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## Laboratory Code: 11148

**SDG Number: L2453053**

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**Project Name:** CORAM MATERIALS
**Project Number:** 2232.0006Y005

**Lab Number:** L2453053
**Report Date:** 10/10/24

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2453053-01 | MW-1SR | WATER | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 11:10 | 09/16/24 |
| L2453053-02 | MW-1DR2 | WATER | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 11:50 | 09/16/24 |
| L2453053-03 | MW-11S | WATER | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 14:20 | 09/16/24 |
| L2453053-04 | MW-11D | WATER | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 14:15 | 09/16/24 |
| L2453053-05 | DUP_091624 | WATER | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 12:00 | 09/16/24 |
| L2453053-06 | TRIP BLANK | TRIP BLANK (AQUEOUS) | 416 MILLER PLACE-YAPHANK ROAD | 09/16/24 00:00 | 09/16/24 |

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

**Case Narrative (continued)**

Report Submission
October 10, 2024: This final report includes the results of all requested analyses.
September 24, 2024: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analyses of Ammonium, Iodide, and Sulfide were subcontracted. Copies of the laboratory reports are included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Semivolatile Organics
The WG1974465-2 LCS recovery, associated with L2453053-01 through -05, is below the acceptance criteria for 4-nitrophenol (9%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Semivolatile Organics by SIM
The WG1974466-1 Method Blank, associated with L2453053-01 through -05, has a concentration above the reporting limit for naphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

Total Metals
The WG1973830-3 MS recovery, performed on L2453053-01, is outside the acceptance criteria for potassium (127%). A post digestion spike was performed and was within acceptance criteria.

Dissolved Metals
The WG1974186-20 MSD recovery, performed on L2453053-01, is outside the acceptance criteria for

**Case Narrative (continued)**

potassium (127%). A post digestion spike was performed and was within acceptance criteria.

Anions by Ion Chromatography

The WG1974201-3/-4 MS/MSD recoveries, performed on L2453053-01, are outside the acceptance criteria for bromide (88%/88%); however, the associated LCS recovery is within criteria. No further action was taken.

Solids, Total Dissolved

The WG1973941-3 Laboratory Duplicate RPD for solids, total dissolved (78%), performed on L2453053-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG1973941-4 Laboratory Duplicate RPD for solids, total dissolved (24%), performed on L2453053-02, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom Report Date: 10/10/24

Title: Technical Director/Representative

## DATA PACKAGE GLOSSARY

***Acronyms***

| | |
|---|---|
| DL | - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| EDL | - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME). |
| EMPC | - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration. |
| EPA | - Environmental Protection Agency. |
| LCS | - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| LCSD | - Laboratory Control Sample Duplicate: Refer to LCS. |
| LFB | - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| LOD | - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| LOQ | - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)<br><br>Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| MDL | - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| MS | - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values. |
| MSD | - Matrix Spike Sample Duplicate: Refer to MS. |
| NA | - Not Applicable. |
| NC | - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit. |
| NDPA/DPA | - N-Nitrosodiphenylamine/Diphenylamine. |
| NI | - Not Ignitable. |
| NP | - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil. |
| NR | - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests. |
| RL | - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| RPD | - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report. |
| SRM | - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples. |
| STLP | - Semi-dynamic Tank Leaching Procedure per EPA Method 1315. |
| TEF | - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD. |
| TEQ | - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values. |
| TIC | - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations. |

*Report Format:* DU Report with 'J' Qualifiers

***Footnotes***

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

***Terms***

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

***Data Qualifiers***

**A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

*Report Format:* DU Report with 'J' Qualifiers

***Data Qualifiers***

the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

**ND or U** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

## Volatile Organics Instruments

Volatile Organics:

| | |
|---|---|
| Instrument: Agilent 7890 GC/5975C MSD | Columns (length x ID x df): |
| Trap: Supelco K Trap (VOACARB 3000) | RTX-VMS 20m x 0.18mm x 1um |
| Concentrator: EST Encon (or equivalent) | RTX-VMS 30m x 0.25mm x 1.4um |
| Autosampler: EST Centurion (or equivalent) | RTX-502.2 40m x 0.18mm x 1um |
| Purge time: 11 min | |

Volatile Organics: VPH

| | |
|---|---|
| Instrument: Agilent 6890 (or equivalent) | Column Type: Restek RTX 502.2 |
| Trap: Supelco K Trap (VOACARB 3000) | Column Length: 105 Meters |
| Concentrator: EST Encon (or equivalent) | df: 3.00 um |
| Autosampler: EST Centurion (or equivalent) | ID: 0.53mm |

Volatile Organics: PIANO

| | |
|---|---|
| Instrument: Agilent 7890 GC/5975C MSD | Column Type: DB-VRX |
| Trap: Supelco K Trap (VOACARB 3000) | Column Length: 60 Meters |
| Concentrator: Tekmar Velocity / EST Encon | df: 1.40 um |
| Autosampler: Varian Archon / EST Centurion | ID: 0.25 mm |
| Purge time: 11 min | Desorb: 1 min |

Volatile Organics: Dissolved Gas

| | |
|---|---|
| Instrument: Agilent 7890 (or equivalent) with FID/TCD | |
| | Column Type: Haysep S Column |
| | Column Length: 2 Meters packed (100/200 mesh) |
| Autosampler: LEAP Headspace | Purge time: 0.6 min |

## Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

| | |
|---|---|
| Concentrator: Entech 7100A or 7200 | Column Type: Restek RTX-1 |
| Autosampler: Entech 7016CA or 7016D | Column Length: 60 Meters |
| | df: 1.00 um |
| | ID: 0.25 mm or 0.32 mm |

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

**Semivolatile Organics Instruments - Westborough**

Semivolatile Organics (Acid/Base/Neutral Extractables):

| | |
|---|---|
| Instrument: Agilent 5973N MSD | Injection volume: 1 ul;2 uL LVI |
| Column Type: Restek RXI-5SILMS | df: 0.32 um |
| Column Length: 30 Meters | ID: 0.25 mm |

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

| | |
|---|---|
| Instrument: Agilent 5973 MSD | Injection volume: 1 ul;2 uL LVI |
| Column Type: Restek RXI-5SILMS | df: 0.25 um |
| Column Length: 30 Meters | ID: 0.25 mm |

Pesticides/PCB/Herbicides:

| | |
|---|---|
| Instrument: Agilent 6890 w/Dual Micro ECDs | Injection Volume: 1uL |
| Column A: Restek RTX-CL/STX-CL | df: 0.32 |
| Column B: Restek RTX/STX-CLPPesticide II | df: 0.25 |
| Column Length: 30 Meters | ID: 0.32 mm |

Petroleum/EPH:

| | |
|---|---|
| Instrument: Agilent 6890 w/FID / HP 5890 w/ FID | Injection Volume: 1uL |
| Column: Restek RTX 5 | df: 0.25 |
| Column Length: 30 Meters | |
| ID: 0.32 mm | |

**Semivolatile Organic Instruments - Mansfield**

Semivolatile Organics (ALK-PAH Extractables):

| | |
|---|---|
| Instrument: Agilent 5973N / 5975 MSD | Injection volume: 1 ul |
| Column Type: ZB-5 | df: 0.25 um |
| Column Length: 60 Meters | ID: 0.25 mm |

Semivolatile Organics (8270):

| | |
|---|---|
| Instrument: Agilent 5973N / 5975 MSD | Injection volume: 2 ul |
| Column Type: ZB-Semivolatiles | df: 0.25 um |
| Column Length: 30 Meters | ID: 0.25 mm |

Semivolatile Organics (8270 SIM):

| | |
|---|---|
| Instrument: Agilent 5973N / 5975 MSD | Injection volume: 3 ul |
| Column Type: ZB-5 | df: 0.25 um |
| Column Length: 30 Meters | ID: 0.25 mm |

Semivolatile Organics (1,4-Dioxane):

| | |
|---|---|
| Instrument: Agilent 5973N / 5975 / 5977 MSD | Injection volume: 3 ul |
| Column Type: RTX-5 | df: 0.25um, 0.18 um |
| Column Length: 30 Meters | ID: 0.25um, 0.18 mm |

Semivolatile Organics (209 Congener):

| | |
|---|---|
| Instrument: Agilent 5973N / 5975 MSD | Injection volume: 3 ul |
| Column Type: RTX-5, RTX-PCB | df: 0.25um, 0.18 um |
| Column Length: 60 Meters | ID: 0.25um, 0.18 mm |

Semivolatile Organics (8081):

| | |
|---|---|
| Instrument: Agilent 6890 / 7890 | Injection volume: 1 ul |
| Column Type: RTX-5 / RTX-CLP II | df: 0.25 um |
| Column Length: 60 Meters | ID: 0.25 mm |

Semivolatile Organics (8082):

| | |
|---|---|
| Instrument: Agilent 6890 w/Dual Micro ECDs | Injection Volume: 1uL |
| Column A: Restek RTX-CL/STX-CL | df: 0.32 |
| Column B: Restek RTX/STX-CLPPesticide II | df: 0.25 |
| Column Length: 30 Meters | ID: 0.32 mm |

Semivolatile Organics (SHC Extractables):

| | |
|---|---|
| Instrument: Agilent 6890 | Injection volume: 1 ul |
| Column Type: RTX-5 | df: 0.25 um |
| Column Length: 60 Meters | ID: 0.25 mm |

# Sample Delivery Group Summary

Alpha Job Number : L2453053

Account Name : Roux Env. Eng. & Geology, DPC
Project Number : 2232.0006Y005
Project Name : CORAM MATERIALS

Received : 16-SEP-2024
Reviewer : Maile Kolton

## Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

## Cooler Information

| Cooler | Seal/Seal# | Preservation | Temperature(°C) | Additional Information |
|---|---|---|---|---|
| A | Absent/ | Ice | 2.9 | |
| B | Absent/ | Ice | 4.1 | |
| C | Absent/ | Ice | 3.6 | |
| D | Absent/ | Ice | 2.8 | |
| E | Absent/ | Ice | 3.2 | |
| F | Absent/ | Ice | 3.2 | |

## Condition Information

| | |
|---|---|
| 1) All samples on COC received? | **YES** |
| 2) Extra samples received? | **NO** |
| 3) Are there any sample container discrepancies? | **NO** |
| 4) Are there any discrepancies between COC & sample labels? | **NO** |
| 5) Are samples in appropriate containers for requested analysis? | **YES** |
| 6) Are samples properly preserved for requested analysis? | **YES** |
| 7) Are samples within holding time for requested analysis? | **YES** |
| 8) All sampling equipment returned? | **NA** |

## Volatile Organics/VPH

| | |
|---|---|
| 1) Reagent Water Vials Frozen by Client? | **NO** |

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 10 2024, 05:17 pm

Login Number: L2453053

Account: ROUX-NY  Roux Env. Eng. & Geology, DPCProject: 2232.0006Y005  416 MILLER PLACE-YAPHANK ROAD, MILLE
Received: 16SEP24  Due Date: 07OCT24

| Sample # | Client ID | Mat | PR | Collected |
|---|---|---|---|---|
| L2453053-01 | MW-1SR | S0 | 1 | 16SEP24 11:10 |

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) SUB-Sulfide is direct sub to Pace Melville Matrix description field has to be filled in appropriately for QC, ex: Trip Blank, Field Blank, etc Only one result per compound NYTCL-8260: Report list built including Non-Routine: ;Freon-113;Cyclohexane;Methyl Acetate;Methyl cyclohexane NYTCL-8270-RVT:Report list built including Non-Routine: ;1,2,4,5-Tetrachlorobenzene;Atrazine;Benzaldehyde; Caprolactam NYTCL-8270 SIM RVT Report list built NYTCL-8081: Report list built including TOX HERB-8151: Report list built L2453053-01 MS L2453053-01 MSD 778640075005 $33.76 USD Pace, IN 778639490414 $43.85 USD Galbraith, TN ASP-B Package Due Date: 10/07/24

ALK-CO3-2320,ALK-HCO3-2320,ASP-B,BR-300,CL-4500,F-4500,HERB-8151,MS/MSD,NYTCL-8081,NYTCL-8082-LVI, NYTCL-8260,NYTCL-8270/SIM-RVT,NYTCL-8270-RVT,NYTCL-8270-SIM-RVT,SHIPPING,SO4-4500,SUB-AMMONIUM,SUB-IODIDE,SUB-LEVEL5,SUB-SULFIDE,TAL-2007S,AG-RI,AL-RI,AS-RI,BA-RI,BE-RI,CA-RI,CD-RI,CO-RI,CR-RI,CU-RI, FE-RI,HG-R,K-RI,MG-RI,MN-RI,NA-RI,NI-RI,PB-RI,PREPR,SB-RI,SE-RI,TL-RI,V-RI,ZN-RI,TAL-600,AG-UI,AL-UI,AS-UI,BA-UI,BE-UI,CA-UI,CD-UI,CO-UI,CR-UI,CU-UI,FE-UI,HG-U,K-UI,MG-UI,MN-UI,NA-UI,NI-UI,PB-UI, PREPU,SB-UI,SE-UI,TL-UI,V-UI,ZN-UI,TDS-2540,TKN-351,TOTALNITROGEN,NO3/NO2-4500,TNITROGEN,TPO4-4500

| Sample # | Client ID | Mat | PR | Collected |
|---|---|---|---|---|
| L2453053-02 | MW-1DR2 | S0 | 1 | 16SEP24 11:50 |

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) SUB-Sulfide is direct sub to Pace Melville Matrix description field has to be filled in appropriately for QC, ex: Trip Blank, Field Blank, etc Only one result per compound NYTCL-8260: Report list built including Non-Routine: ;Freon-113;Cyclohexane;Methyl Acetate;Methyl cyclohexane NYTCL-8270-RVT:Report list built including Non-Routine: ;1,2,4,5-Tetrachlorobenzene;Atrazine;Benzaldehyde; Caprolactam NYTCL-8270 SIM RVT Report list built NYTCL-8081: Report list built including TOX HERB-8151: Report list built  Package Due Date: 10/07/24

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 10 2024, 05:17 pm

Login Number: L2453053

Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2232.0006Y005 416 MILLER PLACE-YAPHANK ROAD, MILLE
Received: 16SEP24 Due Date: 07OCT24

| Sample # | Client ID | Mat | PR | Collected |
|---|---|---|---|---|

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-4500,F-4500,HERB-8151,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260,
NYTCL-8270/SIM-RVT,NYTCL-8270-RVT,NYTCL-8270-SIM-RVT,SO4-4500,SUB-AMMONIUM,SUB-IODIDE,SUB-SULFIDE,
TAL-2007S,AG-RI,AL-RI,AS-RI,BA-RI,BE-RI,CA-RI,CD-RI,CO-RI,CR-RI,CU-RI,FE-RI,HG-R,K-RI,MG-RI,MN-RI,
NA-RI,NI-RI,PB-RI,PREPR,SB-RI,SE-RI,TL-RI,V-RI,ZN-RI,TAL-600,AG-UI,AL-UI,AS-UI,BA-UI,BE-UI,CA-UI,CD-
UI,CO-UI,CR-UI,CU-UI,FE-UI,HG-U,K-UI,MG-UI,MN-UI,NA-UI,NI-UI,PB-UI,PREPU,SB-UI,SE-UI,TL-UI,V-UI,ZN-
UI,TDS-2540,TKN-351,TOTALNITROGEN,NO3/NO2-4500,TNITROGEN,TPO4-4500

| | | | | |
|---|---|---|---|---|
| L2453053-03 | MW-11S | | 1 S0 | 16SEP24 14:20 |

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) SUB-Sulfide is direct sub to Pace Melville Matrix description field has to be filled in appropriately for QC, ex: Trip Blank, Field Blank, etc Only one result per compound NYTCL-8260: Report list built including Non-Routine: ;Freon-113;Cyclohexane;Methyl Acetate;Methyl cyclohexane NYTCL-8270-RVT:Report list built including Non-Routine: ;1,2,4,5-Tetrachlorobenzene;Atrazine;Benzaldehyde; Caprolactam NYTCL-8270 SIM RVT Report list built NYTCL-8081: Report list built including TOX HERB-8151: Report list built Package Due Date: 10/07/24

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-4500,F-4500,HERB-8151,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260,
NYTCL-8270/SIM-RVT,NYTCL-8270-RVT,NYTCL-8270-SIM-RVT,SO4-4500,SUB-AMMONIUM,SUB-IODIDE,SUB-SULFIDE,
TAL-2007S,AG-RI,AL-RI,AS-RI,BA-RI,BE-RI,CA-RI,CD-RI,CO-RI,CR-RI,CU-RI,FE-RI,HG-R,K-RI,MG-RI,MN-RI,
NA-RI,NI-RI,PB-RI,PREPR,SB-RI,SE-RI,TL-RI,V-RI,ZN-RI,TAL-600,AG-UI,AL-UI,AS-UI,BA-UI,BE-UI,CA-UI,CD-
UI,CO-UI,CR-UI,CU-UI,FE-UI,HG-U,K-UI,MG-UI,MN-UI,NA-UI,NI-UI,PB-UI,PREPU,SB-UI,SE-UI,TL-UI,V-UI,ZN-
UI,TDS-2540,TKN-351,TOTALNITROGEN,NO3/NO2-4500,TNITROGEN,TPO4-4500

| | | | | |
|---|---|---|---|---|
| L2453053-04 | MW-11D | | 1 S0 | 16SEP24 14:15 |

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) SUB-Sulfide is direct sub to Pace Melville Matrix description field has to be filled in appropriately for QC, ex: Trip Blank, Field Blank, etc Only one result per compound NYTCL-8260: Report list built including Non-Routine: ;Freon-113;Cyclohexane;Methyl Acetate;Methyl cyclohexane NYTCL-8270-RVT:Report list built including Non-Routine: ;1,2,4,5-Tetrachlorobenzene;Atrazine;Benzaldehyde; Caprolactam NYTCL-8270 SIM RVT Report list built NYTCL-8081: Report list built including TOX HERB-8151: Report list built Package Due Date: 10/07/24

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 10 2024, 05:17 pm

Login Number: L2453053

Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2232.0006Y005 416 MILLER PLACE-YAPHANK ROAD, MILLE
Received: 16SEP24 Due Date: 07OCT24

| Sample # | Client ID | Mat | PR | Collected |
|---|---|---|---|---|

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-4500,F-4500,HERB-8151,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260,
NYTCL-8270/SIM-RVT,NYTCL-8270-RVT,NYTCL-8270-SIM-RVT,SO4-4500,SUB-AMMONIUM,SUB-IODIDE,SUB-SULFIDE,
TAL-2007S,AG-RI,AL-RI,AS-RI,BA-RI,BE-RI,CA-RI,CD-RI,CO-RI,CR-RI,CU-RI,FE-RI,HG-R,K-RI,MG-RI,MN-RI,
NA-RI,NI-RI,PB-RI,PREPR,SB-RI,SE-RI,TL-RI,V-RI,ZN-RI,TAL-600,AG-UI,AL-UI,AS-UI,BA-UI,BE-UI,CA-UI,CD-
UI,CO-UI,CR-UI,CU-UI,FE-UI,HG-U,K-UI,MG-UI,MN-UI,NA-UI,NI-UI,PB-UI,PREPU,SB-UI,SE-UI,TL-UI,V-UI,ZN-
UI,TDS-2540,TKN-351,TOTALNITROGEN,NO3/NO2-4500,TNITROGEN,TPO4-4500

L2453053-05 DUP_091624 1 S0 16SEP24 12:00

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) SUB-Sulfide is direct sub to Pace Melville Matrix description field has to be filled in appropriately for QC, ex: Trip Blank, Field Blank, etc Only one result per compound NYTCL-8260: Report list built including Non-Routine: ;Freon-113;Cyclohexane;Methyl Acetate;Methyl cyclohexane NYTCL-8270-RVT:Report list built including Non-Routine: ;1,2,4,5-Tetrachlorobenzene;Atrazine;Benzaldehyde; Caprolactam NYTCL-8270 SIM RVT Report list built NYTCL-8081: Report list built including TOX HERB-8151: Report list built Package Due Date: 10/07/24

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-4500,F-4500,HERB-8151,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260,
NYTCL-8270/SIM-RVT,NYTCL-8270-RVT,NYTCL-8270-SIM-RVT,SO4-4500,SUB-AMMONIUM,SUB-IODIDE,SUB-SULFIDE,
TAL-2007S,AG-RI,AL-RI,AS-RI,BA-RI,BE-RI,CA-RI,CD-RI,CO-RI,CR-RI,CU-RI,FE-RI,HG-R,K-RI,MG-RI,MN-RI,
NA-RI,NI-RI,PB-RI,PREPR,SB-RI,SE-RI,TL-RI,V-RI,ZN-RI,TAL-600,AG-UI,AL-UI,AS-UI,BA-UI,BE-UI,CA-UI,CD-
UI,CO-UI,CR-UI,CU-UI,FE-UI,HG-U,K-UI,MG-UI,MN-UI,NA-UI,NI-UI,PB-UI,PREPU,SB-UI,SE-UI,TL-UI,V-UI,ZN-
UI,TDS-2540,TKN-351,TOTALNITROGEN,NO3/NO2-4500,TNITROGEN,TPO4-4500

L2453053-06 TRIP BLANK 1 S0 16SEP24 00:00

| Package Due Date: 10/07/24

NYTCL-8260



Logged By: Jennifer Byrnes

ALPHA ANALYTICAL

# NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193
Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

**Service Centers**
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd In Lab 9/17/24

L2453053 23SEP24
ROUX – NY

## Client Information

Client: ROUX Env.Eng.&Geology, DPC
Address: 209 Shafter Street
Islandia, NY 11749-5074
Phone: 631-232-2600
Fax:
Email: jmichaels@rouxinc.com

## Project Information

Project Name: CORAM MATERIALS
Project Location: 416 Miller Place-Yaphank Road
Project #
(Use Project name as Project #) ☐
Project Manager: Julia Michaels
ALPHAQuote #: 28577

## Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

## Deliverables

☐ ASP-A ☑ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

## Billing Information

☐ Same as Client Info
PO #

## Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

## Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

**Other project specific requirements/comments:**

**Please specify Metals or TAL.**

## ANALYSIS

*Sample Filtration*
☑ Done
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please Specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | NYTCL-8260 | NYTCL-8270/SIM-RVT | TAL600/TAL-2007S | 8081/8151/8082 | NO3/NO2-4500-PPB | TOTALNITROGEN | CI-4500/BR-300 | SO4-4500/TPO4-4500 | Sample Specific Comments | Total Bottles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53053-01 | MW-1SR | 9/16/24 | 11:10 | AQ | AI | X | X | X | X | X | X | X | X | MS/MSD | 60 |
| 02 | MW-1DR2 | 9/16/24 | 11:50 | AQ | JM | X | X | X | X | X | X | X | X | | 20 |
| 03 | MW-11S | 9/16/24 | 14:20 | AQ | BPP | X | X | X | X | X | X | X | X | | 20 |
| 04 | MW-11D | 9/16/24 | 1415 | AQ | AI | X | X | X | X | X | X | X | X | | 20 |
| 05 | DUP_091624 | 9/16/24 | 12:00 | AQ | JM | X | X | X | X | X | X | X | X | | 20 |
| 06 | TRIP BLANK | 9/16/24 | LAB | AQ | B | X | | | | | | | | | |

Preservative Code:
A = None
B = HCl
C = $HNO_3$
D = $H_2SO_4$
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

| Container Type | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Preservative | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| | 9/16/24 1515 | | 9/16/24 15:15 |
| | 9/17/24 12:10 | | 9/17/24 2:20 |
| | 9/17/24 12:10 | | 9/17/24 2:55 |

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

# NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

**Service Centers**
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd In Lab: 9/17/24

ALPHA Job #: L2453053

## Client Information

Client: ROUX Env.Eng.&Geology, DPC
Address: 209 Shafter Street
Islandia, NY 11749-5074
Phone: 631-232-2600
Fax:
Email: jmichaels@rouxinc.com

## Project Information

Project Name: CORAM MATERIALS
Project Location: 416 Miller Place-Yaphank Road
Project #
(Use Project name as Project #) ☐
Project Manager: Julia Michaels
ALPHAQuote #: 28577

## Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

## Deliverables

☐ ASP-A ☑ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

## Billing Information

☐ Same as Client Info
PO #

## Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

## Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

**Other project specific requirements/comments:**

**Please specify Metals or TAL.**

## ANALYSIS

*Sample Filtration*
☐ Done
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please Specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Alk-CO3-2320 | Alk-HCO3-2320 | F-4500 | TDS-2540 | | Sub-Iodide | Sub-sulfide | Sub-Ammonium | Sample Specific Comments | Total Bottles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53053-01 | MW-15R | 9/16/24 | 11:10 | AQ | AT | X | X | X | X | | X | X | X | MS/MSD | 6 |
| 02 | MW-1DR2 | 9/16/24 | 11:50 | AQ | JM | X | X | X | X | | X | X | X | | 2 |
| 03 | MW-11S | 9/16/24 | 14:20 | AQ | PP | X | X | X | X | | X | X | X | | 2 |
| 04 | MW-11D | 9/16/24 | 14:15 | AQ | AT | X | X | X | X | | X | X | X | | 2 |
| 05 | TRIP-091624 | 9/16/24 | 12:00 | AQ | JM | X | X | X | X | | X | X | X | | 2 |

Preservative Code:
A = None
B = HCl
C = $HNO_3$
D = $H_2SO_4$
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Container Type | | | | | | | | | |
| Preservative | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| | 9/16/24 1515 | | 9/16/24 15:15 |
| | 9/16/24 17:30 | | 9/16/24 16:37 |
| | 9/16/24 19:10 | | 9/16/24 1921 |
| | 9/16/24 | | 9/16/24 23:00 |
| Client Pick | 9/17/24 02:55 | Julia | 9/17/24 2:55 |

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

W 3.4

Form No: 01-25 (rev. 30-Sept-2013)

# Organics

# GC/MS 8260
# Analysis

# Volatiles QC Summary

# Surrogate Recovery Summary
# Form 2
# Volatiles

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Trip Blank (Aqueous)/Water**

| CLIENT ID (LAB SAMPLE NO.) | SMC1 DCA | SMC2 TOL | SMC3 BFB | SMC4 DBFM | TOT OUT |
|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 96 | 99 | 87 | 107 | 0 |
| MW-1DR2 (L2453053-02) | 95 | 98 | 89 | 109 | 0 |
| MW-11S (L2453053-03) | 95 | 98 | 88 | 107 | 0 |
| MW-11D (L2453053-04) | 98 | 98 | 90 | 111 | 0 |
| DUP_091624 (L2453053-05) | 97 | 100 | 88 | 108 | 0 |
| TRIP BLANK (L2453053-06) | 107 | 100 | 104 | 109 | 0 |
| WG1974932-3LCS | 99 | 103 | 110 | 98 | 0 |
| WG1974932-4LCSD | 100 | 103 | 110 | 99 | 0 |
| WG1974932-5BLANK | 100 | 100 | 109 | 103 | 0 |
| WG1974948-3LCS | 92 | 97 | 89 | 105 | 0 |
| WG1974948-4LCSD | 95 | 97 | 89 | 106 | 0 |
| WG1974948-5BLANK | 94 | 99 | 91 | 107 | 0 |
| MW-1SRMS | 94 | 98 | 87 | 107 | 0 |
| MW-1SRMSD | 97 | 98 | 87 | 108 | 0 |

**QC LIMITS**

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

*** Values outside of QC limits**

**FORM II NYTCL-8260**

# Laboratory Control Sample Summary
# Form 3
# Volatiles

**Client** : Roux Env. Eng. & Geology, DPC **Lab Number** : L2453053
**Project Name** : CORAM MATERIALS **Project Number** : 2232.0006Y005
**Matrix (Level)** : WATER (LOW)
**LCS Sample ID** : WG1974932-3 **Analysis Date** : 09/22/24 17:45 **File ID** : V05240922A01
**LCSD Sample ID** : WG1974932-4 **Analysis Date** : 09/22/24 18:10 **File ID** : V05240922A02

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Methylene chloride | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,1-Dichloroethane | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Chloroform | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Carbon tetrachloride | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 63-132 | 20 |
| 1,2-Dichloropropane | 10 | 10 | 100 | 10 | 11 | 110 | 10 | 70-130 | 20 |
| Dibromochloromethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 63-130 | 20 |
| 1,1,2-Trichloroethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Tetrachloroethene | 10 | 11 | 110 | 10 | 10 | 100 | 10 | 70-130 | 20 |
| Chlorobenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 75-130 | 20 |
| Trichlorofluoromethane | 10 | 9.7 | 97 | 10 | 9.5 | 95 | 2 | 62-150 | 20 |
| 1,2-Dichloroethane | 10 | 9.7 | 97 | 10 | 9.9 | 99 | 2 | 70-130 | 20 |
| 1,1,1-Trichloroethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 67-130 | 20 |
| Bromodichloromethane | 10 | 9.9 | 99 | 10 | 9.9 | 99 | 0 | 67-130 | 20 |
| trans-1,3-Dichloropropene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| cis-1,3-Dichloropropene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Bromoform | 10 | 9.7 | 97 | 10 | 9.6 | 96 | 1 | 54-136 | 20 |
| 1,1,2,2-Tetrachloroethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 67-130 | 20 |
| Benzene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Toluene | 10 | 11 | 110 | 10 | 10 | 100 | 10 | 70-130 | 20 |
| Ethylbenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Chloromethane | 10 | 8.0 | 80 | 10 | 8.0 | 80 | 0 | 64-130 | 20 |
| Bromomethane | 10 | 3.1 | 31 Q | 10 | 3.7 | 37 Q | 18 | 39-139 | 20 |
| Vinyl chloride | 10 | 9.9 | 99 | 10 | 10 | 100 | 1 | 55-140 | 20 |
| Chloroethane | 10 | 7.3 | 73 | 10 | 7.7 | 77 | 5 | 55-138 | 20 |
| 1,1-Dichloroethene | 10 | 10 | 100 | 10 | 9.8 | 98 | 2 | 61-145 | 20 |
| trans-1,2-Dichloroethene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |

# Laboratory Control Sample Summary
# Form 3
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974932-3 **Analysis Date** : 09/22/24 17:45 | **File ID** | : V05240922A01 |
| **LCSD Sample ID** | : WG1974932-4 **Analysis Date** : 09/22/24 18:10 | **File ID** | : V05240922A02 |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Trichloroethene | 10 | 9.9 | 99 | 10 | 9.9 | 99 | 0 | 70-130 | 20 |
| 1,2-Dichlorobenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| 1,3-Dichlorobenzene | 10 | 11 | 110 | 10 | 10 | 100 | 10 | 70-130 | 20 |
| 1,4-Dichlorobenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Methyl tert butyl ether | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 63-130 | 20 |
| p/m-Xylene | 20 | 21 | 105 | 20 | 22 | 110 | 5 | 70-130 | 20 |
| o-Xylene | 20 | 22 | 110 | 20 | 22 | 110 | 0 | 70-130 | 20 |
| cis-1,2-Dichloroethene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Styrene | 20 | 21 | 105 | 20 | 21 | 105 | 0 | 70-130 | 20 |
| Dichlorodifluoromethane | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 36-147 | 20 |
| Acetone | 10 | 8.2 | 82 | 10 | 9.1 | 91 | 10 | 58-148 | 20 |
| Carbon disulfide | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 51-130 | 20 |
| 2-Butanone | 10 | 9.1 | 91 | 10 | 9.3 | 93 | 2 | 63-138 | 20 |
| 4-Methyl-2-pentanone | 10 | 10 | 100 | 10 | 9.8 | 98 | 2 | 59-130 | 20 |
| 2-Hexanone | 10 | 9.0 | 90 | 10 | 9.1 | 91 | 1 | 57-130 | 20 |
| Bromochloromethane | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,2-Dibromoethane | 10 | 11 | 110 | 10 | 10 | 100 | 10 | 70-130 | 20 |
| 1,2-Dibromo-3-chloropropane | 10 | 9.5 | 95 | 10 | 9.7 | 97 | 2 | 41-144 | 20 |
| Isopropylbenzene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,2,3-Trichlorobenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| 1,2,4-Trichlorobenzene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Methyl Acetate | 10 | 9.8 | 98 | 10 | 9.6 | 96 | 2 | 70-130 | 20 |
| Cyclohexane | 10 | 12 | 120 | 10 | 11 | 110 | 9 | 70-130 | 20 |
| Freon-113 | 10 | 10 | 100 | 10 | 9.6 | 96 | 4 | 70-130 | 20 |
| Methyl cyclohexane | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |

# Laboratory Control Sample Summary
# Form 3
# Volatiles

**Client** : Roux Env. Eng. & Geology, DPC **Lab Number** : L2453053
**Project Name** : CORAM MATERIALS **Project Number** : 2232.0006Y005
**Matrix (Level)** : WATER (LOW)
**LCS Sample ID** : WG1974948-3 **Analysis Date** : 09/21/24 07:26 **File ID** : VE240921A02
**LCSD Sample ID** : WG1974948-4 **Analysis Date** : 09/21/24 07:51 **File ID** : VE240921A03

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Methylene chloride | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,1-Dichloroethane | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Chloroform | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Carbon tetrachloride | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 63-132 | 20 |
| 1,2-Dichloropropane | 10 | 10 | 100 | 10 | 11 | 110 | 10 | 70-130 | 20 |
| Dibromochloromethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 63-130 | 20 |
| 1,1,2-Trichloroethane | 10 | 9.8 | 98 | 10 | 9.7 | 97 | 1 | 70-130 | 20 |
| Tetrachloroethene | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 70-130 | 20 |
| Chlorobenzene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 75-130 | 20 |
| Trichlorofluoromethane | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 62-150 | 20 |
| 1,2-Dichloroethane | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| 1,1,1-Trichloroethane | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 67-130 | 20 |
| Bromodichloromethane | 10 | 10 | 100 | 10 | 11 | 110 | 10 | 67-130 | 20 |
| trans-1,3-Dichloropropene | 10 | 9.7 | 97 | 10 | 9.9 | 99 | 2 | 70-130 | 20 |
| cis-1,3-Dichloropropene | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Bromoform | 10 | 9.7 | 97 | 10 | 9.7 | 97 | 0 | 54-136 | 20 |
| 1,1,2,2-Tetrachloroethane | 10 | 9.1 | 91 | 10 | 9.4 | 94 | 3 | 67-130 | 20 |
| Benzene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Toluene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Ethylbenzene | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Chloromethane | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 64-130 | 20 |
| Bromomethane | 10 | 14 | 140 Q | 10 | 14 | 140 Q | 0 | 39-139 | 20 |
| Vinyl chloride | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 55-140 | 20 |
| Chloroethane | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 55-138 | 20 |
| 1,1-Dichloroethene | 10 | 10 | 100 | 10 | 12 | 120 | 18 | 61-145 | 20 |
| trans-1,2-Dichloroethene | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 70-130 | 20 |

# Laboratory Control Sample Summary
# Form 3
# Volatiles

**Client** : Roux Env. Eng. & Geology, DPC **Lab Number** : L2453053
**Project Name** : CORAM MATERIALS **Project Number** : 2232.0006Y005
**Matrix (Level)** : WATER (LOW)
**LCS Sample ID** : WG1974948-3 **Analysis Date** : 09/21/24 07:26 **File ID** : VE240921A02
**LCSD Sample ID** : WG1974948-4 **Analysis Date** : 09/21/24 07:51 **File ID** : VE240921A03

| | Laboratory Control Sample | | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Trichloroethene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,2-Dichlorobenzene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,3-Dichlorobenzene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,4-Dichlorobenzene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Methyl tert butyl ether | 10 | 9.2 | 92 | | 10 | 9.7 | 97 | 5 | 63-130 | 20 |
| p/m-Xylene | 20 | 23 | 115 | | 20 | 23 | 115 | 0 | 70-130 | 20 |
| o-Xylene | 20 | 23 | 115 | | 20 | 23 | 115 | 0 | 70-130 | 20 |
| cis-1,2-Dichloroethene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Styrene | 20 | 22 | 110 | | 20 | 23 | 115 | 4 | 70-130 | 20 |
| Dichlorodifluoromethane | 10 | 12 | 120 | | 10 | 12 | 120 | 0 | 36-147 | 20 |
| Acetone | 10 | 6.5 | 65 | | 10 | 6.8 | 68 | 5 | 58-148 | 20 |
| Carbon disulfide | 10 | 11 | 110 | | 10 | 12 | 120 | 9 | 51-130 | 20 |
| 2-Butanone | 10 | 6.6 | 66 | | 10 | 7.1 | 71 | 7 | 63-138 | 20 |
| 4-Methyl-2-pentanone | 10 | 7.1 | 71 | | 10 | 7.5 | 75 | 5 | 59-130 | 20 |
| 2-Hexanone | 10 | 5.8 | 58 | | 10 | 6.2 | 62 | 7 | 57-130 | 20 |
| Bromochloromethane | 10 | 12 | 120 | | 10 | 12 | 120 | 0 | 70-130 | 20 |
| 1,2-Dibromoethane | 10 | 9.7 | 97 | | 10 | 9.8 | 98 | 1 | 70-130 | 20 |
| 1,2-Dibromo-3-chloropropane | 10 | 8.0 | 80 | | 10 | 7.6 | 76 | 5 | 41-144 | 20 |
| Isopropylbenzene | 10 | 11 | 110 | | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,2,3-Trichlorobenzene | 10 | 9.6 | 96 | | 10 | 9.7 | 97 | 1 | 70-130 | 20 |
| 1,2,4-Trichlorobenzene | 10 | 10 | 100 | | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Methyl Acetate | 10 | 6.8 | 68 | Q | 10 | 7.1 | 71 | 4 | 70-130 | 20 |
| Cyclohexane | 10 | 10 | 100 | | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Freon-113 | 10 | 12 | 120 | | 10 | 12 | 120 | 0 | 70-130 | 20 |
| Methyl cyclohexane | 10 | 10 | 100 | | 10 | 11 | 110 | 10 | 70-130 | 20 |

# Matrix Spike Sample Summary
# Form 3
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 10:28 |
| **Matrix Spike** | : WG1974948-6 | **MS Analysis Date** | : 09/21/24 17:27 |
| **Matrix Spike Dup** | : WG1974948-7 | **MSD Analysis Date** | : 09/21/24 17:52 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Methylene chloride | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,1-Dichloroethane | ND | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 70-130 | 20 |
| Chloroform | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Carbon tetrachloride | ND | 10 | 13 | 130 | 10 | 13 | 130 | 0 | 63-132 | 20 |
| 1,2-Dichloropropane | ND | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Dibromochloromethane | ND | 10 | 9.9 | 99 | 10 | 10 | 100 | 1 | 63-130 | 20 |
| 1,1,2-Trichloroethane | ND | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| Tetrachloroethene | ND | 10 | 13 | 130 | 10 | 13 | 130 | 0 | 70-130 | 20 |
| Chlorobenzene | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 75-130 | 20 |
| Trichlorofluoromethane | ND | 10 | 13 | 130 | 10 | 13 | 130 | 0 | 62-150 | 20 |
| 1,2-Dichloroethane | ND | 10 | 10 | 100 | 10 | 10 | 100 | 0 | 70-130 | 20 |
| 1,1,1-Trichloroethane | ND | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 67-130 | 20 |
| Bromodichloromethane | ND | 10 | 10 | 100 | 10 | 11 | 110 | 10 | 67-130 | 20 |
| trans-1,3-Dichloropropene | ND | 10 | 9.0 | 90 | 10 | 9.2 | 92 | 2 | 70-130 | 20 |
| cis-1,3-Dichloropropene | ND | 10 | 9.6 | 96 | 10 | 9.8 | 98 | 2 | 70-130 | 20 |
| Bromoform | ND | 10 | 9.2 | 92 | 10 | 9.4 | 94 | 2 | 54-136 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | 10 | 8.8 | 88 | 10 | 9.4 | 94 | 7 | 67-130 | 20 |
| Benzene | ND | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 70-130 | 20 |
| Toluene | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Ethylbenzene | ND | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 70-130 | 20 |
| Chloromethane | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 64-130 | 20 |
| Bromomethane | ND | 10 | 7.6 | 76 | 10 | 8.5 | 85 | 11 | 39-139 | 20 |

# Matrix Spike Sample Summary
# Form 3
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 10:28 |
| **Matrix Spike** | : WG1974948-6 | **MS Analysis Date** | : 09/21/24 17:27 |
| **Matrix Spike Dup** | : WG1974948-7 | **MSD Analysis Date** | : 09/21/24 17:52 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Vinyl chloride | ND | 10 | 14 | 140 | 10 | 14 | 140 | 0 | 55-140 | 20 |
| Chloroethane | ND | 10 | 13 | 130 | 10 | 12 | 120 | 8 | 55-138 | 20 |
| 1,1-Dichloroethene | ND | 10 | 12 | 120 | 10 | 13 | 130 | 8 | 61-145 | 20 |
| trans-1,2-Dichloroethene | ND | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 70-130 | 20 |
| Trichloroethene | ND | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 70-130 | 20 |
| 1,2-Dichlorobenzene | ND | 10 | 10 | 100 | 10 | 11 | 110 | 10 | 70-130 | 20 |
| 1,3-Dichlorobenzene | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| 1,4-Dichlorobenzene | ND | 10 | 11 | 110 | 10 | 11 | 110 | 0 | 70-130 | 20 |
| Methyl tert butyl ether | ND | 10 | 9.1 | 91 | 10 | 9.6 | 96 | 5 | 63-130 | 20 |
| p/m-Xylene | ND | 20 | 23 | 115 | 20 | 24 | 120 | 4 | 70-130 | 20 |
| o-Xylene | ND | 20 | 23 | 115 | 20 | 23 | 115 | 0 | 70-130 | 20 |
| cis-1,2-Dichloroethene | ND | 10 | 11 | 110 | 10 | 12 | 120 | 9 | 70-130 | 20 |
| Styrene | ND | 20 | 22 | 110 | 20 | 22 | 110 | 0 | 70-130 | 20 |
| Dichlorodifluoromethane | ND | 10 | 14 | 140 | 10 | 14 | 140 | 0 | 36-147 | 20 |
| Acetone | ND | 10 | 8.2 | 82 | 10 | 7.7 | 77 | 6 | 58-148 | 20 |
| Carbon disulfide | ND | 10 | 13 | 130 | 10 | 13 | 130 | 0 | 51-130 | 20 |
| 2-Butanone | ND | 10 | 6.8 | 68 | 10 | 7.9 | 79 | 15 | 63-138 | 20 |
| 4-Methyl-2-pentanone | ND | 10 | 6.8 | 68 | 10 | 7.2 | 72 | 6 | 59-130 | 20 |
| 2-Hexanone | ND | 10 | 5.8 | 58 | 10 | 5.8 | 58 | 0 | 57-130 | 20 |
| Bromochloromethane | ND | 10 | 12 | 120 | 10 | 12 | 120 | 0 | 70-130 | 20 |
| 1,2-Dibromoethane | ND | 10 | 9.6 | 96 | 10 | 9.9 | 99 | 3 | 70-130 | 20 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | 7.6 | 76 | 10 | 7.6 | 76 | 0 | 41-144 | 20 |

# Matrix Spike Sample Summary
# Form 3
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 10:28 |
| **Matrix Spike** | : WG1974948-6 | **MS Analysis Date** | : 09/21/24 17:27 |
| **Matrix Spike Dup** | : WG1974948-7 | **MSD Analysis Date** | : 09/21/24 17:52 |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (ug/l)** | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | | **RPD** | **Recovery Limits** | **RPD Limit** |
| Isopropylbenzene | ND | 10 | 11 | 110 | | 10 | 11 | 110 | | 0 | 70-130 | 20 |
| 1,2,3-Trichlorobenzene | ND | 10 | 8.9 | 89 | | 10 | 9.5 | 95 | | 7 | 70-130 | 20 |
| 1,2,4-Trichlorobenzene | ND | 10 | 9.3 | 93 | | 10 | 9.8 | 98 | | 5 | 70-130 | 20 |
| Methyl Acetate | ND | 10 | 5.8 | 58 | Q | 10 | 6.0 | 60 | Q | 3 | 70-130 | 20 |
| Cyclohexane | ND | 10 | 11 | 110 | | 10 | 12 | 120 | | 9 | 70-130 | 20 |
| Freon-113 | ND | 10 | 13 | 130 | | 10 | 13 | 130 | | 0 | 70-130 | 20 |
| Methyl cyclohexane | ND | 10 | 11 | 110 | | 10 | 12 | 120 | | 9 | 70-130 | 20 |

# Method Blank Summary
# Form 4
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974948-5 | **Lab File ID** | : VE240921A05 |
| **Instrument ID** | : ELAINE | | |
| **Matrix** | : WATER | **Analysis Date** | : 09/21/24 08:50 |

| Client Sample No. | Lab Sample ID | Analysis Date |
|---|---|---|
| WG1974948-3LCS | WG1974948-3 | 09/21/24 07:26 |
| WG1974948-4LCSD | WG1974948-4 | 09/21/24 07:51 |
| MW-1SR | L2453053-01 | 09/21/24 10:28 |
| MW-1DR2 | L2453053-02 | 09/21/24 10:53 |
| MW-11S | L2453053-03 | 09/21/24 11:17 |
| MW-11D | L2453053-04 | 09/21/24 11:42 |
| DUP_091624 | L2453053-05 | 09/21/24 12:07 |
| MW-1SRMS | WG1974948-6 | 09/21/24 17:27 |
| MW-1SRMSD | WG1974948-7 | 09/21/24 17:52 |

# Method Blank Summary
# Form 4
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974932-5 | **Lab File ID** | : V05240922A05 |
| **Instrument ID** | : VOA105 | | |
| **Matrix** | : WATER | **Analysis Date** | : 09/22/24 19:26 |

| Client Sample No. | Lab Sample ID | Analysis Date |
|---|---|---|
| WG1974932-3LCS | WG1974932-3 | 09/22/24 17:45 |
| WG1974932-4LCSD | WG1974932-4 | 09/22/24 18:10 |
| TRIP BLANK | L2453053-06 | 09/22/24 22:49 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Volatiles
# Bromofluorobenzene (BFB)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : ELAINE | **Analysis Date** | : 07/31/24 17:25 |
| **Tune Standard** | : WG1954249-1 | **Tune File ID** | : VE240731NBF1_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 23.6 |
| 75 | 30.0 - 80.0% of mass 95 | 47.5 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7 |
| 173 | Less than 2.0% of mass 174 | 0.5 (.6 )1 |
| 174 | Greater than 50.0% of mass 95 | 83.7 |
| 175 | 5.0 - 9.0% of mass 174 | 6 (7.1 )1 |
| 176 | Greater than 95.0% but less than 101% of mass | 80.5 (96.2)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.2 (6.5 )2 |

1-Value is % of mass 174 2-Value is % of mass 176

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| STD0.19PPB | R1859523-1 | VE240731N03 | 07/31/24 18:35 |
| STD0.5PPB | R1859523-2 | VE240731N05 | 07/31/24 19:26 |
| STD2PPB | R1859523-4 | VE240731N07 | 07/31/24 20:16 |
| STD10PPB | R1859523-3 | VE240731N08 | 07/31/24 20:42 |
| STD30PPB | R1859523-5 | VE240731N09 | 07/31/24 21:07 |
| STD80PPB | R1859523-6 | VE240731N10 | 07/31/24 21:32 |
| STD120PPB | R1859523-7 | VE240731N11 | 07/31/24 21:57 |
| STD200PPB | R1859523-8 | VE240731N12 | 07/31/24 22:22 |
| ICV Quant Report | R1859523-9 | VE240731N17 | 08/01/24 00:28 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Volatiles
# Bromofluorobenzene (BFB)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : ELAINE | **Analysis Date** | : 09/21/24 06:37 |
| **Tune Standard** | : WG1974948-1 | **Tune File ID** | : VE240921BF2_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.6 |
| 75 | 30.0 - 80.0% of mass 95 | 50.3 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.8 |
| 173 | Less than 2.0% of mass 174 | 0.5 (.5 )1 |
| 174 | Greater than 50.0% of mass 95 | 99.8 |
| 175 | 5.0 - 9.0% of mass 174 | 7.3 (7.3 )1 |
| 176 | Greater than 95.0% but less than 101% of mass | 96.7 (96.9)1 |
| 177 | 5.0 - 9.0% of mass 176 | 6.2 (6.4 )2 |

1-Value is % of mass 174 2-Value is % of mass 176

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| WG1974948-2CCAL | WG1974948-2 | VE240921A02 | 09/21/24 07:26 |
| WG1974948-3LCS | WG1974948-3 | VE240921A02 | 09/21/24 07:26 |
| WG1974948-4LCSD | WG1974948-4 | VE240921A03 | 09/21/24 07:51 |
| WG1974948-5BLANK | WG1974948-5 | VE240921A05 | 09/21/24 08:50 |
| MW-1SR | L2453053-01 | VE240921A09 | 09/21/24 10:28 |
| MW-1DR2 | L2453053-02 | VE240921A10 | 09/21/24 10:53 |
| MW-11S | L2453053-03 | VE240921A11 | 09/21/24 11:17 |
| MW-11D | L2453053-04 | VE240921A12 | 09/21/24 11:42 |
| DUP_091624 | L2453053-05 | VE240921A13 | 09/21/24 12:07 |
| WG1974948-6MS | WG1974948-6 | VE240921A26 | 09/21/24 17:27 |
| WG1974948-7MSD | WG1974948-7 | VE240921A27 | 09/21/24 17:52 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Volatiles
# Bromofluorobenzene (BFB)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : VOA105 | **Analysis Date** | : 09/06/24 16:20 |
| **Tune Standard** | : WG1969218-1 | **Tune File ID** | : V05240906NBF1_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.1 |
| 75 | 30.0 - 80.0% of mass 95 | 49.9 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.2 |
| 173 | Less than 2.0% of mass 174 | 1 (1.1 )1 |
| 174 | Greater than 50.0% of mass 95 | 91.2 |
| 175 | 5.0 - 9.0% of mass 174 | 7.1 (7.8 )1 |
| 176 | Greater than 95.0% but less than 101% of mass | 86.7 (95.1)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.9 (6.8 )2 |

1-Value is % of mass 174 2-Value is % of mass 176

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| STD0.19PPB | R1873592-1 | V05240906N03 | 09/06/24 17:39 |
| STD0.5PPB | R1873592-2 | V05240906N05 | 09/06/24 18:30 |
| STD2PPB | R1873592-3 | V05240906N07 | 09/06/24 19:21 |
| STD10PPB | R1873592-4 | V05240906N09 | 09/06/24 20:12 |
| STD30PPB | R1873592-5 | V05240906N10 | 09/06/24 20:37 |
| STD80PPB | R1873592-7 | V05240906N11 | 09/06/24 21:02 |
| STD120PPB | R1873592-6 | V05240906N12 | 09/06/24 21:28 |
| STD200PPB | R1873592-8 | V05240906N13 | 09/06/24 21:53 |
| Correlation Data Summary | R1873592-9 | V05240906N18 | 09/07/24 00:00 |
| ICV Quant Report | R1873592-9 | V05240906N18 | 09/07/24 00:00 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Volatiles
# Bromofluorobenzene (BFB)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : VOA105 | **Analysis Date** | : 09/22/24 17:30 |
| **Tune Standard** | : WG1974932-1 | **Tune File ID** | : V05240922ABF1_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 20.8 |
| 75 | 30.0 - 80.0% of mass 95 | 49.1 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0.8 (1 )1 |
| 174 | Greater than 50.0% of mass 95 | 86.8 |
| 175 | 5.0 - 9.0% of mass 174 | 6.4 (7.3 )1 |
| 176 | Greater than 95.0% but less than 101% of mass | 83.3 (96 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.4 (6.5 )2 |

1-Value is % of mass 174 2-Value is % of mass 176

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| WG1974932-2CCAL | WG1974932-2 | V05240922A01 | 09/22/24 17:45 |
| WG1974932-3LCS | WG1974932-3 | V05240922A01 | 09/22/24 17:45 |
| WG1974932-4LCSD | WG1974932-4 | V05240922A02 | 09/22/24 18:10 |
| WG1974932-5BLANK | WG1974932-5 | V05240922A05 | 09/22/24 19:26 |
| TRIP BLANK | L2453053-06 | V05240922A13 | 09/22/24 22:49 |

# Internal Standard Area and RT Summary
# Form 8a
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : ELAINE | **Analysis Date** | : 09/21/24 07:26:00 |
| **Sample No** | : WG1974948-2 | **Lab File ID** | : VE240921A02 |

| | Fluorobenzene (IS) | | Chlorobenzene-d5 | | 1,4-Dichlorobenzene-D4 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974948-2 | 262722 | 5.96 | 197518 | 9.49 | 115520 | 12.20 |
| Upper Limit | 525444 | 6.46 | 395036 | 9.99 | 231040 | 12.70 |
| Lower Limit | 131361 | 5.46 | 98759 | 8.99 | 57760 | 11.70 |
| Sample ID | | | | | | |
| WG1974948-3 LCS | 262722 | 5.96 | 197518 | 9.49 | 115520 | 12.20 |
| WG1974948-4 LCSD | 264446 | 5.96 | 201178 | 9.49 | 118032 | 12.20 |
| WG1974948-5 BLANK | 259239 | 5.95 | 192524 | 9.49 | 108281 | 12.20 |
| MW-1SR | 247384 | 5.95 | 186643 | 9.49 | 107165 | 12.20 |
| MW-1DR2 | 245347 | 5.96 | 187382 | 9.49 | 106556 | 12.20 |
| MW-11S | 244546 | 5.96 | 185034 | 9.49 | 106204 | 12.20 |
| MW-11D | 242710 | 5.96 | 187067 | 9.49 | 105204 | 12.20 |
| DUP_091624 | 242893 | 5.96 | 184245 | 9.49 | 105431 | 12.20 |
| MW-1SR MS | 250990 | 5.96 | 188883 | 9.49 | 114563 | 12.20 |
| MW-1SR MSD | 252372 | 5.96 | 189811 | 9.49 | 114025 | 12.20 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

# Internal Standard Area and RT Summary
# Form 8a
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : VOA105 | **Analysis Date** | : 09/22/24 17:45:00 |
| **Sample No** | : WG1974932-2 | **Lab File ID** | : V05240922A01 |

| | Fluorobenzene (IS) | | Chlorobenzene-d5 | | 1,4-Dichlorobenzene-D4 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974932-2 | 644553 | 5.68 | 502331 | 9.18 | 298302 | 11.95 |
| Upper Limit | 1289106 | 6.18 | 1004662 | 9.68 | 596604 | 12.45 |
| Lower Limit | 322277 | 5.18 | 251166 | 8.68 | 149151 | 11.45 |
| Sample ID | | | | | | |
| WG1974932-3 LCS | 644553 | 5.68 | 502331 | 9.18 | 298302 | 11.95 |
| WG1974932-4 LCSD | 619901 | 5.68 | 486000 | 9.18 | 291553 | 11.95 |
| WG1974932-5 BLANK | 575102 | 5.68 | 439413 | 9.18 | 259847 | 11.95 |
| TRIP BLANK | 429942 | 5.68 | 335933 | 9.18 | 199200 | 11.95 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

**Date Created:** 03/15/23
**Created By:** Jason Hebert
**File:** PM14094-1
**Page:** 1

## Volatile Organics - EPA 8260D (WATER)

**Holding Time:** 14 days
**Container/Sample Preservation:** 3 - Vial HCl preserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 3 | 0.678 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,1-Dichloroethane | 75-34-3 | 0.75 | 0.21 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Chloroform | 67-66-3 | 0.75 | 0.222 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Carbon tetrachloride | 56-23-5 | 0.5 | 0.134 | ug/l | 63-132 | 20 | 63-132 | 20 | 20 | | | |
| 1,2-Dichloropropane | 78-87-5 | 1.75 | 0.137 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Dibromochloromethane | 124-48-1 | 0.5 | 0.149 | ug/l | 63-130 | 20 | 63-130 | 20 | 20 | | | |
| 1,1,2-Trichloroethane | 79-00-5 | 0.75 | 0.144 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Tetrachloroethene | 127-18-4 | 0.5 | 0.181 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Chlorobenzene | 108-90-7 | 0.5 | 0.178 | ug/l | 75-130 | 25 | 75-130 | 25 | 25 | | | |
| Trichlorofluoromethane | 75-69-4 | 2.5 | 0.161 | ug/l | 62-150 | 20 | 62-150 | 20 | 20 | | | |
| 1,2-Dichloroethane | 107-06-2 | 0.5 | 0.132 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 0.5 | 0.158 | ug/l | 67-130 | 20 | 67-130 | 20 | 20 | | | |
| Bromodichloromethane | 75-27-4 | 0.5 | 0.192 | ug/l | 67-130 | 20 | 67-130 | 20 | 20 | | | |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.5 | 0.164 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.5 | 0.144 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,3-Dichloropropene, Total | 542-75-6 | 0.5 | 0.144 | ug/l | | | | 20 | 20 | | | |
| 1,1-Dichloropropene | 563-58-6 | 2.5 | 0.24 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Bromoform | 75-25-2 | 2 | 0.248 | ug/l | 54-136 | 20 | 54-136 | 20 | 20 | | | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.5 | 0.167 | ug/l | 67-130 | 20 | 67-130 | 20 | 20 | | | |
| Benzene | 71-43-2 | 0.5 | 0.159 | ug/l | 70-130 | 25 | 70-130 | 25 | 25 | | | |
| Toluene | 108-88-3 | 0.75 | 0.203 | ug/l | 70-130 | 25 | 70-130 | 25 | 25 | | | |
| Ethylbenzene | 100-41-4 | 0.5 | 0.167 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Chloromethane | 74-87-3 | 2.5 | 0.2 | ug/l | 64-130 | 20 | 64-130 | 20 | 20 | | | |
| Bromomethane | 74-83-9 | 1 | 0.256 | ug/l | 39-139 | 20 | 39-139 | 20 | 20 | | | |
| Vinyl chloride | 75-01-4 | 1 | 0.0714 | ug/l | 55-140 | 20 | 55-140 | 20 | 20 | | | |
| Chloroethane | 75-00-3 | 1 | 0.134 | ug/l | 55-138 | 20 | 55-138 | 20 | 20 | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.5 | 0.169 | ug/l | 61-145 | 25 | 61-145 | 25 | 25 | | | |
| trans-1,2-Dichloroethene | 156-60-5 | 0.75 | 0.163 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,2-Dichloroethene (total) | 540-59-0 | 0.5 | 0.163 | ug/l | | | | 20 | 20 | | | |
| Trichloroethene | 79-01-6 | 0.5 | 0.175 | ug/l | 70-130 | 25 | 70-130 | 25 | 25 | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 2.5 | 0.184 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 2.5 | 0.186 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 2.5 | 0.187 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Methyl tert butyl ether | 1634-04-4 | 1 | 0.166 | ug/l | 63-130 | 20 | 63-130 | 20 | 20 | | | |
| p/m-Xylene | 179601-23-1 | 1 | 0.332 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| o-Xylene | 95-47-6 | 1 | 0.392 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Xylene (Total) | 1330-20-7 | 1 | 0.33 | ug/l | | | | 20 | 20 | | | |
| cis-1,2-Dichloroethene | 156-59-2 | 0.5 | 0.187 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Dibromomethane | 74-95-3 | 5 | 0.363 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,4-Dichlorobutane | 110-56-5 | 5 | 0.464 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,2,3-Trichloropropane | 96-18-4 | 5 | 0.176 | ug/l | 64-130 | 20 | 64-130 | 20 | 20 | | | |
| Styrene | 100-42-5 | 1 | 0.359 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

## Volatile Organics - EPA 8260D (WATER)

**Holding Time:** 14 days
**Container/Sample Preservation:** 3 - Vial HCl preserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 5 | 0.244 | ug/l | 36-147 | 20 | 36-147 | 20 | 20 | | | |
| Acetone | 67-64-1 | 5 | 1.46 | ug/l | 58-148 | 20 | 58-148 | 20 | 20 | | | |
| Carbon disulfide | 75-15-0 | 5 | 0.299 | ug/l | 51-130 | 20 | 51-130 | 20 | 20 | | | |
| 2-Butanone | 78-93-3 | 5 | 1.94 | ug/l | 63-138 | 20 | 63-138 | 20 | 20 | | | |
| Vinyl acetate | 108-05-4 | 5 | 0.311 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 4-Methyl-2-pentanone | 108-10-1 | 5 | 0.416 | ug/l | 59-130 | 20 | 59-130 | 20 | 20 | | | |
| 2-Hexanone | 591-78-6 | 5 | 0.515 | ug/l | 57-130 | 20 | 57-130 | 20 | 20 | | | |
| Ethyl methacrylate | 97-63-2 | 5 | 0.606 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Acrylonitrile | 107-13-1 | 5 | 0.43 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Bromochloromethane | 74-97-5 | 2.5 | 0.152 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Tetrahydrofuran | 109-99-9 | 5 | 0.525 | ug/l | 58-130 | 20 | 58-130 | 20 | 20 | | | |
| 2,2-Dichloropropane | 594-20-7 | 2.5 | 0.204 | ug/l | 63-133 | 20 | 63-133 | 20 | 20 | | | |
| 1,2-Dibromoethane | 106-93-4 | 2 | 0.193 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,3-Dichloropropane | 142-28-9 | 2.5 | 0.212 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.5 | 0.164 | ug/l | 64-130 | 20 | 64-130 | 20 | 20 | | | |
| Bromobenzene | 108-86-1 | 2.5 | 0.152 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| n-Butylbenzene | 104-51-8 | 0.5 | 0.192 | ug/l | 53-136 | 20 | 53-136 | 20 | 20 | | | |
| sec-Butylbenzene | 135-98-8 | 0.5 | 0.181 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| tert-Butylbenzene | 98-06-6 | 2.5 | 0.196 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| o-Chlorotoluene | 95-49-8 | 2.5 | 0.215 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| p-Chlorotoluene | 106-43-4 | 2.5 | 0.185 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 2.5 | 0.353 | ug/l | 41-144 | 20 | 41-144 | 20 | 20 | | | |
| Hexachlorobutadiene | 87-68-3 | 0.5 | 0.217 | ug/l | 63-130 | 20 | 63-130 | 20 | 20 | | | |
| Isopropylbenzene | 98-82-8 | 0.5 | 0.187 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| p-Isopropyltoluene | 99-87-6 | 0.5 | 0.188 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Naphthalene | 91-20-3 | 2.5 | 0.216 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| n-Propylbenzene | 103-65-1 | 0.5 | 0.173 | ug/l | 69-130 | 20 | 69-130 | 20 | 20 | | | |
| 1,2,3-Trichlorobenzene | 87-61-6 | 2.5 | 0.234 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 2.5 | 0.22 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| 1,3,5-Trimethylbenzene | 108-67-8 | 2.5 | 0.217 | ug/l | 64-130 | 20 | 64-130 | 20 | 20 | | | |
| 1,2,4-Trimethylbenzene | 95-63-6 | 2.5 | 0.191 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 2.5 | 0.213 | ug/l | 70-130 | 20 | 70-130 | 20 | 20 | | | |
| Ethyl ether | 60-29-7 | 2.5 | 0.163 | ug/l | 59-134 | 20 | 59-134 | 20 | 20 | | | |
| *1,2-Dichloroethane-d4* | *17060-07-0* | | | | | | | | | *70-130* | | |
| *Toluene-d8* | *2037-26-5* | | | | | | | | | *70-130* | | |
| *4-Bromofluorobenzene* | *460-00-4* | | | | | | | | | *70-130* | | |
| *Dibromofluoromethane* | *1868-53-7* | | | | | | | | | *70-130* | | |
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***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/15/23
**Created By:** Jason Hebert
**File:** PM14095-1
**Page:** 1

**VOCs - EPA 8260D/5035 High & Low (SOIL)**

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - 1 Vial MeOH/2 Vial Water

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 5 | 2.29 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,1-Dichloroethane | 75-34-3 | 1 | 0.145 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Chloroform | 67-66-3 | 1.5 | 0.14 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Carbon tetrachloride | 56-23-5 | 1 | 0.23 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2-Dichloropropane | 78-87-5 | 1 | 0.125 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Dibromochloromethane | 124-48-1 | 1 | 0.14 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,1,2-Trichloroethane | 79-00-5 | 1 | 0.267 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Tetrachloroethene | 127-18-4 | 0.5 | 0.196 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Chlorobenzene | 108-90-7 | 0.5 | 0.127 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Trichlorofluoromethane | 75-69-4 | 4 | 0.695 | ug/kg | 70-139 | 30 | 70-139 | 30 | 30 | | | |
| 1,2-Dichloroethane | 107-06-2 | 1 | 0.257 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 0.5 | 0.167 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Bromodichloromethane | 75-27-4 | 0.5 | 0.109 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| trans-1,3-Dichloropropene | 10061-02-6 | 1 | 0.273 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.5 | 0.158 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,3-Dichloropropene, Total | 542-75-6 | 0.5 | 0.158 | ug/kg | | | | 30 | 30 | | | |
| 1,1-Dichloropropene | 563-58-6 | 0.5 | 0.159 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Bromoform | 75-25-2 | 4 | 0.246 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.5 | 0.166 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Benzene | 71-43-2 | 0.5 | 0.166 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Toluene | 108-88-3 | 1 | 0.543 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Ethylbenzene | 100-41-4 | 1 | 0.141 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Chloromethane | 74-87-3 | 4 | 0.932 | ug/kg | 52-130 | 30 | 52-130 | 30 | 30 | | | |
| Bromomethane | 74-83-9 | 2 | 0.581 | ug/kg | 57-147 | 30 | 57-147 | 30 | 30 | | | |
| Vinyl chloride | 75-01-4 | 1 | 0.335 | ug/kg | 67-130 | 30 | 67-130 | 30 | 30 | | | |
| Chloroethane | 75-00-3 | 2 | 0.452 | ug/kg | 50-151 | 30 | 50-151 | 30 | 30 | | | |
| 1,1-Dichloroethene | 75-35-4 | 1 | 0.238 | ug/kg | 65-135 | 30 | 65-135 | 30 | 30 | | | |
| trans-1,2-Dichloroethene | 156-60-5 | 1.5 | 0.137 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Trichloroethene | 79-01-6 | 0.5 | 0.137 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 2 | 0.144 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 2 | 0.148 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 2 | 0.171 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Methyl tert butyl ether | 1634-04-4 | 2 | 0.201 | ug/kg | 66-130 | 30 | 66-130 | 30 | 30 | | | |
| p/m-Xylene | 179601-23-1 | 2 | 0.56 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| o-Xylene | 95-47-6 | 1 | 0.291 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Xylene (Total) | 1330-20-7 | 1 | 0.291 | ug/kg | | | | 30 | 30 | | | |
| cis-1,2-Dichloroethene | 156-59-2 | 1 | 0.175 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2-Dichloroethene (total) | 540-59-0 | 1 | 0.137 | ug/kg | | | | 30 | 30 | | | |
| Dibromomethane | 74-95-3 | 2 | 0.238 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,4-Dichlorobutane | 110-56-5 | 10 | 0.226 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2,3-Trichloropropane | 96-18-4 | 2 | 0.127 | ug/kg | 68-130 | 30 | 68-130 | 30 | 30 | | | |
| Styrene | 100-42-5 | 1 | 0.196 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**VOCs - EPA 8260D/5035 High & Low (SOIL)**

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - 1 Vial MeOH/2 Vial Water

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 75-71-8 | 10 | 0.915 | ug/kg | 30-146 | 30 | 30-146 | 30 | 30 | | | |
| Acetone | 67-64-1 | 25 | 10 | ug/kg | 54-140 | 30 | 54-140 | 30 | 30 | | | |
| Carbon disulfide | 75-15-0 | 10 | 4.55 | ug/kg | 59-130 | 30 | 59-130 | 30 | 30 | | | |
| 2-Butanone | 78-93-3 | 10 | 2.22 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Vinyl acetate | 108-05-4 | 10 | 2.15 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 4-Methyl-2-pentanone | 108-10-1 | 10 | 1.28 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 2-Hexanone | 591-78-6 | 10 | 1.18 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Ethyl methacrylate | 97-63-2 | 10 | 1.58 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Acrylonitrile | 107-13-1 | 4 | 1.15 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Bromochloromethane | 74-97-5 | 2 | 0.205 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Tetrahydrofuran | 109-99-9 | 4 | 1.59 | ug/kg | 66-130 | 30 | 66-130 | 30 | 30 | | | |
| 2,2-Dichloropropane | 594-20-7 | 2 | 0.202 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2-Dibromoethane | 106-93-4 | 1 | 0.279 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,3-Dichloropropane | 142-28-9 | 2 | 0.167 | ug/kg | 69-130 | 30 | 69-130 | 30 | 30 | | | |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.5 | 0.132 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Bromobenzene | 108-86-1 | 2 | 0.145 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| n-Butylbenzene | 104-51-8 | 1 | 0.167 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| sec-Butylbenzene | 135-98-8 | 1 | 0.146 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| tert-Butylbenzene | 98-06-6 | 2 | 0.118 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| o-Chlorotoluene | 95-49-8 | 2 | 0.191 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| p-Chlorotoluene | 106-43-4 | 2 | 0.108 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 3 | 0.998 | ug/kg | 68-130 | 30 | 68-130 | 30 | 30 | | | |
| Hexachlorobutadiene | 87-68-3 | 4 | 0.169 | ug/kg | 67-130 | 30 | 67-130 | 30 | 30 | | | |
| Isopropylbenzene | 98-82-8 | 1 | 0.109 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| p-Isopropyltoluene | 99-87-6 | 1 | 0.109 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Naphthalene | 91-20-3 | 4 | 0.65 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| n-Propylbenzene | 103-65-1 | 1 | 0.171 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2,3-Trichlorobenzene | 87-61-6 | 2 | 0.322 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 2 | 0.272 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,3,5-Trimethylbenzene | 108-67-8 | 2 | 0.193 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| 1,2,4-Trimethylbenzene | 95-63-6 | 2 | 0.334 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 5 | 1.42 | ug/kg | 70-130 | 30 | 70-130 | 30 | 30 | | | |
| Ethyl ether | 60-29-7 | 2 | 0.341 | ug/kg | 67-130 | 30 | 67-130 | 30 | 30 | | | |
| *1,2-Dichloroethane-d4* | *17060-07-0* | | | | | | | | | *70-130* | | |
| *Toluene-d8* | *2037-26-5* | | | | | | | | | *70-130* | | |
| *4-Bromofluorobenzene* | *460-00-4* | | | | | | | | | *70-130* | | |
| *Dibromofluoromethane* | *1868-53-7* | | | | | | | | | *70-130* | | |
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***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Volatiles Sample Data

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A09 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A09 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A09 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A10 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A10 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 10:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A10 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A11 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A11 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A11 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:42 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A12 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:42 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A12 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 11:42 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A12 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 12:07 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A13 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 12:07 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A13 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 12:07 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : VE240921A13 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-06 | **Date Collected** | : 09/16/24 00:00 |
| **Client ID** | : TRIP BLANK | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 22:49 |
| **Sample Matrix** | : Trip Blank (aqueous) | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : V05240922A13 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-06 | **Date Collected** | : 09/16/24 00:00 |
| **Client ID** | : TRIP BLANK | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 22:49 |
| **Sample Matrix** | : Trip Blank (aqueous) | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : V05240922A13 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-06 | **Date Collected** | : 09/16/24 00:00 |
| **Client ID** | : TRIP BLANK | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 22:49 |
| **Sample Matrix** | : Trip Blank (aqueous) | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : MJV |
| **Lab File ID** | : V05240922A13 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974932-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974932-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 19:26 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : PID |
| **Lab File ID** | : V05240922A05 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974932-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974932-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 19:26 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : PID |
| **Lab File ID** | : V05240922A05 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974932-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974932-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 19:26 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : PID |
| **Lab File ID** | : V05240922A05 | **Instrument ID** | : VOA105 |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974948-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974948-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 08:50 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : LAC |
| **Lab File ID** | : VE240921A05 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 75-09-2 | Methylene chloride | ND | 2.5 | 0.70 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.5 | 0.70 | U |
| 67-66-3 | Chloroform | ND | 2.5 | 0.70 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.13 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.14 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.15 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.5 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.70 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.70 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.70 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.65 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.17 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.16 | U |
| 108-88-3 | Toluene | ND | 2.5 | 0.70 | U |
| 100-41-4 | Ethylbenzene | ND | 2.5 | 0.70 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.70 | U |
| 74-83-9 | Bromomethane | ND | 2.5 | 0.70 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.07 | U |
| 75-00-3 | Chloroethane | ND | 2.5 | 0.70 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.17 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974948-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974948-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 08:50 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : LAC |
| **Lab File ID** | : VE240921A05 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.18 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.70 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.5 | 0.17 | U |
| 179601-23-1 | p/m-Xylene | ND | 2.5 | 0.70 | U |
| 95-47-6 | o-Xylene | ND | 2.5 | 0.70 | U |
| 1330-20-7 | Xylenes, Total | ND | 2.5 | 0.70 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 2.5 | 0.70 | U |
| 100-42-5 | Styrene | ND | 2.5 | 0.70 | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | U |
| 67-64-1 | Acetone | ND | 5.0 | 1.5 | U |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 1.0 | U |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 1.0 | U |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 1.0 | U |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.70 | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.65 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.70 | U |
| 98-82-8 | Isopropylbenzene | ND | 2.5 | 0.70 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.70 | U |
| 79-20-9 | Methyl Acetate | ND | 2.0 | 0.23 | U |
| 110-82-7 | Cyclohexane | ND | 10 | 0.27 | U |

# Results Summary
# Form 1
# Volatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974948-5 | **Date Collected** | : NA |
| **Client ID** | : WG1974948-5BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 08:50 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 1,8260D | **Analyst** | : LAC |
| **Lab File ID** | : VE240921A05 | **Instrument ID** | : ELAINE |
| **Sample Amount** | : 10 ml | **GC Column** | : RTX-502.2 |
| **Level** | : LOW | **%Solids** | : N/A |
| **Extract Volume (MeOH)** | : N/A | **Injection Volume** | : N/A |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 76-13-1 | Freon-113 | ND | 2.5 | 0.70 | U |
| 108-87-2 | Methyl cyclohexane | ND | 10 | 0.40 | U |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A09.D
Acq On : 21 Sep 2024 10:28 am
Operator : ELAINE:MJV
Sample : l2453053-01,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 23 07:42:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.953 | 96 | 247384 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 94.16% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 186643 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 94.49% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.200 | 152 | 107165 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 92.77% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.150 | 113 | 61950 | 10.697 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.97% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.671 | 65 | 73823 | 9.553 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.53% | | | |
| 64) Toluene-d8 | 7.649 | 98 | 242473 | 9.863 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.63% | | | |
| 88) 4-Bromofluorobenzene | 10.989 | 95 | 85790 | 8.666 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 86.66% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.497 | 85 | 30 | N.D. | | |
| 3) Chloromethane | 1.781 | 50 | 65 | N.D. | | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | | |
| 5) Bromomethane | 0.000 | | 0 | N.D. | d | |
| 6) Chloroethane | 2.216 | 64 | 231 | N.D. | | |
| 7) Trichlorofluoromethane | 2.311 | 101 | 33 | N.D. | | |
| 10) 1,1-Dichloroethene | 2.838 | 96 | 32 | N.D. | | |
| 11) Carbon disulfide | 2.925 | 76 | 346 | N.D. | | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | | |
| 15) Methylene chloride | 3.452 | 84 | 34 | N.D. | | |
| 17) Acetone | 3.493 | 43 | 2035M3 | 1.121 | ug/L | |
| 18) trans-1,2-Dichloroethene | 3.611 | 96 | 33 | N.D. | | |
| 19) Methyl acetate | 0.000 | | 0 | N.D. | d | |
| 21) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | | |
| 25) 1,1-Dichloroethane | 4.305 | 63 | 26 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.762 | 96 | 29 | N.D. | | |
| 33) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 34) Cyclohexane | 4.918 | 56 | 37 | N.D. | | |
| 35) Chloroform | 4.893 | 83 | 29 | N.D. | | |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A09.D
Acq On : 21 Sep 2024 10:28 am
Operator : ELAINE:MJV
Sample : l2453053-01,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 23 07:42:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 0.000 | | 0 | N.D. | |
| 42) 2-Butanone | 5.256 | 43 | 2208M3 | 0.851 ug/L | |
| 45) Benzene | 0.000 | | 0 | N.D. d | |
| 48) 1,2-Dichloroethane | 5.727 | 62 | 37 | N.D. | |
| 51) Methyl cyclohexane | 0.000 | | 0 | N.D. | |
| 52) Trichloroethene | 6.031 | 95 | 279 | N.D. | |
| 55) 1,2-Dichloropropane | 0.000 | | 0 | N.D. | |
| 58) Bromodichloromethane | 0.000 | | 0 | N.D. | |
| 62) cis-1,3-Dichloropropene | 0.000 | | 0 | N.D. | |
| 65) Toluene | 7.701 | 92 | 32 | N.D. | |
| 66) 4-Methyl-2-pentanone | 0.000 | | 0 | N.D. | |
| 67) Tetrachloroethene | 8.150 | 166 | 39 | N.D. | |
| 69) trans-1,3-Dichloropropene | 0.000 | | 0 | N.D. | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | N.D. | |
| 73) Chlorodibromomethane | 0.000 | | 0 | N.D. | |
| 75) 1,2-Dibromoethane | 0.000 | | 0 | N.D. | |
| 77) 2-Hexanone | 9.177 | 43 | 36 | N.D. | |
| 78) Chlorobenzene | 0.000 | | 0 | N.D. | |
| 79) Ethylbenzene | 9.548 | 91 | 28 | N.D. | |
| 81) p/m Xylene | 9.570 | 106 | 25 | N.D. | |
| 82) o Xylene | 0.000 | | 0 | N.D. | |
| 83) Styrene | 10.370 | 104 | 27 | N.D. | |
| 85) Bromoform | 0.000 | | 0 | N.D. | |
| 87) Isopropylbenzene | 0.000 | | 0 | N.D. | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | N.D. | |
| 105) 1,3-Dichlorobenzene | 12.130 | 146 | 27 | N.D. | |
| 106) 1,4-Dichlorobenzene | 12.130 | 146 | 27 | N.D. | |
| 109) 1,2-Dichlorobenzene | 12.646 | 146 | 119 | N.D. | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | N.D. | |
| 114) 1,2,4-Trichlorobenzene | 14.051 | 180 | 30 | N.D. | |
| 116) 1,2,3-Trichlorobenzene | 14.503 | 180 | 31 | N.D. | |

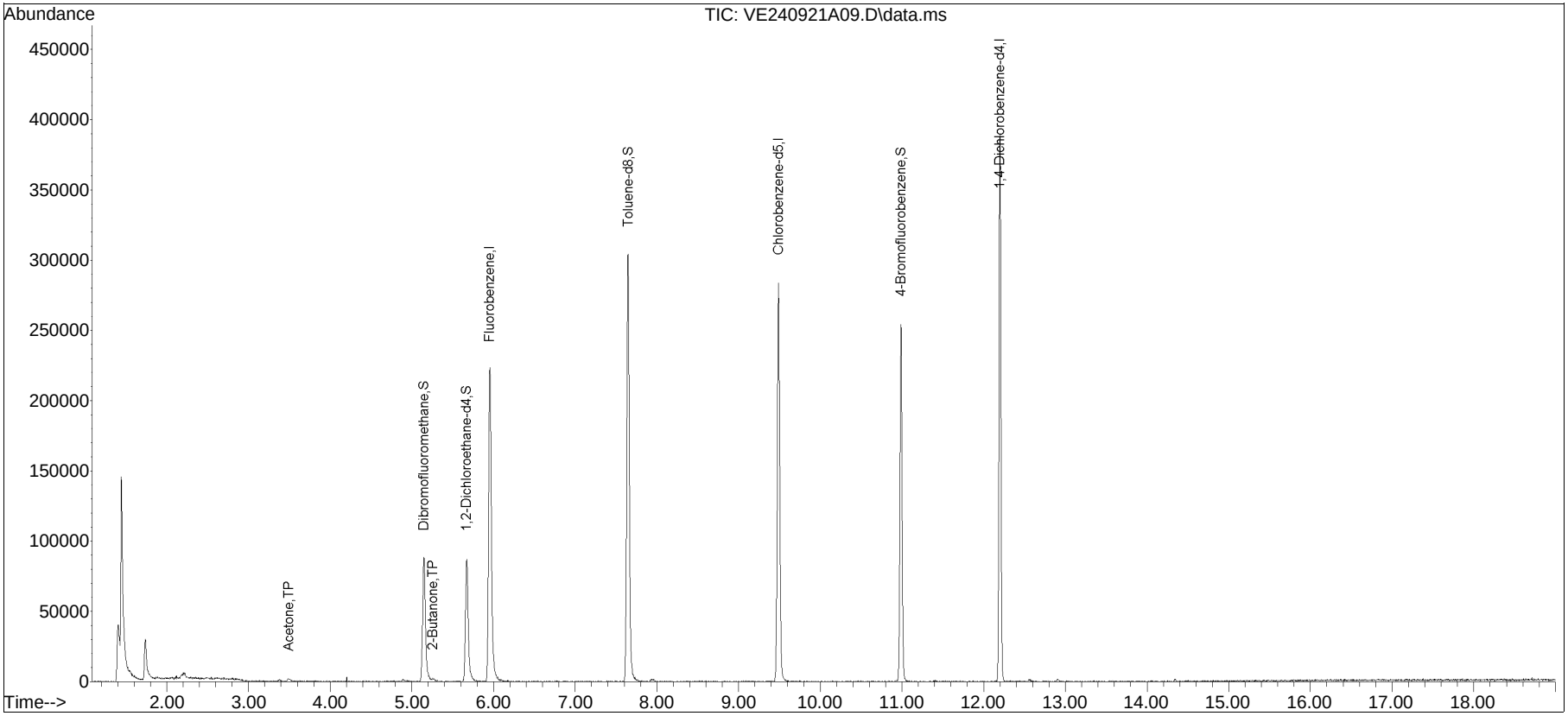
(#) = qualifier out of range (m) = manual integration (+) = signals summed

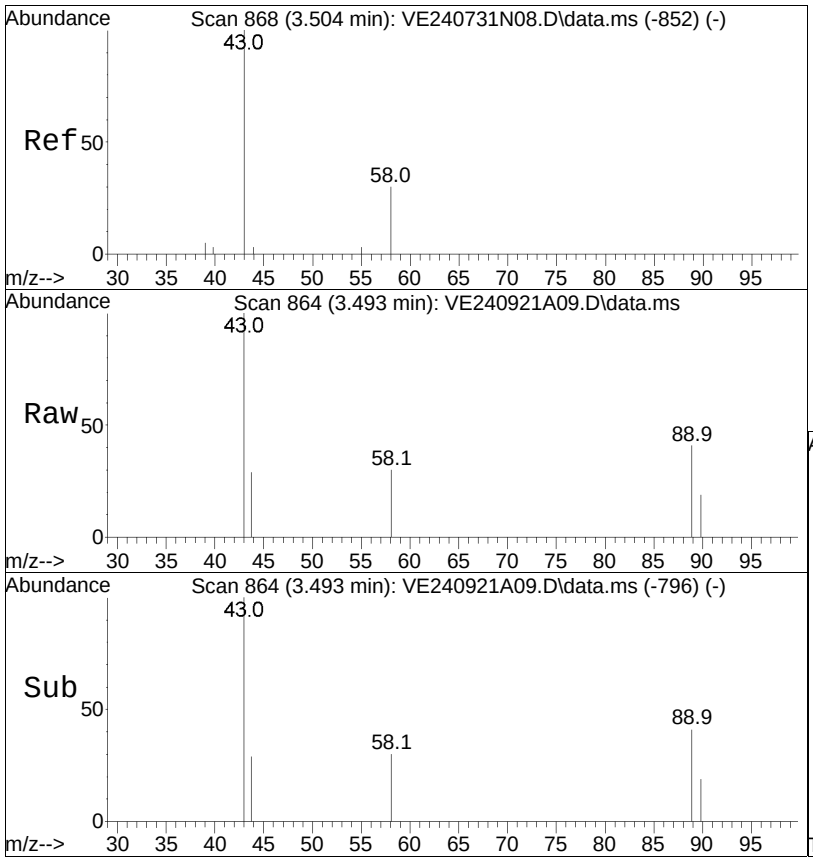
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A09.D
Acq On : 21 Sep 2024 10:28 am
Operator : ELAINE:MJV
Sample : l2453053-01,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 23 07:42:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

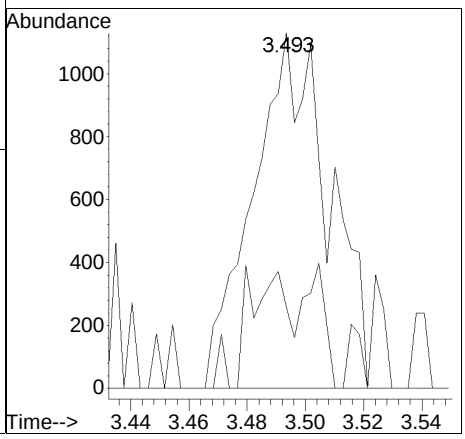


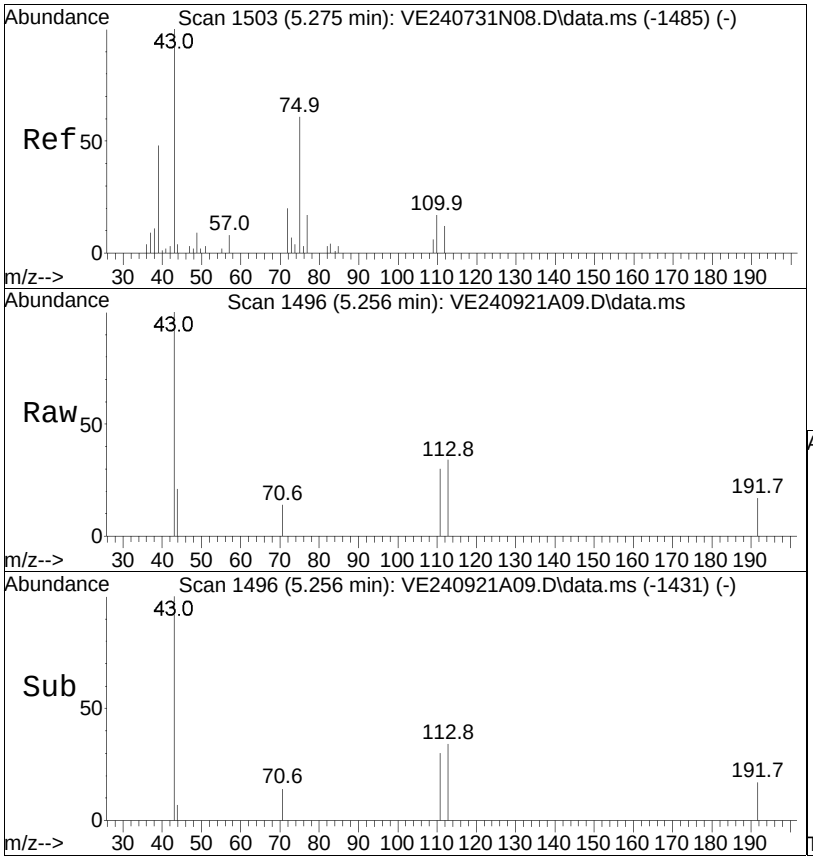



#17
Acetone
Concen: 1.12 ug/L M3
RT: 3.493 min Scan# 864
Delta R.T. -0.011 min
Lab File: VE240921A09.D
Acq: 21 Sep 2024 10:28 am

Tgt Ion: 43 Resp: 2035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 1.4 | 23.4 | 35.0# |

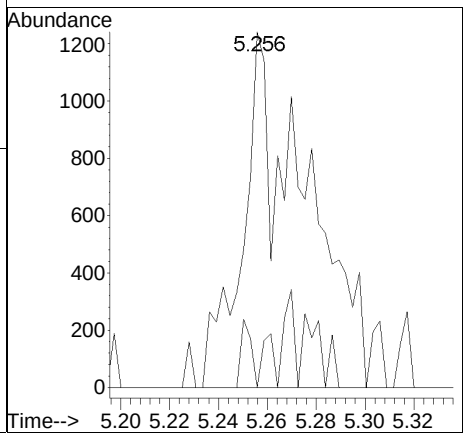





#42
2-Butanone
Concen: 0.85 ug/L M3
RT: 5.256 min Scan# 1496
Delta R.T. -0.019 min
Lab File: VE240921A09.D
Acq: 21 Sep 2024 10:28 am

Tgt Ion: 43 Resp: 2208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 4.4 | 15.7 | 23.5# |

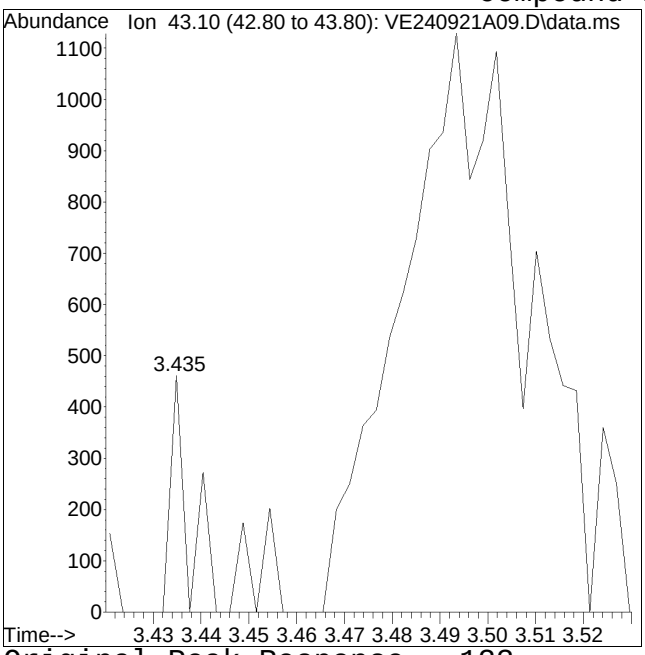


# Manual Integration Report

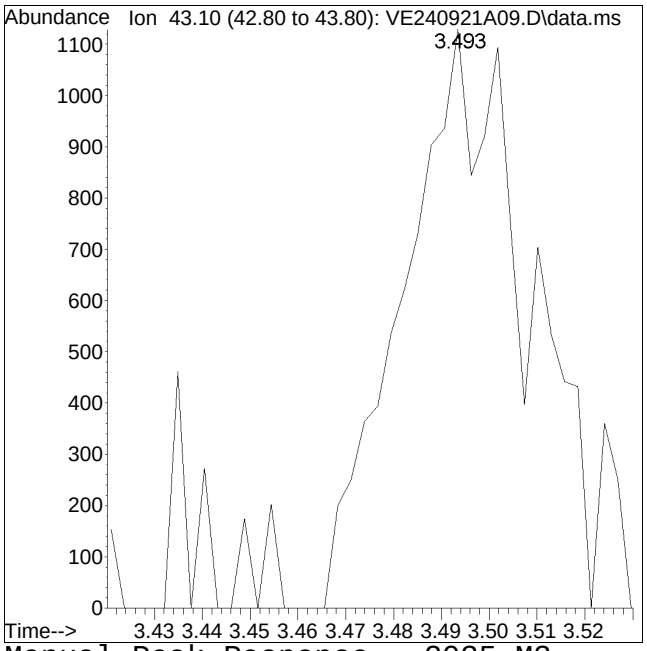
Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A09.D
Date Inj'd : 9/21/2024 10:28 am
Sample : l2453053-01,31,10,10,,a

QMethod : Elaine_240731N_8260.m
Operator : ELAINE:MJV
Instrument : Elaine
Quant Date : 9/23/2024 7:30 am

## Compound #17: Acetone




Original Peak Response = 123




Manual Peak Response = 2035 M3

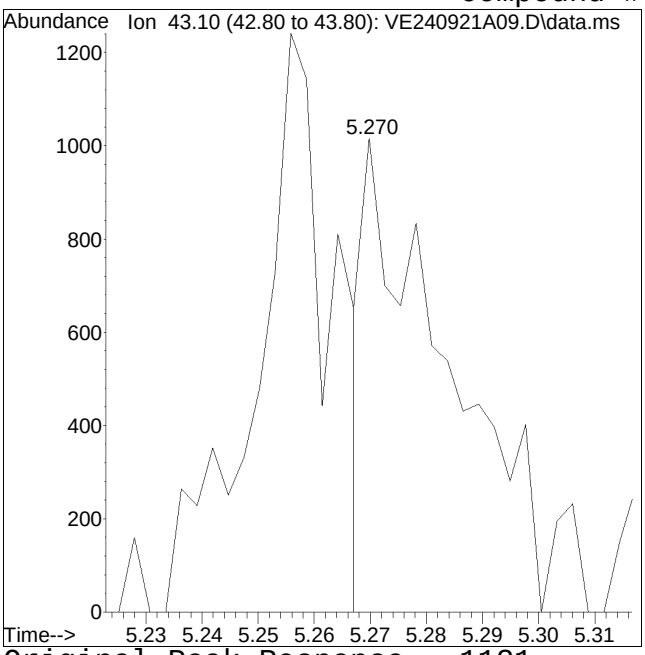
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

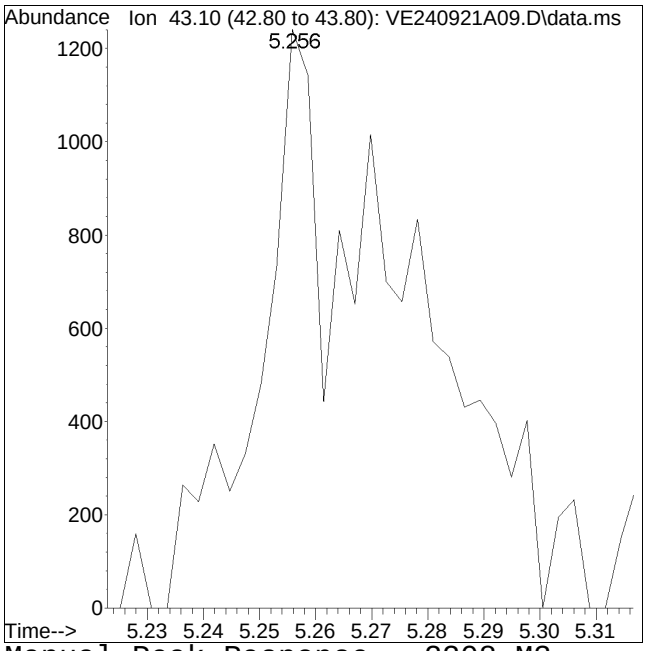
Manual Integration Report

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A09.D
Date Inj'd : 9/21/2024 10:28 am
Sample : l2453053-01,31,10,10,,a

QMethod : Elaine_240731N_8260.m
Operator : ELAINE:MJV
Instrument : Elaine
Quant Date : 9/23/2024 7:30 am

Compound #42: 2-Butanone




Original Peak Response = 1121 Manual Peak Response = 2208 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A10.D
Acq On : 21 Sep 2024 10:53 am
Operator : ELAINE:MJV
Sample : l2453053-02,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 07:42:48 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 245347 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 93.39% | | | |
| 63) Chlorobenzene-d5 | 9.486 | 117 | 187382 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 94.87% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.200 | 152 | 106556 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 92.24% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.150 | 113 | 62384 | 10.862 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 108.62% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.671 | 65 | 72725 | 9.489 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 94.89% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 240945 | 9.762 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.62% | | | |
| 88) 4-Bromofluorobenzene | 10.987 | 95 | 87411 | 8.880 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.410 | 85 | 164 | N.D. | | |
| 3) Chloromethane | 1.776 | 50 | 159 | N.D. | | |
| 4) Vinyl chloride | 1.954 | 62 | 26 | N.D. | | |
| 5) Bromomethane | 0.000 | | 0 | N.D. | | |
| 6) Chloroethane | 2.272 | 64 | 112 | N.D. | | |
| 7) Trichlorofluoromethane | 2.434 | 101 | 33 | N.D. | | |
| 10) 1,1-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 11) Carbon disulfide | 2.933 | 76 | 107 | N.D. | | |
| 12) Freon-113 | 3.047 | 101 | 26 | N.D. | | |
| 15) Methylene chloride | 0.000 | | 0 | N.D. | | |
| 17) Acetone | 0.000 | | 0 | N.D. | d | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 3.605 | 43 | 25 | N.D. | | |
| 21) Methyl tert-butyl ether | 3.803 | 73 | 29 | N.D. | | |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 30 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.782 | 96 | 35 | N.D. | | |
| 33) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 34) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 35) Chloroform | 4.963 | 83 | 1287 | 0.157 | ug/L # | 47 |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A10.D
Acq On : 21 Sep 2024 10:53 am
Operator : ELAINE:MJV
Sample : l2453053-02,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 07:42:48 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 0.000 | | 0 | N.D. | | |
| 42) 2-Butanone | 0.000 | | 0 | N.D. | d | |
| 45) Benzene | 0.000 | | 0 | N.D. | | |
| 48) 1,2-Dichloroethane | 5.644 | 62 | 48 | N.D. | | |
| 51) Methyl cyclohexane | 0.000 | | 0 | N.D. | | |
| 52) Trichloroethene | 0.000 | | 0 | N.D. | | |
| 55) 1,2-Dichloropropane | 0.000 | | 0 | N.D. | | |
| 58) Bromodichloromethane | 0.000 | | 0 | N.D. | | |
| 62) cis-1,3-Dichloropropene | 7.621 | 75 | 34 | N.D. | | |
| 65) Toluene | 7.699 | 92 | 64 | N.D. | | |
| 66) 4-Methyl-2-pentanone | 0.000 | | 0 | N.D. | | |
| 67) Tetrachloroethene | 0.000 | | 0 | N.D. | | |
| 69) trans-1,3-Dichloropropene | 0.000 | | 0 | N.D. | | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | N.D. | | |
| 73) Chlorodibromomethane | 0.000 | | 0 | N.D. | | |
| 75) 1,2-Dibromoethane | 0.000 | | 0 | N.D. | | |
| 77) 2-Hexanone | 9.143 | 43 | 44 | N.D. | | |
| 78) Chlorobenzene | 9.483 | 112 | 27 | N.D. | | |
| 79) Ethylbenzene | 9.545 | 91 | 55 | N.D. | | |
| 81) p/m Xylene | 0.000 | | 0 | N.D. | | |
| 82) o Xylene | 0.000 | | 0 | N.D. | | |
| 83) Styrene | 0.000 | | 0 | N.D. | | |
| 85) Bromoform | 0.000 | | 0 | N.D. | | |
| 87) Isopropylbenzene | 0.000 | | 0 | N.D. | | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | N.D. | | |
| 105) 1,3-Dichlorobenzene | 12.202 | 146 | 30 | N.D. | | |
| 106) 1,4-Dichlorobenzene | 12.214 | 146 | 66 | N.D. | | |
| 109) 1,2-Dichlorobenzene | 12.640 | 146 | 70 | N.D. | | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | N.D. | | |
| 114) 1,2,4-Trichlorobenzene | 14.043 | 180 | 26 | N.D. | | |
| 116) 1,2,3-Trichlorobenzene | 14.500 | 180 | 32 | N.D. | | |

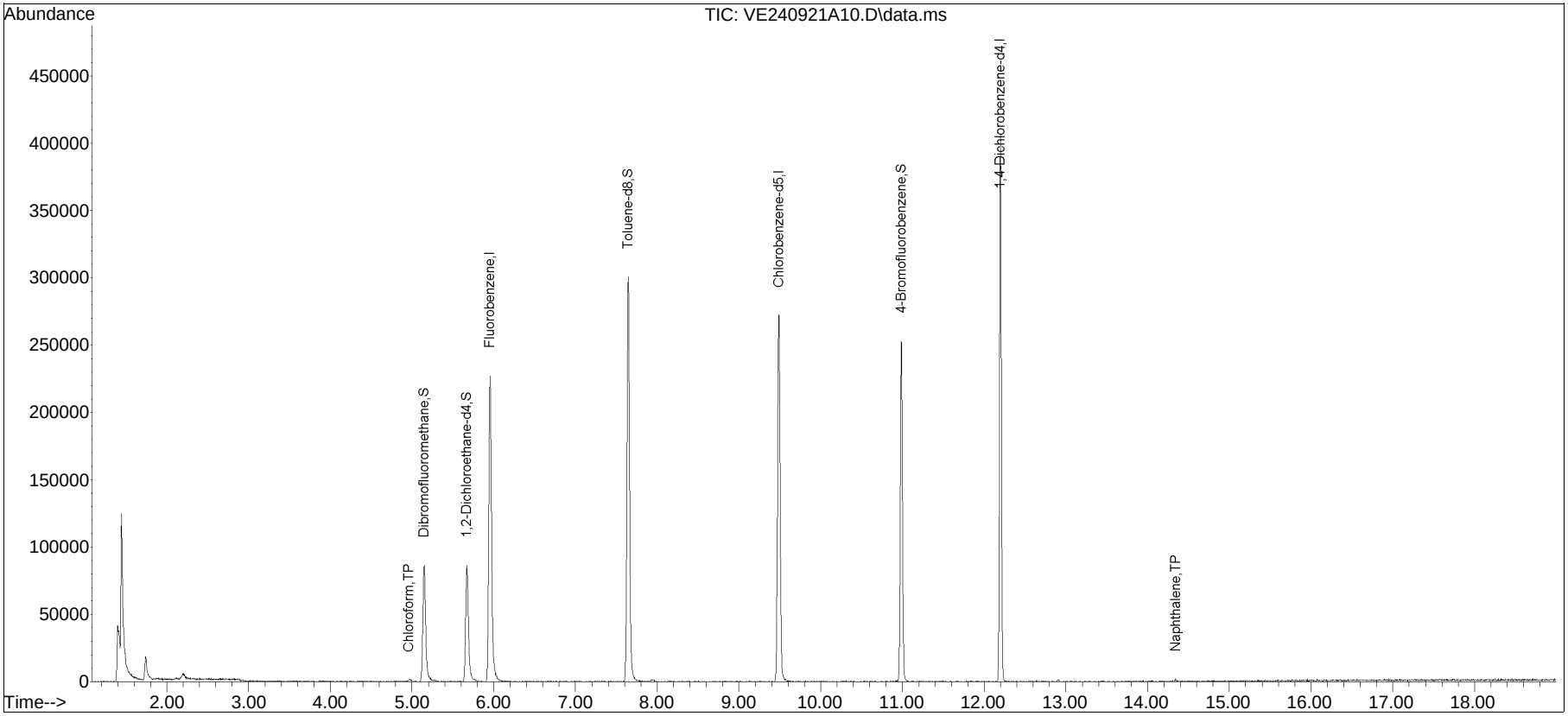
(#) = qualifier out of range (m) = manual integration (+) = signals summed

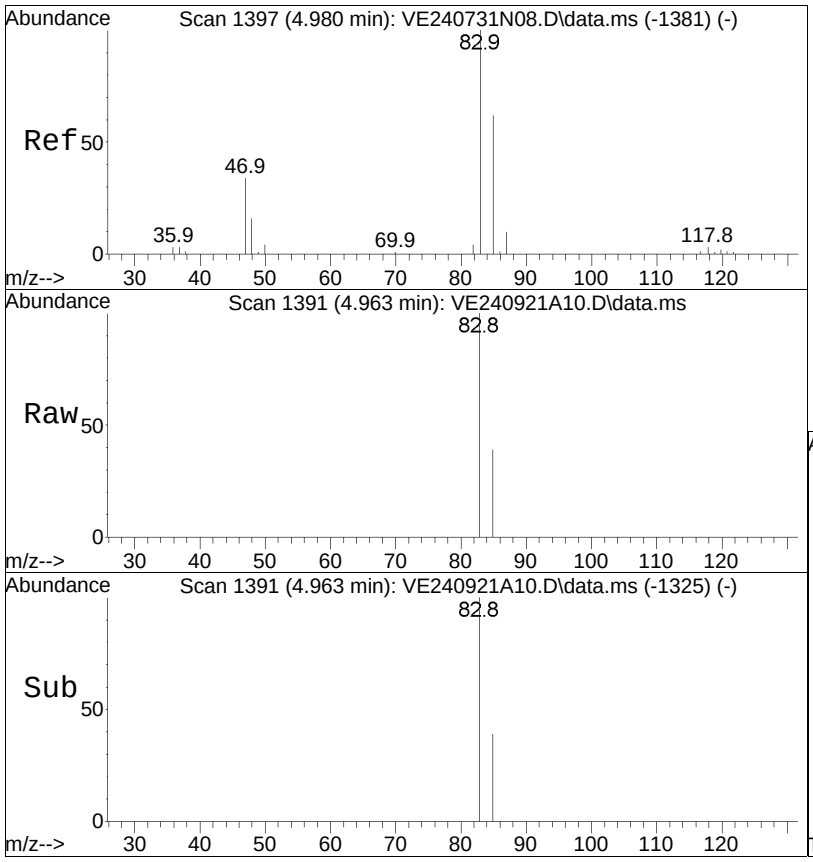
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A10.D
Acq On : 21 Sep 2024 10:53 am
Operator : ELAINE:MJV
Sample : l2453053-02,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 07:42:48 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

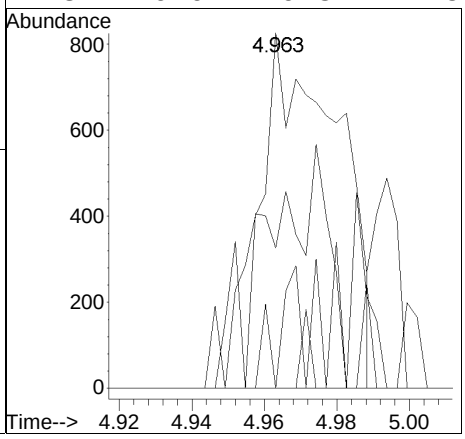





#35
Chloroform
Concen: 0.16 ug/L
RT: 4.963 min Scan# 1391
Delta R.T. -0.017 min
Lab File: VE240921A10.D
Acq: 21 Sep 2024 10:53 am

Tgt Ion: 83 Resp: 1287

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 14.8 | 41.3 | 85.9# |
| 47 | 9.2 | 20.9 | 43.3# |
| 48 | 0.0 | 10.3 | 21.5# |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\Elaine\2024\240921A\ | QMethod | : Elaine_240731N_8260.m |
| Data File | : VE240921A10.D | Operator | : ELAINE:MJV |
| Date Inj'd | : 9/21/2024 10:53 am | Instrument | : Elaine |
| Sample | : l2453053-02,31,10,10,,a | Quant Date | : 9/23/2024 7:30 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A11.D
Acq On : 21 Sep 2024 11:17 am
Operator : ELAINE:MJV
Sample : l2453053-03,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 07:43:11 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 244546 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 93.08% | | | |
| 63) Chlorobenzene-d5 | 9.486 | 117 | 185034 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 93.68% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.200 | 152 | 106204 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 91.94% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 61110 | 10.675 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.75% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.674 | 65 | 72849 | 9.537 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.37% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 239119 | 9.811 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.11% | | | |
| 88) 4-Bromofluorobenzene | 10.984 | 95 | 86420 | 8.809 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.09% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.422 | 85 | 29 | N.D. | | |
| 3) Chloromethane | 1.776 | 50 | 61 | N.D. | | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | | |
| 5) Bromomethane | 0.000 | | 0 | N.D. | | |
| 6) Chloroethane | 2.191 | 64 | 76 | N.D. | | |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | | |
| 10) 1,1-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 11) Carbon disulfide | 2.922 | 76 | 33 | N.D. | | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | | |
| 15) Methylene chloride | 0.000 | | 0 | N.D. | | |
| 17) Acetone | 3.488 | 43 | 857M1 | 0.478 | ug/L | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 0.000 | | 0 | N.D. | d | |
| 21) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | | |
| 25) 1,1-Dichloroethane | 0.000 | | 0 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.771 | 96 | 35 | N.D. | | |
| 33) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 34) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 35) Chloroform | 0.000 | | 0 | N.D. | | |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A11.D
Acq On : 21 Sep 2024 11:17 am
Operator : ELAINE:MJV
Sample : l2453053-03,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 07:43:11 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 42) 2-Butanone | 5.284 | 43 | 26 | | N.D. | |
| 45) Benzene | 5.546 | 78 | 41 | | N.D. | |
| 48) 1,2-Dichloroethane | 5.730 | 62 | 43 | | N.D. | |
| 51) Methyl cyclohexane | 0.000 | | 0 | | N.D. | |
| 52) Trichloroethene | 6.034 | 95 | 295 | | N.D. | |
| 55) 1,2-Dichloropropane | 6.667 | 63 | 27 | | N.D. | |
| 58) Bromodichloromethane | 0.000 | | 0 | | N.D. | |
| 62) cis-1,3-Dichloropropene | 7.621 | 75 | 36 | | N.D. | |
| 65) Toluene | 7.704 | 92 | 33 | | N.D. | |
| 66) 4-Methyl-2-pentanone | 0.000 | | 0 | | N.D. | |
| 67) Tetrachloroethene | 8.159 | 166 | 33 | | N.D. | |
| 69) trans-1,3-Dichloropropene | 8.304 | 75 | 28 | | N.D. | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 73) Chlorodibromomethane | 0.000 | | 0 | | N.D. | |
| 75) 1,2-Dibromoethane | 0.000 | | 0 | | N.D. | |
| 77) 2-Hexanone | 9.205 | 43 | 28 | | N.D. | |
| 78) Chlorobenzene | 0.000 | | 0 | | N.D. | |
| 79) Ethylbenzene | 9.489 | 91 | 113 | | N.D. | |
| 81) p/m Xylene | 9.746 | 106 | 37 | | N.D. | |
| 82) o Xylene | 0.000 | | 0 | | N.D. | |
| 83) Styrene | 10.337 | 104 | 29 | | N.D. | |
| 85) Bromoform | 0.000 | | 0 | | N.D. | |
| 87) Isopropylbenzene | 10.655 | 105 | 30 | | N.D. | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | | N.D. | |
| 105) 1,3-Dichlorobenzene | 12.202 | 146 | 32 | | N.D. | |
| 106) 1,4-Dichlorobenzene | 12.216 | 146 | 43 | | N.D. | |
| 109) 1,2-Dichlorobenzene | 12.651 | 146 | 85 | | N.D. | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | | N.D. | |
| 114) 1,2,4-Trichlorobenzene | 14.057 | 180 | 77 | | N.D. | |
| 116) 1,2,3-Trichlorobenzene | 14.511 | 180 | 41 | | N.D. | |

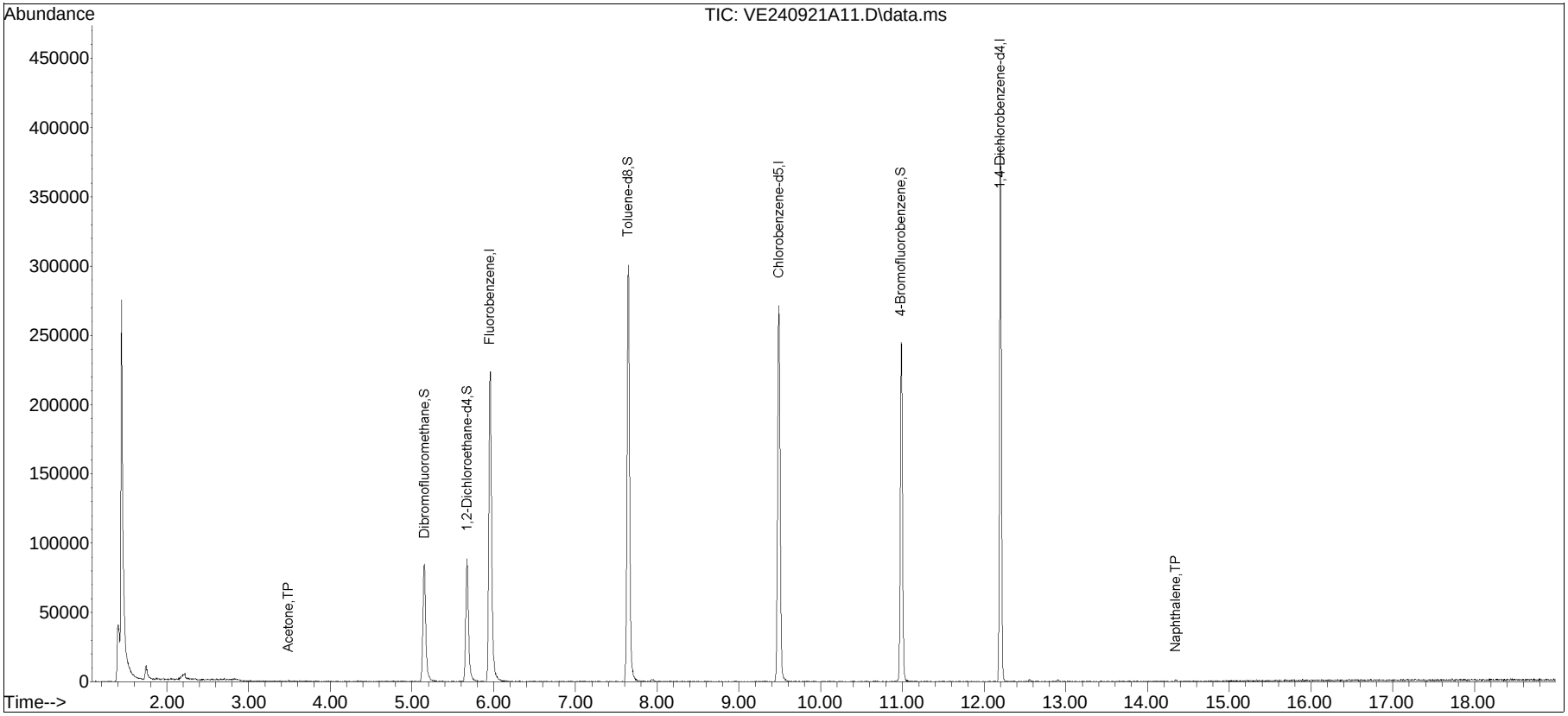
(#) = qualifier out of range (m) = manual integration (+) = signals summed

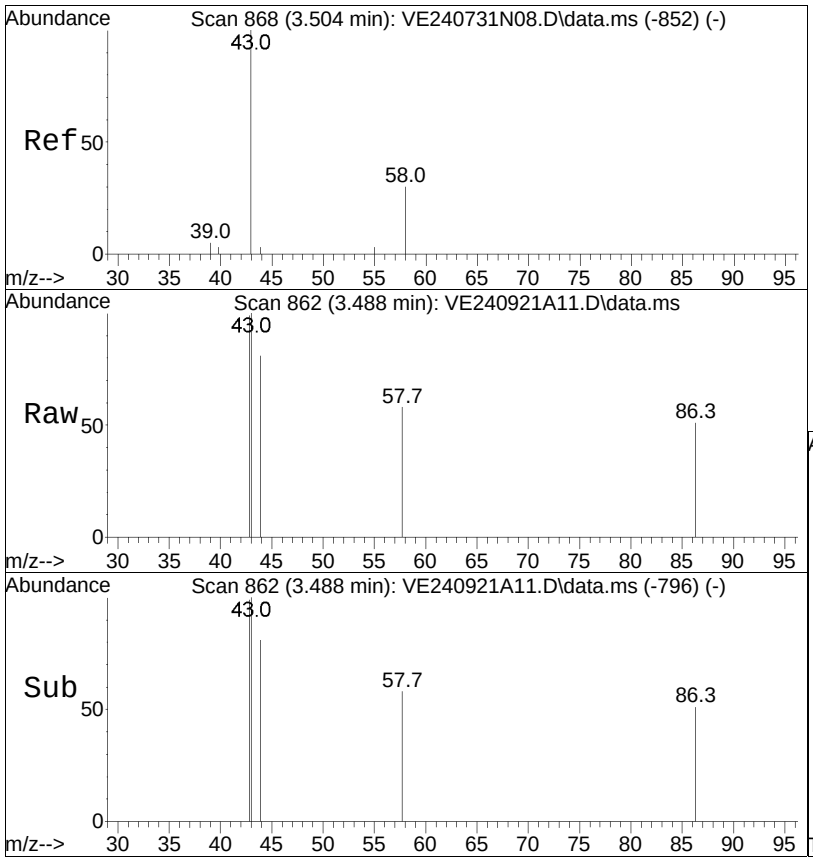
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A11.D
Acq On : 21 Sep 2024 11:17 am
Operator : ELAINE:MJV
Sample : l2453053-03,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 07:43:11 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

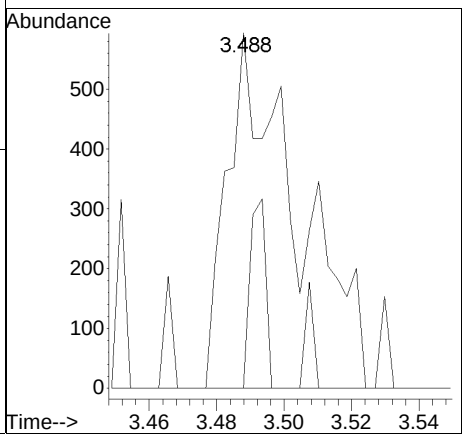





#17
Acetone
Concen: 0.48 ug/L M1
RT: 3.488 min Scan# 862
Delta R.T. -0.016 min
Lab File: VE240921A11.D
Acq: 21 Sep 2024 11:17 am

Tgt Ion: 43 Resp: 857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 11.9 | 23.4 | 35.0# |

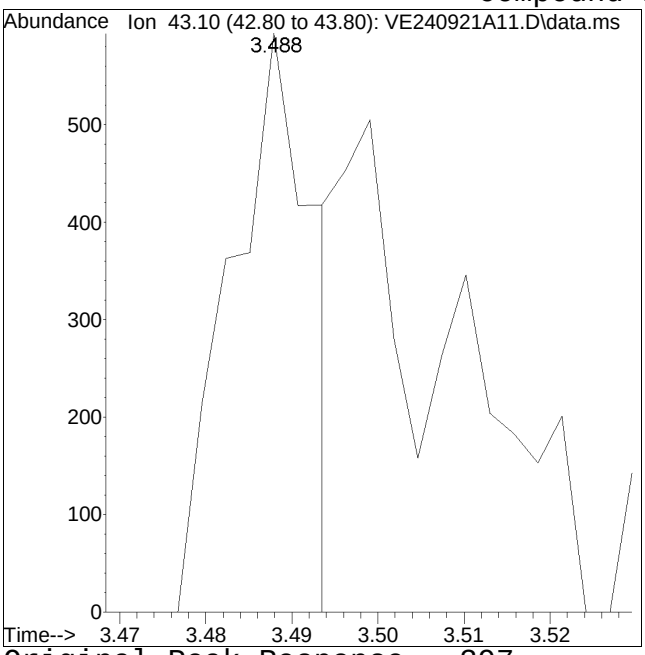


# Manual Integration Report

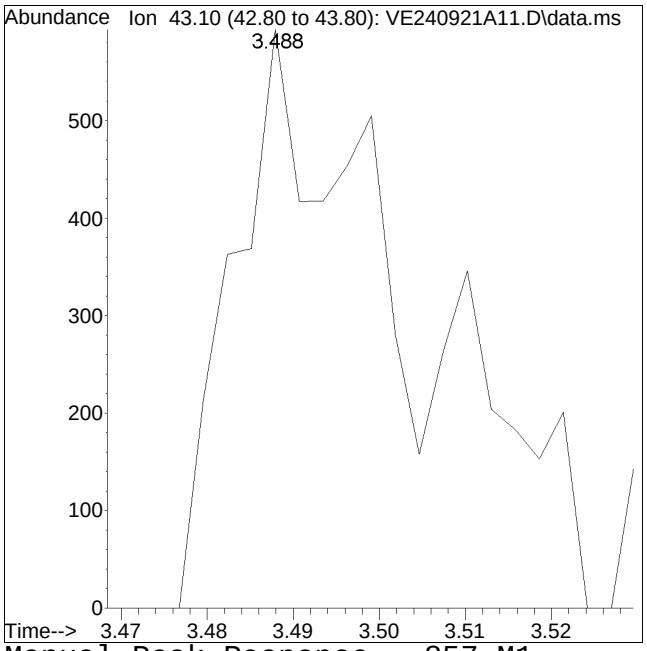
Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A11.D
Date Inj'd : 9/21/2024 11:17 am
Sample : l2453053-03,31,10,10,,a

QMethod : Elaine_240731N_8260.m
Operator : ELAINE:MJV
Instrument : Elaine
Quant Date : 9/23/2024 7:30 am

## Compound #17: Acetone




Original Peak Response = 397




Manual Peak Response = 857 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A12.D
Acq On : 21 Sep 2024 11:42 am
Operator : ELAINE:MJV
Sample : l2453053-04,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 23 07:43:21 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 242710 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 92.38% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 187067 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 94.71% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.197 | 152 | 105204 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 115520 | | | Recovery = 91.07% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.147 | 113 | 62800 | 11.053 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 110.53% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.671 | 65 | 73956 | 9.755 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.55% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 240389 | 9.756 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.56% | | | |
| 88) 4-Bromofluorobenzene | 10.987 | 95 | 87333 | 8.986 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 89.86% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.416 | 85 | 90 | N.D. | | |
| 3) Chloromethane | 1.770 | 50 | 56 | N.D. | | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | | |
| 5) Bromomethane | 2.160 | 94 | 26 | 0.339 | ug/L # | 13 |
| 6) Chloroethane | 0.000 | | 0 | N.D. d | | |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | | |
| 10) 1,1-Dichloroethene | 2.721 | 96 | 26 | N.D. | | |
| 11) Carbon disulfide | 2.927 | 76 | 100 | N.D. | | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | | |
| 15) Methylene chloride | 0.000 | | 0 | N.D. | | |
| 17) Acetone | 3.374 | 43 | 78 | N.D. | | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 3.616 | 43 | 35 | N.D. | | |
| 21) Methyl tert-butyl ether | 3.703 | 73 | 344 | N.D. | | |
| 25) 1,1-Dichloroethane | 4.255 | 63 | 26 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.787 | 96 | 25 | N.D. | | |
| 33) Bromochloromethane | 4.846 | 128 | 33 | N.D. | | |
| 34) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 35) Chloroform | 0.000 | | 0 | N.D. | | |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A12.D
Acq On : 21 Sep 2024 11:42 am
Operator : ELAINE:MJV
Sample : l2453053-04,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 23 07:43:21 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 42) 2-Butanone | 5.275 | 43 | 55 | | N.D. | |
| 45) Benzene | 0.000 | | 0 | | N.D. | |
| 48) 1,2-Dichloroethane | 0.000 | | 0 | | N.D. | |
| 51) Methyl cyclohexane | 5.945 | 83 | 26 | | N.D. | |
| 52) Trichloroethene | 6.037 | 95 | 128 | | N.D. | |
| 55) 1,2-Dichloropropane | 6.798 | 63 | 25 | | N.D. | |
| 58) Bromodichloromethane | 6.561 | 83 | 31 | | N.D. | |
| 62) cis-1,3-Dichloropropene | 7.615 | 75 | 29 | | N.D. | |
| 65) Toluene | 7.704 | 92 | 30 | | N.D. | |
| 66) 4-Methyl-2-pentanone | 0.000 | | 0 | | N.D. | |
| 67) Tetrachloroethene | 0.000 | | 0 | | N.D. | |
| 69) trans-1,3-Dichloropropene | 0.000 | | 0 | | N.D. | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 73) Chlorodibromomethane | 0.000 | | 0 | | N.D. | |
| 75) 1,2-Dibromoethane | 8.856 | 107 | 27 | | N.D. | |
| 77) 2-Hexanone | 9.146 | 43 | 28 | | N.D. | |
| 78) Chlorobenzene | 0.000 | | 0 | | N.D. | |
| 79) Ethylbenzene | 9.500 | 91 | 33 | | N.D. | |
| 81) p/m Xylene | 9.734 | 106 | 29 | | N.D. | |
| 82) o Xylene | 0.000 | | 0 | | N.D. | |
| 83) Styrene | 10.214 | 104 | 26 | | N.D. | |
| 85) Bromoform | 0.000 | | 0 | | N.D. | |
| 87) Isopropylbenzene | 0.000 | | 0 | | N.D. | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | | N.D. | |
| 105) 1,3-Dichlorobenzene | 12.202 | 146 | 35 | | N.D. | |
| 106) 1,4-Dichlorobenzene | 12.211 | 146 | 71 | | N.D. | |
| 109) 1,2-Dichlorobenzene | 12.632 | 146 | 27 | | N.D. | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | | N.D. | |
| 114) 1,2,4-Trichlorobenzene | 0.000 | | 0 | | N.D. | |
| 116) 1,2,3-Trichlorobenzene | 0.000 | | 0 | | N.D. | |

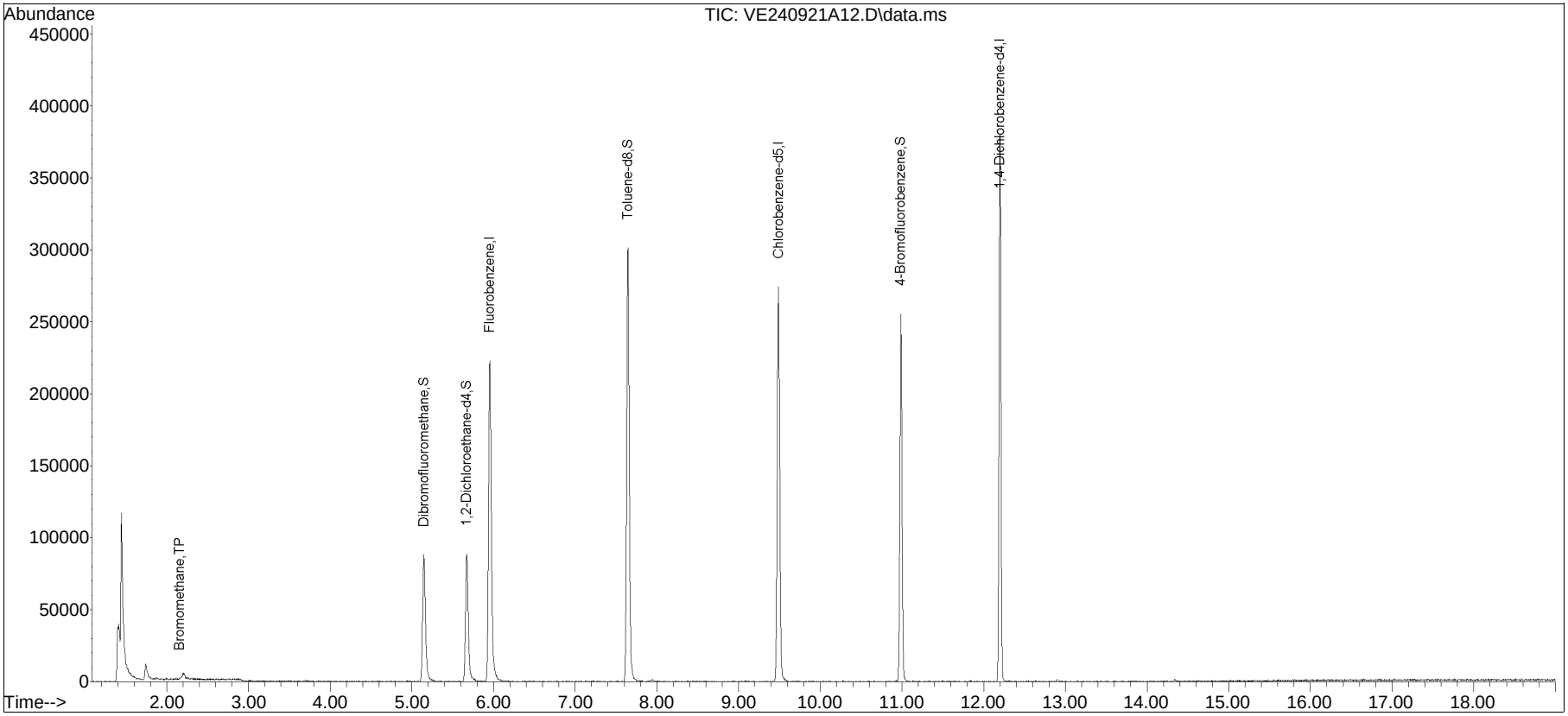
(#) = qualifier out of range (m) = manual integration (+) = signals summed

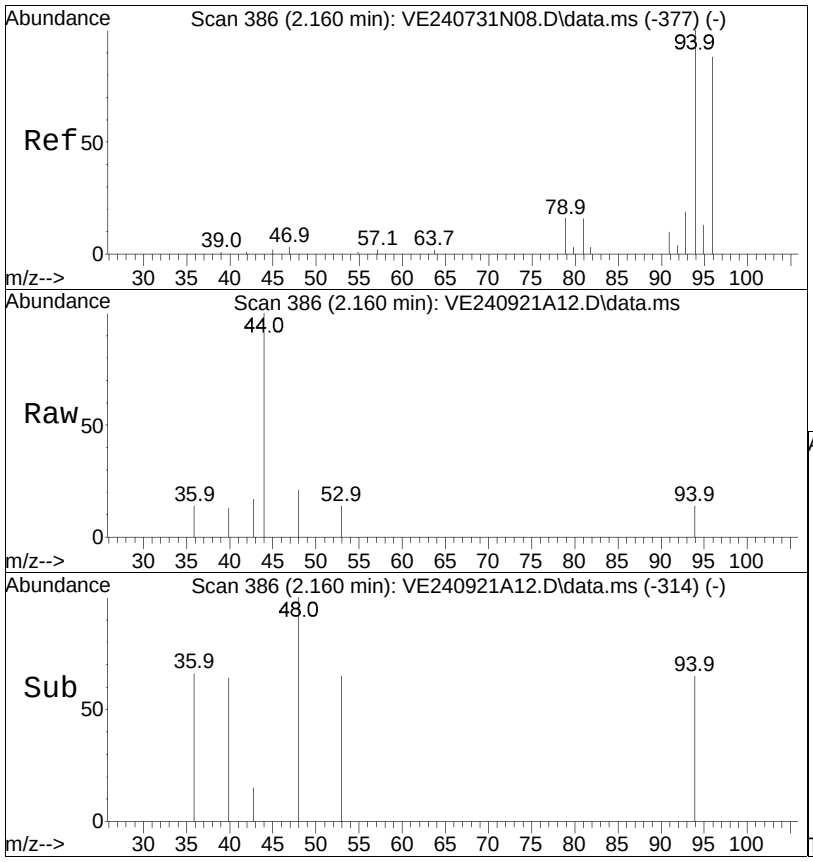
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A12.D
Acq On : 21 Sep 2024 11:42 am
Operator : ELAINE:MJV
Sample : l2453053-04,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 23 07:43:21 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

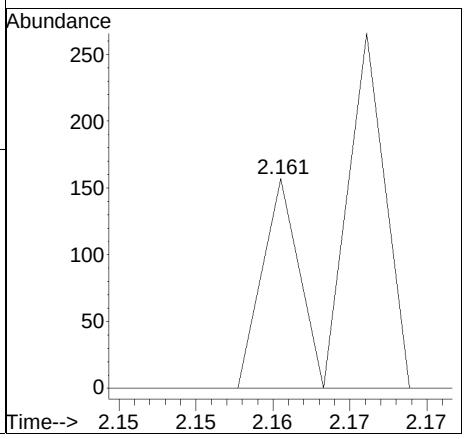





#5
Bromomethane
Concen: 0.34 ug/L
RT: 2.160 min Scan# 386
Delta R.T. 0.000 min
Lab File: VE240921A12.D
Acq: 21 Sep 2024 11:42 am

Tgt Ion: 94 Resp: 26

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 169.2 | 68.2 | 108.2# |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\Elaine\2024\240921A\ | QMethod | : Elaine_240731N_8260.m |
| Data File | : VE240921A12.D | Operator | : ELAINE:MJV |
| Date Inj'd | : 9/21/2024 11:42 am | Instrument | : Elaine |
| Sample | : l2453053-04,31,10,10,,a | Quant Date | : 9/23/2024 7:30 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A13.D
Acq On : 21 Sep 2024 12:07 pm
Operator : ELAINE:MJV
Sample : l2453053-05,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:44:18 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 242893 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 92.45% | | | |
| 63) Chlorobenzene-d5 | 9.486 | 117 | 184245 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 93.28% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.202 | 152 | 105431 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 91.27% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 61631 | 10.839 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 108.39% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.674 | 65 | 73266 | 9.657 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.57% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 243183 | 10.020 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.20% | | | |
| 88) 4-Bromofluorobenzene | 10.989 | 95 | 85816 | 8.811 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.11% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.589 | 85 | 34 | N.D. | | |
| 3) Chloromethane | 1.781 | 50 | 58 | N.D. | | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | | |
| 5) Bromomethane | 0.000 | | 0 | N.D. | d | |
| 6) Chloroethane | 0.000 | | 0 | N.D. | d | |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | | |
| 10) 1,1-Dichloroethene | 2.900 | 96 | 26 | N.D. | | |
| 11) Carbon disulfide | 2.941 | 76 | 29 | N.D. | | |
| 12) Freon-113 | 2.916 | 101 | 28 | N.D. | | |
| 15) Methylene chloride | 3.410 | 84 | 28 | N.D. | | |
| 17) Acetone | 0.000 | | 0 | N.D. | d | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 3.613 | 43 | 30 | N.D. | | |
| 21) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | | |
| 25) 1,1-Dichloroethane | 4.202 | 63 | 32 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.748 | 96 | 29 | N.D. | | |
| 33) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 34) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 35) Chloroform | 4.969 | 83 | 391 | N.D. | | |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A13.D
Acq On : 21 Sep 2024 12:07 pm
Operator : ELAINE:MJV
Sample : l2453053-05,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:44:18 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 5.161 | 97 | 25 | N.D. | | |
| 42) 2-Butanone | 5.259 | 43 | 41 | N.D. | | |
| 45) Benzene | 5.716 | 78 | 29 | N.D. | | |
| 48) 1,2-Dichloroethane | 5.750 | 62 | 41 | N.D. | | |
| 51) Methyl cyclohexane | 6.017 | 83 | 34 | N.D. | | |
| 52) Trichloroethene | 0.000 | | 0 | N.D. | d | |
| 55) 1,2-Dichloropropane | 0.000 | | 0 | N.D. | | |
| 58) Bromodichloromethane | 0.000 | | 0 | N.D. | | |
| 62) cis-1,3-Dichloropropene | 0.000 | | 0 | N.D. | | |
| 65) Toluene | 7.702 | 92 | 29 | N.D. | | |
| 66) 4-Methyl-2-pentanone | 0.000 | | 0 | N.D. | | |
| 67) Tetrachloroethene | 0.000 | | 0 | N.D. | | |
| 69) trans-1,3-Dichloropropene | 8.011 | 75 | 37 | N.D. | | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | N.D. | | |
| 73) Chlorodibromomethane | 0.000 | | 0 | N.D. | | |
| 75) 1,2-Dibromoethane | 0.000 | | 0 | N.D. | | |
| 77) 2-Hexanone | 9.132 | 43 | 40 | N.D. | | |
| 78) Chlorobenzene | 0.000 | | 0 | N.D. | | |
| 79) Ethylbenzene | 9.497 | 91 | 80 | N.D. | | |
| 81) p/m Xylene | 9.734 | 106 | 38 | N.D. | | |
| 82) o Xylene | 0.000 | | 0 | N.D. | | |
| 83) Styrene | 0.000 | | 0 | N.D. | | |
| 85) Bromoform | 10.460 | 173 | 30 | N.D. | | |
| 87) Isopropylbenzene | 10.713 | 105 | 35 | N.D. | | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | N.D. | | |
| 105) 1,3-Dichlorobenzene | 0.000 | | 0 | N.D. | | |
| 106) 1,4-Dichlorobenzene | 0.000 | | 0 | N.D. | | |
| 109) 1,2-Dichlorobenzene | 12.635 | 146 | 26 | N.D. | | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | N.D. | d | |
| 114) 1,2,4-Trichlorobenzene | 14.060 | 180 | 26 | N.D. | | |
| 116) 1,2,3-Trichlorobenzene | 14.503 | 180 | 40 | N.D. | | |

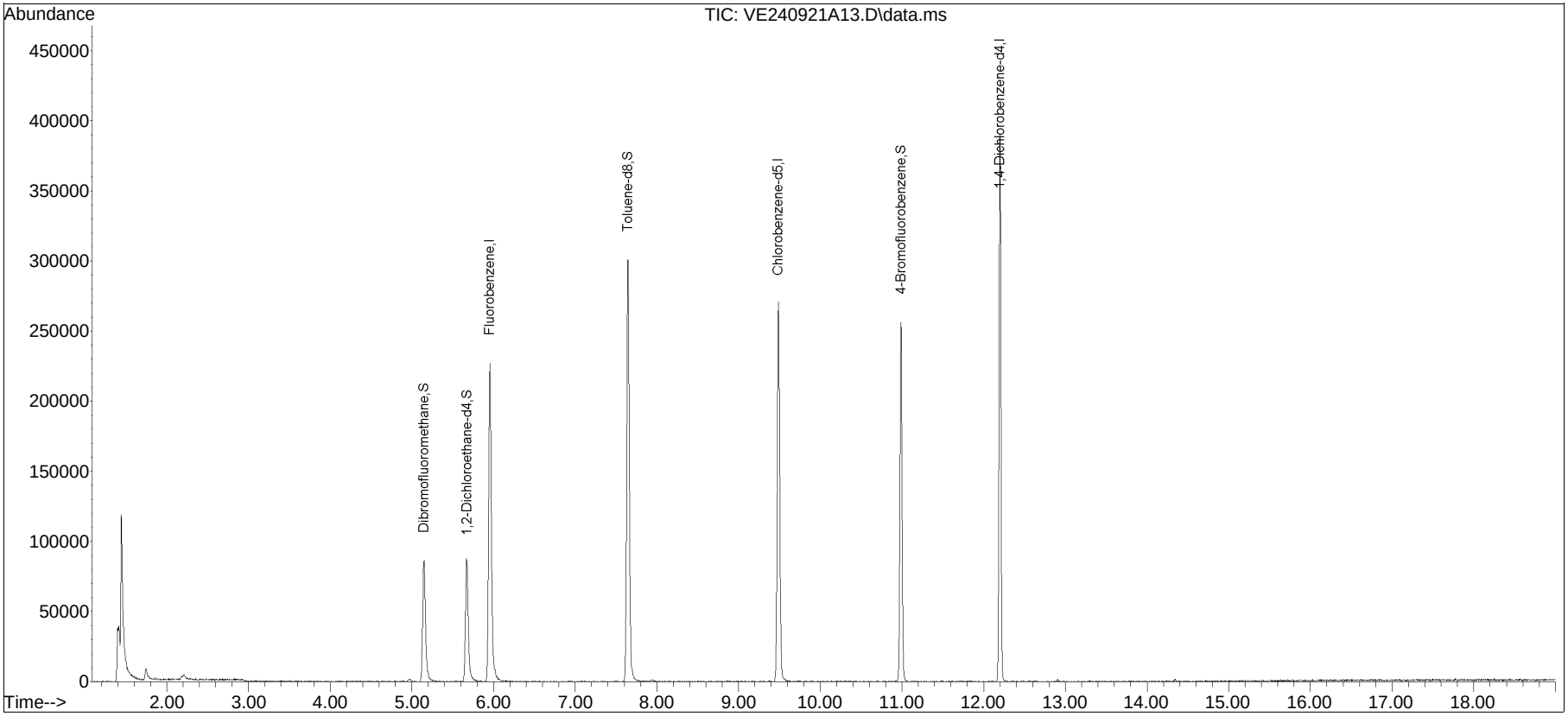
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A13.D
Acq On : 21 Sep 2024 12:07 pm
Operator : ELAINE:MJV
Sample : l2453053-05,31,10,10,,a
Misc : WG1974948,ICAL21358
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:44:18 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\Elaine\2024\240921A\ | QMethod | : Elaine_240731N_8260.m |
| Data File | : VE240921A13.D | Operator | : ELAINE:MJV |
| Date Inj'd | : 9/21/2024 12:07 pm | Instrument | : Elaine |
| Sample | : l2453053-05,31,10,10,,a | Quant Date | : 9/23/2024 7:30 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A13.D
Acq On : 22 Sep 2024 10:49 pm
Operator : VOA105:MJV
Sample : l2453053-06,31,10,10,,a
Misc : WG1974932,ICAL21466
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:05:02 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 429942 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 644553 | | | Recovery = 66.70% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 335933 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 502331 | | | Recovery = 66.87% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 199200 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 298302 | | | Recovery = 66.78% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 131227 | 10.922 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 109.22% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.411 | 65 | 132507 | 10.667 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.67% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 404142 | 9.961 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.61% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 143618 | 10.391 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 103.91% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.361 | 85 | 92 | N.D. | | |
| 3) Chloromethane | 0.000 | | 0 | N.D. | | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | | |
| 5) Bromomethane | 2.017 | 94 | 276 | N.D. | | |
| 6) Chloroethane | 2.154 | 64 | 125 | Below Cal # 41 | | |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | | |
| 10) 1,1-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 11) Carbon disulfide | 2.740 | 76 | 103 | N.D. | | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | | |
| 15) Methylene chloride | 0.000 | | 0 | N.D. | | |
| 17) Acetone | 0.000 | | 0 | N.D. d | | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 3.425 | 43 | 191 | N.D. | | |
| 20) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | | |
| 23) 1,1-Dichloroethane | 0.000 | | 0 | N.D. | | |
| 28) cis-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 30) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 31) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 32) Chloroform | 0.000 | | 0 | N.D. | | |
| 34) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A13.D
Acq On : 22 Sep 2024 10:49 pm
Operator : VOA105:MJV
Sample : l2453053-06,31,10,10,,a
Misc : WG1974932,ICAL21466
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:05:02 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 39) 2-Butanone | 0.000 | | 0 | | N.D. | |
| 41) Benzene | 0.000 | | 0 | | N.D. | |
| 44) 1,2-Dichloroethane | 0.000 | | 0 | | N.D. | |
| 47) Methyl cyclohexane | 0.000 | | 0 | | N.D. | |
| 48) Trichloroethene | 0.000 | | 0 | | N.D. | |
| 51) 1,2-Dichloropropane | 0.000 | | 0 | | N.D. | |
| 54) Bromodichloromethane | 0.000 | | 0 | | N.D. | |
| 58) cis-1,3-Dichloropropene | 0.000 | | 0 | | N.D. | |
| 61) Toluene | 7.416 | 92 | 322 | | N.D. | |
| 62) 4-Methyl-2-pentanone | 0.000 | | 0 | | N.D. | |
| 63) Tetrachloroethene | 0.000 | | 0 | | N.D. | |
| 65) trans-1,3-Dichloropropene | 0.000 | | 0 | | N.D. | |
| 68) 1,1,2-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 69) Chlorodibromomethane | 0.000 | | 0 | | N.D. | |
| 71) 1,2-Dibromoethane | 0.000 | | 0 | | N.D. | |
| 72) 2-Hexanone | 0.000 | | 0 | | N.D. | |
| 73) Chlorobenzene | 0.000 | | 0 | | N.D. | |
| 74) Ethylbenzene | 9.177 | 91 | 488 | | N.D. | |
| 76) p/m Xylene | 0.000 | | 0 | | N.D. | |
| 77) o Xylene | 0.000 | | 0 | | N.D. | |
| 78) Styrene | 0.000 | | 0 | | N.D. | |
| 80) Bromoform | 0.000 | | 0 | | N.D. | |
| 82) Isopropylbenzene | 0.000 | | 0 | | N.D. | |
| 87) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | | N.D. | |
| 100) 1,3-Dichlorobenzene | 0.000 | | 0 | | N.D. | |
| 101) 1,4-Dichlorobenzene | 0.000 | | 0 | | N.D. | |
| 104) 1,2-Dichlorobenzene | 0.000 | | 0 | | N.D. | |
| 106) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | | N.D. | |
| 109) 1,2,4-Trichlorobenzene | 0.000 | | 0 | | N.D. | |
| 111) 1,2,3-Trichlorobenzene | 0.000 | | 0 | | N.D. | |

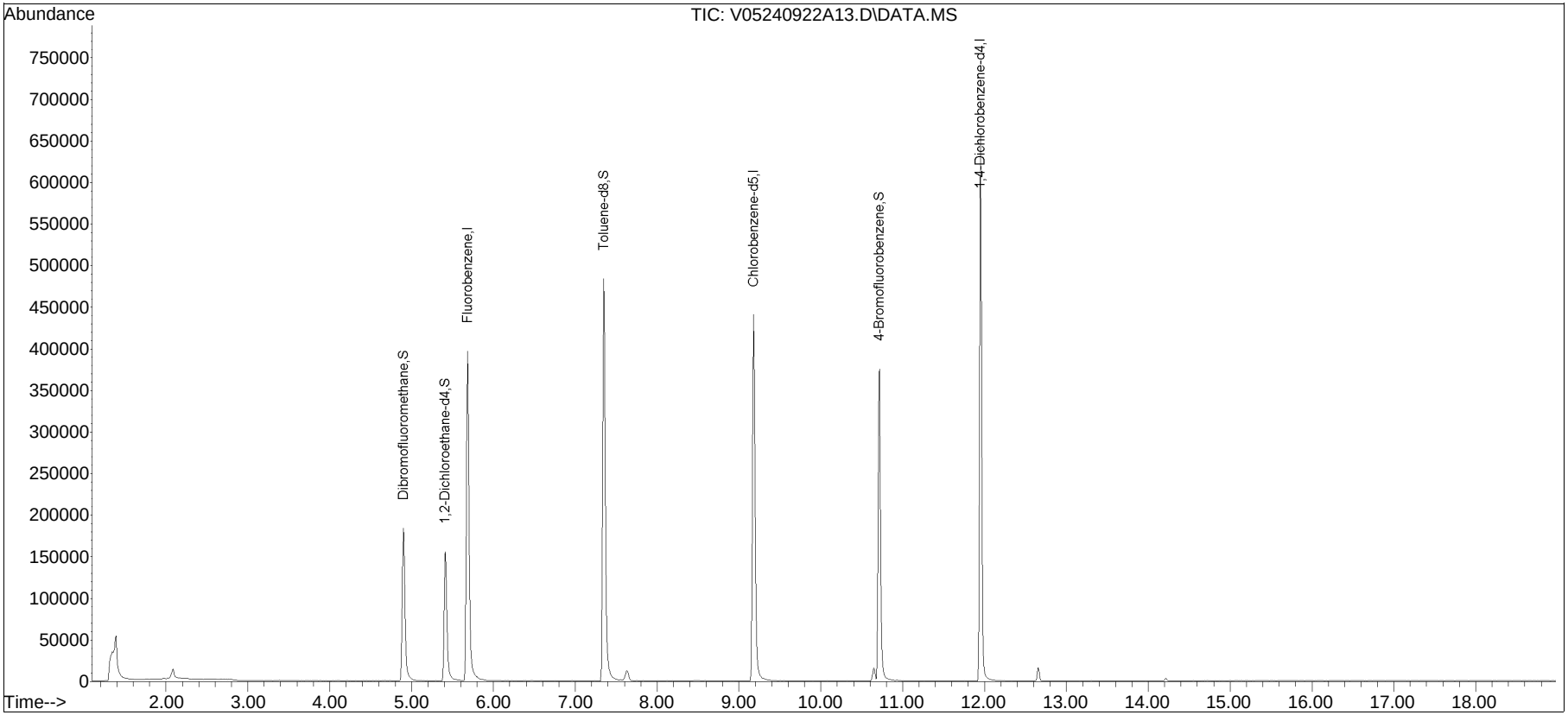
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A13.D
Acq On : 22 Sep 2024 10:49 pm
Operator : VOA105:MJV
Sample : l2453053-06,31,10,10,,a
Misc : WG1974932,ICAL21466
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 07:05:02 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\VOA105\2024\240922A\ | QMethod | : V105_240906N_8260.m |
| Data File | : V05240922A13.D | Operator | : VOA105:MJV |
| Date Inj'd | : 9/22/2024 10:49 pm | Instrument | : VOA105 |
| Sample | : l2453053-06,31,10,10,,a | Quant Date | : 9/23/2024 6:56 am |

There are no manual integrations or false positives in this file.

# Volatiles Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: ELAINE** | **Ical Ref** | **: ICAL21358** |
| **Calibration dates** | **: 07/31/24 18:35 07/31/24 22:22** | | |

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Fluorobenzene | ----------ISTD---------- | | | | | | | | | |
| 2) | TP | Dichlorodifluo | | 0.138 | 0.246 | 0.220 | 0.243 | 0.243 | 0.244 | 0.235 | 0.224 | 17.36 |
| 3) | TP | Chloromethane | | 0.199 | 0.251 | 0.263 | 0.261 | 0.259 | 0.260 | 0.256 | 0.250 | 9.09 |
| 4) | TP | Vinyl chloride | 0.163 | 0.159 | 0.248 | 0.243 | 0.263 | 0.260 | 0.265 | 0.260 | 0.233 | 19.30 |
| 5) | TP | Bromomethane | | 0.043 | 0.054 | 0.058 | 0.067 | 0.084 | 0.095 | 0.102 | *Q | 0.9983 |
| 6) | TP | Chloroethane | | 0.109 | 0.166 | 0.154 | 0.151 | 0.153 | 0.144 | 0.107 | 0.140 | 16.43 |
| 7) | TP | Trichlorofluor | | 0.189 | 0.262 | 0.254 | 0.291 | 0.294 | 0.295 | 0.287 | 0.267 | 14.21 |
| 8) | TP | Ethyl ether | | 0.098 | 0.094 | 0.106 | 0.111 | 0.111 | 0.108 | 0.108 | 0.105 | 6.41 |
| 10) | TP | 1,1-Dichloroet | | 0.128 | 0.165 | 0.154 | 0.168 | 0.170 | 0.170 | 0.165 | 0.160 | 9.41 |
| 11) | TP | Carbon disulfide | | 0.423 | 0.489 | 0.504 | 0.523 | 0.517 | 0.512 | 0.493 | 0.494 | 6.86 |
| 12) | TP | Freon-113 | | 0.120 | 0.172 | 0.163 | 0.178 | 0.178 | 0.183 | 0.175 | 0.167 | 13.06 |
| 13) | TP | Iodomethane | | | 0.056 | 0.087 | 0.130 | 0.163 | 0.172 | 0.180 | *Q | 0.9978 |
| 14) | TP | Acrolein | | 0.042 | 0.047 | 0.044 | 0.045 | 0.045 | 0.046 | 0.048 | 0.045 | 4.40 |
| 15) | TP | Methylene chlo | | 0.219 | 0.207 | 0.204 | 0.201 | 0.197 | 0.195 | 0.191 | 0.202 | 4.65 |
| 17) | TP | Acetone | | | 0.094 | 0.071 | 0.077 | 0.071 | 0.065 | 0.063 | 0.073 | 15.12 |
| 18) | TP | trans-1,2-Dich | | 0.134 | 0.173 | 0.177 | 0.180 | 0.183 | 0.181 | 0.176 | 0.172 | 9.89 |
| 19) | TP | Methyl acetate | | 0.231 | 0.183 | 0.165 | 0.161 | 0.156 | 0.153 | 0.149 | 0.171 | 16.75 |
| 21) | TP | Methyl tert butyl ether | | 0.595 | 0.630 | 0.676 | 0.661 | 0.657 | 0.646 | 0.629 | 0.642 | 4.16 |
| 22) | TP | tert-Butyl alc | | 0.021 | 0.023 | 0.024 | 0.024 | 0.023 | 0.023 | 0.023 | 0.023 | 4.09 |
| 24) | TP | Diisopropyl ether | | 0.797 | 0.878 | 0.965 | 0.985 | 0.960 | 0.936 | 0.916 | 0.920 | 7.03 |
| 25) | TP | 1,1-Dichloroet | | 0.339 | 0.407 | 0.424 | 0.424 | 0.420 | 0.409 | 0.405 | 0.404 | 7.39 |
| 26) | TP | Halothane | | 0.117 | 0.137 | 0.142 | 0.147 | 0.145 | 0.143 | 0.141 | 0.139 | 7.40 |
| 27) | TP | Acrylonitrile | | 0.076 | 0.081 | 0.088 | 0.089 | 0.087 | 0.086 | 0.084 | 0.084 | 5.26 |
| 28) | TP | Ethyl tert-but | | 0.694 | 0.779 | 0.838 | 0.837 | 0.826 | 0.811 | 0.800 | 0.798 | 6.32 |
| 29) | TP | Vinyl acetate | | 0.679 | 0.649 | 0.556 | 0.550 | 0.513 | 0.670 | 0.667 | 0.612 | 11.34 |
| 30) | TP | cis-1,2-Dichlo | | 0.183 | 0.211 | 0.211 | 0.208 | 0.214 | 0.211 | 0.205 | 0.206 | 5.19 |
| 31) | TP | 2,2-Dichloropr | | 0.240 | 0.279 | 0.270 | 0.284 | 0.278 | 0.279 | 0.263 | 0.270 | 5.58 |
| 33) | TP | Bromochloromet | | 0.089 | 0.091 | 0.096 | 0.096 | 0.091 | 0.086 | 0.085 | 0.091# | 4.89 |
| 34) | TP | Cyclohexane | | 0.384 | 0.496 | 0.452 | 0.498 | 0.498 | 0.499 | 0.484 | 0.473 | 8.98 |
| 35) | TP | Chloroform | | 0.303 | 0.352 | 0.346 | 0.336 | 0.339 | 0.333 | 0.335 | 0.335 | 4.66 |
| 36) | TP | Ethyl acetate | | 0.314 | 0.226 | 0.262 | 0.255 | 0.249 | 0.243 | 0.242 | 0.256 | 11.00 |
| 37) | TP | Carbon tetrachloride | 0.229 | 0.188 | 0.270 | 0.260 | 0.275 | 0.275 | 0.279 | 0.271 | 0.256 | 12.38 |
| 38) | TP | Tetrahydrofuran | | 0.087 | 0.083 | 0.081 | 0.080 | 0.078 | 0.074 | 0.073 | 0.079 | 5.85 |
| 39) | S | Dibromofluoromethane | 0.242 | 0.242 | 0.240 | 0.238 | 0.232 | 0.231 | 0.224 | 0.223 | 0.234 | 3.26 |
| 40) | TP | 1,1,1-Trichlor | | 0.265 | 0.301 | 0.310 | 0.316 | 0.315 | 0.315 | 0.308 | 0.304 | 5.96 |
| 42) | TP | 2-Butanone | | | 0.118 | 0.104 | 0.105 | 0.104 | 0.100 | 0.099 | 0.105 | 6.40 |

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: ELAINE** | **Ical Ref** | **: ICAL21358** |
| **Calibration dates** | **: 07/31/24 18:35 07/31/24 22:22** | | |

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 43) TP | 1,1-Dichloropr | | 0.193 | 0.259 | 0.260 | 0.270 | 0.271 | 0.271 | 0.268 | 0.256 | 11.09 |
| 45) TP | Benzene | 0.719 | 0.654 | 0.814 | 0.838 | 0.839 | 0.835 | 0.825 | 0.813 | 0.792 | 8.59 |
| 46) TP | Tertiary-Amyl Methyl Ether | | 0.549 | 0.579 | 0.619 | 0.622 | 0.611 | 0.607 | 0.598 | 0.598 | 4.33 |
| 47) S | 1,2-Dichloroethane-d4 | 0.326 | 0.322 | 0.322 | 0.316 | 0.305 | 0.309 | 0.298 | 0.302 | 0.312 | 3.33 |
| 48) T | 1,2-Dichloroet | | 0.295 | 0.300 | 0.320 | 0.314 | 0.310 | 0.303 | 0.299 | 0.306 | 2.93 |
| 51) TP | Methyl cyclohe | | 0.281 | 0.360 | 0.333 | 0.364 | 0.386 | 0.390 | 0.377 | 0.356 | 10.67 |
| 52) TP | Trichloroethene | 0.193 | 0.161 | 0.200 | 0.210 | 0.217 | 0.216 | 0.201 | 0.195 | 0.199# | 8.96 |
| 54) TP | Dibromomethane | | 0.096 | 0.116 | 0.120 | 0.119 | 0.118 | 0.116 | 0.117 | 0.115 | 7.18 |
| 55) TP | 1,2-Dichloropr | | 0.215 | 0.233 | 0.249 | 0.248 | 0.246 | 0.242 | 0.239 | 0.239 | 5.05 |
| 57) TP | 2-Chloroethyl | | 0.127 | 0.145 | 0.157 | 0.163 | 0.167 | 0.160 | 0.158 | 0.154 | 8.95 |
| 58) TP | Bromodichlorom | | 0.250 | 0.293 | 0.294 | 0.289 | 0.290 | 0.286 | 0.282 | 0.283# | 5.40 |
| 61) TP | 1,4-Dioxane | | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002# | 1.58 |
| 62) TP | cis-1,3-Dichloropropene | 0.241 | 0.293 | 0.316 | 0.341 | 0.345 | 0.345 | 0.339 | 0.334 | 0.319 | 11.31 |
| 63) I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | | |
| 64) S | Toluene-d8 | 1.316 | 1.311 | 1.306 | 1.323 | 1.314 | 1.308 | 1.321 | 1.339 | 1.317 | 0.79 |
| 65) TP | Toluene | | 0.596 | 0.701 | 0.712 | 0.711 | 0.697 | 0.702 | 0.700 | 0.689 | 5.96 |
| 66) TP | 4-Methyl-2-pen | | 0.096 | 0.114 | 0.124 | 0.124 | 0.122 | 0.121 | 0.120 | 0.117 | 8.43 |
| 67) TP | Tetrachloroethene | | 0.219 | 0.288 | 0.302 | 0.312 | 0.308 | 0.313 | 0.307 | 0.293 | 11.47 |
| 69) TP | trans-1,3-Dichloropropene | 0.319 | 0.359 | 0.375 | 0.414 | 0.420 | 0.408 | 0.405 | 0.402 | 0.388 | 8.92 |
| 71) TP | Ethyl methacry | | 0.356 | 0.363 | 0.387 | 0.378 | 0.367 | 0.368 | 0.365 | 0.369 | 2.79 |
| 72) TP | 1,1,2-Trichlor | | 0.183 | 0.190 | 0.204 | 0.201 | 0.193 | 0.192 | 0.190 | 0.193# | 3.69 |
| 73) TP | Chlorodibromom | | 0.230 | 0.258 | 0.281 | 0.283 | 0.277 | 0.281 | 0.281 | 0.270 | 7.23 |
| 74) TP | 1,3-Dichloropr | | 0.369 | 0.398 | 0.430 | 0.429 | 0.412 | 0.410 | 0.409 | 0.408 | 5.11 |
| 75) TP | 1,2-Dibromoethane | | 0.216 | 0.223 | 0.237 | 0.236 | 0.229 | 0.228 | 0.230 | 0.228 | 3.24 |
| 77) TP | 2-Hexanone | | 0.238 | 0.227 | 0.234 | 0.233 | 0.225 | 0.221 | 0.222 | 0.229 | 2.91 |
| 78) TP | Chlorobenzene | | 0.673 | 0.728 | 0.767 | 0.755 | 0.737 | 0.742 | 0.734 | 0.734 | 4.10 |
| 79) TP | Ethylbenzene | | 1.142 | 1.358 | 1.408 | 1.393 | 1.353 | 1.359 | 1.329 | 1.335 | 6.66 |
| 80) TP | 1,1,1,2-Tetrac | | 0.215 | 0.270 | 0.287 | 0.286 | 0.276 | 0.276 | 0.273 | 0.269 | 9.12 |
| 81) TP | p/m Xylene | | 0.447 | 0.521 | 0.548 | 0.535 | 0.510 | 0.508 | 0.492 | 0.509 | 6.43 |
| 82) TP | o Xylene | | 0.454 | 0.508 | 0.533 | 0.516 | 0.497 | 0.495 | 0.479 | 0.497 | 5.16 |
| 83) TP | Styrene | | 0.718 | 0.838 | 0.886 | 0.858 | 0.817 | 0.812 | 0.779 | 0.816 | 6.74 |
| 84) I | 1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | |
| 85) TP | Bromoform | | 0.284 | 0.320 | 0.331 | 0.334 | 0.334 | 0.338 | 0.337 | 0.325 | 5.92 |
| 87) TP | Isopropylbenzene | | 1.911 | 2.394 | 2.445 | 2.472 | 2.475 | 2.556 | 2.509 | 2.395 | 9.15 |
| 88) S | 4-Bromofluorobenzene | 0.912 | 0.926 | 0.900 | 0.927 | 0.899 | 0.923 | 0.942 | 0.959 | 0.924 | 2.20 |
| 89) TP | Bromobenzene | | 0.539 | 0.594 | 0.625 | 0.612 | 0.613 | 0.627 | 0.622 | 0.605 | 5.15 |

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: ELAINE** | **Ical Ref** | **: ICAL21358** |
| **Calibration dates** | **: 07/31/24 18:35 07/31/24 22:22** | | |

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90) TP | n-Propylbenzene | | 2.463 | 2.827 | 2.941 | 2.951 | 2.948 | 3.011 | 2.888 | 2.861 | 6.45 |
| 91) TP | 1,4-Dichlorobu | | 1.076 | 1.063 | 1.068 | 1.046 | 1.022 | 1.031 | 1.015 | 1.046 | 2.29 |
| 92) TP | 1,1,2,2-Tetrac | | 0.512 | 0.521 | 0.493 | 0.487 | 0.485 | 0.530 | 0.529 | 0.508 | 3.87 |
| 93) TP | 4-Ethyltoluene | | 1.935 | 2.296 | 2.424 | 2.400 | 2.399 | 2.443 | 2.350 | 2.321 | 7.63 |
| 94) TP | 2-Chlorotoluene | | 1.451 | 1.722 | 1.764 | 1.719 | 1.699 | 1.724 | 1.705 | 1.683 | 6.21 |
| 95) TP | 1,3,5-Trimethy | | 1.733 | 2.008 | 2.145 | 2.110 | 2.089 | 2.133 | 2.036 | 2.036 | 7.01 |
| 96) TP | 1,2,3-Trichlor | | 0.395 | 0.420 | 0.431 | 0.422 | 0.414 | 0.414 | 0.407 | 0.415 | 2.78 |
| 97) TP | trans-1,4-Dich | | 0.185 | 0.197 | 0.203 | 0.201 | 0.207 | 0.213 | 0.219 | 0.204 | 5.51 |
| 98) TP | 4-Chlorotoluene | | 1.530 | 1.763 | 1.829 | 1.796 | 1.785 | 1.839 | 1.801 | 1.763 | 6.02 |
| 99) TP | tert-Butylbenzene | | 1.412 | 1.689 | 1.769 | 1.762 | 1.779 | 1.824 | 1.747 | 1.712 | 8.07 |
| 102) TP | 1,2,4-Trimethy | | 1.747 | 1.954 | 2.131 | 2.103 | 2.101 | 2.135 | 2.057 | 2.033 | 6.91 |
| 103) TP | sec-Butylbenzene | | 2.141 | 2.500 | 2.584 | 2.607 | 2.644 | 2.708 | 2.584 | 2.538 | 7.33 |
| 104) TP | p-Isopropyltol | | 1.701 | 2.077 | 2.196 | 2.232 | 2.258 | 2.294 | 2.214 | 2.139 | 9.58 |
| 105) TP | 1,3-Dichlorobe | | 1.015 | 1.081 | 1.169 | 1.146 | 1.135 | 1.148 | 1.122 | 1.117 | 4.72 |
| 106) TP | 1,4-Dichlorobe | | 1.009 | 1.087 | 1.157 | 1.145 | 1.138 | 1.145 | 1.131 | 1.116 | 4.67 |
| 107) TP | p-Diethylbenzene | | 1.028 | 1.180 | 1.302 | 1.316 | 1.335 | 1.335 | 1.333 | 1.261 | 9.25 |
| 108) TP | n-Butylbenzene | | 1.501 | 1.792 | 1.868 | 1.891 | 1.948 | 1.955 | 1.939 | 1.842 | 8.74 |
| 109) TP | 1,2-Dichlorobe | | 0.978 | 1.026 | 1.115 | 1.108 | 1.094 | 1.098 | 1.099 | 1.074 | 4.80 |
| 110) TP | 1,2,4,5-Tetram | | 1.737 | 1.892 | 2.127 | 2.116 | 2.105 | 2.156 | 2.192 | 2.046 | 8.17 |
| 111) TP | 1,2-Dibromo-3- | | 0.049 | 0.087 | 0.092 | 0.094 | 0.094 | 0.097 | 0.102 | *L | 0.9989 |
| 112) TP | 1,3,5-Trichlor | | 0.709 | 0.775 | 0.890 | 0.883 | 0.879 | 0.919 | 0.916 | 0.853 | 9.33 |
| 113) TP | Hexachlorobuta | | 0.225 | 0.275 | 0.285 | 0.293 | 0.293 | 0.305 | 0.303 | 0.283 | 9.74 |
| 114) TP | 1,2,4-Trichlor | | 0.666 | 0.683 | 0.789 | 0.797 | 0.806 | 0.839 | 0.809 | 0.770 | 8.71 |
| 115) TP | Naphthalene | | 1.419 | 1.532 | 1.695 | 1.747 | 1.797 | 1.858 | 1.833 | 1.697 | 9.67 |
| 116) TP | 1,2,3-Trichlor | | 0.578 | 0.647 | 0.721 | 0.728 | 0.750 | 0.771 | 0.757 | 0.707 | 9.89 |

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: VOA105** | **Ical Ref** | **: ICAL21466** |
| **Calibration dates** | **: 09/06/24 17:39 09/06/24 21:53** | | |

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Fluorobenzene | ISTD | | | | | | | | | |
| 2) | TP | Dichlorodifluo | | 0.239 | 0.295 | 0.329 | 0.308 | 0.301 | 0.294 | 0.283 | 0.293 | 9.46 |
| 3) | TP | Chloromethane | | 0.262 | 0.294 | 0.307 | 0.296 | 0.285 | 0.271 | 0.263 | 0.283 | 6.25 |
| 4) | TP | Vinyl chloride | 0.231 | 0.200 | 0.252 | 0.272 | 0.260 | 0.257 | 0.252 | 0.243 | 0.246 | 8.93 |
| 5) | TP | Bromomethane | | 0.099 | 0.102 | 0.113 | 0.117 | 0.130 | 0.133 | 0.143 | 0.120 | 13.57 |
| 6) | TP | Chloroethane | | 0.270 | 0.223 | 0.163 | 0.153 | 0.139 | 0.116 | | *Q | 0.9989 |
| 7) | TP | Trichlorofluor | | 0.317 | 0.394 | 0.406 | 0.386 | 0.372 | 0.361 | 0.353 | 0.370 | 8.05 |
| 8) | TP | Ethyl ether | | 0.079 | 0.091 | 0.090 | 0.093 | 0.092 | 0.089 | 0.090 | 0.089 | 5.41 |
| 10) | TP | 1,1-Dichloroet | | 0.169 | 0.186 | 0.199 | 0.188 | 0.186 | 0.179 | 0.181 | 0.184 | 5.04 |
| 11) | TP | Carbon disulfide | | 0.512 | 0.592 | 0.615 | 0.581 | 0.576 | 0.544 | 0.547 | 0.567 | 6.08 |
| 12) | TP | Freon-113 | | 0.174 | 0.213 | 0.224 | 0.208 | 0.204 | 0.196 | 0.198 | 0.202 | 7.72 |
| 13) | TP | Iodomethane | | 0.241 | 0.273 | 0.310 | 0.330 | 0.339 | 0.331 | 0.341 | 0.309 | 12.31 |
| 14) | TP | Acrolein | | | 0.021 | 0.022 | 0.024 | 0.026 | 0.027 | 0.027 | 0.025 | 10.54 |
| 15) | TP | Methylene chlo | | 0.220 | 0.228 | 0.226 | 0.217 | 0.213 | 0.211 | 0.215 | 0.219 | 3.02 |
| 17) | TP | Acetone | | | 0.054 | 0.047 | 0.045 | 0.045 | 0.047 | 0.045 | 0.047 | 7.70 |
| 18) | TP | trans-1,2-Dich | | 0.179 | 0.211 | 0.231 | 0.226 | 0.229 | 0.223 | 0.225 | 0.218 | 8.33 |
| 19) | TP | Methyl acetate | | | 0.091 | 0.098 | 0.108 | 0.110 | 0.111 | 0.104 | 0.104 | 7.33 |
| 20) | TP | Methyl tert butyl ether | | 0.357 | 0.444 | 0.477 | 0.504 | 0.520 | 0.523 | 0.530 | 0.479 | 12.93 |
| 21) | TP | tert-Butyl alc | | | 0.010 | 0.010 | 0.010 | 0.011 | 0.012 | 0.012 | 0.011 | 10.37 |
| 22) | TP | Diisopropyl ether | | 0.575 | 0.654 | 0.734 | 0.783 | 0.795 | 0.778 | 0.783 | 0.729 | 11.50 |
| 23) | TP | 1,1-Dichloroet | | 0.368 | 0.411 | 0.431 | 0.408 | 0.401 | 0.383 | 0.372 | 0.396 | 5.73 |
| 24) | TP | Halothane | | 0.146 | 0.162 | 0.186 | 0.182 | 0.182 | 0.181 | 0.187 | 0.175 | 8.77 |
| 25) | TP | Acrylonitrile | | | 0.049 | 0.054 | 0.055 | 0.056 | 0.058 | 0.057 | 0.055 | 5.90 |
| 26) | TP | Ethyl tert-but | | 0.398 | 0.459 | 0.532 | 0.579 | 0.597 | 0.591 | 0.605 | 0.537 | 14.88 |
| 27) | TP | Vinyl acetate | | | 0.303 | 0.391 | 0.443 | 0.485 | 0.502 | 0.482 | 0.434 | 17.41 |
| 28) | TP | cis-1,2-Dichlo | | 0.212 | 0.245 | 0.257 | 0.256 | 0.256 | 0.248 | 0.252 | 0.247 | 6.49 |
| 29) | TP | 2,2-Dichloropr | | 0.275 | 0.313 | 0.344 | 0.343 | 0.337 | 0.324 | 0.325 | 0.323 | 7.39 |
| 30) | TP | Bromochloromet | | 0.110 | 0.125 | 0.126 | 0.123 | 0.118 | 0.114 | 0.117 | 0.119 | 4.98 |
| 31) | TP | Cyclohexane | | 0.244 | 0.353 | 0.432 | 0.420 | 0.417 | 0.407 | 0.405 | 0.382 | 17.31 |
| 32) | TP | Chloroform | | 0.408 | 0.451 | 0.431 | 0.415 | 0.406 | 0.393 | 0.398 | 0.414 | 4.86 |
| 33) | TP | Ethyl acetate | | | 0.141 | 0.148 | 0.165 | 0.178 | 0.185 | 0.184 | 0.167 | 11.23 |
| 34) | TP | Carbon tetrachloride | 0.334 | 0.290 | 0.342 | 0.377 | 0.372 | 0.375 | 0.374 | 0.381 | 0.356 | 8.91 |
| 35) | TP | Tetrahydrofuran | | | 0.052 | 0.050 | 0.054 | 0.055 | 0.056 | 0.054 | 0.054 | 4.05 |
| 36) | S | Dibromofluoromethane | 0.287 | 0.288 | 0.286 | 0.275 | 0.276 | 0.273 | 0.273 | 0.277 | 0.279 | 2.28 |
| 37) | TP | 1,1,1-Trichlor | | 0.320 | 0.378 | 0.419 | 0.403 | 0.400 | 0.389 | 0.396 | 0.386 | 8.25 |
| 39) | TP | 2-Butanone | | | 0.055 | 0.065 | 0.075 | 0.078 | 0.080 | 0.078 | 0.072 | 13.45 |

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: VOA105** | **Ical Ref** | **: ICAL21466** |
| **Calibration dates** | **: 09/06/24 17:39 09/06/24 21:53** | | |

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 40) TP | 1,1-Dichloropr | | 0.198 | 0.267 | 0.309 | 0.312 | 0.312 | 0.302 | 0.302 | 0.286 | 14.66 |
| 41) TP | Benzene | 0.774 | 0.700 | 0.838 | 0.913 | 0.905 | 0.893 | 0.857 | 0.861 | 0.842 | 8.64 |
| 42) TP | Tertiary-Amyl Methyl Ether | | 0.297 | 0.376 | 0.439 | 0.478 | 0.504 | 0.502 | 0.512 | 0.444 | 18.16 |
| 43) S | 1,2-Dichloroethane-d4 | 0.296 | 0.300 | 0.300 | 0.301 | 0.282 | 0.275 | 0.278 | 0.278 | 0.289 | 4.02 |
| 44) TP | 1,2-Dichloroet | | 0.261 | 0.296 | 0.288 | 0.285 | 0.278 | 0.270 | 0.271 | 0.278 | 4.35 |
| 47) TP | Methyl cyclohe | | 0.273 | 0.336 | 0.421 | 0.416 | 0.427 | 0.414 | 0.417 | 0.386 | 15.24 |
| 48) TP | Trichloroethene | 0.263 | 0.209 | 0.259 | 0.261 | 0.258 | 0.257 | 0.248 | 0.251 | 0.251 | 7.07 |
| 50) TP | Dibromomethane | | 0.116 | 0.132 | 0.130 | 0.131 | 0.133 | 0.132 | 0.136 | 0.130 | 5.13 |
| 51) TP | 1,2-Dichloropr | | 0.168 | 0.208 | 0.222 | 0.222 | 0.222 | 0.215 | 0.216 | 0.210 | 9.28 |
| 53) TP | 2-Chloroethyl | | | 0.079 | 0.101 | 0.117 | 0.126 | 0.127 | 0.127 | 0.113 | 17.35 |
| 54) TP | Bromodichlorom | | 0.281 | 0.299 | 0.310 | 0.314 | 0.319 | 0.312 | 0.321 | 0.308 | 4.54 |
| 57) TP | 1,4-Dioxane | | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.001# | 16.96 |
| 58) TP | cis-1,3-Dichlo | | 0.235 | 0.284 | 0.334 | 0.352 | 0.360 | 0.349 | 0.355 | 0.324 | 14.55 |
| 59) I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | | |
| 60) S | Toluene-d8 | 1.224 | 1.228 | 1.254 | 1.244 | 1.203 | 1.177 | 1.164 | 1.167 | 1.208 | 2.93 |
| 61) TP | Toluene | | 0.603 | 0.733 | 0.751 | 0.727 | 0.718 | 0.690 | 0.692 | 0.702 | 6.95 |
| 62) TP | 4-Methyl-2-pen | | | 0.042 | 0.054 | 0.059 | 0.063 | 0.067 | 0.065 | 0.058 | 15.95 |
| 63) TP | Tetrachloroethene | | 0.304 | 0.365 | 0.400 | 0.389 | 0.386 | 0.371 | 0.378 | 0.370 | 8.50 |
| 65) TP | trans-1,3-Dich | | 0.250 | 0.312 | 0.360 | 0.368 | 0.373 | 0.365 | 0.364 | 0.342 | 13.28 |
| 67) TP | Ethyl methacry | | | 0.171 | 0.213 | 0.240 | 0.252 | 0.256 | 0.253 | 0.231 | 14.48 |
| 68) TP | 1,1,2-Trichlor | | 0.140 | 0.186 | 0.182 | 0.181 | 0.179 | 0.175 | 0.173 | 0.174# | 8.82 |
| 69) TP | Chlorodibromom | | 0.248 | 0.279 | 0.295 | 0.300 | 0.312 | 0.314 | 0.325 | 0.296 | 8.73 |
| 70) TP | 1,3-Dichloropr | | 0.283 | 0.348 | 0.365 | 0.358 | 0.352 | 0.341 | 0.339 | 0.341 | 7.91 |
| 71) TP | 1,2-Dibromoethane | | 0.155 | 0.216 | 0.246 | 0.251 | 0.254 | 0.256 | 0.258 | 0.234 | 16.06 |
| 72) TP | 2-Hexanone | | | 0.084 | 0.104 | 0.118 | 0.127 | 0.133 | 0.129 | 0.116 | 16.16 |
| 73) TP | Chlorobenzene | | 0.727 | 0.837 | 0.870 | 0.854 | 0.855 | 0.828 | 0.837 | 0.830 | 5.71 |
| 74) TP | Ethylbenzene | | 1.144 | 1.341 | 1.518 | 1.498 | 1.486 | 1.420 | 1.407 | 1.402 | 9.22 |
| 75) TP | 1,1,1,2-Tetrac | | 0.252 | 0.296 | 0.310 | 0.317 | 0.322 | 0.313 | 0.322 | 0.305 | 8.12 |
| 76) TP | p/m Xylene | | 0.383 | 0.510 | 0.599 | 0.597 | 0.587 | 0.560 | 0.553 | 0.541 | 14.11 |
| 77) TP | o Xylene | | 0.346 | 0.473 | 0.566 | 0.568 | 0.564 | 0.538 | 0.534 | 0.513 | 15.75 |
| 78) TP | Styrene | | 0.523 | 0.798 | 0.940 | 0.960 | 0.943 | 0.900 | 0.876 | 0.849 | 18.10 |
| 79) I | 1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | |
| 80) TP | Bromoform | | 0.249 | 0.260 | 0.273 | 0.297 | 0.320 | 0.329 | 0.346 | 0.296 | 12.48 |
| 82) TP | Isopropylbenzene | | 1.594 | 2.062 | 2.466 | 2.480 | 2.552 | 2.464 | 2.572 | 2.313 | 15.57 |
| 83) S | 4-Bromofluorobenzene | 0.722 | 0.722 | 0.711 | 0.676 | 0.665 | 0.675 | 0.681 | 0.700 | 0.694 | 3.25 |
| 84) TP | Bromobenzene | | 0.546 | 0.597 | 0.607 | 0.611 | 0.623 | 0.619 | 0.654 | 0.608 | 5.42 |

# Initial Calibration Summary
# Form 6
# Volatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: VOA105** | **Ical Ref** | **: ICAL21466** |
| **Calibration dates** | **: 09/06/24 17:39 09/06/24 21:53** | | |

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 85) TP | n-Propylbenzene | | 2.078 | 2.527 | 2.905 | 2.849 | 2.919 | 2.793 | 2.845 | 2.702 | 11.29 |
| 86) TP | 1,4-Dichlorobu | | 0.472 | 0.606 | 0.592 | 0.590 | 0.600 | 0.593 | 0.613 | 0.581 | 8.37 |
| 87) TP | 1,1,2,2-Tetrac | | 0.375 | 0.398 | 0.392 | 0.396 | 0.410 | 0.415 | 0.425 | 0.402 | 4.08 |
| 88) TP | 4-Ethyltoluene | | 1.636 | 2.065 | 2.398 | 2.410 | 2.450 | 2.353 | 2.450 | 2.252 | 13.44 |
| 89) TP | 2-Chlorotoluene | | 1.260 | 1.553 | 1.621 | 1.586 | 1.586 | 1.536 | 1.523 | 1.524 | 7.95 |
| 90) TP | 1,3,5-Trimethy | | 1.495 | 1.883 | 2.136 | 2.115 | 2.125 | 2.052 | 2.103 | 1.987 | 11.78 |
| 91) TP | 1,2,3-Trichlor | | 0.290 | 0.313 | 0.313 | 0.311 | 0.316 | 0.320 | 0.321 | 0.312 | 3.36 |
| 92) TP | trans-1,4-Dich | | | 0.126 | 0.130 | 0.135 | 0.132 | 0.136 | 0.140 | 0.133 | 3.66 |
| 93) TP | 4-Chlorotoluene | | 1.264 | 1.536 | 1.674 | 1.632 | 1.642 | 1.607 | 1.667 | 1.575 | 9.17 |
| 94) TP | tert-Butylbenzene | | 1.182 | 1.522 | 1.864 | 1.866 | 1.923 | 1.883 | 1.941 | 1.740 | 16.32 |
| 97) TP | 1,2,4-Trimethy | | 1.231 | 1.732 | 2.053 | 2.075 | 2.117 | 2.031 | 2.083 | 1.903 | 16.99 |
| 98) TP | sec-Butylbenzene | | 1.753 | 2.362 | 2.736 | 2.737 | 2.805 | 2.704 | 2.726 | 2.546 | 14.87 |
| 99) TP | p-Isopropyltol | | 1.309 | 1.914 | 2.387 | 2.421 | 2.502 | 2.410 | 2.422 | 2.195 | 19.90 |
| 100) TP | 1,3-Dichlorobe | | 1.027 | 1.163 | 1.249 | 1.237 | 1.256 | 1.225 | 1.252 | 1.201 | 6.93 |
| 101) TP | 1,4-Dichlorobe | | 1.226 | 1.223 | 1.258 | 1.238 | 1.235 | 1.220 | 1.244 | 1.235 | 1.06 |
| 102) TP | p-Diethylbenzene | | 0.798 | 1.067 | 1.350 | 1.386 | 1.443 | 1.410 | 1.446 | 1.271 | 19.37 |
| 103) TP | n-Butylbenzene | | 1.166 | 1.704 | 1.976 | 1.931 | 2.013 | 1.908 | 1.936 | 1.805 | 16.55 |
| 104) TP | 1,2-Dichlorobe | | 0.889 | 1.060 | 1.119 | 1.123 | 1.146 | 1.121 | 1.138 | 1.085 | 8.35 |
| 105) TP | 1,2,4,5-Tetram | | | 1.322 | 1.850 | 1.988 | 2.154 | 2.101 | 2.116 | 1.922 | 16.34 |
| 106) TP | 1,2-Dibromo-3- | | 0.038 | 0.057 | 0.063 | 0.067 | 0.076 | 0.082 | 0.081 | *Q | 0.9987 |
| 107) TP | 1,3,5-Trichlor | | 0.722 | 0.830 | 0.916 | 0.919 | 0.957 | 0.918 | 0.910 | 0.882 | 9.10 |
| 108) TP | Hexachlorobuta | | 0.259 | 0.295 | 0.326 | 0.331 | 0.355 | 0.340 | 0.346 | 0.322 | 10.44 |
| 109) TP | 1,2,4-Trichlor | | 0.562 | 0.645 | 0.733 | 0.763 | 0.808 | 0.781 | 0.776 | 0.724 | 12.25 |
| 110) TP | Naphthalene | | 0.761 | 0.993 | 1.275 | 1.397 | 1.536 | 1.557 | 1.506 | *L | 0.9988 |
| 111) TP | 1,2,3-Trichlor | | 0.476 | 0.565 | 0.630 | 0.644 | 0.676 | 0.663 | 0.656 | 0.616 | 11.58 |

# Response Factor Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024
Response Via : Initial Calibration

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Fluorobenzene | ---------- | ISTD | ---------- | | | | | | | |
| 2) | TP | Dichlorodifluo... | | 0.138 | 0.246 | 0.220 | 0.243 | 0.243 | 0.244 | 0.235 | 0.224 | 17.36 |
| 3) | TP | Chloromethane | | 0.199 | 0.251 | 0.263 | 0.261 | 0.259 | 0.260 | 0.256 | 0.250 | 9.09 |
| 4) | TP | Vinyl chloride | 0.163 | 0.159 | 0.248 | 0.243 | 0.263 | 0.260 | 0.265 | 0.260 | 0.233 | 19.30 |
| 5) | TP | Bromomethane | | 0.043 | 0.054 | 0.058 | 0.067 | 0.084 | 0.095 | 0.102 | *Q | 0.9983 |
| 6) | TP | Chloroethane | | 0.109 | 0.166 | 0.154 | 0.151 | 0.153 | 0.144 | 0.107 | 0.140 | 16.43 |
| 7) | TP | Trichlorofluor... | | 0.189 | 0.262 | 0.254 | 0.291 | 0.294 | 0.295 | 0.287 | 0.267 | 14.21 |
| 8) | TP | Ethyl ether | | 0.098 | 0.094 | 0.106 | 0.111 | 0.111 | 0.108 | 0.108 | 0.105 | 6.41 |
| 10) | TP | 1,1-Dichloroet... | | 0.128 | 0.165 | 0.154 | 0.168 | 0.170 | 0.170 | 0.165 | 0.160 | 9.41 |
| 11) | TP | Carbon disulfide | | 0.423 | 0.489 | 0.504 | 0.523 | 0.517 | 0.512 | 0.493 | 0.494 | 6.86 |
| 12) | TP | Freon-113 | | 0.120 | 0.172 | 0.163 | 0.178 | 0.178 | 0.183 | 0.175 | 0.167 | 13.06 |
| 13) | TP | Iodomethane | | | 0.056 | 0.087 | 0.130 | 0.163 | 0.172 | 0.180 | *Q | 0.9978 |
| 14) | TP | Acrolein | | 0.042 | 0.047 | 0.044 | 0.045 | 0.045 | 0.046 | 0.048 | 0.045 | 4.40 |
| 15) | TP | Methylene chlo... | | 0.219 | 0.207 | 0.204 | 0.201 | 0.197 | 0.195 | 0.191 | 0.202 | 4.65 |
| 17) | TP | Acetone | | | 0.094 | 0.071 | 0.077 | 0.071 | 0.065 | 0.063 | 0.073 | 15.12 |
| 18) | TP | trans-1,2-Dich... | | 0.134 | 0.173 | 0.177 | 0.180 | 0.183 | 0.181 | 0.176 | 0.172 | 9.89 |
| 19) | TP | Methyl acetate | | 0.231 | 0.183 | 0.165 | 0.161 | 0.156 | 0.153 | 0.149 | 0.171 | 16.75 |
| 21) | TP | Methyl tert-bu... | | 0.595 | 0.630 | 0.676 | 0.661 | 0.657 | 0.646 | 0.629 | 0.642 | 4.16 |
| 22) | TP | tert-Butyl alc... | | 0.021 | 0.023 | 0.024 | 0.024 | 0.023 | 0.023 | 0.023 | 0.023 | 4.09 |
| 24) | TP | Diisopropyl ether | | 0.797 | 0.878 | 0.965 | 0.985 | 0.960 | 0.936 | 0.916 | 0.920 | 7.03 |
| 25) | TP | 1,1-Dichloroet... | | 0.339 | 0.407 | 0.424 | 0.424 | 0.420 | 0.409 | 0.405 | 0.404 | 7.39 |
| 26) | TP | Halothane | | 0.117 | 0.137 | 0.142 | 0.147 | 0.145 | 0.143 | 0.141 | 0.139 | 7.40 |
| 27) | TP | Acrylonitrile | | 0.076 | 0.081 | 0.088 | 0.089 | 0.087 | 0.086 | 0.084 | 0.084 | 5.26 |
| 28) | TP | Ethyl tert-but... | | 0.694 | 0.779 | 0.838 | 0.837 | 0.826 | 0.811 | 0.800 | 0.798 | 6.32 |
| 29) | TP | Vinyl acetate | | 0.679 | 0.649 | 0.556 | 0.550 | 0.513 | 0.670 | 0.667 | 0.612 | 11.34 |
| 30) | TP | cis-1,2-Dichlo... | | 0.183 | 0.211 | 0.211 | 0.208 | 0.214 | 0.211 | 0.205 | 0.206 | 5.19 |
| 31) | TP | 2,2-Dichloropr... | | 0.240 | 0.279 | 0.270 | 0.284 | 0.278 | 0.279 | 0.263 | 0.270 | 5.58 |
| 33) | TP | Bromochloromet... | | 0.089 | 0.091 | 0.096 | 0.096 | 0.091 | 0.086 | 0.085 | 0.091# | 4.89 |
| 34) | TP | Cyclohexane | | 0.384 | 0.496 | 0.452 | 0.498 | 0.498 | 0.499 | 0.484 | 0.473 | 8.98 |
| 35) | TP | Chloroform | | 0.303 | 0.352 | 0.346 | 0.336 | 0.339 | 0.333 | 0.335 | 0.335 | 4.66 |
| 36) | TP | Ethyl acetate | | 0.314 | 0.226 | 0.262 | 0.255 | 0.249 | 0.243 | 0.242 | 0.256 | 11.00 |

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024
Response Via : Initial Calibration

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) | TP | Carbon tetrach... | 0.229 | 0.188 | 0.270 | 0.260 | 0.275 | 0.275 | 0.279 | 0.271 | 0.256 | 12.38 |
| 38) | TP | Tetrahydrofuran | | 0.087 | 0.083 | 0.081 | 0.080 | 0.078 | 0.074 | 0.073 | 0.079 | 5.85 |
| 39) | S | Dibromofluorom... | 0.242 | 0.242 | 0.240 | 0.238 | 0.232 | 0.231 | 0.224 | 0.223 | 0.234 | 3.26 |
| 40) | TP | 1,1,1-Trichlor... | | 0.265 | 0.301 | 0.310 | 0.316 | 0.315 | 0.315 | 0.308 | 0.304 | 5.96 |
| 42) | TP | 2-Butanone | | | 0.118 | 0.104 | 0.105 | 0.104 | 0.100 | 0.099 | 0.105 | 6.40 |
| 43) | TP | 1,1-Dichloropr... | | 0.193 | 0.259 | 0.260 | 0.270 | 0.271 | 0.271 | 0.268 | 0.256 | 11.09 |
| 45) | TP | Benzene | 0.719 | 0.654 | 0.814 | 0.838 | 0.839 | 0.835 | 0.825 | 0.813 | 0.792 | 8.59 |
| 46) | TP | tert-Amyl meth... | | 0.549 | 0.579 | 0.619 | 0.622 | 0.611 | 0.607 | 0.598 | 0.598 | 4.33 |
| 47) | S | 1,2-Dichloroet... | 0.326 | 0.322 | 0.322 | 0.316 | 0.305 | 0.309 | 0.298 | 0.302 | 0.312 | 3.33 |
| 48) | T | 1,2-Dichloroet... | | 0.295 | 0.300 | 0.320 | 0.314 | 0.310 | 0.303 | 0.299 | 0.306 | 2.93 |
| 51) | TP | Methyl cyclohe... | | 0.281 | 0.360 | 0.333 | 0.364 | 0.386 | 0.390 | 0.377 | 0.356 | 10.67 |
| 52) | TP | Trichloroethene | 0.193 | 0.161 | 0.200 | 0.210 | 0.217 | 0.216 | 0.201 | 0.195 | 0.199# | 8.96 |
| 54) | TP | Dibromomethane | | 0.096 | 0.116 | 0.120 | 0.119 | 0.118 | 0.116 | 0.117 | 0.115 | 7.18 |
| 55) | TP | 1,2-Dichloropr... | | 0.215 | 0.233 | 0.249 | 0.248 | 0.246 | 0.242 | 0.239 | 0.239 | 5.05 |
| 57) | TP | 2-Chloroethyl ... | | 0.127 | 0.145 | 0.157 | 0.163 | 0.167 | 0.160 | 0.158 | 0.154 | 8.95 |
| 58) | TP | Bromodichlorom... | | 0.250 | 0.293 | 0.294 | 0.289 | 0.290 | 0.286 | 0.282 | 0.283# | 5.40 |
| 61) | TP | 1,4-Dioxane | | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002# | 1.58 |
| 62) | TP | cis-1,3-Dichlo... | 0.241 | 0.293 | 0.316 | 0.341 | 0.345 | 0.345 | 0.339 | 0.334 | 0.319 | 11.31 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | | |
| 64) | S | Toluene-d8 | 1.316 | 1.311 | 1.306 | 1.323 | 1.314 | 1.308 | 1.321 | 1.339 | 1.317 | 0.79 |
| 65) | TP | Toluene | | 0.596 | 0.701 | 0.712 | 0.711 | 0.697 | 0.702 | 0.700 | 0.689 | 5.96 |
| 66) | TP | 4-Methyl-2-pen... | | 0.096 | 0.114 | 0.124 | 0.124 | 0.122 | 0.121 | 0.120 | 0.117 | 8.43 |
| 67) | TP | Tetrachloroethene | | 0.219 | 0.288 | 0.302 | 0.312 | 0.308 | 0.313 | 0.307 | 0.293 | 11.47 |
| 69) | TP | trans-1,3-Dich... | 0.319 | 0.359 | 0.375 | 0.414 | 0.420 | 0.408 | 0.405 | 0.402 | 0.388 | 8.92 |
| 71) | TP | Ethyl methacry... | | 0.356 | 0.363 | 0.387 | 0.378 | 0.367 | 0.368 | 0.365 | 0.369 | 2.79 |
| 72) | TP | 1,1,2-Trichlor... | | 0.183 | 0.190 | 0.204 | 0.201 | 0.193 | 0.192 | 0.190 | 0.193# | 3.69 |
| 73) | TP | Chlorodibromom... | | 0.230 | 0.258 | 0.281 | 0.283 | 0.277 | 0.281 | 0.281 | 0.270 | 7.23 |
| 74) | TP | 1,3-Dichloropr... | | 0.369 | 0.398 | 0.430 | 0.429 | 0.412 | 0.410 | 0.409 | 0.408 | 5.11 |
| 75) | TP | 1,2-Dibromoethane | | 0.216 | 0.223 | 0.237 | 0.236 | 0.229 | 0.228 | 0.230 | 0.228 | 3.24 |
| 77) | TP | 2-Hexanone | | 0.238 | 0.227 | 0.234 | 0.233 | 0.225 | 0.221 | 0.222 | 0.229 | 2.91 |
| 78) | TP | Chlorobenzene | | 0.673 | 0.728 | 0.767 | 0.755 | 0.737 | 0.742 | 0.734 | 0.734 | 4.10 |

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024
Response Via : Initial Calibration

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 79) | TP | Ethylbenzene | | 1.142 | 1.358 | 1.408 | 1.393 | 1.353 | 1.359 | 1.329 | 1.335 | 6.66 |
| 80) | TP | 1,1,1,2-Tetrac... | | 0.215 | 0.270 | 0.287 | 0.286 | 0.276 | 0.276 | 0.273 | 0.269 | 9.12 |
| 81) | TP | p/m Xylene | | 0.447 | 0.521 | 0.548 | 0.535 | 0.510 | 0.508 | 0.492 | 0.509 | 6.43 |
| 82) | TP | o Xylene | | 0.454 | 0.508 | 0.533 | 0.516 | 0.497 | 0.495 | 0.479 | 0.497 | 5.16 |
| 83) | TP | Styrene | | 0.718 | 0.838 | 0.886 | 0.858 | 0.817 | 0.812 | 0.779 | 0.816 | 6.74 |
| 84) | I | 1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | |
| 85) | TP | Bromoform | | 0.284 | 0.320 | 0.331 | 0.334 | 0.334 | 0.338 | 0.337 | 0.325 | 5.92 |
| 87) | TP | Isopropylbenzene | | 1.911 | 2.394 | 2.445 | 2.472 | 2.475 | 2.556 | 2.509 | 2.395 | 9.15 |
| 88) | S | 4-Bromofluorob... | 0.912 | 0.926 | 0.900 | 0.927 | 0.899 | 0.923 | 0.942 | 0.959 | 0.924 | 2.20 |
| 89) | TP | Bromobenzene | | 0.539 | 0.594 | 0.625 | 0.612 | 0.613 | 0.627 | 0.622 | 0.605 | 5.15 |
| 90) | TP | n-Propylbenzene | | 2.463 | 2.827 | 2.941 | 2.951 | 2.948 | 3.011 | 2.888 | 2.861 | 6.45 |
| 91) | TP | 1,4-Dichlorobu... | | 1.076 | 1.063 | 1.068 | 1.046 | 1.022 | 1.031 | 1.015 | 1.046 | 2.29 |
| 92) | TP | 1,1,2,2-Tetrac... | | 0.512 | 0.521 | 0.493 | 0.487 | 0.485 | 0.530 | 0.529 | 0.508 | 3.87 |
| 93) | TP | 4-Ethyltoluene | | 1.935 | 2.296 | 2.424 | 2.400 | 2.399 | 2.443 | 2.350 | 2.321 | 7.63 |
| 94) | TP | 2-Chlorotoluene | | 1.451 | 1.722 | 1.764 | 1.719 | 1.699 | 1.724 | 1.705 | 1.683 | 6.21 |
| 95) | TP | 1,3,5-Trimethy... | | 1.733 | 2.008 | 2.145 | 2.110 | 2.089 | 2.133 | 2.036 | 2.036 | 7.01 |
| 96) | TP | 1,2,3-Trichlor... | | 0.395 | 0.420 | 0.431 | 0.422 | 0.414 | 0.414 | 0.407 | 0.415 | 2.78 |
| 97) | TP | trans-1,4-Dich... | | 0.185 | 0.197 | 0.203 | 0.201 | 0.207 | 0.213 | 0.219 | 0.204 | 5.51 |
| 98) | TP | 4-Chlorotoluene | | 1.530 | 1.763 | 1.829 | 1.796 | 1.785 | 1.839 | 1.801 | 1.763 | 6.02 |
| 99) | TP | tert-Butylbenzene | | 1.412 | 1.689 | 1.769 | 1.762 | 1.779 | 1.824 | 1.747 | 1.712 | 8.07 |
| 102) | TP | 1,2,4-Trimethy... | | 1.747 | 1.954 | 2.131 | 2.103 | 2.101 | 2.135 | 2.057 | 2.033 | 6.91 |
| 103) | TP | sec-Butylbenzene | | 2.141 | 2.500 | 2.584 | 2.607 | 2.644 | 2.708 | 2.584 | 2.538 | 7.33 |
| 104) | TP | p-Isopropyltol... | | 1.701 | 2.077 | 2.196 | 2.232 | 2.258 | 2.294 | 2.214 | 2.139 | 9.58 |
| 105) | TP | 1,3-Dichlorobe... | | 1.015 | 1.081 | 1.169 | 1.146 | 1.135 | 1.148 | 1.122 | 1.117 | 4.72 |
| 106) | TP | 1,4-Dichlorobe... | | 1.009 | 1.087 | 1.157 | 1.145 | 1.138 | 1.145 | 1.131 | 1.116 | 4.67 |
| 107) | TP | p-Diethylbenzene | | 1.028 | 1.180 | 1.302 | 1.316 | 1.335 | 1.335 | 1.333 | 1.261 | 9.25 |
| 108) | TP | n-Butylbenzene | | 1.501 | 1.792 | 1.868 | 1.891 | 1.948 | 1.955 | 1.939 | 1.842 | 8.74 |
| 109) | TP | 1,2-Dichlorobe... | | 0.978 | 1.026 | 1.115 | 1.108 | 1.094 | 1.098 | 1.099 | 1.074 | 4.80 |
| 110) | TP | 1,2,4,5-Tetram... | | 1.737 | 1.892 | 2.127 | 2.116 | 2.105 | 2.156 | 2.192 | 2.046 | 8.17 |
| 111) | TP | 1,2-Dibromo-3-... | | 0.049 | 0.087 | 0.092 | 0.094 | 0.094 | 0.097 | 0.102 | *L | 0.9989 |
| 112) | TP | 1,3,5-Trichlor... | | 0.709 | 0.775 | 0.890 | 0.883 | 0.879 | 0.919 | 0.916 | 0.853 | 9.33 |

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024
Response Via : Initial Calibration

Calibration Files
L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

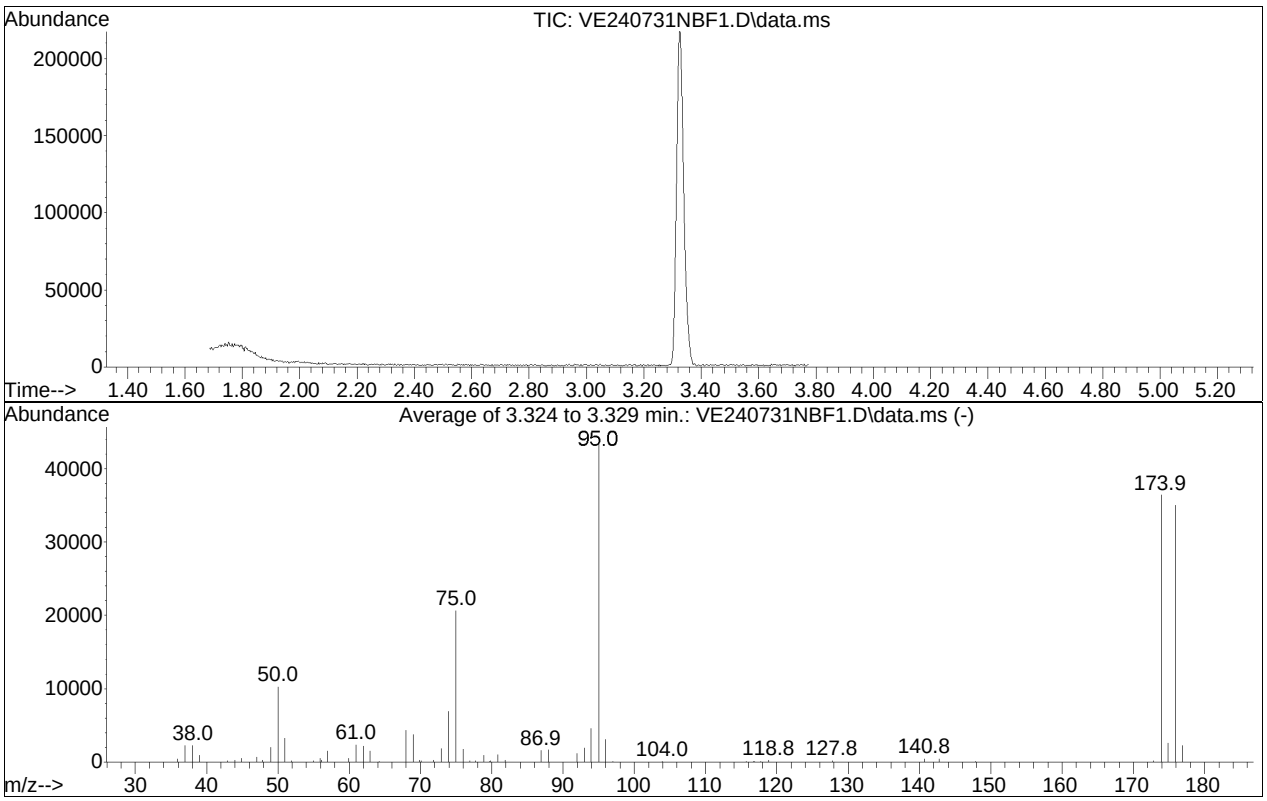
| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 113) | TP Hexachlorobuta... | 0.225 | 0.275 | 0.285 | 0.293 | 0.293 | 0.305 | 0.303 | 0.283 | | 9.74 |
| 114) | TP 1,2,4-Trichlor... | 0.666 | 0.683 | 0.789 | 0.797 | 0.806 | 0.839 | 0.809 | 0.770 | | 8.71 |
| 115) | TP Naphthalene | 1.419 | 1.532 | 1.695 | 1.747 | 1.797 | 1.858 | 1.833 | 1.697 | | 9.67 |
| 116) | TP 1,2,3-Trichlor... | 0.578 | 0.647 | 0.721 | 0.728 | 0.750 | 0.771 | 0.757 | 0.707 | | 9.89 |

(#) = Out of Range

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731NBF1.D
Acq On : 31 Jul 2024 5:25 pm
Operator : ELAINE:MAG
Sample : WG1954249-1
Misc : WG1954249
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024




AutoFind: Scans 588, 589, 590; Background Corrected with Scan 574

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 23.6 | 10291 | PASS |
| 75 | 95 | 30 | 60 | 47.5 | 20672 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 43531 | PASS |
| 96 | 95 | 5 | 9 | 7.0 | 3063 | PASS |
| 173 | 174 | 0.00 | 2 | 0.6 | 217 | PASS |
| 174 | 95 | 50 | 100 | 83.7 | 36424 | PASS |
| 175 | 174 | 5 | 9 | 7.1 | 2596 | PASS |
| 176 | 174 | 95 | 101 | 96.2 | 35043 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 2267 | PASS |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N03.D
Acq On : 31 Jul 2024 6:35 pm
Operator : ELAINE:MKS
Sample : I8260STD0.19PPB
Misc : WG1954249
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 01 11:59:43 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-L11_MCP - L11 MCP

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.967 | 96 | 205517 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 100.46% | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 152868 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 103.46% | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.208 | 152 | 86858 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 102.78% | | |
| System Monitoring Compounds | | | | | |
| 39) Dibromofluoromethane | 5.158 | 113 | 49774 | 10.178 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.78% | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 66950 | 10.310 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 103.10% | | |
| 64) Toluene-d8 | 7.657 | 98 | 201231 | 9.951 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.51% | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 79257 | 9.840 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.40% | | |
| Target Compounds | | | | | Qvalue |
| 4) Vinyl chloride | 1.854 | 62 | 637 | 0.127 ug/L # | 12 |
| 37) Carbon tetrachloride | 5.122 | 117 | 895M1 | 0.167 ug/L | |
| 45) Benzene | 5.549 | 78 | 2809 | 0.163 ug/L # | 76 |
| 52) Trichloroethene | 6.156 | 95 | 755M1 | 0.175 ug/L | |
| 62) cis-1,3-Dichloropropene | 7.453 | 75 | 943 | 0.135 ug/L # | 55 |
| 69) trans-1,3-Dichloropropene | 8.203 | 75 | 927M1 | 0.146 ug/L | |

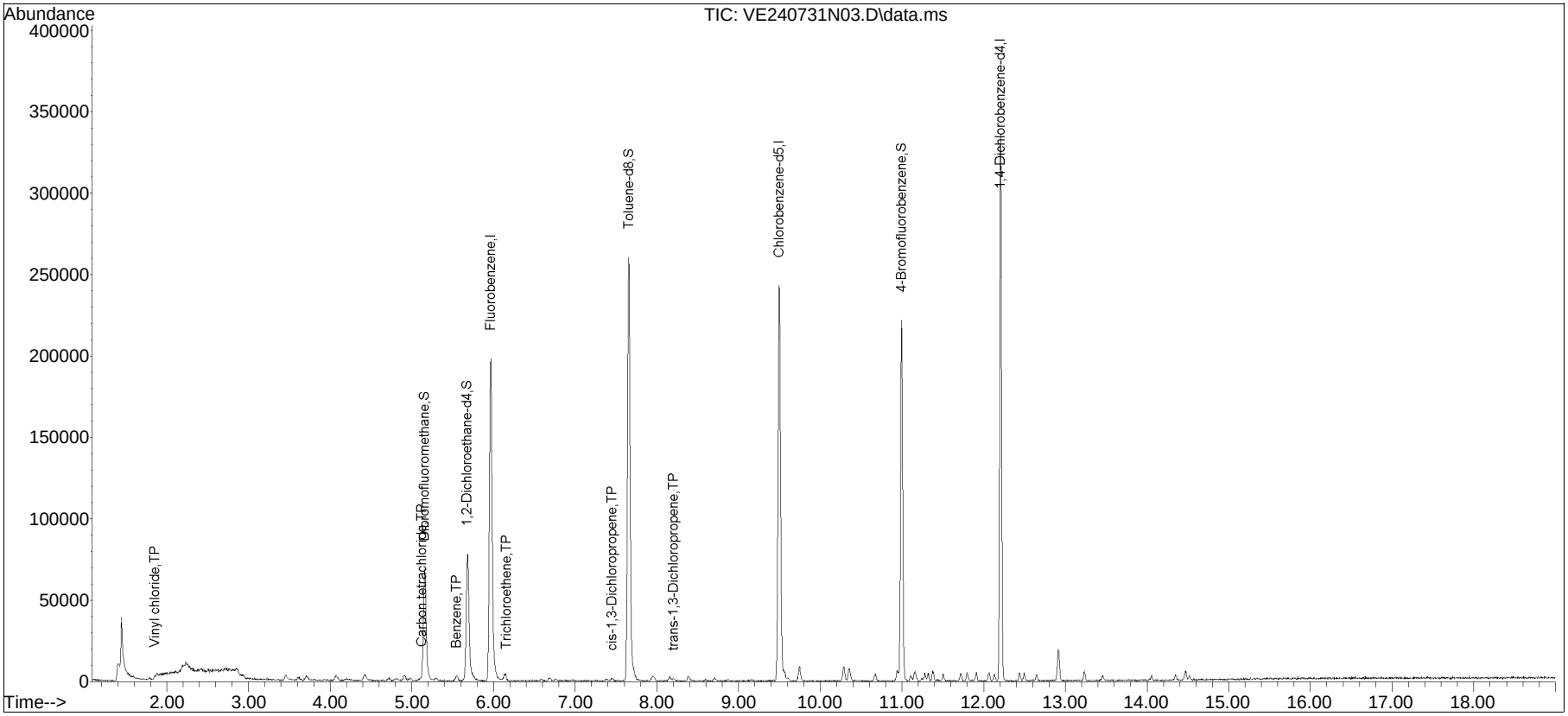
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N03.D
Acq On : 31 Jul 2024 6:35 pm
Operator : ELAINE:MKS
Sample : I8260STD0.19PPB
Misc : WG1954249
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 01 11:59:43 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-L11_MCP - L11 MCP731N-ICAL\VE240731N08.D•

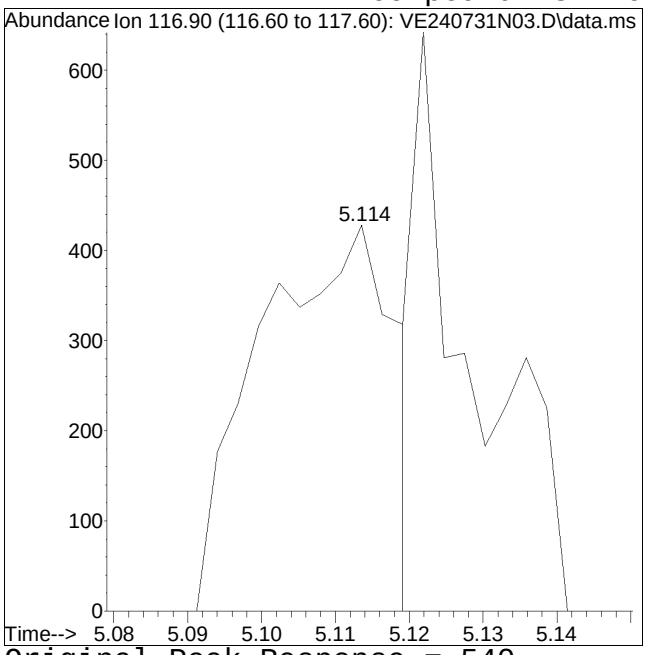


# Manual Integration Report

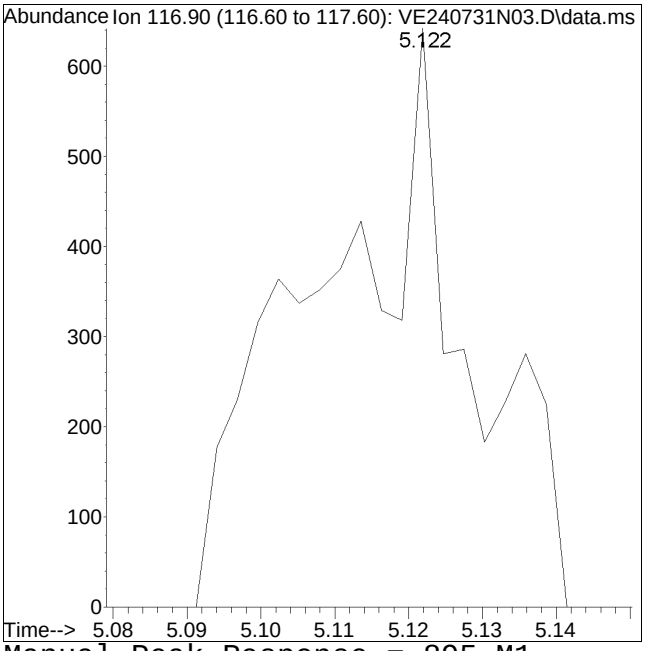
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N03.D
Date Inj'd : 7/31/2024 6:35 pm
Sample : I8260STD0.19PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #37: Carbon tetrachloride




Original Peak Response = 540



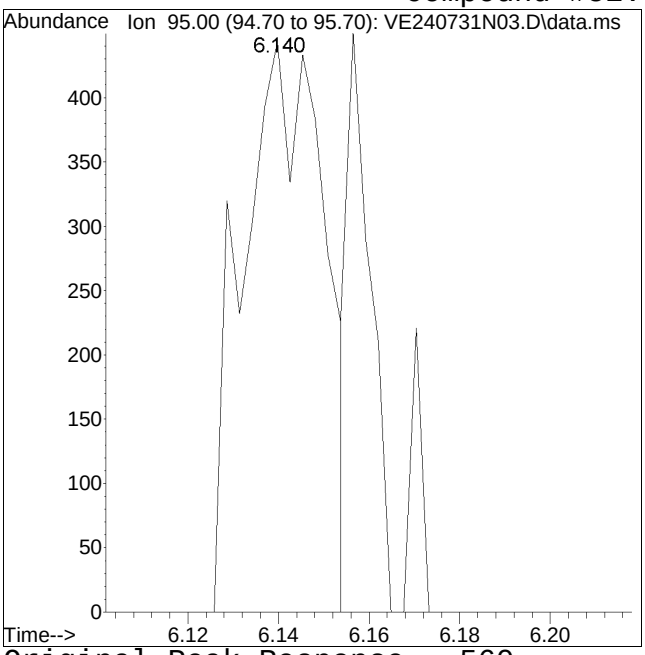

Manual Peak Response = 895 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

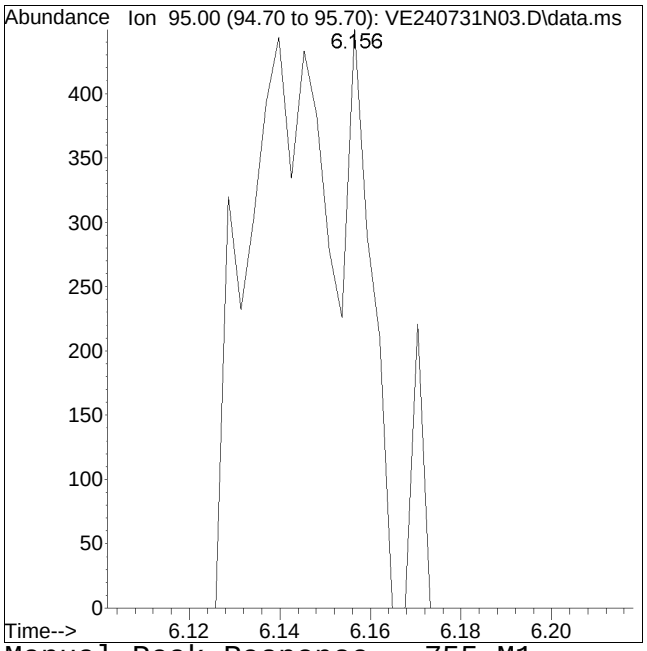
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N03.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 6:35 pm Instrument : Elaine
Sample : I8260STD0.19PPB Quant Date : 8/1/2024 11:57 am

## Compound #52: Trichloroethene




Original Peak Response = 560




Manual Peak Response = 755 M1

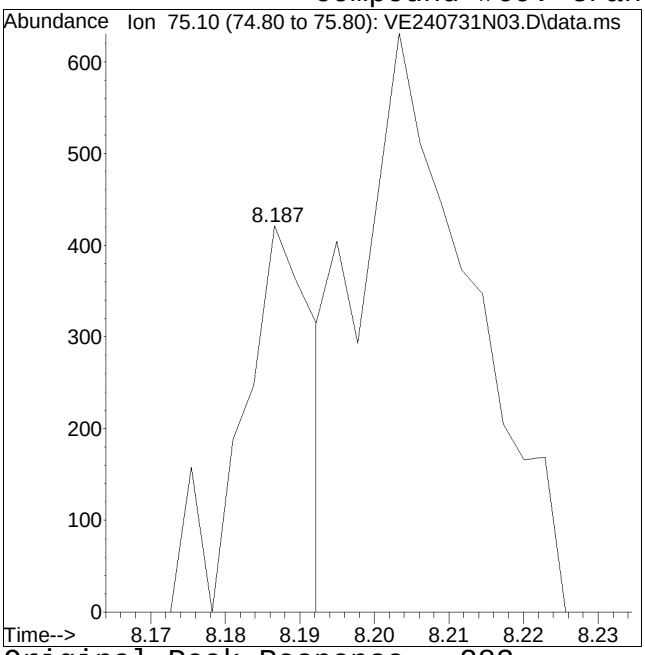
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

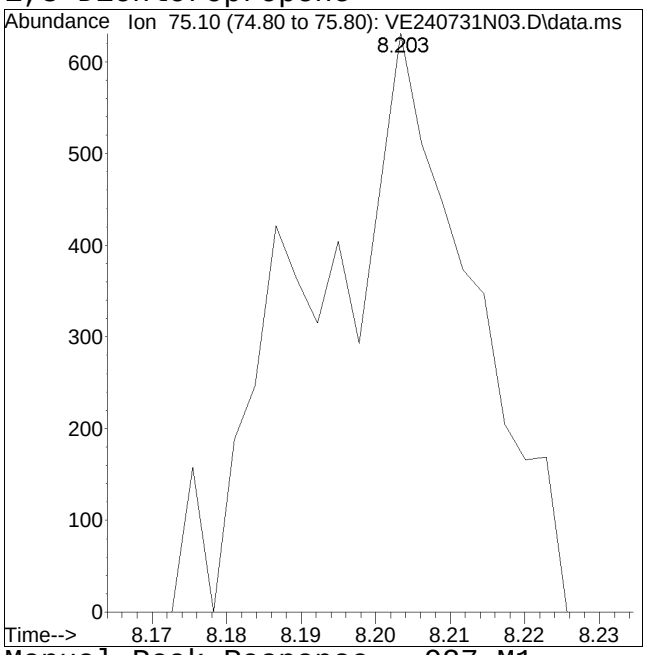
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N03.D
Date Inj'd : 7/31/2024 6:35 pm
Sample : I8260STD0.19PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #69: trans-1,3-Dichloropropene




Original Peak Response = 283




Manual Peak Response = 927 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N05.D
Acq On : 31 Jul 2024 7:26 pm
Operator : ELAINE:MKS
Sample : I8260STD0.5PPB
Misc : WG1954249
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.964 | 96 | 205652 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 100.52% | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 152599 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 103.28% | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.205 | 152 | 86607 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 102.49% | | |
| System Monitoring Compounds | | | | | |
| 39) Dibromofluoromethane | 5.158 | 113 | 49722 | 10.161 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.61% | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 66192 | 10.187 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.87% | | |
| 64) Toluene-d8 | 7.651 | 98 | 200132 | 9.914 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.14% | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 80217 | 9.988 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.88% | | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.592 | 85 | 1422 | 0.314 ug/L | 88 |
| 3) Chloromethane | 1.790 | 50 | 2046 | 0.379 ug/L | 89 |
| 4) Vinyl chloride | 1.857 | 62 | 1632 | 0.326 ug/L | 73 |
| 5) Bromomethane | 2.161 | 94 | 446 | 0.371 ug/L | 81 |
| 6) Chloroethane | 2.272 | 64 | 1120M4 | 0.355 ug/L | |
| 7) Trichlorofluoromethane | 2.420 | 101 | 1947 | 0.372 ug/L # | 69 |
| 8) Ethyl ether | 2.716 | 74 | 1005M1 | 0.461 ug/L | |
| 10) 1,1-Dichloroethene | 2.900 | 96 | 1318 | 0.415 ug/L # | 79 |
| 11) Carbon disulfide | 2.933 | 76 | 4345 | 0.420 ug/L # | 83 |
| 12) Freon-113 | 2.939 | 101 | 1230M1 | 0.367 ug/L | |
| 13) Iodomethane | 0.000 | | 0 | N.D. d | |
| 14) Acrolein | 3.229 | 56 | 430M1 | 0.473 ug/L | |
| 15) Methylene chloride | 3.463 | 84 | 2255 | 0.538 ug/L | 95 |
| 17) Acetone | 3.499 | 43 | 1696M1 | 1.168 ug/L | |
| 18) trans-1,2-Dichloroethene | 3.611 | 96 | 1381 | 0.380 ug/L | 78 |
| 19) Methyl acetate | 3.622 | 43 | 2374M1 | 0.700 ug/L | |
| 21) Methyl tert-butyl ether | 3.714 | 73 | 6120M1 | 0.440 ug/L | |
| 22) tert-Butyl alcohol | 3.792 | 59 | 1084M1 | 2.240 ug/L | |
| 24) Diisopropyl ether | 4.079 | 45 | 8193 | 0.413 ug/L # | 75 |
| 25) 1,1-Dichloroethane | 4.196 | 63 | 3485 | 0.399 ug/L | 82 |
| 26) Halothane | 4.258 | 117 | 1199M1 | 0.411 ug/L | |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N05.D
Acq On : 31 Jul 2024 7:26 pm
Operator : ELAINE:MKS
Sample : I8260STD0.5PPB
Misc : WG1954249
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.230 | 53 | 782M1 | 0.433 | ug/L | | |
| 28) Ethyl tert-butyl ether | 4.422 | 59 | 7137 | 0.414 | ug/L | # | 76 |
| 29) Vinyl acetate | 4.431 | 43 | 6978M1 | 0.610 | ug/L | | |
| 30) cis-1,2-Dichloroethene | 4.709 | 96 | 1882M1 | 0.433 | ug/L | | |
| 31) 2,2-Dichloropropane | 4.818 | 77 | 2468 | 0.444 | ug/L | # | 31 |
| 33) Bromochloromethane | 4.907 | 128 | 912M1 | 0.463 | ug/L | | |
| 34) Cyclohexane | 4.913 | 56 | 3953 | 0.426 | ug/L | # | 23 |
| 35) Chloroform | 4.980 | 83 | 3115 | 0.438 | ug/L | # | 88 |
| 36) Ethyl acetate | 5.097 | 43 | 3232M1 | 0.601 | ug/L | | |
| 37) Carbon tetrachloride | 5.117 | 117 | 1932 | 0.361 | ug/L | # | 25 |
| 38) Tetrahydrofuran | 5.144 | 42 | 890M1 | 0.535 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.178 | 97 | 2722M1 | 0.427 | ug/L | | |
| 42) 2-Butanone | 0.000 | | 0 | N.D. | d | | |
| 43) 1,1-Dichloropropene | 5.301 | 75 | 1981 | 0.370 | ug/L | # | 73 |
| 45) Benzene | 5.552 | 78 | 6728 | 0.390 | ug/L | # | 79 |
| 46) tert-Amyl methyl ether | 5.663 | 73 | 5646M1 | 0.444 | ug/L | | |
| 48) 1,2-Dichloroethane | 5.752 | 62 | 3030 | 0.461 | ug/L | # | 59 |
| 51) Methyl cyclohexane | 6.134 | 83 | 2892 | 0.422 | ug/L | # | 61 |
| 52) Trichloroethene | 6.148 | 95 | 1655M1 | 0.383 | ug/L | | |
| 54) Dibromomethane | 6.583 | 93 | 990M1 | 0.402 | ug/L | | |
| 55) 1,2-Dichloropropane | 6.684 | 63 | 2209M1 | 0.431 | ug/L | | |
| 57) 2-Chloroethyl vinyl ether | 7.381 | 63 | 1303M1 | 0.404 | ug/L | | |
| 58) Bromodichloromethane | 6.756 | 83 | 2570 | 0.424 | ug/L | # | 77 |
| 61) 1,4-Dioxane | 6.971 | 88 | 3965M1 | 99.134 | ug/L | | |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 3009 | 0.430 | ug/L | # | 84 |
| 65) Toluene | 7.718 | 92 | 4550 | 0.419 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.148 | 58 | 735M1 | 0.388 | ug/L | | |
| 67) Tetrachloroethene | 8.151 | 166 | 1670 | 0.362 | ug/L | # | 47 |
| 69) trans-1,3-Dichloropropene | 8.201 | 75 | 2736 | 0.433 | ug/L | # | 86 |
| 71) Ethyl methacrylate | 8.382 | 69 | 2714 | 0.460 | ug/L | # | 32 |
| 72) 1,1,2-Trichloroethane | 8.382 | 83 | 1399M1 | 0.449 | ug/L | | |
| 73) Chlorodibromomethane | 8.594 | 129 | 1758M1 | 0.409 | ug/L | | |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 2813 | 0.428 | ug/L | | 95 |
| 75) 1,2-Dibromoethane | 8.864 | 107 | 1649 | 0.455 | ug/L | # | 59 |
| 77) 2-Hexanone | 9.157 | 43 | 1819 | 0.509 | ug/L | # | 40 |
| 78) Chlorobenzene | 9.517 | 112 | 5132 | 0.438 | ug/L | # | 61 |
| 79) Ethylbenzene | 9.559 | 91 | 8713 | 0.405 | ug/L | | 100 |
| 80) 1,1,1,2-Tetrachloroethane | 9.609 | 131 | 1642 | 0.375 | ug/L | # | 44 |
| 81) p/m Xylene | 9.746 | 106 | 6826 | 0.817 | ug/L | | 100 |
| 82) o Xylene | 10.289 | 106 | 6928M1 | 0.852 | ug/L | | |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N05.D
Acq On : 31 Jul 2024 7:26 pm
Operator : ELAINE:MKS
Sample : I8260STD0.5PPB
Misc : WG1954249
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 83) | Styrene | 10.354 | 104 | 10959 | 0.810 | ug/L | | 96 |
| 85) | Bromoform | 10.381 | 173 | 1229M1 | 0.429 | ug/L | | |
| 87) | Isopropylbenzene | 10.669 | 105 | 8275 | 0.391 | ug/L | | 94 |
| 89) | Bromobenzene | 11.104 | 156 | 2333 | 0.431 | ug/L | | 96 |
| 90) | n-Propylbenzene | 11.154 | 91 | 10667 | 0.419 | ug/L | | 99 |
| 91) | 1,4-Dichlorobutane | 11.168 | 55 | 4660 | 0.504 | ug/L | | 98 |
| 92) | 1,1,2,2-Tetrachloroethane | 11.238 | 83 | 2216M1 | 0.519 | ug/L | | |
| 93) | 4-Ethyltoluene | 11.282 | 105 | 8381 | 0.399 | ug/L | | 99 |
| 94) | 2-Chlorotoluene | 11.324 | 91 | 6283 | 0.411 | ug/L | | 100 |
| 95) | 1,3,5-Trimethylbenzene | 11.377 | 105 | 7504 | 0.404 | ug/L | | 100 |
| 96) | 1,2,3-Trichloropropane | 11.377 | 75 | 1709 | 0.458 | ug/L | | 98 |
| 97) | trans-1,4-Dichloro-2-b... | 11.430 | 53 | 800M1 | 0.454 | ug/L | | |
| 98) | 4-Chlorotoluene | 11.505 | 91 | 6625 | 0.418 | ug/L | | 99 |
| 99) | tert-Butylbenzene | 11.717 | 119 | 6113 | 0.399 | ug/L | | 94 |
| 102) | 1,2,4-Trimethylbenzene | 11.798 | 105 | 7563 | 0.410 | ug/L | | 99 |
| 103) | sec-Butylbenzene | 11.910 | 105 | 9273 | 0.414 | ug/L | | 100 |
| 104) | p-Isopropyltoluene | 12.066 | 119 | 7364 | 0.387 | ug/L | | 96 |
| 105) | 1,3-Dichlorobenzene | 12.127 | 146 | 4394 | 0.434 | ug/L | | 93 |
| 106) | 1,4-Dichlorobenzene | 12.222 | 146 | 4371M3 | 0.436 | ug/L | | |
| 107) | p-Diethylbenzene | 12.437 | 119 | 4450 | 0.395 | ug/L | | 96 |
| 108) | n-Butylbenzene | 12.492 | 91 | 6499 | 0.402 | ug/L | # | 40 |
| 109) | 1,2-Dichlorobenzene | 12.643 | 146 | 4236 | 0.439 | ug/L | | 98 |
| 110) | 1,2,4,5-Tetramethylben... | 13.231 | 119 | 7522 | 0.408 | ug/L | | 98 |
| 111) | 1,2-Dibromo-3-chloropr... | 13.424 | 155 | 212M1 | 0.267 | ug/L | | |
| 112) | 1,3,5-Trichlorobenzene | 13.457 | 180 | 3071 | 0.398 | ug/L | | 92 |
| 113) | Hexachlorobutadiene | 14.029 | 225 | 974 | 0.395 | ug/L | | 90 |
| 114) | 1,2,4-Trichlorobenzene | 14.057 | 180 | 2885 | 0.422 | ug/L | | 90 |
| 115) | Naphthalene | 14.350 | 128 | 6143 | 0.418 | ug/L | | 100 |
| 116) | 1,2,3-Trichlorobenzene | 14.514 | 180 | 2501 | 0.400 | ug/L | # | 83 |

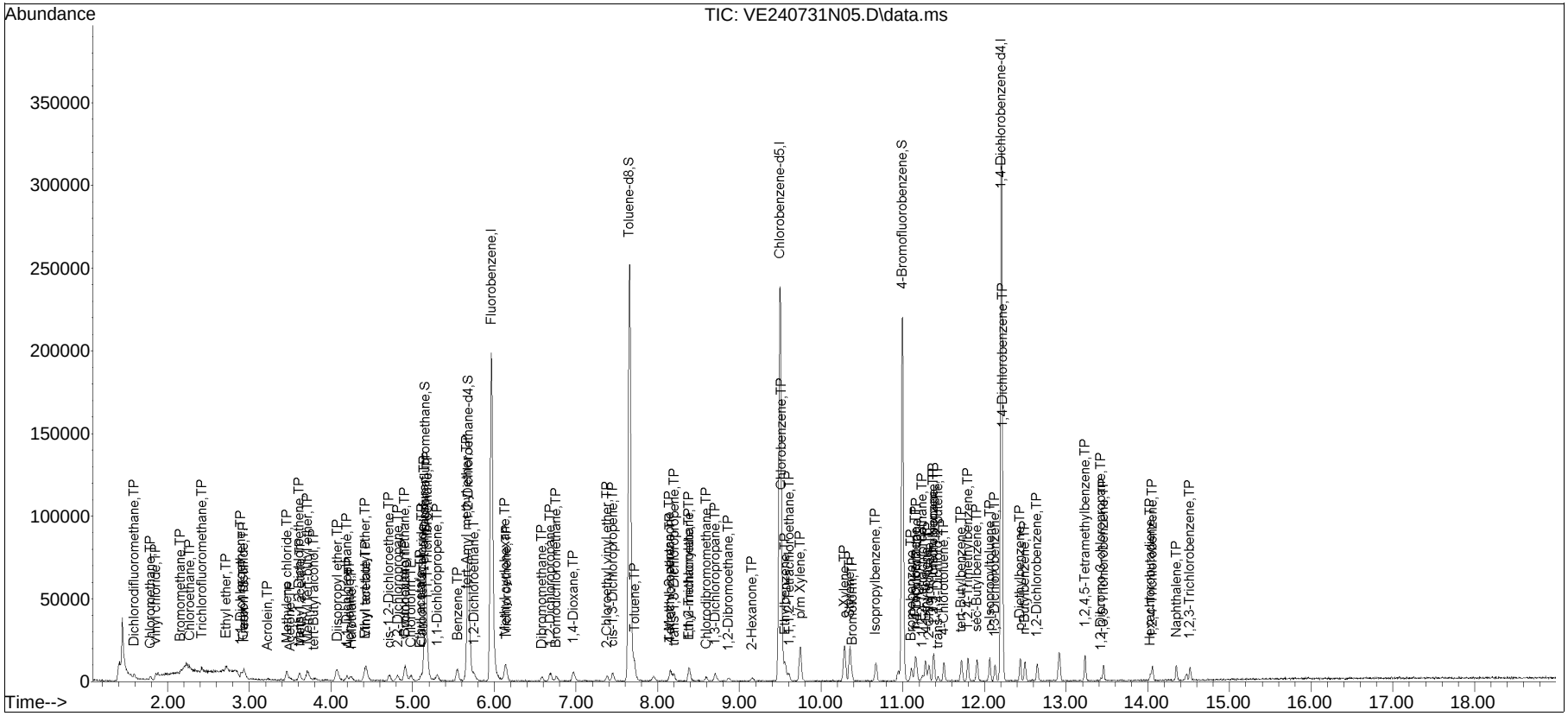
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N05.D
Acq On : 31 Jul 2024 7:26 pm
Operator : ELAINE:MKS
Sample : I8260STD0.5PPB
Misc : WG1954249
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

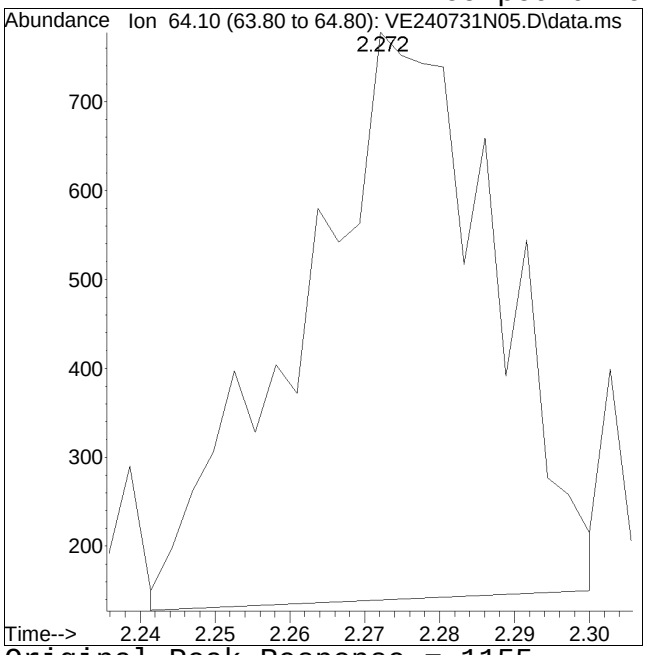


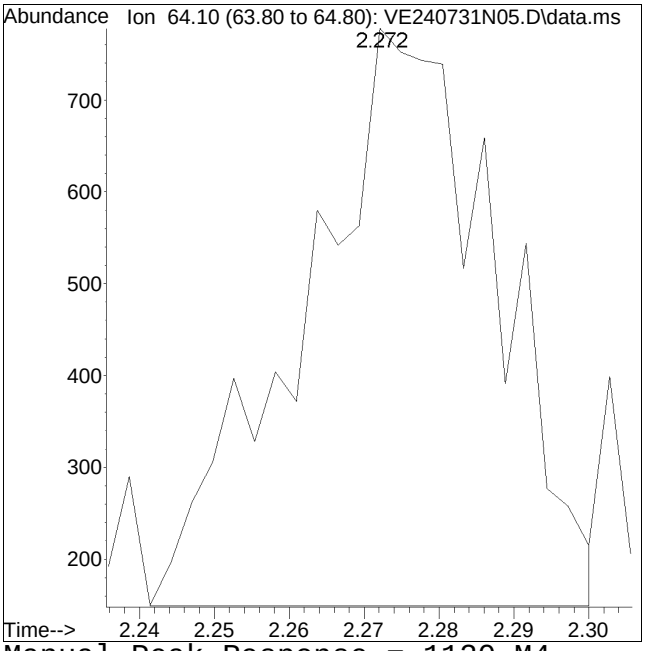
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane



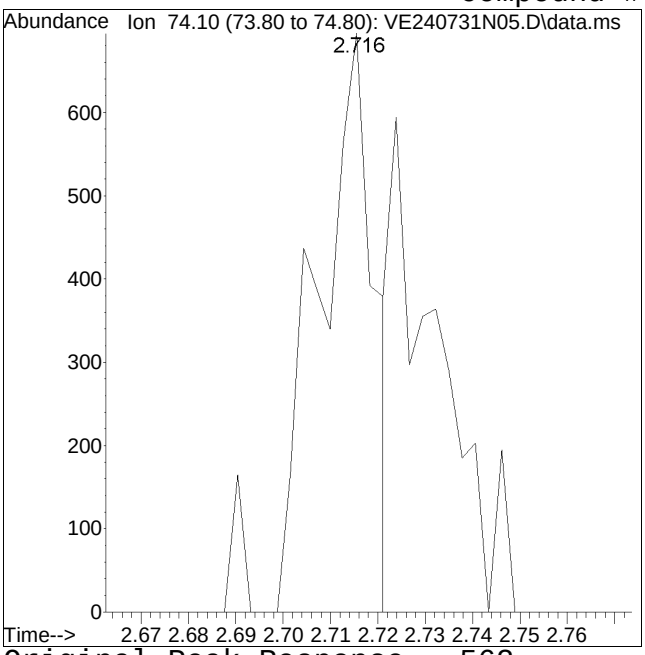




Original Peak Response = 1155 Manual Peak Response = 1120 M4
M4 = Poor automated baseline construction.

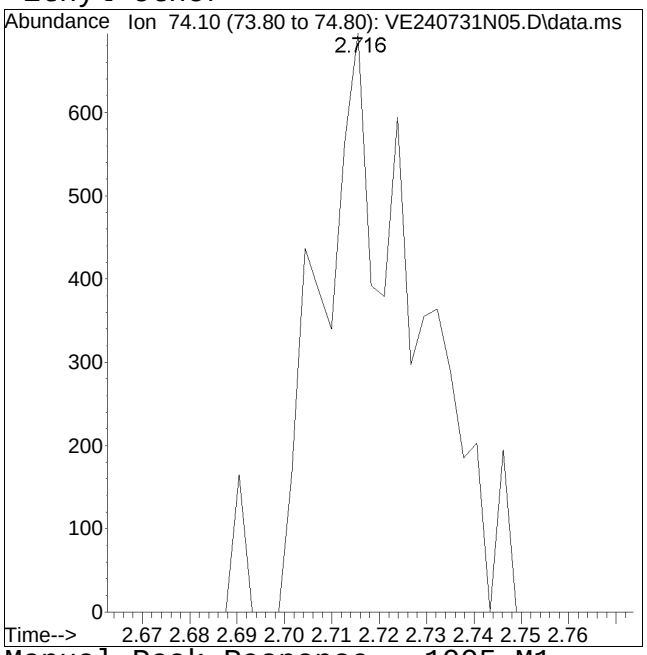
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #8: Ethyl ether




Original Peak Response = 562




Manual Peak Response = 1005 M1

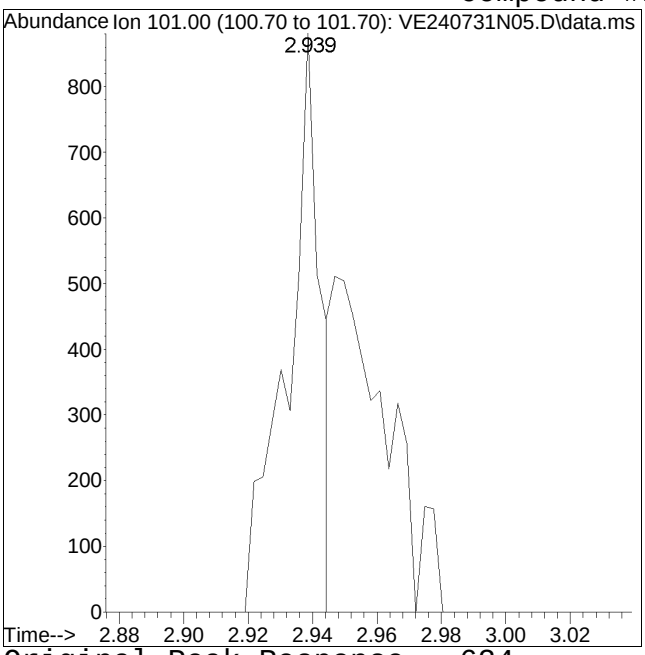
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

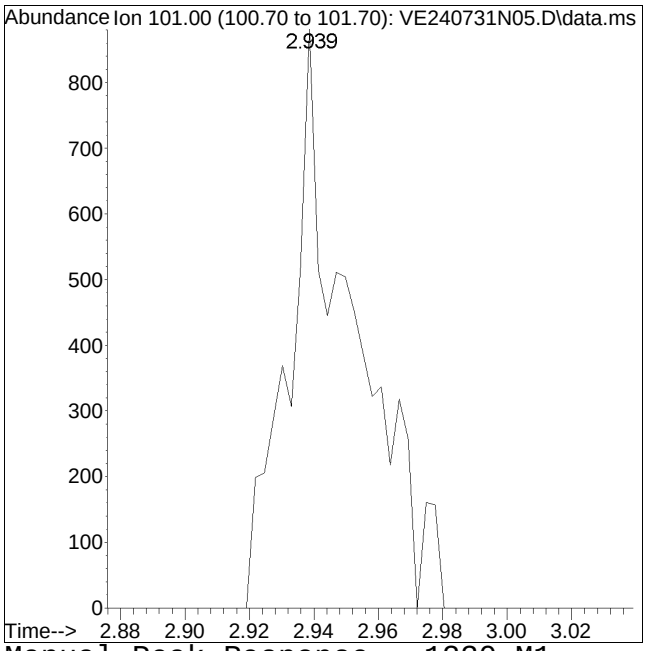
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #12: Freon-113




Original Peak Response = 624




Manual Peak Response = 1230 M1

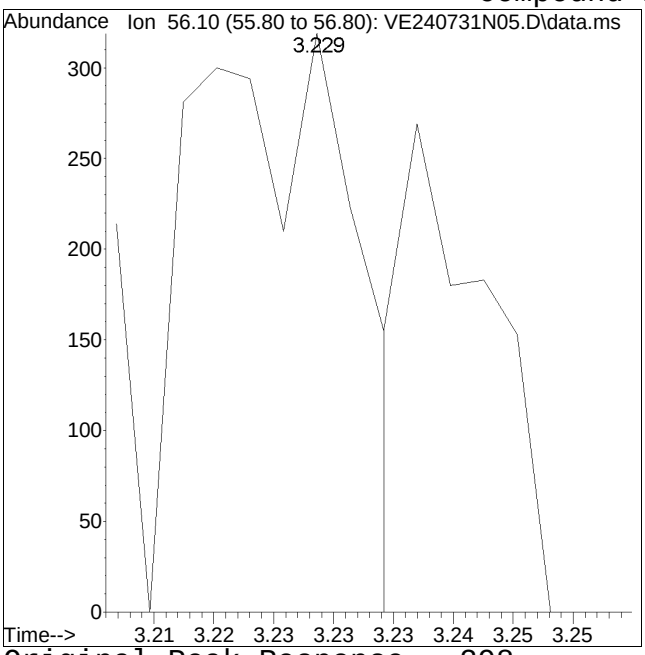
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

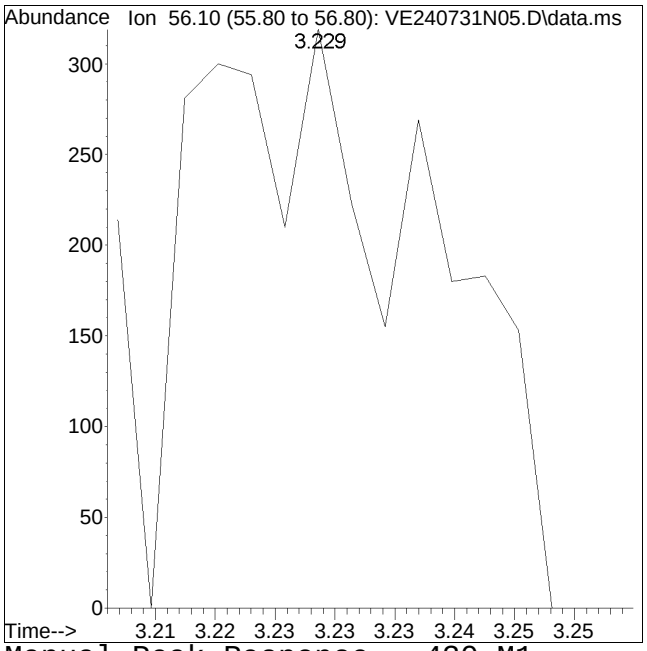
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #14: Acrolein




Original Peak Response = 298



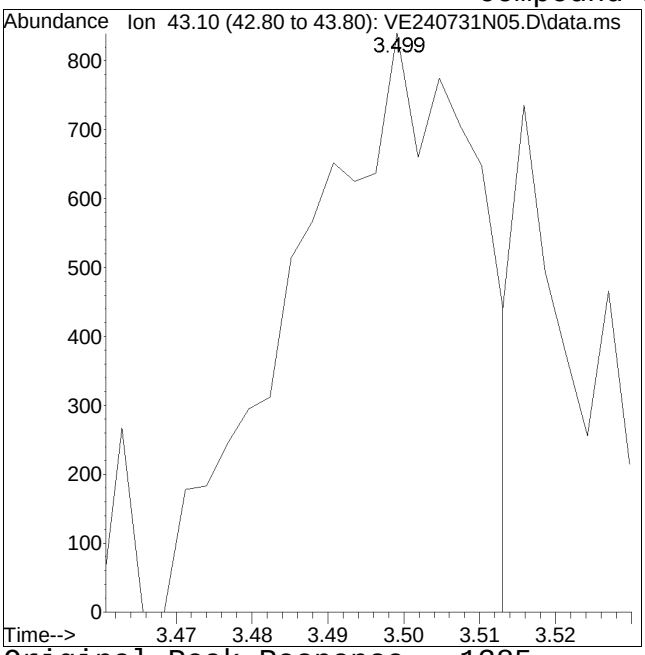

Manual Peak Response = 430 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

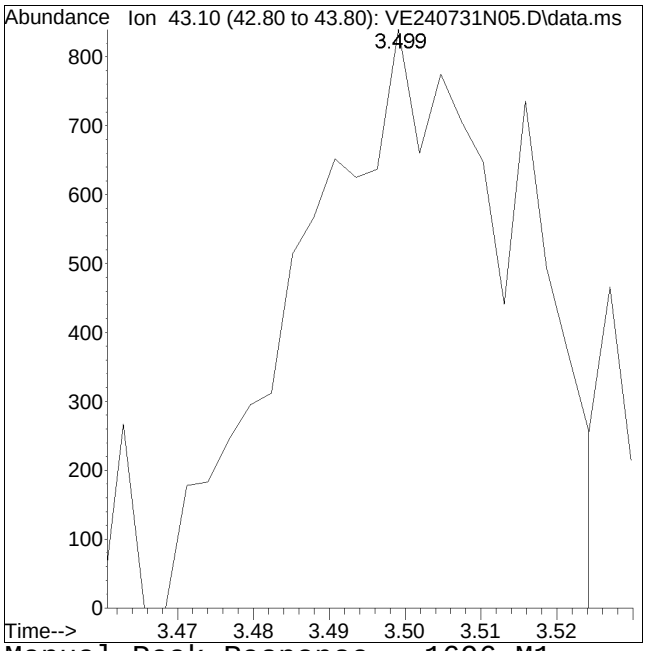
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #17: Acetone




Original Peak Response = 1385



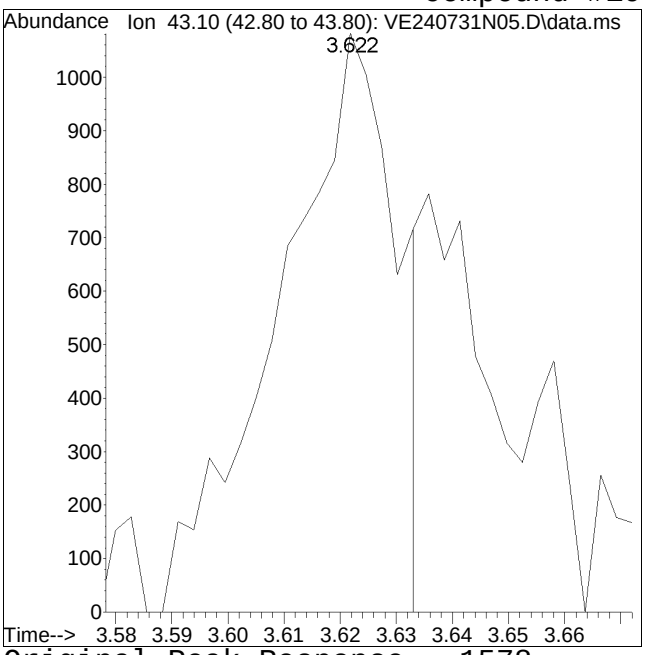

Manual Peak Response = 1696 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

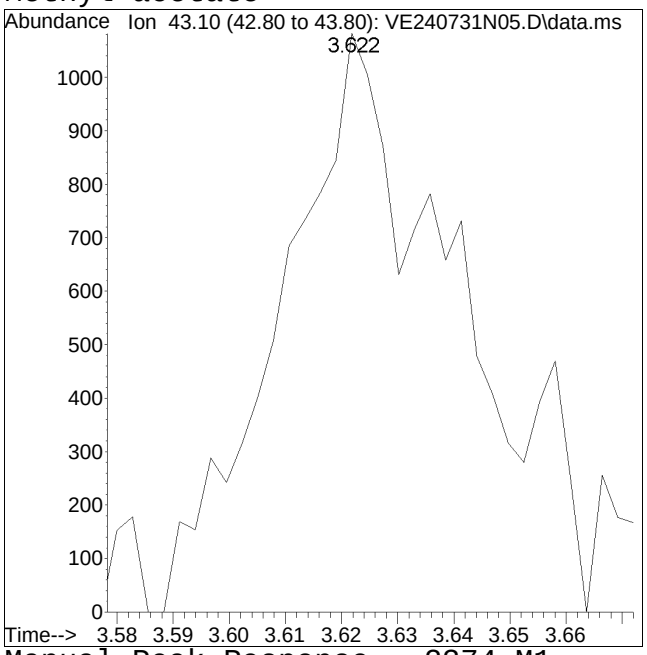
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #19: Methyl acetate




Original Peak Response = 1578




Manual Peak Response = 2374 M1

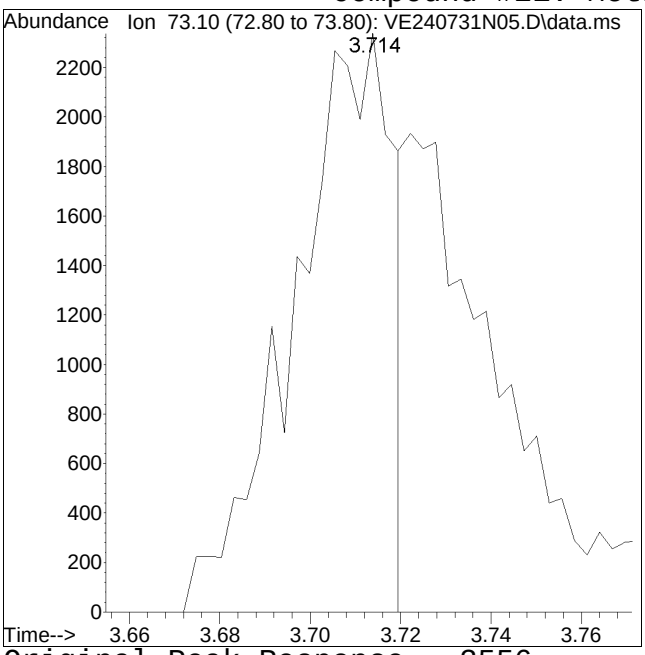
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

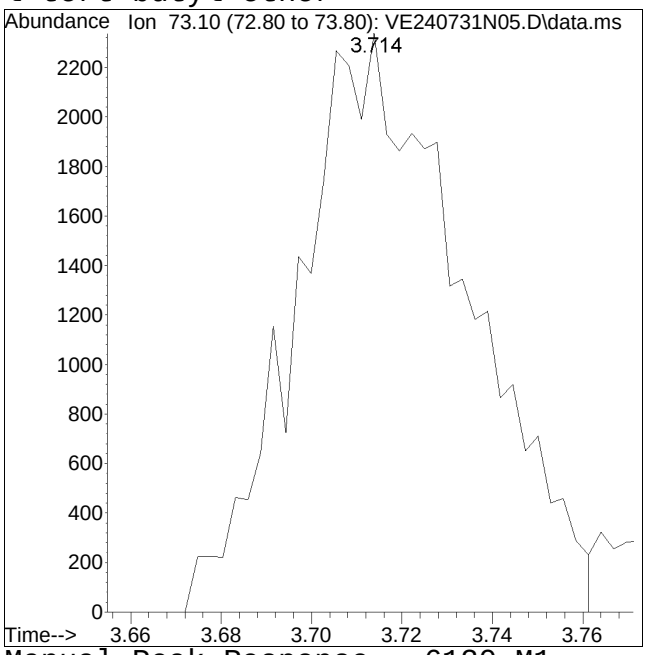
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #21: Methyl tert-butyl ether




Original Peak Response = 3556



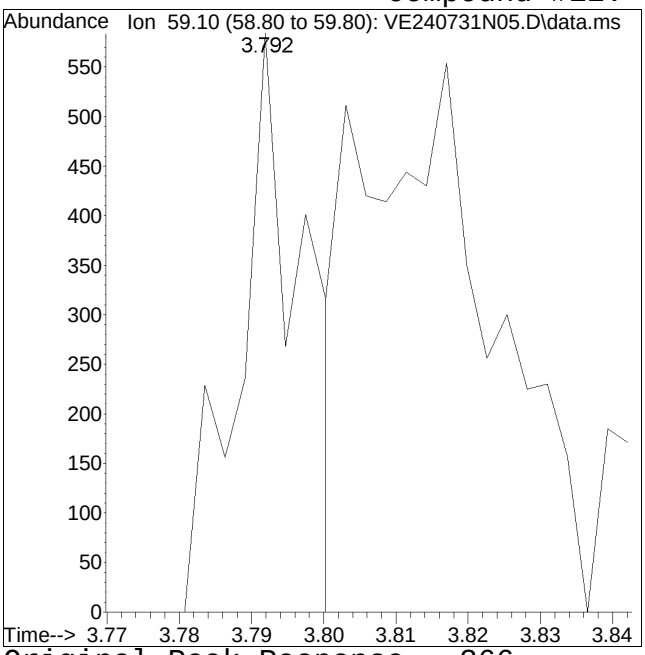

Manual Peak Response = 6120 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

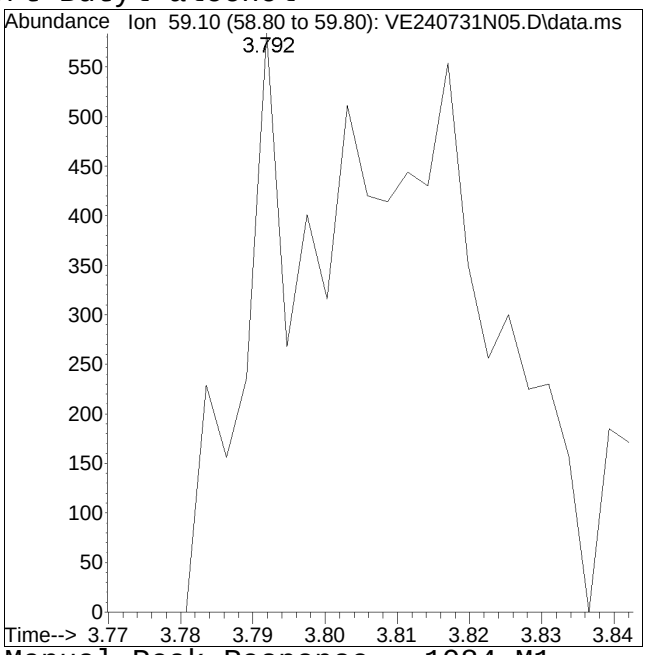
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

## Compound #22: tert-Butyl alcohol




Original Peak Response = 366



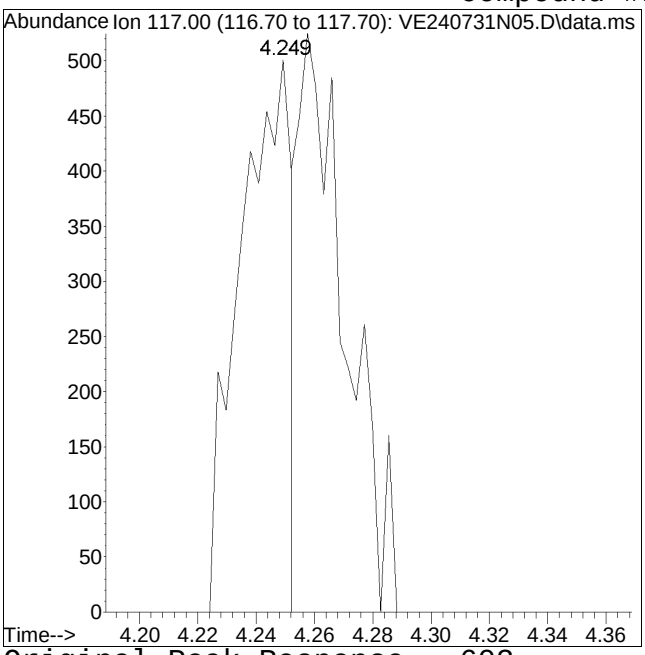

Manual Peak Response = 1084 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

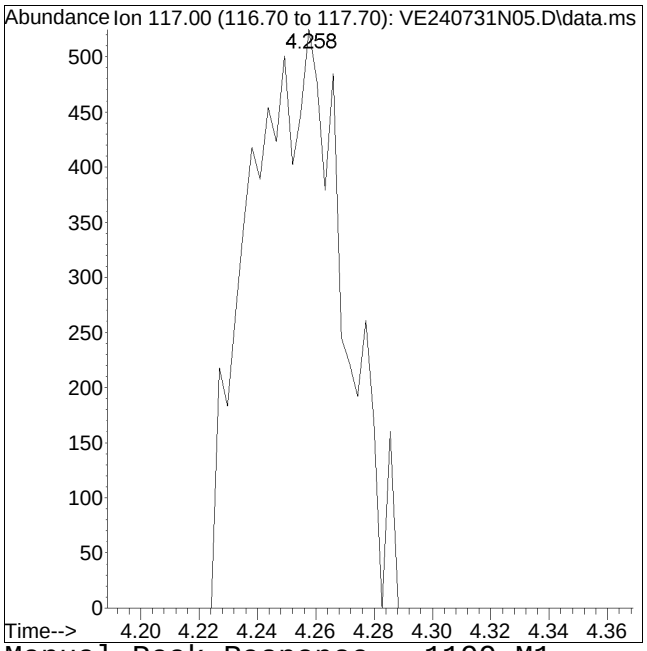
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #26: Halothane




Original Peak Response = 603



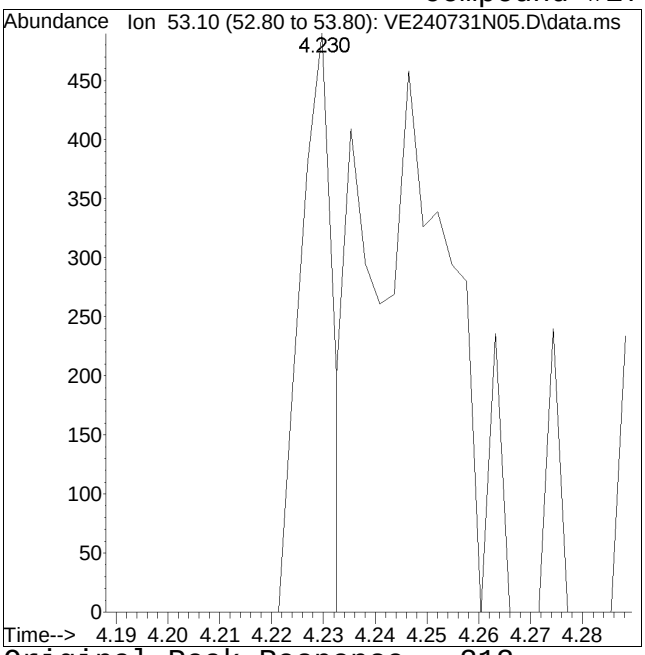

Manual Peak Response = 1199 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

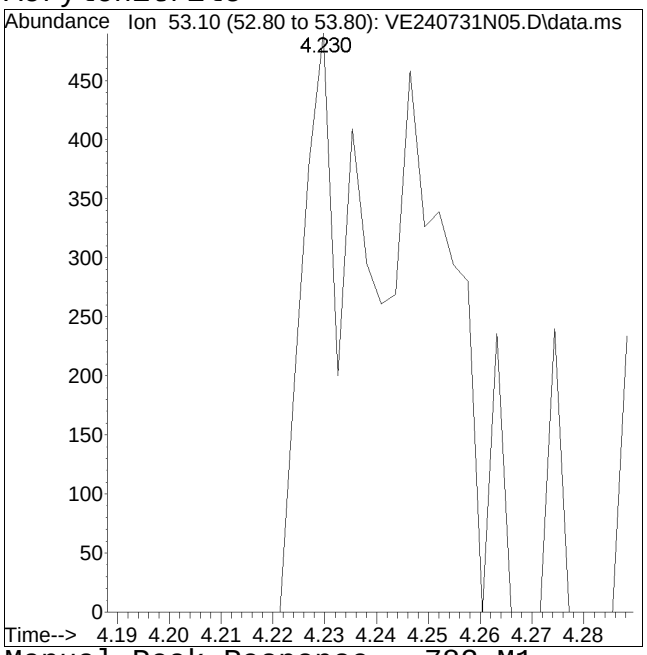
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #27: Acrylonitrile




Original Peak Response = 212



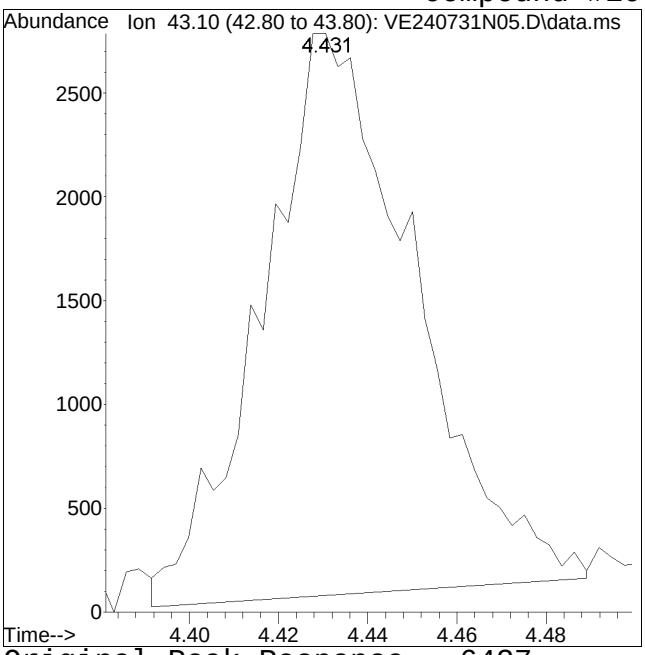

Manual Peak Response = 782 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

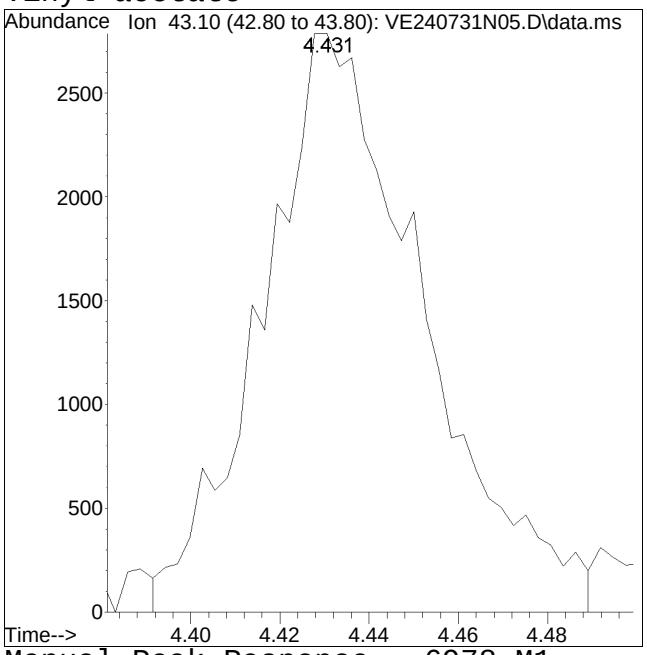
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #29: Vinyl acetate




Original Peak Response = 6427




Manual Peak Response = 6978 M1

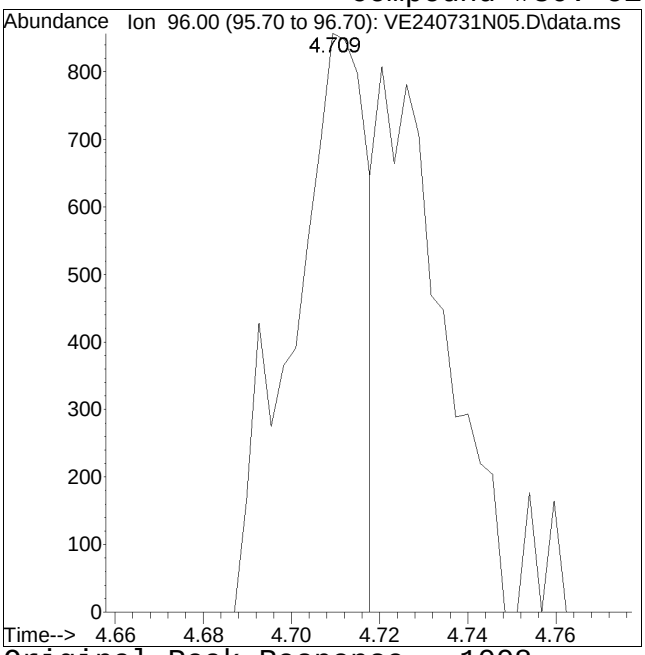
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

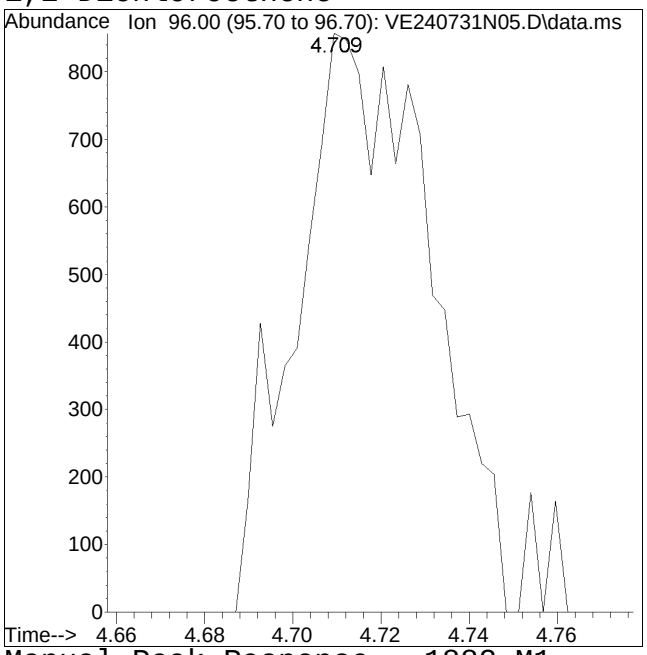
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #30: cis-1,2-Dichloroethene




Original Peak Response = 1008 Manual Peak Response = 1882 M1

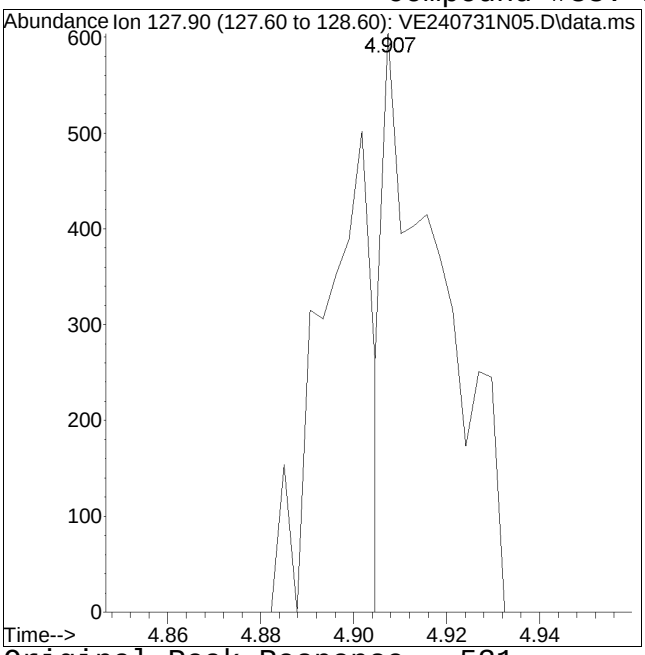
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

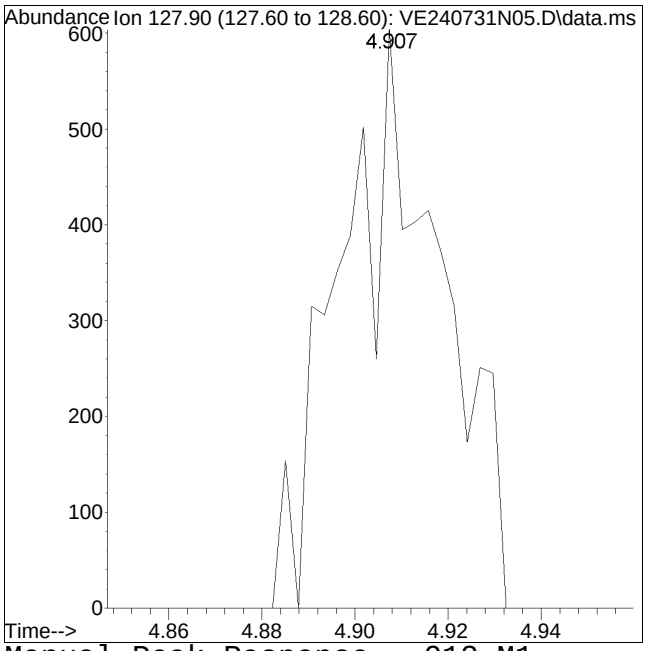
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #33: Bromochloromethane




Original Peak Response = 531




Manual Peak Response = 912 M1

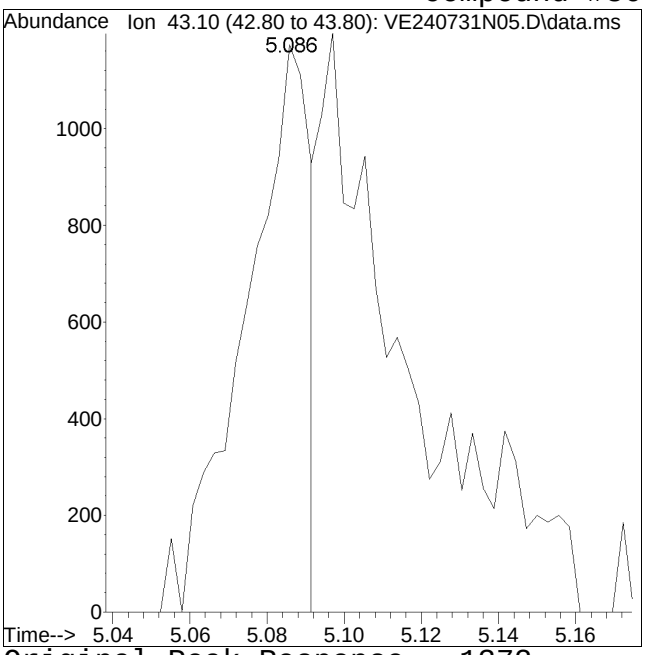
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

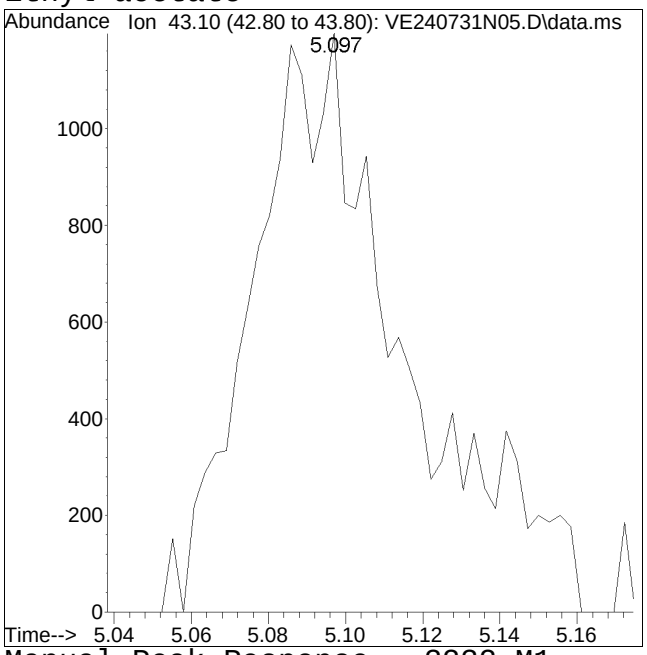
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #36: Ethyl acetate




Original Peak Response = 1372



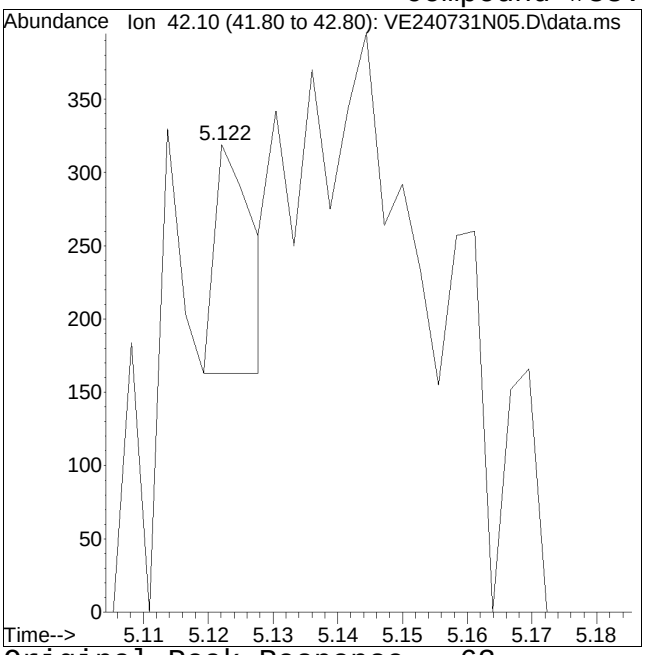

Manual Peak Response = 3232 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

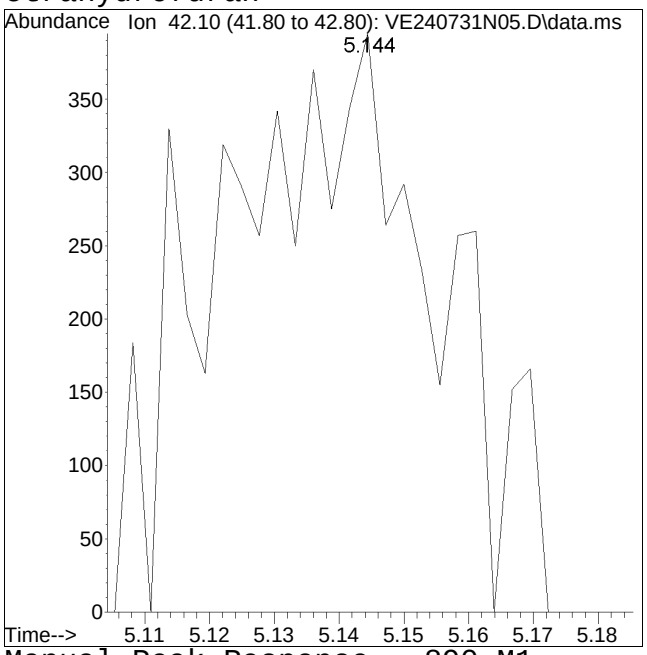
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 63



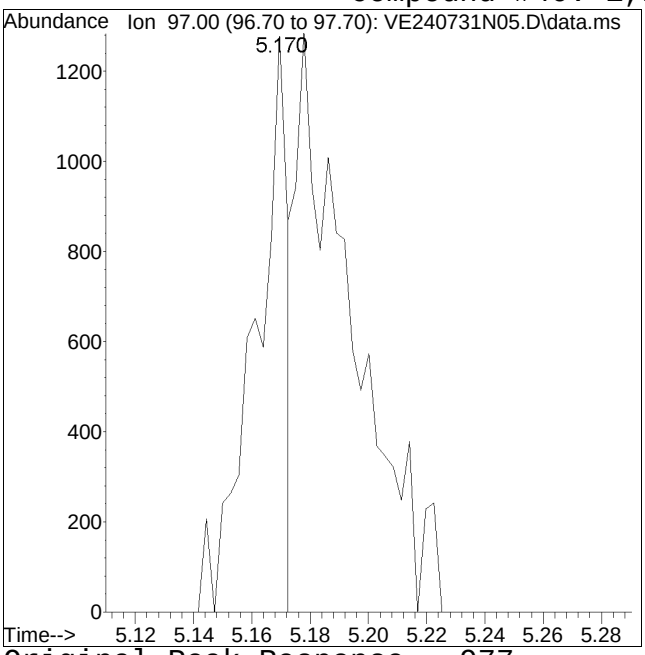

Manual Peak Response = 890 M1

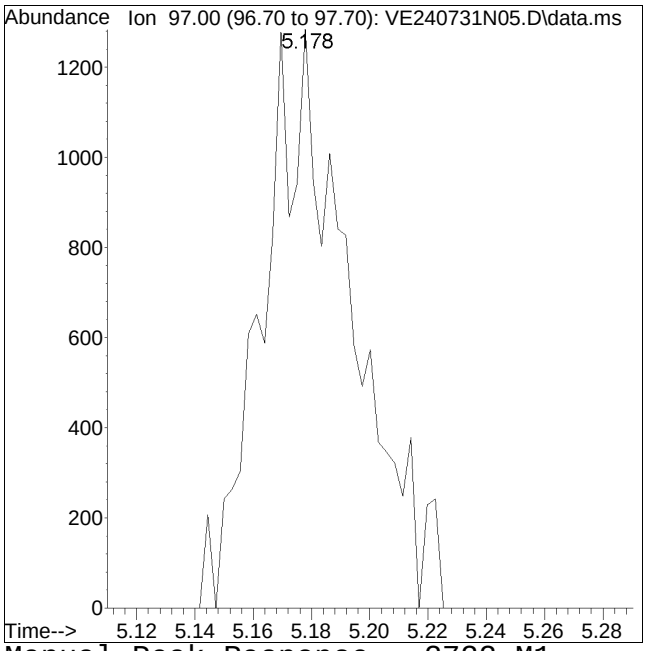
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #40: 1,1,1-Trichloroethane



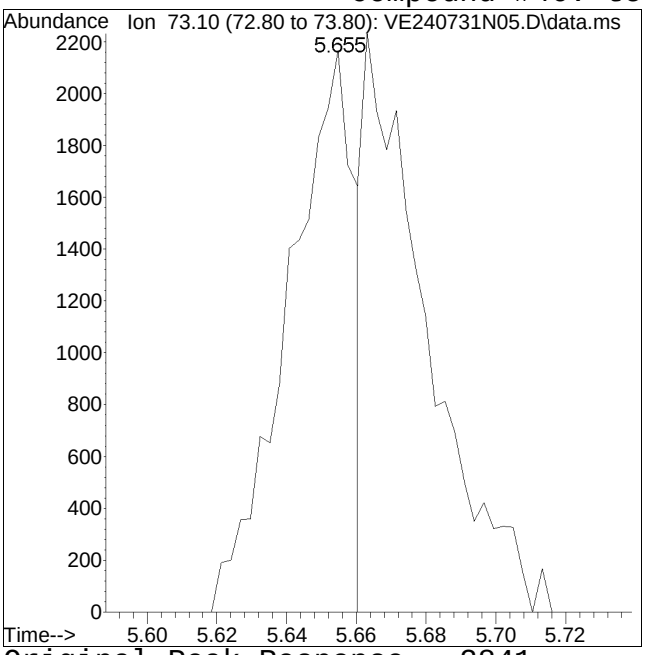

Original Peak Response = 977 Manual Peak Response = 2722 M1

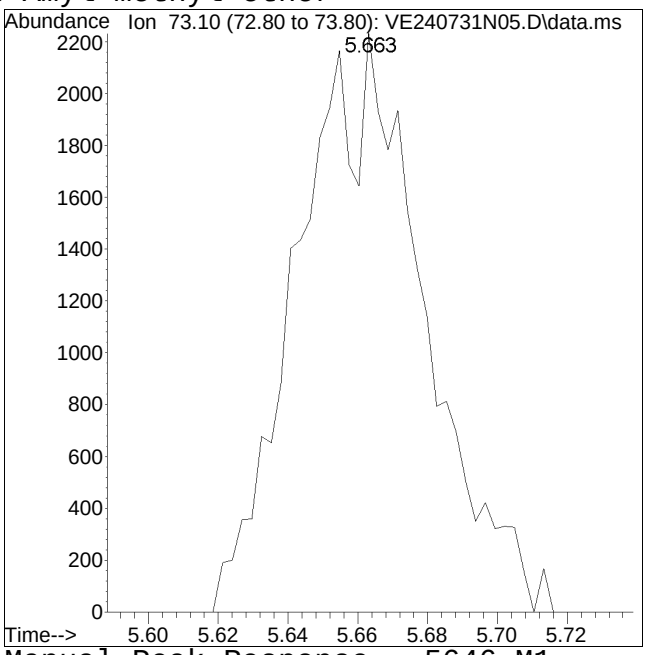
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #46: tert-Amyl methyl ether



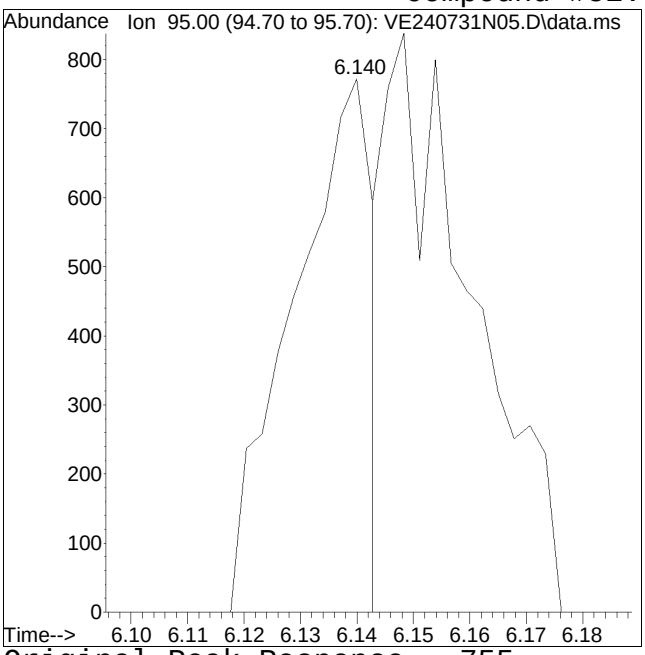




Original Peak Response = 2841 Manual Peak Response = 5646 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

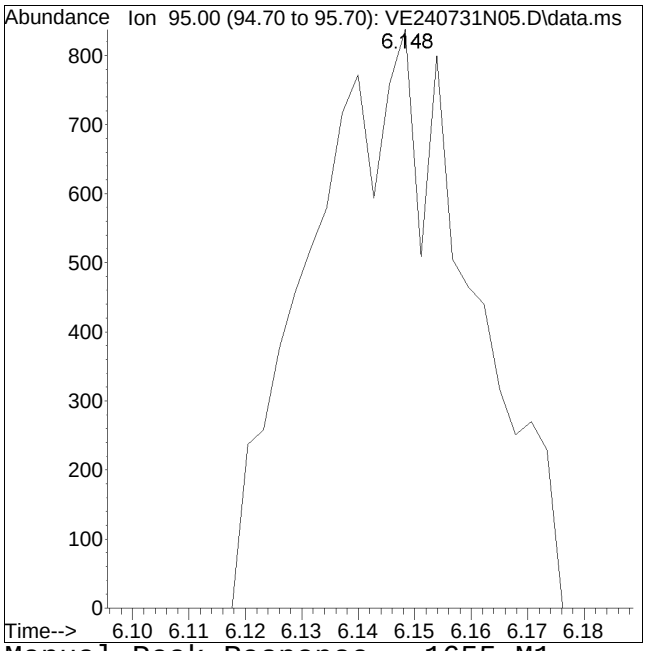
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #52: Trichloroethene




Original Peak Response = 755



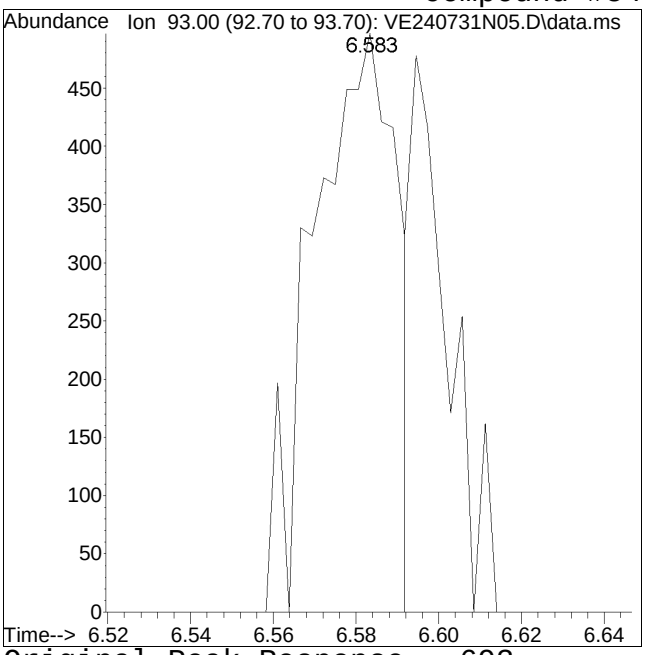

Manual Peak Response = 1655 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

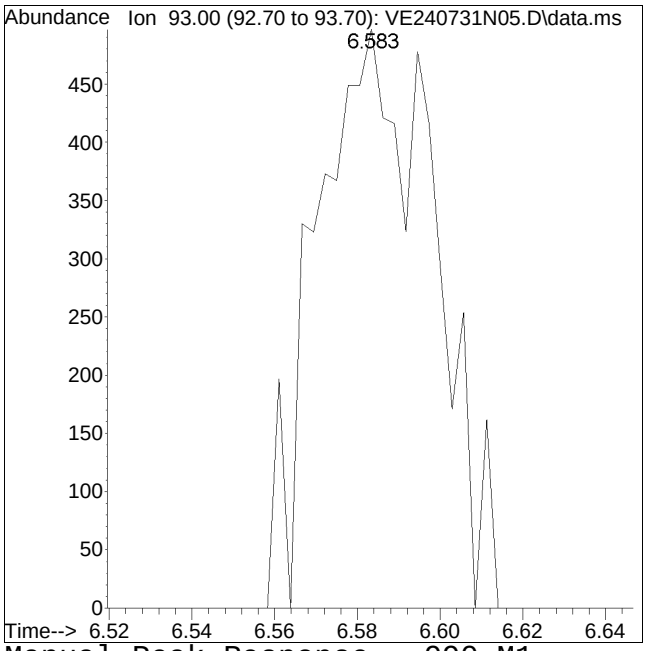
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #54: Dibromomethane




Original Peak Response = 693




Manual Peak Response = 990 M1

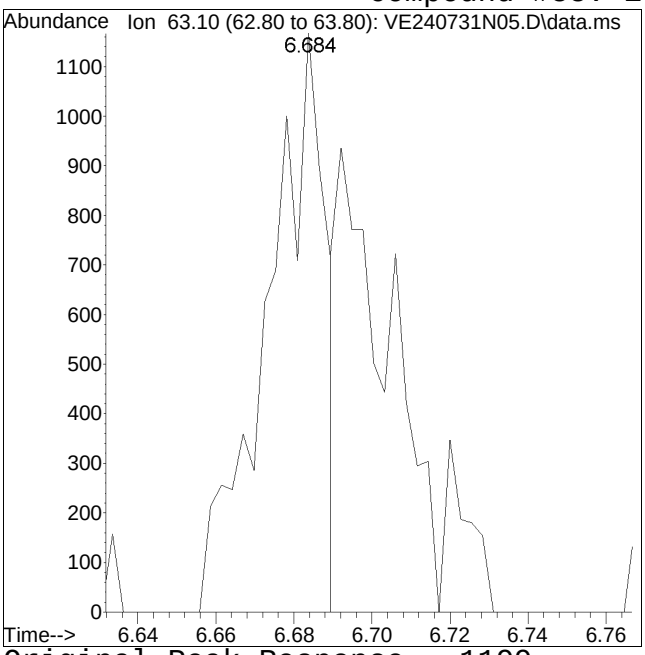
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

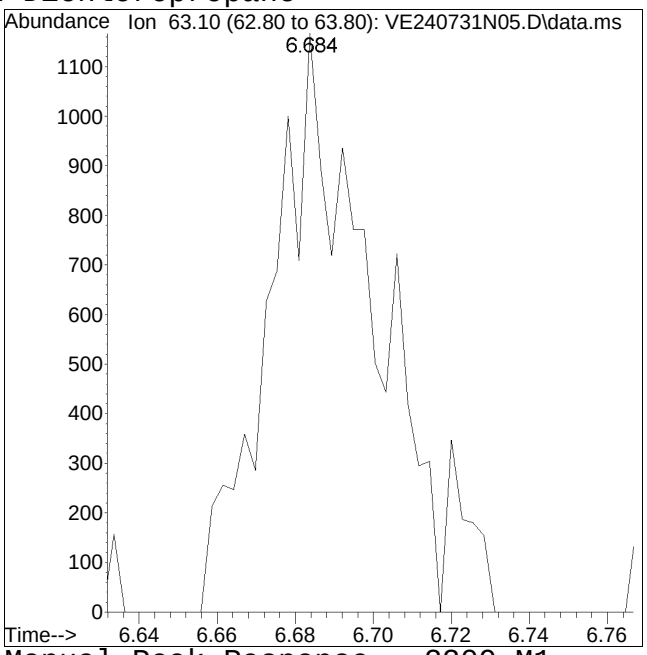
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #55: 1,2-Dichloropropane




Original Peak Response = 1199



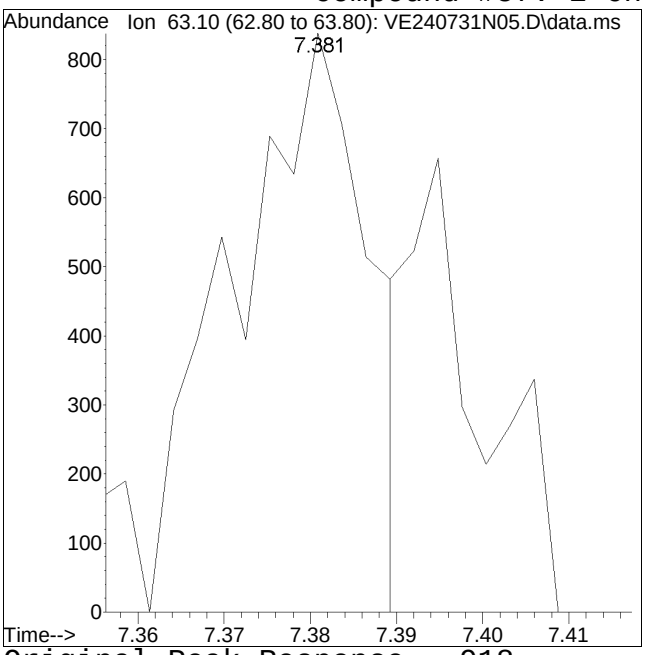

Manual Peak Response = 2209 M1

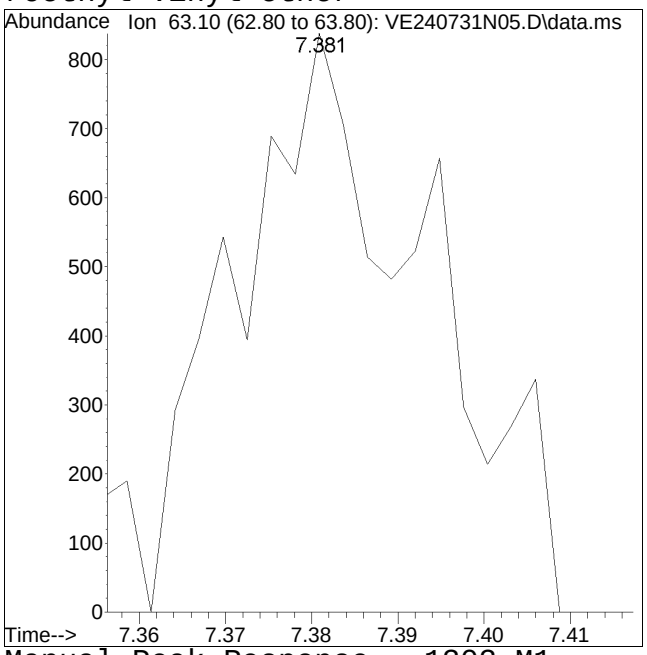
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #57: 2-Chloroethyl vinyl ether



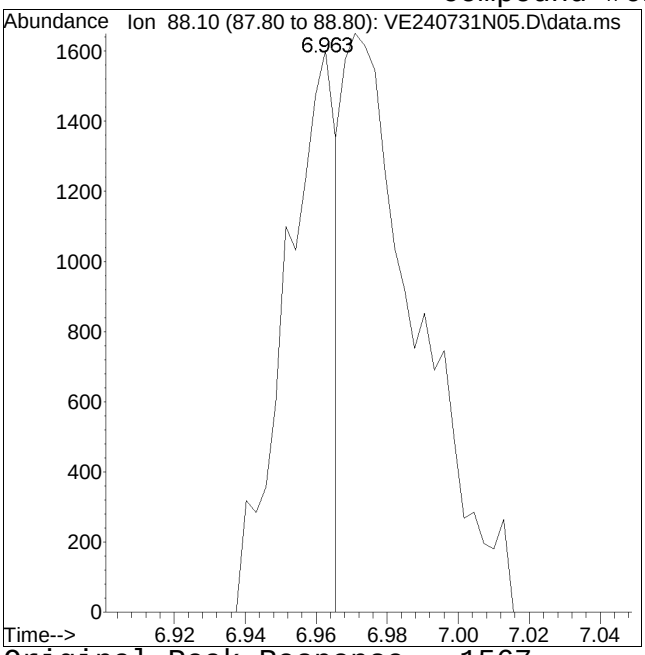




Original Peak Response = 918 Manual Peak Response = 1303 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

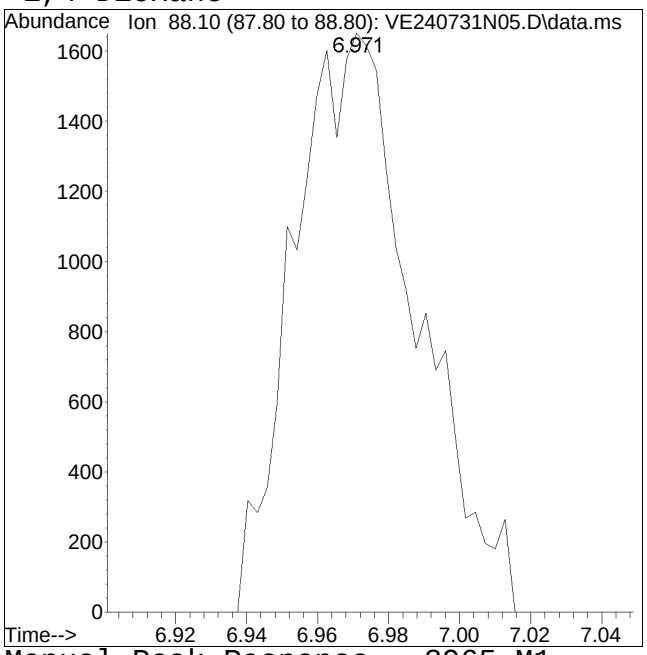
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #61: 1,4-Dioxane




Original Peak Response = 1567



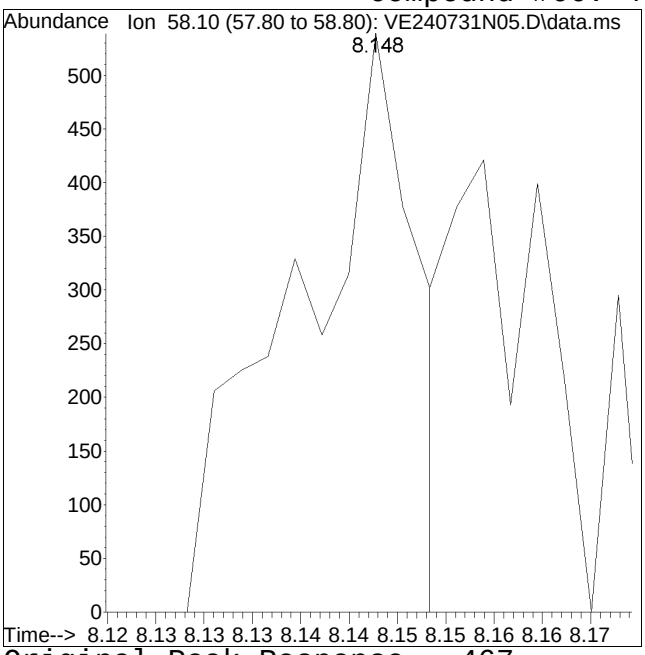

Manual Peak Response = 3965 M1

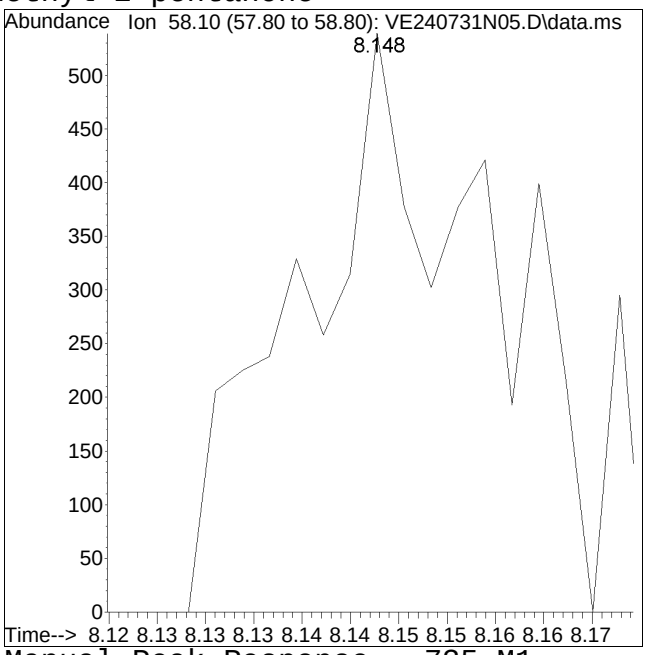
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #66: 4-Methyl-2-pentanone



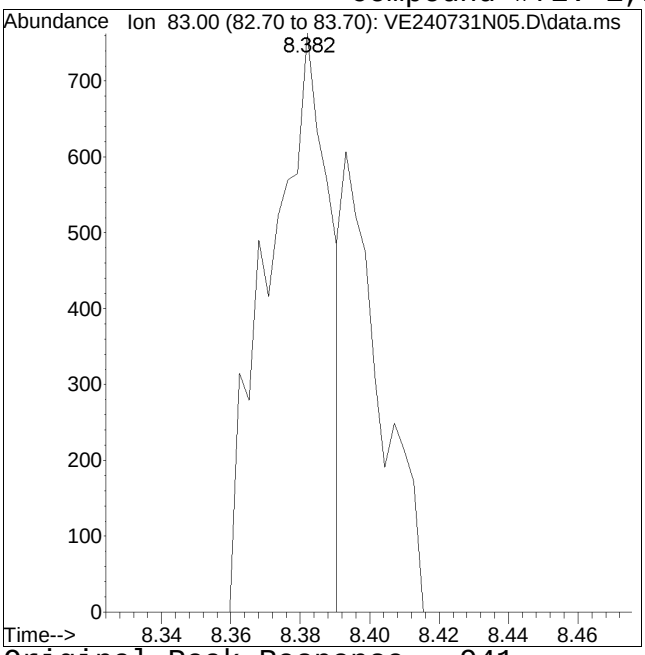

Original Peak Response = 467 Manual Peak Response = 735 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

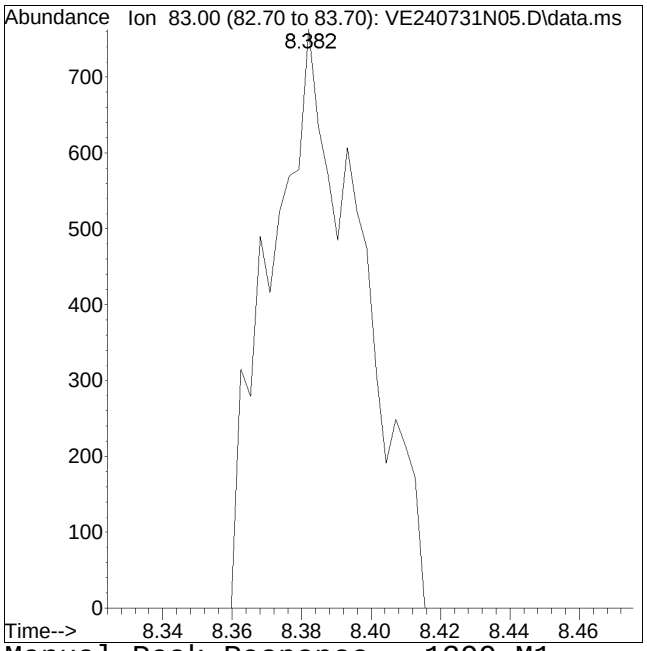
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N05.D
Date Inj'd : 7/31/2024 7:26 pm
Sample : I8260STD0.5PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #72: 1,1,2-Trichloroethane




Original Peak Response = 941



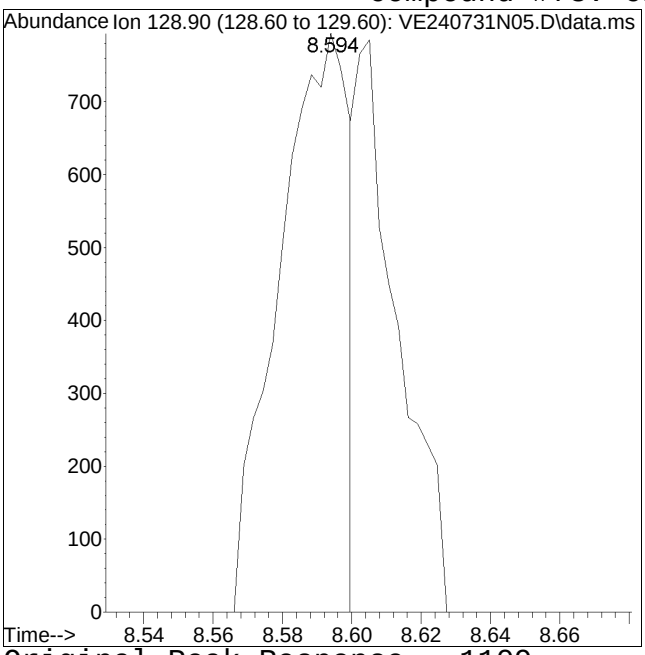

Manual Peak Response = 1399 M1

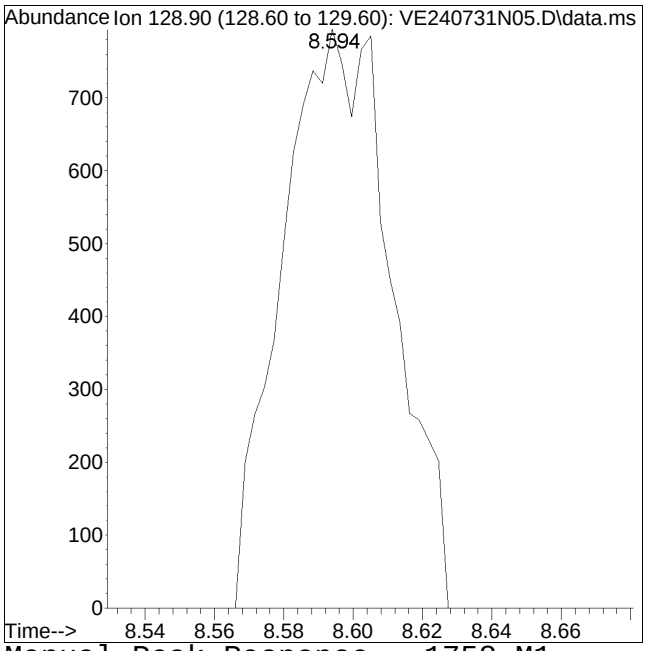
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #73: Chlorodibromomethane



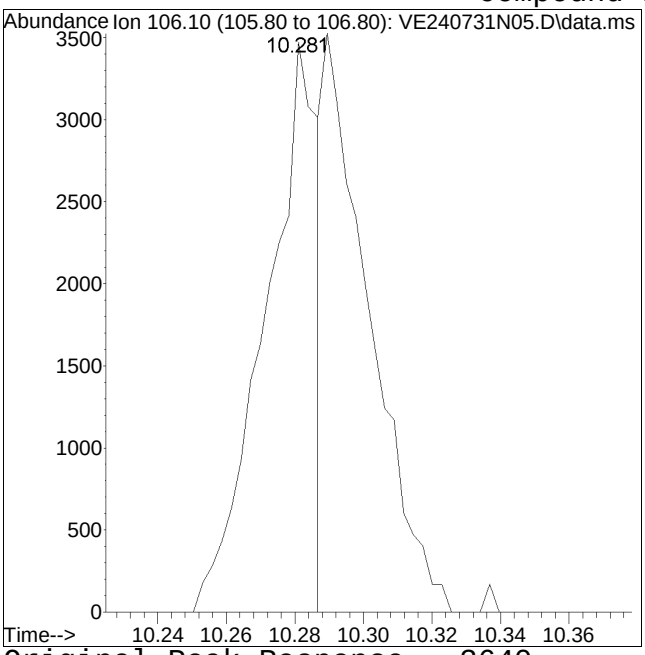




Original Peak Response = 1109 Manual Peak Response = 1758 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

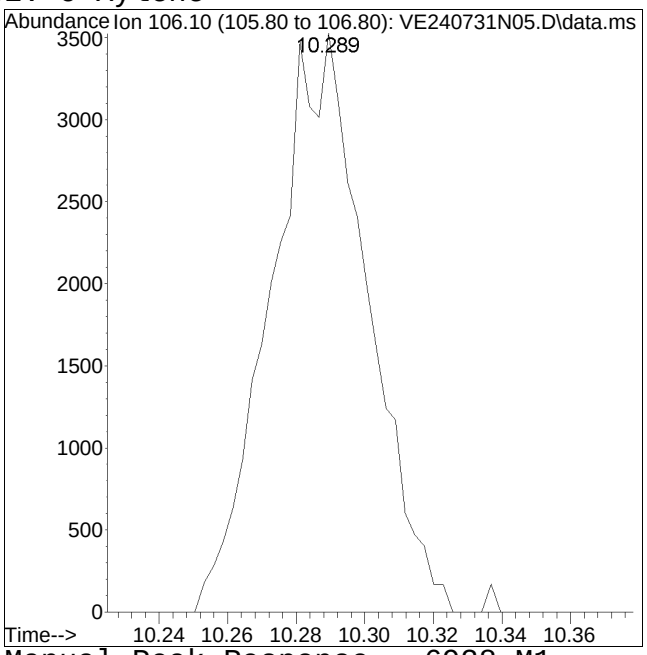
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #82: o Xylene




Original Peak Response = 3640



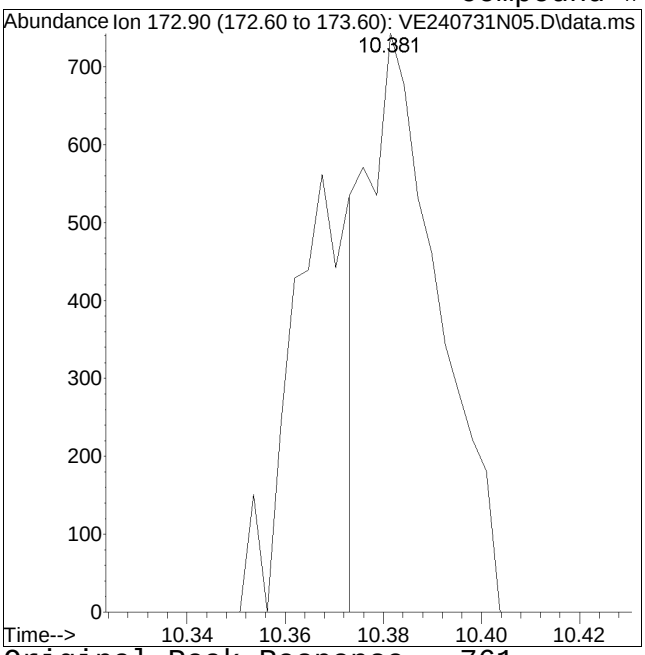

Manual Peak Response = 6928 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

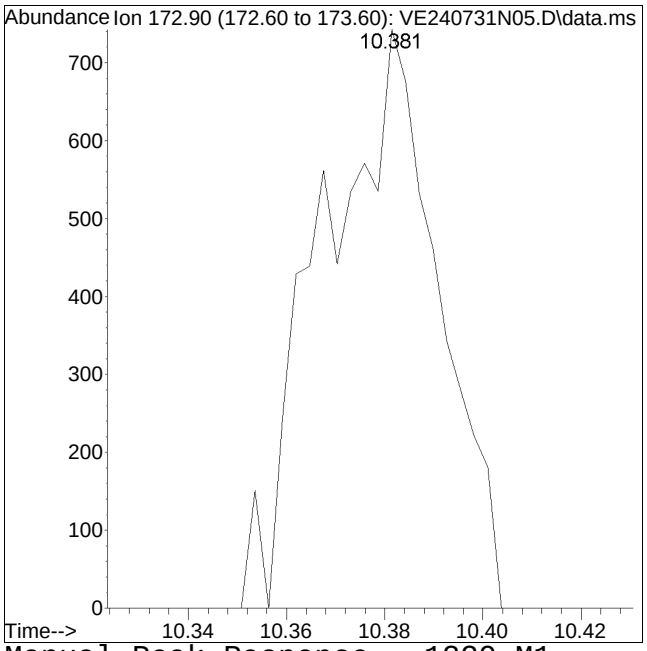
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #85: Bromoform




Original Peak Response = 761



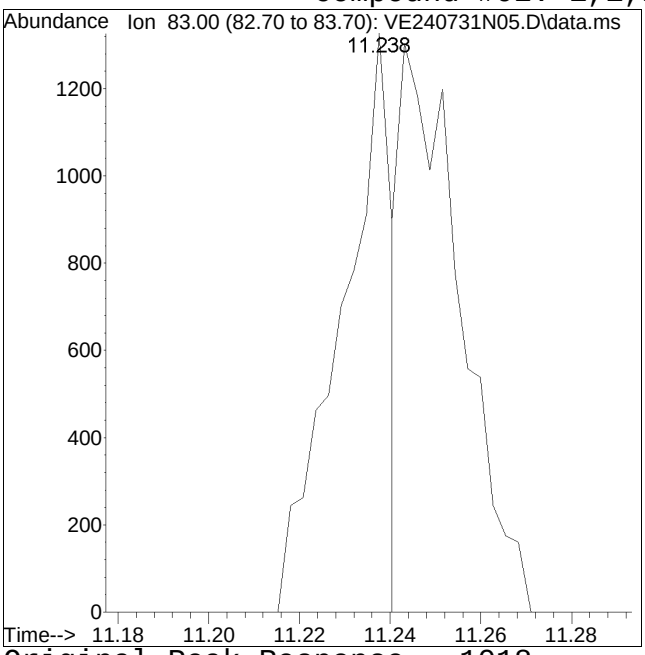

Manual Peak Response = 1229 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

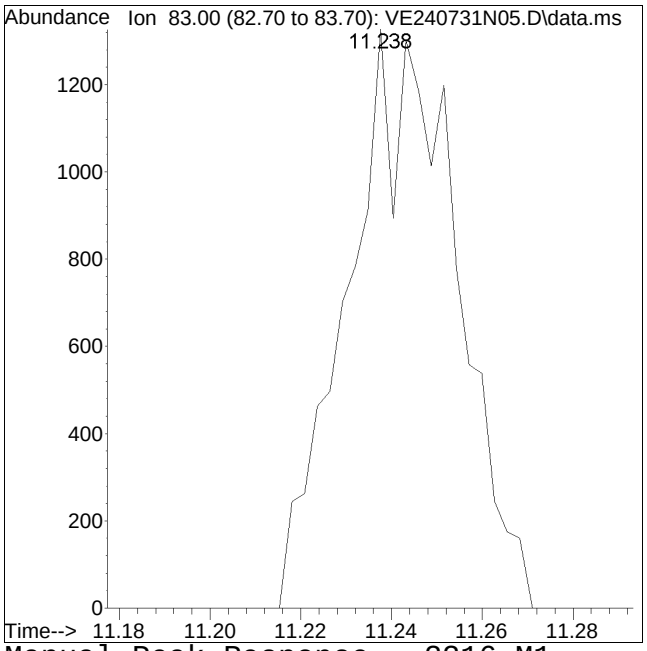
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

## Compound #92: 1,1,2,2-Tetrachloroethane




Original Peak Response = 1018



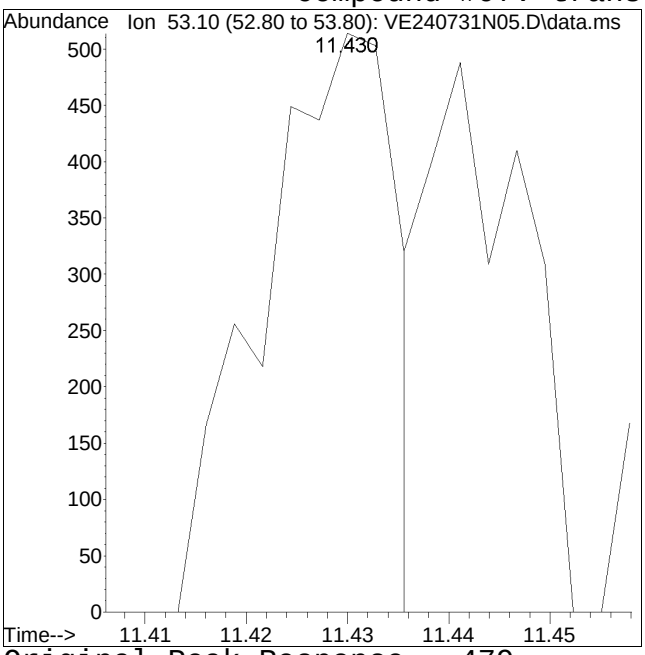

Manual Peak Response = 2216 M1

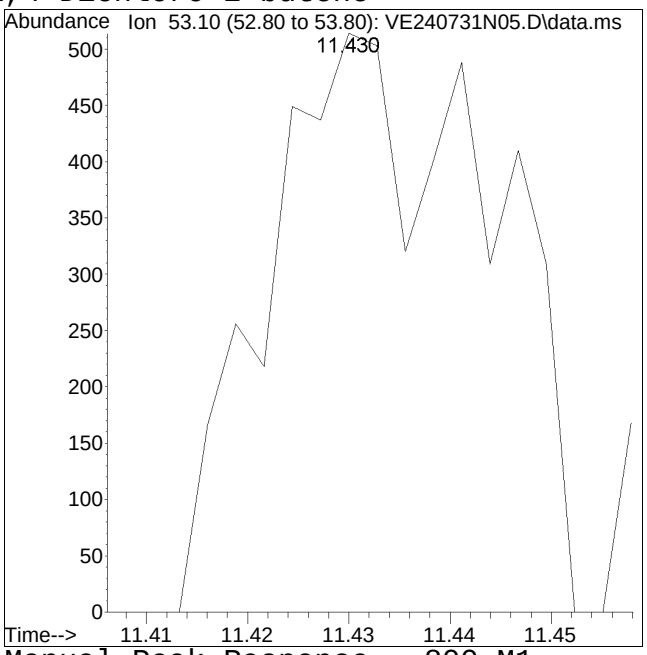
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #97: trans-1,4-Dichloro-2-butene



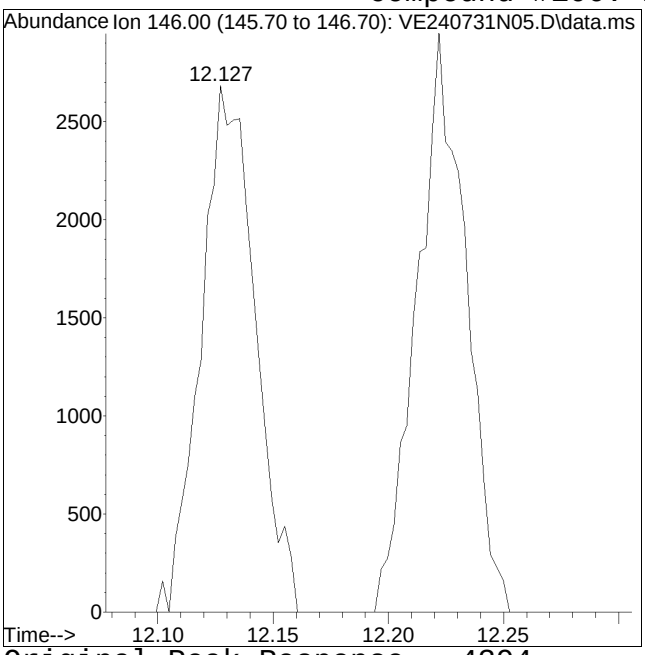




Original Peak Response = 479 Manual Peak Response = 800 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

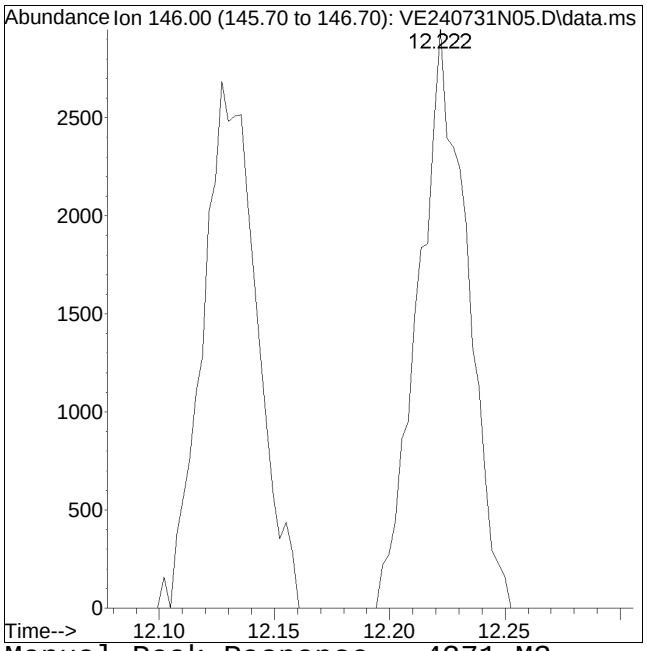
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #106: 1,4-Dichlorobenzene




Original Peak Response = 4394



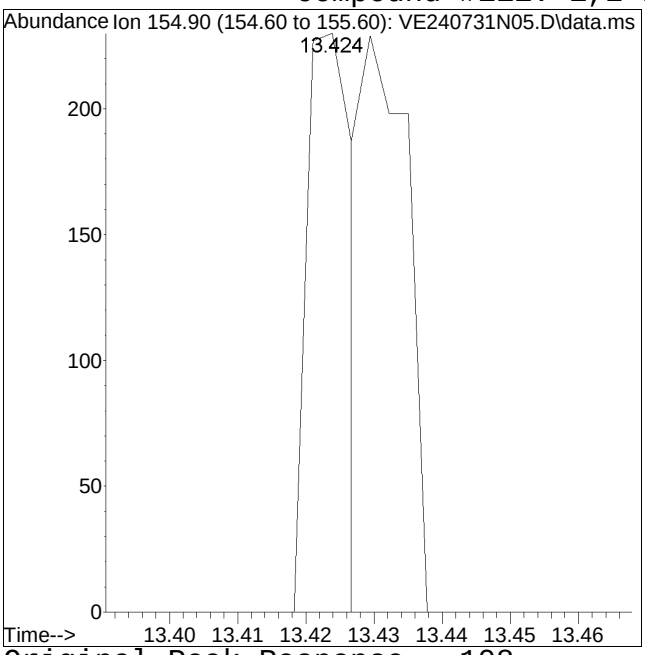

Manual Peak Response = 4371 M3

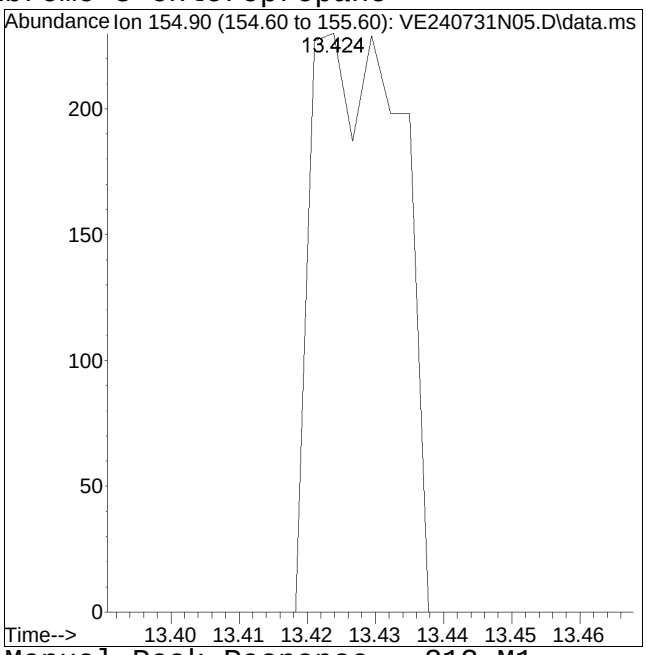
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #111: 1,2-Dibromo-3-chloropropane




Original Peak Response = 108 Manual Peak Response = 212 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N07.D
Acq On : 31 Jul 2024 8:16 pm
Operator : ELAINE:MKS
Sample : I8260STD2PPB
Misc : WG1954249
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.964 | 96 | 205965 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 100.68% | | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 151862 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 102.78% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.208 | 152 | 86373 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 102.21% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 49492 | 10.098 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.98% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.682 | 65 | 66293 | 10.187 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.87% | | | |
| 64) Toluene-d8 | 7.651 | 98 | 198351 | 9.874 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.74% | | | |
| 88) 4-Bromofluorobenzene | 10.998 | 95 | 77750 | 9.707 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.07% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.592 | 85 | 10135 | 2.234 | ug/L # | 87 |
| 3) Chloromethane | 1.787 | 50 | 10322 | 1.907 | ug/L | 98 |
| 4) Vinyl chloride | 1.854 | 62 | 10227 | 2.041 | ug/L | 83 |
| 5) Bromomethane | 2.160 | 94 | 2217 | 1.844 | ug/L | 99 |
| 6) Chloroethane | 2.272 | 64 | 6822M1 | 2.156 | ug/L | |
| 7) Trichlorofluoromethane | 2.420 | 101 | 10784 | 2.060 | ug/L | 87 |
| 8) Ethyl ether | 2.713 | 74 | 3876 | 1.776 | ug/L # | 61 |
| 10) 1,1-Dichloroethene | 2.905 | 96 | 6805 | 2.139 | ug/L | 87 |
| 11) Carbon disulfide | 2.933 | 76 | 20147 | 1.943 | ug/L | 92 |
| 12) Freon-113 | 2.944 | 101 | 7065M1 | 2.106 | ug/L | |
| 13) Iodomethane | 3.036 | 142 | 2297 | 1.282 | ug/L # | 84 |
| 14) Acrolein | 3.228 | 56 | 1941M3 | 2.134 | ug/L | |
| 15) Methylene chloride | 3.457 | 84 | 8519 | 2.029 | ug/L | 89 |
| 17) Acetone | 3.499 | 43 | 3859M1 | 2.655 | ug/L | |
| 18) trans-1,2-Dichloroethene | 3.613 | 96 | 7133 | 1.958 | ug/L | 78 |
| 19) Methyl acetate | 3.622 | 43 | 7542 | 2.220 | ug/L # | 84 |
| 21) Methyl tert-butyl ether | 3.719 | 73 | 25937 | 1.863 | ug/L | 96 |
| 22) tert-Butyl alcohol | 3.803 | 59 | 4687 | 9.669 | ug/L # | 72 |
| 24) Diisopropyl ether | 4.073 | 45 | 36164 | 1.819 | ug/L # | 89 |
| 25) 1,1-Dichloroethane | 4.196 | 63 | 16753 | 1.917 | ug/L | 95 |
| 26) Halothane | 4.246 | 117 | 5656M1 | 1.936 | ug/L | |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N07.D
Acq On : 31 Jul 2024 8:16 pm
Operator : ELAINE:MKS
Sample : I8260STD2PPB
Misc : WG1954249
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.238 | 53 | 3350 | 1.851 | ug/L | # | 71 |
| 28) Ethyl tert-butyl ether | 4.422 | 59 | 32105 | 1.861 | ug/L | # | 83 |
| 29) Vinyl acetate | 4.436 | 43 | 26731M1 | 2.333 | ug/L | | |
| 30) cis-1,2-Dichloroethene | 4.715 | 96 | 8707 | 2.000 | ug/L | | 97 |
| 31) 2,2-Dichloropropane | 4.815 | 77 | 11494 | 2.065 | ug/L | # | 81 |
| 33) Bromochloromethane | 4.907 | 128 | 3765 | 1.909 | ug/L | # | 76 |
| 34) Cyclohexane | 4.913 | 56 | 20412M1 | 2.195 | ug/L | | |
| 35) Chloroform | 4.980 | 83 | 14505 | 2.035 | ug/L | | 95 |
| 36) Ethyl acetate | 5.091 | 43 | 9324 | 1.730 | ug/L | # | 96 |
| 37) Carbon tetrachloride | 5.114 | 117 | 11111 | 2.073 | ug/L | | 96 |
| 38) Tetrahydrofuran | 5.130 | 42 | 3400M3 | 2.040 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.180 | 97 | 12396 | 1.940 | ug/L | # | 79 |
| 42) 2-Butanone | 5.273 | 43 | 4841M3 | 2.253 | ug/L | | |
| 43) 1,1-Dichloropropene | 5.303 | 75 | 10689 | 1.993 | ug/L | | 92 |
| 45) Benzene | 5.549 | 78 | 33518 | 1.941 | ug/L | | 91 |
| 46) tert-Amyl methyl ether | 5.655 | 73 | 23844 | 1.870 | ug/L | | 98 |
| 48) 1,2-Dichloroethane | 5.749 | 62 | 12349 | 1.876 | ug/L | | 96 |
| 51) Methyl cyclohexane | 6.134 | 83 | 14843 | 2.162 | ug/L | | 86 |
| 52) Trichloroethene | 6.145 | 95 | 8248 | 1.904 | ug/L | # | 68 |
| 54) Dibromomethane | 6.580 | 93 | 4791 | 1.944 | ug/L | | 87 |
| 55) 1,2-Dichloropropane | 6.686 | 63 | 9613 | 1.871 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.381 | 63 | 5980 | 1.853 | ug/L | # | 77 |
| 58) Bromodichloromethane | 6.759 | 83 | 12056 | 1.988 | ug/L | # | 93 |
| 61) 1,4-Dioxane | 6.968 | 88 | 16165 | 403.548 | ug/L | | 88 |
| 62) cis-1,3-Dichloropropene | 7.445 | 75 | 13006 | 1.854 | ug/L | | 92 |
| 65) Toluene | 7.713 | 92 | 21290 | 1.968 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.148 | 58 | 3470 | 1.842 | ug/L | # | 96 |
| 67) Tetrachloroethene | 8.159 | 166 | 8736 | 1.904 | ug/L | | 96 |
| 69) trans-1,3-Dichloropropene | 8.195 | 75 | 11383 | 1.811 | ug/L | | 87 |
| 71) Ethyl methacrylate | 8.387 | 69 | 11034 | 1.879 | ug/L | | 89 |
| 72) 1,1,2-Trichloroethane | 8.385 | 83 | 5762 | 1.858 | ug/L | | 97 |
| 73) Chlorodibromomethane | 8.594 | 129 | 7851 | 1.837 | ug/L | | 98 |
| 74) 1,3-Dichloropropane | 8.708 | 76 | 12084 | 1.849 | ug/L | | 99 |
| 75) 1,2-Dibromoethane | 8.867 | 107 | 6772 | 1.878 | ug/L | | 86 |
| 77) 2-Hexanone | 9.157 | 43 | 6900 | 1.938 | ug/L | # | 88 |
| 78) Chlorobenzene | 9.520 | 112 | 22113 | 1.898 | ug/L | | 90 |
| 79) Ethylbenzene | 9.559 | 91 | 41231 | 1.928 | ug/L | | 98 |
| 80) 1,1,1,2-Tetrachloroethane | 9.603 | 131 | 8186 | 1.881 | ug/L | | 93 |
| 81) p/m Xylene | 9.745 | 106 | 31668 | 3.808 | ug/L | | 98 |
| 82) o Xylene | 10.289 | 106 | 30832 | 3.808 | ug/L | | 95 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N07.D
Acq On : 31 Jul 2024 8:16 pm
Operator : ELAINE:MKS
Sample : I8260STD2PPB
Misc : WG1954249
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.351 | 104 | 50933 | 3.785 | ug/L | | 99 |
| 85) Bromoform | 10.379 | 173 | 5528 | 1.934 | ug/L | | 92 |
| 87) Isopropylbenzene | 10.669 | 105 | 41364 | 1.959 | ug/L | | 95 |
| 89) Bromobenzene | 11.104 | 156 | 10259 | 1.901 | ug/L | | 100 |
| 90) n-Propylbenzene | 11.151 | 91 | 48832 | 1.922 | ug/L | | 97 |
| 91) 1,4-Dichlorobutane | 11.168 | 55 | 18365 | 1.991 | ug/L | | 97 |
| 92) 1,1,2,2-Tetrachloroethane | 11.243 | 83 | 9003 | 2.115 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.279 | 105 | 39669 | 1.895 | ug/L | | 99 |
| 94) 2-Chlorotoluene | 11.321 | 91 | 29752 | 1.953 | ug/L | | 99 |
| 95) 1,3,5-Trimethylbenzene | 11.377 | 105 | 34688 | 1.872 | ug/L | | 100 |
| 96) 1,2,3-Trichloropropane | 11.377 | 75 | 7255 | 1.949 | ug/L | | 93 |
| 97) trans-1,4-Dichloro-2-b... | 11.433 | 53 | 3407 | 1.939 | ug/L | # | 84 |
| 98) 4-Chlorotoluene | 11.502 | 91 | 30450 | 1.927 | ug/L | | 98 |
| 99) tert-Butylbenzene | 11.720 | 119 | 29184 | 1.910 | ug/L | # | 97 |
| 102) 1,2,4-Trimethylbenzene | 11.798 | 105 | 33754 | 1.834 | ug/L | | 94 |
| 103) sec-Butylbenzene | 11.909 | 105 | 43184 | 1.935 | ug/L | | 98 |
| 104) p-Isopropyltoluene | 12.063 | 119 | 35878 | 1.891 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.127 | 146 | 18671M3 | 1.849 | ug/L | | |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 18771 | 1.878 | ug/L | | 94 |
| 107) p-Diethylbenzene | 12.439 | 119 | 20387 | 1.813 | ug/L | | 94 |
| 108) n-Butylbenzene | 12.498 | 91 | 30950 | 1.918 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.648 | 146 | 17729 | 1.841 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.229 | 119 | 32685 | 1.779 | ug/L | | 94 |
| 111) 1,2-Dibromo-3-chloropr... | 13.432 | 155 | 1498 | 1.893 | ug/L | | 95 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 13388 | 1.742 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 4746 | 1.931 | ug/L | | 93 |
| 114) 1,2,4-Trichlorobenzene | 14.054 | 180 | 11806 | 1.733 | ug/L | | 98 |
| 115) Naphthalene | 14.352 | 128 | 26466 | 1.808 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.517 | 180 | 11185 | 1.795 | ug/L | | 95 |

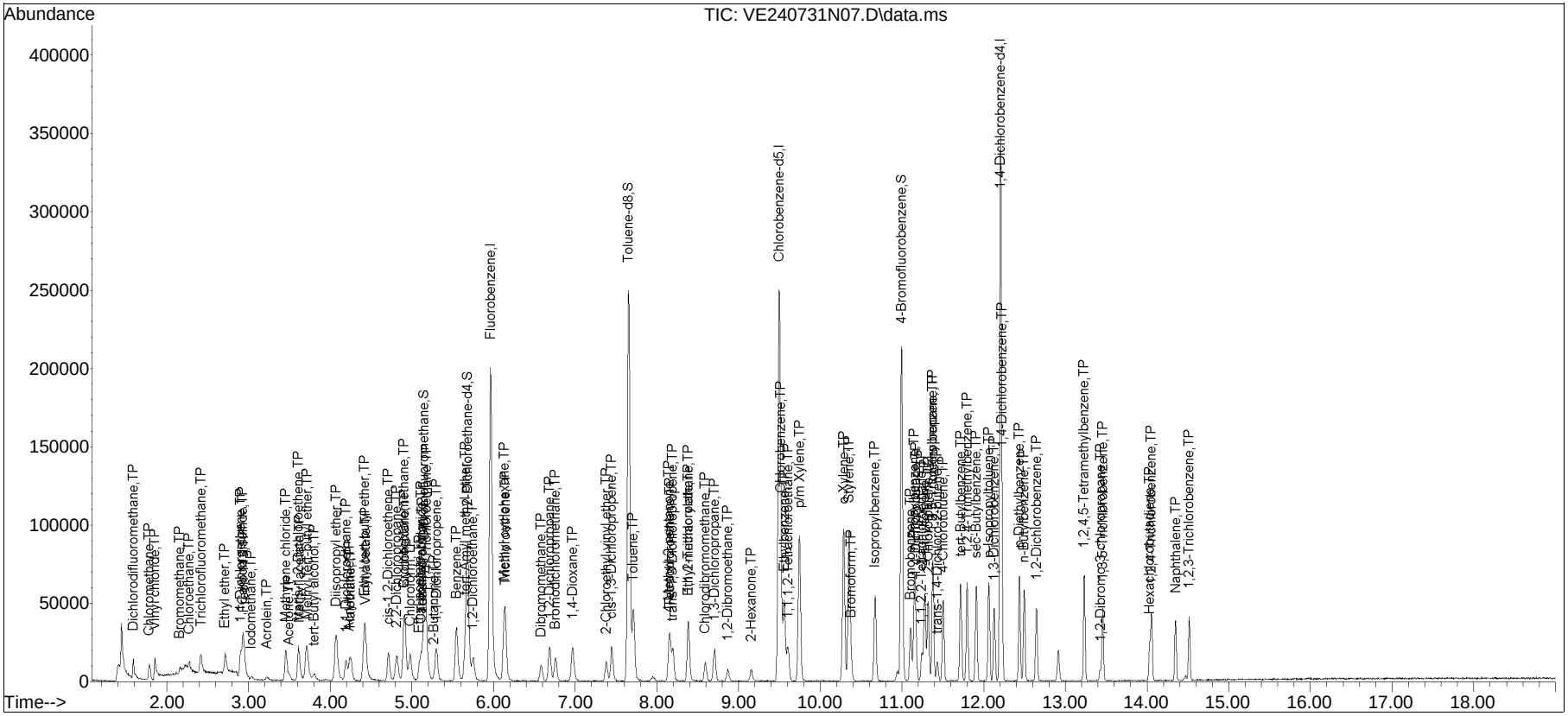
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N07.D
Acq On : 31 Jul 2024 8:16 pm
Operator : ELAINE:MKS
Sample : I8260STD2PPB
Misc : WG1954249
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

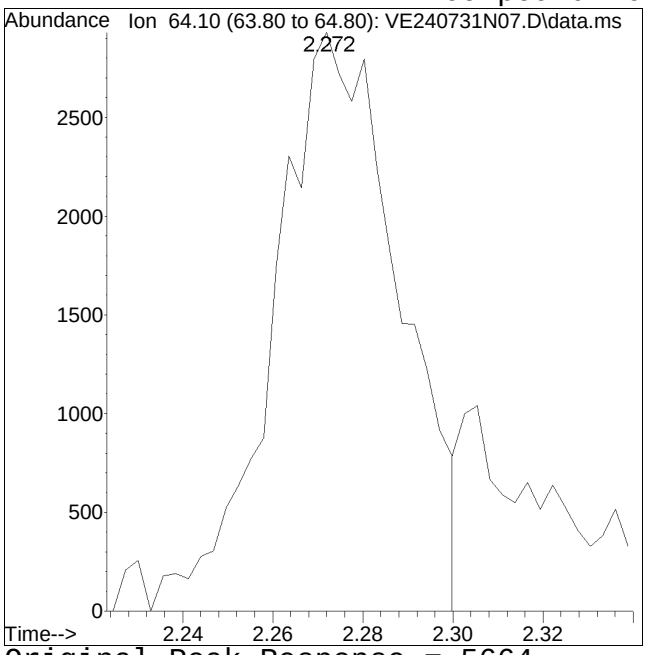


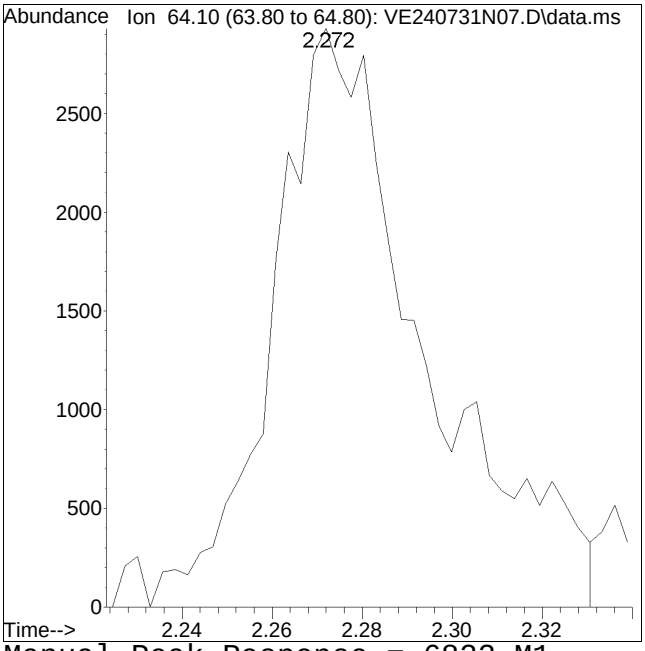
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane




Original Peak Response = 5664 Manual Peak Response = 6822 M1

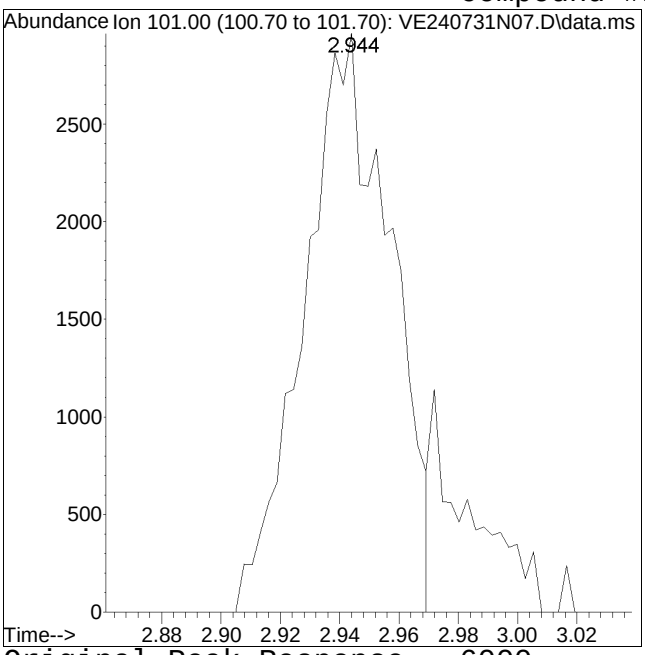
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

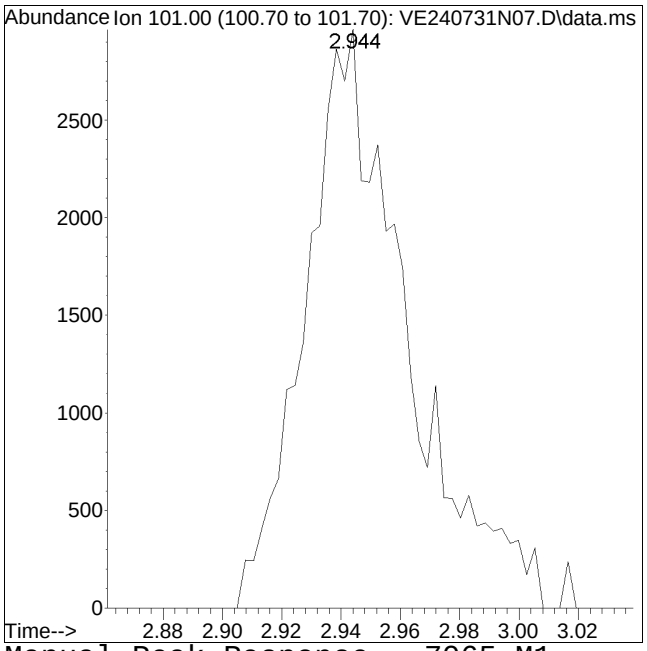
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #12: Freon-113




Original Peak Response = 6000



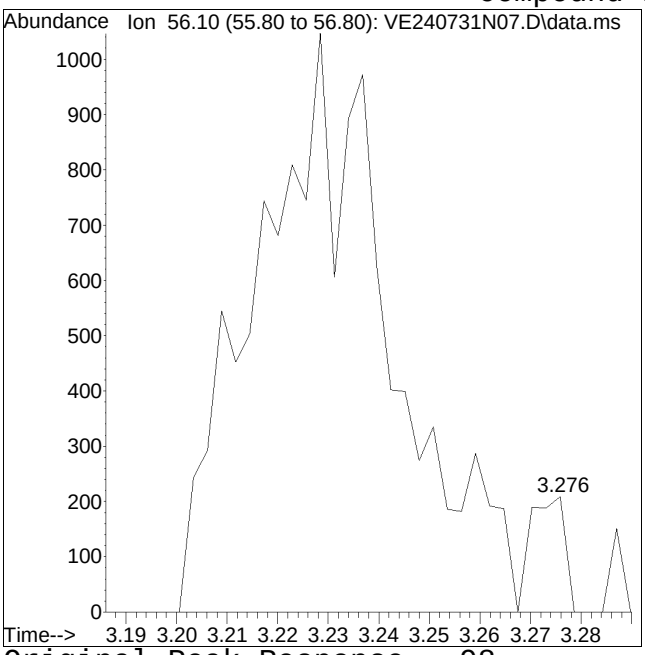

Manual Peak Response = 7065 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

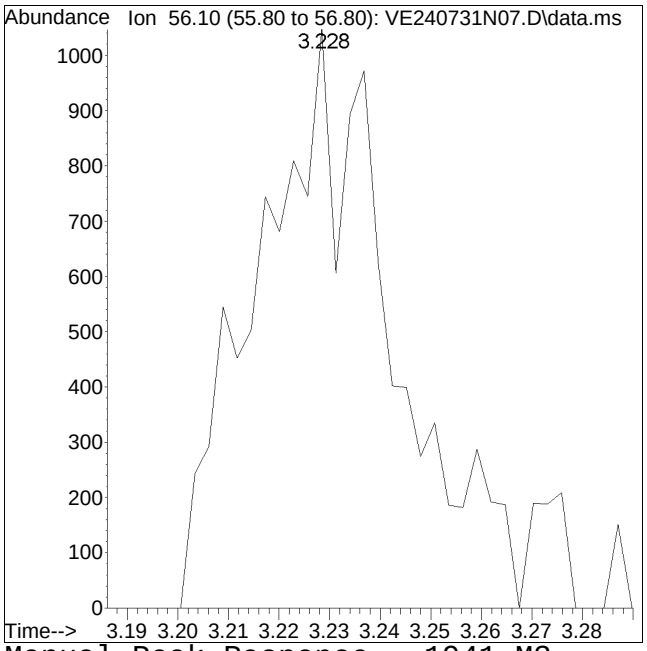
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #14: Acrolein




Original Peak Response = 98




Manual Peak Response = 1941 M3

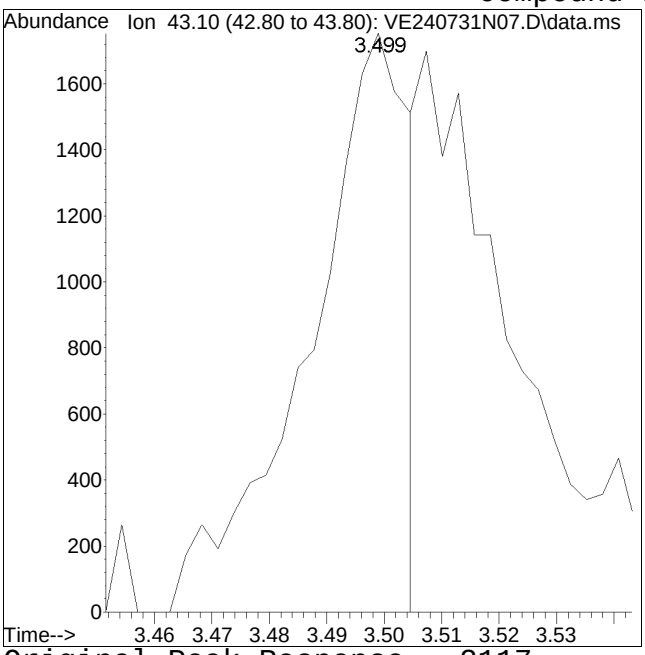
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

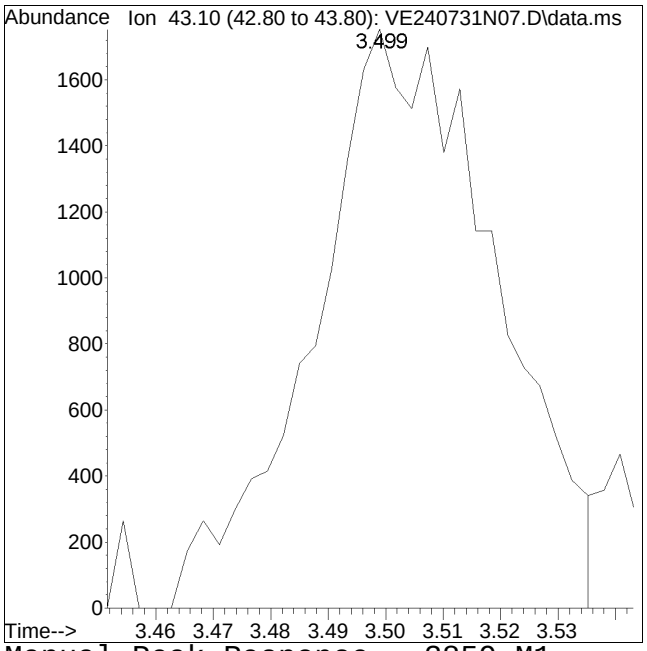
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #17: Acetone




Original Peak Response = 2117




Manual Peak Response = 3859 M1

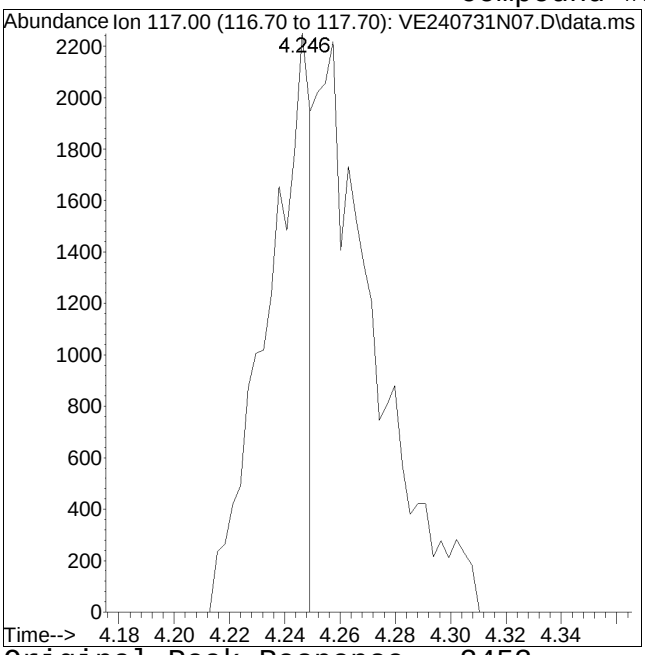
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

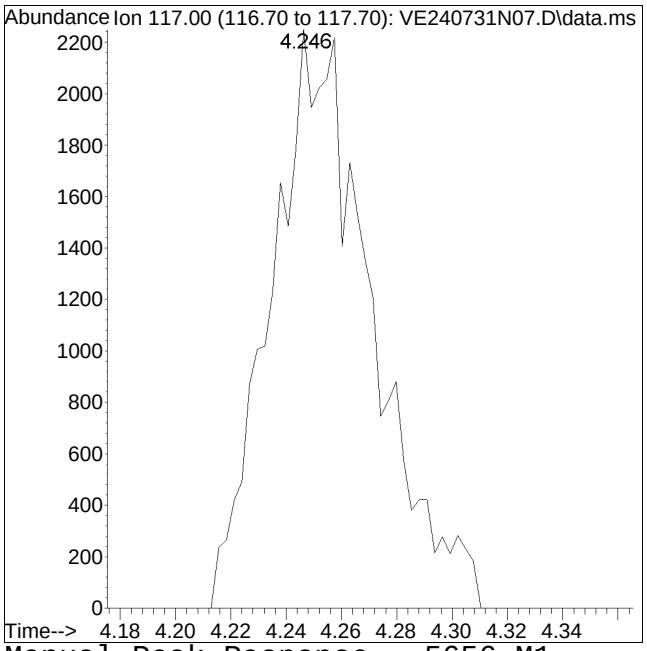
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #26: Halothane




Original Peak Response = 2453



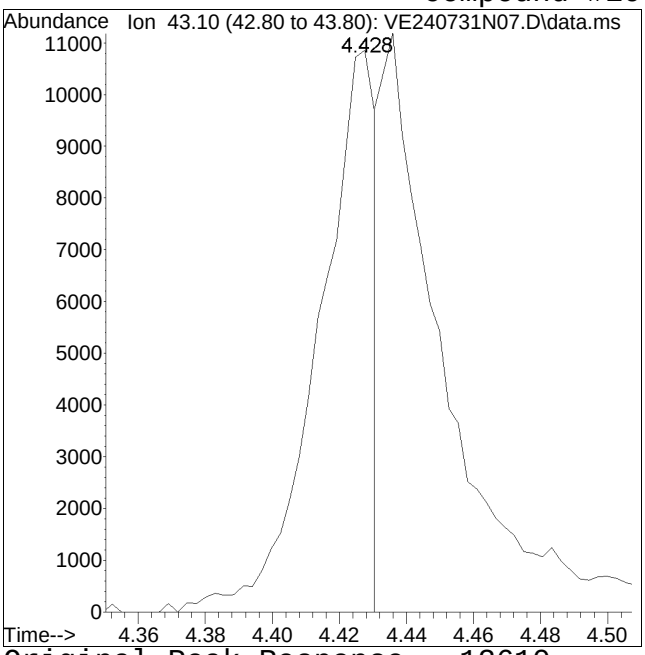

Manual Peak Response = 5656 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

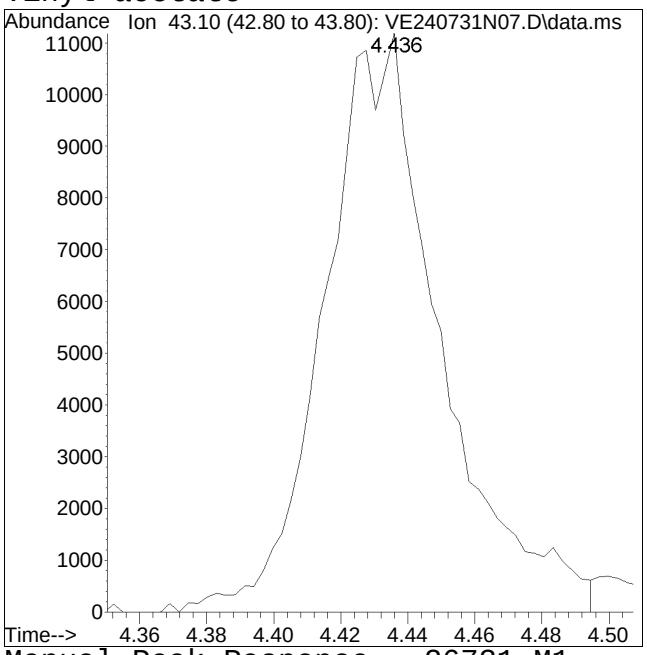
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

## Compound #29: Vinyl acetate




Original Peak Response = 12610




Manual Peak Response = 26731 M1

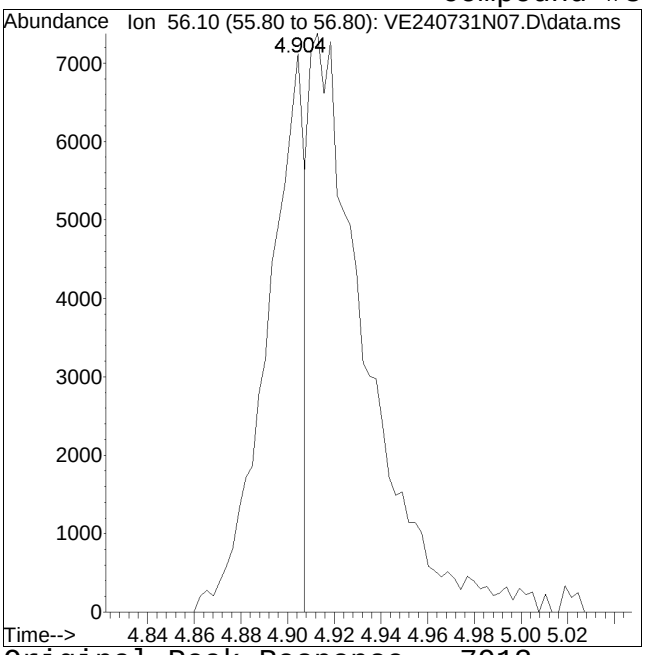
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

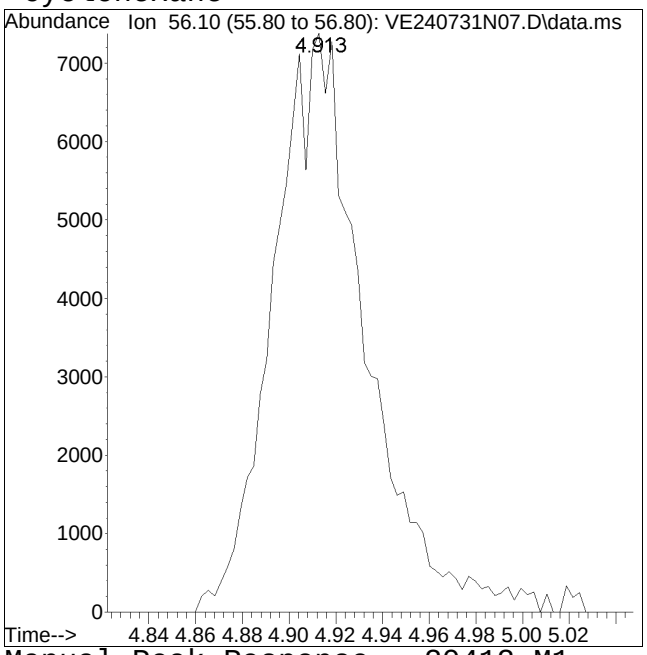
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #34: Cyclohexane




Original Peak Response = 7913



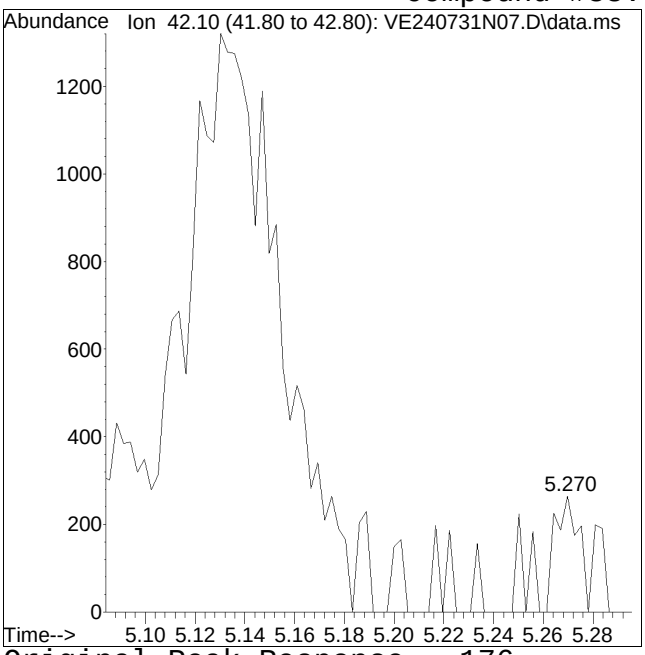

Manual Peak Response = 20412 M1

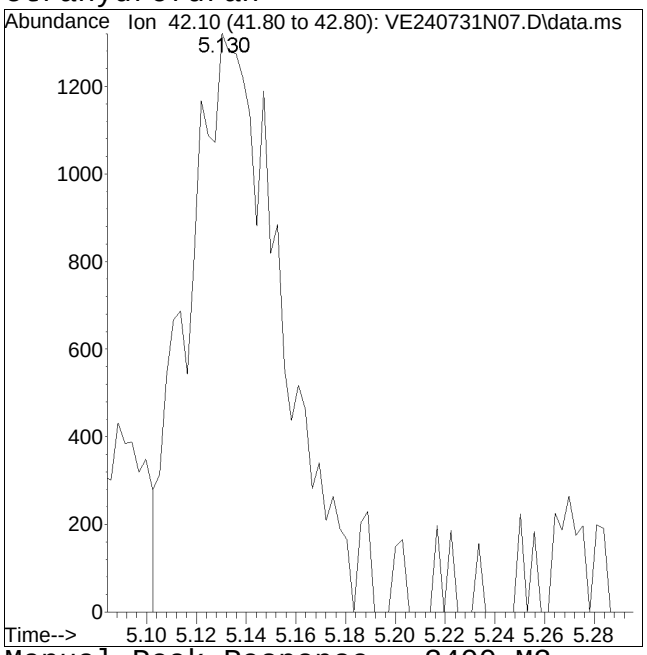
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



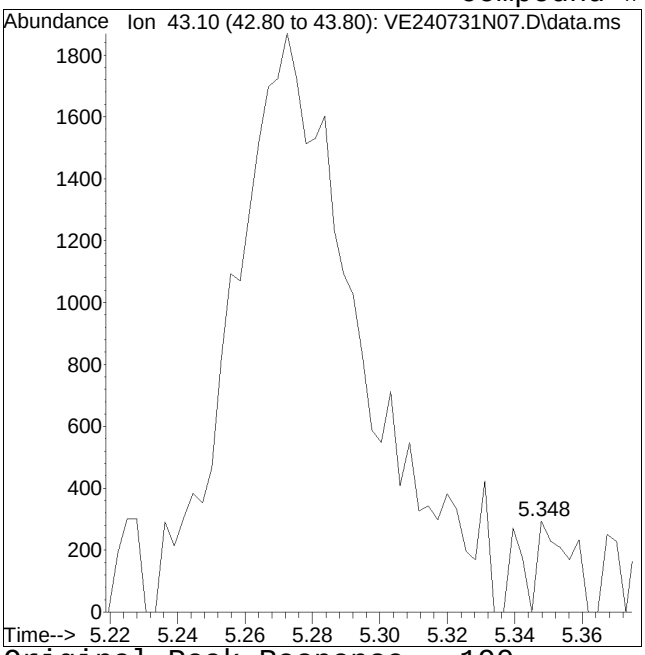

Original Peak Response = 176 Manual Peak Response = 3400 M3

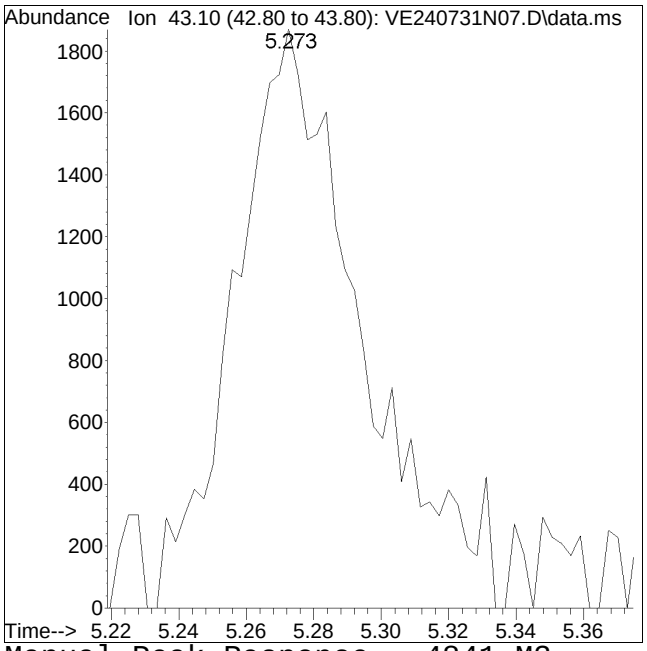
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #42: 2-Butanone




Original Peak Response = 190 Manual Peak Response = 4841 M3

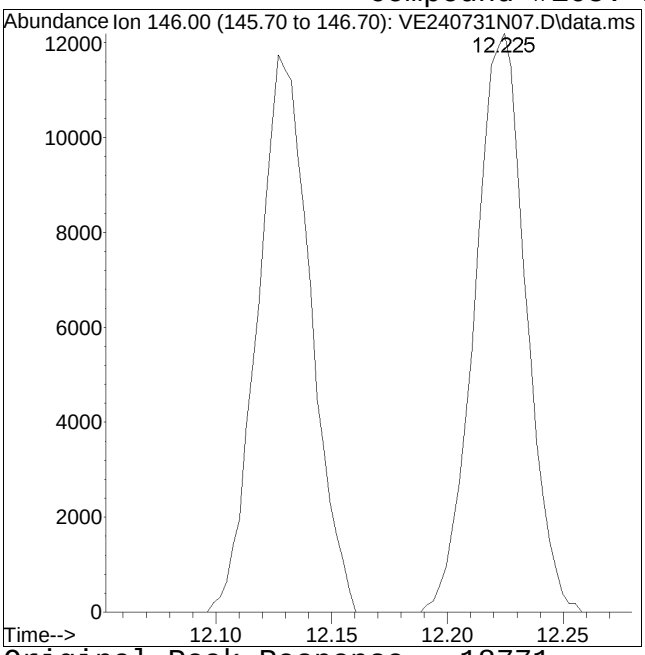
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

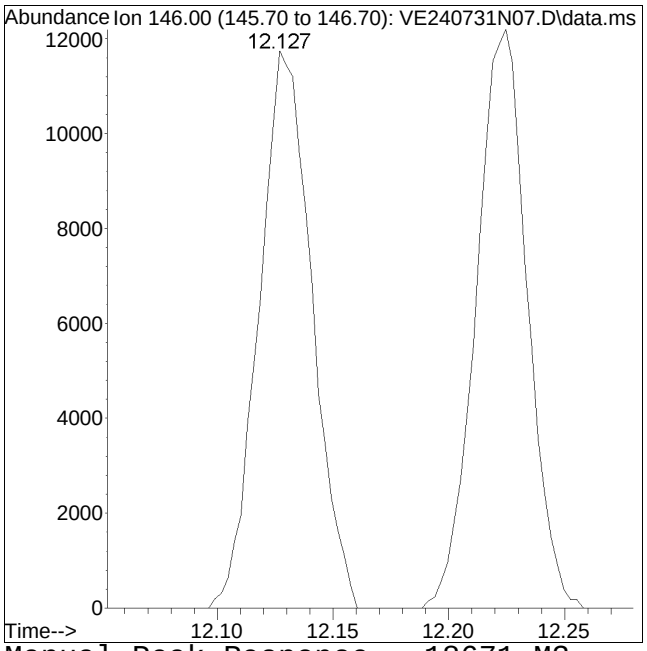
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N07.D
Date Inj'd : 7/31/2024 8:16 pm
Sample : I8260STD2PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

Compound #105: 1,3-Dichlorobenzene




Original Peak Response = 18771




Manual Peak Response = 18671 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N08.D
Acq On : 31 Jul 2024 8:42 pm
Operator : ELAINE:MKS
Sample : I8260STD10PPB
Misc : WG1954249
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 23 13:01:28 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.967 | 96 | 204581 | 10.000 | ug/L | -0.11 |
| Standard Area 1 = 204581 | | | Recovery = 100.00% | | | |
| 63) Chlorobenzene-d5 | 9.494 | 117 | 147756 | 10.000 | ug/L | -0.12 |
| Standard Area 1 = 147756 | | | Recovery = 100.00% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.208 | 152 | 84505 | 10.000 | ug/L | -0.10 |
| Standard Area 1 = 84505 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.155 | 113 | 48680 | 10.071 | ug/L | -0.10 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.71% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 64640 | 11.293 | ug/L | -0.10 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 112.93% | | | |
| 64) Toluene-d8 | 7.654 | 98 | 195456 | 10.248 | ug/L | -0.11 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.48% | | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 78367 | 9.155 | ug/L | -0.11 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 91.55% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.591 | 85 | 45066 | 10.341 | ug/L | 95 |
| 3) Chloromethane | 1.789 | 50 | 53760 | 10.543 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 49777 | 10.843 | ug/L | 93 |
| 5) Bromomethane | 2.160 | 94 | 11943 | 5.484 | ug/L | 97 |
| 6) Chloroethane | 2.275 | 64 | 31423 | 12.949 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 52002 | 9.781 | ug/L | 94 |
| 8) Ethyl ether | 2.721 | 74 | 21677 | 12.265 | ug/L | 70 |
| 10) 1,1-Dichloroethene | 2.905 | 96 | 31598 | 9.087 | ug/L # | 73 |
| 11) Carbon disulfide | 2.933 | 76 | 103009 | 9.770 | ug/L | 96 |
| 12) Freon-113 | 2.938 | 101 | 33321M1 | 8.975 | ug/L | |
| 13) Iodomethane | 3.042 | 142 | 17802 | 6.094 | ug/L | 90 |
| 14) Acrolein | 3.226 | 56 | 9036 | 12.767 | ug/L # | 70 |
| 15) Methylene chloride | 3.457 | 84 | 41711 | 9.623 | ug/L | 85 |
| 17) Acetone | 3.504 | 43 | 14439 | 12.752 | ug/L | 95 |
| 18) trans-1,2-Dichloroethene | 3.610 | 96 | 36183 | 9.609 | ug/L | 78 |
| 19) Methyl acetate | 3.622 | 43 | 33745 | 13.642 | ug/L | 97 |
| 21) Methyl tert-butyl ether | 3.711 | 73 | 138295 | 12.360 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.806 | 59 | 24074 | 69.596 | ug/L # | 81 |
| 24) Diisopropyl ether | 4.071 | 45 | 197488 | 12.583 | ug/L | 92 |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 86782 | 11.170 | ug/L | 96 |
| 26) Halothane | 4.249 | 117 | 29017 | 9.517 | ug/L | 95 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N08.D
Acq On : 31 Jul 2024 8:42 pm
Operator : ELAINE:MKS
Sample : I8260STD10PPB
Misc : WG1954249
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 23 13:01:28 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.235 | 53 | 17977 | 15.263 | ug/L | | 92 |
| 28) Ethyl tert-butyl ether | 4.419 | 59 | 171389 | 11.890 | ug/L | | 97 |
| 29) Vinyl acetate | 4.430 | 43 | 113807 | 21.432 | ug/L | # | 94 |
| 30) cis-1,2-Dichloroethene | 4.712 | 96 | 43236 | 9.861 | ug/L | | 93 |
| 31) 2,2-Dichloropropane | 4.812 | 77 | 55274 | 9.397 | ug/L | | 96 |
| 33) Bromochloromethane | 4.907 | 128 | 19592 | 10.285 | ug/L | | 84 |
| 34) Cyclohexane | 4.907 | 56 | 92383 | 10.659 | ug/L | | 92 |
| 35) Chloroform | 4.980 | 83 | 70787 | 9.942 | ug/L | | 98 |
| 36) Ethyl acetate | 5.088 | 43 | 53536 | 13.935 | ug/L | | 97 |
| 37) Carbon tetrachloride | 5.114 | 117 | 53227 | 9.425 | ug/L | | 95 |
| 38) Tetrahydrofuran | 5.127 | 42 | 16553M1 | 15.540 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.180 | 97 | 63467 | 9.719 | ug/L | | 95 |
| 42) 2-Butanone | 5.275 | 43 | 21339 | 12.529 | ug/L | # | 90 |
| 43) 1,1-Dichloropropene | 5.300 | 75 | 53283 | 9.911 | ug/L | | 96 |
| 45) Benzene | 5.543 | 78 | 171532 | 10.324 | ug/L | | 92 |
| 46) tert-Amyl methyl ether | 5.663 | 73 | 126640 | 10.776 | ug/L | | 98 |
| 48) 1,2-Dichloroethane | 5.752 | 62 | 65371 | 11.273 | ug/L | | 95 |
| 51) Methyl cyclohexane | 6.131 | 83 | 68206 | 9.257 | ug/L | | 85 |
| 52) Trichloroethene | 6.143 | 95 | 43027 | 9.068 | ug/L | | 97 |
| 54) Dibromomethane | 6.580 | 93 | 24484 | 10.201 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.686 | 63 | 51035 | 11.347 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.378 | 63 | 32060 | 12.970 | ug/L | | 89 |
| 58) Bromodichloromethane | 6.759 | 83 | 60227 | 10.235 | ug/L | | 95 |
| 61) 1,4-Dioxane | 6.971 | 88 | 19894 | 537.767 | ug/L | | 87 |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 69674 | 10.183 | ug/L | | 95 |
| 65) Toluene | 7.710 | 92 | 105232 | 10.216 | ug/L | | 93 |
| 66) 4-Methyl-2-pentanone | 8.150 | 58 | 18333 | 13.376 | ug/L | | 92 |
| 67) Tetrachloroethene | 8.161 | 166 | 44641 | 10.701 | ug/L | | 95 |
| 69) trans-1,3-Dichloropropene | 8.195 | 75 | 61164 | 10.422 | ug/L | | 99 |
| 71) Ethyl methacrylate | 8.382 | 69 | 57150 | 12.437 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.385 | 83 | 30175 | 10.730 | ug/L | | 99 |
| 73) Chlorodibromomethane | 8.591 | 129 | 41583 | 10.106 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 63598 | 10.633 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.870 | 107 | 35086 | 10.324 | ug/L | | 88 |
| 77) 2-Hexanone | 9.151 | 43 | 34633 | 13.757 | ug/L | | 96 |
| 78) Chlorobenzene | 9.520 | 112 | 113340 | 10.114 | ug/L | # | 80 |
| 79) Ethylbenzene | 9.556 | 91 | 208074 | 10.388 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.603 | 131 | 42343 | 10.608 | ug/L | | 97 |
| 81) p/m Xylene | 9.745 | 106 | 161846 | 21.186 | ug/L | | 99 |
| 82) o Xylene | 10.284 | 106 | 157536 | 21.096 | ug/L | | 96 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N08.D
Acq On : 31 Jul 2024 8:42 pm
Operator : ELAINE:MKS
Sample : I8260STD10PPB
Misc : WG1954249
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 23 13:01:28 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 83) Styrene | 10.353 | 104 | 261864 | 21.427 | ug/L | 99 |
| 85) Bromoform | 10.378 | 173 | 27962 | 10.670 | ug/L | 94 |
| 87) Isopropylbenzene | 10.671 | 105 | 206589 | 8.866 | ug/L | 97 |
| 89) Bromobenzene | 11.106 | 156 | 52794 | 9.847 | ug/L | 99 |
| 90) n-Propylbenzene | 11.151 | 91 | 248567 | 9.173 | ug/L | 96 |
| 91) 1,4-Dichlorobutane | 11.168 | 55 | 90223 | 12.511 | ug/L | 99 |
| 92) 1,1,2,2-Tetrachloroethane | 11.243 | 83 | 41654 | 10.363 | ug/L | 97 |
| 93) 4-Ethyltoluene | 11.279 | 105 | 204854 | 9.166 | ug/L | 100 |
| 94) 2-Chlorotoluene | 11.321 | 91 | 149060 | 9.239 | ug/L | 97 |
| 95) 1,3,5-Trimethylbenzene | 11.377 | 105 | 181257 | 9.354 | ug/L | 97 |
| 96) 1,2,3-Trichloropropane | 11.382 | 75 | 36413 | 9.806 | ug/L | 95 |
| 97) trans-1,4-Dichloro-2-b... | 11.430 | 53 | 17188 | 11.349 | ug/L | 88 |
| 98) 4-Chlorotoluene | 11.502 | 91 | 154593 | 9.170 | ug/L | 99 |
| 99) tert-Butylbenzene | 11.717 | 119 | 149482 | 9.048 | ug/L | 98 |
| 102) 1,2,4-Trimethylbenzene | 11.795 | 105 | 180087 | 9.233 | ug/L | 95 |
| 103) sec-Butylbenzene | 11.909 | 105 | 218386 | 9.091 | ug/L | 99 |
| 104) p-Isopropyltoluene | 12.063 | 119 | 185594 | 9.031 | ug/L | 96 |
| 105) 1,3-Dichlorobenzene | 12.130 | 146 | 98794 | 9.599 | ug/L | 96 |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 97784 | 9.413 | ug/L | 99 |
| 107) p-Diethylbenzene | 12.439 | 119 | 110030 | 9.210 | ug/L | 98 |
| 108) n-Butylbenzene | 12.498 | 91 | 157868 | 9.276 | ug/L | 97 |
| 109) 1,2-Dichlorobenzene | 12.646 | 146 | 94225 | 9.408 | ug/L | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.231 | 119 | 179730 | 9.214 | ug/L | 95 |
| 111) 1,2-Dibromo-3-chloropr... | 13.429 | 155 | 7741 | 10.135 | ug/L | 92 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 75211 | 10.551 | ug/L | 93 |
| 113) Hexachlorobutadiene | 14.034 | 225 | 24042 | 11.211 | ug/L | 90 |
| 114) 1,2,4-Trichlorobenzene | 14.057 | 180 | 66652 | 10.420 | ug/L | 99 |
| 115) Naphthalene | 14.347 | 128 | 143235 | 9.075 | ug/L | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.517 | 180 | 60948 | 10.602 | ug/L | 96 |

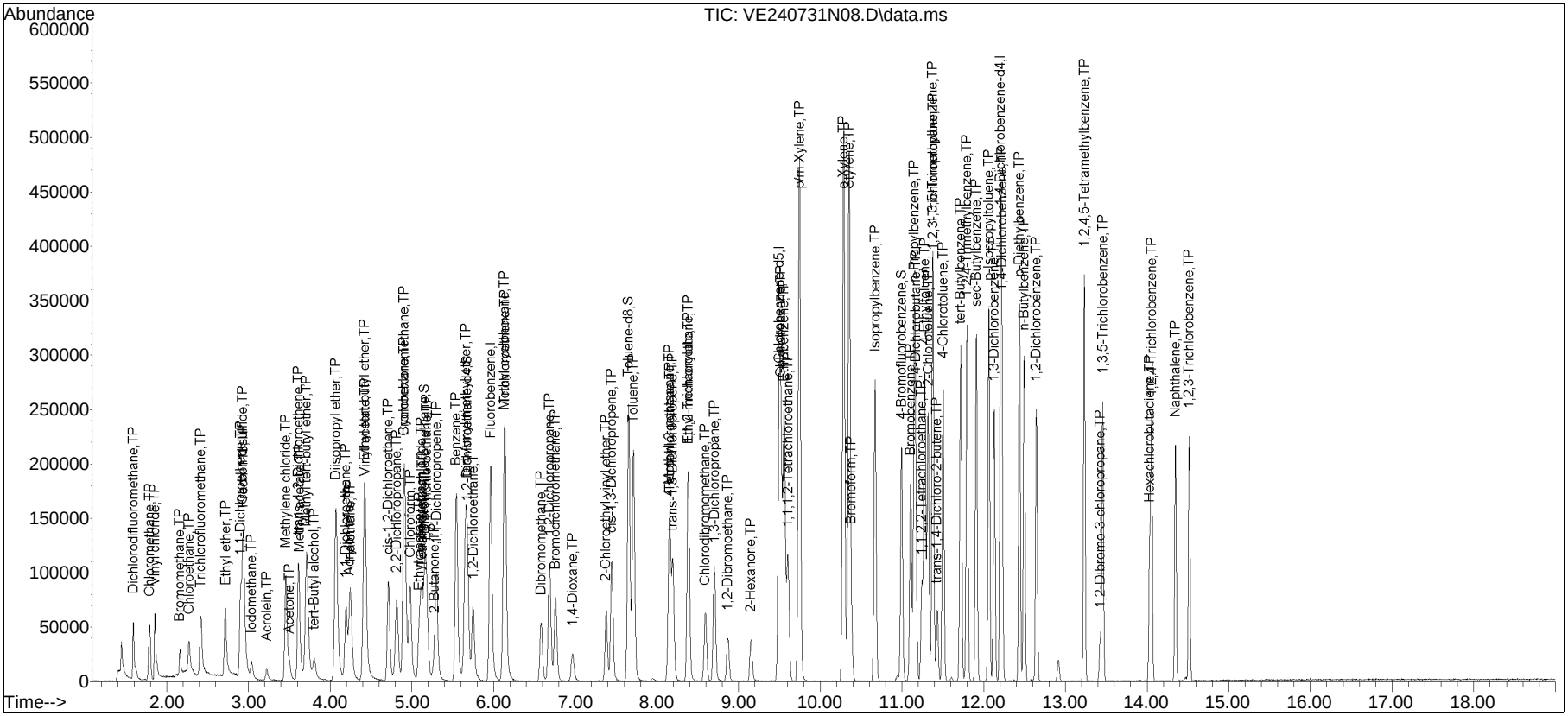
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N08.D
Acq On : 31 Jul 2024 8:42 pm
Operator : ELAINE:MKS
Sample : I8260STD10PPB
Misc : WG1954249
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 23 13:01:28 2024
Response via : Initial Calibration

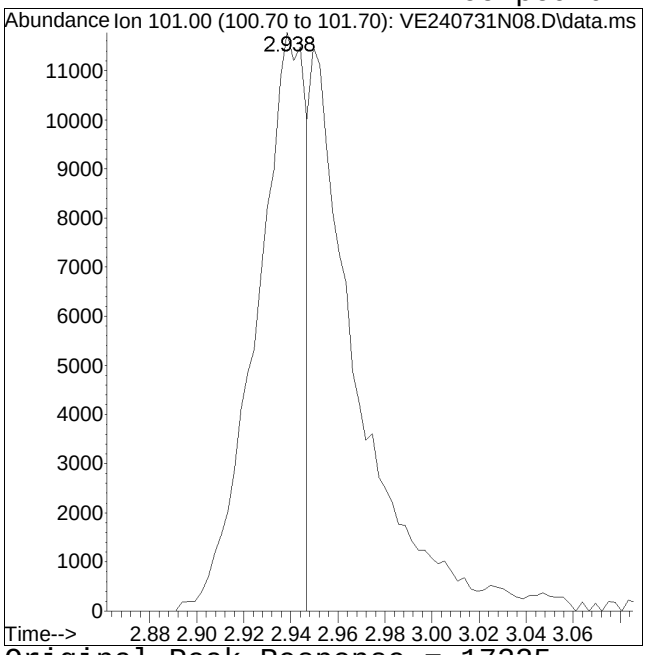
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

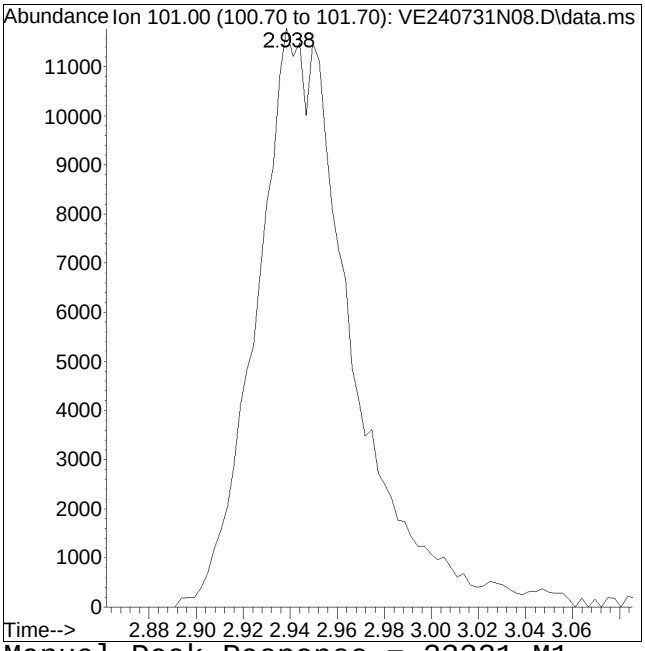


# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N08.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:42 pm Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 8/1/2024 11:54 am

## Compound #12: Freon-113



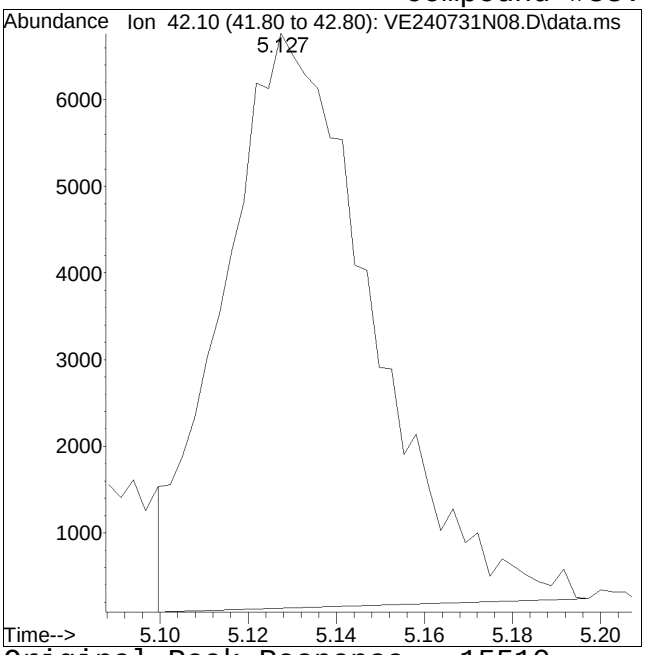

Original Peak Response = 17225 Manual Peak Response = 33321 M1

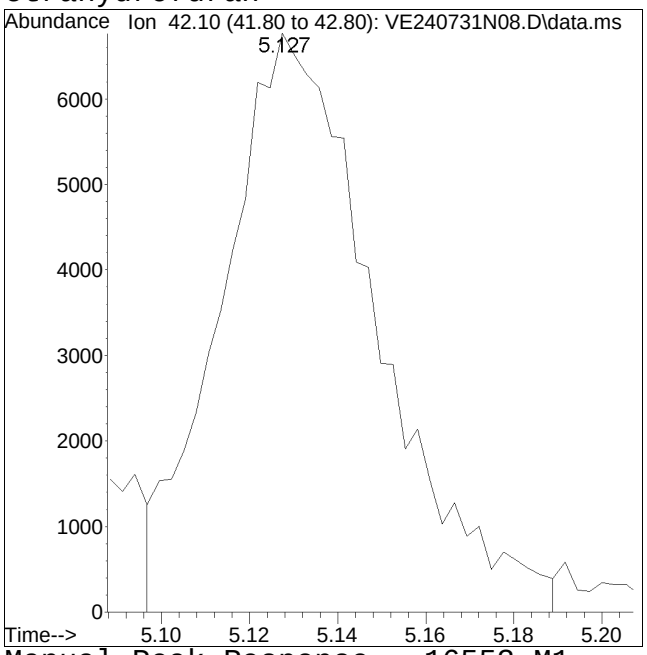
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N08.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:42 pm Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 8/1/2024 11:54 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 15510 Manual Peak Response = 16553 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N09.D
Acq On : 31 Jul 2024 9:07 pm
Operator : ELAINE:MKS
Sample : I8260STD30PPB
Misc : WG1954249
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.967 | 96 | 204403 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 99.91% | | | |
| 63) Chlorobenzene-d5 | 9.500 | 117 | 149625 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 101.26% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.208 | 152 | 84874 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 100.44% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.156 | 113 | 47450 | 9.756 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.56% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.685 | 65 | 62257 | 9.640 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.40% | | | |
| 64) Toluene-d8 | 7.657 | 98 | 196570 | 9.931 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.31% | | | |
| 88) 4-Bromofluorobenzene | 10.998 | 95 | 76337 | 9.699 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.99% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.592 | 85 | 149245 | 33.146 | ug/L | 96 |
| 3) Chloromethane | 1.787 | 50 | 160207 | 29.826 | ug/L | 97 |
| 4) Vinyl chloride | 1.854 | 62 | 161006 | 32.374 | ug/L | 96 |
| 5) Bromomethane | 2.163 | 94 | 41058 | 34.408 | ug/L | 95 |
| 6) Chloroethane | 2.272 | 64 | 92566 | 29.484 | ug/L | 100 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 178263 | 34.310 | ug/L | 97 |
| 8) Ethyl ether | 2.718 | 74 | 68340 | 31.554 | ug/L | 75 |
| 10) 1,1-Dichloroethene | 2.905 | 96 | 102934 | 32.604 | ug/L | 79 |
| 11) Carbon disulfide | 2.933 | 76 | 320678 | 31.158 | ug/L | 96 |
| 12) Freon-113 | 2.941 | 101 | 108914 | 32.715 | ug/L | 86 |
| 13) Iodomethane | 3.042 | 142 | 79903 | 44.923 | ug/L | 90 |
| 14) Acrolein | 3.223 | 56 | 27320 | 30.261 | ug/L # | 65 |
| 15) Methylene chloride | 3.460 | 84 | 123480 | 29.629 | ug/L | 87 |
| 17) Acetone | 3.502 | 43 | 47292 | 32.781 | ug/L | 96 |
| 18) trans-1,2-Dichloroethene | 3.611 | 96 | 110330 | 30.519 | ug/L | 78 |
| 19) Methyl acetate | 3.619 | 43 | 98711 | 29.278 | ug/L | 96 |
| 21) Methyl tert-butyl ether | 3.711 | 73 | 405204 | 29.325 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.806 | 59 | 73709 | 153.222 | ug/L | 91 |
| 24) Diisopropyl ether | 4.071 | 45 | 603714 | 30.596 | ug/L | 91 |
| 25) 1,1-Dichloroethane | 4.196 | 63 | 260295 | 30.020 | ug/L | 92 |
| 26) Halothane | 4.255 | 117 | 90214 | 31.117 | ug/L | 94 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N09.D
Acq On : 31 Jul 2024 9:07 pm
Operator : ELAINE:MKS
Sample : I8260STD30PPB
Misc : WG1954249
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.238 | 53 | 54373 | 30.272 | ug/L | | 90 |
| 28) Ethyl tert-butyl ether | 4.419 | 59 | 513557 | 29.991 | ug/L | | 97 |
| 29) Vinyl acetate | 4.430 | 43 | 337157 | 29.651 | ug/L | # | 94 |
| 30) cis-1,2-Dichloroethene | 4.712 | 96 | 127517 | 29.519 | ug/L | | 93 |
| 31) 2,2-Dichloropropane | 4.813 | 77 | 173960 | 31.500 | ug/L | | 97 |
| 33) Bromochloromethane | 4.907 | 128 | 58968 | 30.124 | ug/L | | 88 |
| 34) Cyclohexane | 4.910 | 56 | 305150 | 33.060 | ug/L | | 96 |
| 35) Chloroform | 4.980 | 83 | 205797 | 29.098 | ug/L | | 98 |
| 36) Ethyl acetate | 5.086 | 43 | 156227 | 29.207 | ug/L | | 96 |
| 37) Carbon tetrachloride | 5.114 | 117 | 168502 | 31.685 | ug/L | | 94 |
| 38) Tetrahydrofuran | 5.128 | 42 | 49298M1 | 29.808 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.178 | 97 | 193545 | 30.522 | ug/L | | 96 |
| 42) 2-Butanone | 5.267 | 43 | 64303 | 30.160 | ug/L | | 96 |
| 43) 1,1-Dichloropropene | 5.301 | 75 | 165534 | 31.094 | ug/L | | 95 |
| 45) Benzene | 5.546 | 78 | 514522 | 30.022 | ug/L | | 92 |
| 46) tert-Amyl methyl ether | 5.657 | 73 | 381559 | 30.156 | ug/L | | 97 |
| 48) 1,2-Dichloroethane | 5.752 | 62 | 192313 | 29.444 | ug/L | | 98 |
| 51) Methyl cyclohexane | 6.132 | 83 | 223375 | 32.779 | ug/L | | 84 |
| 52) Trichloroethene | 6.143 | 95 | 132908 | 30.916 | ug/L | | 97 |
| 54) Dibromomethane | 6.583 | 93 | 73052 | 29.863 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.686 | 63 | 152088 | 29.827 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.378 | 63 | 99727 | 31.133 | ug/L | | 89 |
| 58) Bromodichloromethane | 6.762 | 83 | 176926 | 29.402 | ug/L | | 92 |
| 61) 1,4-Dioxane | 6.971 | 88 | 23357 | 587.548 | ug/L | | 86 |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 211389 | 30.366 | ug/L | | 95 |
| 65) Toluene | 7.713 | 92 | 319096 | 29.944 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.148 | 58 | 55773 | 30.042 | ug/L | | 93 |
| 67) Tetrachloroethene | 8.159 | 166 | 139900 | 30.947 | ug/L | | 95 |
| 69) trans-1,3-Dichloropropene | 8.198 | 75 | 188733 | 30.471 | ug/L | | 99 |
| 71) Ethyl methacrylate | 8.385 | 69 | 169809 | 29.342 | ug/L | | 91 |
| 72) 1,1,2-Trichloroethane | 8.382 | 83 | 90229 | 29.528 | ug/L | | 100 |
| 73) Chlorodibromomethane | 8.594 | 129 | 127142 | 30.194 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 192488 | 29.888 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.867 | 107 | 106125 | 29.869 | ug/L | | 88 |
| 77) 2-Hexanone | 9.152 | 43 | 104812 | 29.886 | ug/L | | 98 |
| 78) Chlorobenzene | 9.520 | 112 | 339097 | 29.545 | ug/L | # | 80 |
| 79) Ethylbenzene | 9.556 | 91 | 625293 | 29.676 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.606 | 131 | 128406 | 29.946 | ug/L | | 97 |
| 81) p/m Xylene | 9.743 | 106 | 480185 | 58.597 | ug/L | | 99 |
| 82) o Xylene | 10.284 | 106 | 463412 | 58.098 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N09.D
Acq On : 31 Jul 2024 9:07 pm
Operator : ELAINE:MKS
Sample : I8260STD30PPB
Misc : WG1954249
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.354 | 104 | 770256 | 58.094 | ug/L | | 100 |
| 85) Bromoform | 10.376 | 173 | 85058 | 30.287 | ug/L | | 93 |
| 87) Isopropylbenzene | 10.671 | 105 | 629312 | 30.330 | ug/L | | 97 |
| 89) Bromobenzene | 11.106 | 156 | 155787 | 29.380 | ug/L | | 98 |
| 90) n-Propylbenzene | 11.151 | 91 | 751510 | 30.102 | ug/L | | 96 |
| 91) 1,4-Dichlorobutane | 11.168 | 55 | 266291 | 29.386 | ug/L | | 97 |
| 92) 1,1,2,2-Tetrachloroethane | 11.240 | 83 | 124080 | 29.659 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.279 | 105 | 611178 | 29.705 | ug/L | | 99 |
| 94) 2-Chlorotoluene | 11.318 | 91 | 437659 | 29.234 | ug/L | | 97 |
| 95) 1,3,5-Trimethylbenzene | 11.377 | 105 | 537259 | 29.512 | ug/L | | 98 |
| 96) 1,2,3-Trichloropropane | 11.380 | 75 | 107348 | 29.353 | ug/L | | 94 |
| 97) trans-1,4-Dichloro-2-b... | 11.430 | 53 | 51127 | 29.616 | ug/L | # | 84 |
| 98) 4-Chlorotoluene | 11.502 | 91 | 457411 | 29.459 | ug/L | | 99 |
| 99) tert-Butylbenzene | 11.720 | 119 | 448526 | 29.875 | ug/L | | 98 |
| 102) 1,2,4-Trimethylbenzene | 11.795 | 105 | 535558 | 29.610 | ug/L | | 95 |
| 103) sec-Butylbenzene | 11.910 | 105 | 663673 | 30.258 | ug/L | | 99 |
| 104) p-Isopropyltoluene | 12.063 | 119 | 568430 | 30.494 | ug/L | | 96 |
| 105) 1,3-Dichlorobenzene | 12.130 | 146 | 291786 | 29.406 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 291447 | 29.676 | ug/L | | 99 |
| 107) p-Diethylbenzene | 12.439 | 119 | 335133 | 30.326 | ug/L | | 97 |
| 108) n-Butylbenzene | 12.495 | 91 | 481406 | 30.362 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.646 | 146 | 282170 | 29.816 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.231 | 119 | 538890 | 29.853 | ug/L | | 96 |
| 111) 1,2-Dibromo-3-chloropr... | 13.427 | 155 | 23835 | 30.657 | ug/L | | 92 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 224773 | 29.756 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 74680 | 30.927 | ug/L | | 92 |
| 114) 1,2,4-Trichlorobenzene | 14.054 | 180 | 202950 | 30.317 | ug/L | | 99 |
| 115) Naphthalene | 14.347 | 128 | 444851 | 30.922 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.517 | 180 | 185426 | 30.291 | ug/L | | 95 |

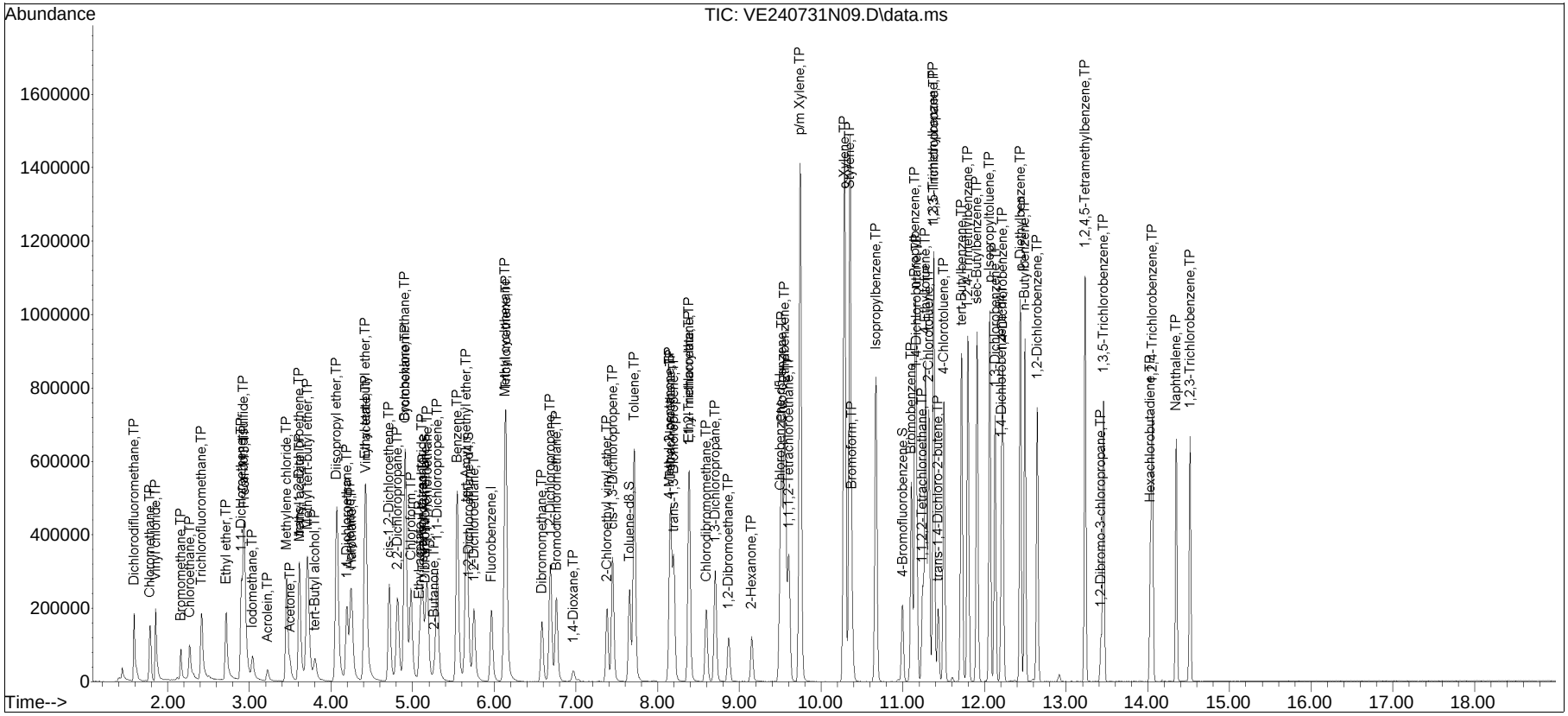
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N09.D
Acq On : 31 Jul 2024 9:07 pm
Operator : ELAINE:MKS
Sample : I8260STD30PPB
Misc : WG1954249
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

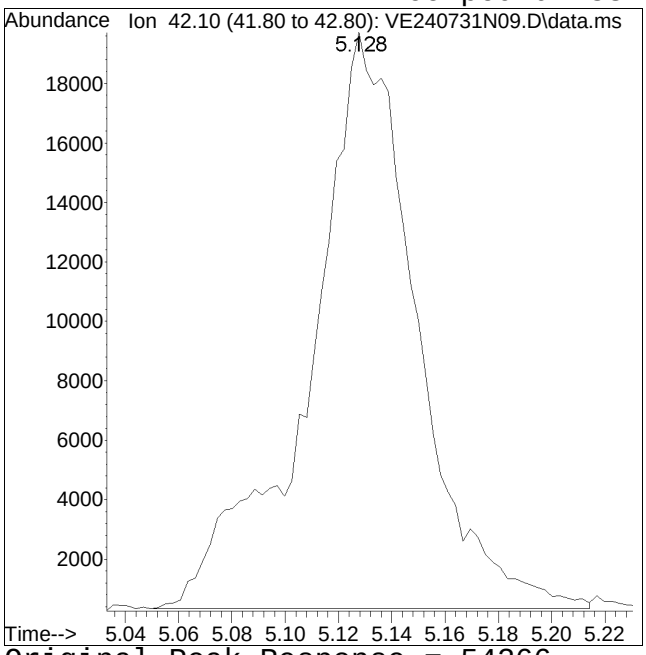


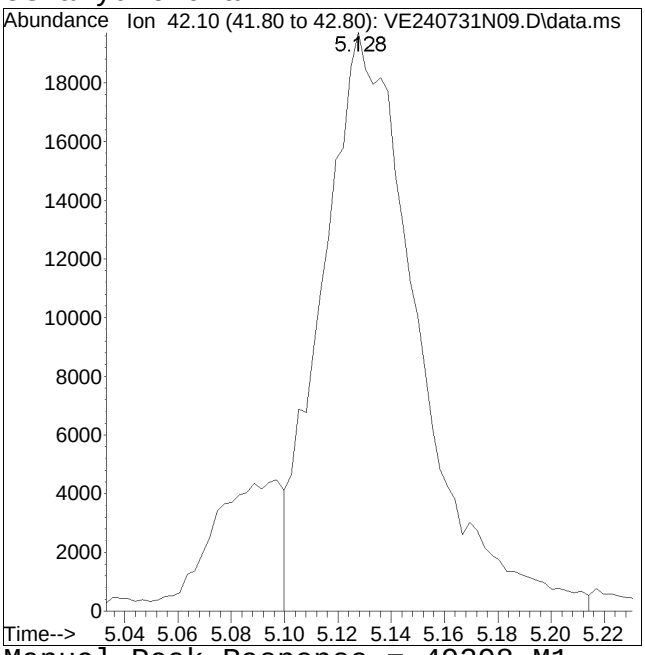
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N09.D
Date Inj'd : 7/31/2024 9:07 pm
Sample : I8260STD30PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 54266 Manual Peak Response = 49298 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N10.D
Acq On : 31 Jul 2024 9:32 pm
Operator : ELAINE:MKS
Sample : I8260STD80PPB
Misc : WG1954249
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.964 | 96 | 205552 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 100.47% | | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 153791 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 104.08% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.211 | 152 | 85405 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 101.07% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.155 | 113 | 47510 | 9.714 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.14% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 63482 | 9.774 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.74% | | | |
| 64) Toluene-d8 | 7.654 | 98 | 201166 | 9.888 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.88% | | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 78835 | 9.954 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.54% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.592 | 85 | 398777 | 88.069 | ug/L | 96 |
| 3) Chloromethane | 1.787 | 50 | 425203 | 78.719 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 427307 | 85.439 | ug/L | 94 |
| 5) Bromomethane | 2.163 | 94 | 137967 | 114.976 | ug/L | 94 |
| 6) Chloroethane | 2.266 | 64 | 251474 | 79.651 | ug/L | 87 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 483684 | 92.573 | ug/L | 95 |
| 8) Ethyl ether | 2.718 | 74 | 182990 | 84.018 | ug/L | 73 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 279624 | 88.076 | ug/L | 79 |
| 11) Carbon disulfide | 2.933 | 76 | 849801 | 82.108 | ug/L | 96 |
| 12) Freon-113 | 2.944 | 101 | 292977 | 87.510 | ug/L | 88 |
| 13) Iodomethane | 3.039 | 142 | 267444 | 149.523 | ug/L | 92 |
| 14) Acrolein | 3.223 | 56 | 74031 | 81.542 | ug/L # | 70 |
| 15) Methylene chloride | 3.460 | 84 | 324549 | 77.441 | ug/L | 87 |
| 17) Acetone | 3.502 | 43 | 116076 | 80.011 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.611 | 96 | 301708 | 82.990 | ug/L | 81 |
| 19) Methyl acetate | 3.622 | 43 | 256155 | 75.550 | ug/L | 97 |
| 21) Methyl tert-butyl ether | 3.711 | 73 | 1080950 | 77.793 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.806 | 59 | 192001 | 396.889 | ug/L | 90 |
| 24) Diisopropyl ether | 4.071 | 45 | 1579187 | 79.586 | ug/L | 91 |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 690552 | 79.197 | ug/L | 97 |
| 26) Halothane | 4.249 | 117 | 237954 | 81.618 | ug/L | 93 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N10.D
Acq On : 31 Jul 2024 9:32 pm
Operator : ELAINE:MKS
Sample : I8260STD80PPB
Misc : WG1954249
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.238 | 53 | 143107 | 79.230 | ug/L | | 91 |
| 28) Ethyl tert-butyl ether | 4.419 | 59 | 1358577 | 78.894 | ug/L | | 97 |
| 29) Vinyl acetate | 4.428 | 43 | 844268 | 73.834 | ug/L | # | 95 |
| 30) cis-1,2-Dichloroethene | 4.715 | 96 | 352546 | 81.155 | ug/L | | 97 |
| 31) 2,2-Dichloropropane | 4.815 | 77 | 456698 | 82.234 | ug/L | | 98 |
| 33) Bromochloromethane | 4.904 | 128 | 149382 | 75.886 | ug/L | | 87 |
| 34) Cyclohexane | 4.910 | 56 | 818733 | 88.205 | ug/L | | 97 |
| 35) Chloroform | 4.980 | 83 | 557889 | 78.440 | ug/L | | 98 |
| 36) Ethyl acetate | 5.086 | 43 | 409173 | 76.068 | ug/L | | 95 |
| 37) Carbon tetrachloride | 5.114 | 117 | 452565 | 84.624 | ug/L | | 95 |
| 38) Tetrahydrofuran | 5.128 | 42 | 127579M1 | 76.709 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.181 | 97 | 517219 | 81.109 | ug/L | | 95 |
| 42) 2-Butanone | 5.267 | 43 | 170745 | 79.637 | ug/L | # | 76 |
| 43) 1,1-Dichloropropene | 5.300 | 75 | 445417 | 83.200 | ug/L | | 95 |
| 45) Benzene | 5.546 | 78 | 1372838 | 79.656 | ug/L | | 93 |
| 46) tert-Amyl methyl ether | 5.657 | 73 | 1003985 | 78.904 | ug/L | | 97 |
| 48) 1,2-Dichloroethane | 5.749 | 62 | 510065 | 77.658 | ug/L | | 97 |
| 51) Methyl cyclohexane | 6.131 | 83 | 634905 | 92.647 | ug/L | | 87 |
| 52) Trichloroethene | 6.143 | 95 | 354708 | 82.049 | ug/L | | 97 |
| 54) Dibromomethane | 6.583 | 93 | 194273 | 78.972 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.684 | 63 | 405164 | 79.014 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.381 | 63 | 275108 | 85.405 | ug/L | | 92 |
| 58) Bromodichloromethane | 6.759 | 83 | 477315 | 78.878 | ug/L | | 93 |
| 61) 1,4-Dioxane | 6.968 | 88 | 30991 | 775.224 | ug/L | | 88 |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 566751 | 80.959 | ug/L | | 95 |
| 65) Toluene | 7.715 | 92 | 857485 | 78.288 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.145 | 58 | 150511 | 78.877 | ug/L | | 91 |
| 67) Tetrachloroethene | 8.162 | 166 | 378641 | 81.491 | ug/L | | 96 |
| 69) trans-1,3-Dichloropropene | 8.198 | 75 | 501573 | 78.787 | ug/L | | 98 |
| 71) Ethyl methacrylate | 8.385 | 69 | 451462 | 75.896 | ug/L | | 91 |
| 72) 1,1,2-Trichloroethane | 8.382 | 83 | 237889 | 75.743 | ug/L | | 99 |
| 73) Chlorodibromomethane | 8.594 | 129 | 340620 | 78.699 | ug/L | | 98 |
| 74) 1,3-Dichloropropane | 8.703 | 76 | 507269 | 76.632 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.870 | 107 | 281759 | 77.154 | ug/L | | 87 |
| 77) 2-Hexanone | 9.152 | 43 | 277176 | 76.892 | ug/L | | 98 |
| 78) Chlorobenzene | 9.520 | 112 | 906237 | 76.820 | ug/L | # | 81 |
| 79) Ethylbenzene | 9.559 | 91 | 1664160 | 76.841 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.603 | 131 | 340057 | 77.159 | ug/L | | 97 |
| 81) p/m Xylene | 9.746 | 106 | 1254976 | 148.997 | ug/L | | 98 |
| 82) o Xylene | 10.287 | 106 | 1224130 | 149.311 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N10.D
Acq On : 31 Jul 2024 9:32 pm
Operator : ELAINE:MKS
Sample : I8260STD80PPB
Misc : WG1954249
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.353 | 104 | 2011221 | 147.580 | ug/L | | 100 |
| 85) Bromoform | 10.381 | 173 | 228150 | 80.733 | ug/L | | 94 |
| 87) Isopropylbenzene | 10.671 | 105 | 1691278 | 81.004 | ug/L | | 97 |
| 89) Bromobenzene | 11.106 | 156 | 418818 | 78.495 | ug/L | | 98 |
| 90) n-Propylbenzene | 11.154 | 91 | 2013910 | 80.167 | ug/L | | 97 |
| 91) 1,4-Dichlorobutane | 11.171 | 55 | 698575 | 76.612 | ug/L | | 97 |
| 92) 1,1,2,2-Tetrachloroethane | 11.243 | 83 | 331120 | 78.655 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.279 | 105 | 1639001 | 79.165 | ug/L | | 100 |
| 94) 2-Chlorotoluene | 11.321 | 91 | 1160531M1 | 77.036 | ug/L | | |
| 95) 1,3,5-Trimethylbenzene | 11.380 | 105 | 1427143 | 77.906 | ug/L | | 98 |
| 96) 1,2,3-Trichloropropane | 11.382 | 75 | 282589 | 76.789 | ug/L | | 95 |
| 97) trans-1,4-Dichloro-2-b... | 11.433 | 53 | 141551 | 81.487 | ug/L | # | 81 |
| 98) 4-Chlorotoluene | 11.505 | 91 | 1219919 | 78.080 | ug/L | | 99 |
| 99) tert-Butylbenzene | 11.720 | 119 | 1215335 | 80.446 | ug/L | | 98 |
| 102) 1,2,4-Trimethylbenzene | 11.798 | 105 | 1435491 | 78.871 | ug/L | | 96 |
| 103) sec-Butylbenzene | 11.912 | 105 | 1806280 | 81.839 | ug/L | | 99 |
| 104) p-Isopropyltoluene | 12.066 | 119 | 1543039 | 82.264 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.130 | 146 | 775535 | 77.673 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 777852 | 78.710 | ug/L | | 99 |
| 107) p-Diethylbenzene | 12.439 | 119 | 912031 | 82.016 | ug/L | | 96 |
| 108) n-Butylbenzene | 12.495 | 91 | 1330681 | 83.402 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.646 | 146 | 747610 | 78.507 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.231 | 119 | 1438355 | 79.185 | ug/L | | 95 |
| 111) 1,2-Dibromo-3-chloropr... | 13.427 | 155 | 64007 | 81.814 | ug/L | | 94 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 600411 | 78.989 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 199869 | 82.257 | ug/L | | 92 |
| 114) 1,2,4-Trichlorobenzene | 14.057 | 180 | 550611 | 81.739 | ug/L | | 99 |
| 115) Naphthalene | 14.347 | 128 | 1227574 | 84.800 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.514 | 180 | 512444 | 83.193 | ug/L | | 95 |

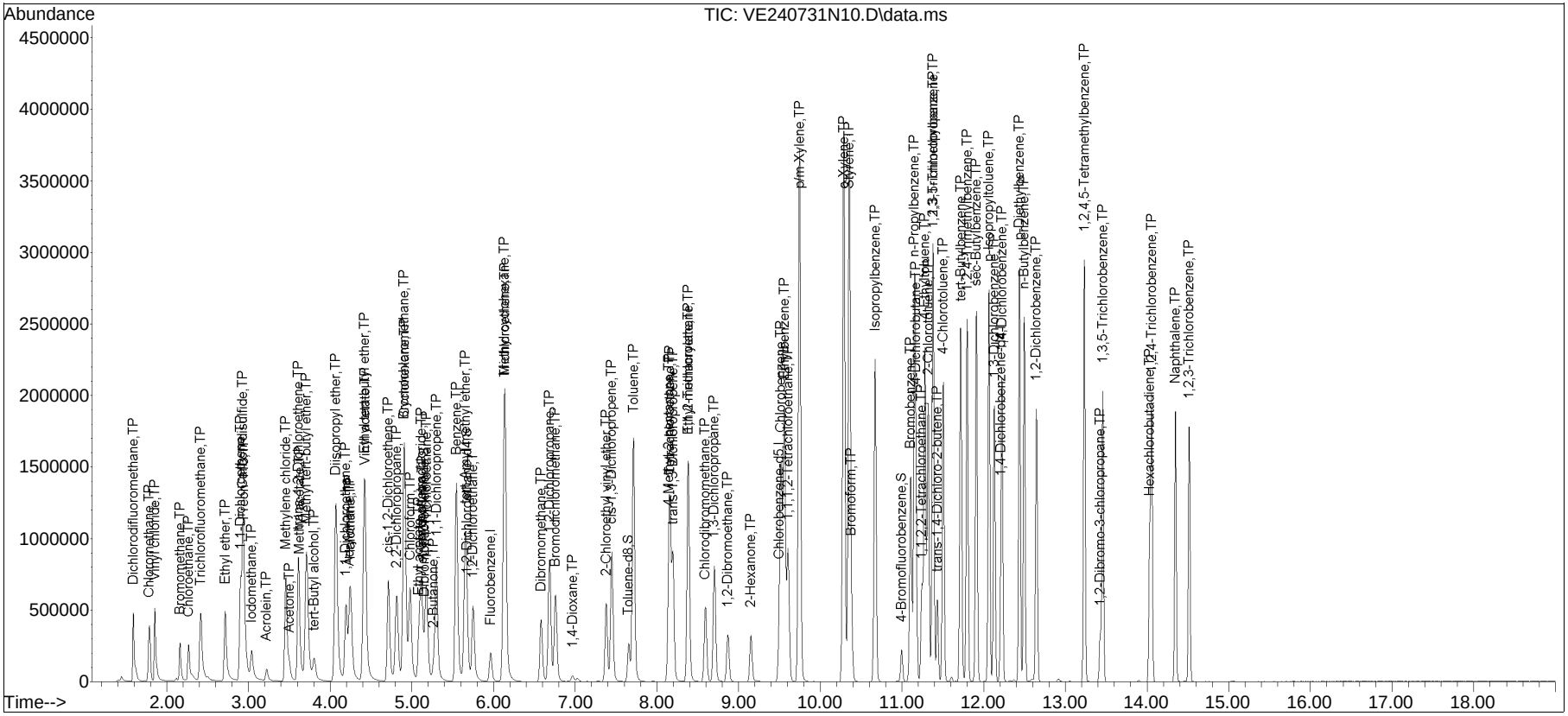
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N10.D
Acq On : 31 Jul 2024 9:32 pm
Operator : ELAINE:MKS
Sample : I8260STD80PPB
Misc : WG1954249
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

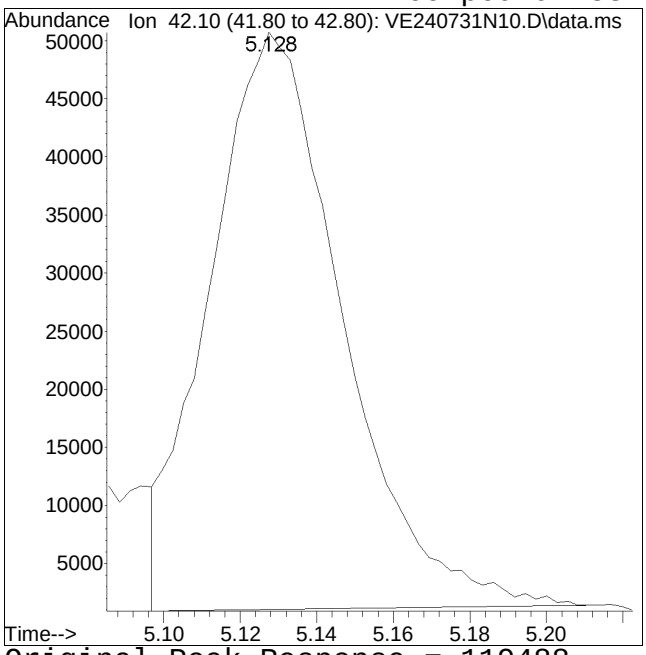


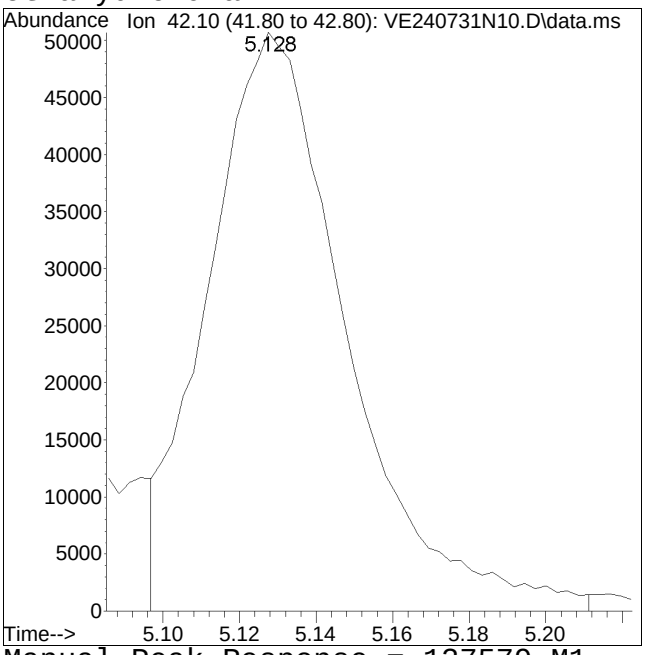
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N10.D
Date Inj'd : 7/31/2024 9:32 pm
Sample : I8260STD80PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 119488 Manual Peak Response = 127579 M1

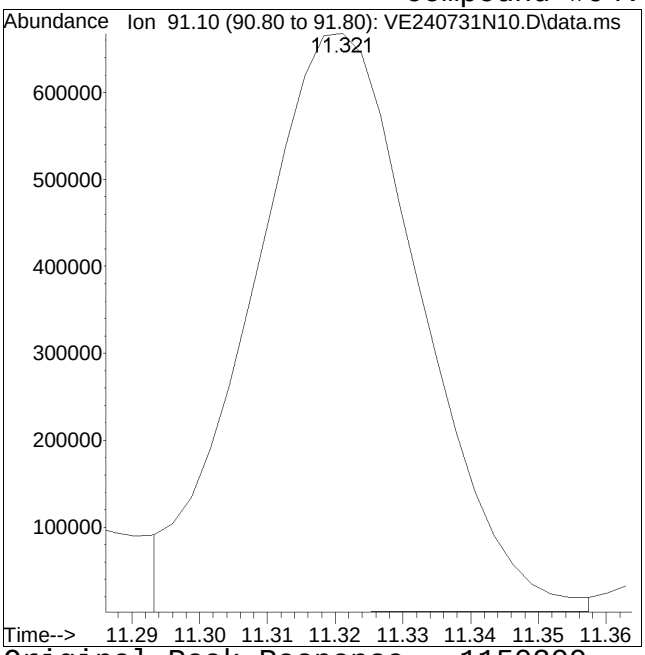
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

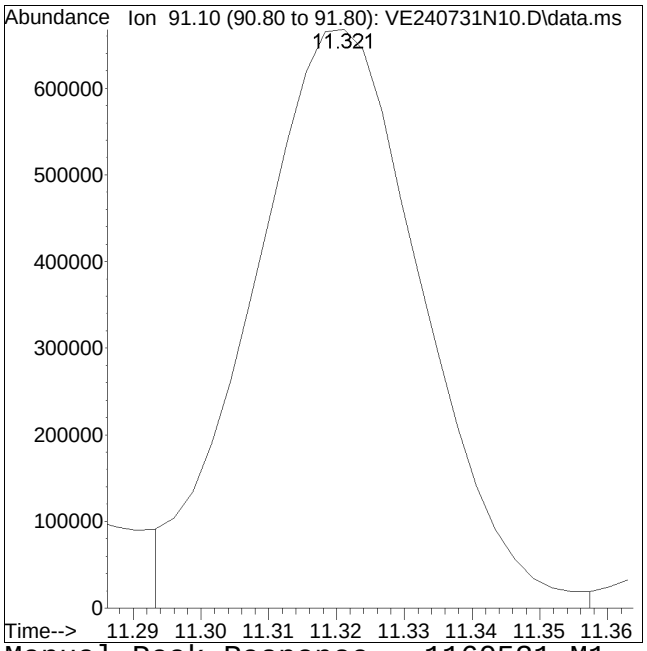
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N10.D
Date Inj'd : 7/31/2024 9:32 pm
Sample : I8260STD80PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #94: 2-Chlorotoluene




Original Peak Response = 1150209




Manual Peak Response = 1160531 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N11.D
Acq On : 31 Jul 2024 9:57 pm
Operator : ELAINE:MKS
Sample : I8260STD120PPB
Misc : WG1954249
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.964 | 96 | 212189 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 103.72% | | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 156001 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 105.58% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.208 | 152 | 84877 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 100.44% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.158 | 113 | 47539 | 9.415 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 94.15% | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 63246 | 9.434 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 94.34% | | |
| 64) Toluene-d8 | 7.654 | 98 | 206007 | 9.983 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 99.83% | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 79943 | 10.156 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 101.56% | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.591 | 85 | 621695 | 133.006 | ug/L | 96 |
| 3) Chloromethane | 1.787 | 50 | 661240 | 118.588 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 675555 | 130.850 | ug/L | 95 |
| 5) Bromomethane | 2.163 | 94 | 241549 | 195.000 | ug/L | 96 |
| 6) Chloroethane | 2.264 | 64 | 366944M1 | 112.589 | ug/L | |
| 7) Trichlorofluoromethane | 2.414 | 101 | 749914 | 139.038 | ug/L | 95 |
| 8) Ethyl ether | 2.715 | 74 | 274710 | 122.185 | ug/L | 71 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 432970 | 132.112 | ug/L # | 77 |
| 11) Carbon disulfide | 2.930 | 76 | 1302644 | 121.925 | ug/L | 96 |
| 12) Freon-113 | 2.941 | 101 | 466342 | 134.936 | ug/L | 89 |
| 13) Iodomethane | 3.039 | 142 | 437611 | 237.007 | ug/L | 92 |
| 14) Acrolein | 3.223 | 56 | 117858 | 125.755 | ug/L # | 71 |
| 15) Methylene chloride | 3.457 | 84 | 496205 | 114.697 | ug/L | 88 |
| 17) Acetone | 3.502 | 43 | 165824 | 110.727 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.610 | 96 | 460682 | 122.755 | ug/L | 80 |
| 19) Methyl acetate | 3.619 | 43 | 388572 | 111.021 | ug/L | 98 |
| 21) Methyl tert-butyl ether | 3.714 | 73 | 1643799 | 114.600 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.806 | 59 | 291372 | 583.461 | ug/L | 87 |
| 24) Diisopropyl ether | 4.071 | 45 | 2382897 | 116.334 | ug/L | 91 |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 1040719 | 115.624 | ug/L | 98 |
| 26) Halothane | 4.249 | 117 | 364896 | 121.244 | ug/L | 93 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N11.D
Acq On : 31 Jul 2024 9:57 pm
Operator : ELAINE:MKS
Sample : I8260STD120PPB
Misc : WG1954249
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.235 | 53 | 217765 | 116.792 | ug/L | | 92 |
| 28) Ethyl tert-butyl ether | 4.419 | 59 | 2065717 | 116.206 | ug/L | | 87 |
| 29) Vinyl acetate | 4.430 | 43 | 1705877 | 144.518 | ug/L | # | 96 |
| 30) cis-1,2-Dichloroethene | 4.715 | 96 | 538397 | 120.060 | ug/L | | 98 |
| 31) 2,2-Dichloropropane | 4.815 | 77 | 711165 | 124.049 | ug/L | | 98 |
| 33) Bromochloromethane | 4.904 | 128 | 219330 | 107.935 | ug/L | | 84 |
| 34) Cyclohexane | 4.910 | 56 | 1269361 | 132.475 | ug/L | | 98 |
| 35) Chloroform | 4.980 | 83 | 848229 | 115.532 | ug/L | | 98 |
| 36) Ethyl acetate | 5.086 | 43 | 617701 | 111.244 | ug/L | | 95 |
| 37) Carbon tetrachloride | 5.116 | 117 | 710348 | 128.671 | ug/L | | 95 |
| 38) Tetrahydrofuran | 5.130 | 42 | 189666M1 | 110.473 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.180 | 97 | 801432 | 121.748 | ug/L | | 95 |
| 42) 2-Butanone | 5.267 | 43 | 253892 | 114.714 | ug/L | # | 78 |
| 43) 1,1-Dichloropropene | 5.300 | 75 | 691130 | 125.059 | ug/L | | 96 |
| 45) Benzene | 5.546 | 78 | 2099718 | 118.021 | ug/L | | 93 |
| 46) tert-Amyl methyl ether | 5.657 | 73 | 1544881 | 117.616 | ug/L | | 97 |
| 48) 1,2-Dichloroethane | 5.749 | 62 | 772246 | 113.897 | ug/L | | 98 |
| 51) Methyl cyclohexane | 6.134 | 83 | 992238 | 140.261 | ug/L | | 87 |
| 52) Trichloroethene | 6.143 | 95 | 512619 | 114.867 | ug/L | | 97 |
| 54) Dibromomethane | 6.580 | 93 | 296625 | 116.807 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.686 | 63 | 617455 | 116.649 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.378 | 63 | 408384 | 122.814 | ug/L | | 92 |
| 58) Bromodichloromethane | 6.759 | 83 | 727451 | 116.454 | ug/L | | 92 |
| 61) 1,4-Dioxane | 6.971 | 88 | 49111 | 1190.061 | ug/L | | 88 |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 862920 | 119.410 | ug/L | | 96 |
| 65) Toluene | 7.713 | 92 | 1314787 | 118.338 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.145 | 58 | 225705 | 116.607 | ug/L | | 91 |
| 67) Tetrachloroethene | 8.159 | 166 | 585961 | 124.323 | ug/L | | 95 |
| 69) trans-1,3-Dichloropropene | 8.198 | 75 | 758357 | 117.434 | ug/L | | 99 |
| 71) Ethyl methacrylate | 8.385 | 69 | 688690 | 114.137 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.382 | 83 | 359465 | 112.831 | ug/L | | 99 |
| 73) Chlorodibromomethane | 8.594 | 129 | 526073 | 119.825 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 767624 | 114.320 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.867 | 107 | 426364 | 115.097 | ug/L | | 87 |
| 77) 2-Hexanone | 9.149 | 43 | 414223 | 113.282 | ug/L | | 99 |
| 78) Chlorobenzene | 9.520 | 112 | 1389349 | 116.104 | ug/L | # | 81 |
| 79) Ethylbenzene | 9.559 | 91 | 2544867 | 115.842 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.603 | 131 | 516387 | 115.508 | ug/L | | 97 |
| 81) p/m Xylene | 9.745 | 106 | 1901677 | 222.578 | ug/L | | 98 |
| 82) o Xylene | 10.289 | 106 | 1853015 | 222.816 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N11.D
Acq On : 31 Jul 2024 9:57 pm
Operator : ELAINE:MKS
Sample : I8260STD120PPB
Misc : WG1954249
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.356 | 104 | 3040245 | 219.928 | ug/L | | 100 |
| 85) Bromoform | 10.381 | 173 | 344244 | 122.572 | ug/L | | 94 |
| 87) Isopropylbenzene | 10.671 | 105 | 2603670 | 125.479 | ug/L | | 97 |
| 89) Bromobenzene | 11.106 | 156 | 638995 | 120.505 | ug/L | | 98 |
| 90) n-Propylbenzene | 11.154 | 91 | 3066625 | 122.831 | ug/L | | 97 |
| 91) 1,4-Dichlorobutane | 11.170 | 55 | 1050044 | 115.873 | ug/L | | 97 |
| 92) 1,1,2,2-Tetrachloroethane | 11.243 | 83 | 539535 | 128.960 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.282 | 105 | 2488678 | 120.953 | ug/L | | 100 |
| 94) 2-Chlorotoluene | 11.321 | 91 | 1755872M1 | 117.280 | ug/L | | |
| 95) 1,3,5-Trimethylbenzene | 11.380 | 105 | 2172113 | 119.311 | ug/L | | 98 |
| 96) 1,2,3-Trichloropropane | 11.380 | 75 | 421191 | 115.164 | ug/L | | 94 |
| 97) trans-1,4-Dichloro-2-b... | 11.433 | 53 | 217211 | 125.820 | ug/L | # | 80 |
| 98) 4-Chlorotoluene | 11.508 | 91 | 1872710 | 120.607 | ug/L | | 98 |
| 99) tert-Butylbenzene | 11.720 | 119 | 1857545 | 123.721 | ug/L | | 98 |
| 102) 1,2,4-Trimethylbenzene | 11.798 | 105 | 2174551 | 120.221 | ug/L | | 96 |
| 103) sec-Butylbenzene | 11.912 | 105 | 2758090 | 125.741 | ug/L | | 99 |
| 104) p-Isopropyltoluene | 12.066 | 119 | 2336309 | 125.331 | ug/L | | 96 |
| 105) 1,3-Dichlorobenzene | 12.133 | 146 | 1169649 | 117.874 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 1165916 | 118.711 | ug/L | | 99 |
| 107) p-Diethylbenzene | 12.439 | 119 | 1359462 | 123.012 | ug/L | | 96 |
| 108) n-Butylbenzene | 12.498 | 91 | 1991135 | 125.574 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.648 | 146 | 1118649 | 118.201 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.234 | 119 | 2195611 | 121.626 | ug/L | | 96 |
| 111) 1,2-Dibromo-3-chloropr... | 13.426 | 155 | 98831 | 127.113 | ug/L | | 93 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 936160 | 123.926 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 311088 | 128.826 | ug/L | | 93 |
| 114) 1,2,4-Trichlorobenzene | 14.057 | 180 | 854868 | 127.696 | ug/L | | 99 |
| 115) Naphthalene | 14.350 | 128 | 1892881 | 131.573 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.517 | 180 | 785081 | 128.247 | ug/L | | 95 |

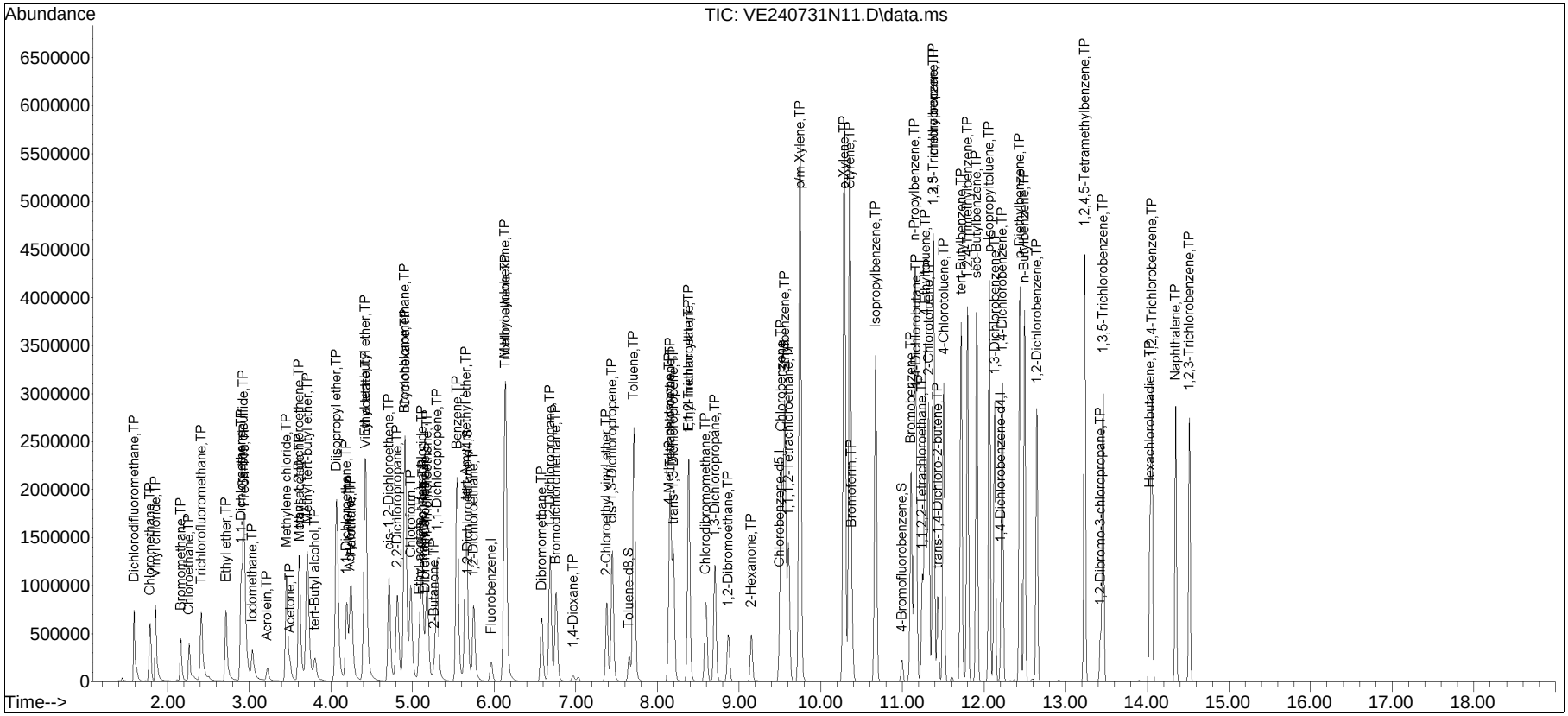
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N11.D
Acq On : 31 Jul 2024 9:57 pm
Operator : ELAINE:MKS
Sample : I8260STD120PPB
Misc : WG1954249
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

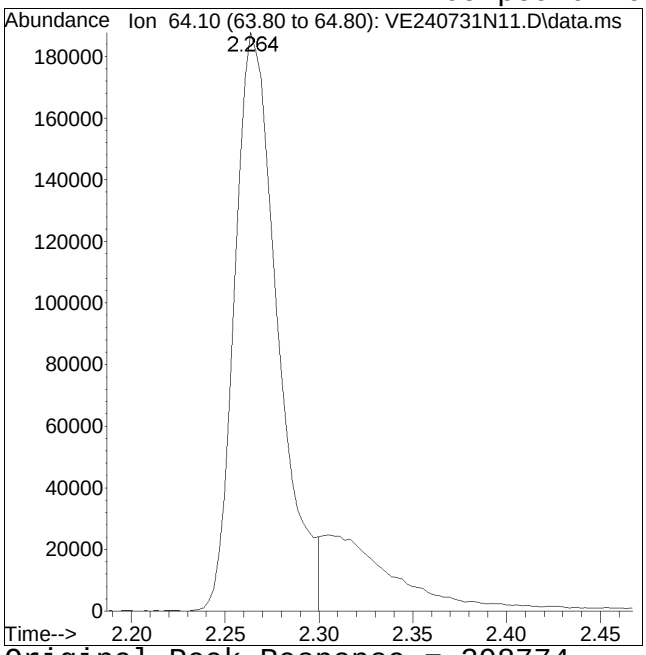


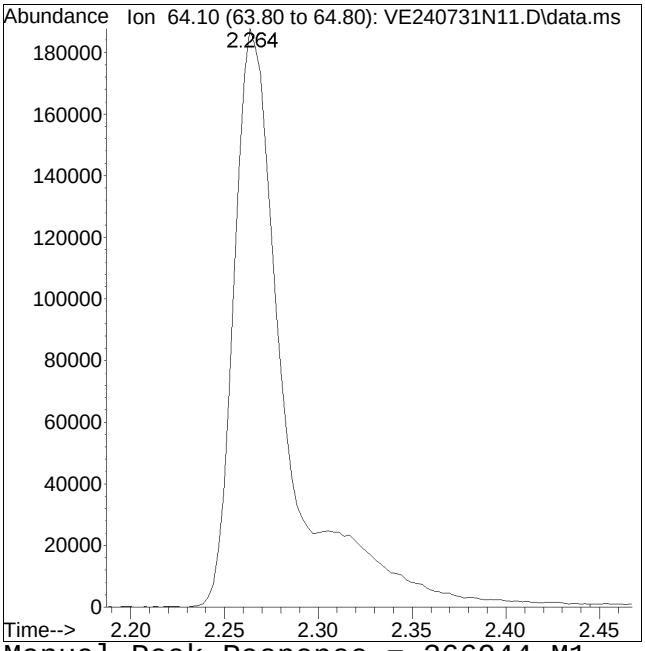
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N11.D
Date Inj'd : 7/31/2024 9:57 pm
Sample : I8260STD120PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #6: Chloroethane



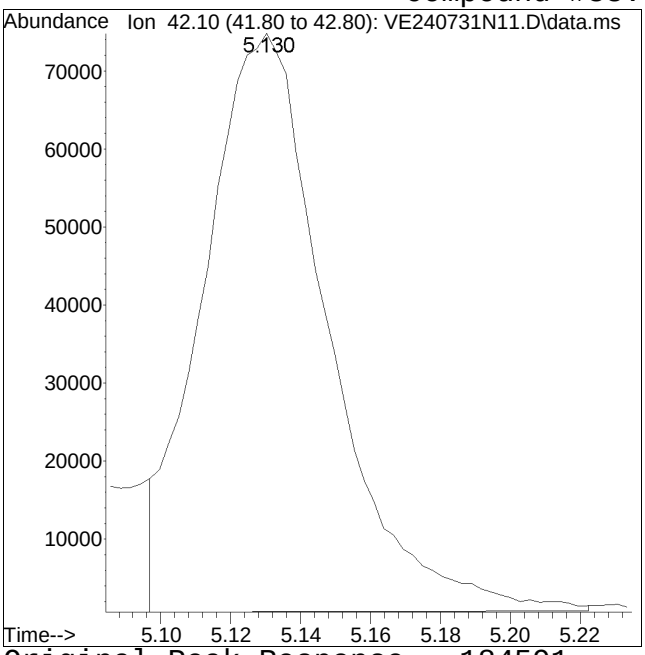

Original Peak Response = 298774 Manual Peak Response = 366944 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

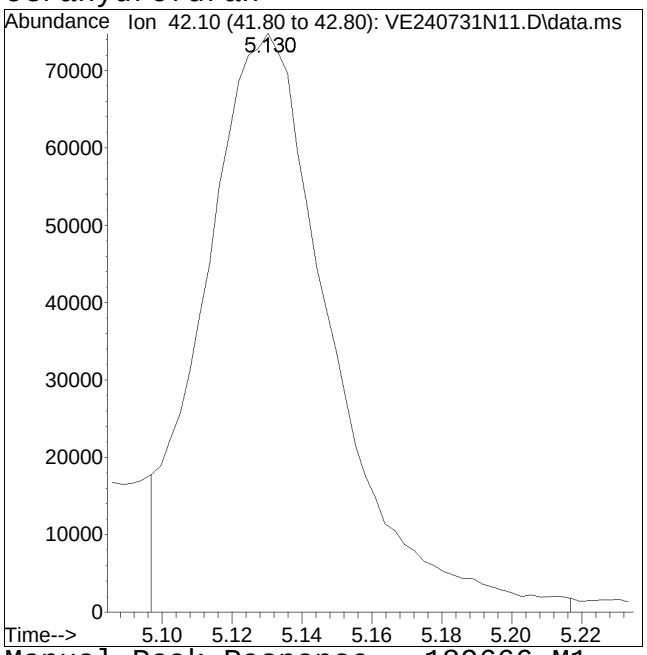
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N11.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:57 pm Instrument : Elaine
Sample : I8260STD120PPB Quant Date : 8/1/2024 11:57 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 184591




Manual Peak Response = 189666 M1

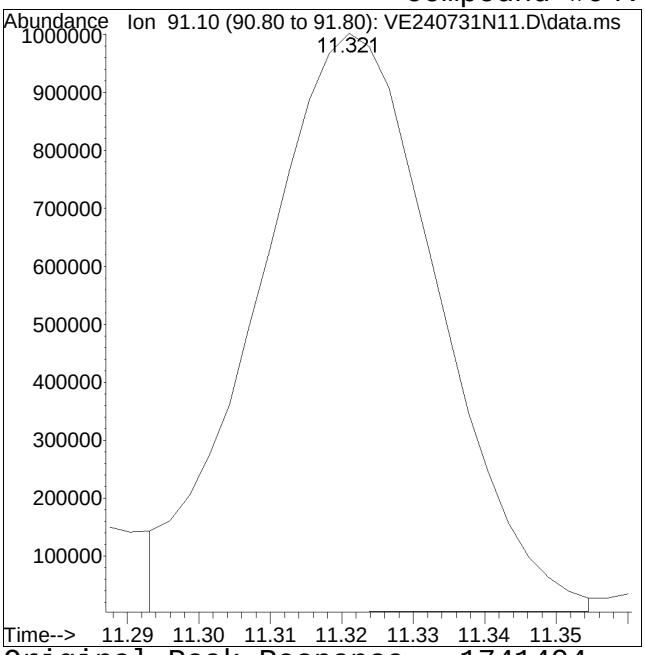
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

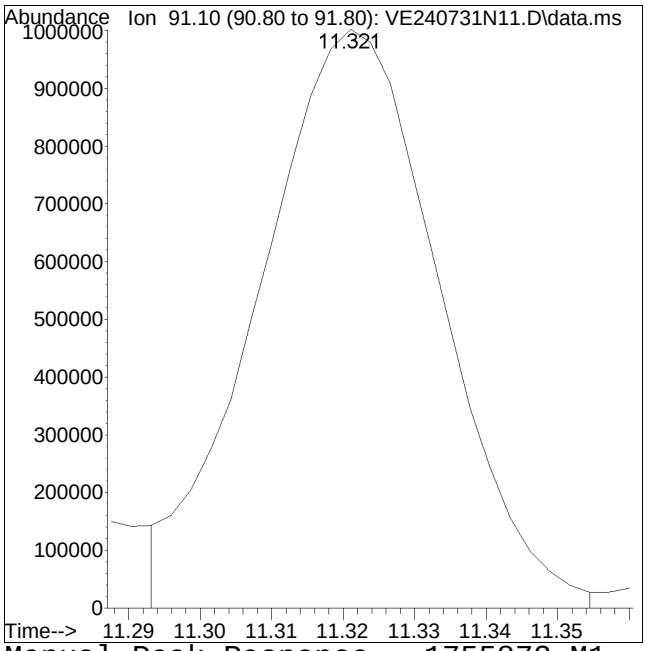
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N11.D
Date Inj'd : 7/31/2024 9:57 pm
Sample : I8260STD120PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #94: 2-Chlorotoluene




Original Peak Response = 1741404 Manual Peak Response = 1755872 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N12.D
Acq On : 31 Jul 2024 10:22 pm
Operator : ELAINE:MKS
Sample : I8260STD200PPB
Misc : WG1954249
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.967 | 96 | 218082 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 106.60% | | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 158225 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 107.09% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.211 | 152 | 85112 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 100.72% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.155 | 113 | 48693 | 9.383 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 93.83% | | |
| 47) 1,2-Dichloroethane-d4 | 5.680 | 65 | 65855 | 9.557 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 95.57% | | |
| 64) Toluene-d8 | 7.654 | 98 | 211806 | 10.120 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 101.20% | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 81664 | 10.346 | ug/L | 0.00 |
| Spiked Amount 10.000 | | Range 70 - 130 | | Recovery = 103.46% | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.589 | 85 | 1023946 | 213.144 | ug/L | 96 |
| 3) Chloromethane | 1.787 | 50 | 1114665 | 194.505 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 1133872 | 213.688 | ug/L | 95 |
| 5) Bromomethane | 2.160 | 94 | 443466 | 348.331 | ug/L | 95 |
| 6) Chloroethane | 2.264 | 64 | 466826M1 | 139.365 | ug/L | |
| 7) Trichlorofluoromethane | 2.409 | 101 | 1250069 | 225.507 | ug/L | 95 |
| 8) Ethyl ether | 2.715 | 74 | 473080 | 204.730 | ug/L | 74 |
| 10) 1,1-Dichloroethene | 2.899 | 96 | 720867 | 214.013 | ug/L # | 77 |
| 11) Carbon disulfide | 2.930 | 76 | 2148112 | 195.626 | ug/L | 96 |
| 12) Freon-113 | 2.941 | 101 | 764970 | 215.363 | ug/L | 87 |
| 13) Iodomethane | 3.039 | 142 | 787010 | 414.722 | ug/L | 90 |
| 14) Acrolein | 3.223 | 56 | 207835 | 215.768 | ug/L # | 68 |
| 15) Methylene chloride | 3.457 | 84 | 830961 | 186.885 | ug/L | 88 |
| 17) Acetone | 3.499 | 43 | 275343 | 178.888 | ug/L | 100 |
| 18) trans-1,2-Dichloroethene | 3.610 | 96 | 769562 | 199.519 | ug/L | 80 |
| 19) Methyl acetate | 3.619 | 43 | 649913 | 180.672 | ug/L | 97 |
| 21) Methyl tert-butyl ether | 3.711 | 73 | 2743068 | 186.070 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.806 | 59 | 494549 | 963.555 | ug/L # | 74 |
| 24) Diisopropyl ether | 4.071 | 45 | 3996934 | 189.859 | ug/L | 91 |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 1767256 | 191.036 | ug/L | 97 |
| 26) Halothane | 4.249 | 117 | 614966 | 198.813 | ug/L | 95 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N12.D
Acq On : 31 Jul 2024 10:22 pm
Operator : ELAINE:MKS
Sample : I8260STD200PPB
Misc : WG1954249
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.238 | 53 | 364875 | 190.402 | ug/L | | 91 |
| 28) Ethyl tert-butyl ether | 4.419 | 59 | 3489282 | 190.985 | ug/L | | 87 |
| 29) Vinyl acetate | 4.427 | 43 | 2909289 | 239.808 | ug/L | | 96 |
| 30) cis-1,2-Dichloroethene | 4.715 | 96 | 893849 | 193.939 | ug/L | | 96 |
| 31) 2,2-Dichloropropane | 4.815 | 77 | 1146211 | 194.531 | ug/L | | 98 |
| 33) Bromochloromethane | 4.904 | 128 | 369034 | 176.699 | ug/L | | 87 |
| 34) Cyclohexane | 4.910 | 56 | 2111879 | 214.448 | ug/L | | 97 |
| 35) Chloroform | 4.980 | 83 | 1463012 | 193.883 | ug/L | | 98 |
| 36) Ethyl acetate | 5.086 | 43 | 1054490 | 184.774 | ug/L | | 95 |
| 37) Carbon tetrachloride | 5.111 | 117 | 1180255 | 208.012 | ug/L | | 94 |
| 38) Tetrahydrofuran | 5.127 | 42 | 319470M1 | 181.050 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.178 | 97 | 1345108 | 198.818 | ug/L | | 94 |
| 42) 2-Butanone | 5.264 | 43 | 430836 | 189.401 | ug/L | # | 77 |
| 43) 1,1-Dichloropropene | 5.300 | 75 | 1167560 | 205.559 | ug/L | | 95 |
| 45) Benzene | 5.546 | 78 | 3545099 | 193.878 | ug/L | | 93 |
| 46) tert-Amyl methyl ether | 5.660 | 73 | 2608163 | 193.201 | ug/L | | 97 |
| 48) 1,2-Dichloroethane | 5.749 | 62 | 1303976 | 187.124 | ug/L | | 98 |
| 51) Methyl cyclohexane | 6.134 | 83 | 1644127 | 226.130 | ug/L | | 87 |
| 52) Trichloroethene | 6.143 | 95 | 848815 | 185.062 | ug/L | | 97 |
| 54) Dibromomethane | 6.580 | 93 | 510294 | 195.517 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.686 | 63 | 1043986 | 191.899 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.381 | 63 | 689730 | 201.819 | ug/L | | 91 |
| 58) Bromodichloromethane | 6.759 | 83 | 1230248 | 191.623 | ug/L | | 93 |
| 61) 1,4-Dioxane | 6.968 | 88 | 82040 | 1934.279 | ug/L | | 87 |
| 62) cis-1,3-Dichloropropene | 7.450 | 75 | 1455382 | 195.953 | ug/L | | 96 |
| 65) Toluene | 7.715 | 92 | 2216340 | 196.679 | ug/L | | 95 |
| 66) 4-Methyl-2-pentanone | 8.145 | 58 | 380672 | 193.904 | ug/L | | 89 |
| 67) Tetrachloroethene | 8.161 | 166 | 969941 | 202.900 | ug/L | | 95 |
| 69) trans-1,3-Dichloropropene | 8.198 | 75 | 1271120 | 194.071 | ug/L | | 98 |
| 71) Ethyl methacrylate | 8.385 | 69 | 1153549 | 188.491 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.385 | 83 | 600082 | 185.709 | ug/L | | 99 |
| 73) Chlorodibromomethane | 8.594 | 129 | 888579 | 199.549 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 1294671 | 190.102 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.870 | 107 | 726378 | 193.330 | ug/L | | 88 |
| 77) 2-Hexanone | 9.149 | 43 | 701973 | 189.278 | ug/L | | 98 |
| 78) Chlorobenzene | 9.520 | 112 | 2322389 | 191.347 | ug/L | # | 81 |
| 79) Ethylbenzene | 9.561 | 91 | 4205575 | 188.746 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.606 | 131 | 864694 | 190.700 | ug/L | | 97 |
| 81) p/m Xylene | 9.748 | 106 | 3113211 | 359.258 | ug/L | | 98 |
| 82) o Xylene | 10.292 | 106 | 3031575 | 359.409 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N12.D
Acq On : 31 Jul 2024 10:22 pm
Operator : ELAINE:MKS
Sample : I8260STD200PPB
Misc : WG1954249
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.359 | 104 | 4931534 | 351.727 | ug/L | | 100 |
| 85) Bromoform | 10.384 | 173 | 573519 | 203.644 | ug/L | | 94 |
| 87) Isopropylbenzene | 10.671 | 105 | 4270477 | 205.239 | ug/L | | 97 |
| 89) Bromobenzene | 11.109 | 156 | 1059408 | 199.237 | ug/L | | 98 |
| 90) n-Propylbenzene | 11.156 | 91 | 4915379 | 196.338 | ug/L | | 97 |
| 91) 1,4-Dichlorobutane | 11.173 | 55 | 1727211 | 190.073 | ug/L | | 97 |
| 92) 1,1,2,2-Tetrachloroethane | 11.246 | 83 | 901020 | 214.768 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.282 | 105 | 4000085 | 193.873 | ug/L | | 100 |
| 94) 2-Chlorotoluene | 11.324 | 91 | 2902075M1 | 193.303 | ug/L | | |
| 95) 1,3,5-Trimethylbenzene | 11.382 | 105 | 3465448 | 189.826 | ug/L | | 98 |
| 96) 1,2,3-Trichloropropane | 11.382 | 75 | 693466 | 189.086 | ug/L | | 94 |
| 97) trans-1,4-Dichloro-2-b... | 11.435 | 53 | 373208 | 215.584 | ug/L | # | 81 |
| 98) 4-Chlorotoluene | 11.508 | 91 | 3065128 | 196.857 | ug/L | | 99 |
| 99) tert-Butylbenzene | 11.723 | 119 | 2974388 | 197.561 | ug/L | | 98 |
| 102) 1,2,4-Trimethylbenzene | 11.801 | 105 | 3501105 | 193.025 | ug/L | | 96 |
| 103) sec-Butylbenzene | 11.912 | 105 | 4398637 | 199.979 | ug/L | | 99 |
| 104) p-Isopropyltoluene | 12.068 | 119 | 3768238 | 201.589 | ug/L | | 96 |
| 105) 1,3-Dichlorobenzene | 12.133 | 146 | 1909080 | 191.860 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.225 | 146 | 1925869 | 195.547 | ug/L | | 99 |
| 107) p-Diethylbenzene | 12.442 | 119 | 2268316 | 204.684 | ug/L | | 96 |
| 108) n-Butylbenzene | 12.501 | 91 | 3301190 | 207.619 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.648 | 146 | 1871437 | 197.197 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.234 | 119 | 3731663 | 206.145 | ug/L | | 95 |
| 111) 1,2-Dibromo-3-chloropr... | 13.429 | 155 | 172945 | 221.821 | ug/L | | 92 |
| 112) 1,3,5-Trichlorobenzene | 13.460 | 180 | 1558415 | 205.728 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 516197 | 213.175 | ug/L | | 93 |
| 114) 1,2,4-Trichlorobenzene | 14.057 | 180 | 1377565 | 205.206 | ug/L | | 100 |
| 115) Naphthalene | 14.349 | 128 | 3120105 | 216.278 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.520 | 180 | 1288109 | 209.838 | ug/L | | 96 |

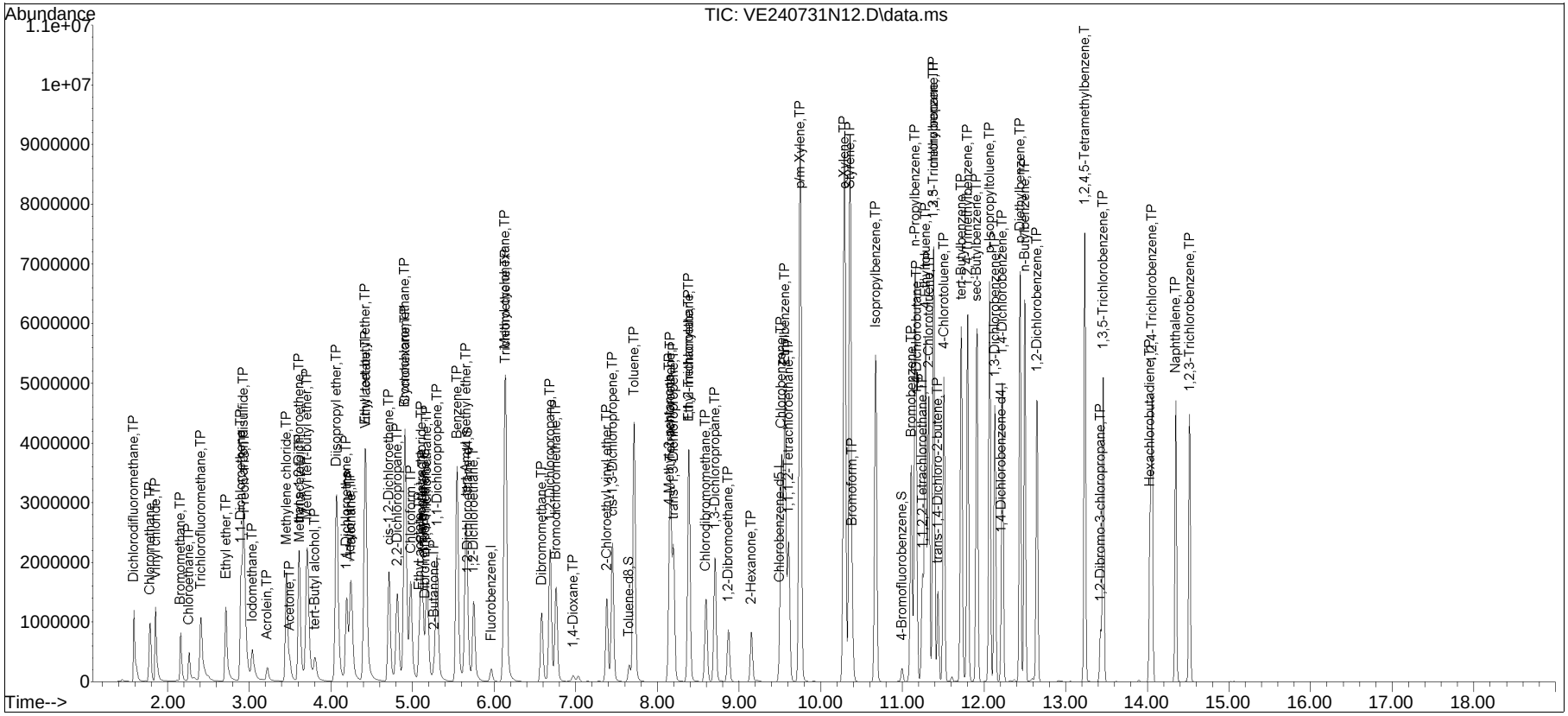
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N12.D
Acq On : 31 Jul 2024 10:22 pm
Operator : ELAINE:MKS
Sample : I8260STD200PPB
Misc : WG1954249
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

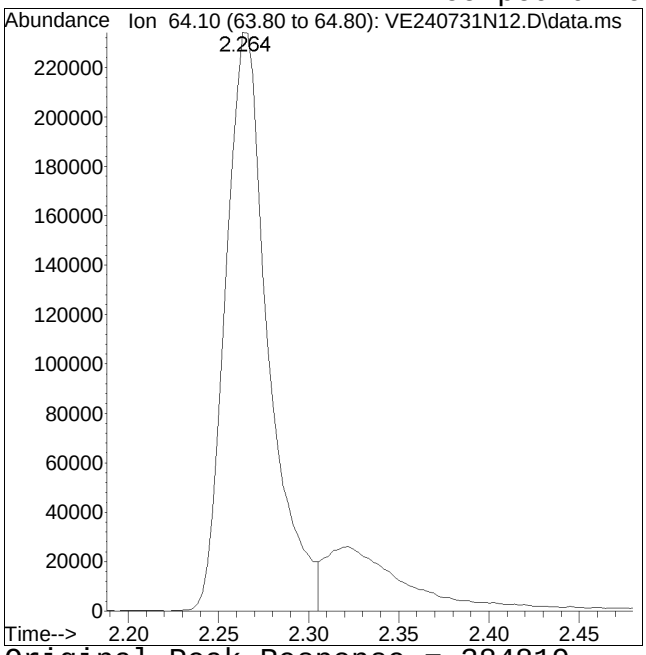


# Manual Integration Report

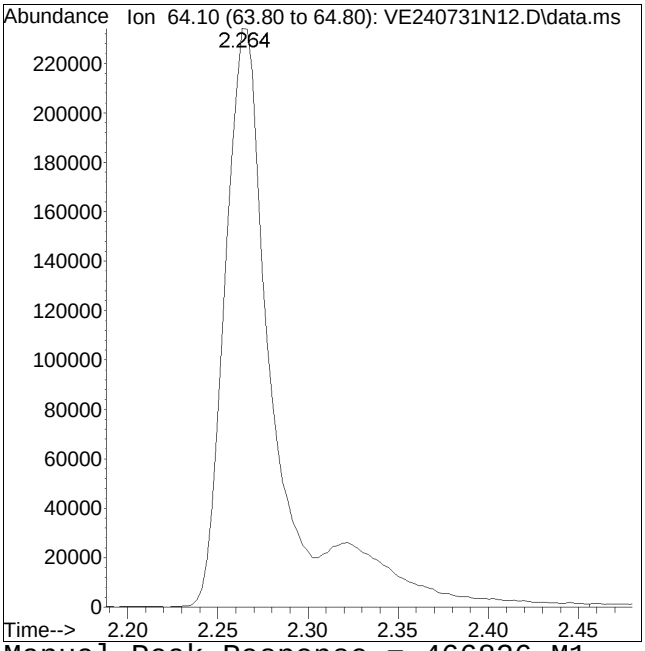
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N12.D
Date Inj'd : 7/31/2024 10:22 pm
Sample : I8260STD200PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #6: Chloroethane




Original Peak Response = 384819



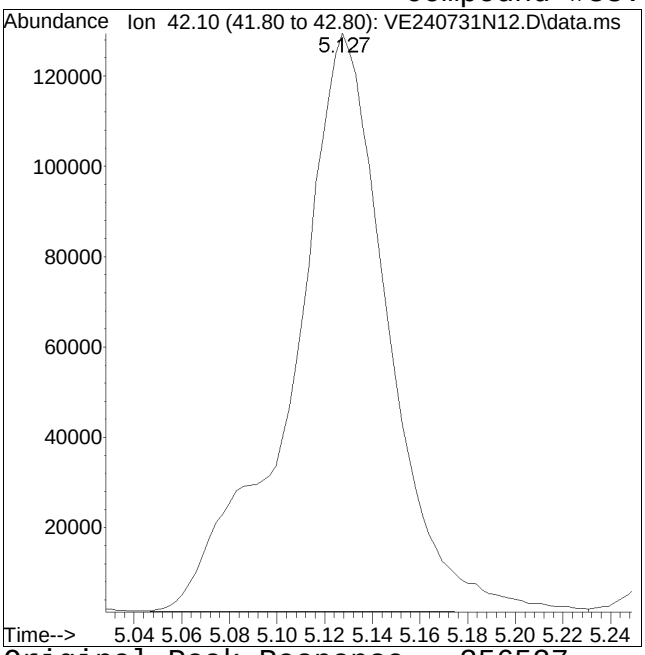

Manual Peak Response = 466826 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

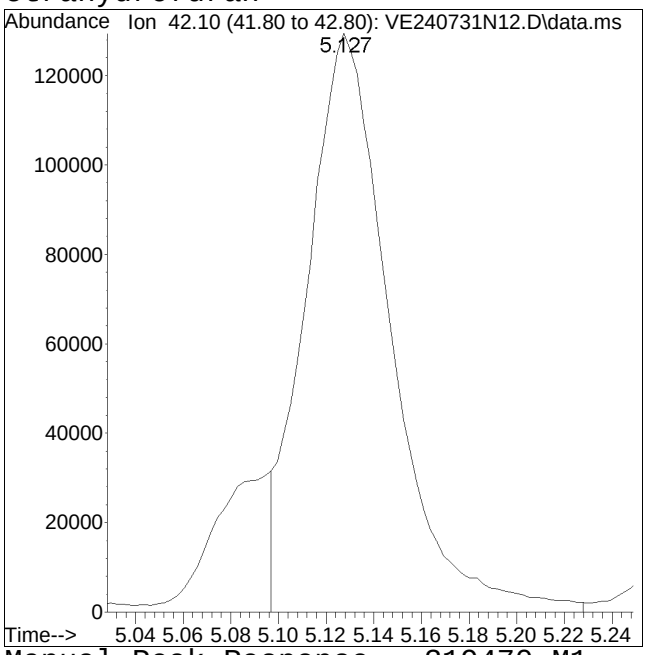
# Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N12.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 10:22 pm Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 8/1/2024 11:57 am

## Compound #38: Tetrahydrofuran




Original Peak Response = 356527




Manual Peak Response = 319470 M1

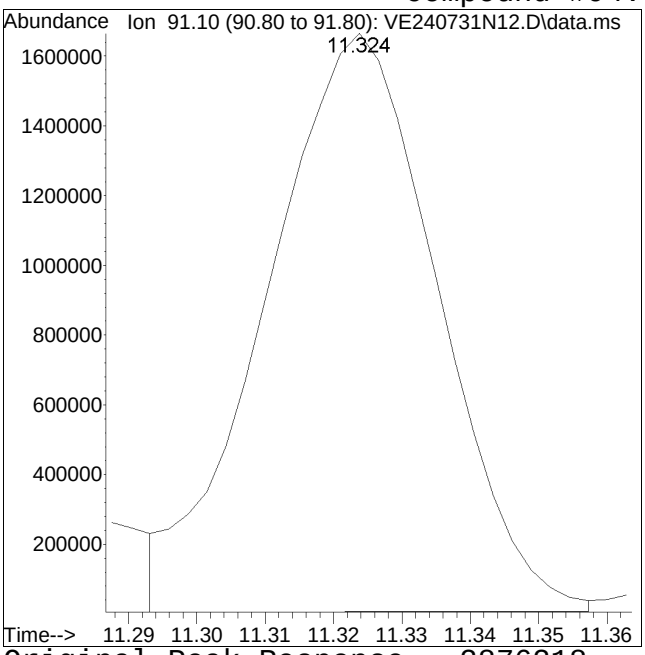
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

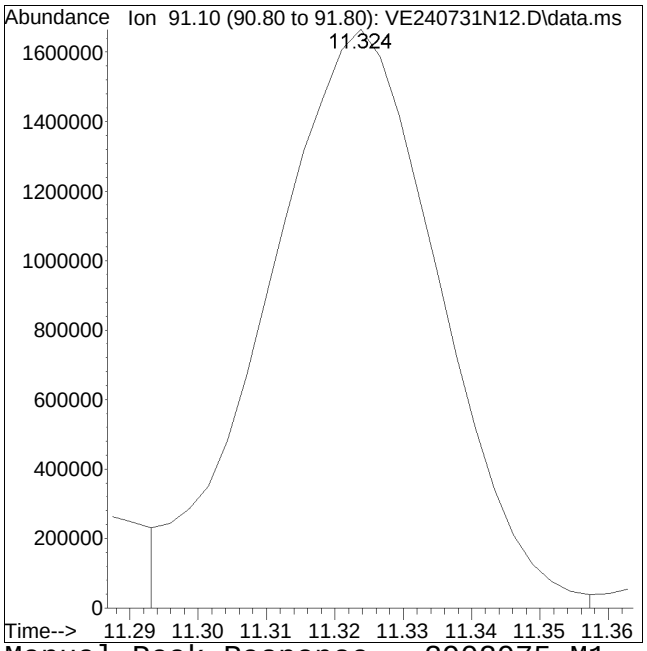
Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N12.D
Date Inj'd : 7/31/2024 10:22 pm
Sample : I8260STD200PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 11:57 am

## Compound #94: 2-Chlorotoluene




Original Peak Response = 2876218




Manual Peak Response = 2902075 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 2 | TP | Dichlorodifluoromethane | 0.224 | 0.184 | 17.9 | 85 | 0.00 |
| 3 | TP | Chloromethane | 0.250 | 0.279 | -11.6 | 108 | 0.00 |
| 4 | TP | Vinyl chloride | 0.233 | 0.239 | -2.6 | 100 | 0.00 |
| 5 | TP | Bromomethane | * 10.000 | 9.312 | 6.9 | 112 | 0.00 |
| 6 | TP | Chloroethane | 0.140 | 0.152 | -8.6 | 101 | 0.00 |
| 7 | TP | Trichlorofluoromethane | 0.267 | 0.291 | -9.0 | 117 | 0.00 |
| 8 | TP | Ethyl ether | 0.105 | 0.106 | -1.0 | 102 | 0.00 |
| 10 | TP | 1,1-Dichloroethene | 0.160 | 0.160 | 0.0 | 105 | 0.00 |
| 11 | TP | Carbon disulfide | 0.494 | 0.453 | 8.3 | 92 | 0.00 |
| 12 | TP | Freon-113 | 0.167 | 0.181 | -8.4 | 113 | 0.00 |
| 13 | TP | Iodomethane | * 10.000 | 5.388 | 46.1# | 62 | 0.00 |
| 14 | TP | Acrolein | 0.045 | 0.032 | 28.9# | 75 | 0.00 |
| 15 | TP | Methylene chloride | 0.202 | 0.202 | 0.0 | 101 | 0.00 |
| 17 | TP | Acetone | 0.073 | 0.073 | 0.0 | 105 | 0.00 |
| 18 | TP | trans-1,2-Dichloroethene | 0.172 | 0.181 | -5.2 | 104 | 0.00 |
| 19 | TP | Methyl acetate | 0.171 | 0.151 | 11.7 | 93 | 0.00 |
| 21 | TP | Methyl tert-butyl ether | 0.642 | 0.561 | 12.6 | 85 | 0.00 |
| 22 | TP | tert-Butyl alcohol | 0.023 | 0.022 | 4.3 | 96 | 0.00 |
| 24 | TP | Diisopropyl ether | 0.920 | 0.922 | -0.2 | 97 | 0.00 |
| 25 | TP | 1,1-Dichloroethane | 0.404 | 0.436 | -7.9 | 105 | 0.00 |
| 26 | TP | Halothane | 0.139 | 0.154 | -10.8 | 111 | 0.00 |
| 27 | TP | Acrylonitrile | 0.084 | 0.077 | 8.3 | 89 | 0.00 |
| 28 | TP | Ethyl tert-butyl ether | 0.798 | 0.794 | 0.5 | 97 | 0.00 |
| 29 | TP | Vinyl acetate | 0.612 | 0.506 | 17.3 | 93 | 0.00 |
| 30 | TP | cis-1,2-Dichloroethene | 0.206 | 0.210 | -1.9 | 101 | 0.00 |
| 31 | TP | 2,2-Dichloropropane | 0.270 | 0.248 | 8.1 | 93 | 0.00 |
| 33 | TP | Bromochloromethane | 0.091 | 0.092# | -1.1 | 97 | 0.00 |
| 34 | TP | Cyclohexane | 0.473 | 0.498 | -5.3 | 112 | 0.00 |
| 35 | TP | Chloroform | 0.335 | 0.346 | -3.3 | 102 | 0.00 |
| 36 | TP | Ethyl acetate | 0.256 | 0.246 | 3.9 | 96 | 0.00 |
| 37 | TP | Carbon tetrachloride | 0.256 | 0.287 | -12.1 | 112 | 0.00 |
| 38 | TP | Tetrahydrofuran | 0.079 | 0.075 | 5.1 | 94 | 0.00 |
| 39 | S | Dibromofluoromethane | 0.234 | 0.239 | -2.1 | 102 | 0.00 |
| 40 | TP | 1,1,1-Trichloroethane | 0.304 | 0.321 | -5.6 | 106 | 0.00 |
| 42 | TP | 2-Butanone | 0.105 | 0.098 | 6.7 | 95 | 0.00 |
| 43 | TP | 1,1-Dichloropropene | 0.256 | 0.286 | -11.7 | 112 | 0.00 |
| 45 | TP | Benzene | 0.792 | 0.833 | -5.2 | 101 | 0.00 |
| 46 | TP | tert-Amyl methyl ether | 0.598 | 0.569 | 4.8 | 94 | 0.00 |

# Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | S | 1,2-Dichloroethane-d4 | 0.312 | 0.314 | -0.6 | 101 | 0.00 |
| 48 | T | 1,2-Dichloroethane | 0.306 | 0.319 | -4.2 | 102 | 0.00 |
| 51 | TP | Methyl cyclohexane | 0.356 | 0.371 | -4.2 | 114 | 0.00 |
| 52 | TP | Trichloroethene | 0.199 | 0.216 | -8.5 | 105 | 0.00 |
| 54 | TP | Dibromomethane | 0.115 | 0.119 | -3.5 | 101 | 0.00 |
| 55 | TP | 1,2-Dichloropropane | 0.239 | 0.252 | -5.4 | 103 | 0.00 |
| 57 | TP | 2-Chloroethyl vinyl ether | 0.154 | 0.137 | 11.0 | 89 | 0.00 |
| 58 | TP | Bromodichloromethane | 0.283 | 0.287# | -1.4 | 99 | 0.00 |
| 61 | TP | 1,4-Dioxane | 0.00192 | 0.00183# | 4.7 | 96 | 0.00 |
| 62 | TP | cis-1,3-Dichloropropene | 0.319 | 0.344 | -7.8 | 103 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 64 | S | Toluene-d8 | 1.317 | 1.314 | 0.2 | 103 | 0.00 |
| 65 | TP | Toluene | 0.689 | 0.694 | -0.7 | 102 | 0.00 |
| 66 | TP | 4-Methyl-2-pentanone | 0.117 | 0.112 | 4.3 | 94 | 0.00 |
| 67 | TP | Tetrachloroethene | 0.293 | 0.316 | -7.8 | 109 | 0.00 |
| 69 | TP | trans-1,3-Dichloropropene | 0.388 | 0.396 | -2.1 | 100 | 0.00 |
| 71 | TP | Ethyl methacrylate | 0.369 | 0.356 | 3.5 | 96 | 0.00 |
| 72 | TP | 1,1,2-Trichloroethane | 0.193 | 0.197# | -2.1 | 100 | 0.00 |
| 73 | TP | Chlorodibromomethane | 0.270 | 0.268 | 0.7 | 99 | 0.00 |
| 74 | TP | 1,3-Dichloropropane | 0.408 | 0.422 | -3.4 | 102 | 0.00 |
| 75 | TP | 1,2-Dibromoethane | 0.228 | 0.226 | 0.9 | 99 | 0.00 |
| 77 | TP | 2-Hexanone | 0.229 | 0.212 | 7.4 | 94 | 0.00 |
| 78 | TP | Chlorobenzene | 0.734 | 0.773 | -5.3 | 105 | 0.00 |
| 79 | TP | Ethylbenzene | 1.335 | 1.426 | -6.8 | 105 | 0.00 |
| 80 | TP | 1,1,1,2-Tetrachloroethane | 0.269 | 0.286 | -6.3 | 104 | 0.00 |
| 81 | TP | p/m Xylene | 0.509 | 0.545 | -7.1 | 104 | 0.00 |
| 82 | TP | o Xylene | 0.497 | 0.524 | -5.4 | 102 | 0.00 |
| 83 | TP | Styrene | 0.816 | 0.883 | -8.2 | 104 | 0.00 |
| 84 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 85 | TP | Bromoform | 0.325 | 0.321 | 1.2 | 101 | 0.00 |
| 87 | TP | Isopropylbenzene | 2.395 | 2.542 | -6.1 | 108 | 0.00 |
| 88 | S | 4-Bromofluorobenzene | 0.924 | 0.917 | 0.8 | 103 | 0.00 |
| 89 | TP | Bromobenzene | 0.605 | 0.612 | -1.2 | 102 | 0.00 |
| 90 | TP | n-Propylbenzene | 2.861 | 3.016 | -5.4 | 106 | 0.00 |
| 91 | TP | 1,4-Dichlorobutane | 1.046 | 0.991 | 5.3 | 96 | 0.00 |
| 92 | TP | 1,1,2,2-Tetrachloroethane | 0.508 | 0.472 | 7.1 | 99 | 0.00 |
| 93 | TP | 4-Ethyltoluene | 2.321 | 2.520 | -8.6 | 108 | 0.00 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 94 TP | 2-Chlorotoluene | 1.683 | 1.751 | -4.0 | 103 | 0.00 |
| 95 TP | 1,3,5-Trimethylbenzene | 2.036 | 2.143 | -5.3 | 104 | 0.00 |
| 96 TP | 1,2,3-Trichloropropane | 0.415 | 0.417 | -0.5 | 100 | 0.00 |
| 97 TP | trans-1,4-Dichloro-2-butene | 0.204 | 0.171 | 16.2 | 87 | 0.00 |
| 98 TP | 4-Chlorotoluene | 1.763 | 1.845 | -4.7 | 105 | 0.00 |
| 99 TP | tert-Butylbenzene | 1.712 | 1.823 | -6.5 | 107 | 0.00 |
| 102 TP | 1,2,4-Trimethylbenzene | 2.033 | 2.161 | -6.3 | 105 | 0.00 |
| 103 TP | sec-Butylbenzene | 2.538 | 2.673 | -5.3 | 107 | 0.00 |
| 104 TP | p-Isopropyltoluene | 2.139 | 2.259 | -5.6 | 107 | 0.00 |
| 105 TP | 1,3-Dichlorobenzene | 1.117 | 1.178 | -5.5 | 105 | 0.00 |
| 106 TP | 1,4-Dichlorobenzene | 1.116 | 1.167 | -4.6 | 105 | 0.00 |
| 107 TP | p-Diethylbenzene | 1.261 | 1.249 | 1.0 | 100 | 0.00 |
| 108 TP | n-Butylbenzene | 1.842 | 2.034 | -10.4 | 113 | 0.00 |
| 109 TP | 1,2-Dichlorobenzene | 1.074 | 1.130 | -5.2 | 105 | 0.00 |
| 110 TP | 1,2,4,5-Tetramethylbenzene | 2.046 | 2.063 | -0.8 | 101 | 0.00 |
| 111 TP | 1,2-Dibromo-3-chloropropane * | 10.000 | 8.973 | 10.3 | 97 | 0.00 |
| 112 TP | 1,3,5-Trichlorobenzene | 0.853 | 0.845 | 0.9 | 99 | 0.00 |
| 113 TP | Hexachlorobutadiene | 0.283 | 0.291 | -2.8 | 106 | 0.00 |
| 114 TP | 1,2,4-Trichlorobenzene | 0.770 | 0.781 | -1.4 | 103 | 0.00 |
| 115 TP | Naphthalene | 1.697 | 1.637 | 3.5 | 100 | 0.00 |
| 116 TP | 1,2,3-Trichlorobenzene | 0.707 | 0.697 | 1.4 | 100 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 4 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.964 | 96 | 208493 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 204581 | | | Recovery = 101.91% | | | |
| 63) Chlorobenzene-d5 | 9.497 | 117 | 153829 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 147756 | | | Recovery = 104.11% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.205 | 152 | 87716 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 84505 | | | Recovery = 103.80% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.158 | 113 | 49879 | 10.219 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.19% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.683 | 65 | 65490 | 10.056 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.56% | | | |
| 64) Toluene-d8 | 7.654 | 98 | 202159 | 9.977 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.77% | | | |
| 88) 4-Bromofluorobenzene | 10.995 | 95 | 80452 | 9.929 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.29% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.592 | 85 | 38360 | 8.206 | ug/L | 95 |
| 3) Chloromethane | 1.784 | 50 | 58239 | 11.190 | ug/L | 97 |
| 4) Vinyl chloride | 1.854 | 62 | 49740 | 10.255 | ug/L | 91 |
| 5) Bromomethane | 2.163 | 94 | 13377 | 9.312 | ug/L | 95 |
| 6) Chloroethane | 2.269 | 64 | 31590 | 10.788 | ug/L | 91 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 60700 | 10.891 | ug/L | 98 |
| 8) Ethyl ether | 2.713 | 74 | 22105 | 10.072 | ug/L | 74 |
| 10) 1,1-Dichloroethene | 2.905 | 96 | 33298 | 9.972 | ug/L | 79 |
| 11) Carbon disulfide | 2.930 | 76 | 94536 | 9.176 | ug/L | 95 |
| 12) Freon-113 | 2.941 | 101 | 37812 | 10.866 | ug/L | 89 |
| 13) Iodomethane | 3.039 | 142 | 11076 | 5.388 | ug/L | 89 |
| 14) Acrolein | 3.223 | 56 | 6767 | 7.176 | ug/L # | 62 |
| 15) Methylene chloride | 3.454 | 84 | 42181 | 10.015 | ug/L | 89 |
| 17) Acetone | 3.496 | 43 | 15145 | 9.901 | ug/L | 98 |
| 18) trans-1,2-Dichloroethene | 3.611 | 96 | 37651 | 10.490 | ug/L | 77 |
| 19) Methyl acetate | 3.619 | 43 | 31485 | 8.829 | ug/L | 96 |
| 21) Methyl tert-butyl ether | 3.708 | 73 | 116912 | 8.735 | ug/L | 96 |
| 22) tert-Butyl alcohol | 3.803 | 59 | 23155 | 48.488 | ug/L # | 68 |
| 24) Diisopropyl ether | 4.068 | 45 | 192295 | 10.030 | ug/L | 91 |
| 25) 1,1-Dichloroethane | 4.193 | 63 | 90833 | 10.783 | ug/L | 96 |
| 26) Halothane | 4.252 | 117 | 32152 | 11.107 | ug/L | 97 |

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 27) Acrylonitrile | 4.235 | 53 | 15982 | 9.093 | ug/L | | 86 |
| 28) Ethyl tert-butyl ether | 4.417 | 59 | 165609 | 9.954 | ug/L | | 98 |
| 29) Vinyl acetate | 4.428 | 43 | 105450 | 8.264 | ug/L | # | 94 |
| 30) cis-1,2-Dichloroethene | 4.715 | 96 | 43745 | 10.168 | ug/L | | 93 |
| 31) 2,2-Dichloropropane | 4.818 | 77 | 51622 | 9.157 | ug/L | | 95 |
| 33) Bromochloromethane | 4.905 | 128 | 19089 | 10.115 | ug/L | | 83 |
| 34) Cyclohexane | 4.913 | 56 | 103732 | 10.523 | ug/L | | 95 |
| 35) Chloroform | 4.980 | 83 | 72175 | 10.336 | ug/L | | 99 |
| 36) Ethyl acetate | 5.086 | 43 | 51304 | 9.621 | ug/L | # | 92 |
| 37) Carbon tetrachloride | 5.111 | 117 | 59745 | 11.201 | ug/L | | 97 |
| 38) Tetrahydrofuran | 5.130 | 42 | 15553M1 | 9.397 | ug/L | | |
| 40) 1,1,1-Trichloroethane | 5.175 | 97 | 66968 | 10.560 | ug/L | # | 76 |
| 42) 2-Butanone | 5.267 | 43 | 20338 | 9.305 | ug/L | # | 85 |
| 43) 1,1-Dichloropropene | 5.295 | 75 | 59608 | 11.165 | ug/L | | 96 |
| 45) Benzene | 5.546 | 78 | 173673 | 10.516 | ug/L | | 93 |
| 46) tert-Amyl methyl ether | 5.660 | 73 | 118656 | 9.521 | ug/L | | 98 |
| 48) 1,2-Dichloroethane | 5.749 | 62 | 66413 | 10.419 | ug/L | | 96 |
| 51) Methyl cyclohexane | 6.134 | 83 | 77419 | 10.431 | ug/L | | 86 |
| 52) Trichloroethene | 6.140 | 95 | 45095 | 10.860 | ug/L | | 97 |
| 54) Dibromomethane | 6.578 | 93 | 24744 | 10.345 | ug/L | # | 84 |
| 55) 1,2-Dichloropropane | 6.684 | 63 | 52520 | 10.534 | ug/L | | 98 |
| 57) 2-Chloroethyl vinyl ether | 7.381 | 63 | 28542 | 8.897 | ug/L | | 91 |
| 58) Bromodichloromethane | 6.762 | 83 | 59854 | 10.131 | ug/L | | 94 |
| 61) 1,4-Dioxane | 6.965 | 88 | 19108 | 477.556 | ug/L | | 87 |
| 62) cis-1,3-Dichloropropene | 7.448 | 75 | 71821 | 10.797 | ug/L | | 95 |
| 65) Toluene | 7.715 | 92 | 106822 | 10.085 | ug/L | | 91 |
| 66) 4-Methyl-2-pentanone | 8.148 | 58 | 17267 | 9.558 | ug/L | # | 91 |
| 67) Tetrachloroethene | 8.162 | 166 | 48681 | 10.819 | ug/L | | 96 |
| 69) trans-1,3-Dichloropropene | 8.195 | 75 | 60906 | 10.213 | ug/L | | 98 |
| 71) Ethyl methacrylate | 8.385 | 69 | 54689 | 9.633 | ug/L | | 92 |
| 72) 1,1,2-Trichloroethane | 8.379 | 83 | 30235 | 10.167 | ug/L | | 99 |
| 73) Chlorodibromomethane | 8.591 | 129 | 41173 | 9.901 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.705 | 76 | 64959 | 10.345 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.867 | 107 | 34815 | 9.906 | ug/L | | 88 |
| 77) 2-Hexanone | 9.152 | 43 | 32606 | 9.263 | ug/L | | 97 |
| 78) Chlorobenzene | 9.520 | 112 | 118893 | 10.534 | ug/L | # | 80 |
| 79) Ethylbenzene | 9.556 | 91 | 219382 | 10.686 | ug/L | | 99 |
| 80) 1,1,1,2-Tetrachloroethane | 9.603 | 131 | 44053 | 10.647 | ug/L | | 99 |
| 81) p/m Xylene | 9.746 | 106 | 167676 | 21.427 | ug/L | | 98 |
| 82) o Xylene | 10.287 | 106 | 161242 | 21.071 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 83) Styrene | 10.354 | 104 | 271514 | 21.640 | ug/L | | 99 |
| 85) Bromoform | 10.381 | 173 | 28158 | 9.866 | ug/L | | 93 |
| 87) Isopropylbenzene | 10.671 | 105 | 223005 | 10.617 | ug/L | | 98 |
| 89) Bromobenzene | 11.106 | 156 | 53699 | 10.126 | ug/L | | 97 |
| 90) n-Propylbenzene | 11.151 | 91 | 264513 | 10.539 | ug/L | | 97 |
| 91) 1,4-Dichlorobutane | 11.168 | 55 | 86888 | 9.472 | ug/L | | 99 |
| 92) 1,1,2,2-Tetrachloroethane | 11.243 | 83 | 41382 | 9.285 | ug/L | | 99 |
| 93) 4-Ethyltoluene | 11.279 | 105 | 221024 | 10.855 | ug/L | | 100 |
| 94) 2-Chlorotoluene | 11.318 | 91 | 153587 | 10.402 | ug/L | | 97 |
| 95) 1,3,5-Trimethylbenzene | 11.377 | 105 | 188009 | 10.527 | ug/L | | 98 |
| 96) 1,2,3-Trichloropropane | 11.380 | 75 | 36549 | 10.052 | ug/L | | 94 |
| 97) trans-1,4-Dichloro-2-b... | 11.433 | 53 | 14957 | 8.371 | ug/L | # | 85 |
| 98) 4-Chlorotoluene | 11.502 | 91 | 161865 | 10.465 | ug/L | | 99 |
| 99) tert-Butylbenzene | 11.720 | 119 | 159878 | 10.649 | ug/L | | 97 |
| 102) 1,2,4-Trimethylbenzene | 11.795 | 105 | 189585 | 10.634 | ug/L | | 96 |
| 103) sec-Butylbenzene | 11.910 | 105 | 234466 | 10.531 | ug/L | | 99 |
| 104) p-Isopropyltoluene | 12.066 | 119 | 198149 | 10.562 | ug/L | | 96 |
| 105) 1,3-Dichlorobenzene | 12.127 | 146 | 103303 | 10.548 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.222 | 146 | 102337 | 10.454 | ug/L | | 99 |
| 107) p-Diethylbenzene | 12.439 | 119 | 109518 | 9.900 | ug/L | | 96 |
| 108) n-Butylbenzene | 12.495 | 91 | 178383 | 11.041 | ug/L | | 98 |
| 109) 1,2-Dichlorobenzene | 12.646 | 146 | 99100 | 10.517 | ug/L | | 97 |
| 110) 1,2,4,5-Tetramethylben... | 13.231 | 119 | 180976 | 10.082 | ug/L | | 96 |
| 111) 1,2-Dibromo-3-chloropr... | 13.427 | 155 | 7500 | 8.973 | ug/L | | 85 |
| 112) 1,3,5-Trichlorobenzene | 13.457 | 180 | 74121 | 9.907 | ug/L | | 92 |
| 113) Hexachlorobutadiene | 14.032 | 225 | 25535 | 10.299 | ug/L | | 93 |
| 114) 1,2,4-Trichlorobenzene | 14.054 | 180 | 68475 | 10.138 | ug/L | | 98 |
| 115) Naphthalene | 14.347 | 128 | 143556 | 9.643 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.517 | 180 | 61106 | 9.847 | ug/L | | 94 |

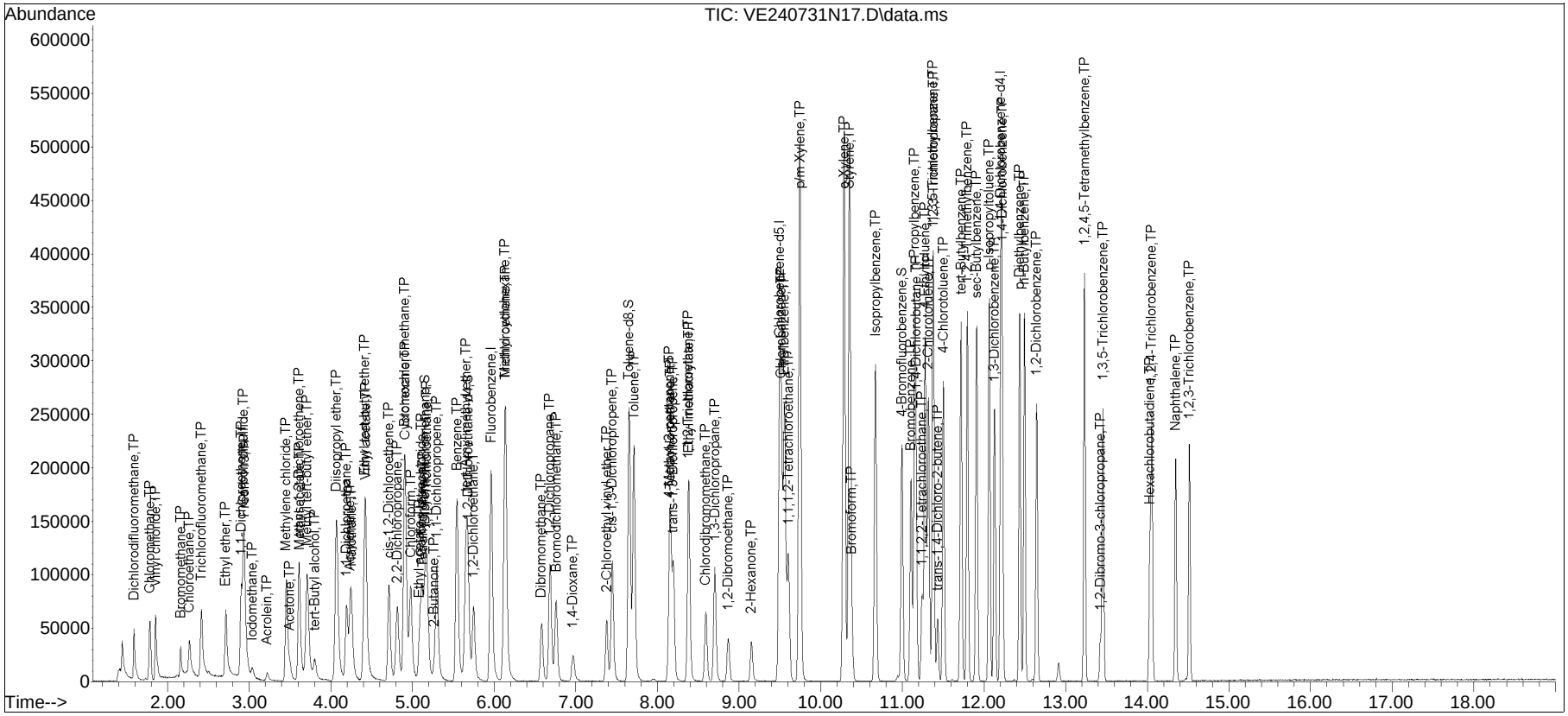
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•

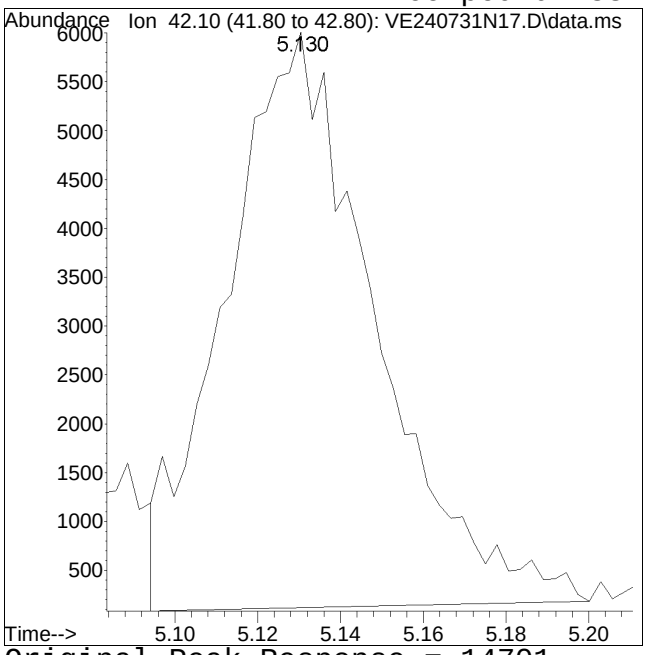


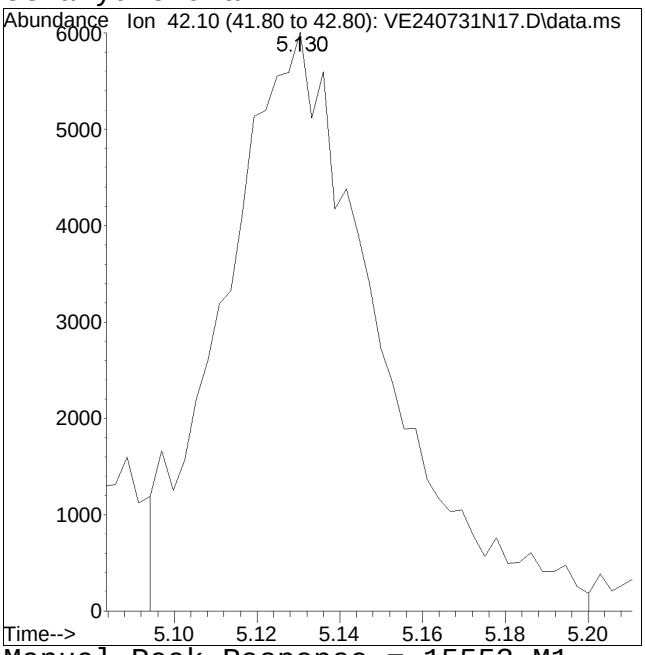
Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQ
Data File : VE240731N17.D
Date Inj'd : 8/1/2024 12:28 am
Sample : C8260STD10PPB

Method : Elaine_240731N_8260.m
Operator : ELAINE:MKS
Instrument : Elaine
Quant Date : 8/1/2024 12:13 pm

Compound #38: Tetrahydrofuran




Original Peak Response = 14701 Manual Peak Response = 15553 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Relative Error Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 5 | TP Bromomethane | Q | ug/L | 10.0 | 8.517 | -14.8 | 0.50 | 0.634 | 26.8 |
| 13 | TP Iodomethane | Q | ug/L | 10.0 | 7.698 | -23.0 | 2.00 | 2.507 | 25.4 |
| 111 | TP 1,2-Dibromo-3-chloropropane | L | ug/L | 10.0 | 9.592 | -4.1 | 0.50 | 0.540 | 8.0 |

Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 5 | TP Bromomethane | Quadratic | 0.998253 | 0.001690 | 0.069754 | -0.00225974 |
| 13 | TP Iodomethane | Quadratic | 0.997800 | 0.002010 | 0.144116 | -0.0251075 |
| 111 | TP 1,2-Dibromo-3-chloropropane | Linear | 0.998896 | 0.000000 | 0.0984884 | -0.00286624 |

# Response Factor Report VOA105

Method Path : K:\VOA105\2024\240906NICAL\
Method File : V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024
Response Via : Initial Calibration

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Fluorobenzene | ---------- | ISTD | ---------- | | | | | | | |
| 2) | TP | Dichlorodifluo... | | 0.239 | 0.295 | 0.329 | 0.308 | 0.301 | 0.294 | 0.283 | 0.293 | 9.46 |
| 3) | TP | Chloromethane | | 0.262 | 0.294 | 0.307 | 0.296 | 0.285 | 0.271 | 0.263 | 0.283 | 6.25 |
| 4) | TP | Vinyl chloride | 0.231 | 0.200 | 0.252 | 0.272 | 0.260 | 0.257 | 0.252 | 0.243 | 0.246 | 8.93 |
| 5) | TP | Bromomethane | | 0.099 | 0.102 | 0.113 | 0.117 | 0.130 | 0.133 | 0.143 | 0.120 | 13.57 |
| 6) | TP | Chloroethane | | 0.270 | 0.223 | 0.163 | 0.153 | 0.139 | 0.116 | | *Q | 0.9989 |
| 7) | TP | Trichlorofluor... | | 0.317 | 0.394 | 0.406 | 0.386 | 0.372 | 0.361 | 0.353 | 0.370 | 8.05 |
| 8) | TP | Ethyl ether | | 0.079 | 0.091 | 0.090 | 0.093 | 0.092 | 0.089 | 0.090 | 0.089 | 5.41 |
| 10) | TP | 1,1-Dichloroet... | | 0.169 | 0.186 | 0.199 | 0.188 | 0.186 | 0.179 | 0.181 | 0.184 | 5.04 |
| 11) | TP | Carbon disulfide | | 0.512 | 0.592 | 0.615 | 0.581 | 0.576 | 0.544 | 0.547 | 0.567 | 6.08 |
| 12) | TP | Freon-113 | | 0.174 | 0.213 | 0.224 | 0.208 | 0.204 | 0.196 | 0.198 | 0.202 | 7.72 |
| 13) | TP | Iodomethane | | 0.241 | 0.273 | 0.310 | 0.330 | 0.339 | 0.331 | 0.341 | 0.309 | 12.31 |
| 14) | TP | Acrolein | | | 0.021 | 0.022 | 0.024 | 0.026 | 0.027 | 0.027 | 0.025 | 10.54 |
| 15) | TP | Methylene chlo... | | 0.220 | 0.228 | 0.226 | 0.217 | 0.213 | 0.211 | 0.215 | 0.219 | 3.02 |
| 17) | TP | Acetone | | | 0.054 | 0.047 | 0.045 | 0.045 | 0.047 | 0.045 | 0.047 | 7.70 |
| 18) | TP | trans-1,2-Dich... | | 0.179 | 0.211 | 0.231 | 0.226 | 0.229 | 0.223 | 0.225 | 0.218 | 8.33 |
| 19) | TP | Methyl acetate | | | 0.091 | 0.098 | 0.108 | 0.110 | 0.111 | 0.104 | 0.104 | 7.33 |
| 20) | TP | Methyl tert-bu... | | 0.357 | 0.444 | 0.477 | 0.504 | 0.520 | 0.523 | 0.530 | 0.479 | 12.93 |
| 21) | TP | tert-Butyl alc... | | | 0.010 | 0.010 | 0.010 | 0.011 | 0.012 | 0.012 | 0.011 | 10.37 |
| 22) | TP | Diisopropyl ether | | 0.575 | 0.654 | 0.734 | 0.783 | 0.795 | 0.778 | 0.783 | 0.729 | 11.50 |
| 23) | TP | 1,1-Dichloroet... | | 0.368 | 0.411 | 0.431 | 0.408 | 0.401 | 0.383 | 0.372 | 0.396 | 5.73 |
| 24) | TP | Halothane | | 0.146 | 0.162 | 0.186 | 0.182 | 0.182 | 0.181 | 0.187 | 0.175 | 8.77 |
| 25) | TP | Acrylonitrile | | | 0.049 | 0.054 | 0.055 | 0.056 | 0.058 | 0.057 | 0.055 | 5.90 |
| 26) | TP | Ethyl tert-but... | | 0.398 | 0.459 | 0.532 | 0.579 | 0.597 | 0.591 | 0.605 | 0.537 | 14.88 |
| 27) | TP | Vinyl acetate | | | 0.303 | 0.391 | 0.443 | 0.485 | 0.502 | 0.482 | 0.434 | 17.41 |
| 28) | TP | cis-1,2-Dichlo... | | 0.212 | 0.245 | 0.257 | 0.256 | 0.256 | 0.248 | 0.252 | 0.247 | 6.49 |
| 29) | TP | 2,2-Dichloropr... | | 0.275 | 0.313 | 0.344 | 0.343 | 0.337 | 0.324 | 0.325 | 0.323 | 7.39 |
| 30) | TP | Bromochloromet... | | 0.110 | 0.125 | 0.126 | 0.123 | 0.118 | 0.114 | 0.117 | 0.119 | 4.98 |
| 31) | TP | Cyclohexane | | 0.244 | 0.353 | 0.432 | 0.420 | 0.417 | 0.407 | 0.405 | 0.382 | 17.31 |
| 32) | TP | Chloroform | | 0.408 | 0.451 | 0.431 | 0.415 | 0.406 | 0.393 | 0.398 | 0.414 | 4.86 |
| 33) | TP | Ethyl acetate | | | 0.141 | 0.148 | 0.165 | 0.178 | 0.185 | 0.184 | 0.167 | 11.23 |

# Response Factor Report VOA105

Method Path : K:\VOA105\2024\240906NICAL\
Method File : V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024
Response Via : Initial Calibration

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34) | TP | Carbon tetrach... | 0.334 | 0.290 | 0.342 | 0.377 | 0.372 | 0.375 | 0.374 | 0.381 | 0.356 | 8.91 |
| 35) | TP | Tetrahydrofuran | | 0.052 | 0.050 | 0.054 | 0.055 | 0.056 | 0.054 | 0.054 | | 4.05 |
| 36) | S | Dibromofluorom... | 0.287 | 0.288 | 0.286 | 0.275 | 0.276 | 0.273 | 0.273 | 0.277 | 0.279 | 2.28 |
| 37) | TP | 1,1,1-Trichlor... | | 0.320 | 0.378 | 0.419 | 0.403 | 0.400 | 0.389 | 0.396 | 0.386 | 8.25 |
| 39) | TP | 2-Butanone | | | 0.055 | 0.065 | 0.075 | 0.078 | 0.080 | 0.078 | 0.072 | 13.45 |
| 40) | TP | 1,1-Dichloropr... | | 0.198 | 0.267 | 0.309 | 0.312 | 0.312 | 0.302 | 0.302 | 0.286 | 14.66 |
| 41) | TP | Benzene | 0.774 | 0.700 | 0.838 | 0.913 | 0.905 | 0.893 | 0.857 | 0.861 | 0.842 | 8.64 |
| 42) | TP | tert-Amyl meth... | | 0.297 | 0.376 | 0.439 | 0.478 | 0.504 | 0.502 | 0.512 | 0.444 | 18.16 |
| 43) | S | 1,2-Dichloroet... | 0.296 | 0.300 | 0.300 | 0.301 | 0.282 | 0.275 | 0.278 | 0.278 | 0.289 | 4.02 |
| 44) | TP | 1,2-Dichloroet... | | 0.261 | 0.296 | 0.288 | 0.285 | 0.278 | 0.270 | 0.271 | 0.278 | 4.35 |
| 47) | TP | Methyl cyclohe... | | 0.273 | 0.336 | 0.421 | 0.416 | 0.427 | 0.414 | 0.417 | 0.386 | 15.24 |
| 48) | TP | Trichloroethene | 0.263 | 0.209 | 0.259 | 0.261 | 0.258 | 0.257 | 0.248 | 0.251 | 0.251 | 7.07 |
| 50) | TP | Dibromomethane | | 0.116 | 0.132 | 0.130 | 0.131 | 0.133 | 0.132 | 0.136 | 0.130 | 5.13 |
| 51) | TP | 1,2-Dichloropr... | | 0.168 | 0.208 | 0.222 | 0.222 | 0.222 | 0.215 | 0.216 | 0.210 | 9.28 |
| 53) | TP | 2-Chloroethyl ... | | | 0.079 | 0.101 | 0.117 | 0.126 | 0.127 | 0.127 | 0.113 | 17.35 |
| 54) | TP | Bromodichlorom... | | 0.281 | 0.299 | 0.310 | 0.314 | 0.319 | 0.312 | 0.321 | 0.308 | 4.54 |
| 57) | TP | 1,4-Dioxane | | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.001# | 16.96 |
| 58) | TP | cis-1,3-Dichlo... | | 0.235 | 0.284 | 0.334 | 0.352 | 0.360 | 0.349 | 0.355 | 0.324 | 14.55 |
| 59) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | | |
| 60) | S | Toluene-d8 | 1.224 | 1.228 | 1.254 | 1.244 | 1.203 | 1.177 | 1.164 | 1.167 | 1.208 | 2.93 |
| 61) | TP | Toluene | | 0.603 | 0.733 | 0.751 | 0.727 | 0.718 | 0.690 | 0.692 | 0.702 | 6.95 |
| 62) | TP | 4-Methyl-2-pen... | | | 0.042 | 0.054 | 0.059 | 0.063 | 0.067 | 0.065 | 0.058 | 15.95 |
| 63) | TP | Tetrachloroethene | | 0.304 | 0.365 | 0.400 | 0.389 | 0.386 | 0.371 | 0.378 | 0.370 | 8.50 |
| 65) | TP | trans-1,3-Dich... | | 0.250 | 0.312 | 0.360 | 0.368 | 0.373 | 0.365 | 0.364 | 0.342 | 13.28 |
| 67) | TP | Ethyl methacry... | | | 0.171 | 0.213 | 0.240 | 0.252 | 0.256 | 0.253 | 0.231 | 14.48 |
| 68) | TP | 1,1,2-Trichlor... | | 0.140 | 0.186 | 0.182 | 0.181 | 0.179 | 0.175 | 0.173 | 0.174# | 8.82 |
| 69) | TP | Chlorodibromom... | | 0.248 | 0.279 | 0.295 | 0.300 | 0.312 | 0.314 | 0.325 | 0.296 | 8.73 |
| 70) | TP | 1,3-Dichloropr... | | 0.283 | 0.348 | 0.365 | 0.358 | 0.352 | 0.341 | 0.339 | 0.341 | 7.91 |
| 71) | TP | 1,2-Dibromoethane | | 0.155 | 0.216 | 0.246 | 0.251 | 0.254 | 0.256 | 0.258 | 0.234 | 16.06 |
| 72) | TP | 2-Hexanone | | | 0.084 | 0.104 | 0.118 | 0.127 | 0.133 | 0.129 | 0.116 | 16.16 |
| 73) | TP | Chlorobenzene | | 0.727 | 0.837 | 0.870 | 0.854 | 0.855 | 0.828 | 0.837 | 0.830 | 5.71 |

# Response Factor Report VOA105

Method Path : K:\VOA105\2024\240906NICAL\
Method File : V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024
Response Via : Initial Calibration

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74) | TP | Ethylbenzene | | 1.144 | 1.341 | 1.518 | 1.498 | 1.486 | 1.420 | 1.407 | 1.402 | 9.22 |
| 75) | TP | 1,1,1,2-Tetrac... | | 0.252 | 0.296 | 0.310 | 0.317 | 0.322 | 0.313 | 0.322 | 0.305 | 8.12 |
| 76) | TP | p/m Xylene | | 0.383 | 0.510 | 0.599 | 0.597 | 0.587 | 0.560 | 0.553 | 0.541 | 14.11 |
| 77) | TP | o Xylene | | 0.346 | 0.473 | 0.566 | 0.568 | 0.564 | 0.538 | 0.534 | 0.513 | 15.75 |
| 78) | TP | Styrene | | 0.523 | 0.798 | 0.940 | 0.960 | 0.943 | 0.900 | 0.876 | 0.849 | 18.10 |
| 79) | I | 1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | |
| 80) | TP | Bromoform | | 0.249 | 0.260 | 0.273 | 0.297 | 0.320 | 0.329 | 0.346 | 0.296 | 12.48 |
| 82) | TP | Isopropylbenzene | | 1.594 | 2.062 | 2.466 | 2.480 | 2.552 | 2.464 | 2.572 | 2.313 | 15.57 |
| 83) | S | 4-Bromofluorob... | 0.722 | 0.722 | 0.711 | 0.676 | 0.665 | 0.675 | 0.681 | 0.700 | 0.694 | 3.25 |
| 84) | TP | Bromobenzene | | 0.546 | 0.597 | 0.607 | 0.611 | 0.623 | 0.619 | 0.654 | 0.608 | 5.42 |
| 85) | TP | n-Propylbenzene | | 2.078 | 2.527 | 2.905 | 2.849 | 2.919 | 2.793 | 2.845 | 2.702 | 11.29 |
| 86) | TP | 1,4-Dichlorobu... | | 0.472 | 0.606 | 0.592 | 0.590 | 0.600 | 0.593 | 0.613 | 0.581 | 8.37 |
| 87) | TP | 1,1,2,2-Tetrac... | | 0.375 | 0.398 | 0.392 | 0.396 | 0.410 | 0.415 | 0.425 | 0.402 | 4.08 |
| 88) | TP | 4-Ethyltoluene | | 1.636 | 2.065 | 2.398 | 2.410 | 2.450 | 2.353 | 2.450 | 2.252 | 13.44 |
| 89) | TP | 2-Chlorotoluene | | 1.260 | 1.553 | 1.621 | 1.586 | 1.586 | 1.536 | 1.523 | 1.524 | 7.95 |
| 90) | TP | 1,3,5-Trimethy... | | 1.495 | 1.883 | 2.136 | 2.115 | 2.125 | 2.052 | 2.103 | 1.987 | 11.78 |
| 91) | TP | 1,2,3-Trichlor... | | 0.290 | 0.313 | 0.313 | 0.311 | 0.316 | 0.320 | 0.321 | 0.312 | 3.36 |
| 92) | TP | trans-1,4-Dich... | | | 0.126 | 0.130 | 0.135 | 0.132 | 0.136 | 0.140 | 0.133 | 3.66 |
| 93) | TP | 4-Chlorotoluene | | 1.264 | 1.536 | 1.674 | 1.632 | 1.642 | 1.607 | 1.667 | 1.575 | 9.17 |
| 94) | TP | tert-Butylbenzene | | 1.182 | 1.522 | 1.864 | 1.866 | 1.923 | 1.883 | 1.941 | 1.740 | 16.32 |
| 97) | TP | 1,2,4-Trimethy... | | 1.231 | 1.732 | 2.053 | 2.075 | 2.117 | 2.031 | 2.083 | 1.903 | 16.99 |
| 98) | TP | sec-Butylbenzene | | 1.753 | 2.362 | 2.736 | 2.737 | 2.805 | 2.704 | 2.726 | 2.546 | 14.87 |
| 99) | TP | p-Isopropyltol... | | 1.309 | 1.914 | 2.387 | 2.421 | 2.502 | 2.410 | 2.422 | 2.195 | 19.90 |
| 100) | TP | 1,3-Dichlorobe... | | 1.027 | 1.163 | 1.249 | 1.237 | 1.256 | 1.225 | 1.252 | 1.201 | 6.93 |
| 101) | TP | 1,4-Dichlorobe... | | 1.226 | 1.223 | 1.258 | 1.238 | 1.235 | 1.220 | 1.244 | 1.235 | 1.06 |
| 102) | TP | p-Diethylbenzene | | 0.798 | 1.067 | 1.350 | 1.386 | 1.443 | 1.410 | 1.446 | 1.271 | 19.37 |
| 103) | TP | n-Butylbenzene | | 1.166 | 1.704 | 1.976 | 1.931 | 2.013 | 1.908 | 1.936 | 1.805 | 16.55 |
| 104) | TP | 1,2-Dichlorobe... | | 0.889 | 1.060 | 1.119 | 1.123 | 1.146 | 1.121 | 1.138 | 1.085 | 8.35 |
| 105) | TP | 1,2,4,5-Tetram... | | | 1.322 | 1.850 | 1.988 | 2.154 | 2.101 | 2.116 | 1.922 | 16.34 |
| 106) | TP | 1,2-Dibromo-3-... | | 0.038 | 0.057 | 0.063 | 0.067 | 0.076 | 0.082 | 0.081 | *Q | 0.9987 |
| 107) | TP | 1,3,5-Trichlor... | | 0.722 | 0.830 | 0.916 | 0.919 | 0.957 | 0.918 | 0.910 | 0.882 | 9.10 |

Method Path : K:\VOA105\2024\240906NICAL\
Method File : V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024
Response Via : Initial Calibration

Calibration Files
L11 =V05240906N03.D L1 =V05240906N05.D L2 =V05240906N07.D L3 =V05240906N09.D L4 =V05240906N10.D
L6 =V05240906N11.D L8 =V05240906N12.D L10 =V05240906N13.D

| | Compound | L11 | L1 | L2 | L3 | L4 | L6 | L8 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108) | TP Hexachlorobuta... | 0.259 | 0.295 | 0.326 | 0.331 | 0.355 | 0.340 | 0.346 | 0.322 | 10.44 | |
| 109) | TP 1,2,4-Trichlor... | 0.562 | 0.645 | 0.733 | 0.763 | 0.808 | 0.781 | 0.776 | 0.724 | 12.25 | |
| 110) | TP Naphthalene | 0.761 | 0.993 | 1.275 | 1.397 | 1.536 | 1.557 | 1.506 | *L | 0.9988 | |
| 111) | TP 1,2,3-Trichlor... | 0.476 | 0.565 | 0.630 | 0.644 | 0.676 | 0.663 | 0.656 | 0.616 | 11.58 | |

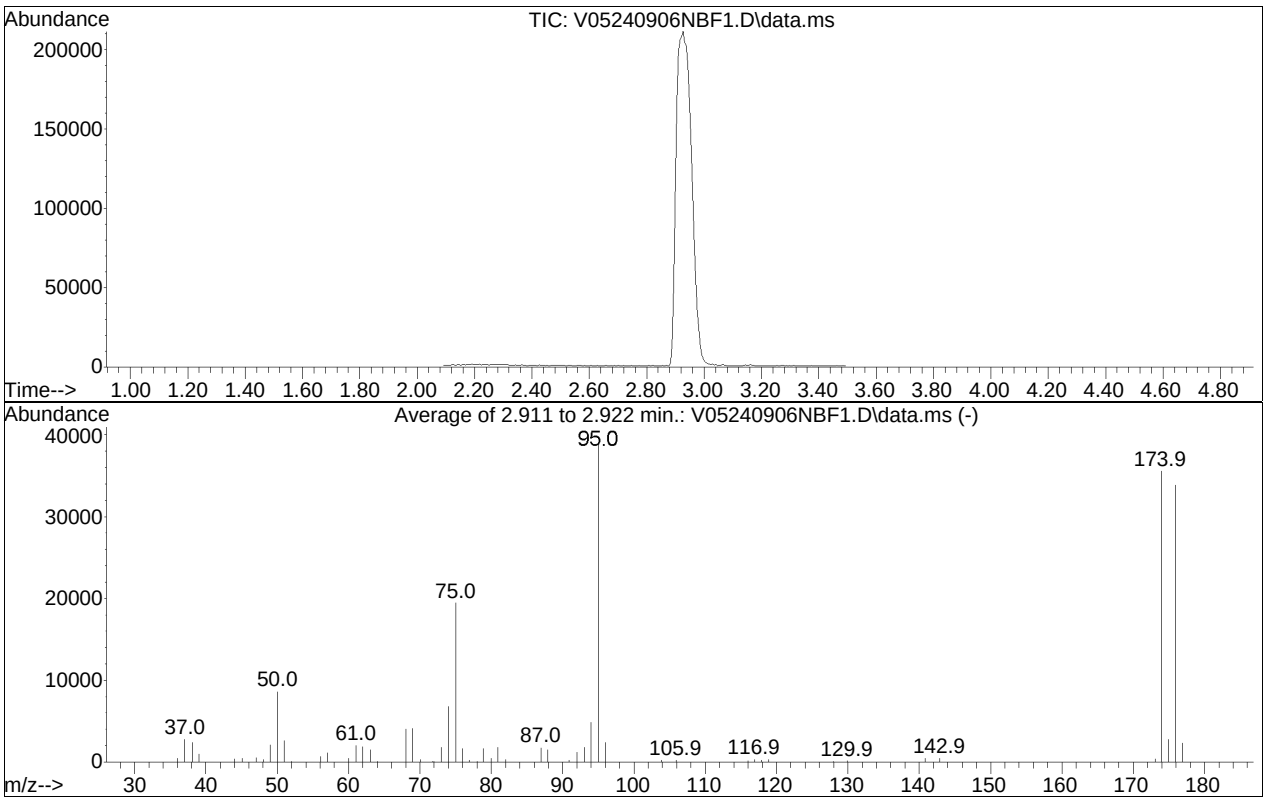
(#) = Out of Range

# BFB

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906NBF1.D
Acq On : 6 Sep 2024 4:20 pm
Operator : VOA105:TMS
Sample : WG1969218-1
Misc : WG1969218
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024




AutoFind: Scans 151, 152, 153; Background Corrected with Scan 143

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.1 | 8619 | PASS |
| 75 | 95 | 30 | 60 | 49.9 | 19488 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 39048 | PASS |
| 96 | 95 | 5 | 9 | 6.2 | 2405 | PASS |
| 173 | 174 | 0.00 | 2 | 1.1 | 393 | PASS |
| 174 | 95 | 50 | 100 | 91.2 | 35603 | PASS |
| 175 | 174 | 5 | 9 | 7.8 | 2778 | PASS |
| 176 | 174 | 95 | 101 | 95.1 | 33861 | PASS |
| 177 | 176 | 5 | 9 | 6.8 | 2299 | PASS |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N03.D
Acq On : 6 Sep 2024 5:39 pm
Operator : VOA105:PID
Sample : I8260STD0.19PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 11:22:10 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-L11 - Level 11 for 8260-LRR product

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 300062 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 92.84% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 236917 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 92.10% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 137080 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 81.25% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 86081 | 10.265 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.65% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 88968 | 10.262 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.62% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 290012 | 10.136 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.36% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 98978 | 10.406 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 104.06% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl chloride | 1.743 | 62 | 1315 | 0.178 | ug/L # | 1 |
| 34) Carbon tetrachloride | 4.843 | 117 | 1906 | 0.179 | ug/L # | 87 |
| 41) Benzene | 5.273 | 78 | 4411 | 0.174 | ug/L # | 83 |
| 48) Trichloroethene | 5.870 | 95 | 1502 | 0.200 | ug/L | 91 |

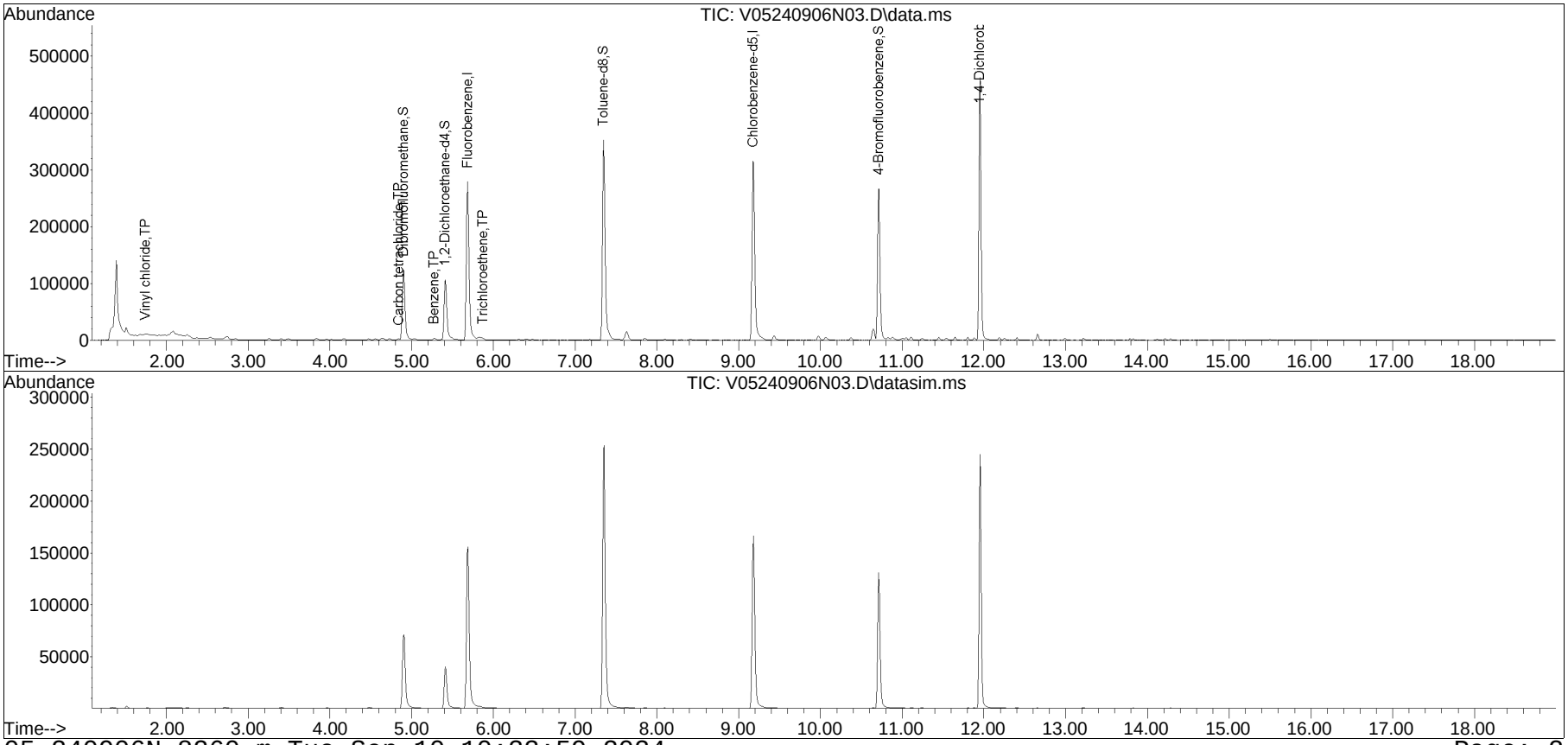
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N03.D
Acq On : 6 Sep 2024 5:39 pm
Operator : VOA105:PID
Sample : I8260STD0.19PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 11:22:10 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR productN09.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\VOA105\2024\240906NICALQ | Method | : V105_240906N_8260.m |
| Data File | : V05240906N03.D | Operator | : VOA105:PID |
| Date Inj'd | : 9/6/2024 5:39 pm | Instrument | : VOA105 |
| Sample | : I8260STD0.19PPB | Quant Date | : 9/9/2024 11:22 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N05.D
Acq On : 6 Sep 2024 6:30 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 11:22:18 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 300523 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = | 92.98% | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 236566 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = | 91.96% | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 139024 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = | 82.40% | |
| System Monitoring Compounds | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 86559 | 10.306 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 103.06% | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 90230 | 10.392 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 103.92% | |
| 60) Toluene-d8 | 7.347 | 98 | 290581 | 10.171 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 101.71% | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 100342 | 10.402 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 104.02% | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 3591 | 0.408 ug/L | 92 |
| 3) Chloromethane | 1.674 | 50 | 3934 | 0.463 ug/L | 92 |
| 4) Vinyl chloride | 1.743 | 62 | 3011 | 0.408 ug/L # | 1 |
| 5) Bromomethane | 2.026 | 94 | 1495 | 0.416 ug/L | 97 |
| 6) Chloroethane | 2.124 | 64 | 4051M4 | 0.811 ug/L | |
| 7) Trichlorofluoromethane | 2.251 | 101 | 4761 | 0.428 ug/L | 94 |
| 8) Ethyl ether | 2.535 | 74 | 1181 | 0.441 ug/L # | 31 |
| 10) 1,1-Dichloroethene | 2.721 | 96 | 2541 | 0.459 ug/L | 94 |
| 11) Carbon disulfide | 2.740 | 76 | 7692 | 0.452 ug/L | 97 |
| 12) Freon-113 | 2.740 | 101 | 2616 | 0.430 ug/L # | 73 |
| 13) Iodomethane | 2.848 | 142 | 3627 | 0.390 ug/L | 90 |
| 14) Acrolein | 0.000 | | 0 | N.D. d | |
| 15) Methylene chloride | 3.259 | 84 | 3307 | 0.503 ug/L # | 66 |
| 17) Acetone | 0.000 | | 0 | N.D. d | |
| 18) trans-1,2-Dichloroethene | 3.405 | 96 | 2694 | 0.412 ug/L | 95 |
| 19) Methyl acetate | 0.000 | | 0 | N.D. d | |
| 20) Methyl tert-butyl ether | 3.493 | 73 | 5360 | 0.372 ug/L # | 41 |
| 21) tert-Butyl alcohol | 0.000 | | 0 | N.D. d | |
| 22) Diisopropyl ether | 3.836 | 45 | 8633 | 0.394 ug/L # | 87 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 5528 | 0.464 ug/L | 91 |
| 24) Halothane | 4.021 | 117 | 2193 | 0.417 ug/L | 95 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N05.D
Acq On : 6 Sep 2024 6:30 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 11:22:18 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) Acrylonitrile | 0.000 | | 0 | N.D. d | |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 5978 | 0.370 ug/L # | 78 |
| 27) Vinyl acetate | 4.237 | 43 | 3312M4 | 0.273 ug/L | |
| 28) cis-1,2-Dichloroethene | 4.471 | 96 | 3183 | 0.430 ug/L | 94 |
| 29) 2,2-Dichloropropane | 4.550 | 77 | 4139 | 0.426 ug/L # | 71 |
| 30) Bromochloromethane | 4.667 | 128 | 1654 | 0.463 ug/L # | 78 |
| 31) Cyclohexane | 4.638 | 56 | 3662 | 0.319 ug/L | 91 |
| 32) Chloroform | 4.726 | 83 | 6124 | 0.492 ug/L # | 95 |
| 33) Ethyl acetate | 0.000 | | 0 | N.D. d | |
| 34) Carbon tetrachloride | 4.843 | 117 | 4362 | 0.408 ug/L | 97 |
| 35) Tetrahydrofuran | 0.000 | | 0 | N.D. d | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 4806 | 0.414 ug/L | 93 |
| 39) 2-Butanone | 0.000 | | 0 | N.D. d | |
| 40) 1,1-Dichloropropene | 5.039 | 75 | 2972 | 0.346 ug/L | 93 |
| 41) Benzene | 5.273 | 78 | 10512 | 0.415 ug/L | 95 |
| 42) tert-Amyl methyl ether | 5.381 | 73 | 4464 | 0.335 ug/L | 91 |
| 44) 1,2-Dichloroethane | 5.489 | 62 | 3916 | 0.468 ug/L # | 91 |
| 47) Methyl cyclohexane | 5.831 | 83 | 4103 | 0.353 ug/L | 92 |
| 48) Trichloroethene | 5.860 | 95 | 3138 | 0.416 ug/L | 96 |
| 50) Dibromomethane | 6.310 | 93 | 1737 | 0.444 ug/L | 95 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 2520 | 0.399 ug/L | 92 |
| 53) 2-Chloroethyl vinyl ether | 7.122 | 63 | 700 | 0.225 ug/L # | 83 |
| 54) Bromodichloromethane | 6.486 | 83 | 4220 | 0.456 ug/L # | 94 |
| 57) 1,4-Dioxane | 6.692 | 88 | 2689 | 68.133 ug/L # | 85 |
| 58) cis-1,3-Dichloropropene | 7.161 | 75 | 3530 | 0.362 ug/L # | 53 |
| 61) Toluene | 7.415 | 92 | 7135 | 0.430 ug/L | 91 |
| 62) 4-Methyl-2-pentanone | 7.865 | 58 | 207 | 0.167 ug/L # | 1 |
| 63) Tetrachloroethene | 7.846 | 166 | 3596 | 0.410 ug/L | 89 |
| 65) trans-1,3-Dichloropropene | 7.924 | 75 | 2954 | 0.366 ug/L # | 8 |
| 67) Ethyl methacrylate | 8.120 | 69 | 1173 | 0.234 ug/L # | 39 |
| 68) 1,1,2-Trichloroethane | 8.090 | 83 | 1661 | 0.404 ug/L | 87 |
| 69) Chlorodibromomethane | 8.296 | 129 | 2939 | 0.419 ug/L | 88 |
| 70) 1,3-Dichloropropane | 8.403 | 76 | 3349 | 0.415 ug/L | 99 |
| 71) 1,2-Dibromoethane | 8.570 | 107 | 1837 | 0.332 ug/L | 94 |
| 72) 2-Hexanone | 0.000 | | 0 | N.D. d | |
| 73) Chlorobenzene | 9.196 | 112 | 8601 | 0.438 ug/L | 93 |
| 74) Ethylbenzene | 9.245 | 91 | 13536 | 0.408 ug/L | 99 |
| 75) 1,1,1,2-Tetrachloroethane | 9.284 | 131 | 2984 | 0.414 ug/L # | 71 |
| 76) p/m Xylene | 9.431 | 106 | 9060 | 0.707 ug/L | 86 |
| 77) o Xylene | 9.970 | 106 | 8178 | 0.674 ug/L | 89 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N05.D
Acq On : 6 Sep 2024 6:30 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 11:22:18 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.058 | 104 | 12374 | 0.616 | ug/L | # | 84 |
| 80) Bromoform | 10.078 | 173 | 1733 | 0.421 | ug/L | | 97 |
| 82) Isopropylbenzene | 10.372 | 105 | 11078 | 0.345 | ug/L | | 100 |
| 84) Bromobenzene | 10.822 | 156 | 3793 | 0.449 | ug/L | | 95 |
| 85) n-Propylbenzene | 10.871 | 91 | 14446 | 0.385 | ug/L | | 98 |
| 86) 1,4-Dichlorobutane | 10.911 | 55 | 3281 | 0.406 | ug/L | # | 83 |
| 87) 1,1,2,2-Tetrachloroethane | 10.989 | 83 | 2609 | 0.467 | ug/L | # | 94 |
| 88) 4-Ethyltoluene | 11.009 | 105 | 11369 | 0.363 | ug/L | | 97 |
| 89) 2-Chlorotoluene | 11.048 | 91 | 8756M6 | 0.413 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.106 | 105 | 10391 | 0.376 | ug/L | | 94 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 2014 | 0.465 | ug/L | | 90 |
| 92) trans-1,4-Dichloro-2-b... | 0.000 | | 0 | N.D. | d | | |
| 93) 4-Chlorotoluene | 11.244 | 91 | 8788 | 0.401 | ug/L | | 99 |
| 94) tert-Butylbenzene | 11.449 | 119 | 8219 | 0.340 | ug/L | | 97 |
| 97) 1,2,4-Trimethylbenzene | 11.538 | 105 | 8558 | 0.323 | ug/L | | 91 |
| 98) sec-Butylbenzene | 11.645 | 105 | 12184 | 0.344 | ug/L | | 99 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 9097 | 0.298 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.880 | 146 | 7137 | 0.427 | ug/L | | 89 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 8525 | 0.497 | ug/L | # | 93 |
| 102) p-Diethylbenzene | 12.184 | 119 | 5550 | 0.314 | ug/L | | 98 |
| 103) n-Butylbenzene | 12.243 | 91 | 8102 | 0.323 | ug/L | | 91 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 6183 | 0.410 | ug/L | | 93 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 6906 | 0.278 | ug/L | | 95 |
| 106) 1,2-Dibromo-3-chloropr... | 13.193 | 155 | 266 | 0.288 | ug/L | | 85 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 5017 | 0.409 | ug/L | # | 93 |
| 108) Hexachlorobutadiene | 13.781 | 225 | 1801 | 0.403 | ug/L | | 94 |
| 109) 1,2,4-Trichlorobenzene | 13.820 | 180 | 3907 | 0.388 | ug/L | # | 92 |
| 110) Naphthalene | 14.114 | 128 | 5290 | 0.295 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.280 | 180 | 3311 | 0.387 | ug/L | # | 93 |

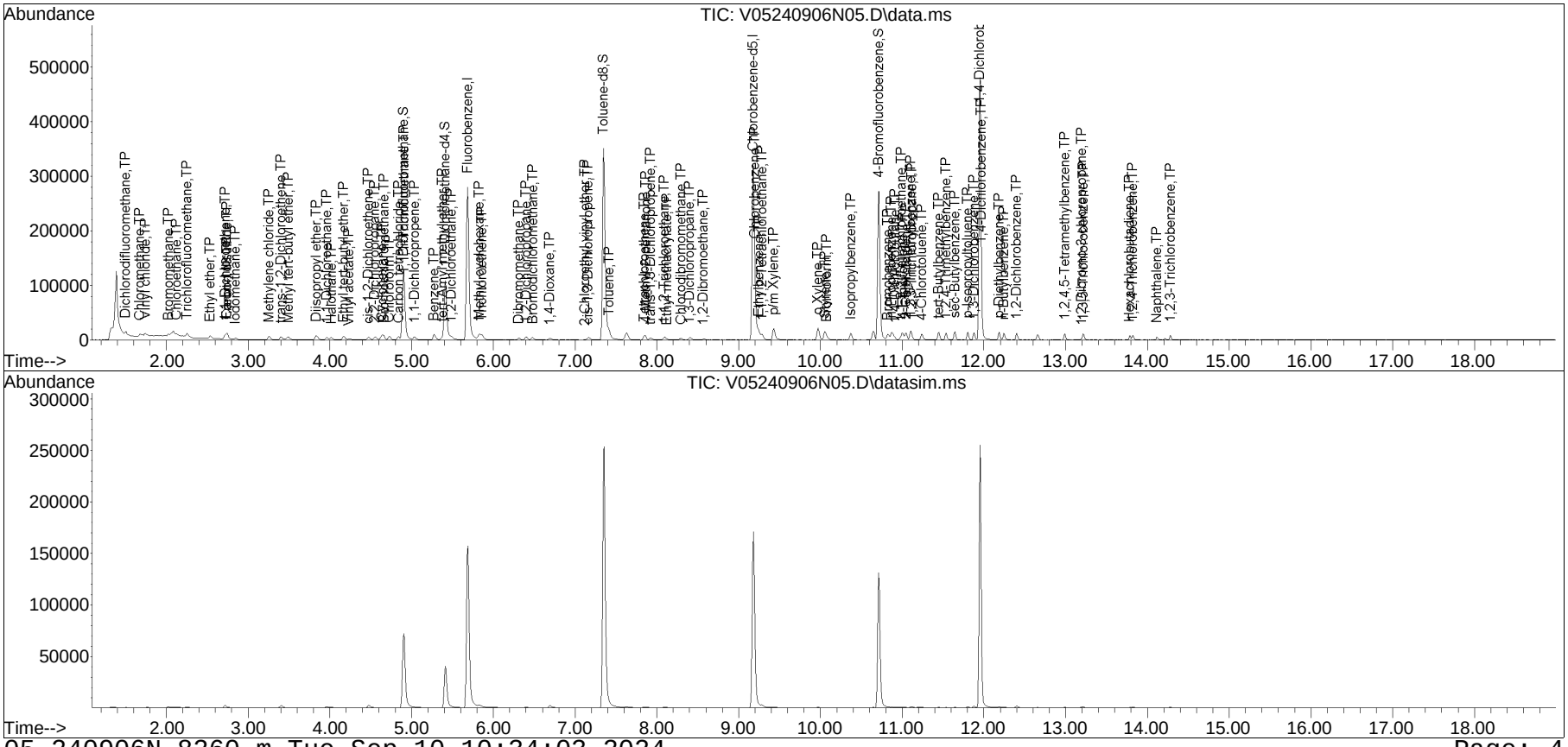
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N05.D
Acq On : 6 Sep 2024 6:30 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 11:22:18 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

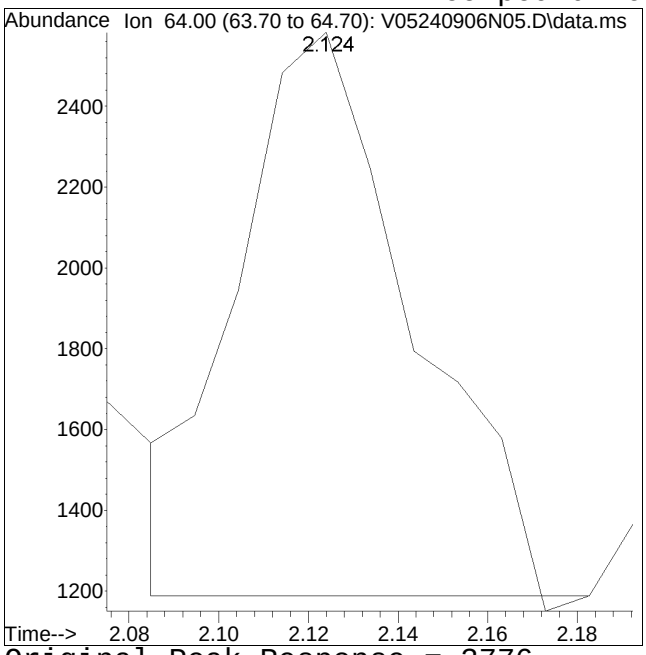


# Manual Integration Report

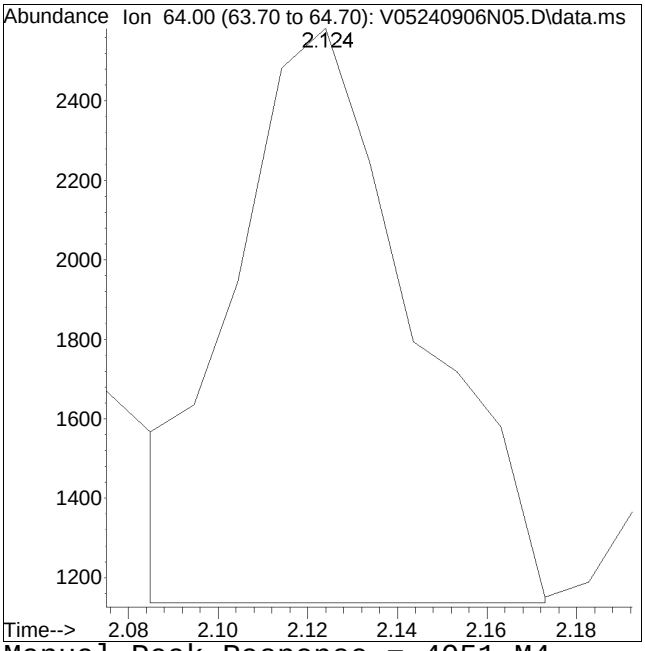
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N05.D
Date Inj'd : 9/6/2024 6:30 pm
Sample : I8260STD0.5PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:22 am

## Compound #6: Chloroethane




Original Peak Response = 3776



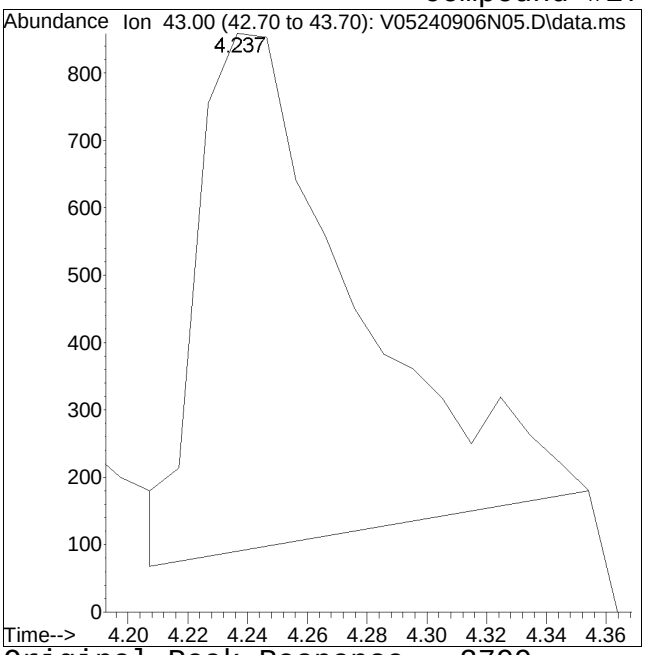

Manual Peak Response = 4051 M4

M4 = Poor automated baseline construction.

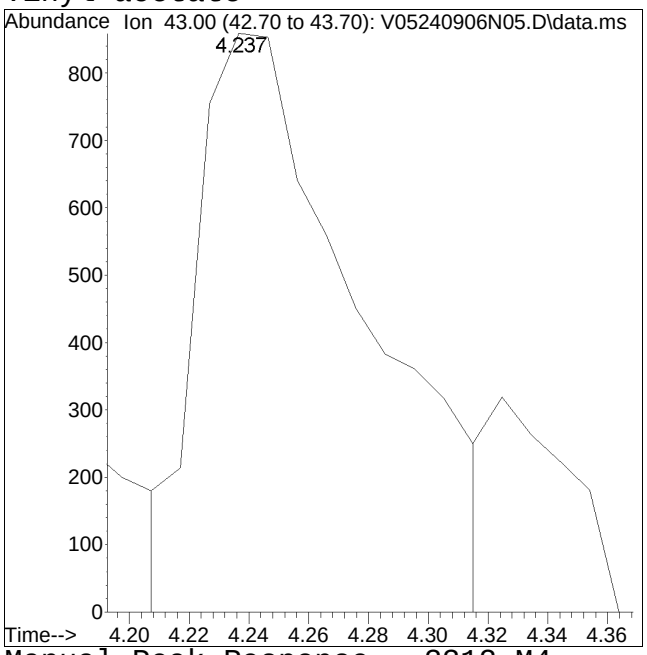
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N05.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 6:30 pm Instrument : VOA105
Sample : I8260STD0.5PPB Quant Date : 9/9/2024 11:22 am

Compound #27: Vinyl acetate




Original Peak Response = 2799



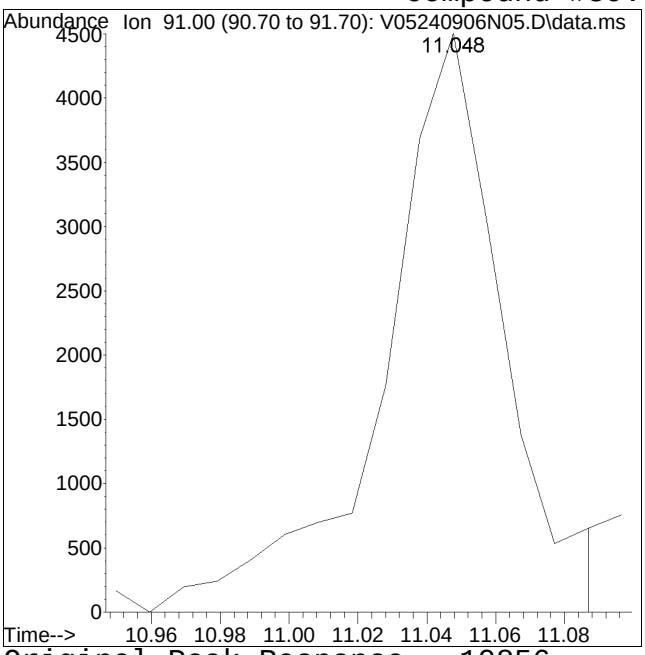

Manual Peak Response = 3312 M4

M4 = Poor automated baseline construction.

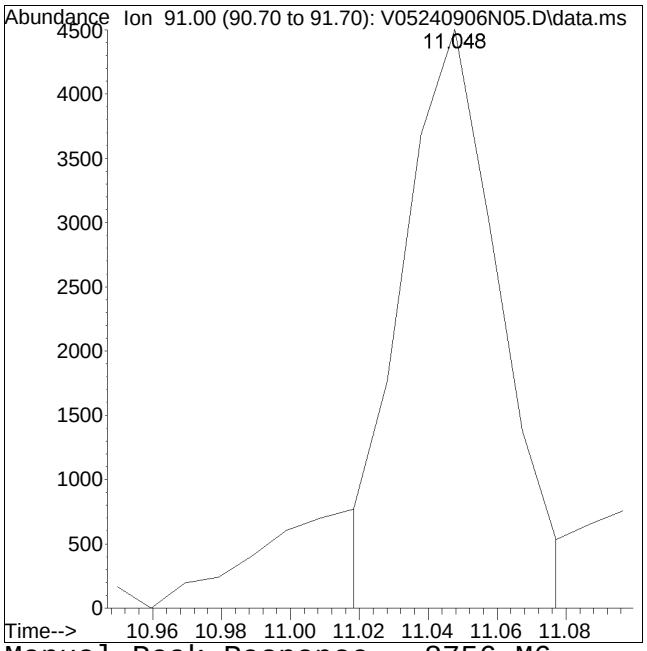
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N05.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 6:30 pm Instrument : VOA105
Sample : I8260STD0.5PPB Quant Date : 9/9/2024 11:22 am

Compound #89: 2-Chlorotoluene




Original Peak Response = 10856




Manual Peak Response = 8756 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N07.D
Acq On : 6 Sep 2024 7:21 pm
Operator : VOA105:PID
Sample : I8260STD2PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 11:22:26 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 312068 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = | 96.55% | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 242102 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = | 94.12% | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 151374 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = | 89.72% | |
| System Monitoring Compounds | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 89225 | 10.231 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 102.31% | |
| 43) 1,2-Dichloroethane-d4 | 5.411 | 65 | 93691 | 10.391 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 103.91% | |
| 60) Toluene-d8 | 7.347 | 98 | 303710 | 10.387 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 103.87% | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 107596 | 10.244 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 102.44% | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 18418 | 2.016 ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 18354 | 2.081 ug/L | 94 |
| 4) Vinyl chloride | 1.743 | 62 | 15728 | 2.050 ug/L # | 1 |
| 5) Bromomethane | 2.026 | 94 | 6382 | 1.709 ug/L | 95 |
| 6) Chloroethane | 2.114 | 64 | 13915 | 2.683 ug/L | 87 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 24565 | 2.127 ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 5703 | 2.051 ug/L # | 44 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 11608 | 2.020 ug/L | 96 |
| 11) Carbon disulfide | 2.740 | 76 | 36953 | 2.090 ug/L | 99 |
| 12) Freon-113 | 2.740 | 101 | 13317 | 2.108 ug/L | 82 |
| 13) Iodomethane | 2.848 | 142 | 17012 | 1.763 ug/L | 90 |
| 14) Acrolein | 3.053 | 56 | 1286 | 1.681 ug/L | 93 |
| 15) Methylene chloride | 3.249 | 84 | 14254 | 2.090 ug/L # | 70 |
| 17) Acetone | 3.317 | 43 | 3400 | 2.305 ug/L # | 77 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 13140 | 1.935 ug/L | 97 |
| 19) Methyl acetate | 3.435 | 43 | 5709M6 | 1.753 ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 27726 | 1.854 ug/L # | 77 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 3102 | 9.168 ug/L # | 72 |
| 22) Diisopropyl ether | 3.836 | 45 | 40833 | 1.795 ug/L # | 86 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 25631 | 2.072 ug/L | 97 |
| 24) Halothane | 4.022 | 117 | 10095 | 1.848 ug/L | 98 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N07.D
Acq On : 6 Sep 2024 7:21 pm
Operator : VOA105:PID
Sample : I8260STD2PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 11:22:26 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.041 | 53 | 3073 | 1.790 | ug/L | # | 85 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 28642 | 1.708 | ug/L | # | 76 |
| 27) Vinyl acetate | 4.207 | 43 | 18916M6 | 1.501 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.472 | 96 | 15279 | 1.986 | ug/L | | 96 |
| 29) 2,2-Dichloropropane | 4.560 | 77 | 19564 | 1.940 | ug/L | # | 80 |
| 30) Bromochloromethane | 4.657 | 128 | 7789 | 2.098 | ug/L | # | 78 |
| 31) Cyclohexane | 4.638 | 56 | 22007 | 1.844 | ug/L | | 82 |
| 32) Chloroform | 4.726 | 83 | 28140 | 2.176 | ug/L | | 93 |
| 33) Ethyl acetate | 4.853 | 43 | 8818 | 1.693 | ug/L | # | 87 |
| 34) Carbon tetrachloride | 4.843 | 117 | 21329 | 1.921 | ug/L | | 97 |
| 35) Tetrahydrofuran | 4.882 | 42 | 3256M6 | 1.944 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.902 | 97 | 23588 | 1.957 | ug/L | | 94 |
| 39) 2-Butanone | 5.049 | 43 | 3456 | 1.541 | ug/L | # | 58 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 16682 | 1.869 | ug/L | | 92 |
| 41) Benzene | 5.274 | 78 | 52308 | 1.990 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.381 | 73 | 23440 | 1.692 | ug/L | | 97 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 18446 | 2.125 | ug/L | | 100 |
| 47) Methyl cyclohexane | 5.831 | 83 | 20982 | 1.740 | ug/L | | 84 |
| 48) Trichloroethene | 5.860 | 95 | 16190 | 2.069 | ug/L | | 96 |
| 50) Dibromomethane | 6.301 | 93 | 8238 | 2.029 | ug/L | | 90 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 12991 | 1.979 | ug/L | | 91 |
| 53) 2-Chloroethyl vinyl ether | 7.103 | 63 | 4910 | 1.521 | ug/L | # | 86 |
| 54) Bromodichloromethane | 6.477 | 83 | 18680 | 1.943 | ug/L | | 98 |
| 57) 1,4-Dioxane | 6.692 | 88 | 15208 | 371.082 | ug/L | # | 86 |
| 58) cis-1,3-Dichloropropene | 7.161 | 75 | 17705 | 1.750 | ug/L | # | 73 |
| 61) Toluene | 7.406 | 92 | 35511 | 2.089 | ug/L | | 96 |
| 62) 4-Methyl-2-pentanone | 7.856 | 58 | 2025 | 1.599 | ug/L | # | 35 |
| 63) Tetrachloroethene | 7.846 | 166 | 17686 | 1.972 | ug/L | | 93 |
| 65) trans-1,3-Dichloropropene | 7.905 | 75 | 15102 | 1.826 | ug/L | # | 63 |
| 67) Ethyl methacrylate | 8.090 | 69 | 8273 | 1.611 | ug/L | | 80 |
| 68) 1,1,2-Trichloroethane | 8.090 | 83 | 9001 | 2.141 | ug/L | | 95 |
| 69) Chlorodibromomethane | 8.296 | 129 | 13489 | 1.881 | ug/L | | 95 |
| 70) 1,3-Dichloropropane | 8.403 | 76 | 16832 | 2.040 | ug/L | | 95 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 10442 | 1.844 | ug/L | | 98 |
| 72) 2-Hexanone | 8.873 | 43 | 4078 | 1.454 | ug/L | # | 65 |
| 73) Chlorobenzene | 9.196 | 112 | 40546 | 2.018 | ug/L | | 90 |
| 74) Ethylbenzene | 9.236 | 91 | 64927 | 1.913 | ug/L | | 95 |
| 75) 1,1,1,2-Tetrachloroethane | 9.285 | 131 | 14346 | 1.945 | ug/L | | 93 |
| 76) p/m Xylene | 9.422 | 106 | 49410 | 3.770 | ug/L | | 86 |
| 77) o Xylene | 9.970 | 106 | 45818 | 3.690 | ug/L | | 84 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N07.D
Acq On : 6 Sep 2024 7:21 pm
Operator : VOA105:PID
Sample : I8260STD2PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 11:22:26 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 77296 | 3.762 | ug/L | # | 84 |
| 80) Bromoform | 10.068 | 173 | 7876 | 1.756 | ug/L | | 99 |
| 82) Isopropylbenzene | 10.372 | 105 | 62435 | 1.783 | ug/L | | 95 |
| 84) Bromobenzene | 10.823 | 156 | 18070 | 1.963 | ug/L | | 98 |
| 85) n-Propylbenzene | 10.872 | 91 | 76504 | 1.870 | ug/L | | 94 |
| 86) 1,4-Dichlorobutane | 10.901 | 55 | 18332 | 2.086 | ug/L | | 90 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 12062 | 1.984 | ug/L | | 99 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 62517 | 1.834 | ug/L | | 96 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 47027M6 | 2.039 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 57002 | 1.895 | ug/L | | 94 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 9462 | 2.004 | ug/L | | 92 |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 3816 | 1.894 | ug/L | | 88 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 46502M6 | 1.951 | ug/L | | |
| 94) tert-Butylbenzene | 11.450 | 119 | 46081 | 1.749 | ug/L | | 97 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 52439 | 1.820 | ug/L | | 95 |
| 98) sec-Butylbenzene | 11.645 | 105 | 71500 | 1.855 | ug/L | | 98 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 57936 | 1.744 | ug/L | | 94 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 35224 | 1.937 | ug/L | | 95 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 37018 | 1.980 | ug/L | | 97 |
| 102) p-Diethylbenzene | 12.184 | 119 | 32303 | 1.678 | ug/L | | 96 |
| 103) n-Butylbenzene | 12.243 | 91 | 51583 | 1.888 | ug/L | | 94 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 32081 | 1.953 | ug/L | | 95 |
| 105) 1,2,4,5-Tetramethylben... | 12.988 | 119 | 40026 | 1.478 | ug/L | | 94 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 1723 | 1.713 | ug/L | | 90 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 25129 | 1.883 | ug/L | | 96 |
| 108) Hexachlorobutadiene | 13.781 | 225 | 8916 | 1.832 | ug/L | | 97 |
| 109) 1,2,4-Trichlorobenzene | 13.820 | 180 | 19524 | 1.781 | ug/L | | 95 |
| 110) Naphthalene | 14.114 | 128 | 30064 | 1.540 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.281 | 180 | 17096 | 1.834 | ug/L | | 96 |

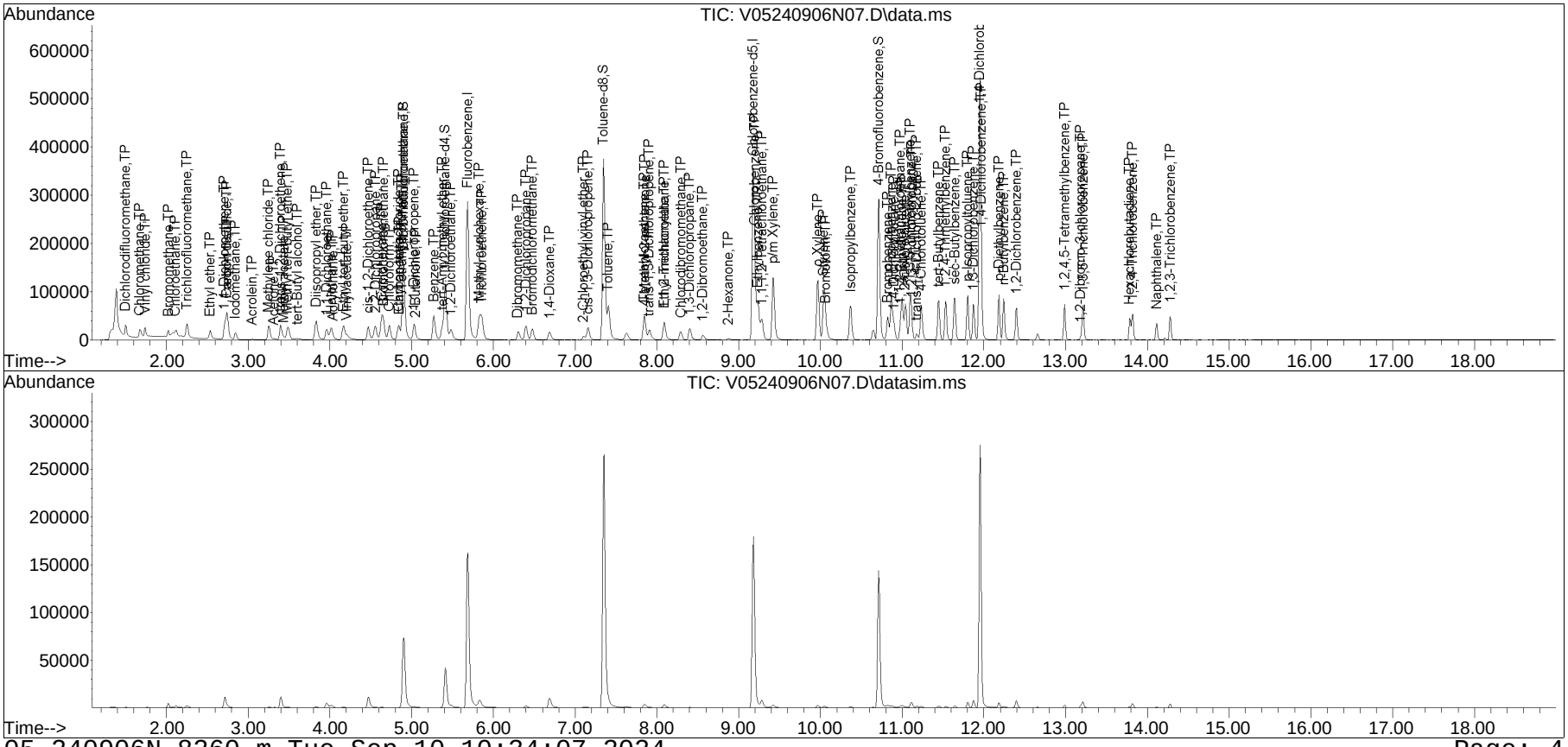
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N07.D
Acq On : 6 Sep 2024 7:21 pm
Operator : VOA105:PID
Sample : I8260STD2PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 11:22:26 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

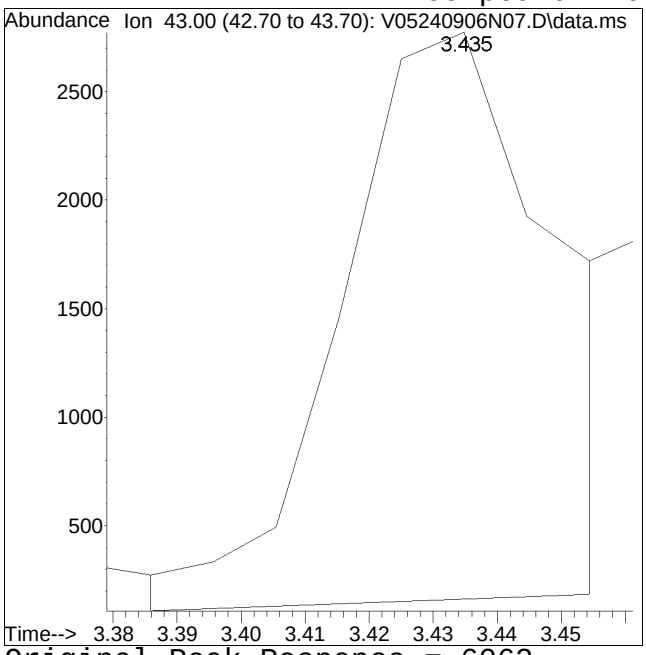


# Manual Integration Report

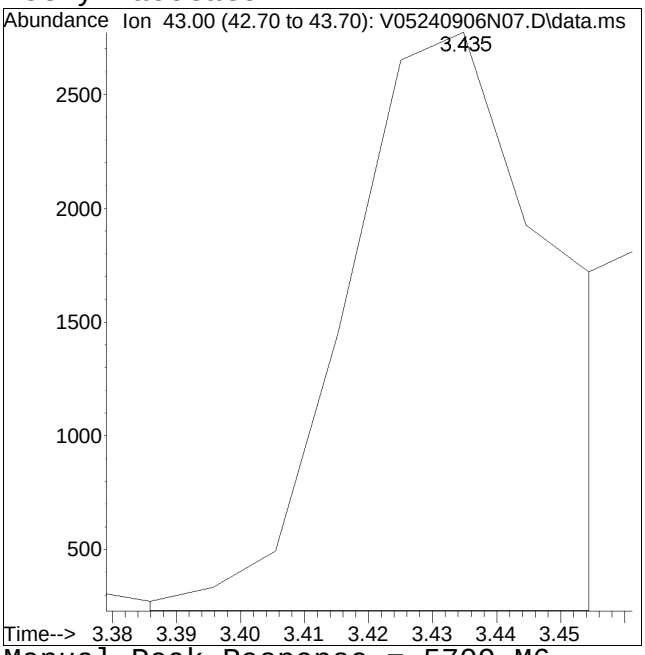
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N07.D
Date Inj'd : 9/6/2024 7:21 pm
Sample : I8260STD2PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:22 am

Compound #19: Methyl acetate




Original Peak Response = 6062



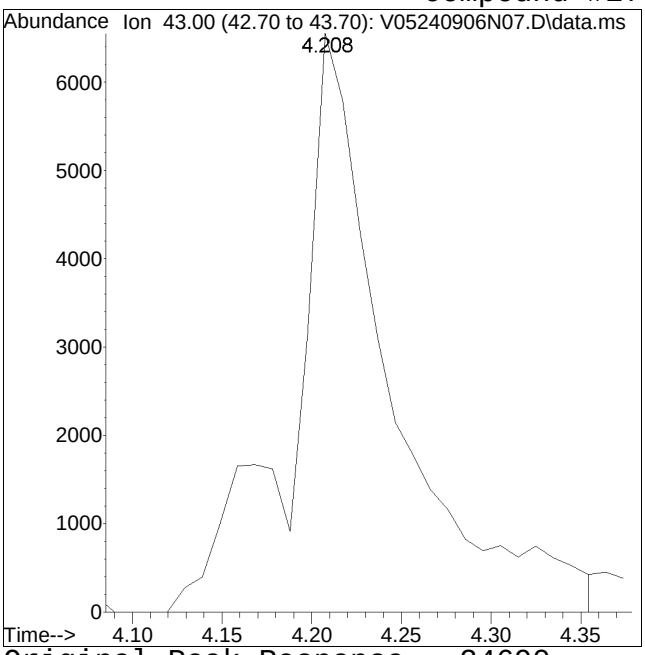

Manual Peak Response = 5709 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

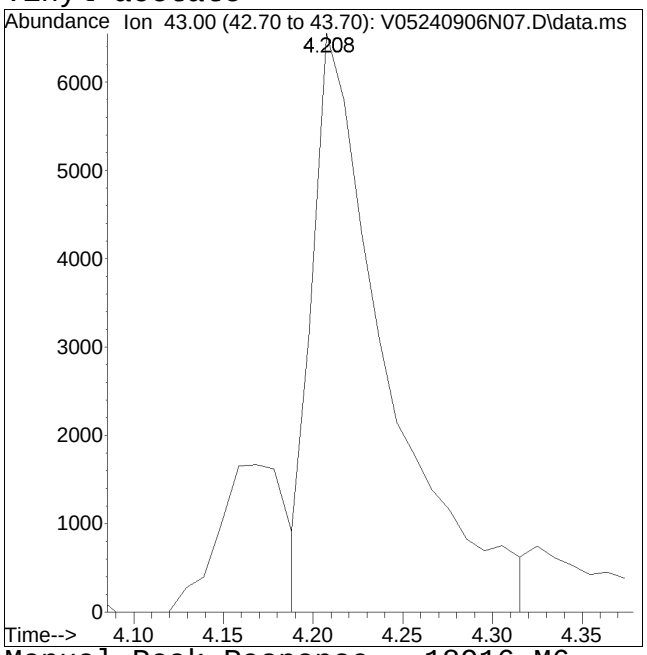
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N07.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 7:21 pm Instrument : VOA105
Sample : I8260STD2PPB Quant Date : 9/9/2024 11:22 am

Compound #27: Vinyl acetate




Original Peak Response = 24690



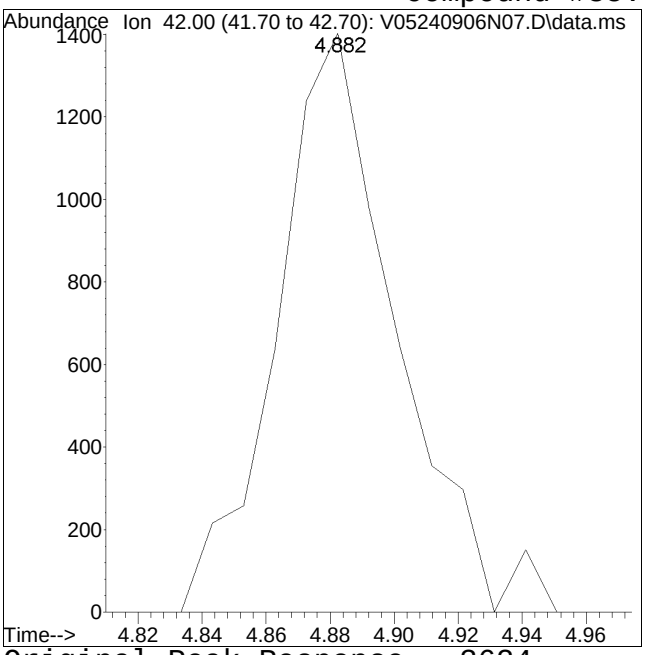

Manual Peak Response = 18916 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

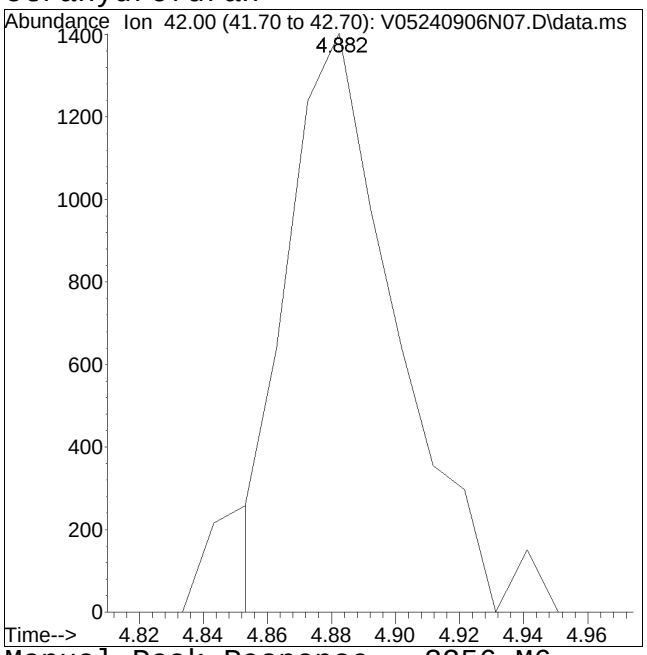
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N07.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 7:21 pm Instrument : VOA105
Sample : I8260STD2PPB Quant Date : 9/9/2024 11:22 am

Compound #35: Tetrahydrofuran




Original Peak Response = 3624



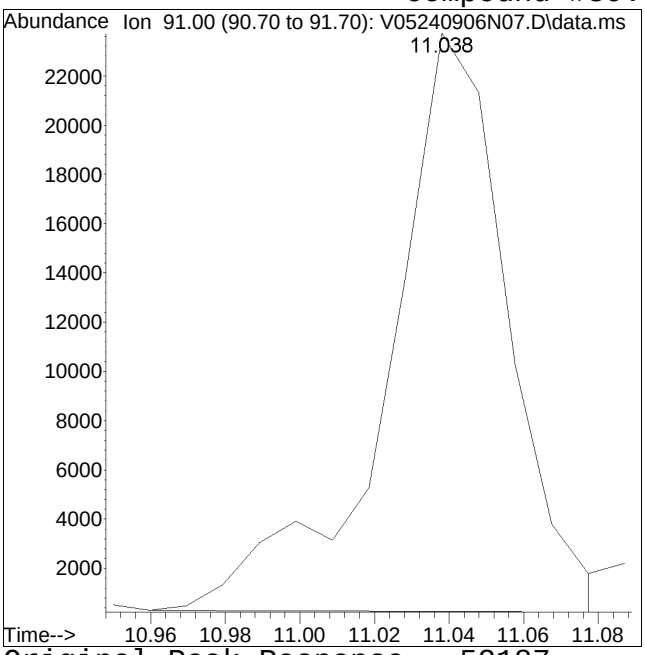

Manual Peak Response = 3256 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

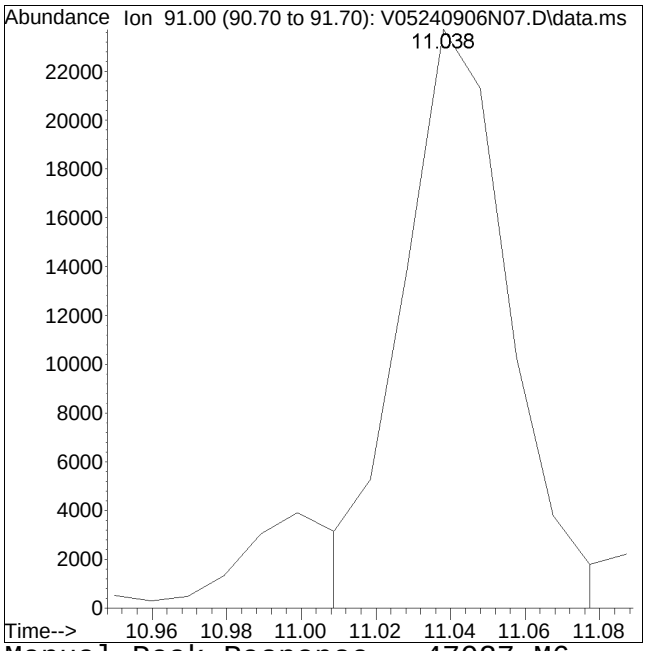
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N07.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 7:21 pm Instrument : VOA105
Sample : I8260STD2PPB Quant Date : 9/9/2024 11:22 am

Compound #89: 2-Chlorotoluene




Original Peak Response = 52187



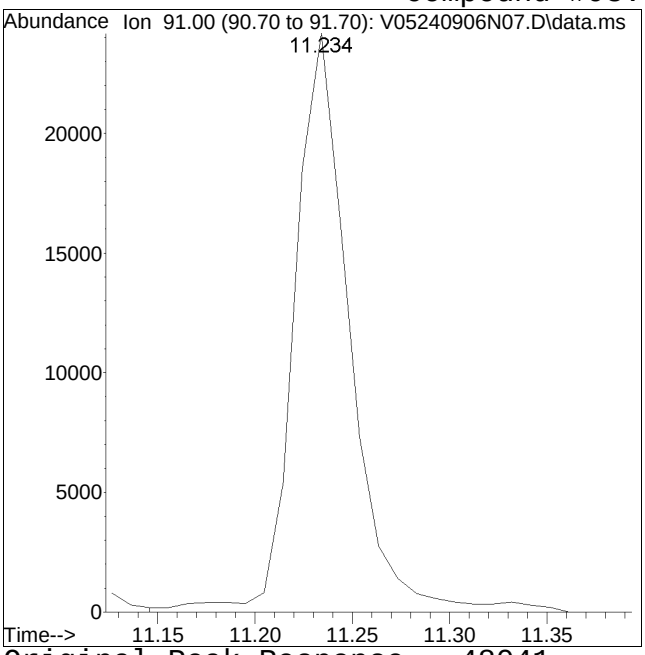

Manual Peak Response = 47027 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

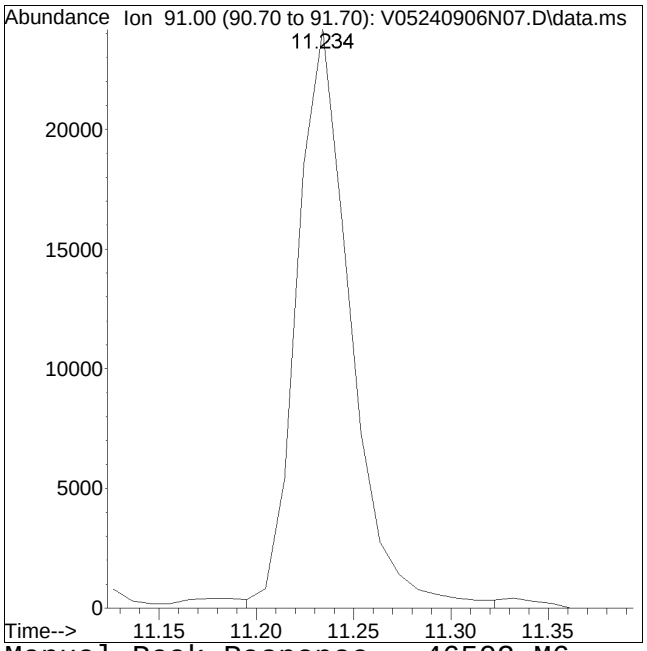
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N07.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 7:21 pm Instrument : VOA105
Sample : I8260STD2PPB Quant Date : 9/9/2024 11:22 am

Compound #93: 4-Chlorotoluene




Original Peak Response = 48041




Manual Peak Response = 46502 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N09.D
Acq On : 6 Sep 2024 8:12 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:22:34 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 323219 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 100.00% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 257237 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 100.00% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 168721 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 89003 | 9.853 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.53% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 97396 | 10.429 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 104.29% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 320062 | 10.302 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 103.02% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 113997 | 9.738 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.38% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 106319 | 11.237 | ug/L | 98 |
| 3) Chloromethane | 1.674 | 50 | 99319 | 10.874 | ug/L | 97 |
| 4) Vinyl chloride | 1.743 | 62 | 87819 | 11.051 | ug/L | 81 |
| 5) Bromomethane | 2.026 | 94 | 36568 | 9.453 | ug/L | 100 |
| 6) Chloroethane | 2.114 | 64 | 52829 | 9.834 | ug/L | 97 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 131339 | 10.982 | ug/L | 98 |
| 8) Ethyl ether | 2.535 | 74 | 29139 | 10.119 | ug/L # | 47 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 64408 | 10.824 | ug/L | 97 |
| 11) Carbon disulfide | 2.740 | 76 | 198657 | 10.846 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 72300 | 11.049 | ug/L | 84 |
| 13) Iodomethane | 2.848 | 142 | 100319 | 10.039 | ug/L | 92 |
| 14) Acrolein | 3.043 | 56 | 7259 | 9.163 | ug/L | 95 |
| 15) Methylene chloride | 3.249 | 84 | 73073 | 10.344 | ug/L # | 71 |
| 17) Acetone | 3.317 | 43 | 15192 | 9.944 | ug/L | 96 |
| 18) trans-1,2-Dichloroethene | 3.395 | 96 | 74660 | 10.614 | ug/L | 96 |
| 19) Methyl acetate | 3.415 | 43 | 31646M6 | 9.384 | ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 154029 | 9.945 | ug/L # | 84 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 15622 | 44.579 | ug/L | 95 |
| 22) Diisopropyl ether | 3.826 | 45 | 237337 | 10.073 | ug/L # | 91 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 139169 | 10.862 | ug/L | 97 |
| 24) Halothane | 4.012 | 117 | 60081 | 10.619 | ug/L | 100 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N09.D
Acq On : 6 Sep 2024 8:12 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:22:34 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.031 | 53 | 17418 | 9.796 | ug/L | # | 86 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 172045 | 9.908 | ug/L | # | 78 |
| 27) Vinyl acetate | 4.198 | 43 | 126287M6 | 9.677 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 83205 | 10.443 | ug/L | | 95 |
| 29) 2,2-Dichloropropane | 4.559 | 77 | 111317 | 10.656 | ug/L | | 84 |
| 30) Bromochloromethane | 4.657 | 128 | 40808 | 10.612 | ug/L | # | 83 |
| 31) Cyclohexane | 4.638 | 56 | 139747 | 11.306 | ug/L | | 81 |
| 32) Chloroform | 4.726 | 83 | 139157 | 10.389 | ug/L | # | 94 |
| 33) Ethyl acetate | 4.843 | 43 | 47789 | 8.860 | ug/L | # | 93 |
| 34) Carbon tetrachloride | 4.843 | 117 | 121821 | 10.594 | ug/L | | 99 |
| 35) Tetrahydrofuran | 4.872 | 42 | 16215M6 | 9.348 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 135310 | 10.836 | ug/L | | 98 |
| 39) 2-Butanone | 5.029 | 43 | 21012 | 9.048 | ug/L | # | 65 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 99944 | 10.808 | ug/L | | 93 |
| 41) Benzene | 5.273 | 78 | 294982 | 10.833 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 142023 | 9.896 | ug/L | | 99 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 93125 | 10.358 | ug/L | | 99 |
| 47) Methyl cyclohexane | 5.831 | 83 | 136168 | 10.904 | ug/L | | 89 |
| 48) Trichloroethene | 5.860 | 95 | 84342 | 10.406 | ug/L | | 90 |
| 50) Dibromomethane | 6.300 | 93 | 42144 | 10.021 | ug/L | | 86 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 71776 | 10.555 | ug/L | # | 89 |
| 53) 2-Chloroethyl vinyl ether | 7.093 | 63 | 32682 | 9.774 | ug/L | | 88 |
| 54) Bromodichloromethane | 6.476 | 83 | 100299 | 10.071 | ug/L | | 99 |
| 57) 1,4-Dioxane | 6.682 | 88 | 20401 | 480.620 | ug/L | # | 87 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 107976 | 10.307 | ug/L | # | 84 |
| 61) Toluene | 7.406 | 92 | 193251 | 10.701 | ug/L | | 95 |
| 62) 4-Methyl-2-pentanone | 7.856 | 58 | 13780 | 10.241 | ug/L | # | 63 |
| 63) Tetrachloroethene | 7.846 | 166 | 102952 | 10.804 | ug/L | | 90 |
| 65) trans-1,3-Dichloropropene | 7.904 | 75 | 92540 | 10.533 | ug/L | | 82 |
| 67) Ethyl methacrylate | 8.081 | 69 | 54800 | 10.046 | ug/L | | 93 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 46850 | 10.486 | ug/L | | 98 |
| 69) Chlorodibromomethane | 8.286 | 129 | 75868 | 9.959 | ug/L | | 98 |
| 70) 1,3-Dichloropropane | 8.403 | 76 | 93845 | 10.704 | ug/L | | 99 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 63282 | 10.520 | ug/L | | 98 |
| 72) 2-Hexanone | 8.853 | 43 | 26704 | 8.959 | ug/L | # | 84 |
| 73) Chlorobenzene | 9.196 | 112 | 223741 | 10.481 | ug/L | | 87 |
| 74) Ethylbenzene | 9.235 | 91 | 390530 | 10.829 | ug/L | | 94 |
| 75) 1,1,1,2-Tetrachloroethane | 9.284 | 131 | 79643 | 10.162 | ug/L | | 96 |
| 76) p/m Xylene | 9.422 | 106 | 308240 | 22.134 | ug/L | | 84 |
| 77) o Xylene | 9.960 | 106 | 291389 | 22.087 | ug/L | | 84 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N09.D
Acq On : 6 Sep 2024 8:12 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:22:34 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 483669 | 22.157 | ug/L | # | 84 |
| 80) Bromoform | 10.068 | 173 | 45982 | 9.199 | ug/L | | 96 |
| 82) Isopropylbenzene | 10.362 | 105 | 416003 | 10.661 | ug/L | | 96 |
| 84) Bromobenzene | 10.822 | 156 | 102348 | 9.976 | ug/L | | 100 |
| 85) n-Propylbenzene | 10.862 | 91 | 490205 | 10.751 | ug/L | | 94 |
| 86) 1,4-Dichlorobutane | 10.891 | 55 | 99820 | 10.189 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 66128 | 9.758 | ug/L | | 97 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 404587 | 10.650 | ug/L | | 97 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 273462M6 | 10.639 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 360456 | 10.751 | ug/L | | 95 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 52857M1 | 10.045 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 21880 | 9.742 | ug/L | # | 81 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 282364M4 | 10.628 | ug/L | | |
| 94) tert-Butylbenzene | 11.449 | 119 | 314412 | 10.709 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 346392 | 10.787 | ug/L | | 93 |
| 98) sec-Butylbenzene | 11.635 | 105 | 461585 | 10.745 | ug/L | | 96 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 402806 | 10.876 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 210767 | 10.399 | ug/L | | 96 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 212174 | 10.184 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 227743 | 10.616 | ug/L | | 96 |
| 103) n-Butylbenzene | 12.243 | 91 | 333345 | 10.948 | ug/L | | 97 |
| 104) 1,2-Dichlorobenzene | 12.390 | 146 | 188882 | 10.316 | ug/L | | 95 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 312190 | 10.342 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 10636 | 9.489 | ug/L | | 98 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 154474 | 10.386 | ug/L | | 95 |
| 108) Hexachlorobutadiene | 13.781 | 225 | 55015 | 10.140 | ug/L | | 99 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 123657 | 10.121 | ug/L | | 98 |
| 110) Naphthalene | 14.104 | 128 | 215152 | 9.891 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.280 | 180 | 106376 | 10.240 | ug/L | | 98 |

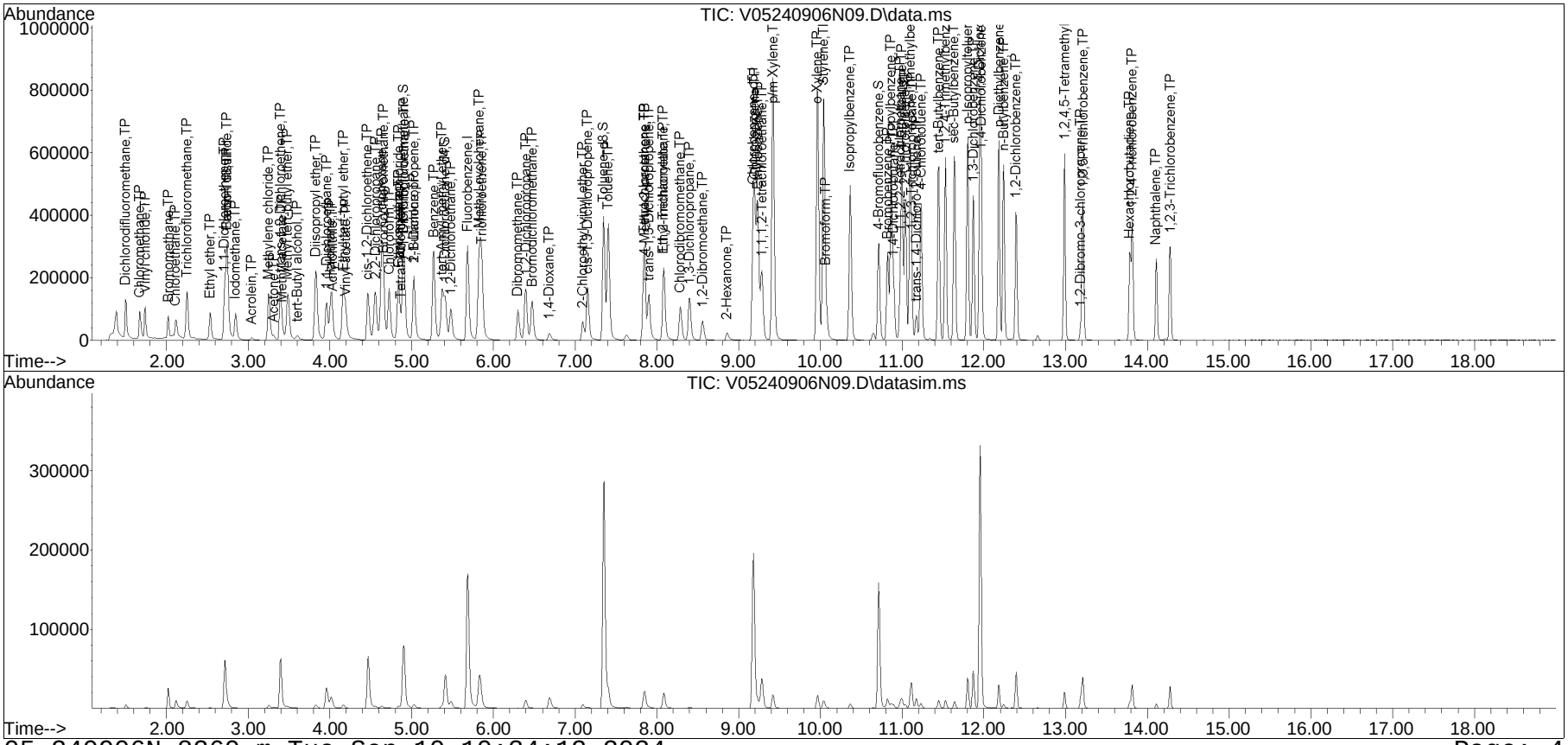
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N09.D
Acq On : 6 Sep 2024 8:12 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 11:22:34 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

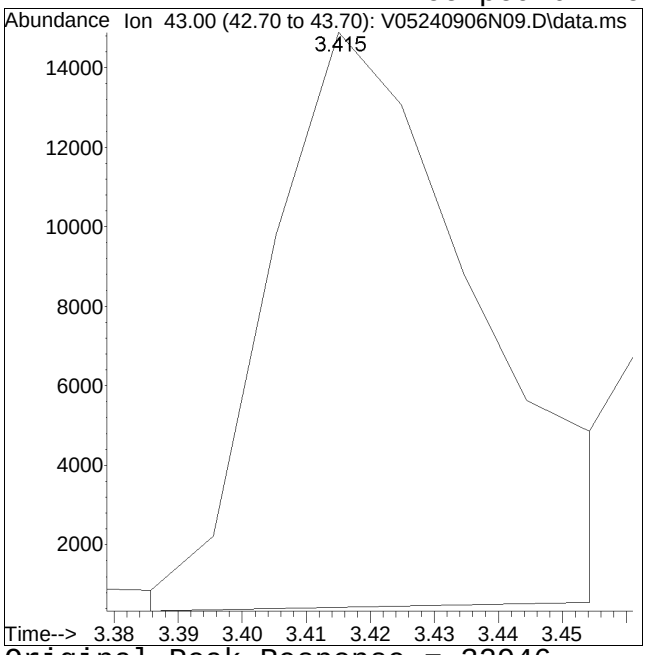


# Manual Integration Report

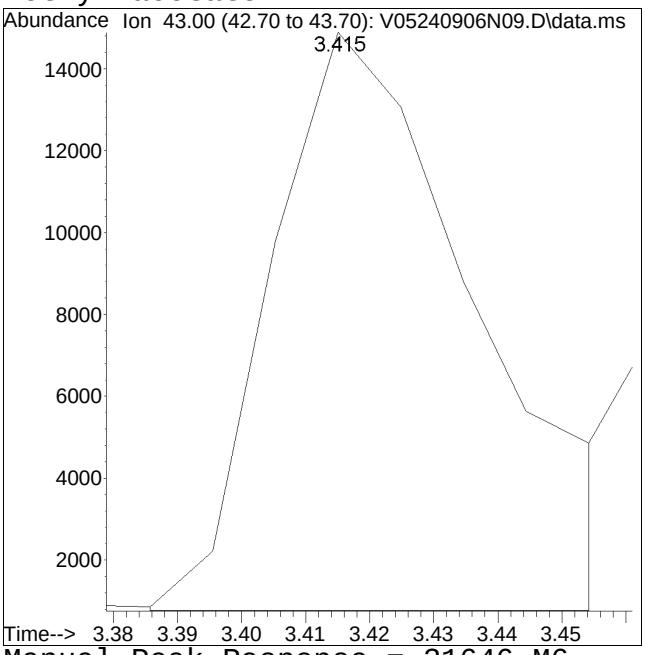
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N09.D
Date Inj'd : 9/6/2024 8:12 pm
Sample : I8260STD10PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:22 am

Compound #19: Methyl acetate




Original Peak Response = 32946



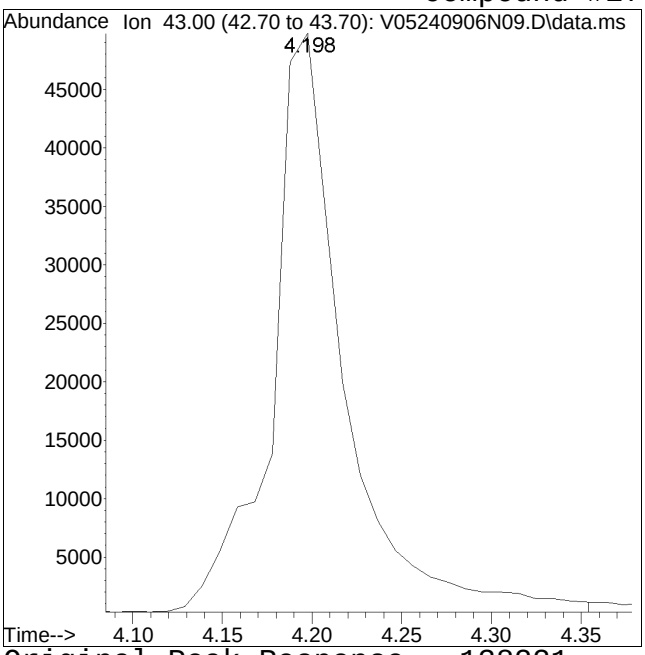

Manual Peak Response = 31646 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

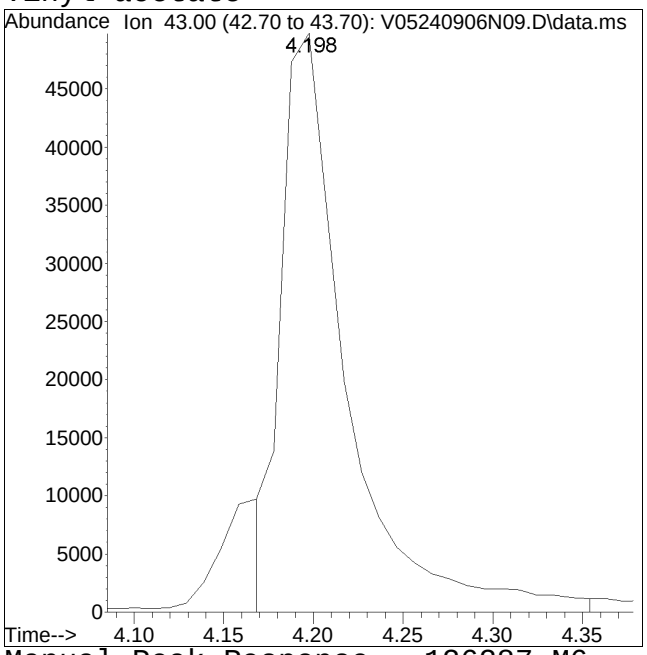
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N09.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:12 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 9/9/2024 11:22 am

Compound #27: Vinyl acetate




Original Peak Response = 138221




Manual Peak Response = 126287 M6

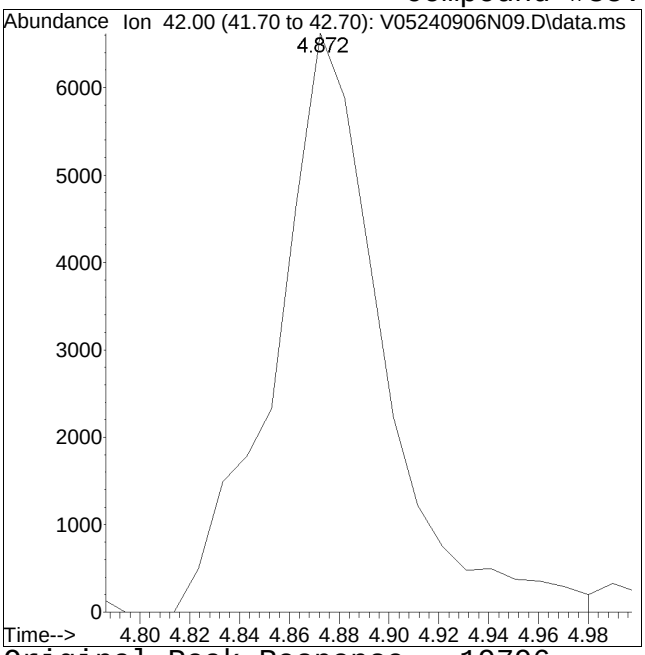
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

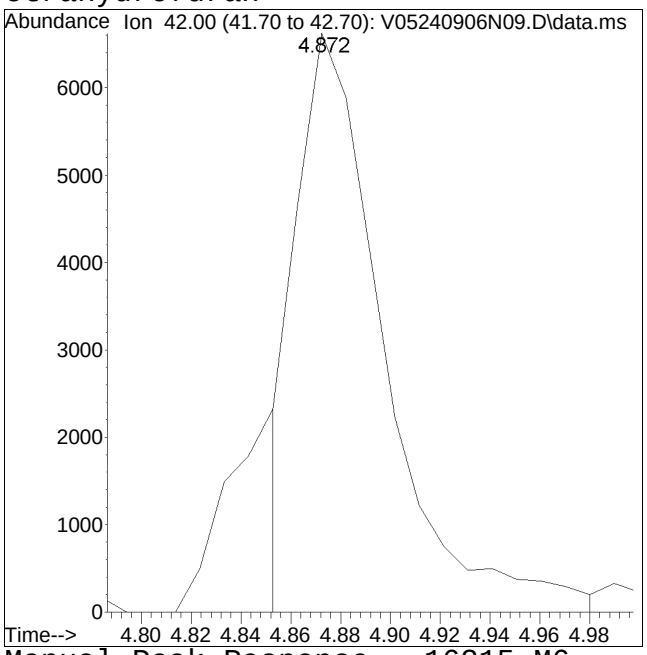
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N09.D
Date Inj'd : 9/6/2024 8:12 pm
Sample : I8260STD10PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:22 am

## Compound #35: Tetrahydrofuran




Original Peak Response = 19796



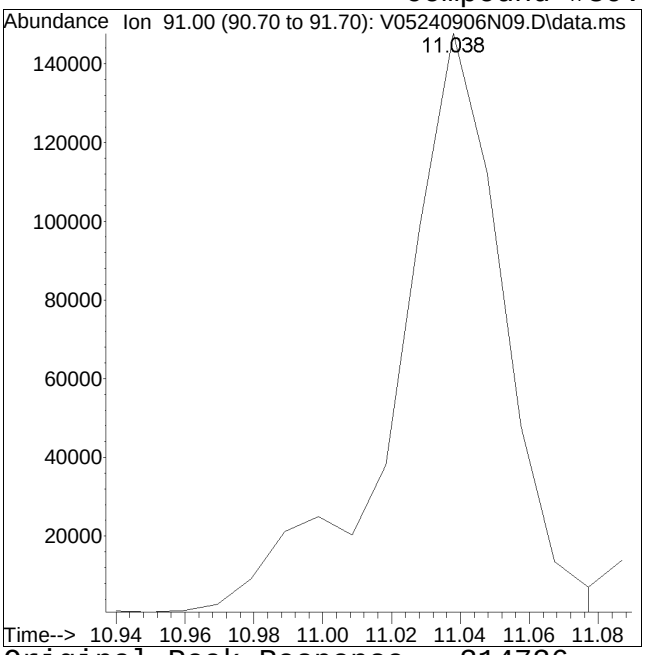

Manual Peak Response = 16215 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

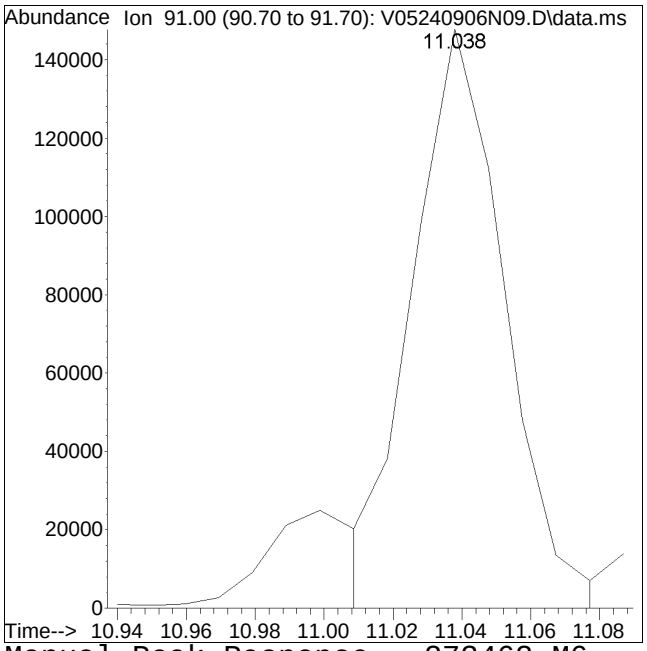
# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N09.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:12 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 9/9/2024 11:22 am

## Compound #89: 2-Chlorotoluene




Original Peak Response = 314736



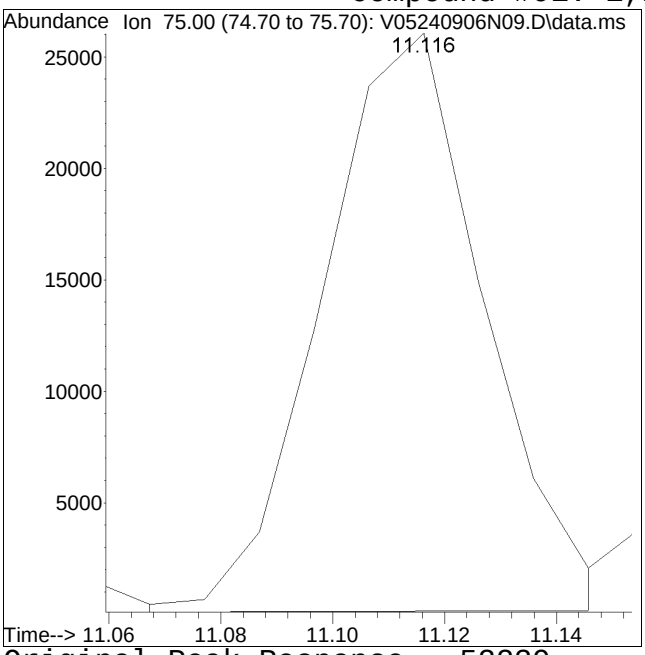

Manual Peak Response = 273462 M6

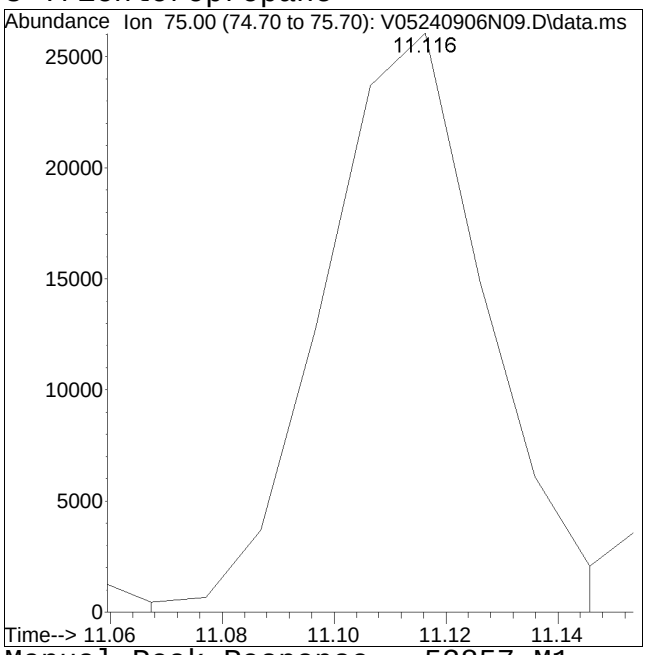
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N09.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:12 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 9/9/2024 11:22 am

Compound #91: 1,2,3-Trichloropropane



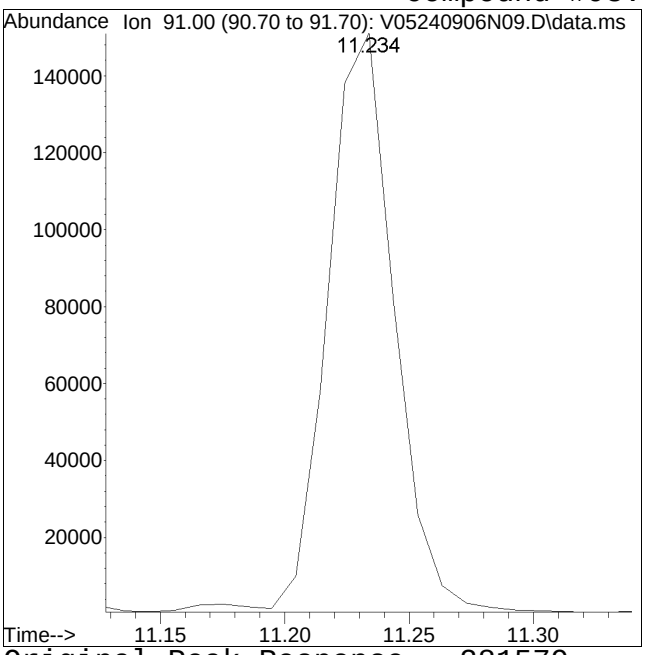




Original Peak Response = 52239 Manual Peak Response = 52857 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

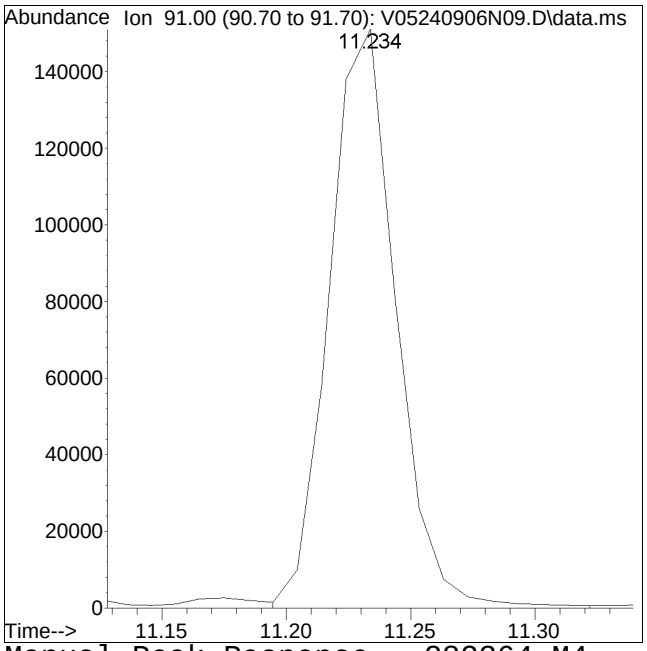
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N09.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:12 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 9/9/2024 11:22 am

Compound #93: 4-Chlorotoluene




Original Peak Response = 281579




Manual Peak Response = 282364 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N10.D
Acq On : 6 Sep 2024 8:37 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 11:22:43 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 348720 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 107.89% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 288773 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 112.26% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 189669 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 112.42% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 96225 | 9.874 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.74% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 98415 | 9.768 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.68% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 347341 | 9.959 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.59% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 126170 | 9.587 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.87% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.508 | 85 | 321760 | 31.521 | ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 309571 | 31.416 | ug/L | 96 |
| 4) Vinyl chloride | 1.743 | 62 | 272089 | 31.734 | ug/L | 94 |
| 5) Bromomethane | 2.026 | 94 | 122230 | 29.287 | ug/L | 99 |
| 6) Chloroethane | 2.114 | 64 | 159984 | 27.603 | ug/L | 96 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 403978 | 31.310 | ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 97106 | 31.255 | ug/L # | 54 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 197120 | 30.704 | ug/L | 97 |
| 11) Carbon disulfide | 2.740 | 76 | 607390 | 30.735 | ug/L | 100 |
| 12) Freon-113 | 2.750 | 101 | 217421 | 30.797 | ug/L | 81 |
| 13) Iodomethane | 2.848 | 142 | 344976 | 31.998 | ug/L | 92 |
| 14) Acrolein | 3.043 | 56 | 25499 | 29.834 | ug/L | 99 |
| 15) Methylene chloride | 3.249 | 84 | 226654 | 29.737 | ug/L # | 73 |
| 17) Acetone | 3.307 | 43 | 46989 | 28.507 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 235924 | 31.088 | ug/L | 97 |
| 19) Methyl acetate | 3.415 | 43 | 113176M6 | 31.106 | ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 526825 | 31.527 | ug/L # | 86 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 53062 | 140.345 | ug/L | 95 |
| 22) Diisopropyl ether | 3.826 | 45 | 818807 | 32.210 | ug/L # | 92 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 427334 | 30.915 | ug/L | 98 |
| 24) Halothane | 4.012 | 117 | 190341 | 31.182 | ug/L | 100 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N10.D
Acq On : 6 Sep 2024 8:37 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 11:22:43 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.021 | 53 | 57490 | 29.968 | ug/L | # | 87 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 605464 | 32.319 | ug/L | # | 76 |
| 27) Vinyl acetate | 4.188 | 43 | 463877M6 | 32.947 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 267478 | 31.116 | ug/L | | 96 |
| 29) 2,2-Dichloropropane | 4.559 | 77 | 359206 | 31.871 | ug/L | | 86 |
| 30) Bromochloromethane | 4.657 | 128 | 128457 | 30.963 | ug/L | # | 84 |
| 31) Cyclohexane | 4.638 | 56 | 439447 | 32.954 | ug/L | | 82 |
| 32) Chloroform | 4.726 | 83 | 433957 | 30.030 | ug/L | # | 95 |
| 33) Ethyl acetate | 4.833 | 43 | 172915 | 29.715 | ug/L | # | 93 |
| 34) Carbon tetrachloride | 4.843 | 117 | 389468 | 31.393 | ug/L | | 98 |
| 35) Tetrahydrofuran | 4.872 | 42 | 56490M6 | 30.186 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 421616 | 31.296 | ug/L | | 98 |
| 39) 2-Butanone | 5.019 | 43 | 78378 | 31.281 | ug/L | # | 61 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 326214 | 32.698 | ug/L | | 93 |
| 41) Benzene | 5.264 | 78 | 946283 | 32.209 | ug/L | | 96 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 500104 | 32.300 | ug/L | | 96 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 297767 | 30.699 | ug/L | | 97 |
| 47) Methyl cyclohexane | 5.831 | 83 | 435215 | 32.303 | ug/L | | 89 |
| 48) Trichloroethene | 5.860 | 95 | 269794 | 30.854 | ug/L | | 91 |
| 50) Dibromomethane | 6.300 | 93 | 137065 | 30.209 | ug/L | # | 86 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 232377 | 31.674 | ug/L | # | 89 |
| 53) 2-Chloroethyl vinyl ether | 7.093 | 63 | 122340 | 33.912 | ug/L | | 91 |
| 54) Bromodichloromethane | 6.476 | 83 | 328243 | 30.550 | ug/L | | 99 |
| 57) 1,4-Dioxane | 6.682 | 88 | 28027 | 611.994 | ug/L | # | 90 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 367855 | 32.546 | ug/L | # | 85 |
| 61) Toluene | 7.406 | 92 | 629585 | 31.056 | ug/L | | 96 |
| 62) 4-Methyl-2-pentanone | 7.846 | 58 | 50791 | 33.626 | ug/L | # | 66 |
| 63) Tetrachloroethene | 7.846 | 166 | 336574 | 31.464 | ug/L | | 90 |
| 65) trans-1,3-Dichloropropene | 7.895 | 75 | 318951 | 32.340 | ug/L | # | 81 |
| 67) Ethyl methacrylate | 8.081 | 69 | 207678 | 33.914 | ug/L | | 99 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 156421 | 31.186 | ug/L | | 99 |
| 69) Chlorodibromomethane | 8.286 | 129 | 260199 | 30.425 | ug/L | | 98 |
| 70) 1,3-Dichloropropane | 8.393 | 76 | 310128 | 31.510 | ug/L | | 98 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 217487 | 32.206 | ug/L | | 99 |
| 72) 2-Hexanone | 8.853 | 43 | 101909 | 30.456 | ug/L | # | 86 |
| 73) Chlorobenzene | 9.196 | 112 | 739981 | 30.877 | ug/L | # | 86 |
| 74) Ethylbenzene | 9.235 | 91 | 1297541 | 32.051 | ug/L | | 93 |
| 75) 1,1,1,2-Tetrachloroethane | 9.284 | 131 | 274658 | 31.217 | ug/L | | 99 |
| 76) p/m Xylene | 9.422 | 106 | 1034153 | 66.151 | ug/L | | 83 |
| 77) o Xylene | 9.960 | 106 | 983912 | 66.436 | ug/L | | 84 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N10.D
Acq On : 6 Sep 2024 8:37 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 11:22:43 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 1662894 | 67.858 | ug/L | # | 83 |
| 80) Bromoform | 10.068 | 173 | 168907 | 30.058 | ug/L | | 96 |
| 82) Isopropylbenzene | 10.362 | 105 | 1411164 | 32.169 | ug/L | | 95 |
| 84) Bromobenzene | 10.822 | 156 | 347435 | 30.124 | ug/L | | 99 |
| 85) n-Propylbenzene | 10.862 | 91 | 1621058 | 31.627 | ug/L | | 93 |
| 86) 1,4-Dichlorobutane | 10.891 | 55 | 335455 | 30.460 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 225404 | 29.587 | ug/L | | 97 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 1371037 | 32.105 | ug/L | | 96 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 902469M6 | 31.231 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 1203442 | 31.931 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 176877M1 | 29.903 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.165 | 53 | 76699 | 30.377 | ug/L | # | 76 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 928420 | 31.086 | ug/L | # | 86 |
| 94) tert-Butylbenzene | 11.449 | 119 | 1062008 | 32.178 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 1180884 | 32.714 | ug/L | | 94 |
| 98) sec-Butylbenzene | 11.636 | 105 | 1557570 | 32.254 | ug/L | | 96 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 1377693 | 33.091 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 703825 | 30.889 | ug/L | | 95 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 704199 | 30.068 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 788442 | 32.694 | ug/L | | 96 |
| 103) n-Butylbenzene | 12.243 | 91 | 1098532 | 32.093 | ug/L | | 96 |
| 104) 1,2-Dichlorobenzene | 12.390 | 146 | 638814 | 31.037 | ug/L | | 95 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 1131040 | 33.329 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 38341 | 30.429 | ug/L | | 99 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 522757 | 31.265 | ug/L | | 95 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 188361 | 30.883 | ug/L | | 98 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 434333 | 31.624 | ug/L | | 98 |
| 110) Naphthalene | 14.104 | 128 | 794654 | 32.497 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.271 | 180 | 366274 | 31.364 | ug/L | | 97 |

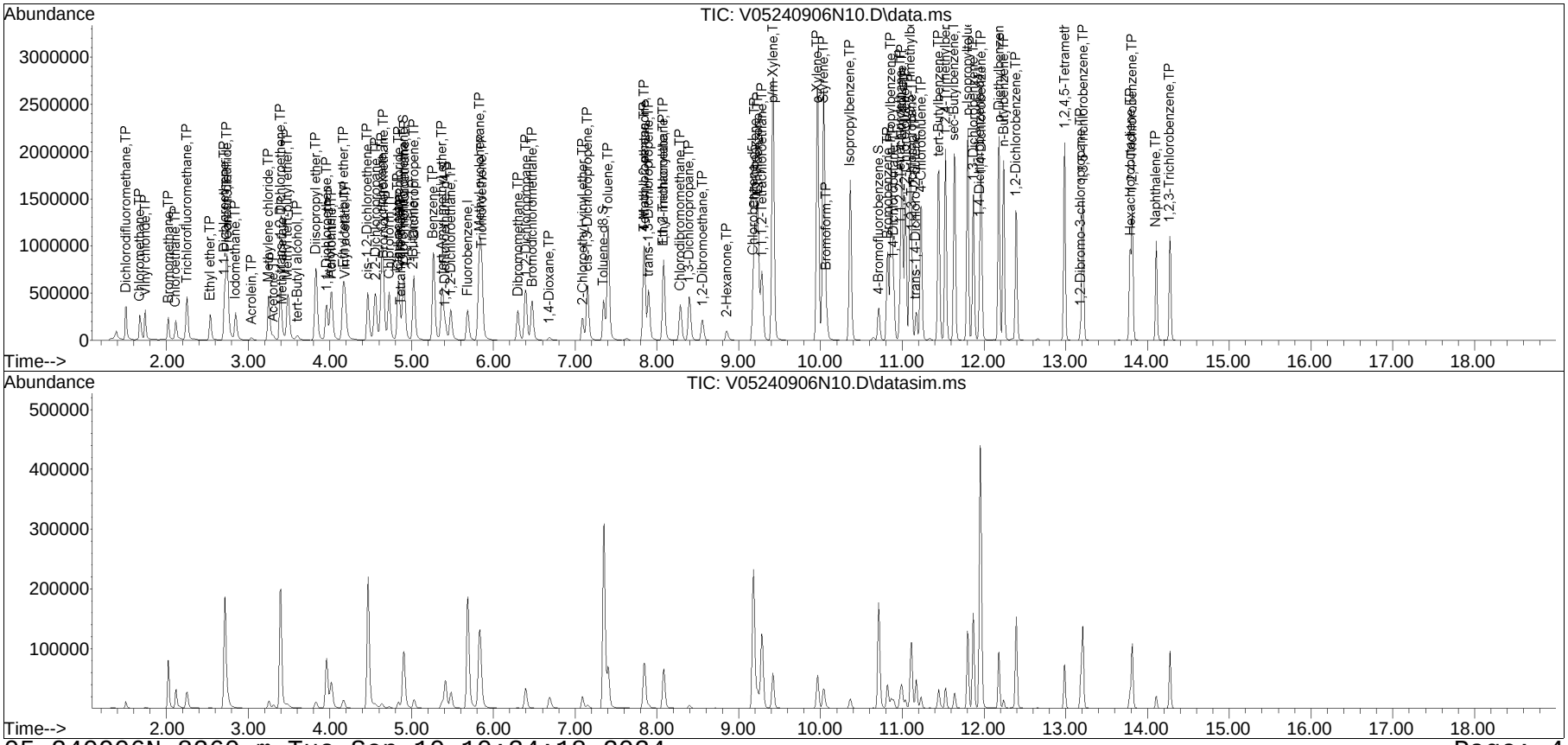
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N10.D
Acq On : 6 Sep 2024 8:37 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 11:22:43 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

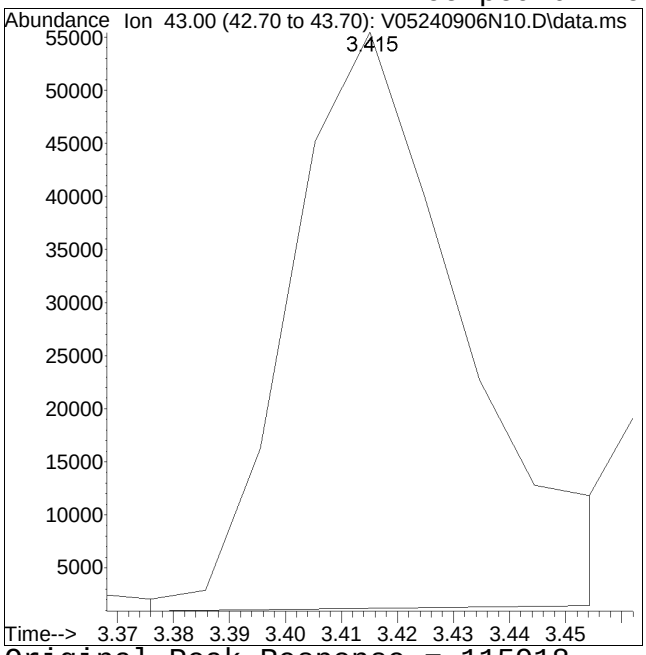
Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•



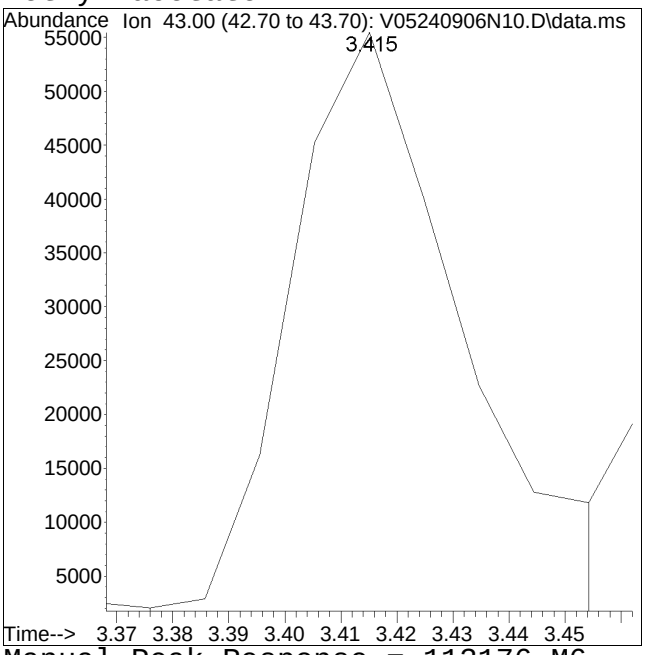
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N10.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:37 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 9/9/2024 11:22 am

Compound #19: Methyl acetate




Original Peak Response = 115918



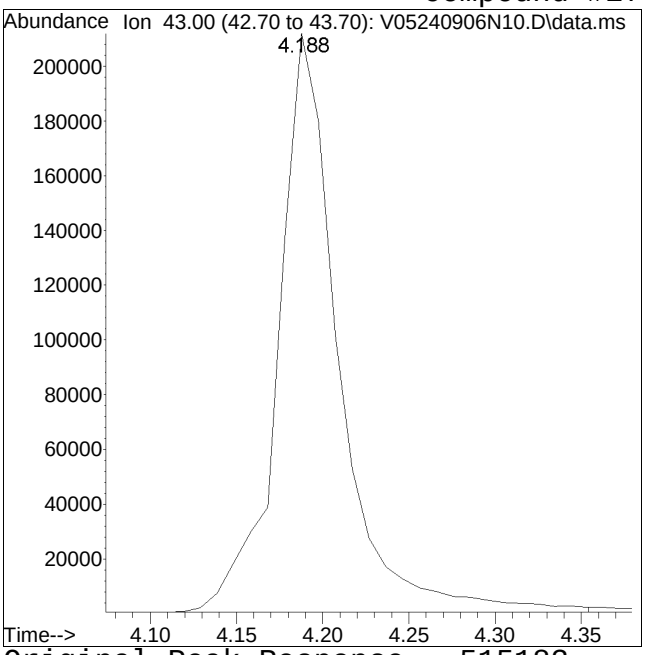

Manual Peak Response = 113176 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

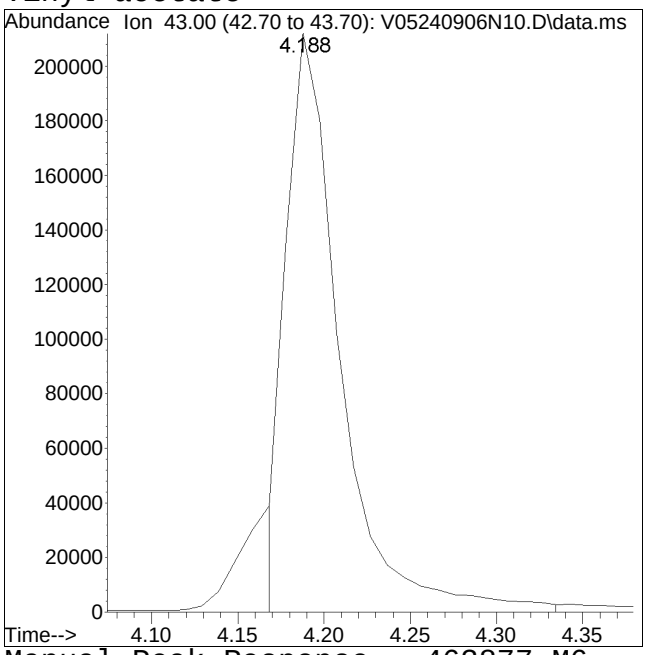
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N10.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:37 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 9/9/2024 11:22 am

Compound #27: Vinyl acetate




Original Peak Response = 515183



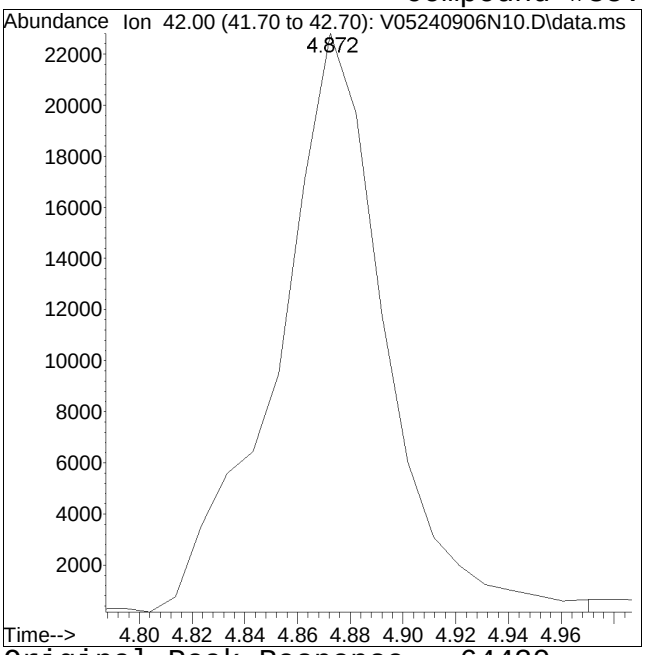

Manual Peak Response = 463877 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

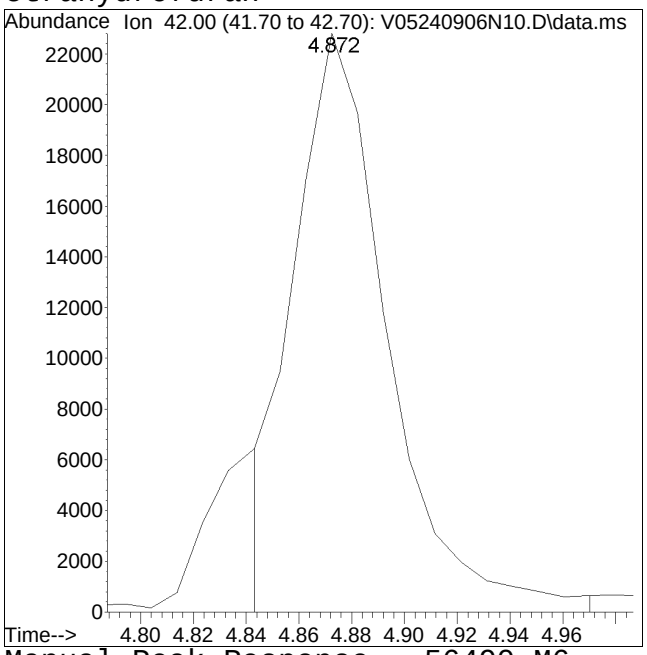
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N10.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:37 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 9/9/2024 11:22 am

Compound #35: Tetrahydrofuran




Original Peak Response = 64430



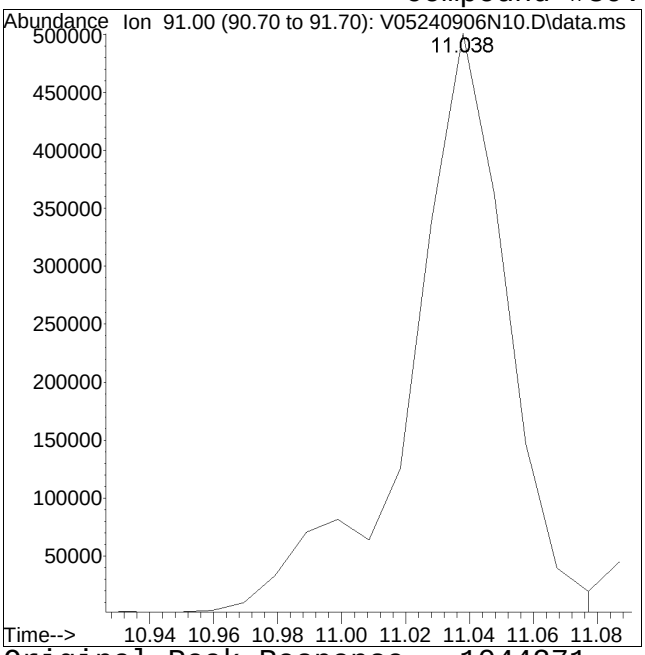

Manual Peak Response = 56490 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

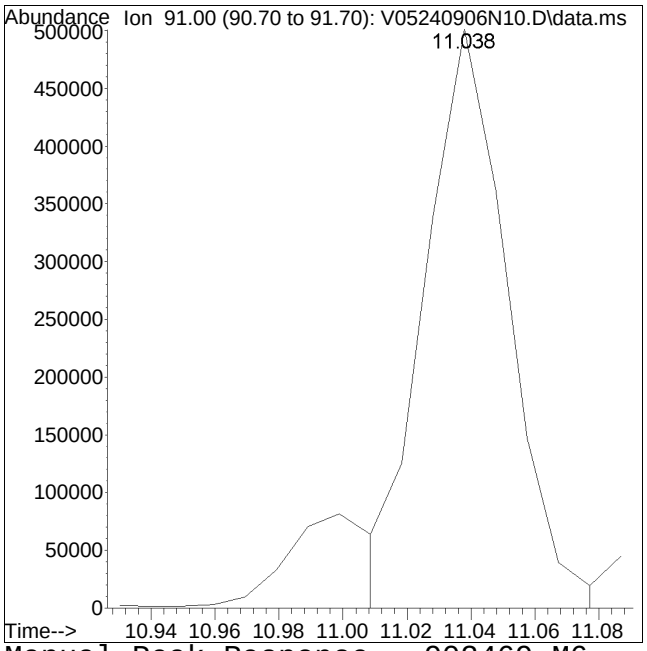
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N10.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:37 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 9/9/2024 11:22 am

Compound #89: 2-Chlorotoluene




Original Peak Response = 1044271



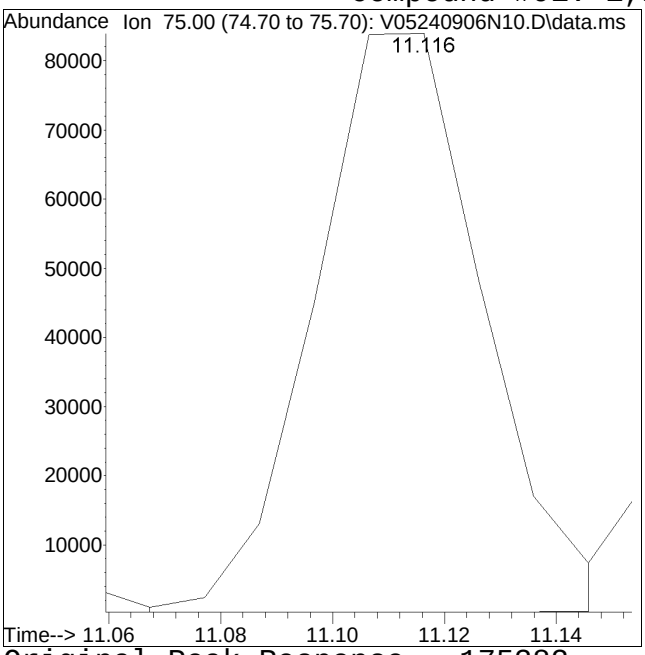

Manual Peak Response = 902469 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

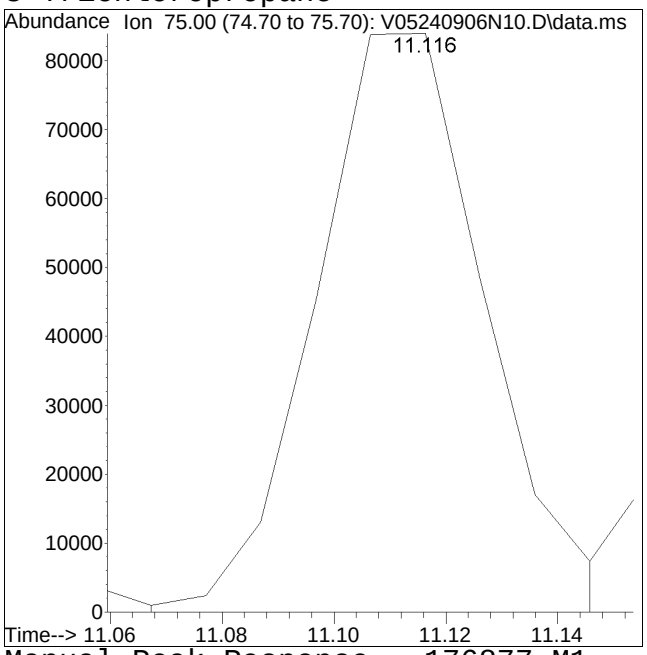
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N10.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 8:37 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 9/9/2024 11:22 am

Compound #91: 1,2,3-Trichloropropane




Original Peak Response = 175382




Manual Peak Response = 176877 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N11.D
Acq On : 6 Sep 2024 9:02 pm
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 09 11:22:52 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 379563 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 117.43% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 321037 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 124.80% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 203819 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 120.80% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 103672 | 9.774 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.74% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 104406 | 9.520 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.20% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 377792 | 9.744 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.44% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 137646 | 9.733 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.33% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 915262 | 82.377 | ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 865328 | 80.680 | ug/L | 97 |
| 4) Vinyl chloride | 1.743 | 62 | 779401 | 83.517 | ug/L | 100 |
| 5) Bromomethane | 2.026 | 94 | 395161 | 86.988 | ug/L | 100 |
| 6) Chloroethane | 2.114 | 64 | 423074 | 67.063 | ug/L | 95 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 1130785 | 80.518 | ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 279555 | 82.667 | ug/L # | 56 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 564519 | 80.786 | ug/L | 98 |
| 11) Carbon disulfide | 2.740 | 76 | 1750350 | 81.374 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 619681 | 80.644 | ug/L | 80 |
| 13) Iodomethane | 2.848 | 142 | 1028701 | 87.662 | ug/L | 92 |
| 14) Acrolein | 3.034 | 56 | 77788 | 83.617 | ug/L | 99 |
| 15) Methylene chloride | 3.249 | 84 | 646885 | 77.976 | ug/L # | 72 |
| 17) Acetone | 3.308 | 43 | 136711 | 76.200 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 694635 | 84.094 | ug/L | 96 |
| 19) Methyl acetate | 3.405 | 43 | 333226M6 | 84.144 | ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 1577701 | 86.743 | ug/L # | 87 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 165824 | 402.952 | ug/L | 95 |
| 22) Diisopropyl ether | 3.826 | 45 | 2415066 | 87.283 | ug/L # | 92 |
| 23) 1,1-Dichloroethane | 3.953 | 63 | 1218037 | 80.958 | ug/L | 98 |
| 24) Halothane | 4.012 | 117 | 552191 | 83.110 | ug/L | 100 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N11.D
Acq On : 6 Sep 2024 9:02 pm
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 09 11:22:52 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.022 | 53 | 171494 | 82.131 | ug/L | # | 85 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 1811471 | 88.836 | ug/L | # | 75 |
| 27) Vinyl acetate | 4.188 | 43 | 1471805M6 | 96.040 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 778715 | 83.228 | ug/L | | 95 |
| 29) 2,2-Dichloropropane | 4.550 | 77 | 1023559 | 83.436 | ug/L | | 87 |
| 30) Bromochloromethane | 4.657 | 128 | 358357 | 79.360 | ug/L | # | 86 |
| 31) Cyclohexane | 4.638 | 56 | 1264952 | 87.151 | ug/L | | 83 |
| 32) Chloroform | 4.726 | 83 | 1232500 | 78.358 | ug/L | | 95 |
| 33) Ethyl acetate | 4.833 | 43 | 541356 | 85.471 | ug/L | # | 91 |
| 34) Carbon tetrachloride | 4.843 | 117 | 1140004 | 84.422 | ug/L | | 99 |
| 35) Tetrahydrofuran | 4.873 | 42 | 167470M6 | 82.217 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 1214445 | 82.822 | ug/L | | 99 |
| 39) 2-Butanone | 5.019 | 43 | 236163 | 86.595 | ug/L | # | 59 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 948684 | 87.365 | ug/L | | 93 |
| 41) Benzene | 5.264 | 78 | 2712471 | 84.824 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 1531007 | 90.846 | ug/L | | 94 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 843375 | 79.884 | ug/L | | 97 |
| 47) Methyl cyclohexane | 5.831 | 83 | 1295309 | 88.329 | ug/L | | 90 |
| 48) Trichloroethene | 5.851 | 95 | 780456 | 82.001 | ug/L | | 91 |
| 50) Dibromomethane | 6.301 | 93 | 404490 | 81.906 | ug/L | # | 86 |
| 51) 1,2-Dichloropropane | 6.389 | 63 | 674569 | 84.476 | ug/L | # | 89 |
| 53) 2-Chloroethyl vinyl ether | 7.083 | 63 | 383068 | 97.555 | ug/L | | 90 |
| 54) Bromodichloromethane | 6.467 | 83 | 969611 | 82.909 | ug/L | | 99 |
| 57) 1,4-Dioxane | 6.692 | 88 | 42405 | 850.708 | ug/L | # | 87 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 1093476 | 88.884 | ug/L | # | 85 |
| 61) Toluene | 7.406 | 92 | 1843729 | 81.808 | ug/L | | 96 |
| 62) 4-Methyl-2-pentanone | 7.846 | 58 | 162305 | 96.654 | ug/L | # | 68 |
| 63) Tetrachloroethene | 7.846 | 166 | 991870 | 83.404 | ug/L | | 90 |
| 65) trans-1,3-Dichloropropene | 7.895 | 75 | 957067 | 87.289 | ug/L | | 82 |
| 67) Ethyl methacrylate | 8.081 | 69 | 648282 | 95.226 | ug/L | | 97 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 460874 | 82.652 | ug/L | | 99 |
| 69) Chlorodibromomethane | 8.286 | 129 | 800088 | 84.151 | ug/L | | 98 |
| 70) 1,3-Dichloropropane | 8.394 | 76 | 902889 | 82.516 | ug/L | | 98 |
| 71) 1,2-Dibromoethane | 8.550 | 107 | 653562 | 87.055 | ug/L | | 100 |
| 72) 2-Hexanone | 8.844 | 43 | 327320 | 87.991 | ug/L | # | 88 |
| 73) Chlorobenzene | 9.196 | 112 | 2196015 | 82.425 | ug/L | # | 85 |
| 74) Ethylbenzene | 9.236 | 91 | 3816602 | 84.802 | ug/L | | 93 |
| 75) 1,1,1,2-Tetrachloroethane | 9.285 | 131 | 828074 | 84.658 | ug/L | | 99 |
| 76) p/m Xylene | 9.422 | 106 | 3014030 | 173.421 | ug/L | | 84 |
| 77) o Xylene | 9.970 | 106 | 2897572 | 175.989 | ug/L | | 83 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N11.D
Acq On : 6 Sep 2024 9:02 pm
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 09 11:22:52 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 4844527 | 177.824 | ug/L | # | 84 |
| 80) Bromoform | 10.068 | 173 | 521118 | 86.299 | ug/L | | 96 |
| 82) Isopropylbenzene | 10.362 | 105 | 4160888 | 88.267 | ug/L | | 95 |
| 84) Bromobenzene | 10.823 | 156 | 1016525 | 82.018 | ug/L | | 99 |
| 85) n-Propylbenzene | 10.862 | 91 | 4759237 | 86.407 | ug/L | | 93 |
| 86) 1,4-Dichlorobutane | 10.891 | 55 | 978453 | 82.678 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 669145 | 81.736 | ug/L | | 98 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 3995213 | 87.058 | ug/L | | 96 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 2585593M6 | 83.267 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 3465604 | 85.570 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 514742M1 | 80.980 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 215698 | 79.497 | ug/L | # | 67 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 2677970 | 83.441 | ug/L | # | 86 |
| 94) tert-Butylbenzene | 11.450 | 119 | 3135178 | 88.399 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 3451085 | 88.967 | ug/L | | 94 |
| 98) sec-Butylbenzene | 11.636 | 105 | 4574058 | 88.142 | ug/L | | 96 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 4078911 | 91.171 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 2047928 | 83.640 | ug/L | | 96 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 2013905 | 80.020 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 2352738 | 90.788 | ug/L | | 97 |
| 103) n-Butylbenzene | 12.243 | 91 | 3282341 | 89.236 | ug/L | | 96 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 1868727 | 84.490 | ug/L | | 95 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 3512932 | 96.331 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 124416 | 91.886 | ug/L | | 97 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 1561071 | 86.883 | ug/L | | 95 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 578437 | 88.254 | ug/L | | 99 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 1317531 | 89.269 | ug/L | | 98 |
| 110) Naphthalene | 14.104 | 128 | 2503822 | 95.285 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.281 | 180 | 1102232 | 87.832 | ug/L | | 98 |

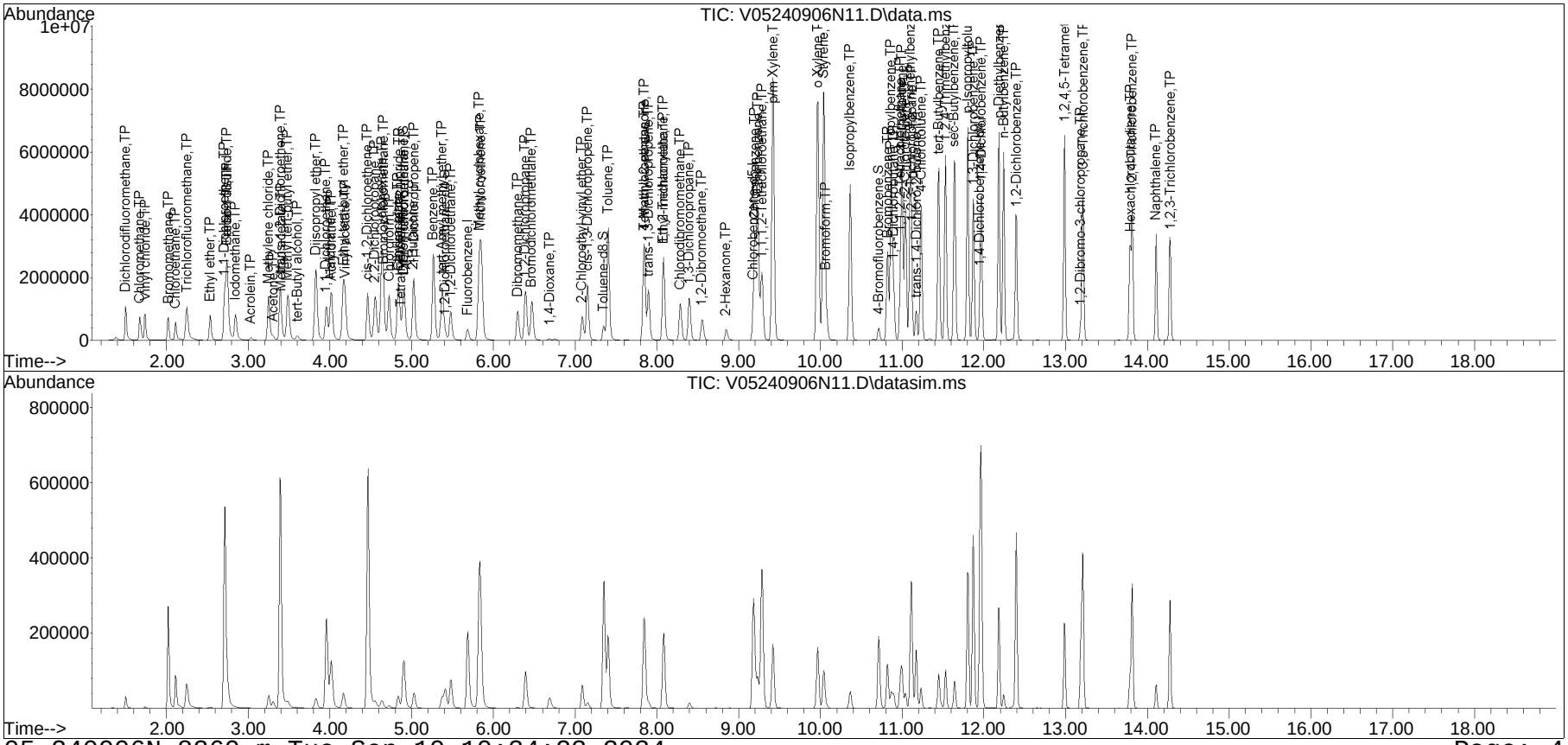
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N11.D
Acq On : 6 Sep 2024 9:02 pm
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 09 11:22:52 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

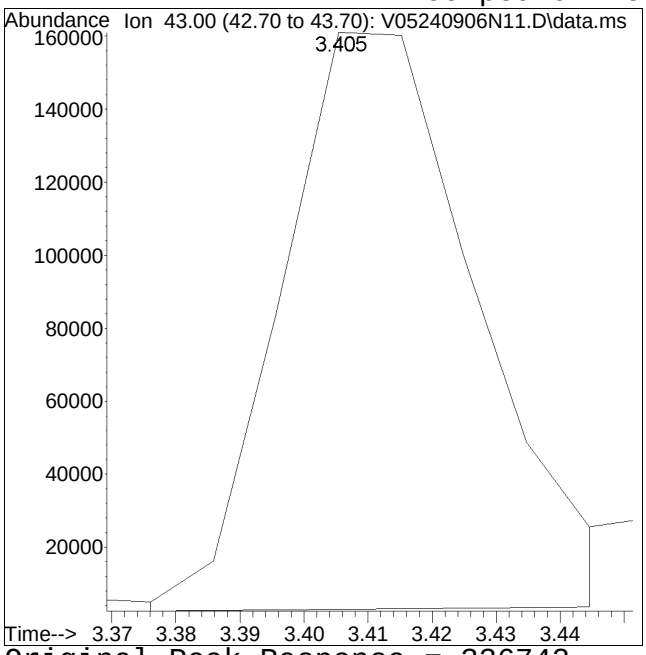


Manual Integration Report

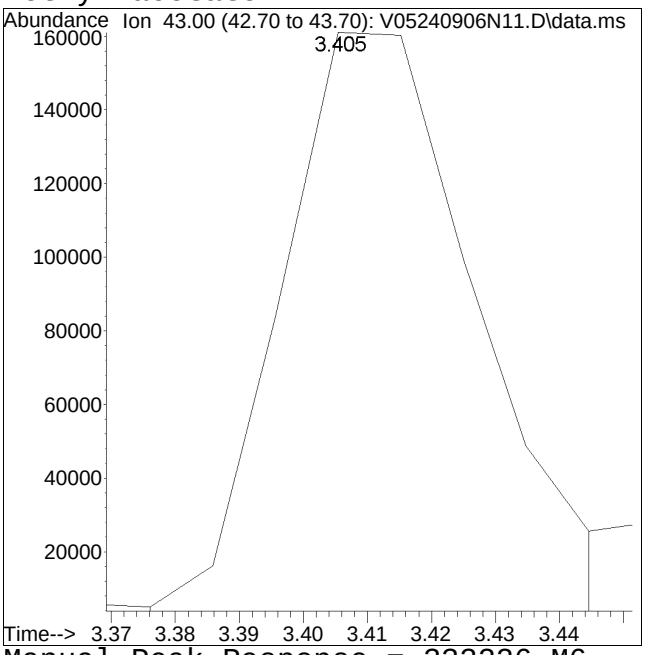
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N11.D
Date Inj'd : 9/6/2024 9:02 pm
Sample : I8260STD80PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:22 am

Compound #19: Methyl acetate




Original Peak Response = 336742



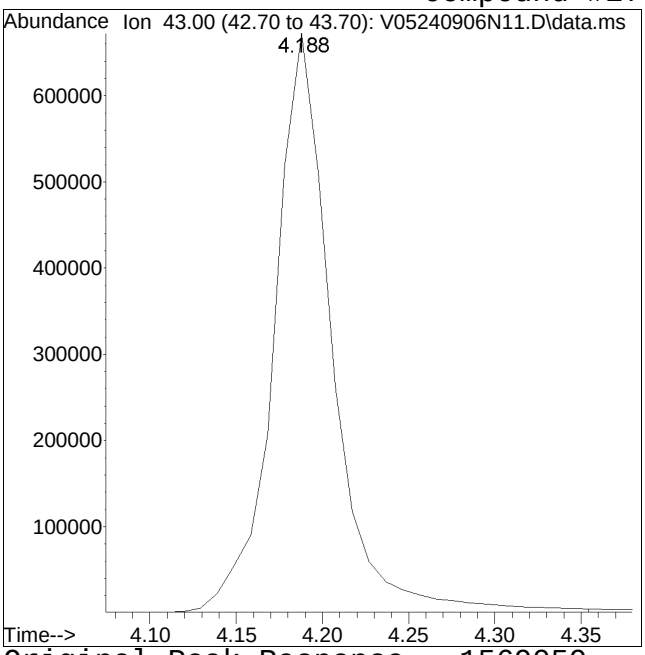

Manual Peak Response = 333226 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

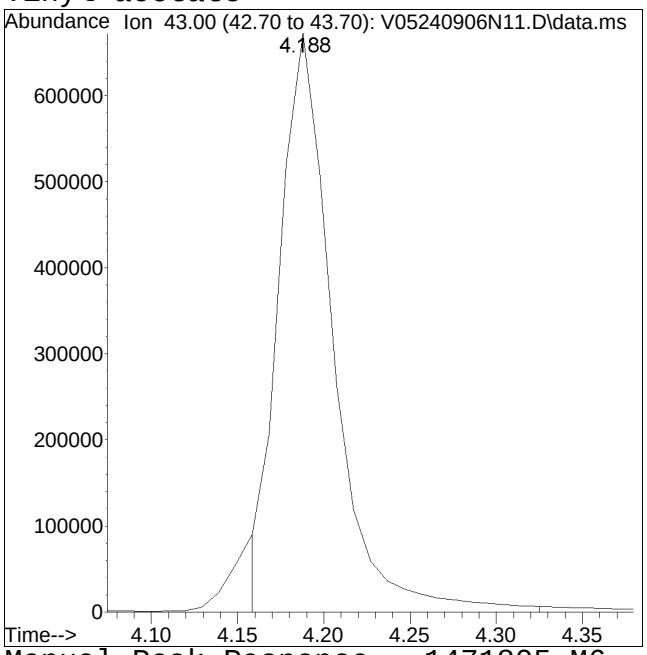
# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N11.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:02 pm Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 9/9/2024 11:22 am

## Compound #27: Vinyl acetate




Original Peak Response = 1569059



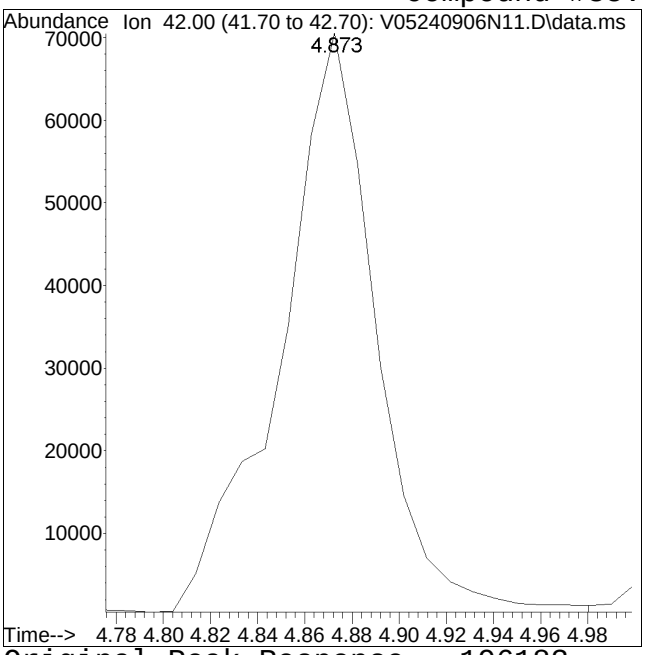

Manual Peak Response = 1471805 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

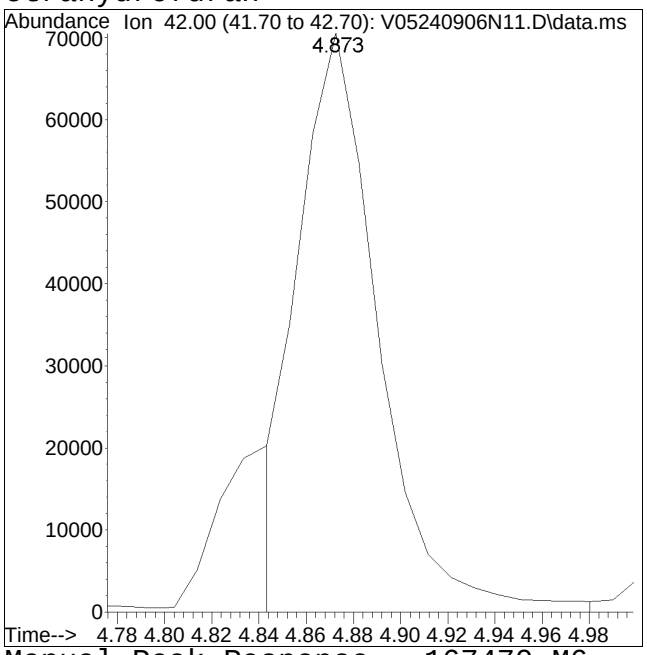
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N11.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:02 pm Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 9/9/2024 11:22 am

Compound #35: Tetrahydrofuran




Original Peak Response = 196183



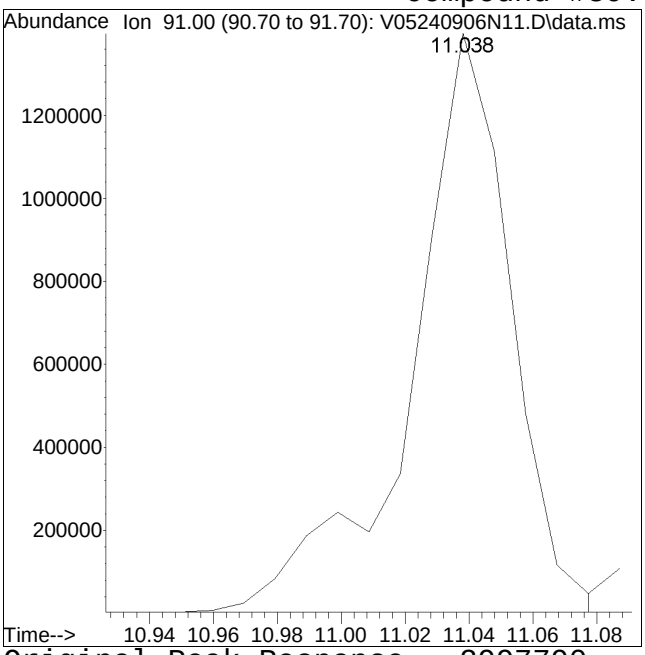

Manual Peak Response = 167470 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

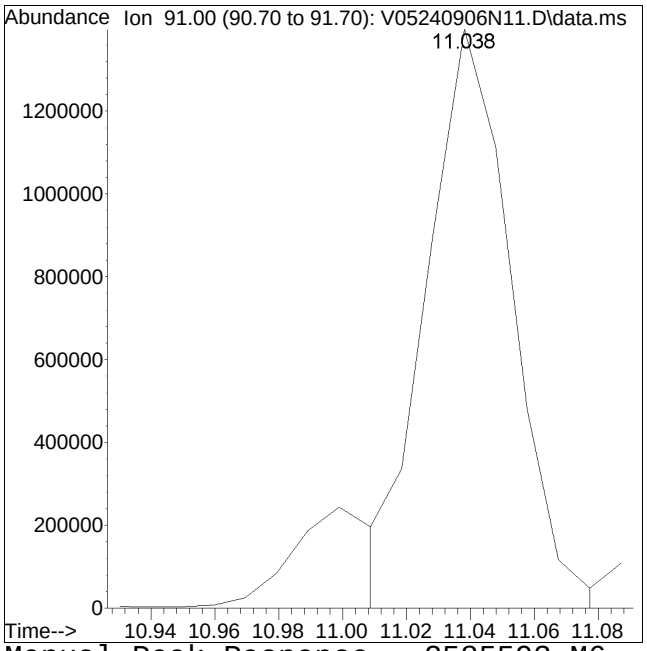
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N11.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:02 pm Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 9/9/2024 11:22 am

Compound #89: 2-Chlorotoluene




Original Peak Response = 2997790



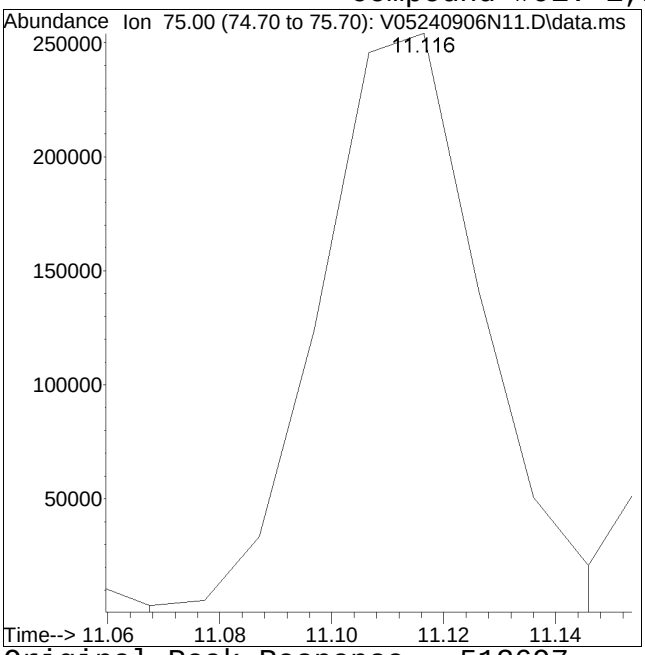

Manual Peak Response = 2585593 M6

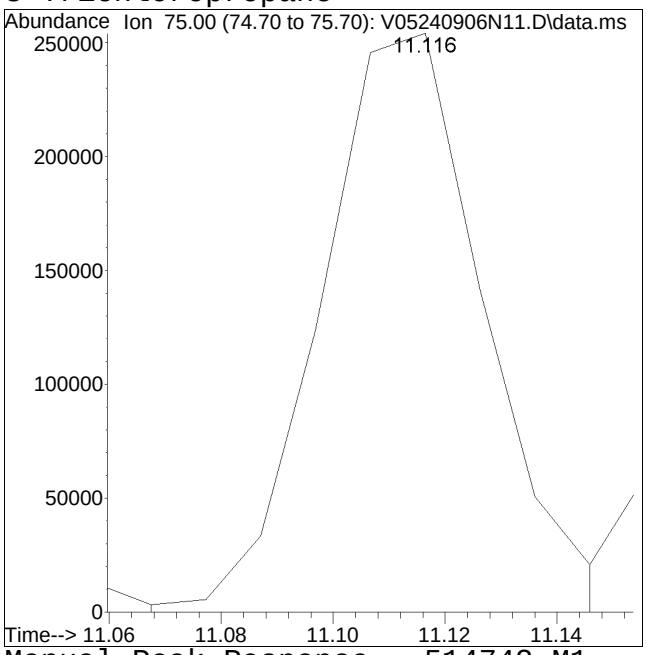
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N11.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:02 pm Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 9/9/2024 11:22 am

Compound #91: 1,2,3-Trichloropropane




Original Peak Response = 512697 Manual Peak Response = 514742 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N12.D
Acq On : 6 Sep 2024 9:28 pm
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 11:23:01 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 420265 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 130.02% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 356774 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 138.69% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 223852 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 132.68% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 114747 | 9.770 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.70% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 116649 | 9.607 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.07% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 415205 | 9.636 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.36% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 152344 | 9.808 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.08% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 1482950 | 120.544 | ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 1366311 | 115.052 | ug/L | 97 |
| 4) Vinyl chloride | 1.743 | 62 | 1273343 | 123.230 | ug/L | 99 |
| 5) Bromomethane | 2.026 | 94 | 672579 | 133.717 | ug/L | 100 |
| 6) Chloroethane | 2.114 | 64 | 584778M1 | 83.718 | ug/L | |
| 7) Trichlorofluoromethane | 2.251 | 101 | 1822778 | 117.221 | ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 449579 | 120.069 | ug/L # | 55 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 902154 | 116.600 | ug/L | 98 |
| 11) Carbon disulfide | 2.740 | 76 | 2743734 | 115.203 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 987365 | 116.049 | ug/L | 82 |
| 13) Iodomethane | 2.848 | 142 | 1666852 | 128.287 | ug/L | 92 |
| 14) Acrolein | 3.034 | 56 | 137839 | 133.819 | ug/L | 98 |
| 15) Methylene chloride | 3.249 | 84 | 1064041 | 115.839 | ug/L # | 74 |
| 17) Acetone | 3.308 | 43 | 235934 | 118.769 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 1123565 | 122.848 | ug/L | 95 |
| 19) Methyl acetate | 3.405 | 43 | 558286M6 | 127.321 | ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 2639051 | 131.044 | ug/L | 88 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 307562 | 674.993 | ug/L | 93 |
| 22) Diisopropyl ether | 3.826 | 45 | 3925497 | 128.132 | ug/L # | 92 |
| 23) 1,1-Dichloroethane | 3.953 | 63 | 1933954 | 116.093 | ug/L | 98 |
| 24) Halothane | 4.012 | 117 | 912239 | 124.004 | ug/L | 100 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N12.D
Acq On : 6 Sep 2024 9:28 pm
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 11:23:01 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.022 | 53 | 294415 | 127.345 | ug/L | # | 85 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 2981664 | 132.061 | ug/L | # | 73 |
| 27) Vinyl acetate | 4.188 | 43 | 2530524M6 | 149.133 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 1249676 | 120.628 | ug/L | | 95 |
| 29) 2,2-Dichloropropane | 4.560 | 77 | 1633721 | 120.277 | ug/L | | 88 |
| 30) Bromochloromethane | 4.657 | 128 | 575136 | 115.031 | ug/L | # | 87 |
| 31) Cyclohexane | 4.638 | 56 | 2050583 | 127.595 | ug/L | | 83 |
| 32) Chloroform | 4.726 | 83 | 1981990 | 113.804 | ug/L | | 95 |
| 33) Ethyl acetate | 4.833 | 43 | 932939 | 133.030 | ug/L | # | 91 |
| 34) Carbon tetrachloride | 4.843 | 117 | 1885021 | 126.074 | ug/L | | 98 |
| 35) Tetrahydrofuran | 4.873 | 42 | 283422M6 | 125.666 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 1963184 | 120.918 | ug/L | | 99 |
| 39) 2-Butanone | 5.019 | 43 | 402458 | 133.279 | ug/L | # | 58 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 1522558 | 126.635 | ug/L | | 92 |
| 41) Benzene | 5.264 | 78 | 4321907 | 122.065 | ug/L | | 96 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 2531535 | 135.667 | ug/L | | 93 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 1359430 | 116.293 | ug/L | | 97 |
| 47) Methyl cyclohexane | 5.831 | 83 | 2088421 | 128.620 | ug/L | | 89 |
| 48) Trichloroethene | 5.860 | 95 | 1248581 | 118.481 | ug/L | | 90 |
| 50) Dibromomethane | 6.301 | 93 | 667183 | 122.015 | ug/L | # | 85 |
| 51) 1,2-Dichloropropane | 6.389 | 63 | 1082802 | 122.466 | ug/L | # | 89 |
| 53) 2-Chloroethyl vinyl ether | 7.083 | 63 | 642403 | 147.755 | ug/L | | 91 |
| 54) Bromodichloromethane | 6.467 | 83 | 1573452 | 121.511 | ug/L | | 98 |
| 57) 1,4-Dioxane | 6.692 | 88 | 77525 | 1404.643 | ug/L | # | 90 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 1760068 | 129.212 | ug/L | # | 85 |
| 61) Toluene | 7.406 | 92 | 2952710 | 117.891 | ug/L | | 97 |
| 62) 4-Methyl-2-pentanone | 7.846 | 58 | 285268 | 152.863 | ug/L | # | 71 |
| 63) Tetrachloroethene | 7.846 | 166 | 1589050 | 120.235 | ug/L | | 90 |
| 65) trans-1,3-Dichloropropene | 7.895 | 75 | 1560703 | 128.085 | ug/L | | 82 |
| 67) Ethyl methacrylate | 8.081 | 69 | 1095259 | 144.767 | ug/L | | 96 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 748330 | 120.760 | ug/L | | 98 |
| 69) Chlorodibromomethane | 8.286 | 129 | 1343386 | 127.140 | ug/L | | 99 |
| 70) 1,3-Dichloropropane | 8.394 | 76 | 1461821 | 120.215 | ug/L | | 98 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 1095959 | 131.360 | ug/L | | 99 |
| 72) 2-Hexanone | 8.844 | 43 | 569203 | 137.688 | ug/L | # | 88 |
| 73) Chlorobenzene | 9.196 | 112 | 3546616 | 119.784 | ug/L | # | 85 |
| 74) Ethylbenzene | 9.236 | 91 | 6077458 | 121.510 | ug/L | | 93 |
| 75) 1,1,1,2-Tetrachloroethane | 9.285 | 131 | 1341860 | 123.444 | ug/L | | 99 |
| 76) p/m Xylene | 9.422 | 106 | 4795977 | 248.309 | ug/L | | 83 |
| 77) o Xylene | 9.970 | 106 | 4610835 | 251.995 | ug/L | | 83 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N12.D
Acq On : 6 Sep 2024 9:28 pm
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 11:23:01 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 7709847 | 254.652 | ug/L | # | 85 |
| 80) Bromoform | 10.078 | 173 | 884524 | 133.372 | ug/L | | 97 |
| 82) Isopropylbenzene | 10.362 | 105 | 6618762 | 127.842 | ug/L | | 94 |
| 84) Bromobenzene | 10.823 | 156 | 1662940 | 122.167 | ug/L | | 100 |
| 85) n-Propylbenzene | 10.872 | 91 | 7503087 | 124.033 | ug/L | | 93 |
| 86) 1,4-Dichlorobutane | 10.891 | 55 | 1592673 | 122.534 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 1114041 | 123.901 | ug/L | | 97 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 6319584 | 125.384 | ug/L | | 95 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 4125083M6 | 120.956 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.107 | 105 | 5511797 | 123.913 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 858636M4 | 122.994 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 365895 | 122.785 | ug/L | # | 64 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 4317577 | 122.489 | ug/L | # | 85 |
| 94) tert-Butylbenzene | 11.449 | 119 | 5057378 | 129.836 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 5456559 | 128.078 | ug/L | | 93 |
| 98) sec-Butylbenzene | 11.645 | 105 | 7264309 | 127.456 | ug/L | | 95 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 6474852 | 131.773 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 3290172 | 122.349 | ug/L | | 96 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 3278127 | 118.595 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 3787905 | 133.087 | ug/L | | 97 |
| 103) n-Butylbenzene | 12.243 | 91 | 5124451 | 126.849 | ug/L | | 96 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 3011747 | 123.983 | ug/L | | 96 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 5643187 | 140.898 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 219904 | 147.874 | ug/L | | 97 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 2464739 | 124.901 | ug/L | | 95 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 912959 | 126.828 | ug/L | | 99 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 2099143 | 129.499 | ug/L | | 98 |
| 110) Naphthalene | 14.104 | 128 | 4182114 | 144.910 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.281 | 180 | 1780417 | 129.177 | ug/L | | 98 |

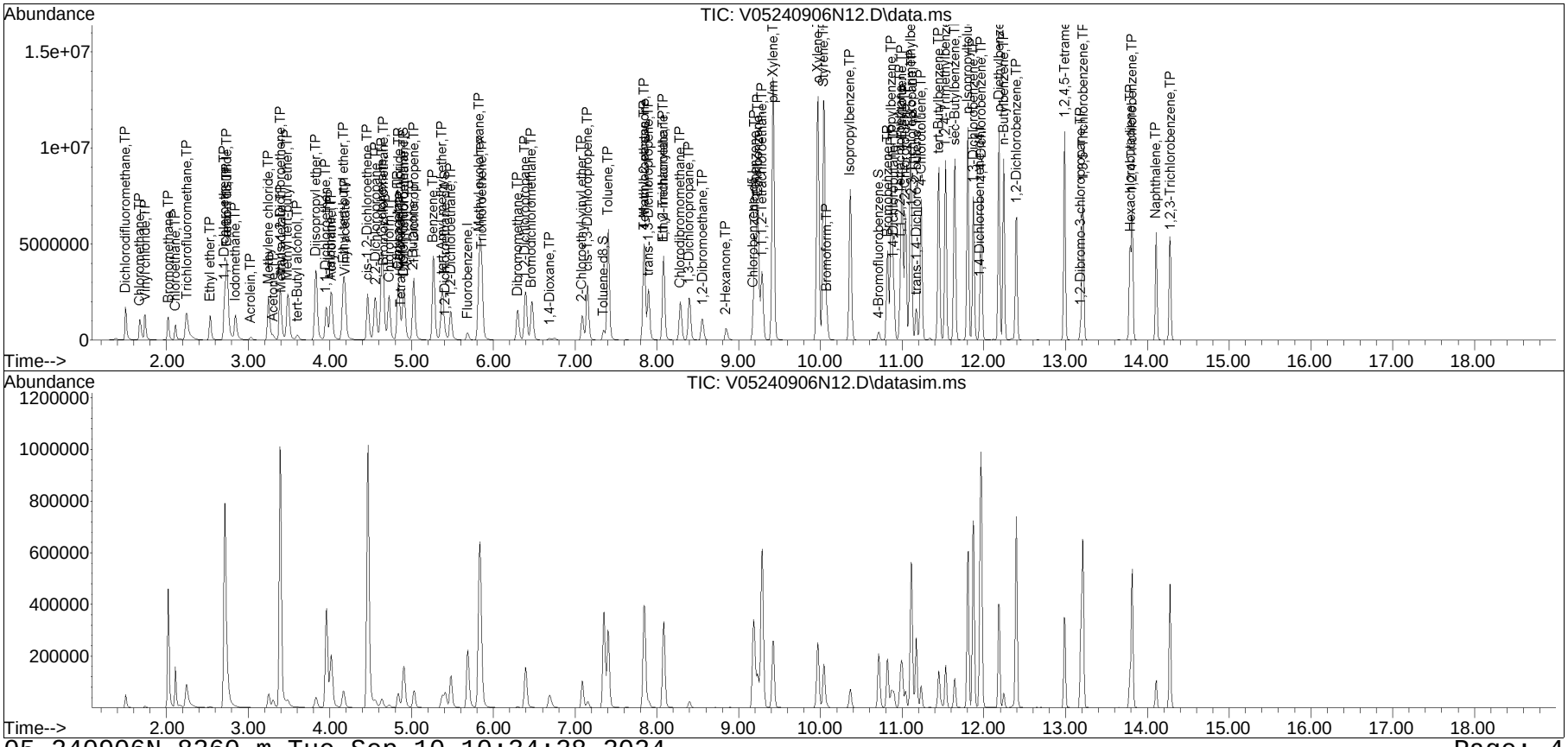
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N12.D
Acq On : 6 Sep 2024 9:28 pm
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 11:23:01 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

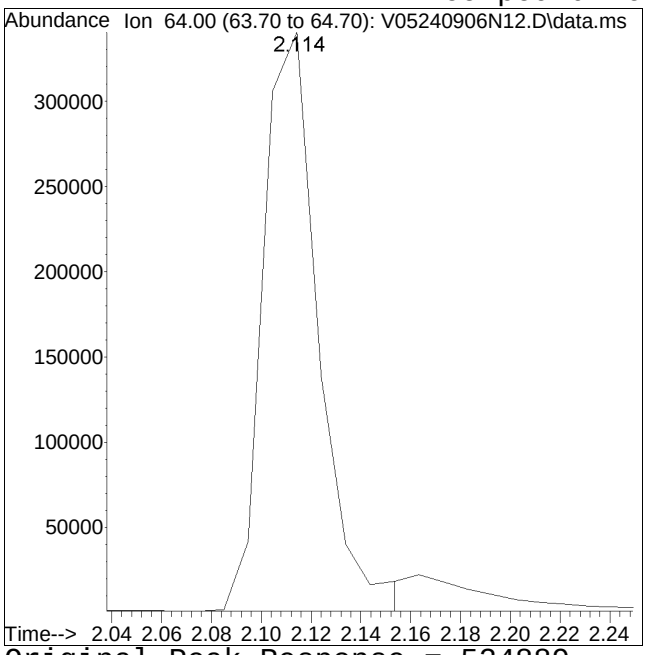
Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

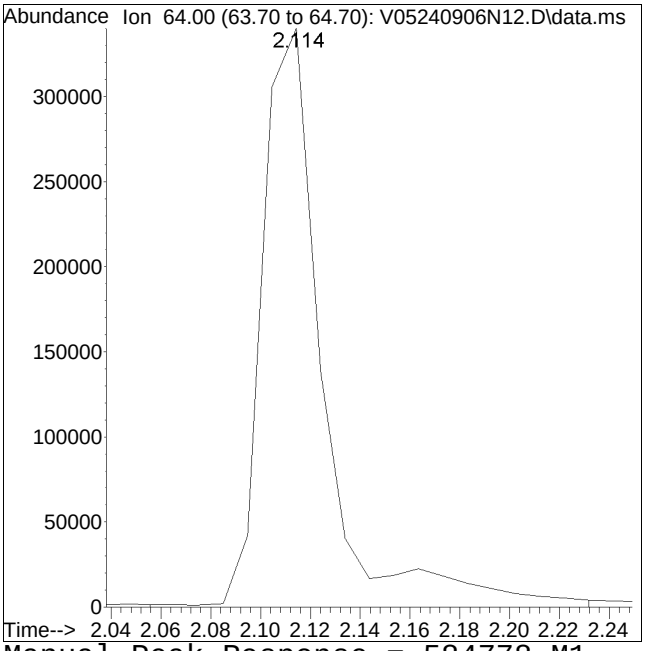


Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

Compound #6: Chloroethane



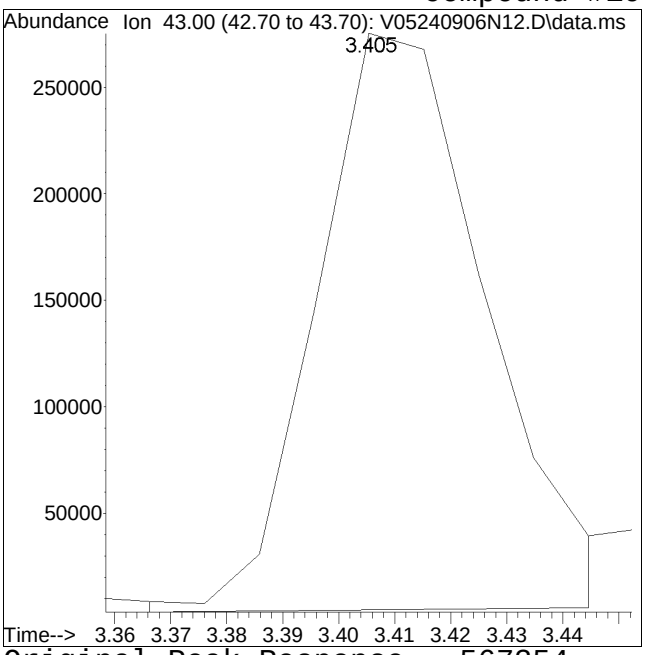




Original Peak Response = 524889 Manual Peak Response = 584778 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

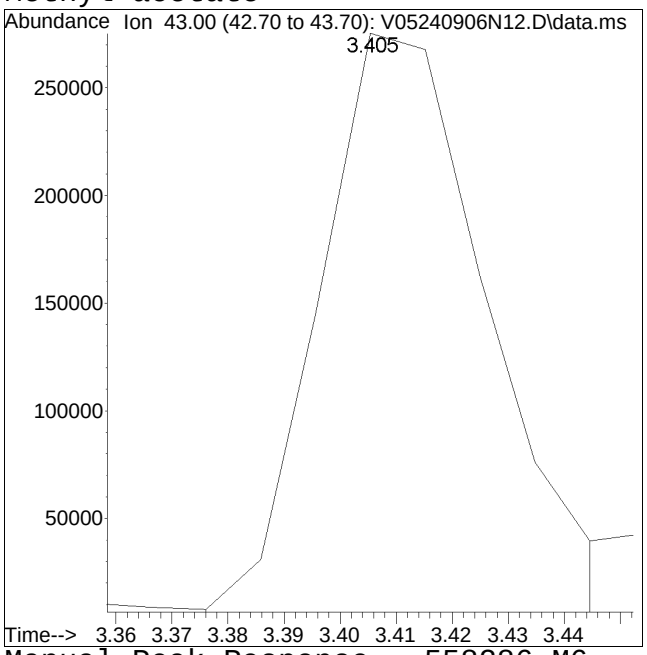
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

Compound #19: Methyl acetate




Original Peak Response = 567354



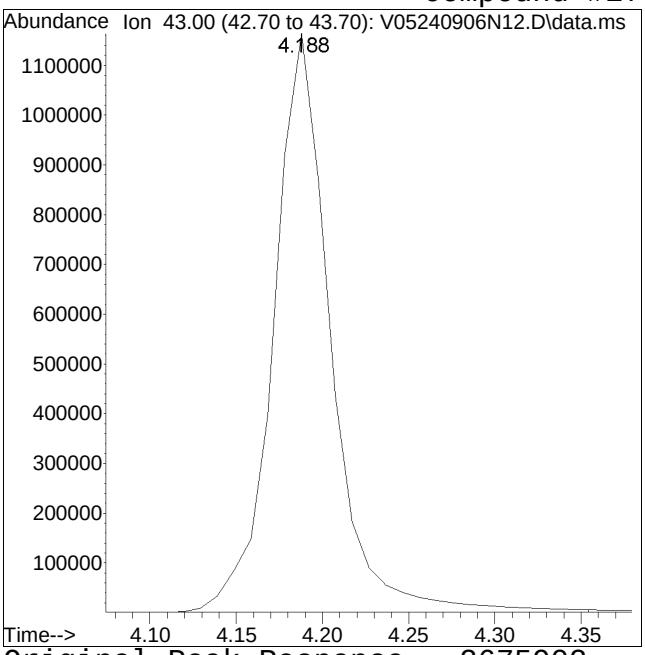

Manual Peak Response = 558286 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

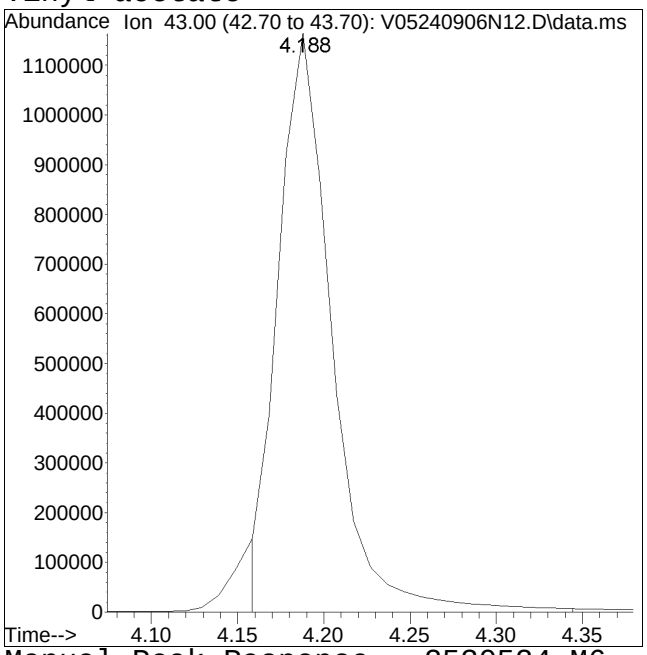
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

Compound #27: Vinyl acetate




Original Peak Response = 2675902



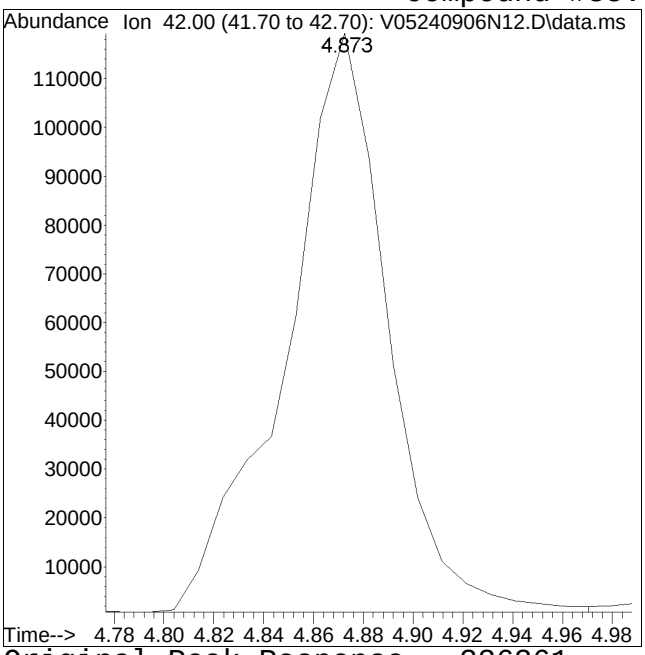

Manual Peak Response = 2530524 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

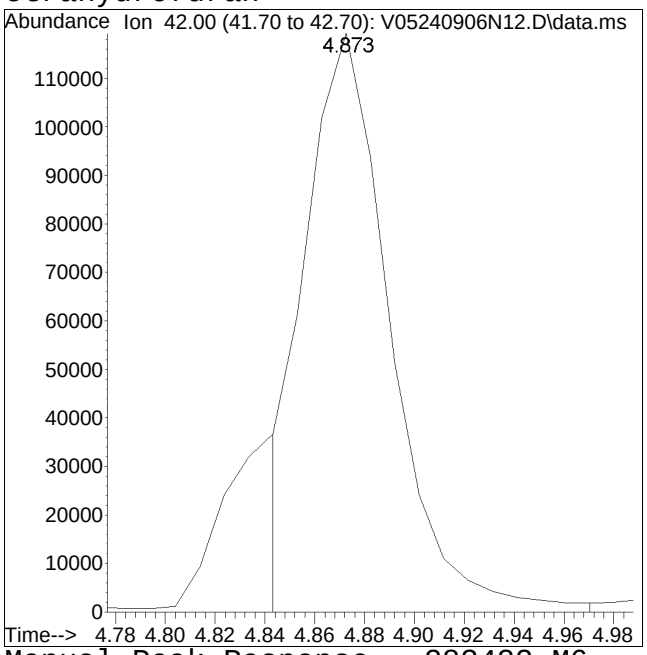
# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

## Compound #35: Tetrahydrofuran




Original Peak Response = 336361



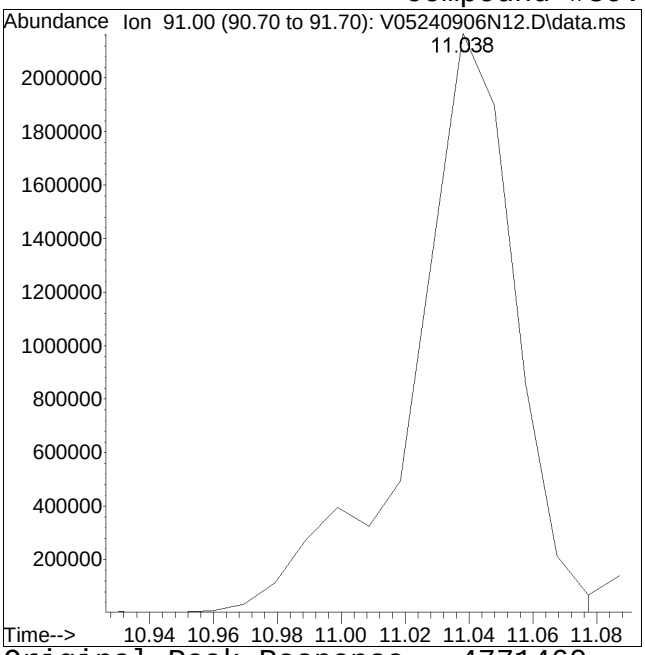

Manual Peak Response = 283422 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

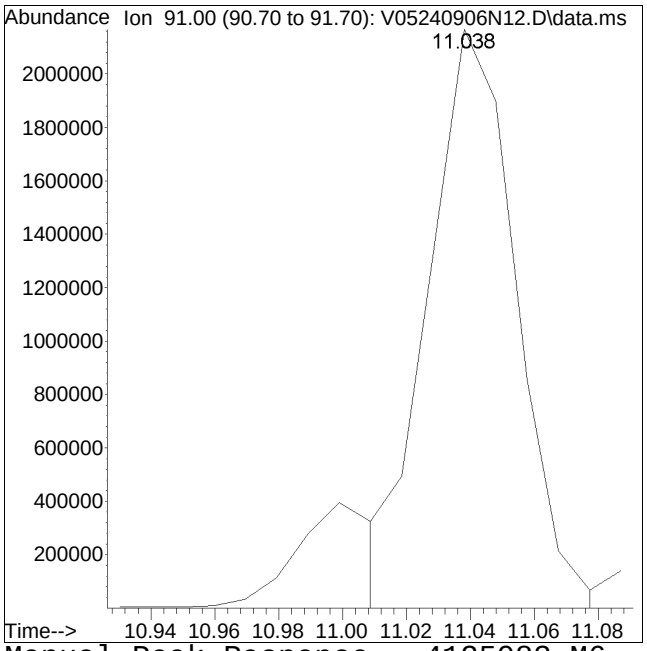
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

Compound #89: 2-Chlorotoluene




Original Peak Response = 4771460



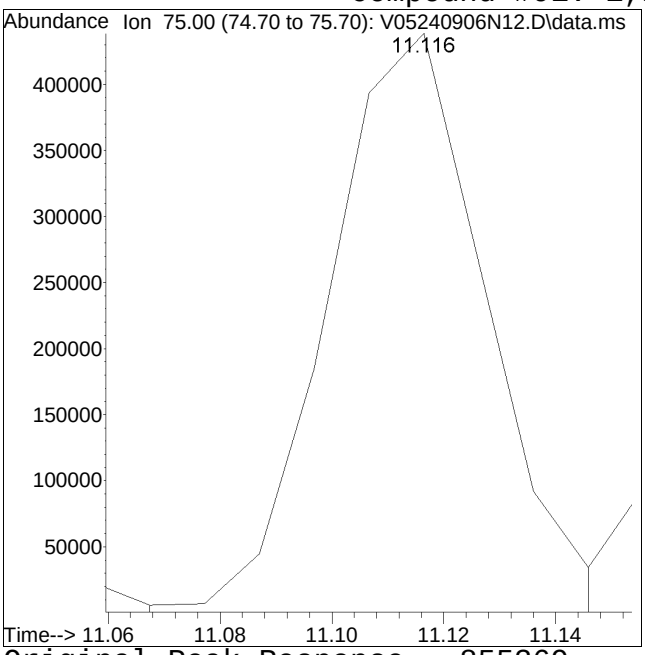

Manual Peak Response = 4125083 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

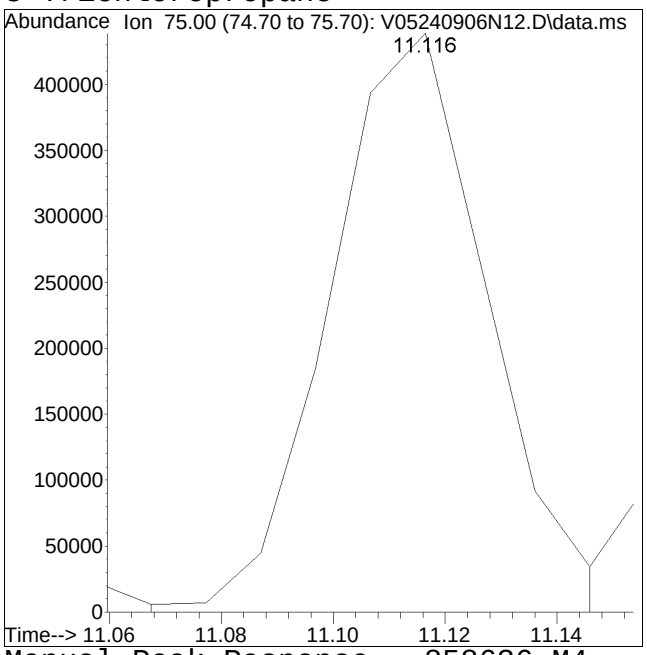
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N12.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:28 pm Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 9/9/2024 11:22 am

Compound #91: 1,2,3-Trichloropropane




Original Peak Response = 855369




Manual Peak Response = 858636 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N13.D
Acq On : 6 Sep 2024 9:53 pm
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:23:08 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 462135 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 142.98% | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 393958 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 153.15% | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.959 | 152 | 233250 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 138.25% | | |
| System Monitoring Compounds | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 128206 | 9.927 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.27% | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 128600 | 9.631 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.31% | | |
| 60) Toluene-d8 | 7.347 | 98 | 459893 | 9.666 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.66% | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 163162 | 10.082 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.82% | | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 2615750 | 193.362 ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 2431290 | 186.181 ug/L | 97 |
| 4) Vinyl chloride | 1.733 | 62 | 2245689 | 197.641 ug/L | 98 |
| 5) Bromomethane | 2.016 | 94 | 1317651 | 238.231 ug/L | 99 |
| 6) Chloroethane | 2.104 | 64 | 917306M1 | 119.425 ug/L | |
| 7) Trichlorofluoromethane | 2.241 | 101 | 3265020 | 190.947 ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 827274 | 200.923 ug/L # | 56 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 1674189 | 196.778 ug/L | 99 |
| 11) Carbon disulfide | 2.740 | 76 | 5058129 | 193.137 ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 1832810 | 195.900 ug/L | 83 |
| 13) Iodomethane | 2.848 | 142 | 3149876 | 220.461 ug/L | 92 |
| 14) Acrolein | 3.034 | 56 | 246503 | 217.631 ug/L | 98 |
| 15) Methylene chloride | 3.249 | 84 | 1984806 | 196.502 ug/L # | 75 |
| 17) Acetone | 3.307 | 43 | 419679 | 192.126 ug/L | 100 |
| 18) trans-1,2-Dichloroethene | 3.386 | 96 | 2084171 | 207.233 ug/L | 95 |
| 19) Methyl acetate | 3.415 | 43 | 961156M6 | 199.338 ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 4902182 | 221.368 ug/L | 88 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 562979 | 1123.604 ug/L | 89 |
| 22) Diisopropyl ether | 3.826 | 45 | 7240486 | 214.924 ug/L | 92 |
| 23) 1,1-Dichloroethane | 3.953 | 63 | 3442782 | 187.941 ug/L | 98 |
| 24) Halothane | 4.012 | 117 | 1728992 | 213.734 ug/L | 100 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N13.D
Acq On : 6 Sep 2024 9:53 pm
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:23:08 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.021 | 53 | 528088 | 207.722 | ug/L | # | 85 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 5592153 | 225.242 | ug/L | # | 76 |
| 27) Vinyl acetate | 4.188 | 43 | 4456553M6 | 238.845 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 2325066 | 204.098 | ug/L | | 94 |
| 29) 2,2-Dichloropropane | 4.559 | 77 | 3001198 | 200.934 | ug/L | | 88 |
| 30) Bromochloromethane | 4.657 | 128 | 1079591 | 196.363 | ug/L | | 89 |
| 31) Cyclohexane | 4.638 | 56 | 3742350 | 211.766 | ug/L | | 83 |
| 32) Chloroform | 4.726 | 83 | 3679979 | 192.156 | ug/L | | 95 |
| 33) Ethyl acetate | 4.833 | 43 | 1696300 | 219.965 | ug/L | # | 91 |
| 34) Carbon tetrachloride | 4.843 | 117 | 3525188 | 214.411 | ug/L | | 99 |
| 35) Tetrahydrofuran | 4.872 | 42 | 501938M6 | 202.390 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 3656427 | 204.805 | ug/L | | 99 |
| 39) 2-Butanone | 5.019 | 43 | 723051 | 217.754 | ug/L | # | 59 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 2792905 | 211.246 | ug/L | | 92 |
| 41) Benzene | 5.273 | 78 | 7958612 | 204.412 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 4730070 | 230.523 | ug/L | | 93 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 2503299 | 194.745 | ug/L | | 97 |
| 47) Methyl cyclohexane | 5.831 | 83 | 3856715 | 216.004 | ug/L | | 89 |
| 48) Trichloroethene | 5.860 | 95 | 2318852 | 200.106 | ug/L | | 90 |
| 50) Dibromomethane | 6.300 | 93 | 1259506 | 209.470 | ug/L | # | 84 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 1994366 | 205.129 | ug/L | # | 90 |
| 53) 2-Chloroethyl vinyl ether | 7.093 | 63 | 1176828 | 246.151 | ug/L | | 90 |
| 54) Bromodichloromethane | 6.476 | 83 | 2969556 | 208.549 | ug/L | # | 99 |
| 57) 1,4-Dioxane | 6.692 | 88 | 142721 | 2351.616 | ug/L | # | 94 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 3285117 | 219.321 | ug/L | # | 85 |
| 61) Toluene | 7.406 | 92 | 5452066 | 197.135 | ug/L | | 98 |
| 62) 4-Methyl-2-pentanone | 7.846 | 58 | 510582 | 247.775 | ug/L | # | 72 |
| 63) Tetrachloroethene | 7.846 | 166 | 2975835 | 203.913 | ug/L | | 90 |
| 65) trans-1,3-Dichloropropene | 7.895 | 75 | 2867761 | 213.140 | ug/L | # | 82 |
| 67) Ethyl methacrylate | 8.081 | 69 | 1996419 | 238.972 | ug/L | | 97 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 1359860 | 198.732 | ug/L | | 98 |
| 69) Chlorodibromomethane | 8.286 | 129 | 2564436 | 219.795 | ug/L | | 98 |
| 70) 1,3-Dichloropropane | 8.403 | 76 | 2673220 | 199.087 | ug/L | | 98 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 2036642 | 221.068 | ug/L | | 99 |
| 72) 2-Hexanone | 8.844 | 43 | 1017716 | 222.946 | ug/L | # | 89 |
| 73) Chlorobenzene | 9.196 | 112 | 6597472 | 201.792 | ug/L | # | 85 |
| 74) Ethylbenzene | 9.235 | 91 | 11082200 | 200.659 | ug/L | | 92 |
| 75) 1,1,1,2-Tetrachloroethane | 9.284 | 131 | 2534793 | 211.178 | ug/L | | 99 |
| 76) p/m Xylene | 9.422 | 106 | 8721874 | 408.949 | ug/L | | 82 |
| 77) o Xylene | 9.970 | 106 | 8419983 | 416.741 | ug/L | | 82 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N13.D
Acq On : 6 Sep 2024 9:53 pm
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:23:08 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.049 | 104 | 13797652 | 412.714 | ug/L | | 87 |
| 80) Bromoform | 10.078 | 173 | 1614830 | 233.680 | ug/L | | 96 |
| 82) Isopropylbenzene | 10.372 | 105 | 11999855 | 222.440 | ug/L | | 93 |
| 84) Bromobenzene | 10.822 | 156 | 3052591 | 215.221 | ug/L | | 100 |
| 85) n-Propylbenzene | 10.871 | 91 | 13271936 | 210.557 | ug/L | | 91 |
| 86) 1,4-Dichlorobutane | 10.901 | 55 | 2858753 | 211.080 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 1981378 | 211.486 | ug/L | | 98 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 11429870 | 217.638 | ug/L | | 95 |
| 89) 2-Chlorotoluene | 11.048 | 91 | 7106559M6 | 199.983 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.107 | 105 | 9811378 | 211.687 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 1498942 | 206.062 | ug/L | | 89 |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 651781 | 209.908 | ug/L | # | 65 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 7778362 | 211.780 | ug/L | # | 86 |
| 94) tert-Butylbenzene | 11.449 | 119 | 9053346 | 223.058 | ug/L | | 97 |
| 97) 1,2,4-Trimethylbenzene | 11.538 | 105 | 9716711 | 218.884 | ug/L | | 93 |
| 98) sec-Butylbenzene | 11.645 | 105 | 12714477 | 214.093 | ug/L | | 94 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 11299950 | 220.706 | ug/L | | 94 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 5840950 | 208.451 | ug/L | | 96 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 5802781 | 201.473 | ug/L | | 96 |
| 102) p-Diethylbenzene | 12.184 | 119 | 6747031 | 227.504 | ug/L | | 98 |
| 103) n-Butylbenzene | 12.243 | 91 | 9032965 | 214.590 | ug/L | # | 96 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 5306734 | 209.658 | ug/L | | 96 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 9868945 | 236.477 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 379081 | 244.641 | ug/L | | 97 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 4244201 | 206.411 | ug/L | | 96 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 1612555 | 214.990 | ug/L | | 99 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 3621201 | 214.395 | ug/L | | 99 |
| 110) Naphthalene | 14.104 | 128 | 7027667 | 233.697 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.280 | 180 | 3060105 | 213.078 | ug/L | | 98 |

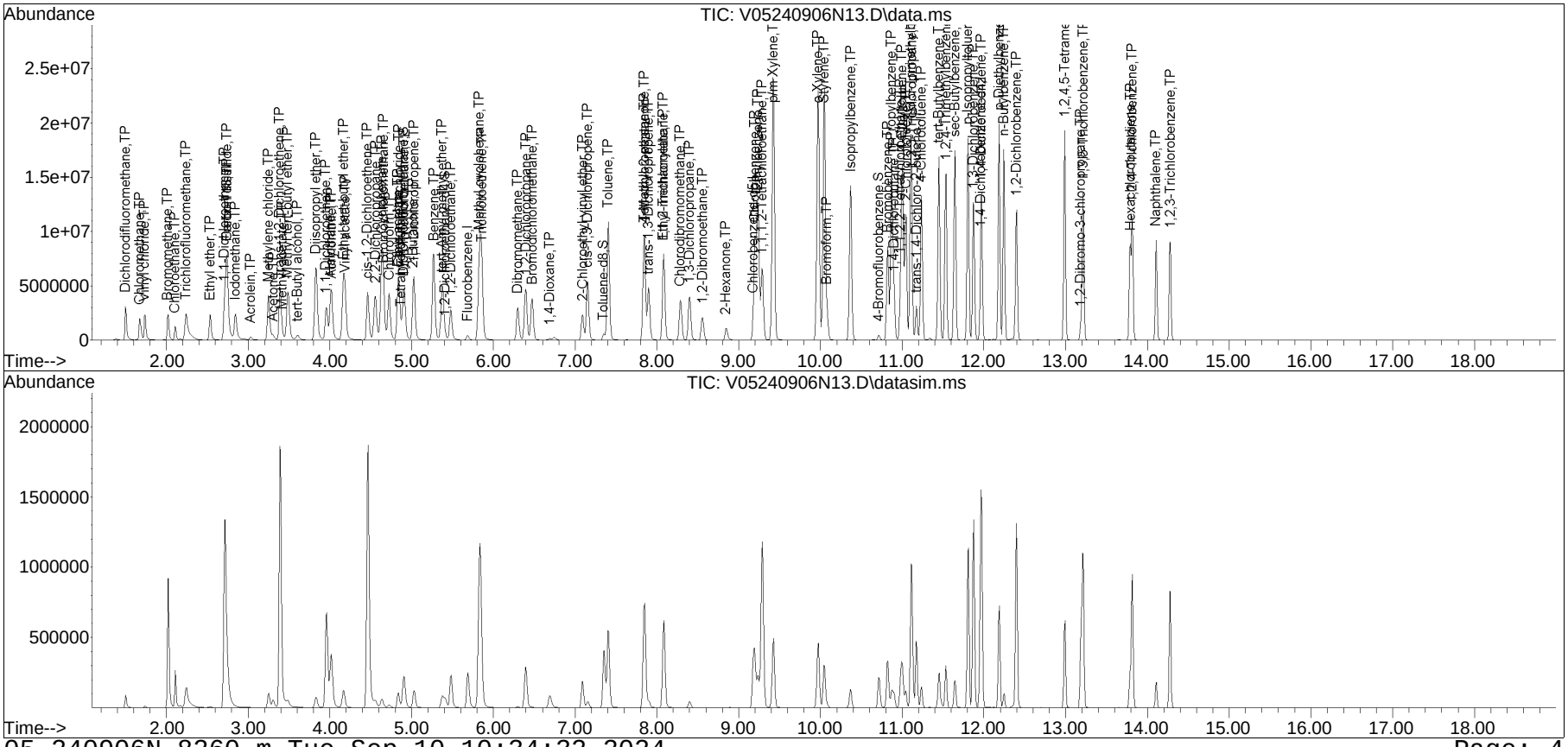
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N13.D
Acq On : 6 Sep 2024 9:53 pm
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 09 11:23:08 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:21:44 2024
Response via : Initial Calibration

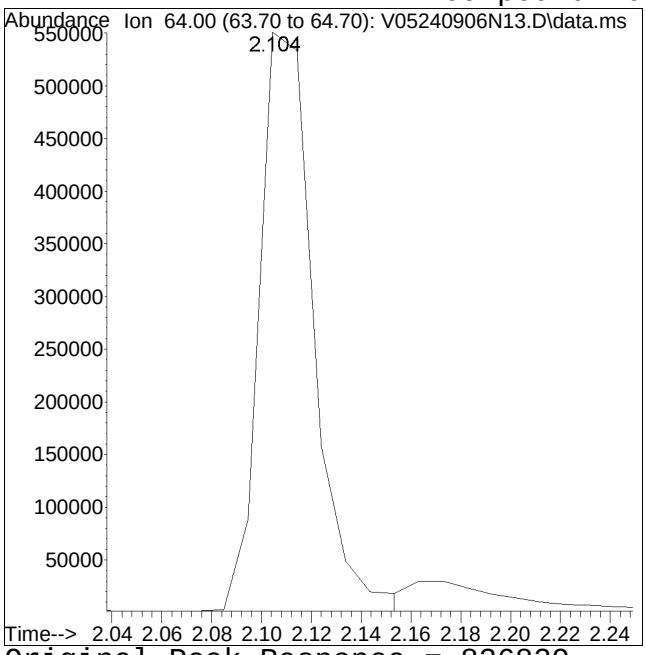
Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•

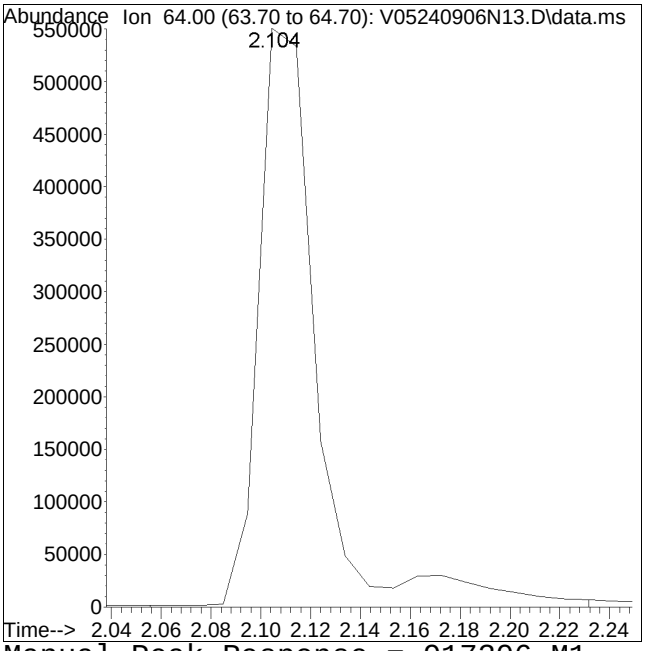


# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N13.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:53 pm Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 9/9/2024 11:23 am

## Compound #6: Chloroethane



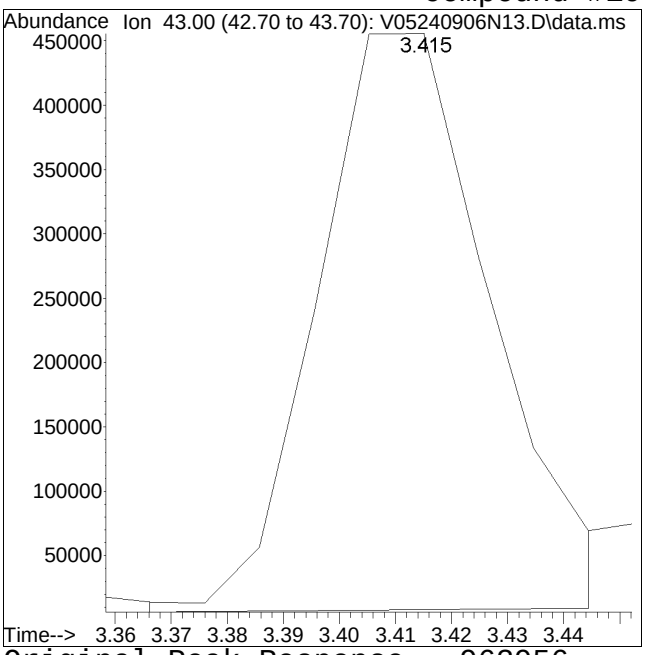




Original Peak Response = 826829 Manual Peak Response = 917306 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

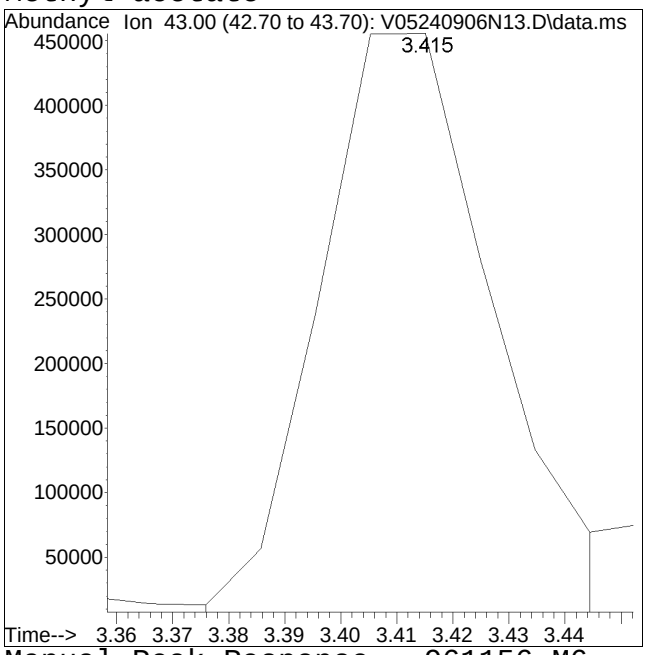
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N13.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:53 pm Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 9/9/2024 11:23 am

Compound #19: Methyl acetate




Original Peak Response = 963956



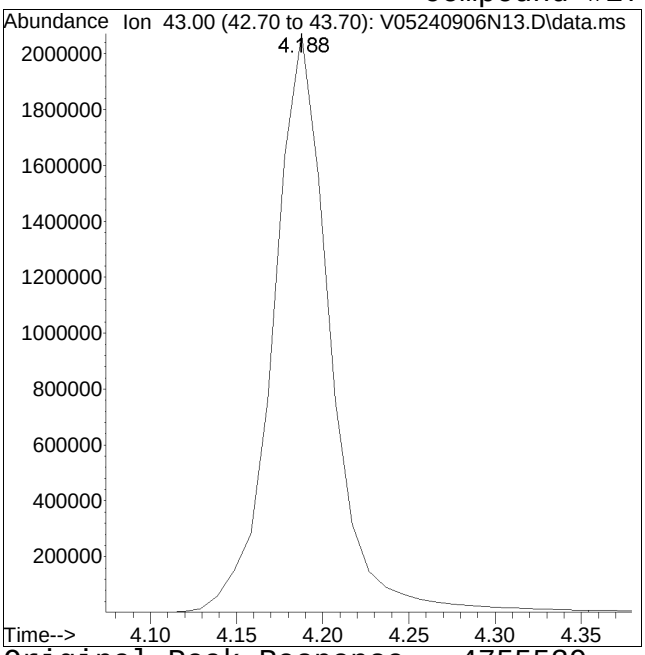

Manual Peak Response = 961156 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

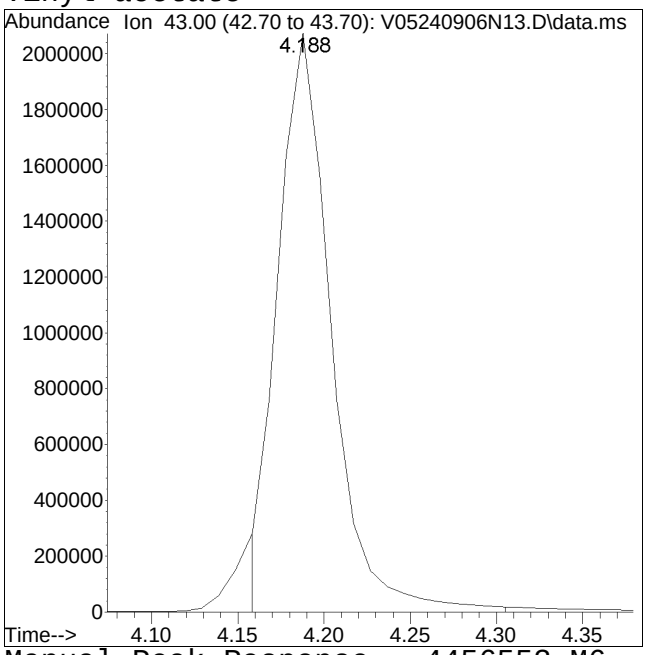
# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N13.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:53 pm Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 9/9/2024 11:23 am

## Compound #27: Vinyl acetate




Original Peak Response = 4755539



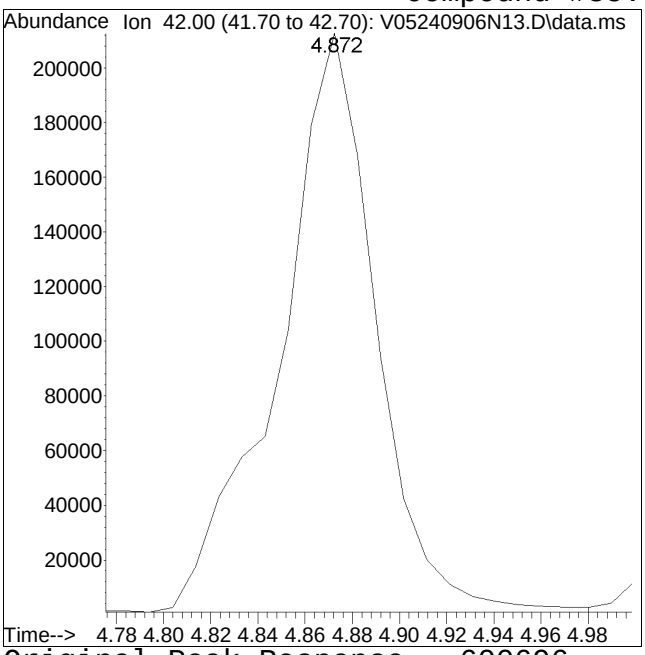

Manual Peak Response = 4456553 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

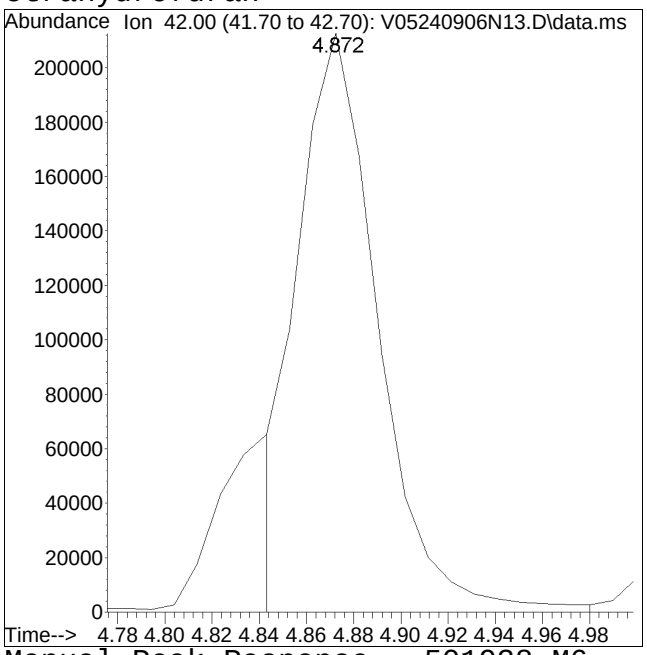
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N13.D Operator : VOA105:PID
Date Inj'd : 9/6/2024 9:53 pm Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 9/9/2024 11:23 am

Compound #35: Tetrahydrofuran




Original Peak Response = 600696




Manual Peak Response = 501938 M6

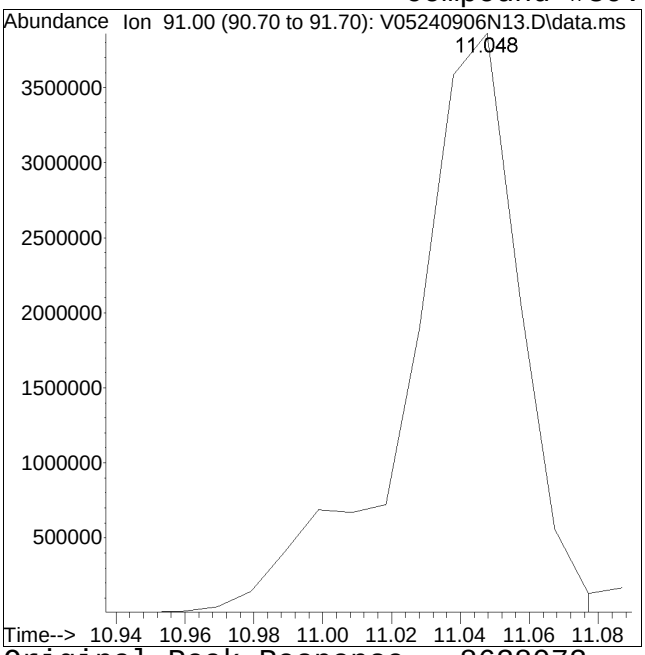
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

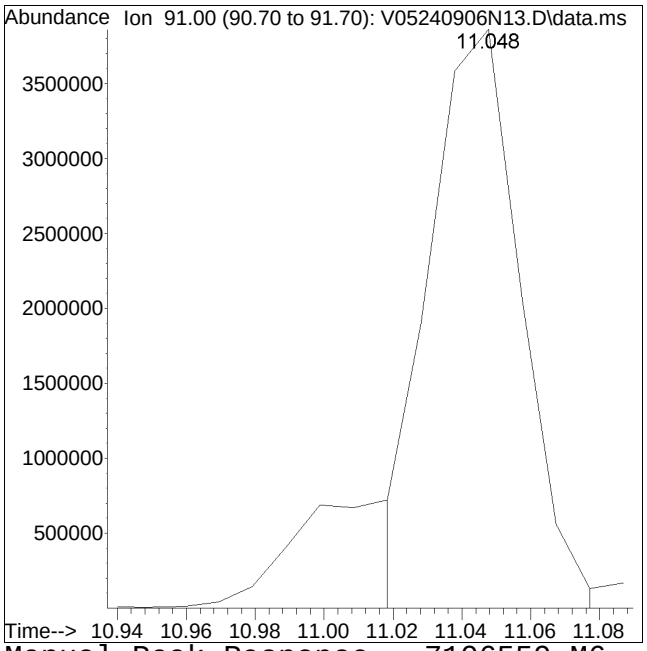
Data Path : K:\VOA105\2024\240906NICALQ
Data File : V05240906N13.D
Date Inj'd : 9/6/2024 9:53 pm
Sample : I8260STD200PPB

Method : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/9/2024 11:23 am

## Compound #89: 2-Chlorotoluene




Original Peak Response = 8638073




Manual Peak Response = 7106559 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 2 | TP | Dichlorodifluoromethane | 0.293 | 0.292 | 0.3 | 98 | 0.00 |
| 3 | TP | Chloromethane | 0.283 | 0.348 | -23.0# | 125 | 0.00 |
| 4 | TP | Vinyl chloride | 0.246 | 0.264 | -7.3 | 107 | 0.00 |
| 5 | TP | Bromomethane | 0.120 | 0.145 | -20.8# | 141 | 0.00 |
| 6 | TP | Chloroethane | * 10.000 | 8.681 | 13.2 | 100 | 0.00 |
| 7 | TP | Trichlorofluoromethane | 0.370 | 0.400 | -8.1 | 108 | 0.00 |
| 8 | TP | Ethyl ether | 0.089 | 0.094 | -5.6 | 115 | 0.00 |
| 10 | TP | 1,1-Dichloroethene | 0.184 | 0.190 | -3.3 | 105 | 0.00 |
| 11 | TP | Carbon disulfide | 0.567 | 0.536 | 5.5 | 96 | 0.00 |
| 12 | TP | Freon-113 | 0.202 | 0.219 | -8.4 | 108 | 0.00 |
| 13 | TP | Iodomethane | 0.309 | 0.254 | 17.8 | 90 | 0.00 |
| 14 | TP | Acrolein | 0.025 | 0.020 | 20.0# | 98 | 0.00 |
| 15 | TP | Methylene chloride | 0.219 | 0.218 | 0.5 | 106 | 0.00 |
| 17 | TP | Acetone | 0.047 | 0.048 | -2.1 | 113 | 0.00 |
| 18 | TP | trans-1,2-Dichloroethene | 0.218 | 0.228 | -4.6 | 109 | 0.00 |
| 19 | TP | Methyl acetate | 0.104 | 0.102 | 1.9 | 115 | 0.00 |
| 20 | TP | Methyl tert-butyl ether | 0.479 | 0.435 | 9.2 | 101 | 0.00 |
| 21 | TP | tert-Butyl alcohol | 0.011 | 0.011 | 0.0 | 127 | 0.00 |
| 22 | TP | Diisopropyl ether | 0.729 | 0.738 | -1.2 | 111 | 0.00 |
| 23 | TP | 1,1-Dichloroethane | 0.396 | 0.409 | -3.3 | 105 | 0.00 |
| 24 | TP | Halothane | 0.175 | 0.188 | -7.4 | 111 | 0.00 |
| 25 | TP | Acrylonitrile | 0.055 | 0.050 | 9.1 | 102 | 0.00 |
| 26 | TP | Ethyl tert-butyl ether | 0.537 | 0.542 | -0.9 | 112 | 0.00 |
| 27 | TP | Vinyl acetate | 0.434 | 0.339 | 21.9# | 96 | 0.00 |
| 28 | TP | cis-1,2-Dichloroethene | 0.247 | 0.248 | -0.4 | 106 | 0.00 |
| 29 | TP | 2,2-Dichloropropane | 0.323 | 0.312 | 3.4 | 100 | 0.00 |
| 30 | TP | Bromochloromethane | 0.119 | 0.120 | -0.8 | 104 | 0.00 |
| 31 | TP | Cyclohexane | 0.382 | 0.408 | -6.8 | 104 | 0.00 |
| 32 | TP | Chloroform | 0.414 | 0.416 | -0.5 | 106 | 0.00 |
| 33 | TP | Ethyl acetate | 0.167 | 0.155 | 7.2 | 115 | 0.00 |
| 34 | TP | Carbon tetrachloride | 0.356 | 0.361 | -1.4 | 106 | 0.00 |
| 35 | TP | Tetrahydrofuran | 0.054 | 0.051 | 5.6 | 112 | 0.01 |
| 36 | S | Dibromofluoromethane | 0.279 | 0.273 | 2.2 | 109 | 0.00 |
| 37 | TP | 1,1,1-Trichloroethane | 0.386 | 0.399 | -3.4 | 105 | 0.00 |
| 39 | TP | 2-Butanone | 0.072 | 0.070 | 2.8 | 119 | 0.00 |
| 40 | TP | 1,1-Dichloropropene | 0.286 | 0.306 | -7.0 | 109 | 0.00 |
| 41 | TP | Benzene | 0.842 | 0.844 | -0.2 | 102 | 0.00 |
| 42 | TP | tert-Amyl methyl ether | 0.444 | 0.439 | 1.1 | 110 | 0.01 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 43 | S | 1,2-Dichloroethane-d4 | 0.289 | 0.296 | -2.4 | 108 | 0.00 |
| 44 | TP | 1,2-Dichloroethane | 0.278 | 0.283 | -1.8 | 108 | 0.00 |
| 47 | TP | Methyl cyclohexane | 0.386 | 0.404 | -4.7 | 106 | 0.00 |
| 48 | TP | Trichloroethene | 0.251 | 0.248 | 1.2 | 105 | 0.00 |
| 50 | TP | Dibromomethane | 0.130 | 0.123 | 5.4 | 104 | 0.00 |
| 51 | TP | 1,2-Dichloropropane | 0.210 | 0.215 | -2.4 | 106 | 0.00 |
| 53 | TP | 2-Chloroethyl vinyl ether | 0.113 | 0.092 | 18.6 | 100 | 0.00 |
| 54 | TP | Bromodichloromethane | 0.308 | 0.293# | 4.9 | 104 | 0.00 |
| 57 | TP | 1,4-Dioxane | 0.00131 | 0.00148# | -13.0 | 129 | 0.00 |
| 58 | TP | cis-1,3-Dichloropropene | 0.324 | 0.332 | -2.5 | 109 | 0.00 |
| 59 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 60 | S | Toluene-d8 | 1.208 | 1.233 | -2.1 | 109 | 0.00 |
| 61 | TP | Toluene | 0.702 | 0.729 | -3.8 | 107 | 0.00 |
| 62 | TP | 4-Methyl-2-pentanone | 0.058 | 0.054 | 6.9 | 111 | 0.00 |
| 63 | TP | Tetrachloroethene | 0.370 | 0.381 | -3.0 | 105 | 0.00 |
| 65 | TP | trans-1,3-Dichloropropene | 0.342 | 0.356 | -4.1 | 109 | 0.00 |
| 67 | TP | Ethyl methacrylate | 0.231 | 0.220 | 4.8 | 114 | 0.00 |
| 68 | TP | 1,1,2-Trichloroethane | 0.174 | 0.181# | -4.0 | 109 | 0.00 |
| 69 | TP | Chlorodibromomethane | 0.296 | 0.288 | 2.7 | 107 | 0.00 |
| 70 | TP | 1,3-Dichloropropane | 0.341 | 0.351 | -2.9 | 106 | 0.00 |
| 71 | TP | 1,2-Dibromoethane | 0.234 | 0.245 | -4.7 | 109 | 0.00 |
| 72 | TP | 2-Hexanone | 0.116 | 0.107 | 7.8 | 113 | 0.01 |
| 73 | TP | Chlorobenzene | 0.830 | 0.860 | -3.6 | 109 | 0.00 |
| 74 | TP | Ethylbenzene | 1.402 | 1.401 | 0.1 | 101 | 0.00 |
| 75 | TP | 1,1,1,2-Tetrachloroethane | 0.305 | 0.303 | 0.7 | 107 | 0.00 |
| 76 | TP | p/m Xylene | 0.541 | 0.565 | -4.4 | 104 | 0.00 |
| 77 | TP | o Xylene | 0.513 | 0.534 | -4.1 | 104 | 0.00 |
| 78 | TP | Styrene | 0.849 | 0.897 | -5.7 | 105 | 0.00 |
| 79 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 80 | TP | Bromoform | 0.296 | 0.287 | 3.0 | 112 | 0.00 |
| 82 | TP | Isopropylbenzene | 2.313 | 2.087 | 9.8 | 90 | 0.00 |
| 83 | S | 4-Bromofluorobenzene | 0.694 | 0.699 | -0.7 | 110 | 0.00 |
| 84 | TP | Bromobenzene | 0.608 | 0.574 | 5.6 | 101 | 0.00 |
| 85 | TP | n-Propylbenzene | 2.702 | 2.773 | -2.6 | 102 | 0.00 |
| 86 | TP | 1,4-Dichlorobutane | 0.581 | 0.577 | 0.7 | 104 | 0.00 |
| 87 | TP | 1,1,2,2-Tetrachloroethane | 0.402 | 0.383 | 4.7 | 104 | 0.00 |
| 88 | TP | 4-Ethyltoluene | 2.252 | 2.467 | -9.5 | 109 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 89 TP | 2-Chlorotoluene | | 1.524 | 1.557 | -2.2 | 102 | 0.00 |
| 90 TP | 1,3,5-Trimethylbenzene | | 1.987 | 1.994 | -0.4 | 99 | 0.00 |
| 91 TP | 1,2,3-Trichloropropane | | 0.312 | 0.295 | 5.4 | 100 | 0.00 |
| 92 TP | trans-1,4-Dichloro-2-butene | | 0.133 | 0.122 | 8.3 | 100 | 0.00 |
| 93 TP | 4-Chlorotoluene | | 1.575 | 1.626 | -3.2 | 103 | 0.00 |
| 94 TP | tert-Butylbenzene | | 1.740 | 1.759 | -1.1 | 100 | 0.00 |
| 97 TP | 1,2,4-Trimethylbenzene | | 1.903 | 1.985 | -4.3 | 103 | 0.00 |
| 98 TP | sec-Butylbenzene | | 2.546 | 2.583 | -1.5 | 101 | 0.01 |
| 99 TP | p-Isopropyltoluene | | 2.195 | 2.263 | -3.1 | 101 | 0.00 |
| 100 TP | 1,3-Dichlorobenzene | | 1.201 | 1.221 | -1.7 | 104 | 0.00 |
| 101 TP | 1,4-Dichlorobenzene | | 1.235 | 1.242 | -0.6 | 105 | 0.00 |
| 102 TP | p-Diethylbenzene | | 1.271 | 1.307 | -2.8 | 103 | 0.00 |
| 103 TP | n-Butylbenzene | | 1.805 | 1.899 | -5.2 | 102 | 0.00 |
| 104 TP | 1,2-Dichlorobenzene | | 1.085 | 1.117 | -2.9 | 106 | 0.00 |
| 105 TP | 1,2,4,5-Tetramethylbenzene | | 1.922 | 1.824 | 5.1 | 105 | 0.00 |
| 106 TP | 1,2-Dibromo-3-chloropropane | * | 10.000 | 9.658 | 3.4 | 114 | 0.00 |
| 107 TP | 1,3,5-Trichlorobenzene | | 0.882 | 0.898 | -1.8 | 104 | 0.00 |
| 108 TP | Hexachlorobutadiene | | 0.322 | 0.315 | 2.2 | 103 | 0.00 |
| 109 TP | 1,2,4-Trichlorobenzene | | 0.724 | 0.730 | -0.8 | 106 | 0.00 |
| 110 TP | Naphthalene | * | 10.000 | 9.082 | 9.2 | 110 | 0.00 |
| 111 TP | 1,2,3-Trichlorobenzene | | 0.616 | 0.629 | -2.1 | 106 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 355839 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 323219 | | | Recovery = 110.09% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 282578 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 257237 | | | Recovery = 109.85% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 179582 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 168721 | | | Recovery = 106.44% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 97147 | 9.769 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.69% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 105336 | 10.246 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.46% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 348357 | 10.207 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.07% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 125466 | 10.069 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.69% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 104036 | 9.988 | ug/L | 96 |
| 3) Chloromethane | 1.674 | 50 | 123782 | 12.310 | ug/L | 97 |
| 4) Vinyl chloride | 1.743 | 62 | 93973 | 10.741 | ug/L | 99 |
| 5) Bromomethane | 2.026 | 94 | 51599 | 12.116 | ug/L | 96 |
| 6) Chloroethane | 2.114 | 64 | 52939 | 8.681 | ug/L | 95 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 142165 | 10.798 | ug/L | 99 |
| 8) Ethyl ether | 2.535 | 74 | 33611 | 10.602 | ug/L # | 56 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 67501 | 10.304 | ug/L | 97 |
| 11) Carbon disulfide | 2.740 | 76 | 190832 | 9.463 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 77874 | 10.810 | ug/L | 97 |
| 13) Iodomethane | 2.848 | 142 | 90416 | 8.219 | ug/L | 91 |
| 14) Acrolein | 3.043 | 56 | 7117 | 8.160 | ug/L | 93 |
| 15) Methylene chloride | 3.249 | 84 | 77700 | 9.990 | ug/L # | 73 |
| 17) Acetone | 3.317 | 43 | 17137 | 10.189 | ug/L | 95 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 81213 | 10.487 | ug/L | 95 |
| 19) Methyl acetate | 3.415 | 43 | 36333M6 | 9.849 | ug/L | |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 154844 | 9.081 | ug/L # | 84 |
| 21) tert-Butyl alcohol | 3.611 | 59 | 19782 | 51.275 | ug/L | 86 |
| 22) Diisopropyl ether | 3.836 | 45 | 262636 | 10.125 | ug/L # | 92 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 145627 | 10.325 | ug/L | 97 |
| 24) Halothane | 4.012 | 117 | 66829 | 10.729 | ug/L | 100 |

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.031 | 53 | 17773 | 9.079 | ug/L | # | 88 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 193027 | 10.097 | ug/L | # | 84 |
| 27) Vinyl acetate | 4.198 | 43 | 120685M1 | 7.809 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 88304 | 10.067 | ug/L | | 94 |
| 29) 2,2-Dichloropropane | 4.560 | 77 | 110895 | 9.642 | ug/L | | 85 |
| 30) Bromochloromethane | 4.657 | 128 | 42605 | 10.064 | ug/L | # | 85 |
| 31) Cyclohexane | 4.638 | 56 | 145331 | 10.680 | ug/L | | 83 |
| 32) Chloroform | 4.726 | 83 | 148161 | 10.048 | ug/L | | 94 |
| 33) Ethyl acetate | 4.843 | 43 | 54994 | 9.262 | ug/L | # | 94 |
| 34) Carbon tetrachloride | 4.843 | 117 | 128529 | 10.153 | ug/L | | 98 |
| 35) Tetrahydrofuran | 4.882 | 42 | 18080M6 | 9.468 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.912 | 97 | 142128 | 10.339 | ug/L | | 97 |
| 39) 2-Butanone | 5.029 | 43 | 24935 | 9.753 | ug/L | # | 62 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 109036 | 10.711 | ug/L | | 93 |
| 41) Benzene | 5.274 | 78 | 300341 | 10.018 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.381 | 73 | 156091 | 9.880 | ug/L | | 97 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 100634 | 10.167 | ug/L | | 99 |
| 47) Methyl cyclohexane | 5.831 | 83 | 143713 | 10.453 | ug/L | | 89 |
| 48) Trichloroethene | 5.860 | 95 | 88422 | 9.910 | ug/L | | 90 |
| 50) Dibromomethane | 6.301 | 93 | 43780 | 9.456 | ug/L | | 89 |
| 51) 1,2-Dichloropropane | 6.398 | 63 | 76332 | 10.196 | ug/L | # | 89 |
| 53) 2-Chloroethyl vinyl ether | 7.093 | 63 | 32711 | 8.140 | ug/L | | 88 |
| 54) Bromodichloromethane | 6.477 | 83 | 104152 | 9.499 | ug/L | | 98 |
| 57) 1,4-Dioxane | 6.692 | 88 | 26303 | 562.858 | ug/L | # | 88 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 118078 | 10.238 | ug/L | # | 83 |
| 61) Toluene | 7.406 | 92 | 205915 | 10.380 | ug/L | | 96 |
| 62) 4-Methyl-2-pentanone | 7.856 | 58 | 15283 | 9.308 | ug/L | # | 63 |
| 63) Tetrachloroethene | 7.846 | 166 | 107758 | 10.294 | ug/L | | 91 |
| 65) trans-1,3-Dichloropropene | 7.905 | 75 | 100597 | 10.424 | ug/L | # | 78 |
| 67) Ethyl methacrylate | 8.090 | 69 | 62274 | 9.545 | ug/L | | 95 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 51051 | 10.401 | ug/L | | 99 |
| 69) Chlorodibromomethane | 8.286 | 129 | 81473 | 9.735 | ug/L | | 99 |
| 70) 1,3-Dichloropropane | 8.403 | 76 | 99279 | 10.308 | ug/L | | 100 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 69144 | 10.463 | ug/L | | 100 |
| 72) 2-Hexanone | 8.863 | 43 | 30124 | 9.200 | ug/L | # | 85 |
| 73) Chlorobenzene | 9.196 | 112 | 243152 | 10.369 | ug/L | # | 85 |
| 74) Ethylbenzene | 9.236 | 91 | 395960 | 9.995 | ug/L | | 93 |
| 75) 1,1,1,2-Tetrachloroethane | 9.285 | 131 | 85590 | 9.941 | ug/L | | 98 |
| 76) p/m Xylene | 9.422 | 106 | 319055 | 20.856 | ug/L | | 83 |
| 77) o Xylene | 9.960 | 106 | 301671 | 20.816 | ug/L | | 84 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240906NICAL\V05240906N09.D
Sub List : 8260-Curve - Megamix plus Diox

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 78) Styrene | 10.039 | 104 | 506740 | 21.132 | ug/L | # | 83 |
| 80) Bromoform | 10.068 | 173 | 51491 | 9.678 | ug/L | | 97 |
| 82) Isopropylbenzene | 10.362 | 105 | 374826 | 9.025 | ug/L | | 96 |
| 84) Bromobenzene | 10.823 | 156 | 103091 | 9.440 | ug/L | | 100 |
| 85) n-Propylbenzene | 10.862 | 91 | 497960 | 10.261 | ug/L | | 94 |
| 86) 1,4-Dichlorobutane | 10.901 | 55 | 103679 | 9.943 | ug/L | | 92 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 68775 | 9.535 | ug/L | | 98 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 442992 | 10.956 | ug/L | | 96 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 279679M6 | 10.222 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 358075 | 10.035 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 53044M1 | 9.471 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 21932 | 9.174 | ug/L | # | 77 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 292004M6 | 10.326 | ug/L | | |
| 94) tert-Butylbenzene | 11.449 | 119 | 315818 | 10.107 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 356460 | 10.430 | ug/L | | 94 |
| 98) sec-Butylbenzene | 11.645 | 105 | 463923 | 10.146 | ug/L | | 96 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 406380 | 10.309 | ug/L | | 94 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 219295 | 10.165 | ug/L | | 95 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 222954 | 10.054 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 234715 | 10.280 | ug/L | | 96 |
| 103) n-Butylbenzene | 12.243 | 91 | 341001 | 10.522 | ug/L | | 96 |
| 104) 1,2-Dichlorobenzene | 12.400 | 146 | 200607 | 10.294 | ug/L | | 96 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 327531 | 9.490 | ug/L | | 93 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 12128 | 9.658 | ug/L | | 94 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 161337 | 10.191 | ug/L | | 96 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 56621 | 9.805 | ug/L | | 98 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 131129 | 10.084 | ug/L | | 97 |
| 110) Naphthalene | 14.104 | 128 | 236906 | 9.082 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.281 | 180 | 112892 | 10.210 | ug/L | | 98 |

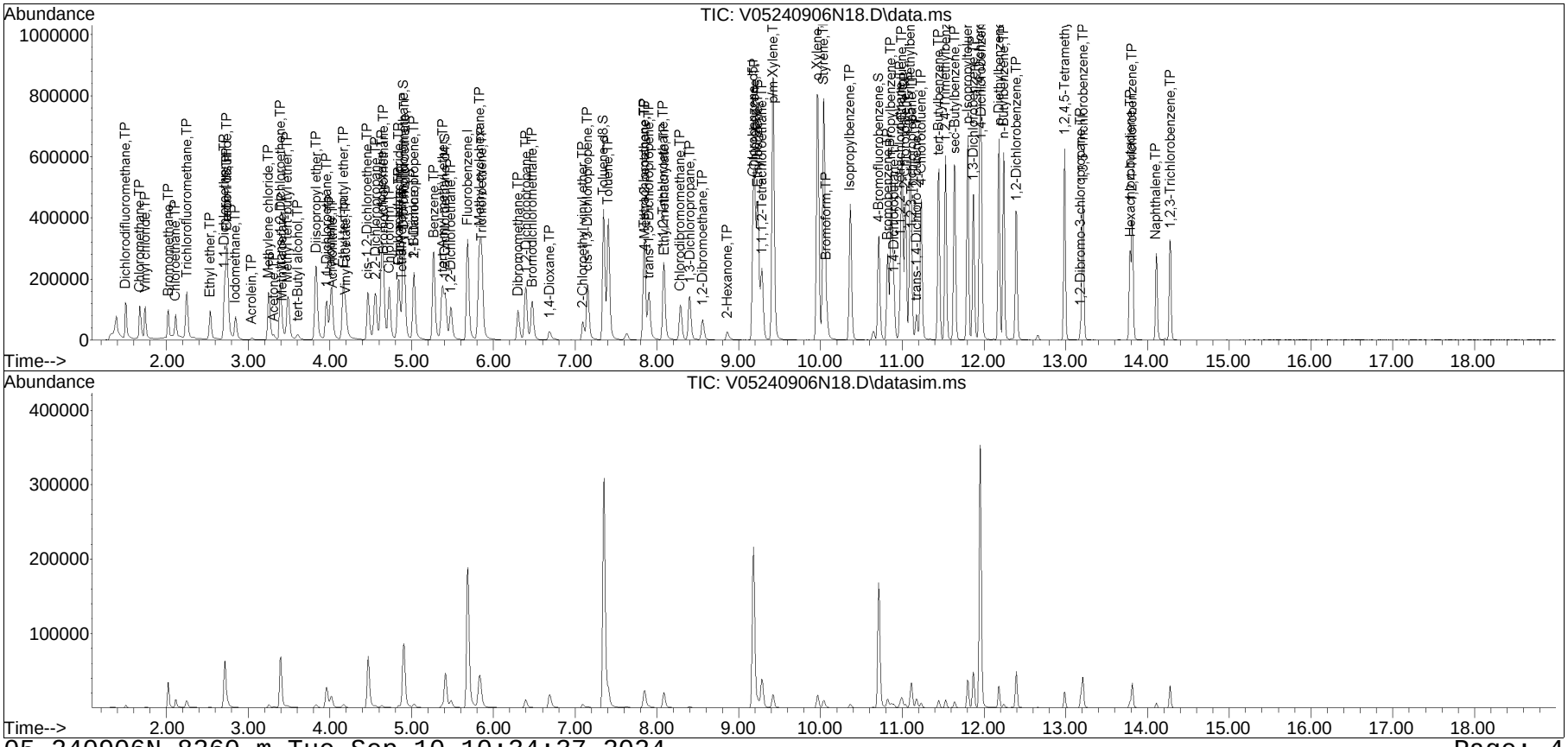
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240906NICAL\
Data File : V05240906N18.D
Acq On : 7 Sep 2024 12:00 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1969218,ICAL (Sig #1); WG,ICAL21168 (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 09 11:35:35 2024
Quant Method : K:\VOA105\2024\240906NICAL\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

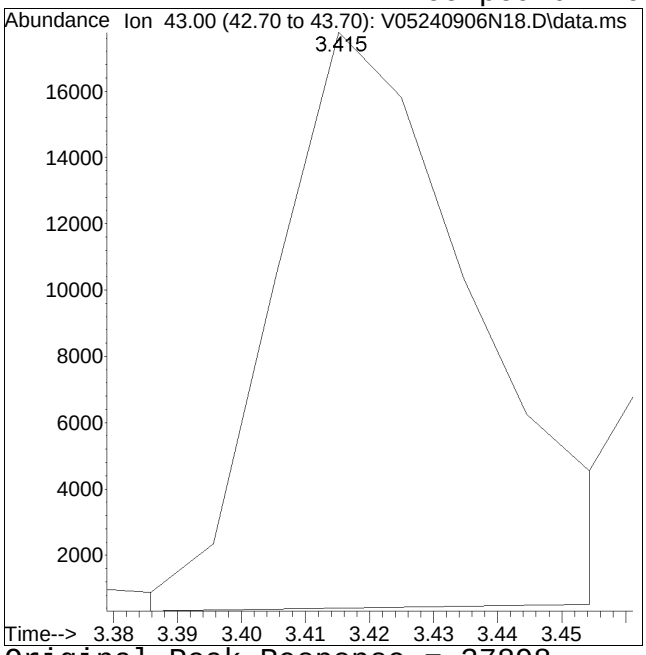
Sub List : 8260-Curve - Megamix plus Diox\V05240906N09.D•



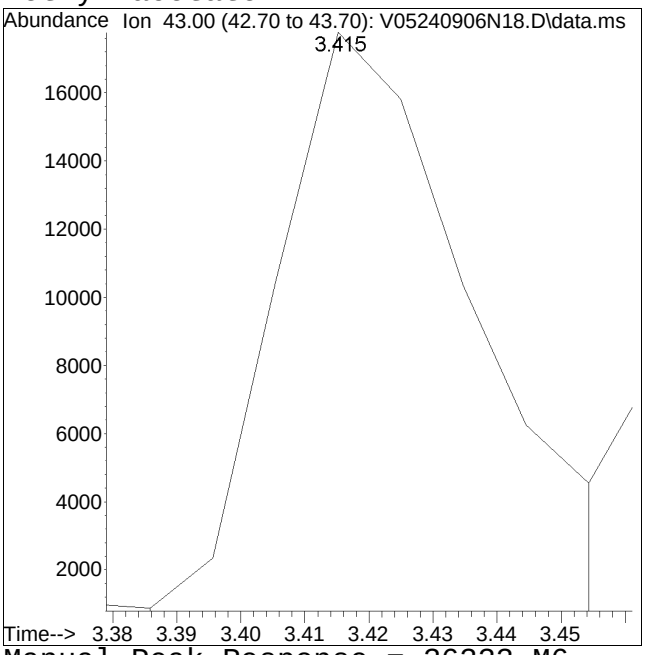
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

Compound #19: Methyl acetate




Original Peak Response = 37898



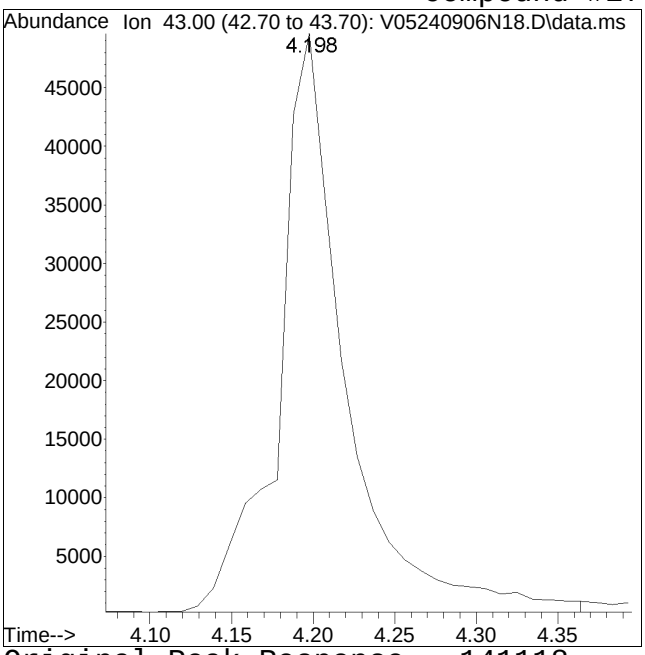

Manual Peak Response = 36333 M6

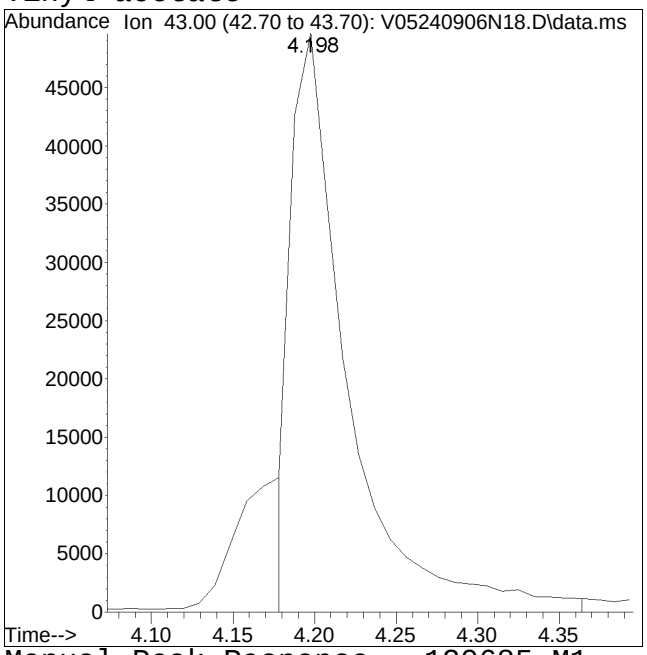
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

Compound #27: Vinyl acetate



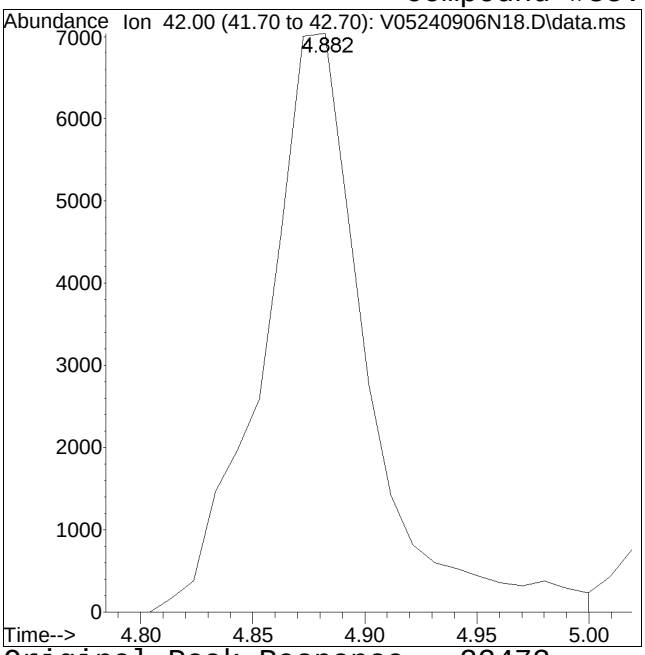




Original Peak Response = 141118 Manual Peak Response = 120685 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

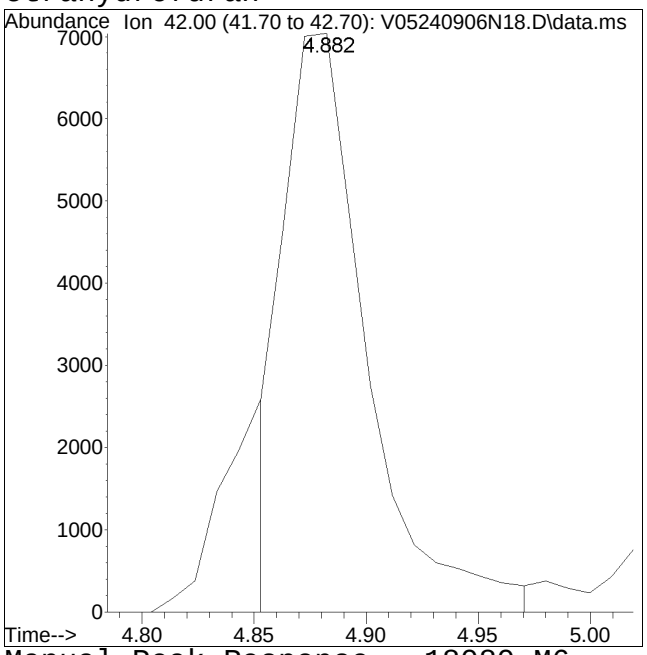
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

Compound #35: Tetrahydrofuran




Original Peak Response = 22473



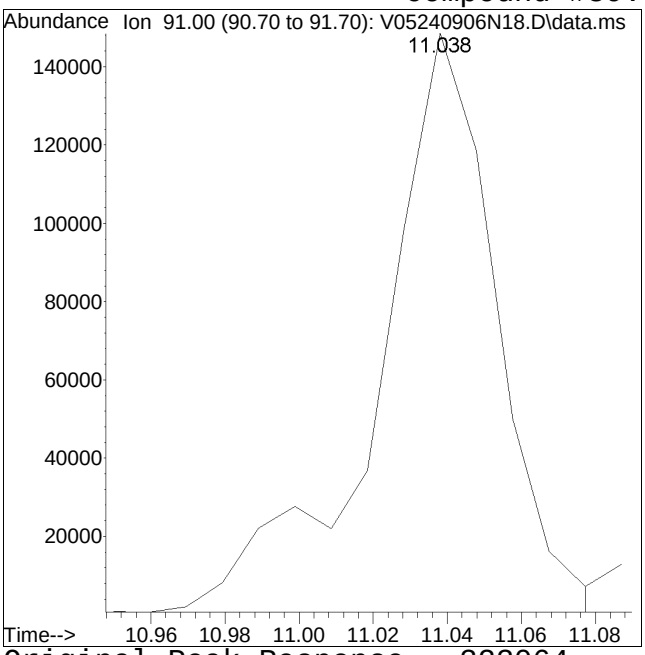

Manual Peak Response = 18080 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

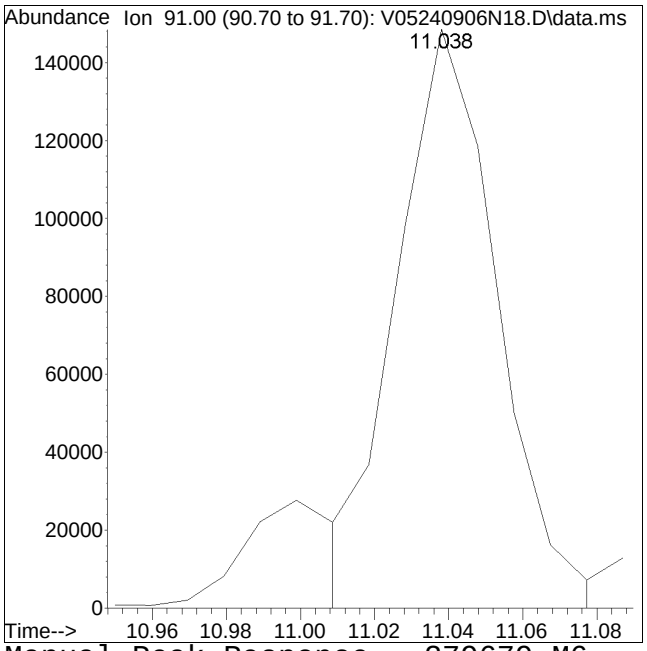
# Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

## Compound #89: 2-Chlorotoluene




Original Peak Response = 323064



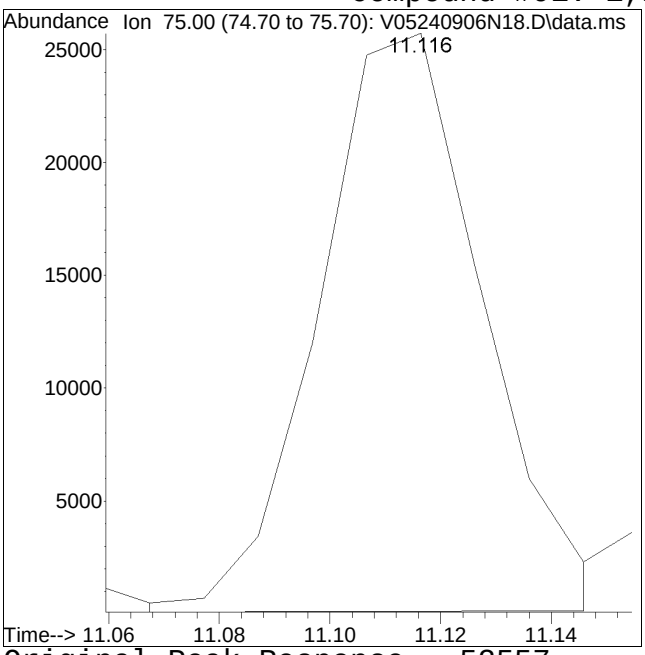

Manual Peak Response = 279679 M6

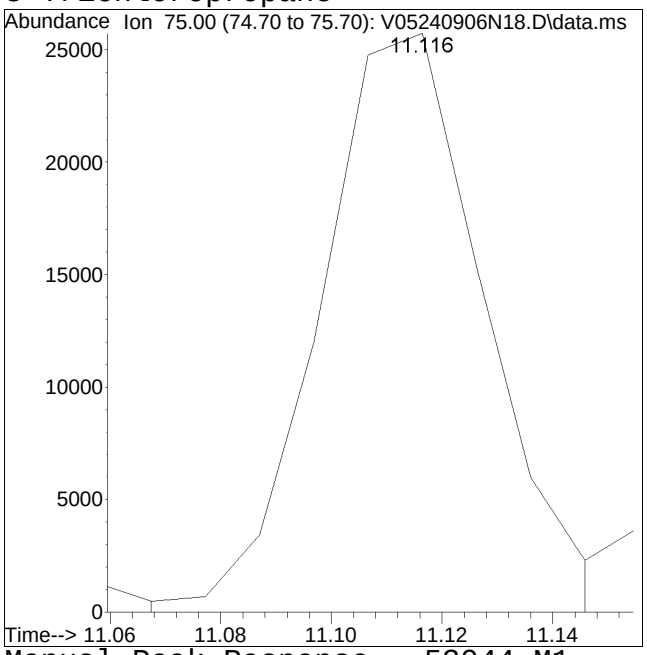
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

Compound #91: 1,2,3-Trichloropropane



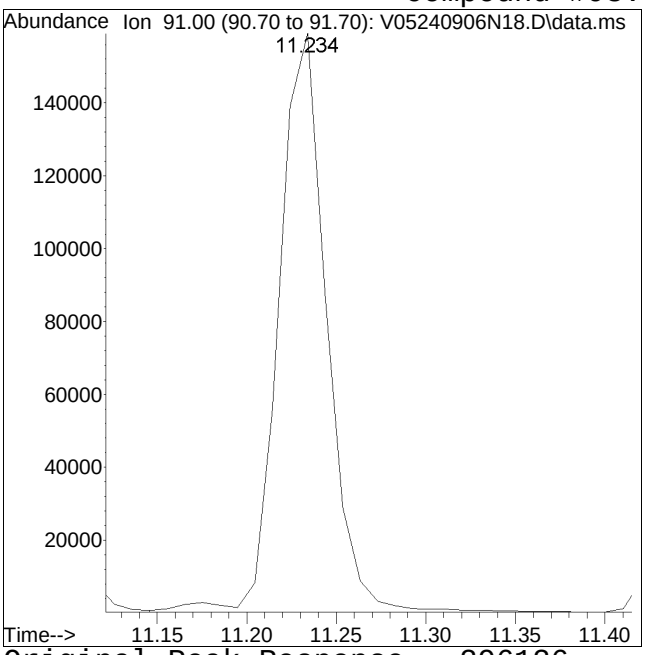




Original Peak Response = 52557 Manual Peak Response = 53044 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

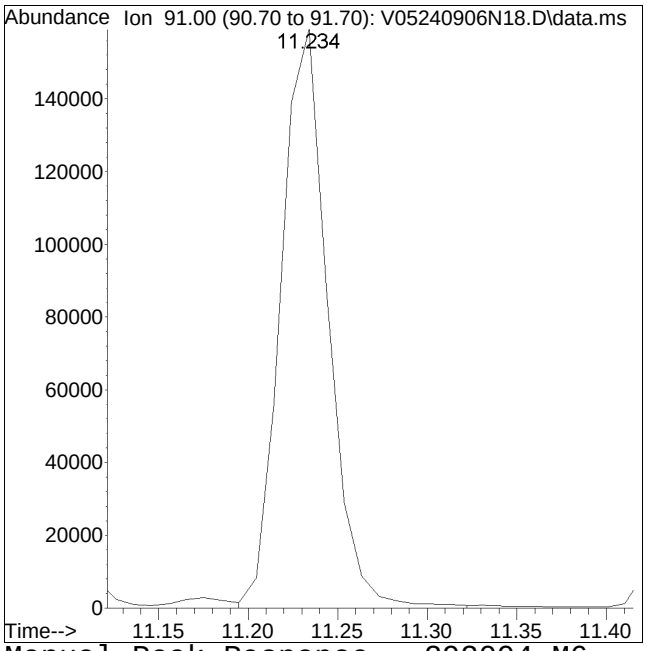
Manual Integration Report

Data Path : K:\VOA105\2024\240906NICALQMethod : V105_240906N_8260.m
Data File : V05240906N18.D Operator : VOA105:PID
Date Inj'd : 9/7/2024 12:00 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 9/9/2024 11:33 am

Compound #93: 4-Chlorotoluene




Original Peak Response = 296126




Manual Peak Response = 292004 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

## Evaluate Relative Error Report VOA105

Method Path : K:\VOA105\2024\240906NICAL\
Method File : V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 6 | TP Chloroethane | Q | ug/L | 10.0 | 9.596 | -4.0 | 0.50 | 0.448 | -10.4 |
| 106 | TP 1,2-Dibromo-3-chloropropane | Q | ug/L | 10.0 | 9.041 | -9.6 | 0.50 | 0.589 | 17.8 |
| 110 | TP Naphthalene | L | ug/L | 10.0 | 8.793 | -12.1 | 0.50 | 0.649 | 29.8 |

## Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 6 | TP Chloroethane | Quadratic | 0.998851 | -0.004258 | 0.168206 | 0.00596107 |
| 106 | TP 1,2-Dibromo-3-chloropropane | Quadratic | 0.998718 | 0.000543 | 0.0717979 | -0.00231609 |
| 110 | TP Naphthalene | Linear | 0.998839 | 0.000000 | 1.51913 | -0.0605148 |

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : ELAINE | **Calibration Date** | : 09/21/24 07:26 | | |
| **Lab File ID** | : VE240921A02 | **Init. Calib. Date(s)** | : 07/31/24 | 07/31/24 | |
| **Sample No** | : WG1974948-2 | **Init. Calib. Times** | : 18:35 | 22:22 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Fluorobenzene | 1 | 1 | - | 0 | 20 | 128 | -.01 |
| Dichlorodifluoromethane | 0.224 | 0.274 | - | -22.3* | 20 | 160 | 0 |
| Chloromethane | 0.25 | 0.285 | - | -14 | 20 | 139 | -.01 |
| Vinyl chloride | 0.233 | 0.282 | - | -21* | 20 | 149 | 0 |
| Bromomethane | 10 | 13.627 | - | -36.3* | 20 | 211 | 0 |
| Chloroethane | 0.14 | 0.166 | - | -18.6 | 20 | 139 | 0 |
| Trichlorofluoromethane | 0.267 | 0.31 | - | -16.1 | 20 | 157 | 0 |
| Ethyl ether | 0.105 | 0.116 | - | -10.5 | 20 | 140 | 0 |
| 1,1-Dichloroethene | 0.16 | 0.168 | - | -5 | 20 | 140 | 0 |
| Carbon disulfide | 0.494 | 0.56 | - | -13.4 | 20 | 143 | 0 |
| Freon-113 | 0.167 | 0.204 | - | -22.2* | 20 | 161 | 0 |
| Methylene chloride | 0.202 | 0.216 | - | -6.9 | 20 | 136 | 0 |
| Acetone | 0.073 | 0.048 | - | 34.2* | 20 | 87 | -.01 |
| trans-1,2-Dichloroethene | 0.172 | 0.202 | - | -17.4 | 20 | 147 | 0 |
| Methyl acetate | 0.171 | 0.116 | - | 32.2* | 20 | 91 | 0 |
| Methyl tert-butyl ether | 0.642 | 0.591 | - | 7.9 | 20 | 112 | 0 |
| tert-Butyl alcohol | 0.023 | 0.015 | - | 34.8* | 20 | 79 | -.02 |
| Diisopropyl ether | 0.92 | 0.795 | - | 13.6 | 20 | 106 | 0 |
| 1,1-Dichloroethane | 0.404 | 0.441 | - | -9.2 | 20 | 133 | 0 |
| Halothane | 0.139 | 0.162 | - | -16.5 | 20 | 146 | 0 |
| Acrylonitrile | 0.084 | 0.071 | - | 15.5 | 20 | 104 | 0 |
| Ethyl tert-butyl ether | 0.798 | 0.737 | - | 7.6 | 20 | 113 | 0 |
| Vinyl acetate | 0.612 | 0.541 | - | 11.6 | 20 | 125 | -.01 |
| cis-1,2-Dichloroethene | 0.206 | 0.234 | - | -13.6 | 20 | 142 | 0 |
| 2,2-Dichloropropane | 0.27 | 0.317 | - | -17.4 | 20 | 151 | 0 |
| Bromochloromethane | 0.091 | 0.106 | - | -16.5 | 20 | 142 | 0 |
| Cyclohexane | 0.473 | 0.479 | - | -1.3 | 20 | 136 | 0 |
| Chloroform | 0.335 | 0.375 | - | -11.9 | 20 | 139 | 0 |
| Ethyl acetate | 0.256 | 0.18 | - | 29.7* | 20 | 88 | -.01 |
| Carbon tetrachloride | 0.256 | 0.306 | - | -19.5 | 20 | 151 | -.01 |
| Tetrahydrofuran | 0.079 | 0.057 | - | 27.8* | 20 | 90 | 0 |
| Dibromofluoromethane | 0.234 | 0.245 | - | -4.7 | 20 | 132 | 0 |
| 1,1,1-Trichloroethane | 0.304 | 0.337 | - | -10.9 | 20 | 140 | -.01 |
| 2-Butanone | 0.105 | 0.069 | - | 34.3* | 20 | 85 | -.02 |
| 1,1-Dichloropropene | 0.256 | 0.285 | - | -11.3 | 20 | 141 | 0 |
| Benzene | 0.792 | 0.884 | - | -11.6 | 20 | 135 | 0 |
| tert-Amyl methyl ether | 0.598 | 0.538 | - | 10 | 20 | 112 | -.01 |
| 1,2-Dichloroethane-d4 | 0.312 | 0.289 | - | 7.4 | 20 | 117 | 0 |
| 1,2-Dichloroethane | 0.306 | 0.31 | - | -1.3 | 20 | 125 | -.01 |
| Methyl cyclohexane | 0.356 | 0.377 | - | -5.9 | 20 | 145 | 0 |
| Trichloroethene | 0.199 | 0.222 | - | -11.6 | 20 | 135 | 0 |
| Dibromomethane | 0.115 | 0.121 | - | -5.2 | 20 | 130 | 0 |
| 1,2-Dichloropropane | 0.239 | 0.245 | - | -2.5 | 20 | 126 | -.01 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : ELAINE | **Calibration Date** | : 09/21/24 07:26 | | |
| **Lab File ID** | : VE240921A02 | **Init. Calib. Date(s)** | : 07/31/24 | 07/31/24 | |
| **Sample No** | : WG1974948-2 | **Init. Calib. Times** | : 18:35 | 22:22 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Bromodichloromethane | 0.283 | 0.292* | - | -3.2 | 20 | 127 | 0 |
| 1,4-Dioxane | 0.00192 | 0.00078* | - | 59.4* | 20 | 52 | -.02 |
| cis-1,3-Dichloropropene | 0.319 | 0.329 | - | -3.1 | 20 | 124 | 0 |
| Chlorobenzene-d5 | 1 | 1 | - | 0 | 20 | 134 | 0 |
| Toluene-d8 | 1.317 | 1.272 | - | 3.4 | 20 | 128 | -.01 |
| Toluene | 0.689 | 0.745 | - | -8.1 | 20 | 140 | 0 |
| 4-Methyl-2-pentanone | 0.117 | 0.083 | - | 29.1* | 20 | 90 | -.02 |
| Tetrachloroethene | 0.293 | 0.357 | - | -21.8* | 20 | 158 | -.01 |
| trans-1,3-Dichloropropene | 0.388 | 0.377 | - | 2.8 | 20 | 122 | 0 |
| Ethyl methacrylate | 0.369 | 0.304 | - | 17.6 | 20 | 105 | 0 |
| 1,1,2-Trichloroethane | 0.193 | 0.189* | - | 2.1 | 20 | 124 | -.01 |
| Chlorodibromomethane | 0.27 | 0.273 | - | -1.1 | 20 | 129 | 0 |
| 1,3-Dichloropropane | 0.408 | 0.402 | - | 1.5 | 20 | 125 | -.01 |
| 1,2-Dibromoethane | 0.228 | 0.222 | - | 2.6 | 20 | 125 | 0 |
| 2-Hexanone | 0.229 | 0.134 | - | 41.5* | 20 | 76 | -.01 |
| Chlorobenzene | 0.734 | 0.825 | - | -12.4 | 20 | 144 | -.01 |
| Ethylbenzene | 1.335 | 1.458 | - | -9.2 | 20 | 138 | 0 |
| 1,1,1,2-Tetrachloroethane | 0.269 | 0.299 | - | -11.2 | 20 | 140 | -.01 |
| p/m Xylene | 0.509 | 0.581 | - | -14.1 | 20 | 142 | -.01 |
| o Xylene | 0.497 | 0.564 | - | -13.5 | 20 | 141 | 0 |
| Styrene | 0.816 | 0.915 | - | -12.1 | 20 | 138 | -.01 |
| 1,4-Dichlorobenzene-d4 | 1 | 1 | - | 0 | 20 | 137 | 0 |
| Bromoform | 0.325 | 0.315 | - | 3.1 | 20 | 130 | -.01 |
| Isopropylbenzene | 2.395 | 2.581 | - | -7.8 | 20 | 144 | 0 |
| 4-Bromofluorobenzene | 0.924 | 0.82 | - | 11.3 | 20 | 121 | 0 |
| Bromobenzene | 0.605 | 0.666 | - | -10.1 | 20 | 146 | 0 |
| n-Propylbenzene | 2.861 | 3.061 | - | -7 | 20 | 142 | 0 |
| 1,4-Dichlorobutane | 1.046 | 0.895 | - | 14.4 | 20 | 115 | 0 |
| 1,1,2,2-Tetrachloroethane | 0.508 | 0.465 | - | 8.5 | 20 | 129 | 0 |
| 4-Ethyltoluene | 2.321 | 2.533 | - | -9.1 | 20 | 143 | -.01 |
| 2-Chlorotoluene | 1.683 | 1.76 | - | -4.6 | 20 | 136 | 0 |
| 1,3,5-Trimethylbenzene | 2.036 | 2.191 | - | -7.6 | 20 | 140 | 0 |
| 1,2,3-Trichloropropane | 0.415 | 0.373 | - | 10.1 | 20 | 118 | -.01 |
| trans-1,4-Dichloro-2-buten | 0.204 | 0.158 | - | 22.5* | 20 | 106 | 0 |
| 4-Chlorotoluene | 1.763 | 1.844 | - | -4.6 | 20 | 138 | 0 |
| tert-Butylbenzene | 1.712 | 1.855 | - | -8.4 | 20 | 143 | 0 |
| 1,2,4-Trimethylbenzene | 2.033 | 2.162 | - | -6.3 | 20 | 139 | 0 |
| sec-Butylbenzene | 2.538 | 2.722 | - | -7.2 | 20 | 144 | 0 |
| p-Isopropyltoluene | 2.139 | 2.326 | - | -8.7 | 20 | 145 | 0 |
| 1,3-Dichlorobenzene | 1.117 | 1.243 | - | -11.3 | 20 | 145 | 0 |
| 1,4-Dichlorobenzene | 1.116 | 1.249 | - | -11.9 | 20 | 148 | 0 |
| p-Diethylbenzene | 1.261 | 1.325 | - | -5.1 | 20 | 139 | -.01 |
| n-Butylbenzene | 1.842 | 1.962 | - | -6.5 | 20 | 144 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : ELAINE | **Calibration Date** | : 09/21/24 07:26 | | |
| **Lab File ID** | : VE240921A02 | **Init. Calib. Date(s)** | : 07/31/24 | 07/31/24 | |
| **Sample No** | : WG1974948-2 | **Init. Calib. Times** | : 18:35 | 22:22 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | 1.074 | 1.181 | - | -10 | 20 | 145 | 0 |
| 1,2,4,5-Tetramethylbenzene | 2.046 | 2.026 | - | 1 | 20 | 130 | 0 |
| 1,2-Dibromo-3-chloropropan | 10 | 7.961 | - | 20.4* | 20 | 113 | -.01 |
| 1,3,5-Trichlorobenzene | 0.853 | 0.949 | - | -11.3 | 20 | 146 | 0 |
| Hexachlorobutadiene | 0.283 | 0.329 | - | -16.3 | 20 | 158 | -.01 |
| 1,2,4-Trichlorobenzene | 0.77 | 0.773 | - | -0.4 | 20 | 134 | 0 |
| Naphthalene | 1.697 | 1.429 | - | 15.8 | 20 | 115 | 0 |
| 1,2,3-Trichlorobenzene | 0.707 | 0.683 | - | 3.4 | 20 | 129 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : VOA105 | **Calibration Date** | : 09/22/24 17:45 | | |
| **Lab File ID** | : V05240922A01 | **Init. Calib. Date(s)** | : 09/06/24 | 09/06/24 | |
| **Sample No** | : WG1974932-2 | **Init. Calib. Times** | : 17:39 | 21:53 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Fluorobenzene | 1 | 1 | - | 0 | 20 | 199 | 0 |
| Dichlorodifluoromethane | 0.293 | 0.32 | - | -9.2 | 20 | 194 | 0 |
| Chloromethane | 0.283 | 0.227 | - | 19.8 | 20 | 147 | 0 |
| Vinyl chloride | 0.246 | 0.243 | - | 1.2 | 20 | 179 | 0 |
| Bromomethane | 0.12 | 0.037 | - | 69.2* | 20 | 66 | 0 |
| Chloroethane | 10 | 7.344 | - | 26.6* | 20 | 155 | 0 |
| Trichlorofluoromethane | 0.37 | 0.358 | - | 3.2 | 20 | 175 | 0 |
| Ethyl ether | 0.089 | 0.087 | - | 2.2 | 20 | 192 | 0 |
| 1,1-Dichloroethene | 0.184 | 0.184 | - | 0 | 20 | 184 | 0 |
| Carbon disulfide | 0.567 | 0.589 | - | -3.9 | 20 | 191 | 0 |
| Freon-113 | 0.202 | 0.202 | - | 0 | 20 | 180 | 0 |
| Iodomethane | 0.309 | 0.088 | - | 71.5* | 20 | 56 | 0 |
| Acrolein | 0.025 | 0.028 | - | -12 | 20 | 250 | 0 |
| Methylene chloride | 0.219 | 0.232 | - | -5.9 | 20 | 205 | 0 |
| Acetone | 0.047 | 0.039 | - | 17 | 20 | 164 | 0 |
| trans-1,2-Dichloroethene | 0.218 | 0.244 | - | -11.9 | 20 | 211 | 0 |
| Methyl acetate | 0.104 | 0.102 | - | 1.9 | 20 | 207 | 0 |
| Methyl tert-butyl ether | 0.479 | 0.513 | - | -7.1 | 20 | 215 | 0 |
| tert-Butyl alcohol | 0.011 | 0.012 | - | -9.1 | 20 | 240 | 0 |
| Diisopropyl ether | 0.729 | 0.738 | - | -1.2 | 20 | 201 | 0 |
| 1,1-Dichloroethane | 0.396 | 0.421 | - | -6.3 | 20 | 195 | 0 |
| Halothane | 0.175 | 0.193 | - | -10.3 | 20 | 207 | 0 |
| Acrylonitrile | 0.055 | 0.052 | - | 5.5 | 20 | 194 | 0 |
| Ethyl tert-butyl ether | 0.537 | 0.582 | - | -8.4 | 20 | 218 | 0 |
| Vinyl acetate | 0.434 | 0.446 | - | -2.8 | 20 | 227 | -.01 |
| cis-1,2-Dichloroethene | 0.247 | 0.265 | - | -7.3 | 20 | 205 | 0 |
| 2,2-Dichloropropane | 0.323 | 0.357 | - | -10.5 | 20 | 207 | 0 |
| Bromochloromethane | 0.119 | 0.127 | - | -6.7 | 20 | 201 | 0 |
| Cyclohexane | 0.382 | 0.445 | - | -16.5 | 20 | 205 | 0 |
| Chloroform | 0.414 | 0.416 | - | -0.5 | 20 | 193 | 0 |
| Ethyl acetate | 0.167 | 0.147 | - | 12 | 20 | 199 | 0 |
| Carbon tetrachloride | 0.356 | 0.367 | - | -3.1 | 20 | 194 | 0 |
| Tetrahydrofuran | 0.054 | 0.053 | - | 1.9 | 20 | 212 | 0 |
| Dibromofluoromethane | 0.279 | 0.274 | - | 1.8 | 20 | 198 | 0 |
| 1,1,1-Trichloroethane | 0.386 | 0.398 | - | -3.1 | 20 | 190 | -.01 |
| 2-Butanone | 0.072 | 0.066 | - | 8.3 | 20 | 201 | 0 |
| 1,1-Dichloropropene | 0.286 | 0.314 | - | -9.8 | 20 | 202 | 0 |
| Benzene | 0.842 | 0.908 | - | -7.8 | 20 | 198 | 0 |
| tert-Amyl methyl ether | 0.444 | 0.462 | - | -4.1 | 20 | 209 | 0 |
| 1,2-Dichloroethane-d4 | 0.289 | 0.286 | - | 1 | 20 | 190 | 0 |
| 1,2-Dichloroethane | 0.278 | 0.27 | - | 2.9 | 20 | 187 | 0 |
| Methyl cyclohexane | 0.386 | 0.417 | - | -8 | 20 | 198 | 0 |
| Trichloroethene | 0.251 | 0.249 | - | 0.8 | 20 | 190 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : VOA105 | **Calibration Date** | : 09/22/24 17:45 | | |
| **Lab File ID** | : V05240922A01 | **Init. Calib. Date(s)** | : 09/06/24 | 09/06/24 | |
| **Sample No** | : WG1974932-2 | **Init. Calib. Times** | : 17:39 | 21:53 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Dibromomethane | 0.13 | 0.125 | - | 3.8 | 20 | 192 | 0 |
| 1,2-Dichloropropane | 0.21 | 0.22 | - | -4.8 | 20 | 198 | 0 |
| Bromodichloromethane | 0.308 | 0.305 | - | 1 | 20 | 196 | 0 |
| 1,4-Dioxane | 0.00131 | 0.0014* | - | -6.9 | 20 | 221 | 0 |
| cis-1,3-Dichloropropene | 0.324 | 0.336 | - | -3.7 | 20 | 201 | 0 |
| Chlorobenzene-d5 | 1 | 1 | - | 0 | 20 | 195 | 0 |
| Toluene-d8 | 1.208 | 1.243 | - | -2.9 | 20 | 195 | 0 |
| Toluene | 0.702 | 0.745 | - | -6.1 | 20 | 194 | 0 |
| 4-Methyl-2-pentanone | 0.058 | 0.058 | - | 0 | 20 | 211 | 0 |
| Tetrachloroethene | 0.37 | 0.393 | - | -6.2 | 20 | 192 | 0 |
| trans-1,3-Dichloropropene | 0.342 | 0.358 | - | -4.7 | 20 | 194 | 0 |
| Ethyl methacrylate | 0.231 | 0.232 | - | -0.4 | 20 | 213 | 0 |
| 1,1,2-Trichloroethane | 0.174 | 0.183* | - | -5.2 | 20 | 196 | 0 |
| Chlorodibromomethane | 0.296 | 0.297 | - | -0.3 | 20 | 196 | 0 |
| 1,3-Dichloropropane | 0.341 | 0.361 | - | -5.9 | 20 | 193 | 0 |
| 1,2-Dibromoethane | 0.234 | 0.249 | - | -6.4 | 20 | 198 | 0 |
| 2-Hexanone | 0.116 | 0.104 | - | 10.3 | 20 | 196 | 0 |
| Chlorobenzene | 0.83 | 0.859 | - | -3.5 | 20 | 193 | 0 |
| Ethylbenzene | 1.402 | 1.468 | - | -4.7 | 20 | 189 | 0 |
| 1,1,1,2-Tetrachloroethane | 0.305 | 0.31 | - | -1.6 | 20 | 196 | 0 |
| p/m Xylene | 0.541 | 0.582 | - | -7.6 | 20 | 190 | 0 |
| o Xylene | 0.513 | 0.553 | - | -7.8 | 20 | 191 | 0 |
| Styrene | 0.849 | 0.904 | - | -6.5 | 20 | 188 | 0 |
| 1,4-Dichlorobenzene-d4 | 1 | 1 | - | 0 | 20 | 177 | 0 |
| Bromoform | 0.296 | 0.288 | - | 2.7 | 20 | 187 | 0 |
| Isopropylbenzene | 2.313 | 2.595 | - | -12.2 | 20 | 186 | 0 |
| 4-Bromofluorobenzene | 0.694 | 0.766 | - | -10.4 | 20 | 201 | 0 |
| Bromobenzene | 0.608 | 0.63 | - | -3.6 | 20 | 184 | 0 |
| n-Propylbenzene | 2.702 | 3.004 | - | -11.2 | 20 | 183 | 0 |
| 1,4-Dichlorobutane | 0.581 | 0.647 | - | -11.4 | 20 | 193 | 0 |
| 1,1,2,2-Tetrachloroethane | 0.402 | 0.424 | - | -5.5 | 20 | 191 | 0 |
| 4-Ethyltoluene | 2.252 | 2.534 | - | -12.5 | 20 | 187 | 0 |
| 2-Chlorotoluene | 1.524 | 1.71 | - | -12.2 | 20 | 187 | 0 |
| 1,3,5-Trimethylbenzene | 1.987 | 2.179 | - | -9.7 | 20 | 180 | 0 |
| 1,2,3-Trichloropropane | 0.312 | 0.322 | - | -3.2 | 20 | 182 | 0 |
| trans-1,4-Dichloro-2-buten | 0.133 | 0.126 | - | 5.3 | 20 | 172 | 0 |
| 4-Chlorotoluene | 1.575 | 1.759 | - | -11.7 | 20 | 186 | 0 |
| tert-Butylbenzene | 1.74 | 1.923 | - | -10.5 | 20 | 182 | 0 |
| 1,2,4-Trimethylbenzene | 1.903 | 2.097 | - | -10.2 | 20 | 181 | 0 |
| sec-Butylbenzene | 2.546 | 2.801 | - | -10 | 20 | 181 | 0 |
| p-Isopropyltoluene | 2.195 | 2.454 | - | -11.8 | 20 | 182 | 0 |
| 1,3-Dichlorobenzene | 1.201 | 1.281 | - | -6.7 | 20 | 181 | 0 |
| 1,4-Dichlorobenzene | 1.235 | 1.258 | - | -1.9 | 20 | 177 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Volatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : VOA105 | **Calibration Date** | : 09/22/24 17:45 | | |
| **Lab File ID** | : V05240922A01 | **Init. Calib. Date(s)** | : 09/06/24 | 09/06/24 | |
| **Sample No** | : WG1974932-2 | **Init. Calib. Times** | : 17:39 | 21:53 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| p-Diethylbenzene | 1.271 | 1.392 | - | -9.5 | 20 | 182 | 0 |
| n-Butylbenzene | 1.805 | 2.014 | - | -11.6 | 20 | 180 | 0 |
| 1,2-Dichlorobenzene | 1.085 | 1.145 | - | -5.5 | 20 | 181 | 0 |
| 1,2,4,5-Tetramethylbenzene | 1.922 | 1.968 | - | -2.4 | 20 | 188 | 0 |
| 1,2-Dibromo-3-chloropropan | 10 | 9.517 | - | 4.8 | 20 | 187 | 0 |
| 1,3,5-Trichlorobenzene | 0.882 | 0.905 | - | -2.6 | 20 | 175 | 0 |
| Hexachlorobutadiene | 0.322 | 0.336 | - | -4.3 | 20 | 182 | 0 |
| 1,2,4-Trichlorobenzene | 0.724 | 0.735 | - | -1.5 | 20 | 177 | 0 |
| Naphthalene | 10 | 9.771 | - | 2.3 | 20 | 197 | 0 |
| 1,2,3-Trichlorobenzene | 0.616 | 0.633 | - | -2.8 | 20 | 178 | 0 |

*** Value outside of QC limits.**

# Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 128 | -0.01 |
| 2 | TP | Dichlorodifluoromethane | 0.224 | 0.274 | -22.3# | 160 | 0.00 |
| 3 | TP | Chloromethane | 0.250 | 0.285 | -14.0 | 139 | -0.01 |
| 4 | TP | Vinyl chloride | 0.233 | 0.282 | -21.0# | 149 | 0.00 |
| 5 | TP | Bromomethane | * 10.000 | 13.627 | -36.3# | 211# | 0.00 |
| 6 | TP | Chloroethane | 0.140 | 0.166 | -18.6 | 139 | 0.00 |
| 7 | TP | Trichlorofluoromethane | 0.267 | 0.310 | -16.1 | 157 | 0.00 |
| 8 | TP | Ethyl ether | 0.105 | 0.116 | -10.5 | 140 | 0.00 |
| 10 | TP | 1,1-Dichloroethene | 0.160 | 0.168 | -5.0 | 140 | 0.00 |
| 11 | TP | Carbon disulfide | 0.494 | 0.560 | -13.4 | 143 | 0.00 |
| 12 | TP | Freon-113 | 0.167 | 0.204 | -22.2# | 161 | 0.00 |
| 15 | TP | Methylene chloride | 0.202 | 0.216 | -6.9 | 136 | 0.00 |
| 17 | TP | Acetone | 0.073 | 0.048 | 34.2# | 87 | -0.01 |
| 18 | TP | trans-1,2-Dichloroethene | 0.172 | 0.202 | -17.4 | 147 | 0.00 |
| 19 | TP | Methyl acetate | 0.171 | 0.116 | 32.2# | 91 | 0.00 |
| 21 | TP | Methyl tert-butyl ether | 0.642 | 0.591 | 7.9 | 112 | 0.00 |
| 22 | TP | tert-Butyl alcohol | 0.023 | 0.015 | 34.8# | 79 | -0.02 |
| 24 | TP | Diisopropyl ether | 0.920 | 0.795 | 13.6 | 106 | 0.00 |
| 25 | TP | 1,1-Dichloroethane | 0.404 | 0.441 | -9.2 | 133 | 0.00 |
| 26 | TP | Halothane | 0.139 | 0.162 | -16.5 | 146 | 0.00 |
| 27 | TP | Acrylonitrile | 0.084 | 0.071 | 15.5 | 104 | 0.00 |
| 28 | TP | Ethyl tert-butyl ether | 0.798 | 0.737 | 7.6 | 113 | 0.00 |
| 29 | TP | Vinyl acetate | 0.612 | 0.541 | 11.6 | 125 | -0.01 |
| 30 | TP | cis-1,2-Dichloroethene | 0.206 | 0.234 | -13.6 | 142 | 0.00 |
| 31 | TP | 2,2-Dichloropropane | 0.270 | 0.317 | -17.4 | 151 | 0.00 |
| 33 | TP | Bromochloromethane | 0.091 | 0.106 | -16.5 | 142 | 0.00 |
| 34 | TP | Cyclohexane | 0.473 | 0.479 | -1.3 | 136 | 0.00 |
| 35 | TP | Chloroform | 0.335 | 0.375 | -11.9 | 139 | 0.00 |
| 36 | TP | Ethyl acetate | 0.256 | 0.180 | 29.7# | 88 | -0.01 |
| 37 | TP | Carbon tetrachloride | 0.256 | 0.306 | -19.5 | 151 | -0.01 |
| 38 | TP | Tetrahydrofuran | 0.079 | 0.057 | 27.8# | 90 | 0.00 |
| 39 | S | Dibromofluoromethane | 0.234 | 0.245 | -4.7 | 132 | 0.00 |
| 40 | TP | 1,1,1-Trichloroethane | 0.304 | 0.337 | -10.9 | 140 | -0.01 |
| 42 | TP | 2-Butanone | 0.105 | 0.069 | 34.3# | 85 | -0.02 |
| 43 | TP | 1,1-Dichloropropene | 0.256 | 0.285 | -11.3 | 141 | 0.00 |
| 45 | TP | Benzene | 0.792 | 0.884 | -11.6 | 135 | 0.00 |
| 46 | TP | tert-Amyl methyl ether | 0.598 | 0.538 | 10.0 | 112 | -0.01 |
| 47 | S | 1,2-Dichloroethane-d4 | 0.312 | 0.289 | 7.4 | 117 | 0.00 |
| 48 | T | 1,2-Dichloroethane | 0.306 | 0.310 | -1.3 | 125 | -0.01 |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 51 | TP | Methyl cyclohexane | 0.356 | 0.377 | -5.9 | 145 | 0.00 |
| 52 | TP | Trichloroethene | 0.199 | 0.222 | -11.6 | 135 | 0.00 |
| 54 | TP | Dibromomethane | 0.115 | 0.121 | -5.2 | 130 | 0.00 |
| 55 | TP | 1,2-Dichloropropane | 0.239 | 0.245 | -2.5 | 126 | -0.01 |
| 58 | TP | Bromodichloromethane | 0.283 | 0.292# | -3.2 | 127 | 0.00 |
| 61 | TP | 1,4-Dioxane | 0.00192 | 0.00078# | 59.4# | 52 | -0.02 |
| 62 | TP | cis-1,3-Dichloropropene | 0.319 | 0.329 | -3.1 | 124 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 134 | 0.00 |
| 64 | S | Toluene-d8 | 1.317 | 1.272 | 3.4 | 128 | -0.01 |
| 65 | TP | Toluene | 0.689 | 0.745 | -8.1 | 140 | 0.00 |
| 66 | TP | 4-Methyl-2-pentanone | 0.117 | 0.083 | 29.1# | 90 | -0.02 |
| 67 | TP | Tetrachloroethene | 0.293 | 0.357 | -21.8# | 158 | -0.01 |
| 69 | TP | trans-1,3-Dichloropropene | 0.388 | 0.377 | 2.8 | 122 | 0.00 |
| 71 | TP | Ethyl methacrylate | 0.369 | 0.304 | 17.6 | 105 | 0.00 |
| 72 | TP | 1,1,2-Trichloroethane | 0.193 | 0.189# | 2.1 | 124 | -0.01 |
| 73 | TP | Chlorodibromomethane | 0.270 | 0.273 | -1.1 | 129 | 0.00 |
| 74 | TP | 1,3-Dichloropropane | 0.408 | 0.402 | 1.5 | 125 | -0.01 |
| 75 | TP | 1,2-Dibromoethane | 0.228 | 0.222 | 2.6 | 125 | 0.00 |
| 77 | TP | 2-Hexanone | 0.229 | 0.134 | 41.5# | 76 | -0.01 |
| 78 | TP | Chlorobenzene | 0.734 | 0.825 | -12.4 | 144 | -0.01 |
| 79 | TP | Ethylbenzene | 1.335 | 1.458 | -9.2 | 138 | 0.00 |
| 80 | TP | 1,1,1,2-Tetrachloroethane | 0.269 | 0.299 | -11.2 | 140 | -0.01 |
| 81 | TP | p/m Xylene | 0.509 | 0.581 | -14.1 | 142 | -0.01 |
| 82 | TP | o Xylene | 0.497 | 0.564 | -13.5 | 141 | 0.00 |
| 83 | TP | Styrene | 0.816 | 0.915 | -12.1 | 138 | -0.01 |
| 84 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 137 | 0.00 |
| 85 | TP | Bromoform | 0.325 | 0.315 | 3.1 | 130 | -0.01 |
| 87 | TP | Isopropylbenzene | 2.395 | 2.581 | -7.8 | 144 | 0.00 |
| 88 | S | 4-Bromofluorobenzene | 0.924 | 0.820 | 11.3 | 121 | 0.00 |
| 89 | TP | Bromobenzene | 0.605 | 0.666 | -10.1 | 146 | 0.00 |
| 90 | TP | n-Propylbenzene | 2.861 | 3.061 | -7.0 | 142 | 0.00 |
| 91 | TP | 1,4-Dichlorobutane | 1.046 | 0.895 | 14.4 | 115 | 0.00 |
| 92 | TP | 1,1,2,2-Tetrachloroethane | 0.508 | 0.465 | 8.5 | 129 | 0.00 |
| 93 | TP | 4-Ethyltoluene | 2.321 | 2.533 | -9.1 | 143 | -0.01 |
| 94 | TP | 2-Chlorotoluene | 1.683 | 1.760 | -4.6 | 136 | 0.00 |
| 95 | TP | 1,3,5-Trimethylbenzene | 2.036 | 2.191 | -7.6 | 140 | 0.00 |
| 96 | TP | 1,2,3-Trichloropropane | 0.415 | 0.373 | 10.1 | 118 | -0.01 |

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 97 TP | trans-1,4-Dichloro-2-butene | 0.204 | 0.158 | 22.5# | 106 | 0.00 |
| 98 TP | 4-Chlorotoluene | 1.763 | 1.844 | -4.6 | 138 | 0.00 |
| 99 TP | tert-Butylbenzene | 1.712 | 1.855 | -8.4 | 143 | 0.00 |
| 102 TP | 1,2,4-Trimethylbenzene | 2.033 | 2.162 | -6.3 | 139 | 0.00 |
| 103 TP | sec-Butylbenzene | 2.538 | 2.722 | -7.2 | 144 | 0.00 |
| 104 TP | p-Isopropyltoluene | 2.139 | 2.326 | -8.7 | 145 | 0.00 |
| 105 TP | 1,3-Dichlorobenzene | 1.117 | 1.243 | -11.3 | 145 | 0.00 |
| 106 TP | 1,4-Dichlorobenzene | 1.116 | 1.249 | -11.9 | 148 | 0.00 |
| 107 TP | p-Diethylbenzene | 1.261 | 1.325 | -5.1 | 139 | -0.01 |
| 108 TP | n-Butylbenzene | 1.842 | 1.962 | -6.5 | 144 | 0.00 |
| 109 TP | 1,2-Dichlorobenzene | 1.074 | 1.181 | -10.0 | 145 | 0.00 |
| 110 TP | 1,2,4,5-Tetramethylbenzene | 2.046 | 2.026 | 1.0 | 130 | 0.00 |
| 111 TP | 1,2-Dibromo-3-chloropropane * | 10.000 | 7.961 | 20.4# | 113 | -0.01 |
| 112 TP | 1,3,5-Trichlorobenzene | 0.853 | 0.949 | -11.3 | 146 | 0.00 |
| 113 TP | Hexachlorobutadiene | 0.283 | 0.329 | -16.3 | 158 | -0.01 |
| 114 TP | 1,2,4-Trichlorobenzene | 0.770 | 0.773 | -0.4 | 134 | 0.00 |
| 115 TP | Naphthalene | 1.697 | 1.429 | 15.8 | 115 | 0.00 |
| 116 TP | 1,2,3-Trichlorobenzene | 0.707 | 0.683 | 3.4 | 129 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 262722 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 100.00% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 197518 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 100.00% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.202 | 152 | 115520 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 64302 | 10.455 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 104.55% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.674 | 65 | 75882 | 9.247 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 92.47% | | | |
| 64) Toluene-d8 | 7.643 | 98 | 251155 | 9.653 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.53% | | | |
| 88) 4-Bromofluorobenzene | 10.987 | 95 | 94695 | 8.874 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.74% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.589 | 85 | 72049 | 12.232 | ug/L | 96 |
| 3) Chloromethane | 1.778 | 50 | 74946 | 11.428 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 74178 | 12.137 | ug/L | 94 |
| 5) Bromomethane | 2.163 | 94 | 25204 | 13.627 | ug/L | 92 |
| 6) Chloroethane | 2.278 | 64 | 43680 | 11.838 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 81537 | 11.610 | ug/L | 91 |
| 8) Ethyl ether | 2.713 | 74 | 30345 | 10.972 | ug/L | 86 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 44234 | 10.513 | ug/L | 81 |
| 11) Carbon disulfide | 2.930 | 76 | 147032 | 11.326 | ug/L | 96 |
| 12) Freon-113 | 2.944 | 101 | 53661 | 12.238 | ug/L # | 57 |
| 15) Methylene chloride | 3.454 | 84 | 56710 | 10.685 | ug/L | 99 |
| 17) Acetone | 3.491 | 43 | 12511 | 6.490 | ug/L # | 70 |
| 18) trans-1,2-Dichloroethene | 3.605 | 96 | 53155 | 11.752 | ug/L | 89 |
| 19) Methyl acetate | 3.613 | 43 | 30602 | 6.810 | ug/L # | 90 |
| 21) Methyl tert-butyl ether | 3.703 | 73 | 155223 | 9.204 | ug/L | 95 |
| 22) tert-Butyl alcohol | 3.789 | 59 | 19132 | 31.794 | ug/L # | 78 |
| 24) Diisopropyl ether | 4.062 | 45 | 208775 | 8.642 | ug/L | 92 |
| 25) 1,1-Dichloroethane | 4.188 | 63 | 115811 | 10.911 | ug/L | 96 |
| 26) Halothane | 4.244 | 117 | 42507M3 | 11.653 | ug/L | |
| 27) Acrylonitrile | 4.230 | 53 | 18700 | 8.443 | ug/L | 93 |
| 28) Ethyl tert-butyl ether | 4.411 | 59 | 193517 | 9.230 | ug/L | 93 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 29) Vinyl acetate | 4.419 | 43 | 142080 | 8.837 | ug/L | | 98 |
| 30) cis-1,2-Dichloroethene | 4.707 | 96 | 61592 | 11.361 | ug/L | | 97 |
| 31) 2,2-Dichloropropane | 4.804 | 77 | 83216 | 11.714 | ug/L | | 97 |
| 33) Bromochloromethane | 4.899 | 128 | 27875 | 11.722 | ug/L | | 98 |
| 34) Cyclohexane | 4.902 | 56 | 125970 | 10.141 | ug/L | | 97 |
| 35) Chloroform | 4.971 | 83 | 98623 | 11.208 | ug/L | | 96 |
| 36) Ethyl acetate | 5.075 | 43 | 47322 | 7.043 | ug/L | | 98 |
| 37) Carbon tetrachloride | 5.103 | 117 | 80333 | 11.953 | ug/L | | 96 |
| 38) Tetrahydrofuran | 5.122 | 42 | 14953 | 7.169 | ug/L | | 98 |
| 40) 1,1,1-Trichloroethane | 5.169 | 97 | 88619 | 11.090 | ug/L | | 92 |
| 42) 2-Butanone | 5.259 | 43 | 18191 | 6.605 | ug/L | # | 83 |
| 43) 1,1-Dichloropropene | 5.295 | 75 | 74902 | 11.133 | ug/L | | 93 |
| 45) Benzene | 5.538 | 78 | 232347 | 11.164 | ug/L | | 96 |
| 46) tert-Amyl methyl ether | 5.649 | 73 | 141312 | 8.998 | ug/L | | 99 |
| 48) 1,2-Dichloroethane | 5.741 | 62 | 81456 | 10.142 | ug/L | | 96 |
| 51) Methyl cyclohexane | 6.123 | 83 | 99060 | 10.591 | ug/L | | 94 |
| 52) Trichloroethene | 6.137 | 95 | 58238 | 11.131 | ug/L | | 97 |
| 54) Dibromomethane | 6.578 | 93 | 31742 | 10.532 | ug/L | # | 78 |
| 55) 1,2-Dichloropropane | 6.673 | 63 | 64292 | 10.234 | ug/L | | 97 |
| 58) Bromodichloromethane | 6.751 | 83 | 76706 | 10.304 | ug/L | # | 91 |
| 61) 1,4-Dioxane | 6.954 | 88 | 10300 | 204.287 | ug/L | # | 31 |
| 62) cis-1,3-Dichloropropene | 7.442 | 75 | 86389 | 10.306 | ug/L | | 97 |
| 65) Toluene | 7.702 | 92 | 147241 | 10.826 | ug/L | | 95 |
| 66) 4-Methyl-2-pentanone | 8.134 | 58 | 16467 | 7.099 | ug/L | | 87 |
| 67) Tetrachloroethene | 8.150 | 166 | 70455 | 12.194 | ug/L | | 93 |
| 69) trans-1,3-Dichloropropene | 8.187 | 75 | 74563 | 9.738 | ug/L | | 89 |
| 71) Ethyl methacrylate | 8.374 | 69 | 60134 | 8.249 | ug/L | | 96 |
| 72) 1,1,2-Trichloroethane | 8.371 | 83 | 37404 | 9.795 | ug/L | | 98 |
| 73) Chlorodibromomethane | 8.583 | 129 | 53830 | 10.082 | ug/L | | 97 |
| 74) 1,3-Dichloropropane | 8.694 | 76 | 79384 | 9.846 | ug/L | | 98 |
| 75) 1,2-Dibromoethane | 8.862 | 107 | 43821 | 9.711 | ug/L | | 91 |
| 77) 2-Hexanone | 9.140 | 43 | 26482 | 5.859 | ug/L | # | 94 |
| 78) Chlorobenzene | 9.509 | 112 | 162947 | 11.244 | ug/L | # | 86 |
| 79) Ethylbenzene | 9.548 | 91 | 287902 | 10.922 | ug/L | | 100 |
| 80) 1,1,1,2-Tetrachloroethane | 9.589 | 131 | 59101 | 11.124 | ug/L | | 99 |
| 81) p/m Xylene | 9.734 | 106 | 229635 | 22.854 | ug/L | | 97 |
| 82) o Xylene | 10.275 | 106 | 222619 | 22.656 | ug/L | | 91 |
| 83) Styrene | 10.342 | 104 | 361524 | 22.441 | ug/L | | 95 |
| 85) Bromoform | 10.367 | 173 | 36349 | 9.671 | ug/L | | 93 |
| 87) Isopropylbenzene | 10.663 | 105 | 298161 | 10.779 | ug/L | | 96 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 89) Bromobenzene | 11.098 | 156 | 76887 | 11.009 | ug/L | | 100 |
| 90) n-Propylbenzene | 11.143 | 91 | 353647 | 10.699 | ug/L | | 94 |
| 91) 1,4-Dichlorobutane | 11.162 | 55 | 103387 | 8.558 | ug/L | | 98 |
| 92) 1,1,2,2-Tetrachloroethane | 11.235 | 83 | 53674 | 9.144 | ug/L | | 97 |
| 93) 4-Ethyltoluene | 11.268 | 105 | 292614 | 10.912 | ug/L | | 99 |
| 94) 2-Chlorotoluene | 11.313 | 91 | 203261 | 10.453 | ug/L | | 93 |
| 95) 1,3,5-Trimethylbenzene | 11.369 | 105 | 253079 | 10.759 | ug/L | | 99 |
| 96) 1,2,3-Trichloropropane | 11.371 | 75 | 43106 | 9.002 | ug/L | | 91 |
| 97) trans-1,4-Dichloro-2-b... | 11.424 | 53 | 18238 | 7.751 | ug/L | # | 82 |
| 98) 4-Chlorotoluene | 11.494 | 91 | 213031 | 10.458 | ug/L | | 99 |
| 99) tert-Butylbenzene | 11.709 | 119 | 214279 | 10.837 | ug/L | | 93 |
| 102) 1,2,4-Trimethylbenzene | 11.790 | 105 | 249800 | 10.639 | ug/L | | 93 |
| 103) sec-Butylbenzene | 11.901 | 105 | 314401 | 10.722 | ug/L | | 96 |
| 104) p-Isopropyltoluene | 12.057 | 119 | 268743 | 10.877 | ug/L | | 94 |
| 105) 1,3-Dichlorobenzene | 12.122 | 146 | 143575 | 11.132 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.216 | 146 | 144253 | 11.189 | ug/L | | 98 |
| 107) p-Diethylbenzene | 12.428 | 119 | 153016 | 10.503 | ug/L | | 97 |
| 108) n-Butylbenzene | 12.490 | 91 | 226635 | 10.651 | ug/L | | 96 |
| 109) 1,2-Dichlorobenzene | 12.637 | 146 | 136389 | 10.991 | ug/L | | 98 |
| 110) 1,2,4,5-Tetramethylben... | 13.223 | 119 | 234050 | 9.900 | ug/L | | 94 |
| 111) 1,2-Dibromo-3-chloropr... | 13.415 | 155 | 8726 | 7.961 | ug/L | | 94 |
| 112) 1,3,5-Trichlorobenzene | 13.449 | 180 | 109678 | 11.132 | ug/L | | 93 |
| 113) Hexachlorobutadiene | 14.023 | 225 | 38002 | 11.638 | ug/L | | 93 |
| 114) 1,2,4-Trichlorobenzene | 14.048 | 180 | 89340 | 10.044 | ug/L | | 97 |
| 115) Naphthalene | 14.338 | 128 | 165055 | 8.418 | ug/L | | 100 |
| 116) 1,2,3-Trichlorobenzene | 14.511 | 180 | 78888 | 9.653 | ug/L | | 94 |

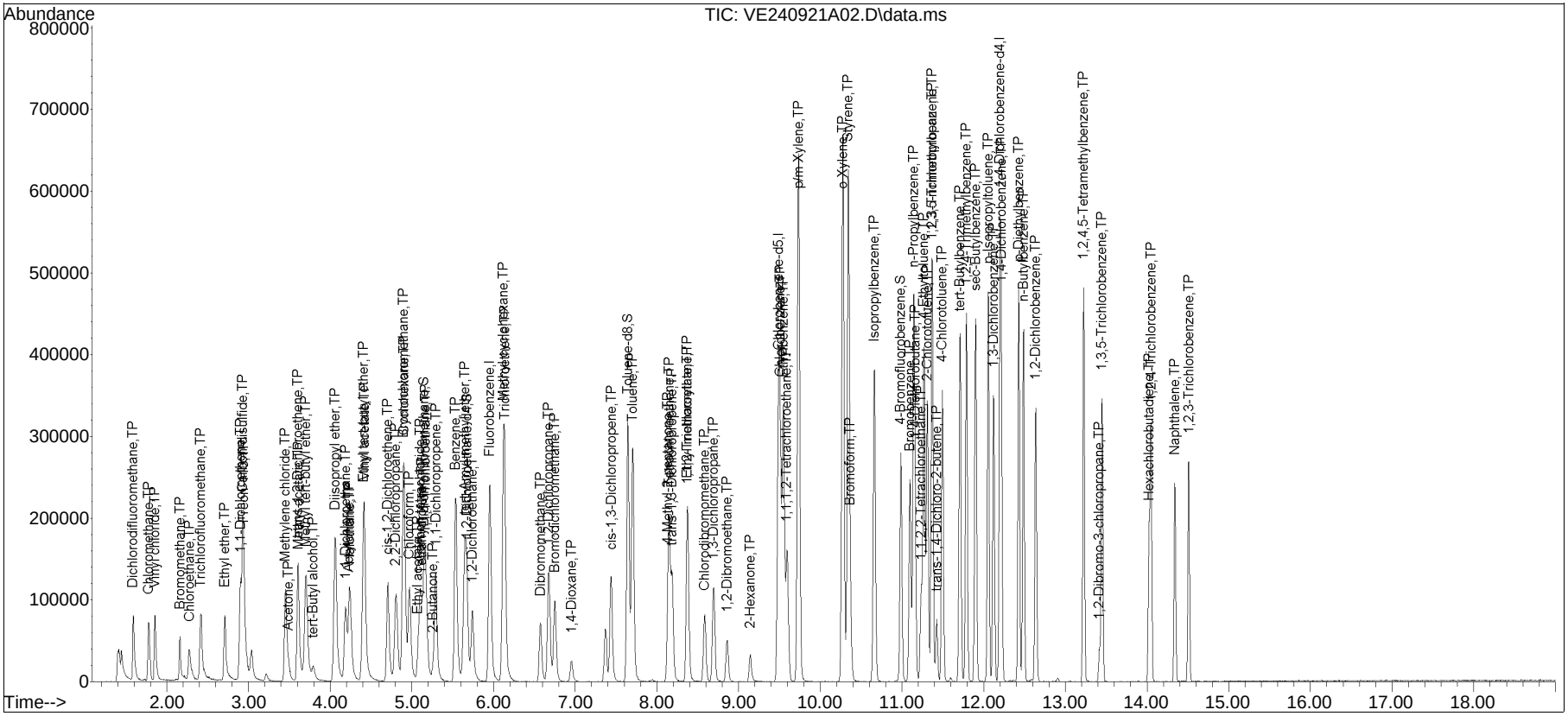
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-2
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

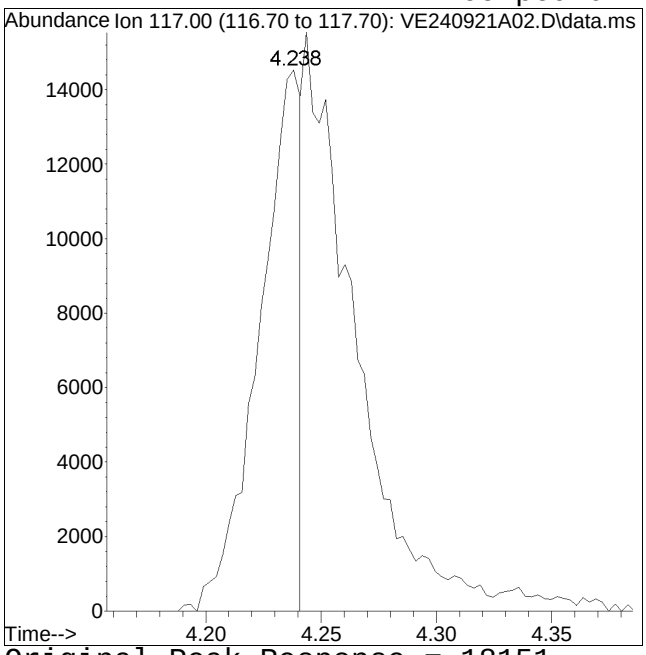
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

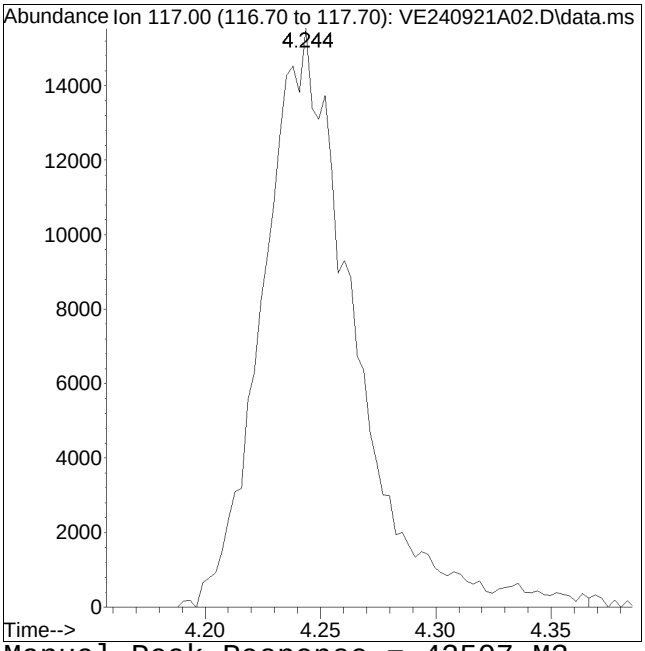


Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\Elaine\2024\240921A\ | QMethod | : Elaine_240731N_8260.m |
| Data File | : VE240921A02.D | Operator | : ELAINE:LAC |
| Date Inj'd | : 9/21/2024 7:26 am | Instrument | : Elaine |
| Sample | : WG1974948-2 | Quant Date | : 9/21/2024 8:14 am |

Compound #26: Halothane




Original Peak Response = 18151 Manual Peak Response = 42507 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | | 1.000 | 1.000 | 0.0 | 199 | 0.00 |
| 2 | TP | Dichlorodifluoromethane | | 0.293 | 0.320 | -9.2 | 194 | 0.00 |
| 3 | TP | Chloromethane | | 0.283 | 0.227 | 19.8 | 147 | 0.00 |
| 4 | TP | Vinyl chloride | | 0.246 | 0.243 | 1.2 | 179 | 0.00 |
| 5 | TP | Bromomethane | | 0.120 | 0.037 | 69.2# | 66 | 0.00 |
| 6 | TP | Chloroethane | * | 10.000 | 7.344 | 26.6# | 155 | 0.00 |
| 7 | TP | Trichlorofluoromethane | | 0.370 | 0.358 | 3.2 | 175 | 0.00 |
| 8 | TP | Ethyl ether | | 0.089 | 0.087 | 2.2 | 192 | 0.00 |
| 10 | TP | 1,1-Dichloroethene | | 0.184 | 0.184 | 0.0 | 184 | 0.00 |
| 11 | TP | Carbon disulfide | | 0.567 | 0.589 | -3.9 | 191 | 0.00 |
| 12 | TP | Freon-113 | | 0.202 | 0.202 | 0.0 | 180 | 0.00 |
| 13 | TP | Iodomethane | | 0.309 | 0.088 | 71.5# | 56 | 0.00 |
| 14 | TP | Acrolein | | 0.025 | 0.028 | -12.0 | 250# | 0.00 |
| 15 | TP | Methylene chloride | | 0.219 | 0.232 | -5.9 | 205# | 0.00 |
| 17 | TP | Acetone | | 0.047 | 0.039 | 17.0 | 164 | 0.00 |
| 18 | TP | trans-1,2-Dichloroethene | | 0.218 | 0.244 | -11.9 | 211# | 0.00 |
| 19 | TP | Methyl acetate | | 0.104 | 0.102 | 1.9 | 207# | 0.00 |
| 20 | TP | Methyl tert-butyl ether | | 0.479 | 0.513 | -7.1 | 215# | 0.00 |
| 21 | TP | tert-Butyl alcohol | | 0.011 | 0.012 | -9.1 | 240# | 0.00 |
| 22 | TP | Diisopropyl ether | | 0.729 | 0.738 | -1.2 | 201# | 0.00 |
| 23 | TP | 1,1-Dichloroethane | | 0.396 | 0.421 | -6.3 | 195 | 0.00 |
| 24 | TP | Halothane | | 0.175 | 0.193 | -10.3 | 207# | 0.00 |
| 25 | TP | Acrylonitrile | | 0.055 | 0.052 | 5.5 | 194 | 0.00 |
| 26 | TP | Ethyl tert-butyl ether | | 0.537 | 0.582 | -8.4 | 218# | 0.00 |
| 27 | TP | Vinyl acetate | | 0.434 | 0.446 | -2.8 | 227# | -0.01 |
| 28 | TP | cis-1,2-Dichloroethene | | 0.247 | 0.265 | -7.3 | 205# | 0.00 |
| 29 | TP | 2,2-Dichloropropane | | 0.323 | 0.357 | -10.5 | 207# | 0.00 |
| 30 | TP | Bromochloromethane | | 0.119 | 0.127 | -6.7 | 201# | 0.00 |
| 31 | TP | Cyclohexane | | 0.382 | 0.445 | -16.5 | 205# | 0.00 |
| 32 | TP | Chloroform | | 0.414 | 0.416 | -0.5 | 193 | 0.00 |
| 33 | TP | Ethyl acetate | | 0.167 | 0.147 | 12.0 | 199 | 0.00 |
| 34 | TP | Carbon tetrachloride | | 0.356 | 0.367 | -3.1 | 194 | 0.00 |
| 35 | TP | Tetrahydrofuran | | 0.054 | 0.053 | 1.9 | 212# | 0.00 |
| 36 | S | Dibromofluoromethane | | 0.279 | 0.274 | 1.8 | 198 | 0.00 |
| 37 | TP | 1,1,1-Trichloroethane | | 0.386 | 0.398 | -3.1 | 190 | -0.01 |
| 39 | TP | 2-Butanone | | 0.072 | 0.066 | 8.3 | 201# | 0.00 |
| 40 | TP | 1,1-Dichloropropene | | 0.286 | 0.314 | -9.8 | 202# | 0.00 |
| 41 | TP | Benzene | | 0.842 | 0.908 | -7.8 | 198 | 0.00 |
| 42 | TP | tert-Amyl methyl ether | | 0.444 | 0.462 | -4.1 | 209# | 0.00 |

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 43 | S | 1,2-Dichloroethane-d4 | 0.289 | 0.286 | 1.0 | 190 | 0.00 |
| 44 | TP | 1,2-Dichloroethane | 0.278 | 0.270 | 2.9 | 187 | 0.00 |
| 47 | TP | Methyl cyclohexane | 0.386 | 0.417 | -8.0 | 198 | 0.00 |
| 48 | TP | Trichloroethene | 0.251 | 0.249 | 0.8 | 190 | 0.00 |
| 50 | TP | Dibromomethane | 0.130 | 0.125 | 3.8 | 192 | 0.00 |
| 51 | TP | 1,2-Dichloropropane | 0.210 | 0.220 | -4.8 | 198 | 0.00 |
| 54 | TP | Bromodichloromethane | 0.308 | 0.305 | 1.0 | 196 | 0.00 |
| 57 | TP | 1,4-Dioxane | 0.00131 | 0.00140# | -6.9 | 221# | 0.00 |
| 58 | TP | cis-1,3-Dichloropropene | 0.324 | 0.336 | -3.7 | 201# | 0.00 |
| 59 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 195 | 0.00 |
| 60 | S | Toluene-d8 | 1.208 | 1.243 | -2.9 | 195 | 0.00 |
| 61 | TP | Toluene | 0.702 | 0.745 | -6.1 | 194 | 0.00 |
| 62 | TP | 4-Methyl-2-pentanone | 0.058 | 0.058 | 0.0 | 211# | 0.00 |
| 63 | TP | Tetrachloroethene | 0.370 | 0.393 | -6.2 | 192 | 0.00 |
| 65 | TP | trans-1,3-Dichloropropene | 0.342 | 0.358 | -4.7 | 194 | 0.00 |
| 67 | TP | Ethyl methacrylate | 0.231 | 0.232 | -0.4 | 213# | 0.00 |
| 68 | TP | 1,1,2-Trichloroethane | 0.174 | 0.183# | -5.2 | 196 | 0.00 |
| 69 | TP | Chlorodibromomethane | 0.296 | 0.297 | -0.3 | 196 | 0.00 |
| 70 | TP | 1,3-Dichloropropane | 0.341 | 0.361 | -5.9 | 193 | 0.00 |
| 71 | TP | 1,2-Dibromoethane | 0.234 | 0.249 | -6.4 | 198 | 0.00 |
| 72 | TP | 2-Hexanone | 0.116 | 0.104 | 10.3 | 196 | 0.00 |
| 73 | TP | Chlorobenzene | 0.830 | 0.859 | -3.5 | 193 | 0.00 |
| 74 | TP | Ethylbenzene | 1.402 | 1.468 | -4.7 | 189 | 0.00 |
| 75 | TP | 1,1,1,2-Tetrachloroethane | 0.305 | 0.310 | -1.6 | 196 | 0.00 |
| 76 | TP | p/m Xylene | 0.541 | 0.582 | -7.6 | 190 | 0.00 |
| 77 | TP | o Xylene | 0.513 | 0.553 | -7.8 | 191 | 0.00 |
| 78 | TP | Styrene | 0.849 | 0.904 | -6.5 | 188 | 0.00 |
| 79 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 177 | 0.00 |
| 80 | TP | Bromoform | 0.296 | 0.288 | 2.7 | 187 | 0.00 |
| 82 | TP | Isopropylbenzene | 2.313 | 2.595 | -12.2 | 186 | 0.00 |
| 83 | S | 4-Bromofluorobenzene | 0.694 | 0.766 | -10.4 | 201# | 0.00 |
| 84 | TP | Bromobenzene | 0.608 | 0.630 | -3.6 | 184 | 0.00 |
| 85 | TP | n-Propylbenzene | 2.702 | 3.004 | -11.2 | 183 | 0.00 |
| 86 | TP | 1,4-Dichlorobutane | 0.581 | 0.647 | -11.4 | 193 | 0.00 |
| 87 | TP | 1,1,2,2-Tetrachloroethane | 0.402 | 0.424 | -5.5 | 191 | 0.00 |
| 88 | TP | 4-Ethyltoluene | 2.252 | 2.534 | -12.5 | 187 | 0.00 |
| 89 | TP | 2-Chlorotoluene | 1.524 | 1.710 | -12.2 | 187 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 90 TP | 1,3,5-Trimethylbenzene | | 1.987 | 2.179 | -9.7 | 180 | 0.00 |
| 91 TP | 1,2,3-Trichloropropane | | 0.312 | 0.322 | -3.2 | 182 | 0.00 |
| 92 TP | trans-1,4-Dichloro-2-butene | | 0.133 | 0.126 | 5.3 | 172 | 0.00 |
| 93 TP | 4-Chlorotoluene | | 1.575 | 1.759 | -11.7 | 186 | 0.00 |
| 94 TP | tert-Butylbenzene | | 1.740 | 1.923 | -10.5 | 182 | 0.00 |
| 97 TP | 1,2,4-Trimethylbenzene | | 1.903 | 2.097 | -10.2 | 181 | 0.00 |
| 98 TP | sec-Butylbenzene | | 2.546 | 2.801 | -10.0 | 181 | 0.00 |
| 99 TP | p-Isopropyltoluene | | 2.195 | 2.454 | -11.8 | 182 | 0.00 |
| 100 TP | 1,3-Dichlorobenzene | | 1.201 | 1.281 | -6.7 | 181 | 0.00 |
| 101 TP | 1,4-Dichlorobenzene | | 1.235 | 1.258 | -1.9 | 177 | 0.00 |
| 102 TP | p-Diethylbenzene | | 1.271 | 1.392 | -9.5 | 182 | 0.00 |
| 103 TP | n-Butylbenzene | | 1.805 | 2.014 | -11.6 | 180 | 0.00 |
| 104 TP | 1,2-Dichlorobenzene | | 1.085 | 1.145 | -5.5 | 181 | 0.00 |
| 105 TP | 1,2,4,5-Tetramethylbenzene | | 1.922 | 1.968 | -2.4 | 188 | 0.00 |
| 106 TP | 1,2-Dibromo-3-chloropropane | * | 10.000 | 9.517 | 4.8 | 187 | 0.00 |
| 107 TP | 1,3,5-Trichlorobenzene | | 0.882 | 0.905 | -2.6 | 175 | 0.00 |
| 108 TP | Hexachlorobutadiene | | 0.322 | 0.336 | -4.3 | 182 | 0.00 |
| 109 TP | 1,2,4-Trichlorobenzene | | 0.724 | 0.735 | -1.5 | 177 | 0.00 |
| 110 TP | Naphthalene | * | 10.000 | 9.771 | 2.3 | 197 | 0.00 |
| 111 TP | 1,2,3-Trichlorobenzene | | 0.616 | 0.633 | -2.8 | 178 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 2 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 644553 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 644553 | | | Recovery = 100.00% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 502331 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 502331 | | | Recovery = 100.00% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 298302 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 298302 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 176501 | 9.799 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.99% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 184620 | 9.914 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.14% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 624623 | 10.296 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.96% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 228580 | 11.044 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 110.44% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 205999 | 10.918 | ug/L | 98 |
| 3) Chloromethane | 1.674 | 50 | 146001 | 8.016 | ug/L | 98 |
| 4) Vinyl chloride | 1.743 | 62 | 156793 | 9.894 | ug/L | 100 |
| 5) Bromomethane | 2.016 | 94 | 24126 | 3.127 | ug/L | 98 |
| 6) Chloroethane | 2.114 | 64 | 81980 | 7.344 | ug/L | 95 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 230470 | 9.664 | ug/L | 100 |
| 8) Ethyl ether | 2.535 | 74 | 55979 | 9.748 | ug/L # | 55 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 118715 | 10.004 | ug/L | 98 |
| 11) Carbon disulfide | 2.740 | 76 | 379772 | 10.397 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 129981 | 9.961 | ug/L # | 76 |
| 13) Iodomethane | 2.848 | 142 | 56557 | 2.838 | ug/L | 90 |
| 14) Acrolein | 3.043 | 56 | 18129 | 11.476 | ug/L | 92 |
| 15) Methylene chloride | 3.249 | 84 | 149856 | 10.637 | ug/L | 79 |
| 17) Acetone | 3.317 | 43 | 24843 | 8.154 | ug/L | 93 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 157328 | 11.216 | ug/L | 96 |
| 19) Methyl acetate | 3.415 | 43 | 65567 | 9.813 | ug/L # | 79 |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 330893 | 10.713 | ug/L | 88 |
| 21) tert-Butyl alcohol | 3.601 | 59 | 37424 | 53.553 | ug/L | 94 |
| 22) Diisopropyl ether | 3.826 | 45 | 475864 | 10.128 | ug/L | 92 |
| 23) 1,1-Dichloroethane | 3.953 | 63 | 271180 | 10.614 | ug/L | 98 |
| 24) Halothane | 4.012 | 117 | 124598 | 11.043 | ug/L | 99 |

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) Acrylonitrile | 4.031 | 53 | 33764 | 9.522 | ug/L | # | 87 |
| 26) Ethyl tert-butyl ether | 4.168 | 59 | 374998 | 10.830 | ug/L | # | 78 |
| 27) Vinyl acetate | 4.188 | 43 | 287163M6 | 10.258 | ug/L | | |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 170618 | 10.738 | ug/L | | 95 |
| 29) 2,2-Dichloropropane | 4.550 | 77 | 230072 | 11.044 | ug/L | | 92 |
| 30) Bromochloromethane | 4.657 | 128 | 81960 | 10.688 | ug/L | | 92 |
| 31) Cyclohexane | 4.638 | 56 | 286862 | 11.638 | ug/L | | 80 |
| 32) Chloroform | 4.726 | 83 | 268079 | 10.037 | ug/L | | 96 |
| 33) Ethyl acetate | 4.833 | 43 | 94892 | 8.822 | ug/L | # | 93 |
| 34) Carbon tetrachloride | 4.833 | 117 | 236813 | 10.327 | ug/L | | 98 |
| 35) Tetrahydrofuran | 4.872 | 42 | 34444M6 | 9.958 | ug/L | | |
| 37) 1,1,1-Trichloroethane | 4.902 | 97 | 256416 | 10.298 | ug/L | | 99 |
| 39) 2-Butanone | 5.019 | 43 | 42236 | 9.120 | ug/L | # | 66 |
| 40) 1,1-Dichloropropene | 5.029 | 75 | 202176 | 10.964 | ug/L | | 93 |
| 41) Benzene | 5.264 | 78 | 585516 | 10.782 | ug/L | | 95 |
| 42) tert-Amyl methyl ether | 5.371 | 73 | 297533 | 10.397 | ug/L | | 96 |
| 44) 1,2-Dichloroethane | 5.479 | 62 | 174038 | 9.707 | ug/L | | 99 |
| 47) Methyl cyclohexane | 5.831 | 83 | 269018 | 10.803 | ug/L | | 87 |
| 48) Trichloroethene | 5.850 | 95 | 160398 | 9.924 | ug/L | | 88 |
| 50) Dibromomethane | 6.300 | 93 | 80751 | 9.629 | ug/L | | 88 |
| 51) 1,2-Dichloropropane | 6.388 | 63 | 142018 | 10.473 | ug/L | # | 89 |
| 54) Bromodichloromethane | 6.476 | 83 | 196484 | 9.894 | ug/L | | 99 |
| 57) 1,4-Dioxane | 6.682 | 88 | 45067 | 532.411 | ug/L | # | 87 |
| 58) cis-1,3-Dichloropropene | 7.151 | 75 | 216634 | 10.370 | ug/L | # | 90 |
| 61) Toluene | 7.406 | 92 | 374198 | 10.611 | ug/L | | 97 |
| 62) 4-Methyl-2-pentanone | 7.856 | 58 | 29125 | 9.978 | ug/L | | 76 |
| 63) Tetrachloroethene | 7.846 | 166 | 197543 | 10.616 | ug/L | | 89 |
| 65) trans-1,3-Dichloropropene | 7.904 | 75 | 179917 | 10.487 | ug/L | | 87 |
| 67) Ethyl methacrylate | 8.081 | 69 | 116674 | 10.060 | ug/L | | 97 |
| 68) 1,1,2-Trichloroethane | 8.081 | 83 | 91819 | 10.524 | ug/L | | 99 |
| 69) Chlorodibromomethane | 8.286 | 129 | 149045 | 10.018 | ug/L | | 97 |
| 70) 1,3-Dichloropropane | 8.393 | 76 | 181231 | 10.585 | ug/L | | 98 |
| 71) 1,2-Dibromoethane | 8.560 | 107 | 125283 | 10.665 | ug/L | | 97 |
| 72) 2-Hexanone | 8.853 | 43 | 52210 | 8.970 | ug/L | | 90 |
| 73) Chlorobenzene | 9.196 | 112 | 431334 | 10.347 | ug/L | | 87 |
| 74) Ethylbenzene | 9.235 | 91 | 737624 | 10.474 | ug/L | | 93 |
| 75) 1,1,1,2-Tetrachloroethane | 9.284 | 131 | 155844 | 10.183 | ug/L | | 97 |
| 76) p/m Xylene | 9.422 | 106 | 584511 | 21.494 | ug/L | | 84 |
| 77) o Xylene | 9.960 | 106 | 555154 | 21.549 | ug/L | | 83 |
| 78) Styrene | 10.039 | 104 | 907961 | 21.300 | ug/L | # | 84 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 80) Bromoform | 10.068 | 173 | 86011 | 9.732 | ug/L | | 97 |
| 82) Isopropylbenzene | 10.362 | 105 | 773993 | 11.219 | ug/L | | 94 |
| 84) Bromobenzene | 10.822 | 156 | 187929 | 10.360 | ug/L | | 100 |
| 85) n-Propylbenzene | 10.862 | 91 | 895993 | 11.115 | ug/L | | 93 |
| 86) 1,4-Dichlorobutane | 10.891 | 55 | 192950 | 11.140 | ug/L | | 90 |
| 87) 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 126446 | 10.553 | ug/L | | 96 |
| 88) 4-Ethyltoluene | 10.999 | 105 | 755871 | 11.254 | ug/L | | 96 |
| 89) 2-Chlorotoluene | 11.038 | 91 | 510236M6 | 11.227 | ug/L | | |
| 90) 1,3,5-Trimethylbenzene | 11.097 | 105 | 649910 | 10.964 | ug/L | | 93 |
| 91) 1,2,3-Trichloropropane | 11.116 | 75 | 96176M1 | 10.338 | ug/L | | |
| 92) trans-1,4-Dichloro-2-b... | 11.175 | 53 | 37715 | 9.497 | ug/L | # | 79 |
| 93) 4-Chlorotoluene | 11.234 | 91 | 524834M6 | 11.173 | ug/L | | |
| 94) tert-Butylbenzene | 11.449 | 119 | 573603 | 11.051 | ug/L | | 98 |
| 97) 1,2,4-Trimethylbenzene | 11.528 | 105 | 625582 | 11.019 | ug/L | | 94 |
| 98) sec-Butylbenzene | 11.636 | 105 | 835477 | 11.000 | ug/L | | 96 |
| 99) p-Isopropyltoluene | 11.802 | 119 | 732118 | 11.181 | ug/L | | 93 |
| 100) 1,3-Dichlorobenzene | 11.871 | 146 | 382046 | 10.661 | ug/L | | 96 |
| 101) 1,4-Dichlorobenzene | 11.969 | 146 | 375353 | 10.190 | ug/L | | 95 |
| 102) p-Diethylbenzene | 12.184 | 119 | 415368 | 10.952 | ug/L | | 97 |
| 103) n-Butylbenzene | 12.243 | 91 | 600671 | 11.158 | ug/L | | 96 |
| 104) 1,2-Dichlorobenzene | 12.390 | 146 | 341529 | 10.551 | ug/L | | 95 |
| 105) 1,2,4,5-Tetramethylben... | 12.987 | 119 | 587016 | 10.240 | ug/L | | 94 |
| 106) 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 19839 | 9.517 | ug/L | | 98 |
| 107) 1,3,5-Trichlorobenzene | 13.213 | 180 | 269876 | 10.263 | ug/L | | 96 |
| 108) Hexachlorobutadiene | 13.791 | 225 | 100274 | 10.453 | ug/L | | 99 |
| 109) 1,2,4-Trichlorobenzene | 13.810 | 180 | 219366 | 10.155 | ug/L | | 98 |
| 110) Naphthalene | 14.104 | 128 | 424714 | 9.771 | ug/L | | 100 |
| 111) 1,2,3-Trichlorobenzene | 14.271 | 180 | 188844 | 10.282 | ug/L | | 98 |

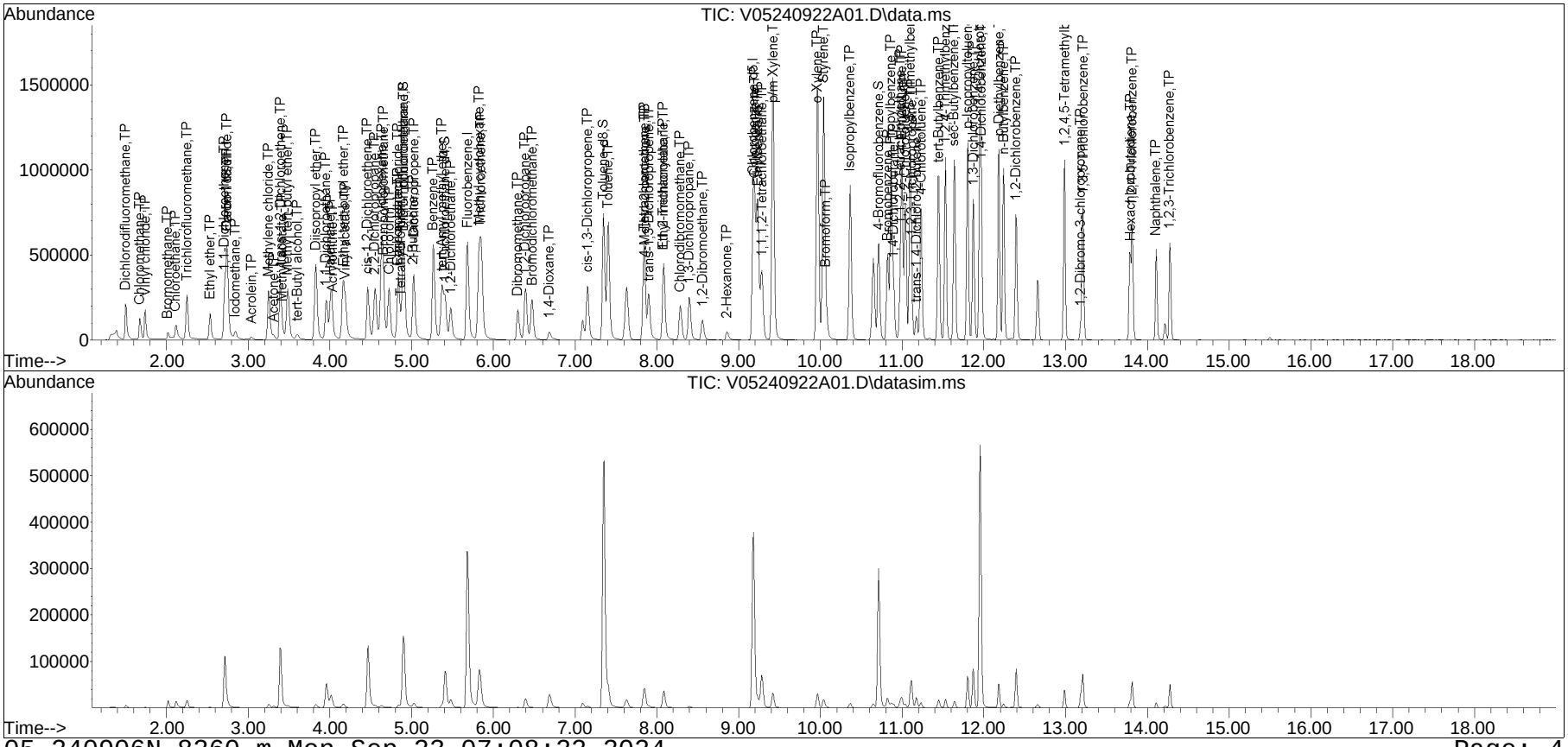
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

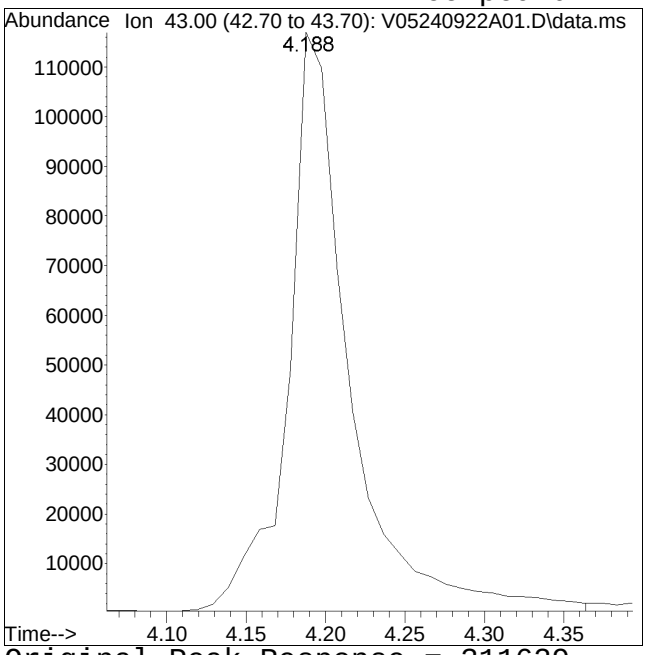


# Manual Integration Report

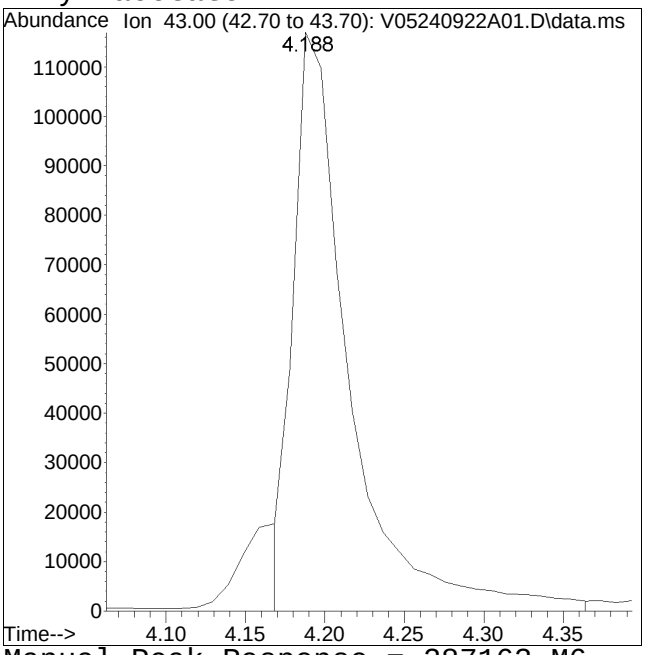
Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Date Inj'd : 9/22/2024 5:45 pm
Sample : WG1974932-2

QMethod : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/22/2024 6:37 pm

## Compound #27: Vinyl acetate




Original Peak Response = 311629



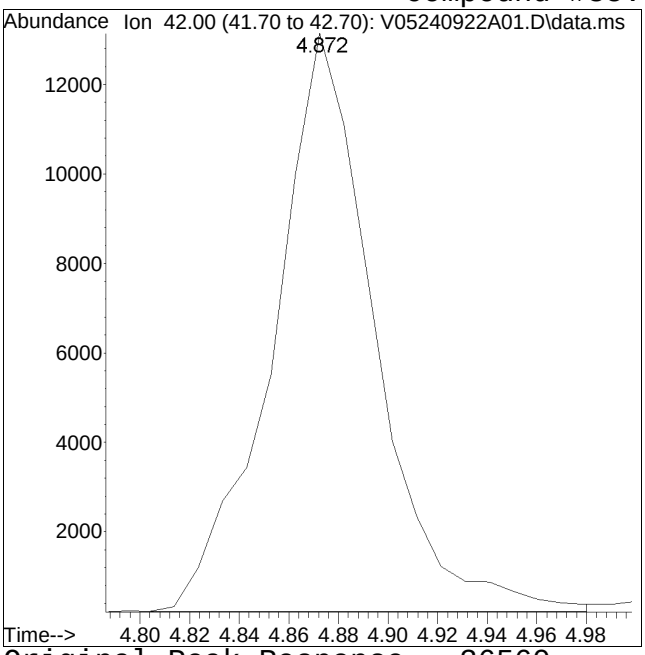

Manual Peak Response = 287163 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

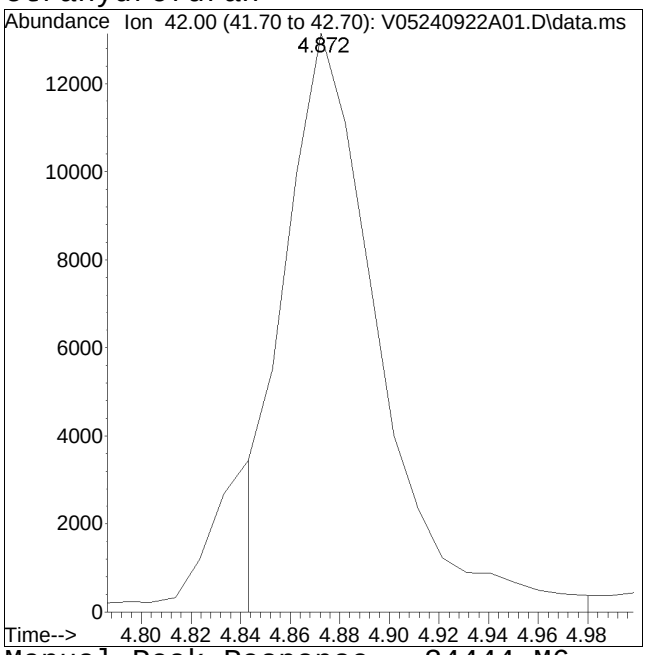
# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\VOA105\2024\240922A\ | QMethod | : V105_240906N_8260.m |
| Data File | : V05240922A01.D | Operator | : VOA105:PID |
| Date Inj'd | : 9/22/2024 5:45 pm | Instrument | : VOA105 |
| Sample | : WG1974932-2 | Quant Date | : 9/22/2024 6:37 pm |

## Compound #35: Tetrahydrofuran




Original Peak Response = 36560




Manual Peak Response = 34444 M6

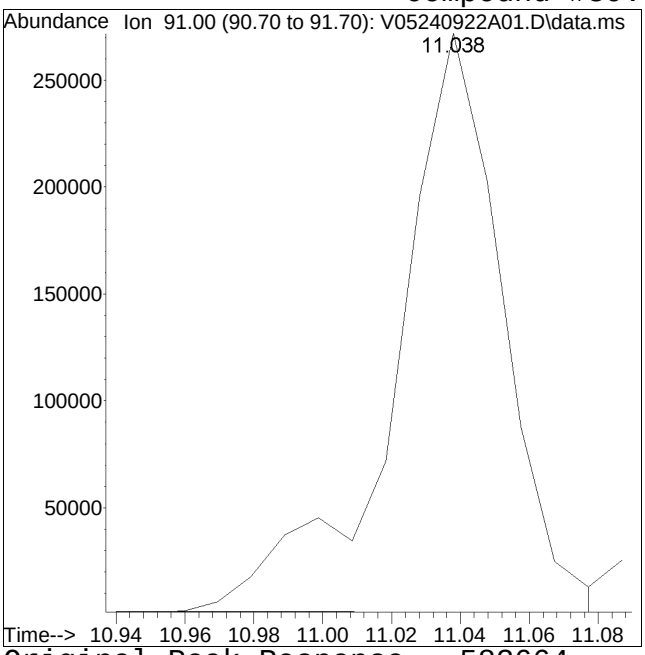
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

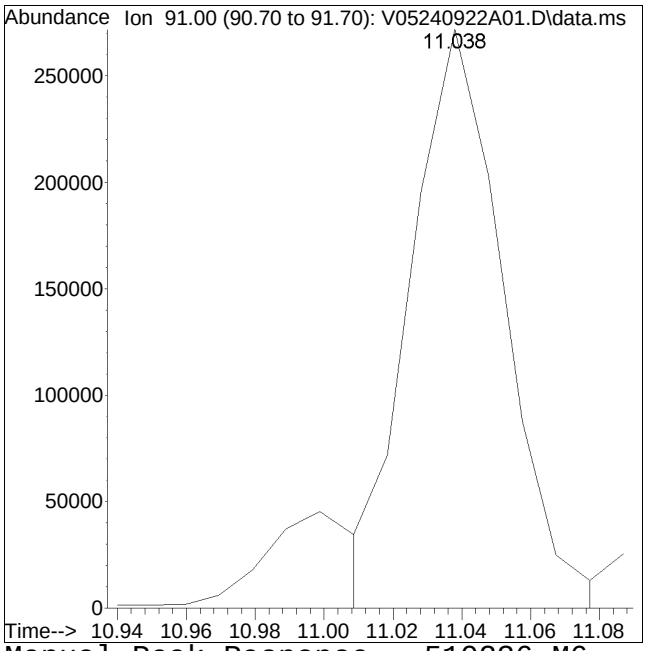
Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Date Inj'd : 9/22/2024 5:45 pm
Sample : WG1974932-2

QMethod : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/22/2024 6:37 pm

Compound #89: 2-Chlorotoluene




Original Peak Response = 583664




Manual Peak Response = 510236 M6

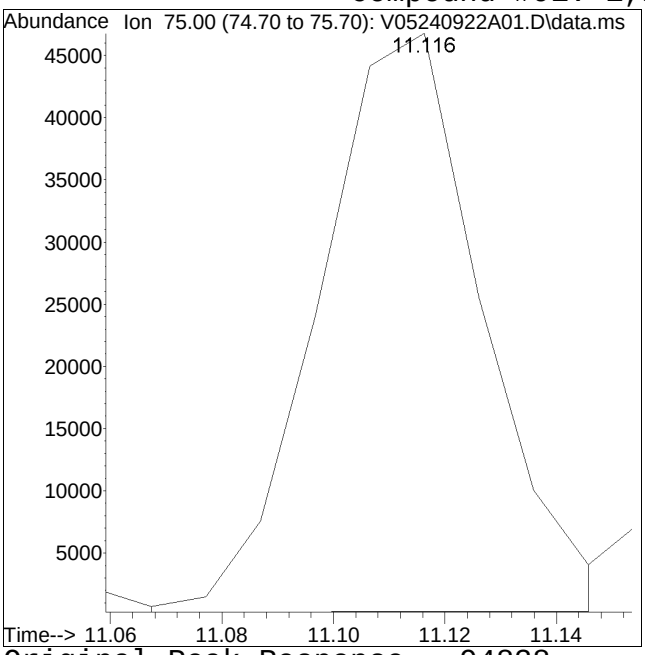
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

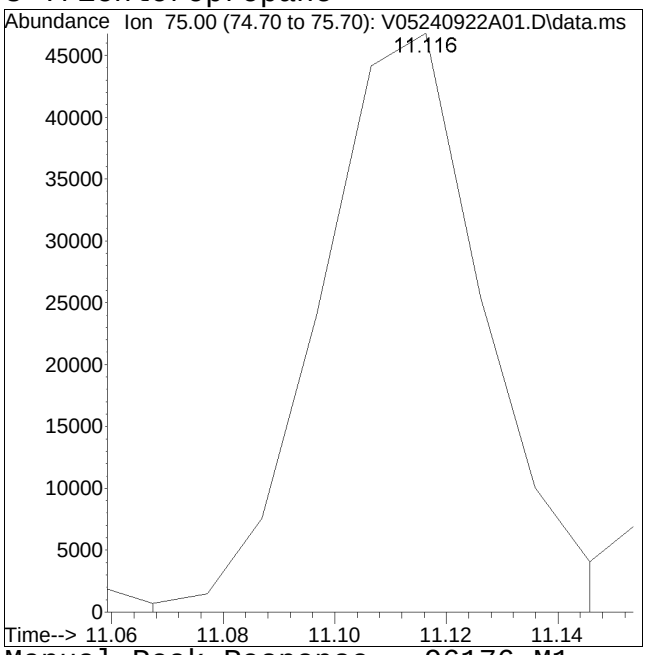
Manual Integration Report

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Date Inj'd : 9/22/2024 5:45 pm
Sample : WG1974932-2

QMethod : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/22/2024 6:37 pm

Compound #91: 1,2,3-Trichloropropane




Original Peak Response = 94838 Manual Peak Response = 96176 M1

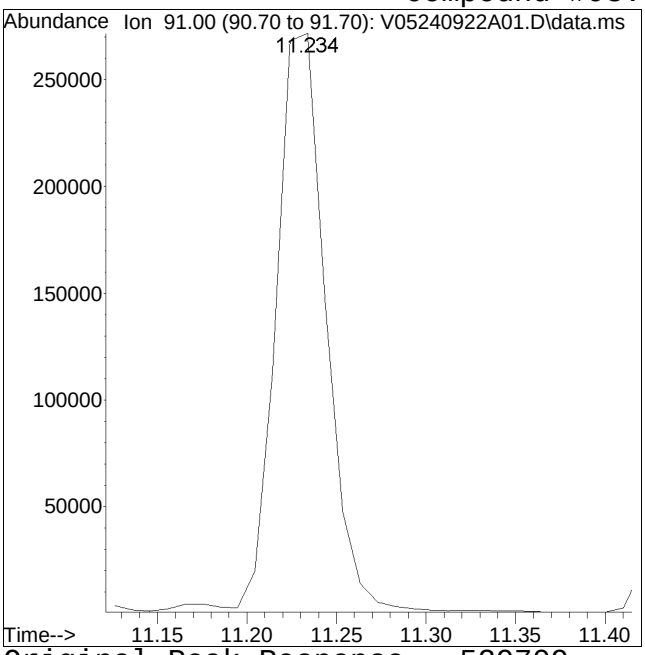
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

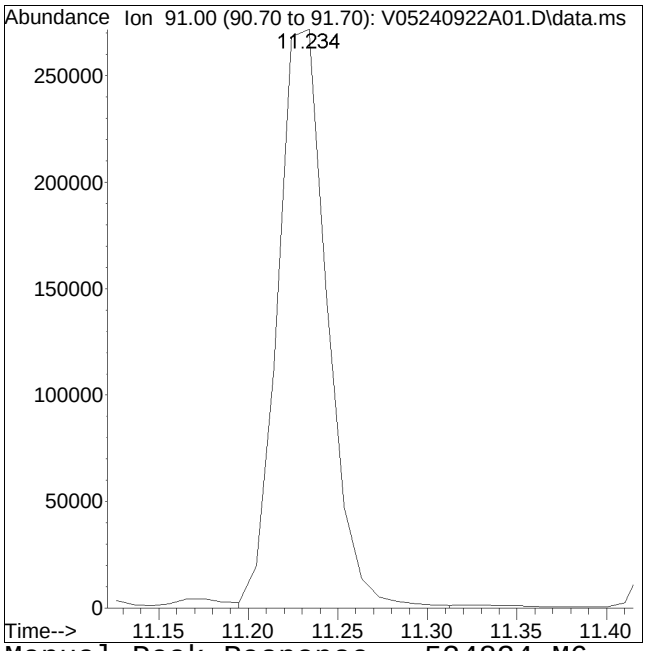
Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Date Inj'd : 9/22/2024 5:45 pm
Sample : WG1974932-2

QMethod : V105_240906N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/22/2024 6:37 pm

Compound #93: 4-Chlorotoluene




Original Peak Response = 529709



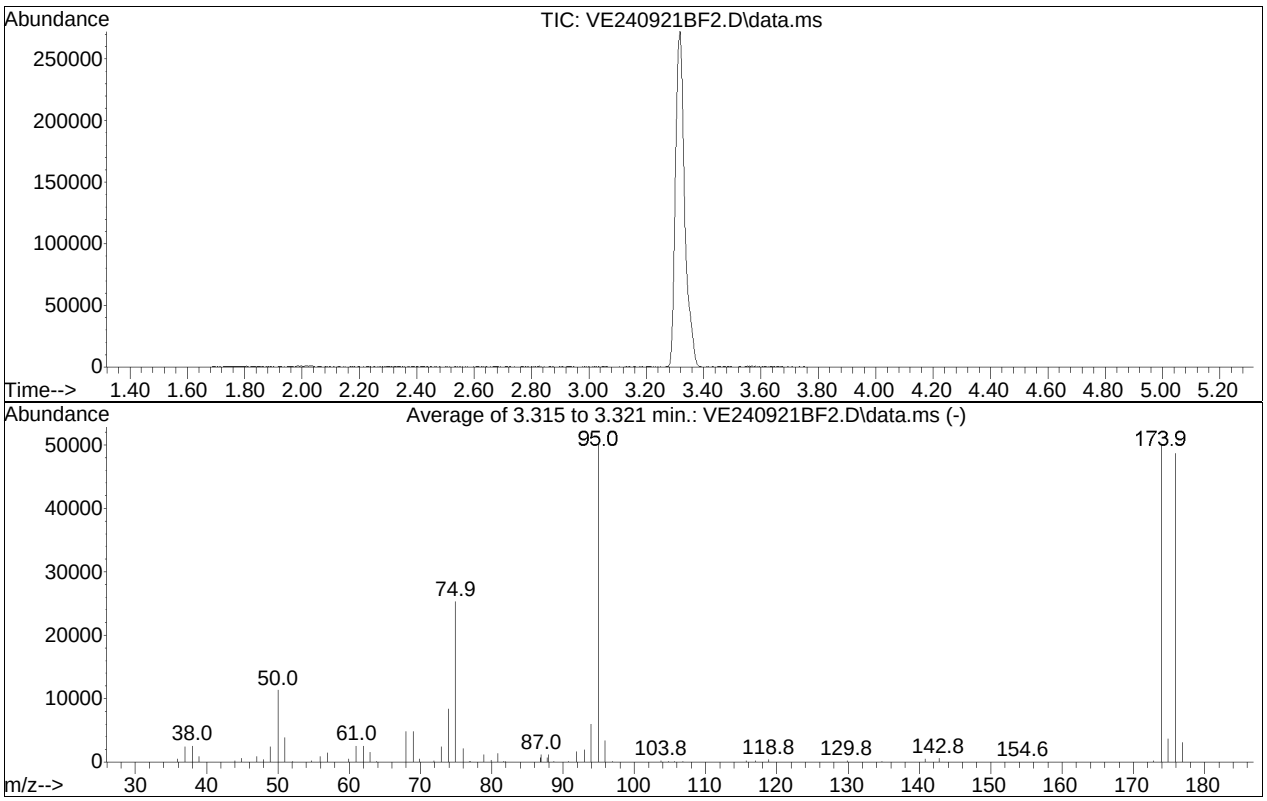

Manual Peak Response = 524834 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921BF2.D
Acq On : 21 Sep 2024 6:37 am
Operator : ELAINE:TMS
Sample : WG1974948-1
Misc : WG1974948,ICAL21358
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024



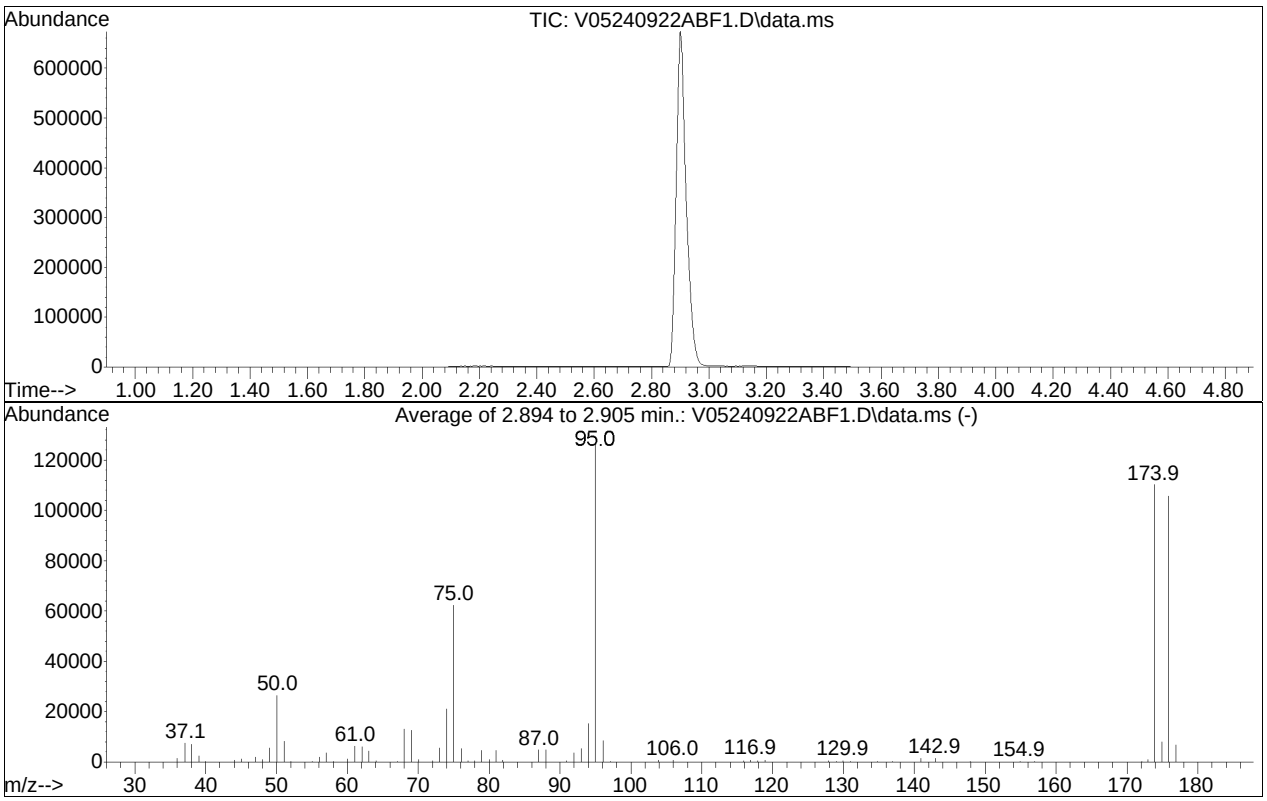

Spectrum Information: Average of 3.315 to 3.321 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.6 | 11404 | PASS |
| 75 | 95 | 30 | 60 | 50.3 | 25355 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 50363 | PASS |
| 96 | 95 | 5 | 9 | 6.8 | 3413 | PASS |
| 173 | 174 | 0.00 | 2 | 0.5 | 253 | PASS |
| 174 | 95 | 50 | 100 | 99.8 | 50256 | PASS |
| 175 | 174 | 5 | 9 | 7.3 | 3678 | PASS |
| 176 | 174 | 95 | 101 | 96.9 | 48688 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 3135 | PASS |

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922ABF1.D
Acq On : 22 Sep 2024 5:30 pm
Operator : VOA105:PID
Sample : WG1974932-1
Misc : WG1974932,ICAL21466
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Sep 09 11:32:51 2024




Spectrum Information: Average of 2.894 to 2.905 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 20.8 | 26453 | PASS |
| 75 | 95 | 30 | 60 | 49.1 | 62355 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 126955 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 8525 | PASS |
| 173 | 174 | 0.00 | 2 | 1.0 | 1078 | PASS |
| 174 | 95 | 50 | 100 | 86.8 | 110147 | PASS |
| 175 | 174 | 5 | 9 | 7.3 | 8080 | PASS |
| 176 | 174 | 95 | 101 | 96.0 | 105757 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 6849 | PASS |

# Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A05.D
Acq On : 21 Sep 2024 8:50 am
Operator : ELAINE:LAC
Sample : WG1974948-5,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 09:23:02 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.950 | 96 | 259239 | 10.000 | ug/L | -0.02 |
| Standard Area 1 = 262722 | | | Recovery = 98.67% | | | |
| 63) Chlorobenzene-d5 | 9.486 | 117 | 192524 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 97.47% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.199 | 152 | 108281 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 93.73% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.150 | 113 | 64793 | 10.676 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.76% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.668 | 65 | 76196 | 9.410 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 94.10% | | | |
| 64) Toluene-d8 | 7.643 | 98 | 251876 | 9.932 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.32% | | | |
| 88) 4-Bromofluorobenzene | 10.984 | 95 | 90576 | 9.055 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 90.55% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.591 | 85 | 25 | N.D. | | |
| 3) Chloromethane | 1.971 | 50 | 29 | N.D. | | |
| 4) Vinyl chloride | 1.915 | 62 | 29 | N.D. | | |
| 5) Bromomethane | 0.000 | | 0 | N.D. | d | |
| 6) Chloroethane | 2.216 | 64 | 29 | N.D. | | |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | | |
| 10) 1,1-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 11) Carbon disulfide | 2.922 | 76 | 156 | N.D. | | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | | |
| 15) Methylene chloride | 3.449 | 84 | 64 | N.D. | | |
| 17) Acetone | 3.499 | 43 | 66 | N.D. | | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | | |
| 19) Methyl acetate | 3.610 | 43 | 66 | N.D. | | |
| 21) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | | |
| 25) 1,1-Dichloroethane | 0.000 | | 0 | N.D. | | |
| 30) cis-1,2-Dichloroethene | 4.718 | 96 | 29 | N.D. | | |
| 33) Bromochloromethane | 0.000 | | 0 | N.D. | | |
| 34) Cyclohexane | 0.000 | | 0 | N.D. | | |
| 35) Chloroform | 4.815 | 83 | 27 | N.D. | | |
| 37) Carbon tetrachloride | 0.000 | | 0 | N.D. | | |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A05.D
Acq On : 21 Sep 2024 8:50 am
Operator : ELAINE:LAC
Sample : WG1974948-5,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 09:23:02 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 0.000 | | 0 | N.D. | | |
| 42) 2-Butanone | 5.261 | 43 | 25 | N.D. | | |
| 45) Benzene | 0.000 | | 0 | N.D. | | |
| 48) 1,2-Dichloroethane | 5.721 | 62 | 53 | N.D. | | |
| 51) Methyl cyclohexane | 0.000 | | 0 | N.D. | | |
| 52) Trichloroethene | 0.000 | | 0 | N.D. | | |
| 55) 1,2-Dichloropropane | 6.784 | 63 | 36 | N.D. | | |
| 58) Bromodichloromethane | 0.000 | | 0 | N.D. | | |
| 62) cis-1,3-Dichloropropene | 0.000 | | 0 | N.D. | | |
| 65) Toluene | 0.000 | | 0 | N.D. | | |
| 66) 4-Methyl-2-pentanone | 8.206 | 58 | 27 | N.D. | | |
| 67) Tetrachloroethene | 0.000 | | 0 | N.D. | | |
| 69) trans-1,3-Dichloropropene | 8.103 | 75 | 26 | N.D. | | |
| 72) 1,1,2-Trichloroethane | 0.000 | | 0 | N.D. | | |
| 73) Chlorodibromomethane | 0.000 | | 0 | N.D. | | |
| 75) 1,2-Dibromoethane | 0.000 | | 0 | N.D. | | |
| 77) 2-Hexanone | 9.146 | 43 | 40 | N.D. | | |
| 78) Chlorobenzene | 9.324 | 112 | 36 | N.D. | | |
| 79) Ethylbenzene | 9.545 | 91 | 35 | N.D. | | |
| 81) p/m Xylene | 9.874 | 106 | 29 | N.D. | | |
| 82) o Xylene | 0.000 | | 0 | N.D. | | |
| 83) Styrene | 10.342 | 104 | 31 | N.D. | | |
| 85) Bromoform | 0.000 | | 0 | N.D. | | |
| 87) Isopropylbenzene | 10.671 | 105 | 44 | N.D. | | |
| 92) 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | N.D. | | |
| 105) 1,3-Dichlorobenzene | 12.116 | 146 | 65 | N.D. | | |
| 106) 1,4-Dichlorobenzene | 12.219 | 146 | 103 | N.D. | | |
| 109) 1,2-Dichlorobenzene | 12.643 | 146 | 252 | N.D. | | |
| 111) 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | N.D. | d | |
| 114) 1,2,4-Trichlorobenzene | 14.043 | 180 | 419 | N.D. | | |
| 116) 1,2,3-Trichlorobenzene | 14.503 | 180 | 43 | N.D. | | |

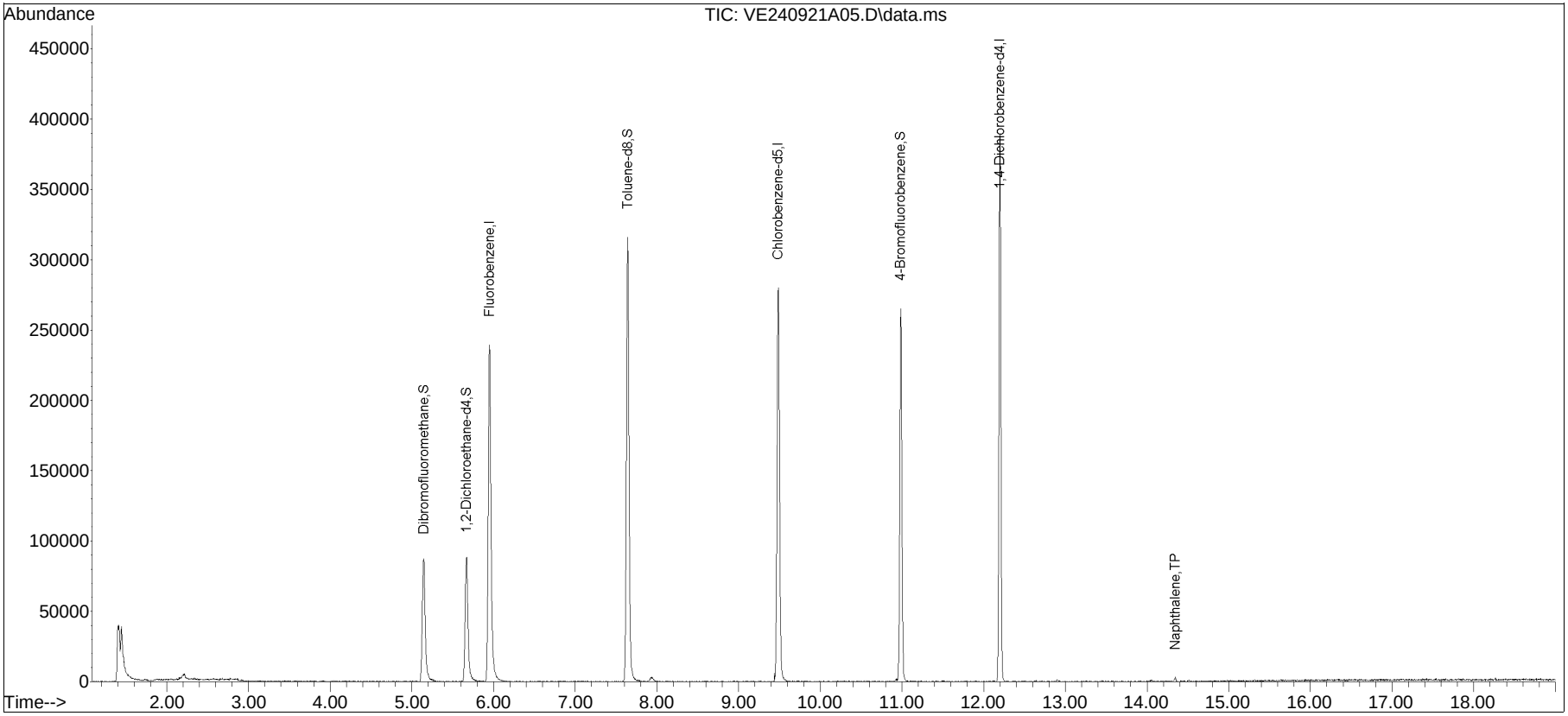
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A05.D
Acq On : 21 Sep 2024 8:50 am
Operator : ELAINE:LAC
Sample : WG1974948-5,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 09:23:02 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\Elaine\2024\240921A\ | QMethod | : Elaine_240731N_8260.m |
| Data File | : VE240921A05.D | Operator | : ELAINE:LAC |
| Date Inj'd | : 9/21/2024 8:50 am | Instrument | : Elaine |
| Sample | : WG1974948-5,31,10,10 | Quant Date | : 9/21/2024 9:22 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A05.D
Acq On : 22 Sep 2024 7:26 pm
Operator : VOA105:PID
Sample : WG1974932-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 22 19:46:18 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 575102 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 644553 | | | Recovery = | 89.22% | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 439413 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 502331 | | | Recovery = | 87.47% | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 259847 | 10.000 ug/L | 0.00 |
| Standard Area 1 = 298302 | | | Recovery = | 87.11% | |
| System Monitoring Compounds | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 165768 | 10.314 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 103.14% | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 166597 | 10.026 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 100.26% | |
| 60) Toluene-d8 | 7.347 | 98 | 529820 | 9.984 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 99.84% | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 197080 | 10.931 ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = | 109.31% | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.351 | 85 | 93 | N.D. | |
| 3) Chloromethane | 1.674 | 50 | 130 | N.D. | |
| 4) Vinyl chloride | 0.000 | | 0 | N.D. | |
| 5) Bromomethane | 2.026 | 94 | 477 | N.D. | |
| 6) Chloroethane | 2.036 | 64 | 560 | Below Cal # | 41 |
| 7) Trichlorofluoromethane | 0.000 | | 0 | N.D. | |
| 10) 1,1-Dichloroethene | 0.000 | | 0 | N.D. | |
| 11) Carbon disulfide | 2.740 | 76 | 640 | N.D. | |
| 12) Freon-113 | 0.000 | | 0 | N.D. | |
| 15) Methylene chloride | 3.259 | 84 | 514 | N.D. | |
| 17) Acetone | 0.000 | | 0 | N.D. d | |
| 18) trans-1,2-Dichloroethene | 0.000 | | 0 | N.D. | |
| 19) Methyl acetate | 3.405 | 43 | 305 | N.D. | |
| 20) Methyl tert-butyl ether | 0.000 | | 0 | N.D. | |
| 23) 1,1-Dichloroethane | 0.000 | | 0 | N.D. | |
| 28) cis-1,2-Dichloroethene | 4.520 | 96 | 89 | N.D. | |
| 30) Bromochloromethane | 0.000 | | 0 | N.D. | |
| 31) Cyclohexane | 0.000 | | 0 | N.D. | |
| 32) Chloroform | 0.000 | | 0 | N.D. | |
| 34) Carbon tetrachloride | 0.000 | | 0 | N.D. | |

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A05.D
Acq On : 22 Sep 2024 7:26 pm
Operator : VOA105:PID
Sample : WG1974932-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 22 19:46:18 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 37) | 1,1,1-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 39) | 2-Butanone | 0.000 | | 0 | | N.D. | |
| 41) | Benzene | 0.000 | | 0 | | N.D. | |
| 44) | 1,2-Dichloroethane | 5.498 | 62 | 89 | | N.D. | |
| 47) | Methyl cyclohexane | 0.000 | | 0 | | N.D. | |
| 48) | Trichloroethene | 0.000 | | 0 | | N.D. | |
| 51) | 1,2-Dichloropropane | 0.000 | | 0 | | N.D. | |
| 54) | Bromodichloromethane | 0.000 | | 0 | | N.D. | |
| 58) | cis-1,3-Dichloropropene | 0.000 | | 0 | | N.D. | |
| 61) | Toluene | 0.000 | | 0 | | N.D. | |
| 62) | 4-Methyl-2-pentanone | 0.000 | | 0 | | N.D. | |
| 63) | Tetrachloroethene | 0.000 | | 0 | | N.D. | |
| 65) | trans-1,3-Dichloropropene | 0.000 | | 0 | | N.D. | |
| 68) | 1,1,2-Trichloroethane | 0.000 | | 0 | | N.D. | |
| 69) | Chlorodibromomethane | 0.000 | | 0 | | N.D. | |
| 71) | 1,2-Dibromoethane | 0.000 | | 0 | | N.D. | |
| 72) | 2-Hexanone | 0.000 | | 0 | | N.D. | |
| 73) | Chlorobenzene | 0.000 | | 0 | | N.D. | |
| 74) | Ethylbenzene | 9.177 | 91 | 560 | | N.D. | |
| 76) | p/m Xylene | 0.000 | | 0 | | N.D. | |
| 77) | o Xylene | 0.000 | | 0 | | N.D. | |
| 78) | Styrene | 0.000 | | 0 | | N.D. | |
| 80) | Bromoform | 0.000 | | 0 | | N.D. | |
| 82) | Isopropylbenzene | 0.000 | | 0 | | N.D. | |
| 87) | 1,1,2,2-Tetrachloroethane | 0.000 | | 0 | | N.D. | |
| 100) | 1,3-Dichlorobenzene | 11.890 | 146 | 126 | | N.D. | |
| 101) | 1,4-Dichlorobenzene | 11.969 | 146 | 489 | | N.D. | |
| 104) | 1,2-Dichlorobenzene | 0.000 | | 0 | | N.D. | |
| 106) | 1,2-Dibromo-3-chloropr... | 0.000 | | 0 | | N.D. | |
| 109) | 1,2,4-Trichlorobenzene | 13.830 | 180 | 135 | | N.D. | |
| 111) | 1,2,3-Trichlorobenzene | 14.290 | 180 | 438 | | N.D. | |

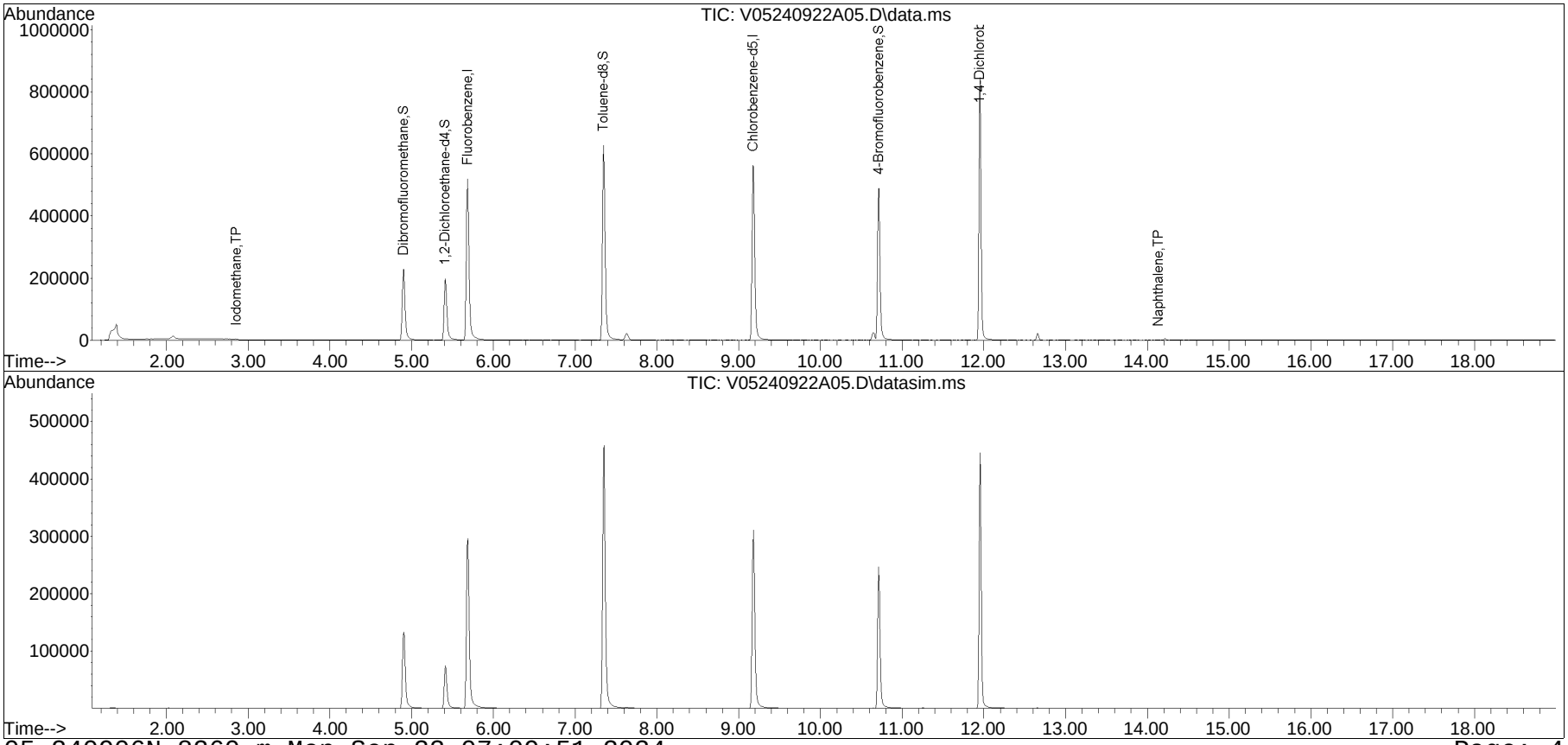
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A05.D
Acq On : 22 Sep 2024 7:26 pm
Operator : VOA105:PID
Sample : WG1974932-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 22 19:46:18 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : K:\VOA105\2024\240922A\ | QMethod | : V105_240906N_8260.m |
| Data File | : V05240922A05.D | Operator | : VOA105:PID |
| Date Inj'd | : 9/22/2024 7:26 pm | Instrument | : VOA105 |
| Sample | : WG1974932-5,31,10,10 | Quant Date | : 9/22/2024 7:46 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 644553 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 644553 | | | Recovery = 100.00% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 502331 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 502331 | | | Recovery = 100.00% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 298302 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 298302 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 176501 | 9.799 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.99% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.410 | 65 | 184620 | 9.914 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.14% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 624623 | 10.296 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.96% | | | |
| 83) 4-Bromofluorobenzene | 10.715 | 95 | 228580 | 11.044 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 110.44% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.498 | 85 | 205999 | 10.918 | ug/L | 98 |
| 3) Chloromethane | 1.674 | 50 | 146001 | 8.016 | ug/L | 98 |
| 4) Vinyl chloride | 1.743 | 62 | 156793 | 9.894 | ug/L | 100 |
| 5) Bromomethane | 2.016 | 94 | 24126 | 3.127 | ug/L | 98 |
| 6) Chloroethane | 2.114 | 64 | 81980 | 7.344 | ug/L | 95 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 230470 | 9.664 | ug/L | 100 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 118715 | 10.004 | ug/L | 98 |
| 11) Carbon disulfide | 2.740 | 76 | 379772 | 10.397 | ug/L | 100 |
| 12) Freon-113 | 2.740 | 101 | 129981 | 9.961 | ug/L # | 76 |
| 15) Methylene chloride | 3.249 | 84 | 149856 | 10.637 | ug/L | 79 |
| 17) Acetone | 3.317 | 43 | 24843 | 8.154 | ug/L | 93 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 157328 | 11.216 | ug/L | 96 |
| 19) Methyl acetate | 3.415 | 43 | 65567 | 9.813 | ug/L # | 79 |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 330893 | 10.713 | ug/L | 88 |
| 23) 1,1-Dichloroethane | 3.953 | 63 | 271180 | 10.614 | ug/L | 98 |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 170618 | 10.738 | ug/L | 95 |
| 30) Bromochloromethane | 4.657 | 128 | 81960 | 10.688 | ug/L | 92 |
| 31) Cyclohexane | 4.638 | 56 | 286862 | 11.638 | ug/L | 80 |
| 32) Chloroform | 4.726 | 83 | 268079 | 10.037 | ug/L | 96 |
| 34) Carbon tetrachloride | 4.833 | 117 | 236813 | 10.327 | ug/L | 98 |

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 37) | 1,1,1-Trichloroethane | 4.902 | 97 | 256416 | 10.298 | ug/L | | 99 |
| 39) | 2-Butanone | 5.019 | 43 | 42236 | 9.120 | ug/L | # | 66 |
| 41) | Benzene | 5.264 | 78 | 585516 | 10.782 | ug/L | | 95 |
| 44) | 1,2-Dichloroethane | 5.479 | 62 | 174038 | 9.707 | ug/L | | 99 |
| 47) | Methyl cyclohexane | 5.831 | 83 | 269018 | 10.803 | ug/L | | 87 |
| 48) | Trichloroethene | 5.850 | 95 | 160398 | 9.924 | ug/L | | 88 |
| 51) | 1,2-Dichloropropane | 6.388 | 63 | 142018 | 10.473 | ug/L | # | 89 |
| 54) | Bromodichloromethane | 6.476 | 83 | 196484 | 9.894 | ug/L | | 99 |
| 58) | cis-1,3-Dichloropropene | 7.151 | 75 | 216634 | 10.370 | ug/L | # | 90 |
| 61) | Toluene | 7.406 | 92 | 374198 | 10.611 | ug/L | | 97 |
| 62) | 4-Methyl-2-pentanone | 7.856 | 58 | 29125 | 9.978 | ug/L | | 76 |
| 63) | Tetrachloroethene | 7.846 | 166 | 197543 | 10.616 | ug/L | | 89 |
| 65) | trans-1,3-Dichloropropene | 7.904 | 75 | 179917 | 10.487 | ug/L | | 87 |
| 68) | 1,1,2-Trichloroethane | 8.081 | 83 | 91819 | 10.524 | ug/L | | 99 |
| 69) | Chlorodibromomethane | 8.286 | 129 | 149045 | 10.018 | ug/L | | 97 |
| 71) | 1,2-Dibromoethane | 8.560 | 107 | 125283 | 10.665 | ug/L | | 97 |
| 72) | 2-Hexanone | 8.853 | 43 | 52210 | 8.970 | ug/L | | 90 |
| 73) | Chlorobenzene | 9.196 | 112 | 431334 | 10.347 | ug/L | | 87 |
| 74) | Ethylbenzene | 9.235 | 91 | 737624 | 10.474 | ug/L | | 93 |
| 76) | p/m Xylene | 9.422 | 106 | 584511 | 21.494 | ug/L | | 84 |
| 77) | o Xylene | 9.960 | 106 | 555154 | 21.549 | ug/L | | 83 |
| 78) | Styrene | 10.039 | 104 | 907961 | 21.300 | ug/L | # | 84 |
| 80) | Bromoform | 10.068 | 173 | 86011 | 9.732 | ug/L | | 97 |
| 82) | Isopropylbenzene | 10.362 | 105 | 773993 | 11.219 | ug/L | | 94 |
| 87) | 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 126446 | 10.553 | ug/L | | 96 |
| 100) | 1,3-Dichlorobenzene | 11.871 | 146 | 382046 | 10.661 | ug/L | | 96 |
| 101) | 1,4-Dichlorobenzene | 11.969 | 146 | 375353 | 10.190 | ug/L | | 95 |
| 104) | 1,2-Dichlorobenzene | 12.390 | 146 | 341529 | 10.551 | ug/L | | 95 |
| 106) | 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 19839 | 9.517 | ug/L | | 98 |
| 109) | 1,2,4-Trichlorobenzene | 13.810 | 180 | 219366 | 10.155 | ug/L | | 98 |
| 111) | 1,2,3-Trichlorobenzene | 14.271 | 180 | 188844 | 10.282 | ug/L | | 98 |

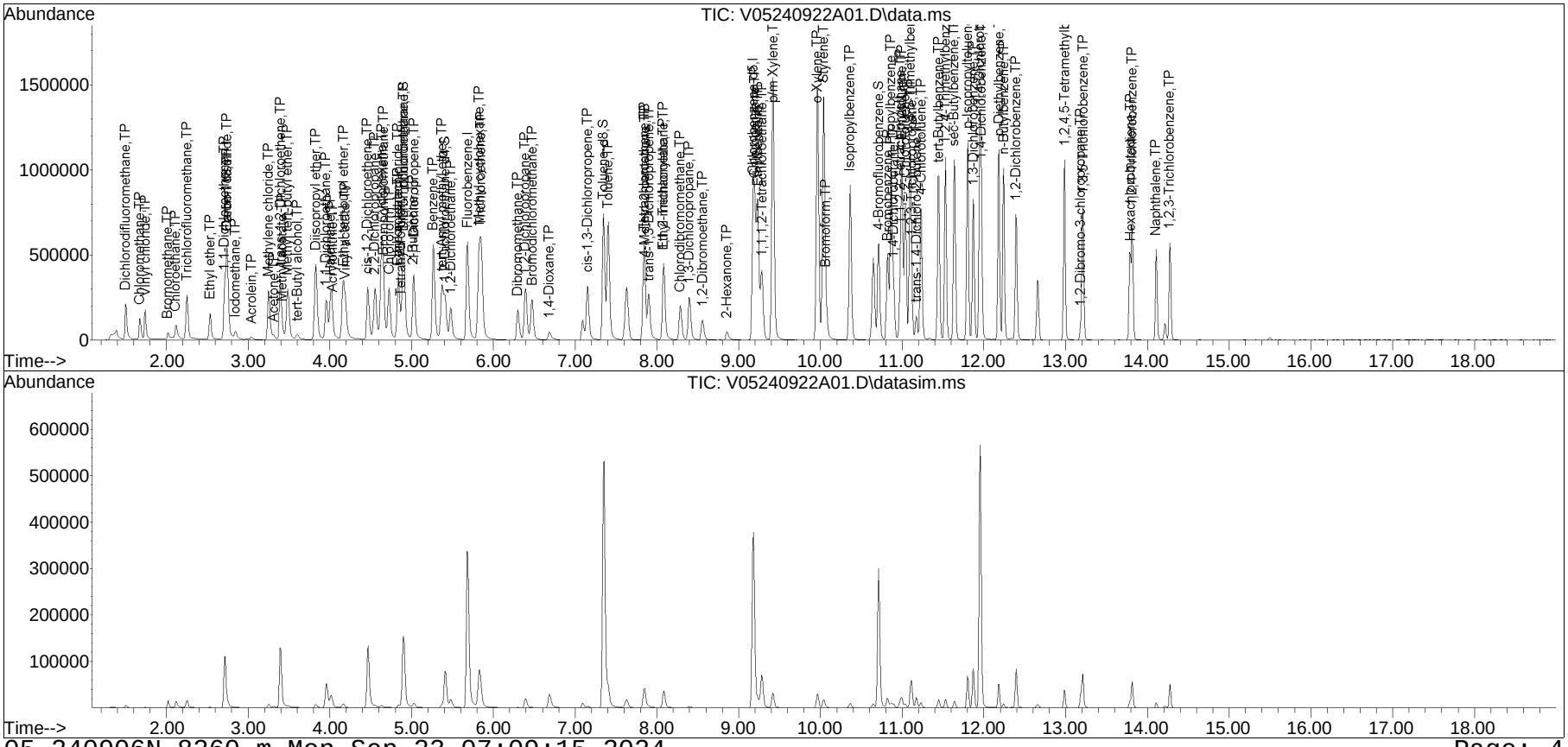
(#) = qualifier out of range (m) = manual integration (+) = signals summed

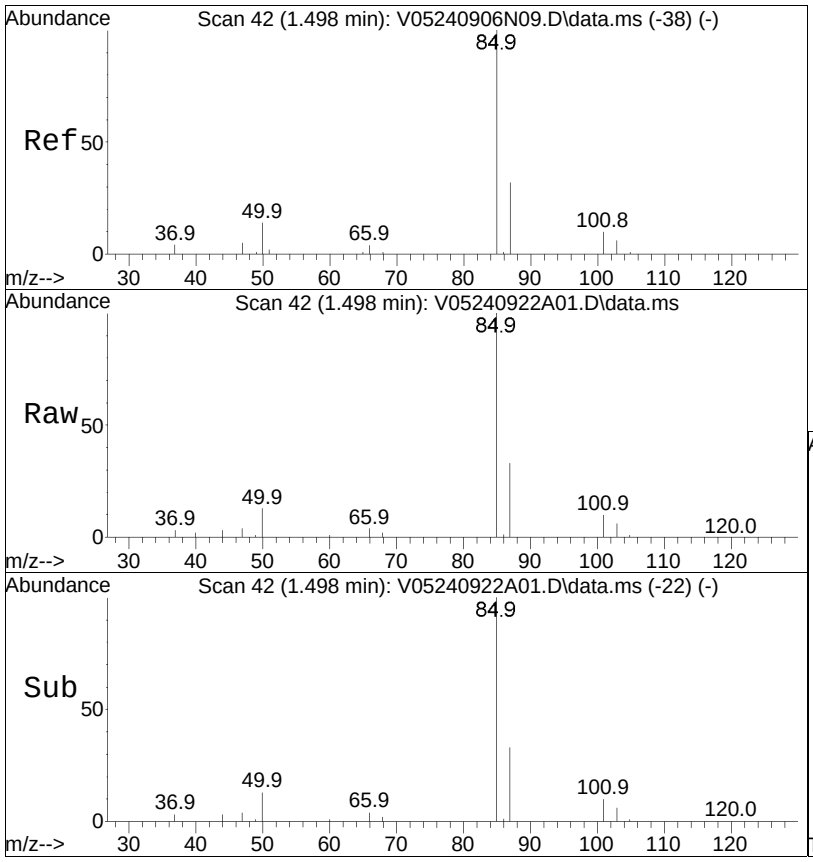
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A01.D
Acq On : 22 Sep 2024 5:45 pm
Operator : VOA105:PID
Sample : WG1974932-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 18:39:50 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

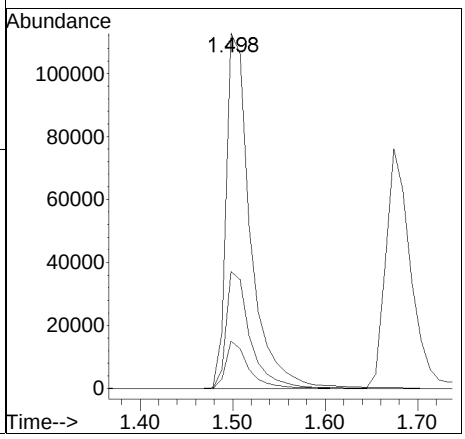


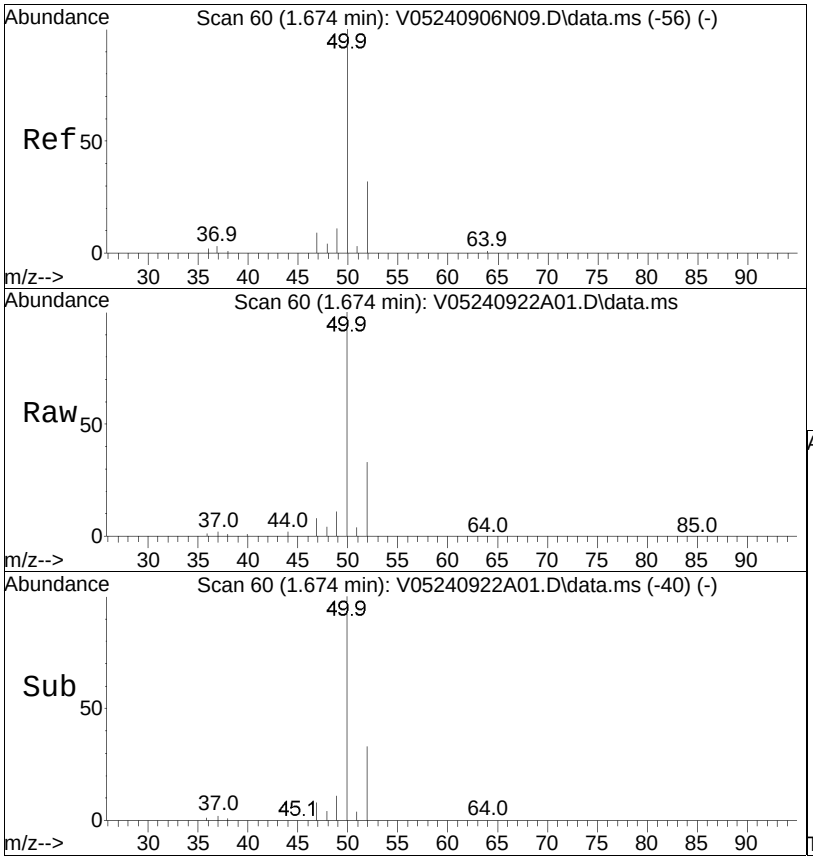



#2
Dichlorodifluoromethane
Concen: 10.92 ug/L
RT: 1.498 min Scan# 42
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 85 Resp: 205999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 20.9 | 43.5 |
| 50 | 12.5 | 6.8 | 14.0 |

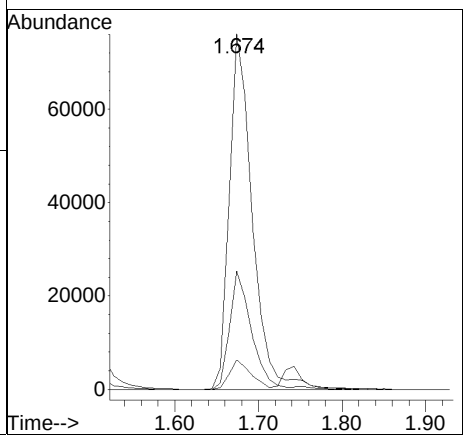


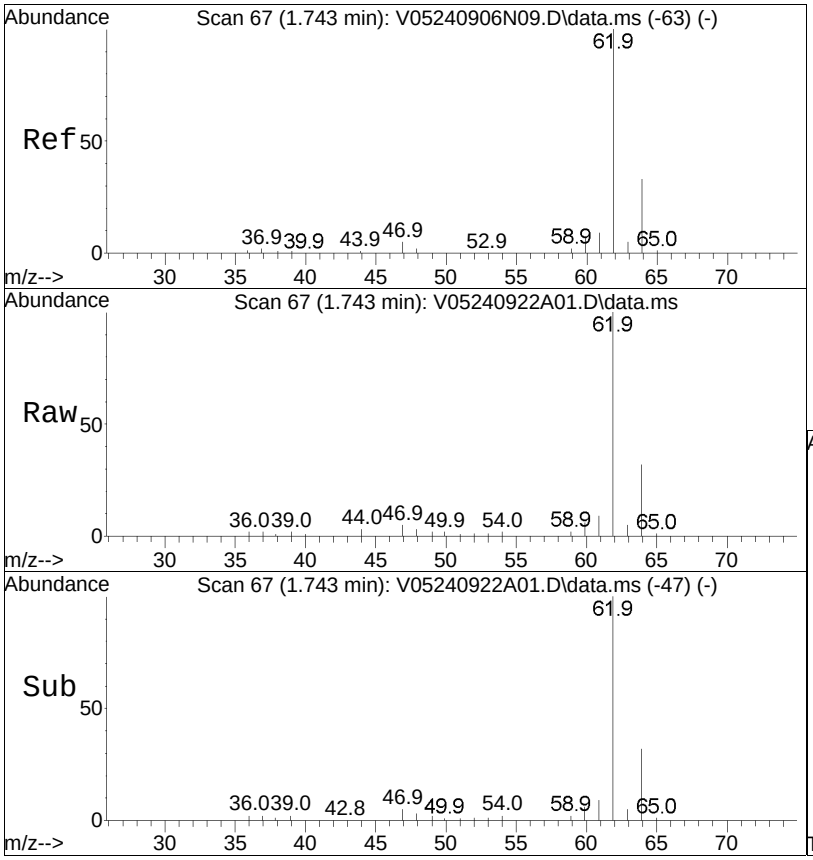



#3
Chloromethane
Concen: 8.02 ug/L
RT: 1.674 min Scan# 60
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 50 Resp: 146001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.0 | 12.6 | 52.6 |
| 47 | 7.8 | 0.0 | 30.1 |

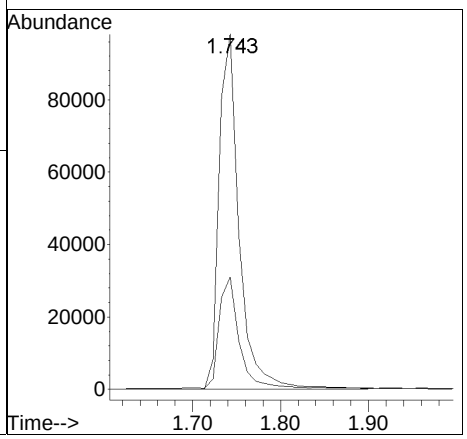


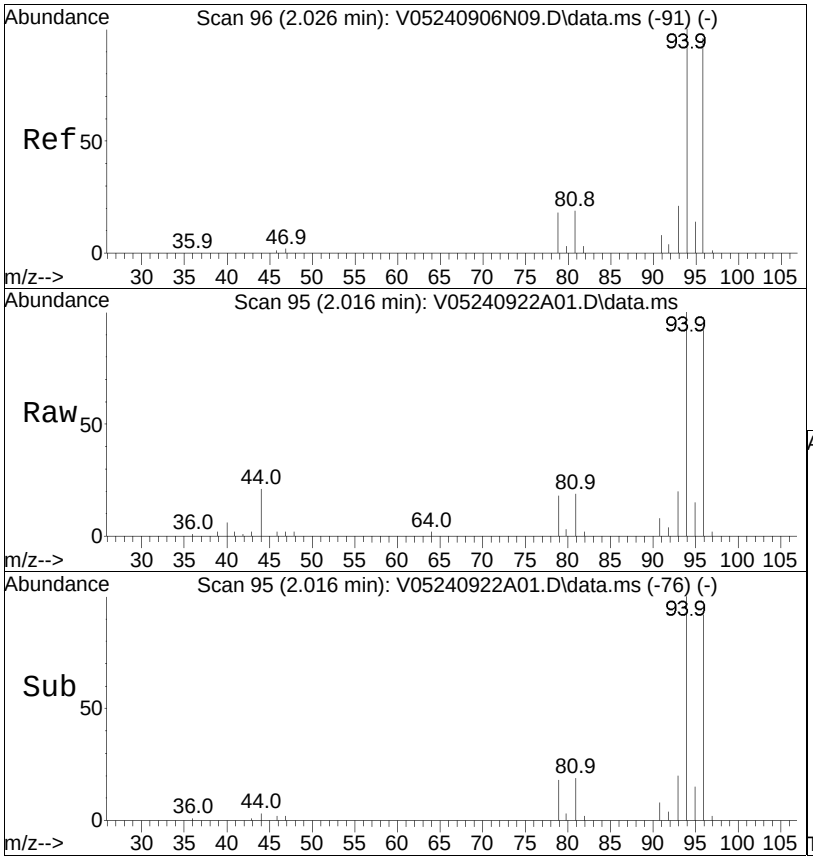



#4
Vinyl chloride
Concen: 9.89 ug/L
RT: 1.743 min Scan# 67
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 62 Resp: 156793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.6 | 13.5 | 53.5 |

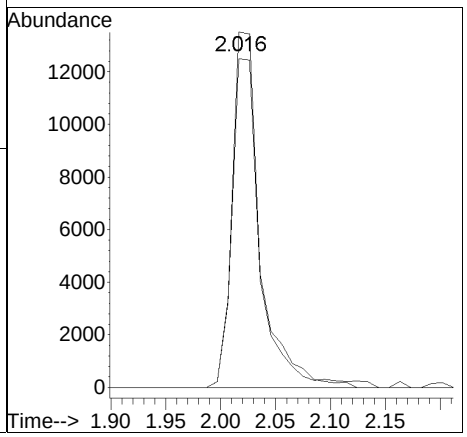


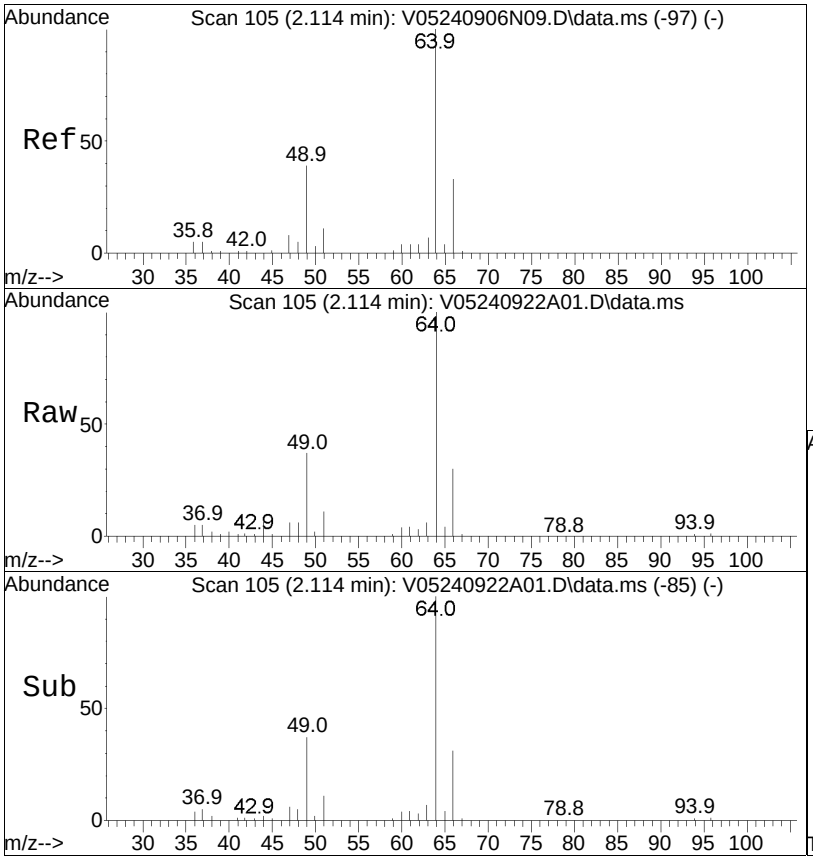



#5
Bromomethane
Concen: 3.13 ug/L
RT: 2.016 min Scan# 95
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 94 Resp: 24126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.5 | 75.4 | 115.4 |

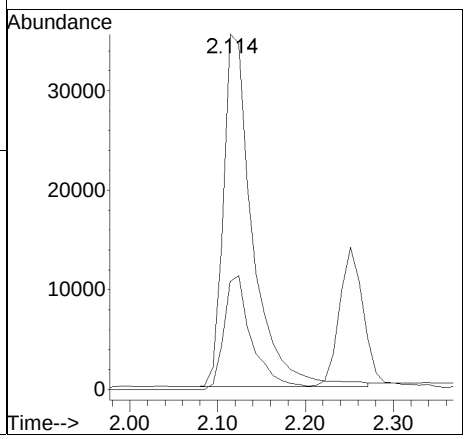


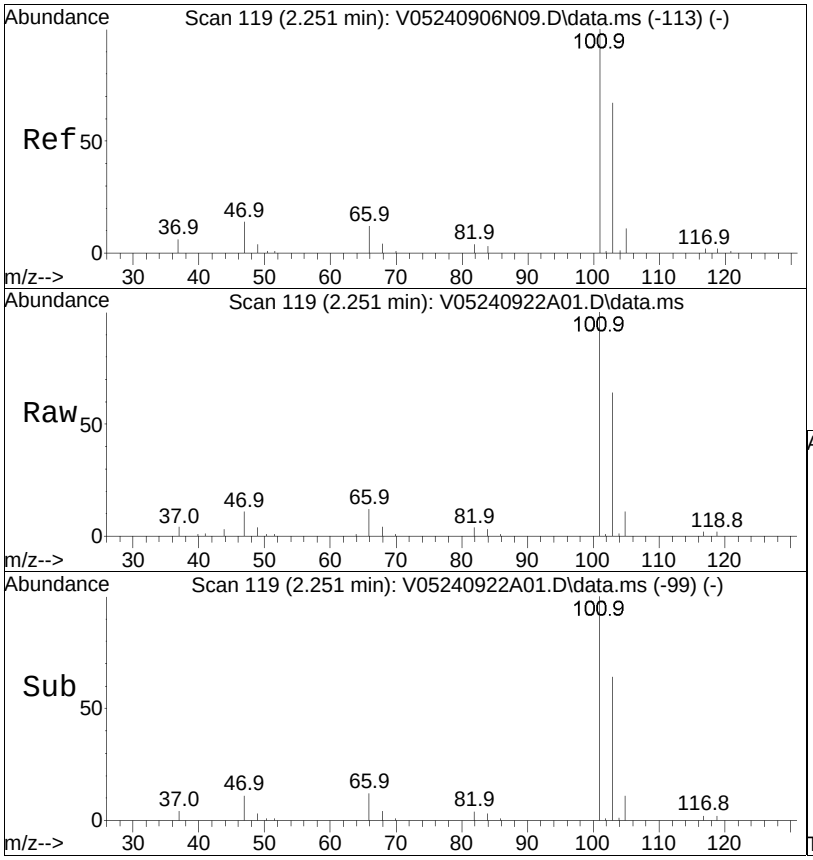



#6
Chloroethane
Concen: 7.34 ug/L
RT: 2.114 min Scan# 105
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 64 Resp: 81980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.0 | 13.8 | 53.8 |

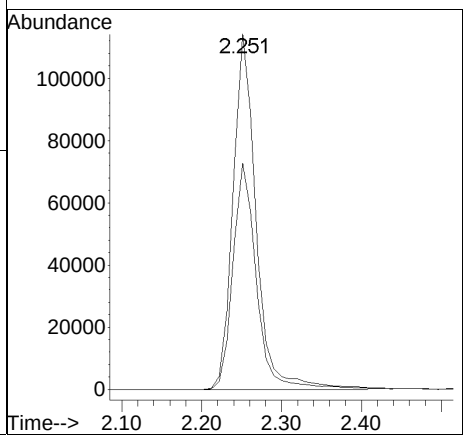


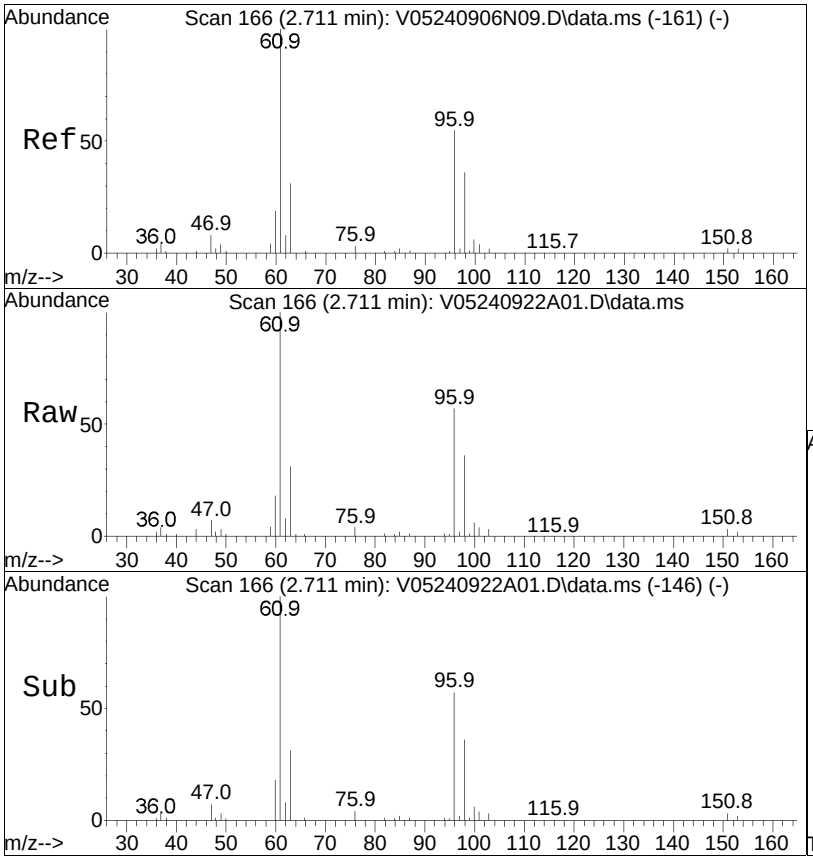



#7
Trichlorofluoromethane
Concen: 9.66 ug/L
RT: 2.251 min Scan# 119
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:101 Resp: 230470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.7 | 51.8 | 77.6 |

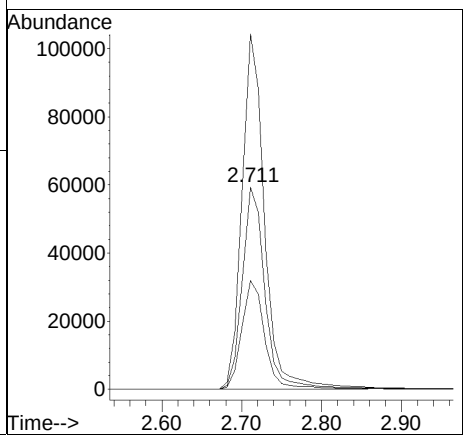


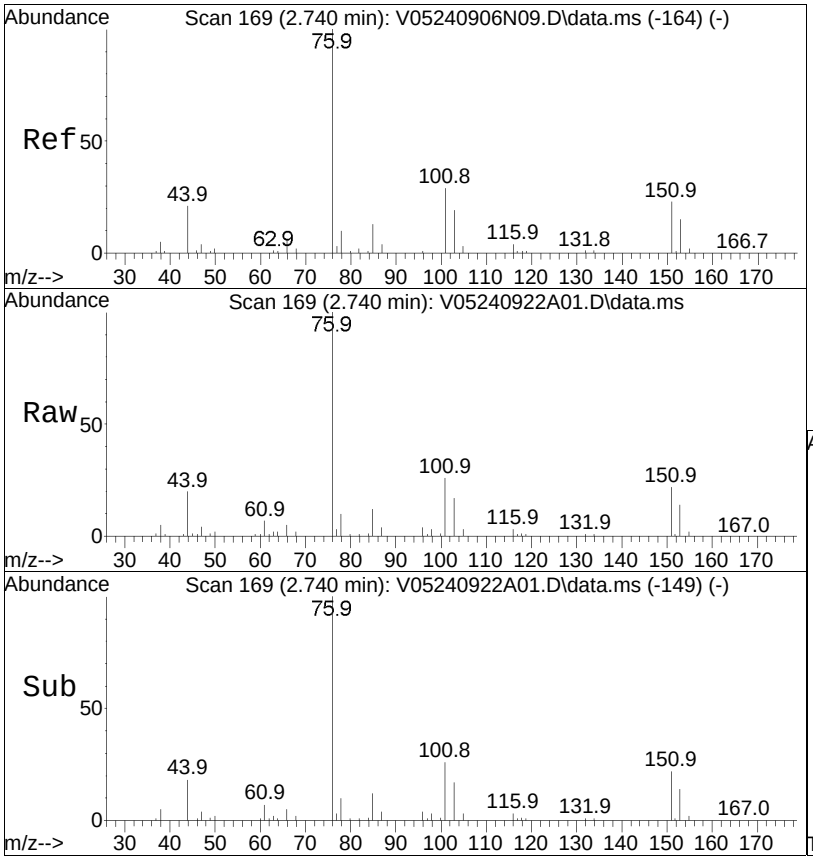



#10
1,1-Dichloroethene
Concen: 10.00 ug/L
RT: 2.711 min Scan# 166
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 96 Resp: 118715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 173.5 | 136.7 | 205.1 |
| 63 | 54.7 | 45.0 | 67.6 |

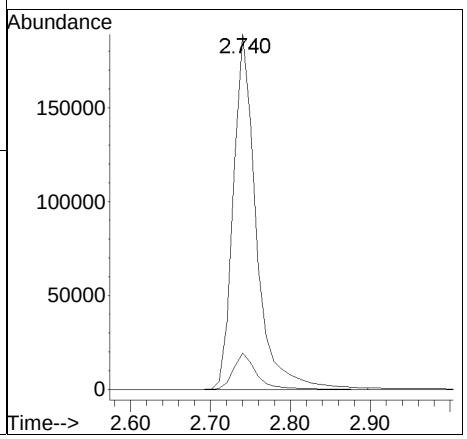


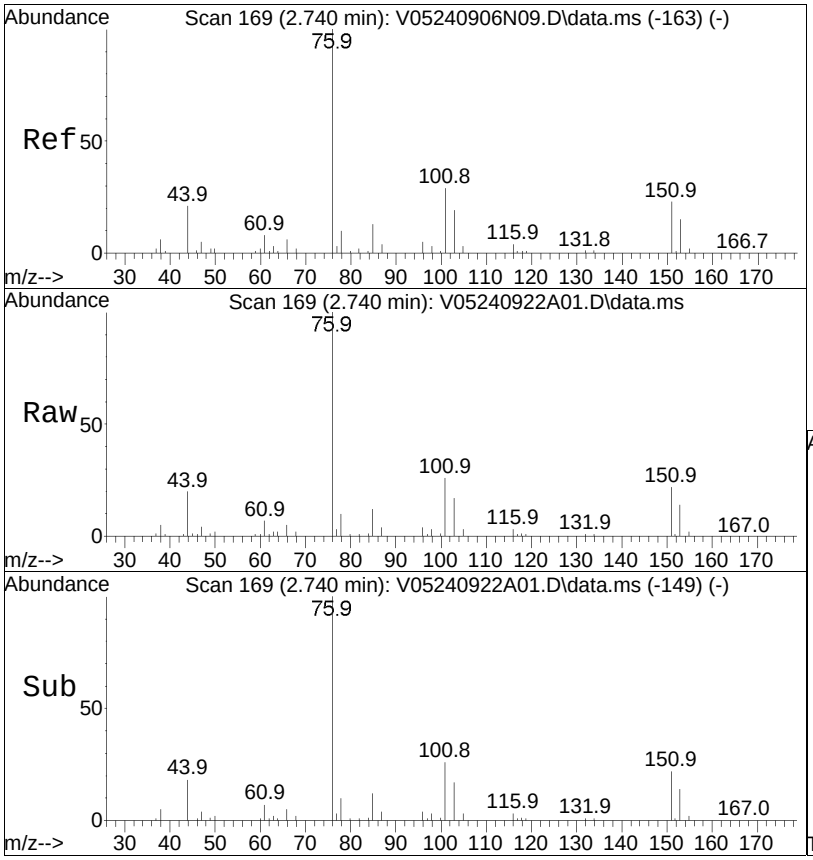



#11
Carbon disulfide
Concen: 10.40 ug/L
RT: 2.740 min Scan# 169
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 76 Resp: 379772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.3 | 6.7 | 13.9 |

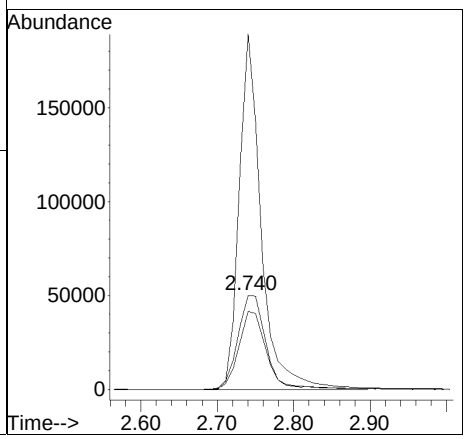


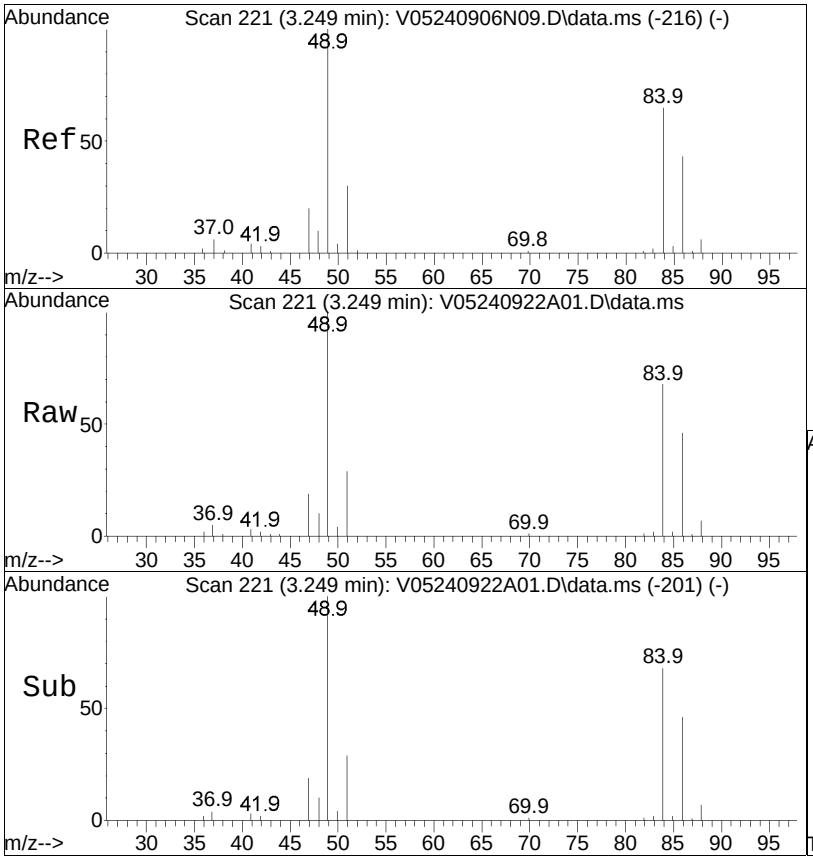



#12
Freon-113
Concen: 9.96 ug/L
RT: 2.740 min Scan# 169
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:101 Resp: 129981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 81.3 | 65.0 | 97.6 |
| 76 | 292.2 | 190.0 | 285.0# |

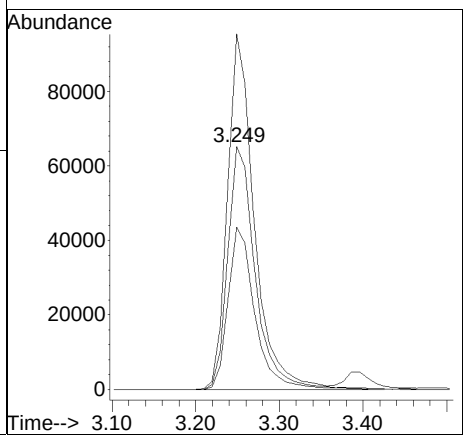


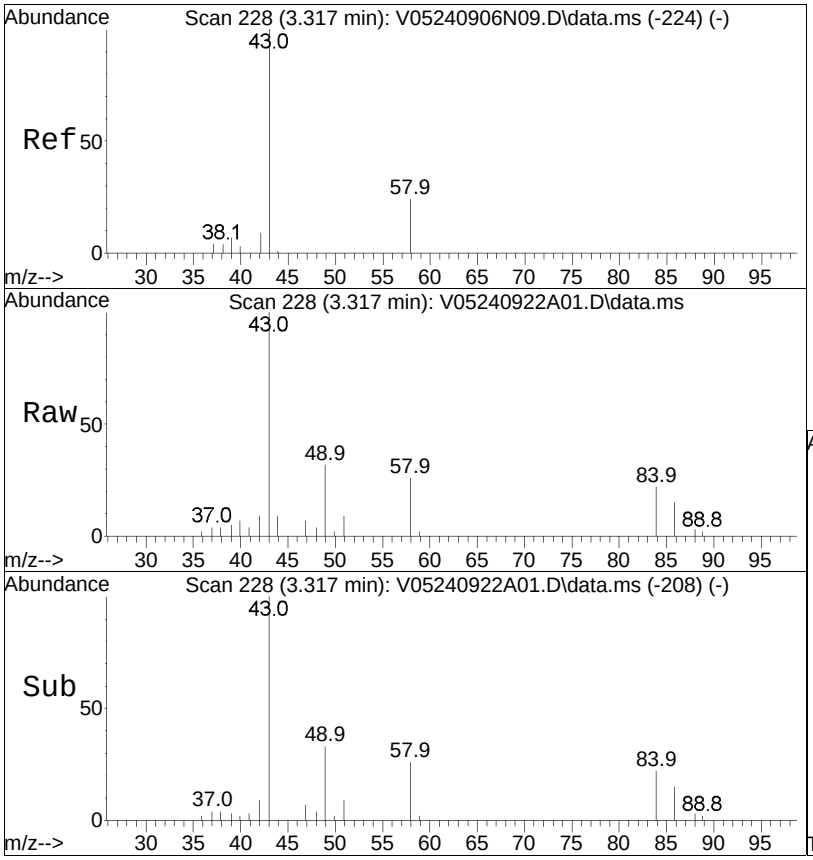



#15
Methylene chloride
Concen: 10.64 ug/L
RT: 3.249 min Scan# 221
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 84 Resp: 149856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 65.1 | 42.1 | 87.5 |
| 49 | 141.4 | 69.3 | 143.9 |

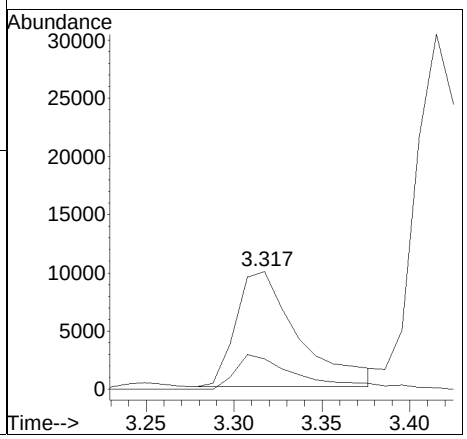


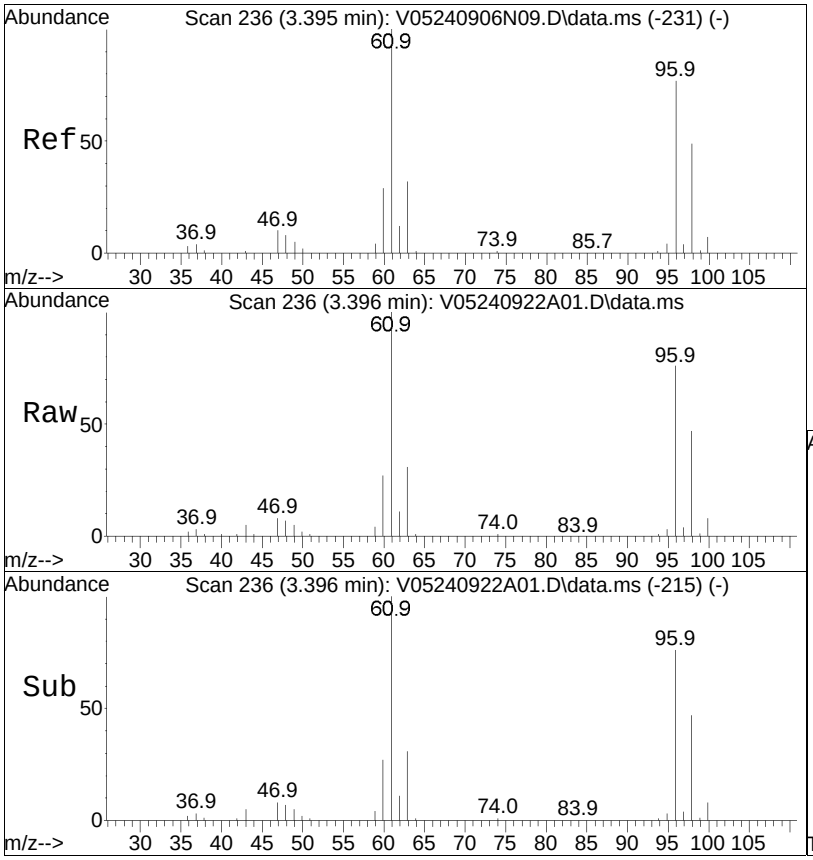



#17
Acetone
Concen: 8.15 ug/L
RT: 3.317 min Scan# 228
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 43 Resp: 24843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.4 | 22.0 | 33.0 |

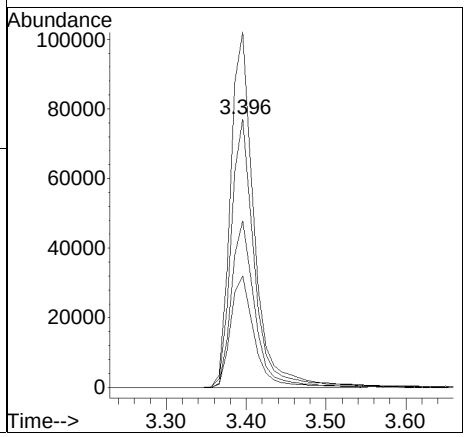


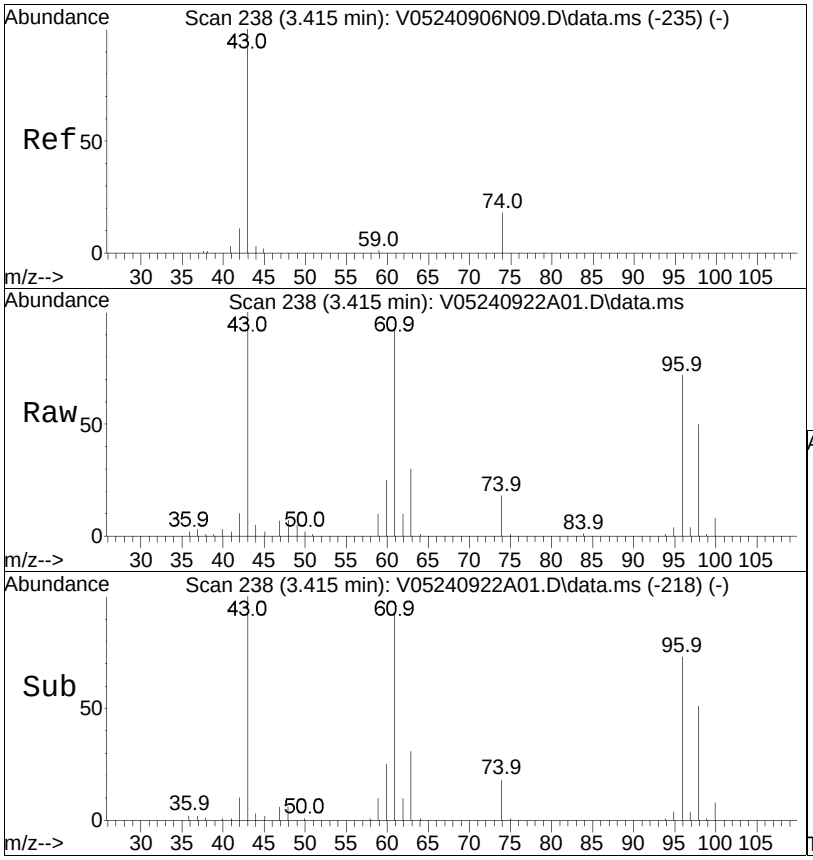



#18
trans-1,2-Dichloroethene
Concen: 11.22 ug/L
RT: 3.396 min Scan# 236
Delta R.T. 0.001 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 96 Resp: 157328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.0 | 91.7 | 190.5 |
| 98 | 62.5 | 41.1 | 85.5 |
| 63 | 42.5 | 29.4 | 61.0 |

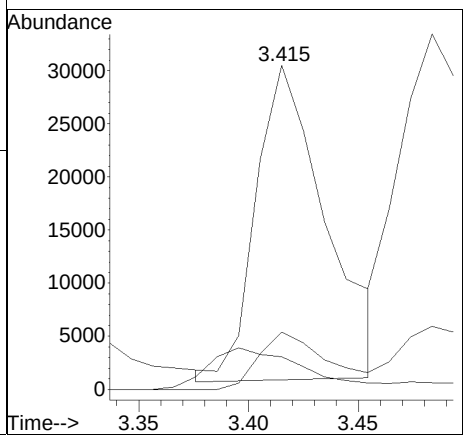


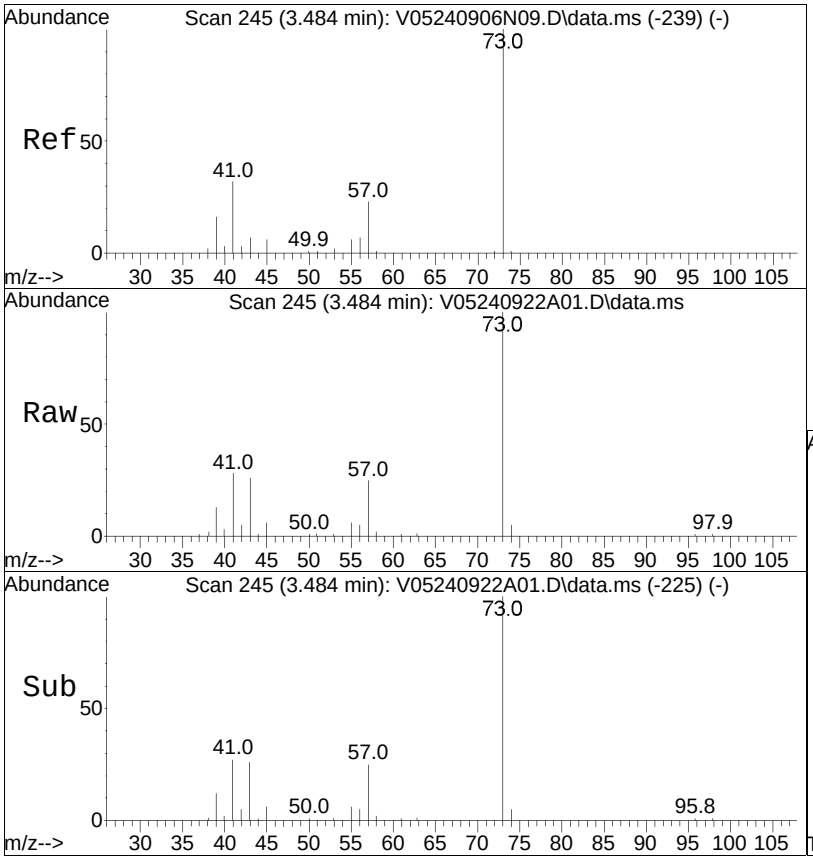



#19
Methyl acetate
Concen: 9.81 ug/L
RT: 3.415 min Scan# 238
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 43 Resp: 65567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.0 | 23.1 | 34.7# |
| 59 | 18.0 | 23.9 | 35.9# |

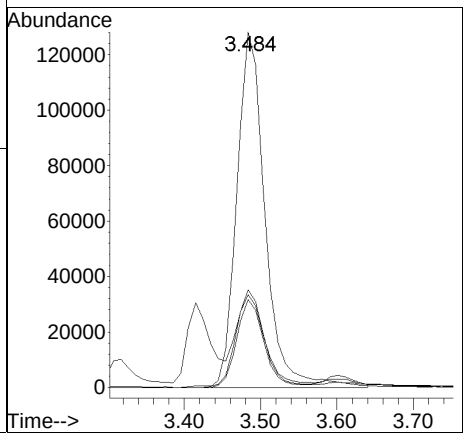


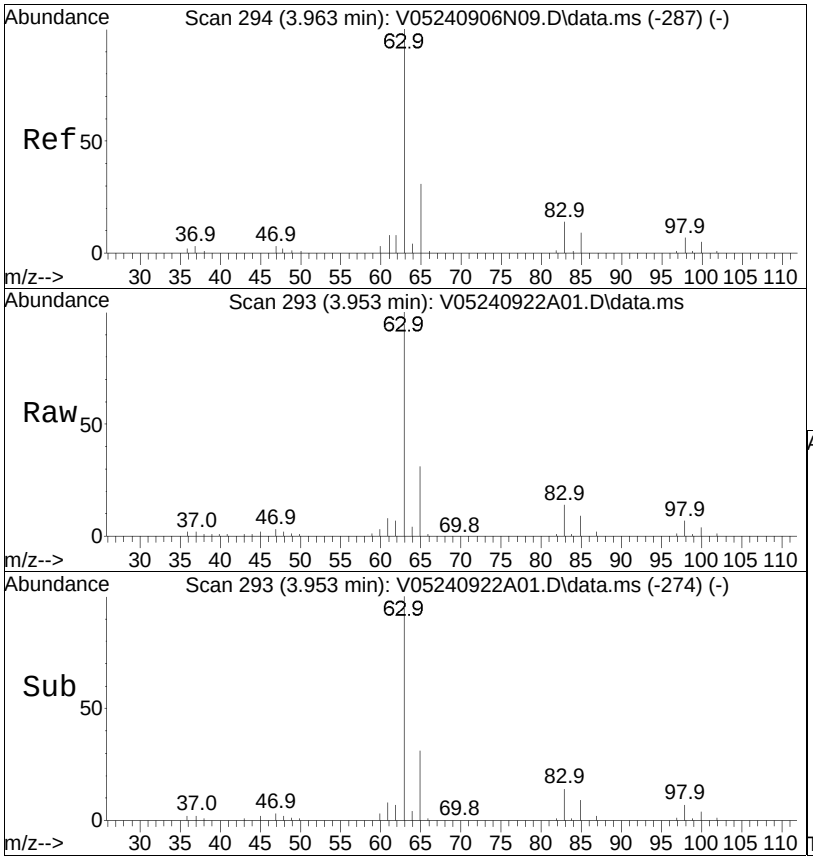



#20
Methyl tert-butyl ether
Concen: 10.71 ug/L
RT: 3.484 min Scan# 245
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 73 Resp: 330893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.8 | 11.8 | 24.6 |
| 43 | 24.1 | 13.5 | 27.9 |
| 41 | 27.5 | 13.3 | 27.5 |

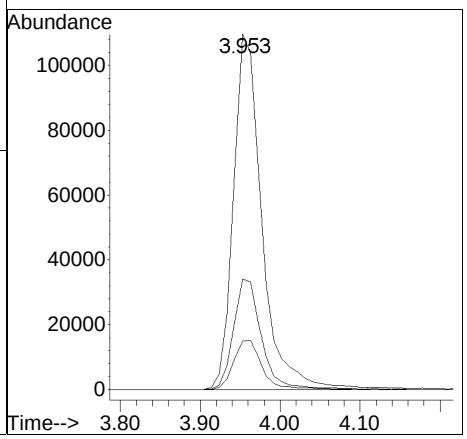


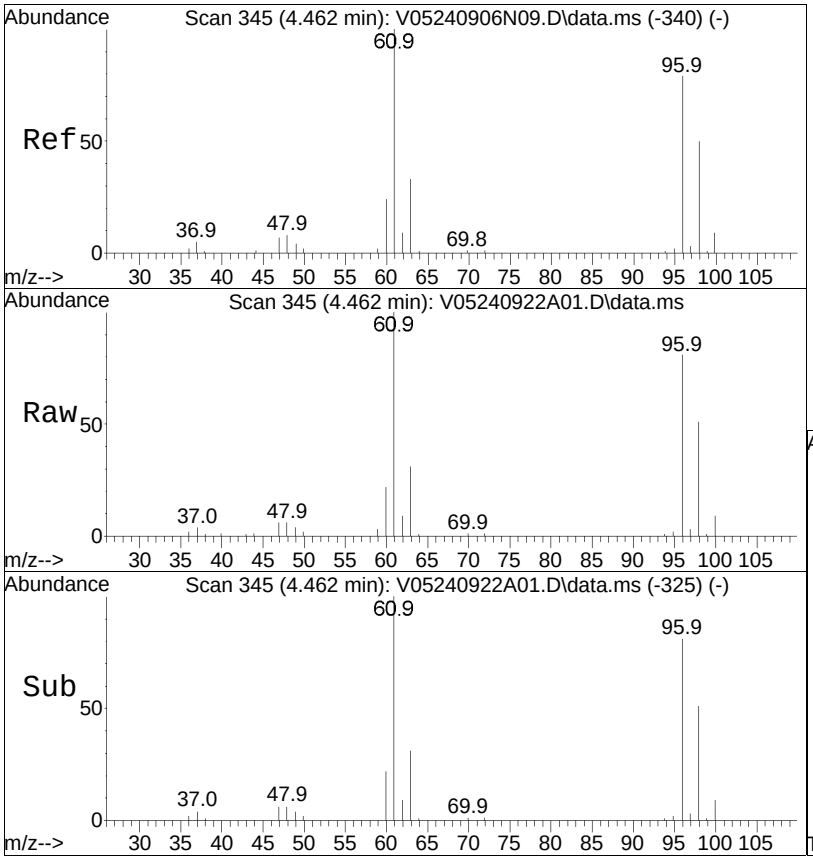



#23
1,1-Dichloroethane
Concen: 10.61 ug/L
RT: 3.953 min Scan# 293
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 63 Resp: 271180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.5 | 11.9 | 51.9 |
| 83 | 13.8 | 0.0 | 34.2 |

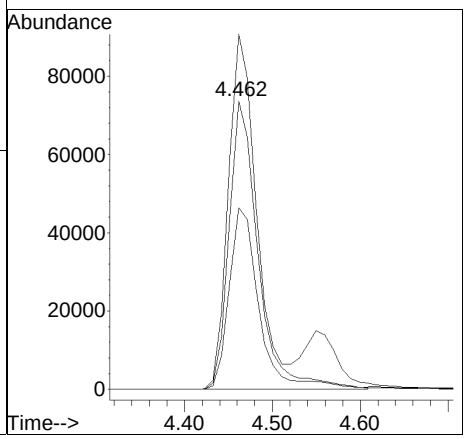


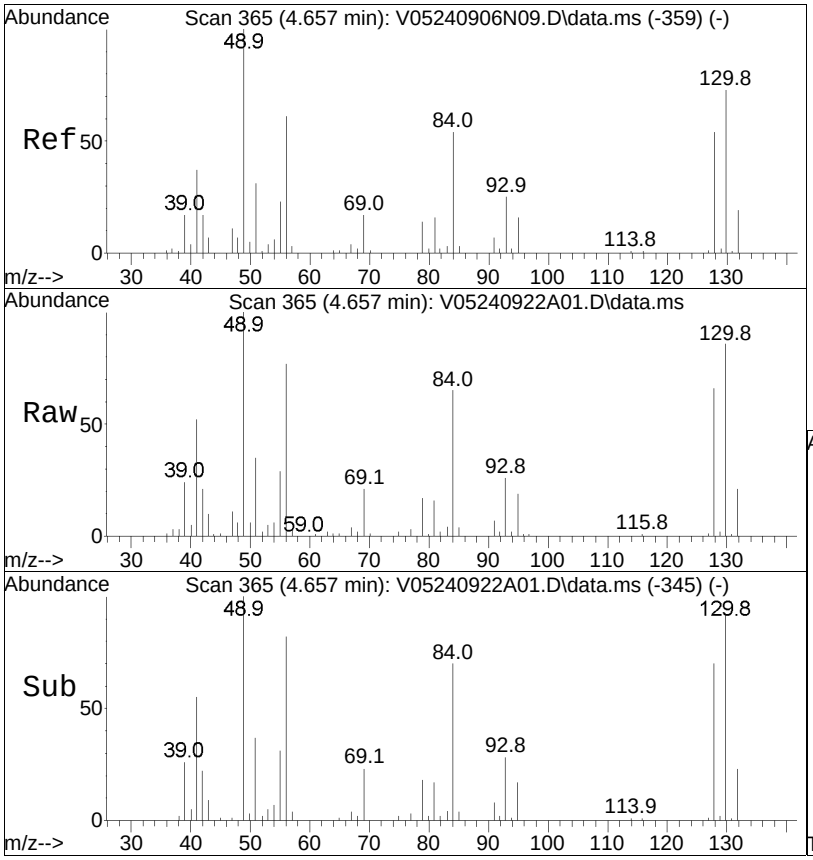



#28
cis-1,2-Dichloroethene
Concen: 10.74 ug/L
RT: 4.462 min Scan# 345
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 96 Resp: 170618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 118.8 | 100.5 | 150.7 |
| 98 | 65.1 | 49.8 | 74.8 |

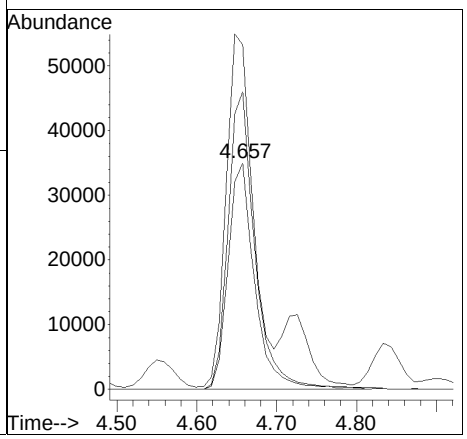


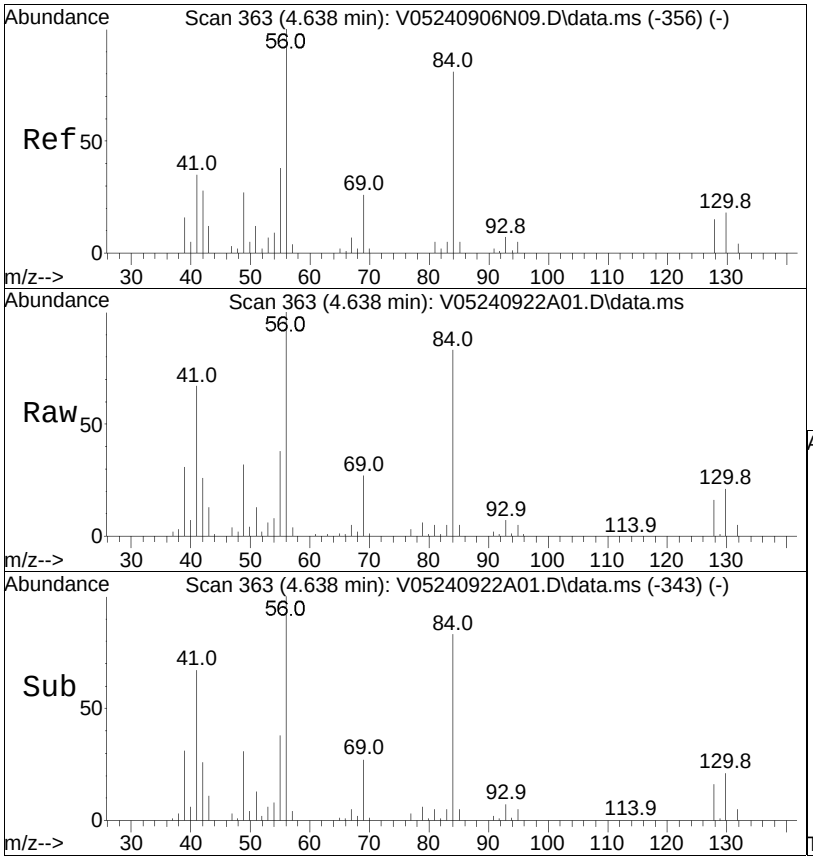



#30
Bromochloromethane
Concen: 10.69 ug/L
RT: 4.657 min Scan# 365
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:128 Resp: 81960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 154.2 | 109.0 | 163.4 |
| 130 | 131.7 | 105.6 | 158.4 |

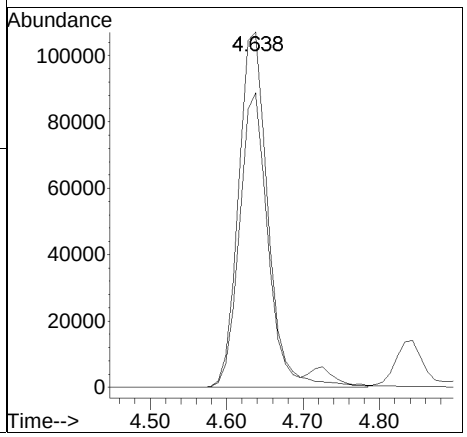


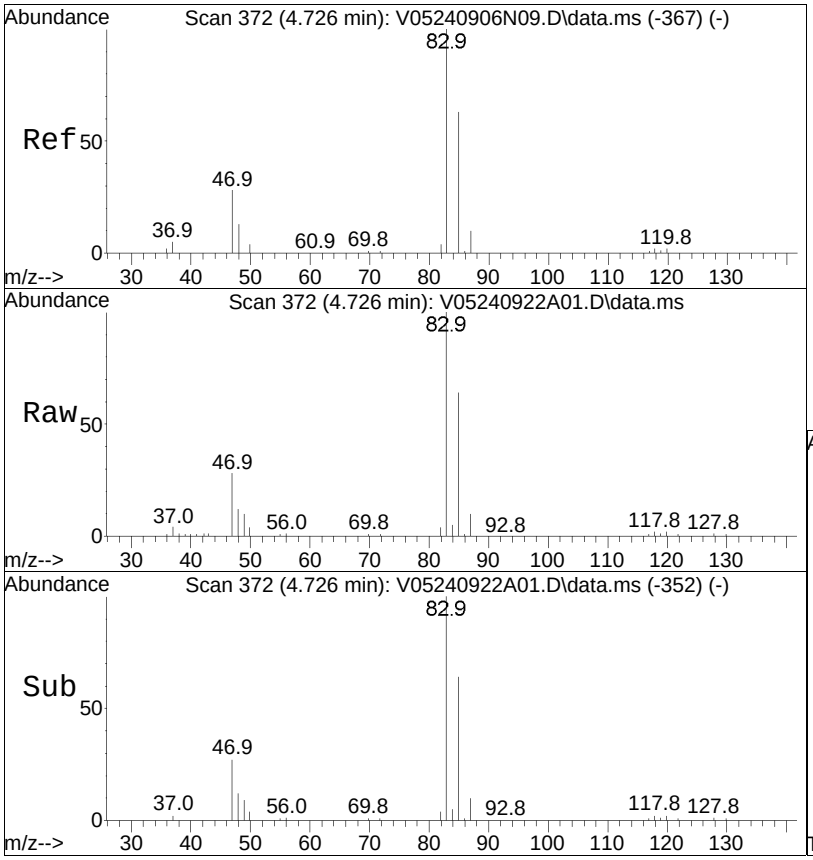



#31
Cyclohexane
Concen: 11.64 ug/L
RT: 4.638 min Scan# 363
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 56 Resp: 286862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 79.0 | 64.4 | 133.8 |

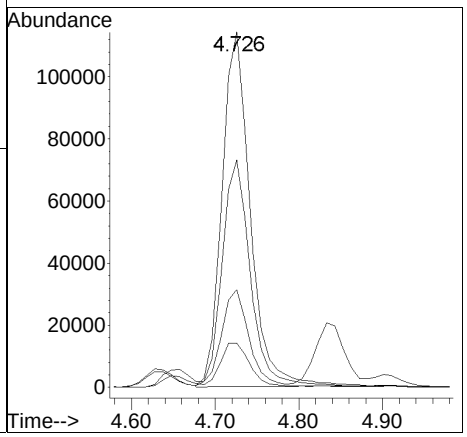


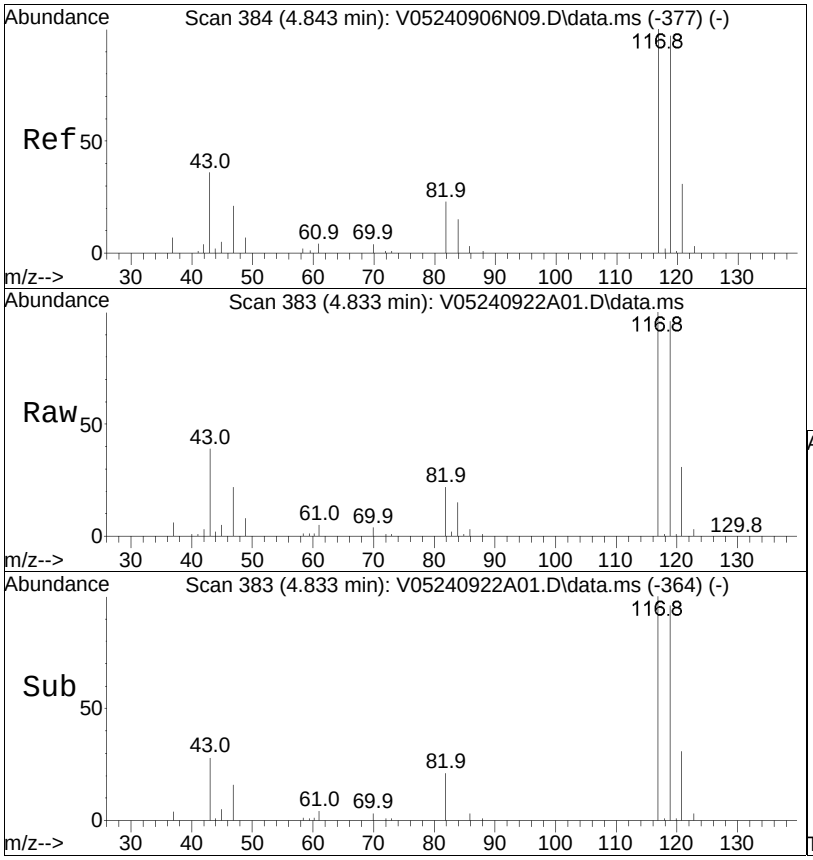



#32
Chloroform
Concen: 10.04 ug/L
RT: 4.726 min Scan# 372
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 83 Resp: 268079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.2 | 42.8 | 89.0 |
| 47 | 24.8 | 13.7 | 28.4 |
| 48 | 12.7 | 6.9 | 14.3 |

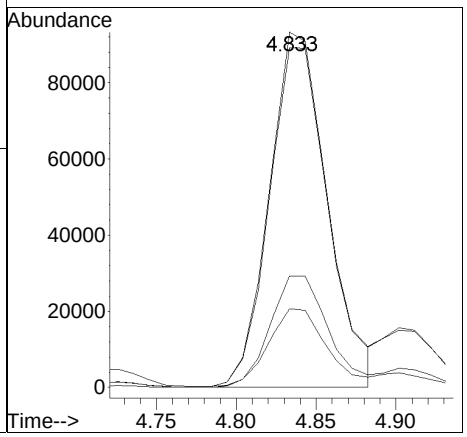


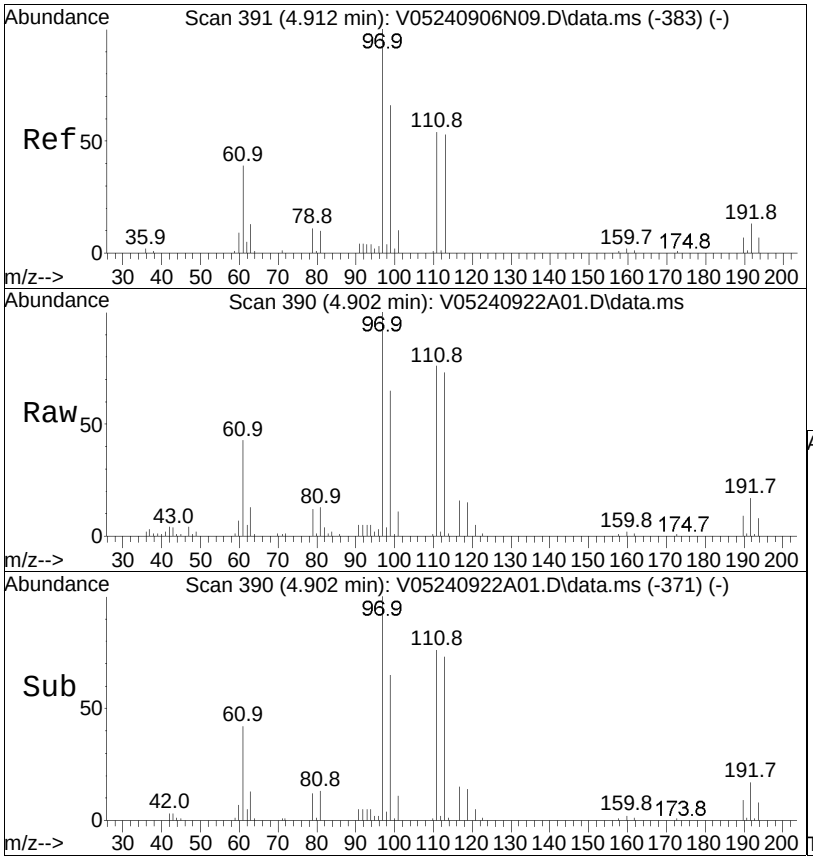



#34
Carbon tetrachloride
Concen: 10.33 ug/L
RT: 4.833 min Scan# 383
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:117 Resp: 236813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.0 | 63.6 | 132.2 |
| 121 | 31.4 | 19.8 | 41.0 |
| 82 | 21.7 | 15.9 | 32.9 |

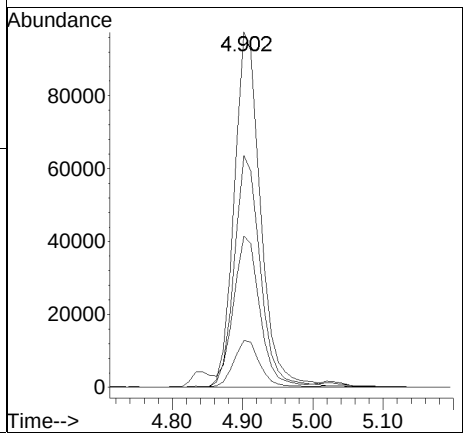


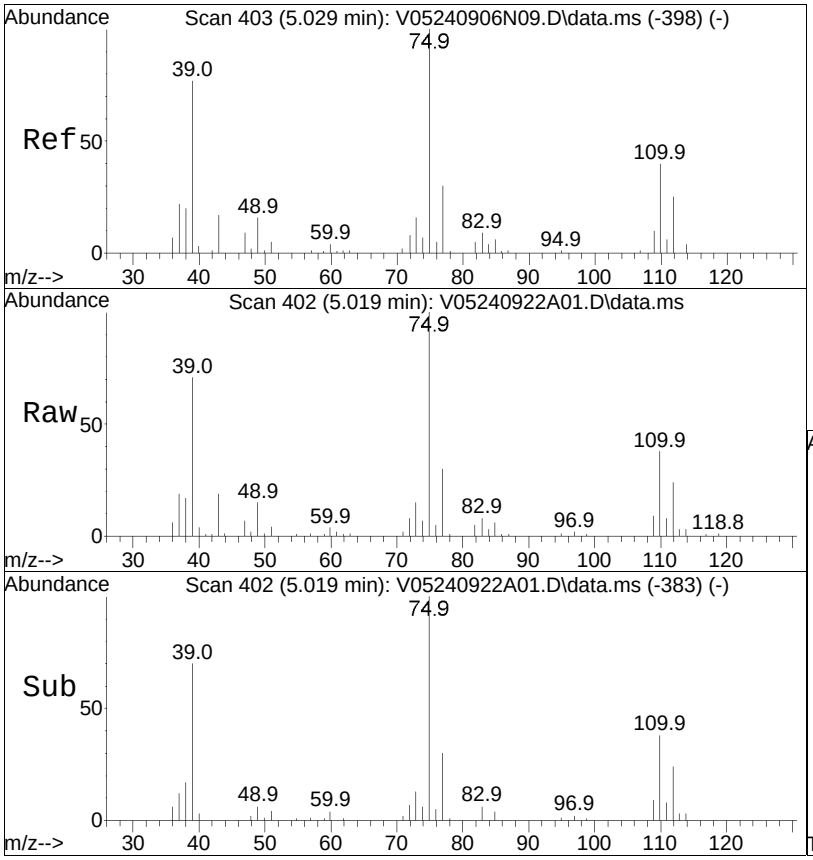



#37
1,1,1-Trichloroethane
Concen: 10.30 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 97 Resp: 256416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.5 | 41.7 | 86.5 |
| 61 | 42.1 | 26.1 | 54.3 |
| 63 | 13.2 | 8.5 | 17.6 |

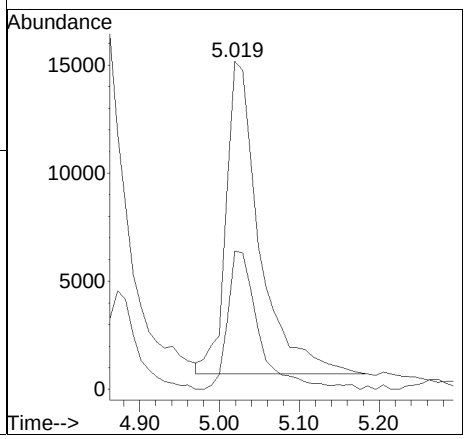


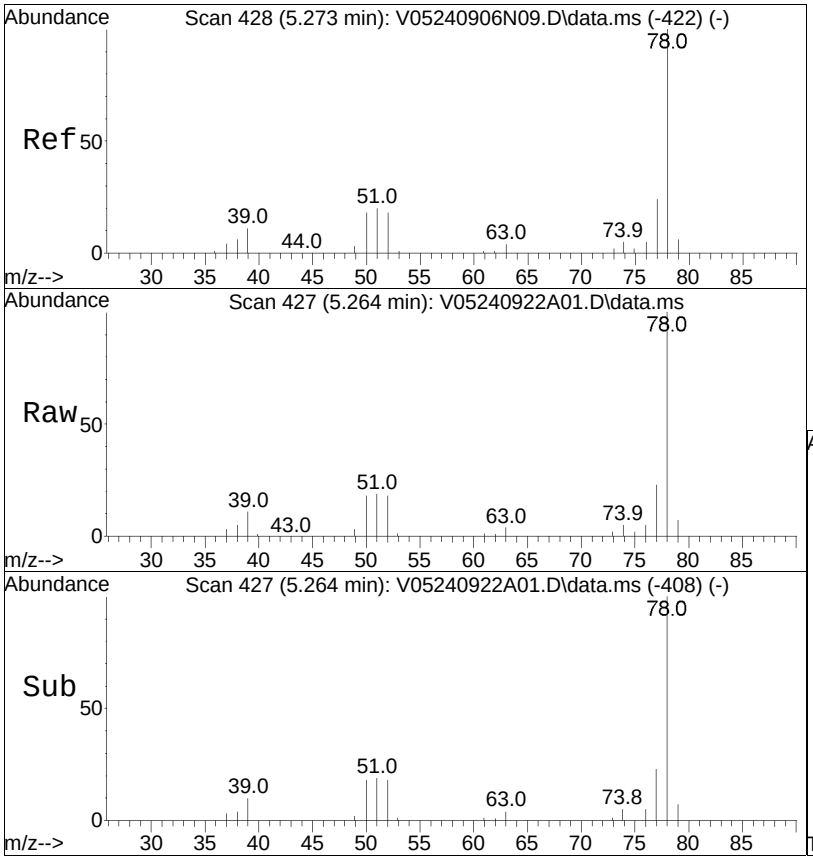



#39
2-Butanone
Concen: 9.12 ug/L
RT: 5.019 min Scan# 402
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 43 Resp: 42236

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 41.5 | 55.6 | 83.4# |

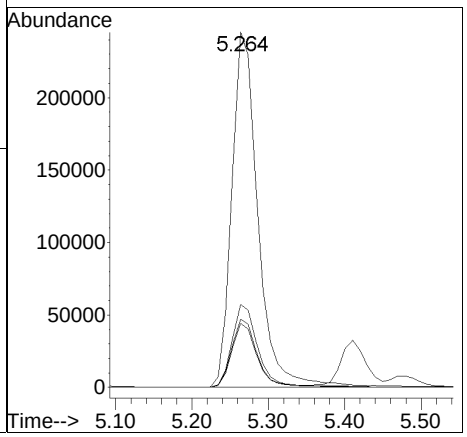


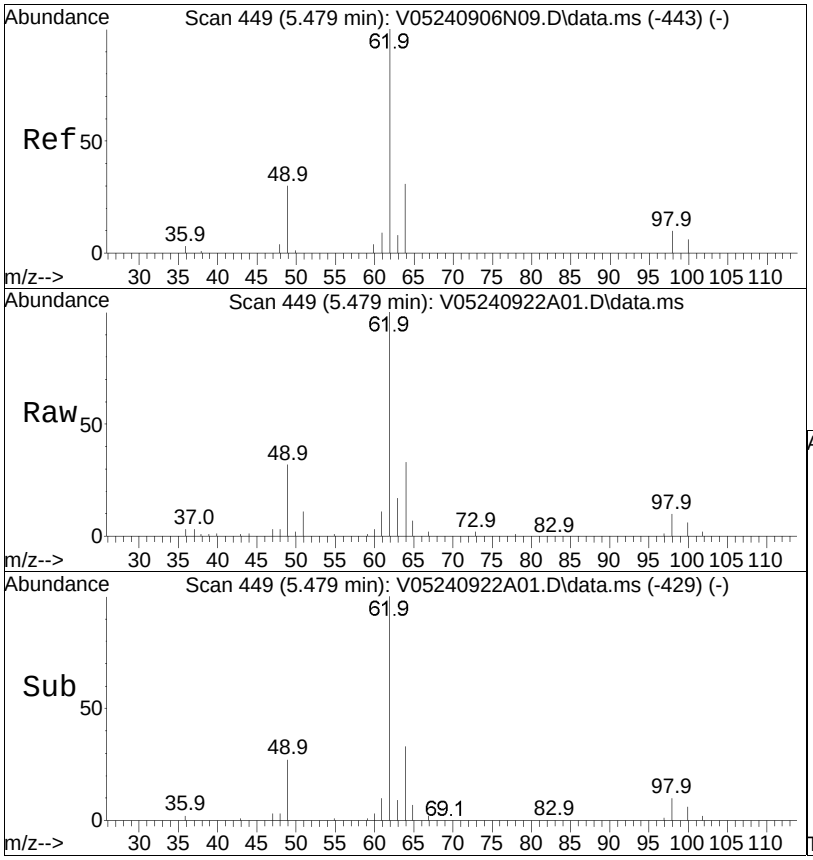



#41
Benzene
Concen: 10.78 ug/L
RT: 5.264 min Scan# 427
Delta R.T. -0.009 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 78 Resp: 585516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.9 | 15.2 | 31.6 |
| 51 | 18.9 | 10.5 | 21.7 |
| 52 | 18.2 | 9.5 | 19.7 |

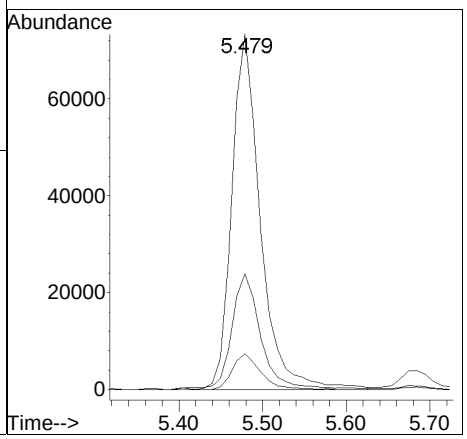


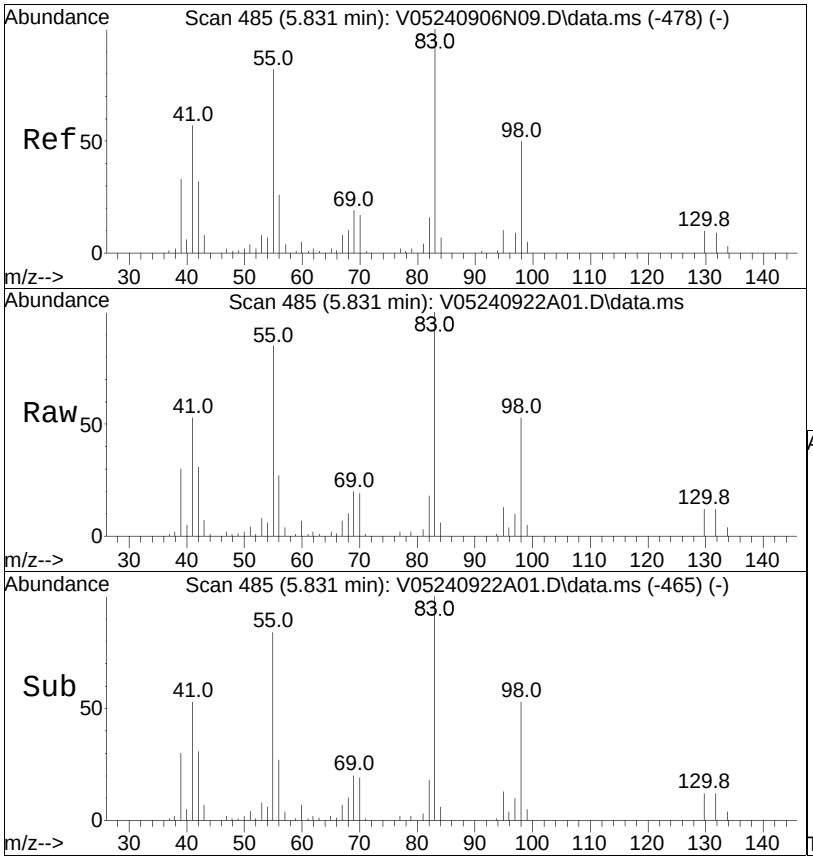



#44
1,2-Dichloroethane
Concen: 9.71 ug/L
RT: 5.479 min Scan# 449
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 62 Resp: 174038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.3 | 13.2 | 53.2 |
| 98 | 9.9 | 0.0 | 27.8 |

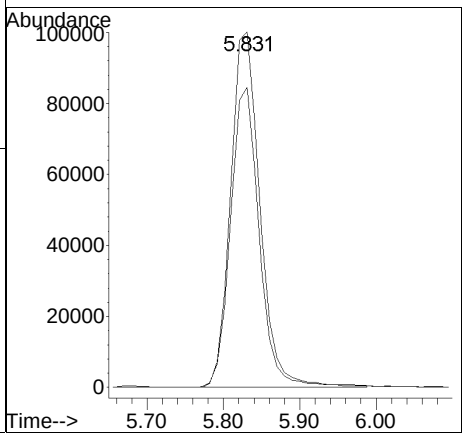


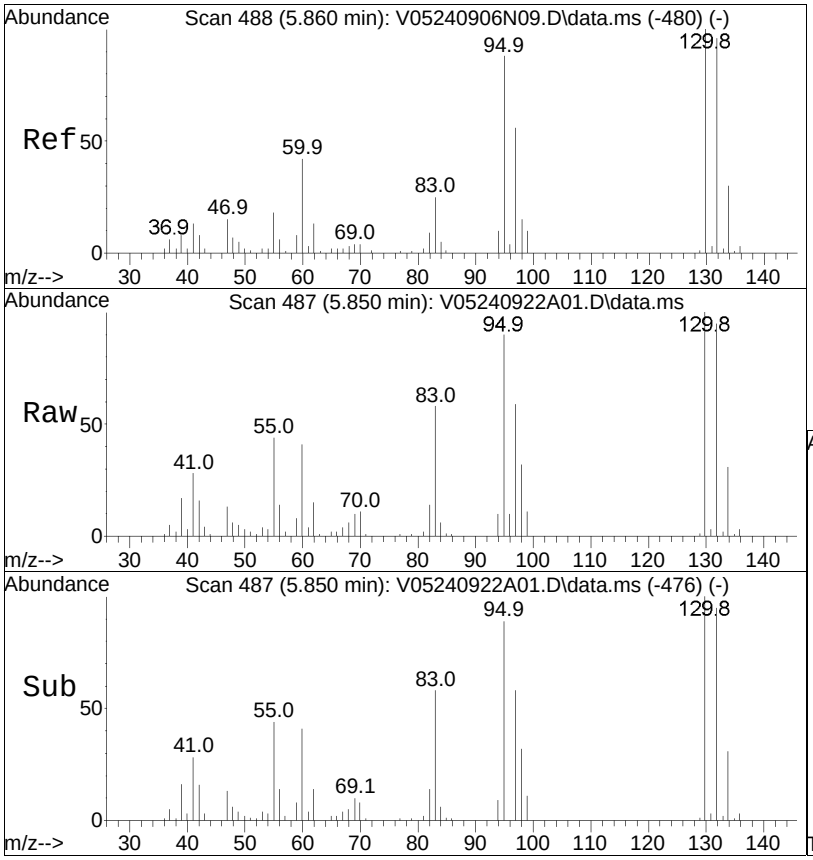



#47
Methyl cyclohexane
Concen:  10.80 ug/L
RT:  5.831 min  Scan# 485
Delta R.T.  -0.000 min
Lab File:  V05240922A01.D
Acq: 22 Sep 2024  5:45 pm

Tgt Ion: 83 Resp:  269018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 82.4 | 57.3 | 85.9 |

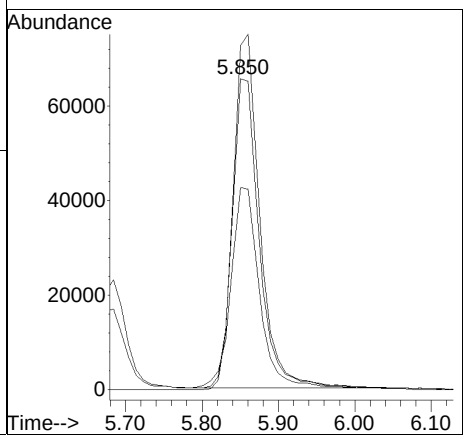


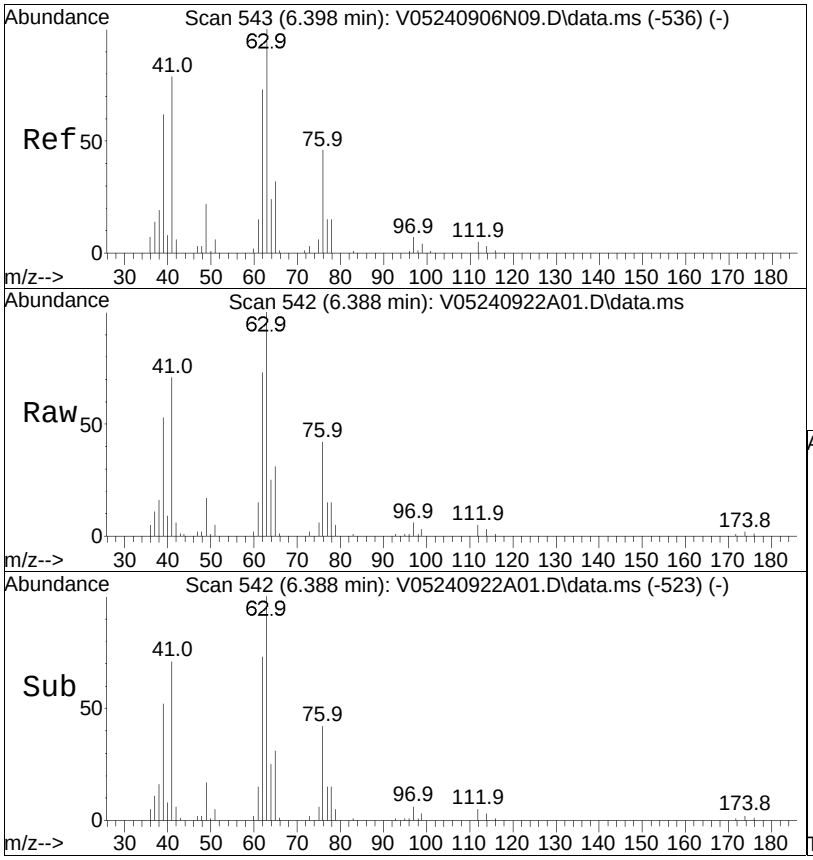



#48
Trichloroethene
Concen: 9.92 ug/L
RT: 5.850 min Scan# 487
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 95 Resp: 160398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 68.4 | 56.1 | 84.1 |
| 130 | 115.5 | 77.7 | 116.5 |

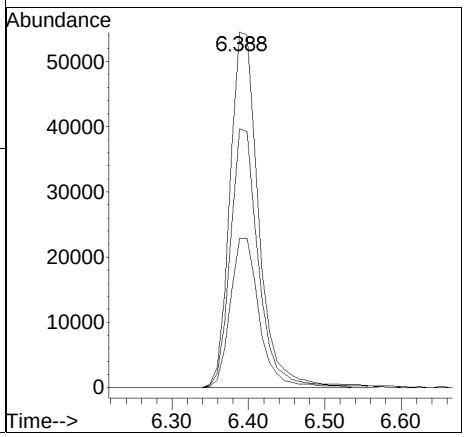


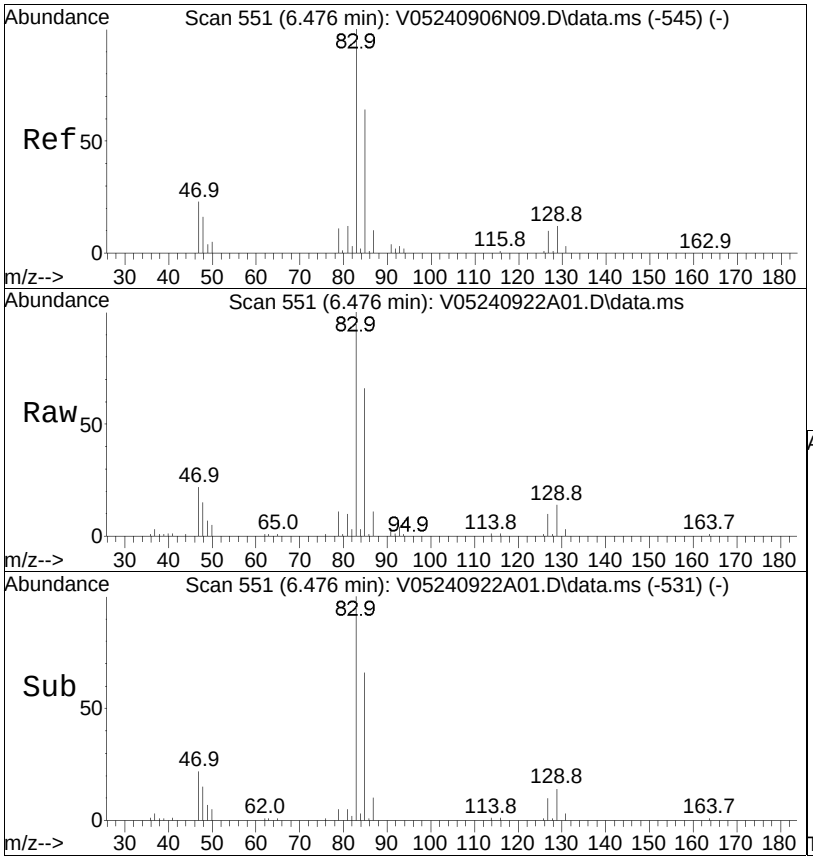



#51
1,2-Dichloropropane
Concen: 10.47 ug/L
RT: 6.388 min Scan# 542
Delta R.T. -0.010 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 63 Resp: 142018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 71.4 | 57.0 | 85.4 |
| 76 | 42.4 | 48.4 | 72.6# |

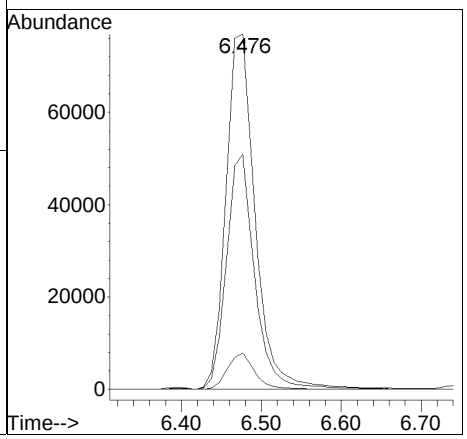


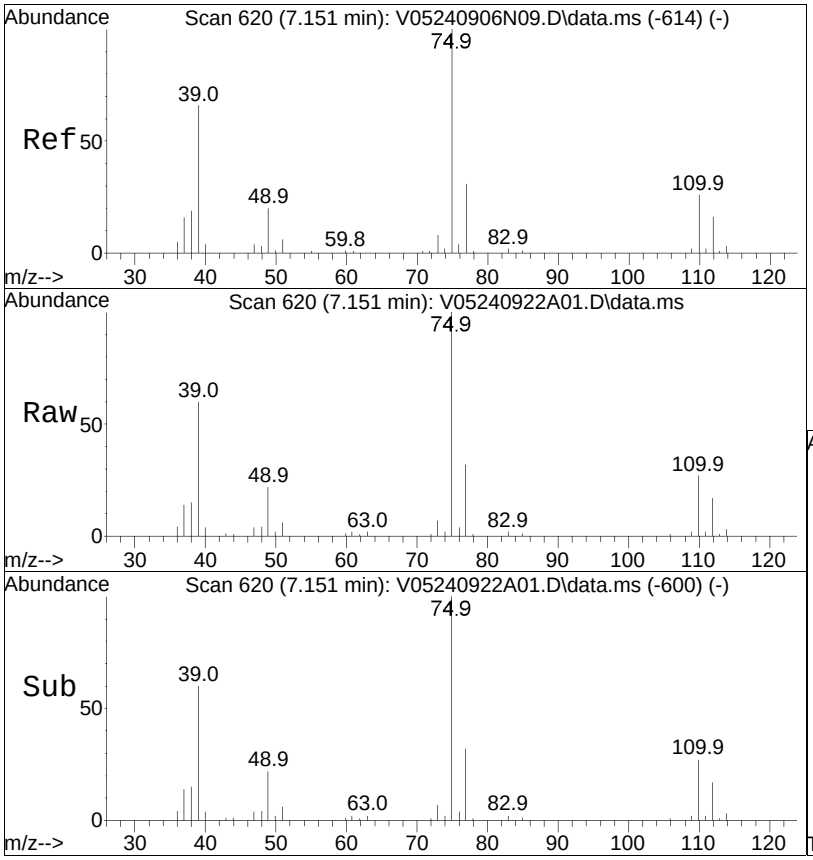



#54
Bromodichloromethane
Concen: 9.89 ug/L
RT: 6.476 min Scan# 551
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 83 Resp: 196484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.0 | 76.6 |
| 127 | 9.5 | 6.7 | 10.1 |

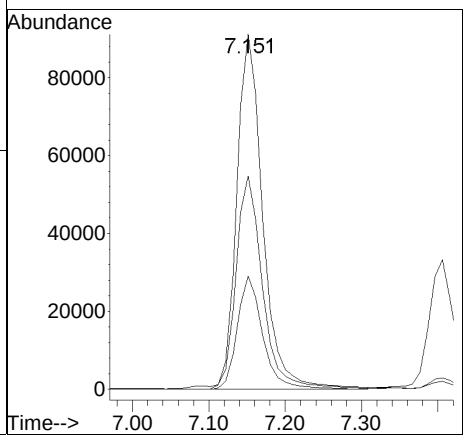


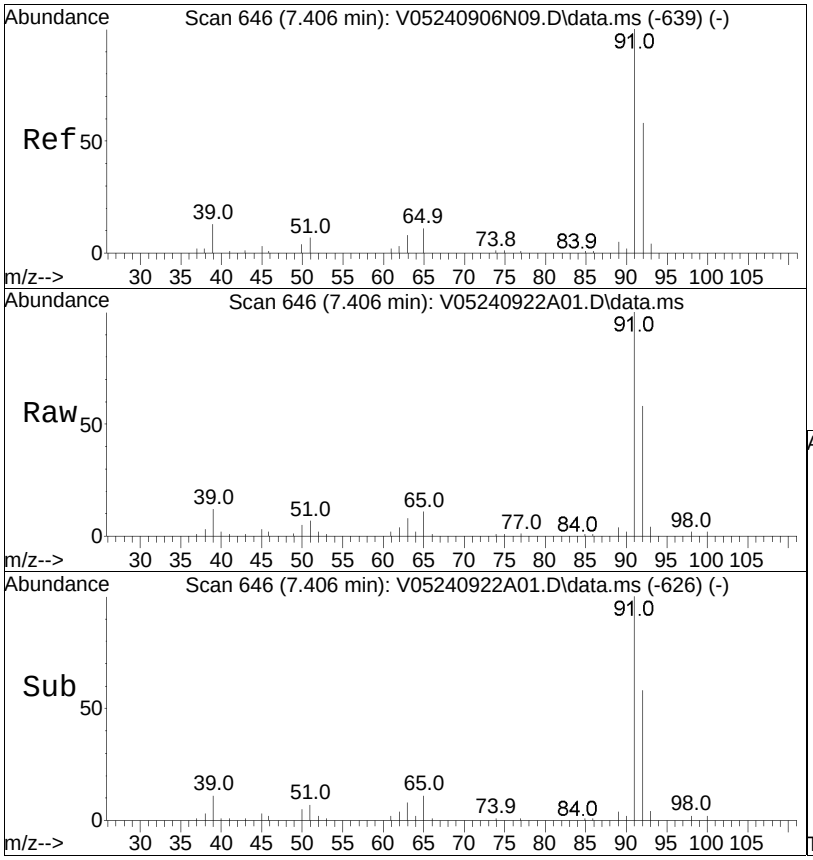



#58
cis-1,3-Dichloropropene
Concen: 10.37 ug/L
RT: 7.151 min Scan# 620
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 75 Resp: 216634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 25.5 | 38.3 |
| 39 | 61.2 | 40.4 | 60.6# |

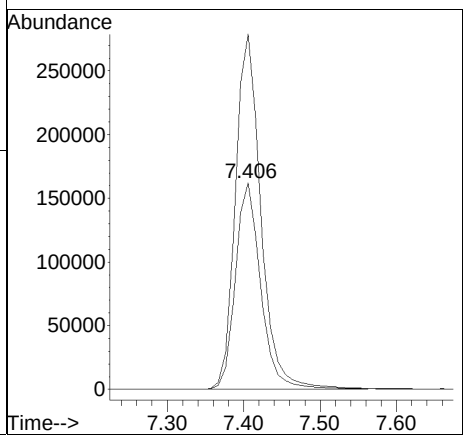


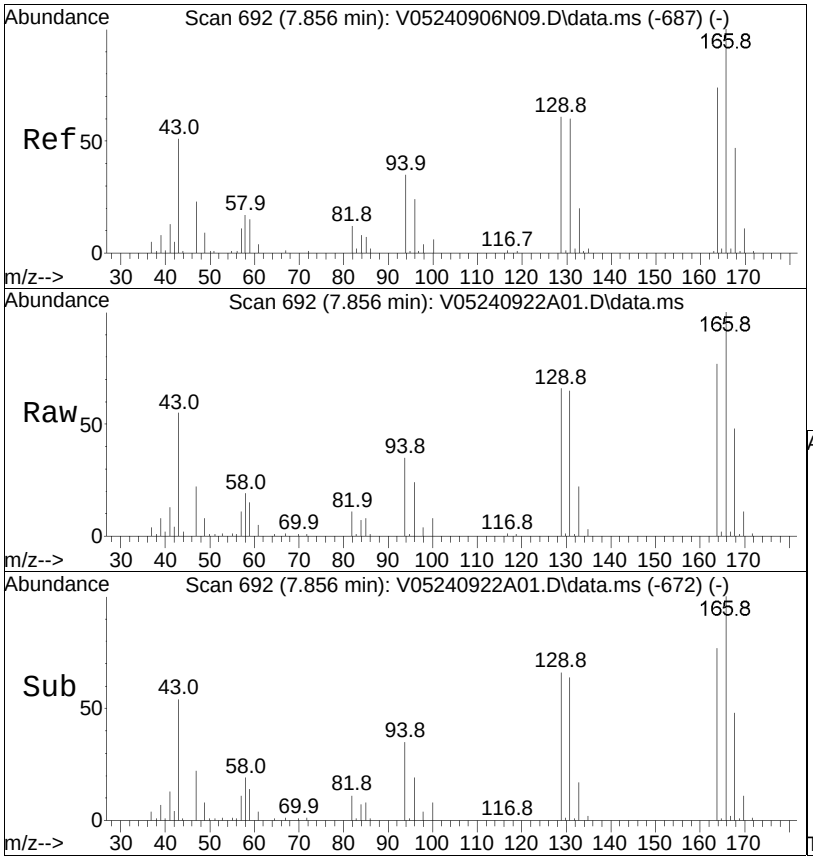



#61
Toluene
Concen: 10.61 ug/L
RT: 7.406 min Scan# 646
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 92 Resp: 374198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.2 | 135.2 | 202.8 |

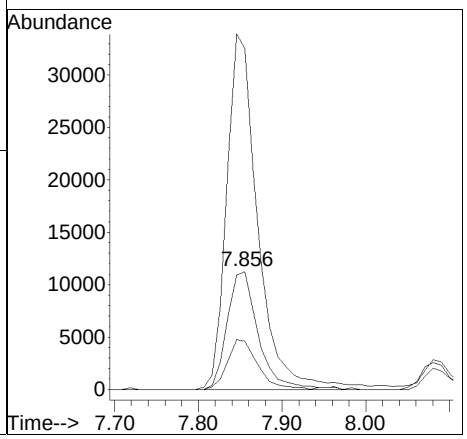


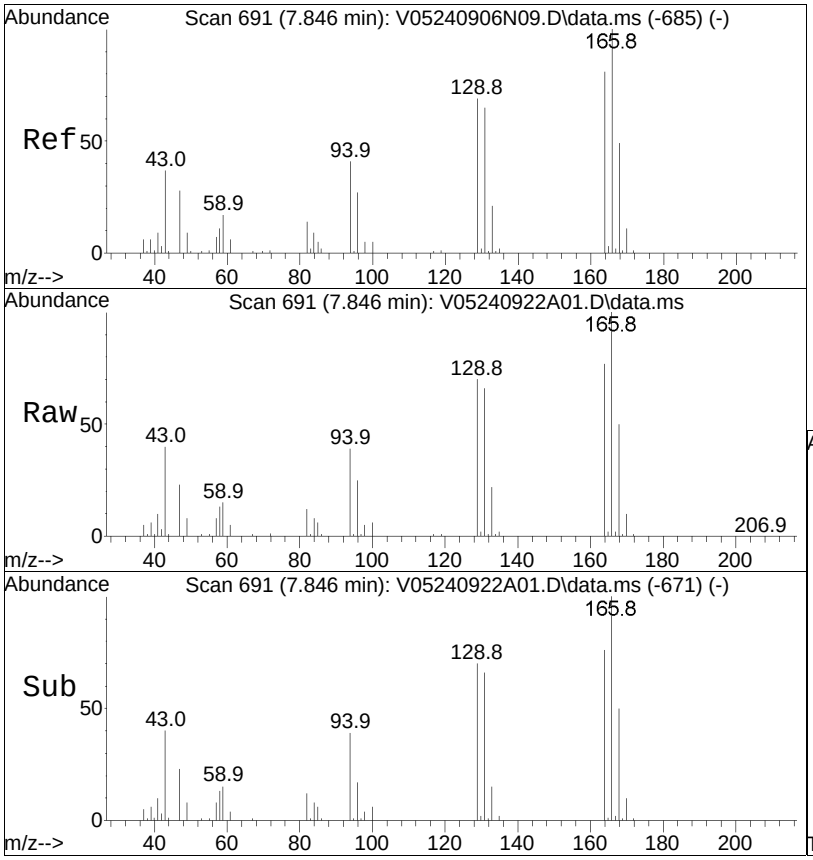



#62
4-Methyl-2-pentanone
Concen: 9.98 ug/L
RT: 7.856 min Scan# 692
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 58 Resp: 29125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 41.1 | 38.9 | 58.3 |
| 43 | 301.8 | 204.2 | 306.2 |

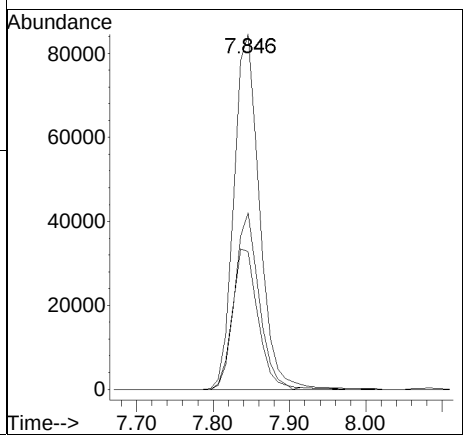


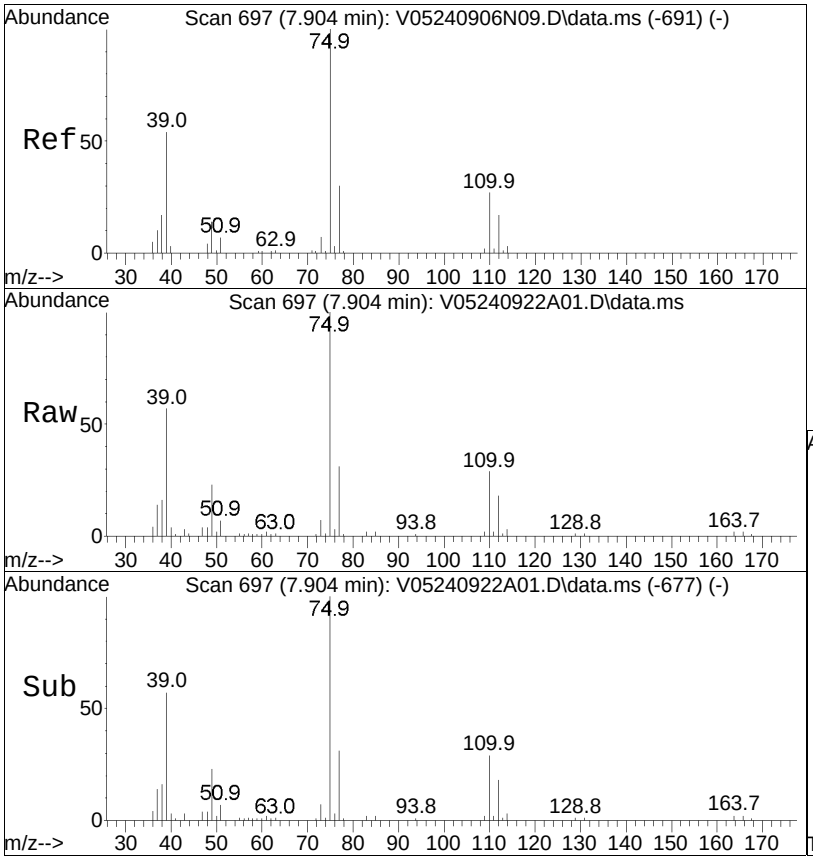



#63
Tetrachloroethene
Concen: 10.62 ug/L
RT: 7.846 min Scan# 691
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:166 Resp: 197543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 47.1 | 30.2 | 70.2 |
| 94 | 39.8 | 32.5 | 72.5 |

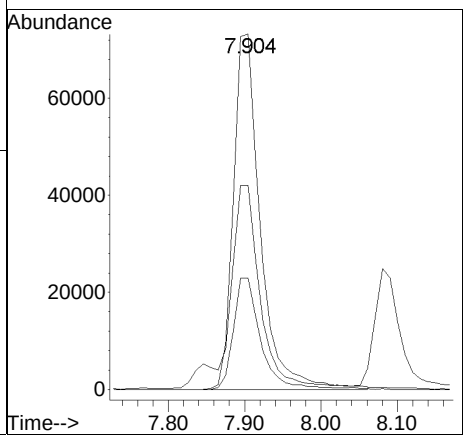


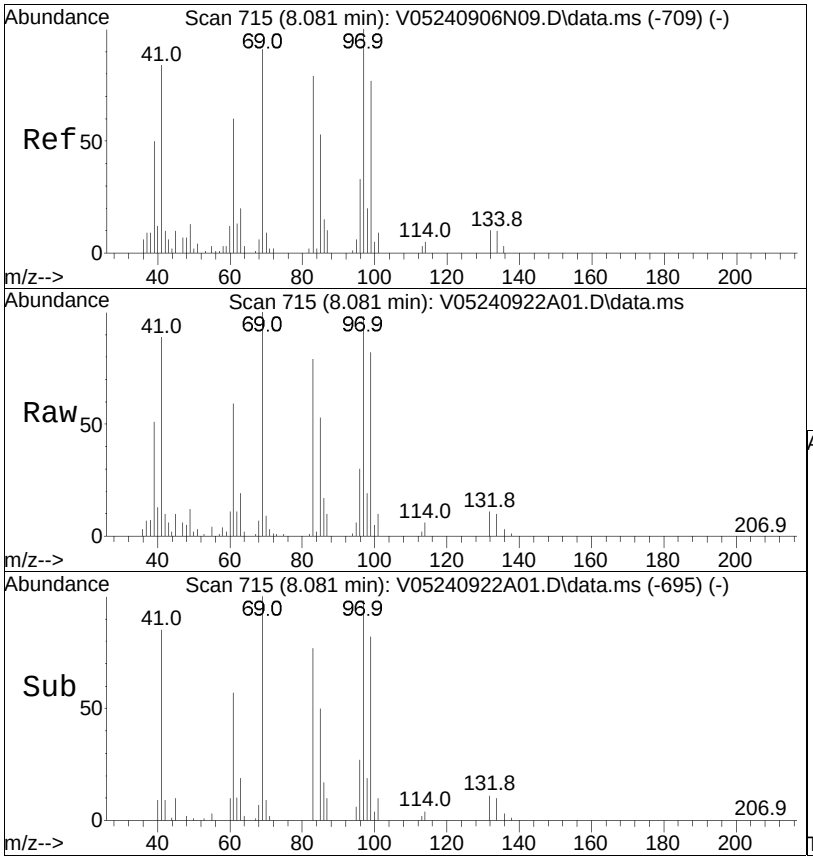



#65
trans-1,3-Dichloropropene
Concen: 10.49 ug/L
RT: 7.904 min Scan# 697
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 75 Resp: 179917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.5 | 11.5 | 51.5 |
| 39 | 64.4 | 29.3 | 69.3 |

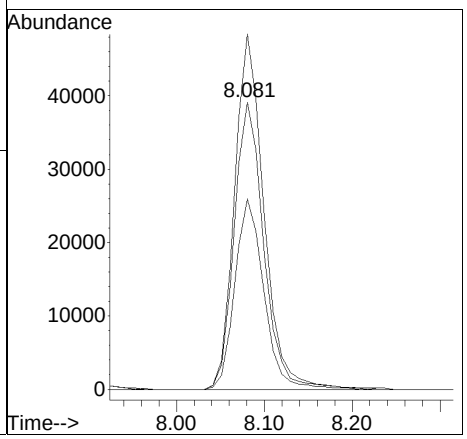


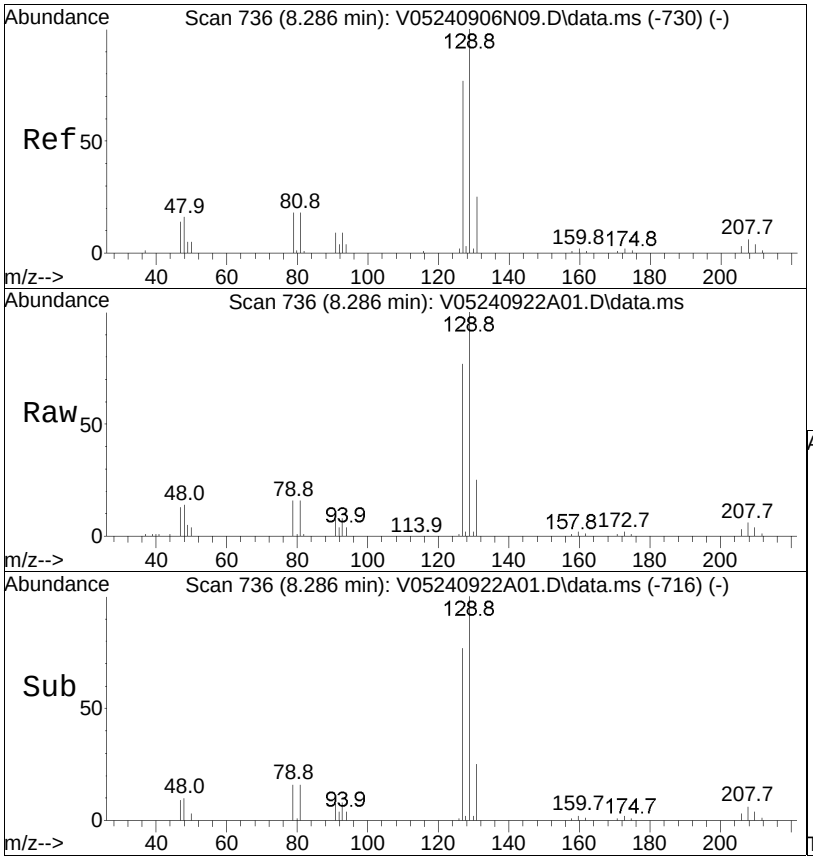



#68
1,1,2-Trichloroethane
Concen: 10.52 ug/L
RT: 8.081 min Scan# 715
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 83 Resp: 91819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 122.9 | 102.2 | 142.2 |
| 85 | 65.1 | 47.5 | 87.5 |

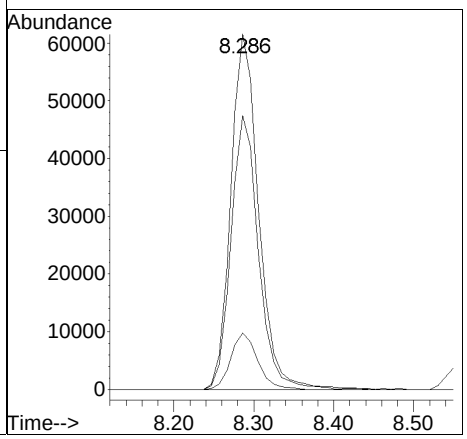


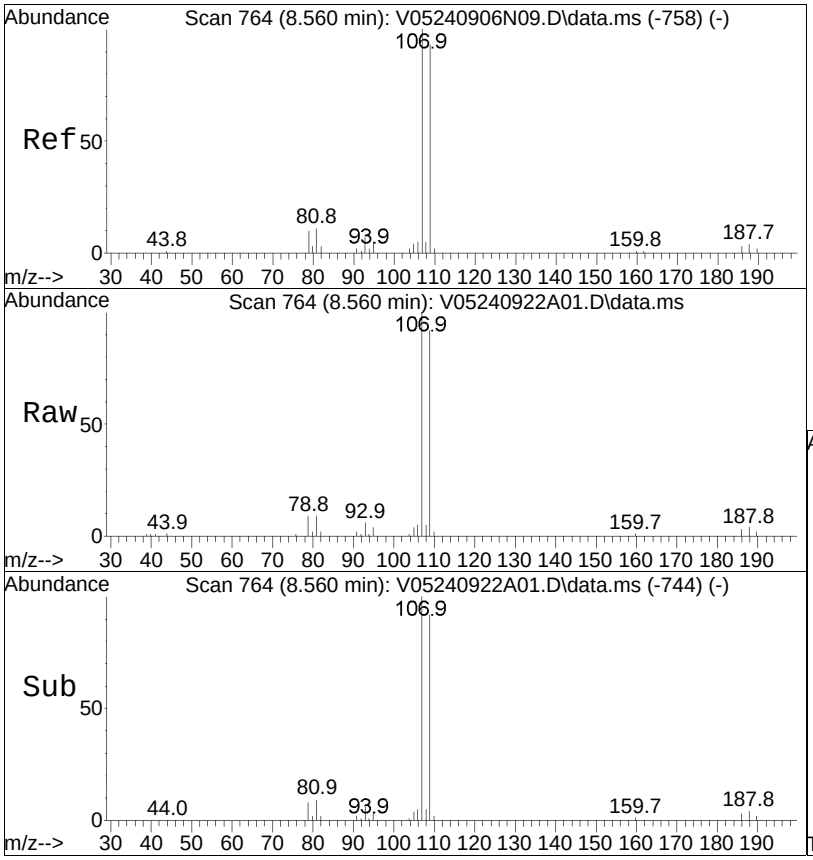



#69
Chlorodibromomethane
Concen: 10.02 ug/L
RT: 8.286 min Scan# 736
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:129 Resp: 149045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 15.3 | 0.0 | 37.0 |
| 127 | 75.9 | 58.3 | 98.3 |

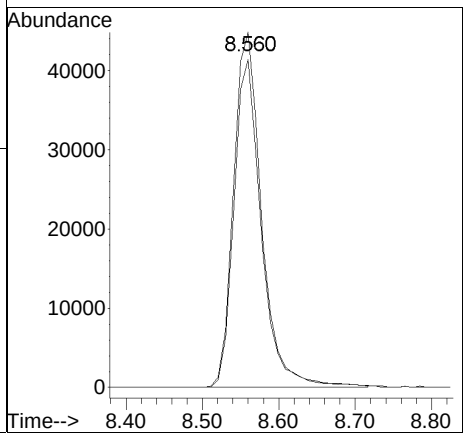


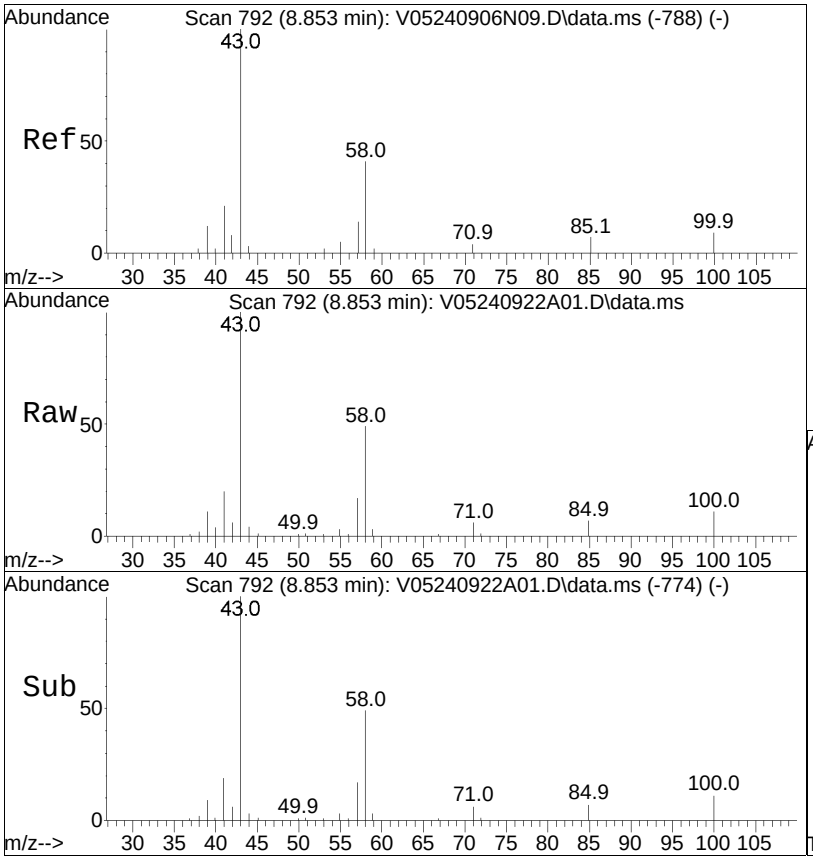



#71
1,2-Dibromoethane
Concen: 10.67 ug/L
RT: 8.560 min Scan# 764
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:107 Resp: 125283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 90.6 | 75.0 | 112.6 |

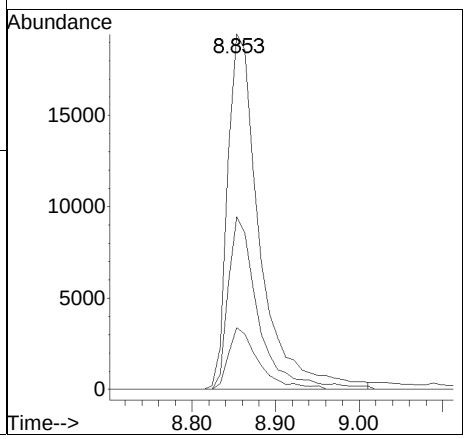


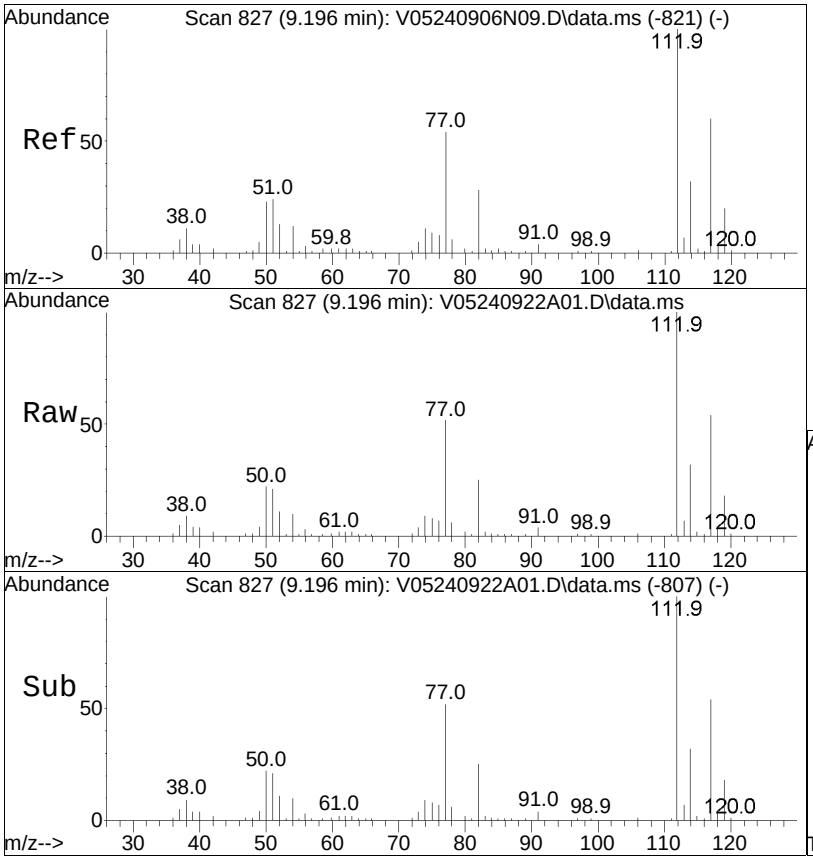



#72
2-Hexanone
Concen: 8.97 ug/L
RT: 8.853 min Scan# 792
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 43 Resp: 52210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 45.4 | 42.3 | 63.5 |
| 57 | 16.3 | 15.6 | 23.4 |

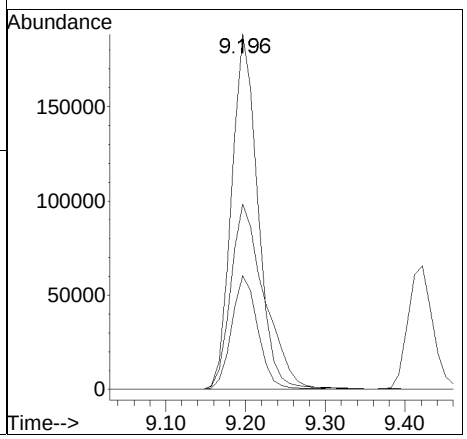


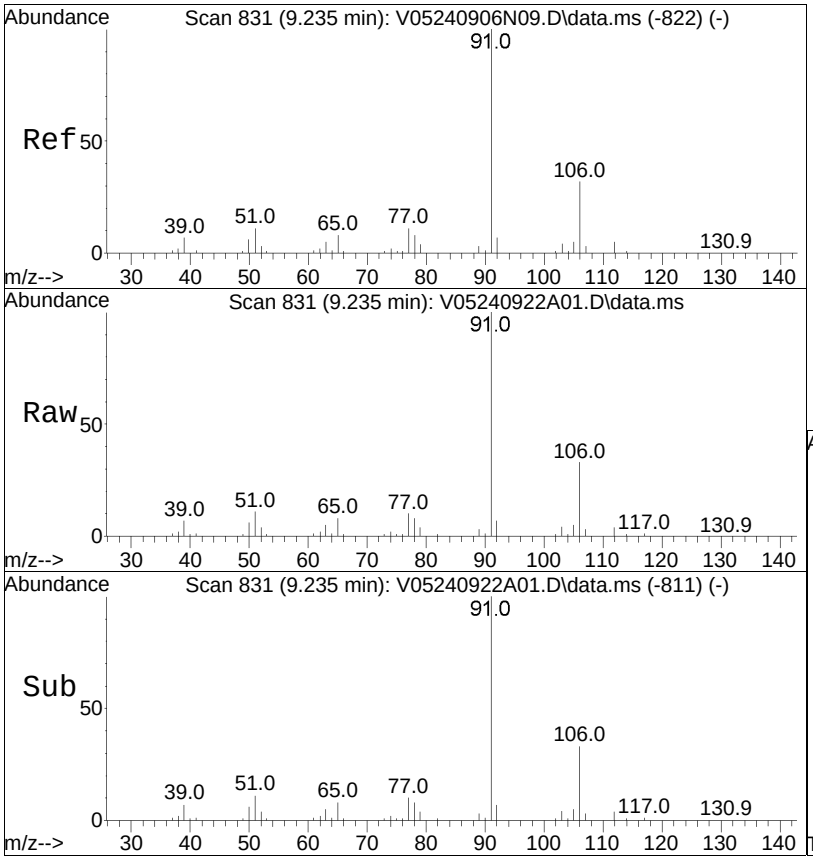



#73
Chlorobenzene
Concen: 10.35 ug/L
RT: 9.196 min Scan# 827
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:112 Resp: 431334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 67.2 | 66.1 | 99.1 |
| 114 | 32.2 | 25.4 | 38.0 |

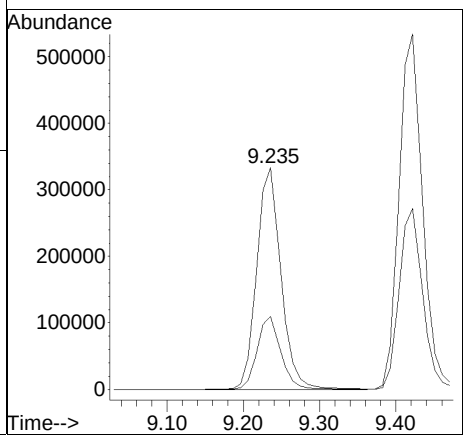


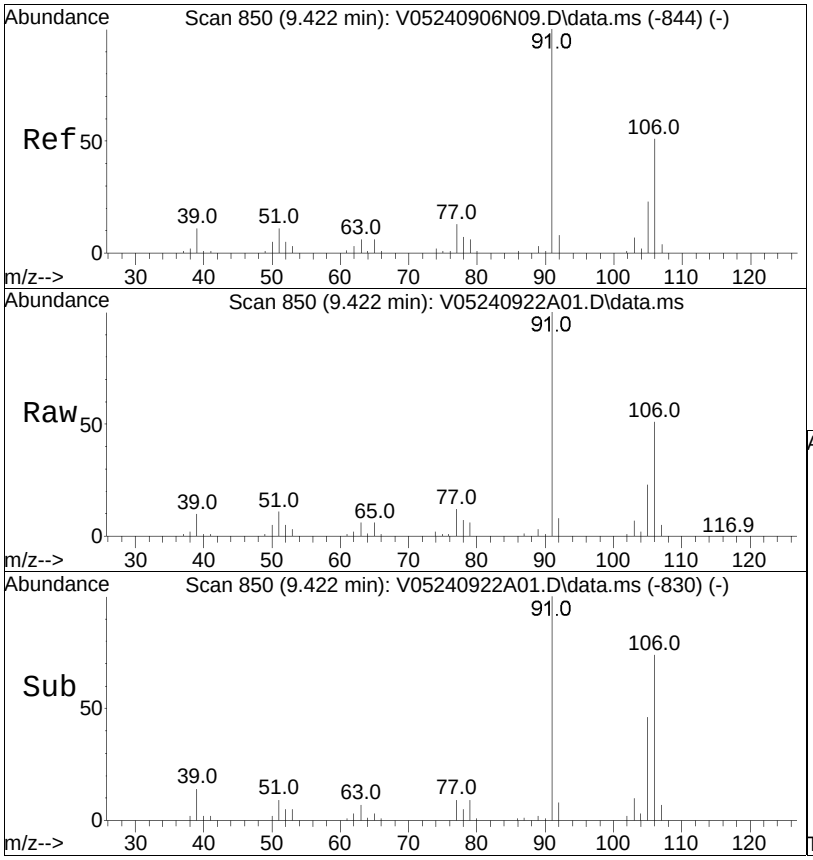



#74
Ethylbenzene
Concen: 10.47 ug/L
RT: 9.235 min Scan# 831
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 91 Resp: 737624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.2 | 22.9 | 34.3 |

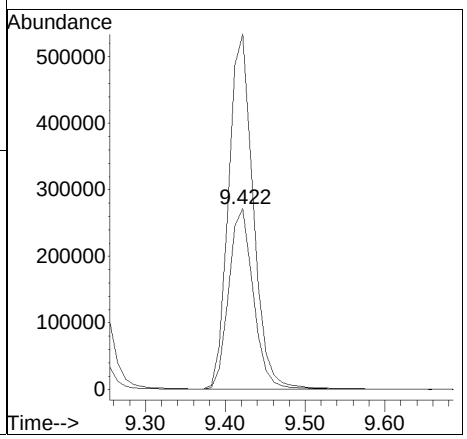


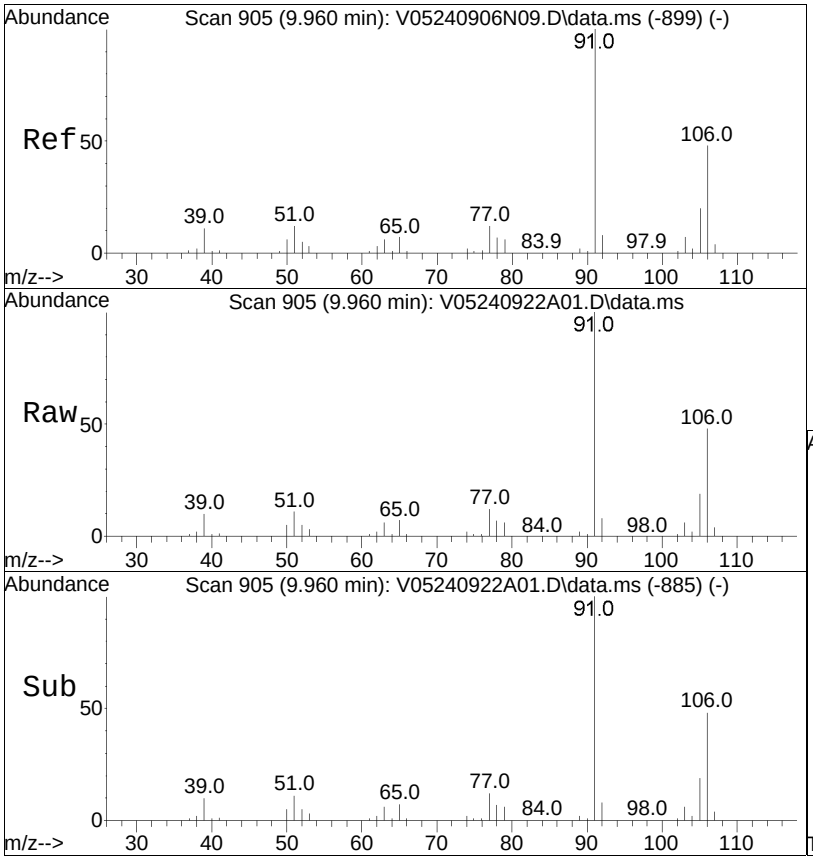



#76
p/m Xylene
Concen: 21.49 ug/L
RT: 9.422 min Scan# 850
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:106 Resp: 584511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 196.0 | 177.2 | 265.8 |

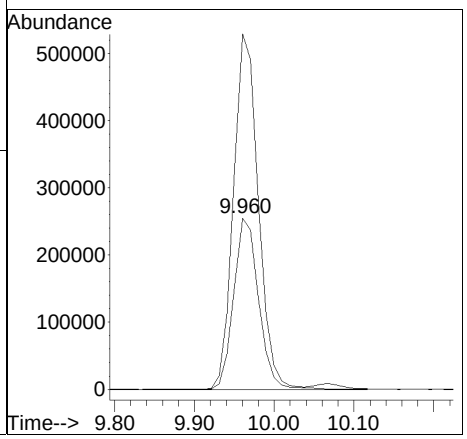


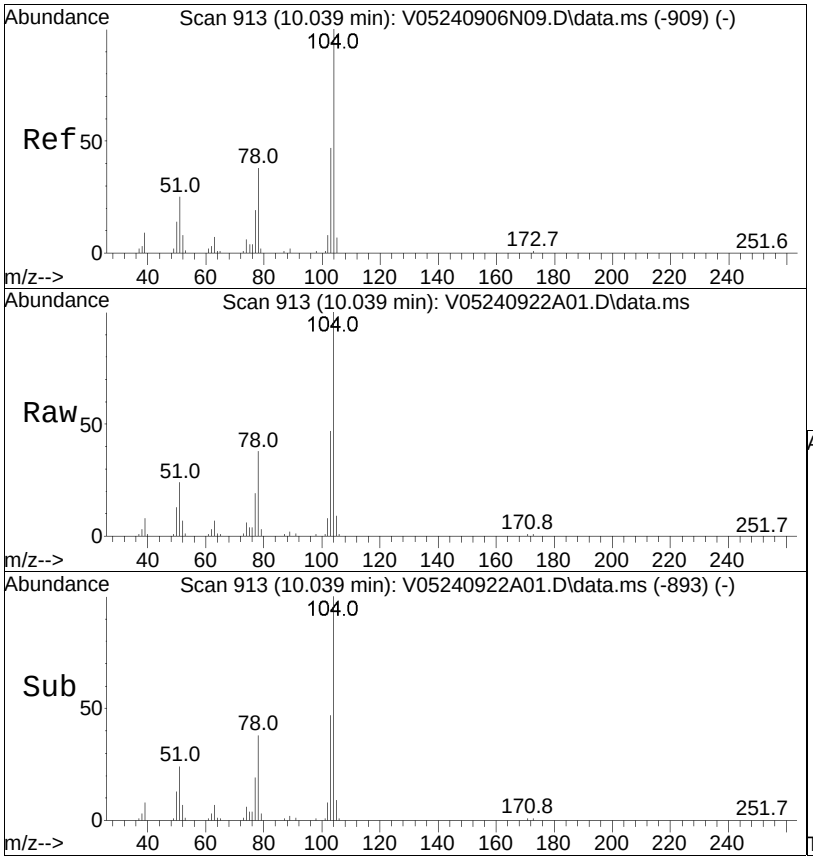



#77
o Xylene
Concen: 21.55 ug/L
RT: 9.960 min Scan# 905
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:106 Resp: 555154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 205.8 | 187.0 | 280.6 |

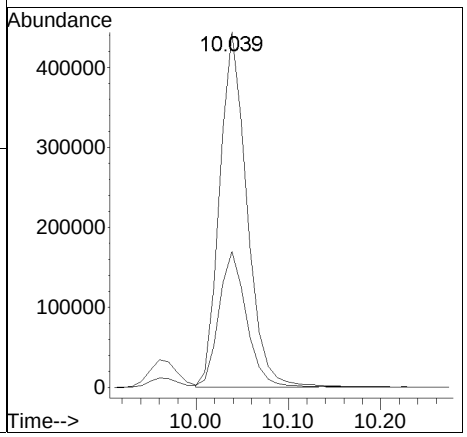


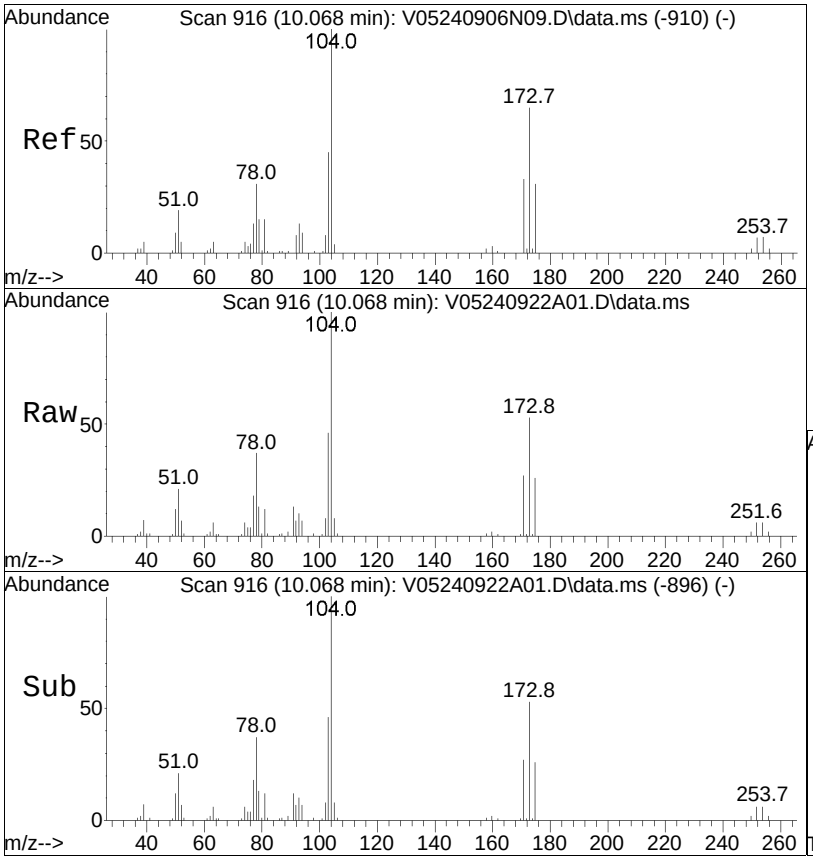



#78
Styrene
Concen: 21.30 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:104 Resp: 907961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 38.8 | 39.6 | 59.4# |

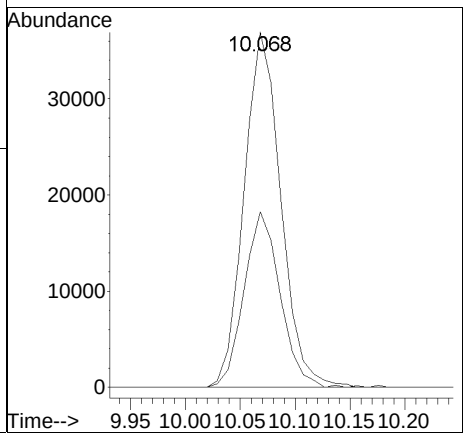


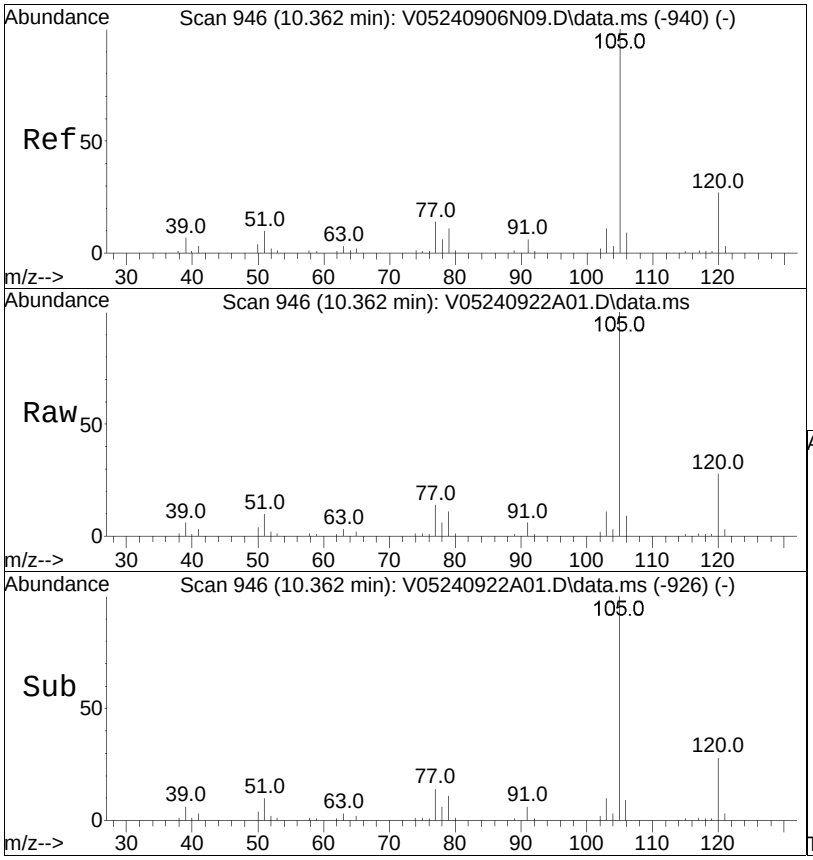



#80
Bromoform
Concen: 9.73 ug/L
RT: 10.068 min Scan# 916
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:173 Resp: 86011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.6 | 26.6 | 66.6 |

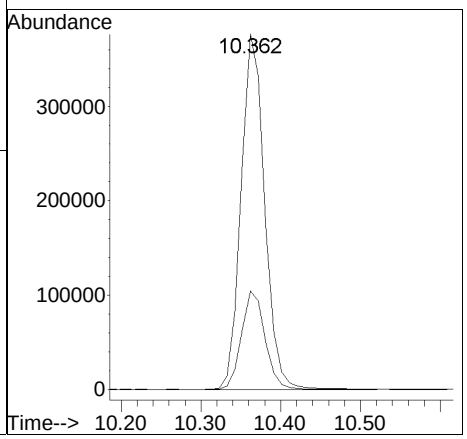


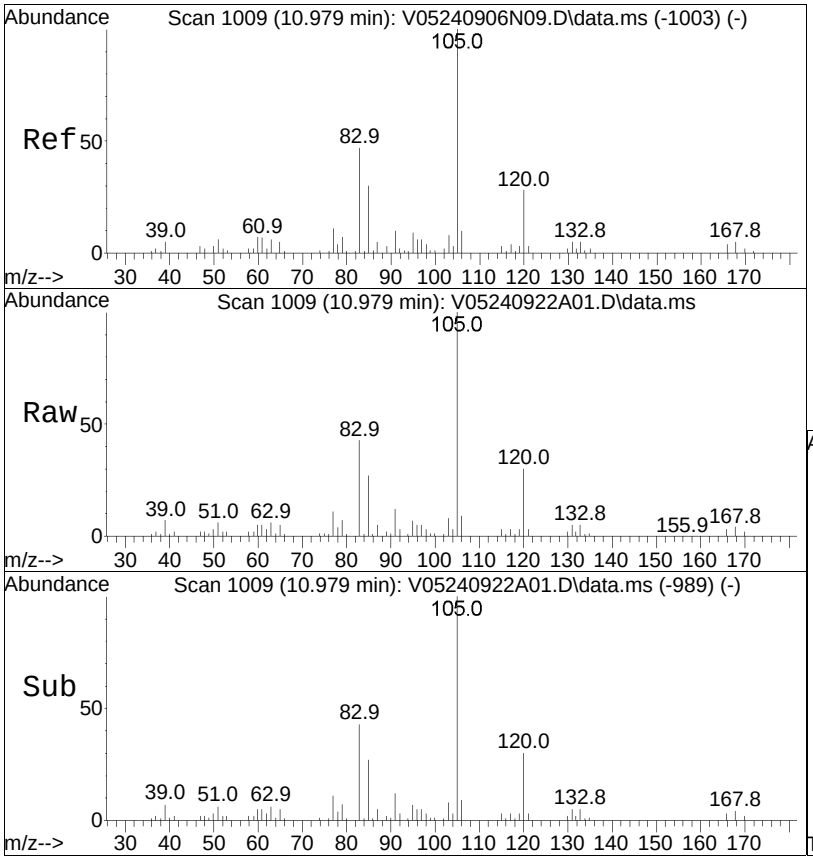



#82
Isopropylbenzene
Concen: 11.22 ug/L
RT: 10.362 min Scan# 946
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:105 Resp: 773993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.7 | 4.8 | 44.8 |

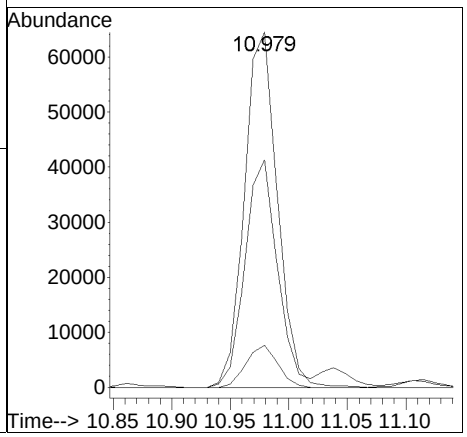


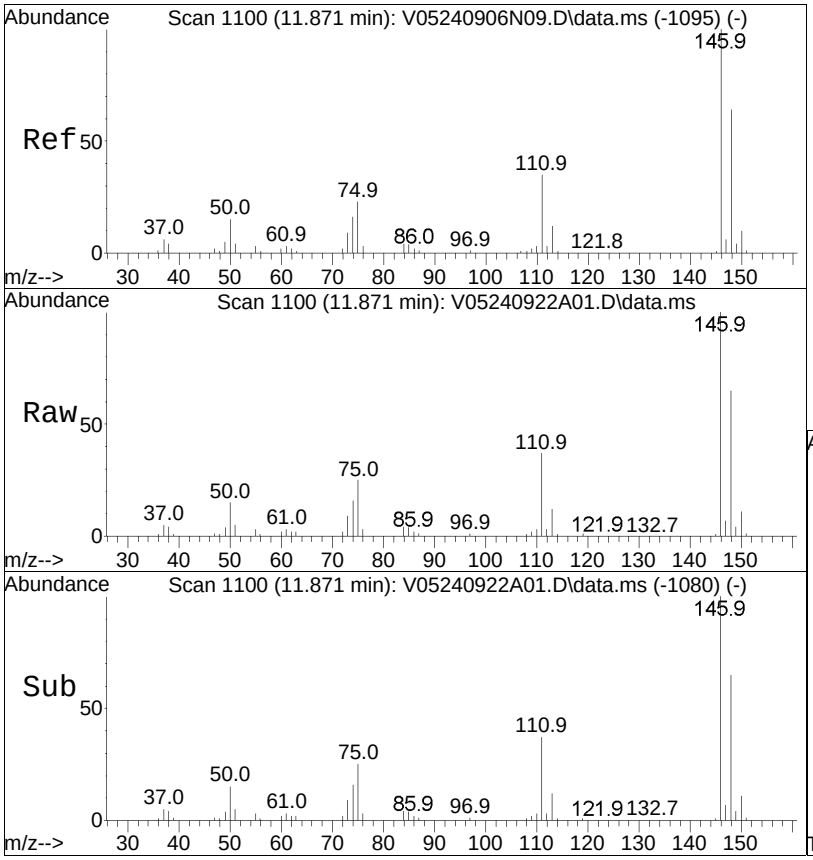



#87
1,1,2,2-Tetrachloroethane
Concen: 10.55 ug/L
RT: 10.979 min Scan# 1009
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion: 83 Resp: 126446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 11.4 | 0.0 | 30.4 |
| 85 | 63.4 | 46.4 | 86.4 |

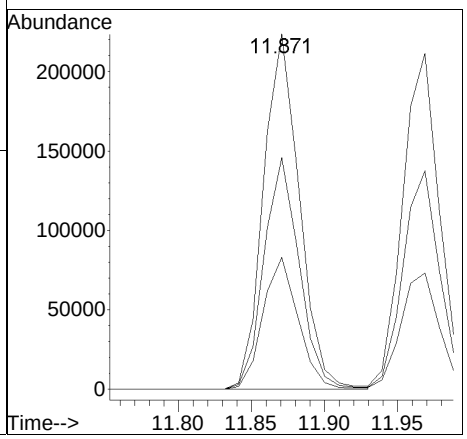


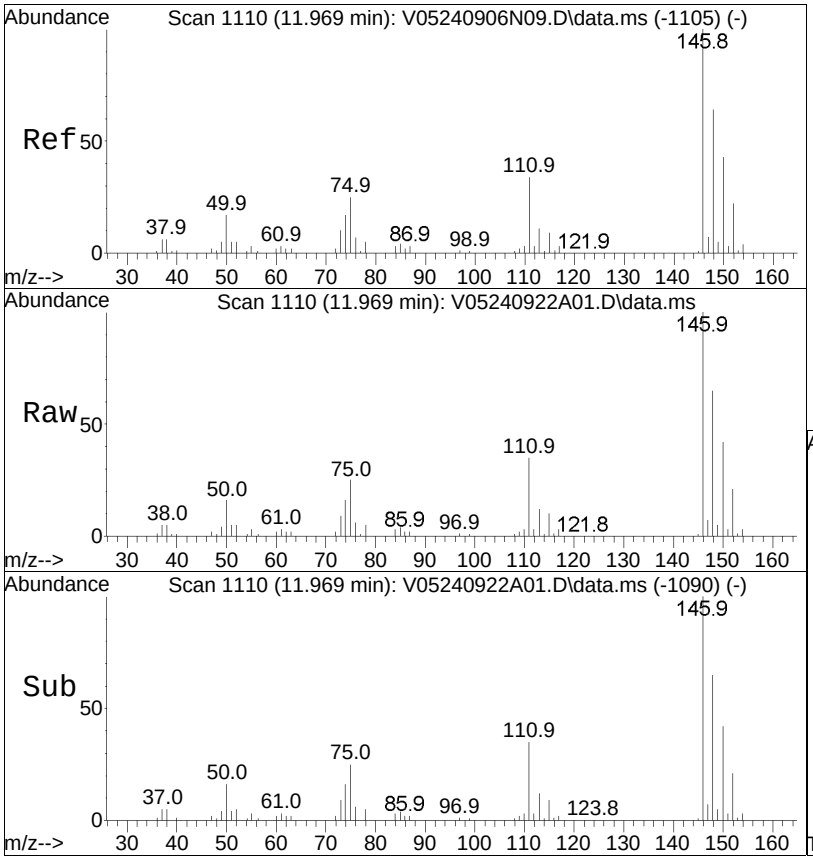



#100
1,3-Dichlorobenzene
Concen: 10.66 ug/L
RT: 11.871 min Scan# 1100
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:146 Resp: 382046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.7 | 28.0 | 58.1 |
| 148 | 64.1 | 41.6 | 86.4 |

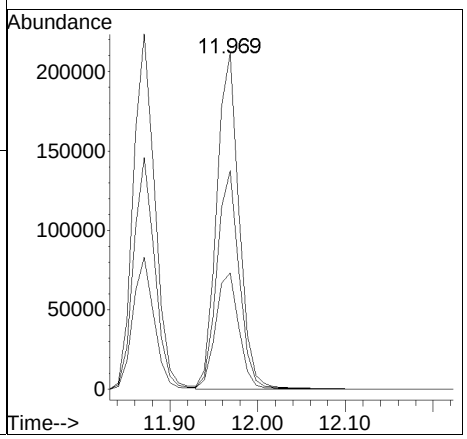


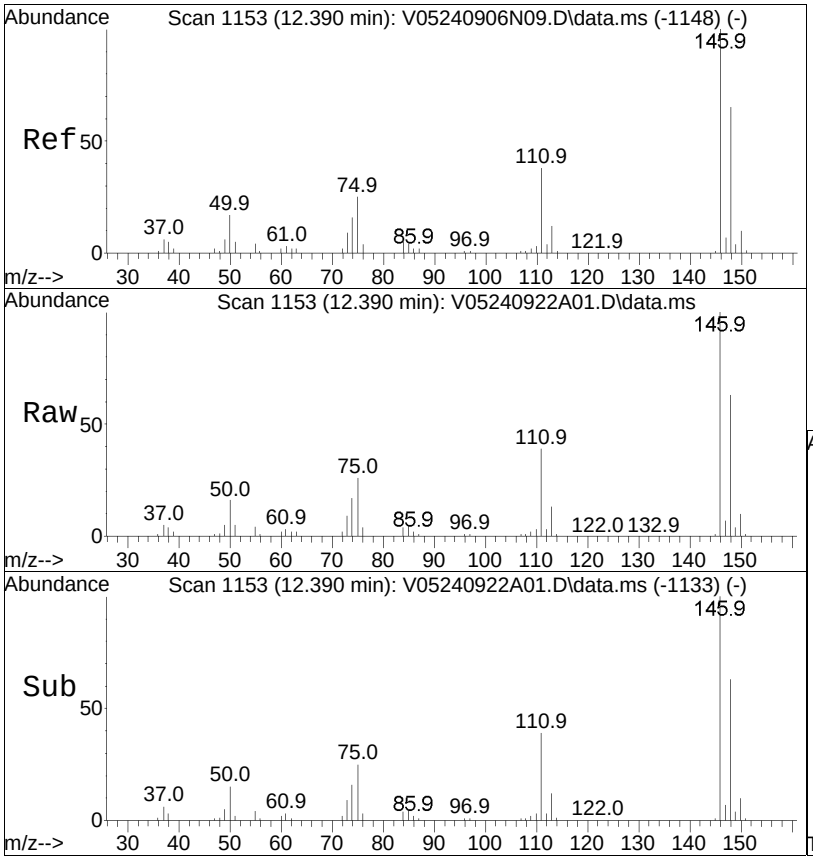



#101
1,4-Dichlorobenzene
Concen: 10.19 ug/L
RT: 11.969 min Scan# 1110
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:146 Resp: 375353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.1 | 33.8 | 50.6 |
| 148 | 64.9 | 51.0 | 76.6 |

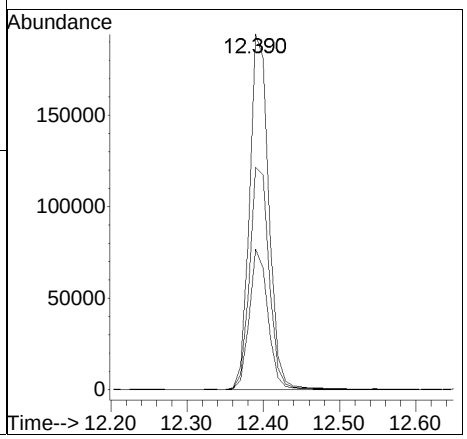


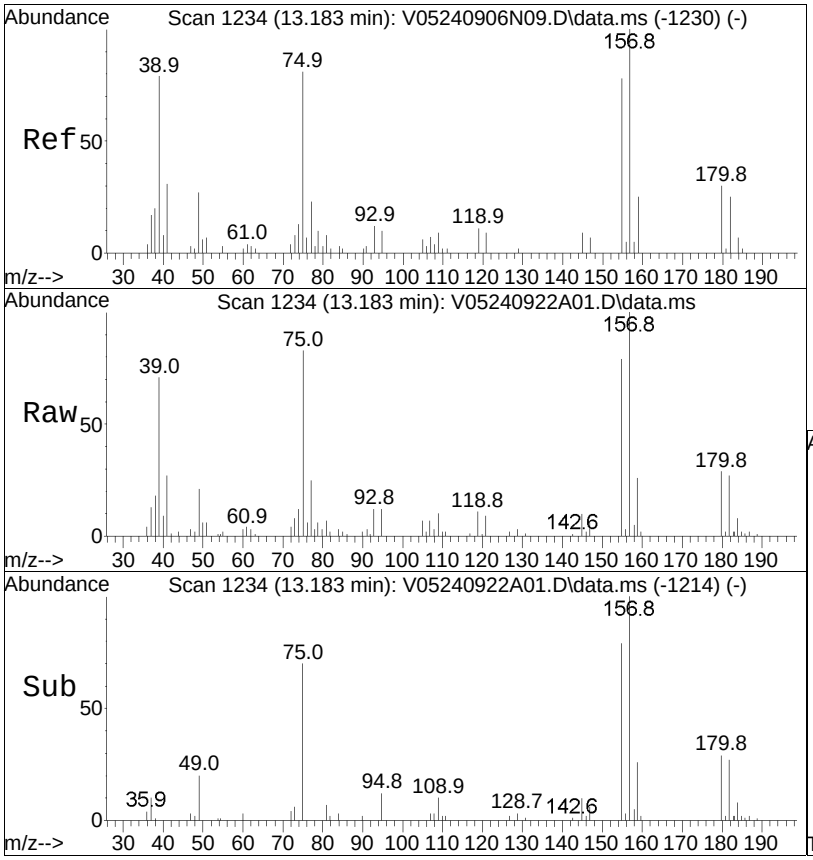



#104
1,2-Dichlorobenzene
Concen: 10.55 ug/L
RT: 12.390 min Scan# 1153
Delta R.T. -0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:146 Resp: 341529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.2 | 29.1 | 60.5 |
| 148 | 63.6 | 41.7 | 86.7 |

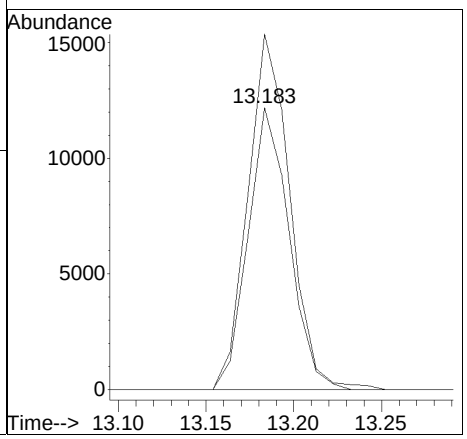


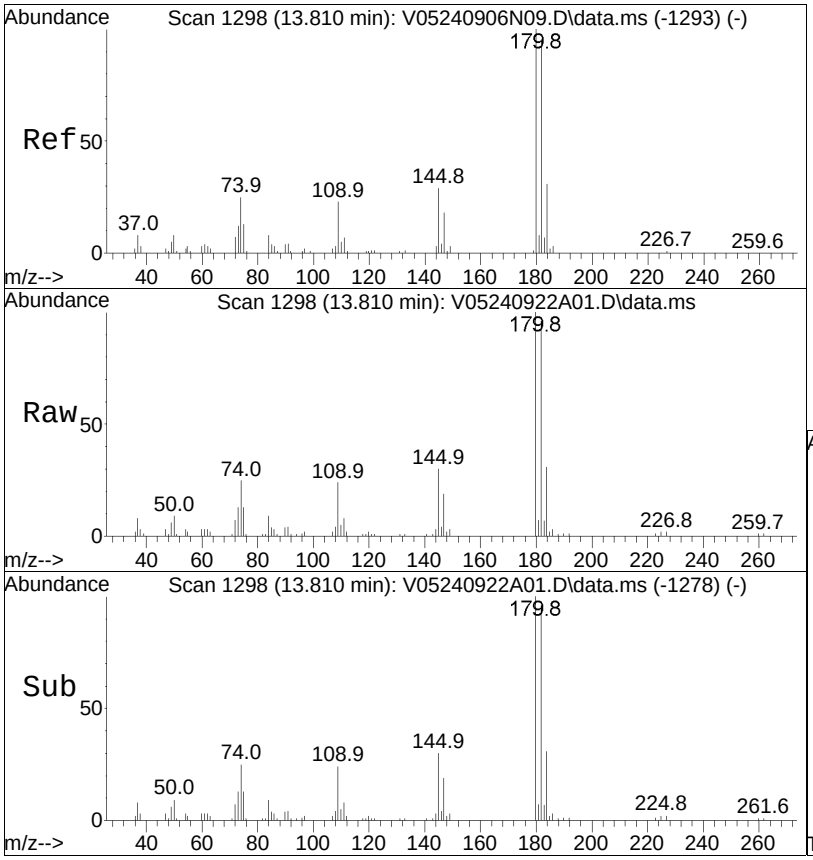



#106
1,2-Dibromo-3-chloropropane
Concen: 9.52 ug/L
RT: 13.183 min Scan# 1234
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:155 Resp: 19839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 128.5 | 105.0 | 157.6 |

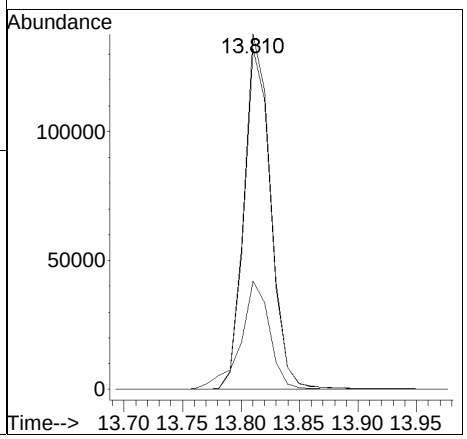


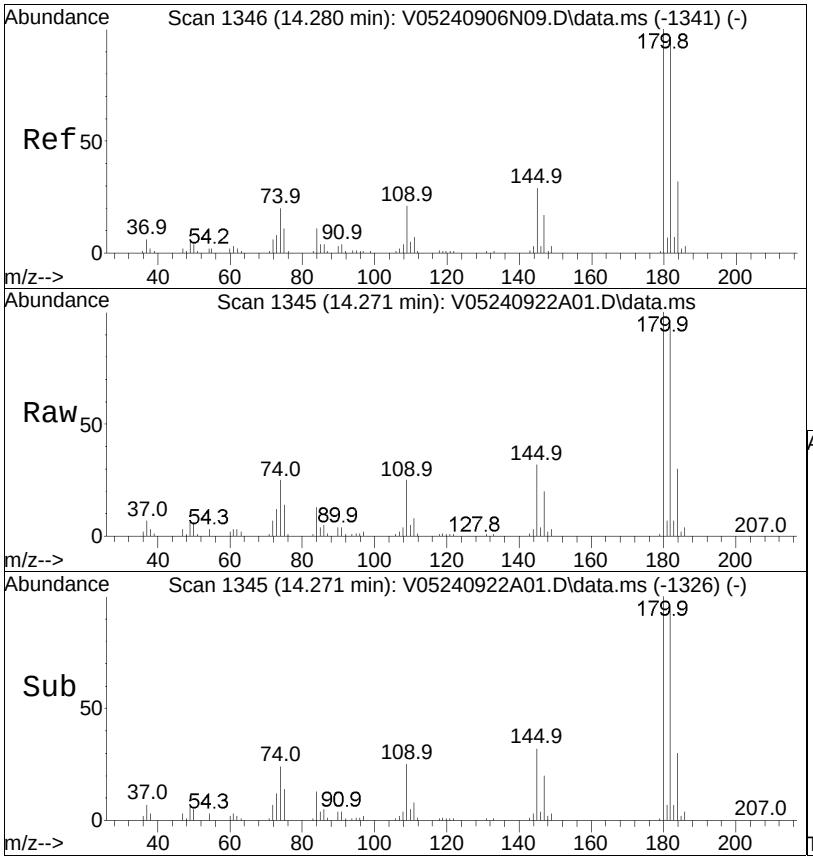



#109
1,2,4-Trichlorobenzene
Concen: 10.16 ug/L
RT: 13.810 min Scan# 1298
Delta R.T. 0.000 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:180 Resp: 219366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.5 | 75.2 | 112.8 |
| 145 | 33.2 | 27.4 | 41.2 |

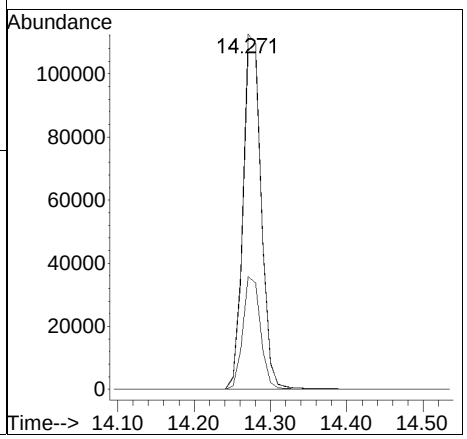





#111
1,2,3-Trichlorobenzene
Concen: 10.28 ug/L
RT: 14.271 min Scan# 1345
Delta R.T. -0.009 min
Lab File: V05240922A01.D
Acq: 22 Sep 2024 5:45 pm

Tgt Ion:180 Resp: 188844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.1 | 75.5 | 113.3 |
| 145 | 30.6 | 26.5 | 39.7 |



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-3,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 262722 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 100.00% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 197518 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 100.00% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.202 | 152 | 115520 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 64302 | 10.455 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 104.55% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.674 | 65 | 75882 | 9.247 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 92.47% | | | |
| 64) Toluene-d8 | 7.643 | 98 | 251155 | 9.653 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.53% | | | |
| 88) 4-Bromofluorobenzene | 10.987 | 95 | 94695 | 8.874 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.74% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.589 | 85 | 72049 | 12.232 | ug/L | 96 |
| 3) Chloromethane | 1.778 | 50 | 74946 | 11.428 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 74178 | 12.137 | ug/L | 94 |
| 5) Bromomethane | 2.163 | 94 | 25204 | 13.627 | ug/L | 92 |
| 6) Chloroethane | 2.278 | 64 | 43680 | 11.838 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 81537 | 11.610 | ug/L | 91 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 44234 | 10.513 | ug/L | 81 |
| 11) Carbon disulfide | 2.930 | 76 | 147032 | 11.326 | ug/L | 96 |
| 12) Freon-113 | 2.944 | 101 | 53661 | 12.238 | ug/L # | 57 |
| 15) Methylene chloride | 3.454 | 84 | 56710 | 10.685 | ug/L | 99 |
| 17) Acetone | 3.491 | 43 | 12511 | 6.490 | ug/L # | 70 |
| 18) trans-1,2-Dichloroethene | 3.605 | 96 | 53155 | 11.752 | ug/L | 89 |
| 19) Methyl acetate | 3.613 | 43 | 30602 | 6.810 | ug/L # | 90 |
| 21) Methyl tert-butyl ether | 3.703 | 73 | 155223 | 9.204 | ug/L | 95 |
| 25) 1,1-Dichloroethane | 4.188 | 63 | 115811 | 10.911 | ug/L | 96 |
| 30) cis-1,2-Dichloroethene | 4.707 | 96 | 61592 | 11.361 | ug/L | 97 |
| 33) Bromochloromethane | 4.899 | 128 | 27875 | 11.722 | ug/L | 98 |
| 34) Cyclohexane | 4.902 | 56 | 125970 | 10.141 | ug/L | 97 |
| 35) Chloroform | 4.971 | 83 | 98623 | 11.208 | ug/L | 96 |
| 37) Carbon tetrachloride | 5.103 | 117 | 80333 | 11.953 | ug/L | 96 |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-3,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 5.169 | 97 | 88619 | 11.090 | ug/L | | 92 |
| 42) 2-Butanone | 5.259 | 43 | 18191 | 6.605 | ug/L | # | 83 |
| 45) Benzene | 5.538 | 78 | 232347 | 11.164 | ug/L | | 96 |
| 48) 1,2-Dichloroethane | 5.741 | 62 | 81456 | 10.142 | ug/L | | 96 |
| 51) Methyl cyclohexane | 6.123 | 83 | 99060 | 10.591 | ug/L | | 94 |
| 52) Trichloroethene | 6.137 | 95 | 58238 | 11.131 | ug/L | | 97 |
| 55) 1,2-Dichloropropane | 6.673 | 63 | 64292 | 10.234 | ug/L | | 97 |
| 58) Bromodichloromethane | 6.751 | 83 | 76706 | 10.304 | ug/L | # | 91 |
| 62) cis-1,3-Dichloropropene | 7.442 | 75 | 86389 | 10.306 | ug/L | | 97 |
| 65) Toluene | 7.702 | 92 | 147241 | 10.826 | ug/L | | 95 |
| 66) 4-Methyl-2-pentanone | 8.134 | 58 | 16467 | 7.099 | ug/L | | 87 |
| 67) Tetrachloroethene | 8.150 | 166 | 70455 | 12.194 | ug/L | | 93 |
| 69) trans-1,3-Dichloropropene | 8.187 | 75 | 74563 | 9.738 | ug/L | | 89 |
| 72) 1,1,2-Trichloroethane | 8.371 | 83 | 37404 | 9.795 | ug/L | | 98 |
| 73) Chlorodibromomethane | 8.583 | 129 | 53830 | 10.082 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.862 | 107 | 43821 | 9.711 | ug/L | | 91 |
| 77) 2-Hexanone | 9.140 | 43 | 26482 | 5.859 | ug/L | # | 94 |
| 78) Chlorobenzene | 9.509 | 112 | 162947 | 11.244 | ug/L | # | 86 |
| 79) Ethylbenzene | 9.548 | 91 | 287902 | 10.922 | ug/L | | 100 |
| 81) p/m Xylene | 9.734 | 106 | 229635 | 22.854 | ug/L | | 97 |
| 82) o Xylene | 10.275 | 106 | 222619 | 22.656 | ug/L | | 91 |
| 83) Styrene | 10.342 | 104 | 361524 | 22.441 | ug/L | | 95 |
| 85) Bromoform | 10.367 | 173 | 36349 | 9.671 | ug/L | | 93 |
| 87) Isopropylbenzene | 10.663 | 105 | 298161 | 10.779 | ug/L | | 96 |
| 92) 1,1,2,2-Tetrachloroethane | 11.235 | 83 | 53674 | 9.144 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.122 | 146 | 143575 | 11.132 | ug/L | | 96 |
| 106) 1,4-Dichlorobenzene | 12.216 | 146 | 144253 | 11.189 | ug/L | | 98 |
| 109) 1,2-Dichlorobenzene | 12.637 | 146 | 136389 | 10.991 | ug/L | | 98 |
| 111) 1,2-Dibromo-3-chloropr... | 13.415 | 155 | 8726 | 7.961 | ug/L | | 94 |
| 114) 1,2,4-Trichlorobenzene | 14.048 | 180 | 89340 | 10.044 | ug/L | | 97 |
| 116) 1,2,3-Trichlorobenzene | 14.511 | 180 | 78888 | 9.653 | ug/L | | 94 |

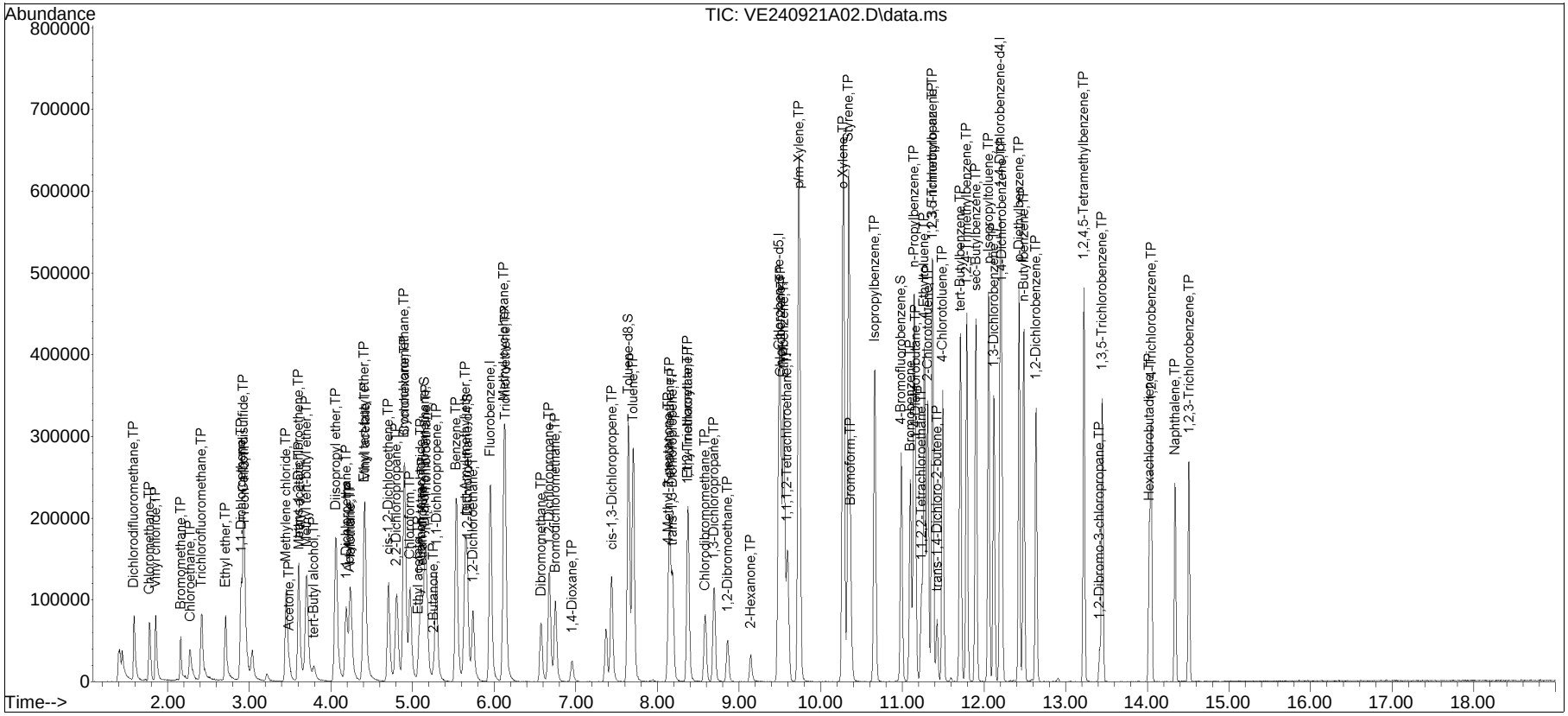
(#) = qualifier out of range (m) = manual integration (+) = signals summed

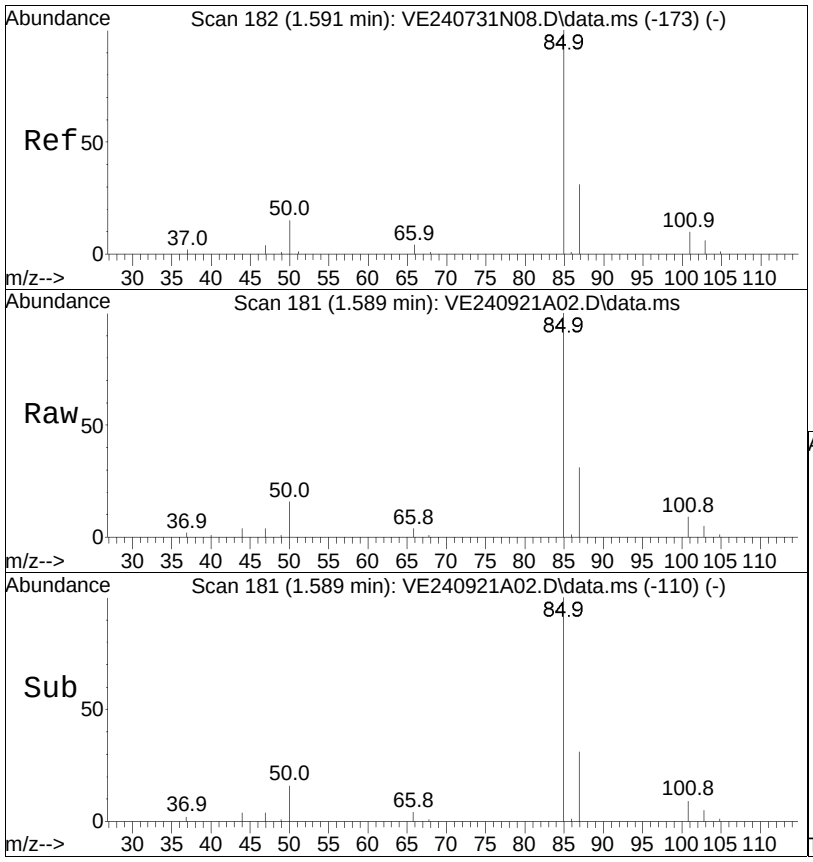
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A02.D
Acq On : 21 Sep 2024 7:26 am
Operator : ELAINE:LAC
Sample : WG1974948-3,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 21 08:18:03 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

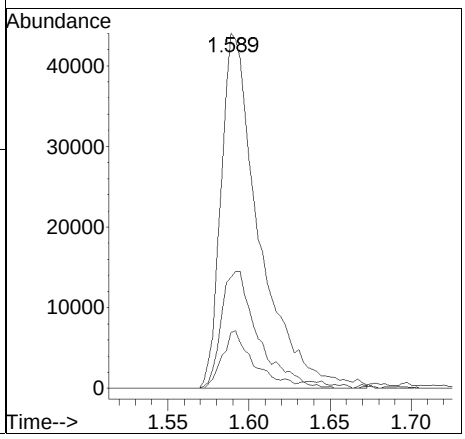


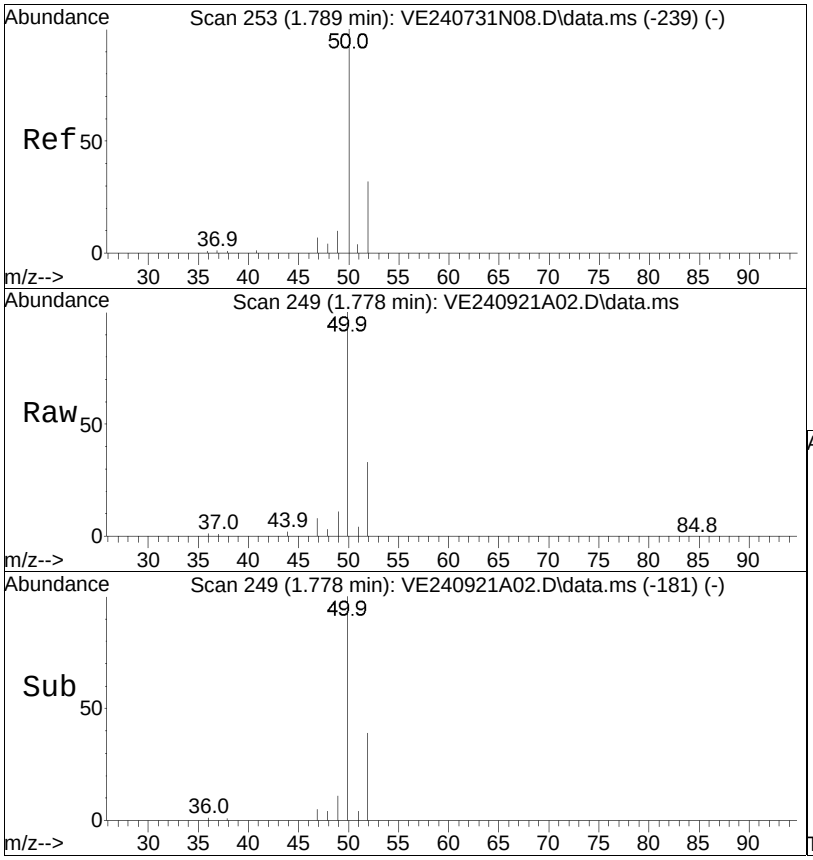



#2
Dichlorodifluoromethane
Concen: 12.23 ug/L
RT: 1.589 min Scan# 181
Delta R.T. -0.002 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 85 Resp: 72049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 21.7 | 45.1 |
| 50 | 14.3 | 11.8 | 24.4 |

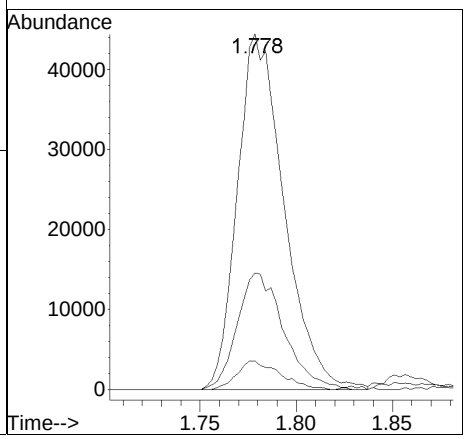


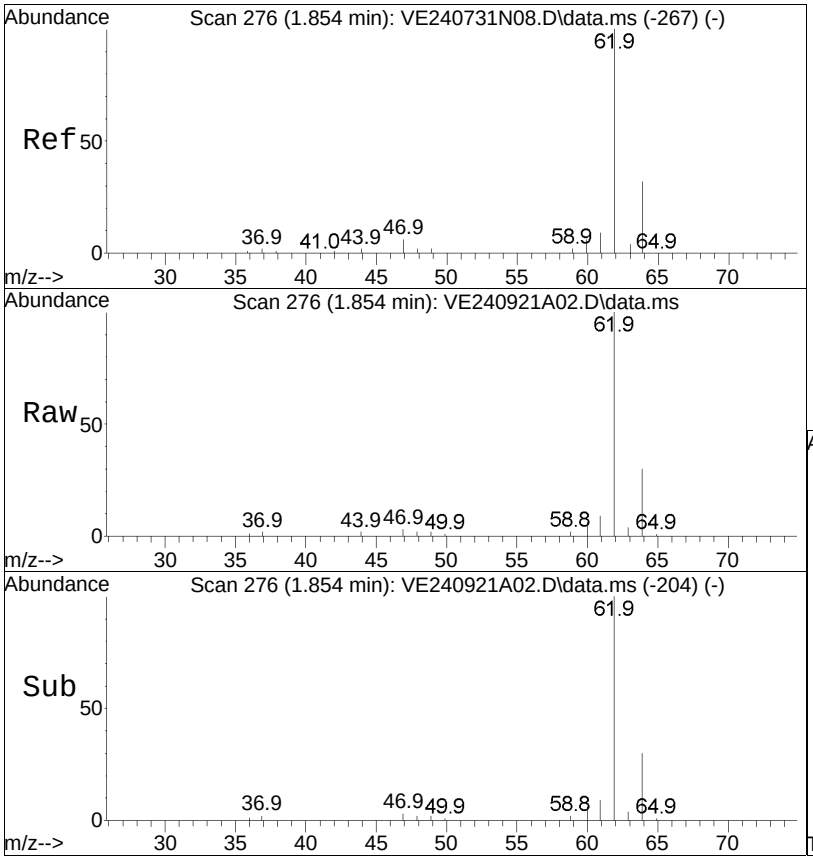



#3
Chloromethane
Concen: 11.43 ug/L
RT: 1.778 min Scan# 249
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 50 Resp: 74946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.5 | 14.9 | 54.9 |
| 47 | 7.4 | 0.0 | 28.0 |

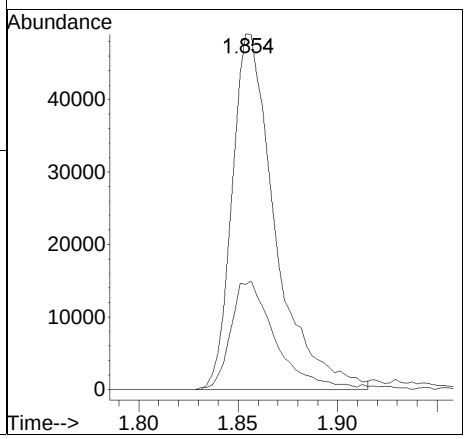


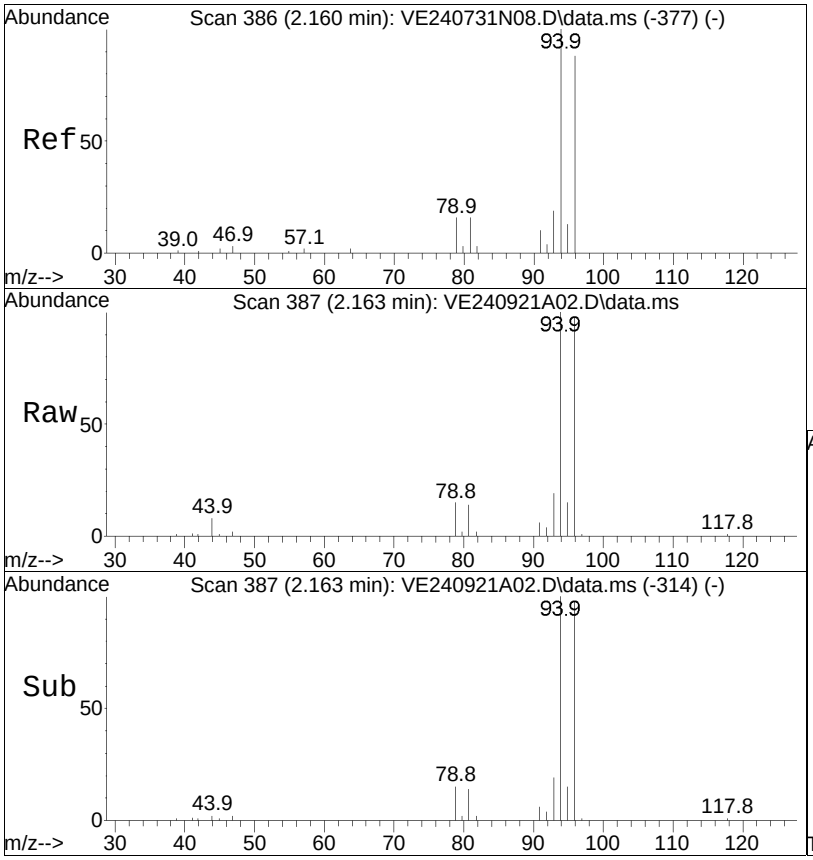



#4
Vinyl chloride
Concen: 12.14 ug/L
RT: 1.854 min Scan# 276
Delta R.T. -0.000 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 62 Resp: 74178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.4 | 8.1 | 48.1 |

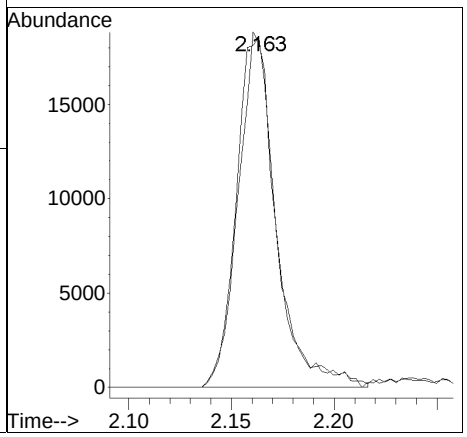


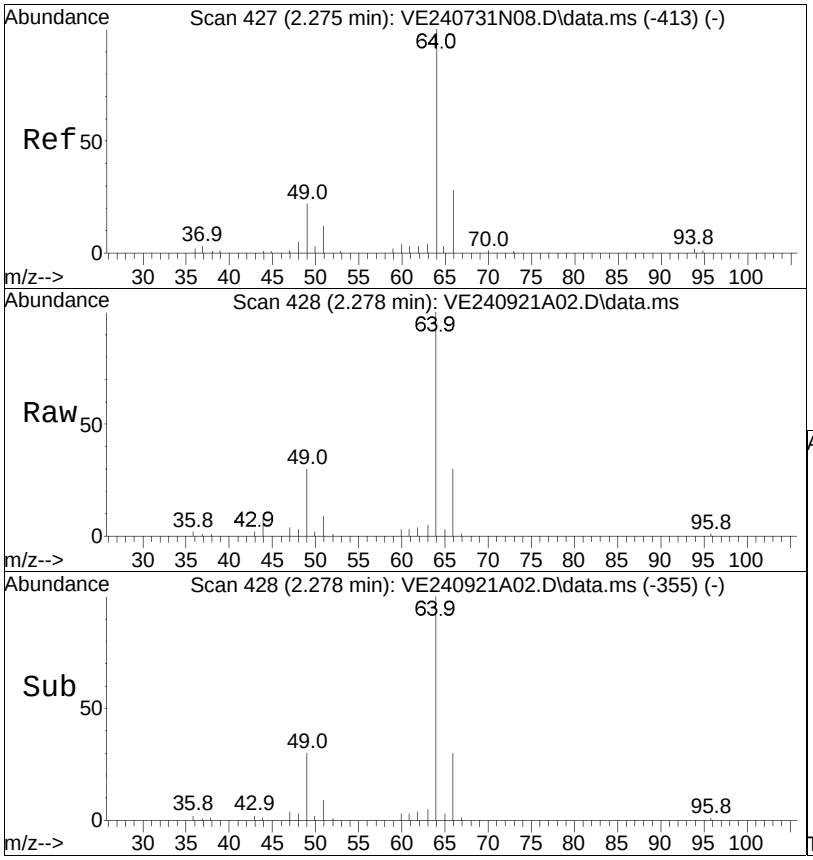



#5
Bromomethane
Concen: 13.63 ug/L
RT: 2.163 min Scan# 387
Delta R.T. 0.003 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 94 Resp: 25204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 95.5 | 68.2 | 108.2 |

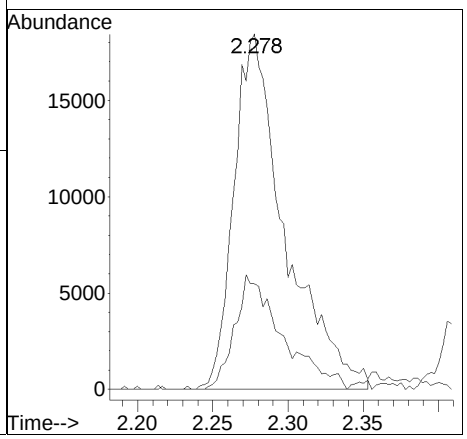


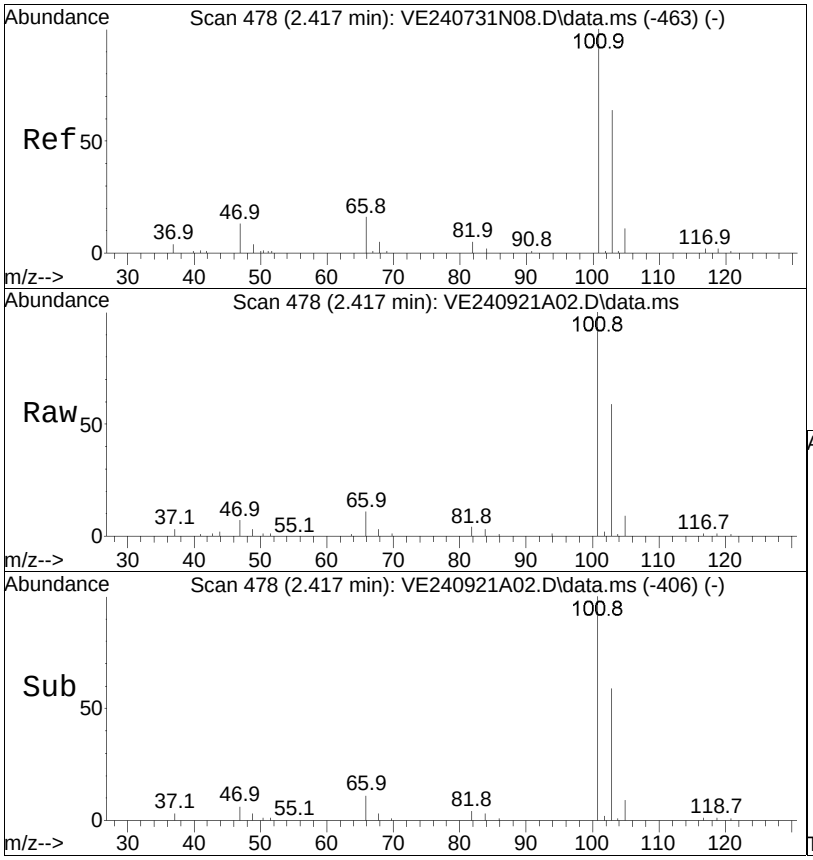



#6
Chloroethane
Concen: 11.84 ug/L
RT: 2.278 min Scan# 428
Delta R.T. 0.003 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 64 Resp: 43680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.0 | 10.7 | 50.7 |

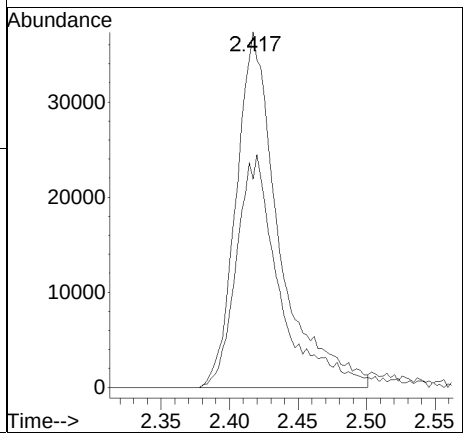


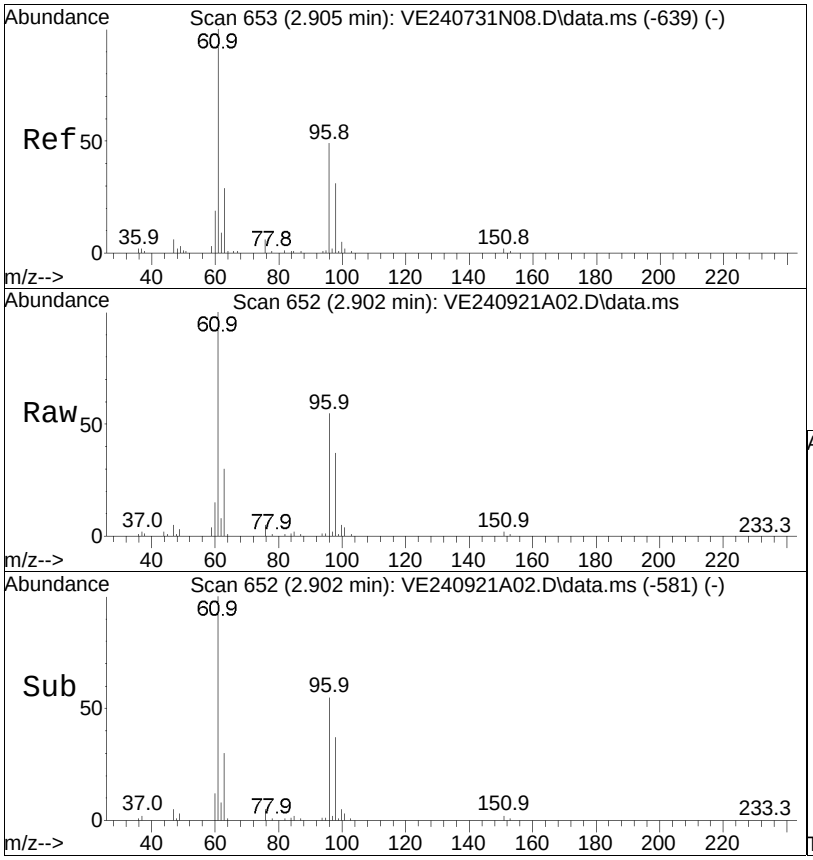



#7
Trichlorofluoromethane
Concen: 11.61 ug/L
RT: 2.417 min Scan# 478
Delta R.T. 0.000 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:101 Resp: 81537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.8 | 48.2 | 72.2 |

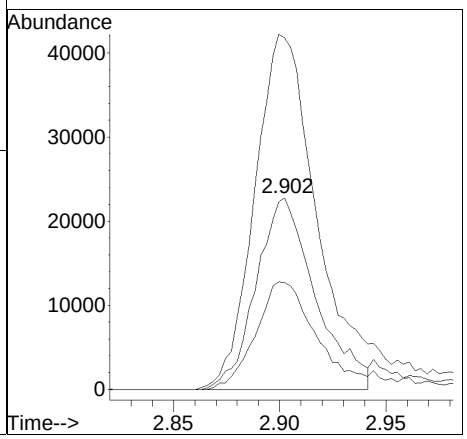


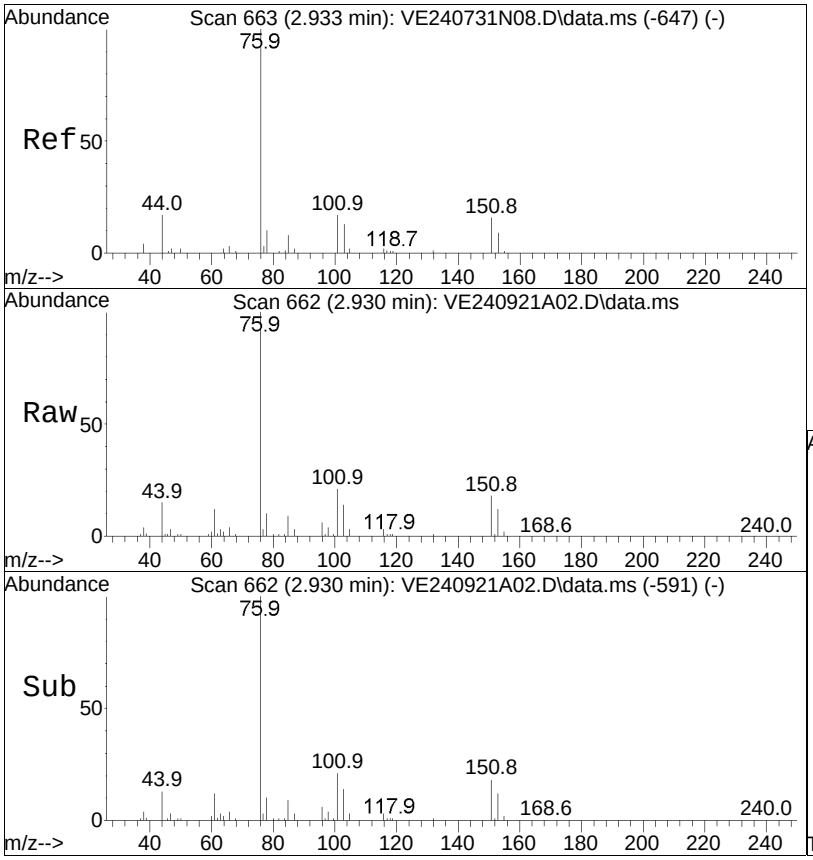



#10
1,1-Dichloroethene
Concen: 10.51 ug/L
RT: 2.902 min Scan# 652
Delta R.T. -0.003 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 96 Resp: 44234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 199.1 | 135.4 | 203.0 |
| 63 | 59.8 | 42.6 | 63.8 |

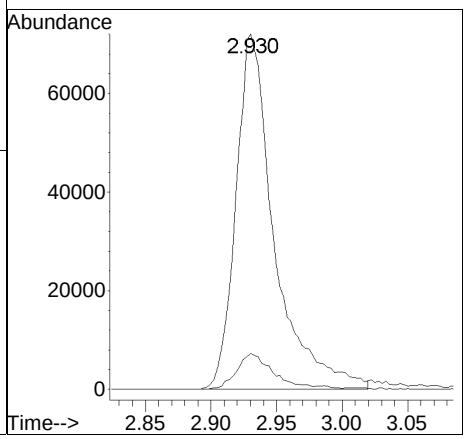


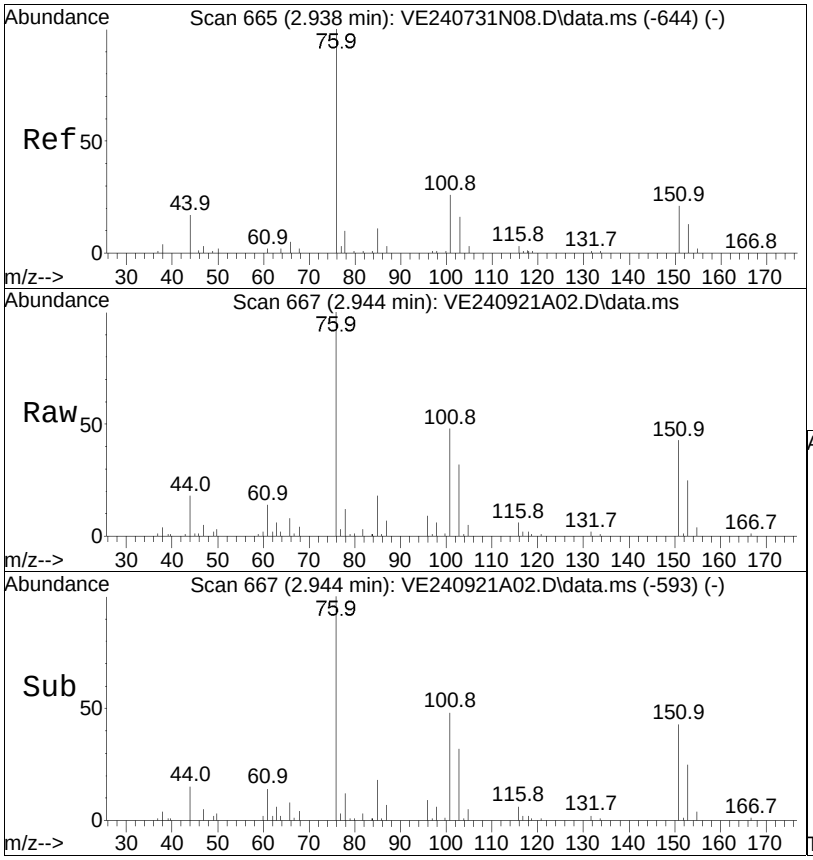



#11
Carbon disulfide
Concen: 11.33 ug/L
RT: 2.930 min Scan# 662
Delta R.T. -0.003 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 76 Resp: 147032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.7 | 5.5 | 11.3 |

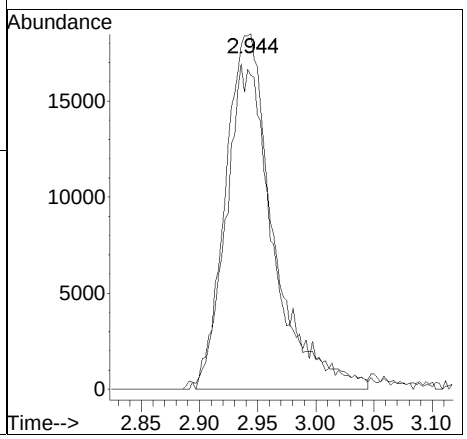


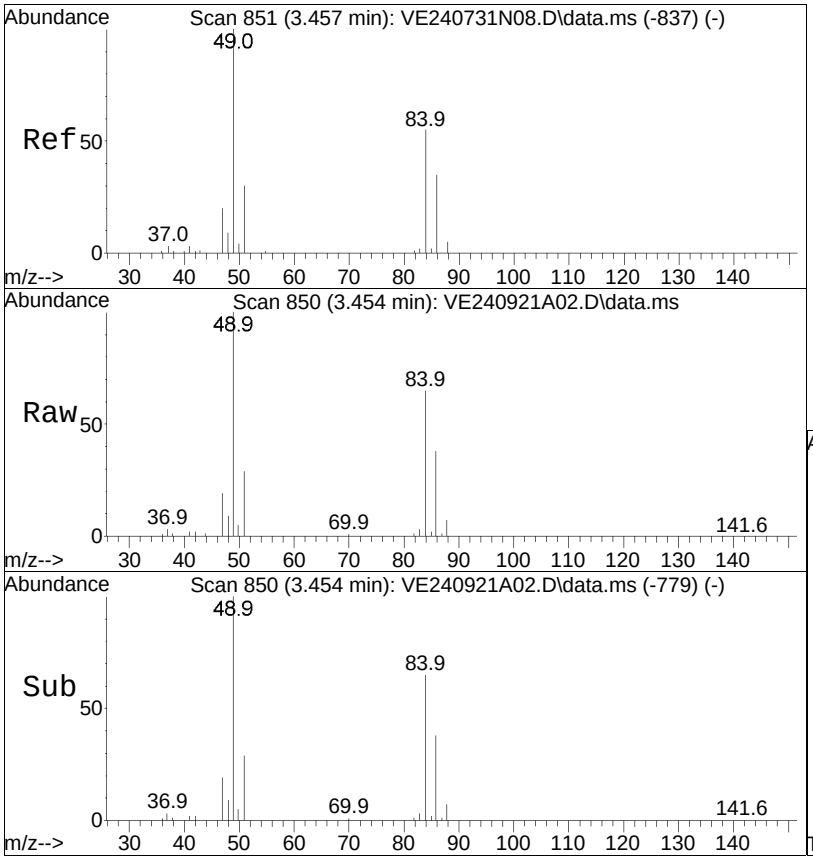



#12
Freon-113
Concen: 12.24 ug/L
RT: 2.944 min Scan# 667
Delta R.T. 0.006 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:101 Resp: 53661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 36.8 | 58.7 | 88.1# |

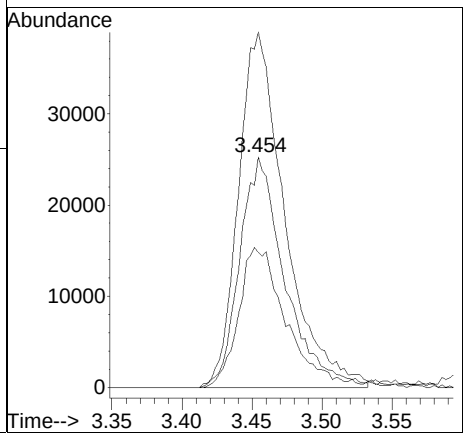


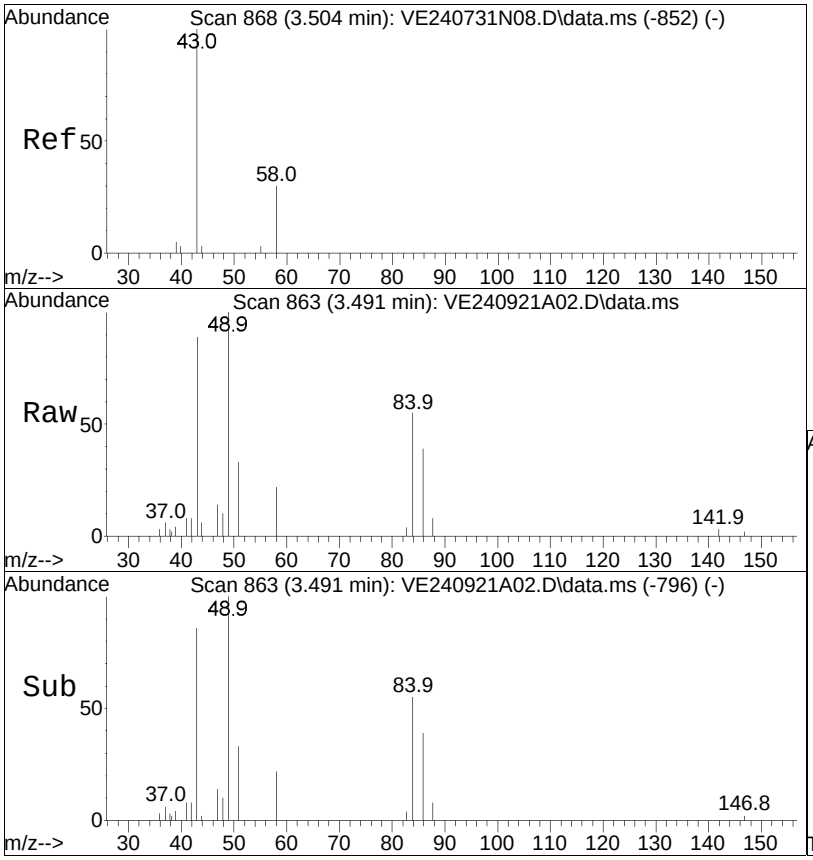



#15
Methylene chloride
Concen: 10.69 ug/L
RT: 3.454 min Scan# 850
Delta R.T. -0.003 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 84 Resp: 56710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 63.8 | 40.2 | 83.6 |
| 49 | 158.6 | 103.2 | 214.4 |

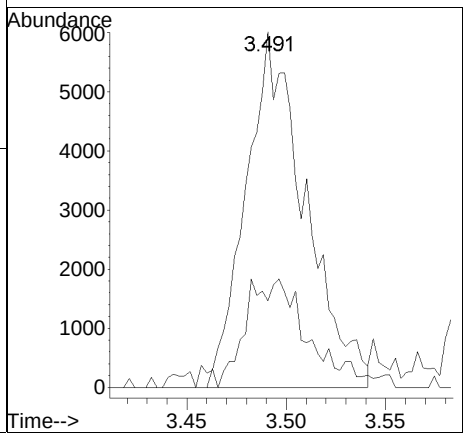


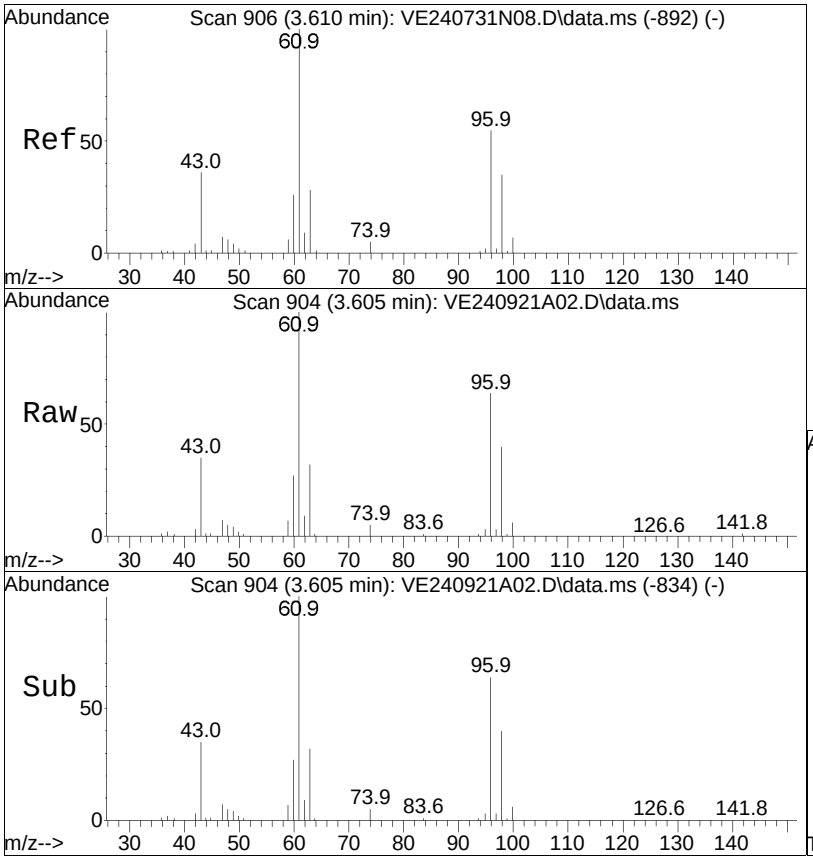



#17
Acetone
Concen: 6.49 ug/L
RT: 3.491 min Scan# 863
Delta R.T. -0.013 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 43 Resp: 12511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 12.9 | 23.4 | 35.0# |

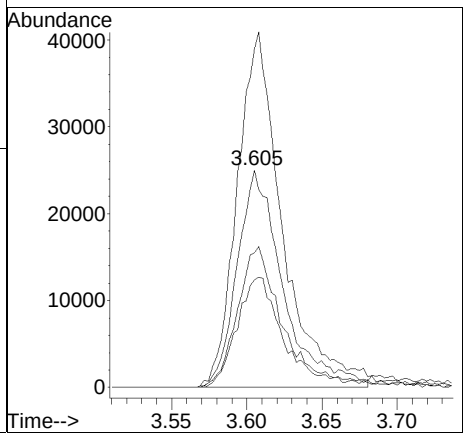


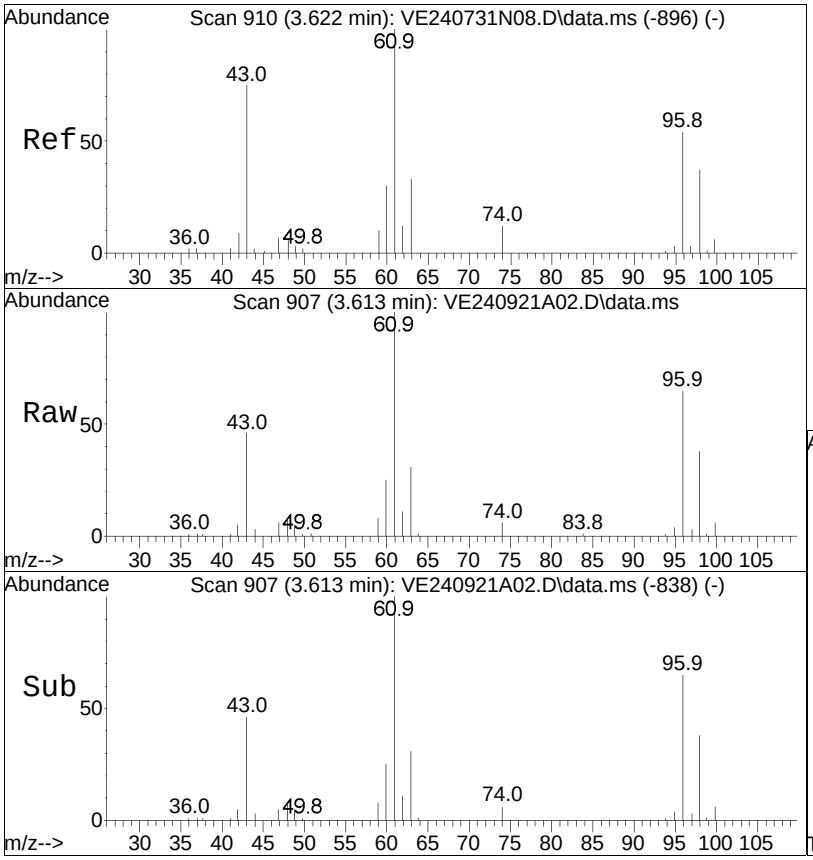



#18
trans-1,2-Dichloroethene
Concen: 11.75 ug/L
RT: 3.605 min Scan# 904
Delta R.T. -0.005 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 96 Resp: 53155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.5 | 93.5 | 194.1 |
| 98 | 64.6 | 37.8 | 78.6 |
| 63 | 51.2 | 29.7 | 61.7 |

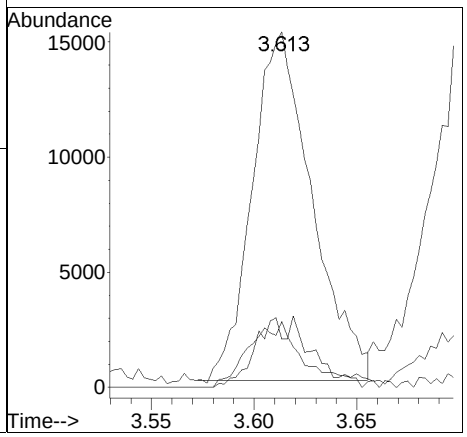


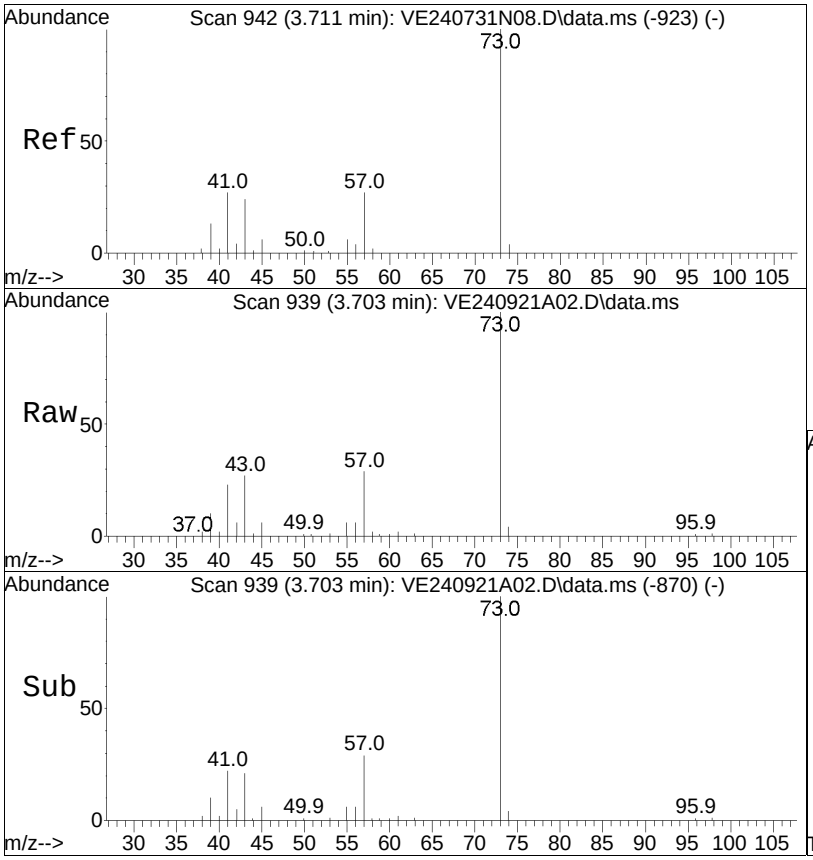



#19
Methyl acetate
Concen: 6.81 ug/L
RT: 3.613 min Scan# 907
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 43 Resp: 30602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 9.2 | 12.6 | 18.8# |
| 59 | 17.2 | 12.2 | 18.2 |

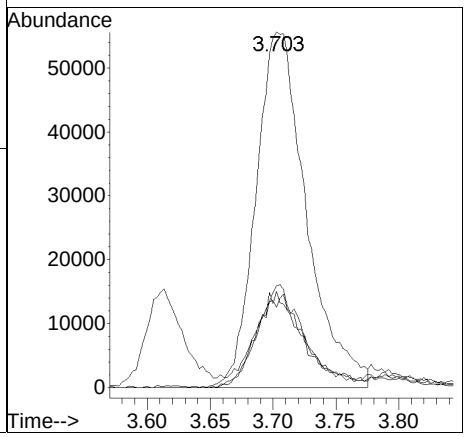


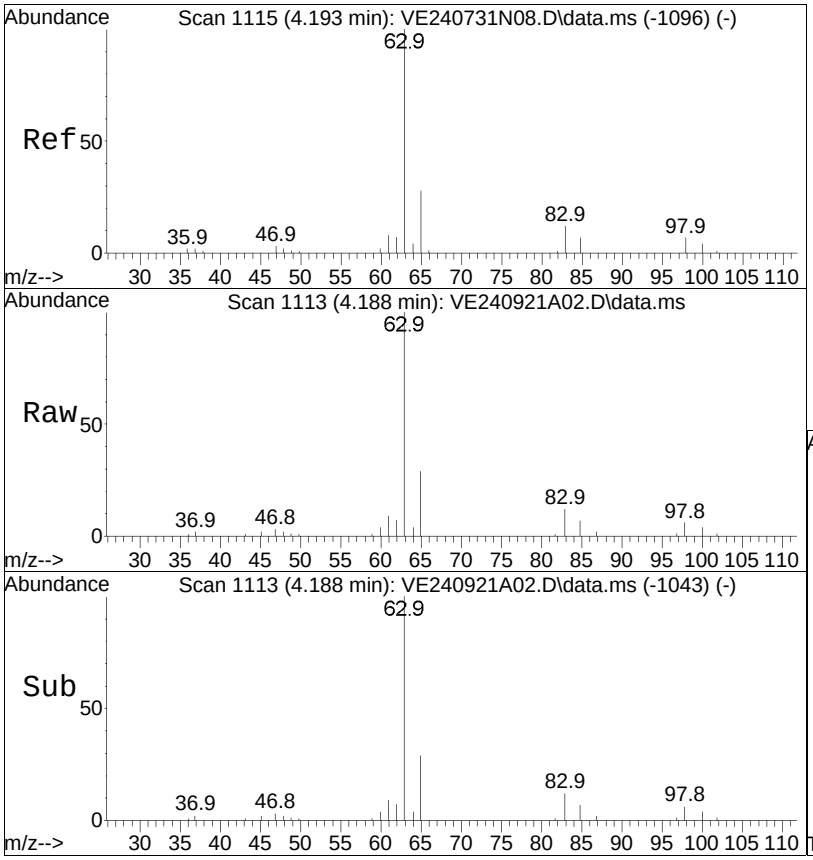



#21
Methyl tert-butyl ether
Concen: 9.20 ug/L
RT: 3.703 min Scan# 939
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 73 Resp: 155223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 26.5 | 16.1 | 33.3 |
| 43 | 22.6 | 17.0 | 35.2 |
| 41 | 25.8 | 18.7 | 38.9 |

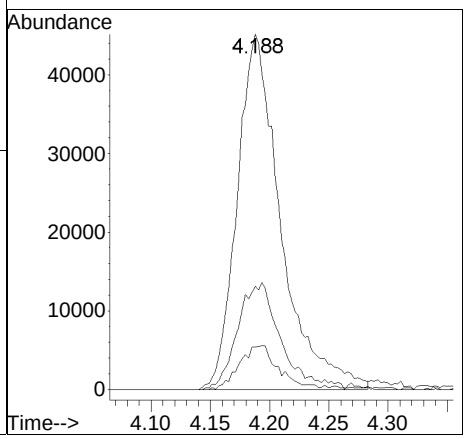


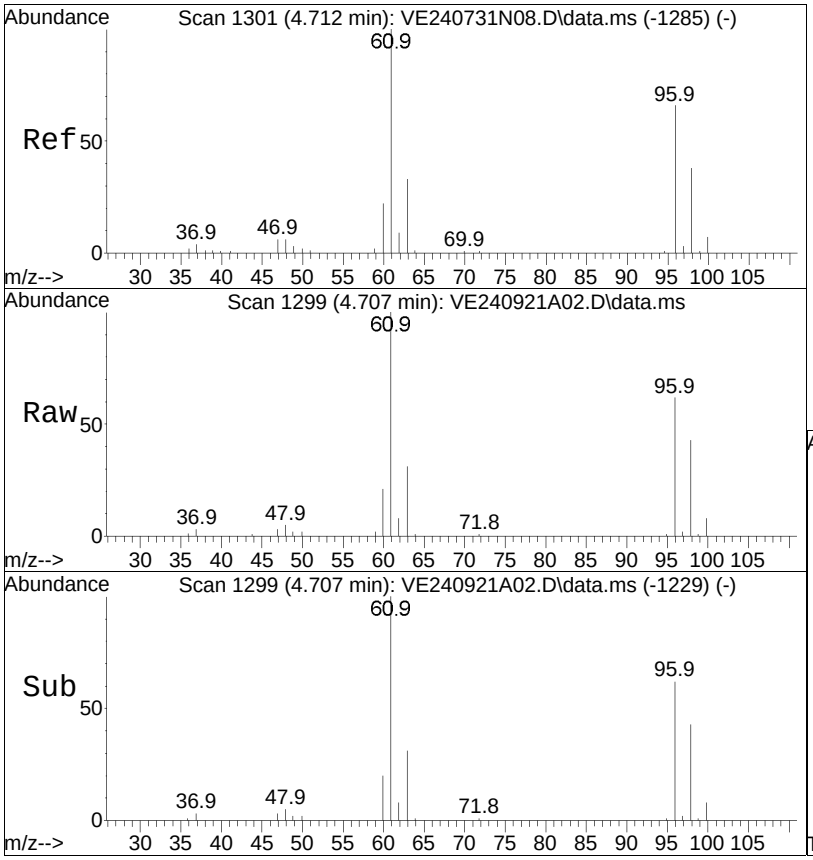



#25
1,1-Dichloroethane
Concen: 10.91 ug/L
RT: 4.188 min Scan# 1113
Delta R.T. -0.005 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 63 Resp: 115811

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 28.8 | 10.3 | 50.3 |
| 83 | 11.1 | 0.0 | 33.1 |

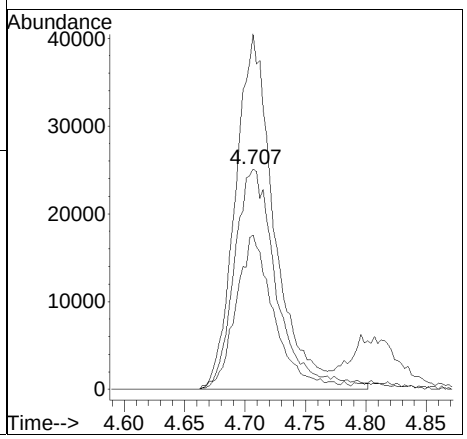


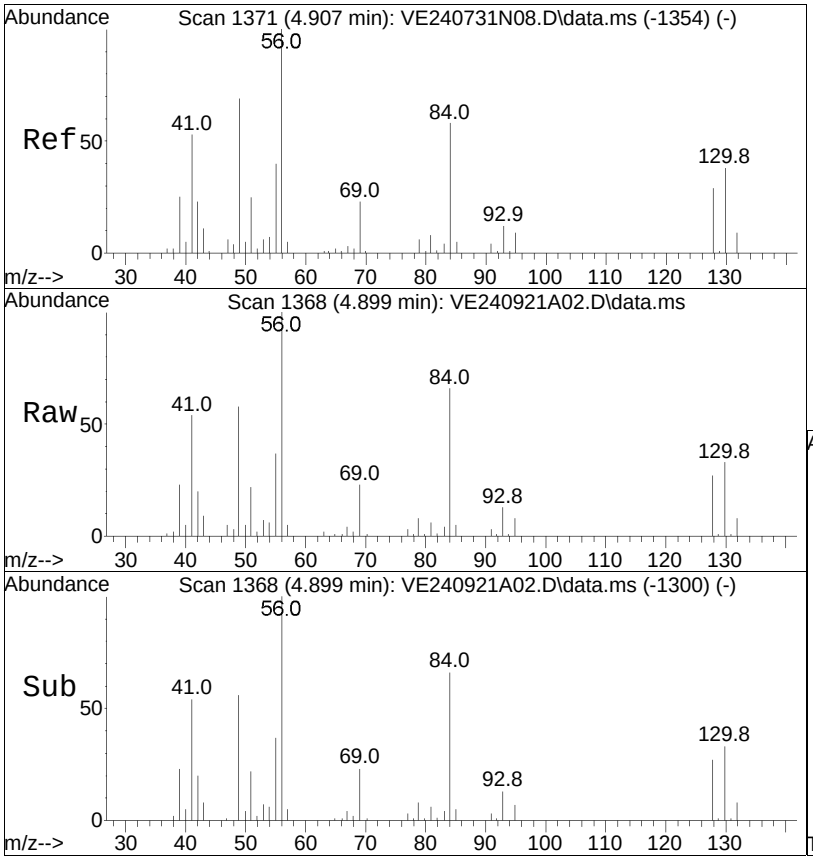



#30
cis-1,2-Dichloroethene
Concen: 11.36 ug/L
RT: 4.707 min Scan# 1299
Delta R.T. -0.005 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 96 Resp: 61592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.9 | 120.3 | 180.5 |
| 98 | 63.2 | 50.2 | 75.4 |

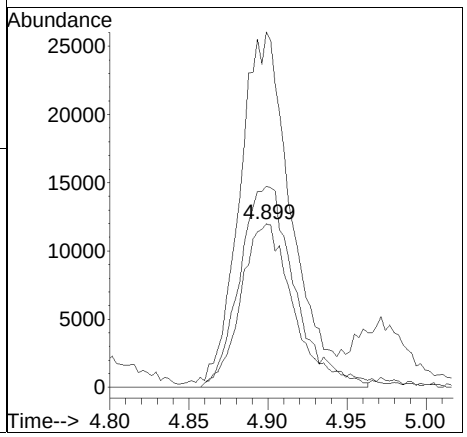


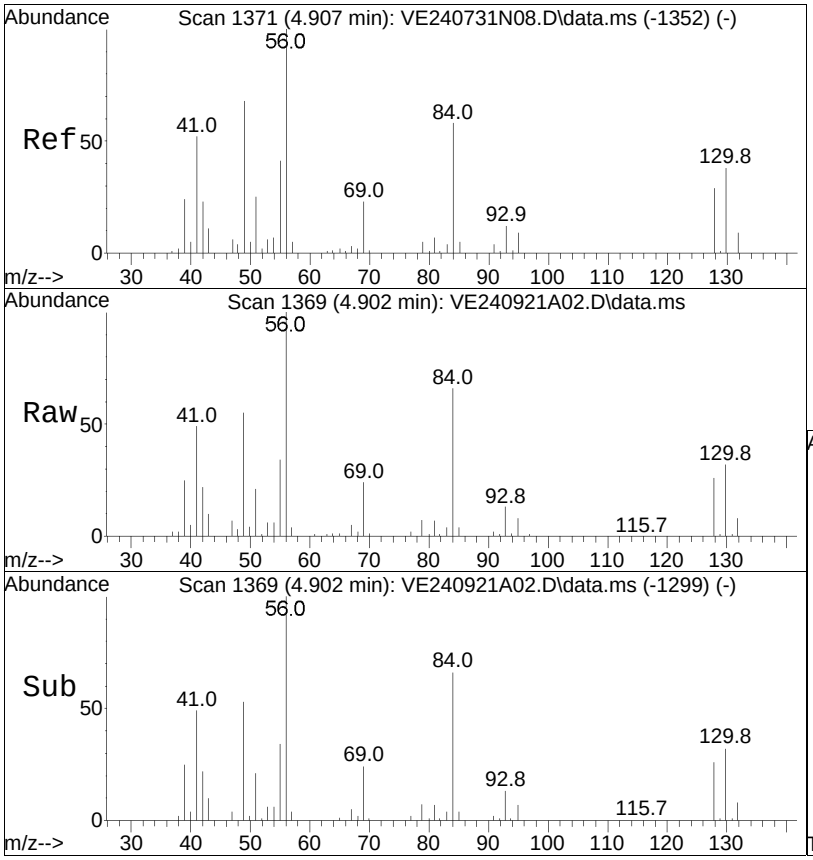



#33
Bromochloromethane
Concen: 11.72 ug/L
RT: 4.899 min Scan# 1368
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:128 Resp: 27875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 208.4 | 170.2 | 255.2 |
| 130 | 128.3 | 103.7 | 155.5 |

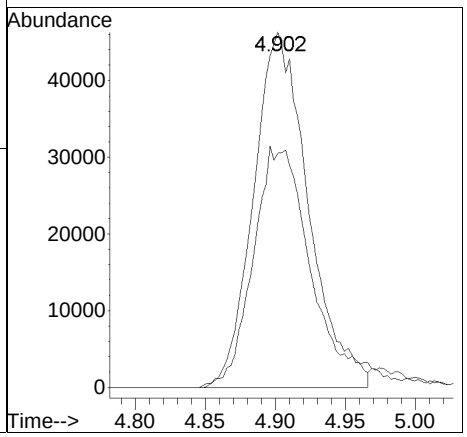


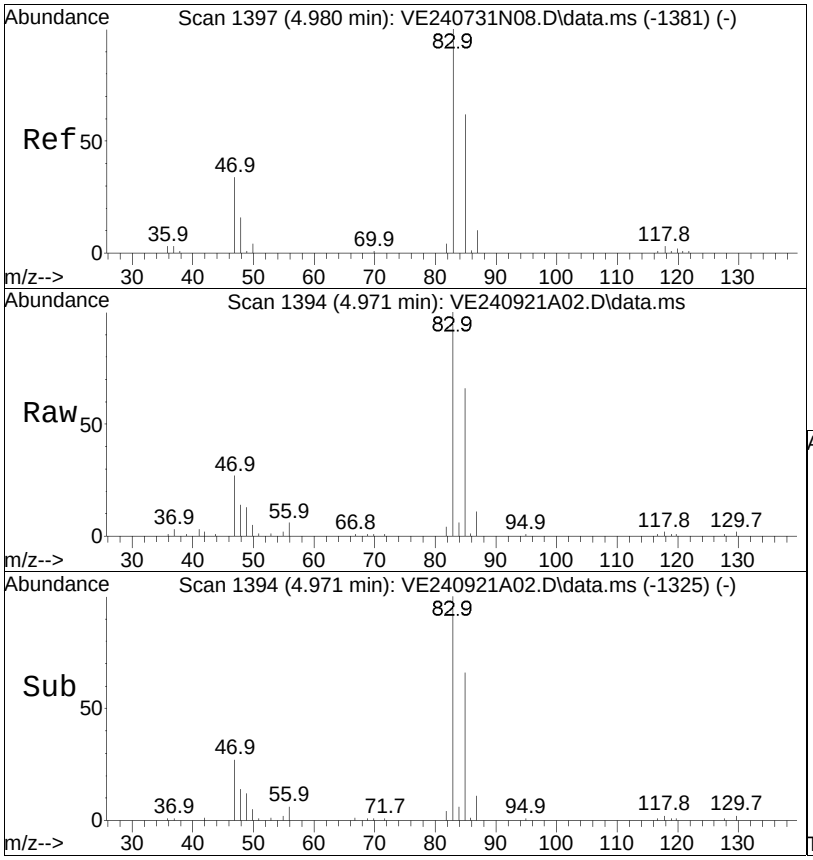



#34
Cyclohexane
Concen: 10.14 ug/L
RT: 4.902 min Scan# 1369
Delta R.T. -0.005 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 56 Resp: 125970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 71.3 | 44.5 | 92.5 |

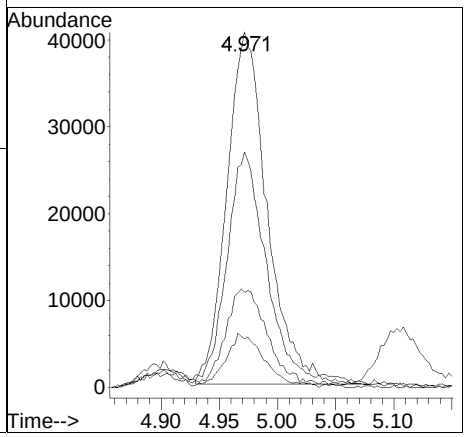


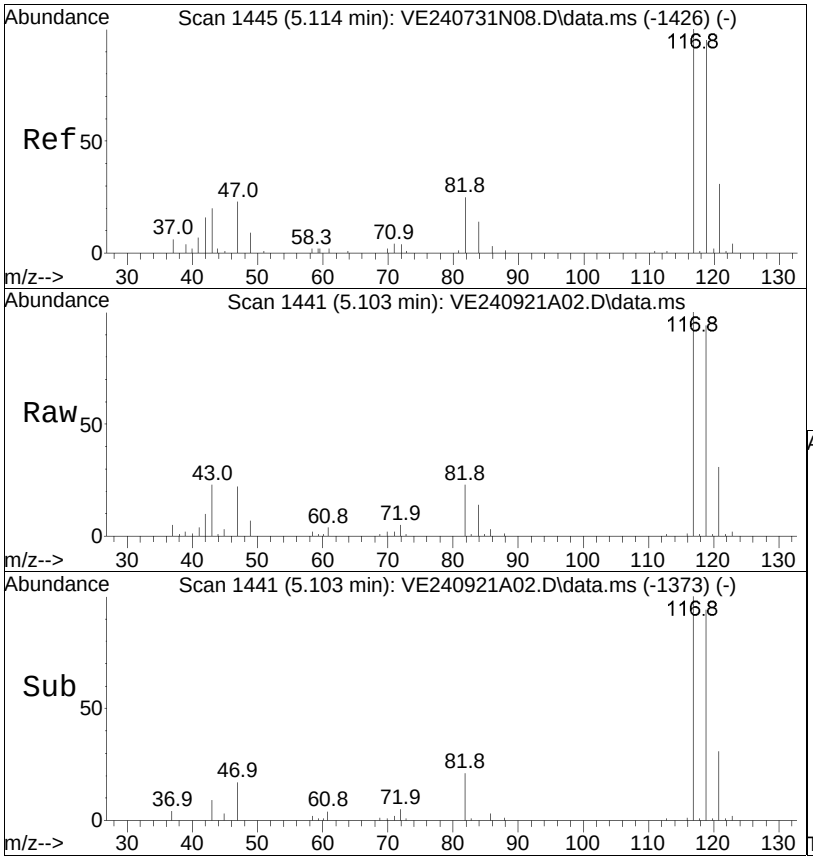



#35
Chloroform
Concen: 11.21 ug/L
RT: 4.971 min Scan# 1394
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 83 Resp: 98623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.1 | 41.3 | 85.9 |
| 47 | 27.5 | 20.9 | 43.3 |
| 48 | 13.4 | 10.3 | 21.5 |

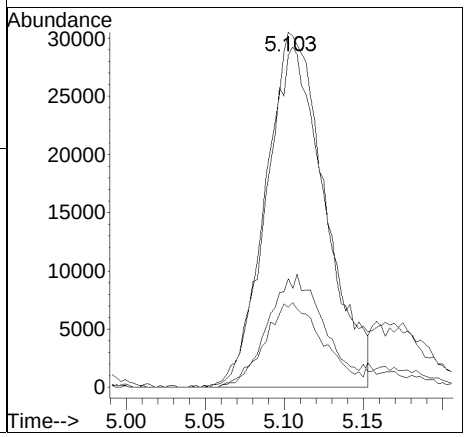


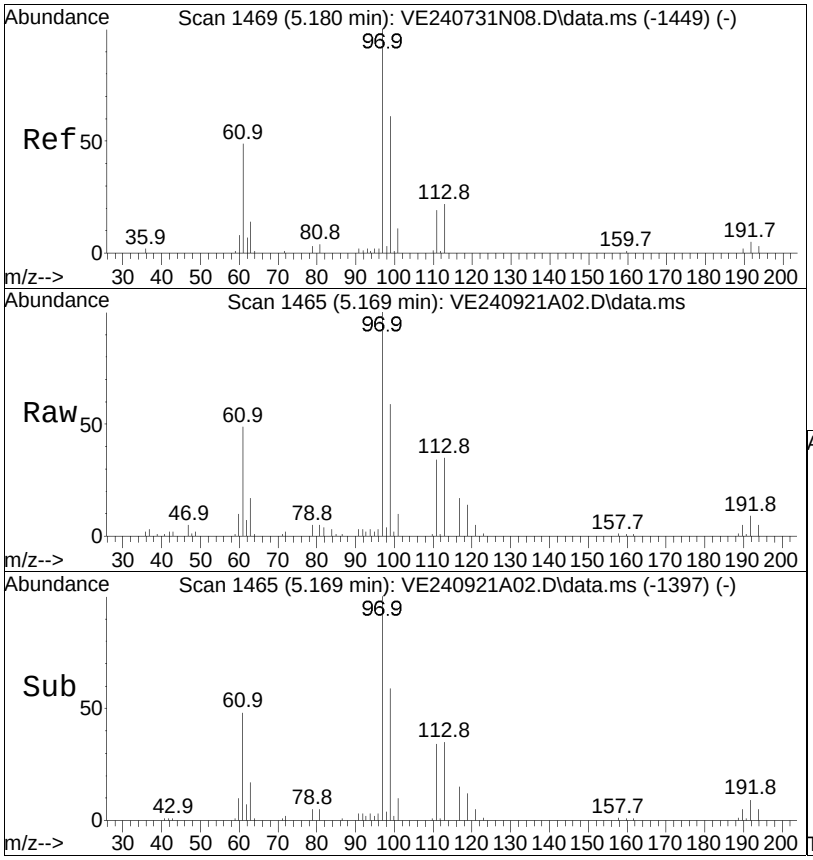



#37
Carbon tetrachloride
Concen: 11.95 ug/L
RT: 5.103 min Scan# 1441
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:117 Resp: 80333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.6 | 60.6 | 126.0 |
| 121 | 29.9 | 18.0 | 37.4 |
| 82 | 23.0 | 19.8 | 41.0 |

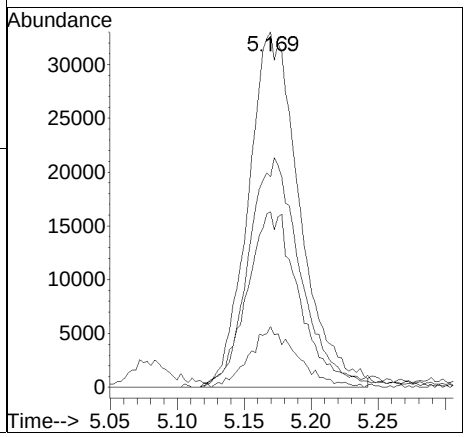


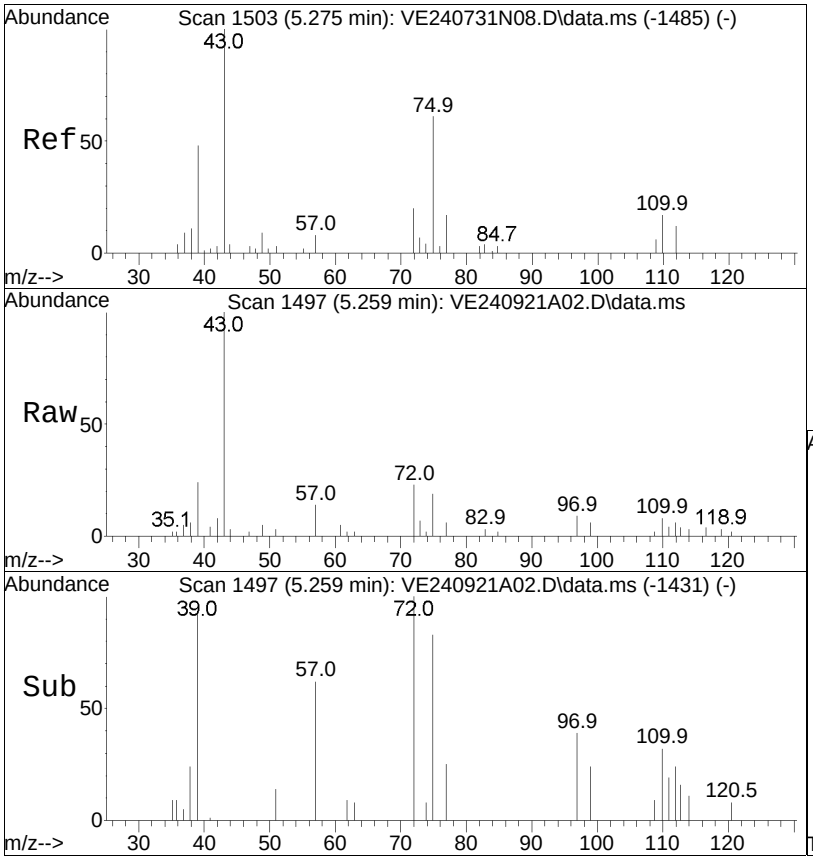



#40
1,1,1-Trichloroethane
Concen: 11.09 ug/L
RT: 5.169 min Scan# 1465
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 97 Resp: 88619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.6 | 40.2 | 83.4 |
| 61 | 47.1 | 36.9 | 76.5 |
| 63 | 15.8 | 8.3 | 17.3 |

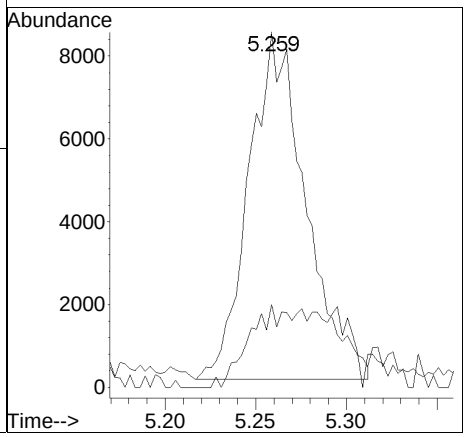


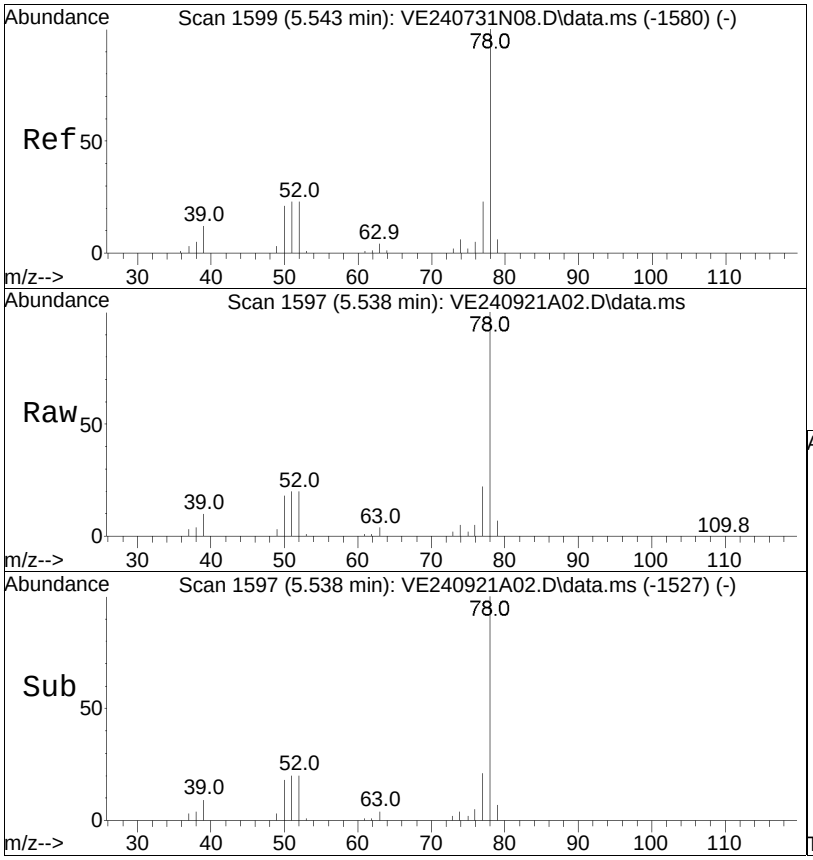



#42
2-Butanone
Concen: 6.60 ug/L
RT: 5.259 min Scan# 1497
Delta R.T. -0.016 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 43 Resp: 18191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 11.9 | 15.7 | 23.5# |

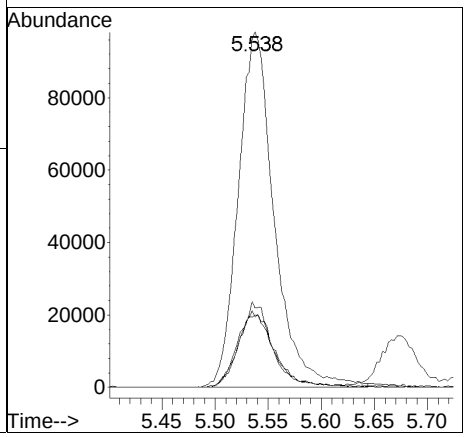


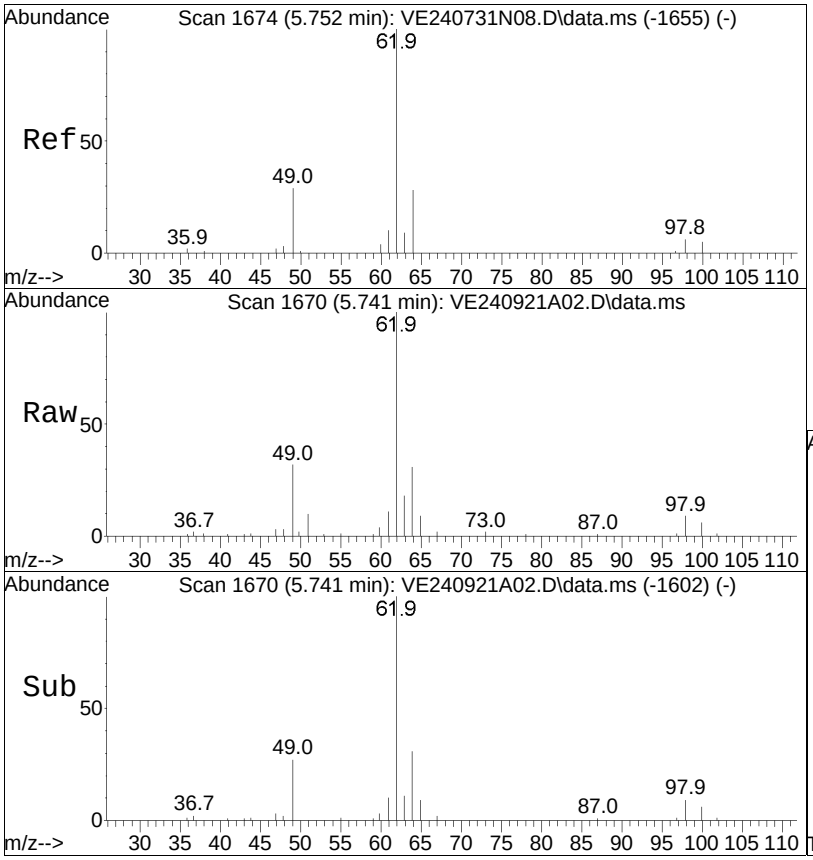



#45
Benzene
Concen: 11.16 ug/L
RT: 5.538 min Scan# 1597
Delta R.T. -0.005 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 78 Resp: 232347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.0 | 12.8 | 26.6 |
| 51 | 21.3 | 13.5 | 27.9 |
| 52 | 20.6 | 12.0 | 25.0 |

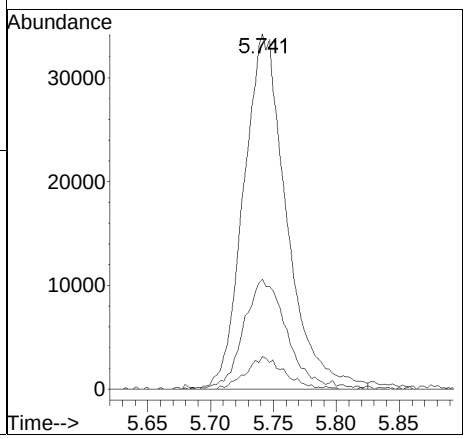


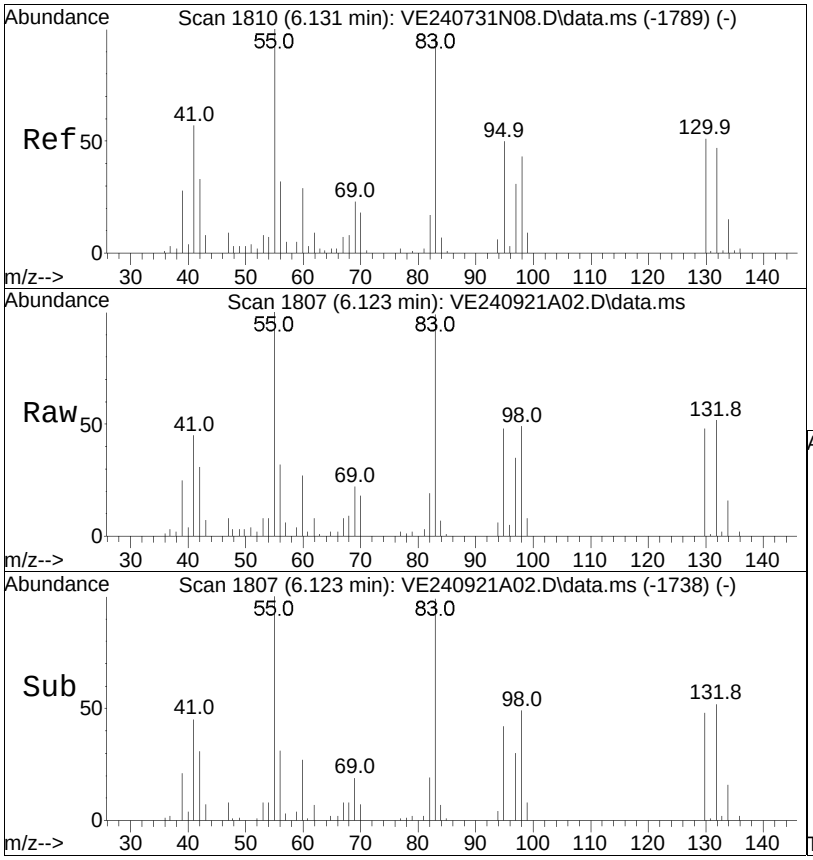



#48
1,2-Dichloroethane
Concen: 10.14 ug/L
RT: 5.741 min Scan# 1670
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 62 Resp: 81456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.5 | 12.0 | 52.0 |
| 98 | 8.3 | 0.0 | 29.1 |

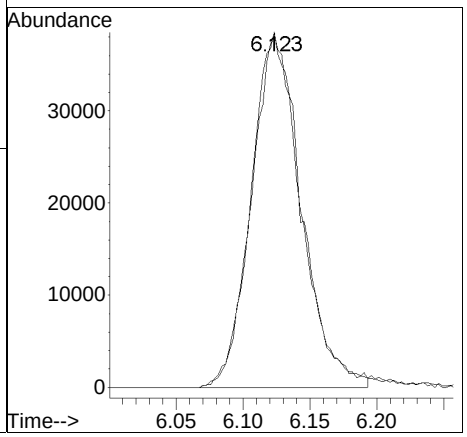


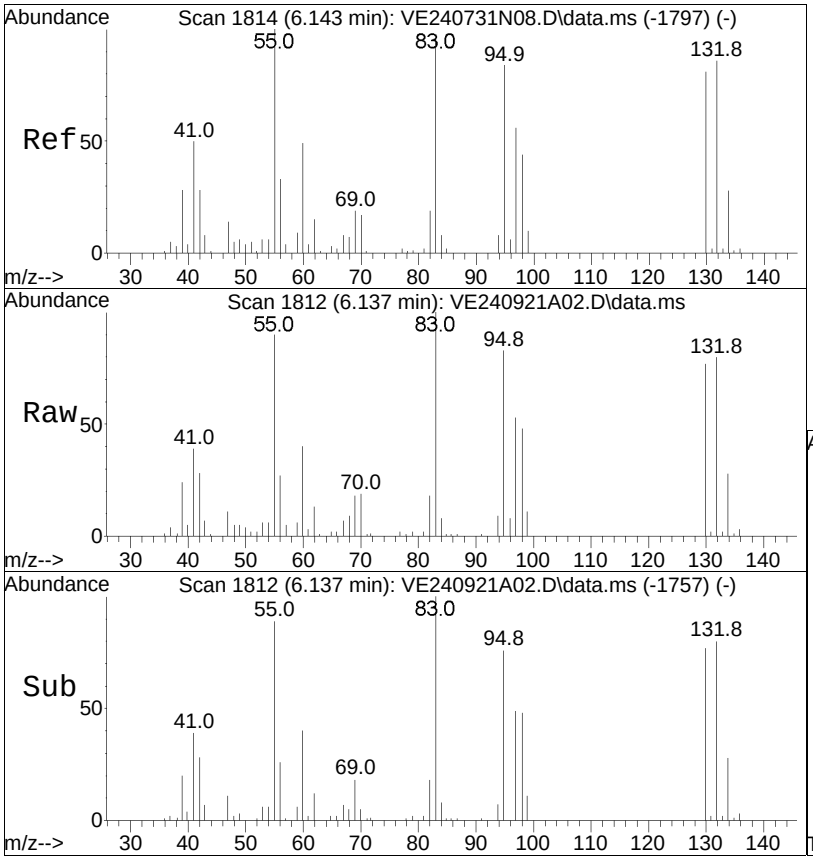



#51
Methyl cyclohexane
Concen: 10.59 ug/L
RT: 6.123 min Scan# 1807
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 83 Resp: 99060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 100.0 | 75.3 | 112.9 |

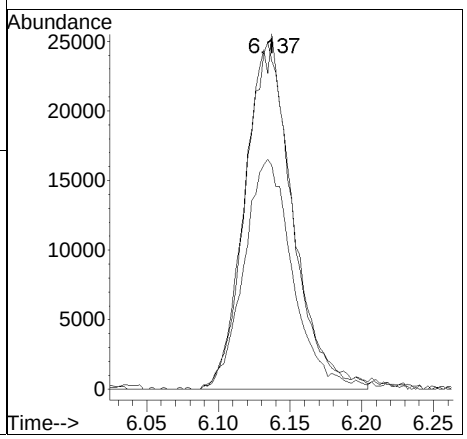


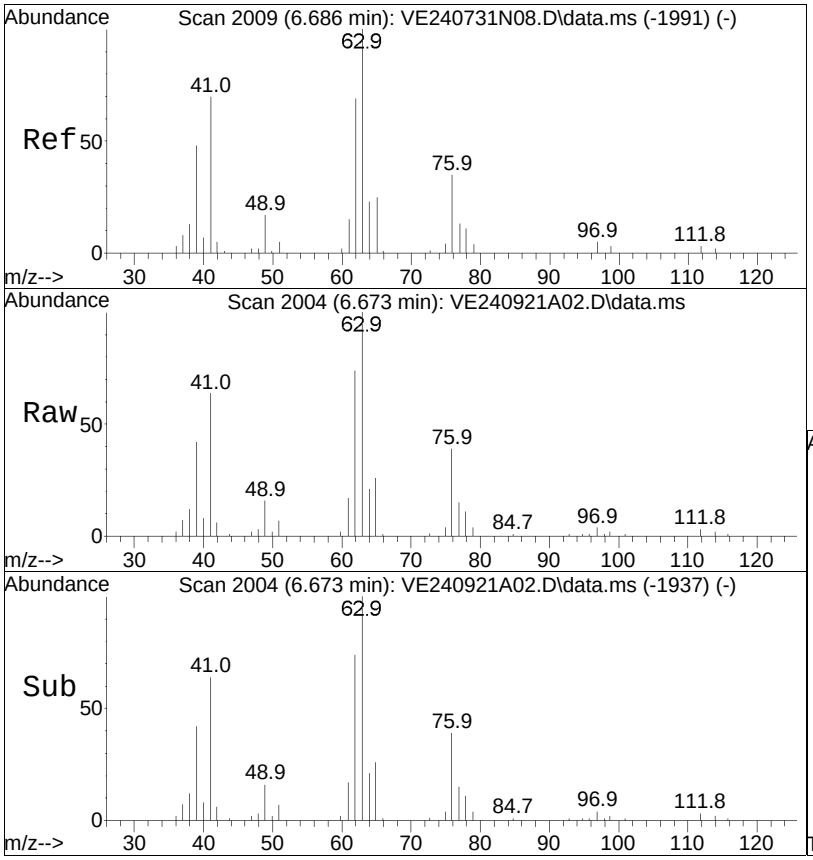



#52
Trichloroethene
Concen: 11.13 ug/L
RT: 6.137 min Scan# 1812
Delta R.T. -0.006 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 95 Resp: 58238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 67.0 | 50.2 | 75.2 |
| 130 | 98.5 | 78.2 | 117.4 |

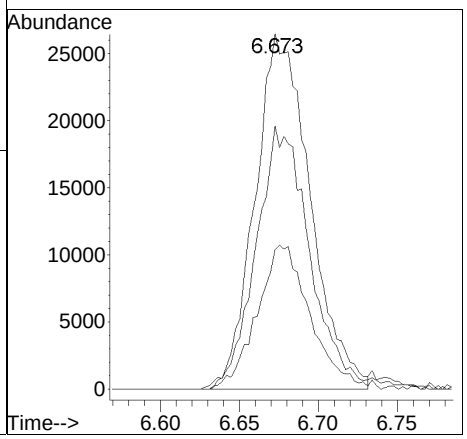


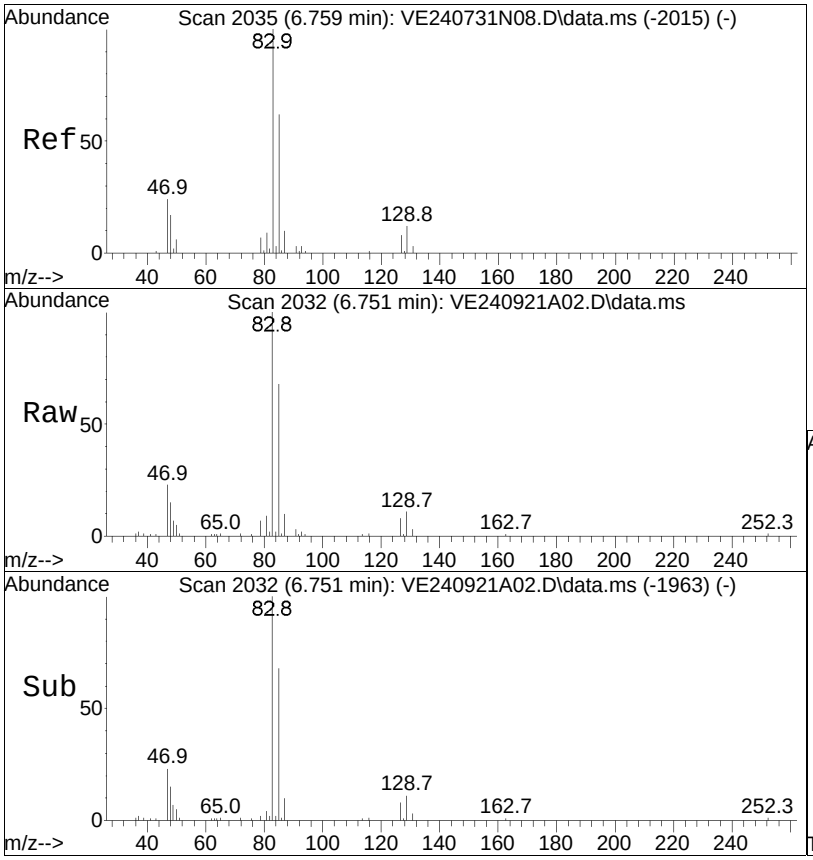



#55
1,2-Dichloropropane
Concen: 10.23 ug/L
RT: 6.673 min Scan# 2004
Delta R.T. -0.013 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 63 Resp: 64292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 71.2 | 58.4 | 87.6 |
| 76 | 39.0 | 28.7 | 43.1 |

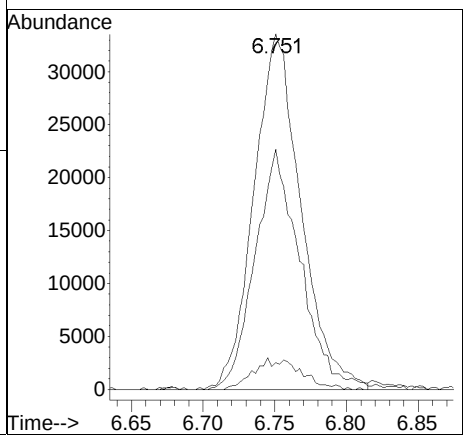


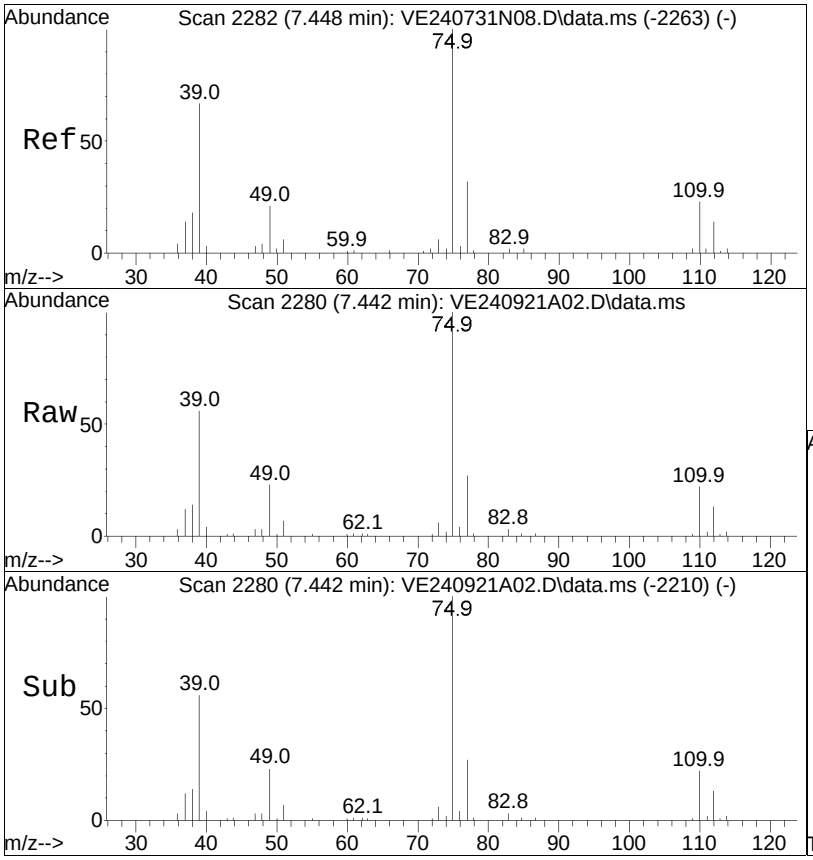



#58
Bromodichloromethane
Concen: 10.30 ug/L
RT: 6.751 min Scan# 2032
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 83 Resp: 76706

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.8 | 46.6 | 69.8 |
| 127 | 3.6 | 6.2 | 9.4# |

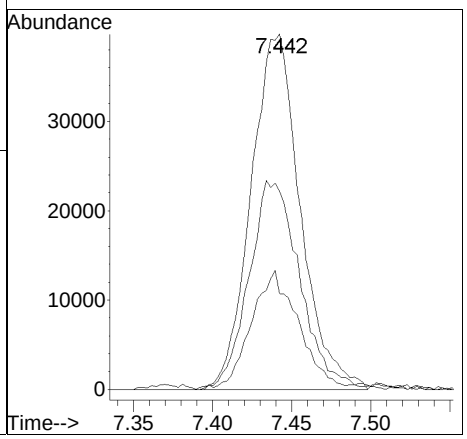


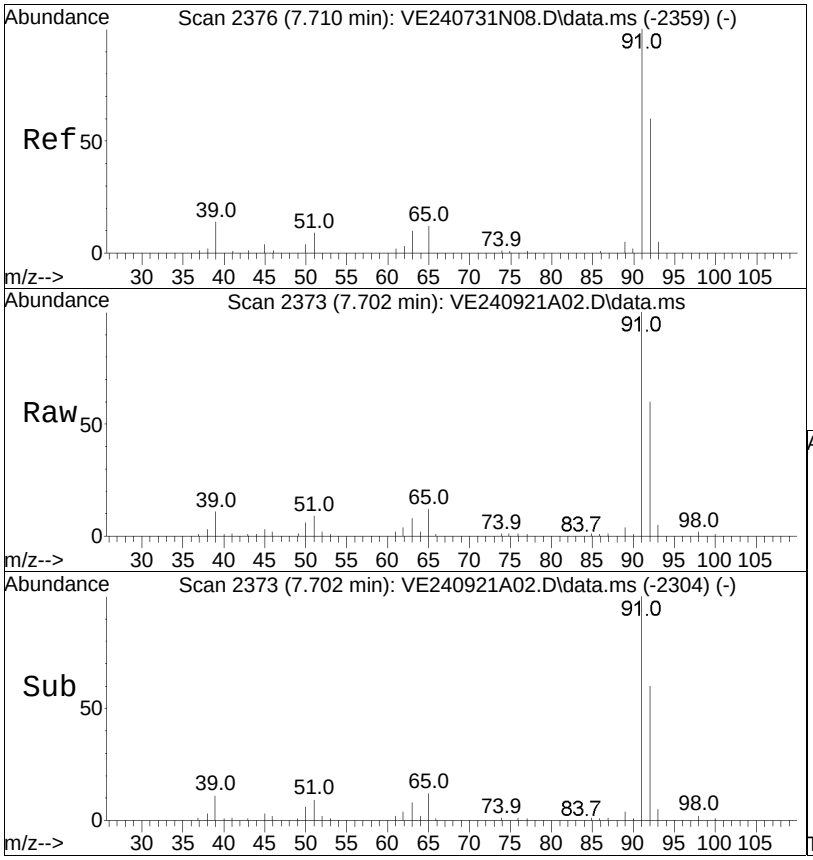



#62
cis-1,3-Dichloropropene
Concen: 10.31 ug/L
RT: 7.442 min Scan# 2280
Delta R.T. -0.006 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 75 Resp: 86389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 25.1 | 37.7 |
| 39 | 60.7 | 50.7 | 76.1 |

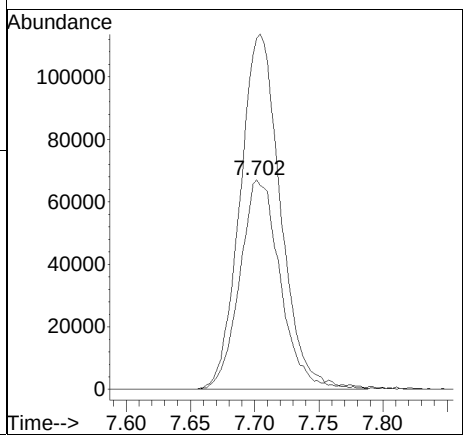


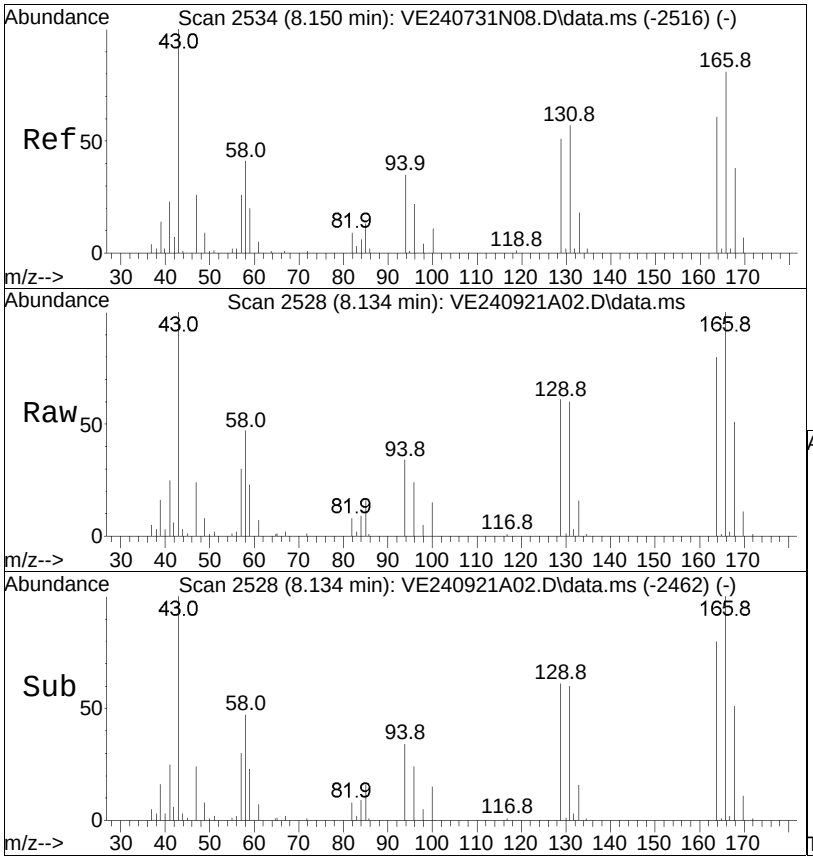



#65
Toluene
Concen: 10.83 ug/L
RT: 7.702 min Scan# 2373
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 92 Resp: 147241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 168.6 | 129.1 | 193.7 |

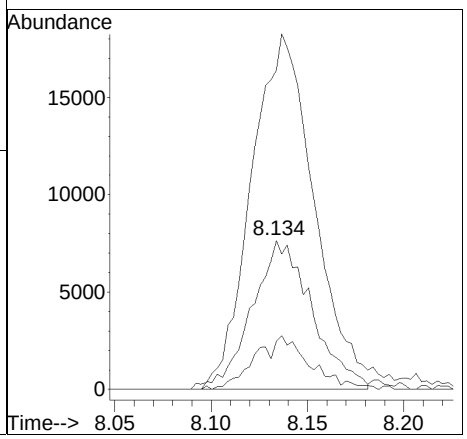


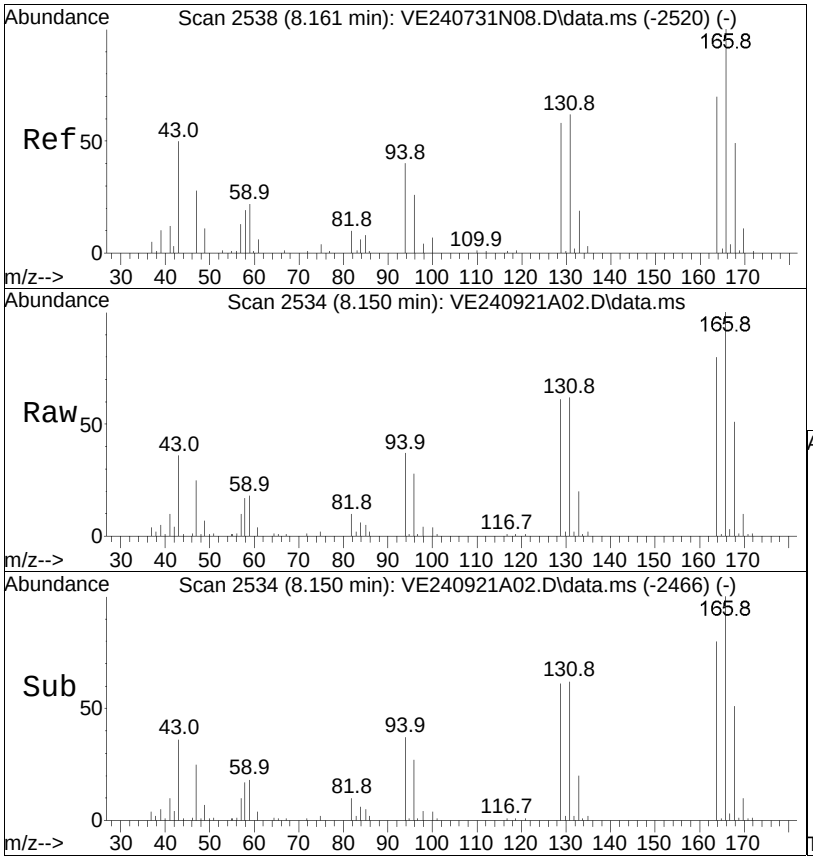



#66
4-Methyl-2-pentanone
Concen: 7.10 ug/L
RT: 8.134 min Scan# 2528
Delta R.T. -0.016 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 58 Resp: 16467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 33.3 | 27.9 | 41.9 |
| 43 | 255.3 | 225.7 | 338.5 |

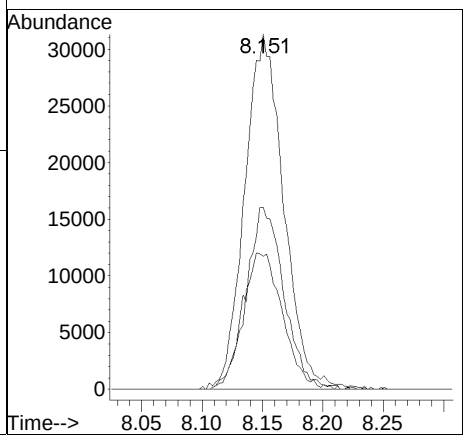


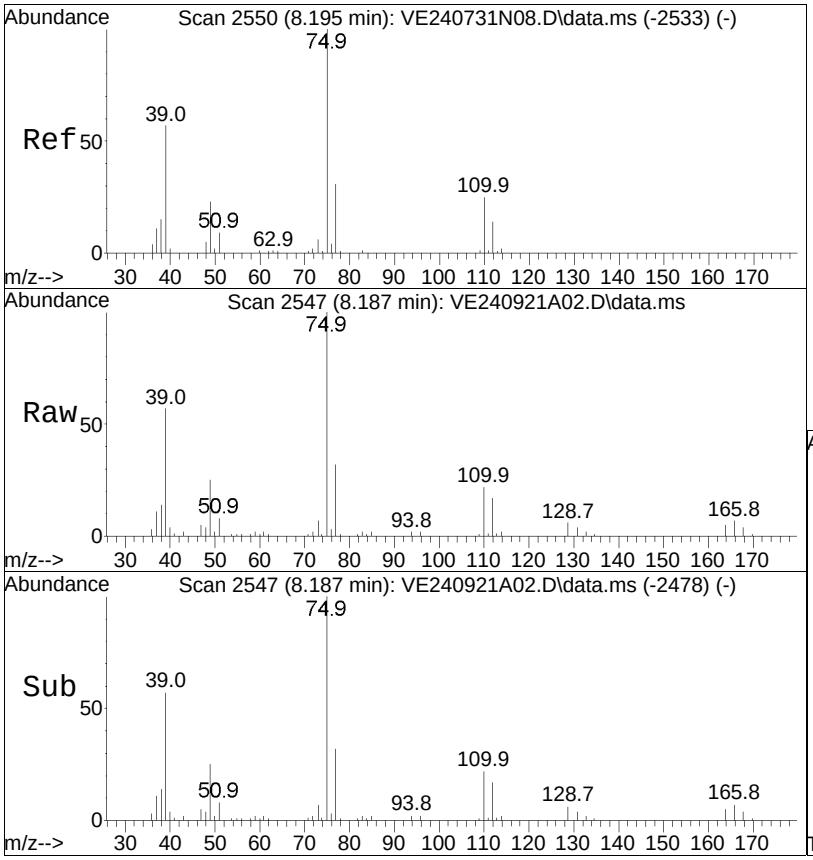



#67
Tetrachloroethene
Concen: 12.19 ug/L
RT: 8.150 min Scan# 2534
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:166 Resp: 70455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 49.8 | 25.8 | 65.8 |
| 94 | 38.9 | 24.3 | 64.3 |

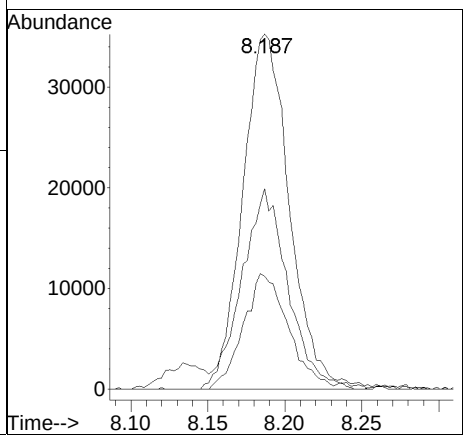


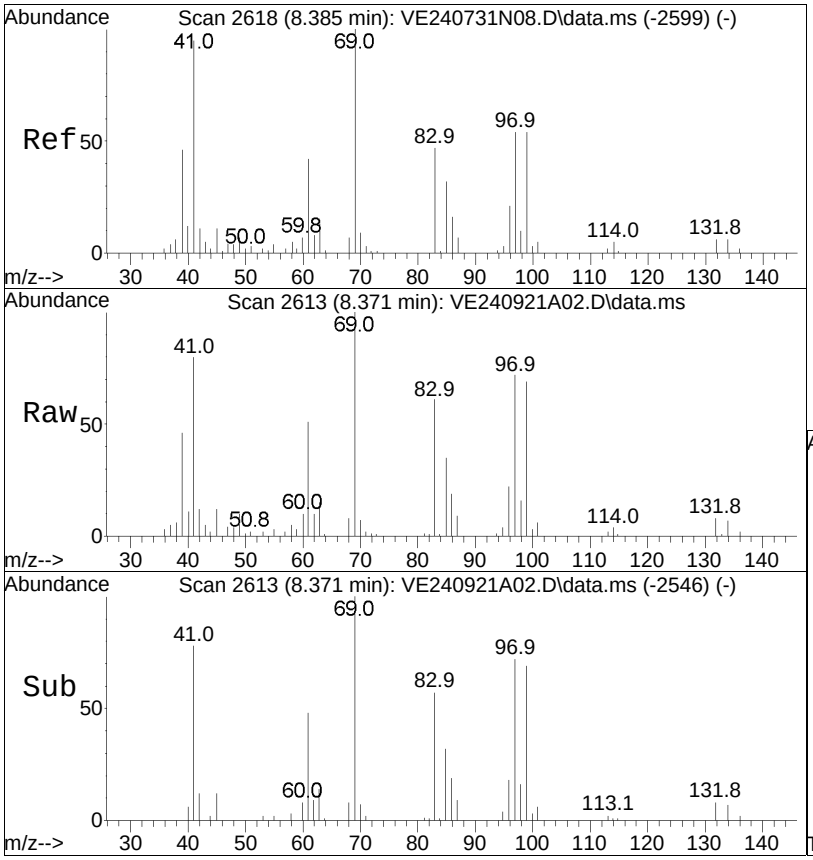



#69
trans-1,3-Dichloropropene
Concen: 9.74 ug/L
RT: 8.187 min Scan# 2547
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 75 Resp: 74563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 10.2 | 50.2 |
| 39 | 53.7 | 45.7 | 85.7 |

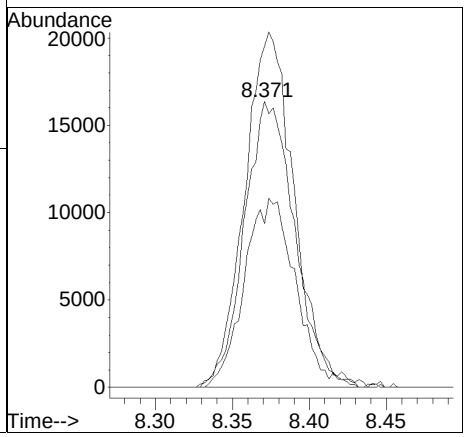


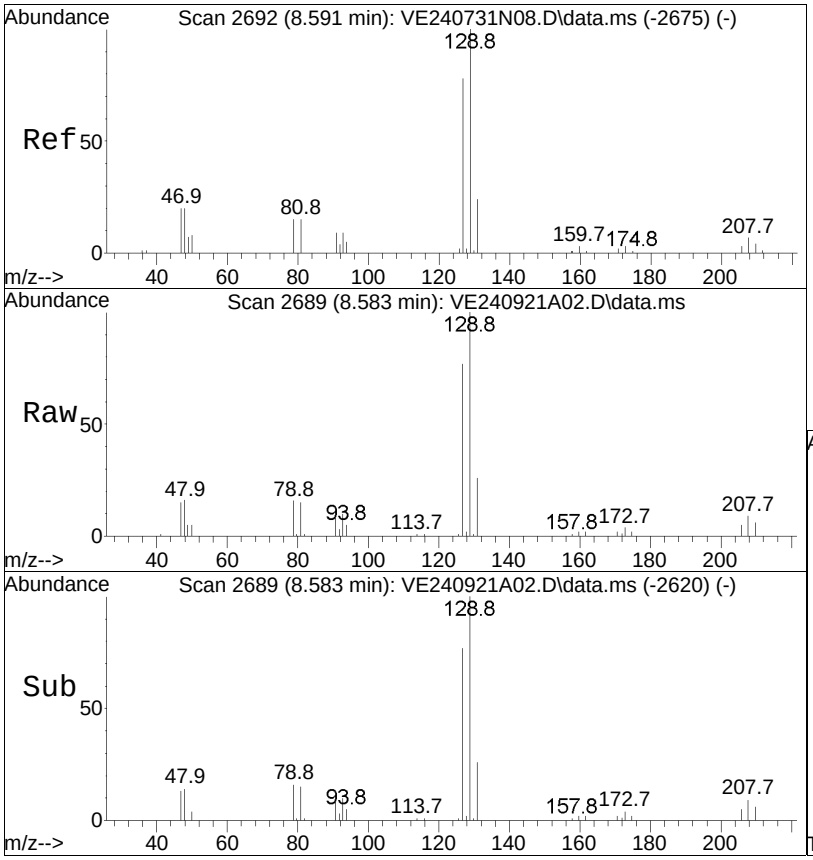



#72
1,1,2-Trichloroethane
Concen: 9.80 ug/L
RT: 8.371 min Scan# 2613
Delta R.T. -0.014 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 83 Resp: 37404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 122.0 | 99.2 | 139.2 |
| 85 | 67.0 | 48.7 | 88.7 |

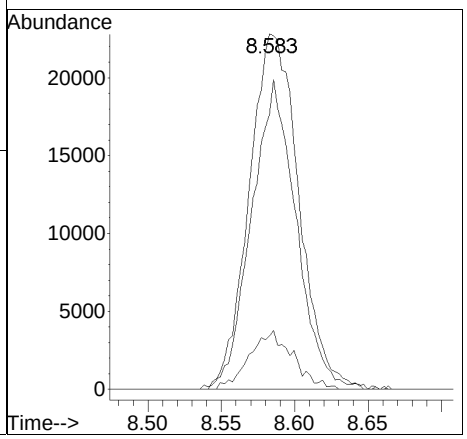


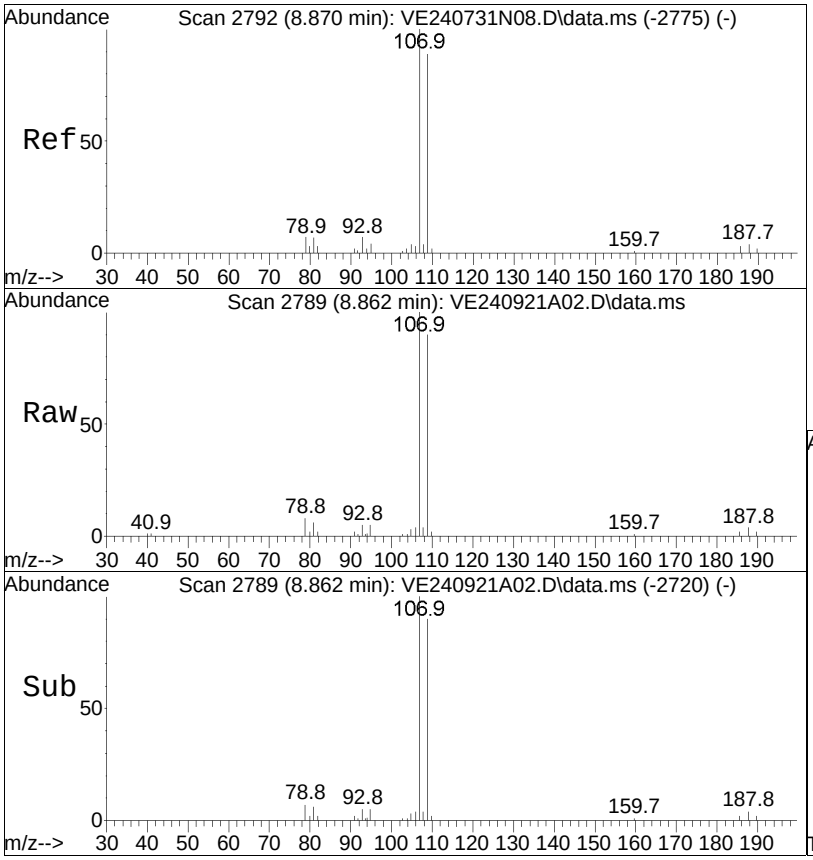



#73
Chlorodibromomethane
Concen: 10.08 ug/L
RT: 8.583 min Scan# 2689
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:129 Resp: 53830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 14.5 | 0.0 | 39.5 |
| 127 | 78.1 | 58.6 | 98.6 |

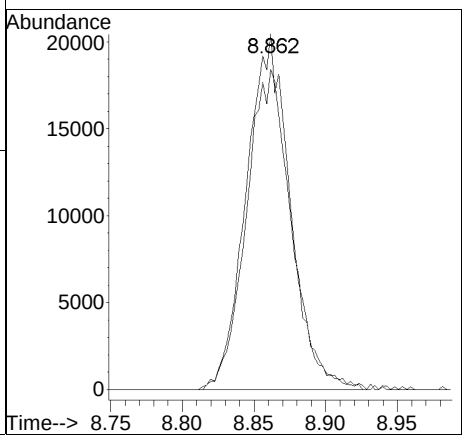


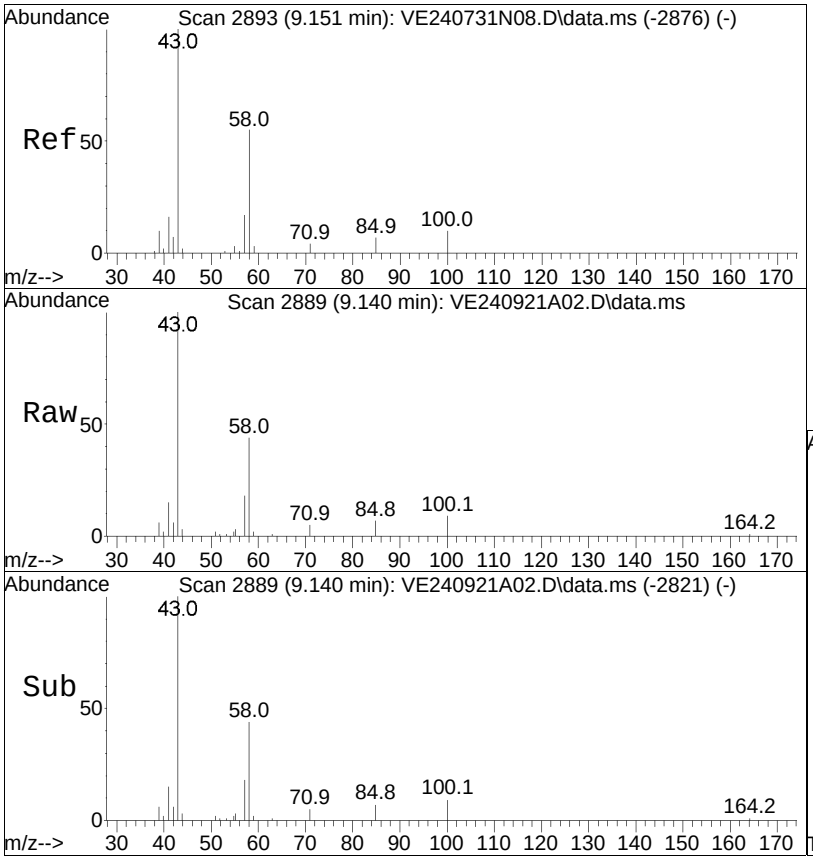



#75
1,2-Dibromoethane
Concen: 9.71 ug/L
RT: 8.862 min Scan# 2789
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:107 Resp: 43821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 91.3 | 66.3 | 99.5 |

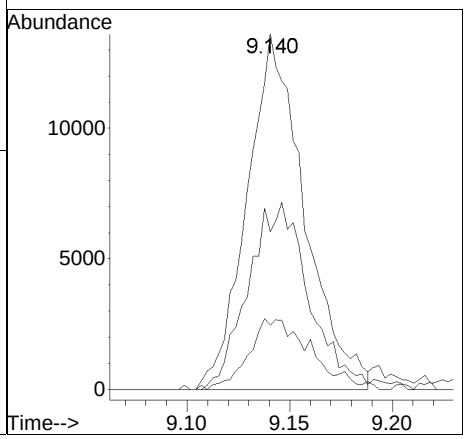


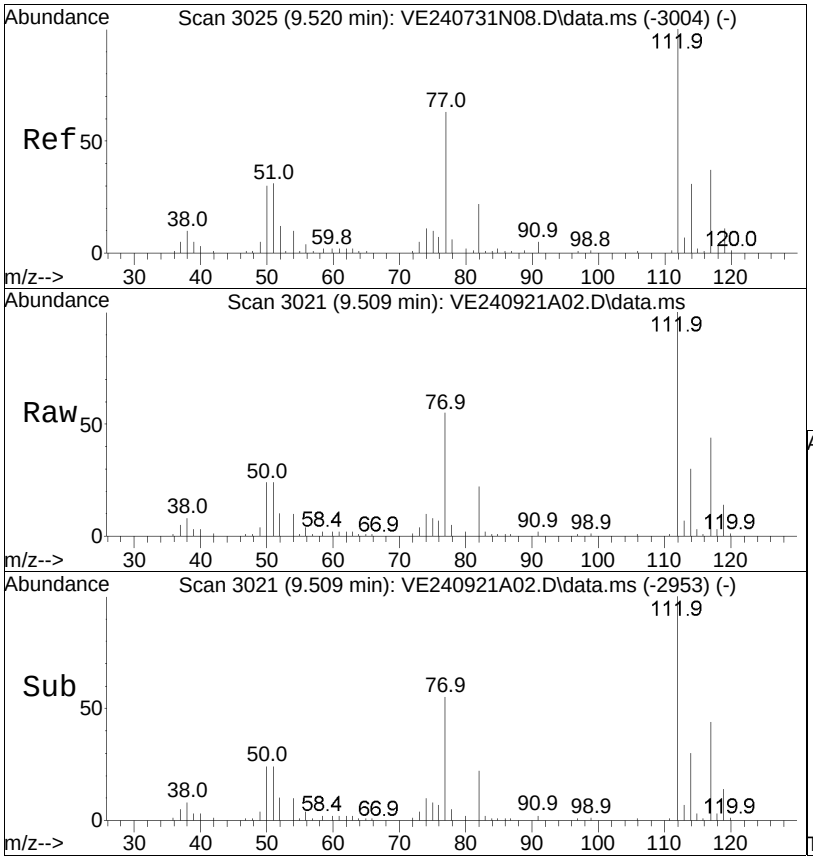



#77
2-Hexanone
Concen: 5.86 ug/L
RT: 9.140 min Scan# 2889
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 43 Resp: 26482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 56.4 | 42.5 | 63.7 |
| 57 | 21.5 | 13.9 | 20.9# |

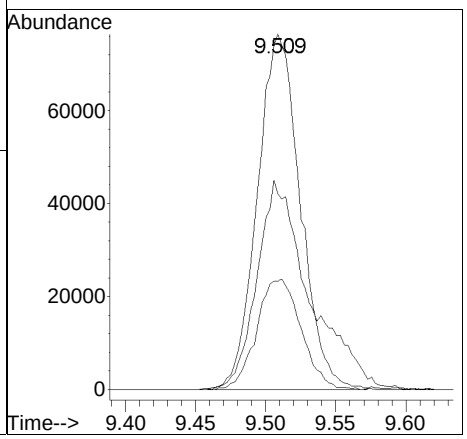


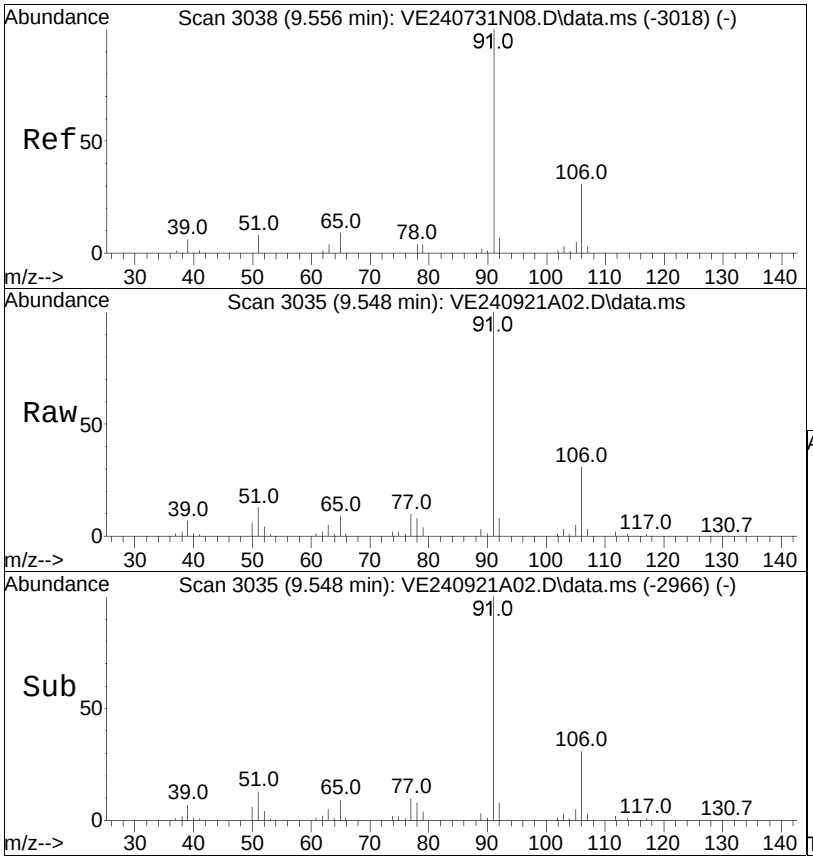



#78
Chlorobenzene
Concen: 11.24 ug/L
RT: 9.509 min Scan# 3021
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:112 Resp: 162947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 72.4 | 46.9 | 70.3# |
| 114 | 32.1 | 23.8 | 35.6 |

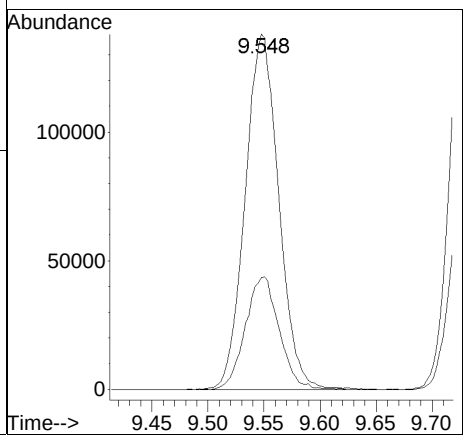


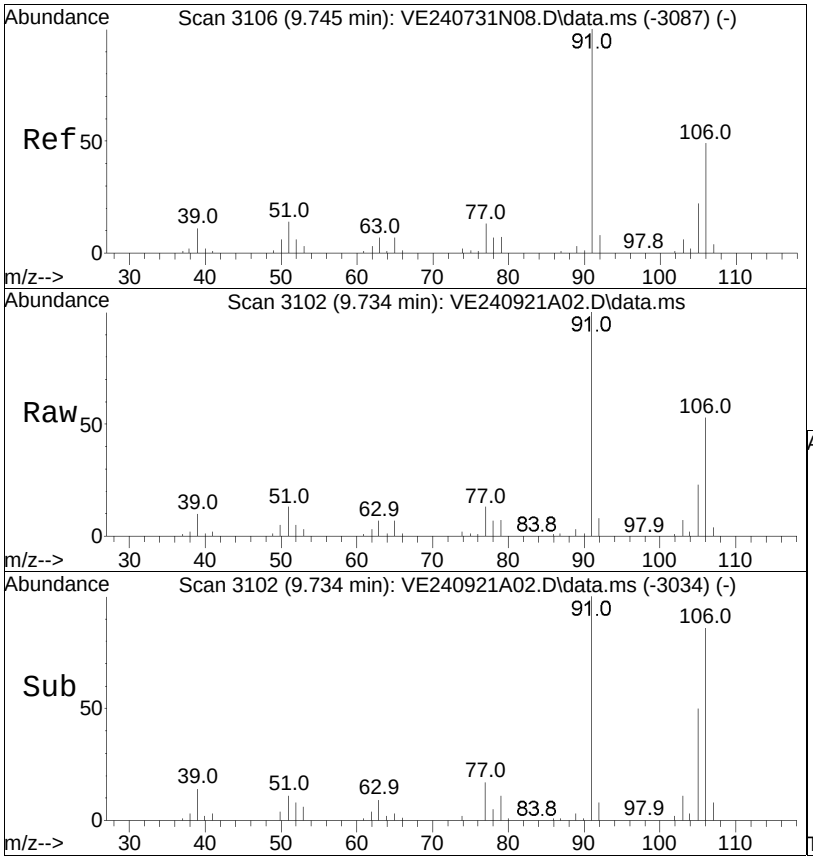



#79
Ethylbenzene
Concen: 10.92 ug/L
RT: 9.548 min Scan# 3035
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 91 Resp: 287902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.8 | 25.3 | 37.9 |

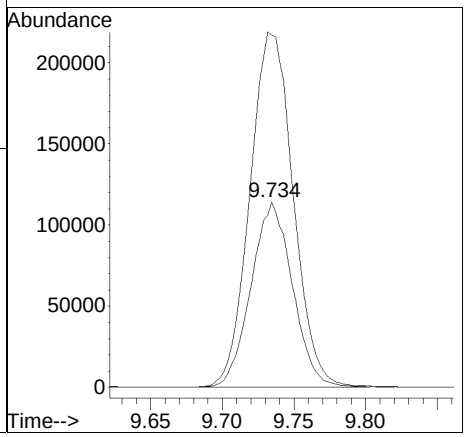


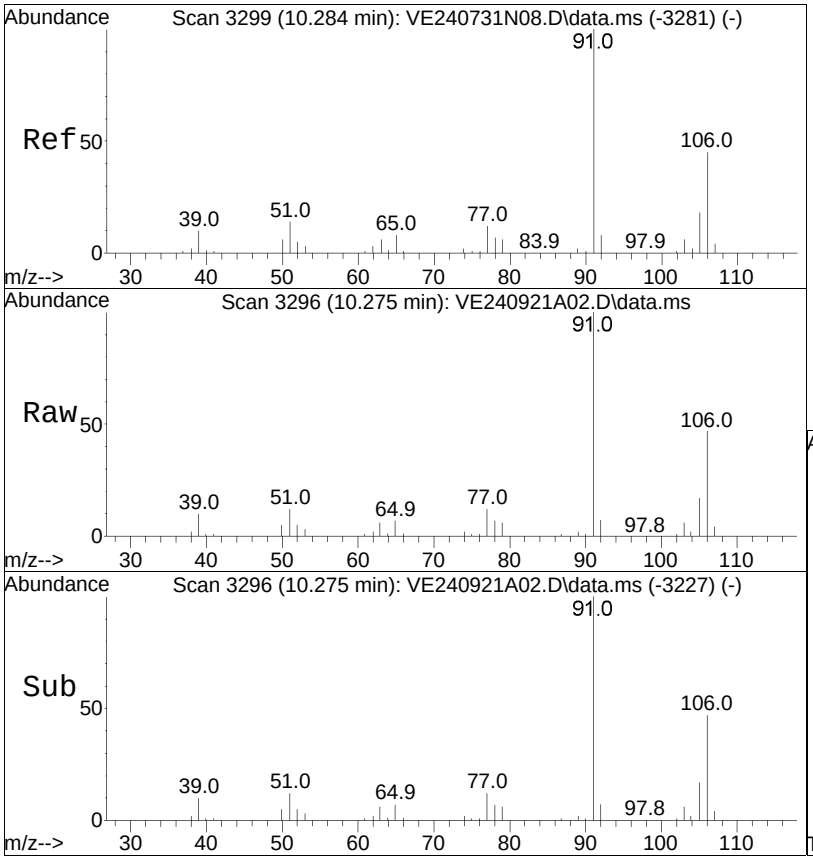



#81
p/m Xylene
Concen: 22.85 ug/L
RT: 9.734 min Scan# 3102
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:106 Resp: 229635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.2 | 163.3 | 244.9 |

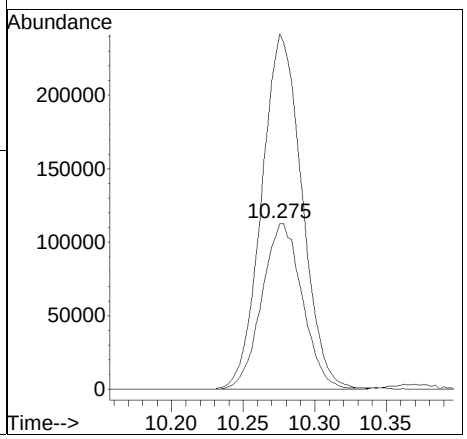


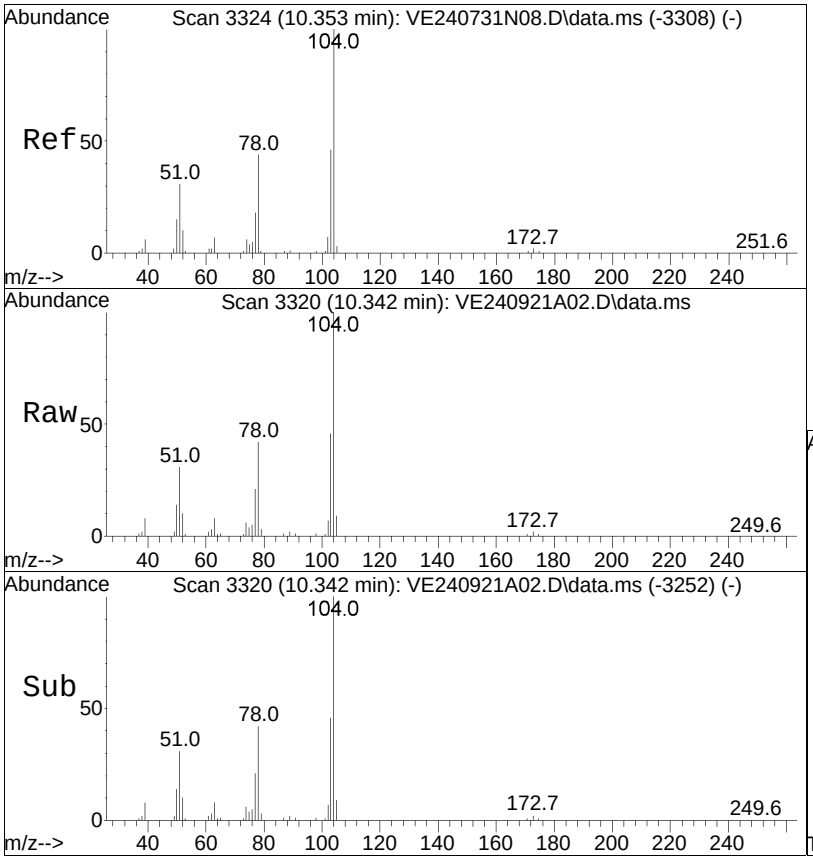



#82
o Xylene
Concen: 22.66 ug/L
RT: 10.275 min Scan# 3296
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:106 Resp: 222619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 212.1 | 181.0 | 271.6 |

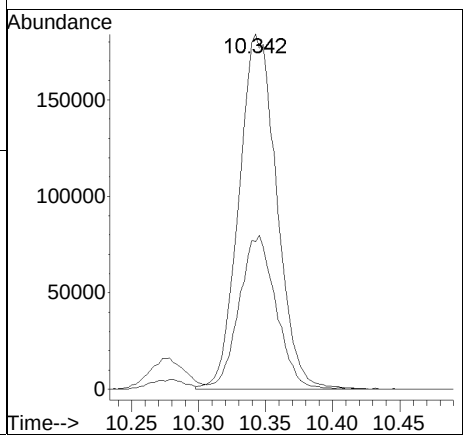


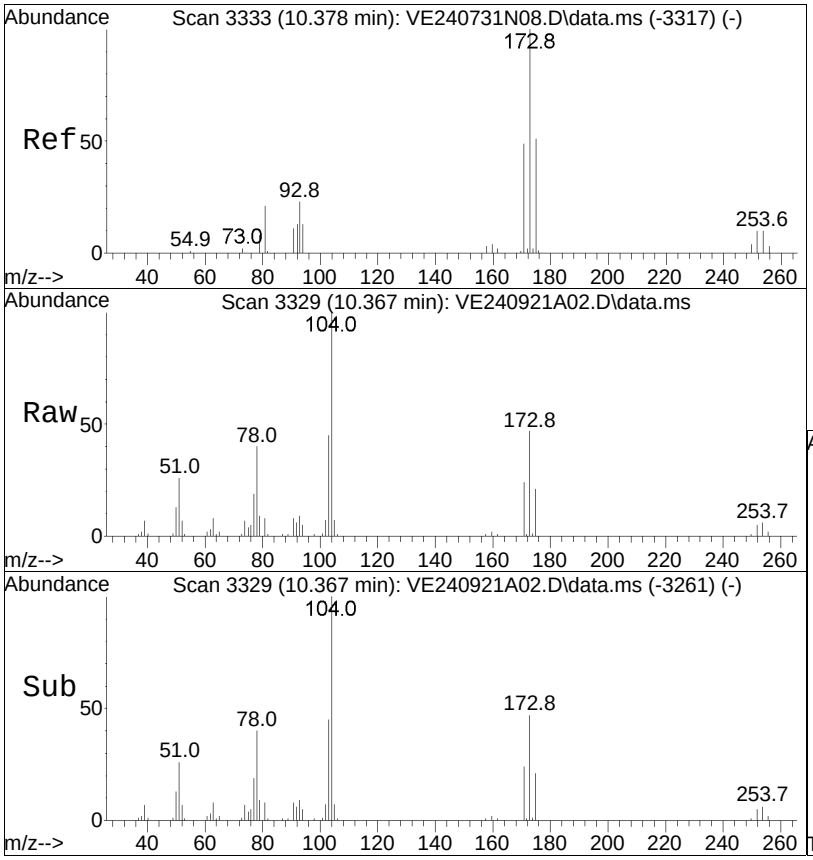



#83
Styrene
Concen: 22.44 ug/L
RT: 10.342 min Scan# 3320
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:104 Resp: 361524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 41.9 | 35.9 | 53.9 |

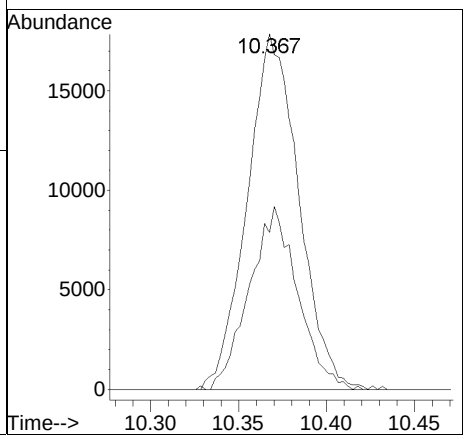


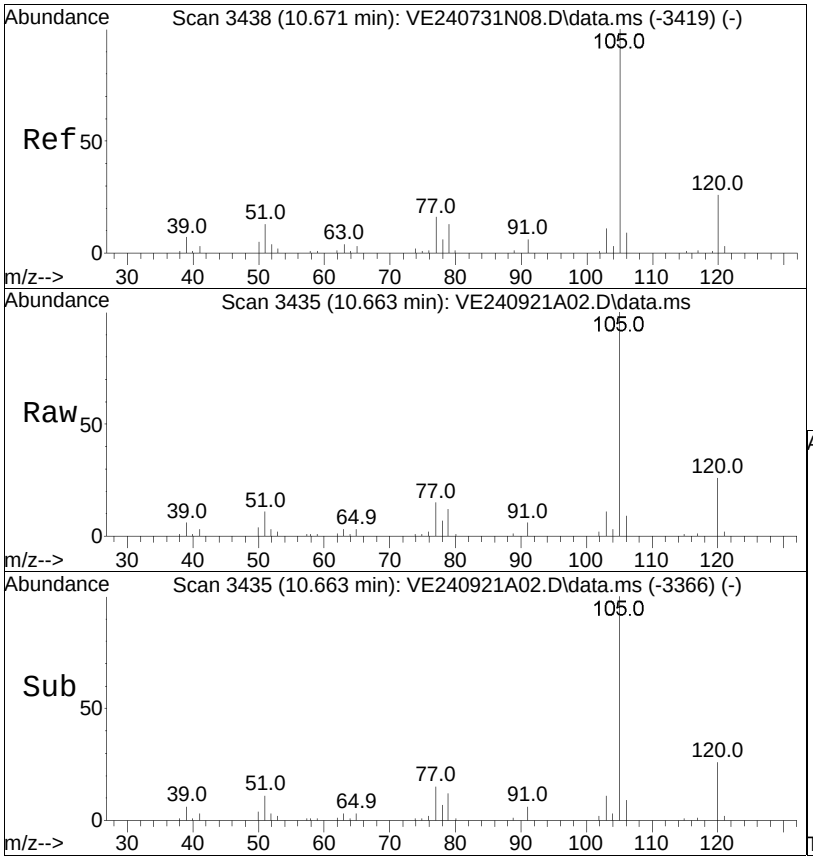



#85
Bromoform
Concen: 9.67 ug/L
RT: 10.367 min Scan# 3329
Delta R.T. -0.011 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:173 Resp: 36349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.2 | 32.9 | 72.9 |

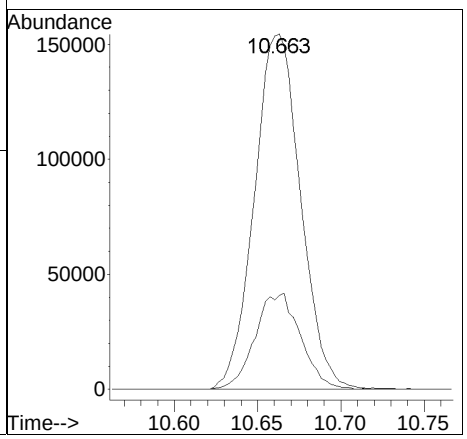


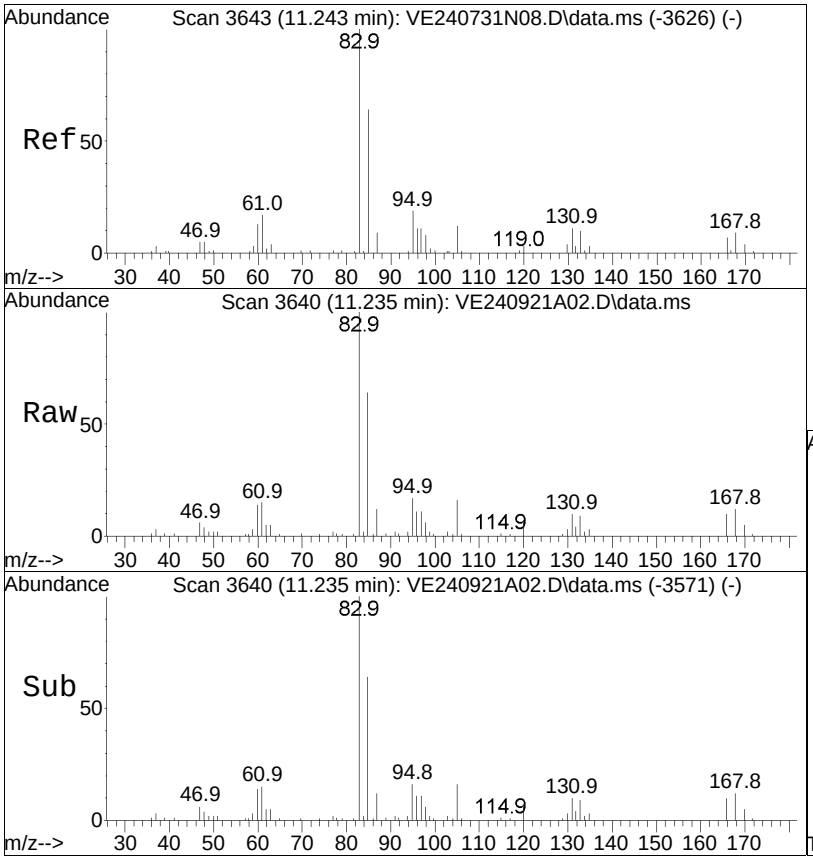



#87
Isopropylbenzene
Concen: 10.78 ug/L
RT: 10.663 min Scan# 3435
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:105 Resp: 298161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.7 | 4.8 | 44.8 |

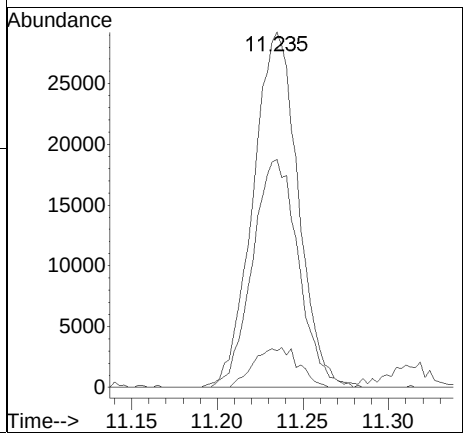


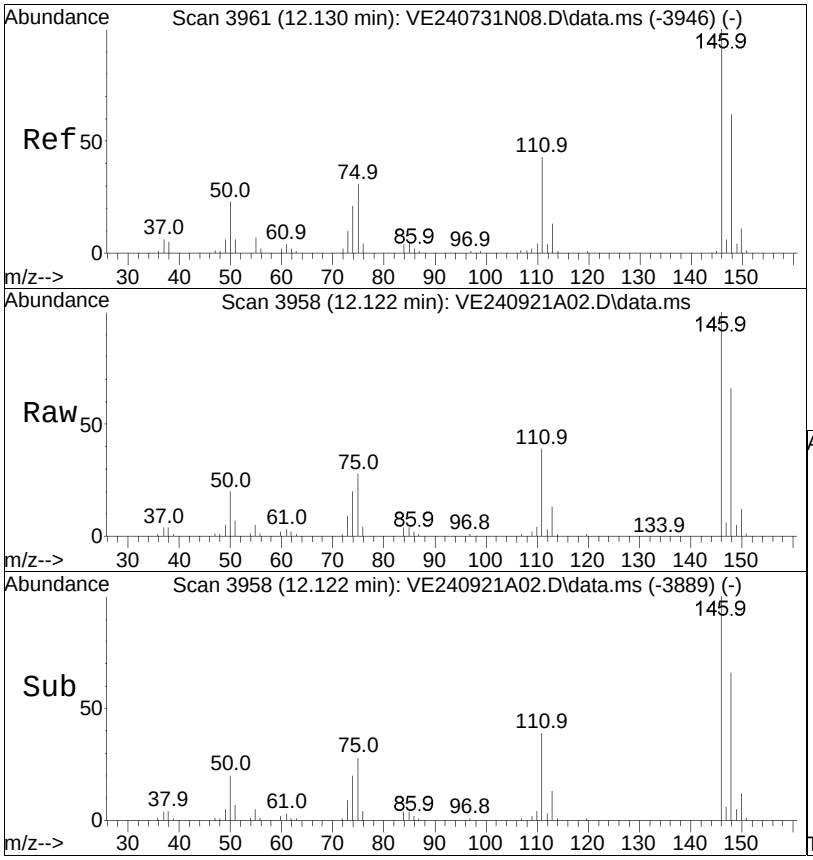



#92
1,1,2,2-Tetrachloroethane
Concen: 9.14 ug/L
RT: 11.235 min Scan# 3640
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion: 83 Resp: 53674

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 11.2 | 0.0 | 28.6 |
| 85 | 65.5 | 47.4 | 87.4 |

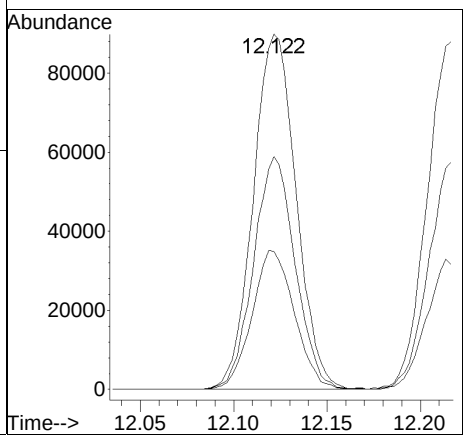


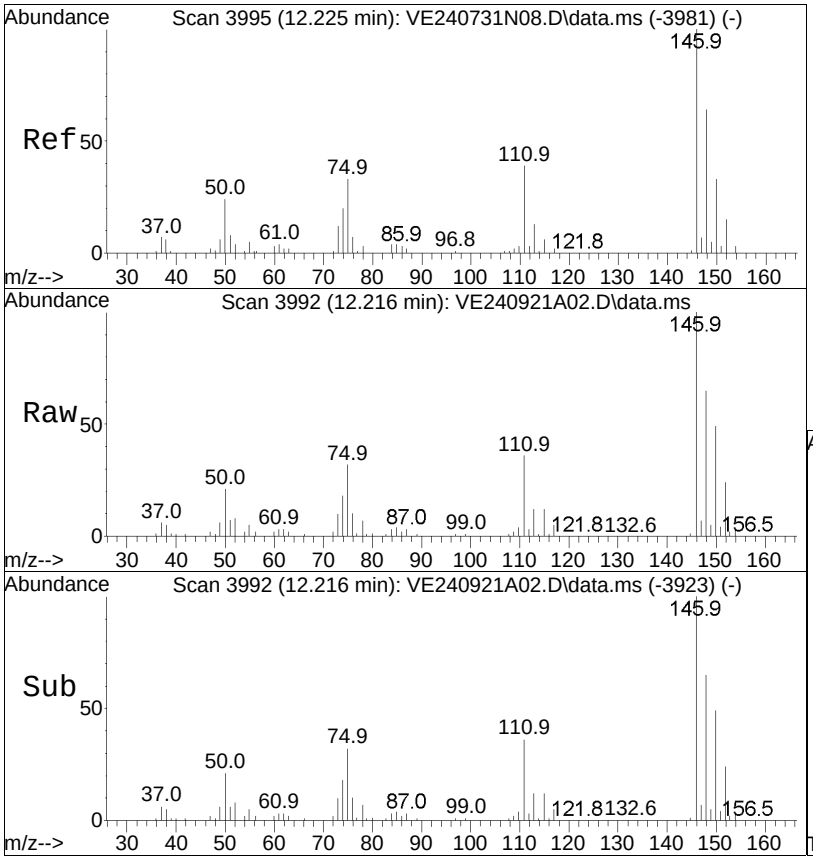



#105
1,3-Dichlorobenzene
Concen: 11.13 ug/L
RT: 12.122 min Scan# 3958
Delta R.T. -0.008 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:146 Resp: 143575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.7 | 27.9 | 57.9 |
| 148 | 63.6 | 42.4 | 88.2 |

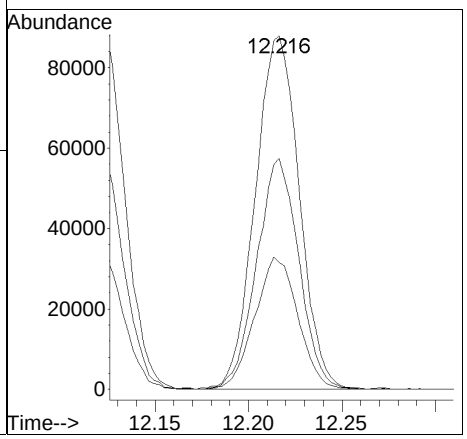


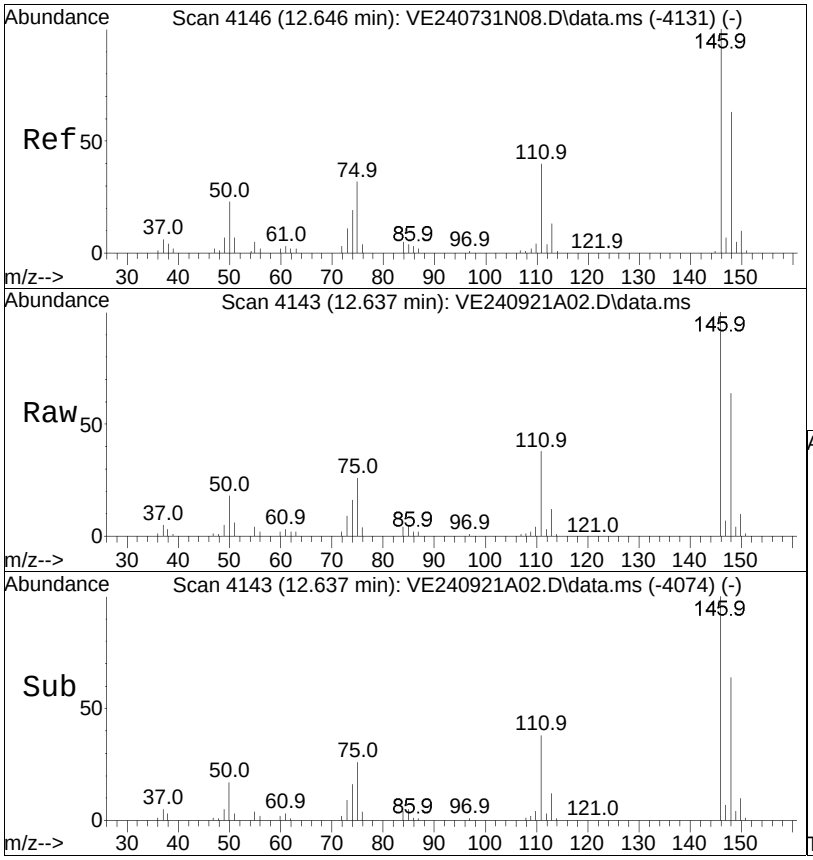



#106
1,4-Dichlorobenzene
Concen: 11.19 ug/L
RT: 12.216 min Scan# 3992
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:146 Resp: 144253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.7 | 31.4 | 47.0 |
| 148 | 62.6 | 49.8 | 74.8 |

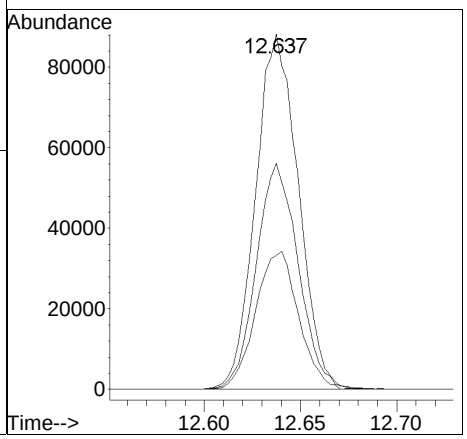


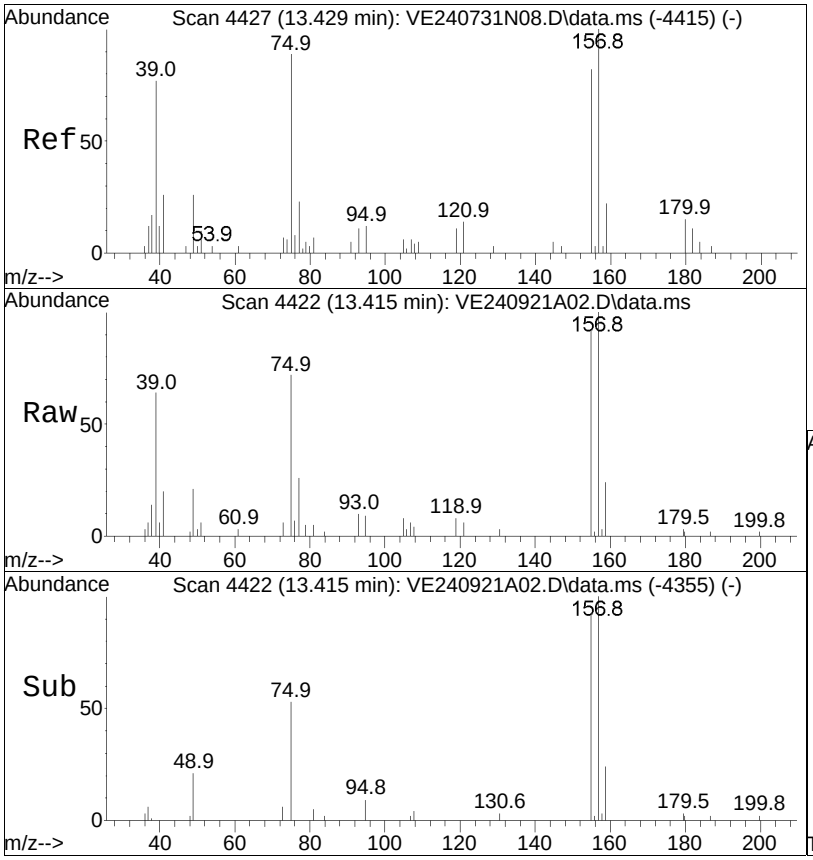



#109
1,2-Dichlorobenzene
Concen: 10.99 ug/L
RT: 12.637 min Scan# 4143
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:146 Resp: 136389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.1 | 26.4 | 54.8 |
| 148 | 62.5 | 41.7 | 86.7 |

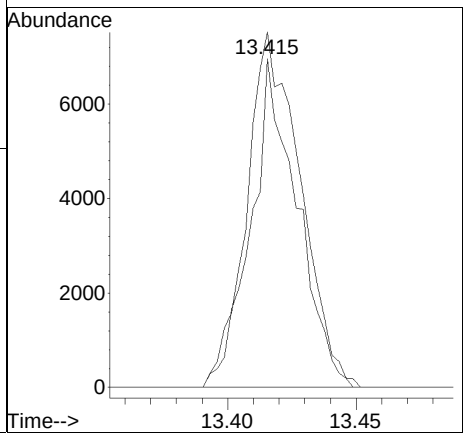


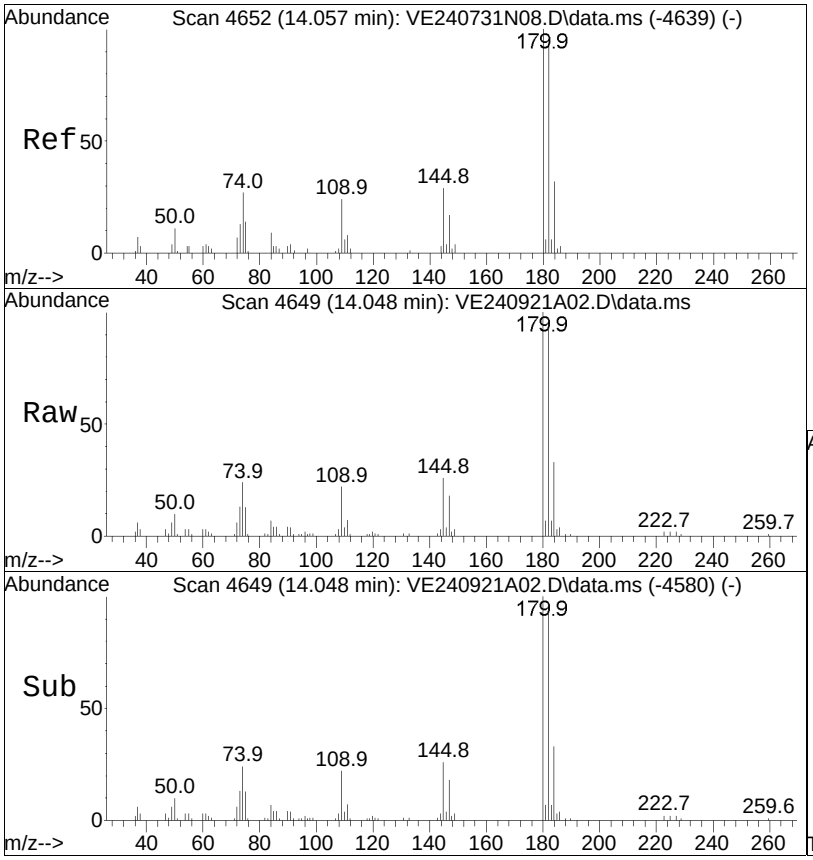



#111
1,2-Dibromo-3-chloropropane
Concen: 7.96 ug/L
RT: 13.415 min Scan# 4422
Delta R.T. -0.014 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:155 Resp: 8726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 125.3 | 95.1 | 142.7 |

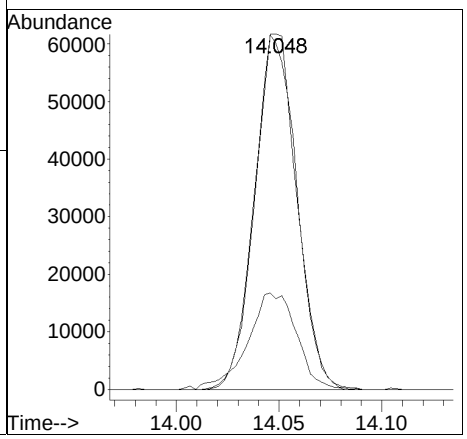


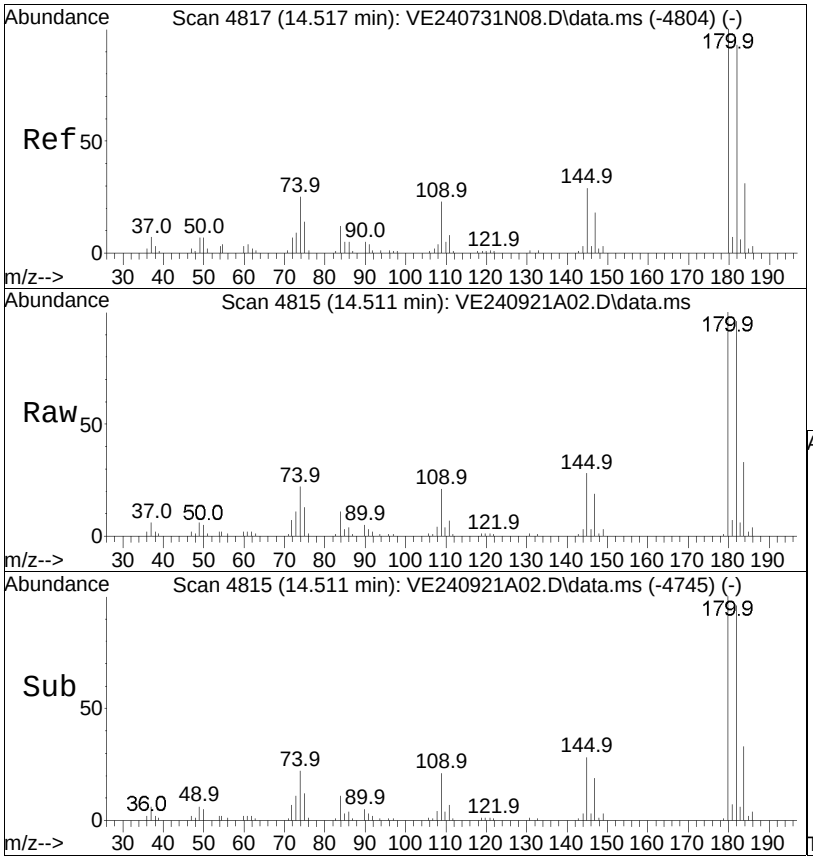



#114
1,2,4-Trichlorobenzene
Concen: 10.04 ug/L
RT: 14.048 min Scan# 4649
Delta R.T. -0.009 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:180 Resp: 89340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.9 | 75.4 | 113.2 |
| 145 | 31.1 | 26.0 | 39.0 |

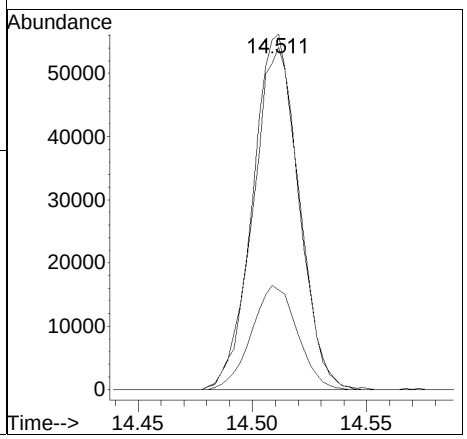





#116
1,2,3-Trichlorobenzene
Concen: 9.65 ug/L
RT: 14.511 min Scan# 4815
Delta R.T. -0.006 min
Lab File: VE240921A02.D
Acq: 21 Sep 2024 7:26 am

Tgt Ion:180 Resp: 78888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.9 | 71.6 | 107.4 |
| 145 | 29.0 | 25.1 | 37.7 |



Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A02.D
Acq On : 22 Sep 2024 6:10 pm
Operator : VOA105:PID
Sample : WG1974932-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 18:41:00 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.684 | 96 | 619901 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 644553 | | | Recovery = 96.18% | | | |
| 59) Chlorobenzene-d5 | 9.177 | 117 | 486000 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 502331 | | | Recovery = 96.75% | | | |
| 79) 1,4-Dichlorobenzene-d4 | 11.949 | 152 | 291553 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 298302 | | | Recovery = 97.74% | | | |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 4.902 | 113 | 171179 | 9.881 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.81% | | | |
| 43) 1,2-Dichloroethane-d4 | 5.411 | 65 | 178889 | 9.988 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.88% | | | |
| 60) Toluene-d8 | 7.347 | 98 | 601774 | 10.252 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.52% | | | |
| 83) 4-Bromofluorobenzene | 10.705 | 95 | 222912 | 11.019 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 110.19% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.508 | 85 | 193330 | 10.654 | ug/L | 97 |
| 3) Chloromethane | 1.674 | 50 | 139995 | 7.992 | ug/L | 97 |
| 4) Vinyl chloride | 1.743 | 62 | 154044 | 10.107 | ug/L | 96 |
| 5) Bromomethane | 2.026 | 94 | 27487 | 3.705 | ug/L | 98 |
| 6) Chloroethane | 2.114 | 64 | 82713 | 7.729 | ug/L | 92 |
| 7) Trichlorofluoromethane | 2.251 | 101 | 219003 | 9.548 | ug/L | 98 |
| 10) 1,1-Dichloroethene | 2.711 | 96 | 111686 | 9.786 | ug/L | 97 |
| 11) Carbon disulfide | 2.740 | 76 | 357832 | 10.186 | ug/L | 99 |
| 12) Freon-113 | 2.740 | 101 | 120544 | 9.605 | ug/L # | 74 |
| 15) Methylene chloride | 3.249 | 84 | 145864 | 10.766 | ug/L | 78 |
| 17) Acetone | 3.317 | 43 | 26631 | 9.089 | ug/L | 99 |
| 18) trans-1,2-Dichloroethene | 3.396 | 96 | 151144 | 11.204 | ug/L | 97 |
| 19) Methyl acetate | 3.415 | 43 | 61769 | 9.612 | ug/L # | 79 |
| 20) Methyl tert-butyl ether | 3.484 | 73 | 321659 | 10.828 | ug/L # | 88 |
| 23) 1,1-Dichloroethane | 3.963 | 63 | 264031 | 10.745 | ug/L | 98 |
| 28) cis-1,2-Dichloroethene | 4.462 | 96 | 166547 | 10.899 | ug/L | 94 |
| 30) Bromochloromethane | 4.657 | 128 | 79127 | 10.729 | ug/L | 91 |
| 31) Cyclohexane | 4.638 | 56 | 271041 | 11.434 | ug/L | 81 |
| 32) Chloroform | 4.726 | 83 | 260587 | 10.144 | ug/L | 96 |
| 34) Carbon tetrachloride | 4.843 | 117 | 224902 | 10.198 | ug/L | 99 |

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A02.D
Acq On : 22 Sep 2024 6:10 pm
Operator : VOA105:PID
Sample : WG1974932-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 18:41:00 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2024\240922A\V05240922A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 37) | 1,1,1-Trichloroethane | 4.902 | 97 | 249497 | 10.418 | ug/L | | 99 |
| 39) | 2-Butanone | 5.029 | 43 | 41411 | 9.297 | ug/L | # | 64 |
| 41) | Benzene | 5.264 | 78 | 558156 | 10.687 | ug/L | | 95 |
| 44) | 1,2-Dichloroethane | 5.479 | 62 | 170988 | 9.917 | ug/L | | 99 |
| 47) | Methyl cyclohexane | 5.831 | 83 | 258516 | 10.794 | ug/L | | 86 |
| 48) | Trichloroethene | 5.860 | 95 | 154318 | 9.928 | ug/L | | 89 |
| 51) | 1,2-Dichloropropane | 6.389 | 63 | 140017 | 10.736 | ug/L | # | 89 |
| 54) | Bromodichloromethane | 6.477 | 83 | 188917 | 9.891 | ug/L | | 99 |
| 58) | cis-1,3-Dichloropropene | 7.152 | 75 | 207930 | 10.349 | ug/L | # | 89 |
| 61) | Toluene | 7.406 | 92 | 360127 | 10.555 | ug/L | | 97 |
| 62) | 4-Methyl-2-pentanone | 7.856 | 58 | 27832 | 9.855 | ug/L | | 75 |
| 63) | Tetrachloroethene | 7.846 | 166 | 188067 | 10.446 | ug/L | | 91 |
| 65) | trans-1,3-Dichloropropene | 7.905 | 75 | 175449 | 10.570 | ug/L | | 87 |
| 68) | 1,1,2-Trichloroethane | 8.081 | 83 | 88517 | 10.486 | ug/L | | 99 |
| 69) | Chlorodibromomethane | 8.286 | 129 | 145308 | 10.096 | ug/L | | 98 |
| 71) | 1,2-Dibromoethane | 8.560 | 107 | 120208 | 10.577 | ug/L | | 100 |
| 72) | 2-Hexanone | 8.854 | 43 | 51435 | 9.134 | ug/L | # | 89 |
| 73) | Chlorobenzene | 9.196 | 112 | 420595 | 10.428 | ug/L | | 87 |
| 74) | Ethylbenzene | 9.236 | 91 | 710145 | 10.423 | ug/L | | 94 |
| 76) | p/m Xylene | 9.422 | 106 | 565707 | 21.501 | ug/L | | 84 |
| 77) | o Xylene | 9.961 | 106 | 537725 | 21.574 | ug/L | | 84 |
| 78) | Styrene | 10.039 | 104 | 875839 | 21.236 | ug/L | # | 85 |
| 80) | Bromoform | 10.068 | 173 | 82602 | 9.563 | ug/L | | 97 |
| 82) | Isopropylbenzene | 10.362 | 105 | 755501 | 11.204 | ug/L | | 95 |
| 87) | 1,1,2,2-Tetrachloroethane | 10.979 | 83 | 121659 | 10.389 | ug/L | | 96 |
| 100) | 1,3-Dichlorobenzene | 11.871 | 146 | 370484 | 10.578 | ug/L | | 96 |
| 101) | 1,4-Dichlorobenzene | 11.969 | 146 | 369802 | 10.272 | ug/L | | 96 |
| 104) | 1,2-Dichlorobenzene | 12.390 | 146 | 332247 | 10.501 | ug/L | | 96 |
| 106) | 1,2-Dibromo-3-chloropr... | 13.183 | 155 | 19744 | 9.684 | ug/L | | 93 |
| 109) | 1,2,4-Trichlorobenzene | 13.810 | 180 | 215676 | 10.216 | ug/L | | 97 |
| 111) | 1,2,3-Trichlorobenzene | 14.271 | 180 | 184517 | 10.279 | ug/L | | 97 |

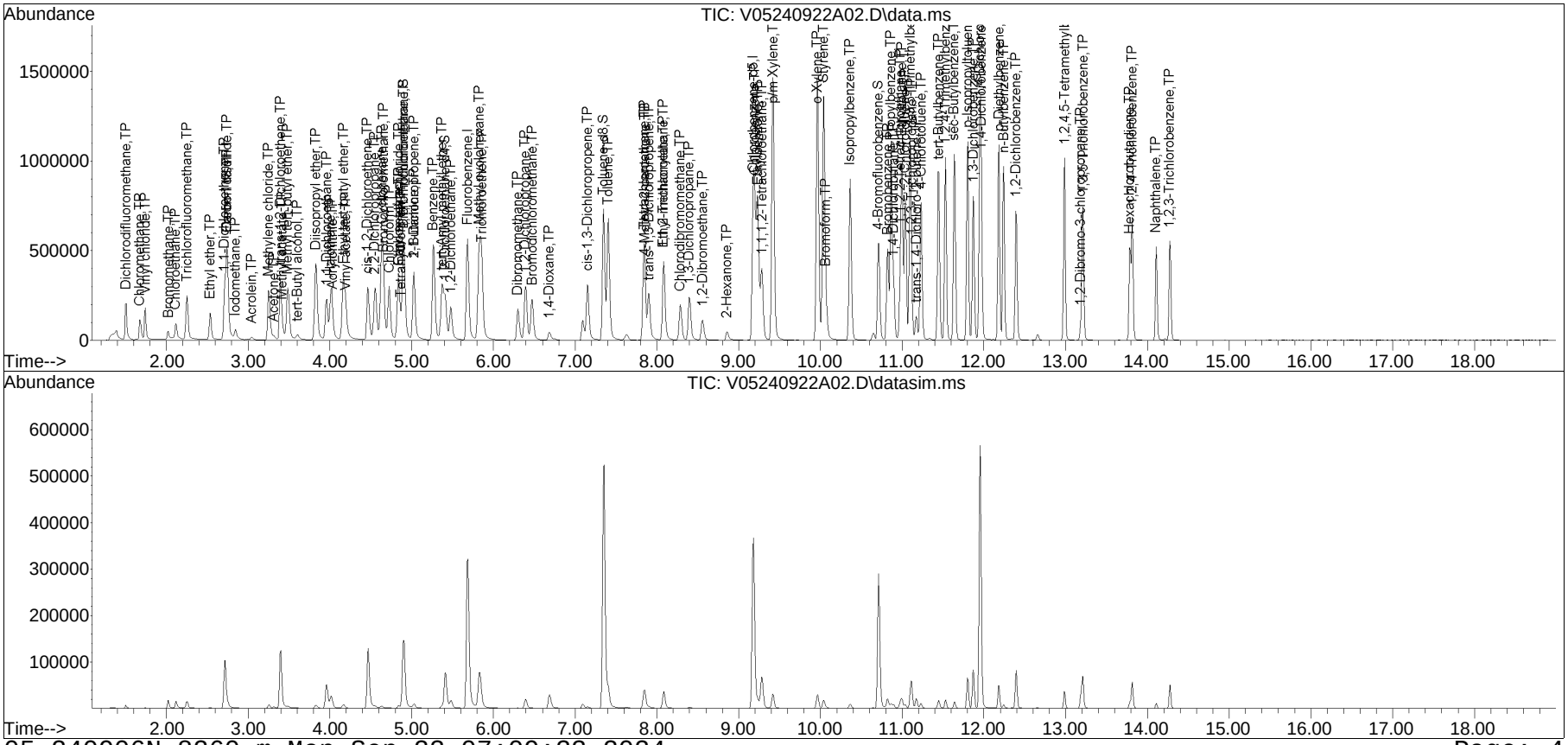
(#) = qualifier out of range (m) = manual integration (+) = signals summed

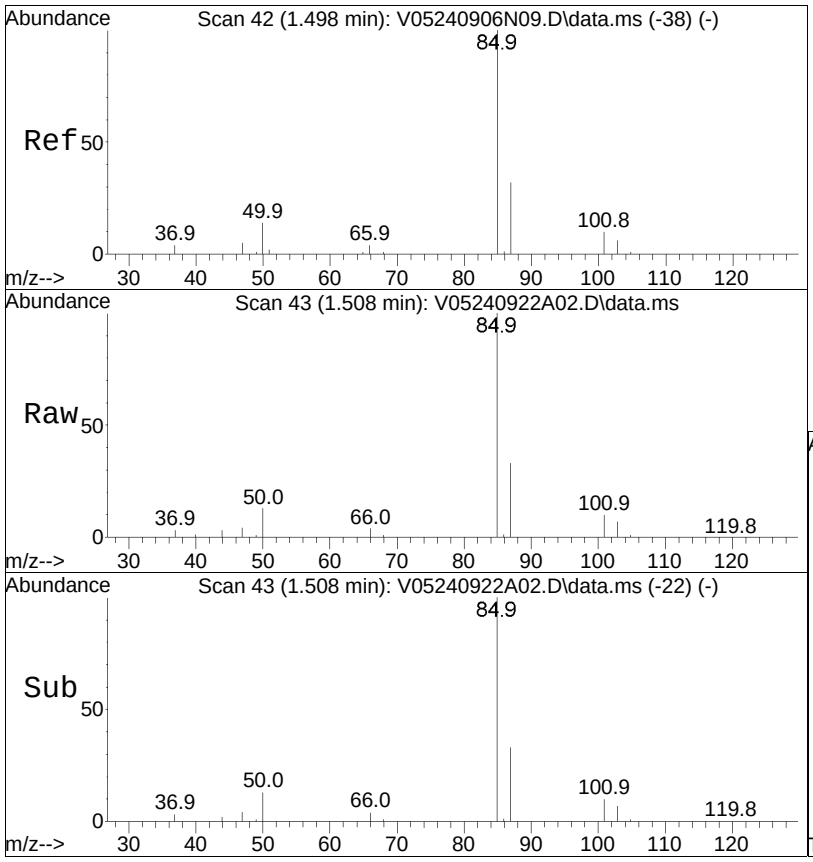
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2024\240922A\
Data File : V05240922A02.D
Acq On : 22 Sep 2024 6:10 pm
Operator : VOA105:PID
Sample : WG1974932-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1974932,ICAL21466 (Sig #1); WG,ICAL21466 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 18:41:00 2024
Quant Method : K:\VOA105\2024\240922A\V105_240906N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 09 11:32:51 2024
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

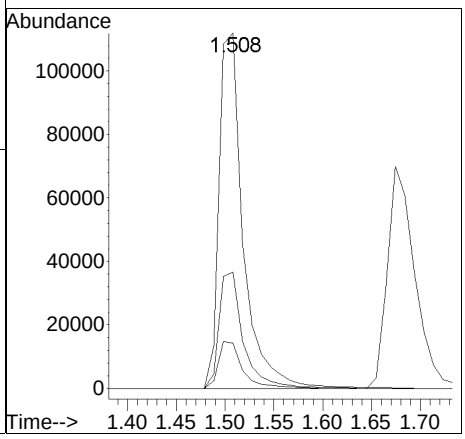


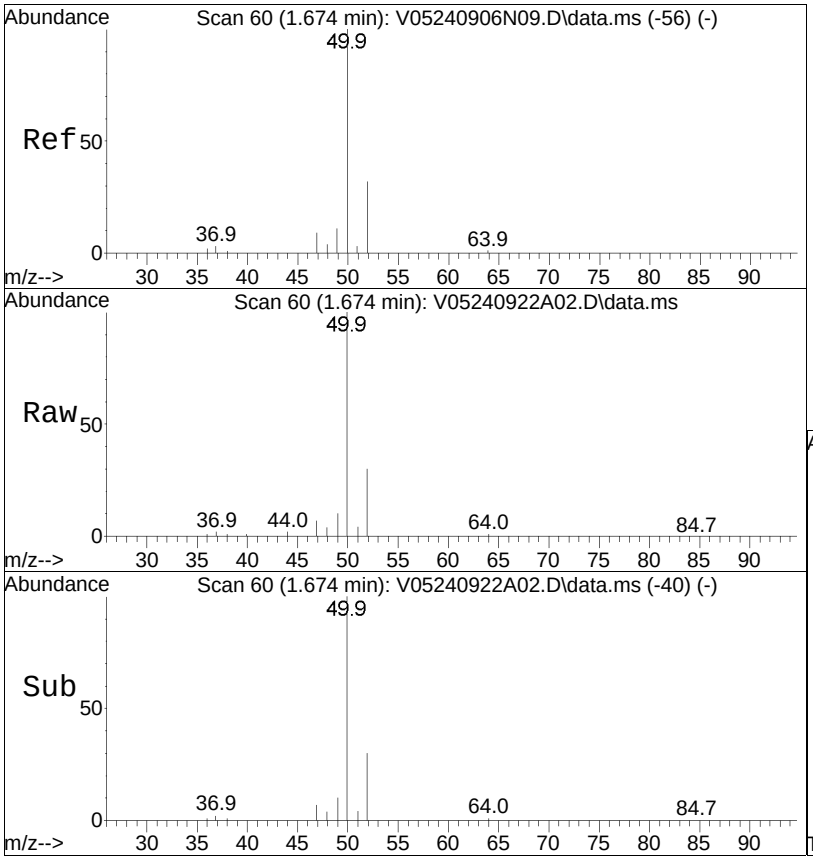



#2
Dichlorodifluoromethane
Concen: 10.65 ug/L
RT: 1.508 min Scan# 43
Delta R.T. 0.010 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 85 Resp: 193330

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.9 | 20.9 | 43.5 |
| 50 | 13.2 | 6.8 | 14.0 |

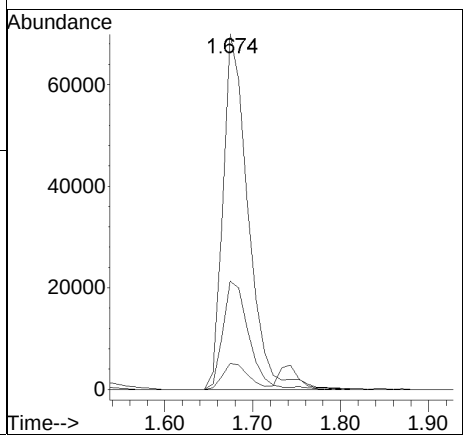


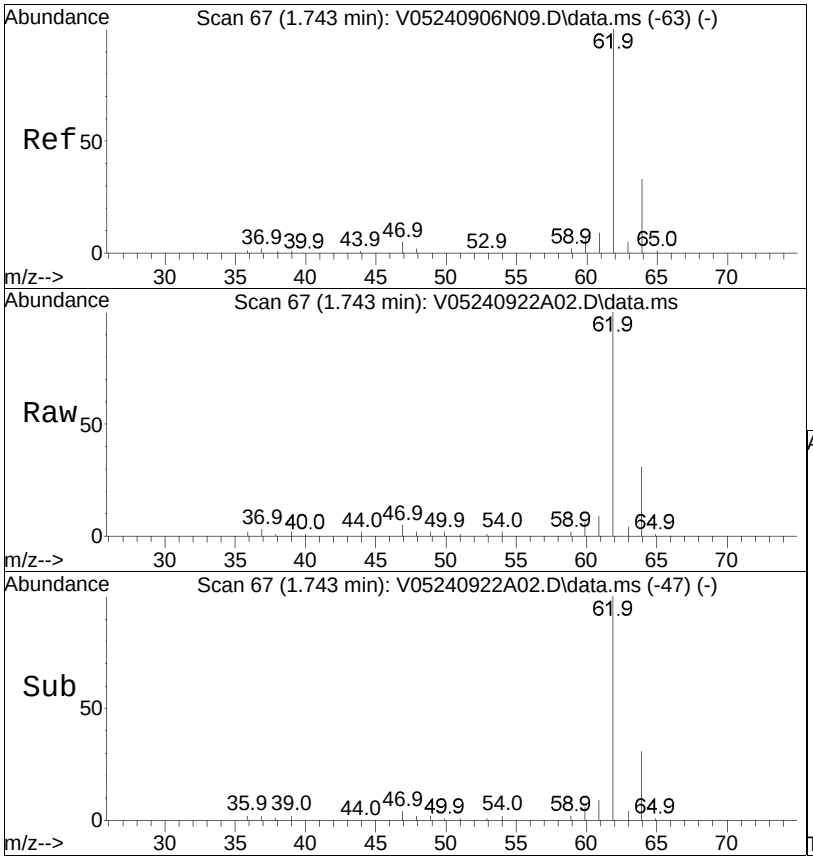



#3
Chloromethane
Concen: 7.99 ug/L
RT: 1.674 min Scan# 60
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 50 Resp: 139995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.3 | 12.6 | 52.6 |
| 47 | 7.4 | 0.0 | 30.1 |

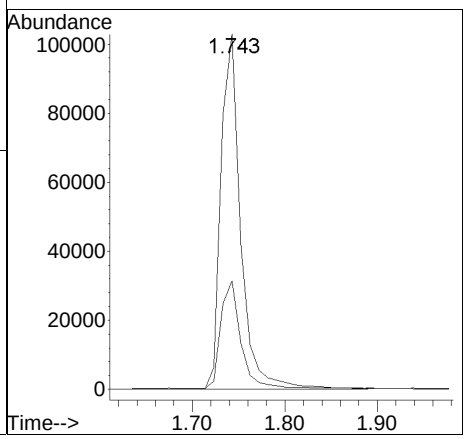


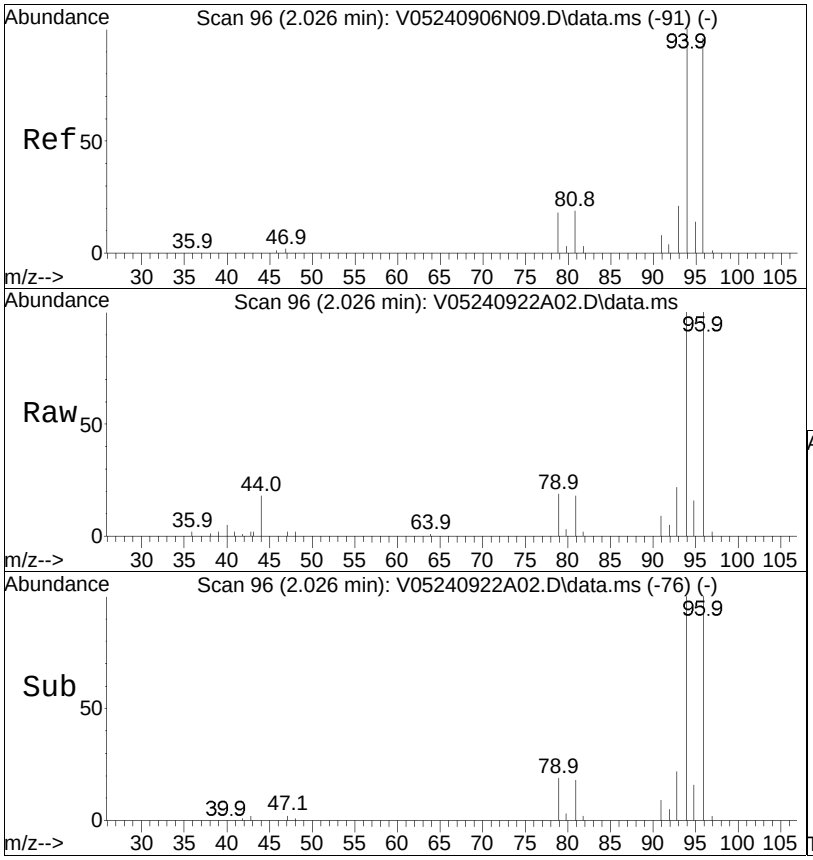



#4
Vinyl chloride
Concen: 10.11 ug/L
RT: 1.743 min Scan# 67
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 62 Resp: 154044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.3 | 13.5 | 53.5 |

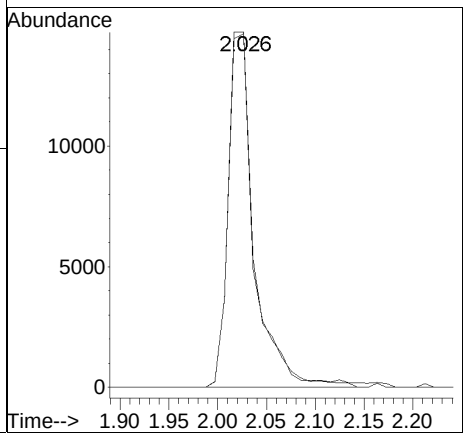


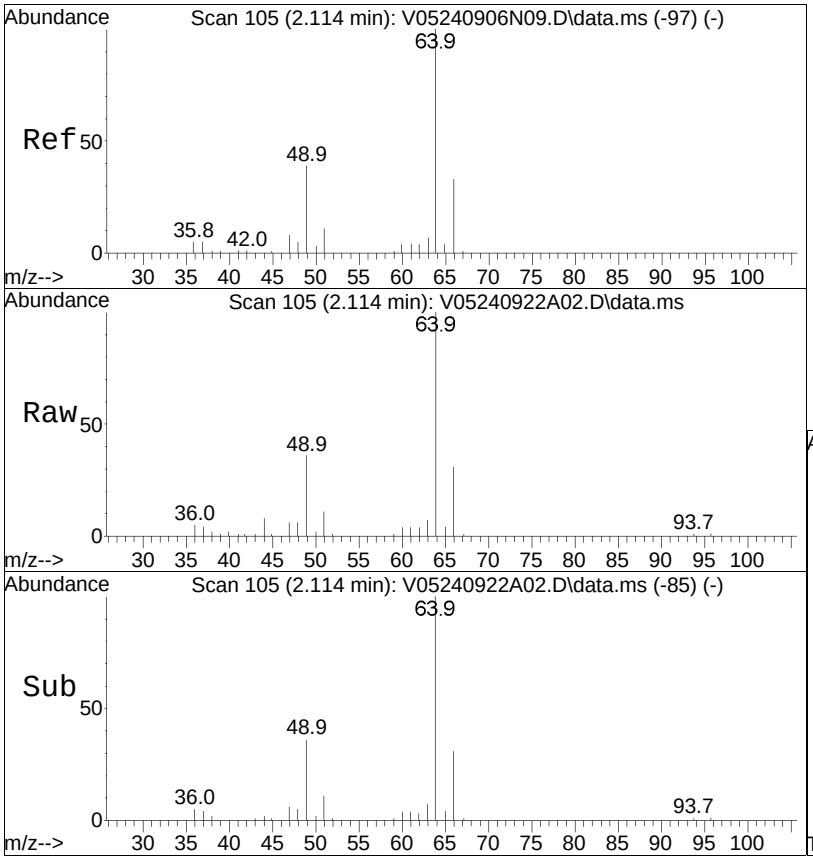



#5
Bromomethane
Concen: 3.70 ug/L
RT: 2.026 min Scan# 96
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 94 Resp: 27487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 97.3 | 75.4 | 115.4 |

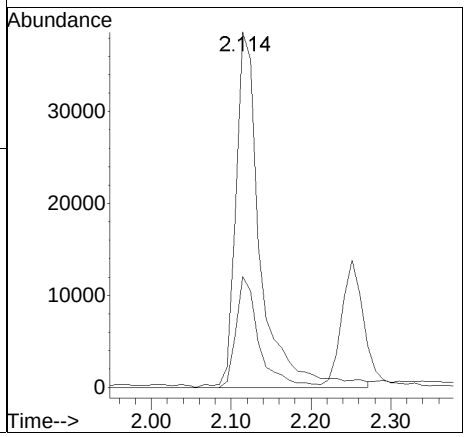


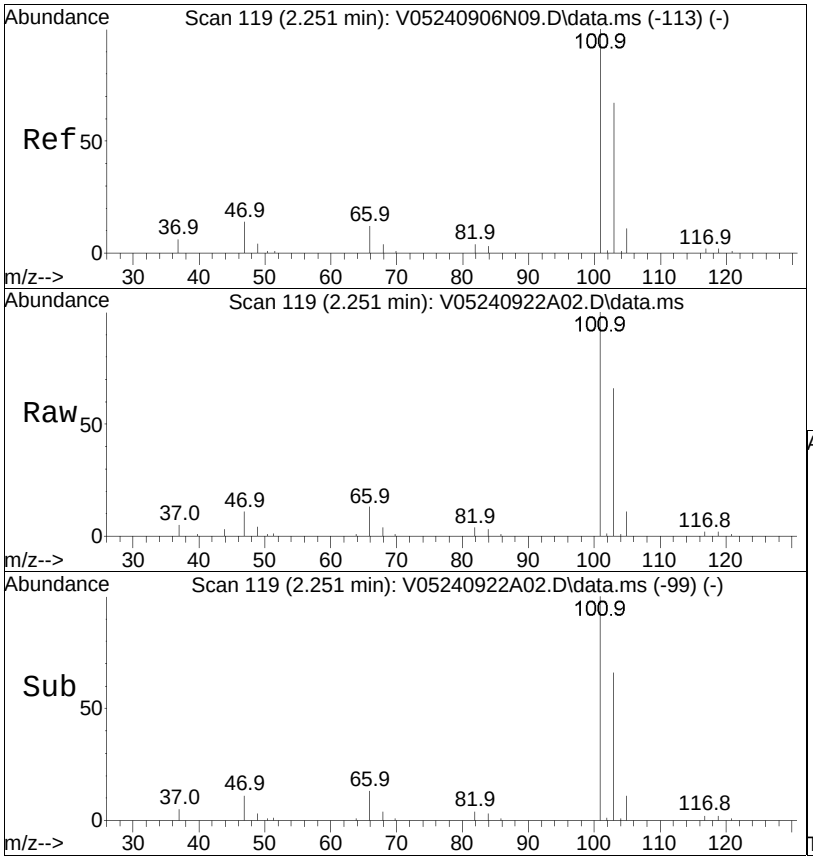



#6
Chloroethane
Concen: 7.73 ug/L
RT: 2.114 min Scan# 105
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 64 Resp: 82713

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 29.2 | 13.8 | 53.8 |

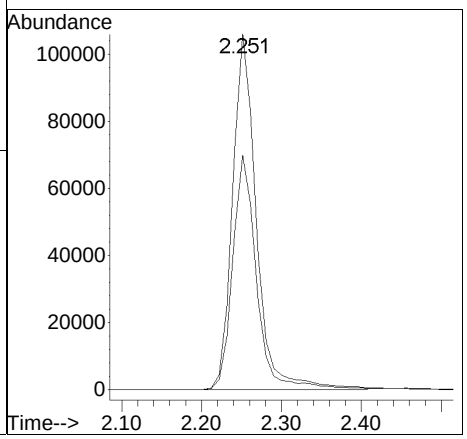


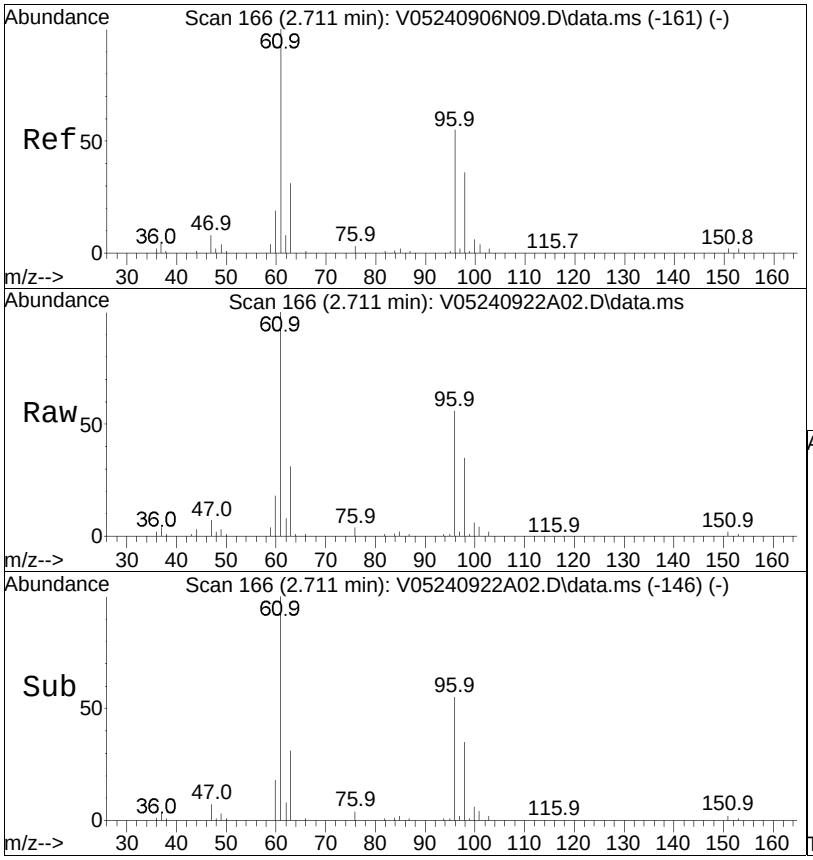



#7
Trichlorofluoromethane
Concen: 9.55 ug/L
RT: 2.251 min Scan# 119
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:101 Resp: 219003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.0 | 51.8 | 77.6 |

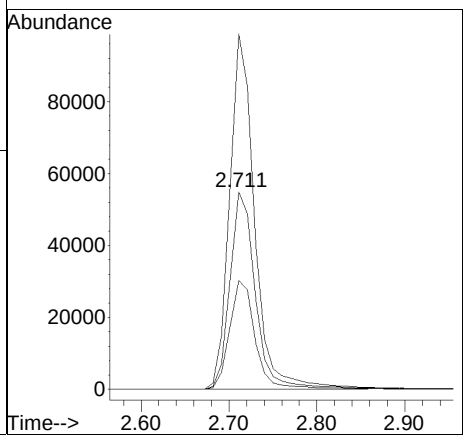


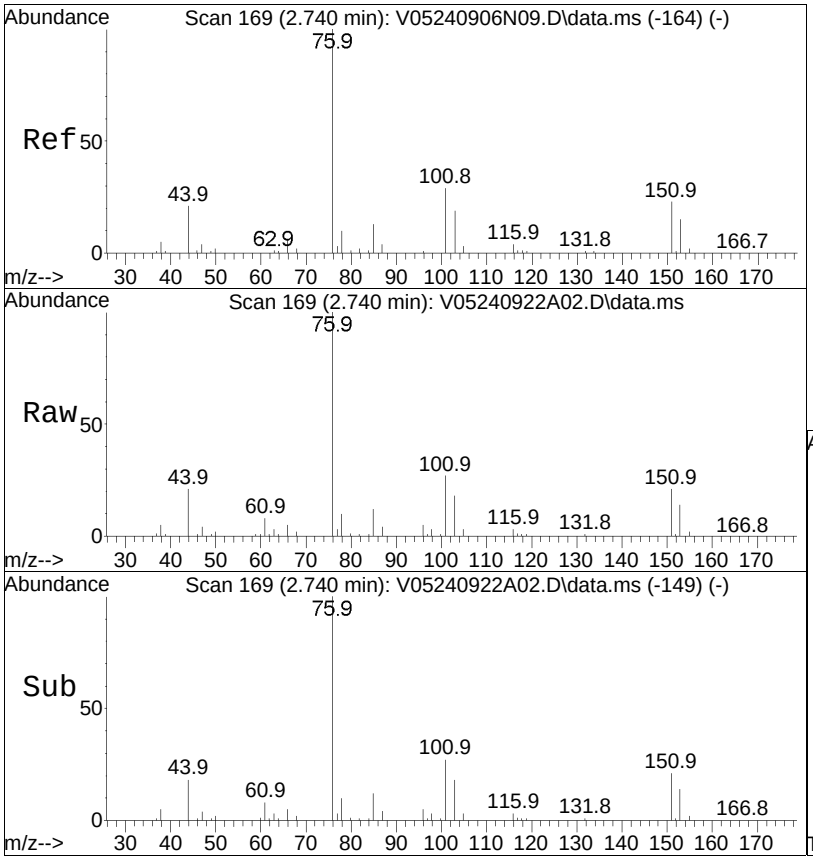



#10
1,1-Dichloroethene
Concen: 9.79 ug/L
RT: 2.711 min Scan# 166
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 96 Resp: 111686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 175.8 | 136.7 | 205.1 |
| 63 | 55.8 | 45.0 | 67.6 |

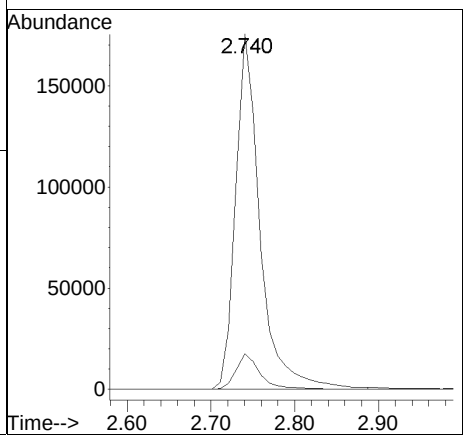


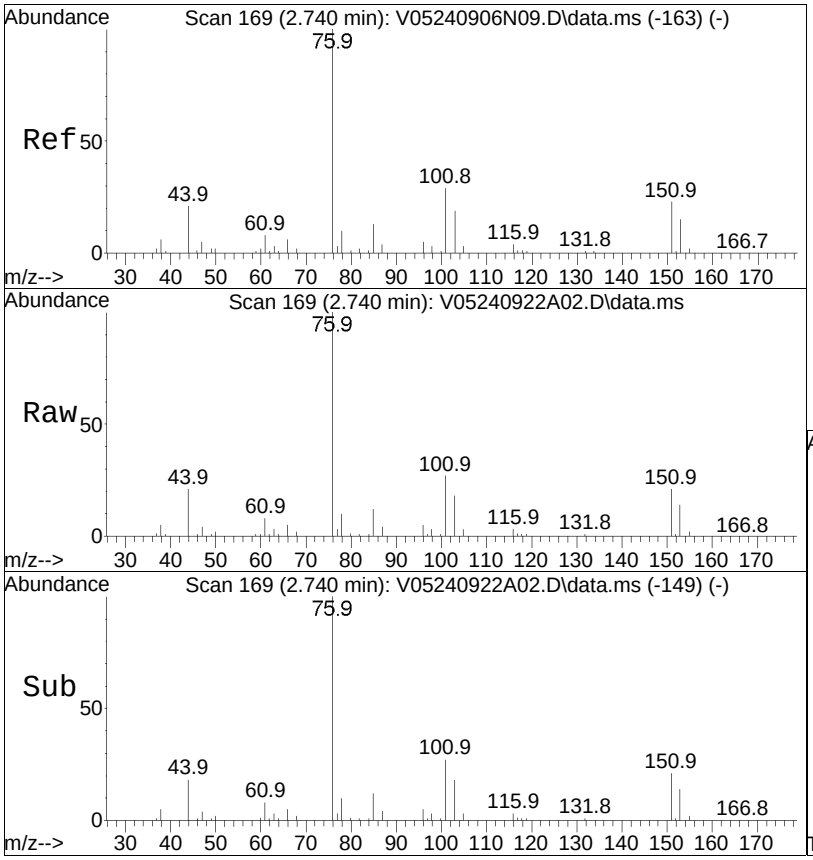



#11
Carbon disulfide
Concen: 10.19 ug/L
RT: 2.740 min Scan# 169
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 76 Resp: 357832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.1 | 6.7 | 13.9 |

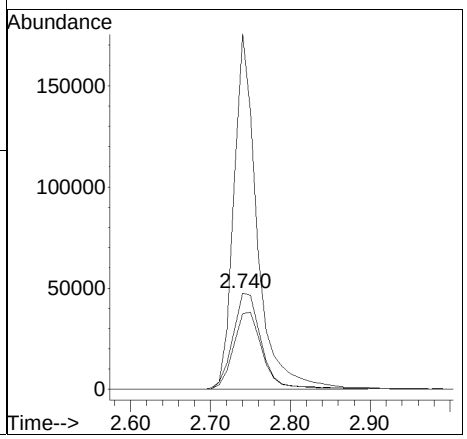


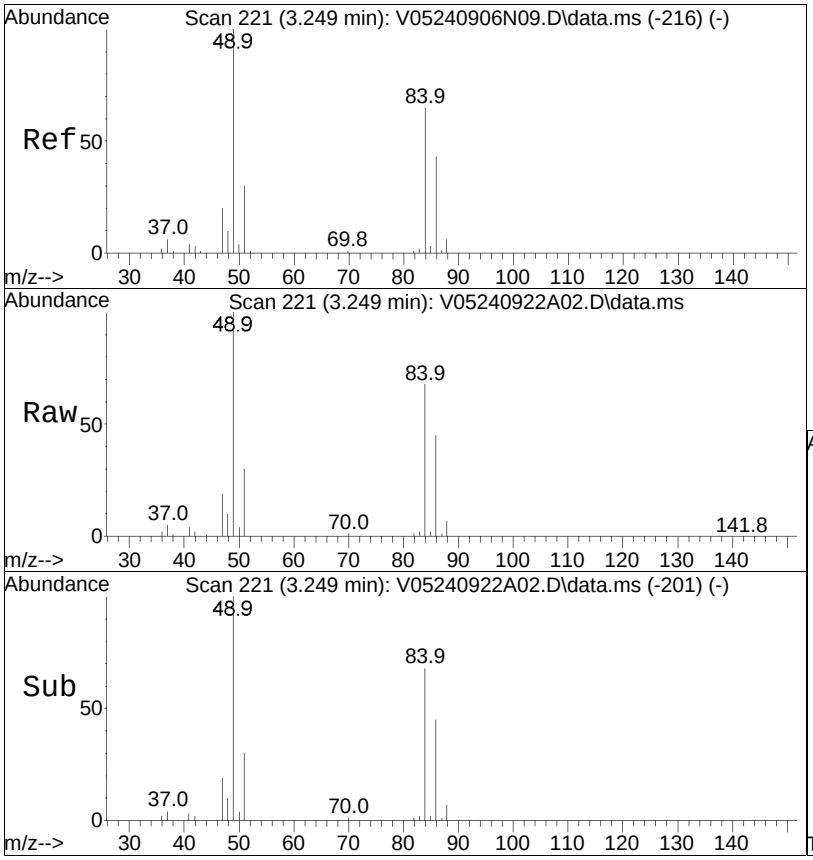



#12
Freon-113
Concen: 9.61 ug/L
RT: 2.740 min Scan# 169
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:101 Resp: 120544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 81.3 | 65.0 | 97.6 |
| 76 | 296.8 | 190.0 | 285.0# |

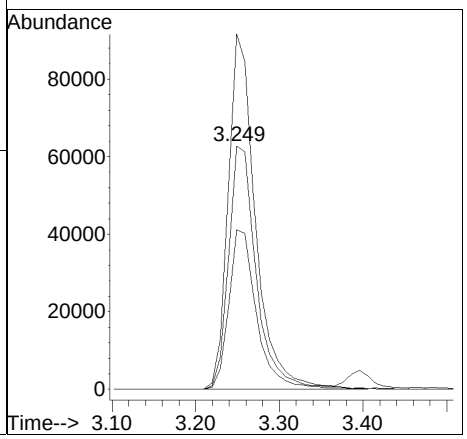


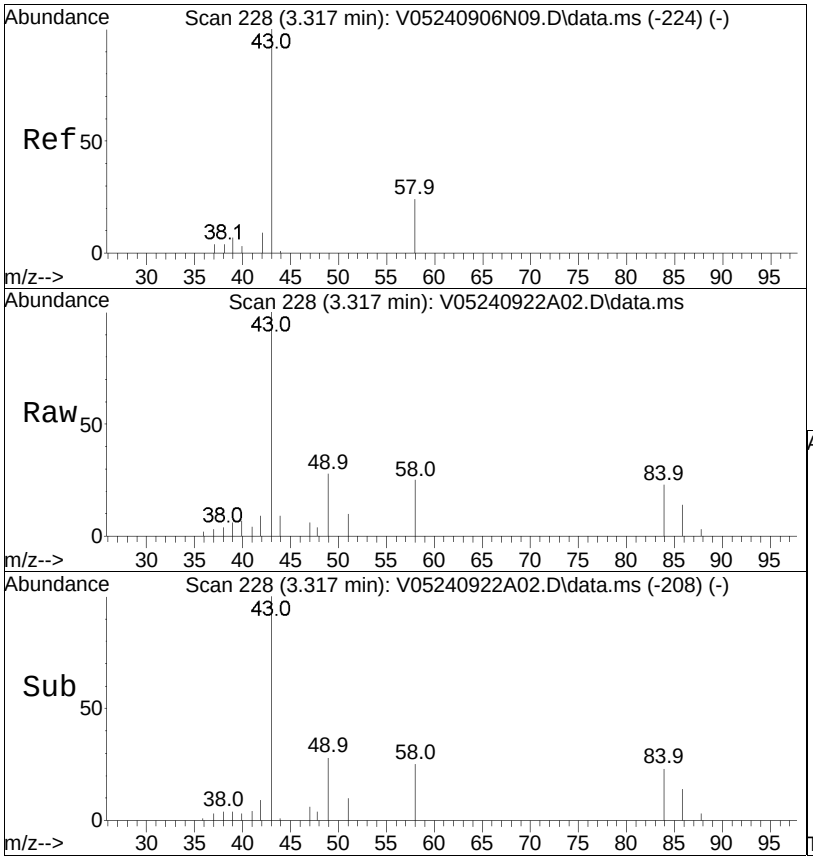



#15
Methylene chloride
Concen: 10.77 ug/L
RT: 3.249 min Scan# 221
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 84 Resp: 145864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 65.7 | 42.1 | 87.5 |
| 49 | 142.4 | 69.3 | 143.9 |

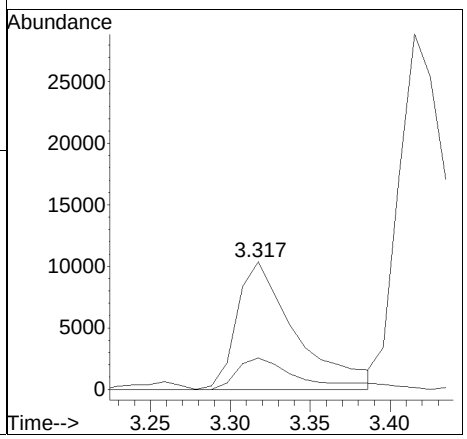


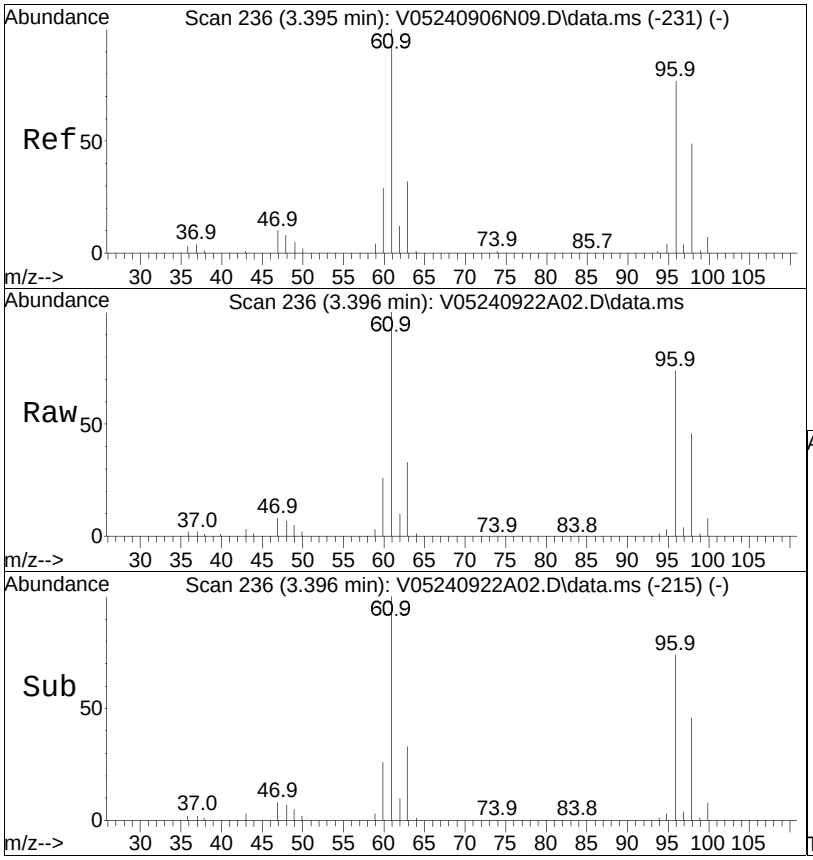



#17
Acetone
Concen: 9.09 ug/L
RT: 3.317 min Scan# 228
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 43 Resp: 26631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.0 | 22.0 | 33.0 |

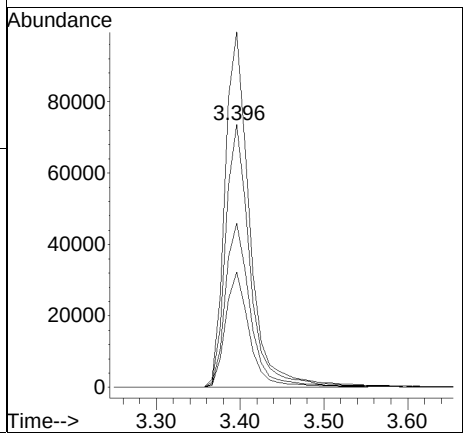


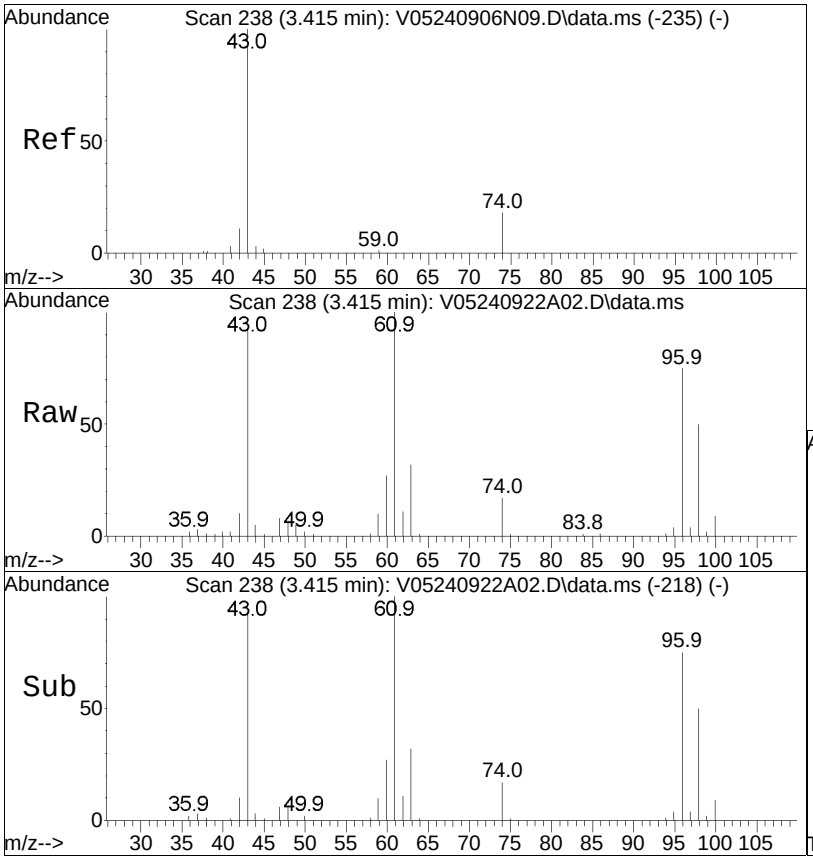



#18
trans-1,2-Dichloroethene
Concen: 11.20 ug/L
RT: 3.396 min Scan# 236
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 96 Resp: 151144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 135.8 | 91.7 | 190.5 |
| 98 | 63.7 | 41.1 | 85.5 |
| 63 | 43.3 | 29.4 | 61.0 |

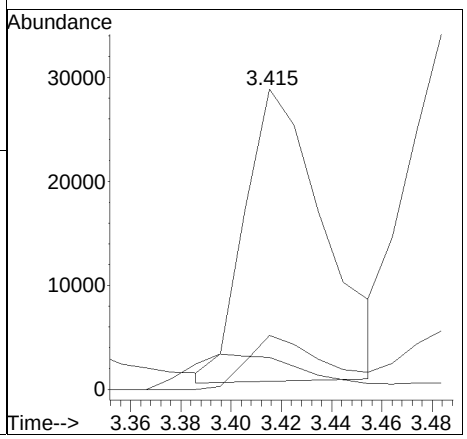


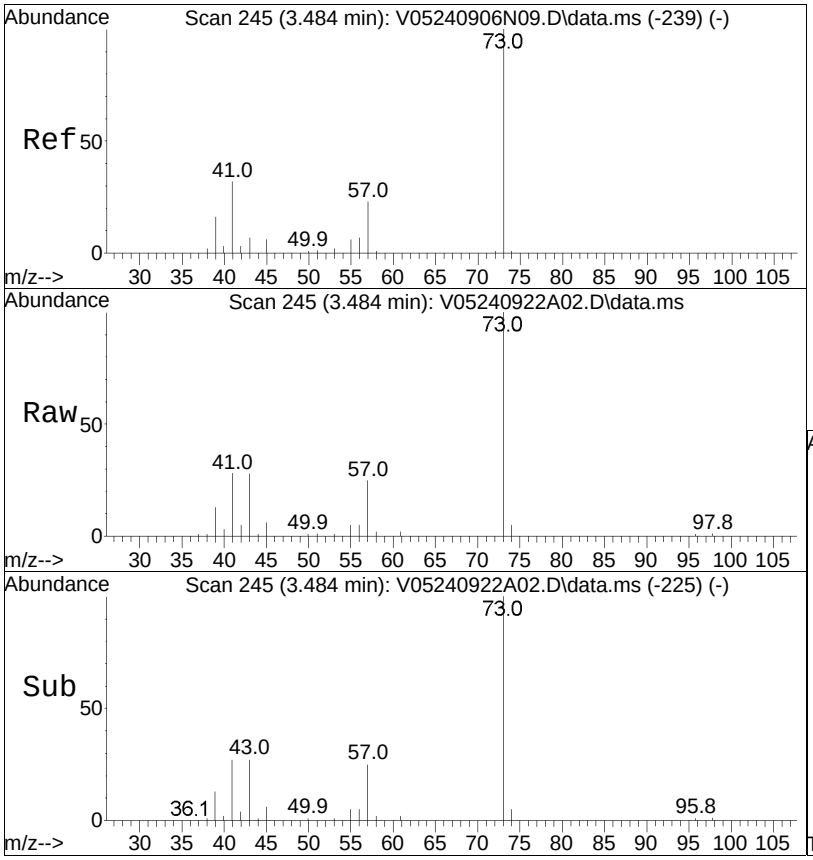



#19
Methyl acetate
Concen: 9.61 ug/L
RT: 3.415 min Scan# 238
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 43 Resp: 61769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.0 | 23.1 | 34.7# |
| 59 | 17.8 | 23.9 | 35.9# |

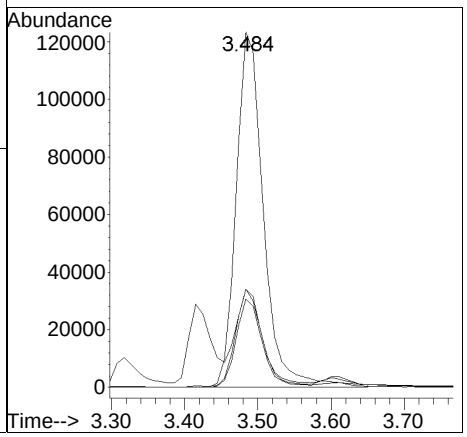


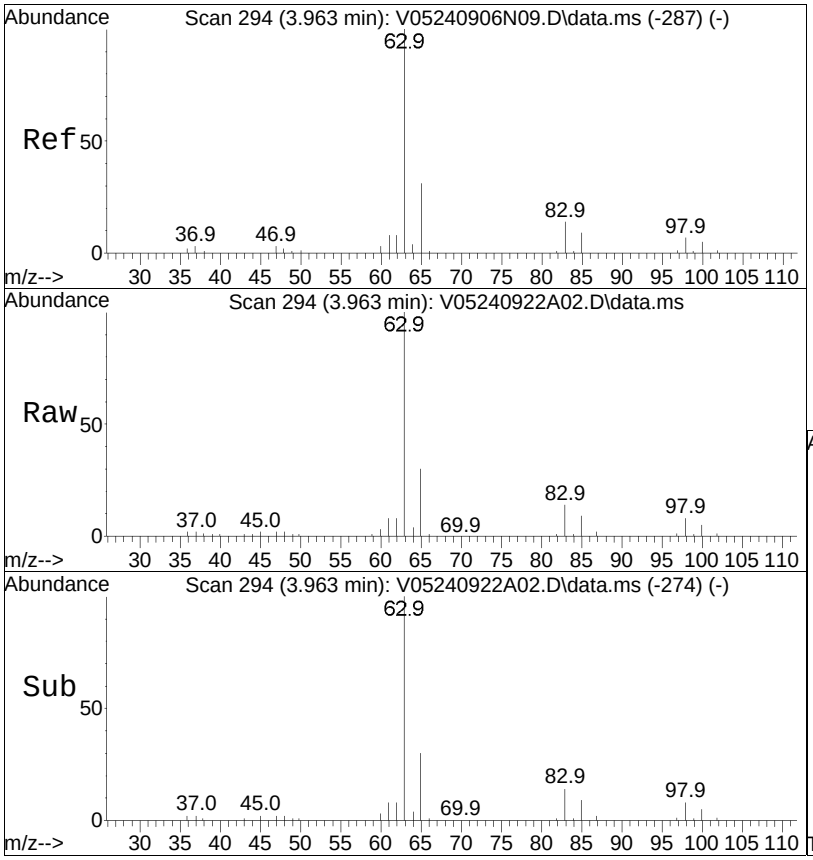



#20
Methyl tert-butyl ether
Concen: 10.83 ug/L
RT: 3.484 min Scan# 245
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 73 Resp: 321659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.8 | 11.8 | 24.6 |
| 43 | 24.8 | 13.5 | 27.9 |
| 41 | 27.6 | 13.3 | 27.5# |

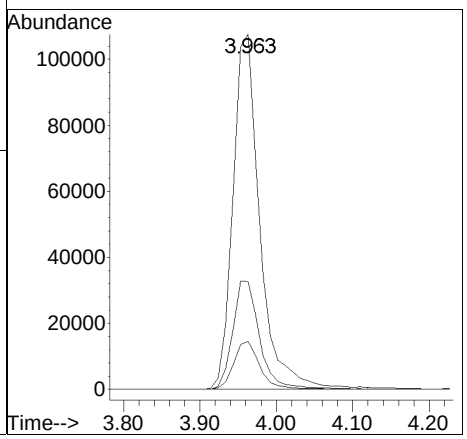


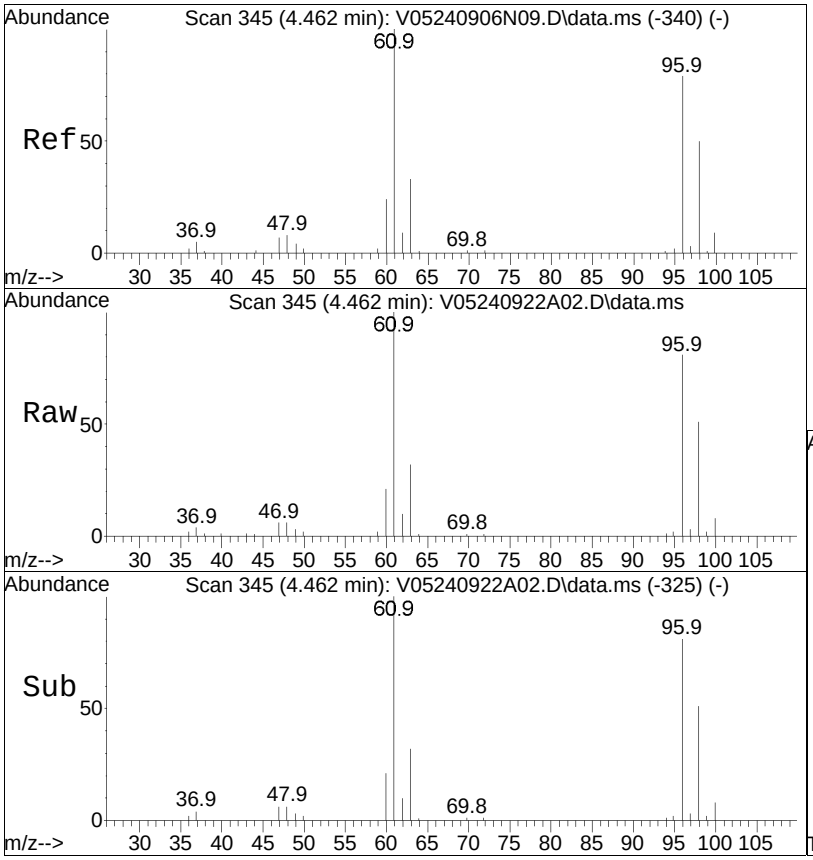



#23
1,1-Dichloroethane
Concen: 10.75 ug/L
RT: 3.963 min Scan# 294
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 63 Resp: 264031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.6 | 11.9 | 51.9 |
| 83 | 13.2 | 0.0 | 34.2 |

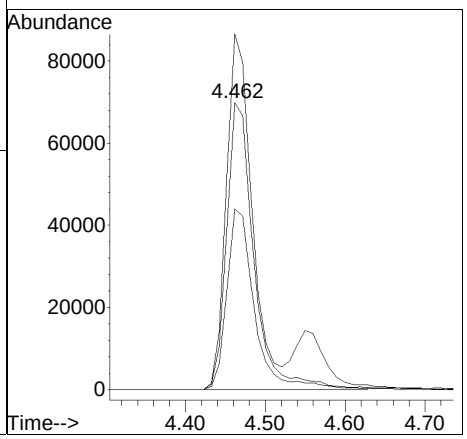


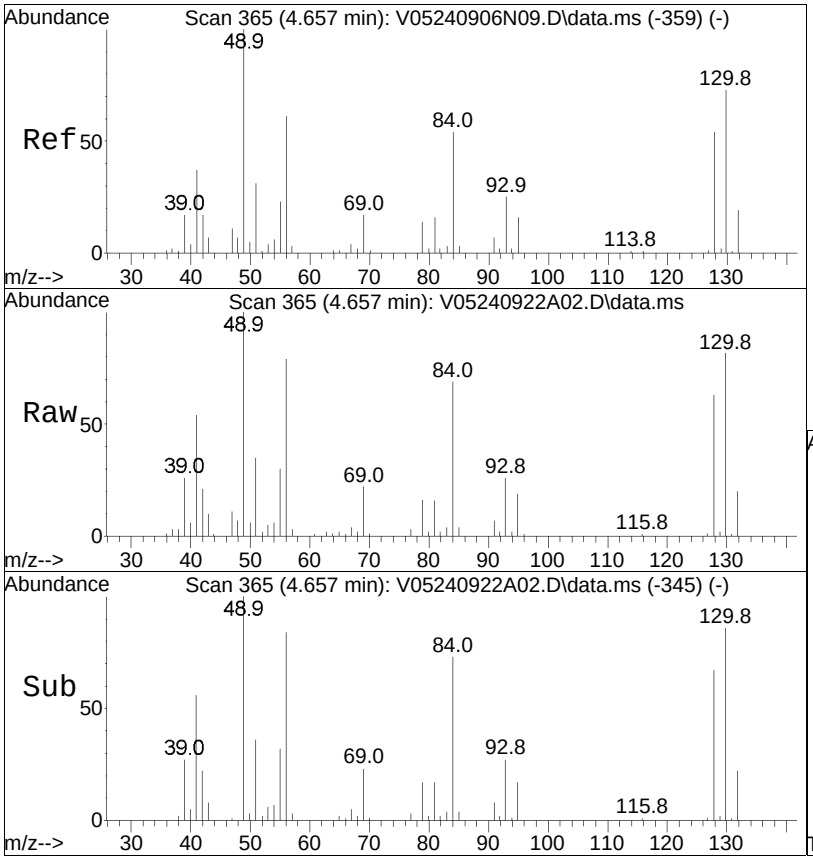



#28
cis-1,2-Dichloroethene
Concen: 10.90 ug/L
RT: 4.462 min Scan# 345
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 96 Resp: 166547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 116.3 | 100.5 | 150.7 |
| 98 | 63.5 | 49.8 | 74.8 |

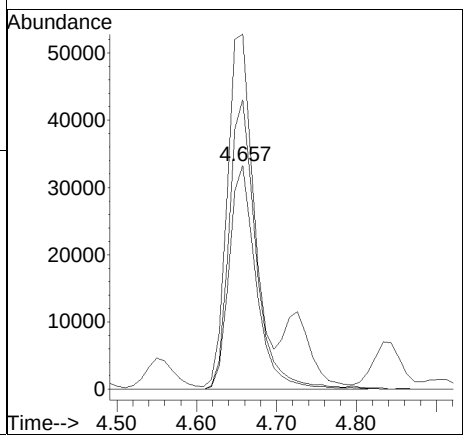


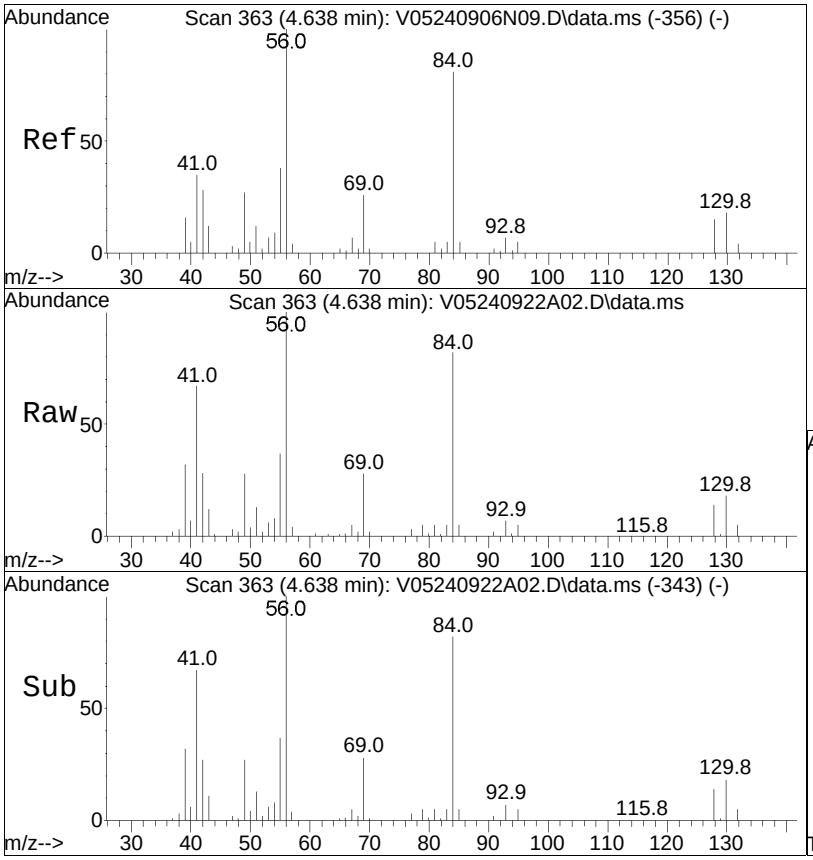



#30
Bromochloromethane
Concen: 10.73 ug/L
RT: 4.657 min Scan# 365
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:128 Resp: 79127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 153.4 | 109.0 | 163.4 |
| 130 | 128.4 | 105.6 | 158.4 |

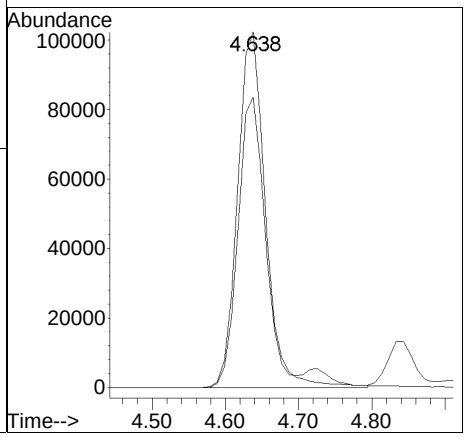


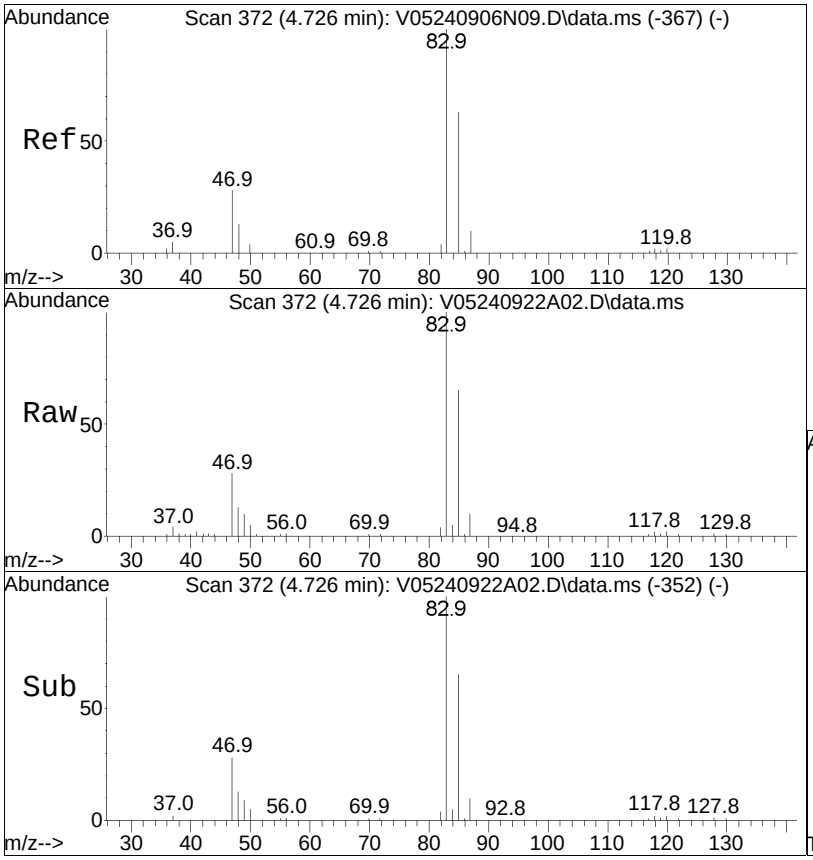



#31
Cyclohexane
Concen: 11.43 ug/L
RT: 4.638 min Scan# 363
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 56 Resp: 271041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 80.1 | 64.4 | 133.8 |

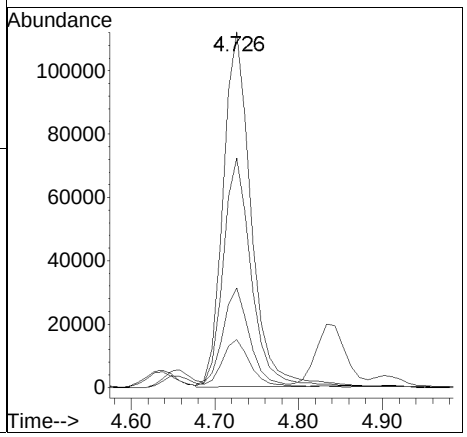


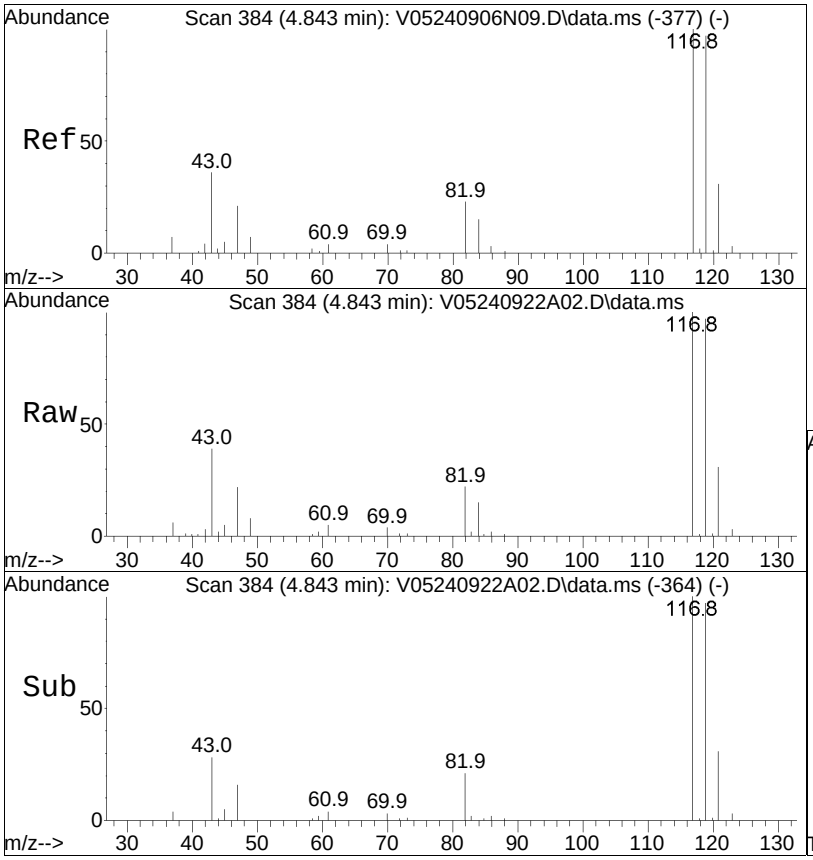



#32
Chloroform
Concen: 10.14 ug/L
RT: 4.726 min Scan# 372
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 83 Resp: 260587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 42.8 | 89.0 |
| 47 | 25.1 | 13.7 | 28.4 |
| 48 | 13.6 | 6.9 | 14.3 |

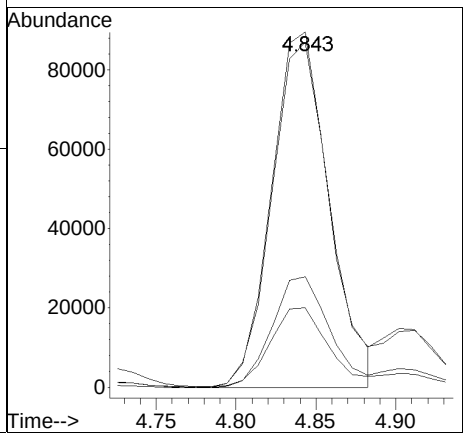


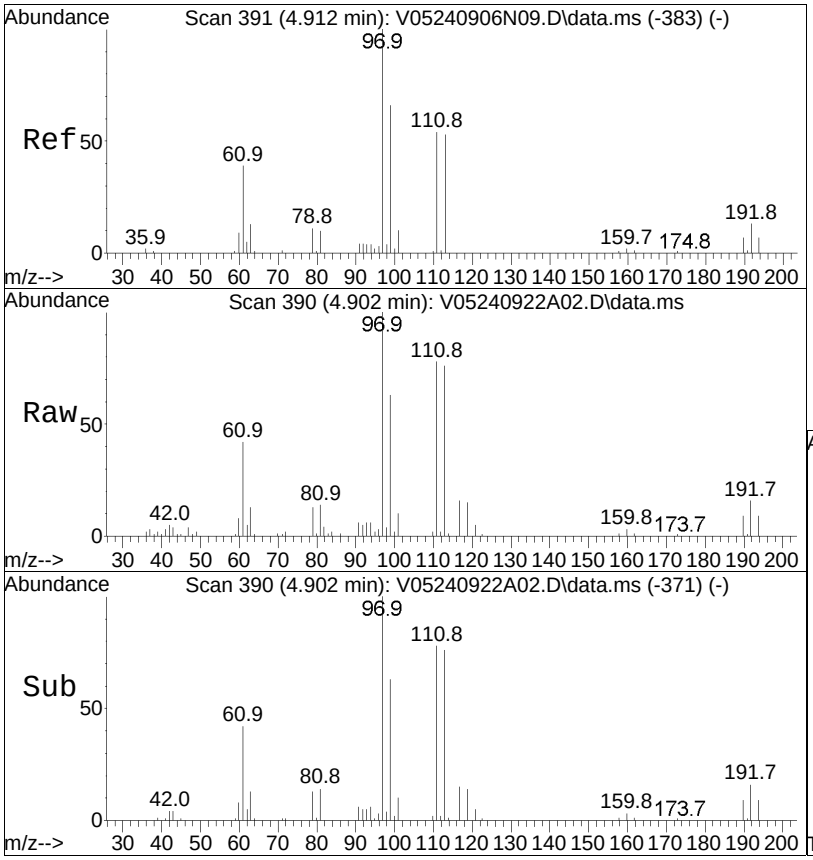



#34
Carbon tetrachloride
Concen: 10.20 ug/L
RT: 4.843 min Scan# 384
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:117 Resp: 224902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.7 | 63.6 | 132.2 |
| 121 | 31.1 | 19.8 | 41.0 |
| 82 | 22.4 | 15.9 | 32.9 |

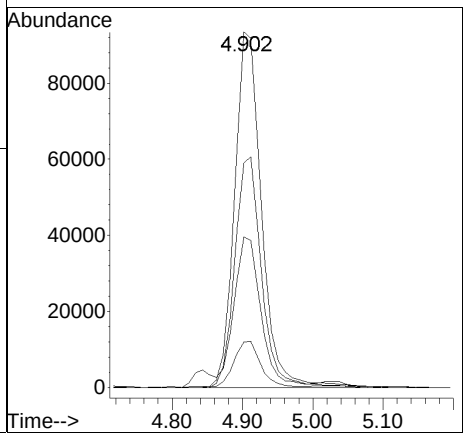


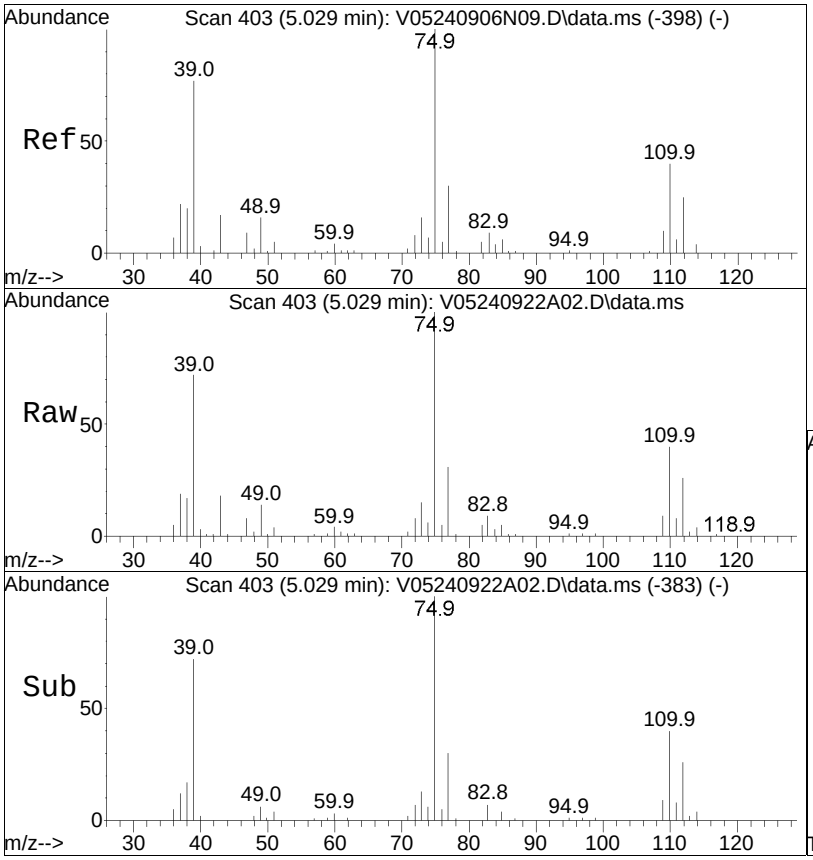



#37
1,1,1-Trichloroethane
Concen: 10.42 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.010 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 97 Resp: 249497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.5 | 41.7 | 86.5 |
| 61 | 41.7 | 26.1 | 54.3 |
| 63 | 13.2 | 8.5 | 17.6 |

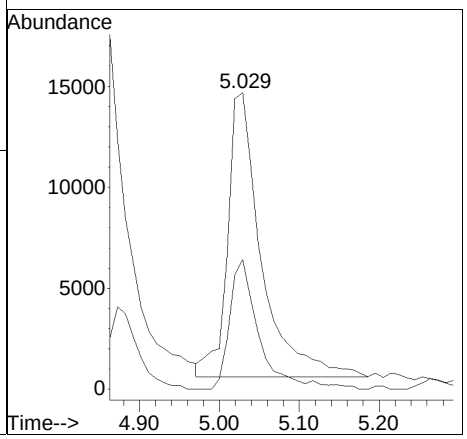


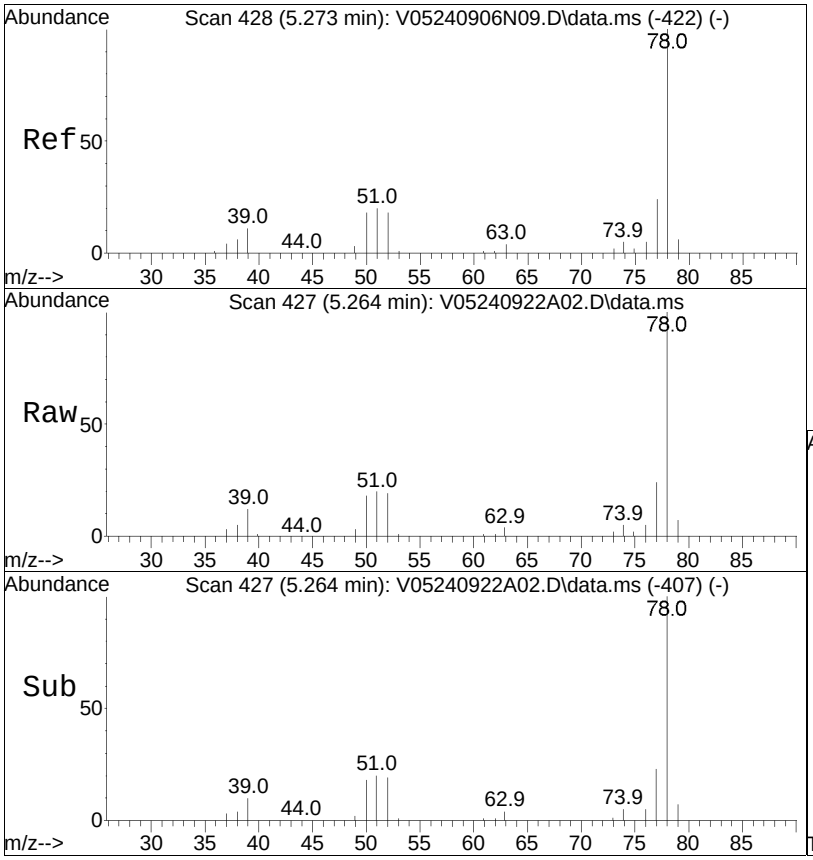



#39
2-Butanone
Concen: 9.30 ug/L
RT: 5.029 min Scan# 403
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 43 Resp: 41411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 40.1 | 55.6 | 83.4# |

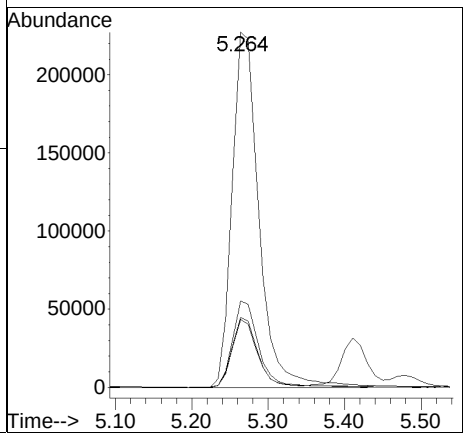


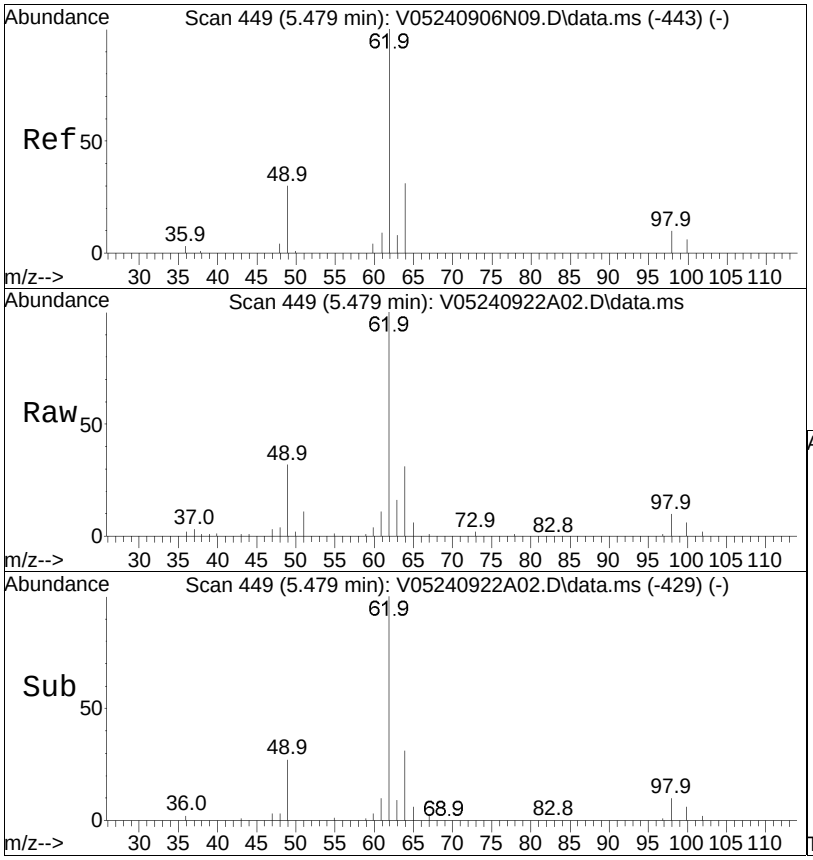



#41
Benzene
Concen: 10.69 ug/L
RT: 5.264 min Scan# 427
Delta R.T. -0.009 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 78 Resp: 558156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.9 | 15.2 | 31.6 |
| 51 | 18.8 | 10.5 | 21.7 |
| 52 | 18.9 | 9.5 | 19.7 |

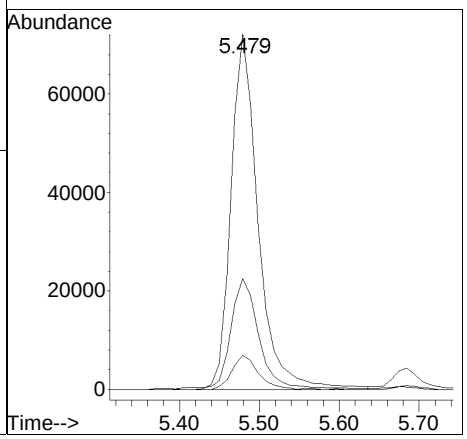


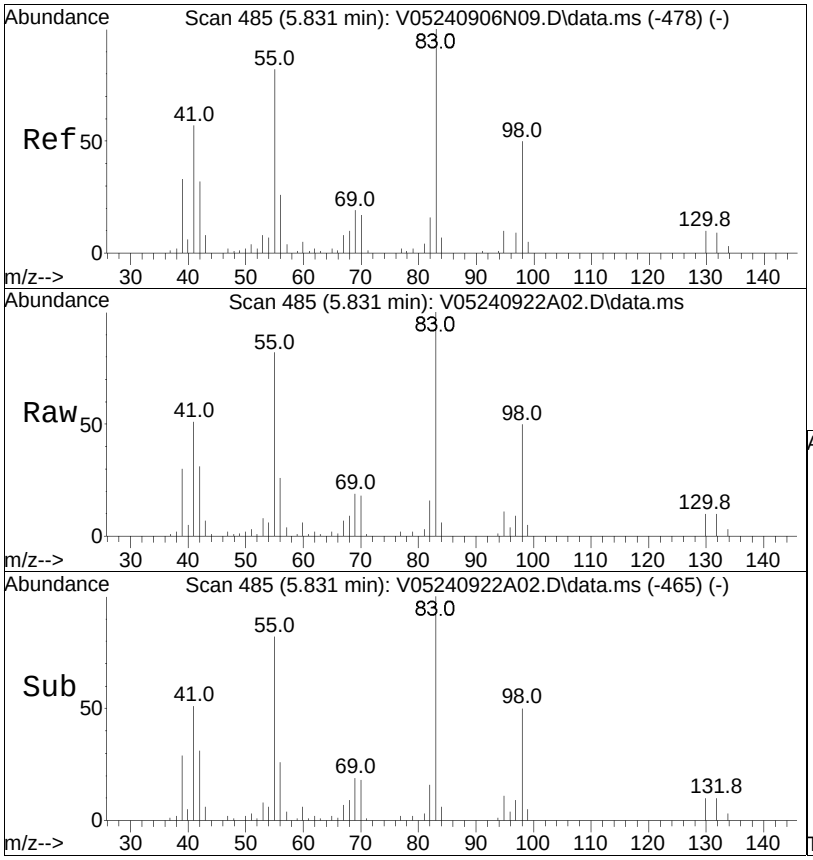



#44
1,2-Dichloroethane
Concen: 9.92 ug/L
RT: 5.479 min Scan# 449
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 62 Resp: 170988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.8 | 13.2 | 53.2 |
| 98 | 9.2 | 0.0 | 27.8 |

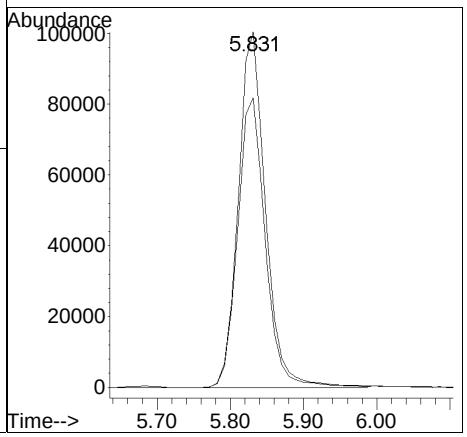


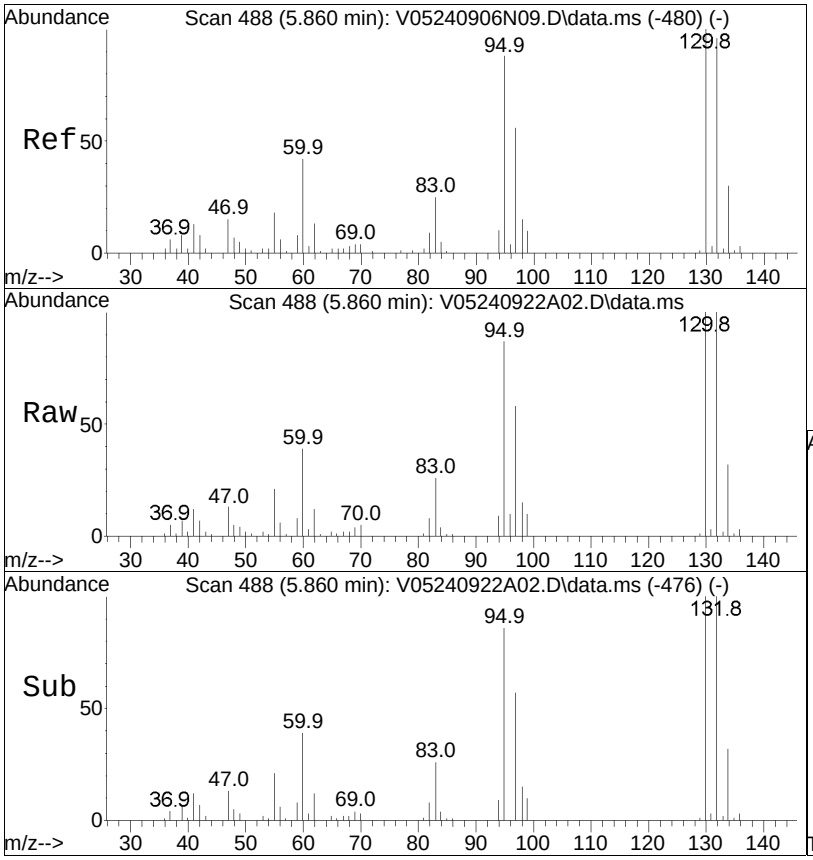



#47
Methyl cyclohexane
Concen: 10.79 ug/L
RT: 5.831 min Scan# 485
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 83 Resp: 258516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 83.0 | 57.3 | 85.9 |

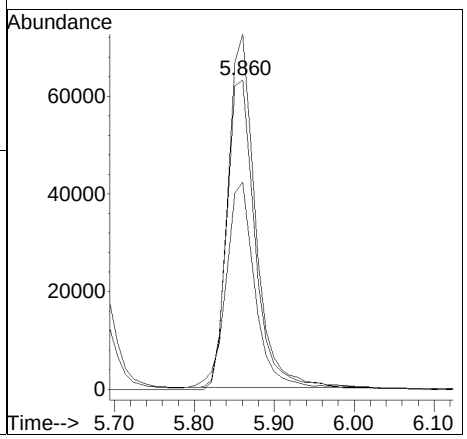


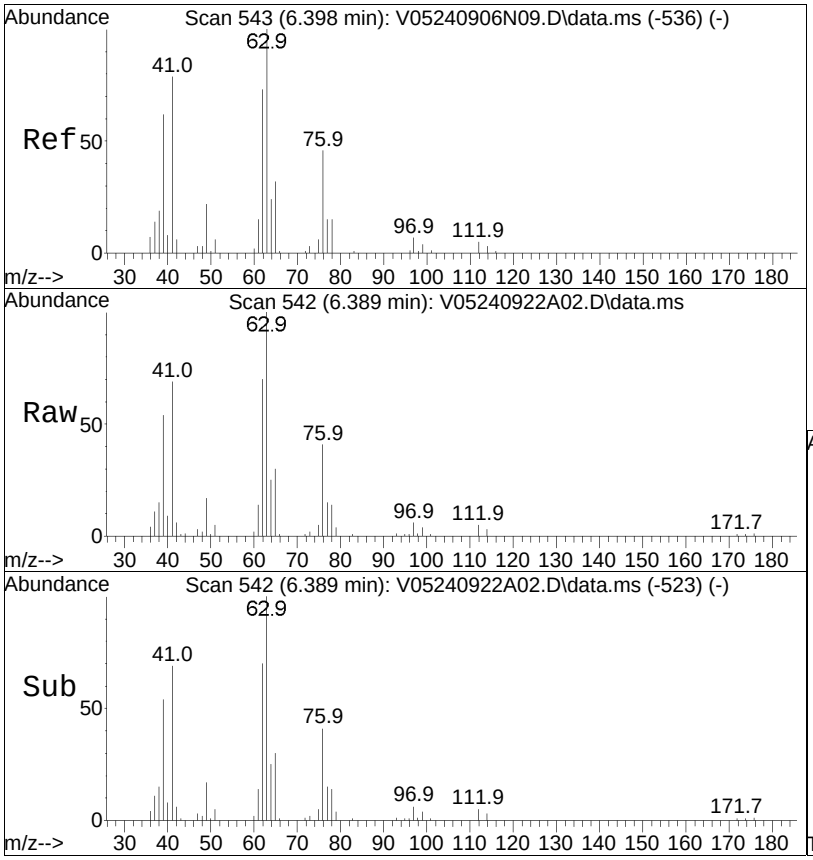



#48
Trichloroethene
Concen: 9.93 ug/L
RT: 5.860 min Scan# 488
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 95 Resp: 154318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 68.6 | 56.1 | 84.1 |
| 130 | 115.0 | 77.7 | 116.5 |

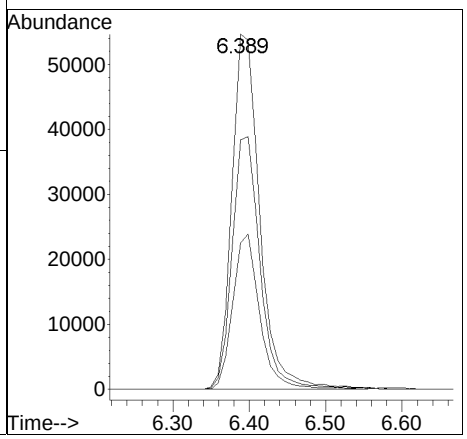


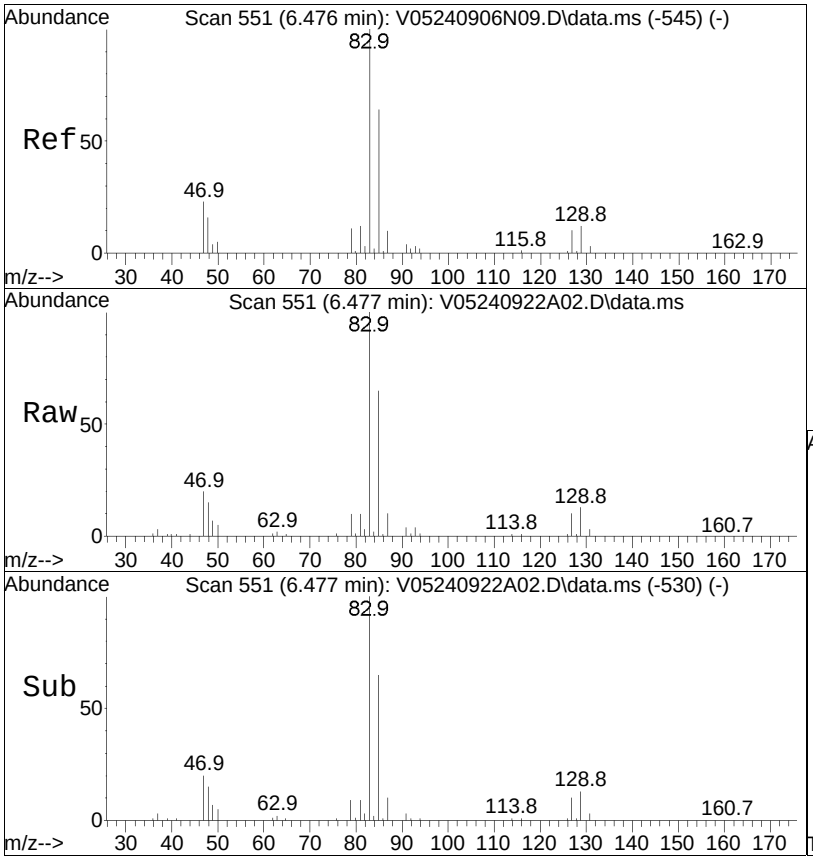



#51
1,2-Dichloropropane
Concen: 10.74 ug/L
RT: 6.389 min Scan# 542
Delta R.T. -0.009 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 63 Resp: 140017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 71.0 | 57.0 | 85.4 |
| 76 | 42.1 | 48.4 | 72.6# |

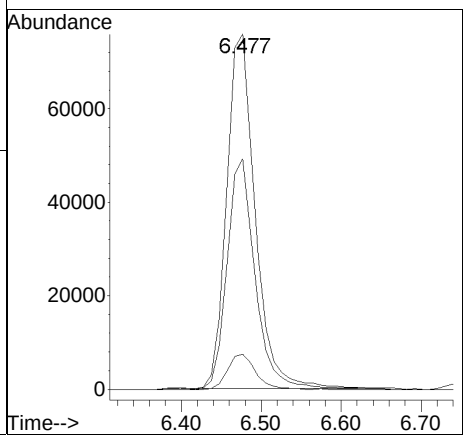


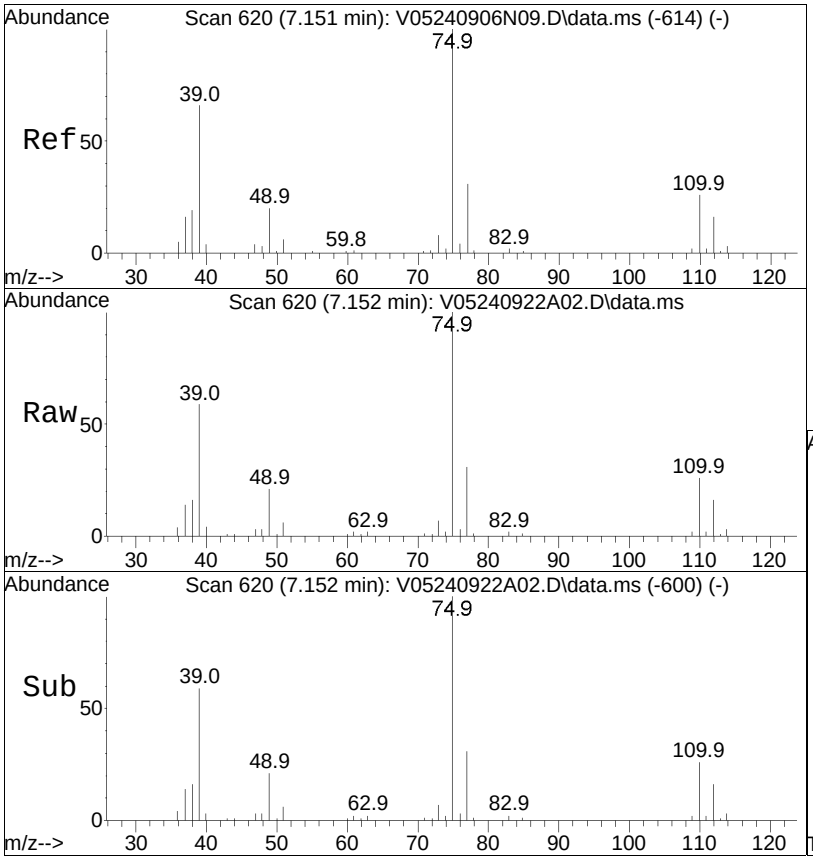



#54
Bromodichloromethane
Concen: 9.89 ug/L
RT: 6.477 min Scan# 551
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 83 Resp: 188917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.3 | 51.0 | 76.6 |
| 127 | 9.7 | 6.7 | 10.1 |

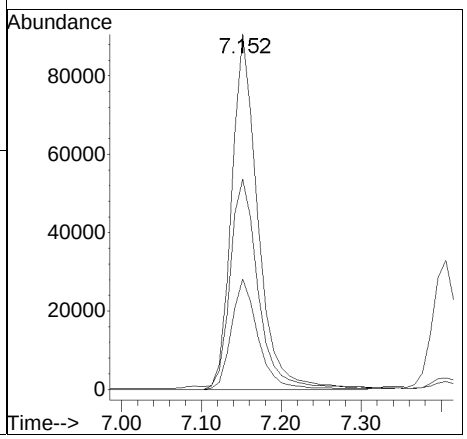


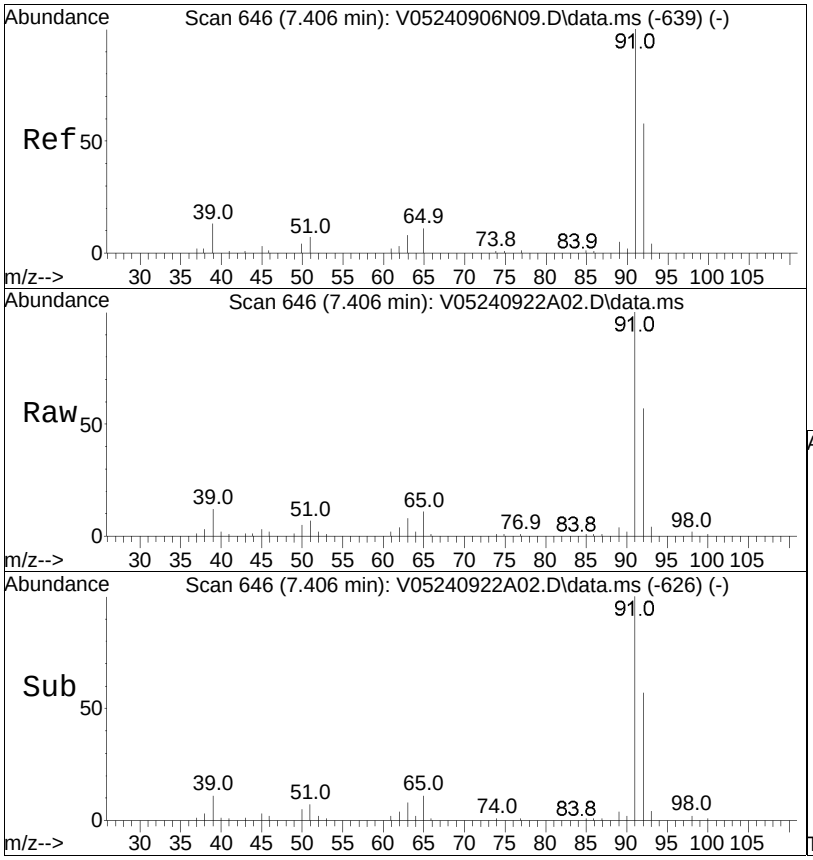



#58
cis-1,3-Dichloropropene
Concen: 10.35 ug/L
RT: 7.152 min Scan# 620
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 75 Resp: 207930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.7 | 25.5 | 38.3 |
| 39 | 63.0 | 40.4 | 60.6# |

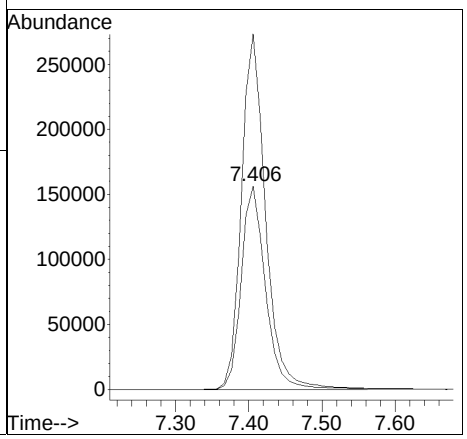


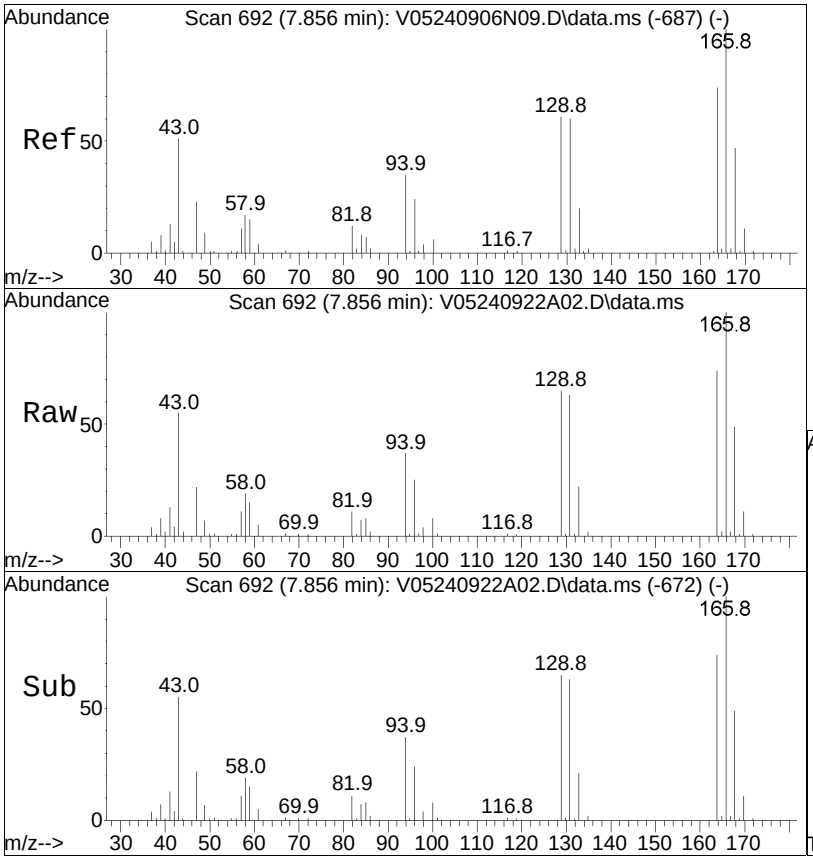



#61
Toluene
Concen: 10.56 ug/L
RT: 7.406 min Scan# 646
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 92 Resp: 360127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.6 | 135.2 | 202.8 |

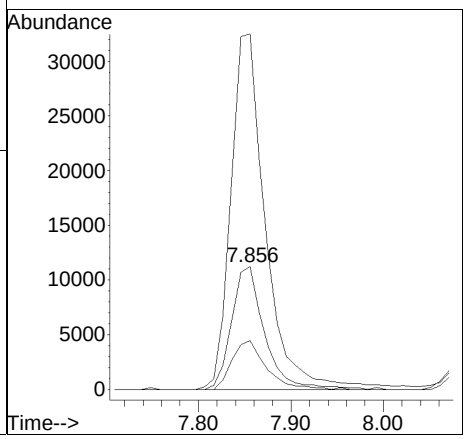


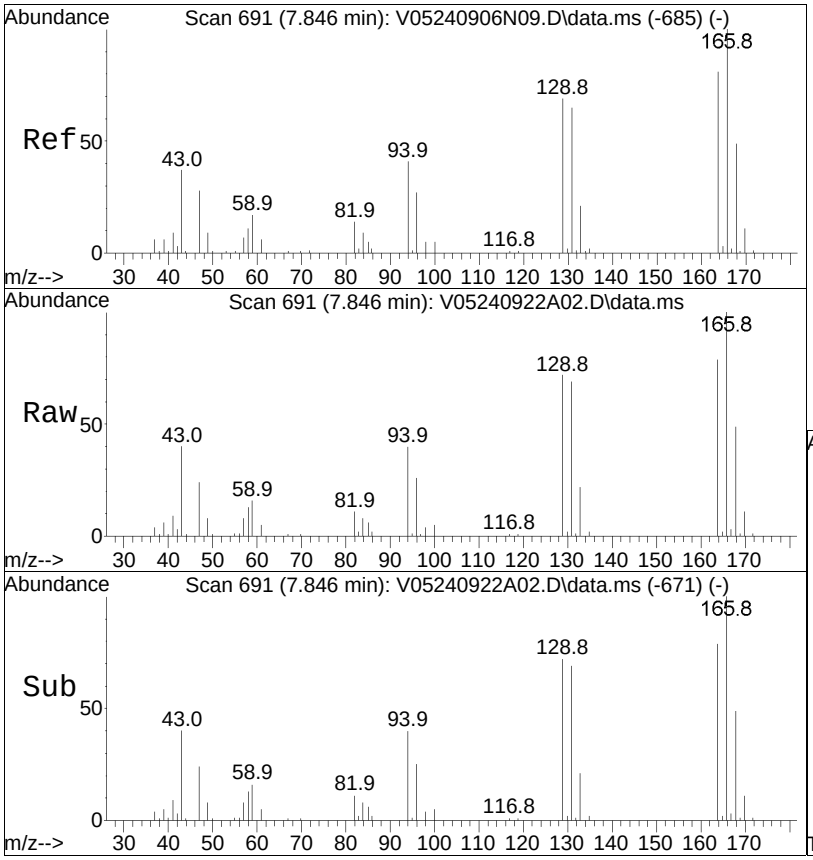



#62
4-Methyl-2-pentanone
Concen: 9.86 ug/L
RT: 7.856 min Scan# 692
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 58 Resp: 27832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 41.3 | 38.9 | 58.3 |
| 43 | 304.3 | 204.2 | 306.2 |

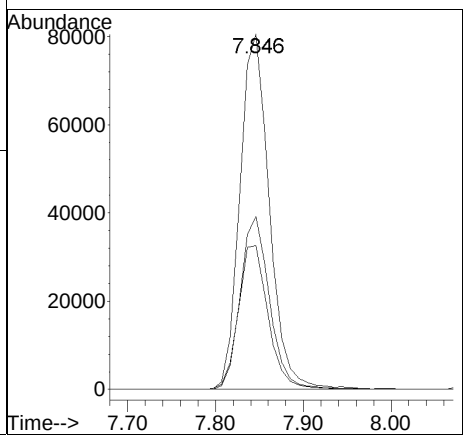


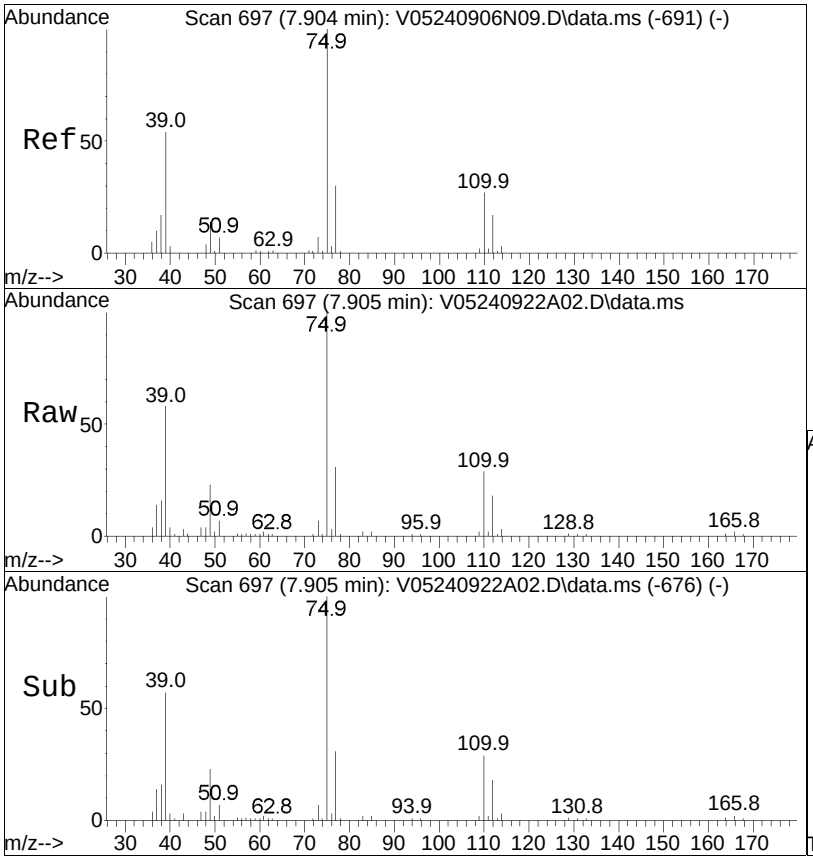



#63
Tetrachloroethene
Concen: 10.45 ug/L
RT: 7.846 min Scan# 691
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:166 Resp: 188067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 48.4 | 30.2 | 70.2 |
| 94 | 41.1 | 32.5 | 72.5 |

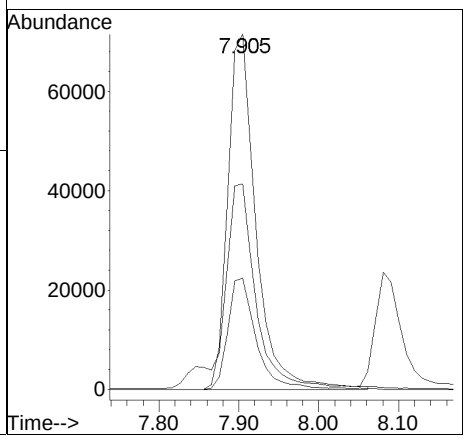


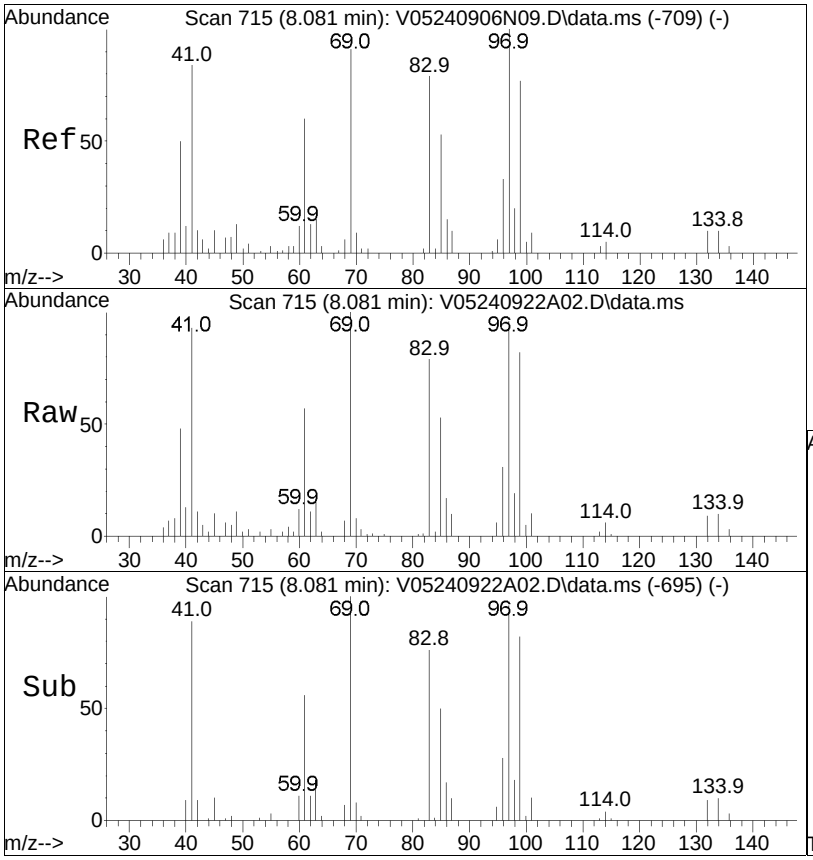



#65
trans-1,3-Dichloropropene
Concen: 10.57 ug/L
RT: 7.905 min Scan# 697
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 75 Resp: 175449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 11.5 | 51.5 |
| 39 | 64.2 | 29.3 | 69.3 |

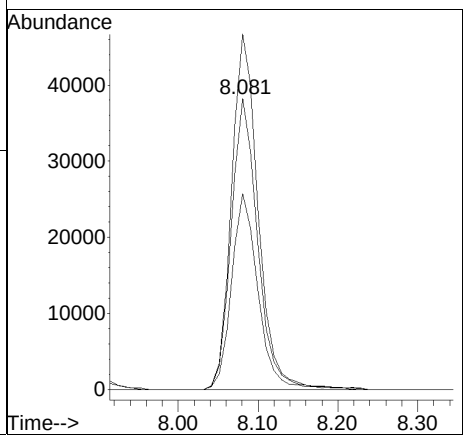


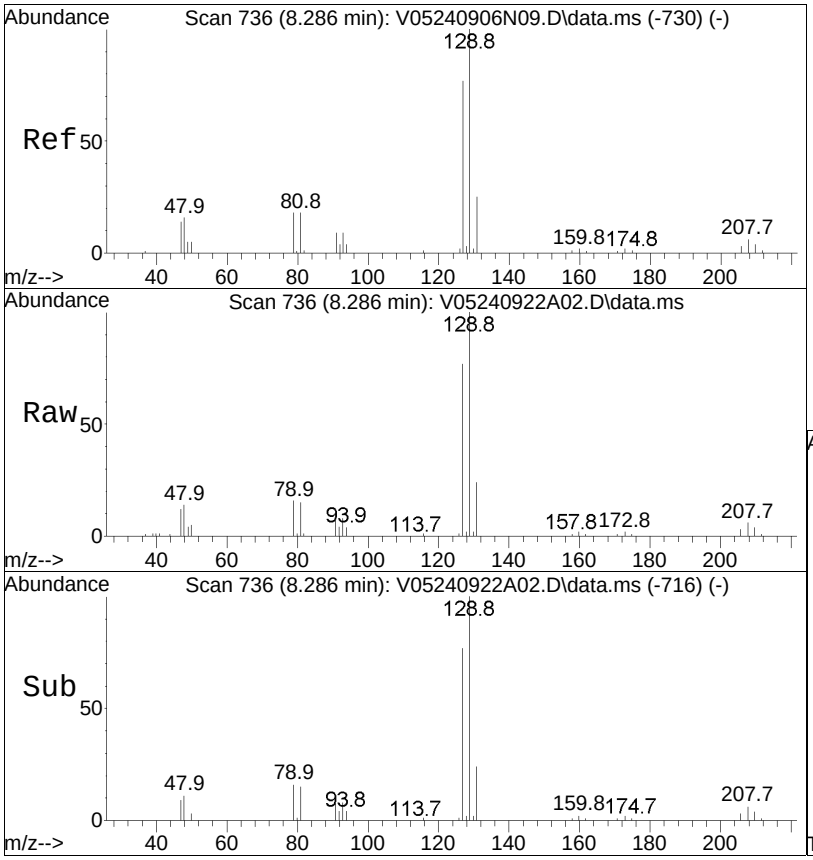



#68
1,1,2-Trichloroethane
Concen: 10.49 ug/L
RT: 8.081 min Scan# 715
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 83 Resp: 88517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 122.6 | 102.2 | 142.2 |
| 85 | 66.9 | 47.5 | 87.5 |

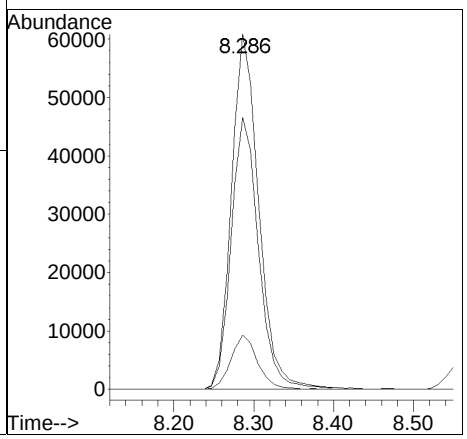


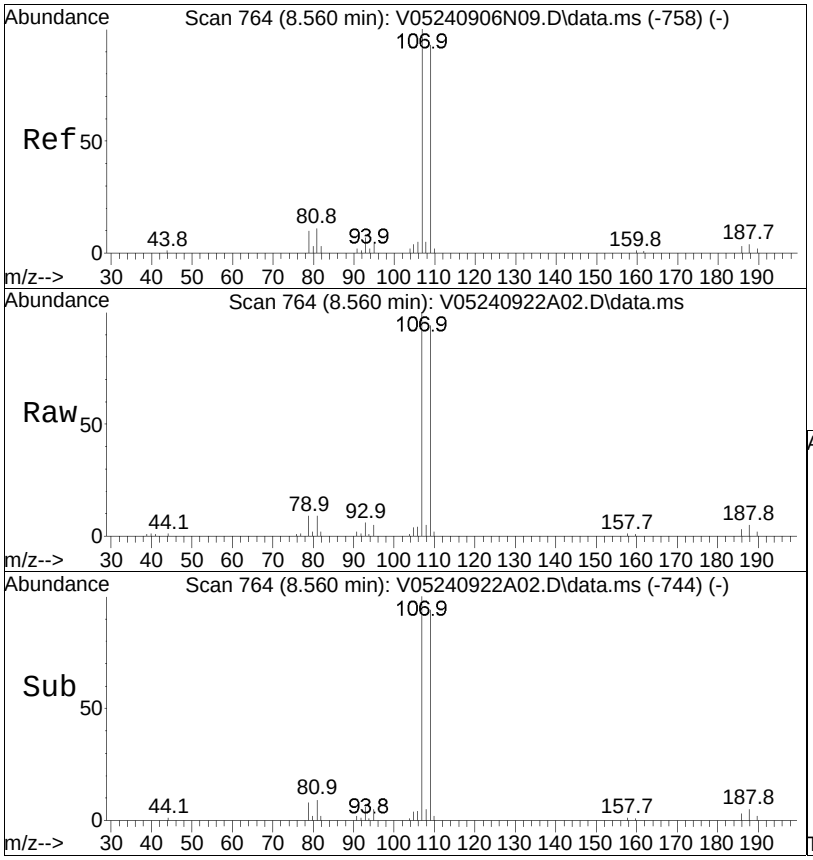



#69
Chlorodibromomethane
Concen: 10.10 ug/L
RT: 8.286 min Scan# 736
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:129 Resp: 145308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 14.9 | 0.0 | 37.0 |
| 127 | 76.6 | 58.3 | 98.3 |

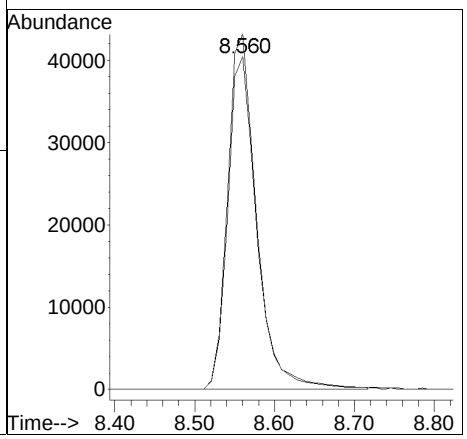


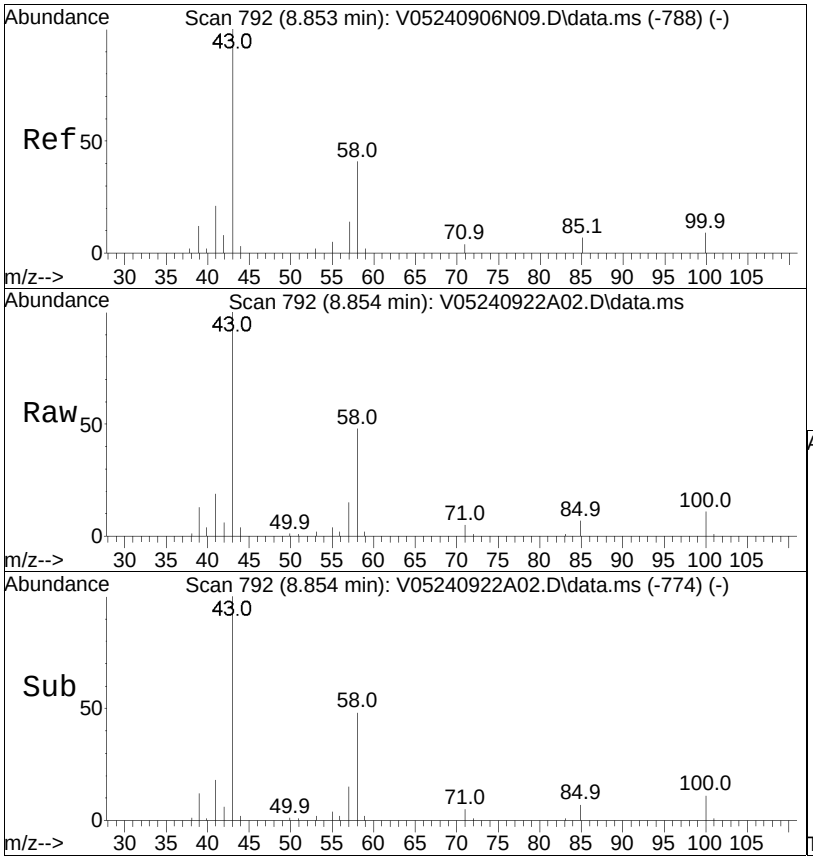



#71
1,2-Dibromoethane
Concen: 10.58 ug/L
RT: 8.560 min Scan# 764
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:107 Resp: 120208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.7 | 75.0 | 112.6 |

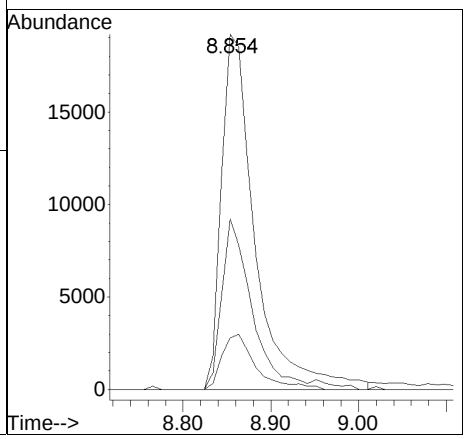


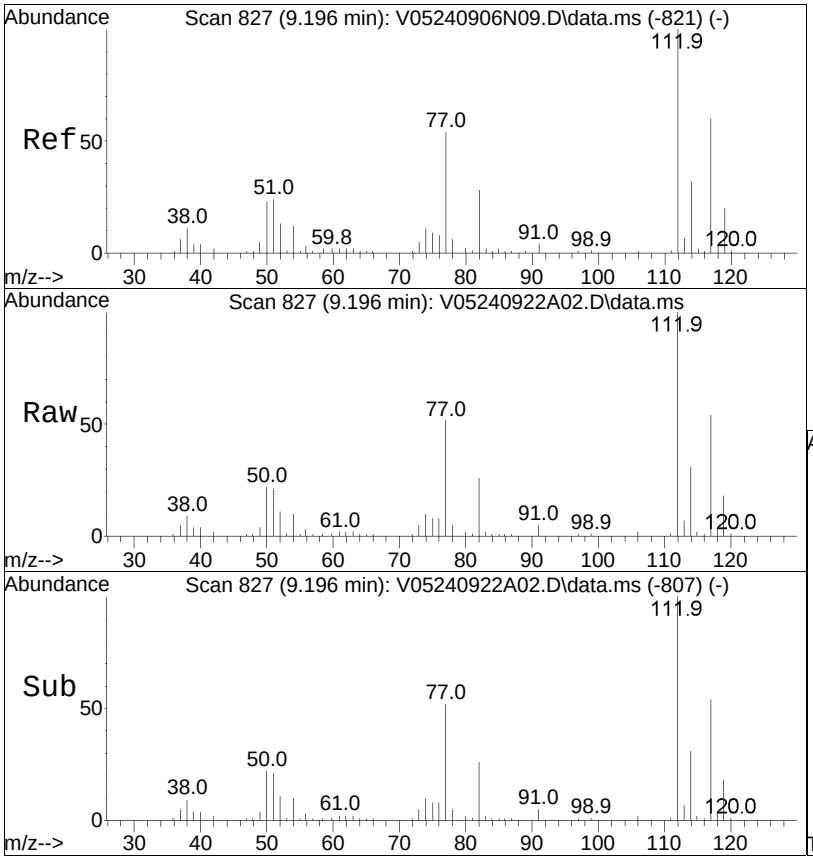



#72
2-Hexanone
Concen: 9.13 ug/L
RT: 8.854 min Scan# 792
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 43 Resp: 51435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 44.3 | 42.3 | 63.5 |
| 57 | 15.6 | 15.6 | 23.4# |

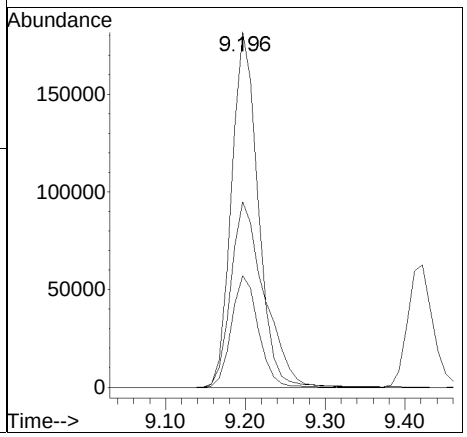


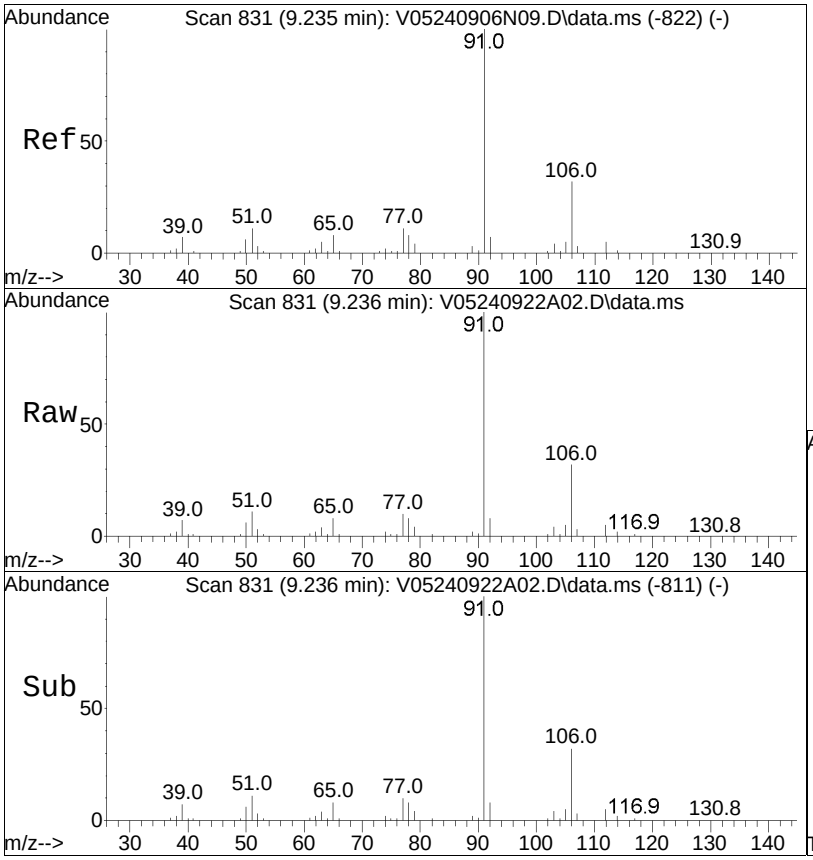



#73
Chlorobenzene
Concen: 10.43 ug/L
RT: 9.196 min Scan# 827
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:112 Resp: 420595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 66.3 | 66.1 | 99.1 |
| 114 | 32.0 | 25.4 | 38.0 |

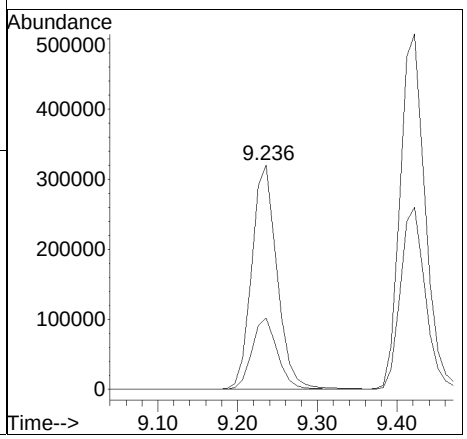


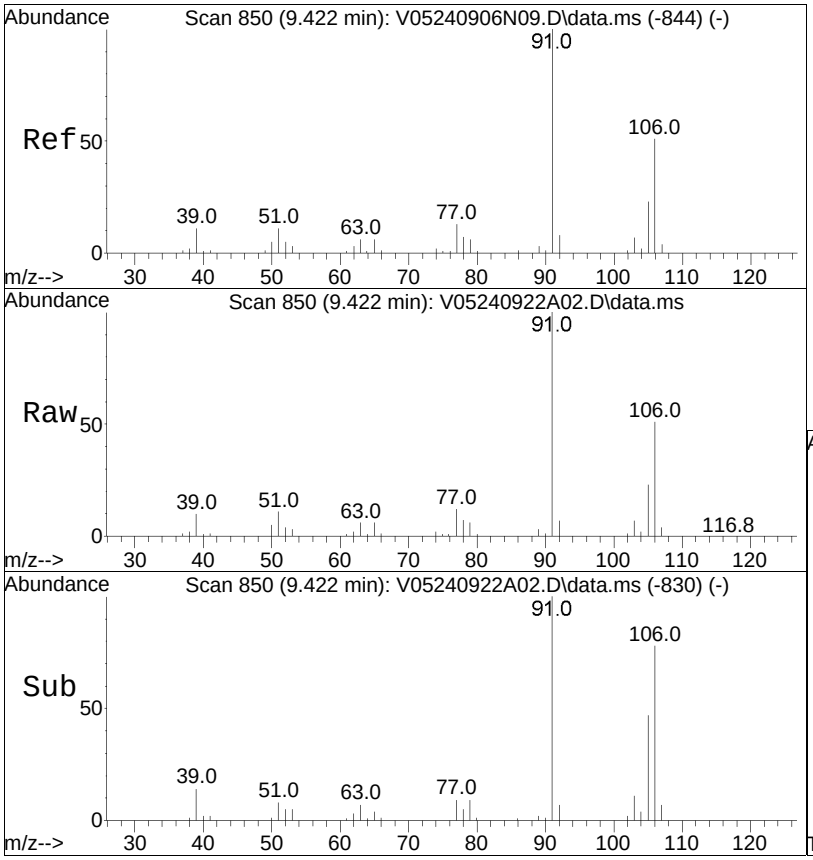



#74
Ethylbenzene
Concen: 10.42 ug/L
RT: 9.236 min Scan# 831
Delta R.T. 0.001 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 91 Resp: 710145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.0 | 22.9 | 34.3 |

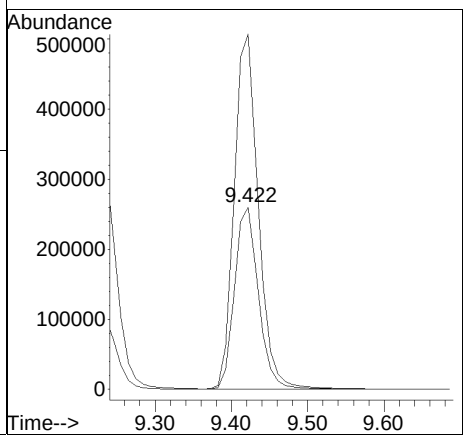


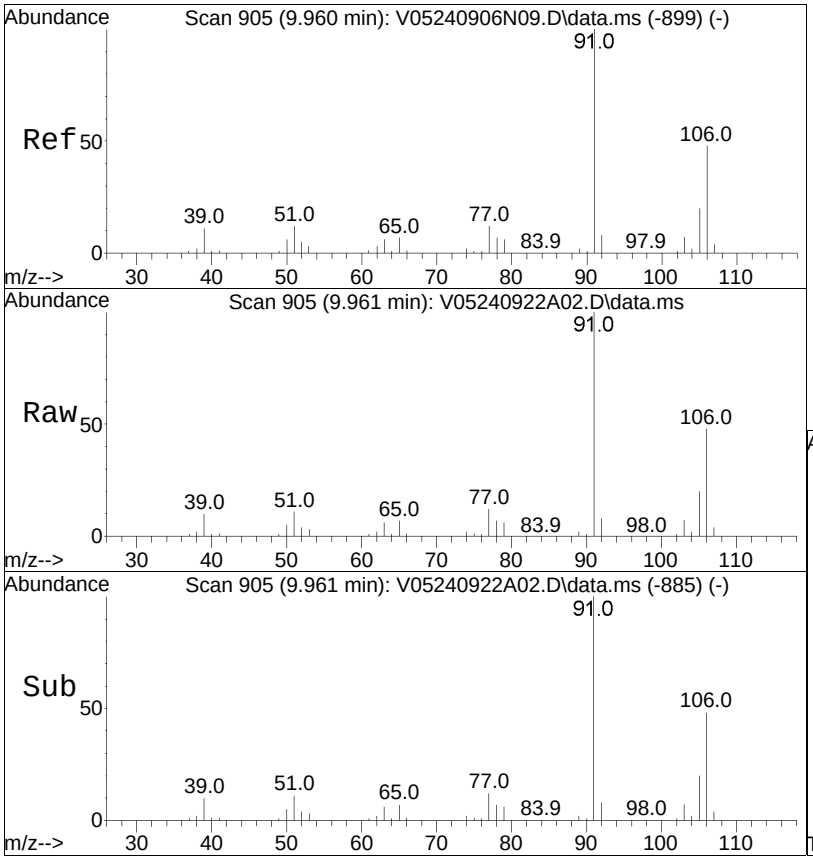



#76
p/m Xylene
Concen: 21.50 ug/L
RT: 9.422 min Scan# 850
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:106 Resp: 565707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 195.3 | 177.2 | 265.8 |

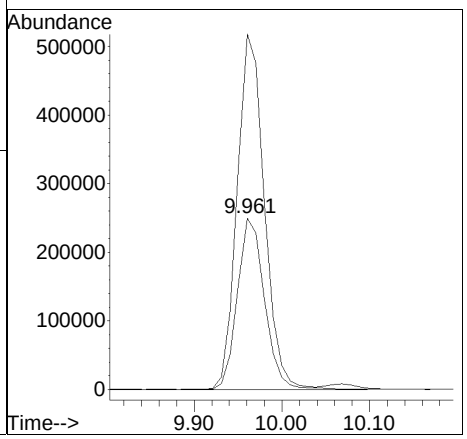


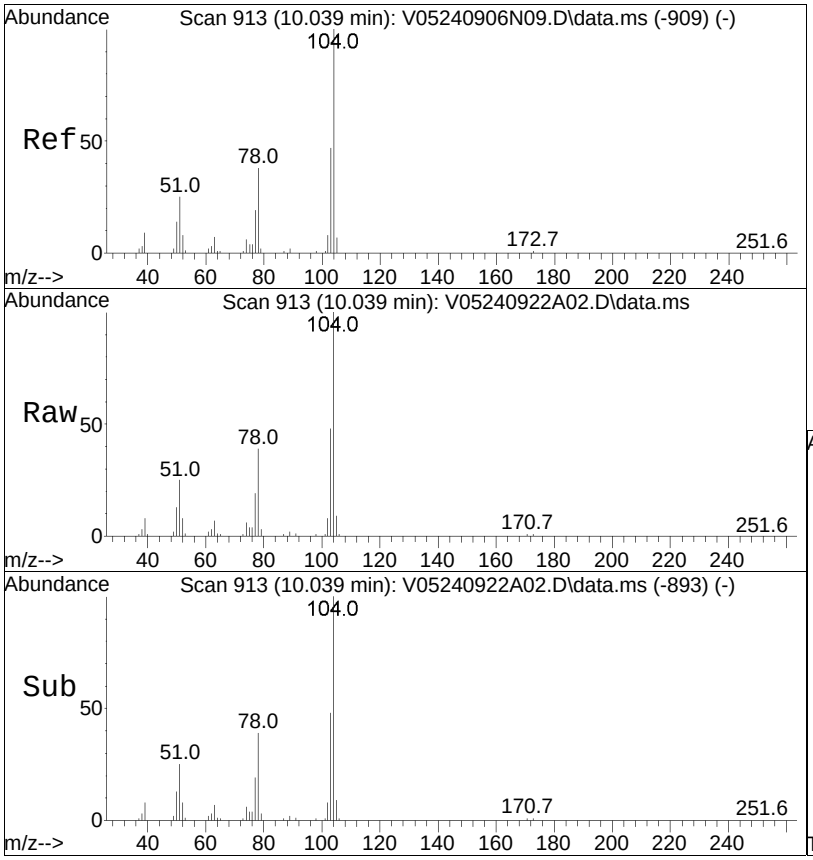



#77
o Xylene
Concen:  21.57 ug/L
RT:  9.961 min  Scan# 905
Delta R.T.  0.001 min
Lab File:  V05240922A02.D
Acq: 22 Sep 2024  6:10 pm

Tgt Ion:106 Resp:  537725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.3 | 187.0 | 280.6 |

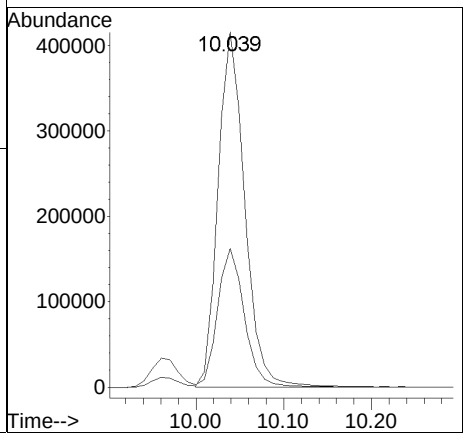


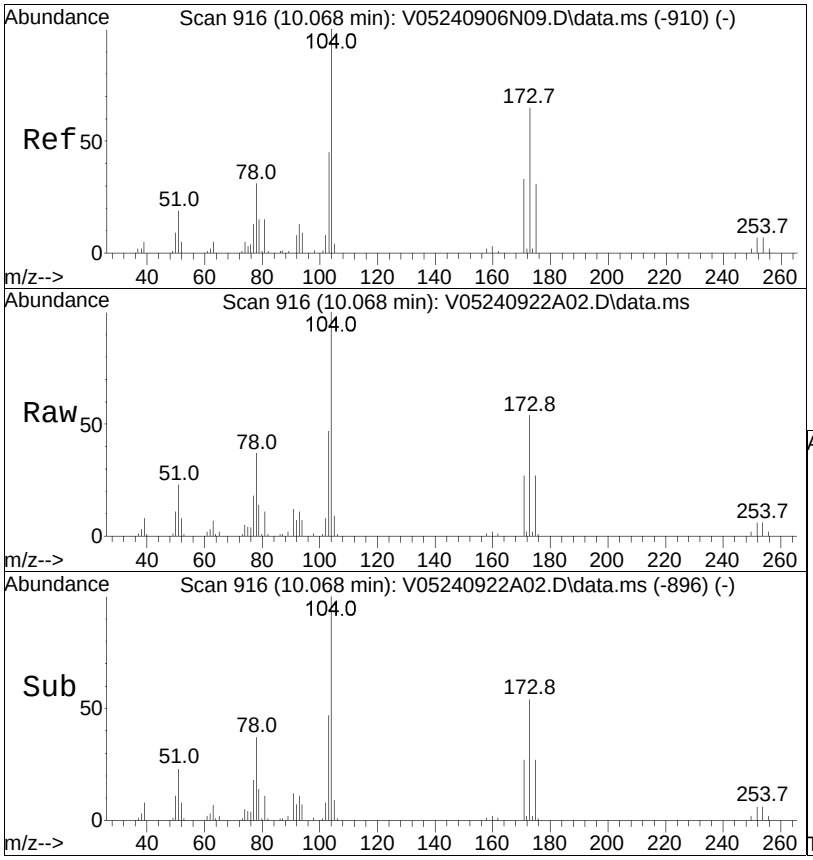



#78
Styrene
Concen: 21.24 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:104 Resp: 875839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 39.3 | 39.6 | 59.4# |

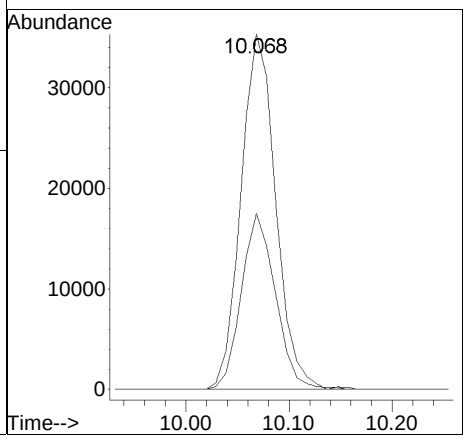


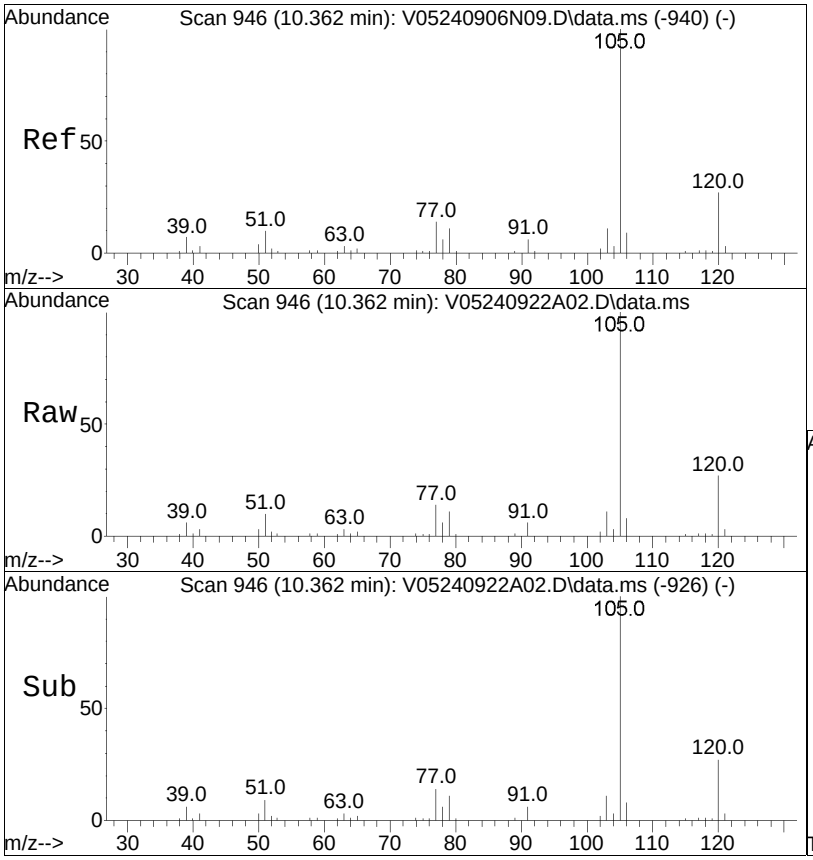



#80
Bromoform
Concen: 9.56 ug/L
RT: 10.068 min Scan# 916
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:173 Resp: 82602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.6 | 26.6 | 66.6 |

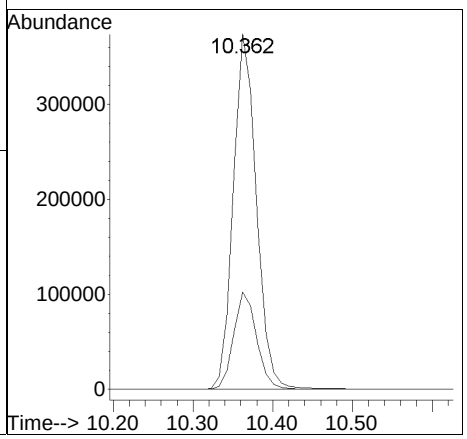


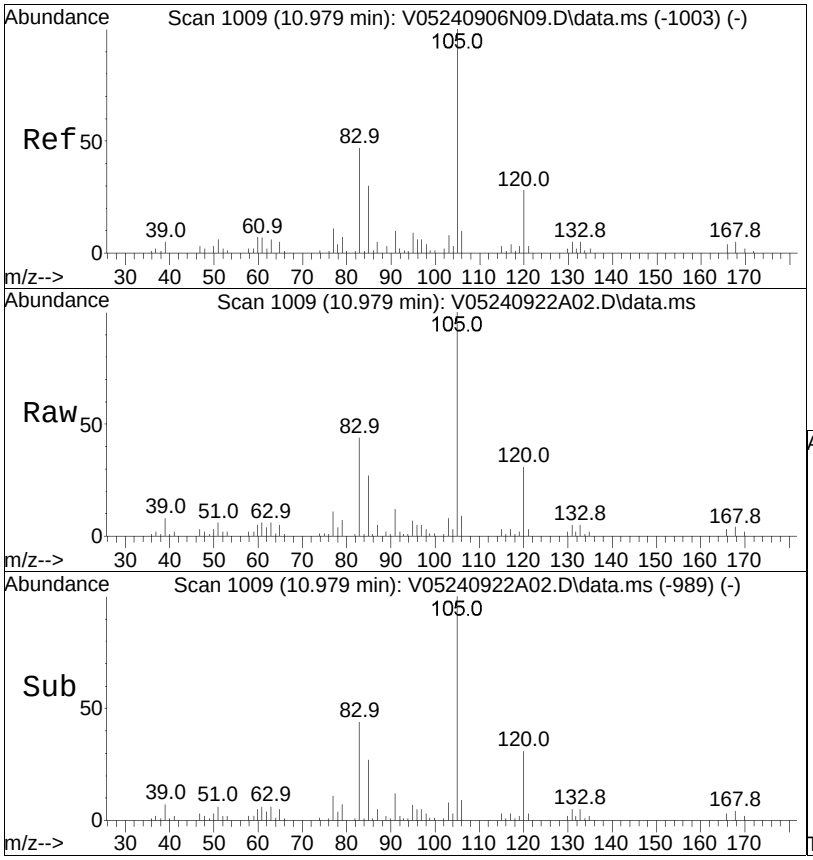



#82
Isopropylbenzene
Concen: 11.20 ug/L
RT: 10.362 min Scan# 946
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:105 Resp: 755501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.3 | 4.8 | 44.8 |

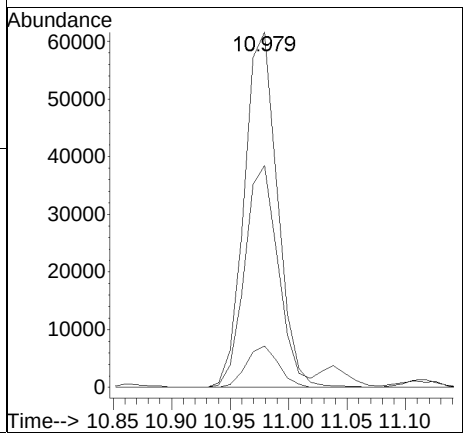


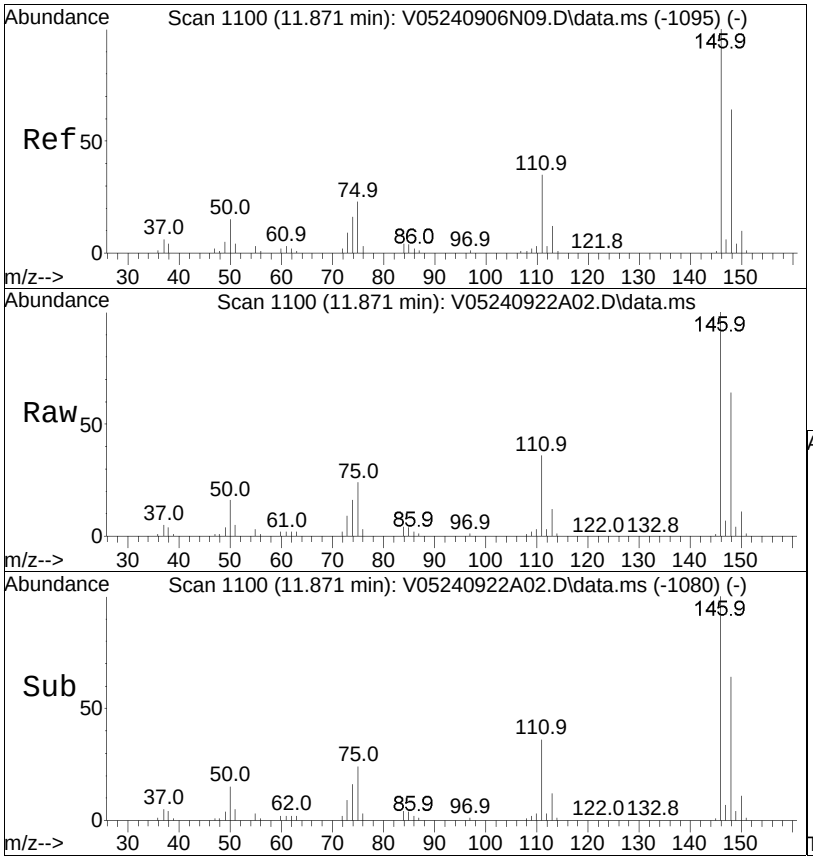



#87
1,1,2,2-Tetrachloroethane
Concen: 10.39 ug/L
RT: 10.979 min Scan# 1009
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion: 83 Resp: 121659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 11.4 | 0.0 | 30.4 |
| 85 | 63.4 | 46.4 | 86.4 |

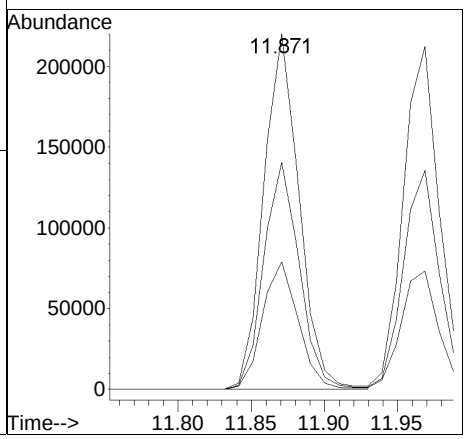


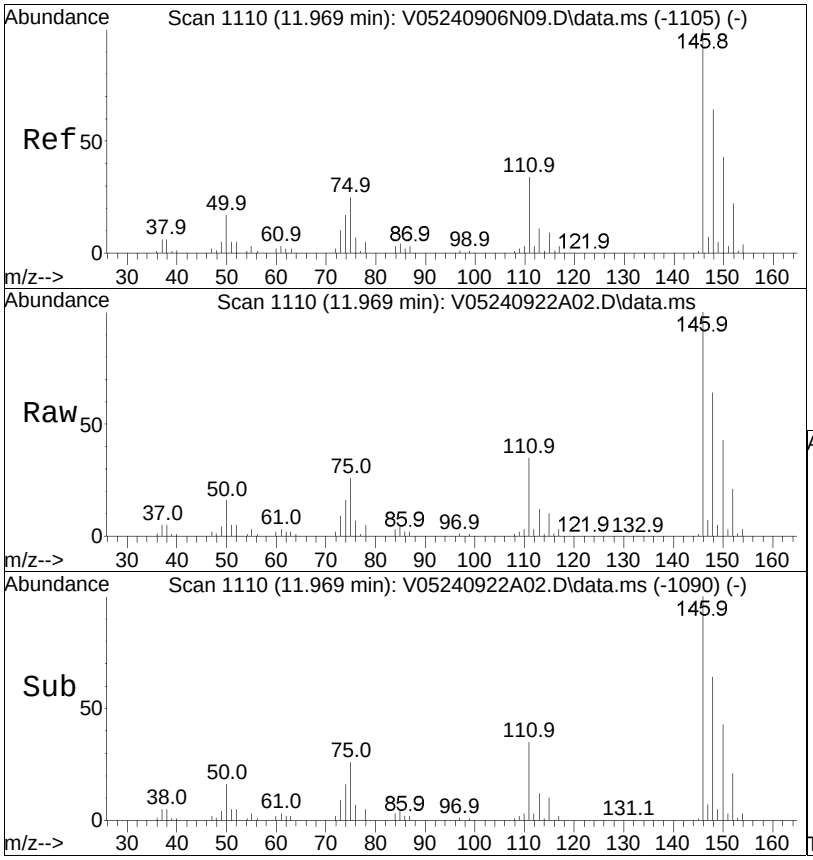



#100
1,3-Dichlorobenzene
Concen: 10.58 ug/L
RT: 11.871 min Scan# 1100
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:146 Resp: 370484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.4 | 28.0 | 58.1 |
| 148 | 64.1 | 41.6 | 86.4 |

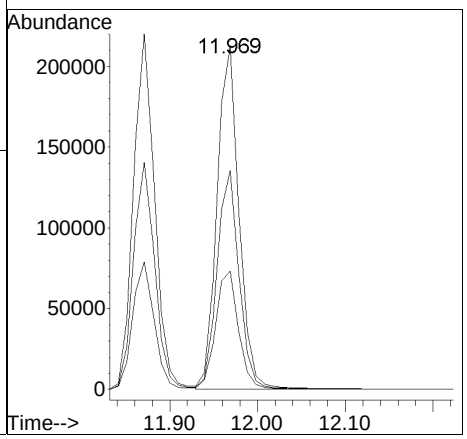


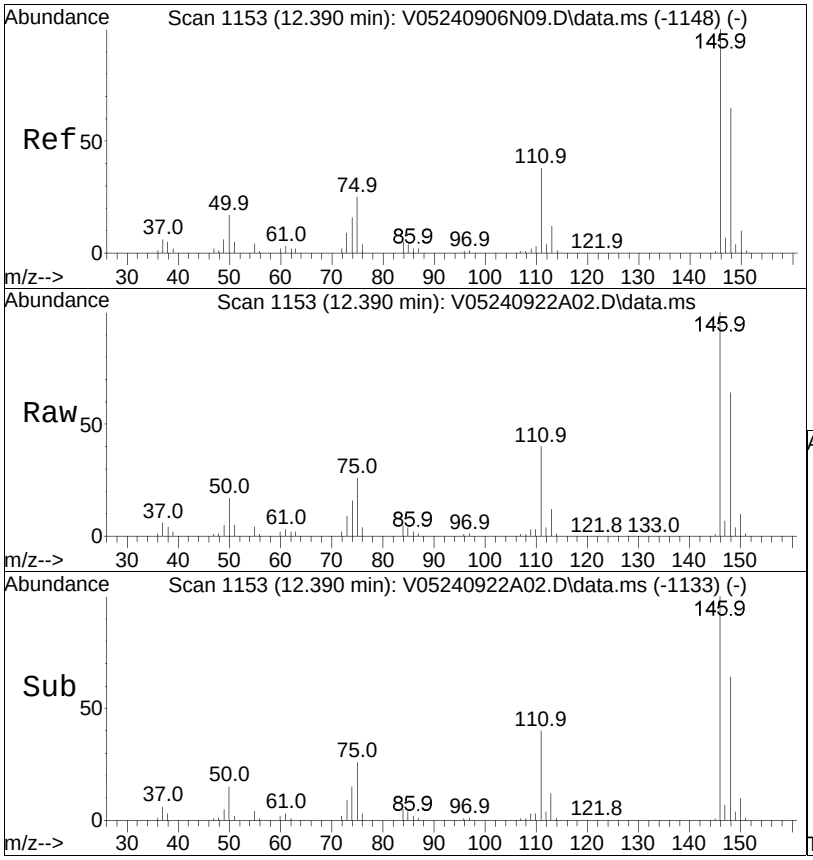



#101
1,4-Dichlorobenzene
Concen: 10.27 ug/L
RT: 11.969 min Scan# 1110
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:146 Resp: 369802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.4 | 33.8 | 50.6 |
| 148 | 64.1 | 51.0 | 76.6 |

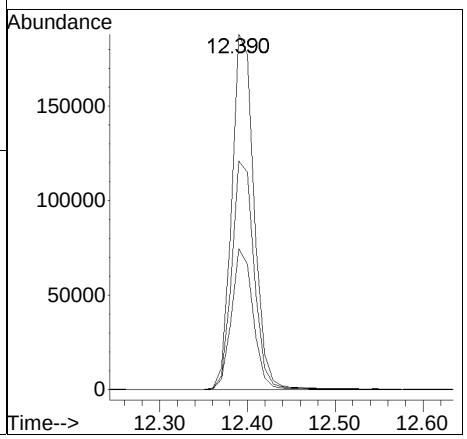


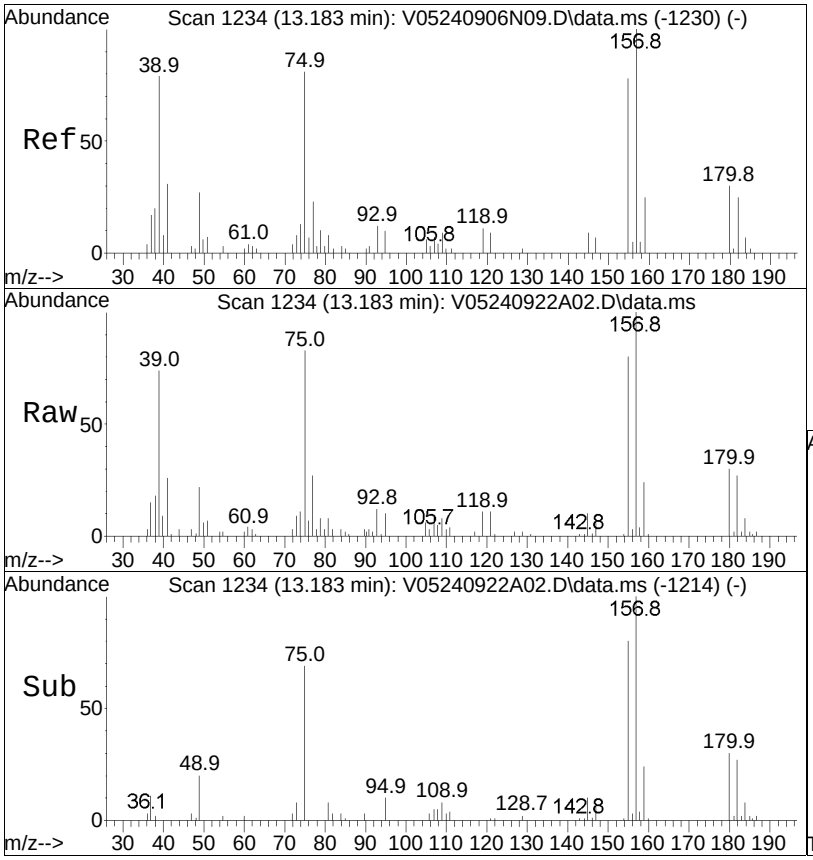



#104
1,2-Dichlorobenzene
Concen: 10.50 ug/L
RT: 12.390 min Scan# 1153
Delta R.T. -0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:146 Resp: 332247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.6 | 29.1 | 60.5 |
| 148 | 64.4 | 41.7 | 86.7 |

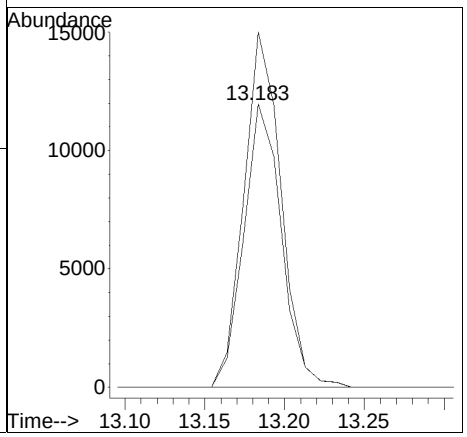


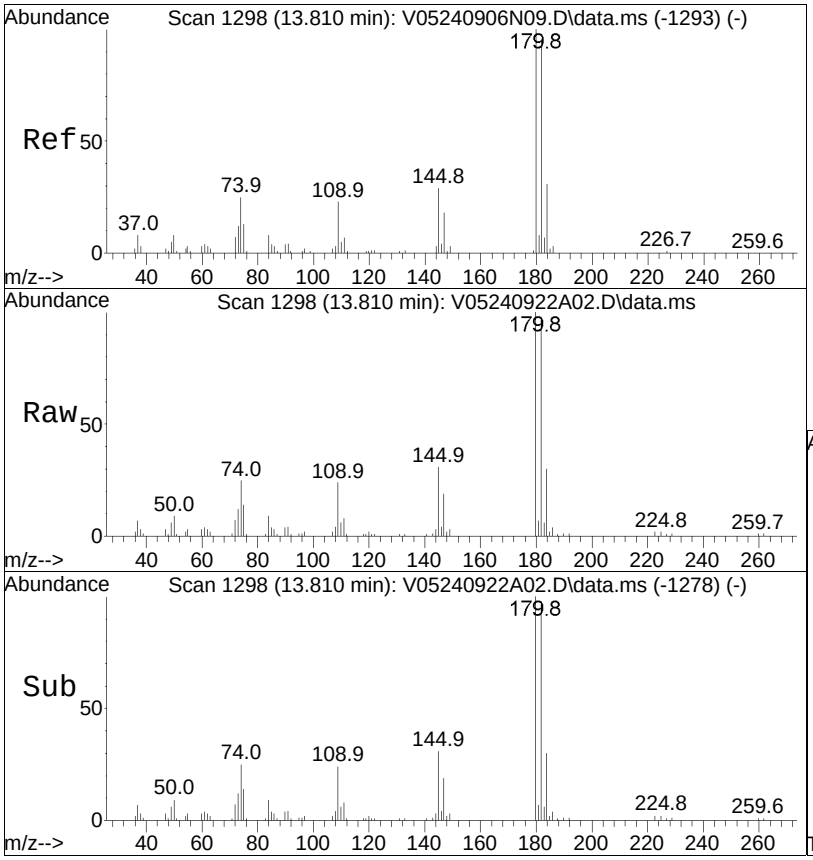



#106
1,2-Dibromo-3-chloropropane
Concen: 9.68 ug/L
RT: 13.183 min Scan# 1234
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:155 Resp: 19744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 123.4 | 105.0 | 157.6 |

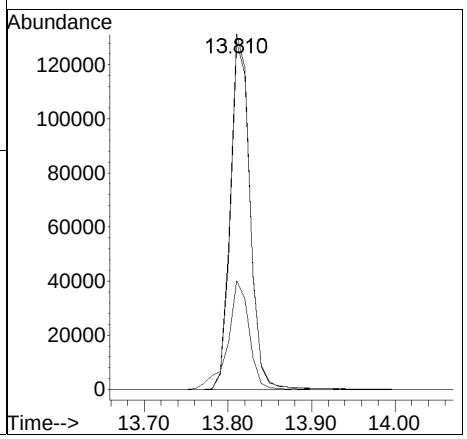


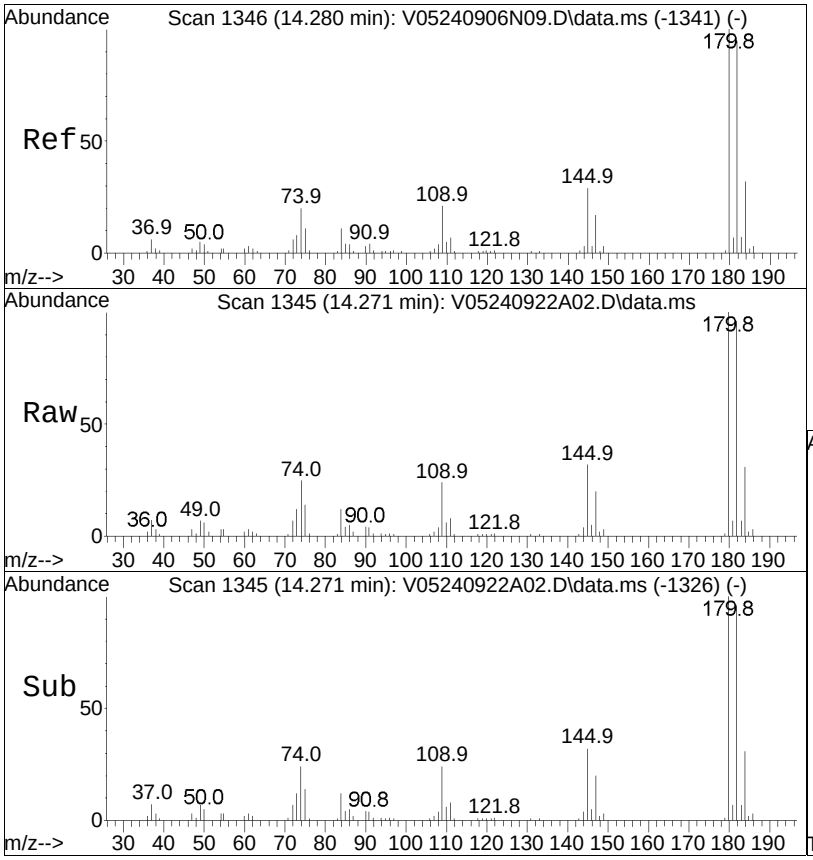



#109
1,2,4-Trichlorobenzene
Concen: 10.22 ug/L
RT: 13.810 min Scan# 1298
Delta R.T. 0.000 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:180 Resp: 215676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.3 | 75.2 | 112.8 |
| 145 | 33.0 | 27.4 | 41.2 |

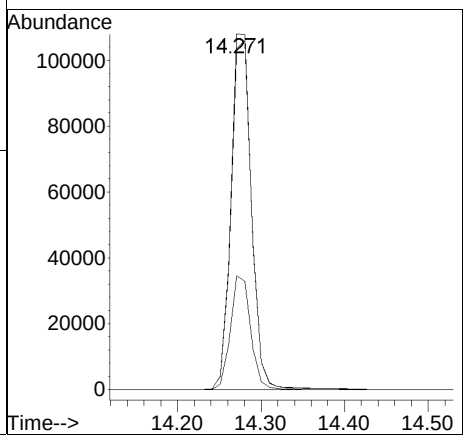





#111
1,2,3-Trichlorobenzene
Concen: 10.28 ug/L
RT: 14.271 min Scan# 1345
Delta R.T. -0.009 min
Lab File: V05240922A02.D
Acq: 22 Sep 2024 6:10 pm

Tgt Ion:180 Resp: 184517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.8 | 75.5 | 113.3 |
| 145 | 31.3 | 26.5 | 39.7 |



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A03.D
Acq On : 21 Sep 2024 7:51 am
Operator : ELAINE:LAC
Sample : WG1974948-4,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 09:21:34 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.959 | 96 | 264446 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 262722 | | | Recovery = 100.66% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 201178 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 101.85% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.200 | 152 | 118032 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 102.17% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.153 | 113 | 65684 | 10.610 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.10% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.671 | 65 | 78203 | 9.467 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 94.67% | | | |
| 64) Toluene-d8 | 7.643 | 98 | 258053 | 9.738 | ug/L | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.38% | | | |
| 88) 4-Bromofluorobenzene | 10.989 | 95 | 96643 | 8.864 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 88.64% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.589 | 85 | 74037 | 12.487 | ug/L | 96 |
| 3) Chloromethane | 1.776 | 50 | 76208 | 11.544 | ug/L | 97 |
| 4) Vinyl chloride | 1.857 | 62 | 76737 | 12.473 | ug/L | 94 |
| 5) Bromomethane | 2.161 | 94 | 26683 | 14.294 | ug/L | 95 |
| 6) Chloroethane | 2.280 | 64 | 45606 | 12.279 | ug/L | 97 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 85621 | 12.112 | ug/L | 94 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 50700 | 11.971 | ug/L | 90 |
| 11) Carbon disulfide | 2.930 | 76 | 153450 | 11.743 | ug/L | 97 |
| 12) Freon-113 | 2.936 | 101 | 54888 | 12.436 | ug/L | 83 |
| 15) Methylene chloride | 3.452 | 84 | 57871 | 10.833 | ug/L | 99 |
| 17) Acetone | 3.491 | 43 | 13216 | 6.811 | ug/L # | 84 |
| 18) trans-1,2-Dichloroethene | 3.608 | 96 | 53370 | 11.723 | ug/L | 84 |
| 19) Methyl acetate | 3.613 | 43 | 32235 | 7.127 | ug/L | 96 |
| 21) Methyl tert-butyl ether | 3.703 | 73 | 164590 | 9.696 | ug/L | 92 |
| 25) 1,1-Dichloroethane | 4.191 | 63 | 116269 | 10.882 | ug/L | 98 |
| 30) cis-1,2-Dichloroethene | 4.704 | 96 | 61852 | 11.335 | ug/L | 99 |
| 33) Bromochloromethane | 4.893 | 128 | 27876 | 11.646 | ug/L | 97 |
| 34) Cyclohexane | 4.905 | 56 | 131924 | 10.551 | ug/L | 99 |
| 35) Chloroform | 4.969 | 83 | 96292 | 10.872 | ug/L # | 94 |
| 37) Carbon tetrachloride | 5.103 | 117 | 82582 | 12.207 | ug/L | 94 |

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A03.D
Acq On : 21 Sep 2024 7:51 am
Operator : ELAINE:LAC
Sample : WG1974948-4,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 09:21:34 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 5.169 | 97 | 93543 | 11.630 | ug/L | | 94 |
| 42) 2-Butanone | 5.261 | 43 | 19753 | 7.125 | ug/L | | 98 |
| 45) Benzene | 5.538 | 78 | 239584 | 11.437 | ug/L | | 96 |
| 48) 1,2-Dichloroethane | 5.741 | 62 | 82774 | 10.238 | ug/L | | 73 |
| 51) Methyl cyclohexane | 6.123 | 83 | 105054 | 11.159 | ug/L | | 95 |
| 52) Trichloroethene | 6.137 | 95 | 58982 | 11.199 | ug/L | | 92 |
| 55) 1,2-Dichloropropane | 6.678 | 63 | 67164 | 10.621 | ug/L | | 96 |
| 58) Bromodichloromethane | 6.753 | 83 | 80588 | 10.754 | ug/L | | 93 |
| 62) cis-1,3-Dichloropropene | 7.442 | 75 | 89368 | 10.592 | ug/L | | 95 |
| 65) Toluene | 7.702 | 92 | 152868 | 11.035 | ug/L | | 96 |
| 66) 4-Methyl-2-pentanone | 8.142 | 58 | 17837 | 7.549 | ug/L | | 79 |
| 67) Tetrachloroethene | 8.151 | 166 | 74141 | 12.599 | ug/L | | 92 |
| 69) trans-1,3-Dichloropropene | 8.184 | 75 | 77051 | 9.879 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.374 | 83 | 37791 | 9.717 | ug/L | | 98 |
| 73) Chlorodibromomethane | 8.586 | 129 | 55305 | 10.170 | ug/L | | 98 |
| 75) 1,2-Dibromoethane | 8.859 | 107 | 45133 | 9.819 | ug/L | | 89 |
| 77) 2-Hexanone | 9.143 | 43 | 28561 | 6.204 | ug/L | # | 94 |
| 78) Chlorobenzene | 9.511 | 112 | 166754 | 11.298 | ug/L | # | 85 |
| 79) Ethylbenzene | 9.550 | 91 | 303367 | 11.299 | ug/L | | 100 |
| 81) p/m Xylene | 9.732 | 106 | 237163 | 23.173 | ug/L | | 97 |
| 82) o Xylene | 10.275 | 106 | 230579 | 23.040 | ug/L | | 90 |
| 83) Styrene | 10.345 | 104 | 374423 | 22.819 | ug/L | | 95 |
| 85) Bromoform | 10.368 | 173 | 37253 | 9.700 | ug/L | | 92 |
| 87) Isopropylbenzene | 10.660 | 105 | 307715 | 10.887 | ug/L | | 96 |
| 92) 1,1,2,2-Tetrachloroethane | 11.229 | 83 | 56676 | 9.450 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.122 | 146 | 148988 | 11.306 | ug/L | | 95 |
| 106) 1,4-Dichlorobenzene | 12.214 | 146 | 147733 | 11.215 | ug/L | | 97 |
| 109) 1,2-Dichlorobenzene | 12.637 | 146 | 139572 | 11.008 | ug/L | | 98 |
| 111) 1,2-Dibromo-3-chloropr... | 13.421 | 155 | 8551 | 7.647 | ug/L | | 90 |
| 114) 1,2,4-Trichlorobenzene | 14.049 | 180 | 93773 | 10.318 | ug/L | | 98 |
| 116) 1,2,3-Trichlorobenzene | 14.509 | 180 | 81314 | 9.738 | ug/L | | 94 |

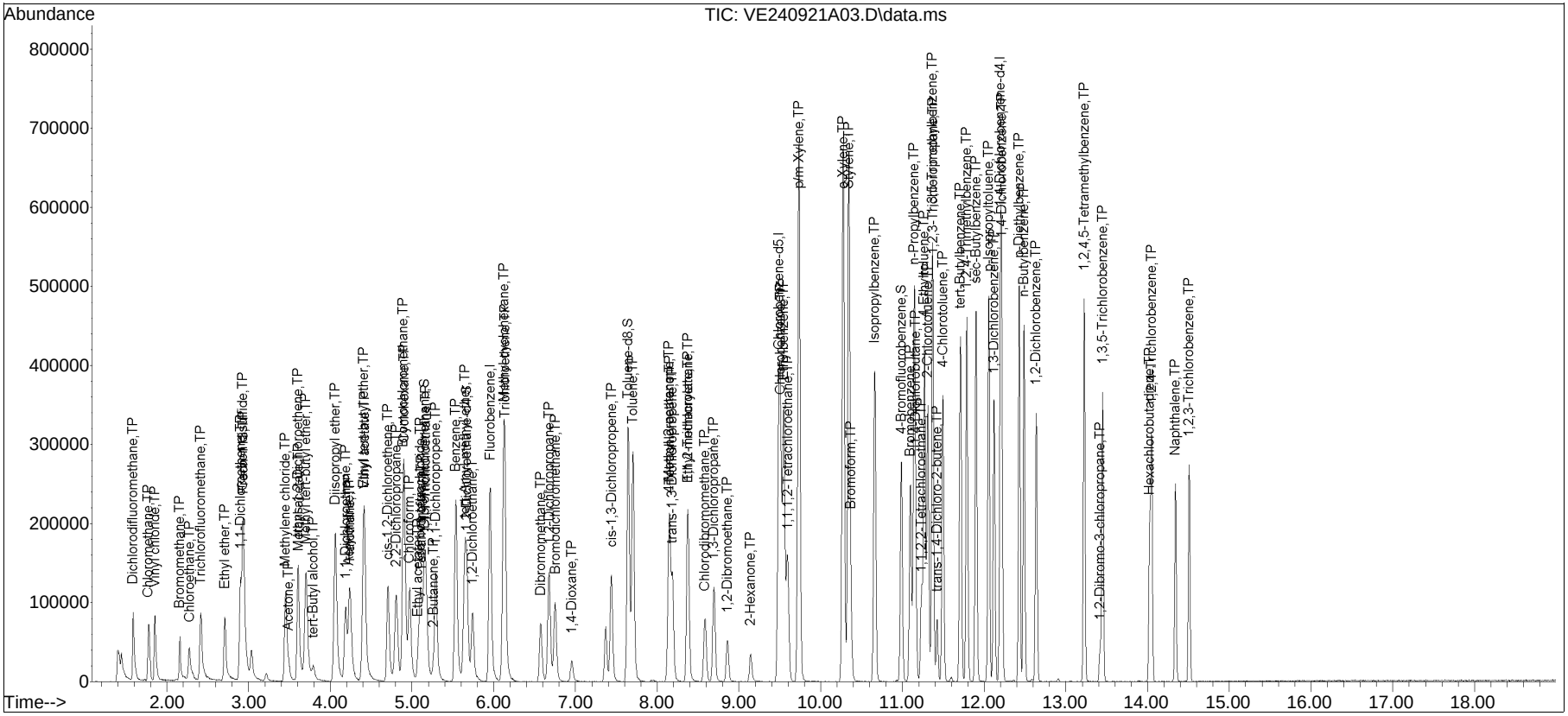
(#) = qualifier out of range (m) = manual integration (+) = signals summed

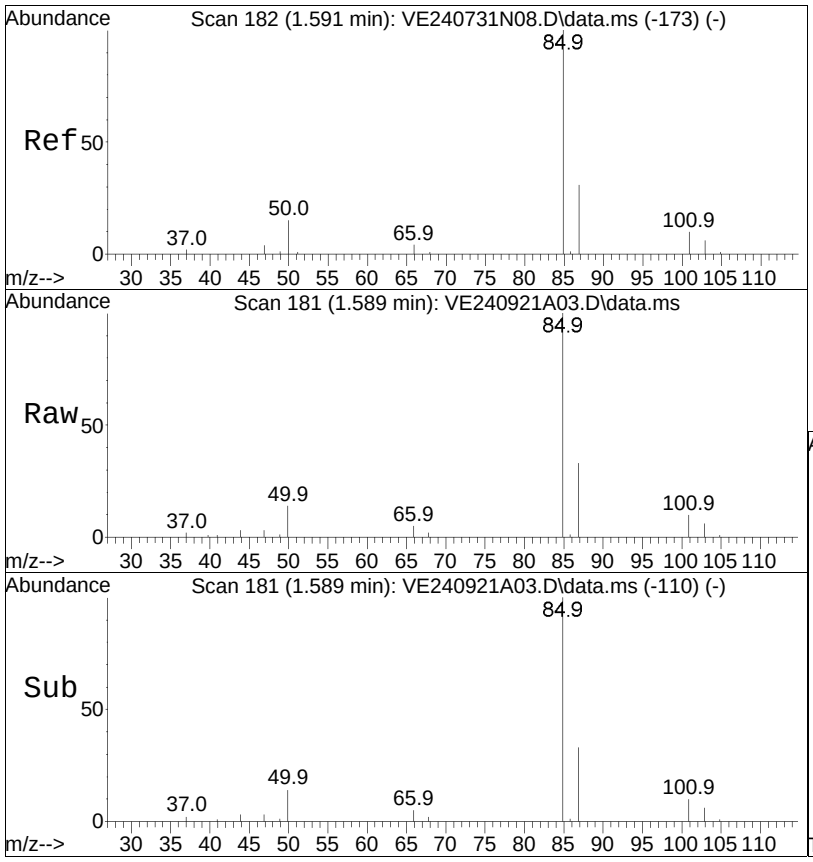
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A03.D
Acq On : 21 Sep 2024 7:51 am
Operator : ELAINE:LAC
Sample : WG1974948-4,31,10,10
Misc : WG1974948,ICAL21358
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 09:21:34 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

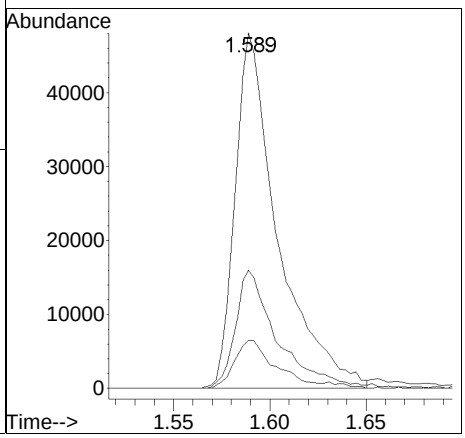


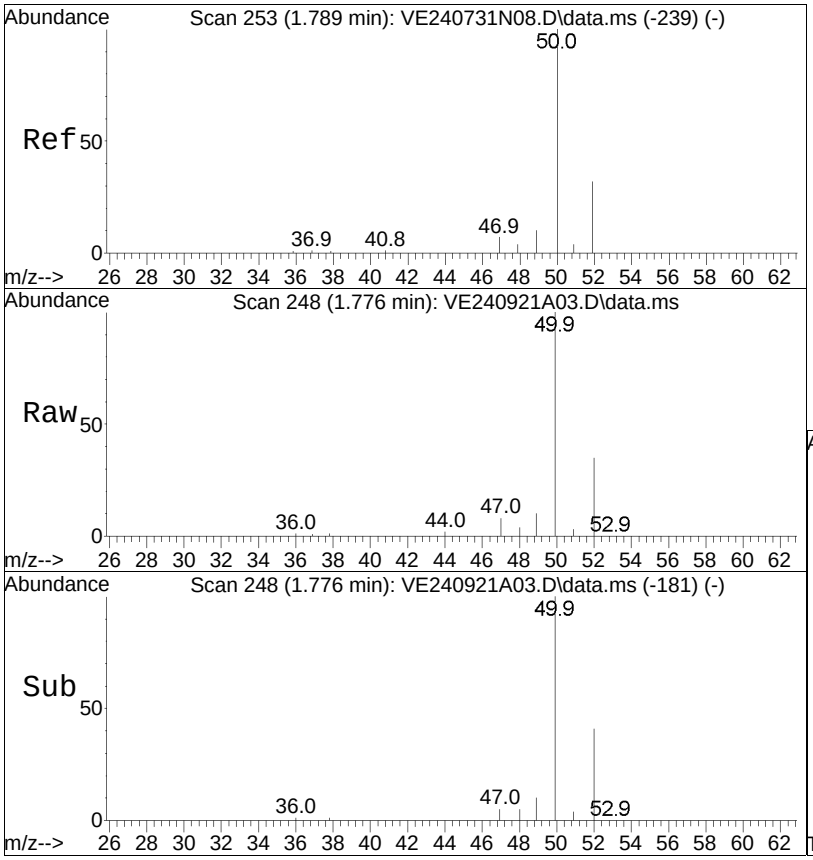



#2
Dichlorodifluoromethane
Concen: 12.49 ug/L
RT: 1.589 min Scan# 181
Delta R.T. -0.002 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 85 Resp: 74037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.0 | 21.7 | 45.1 |
| 50 | 13.9 | 11.8 | 24.4 |

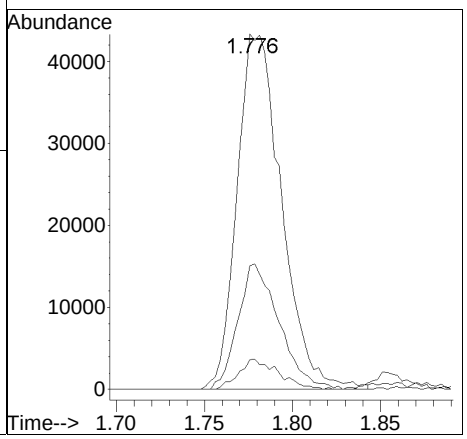


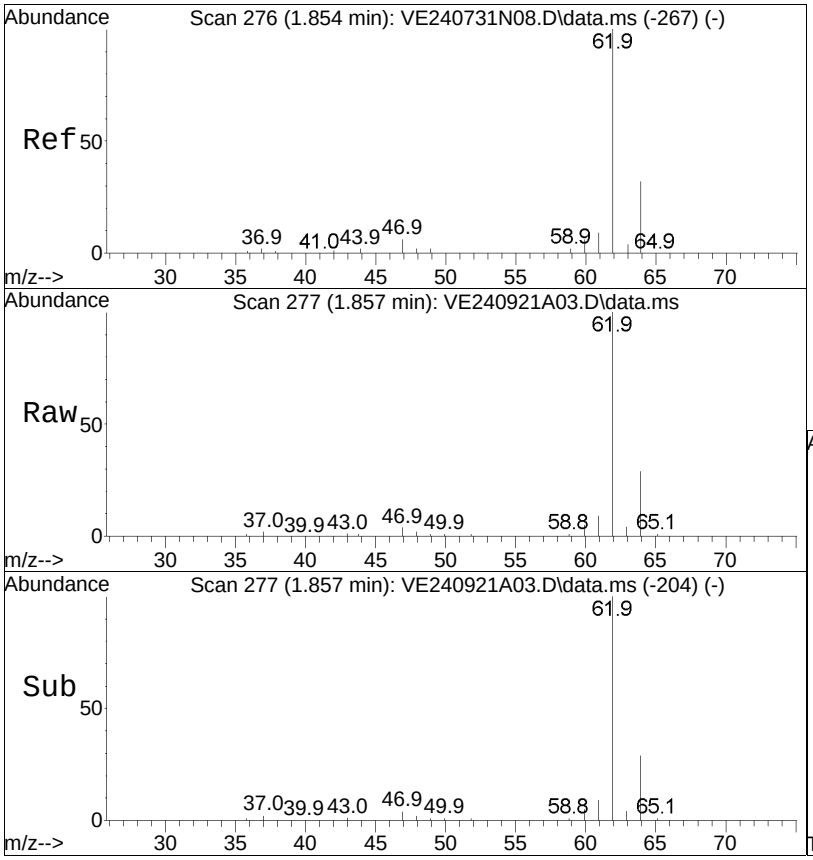



#3
Chloromethane
Concen: 11.54 ug/L
RT: 1.776 min Scan# 248
Delta R.T. -0.013 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 50 Resp: 76208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.8 | 14.9 | 54.9 |
| 47 | 7.7 | 0.0 | 28.0 |

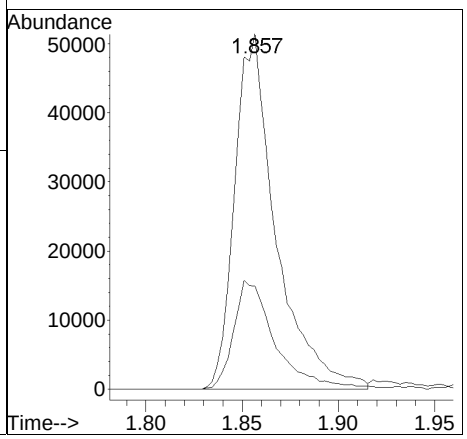


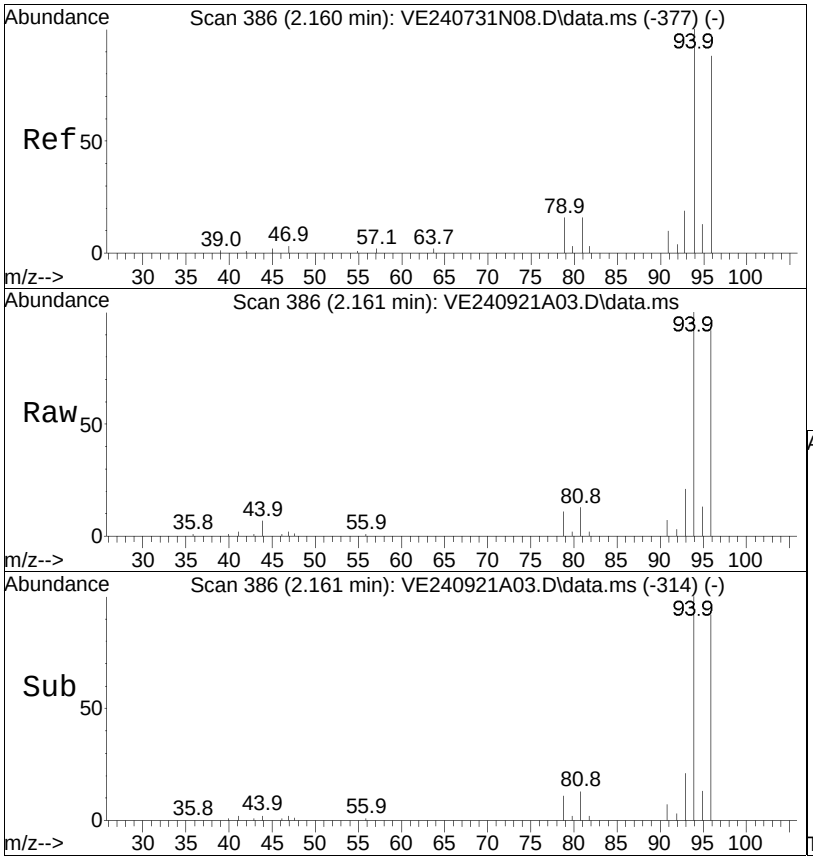



#4
Vinyl chloride
Concen: 12.47 ug/L
RT: 1.857 min Scan# 277
Delta R.T. 0.003 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 62 Resp: 76737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.1 | 8.1 | 48.1 |

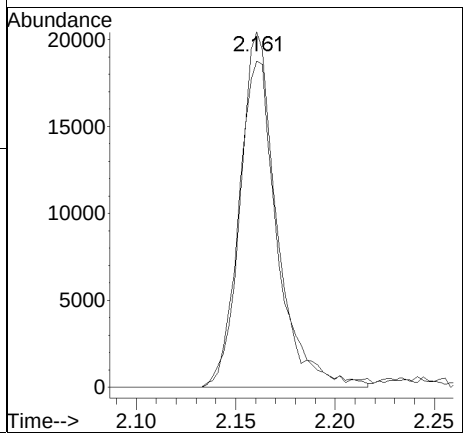


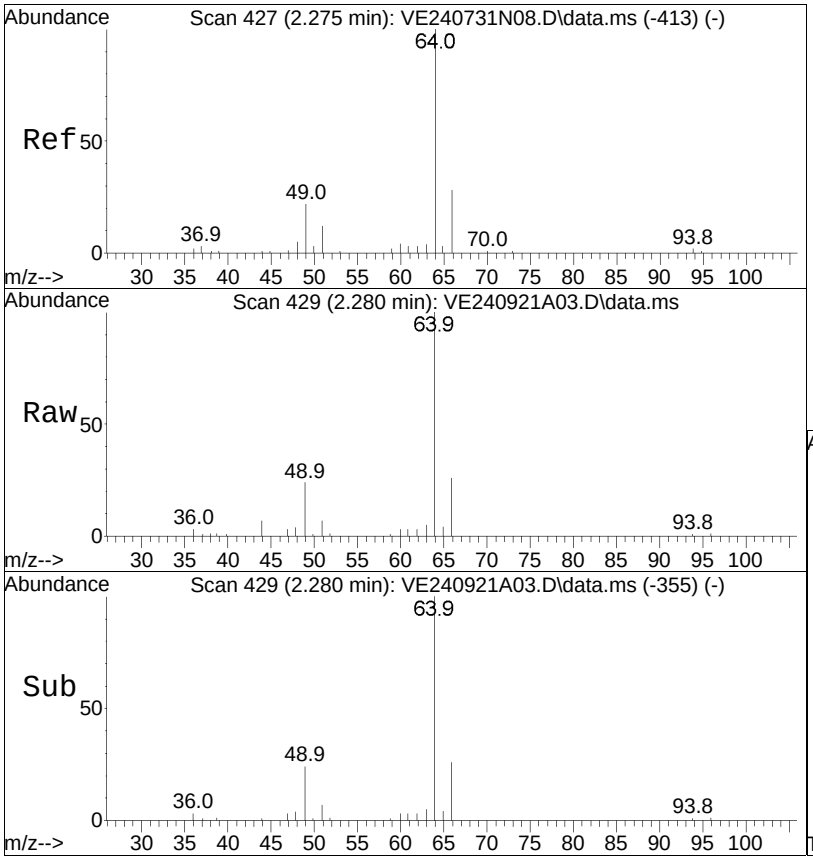



#5
Bromomethane
Concen: 14.29 ug/L
RT: 2.161 min Scan# 386
Delta R.T. 0.001 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 94 Resp: 26683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.5 | 68.2 | 108.2 |

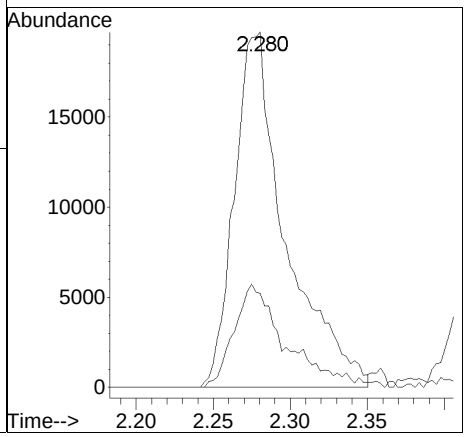


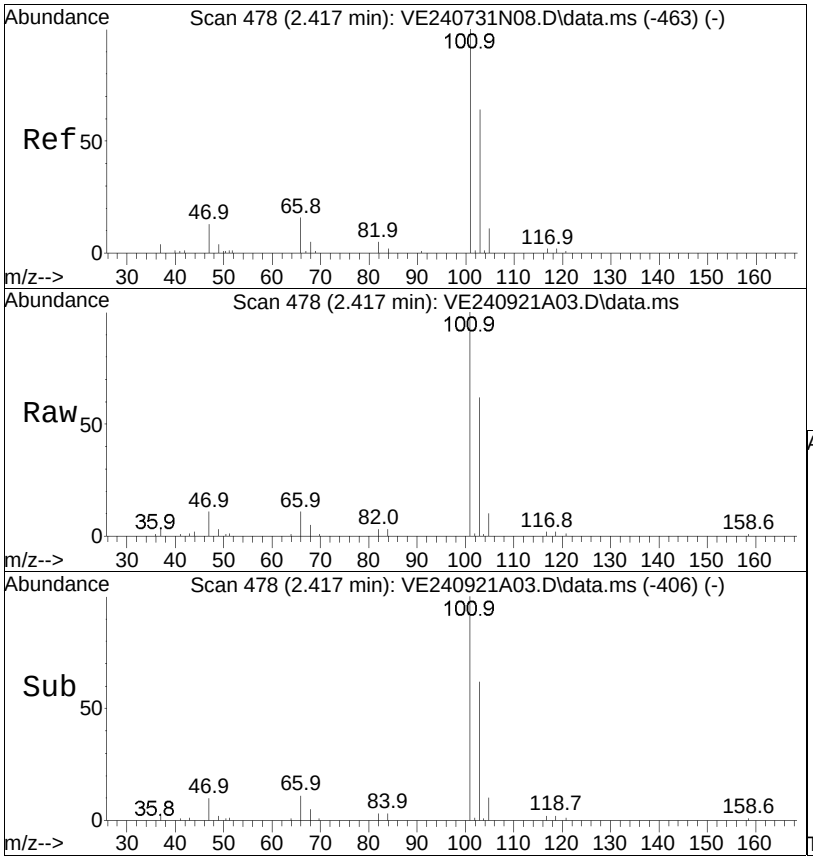



#6
Chloroethane
Concen: 12.28 ug/L
RT: 2.280 min Scan# 429
Delta R.T. 0.005 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 64 Resp: 45606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 28.8 | 10.7 | 50.7 |

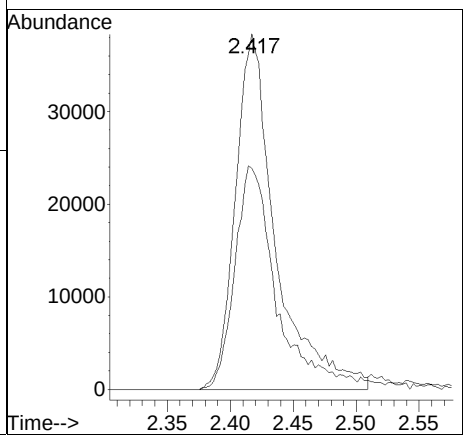


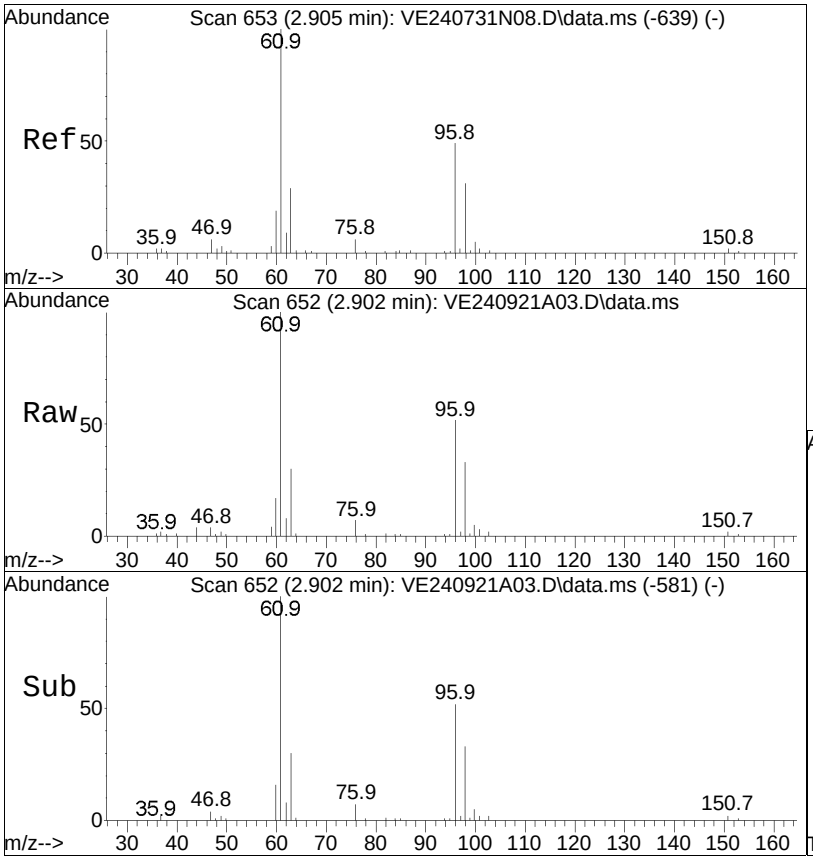



#7
Trichlorofluoromethane
Concen: 12.11 ug/L
RT: 2.417 min Scan# 478
Delta R.T. 0.000 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:101 Resp: 85621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.7 | 48.2 | 72.2 |

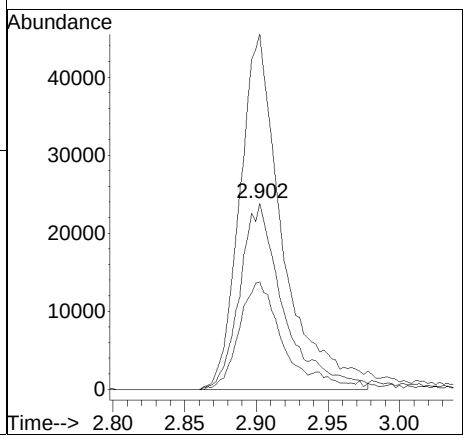


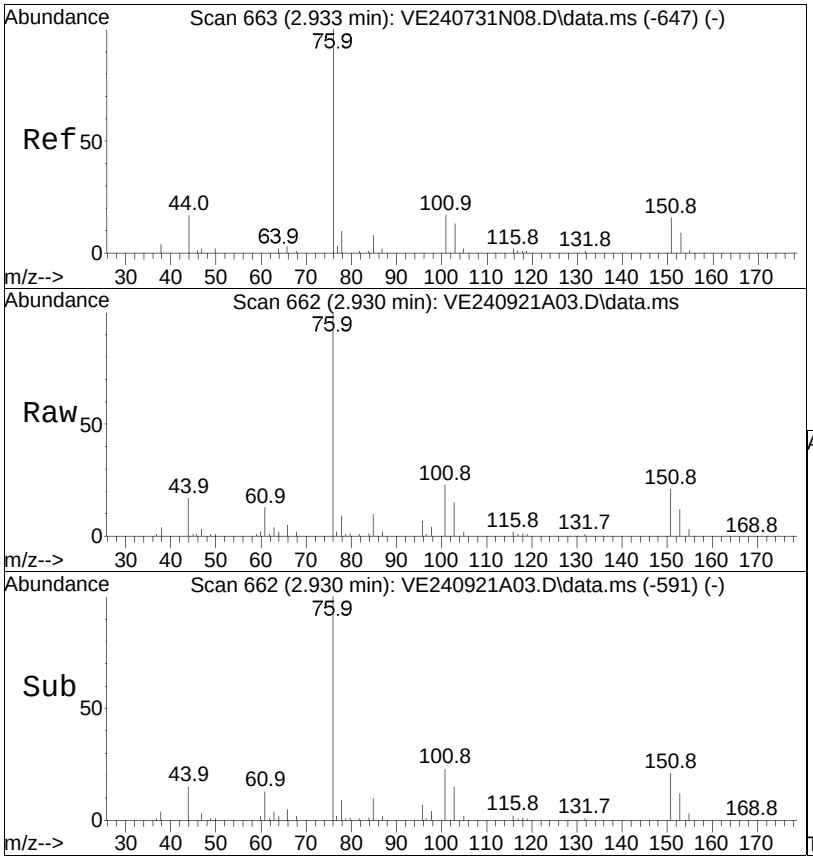



#10
1,1-Dichloroethene
Concen: 11.97 ug/L
RT: 2.902 min Scan# 652
Delta R.T. -0.003 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 96 Resp: 50700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 188.0 | 135.4 | 203.0 |
| 63 | 53.1 | 42.6 | 63.8 |

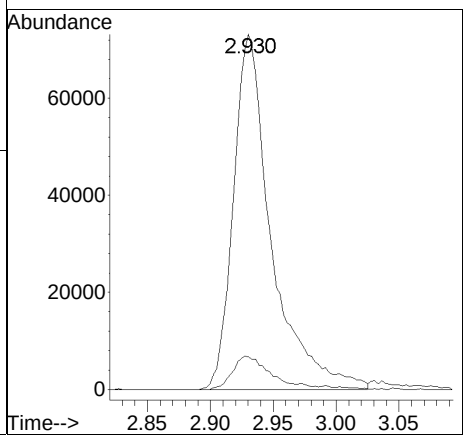


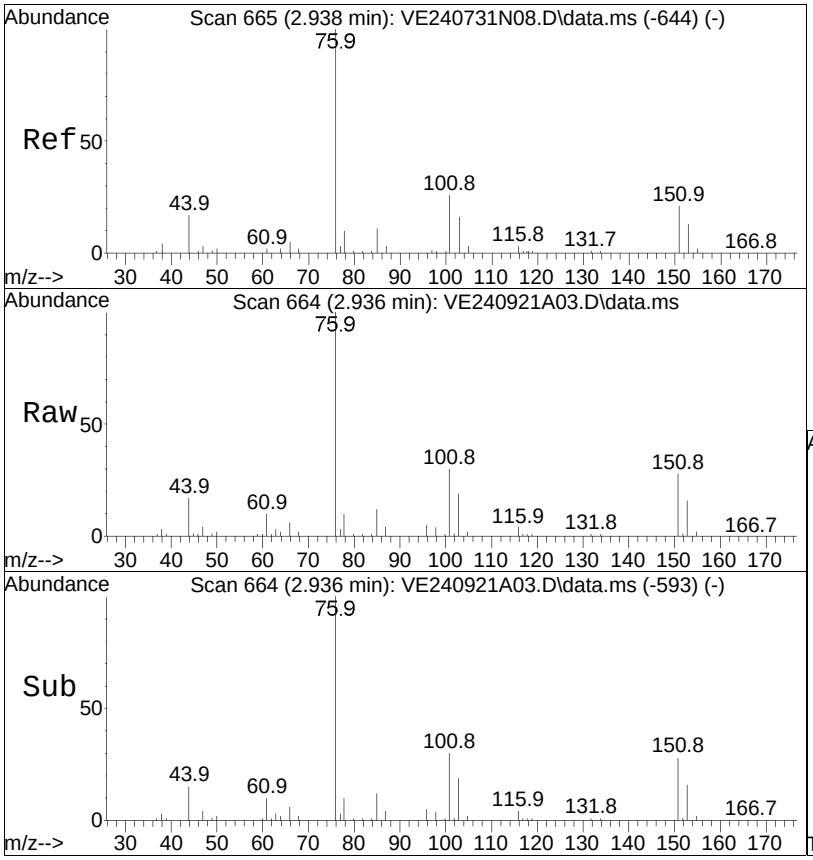



#11
Carbon disulfide
Concen: 11.74 ug/L
RT: 2.930 min Scan# 662
Delta R.T. -0.003 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 76 Resp: 153450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.5 | 5.5 | 11.3 |

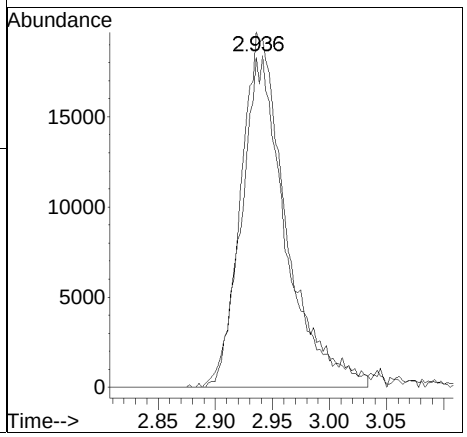


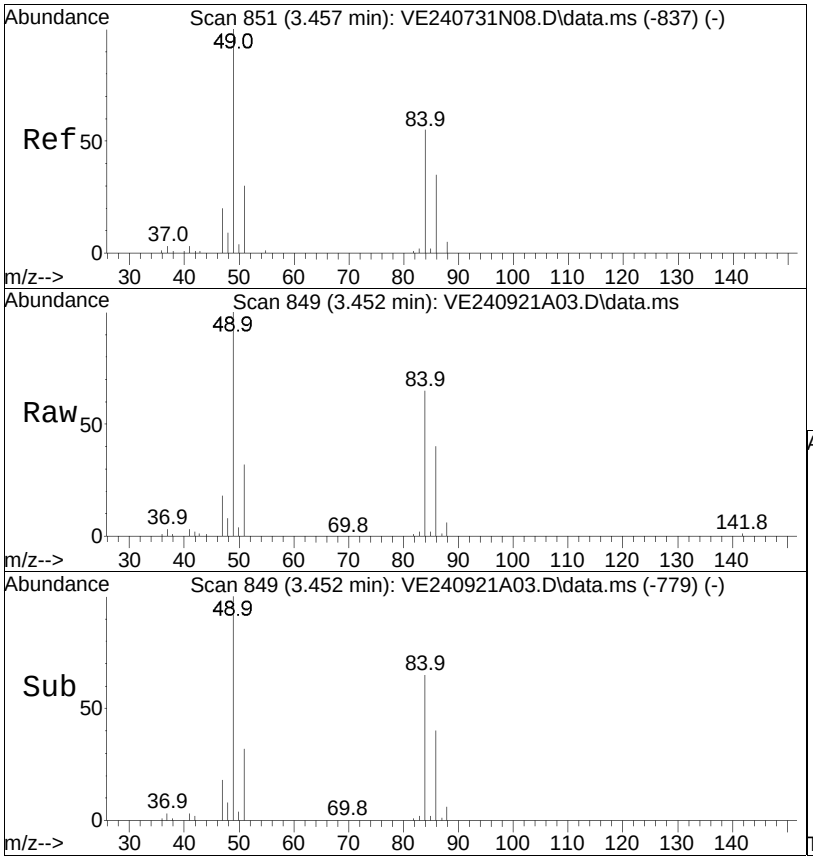



#12
Freon-113
Concen: 12.44 ug/L
RT: 2.936 min Scan# 664
Delta R.T. -0.002 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:101 Resp: 54888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 87.7 | 58.7 | 88.1 |

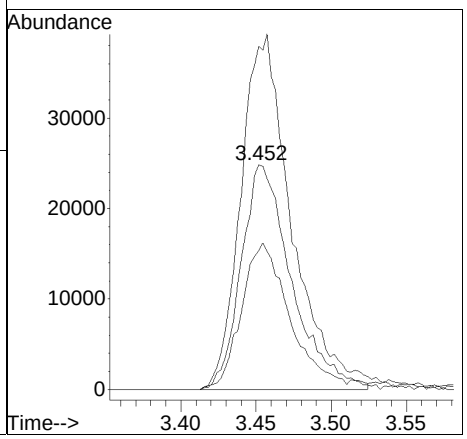


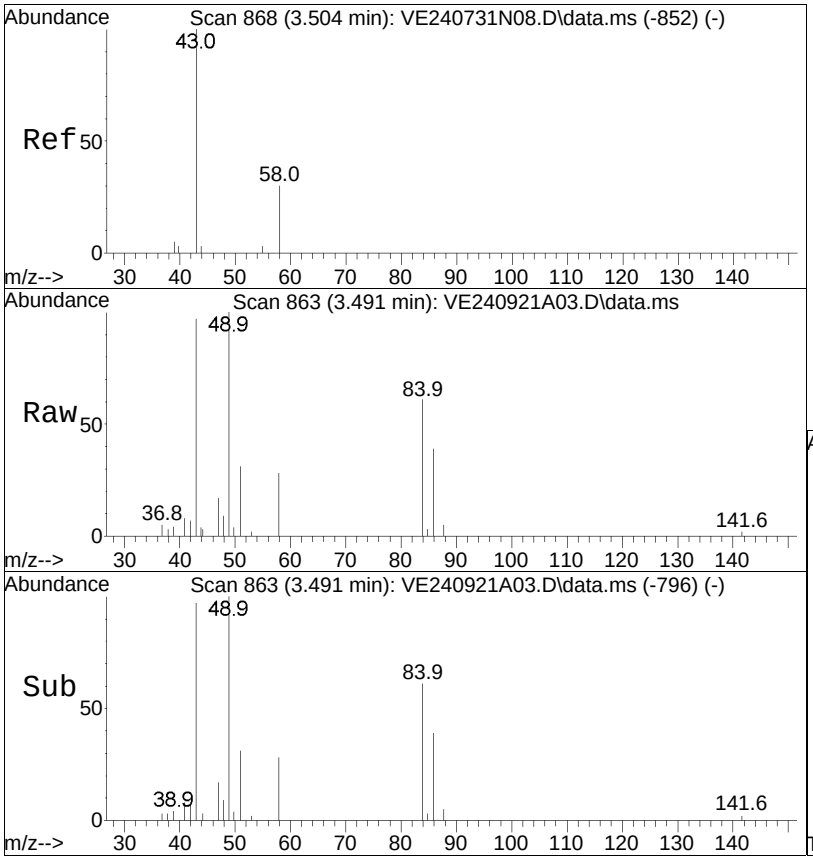



#15
Methylene chloride
Concen: 10.83 ug/L
RT: 3.452 min Scan# 849
Delta R.T. -0.005 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 84 Resp: 57871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 62.7 | 40.2 | 83.6 |
| 49 | 156.9 | 103.2 | 214.4 |

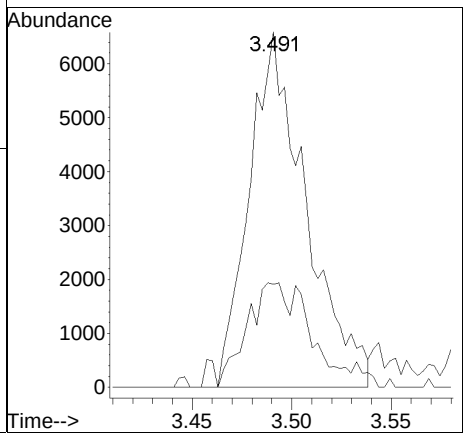


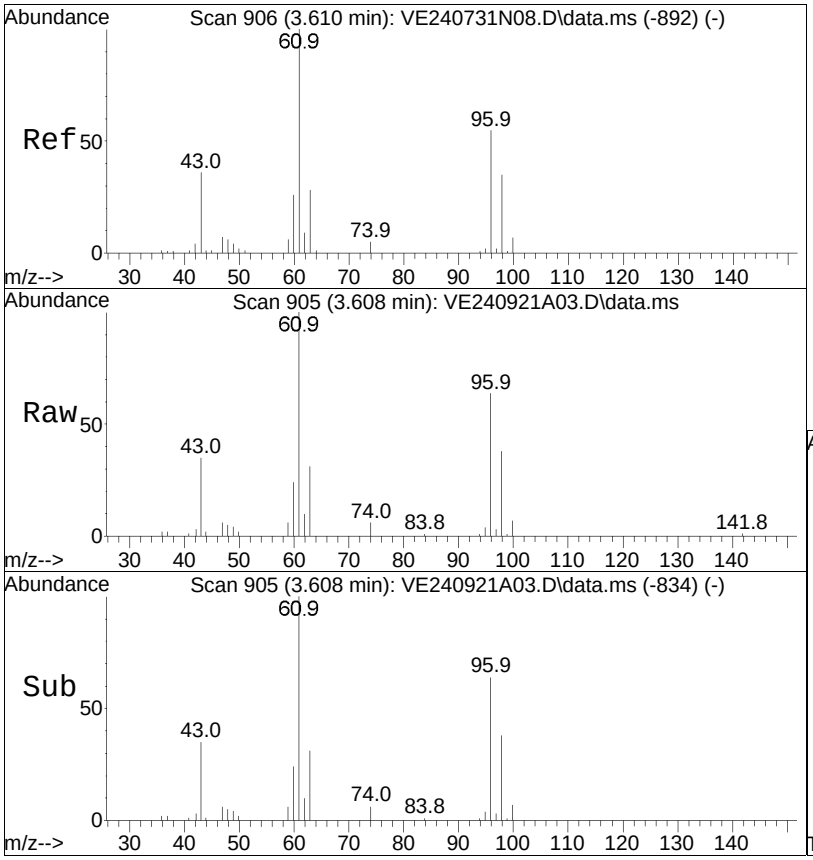



#17
Acetone
Concen: 6.81 ug/L
RT: 3.491 min Scan# 863
Delta R.T. -0.013 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 43 Resp: 13216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 20.8 | 23.4 | 35.0# |

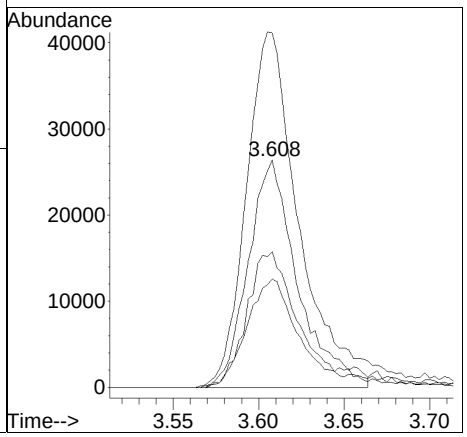


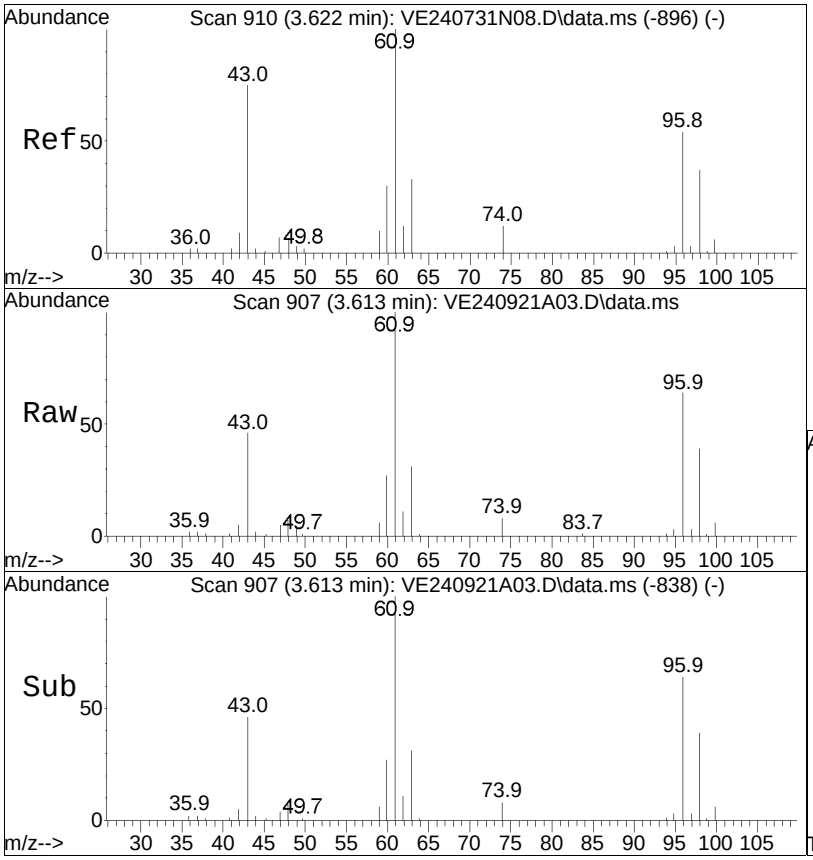



#18
trans-1,2-Dichloroethene
Concen: 11.72 ug/L
RT: 3.608 min Scan# 905
Delta R.T. -0.002 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 96 Resp: 53370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 170.5 | 93.5 | 194.1 |
| 98 | 64.5 | 37.8 | 78.6 |
| 63 | 49.2 | 29.7 | 61.7 |

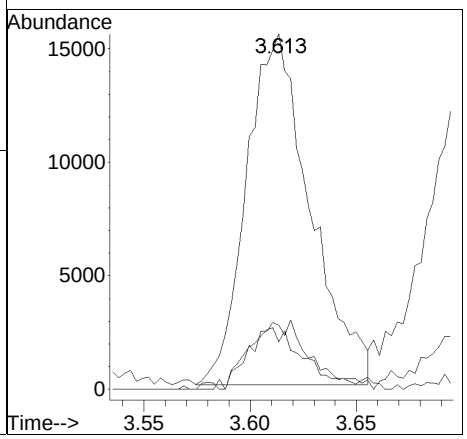


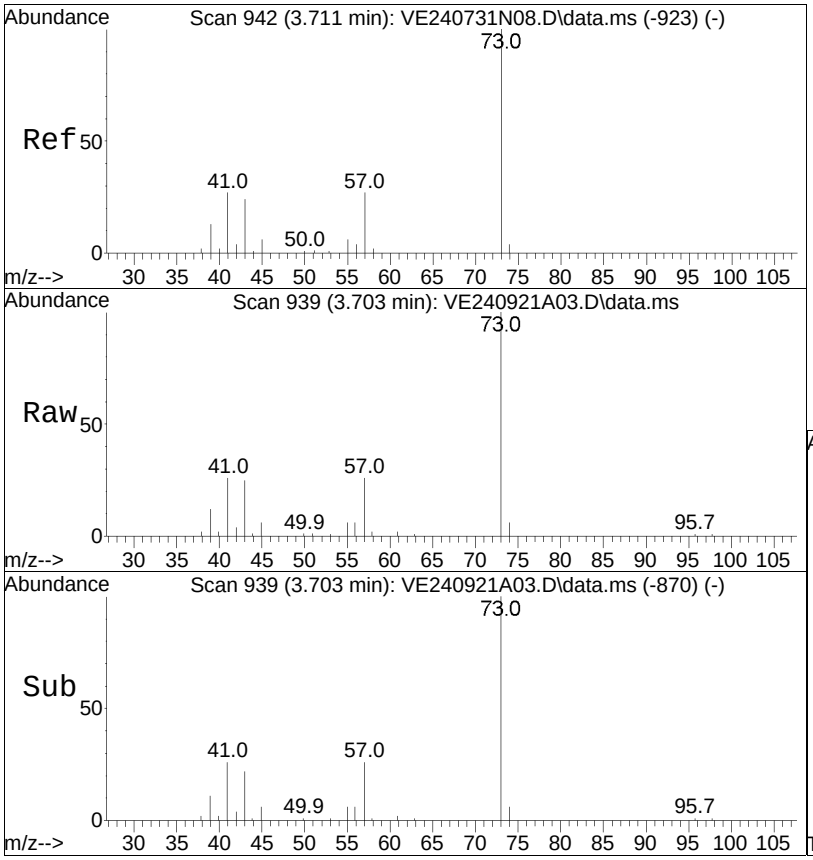



#19
Methyl acetate
Concen: 7.13 ug/L
RT: 3.613 min Scan# 907
Delta R.T. -0.009 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 43 Resp: 32235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.3 | 12.6 | 18.8 |
| 59 | 15.8 | 12.2 | 18.2 |

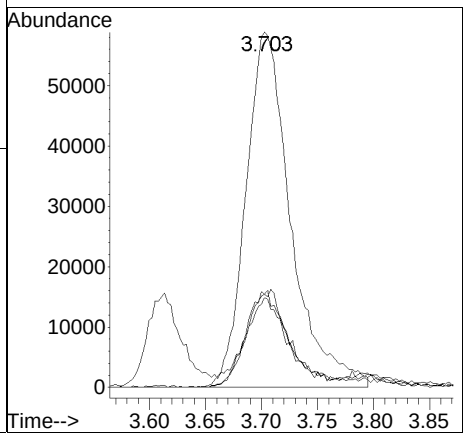


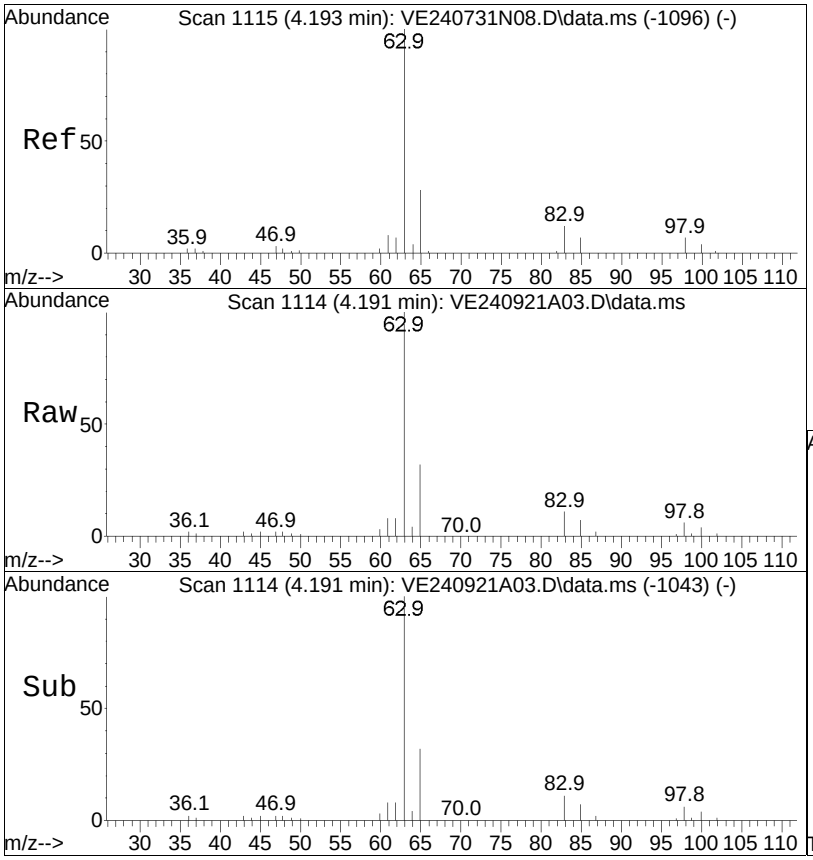



#21
Methyl tert-butyl ether
Concen: 9.70 ug/L
RT: 3.703 min Scan# 939
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 73 Resp: 164590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 26.3 | 16.1 | 33.3 |
| 43 | 20.1 | 17.0 | 35.2 |
| 41 | 24.3 | 18.7 | 38.9 |

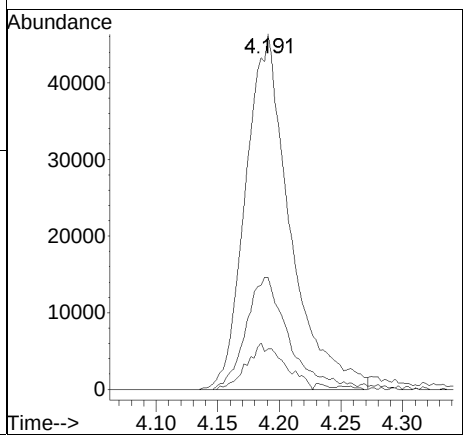


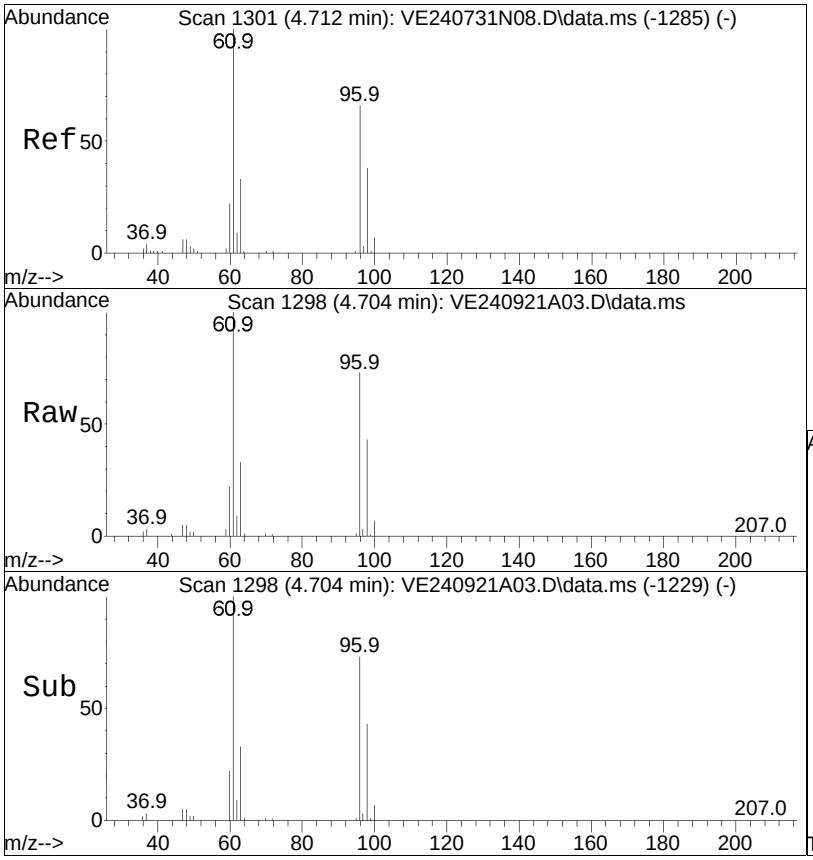



#25
1,1-Dichloroethane
Concen: 10.88 ug/L
RT: 4.191 min Scan# 1114
Delta R.T. -0.002 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 63 Resp: 116269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.9 | 10.3 | 50.3 |
| 83 | 11.1 | 0.0 | 33.1 |

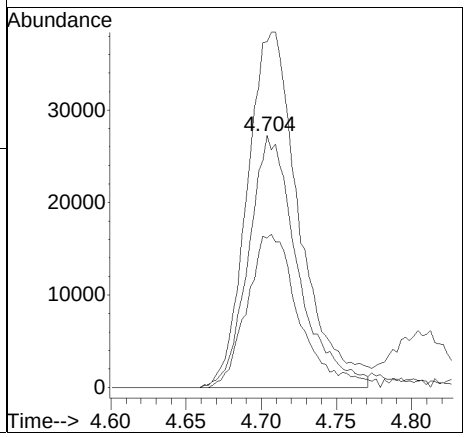


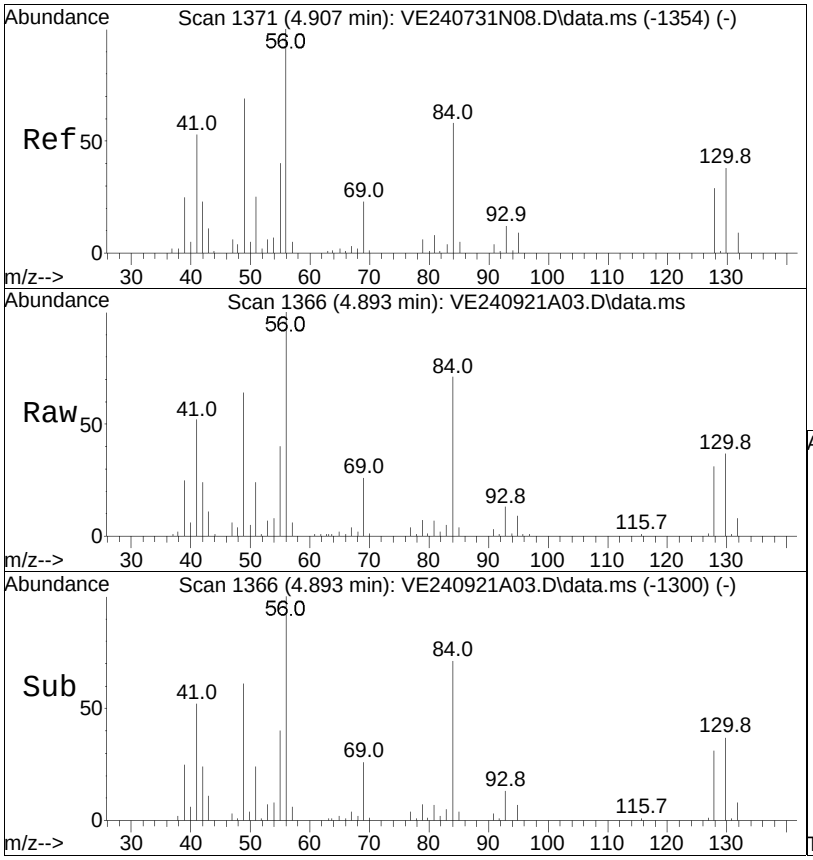



#30
cis-1,2-Dichloroethene
Concen: 11.33 ug/L
RT: 4.704 min Scan# 1298
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 96 Resp: 61852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.6 | 120.3 | 180.5 |
| 98 | 64.5 | 50.2 | 75.4 |

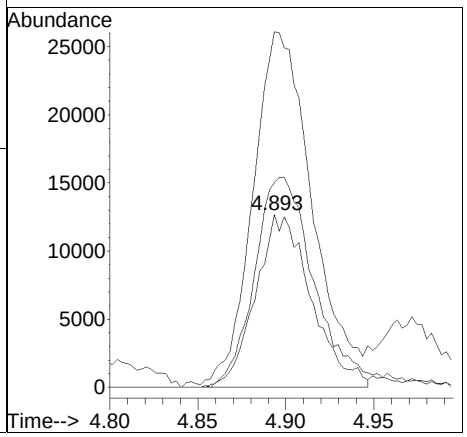


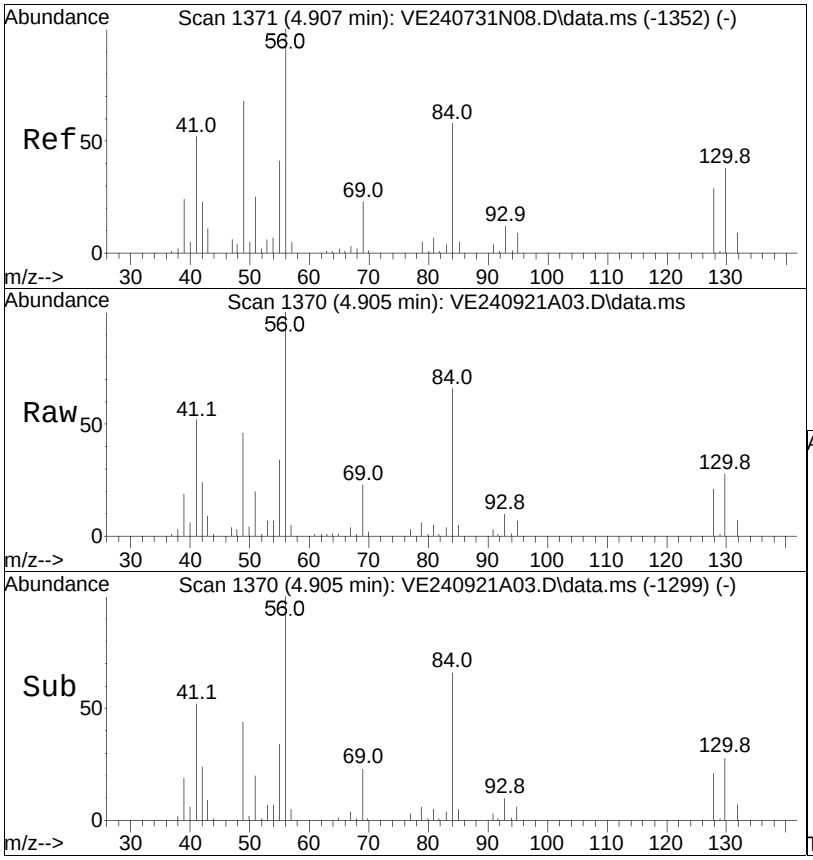



#33
Bromochloromethane
Concen: 11.65 ug/L
RT: 4.893 min Scan# 1366
Delta R.T. -0.014 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:128 Resp: 27876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 215.5 | 170.2 | 255.2 |
| 130 | 134.9 | 103.7 | 155.5 |

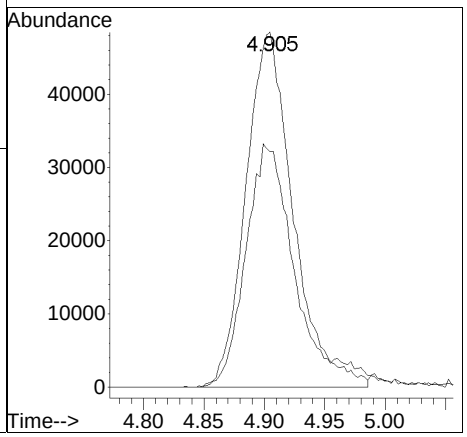


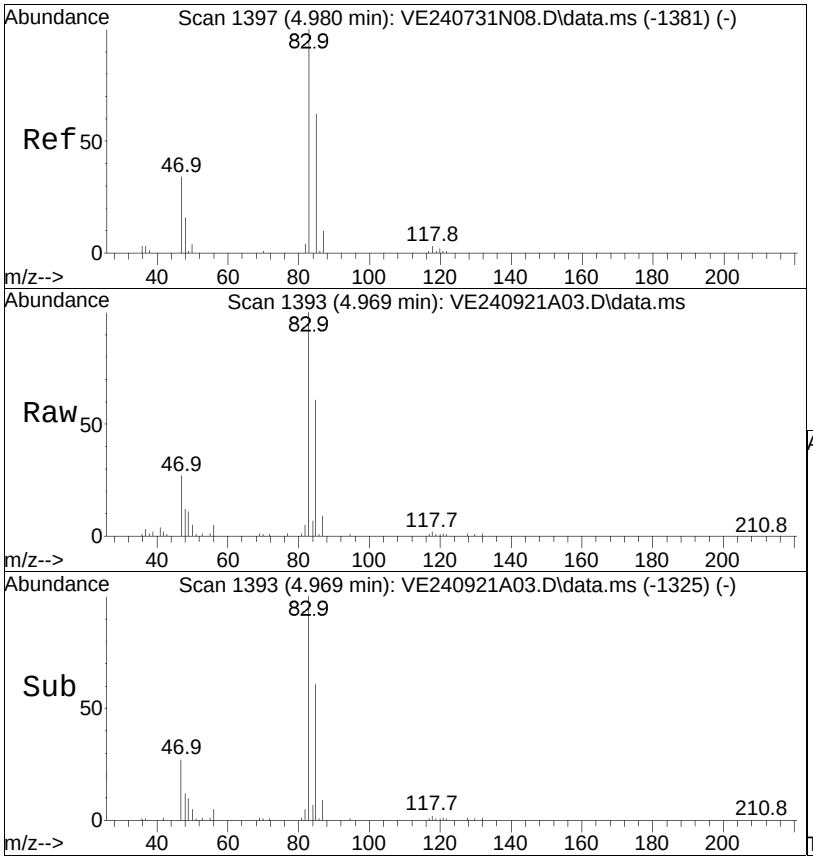



#34
Cyclohexane
Concen: 10.55 ug/L
RT: 4.905 min Scan# 1370
Delta R.T. -0.002 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 56 Resp: 131924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 67.6 | 44.5 | 92.5 |

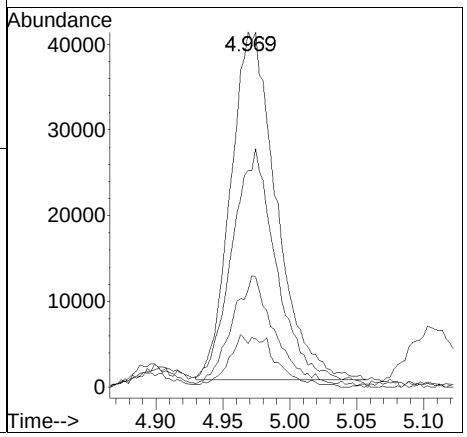


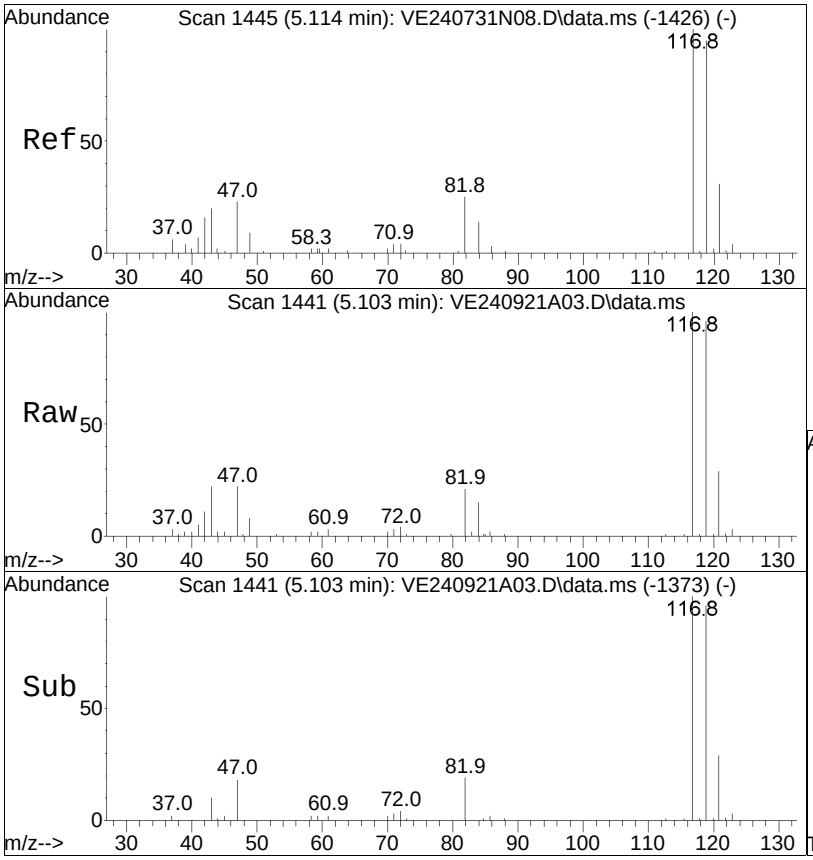



#35
Chloroform
Concen: 10.87 ug/L
RT: 4.969 min Scan# 1393
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 83 Resp: 96292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.4 | 41.3 | 85.9 |
| 47 | 29.3 | 20.9 | 43.3 |
| 48 | 6.0 | 10.3 | 21.5# |

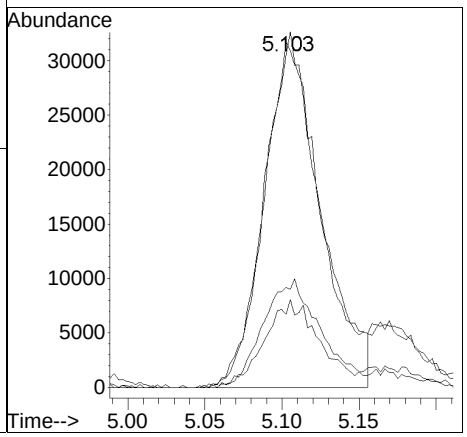


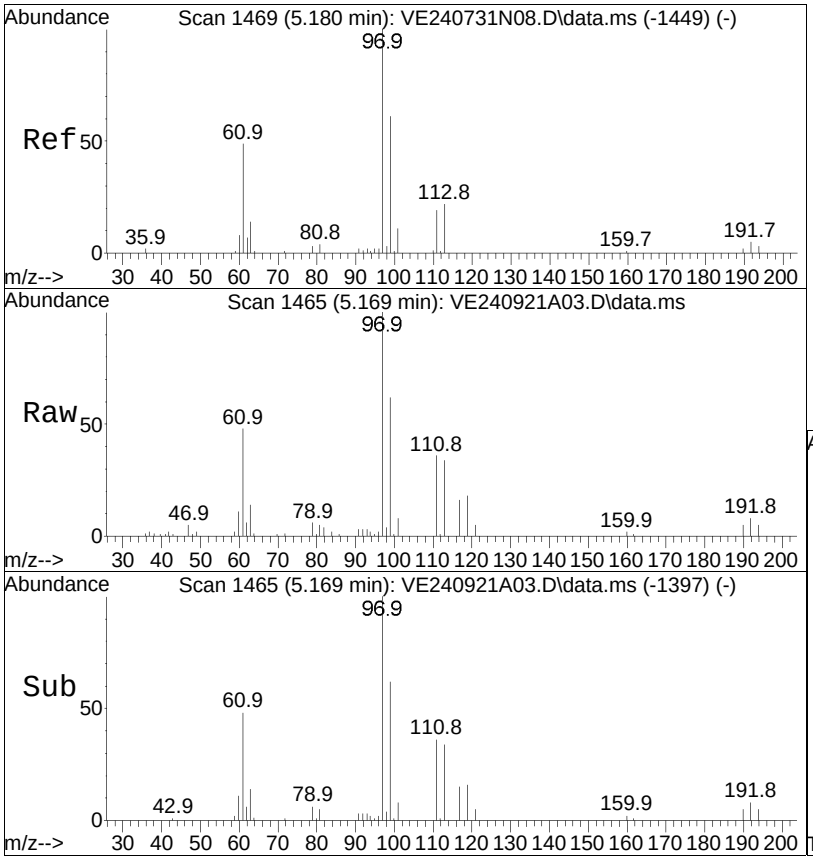



#37
Carbon tetrachloride
Concen: 12.21 ug/L
RT: 5.103 min Scan# 1441
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:117 Resp: 82582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.0 | 60.6 | 126.0 |
| 121 | 31.1 | 18.0 | 37.4 |
| 82 | 24.3 | 19.8 | 41.0 |

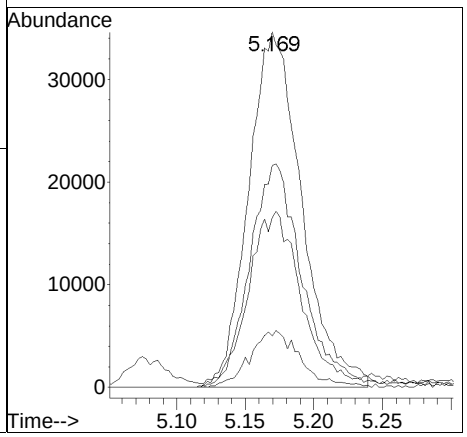


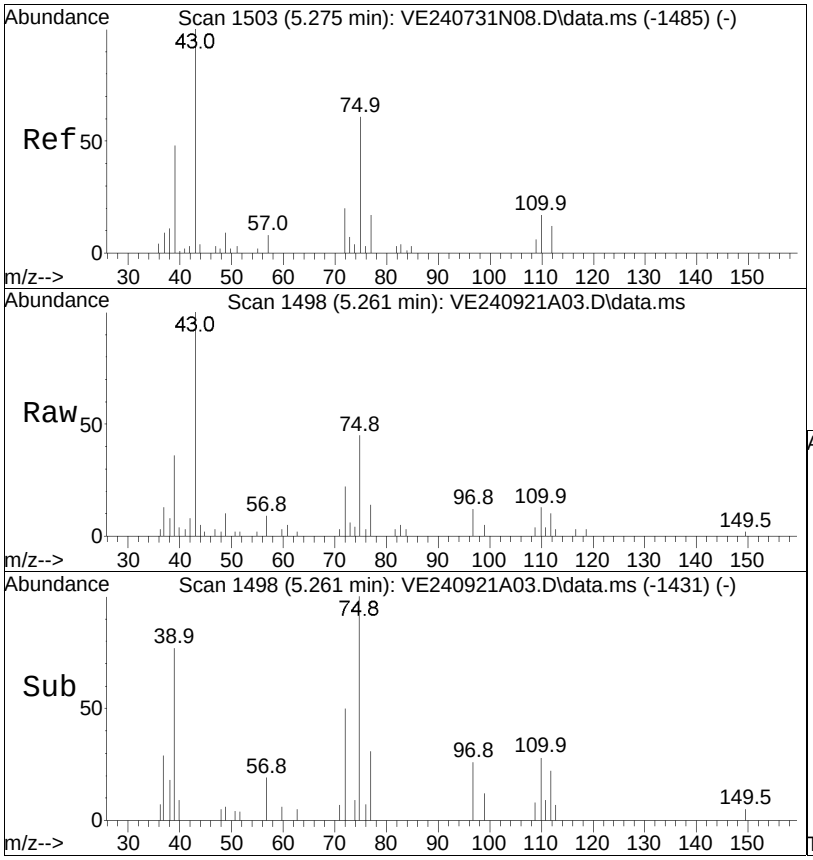



#40
1,1,1-Trichloroethane
Concen: 11.63 ug/L
RT: 5.169 min Scan# 1465
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 97 Resp: 93543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 61.4 | 40.2 | 83.4 |
| 61 | 47.2 | 36.9 | 76.5 |
| 63 | 15.2 | 8.3 | 17.3 |

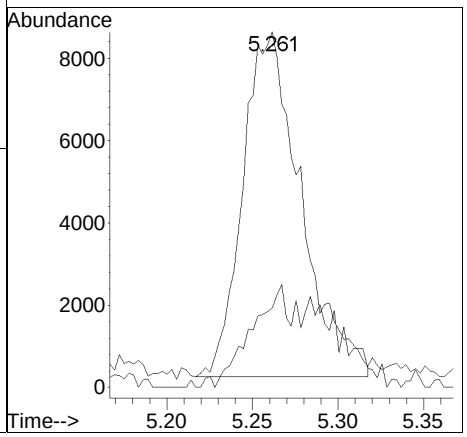


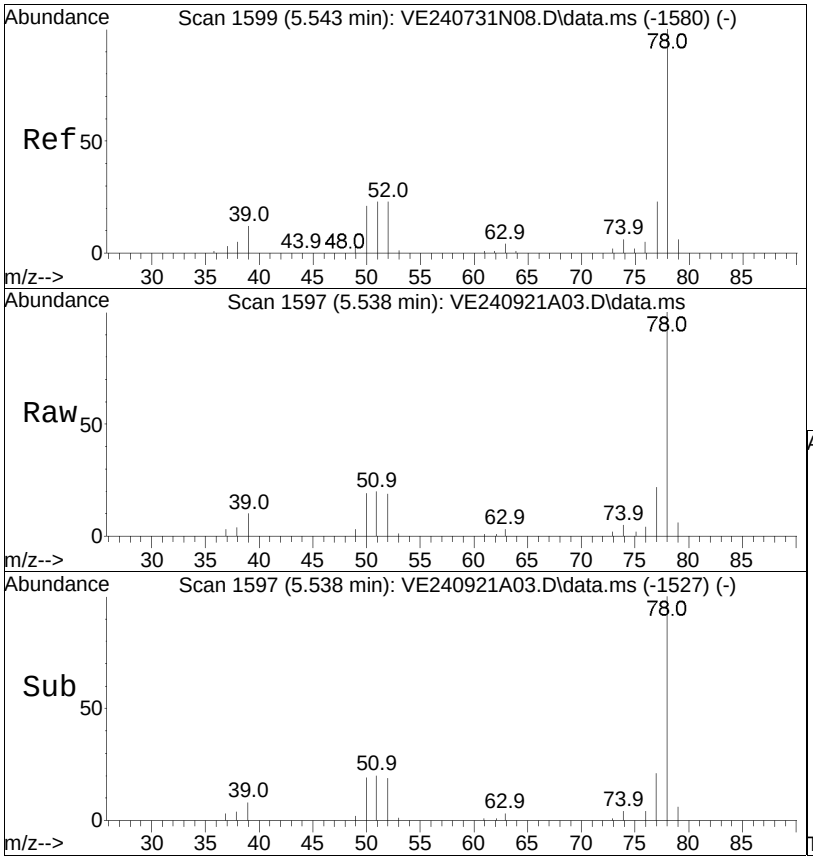



#42
2-Butanone
Concen: 7.13 ug/L
RT: 5.261 min Scan# 1498
Delta R.T. -0.014 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 43 Resp: 19753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 18.5 | 15.7 | 23.5 |

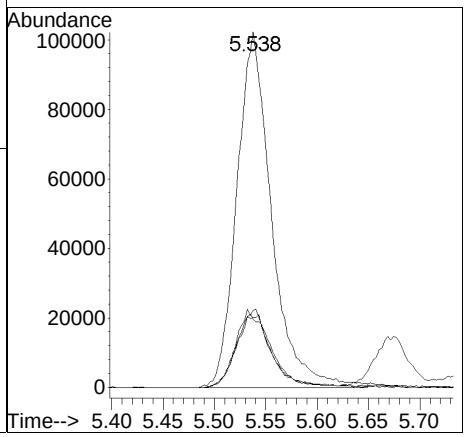


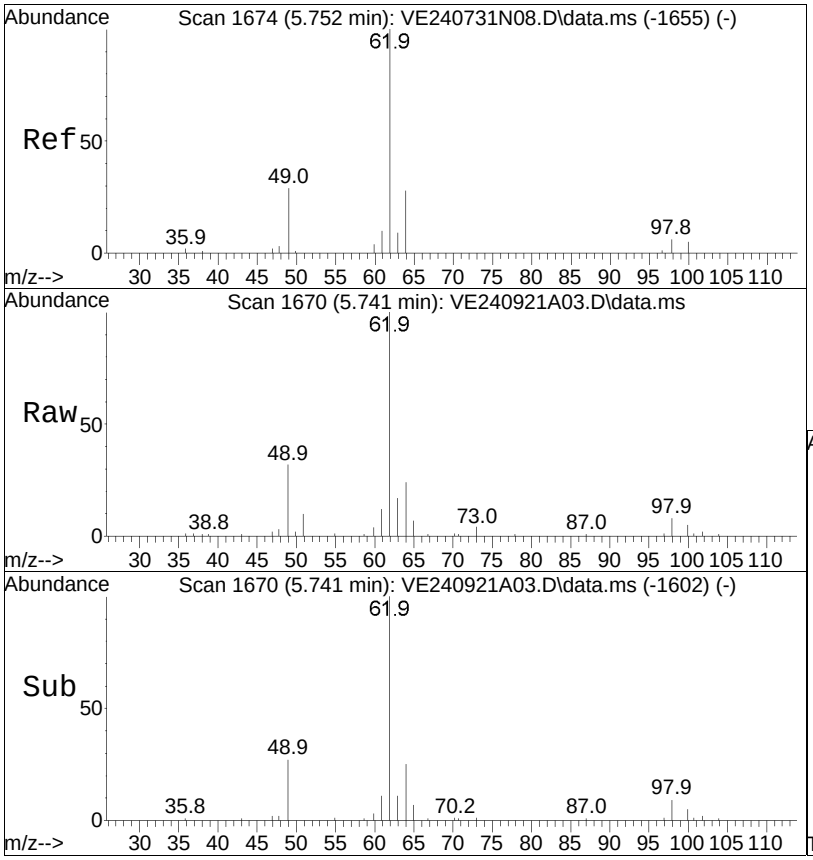



#45
Benzene
Concen: 11.44 ug/L
RT: 5.538 min Scan# 1597
Delta R.T. -0.005 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 78 Resp: 239584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.6 | 12.8 | 26.6 |
| 51 | 21.2 | 13.5 | 27.9 |
| 52 | 20.0 | 12.0 | 25.0 |

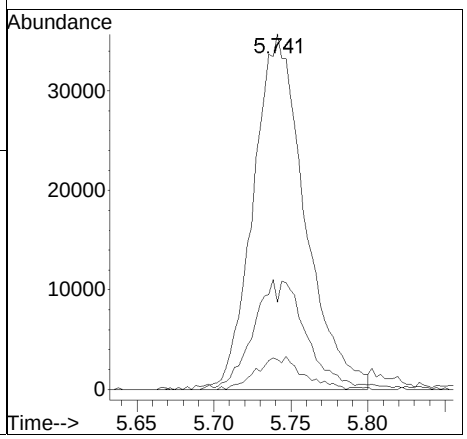


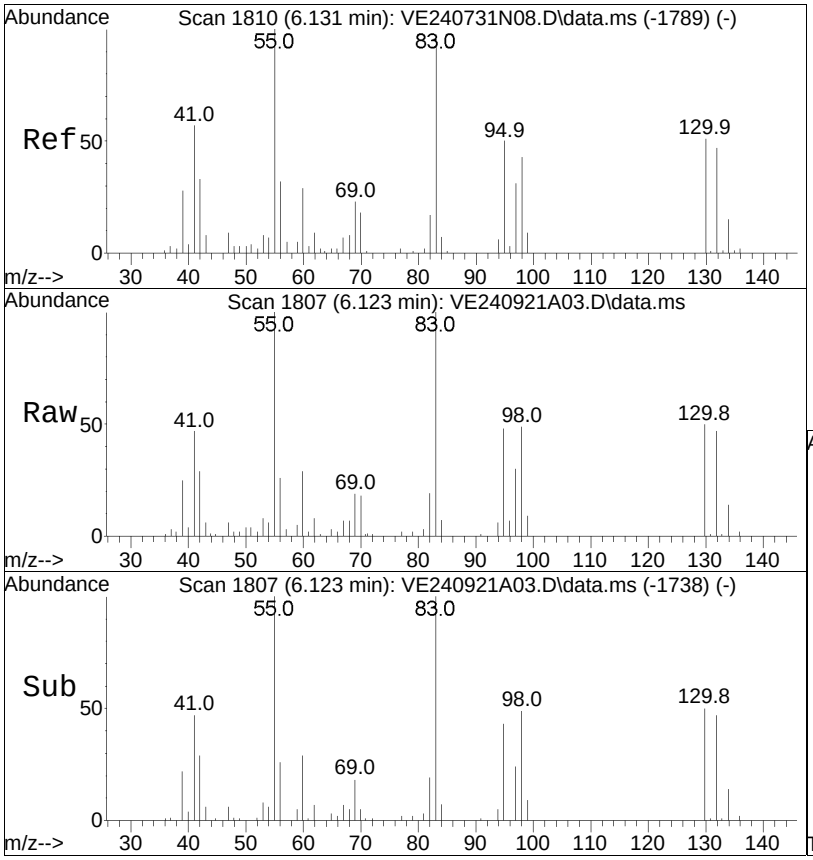



#48
1,2-Dichloroethane
Concen: 10.24 ug/L
RT: 5.741 min Scan# 1670
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 62 Resp: 82774

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 14.5 | 12.0 | 52.0 |
| 98 | 4.7 | 0.0 | 29.1 |

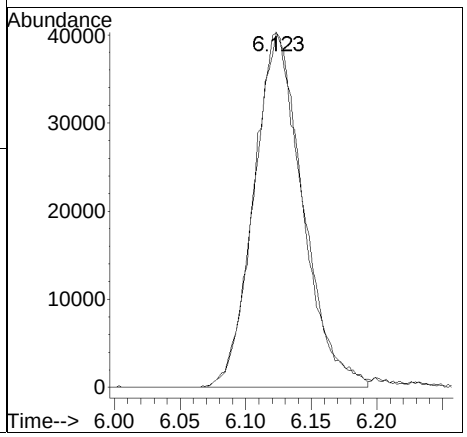


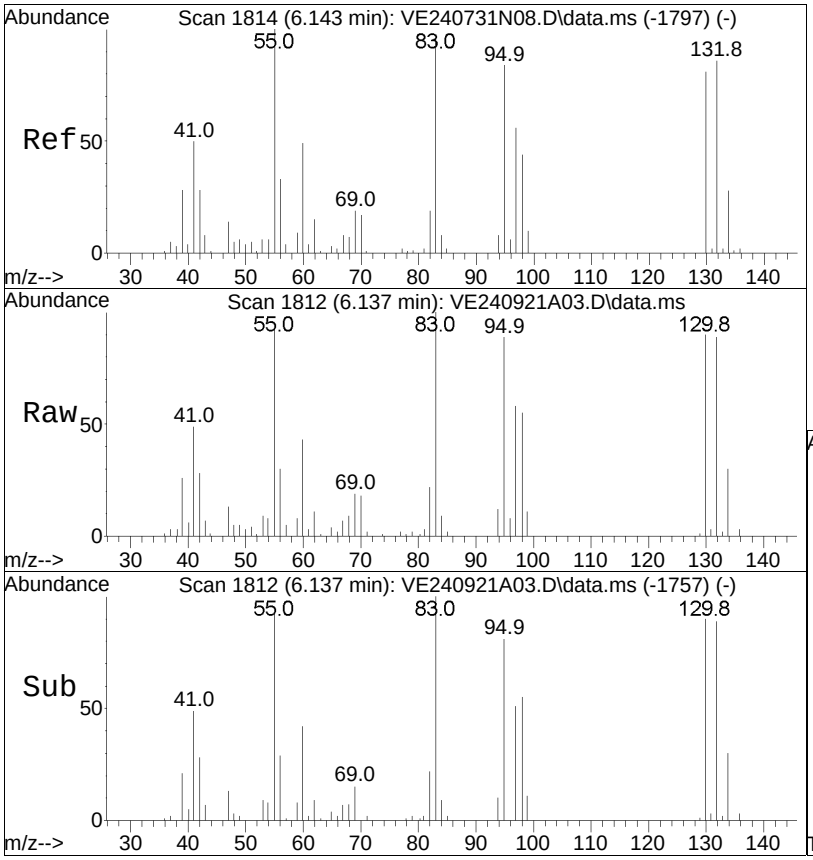



#51
Methyl cyclohexane
Concen: 11.16 ug/L
RT: 6.123 min Scan# 1807
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 83 Resp: 105054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 99.4 | 75.3 | 112.9 |

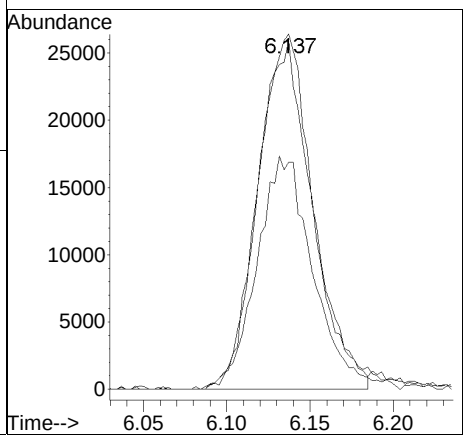


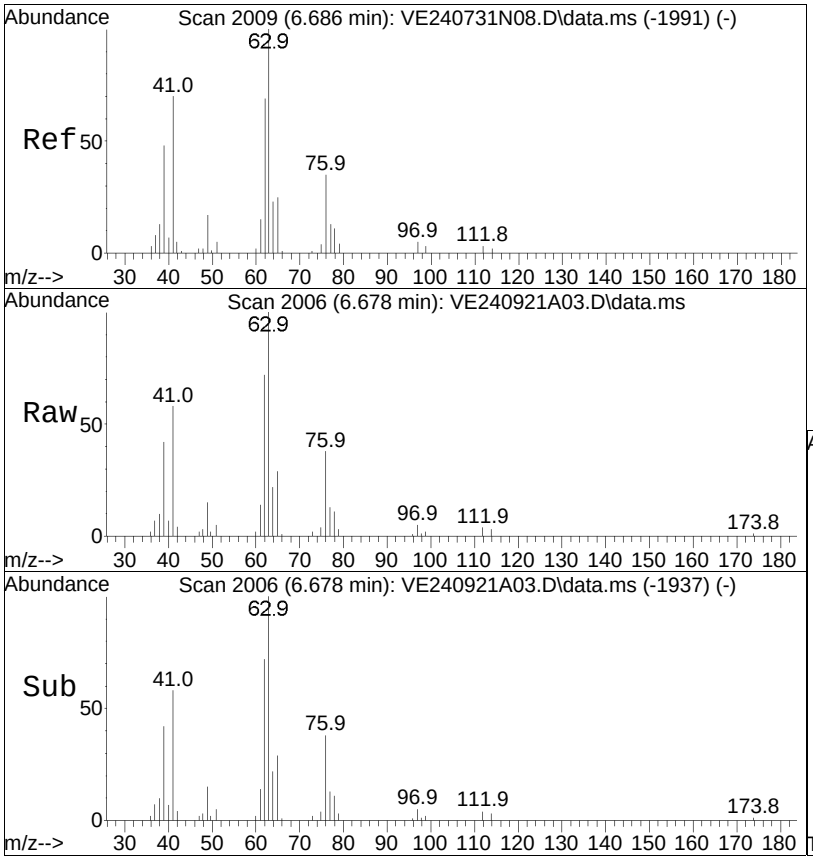



#52
Trichloroethene
Concen: 11.20 ug/L
RT: 6.137 min Scan# 1812
Delta R.T. -0.006 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 95 Resp: 58982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 69.3 | 50.2 | 75.2 |
| 130 | 105.3 | 78.2 | 117.4 |

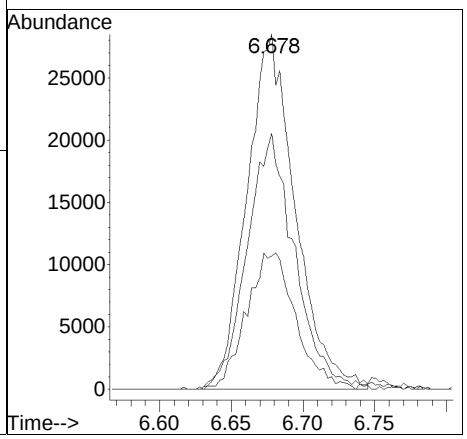


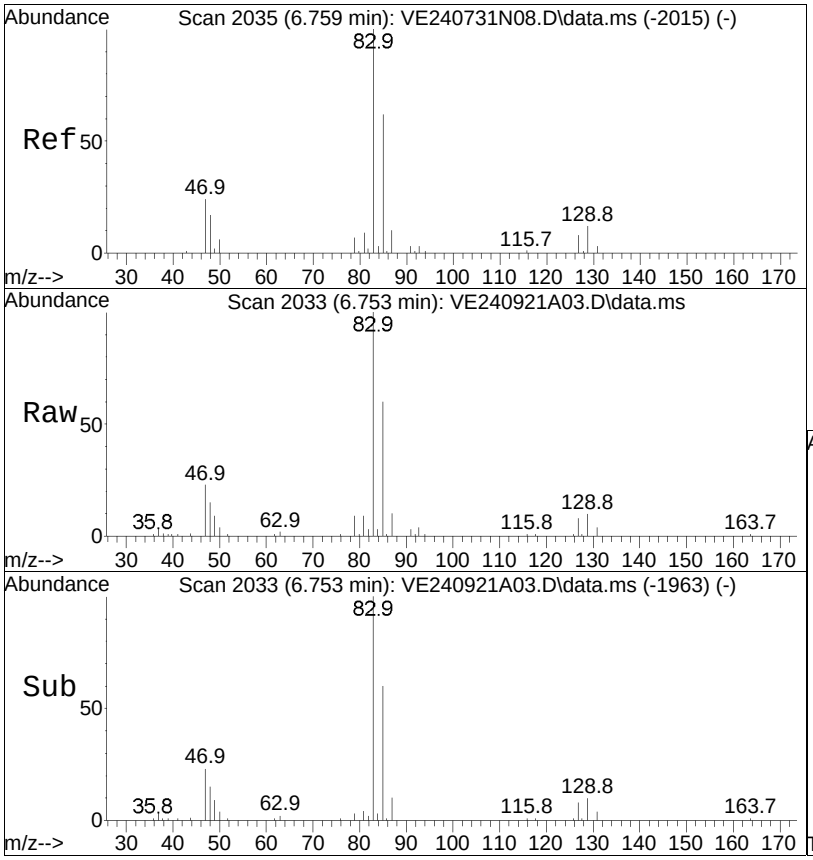



#55
1,2-Dichloropropane
Concen: 10.62 ug/L
RT: 6.678 min Scan# 2006
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 63 Resp: 67164

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 70.6 | 58.4 | 87.6 |
| 76 | 39.2 | 28.7 | 43.1 |

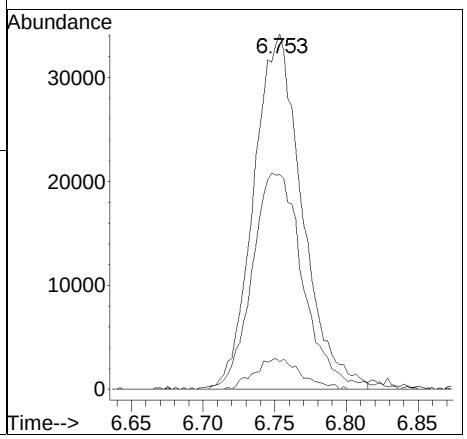


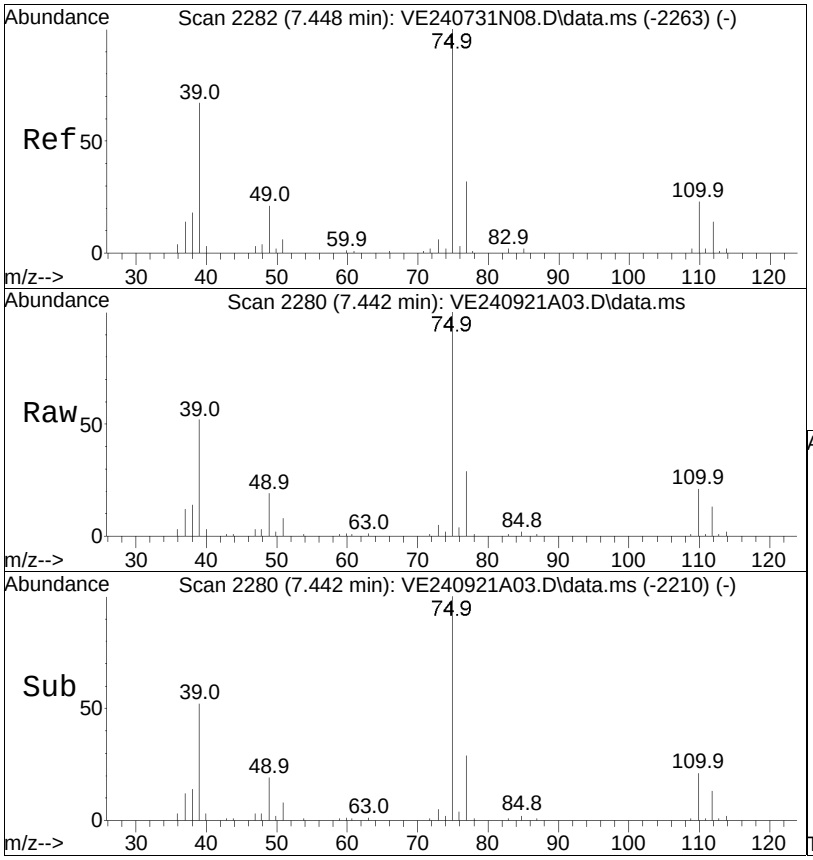



#58
Bromodichloromethane
Concen: 10.75 ug/L
RT: 6.753 min Scan# 2033
Delta R.T. -0.006 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 83 Resp: 80588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.9 | 46.6 | 69.8 |
| 127 | 8.4 | 6.2 | 9.4 |

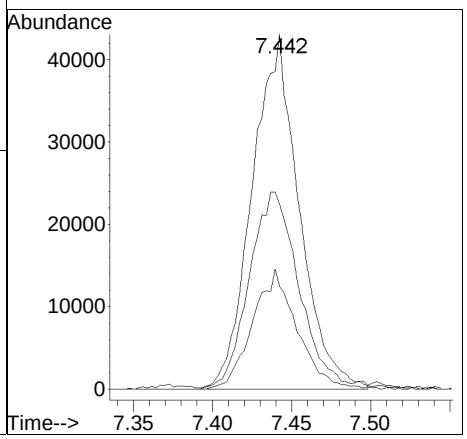


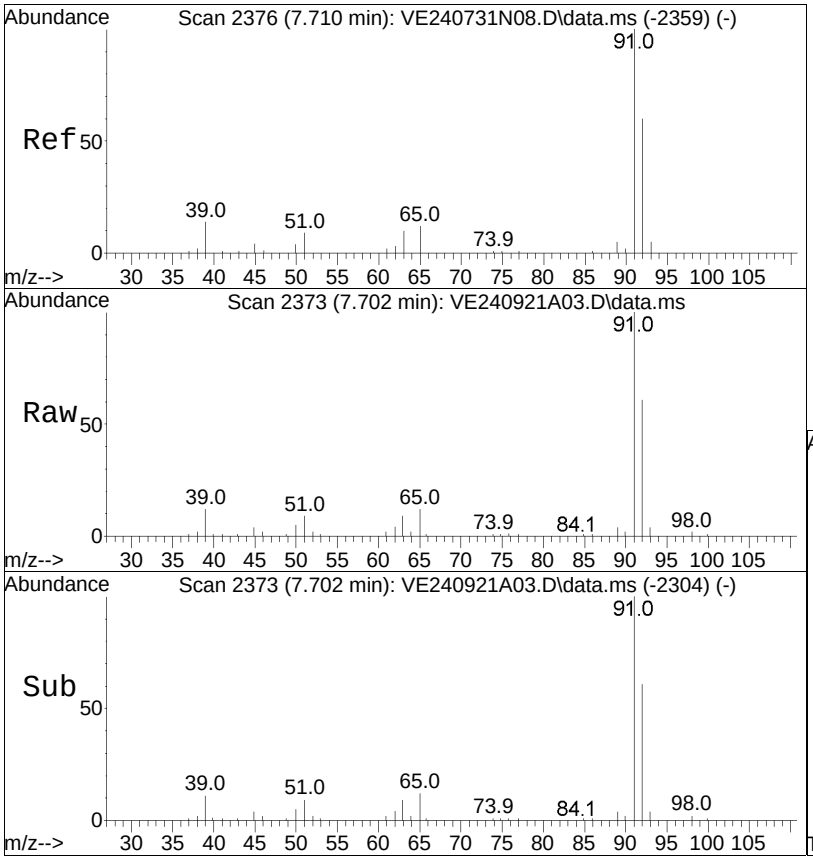



#62
cis-1,3-Dichloropropene
Concen: 10.59 ug/L
RT: 7.442 min Scan# 2280
Delta R.T. -0.006 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 75 Resp: 89368

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.0 | 25.1 | 37.7 |
| 39 | 57.5 | 50.7 | 76.1 |

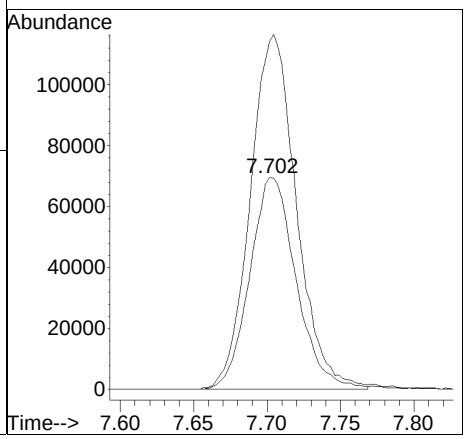


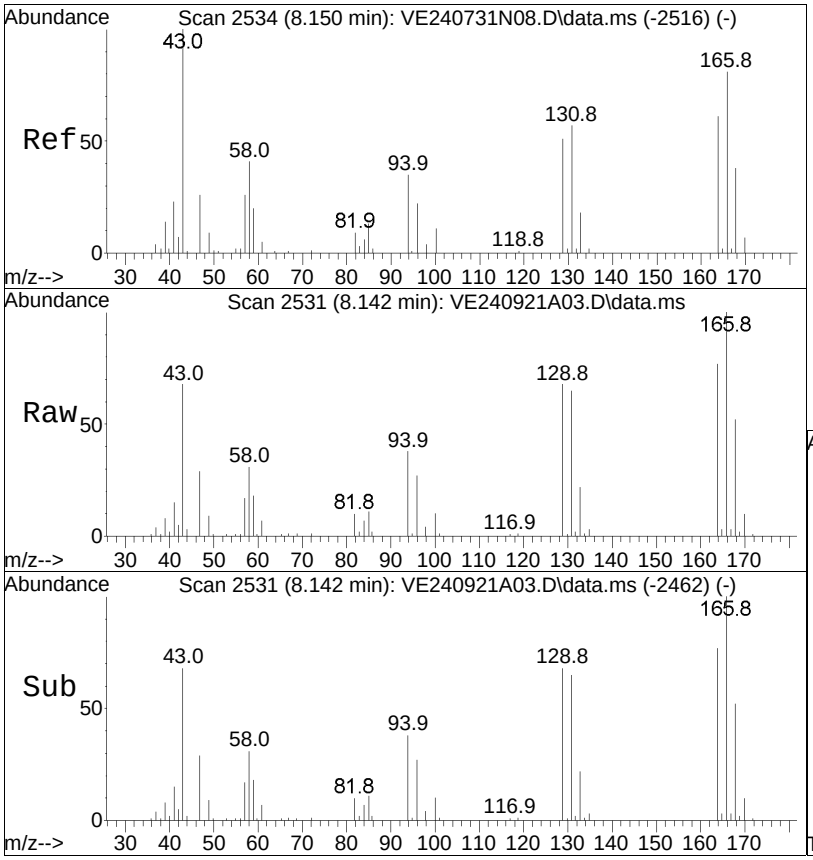



#65
Toluene
Concen: 11.04 ug/L
RT: 7.702 min Scan# 2373
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 92 Resp: 152868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 166.6 | 129.1 | 193.7 |

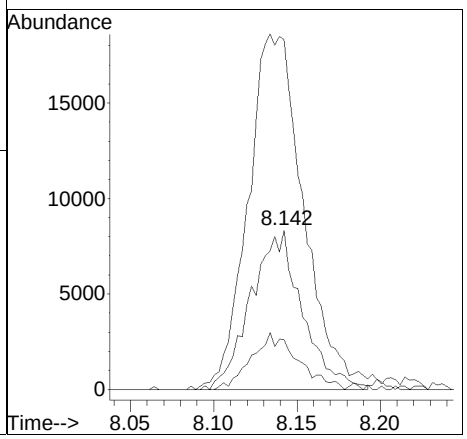


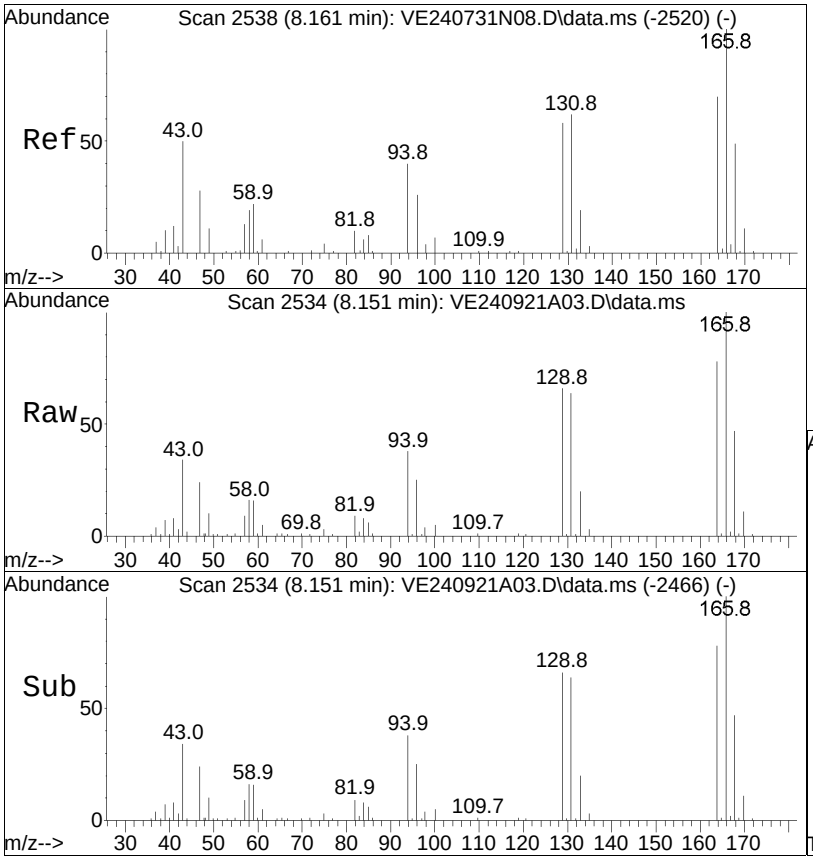



#66
4-Methyl-2-pentanone
Concen: 7.55 ug/L
RT: 8.142 min Scan# 2531
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 58 Resp: 17837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 32.2 | 27.9 | 41.9 |
| 43 | 239.1 | 225.7 | 338.5 |

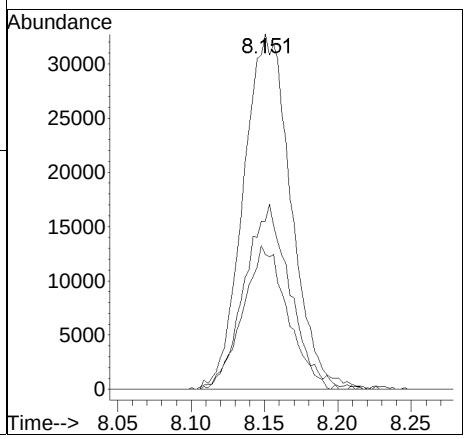


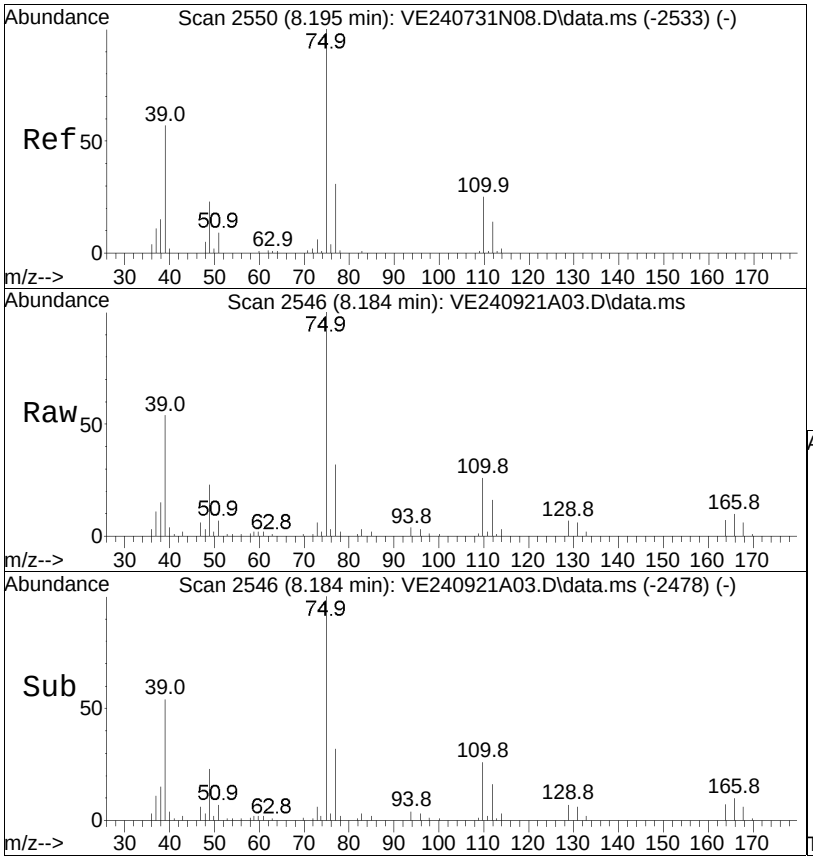



#67
Tetrachloroethene
Concen: 12.60 ug/L
RT: 8.151 min Scan# 2534
Delta R.T. -0.010 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:166 Resp: 74141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 49.7 | 25.8 | 65.8 |
| 94 | 38.0 | 24.3 | 64.3 |

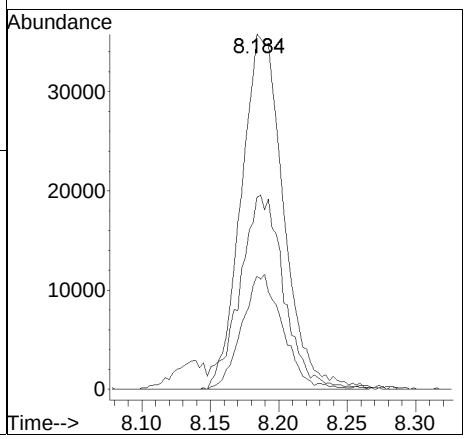


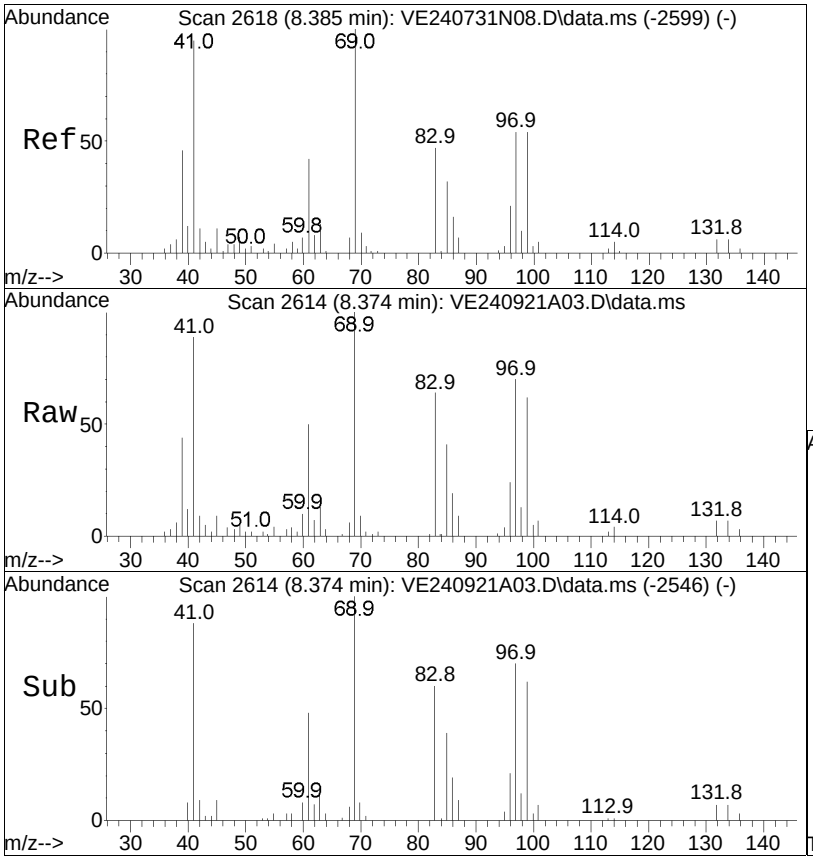



#69
trans-1,3-Dichloropropene
Concen: 9.88 ug/L
RT: 8.184 min Scan# 2546
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 75 Resp: 77051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.3 | 10.2 | 50.2 |
| 39 | 55.5 | 45.7 | 85.7 |

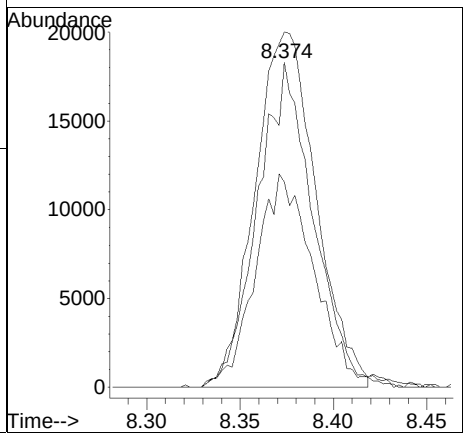


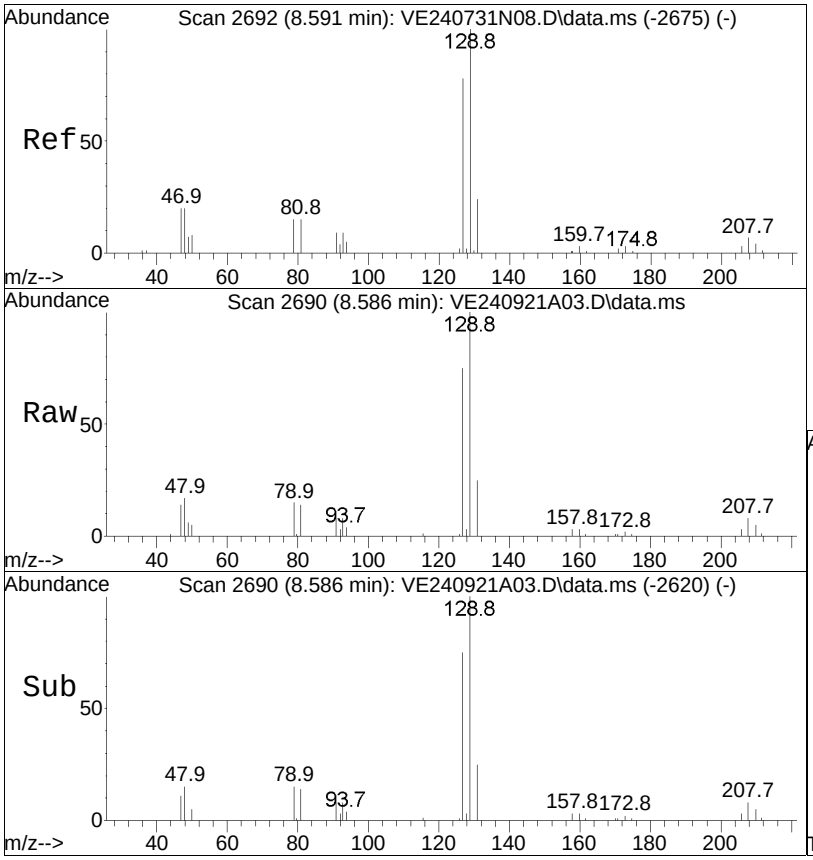



#72
1,1,2-Trichloroethane
Concen: 9.72 ug/L
RT: 8.374 min Scan# 2614
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 83 Resp: 37791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 122.3 | 99.2 | 139.2 |
| 85 | 69.8 | 48.7 | 88.7 |

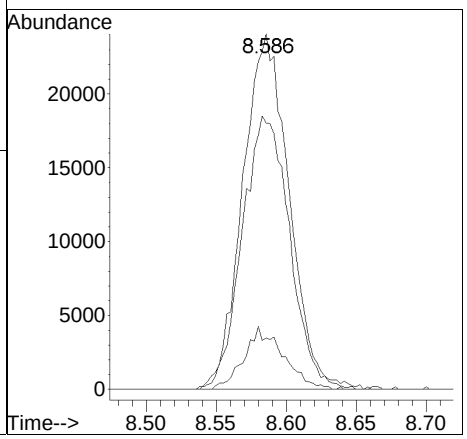


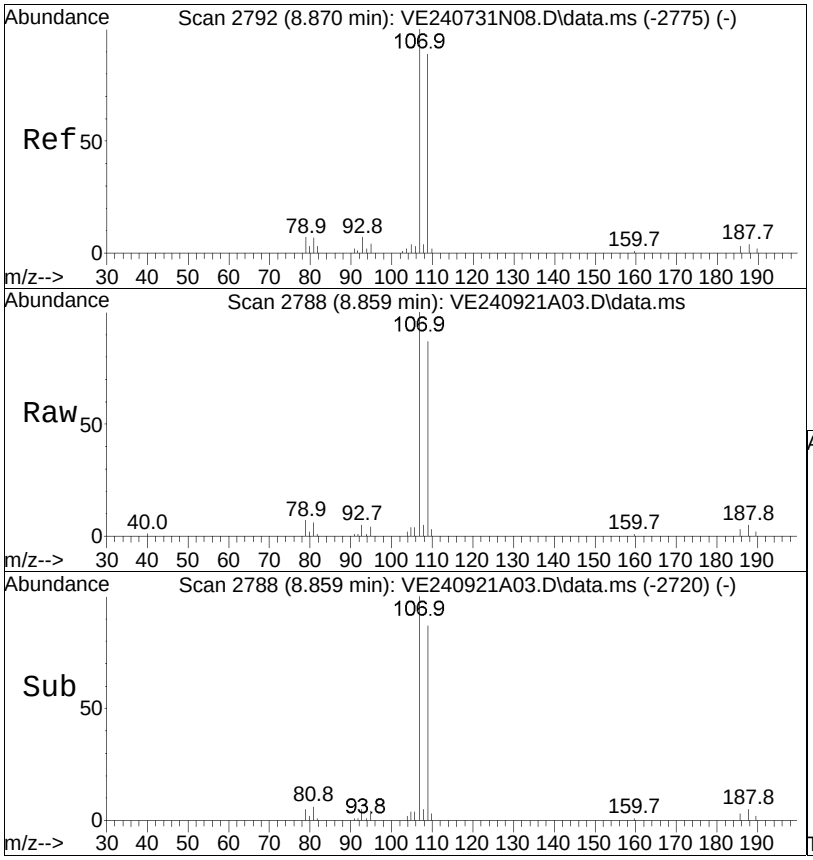



#73
Chlorodibromomethane
Concen: 10.17 ug/L
RT: 8.586 min Scan# 2690
Delta R.T. -0.005 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:129 Resp: 55305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 14.9 | 0.0 | 39.5 |
| 127 | 78.7 | 58.6 | 98.6 |

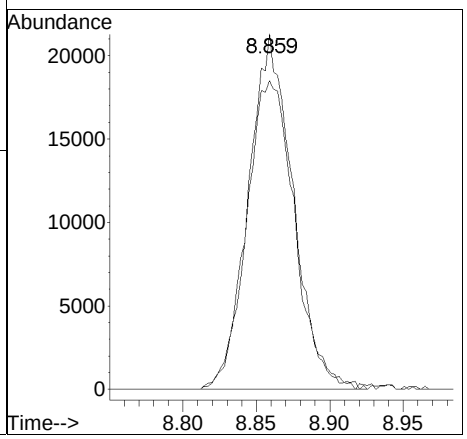


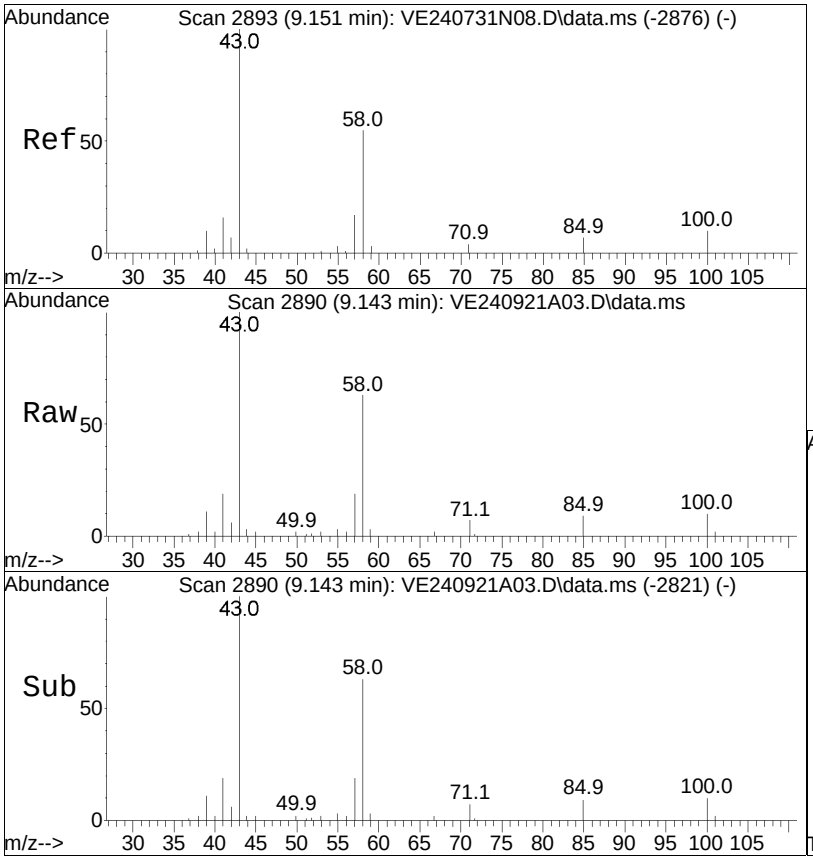



#75
1,2-Dibromoethane
Concen: 9.82 ug/L
RT: 8.859 min Scan# 2788
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:107 Resp: 45133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.0 | 66.3 | 99.5 |

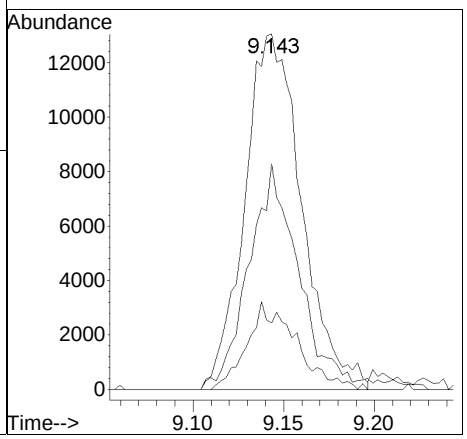


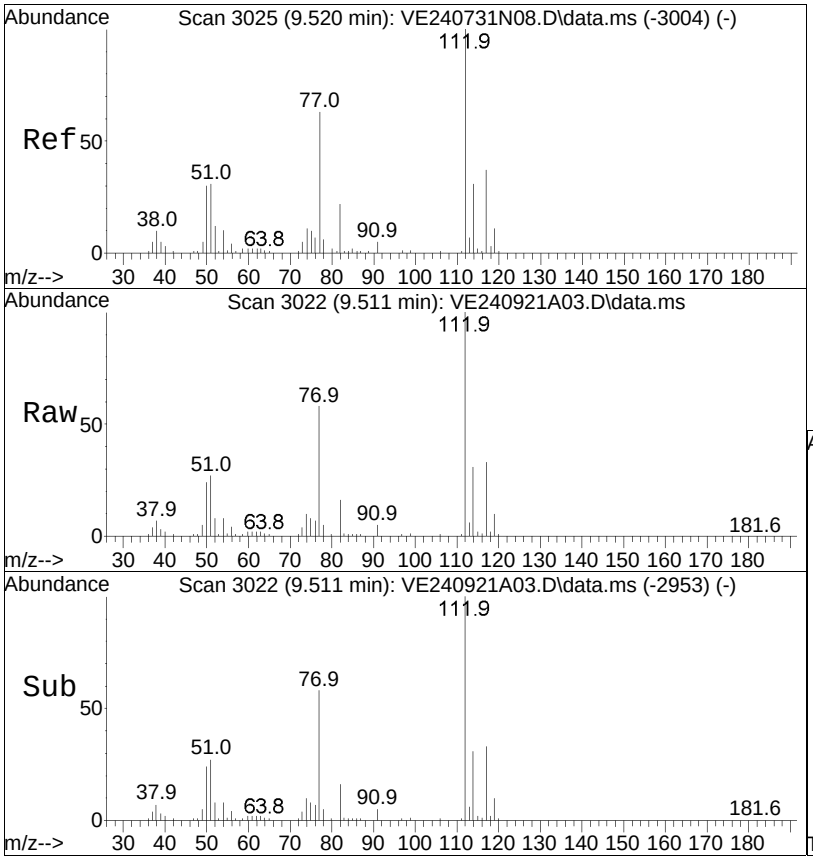



#77
2-Hexanone
Concen: 6.20 ug/L
RT: 9.143 min Scan# 2890
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 43 Resp: 28561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 55.0 | 42.5 | 63.7 |
| 57 | 10.5 | 13.9 | 20.9# |

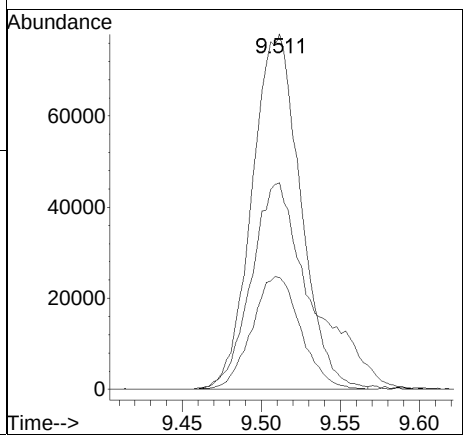


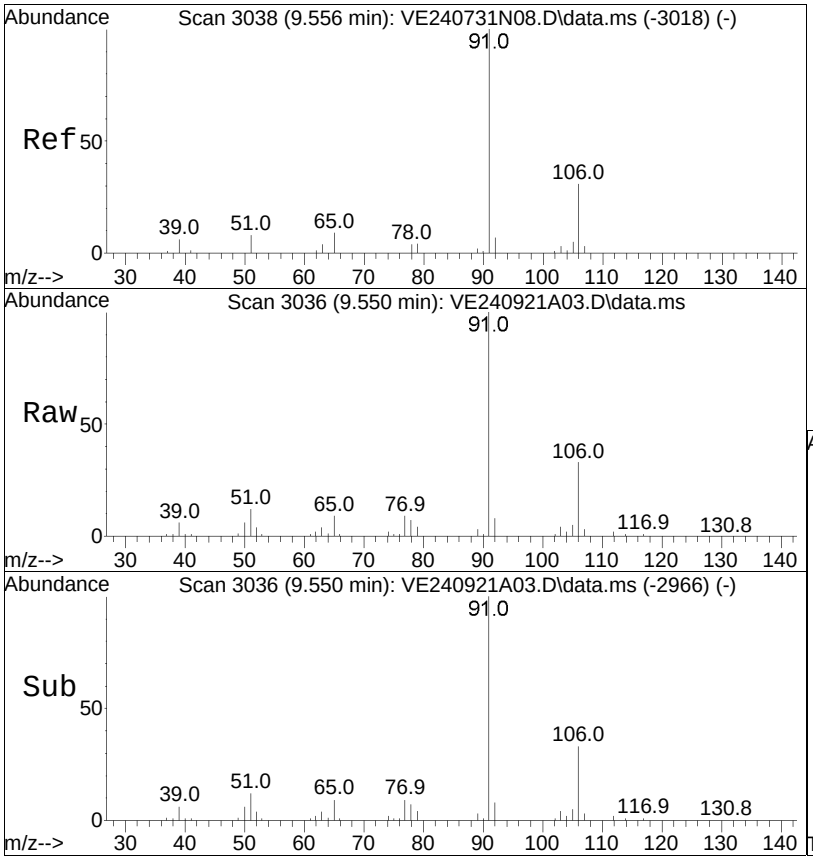



#78
Chlorobenzene
Concen: 11.30 ug/L
RT: 9.511 min Scan# 3022
Delta R.T. -0.009 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:112 Resp: 166754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 73.3 | 46.9 | 70.3# |
| 114 | 32.1 | 23.8 | 35.6 |

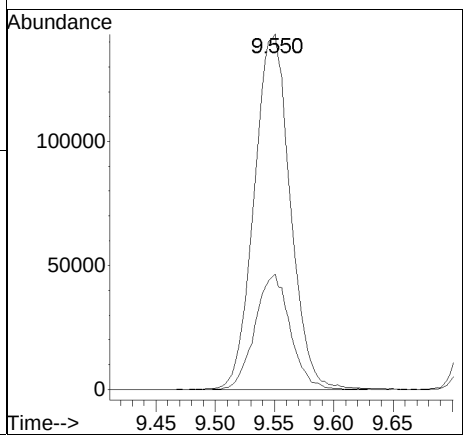


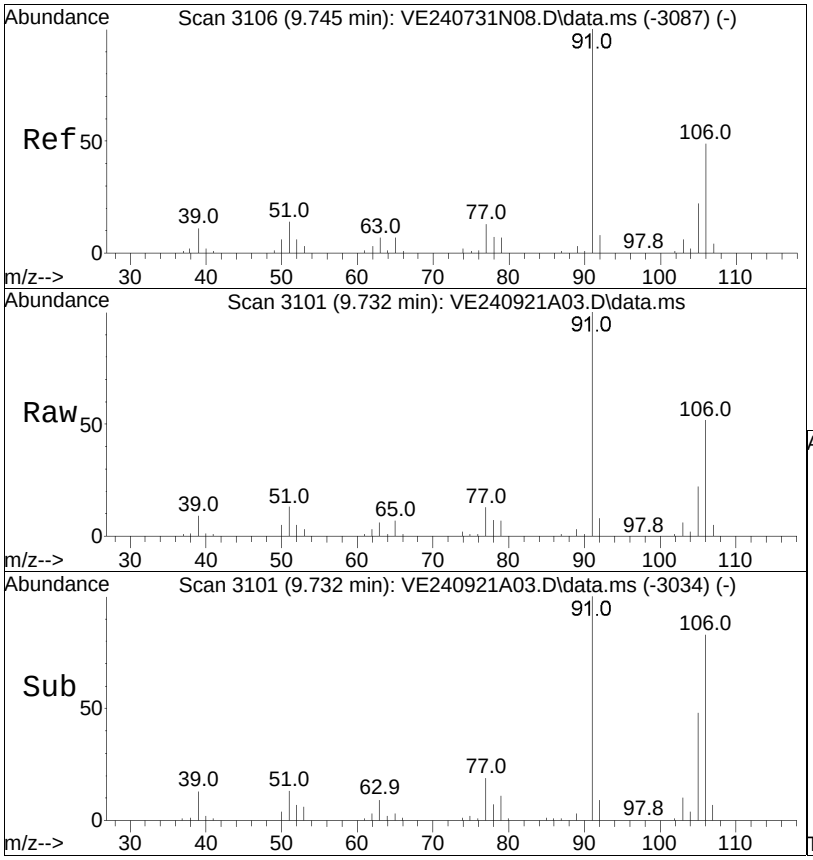



#79
Ethylbenzene
Concen: 11.30 ug/L
RT: 9.550 min Scan# 3036
Delta R.T. -0.006 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 91 Resp: 303367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.6 | 25.3 | 37.9 |

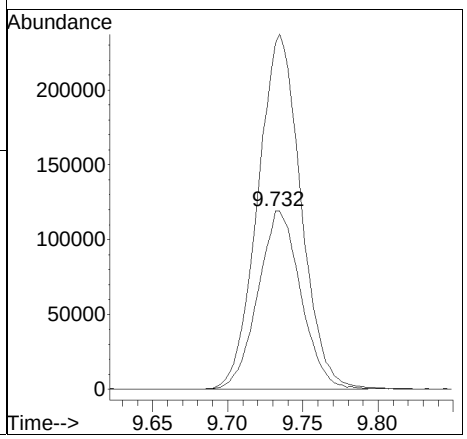


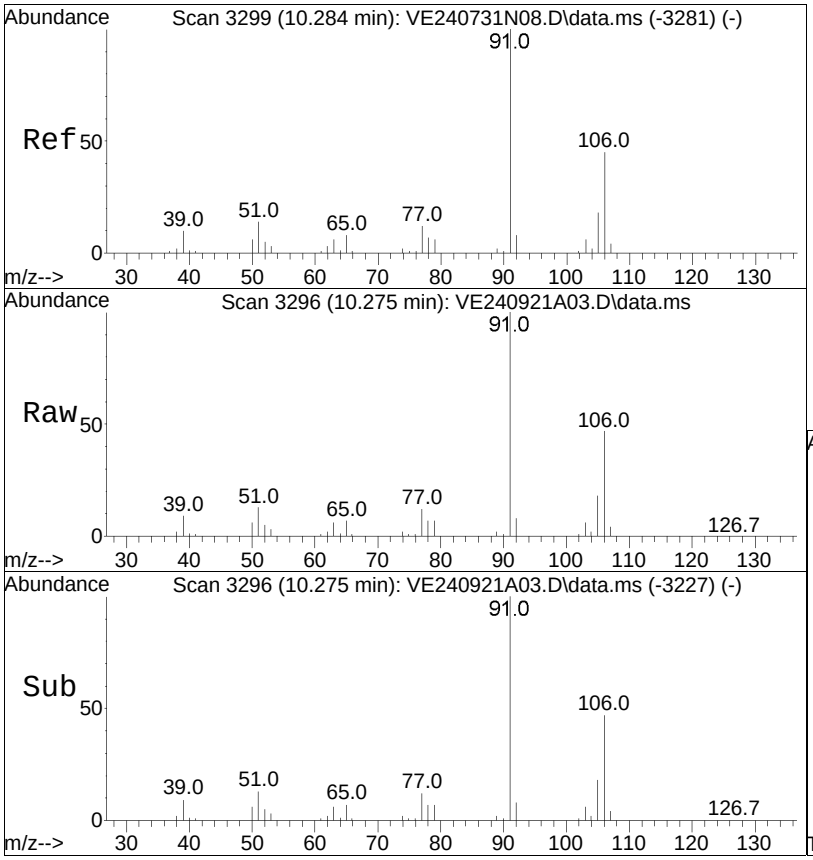



#81
p/m Xylene
Concen: 23.17 ug/L
RT: 9.732 min Scan# 3101
Delta R.T. -0.013 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:106 Resp: 237163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.0 | 163.3 | 244.9 |

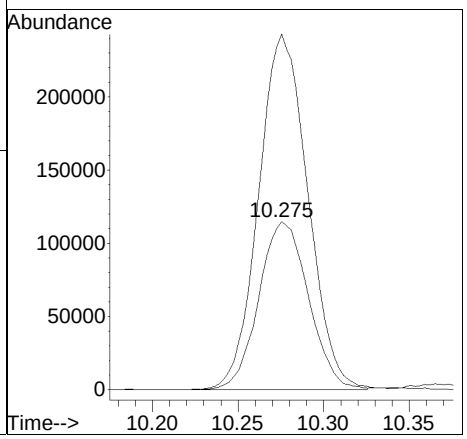


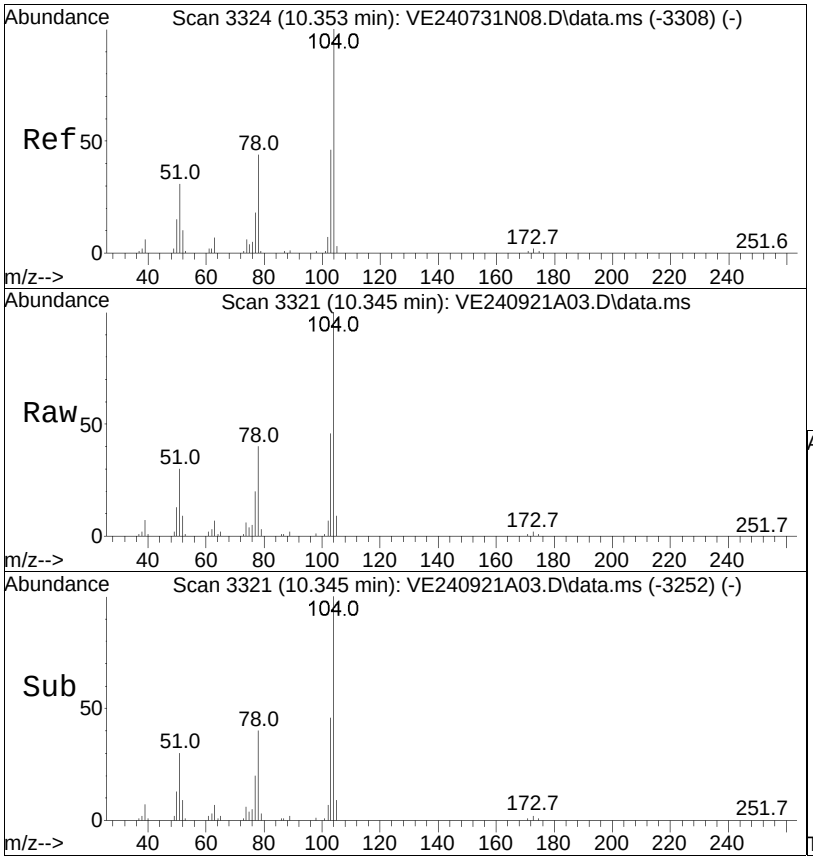



#82
o Xylene
Concen: 23.04 ug/L
RT: 10.275 min Scan# 3296
Delta R.T. -0.009 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:106 Resp: 230579

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.3 | 181.0 | 271.6 |

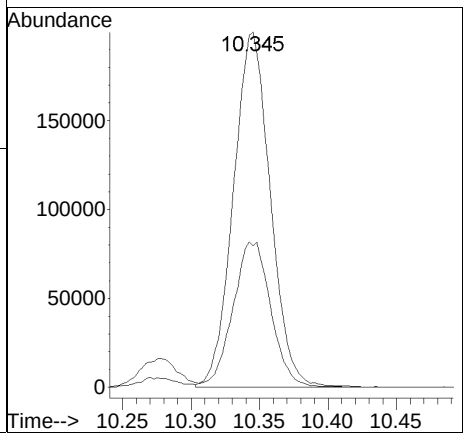


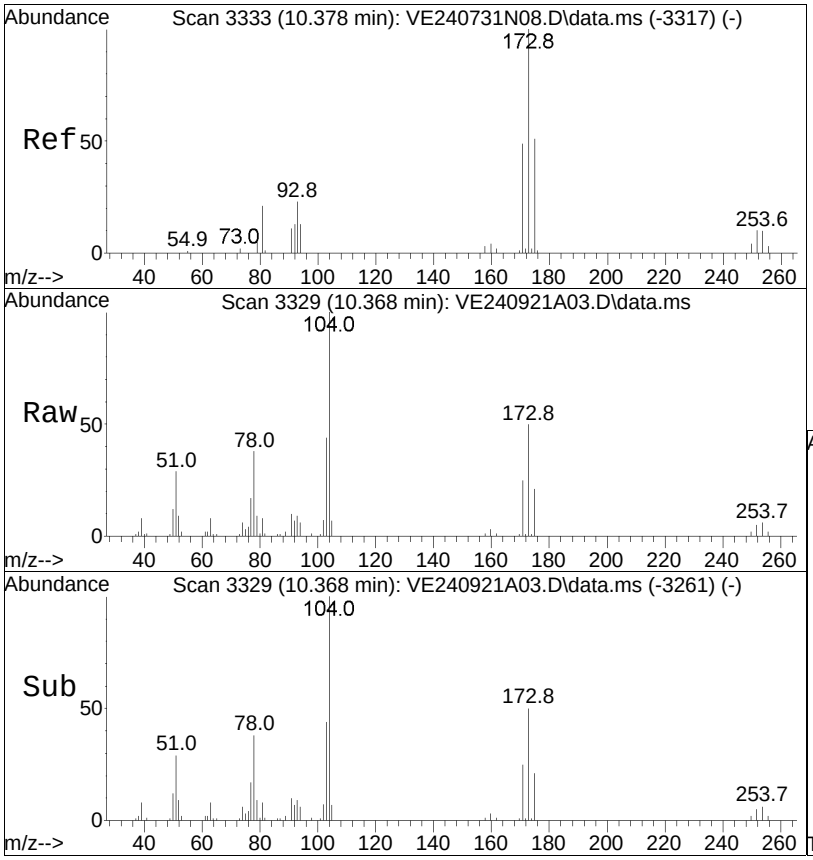



#83
Styrene
Concen: 22.82 ug/L
RT: 10.345 min Scan# 3321
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:104 Resp: 374423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 41.5 | 35.9 | 53.9 |

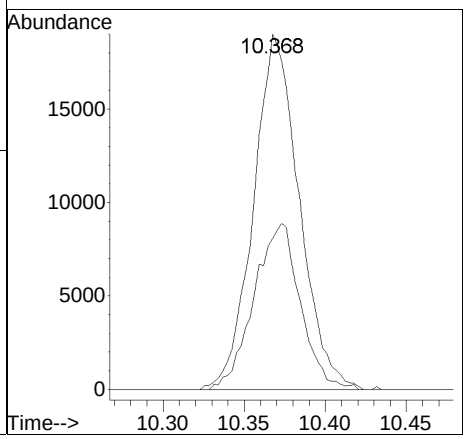


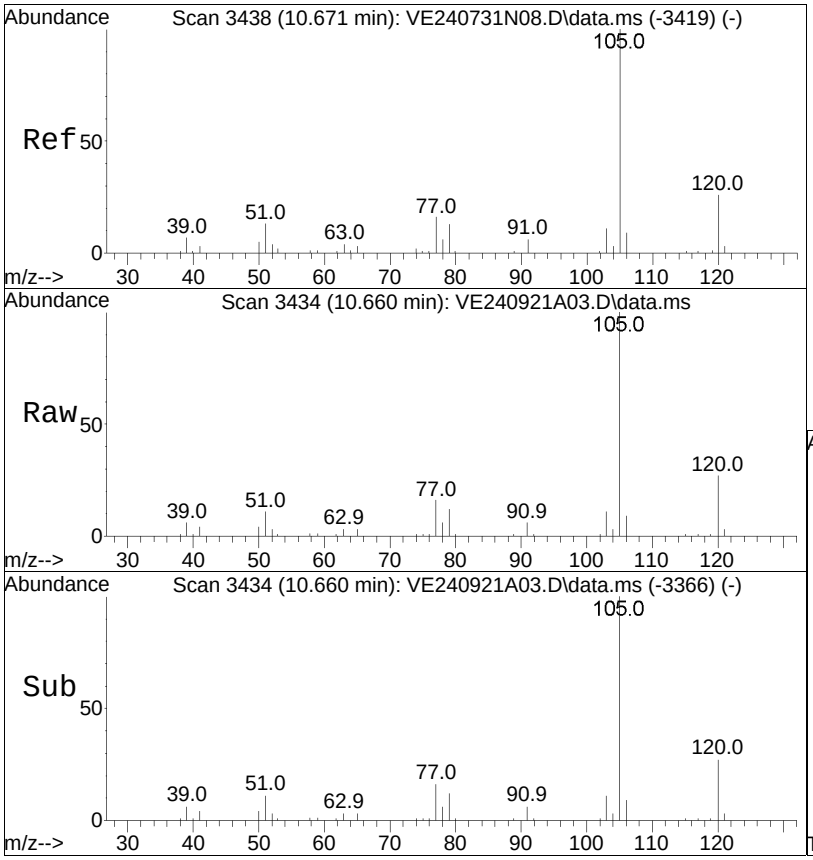



#85
Bromoform
Concen: 9.70 ug/L
RT: 10.368 min Scan# 3329
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:173 Resp: 37253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.4 | 32.9 | 72.9 |

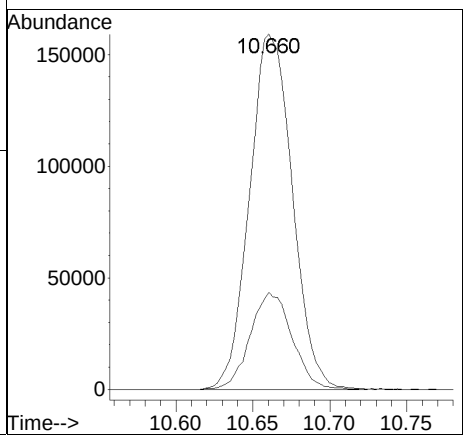


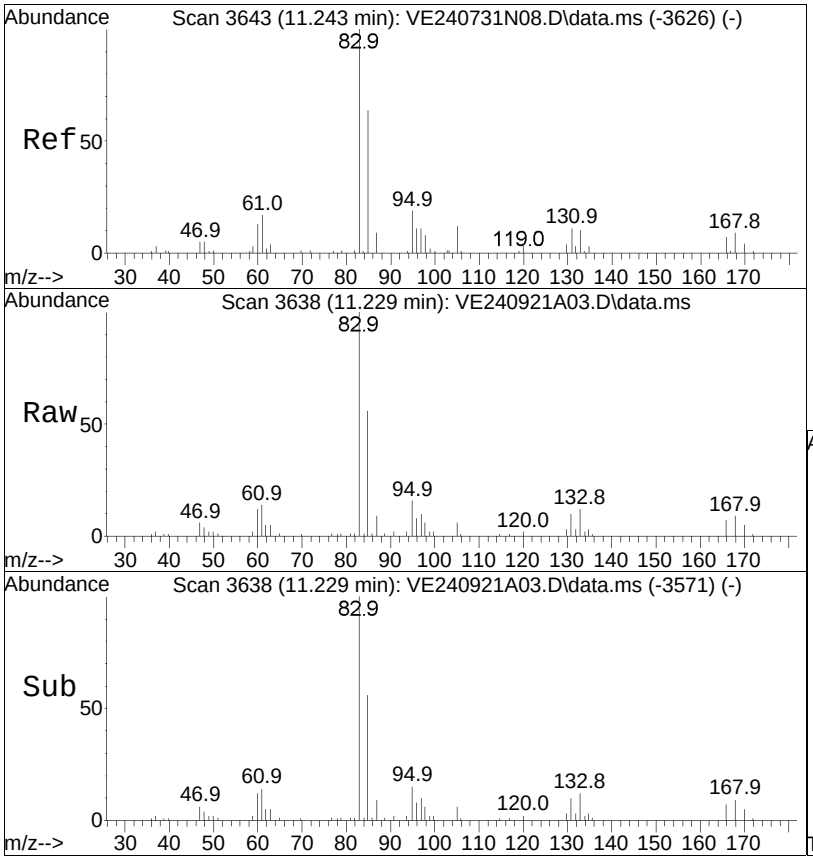



#87
Isopropylbenzene
Concen: 10.89 ug/L
RT: 10.660 min Scan# 3434
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:105 Resp: 307715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.6 | 4.8 | 44.8 |

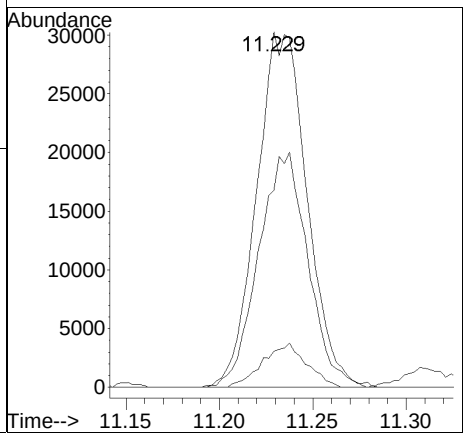


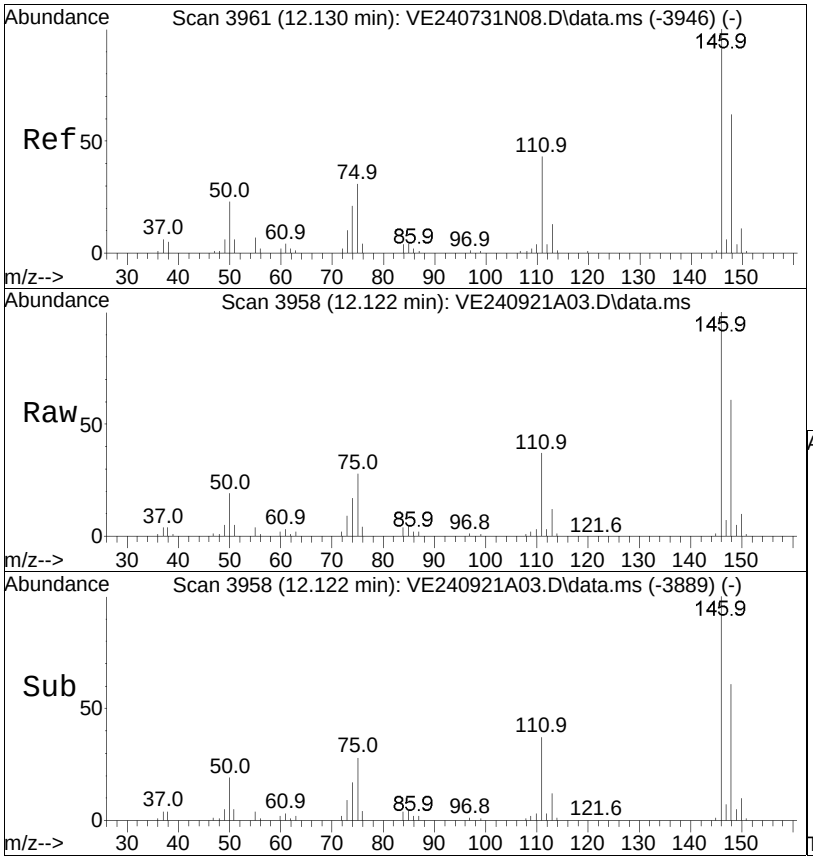



#92
1,1,2,2-Tetrachloroethane
Concen: 9.45 ug/L
RT: 11.229 min Scan# 3638
Delta R.T. -0.014 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion: 83 Resp: 56676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.9 | 0.0 | 28.6 |
| 85 | 65.0 | 47.4 | 87.4 |

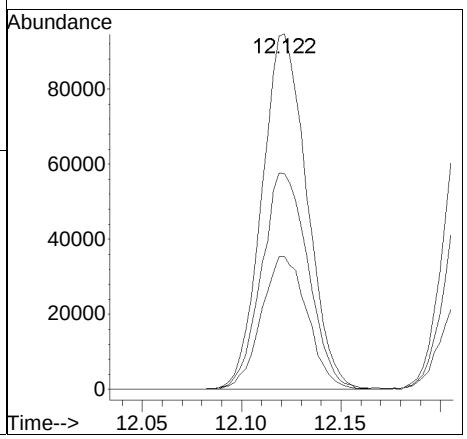


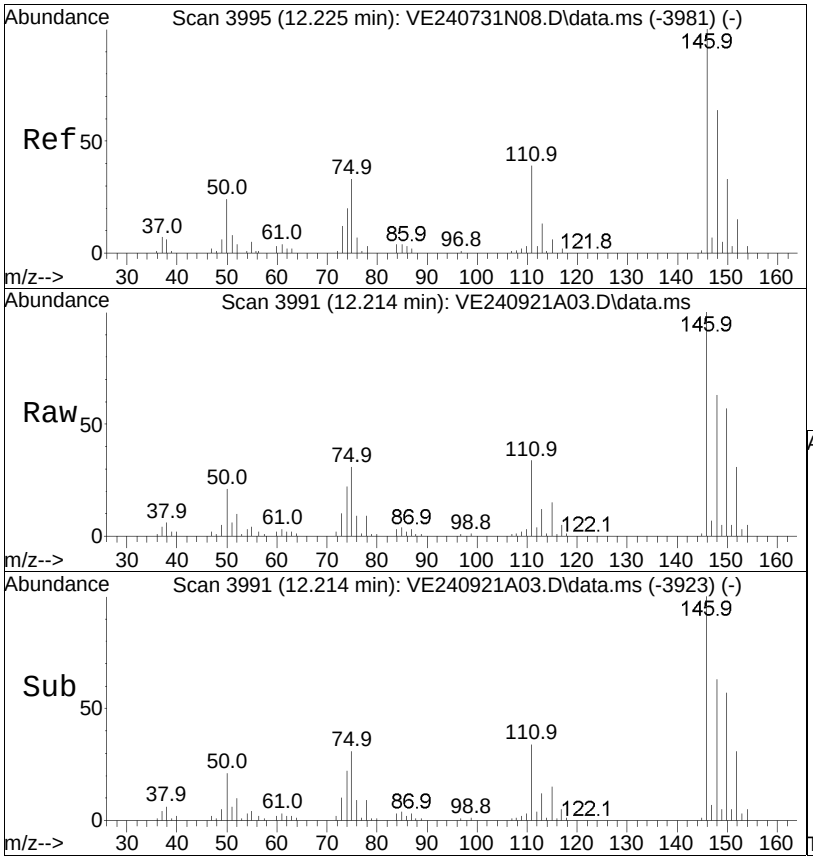



#105
1,3-Dichlorobenzene
Concen: 11.31 ug/L
RT: 12.122 min Scan# 3958
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:146 Resp: 148988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.2 | 27.9 | 57.9 |
| 148 | 63.2 | 42.4 | 88.2 |

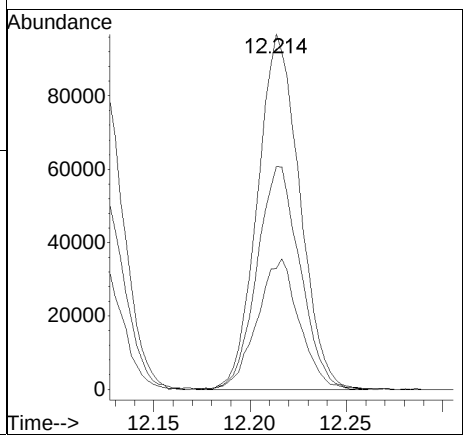


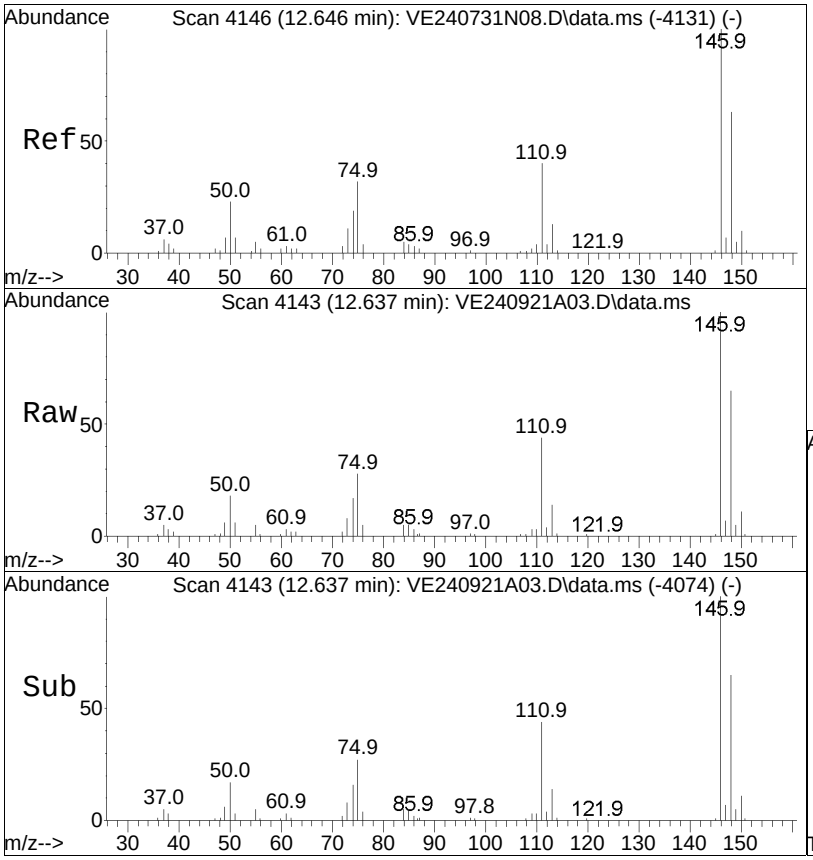



#106
1,4-Dichlorobenzene
Concen: 11.21 ug/L
RT: 12.214 min Scan# 3991
Delta R.T. -0.011 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:146 Resp: 147733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.8 | 31.4 | 47.0 |
| 148 | 64.2 | 49.8 | 74.8 |

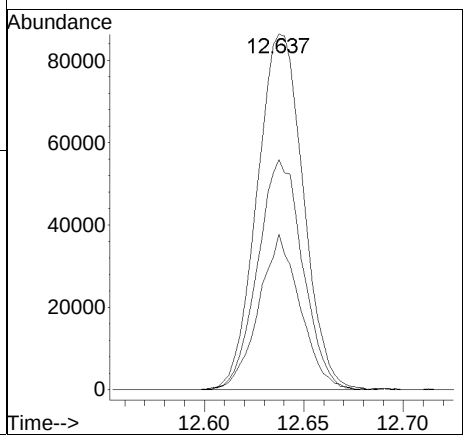


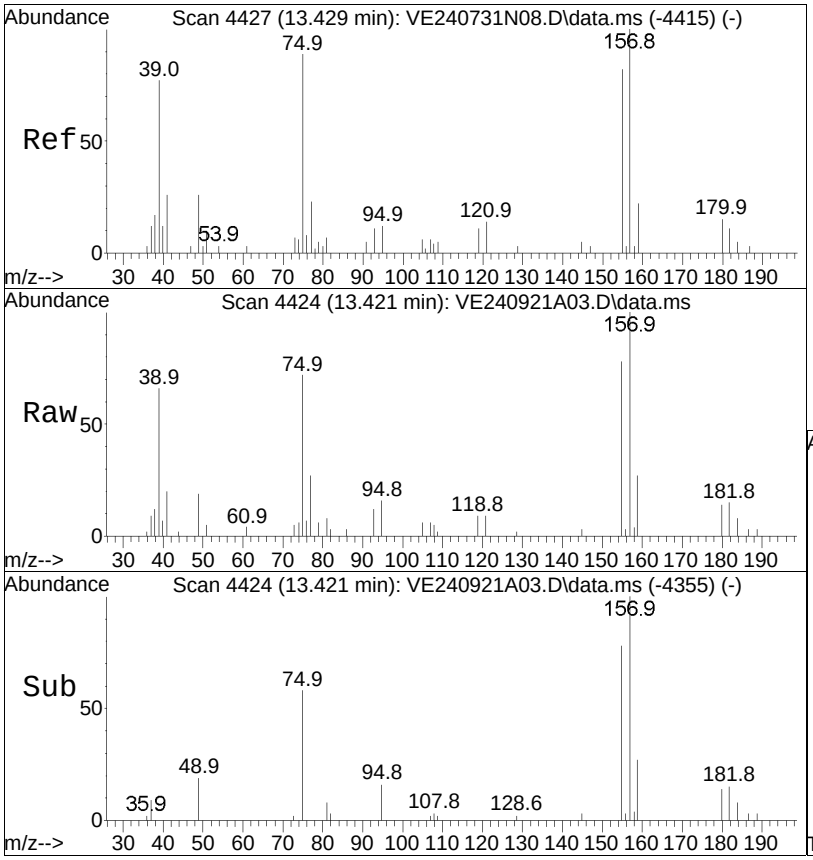



#109
1,2-Dichlorobenzene
Concen: 11.01 ug/L
RT: 12.637 min Scan# 4143
Delta R.T. -0.009 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:146 Resp: 139572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.0 | 26.4 | 54.8 |
| 148 | 63.0 | 41.7 | 86.7 |

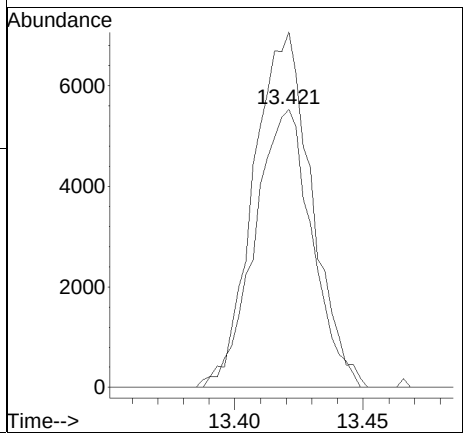


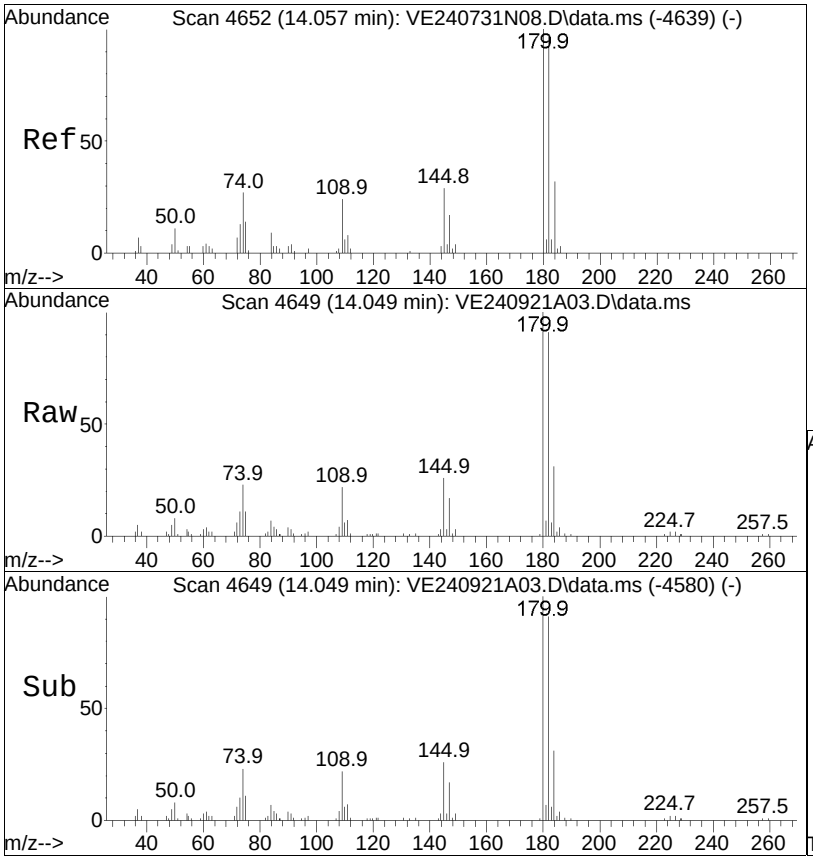



#111
1,2-Dibromo-3-chloropropane
Concen: 7.65 ug/L
RT: 13.421 min Scan# 4424
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:155 Resp: 8551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 130.3 | 95.1 | 142.7 |

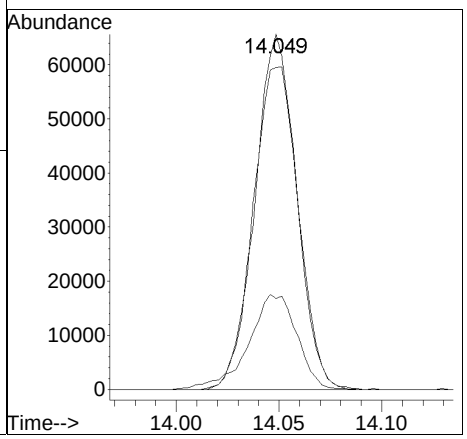


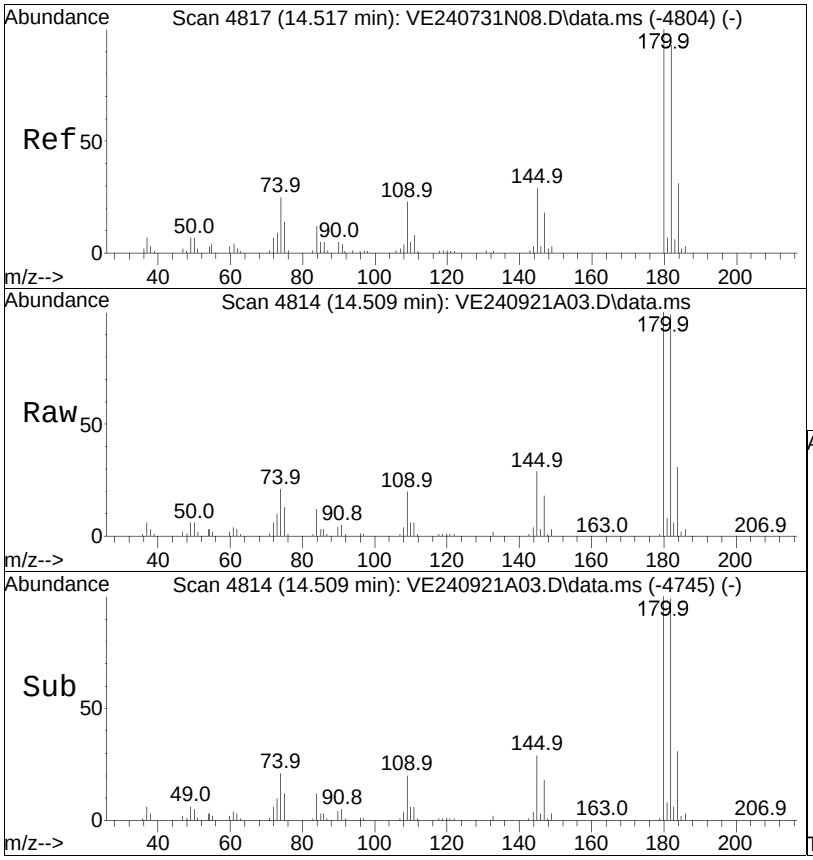



#114
1,2,4-Trichlorobenzene
Concen: 10.32 ug/L
RT: 14.049 min Scan# 4649
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:180 Resp: 93773

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 75.4 | 113.2 |
| 145 | 30.6 | 26.0 | 39.0 |

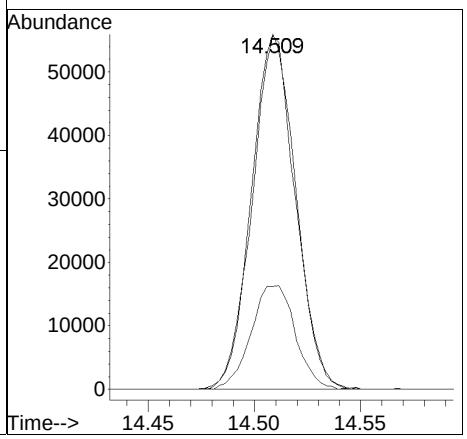





#116
1,2,3-Trichlorobenzene
Concen: 9.74 ug/L
RT: 14.509 min Scan# 4814
Delta R.T. -0.008 min
Lab File: VE240921A03.D
Acq: 21 Sep 2024 7:51 am

Tgt Ion:180 Resp: 81314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.1 | 71.6 | 107.4 |
| 145 | 29.3 | 25.1 | 37.7 |



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A26.D
Acq On : 21 Sep 2024 5:27 pm
Operator : ELAINE:MJV
Sample : WG1974948-6,31,10,10,,a1
Misc : WG1974948,ICAL21358
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 23 08:24:24 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 250990 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 95.53% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 188883 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 95.63% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.199 | 152 | 114563 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 99.17% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.150 | 113 | 62681 | 10.668 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.68% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.674 | 65 | 73446 | 9.368 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 93.68% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 244115 | 9.812 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.12% | | | |
| 88) 4-Bromofluorobenzene | 10.986 | 95 | 91605 | 8.656 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 86.56% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.591 | 85 | 77210 | 13.721 | ug/L | 95 |
| 3) Chloromethane | 1.778 | 50 | 68067 | 10.864 | ug/L | 96 |
| 4) Vinyl chloride | 1.854 | 62 | 80590 | 13.802 | ug/L | 94 |
| 5) Bromomethane | 2.158 | 94 | 12914 | 7.562 | ug/L | 93 |
| 6) Chloroethane | 2.277 | 64 | 45337 | 12.861 | ug/L | 92 |
| 7) Trichlorofluoromethane | 2.420 | 101 | 86907 | 12.953 | ug/L | 92 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 48367 | 12.033 | ug/L | 81 |
| 11) Carbon disulfide | 2.930 | 76 | 156419 | 12.612 | ug/L | 96 |
| 12) Freon-113 | 2.938 | 101 | 56064 | 13.383 | ug/L | 84 |
| 15) Methylene chloride | 3.451 | 84 | 55322 | 10.911 | ug/L | 98 |
| 17) Acetone | 3.491 | 43 | 15164 | 8.234 | ug/L # | 71 |
| 18) trans-1,2-Dichloroethene | 3.610 | 96 | 52176 | 12.075 | ug/L | 85 |
| 19) Methyl acetate | 3.608 | 43 | 25139 | 5.856 | ug/L # | 92 |
| 21) Methyl tert-butyl ether | 3.702 | 73 | 146744 | 9.108 | ug/L | 94 |
| 25) 1,1-Dichloroethane | 4.188 | 63 | 109259 | 10.775 | ug/L | 98 |
| 30) cis-1,2-Dichloroethene | 4.706 | 96 | 59188 | 11.428 | ug/L | 99 |
| 33) Bromochloromethane | 4.896 | 128 | 27822 | 12.246 | ug/L | 98 |
| 34) Cyclohexane | 4.907 | 56 | 134404 | 11.326 | ug/L | 98 |
| 35) Chloroform | 4.971 | 83 | 94014 | 11.184 | ug/L | 97 |
| 37) Carbon tetrachloride | 5.111 | 117 | 82981 | 12.924 | ug/L | 95 |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A26.D
Acq On : 21 Sep 2024 5:27 pm
Operator : ELAINE:MJV
Sample : WG1974948-6,31,10,10,,a1
Misc : WG1974948,ICAL21358
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 23 08:24:24 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 5.172 | 97 | 90855 | 11.901 | ug/L | # | 93 |
| 42) 2-Butanone | 5.259 | 43 | 18048 | 6.859 | ug/L | # | 84 |
| 45) Benzene | 5.540 | 78 | 226356 | 11.385 | ug/L | | 95 |
| 48) 1,2-Dichloroethane | 5.744 | 62 | 78259 | 10.199 | ug/L | | 99 |
| 51) Methyl cyclohexane | 6.123 | 83 | 101617 | 11.373 | ug/L | | 94 |
| 52) Trichloroethene | 6.134 | 95 | 57290 | 11.461 | ug/L | | 95 |
| 55) 1,2-Dichloropropane | 6.678 | 63 | 62248 | 10.371 | ug/L | | 98 |
| 58) Bromodichloromethane | 6.750 | 83 | 74871 | 10.527 | ug/L | | 92 |
| 62) cis-1,3-Dichloropropene | 7.436 | 75 | 77134 | 9.632 | ug/L | | 98 |
| 65) Toluene | 7.704 | 92 | 144790 | 11.132 | ug/L | | 95 |
| 66) 4-Methyl-2-pentanone | 8.134 | 58 | 15168 | 6.838 | ug/L | # | 86 |
| 67) Tetrachloroethene | 8.153 | 166 | 71399 | 12.923 | ug/L | | 94 |
| 69) trans-1,3-Dichloropropene | 8.187 | 75 | 65776 | 8.983 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.379 | 83 | 36591 | 10.020 | ug/L | | 97 |
| 73) Chlorodibromomethane | 8.583 | 129 | 50482 | 9.887 | ug/L | | 97 |
| 75) 1,2-Dibromoethane | 8.859 | 107 | 41427 | 9.600 | ug/L | | 90 |
| 77) 2-Hexanone | 9.143 | 43 | 25086 | 5.804 | ug/L | # | 92 |
| 78) Chlorobenzene | 9.508 | 112 | 156070 | 11.262 | ug/L | # | 85 |
| 79) Ethylbenzene | 9.547 | 91 | 280884 | 11.143 | ug/L | | 99 |
| 81) p/m Xylene | 9.737 | 106 | 223499 | 23.260 | ug/L | | 97 |
| 82) o Xylene | 10.278 | 106 | 215222 | 22.905 | ug/L | | 91 |
| 83) Styrene | 10.345 | 104 | 335158 | 21.756 | ug/L | | 96 |
| 85) Bromoform | 10.367 | 173 | 34278 | 9.196 | ug/L | | 92 |
| 87) Isopropylbenzene | 10.663 | 105 | 291197 | 10.615 | ug/L | | 96 |
| 92) 1,1,2,2-Tetrachloroethane | 11.235 | 83 | 51405 | 8.831 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.121 | 146 | 138633 | 10.838 | ug/L | | 94 |
| 106) 1,4-Dichlorobenzene | 12.216 | 146 | 137588 | 10.761 | ug/L | | 99 |
| 109) 1,2-Dichlorobenzene | 12.637 | 146 | 128647 | 10.453 | ug/L | | 98 |
| 111) 1,2-Dibromo-3-chloropr... | 13.418 | 155 | 8218 | 7.574 | ug/L | | 92 |
| 114) 1,2,4-Trichlorobenzene | 14.046 | 180 | 82347 | 9.335 | ug/L | | 98 |
| 116) 1,2,3-Trichlorobenzene | 14.508 | 180 | 72031 | 8.888 | ug/L | | 94 |

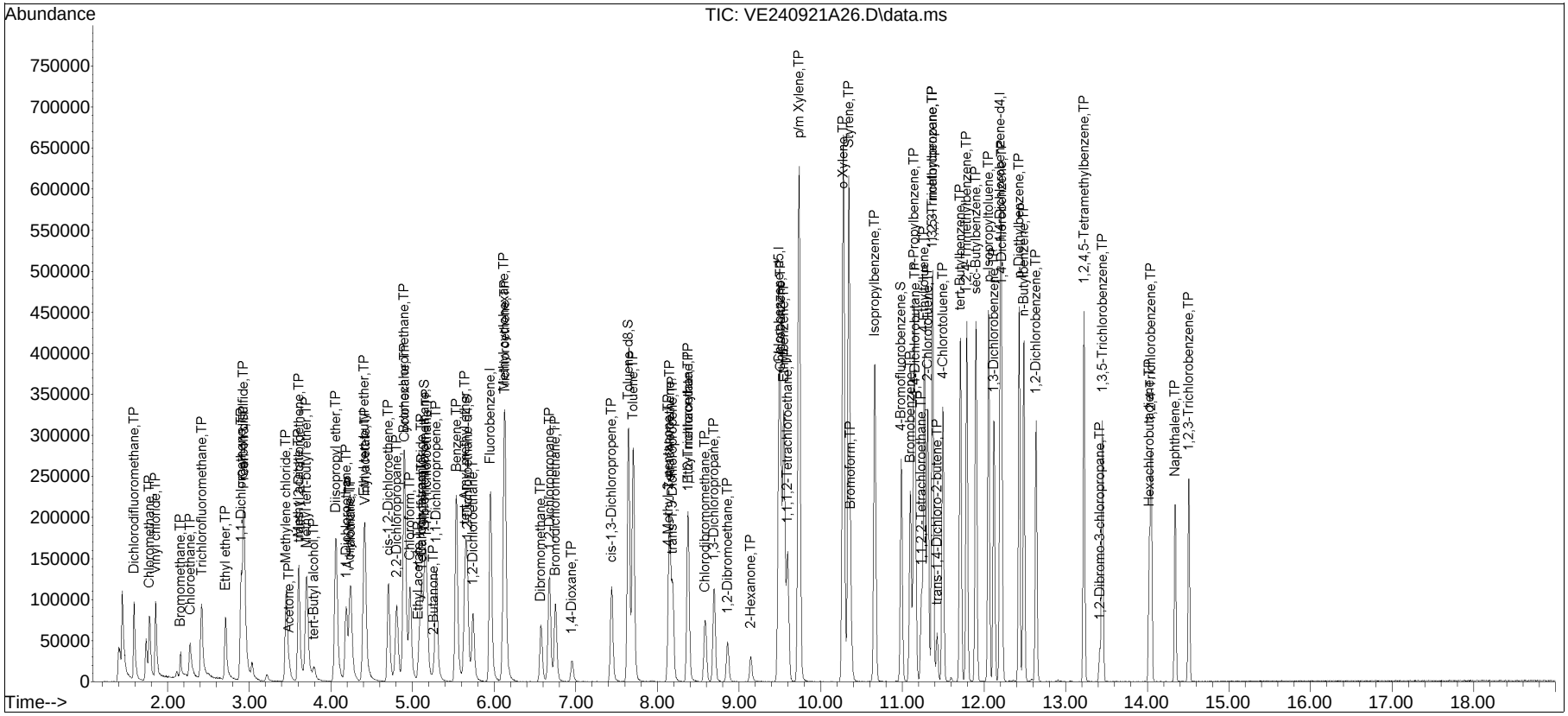
(#) = qualifier out of range (m) = manual integration (+) = signals summed

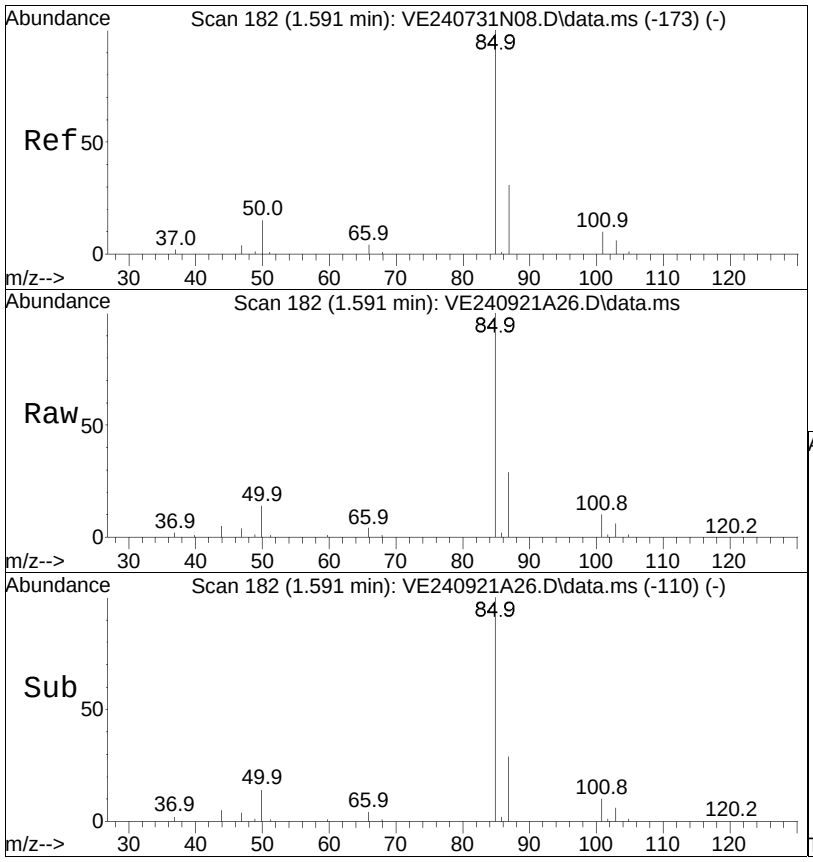
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A26.D
Acq On : 21 Sep 2024 5:27 pm
Operator : ELAINE:MJV
Sample : WG1974948-6,31,10,10,,a1
Misc : WG1974948,ICAL21358
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 23 08:24:24 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

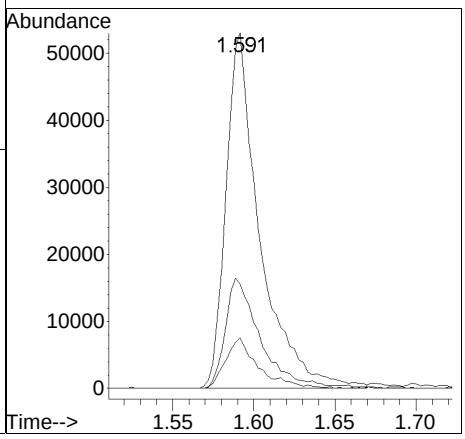


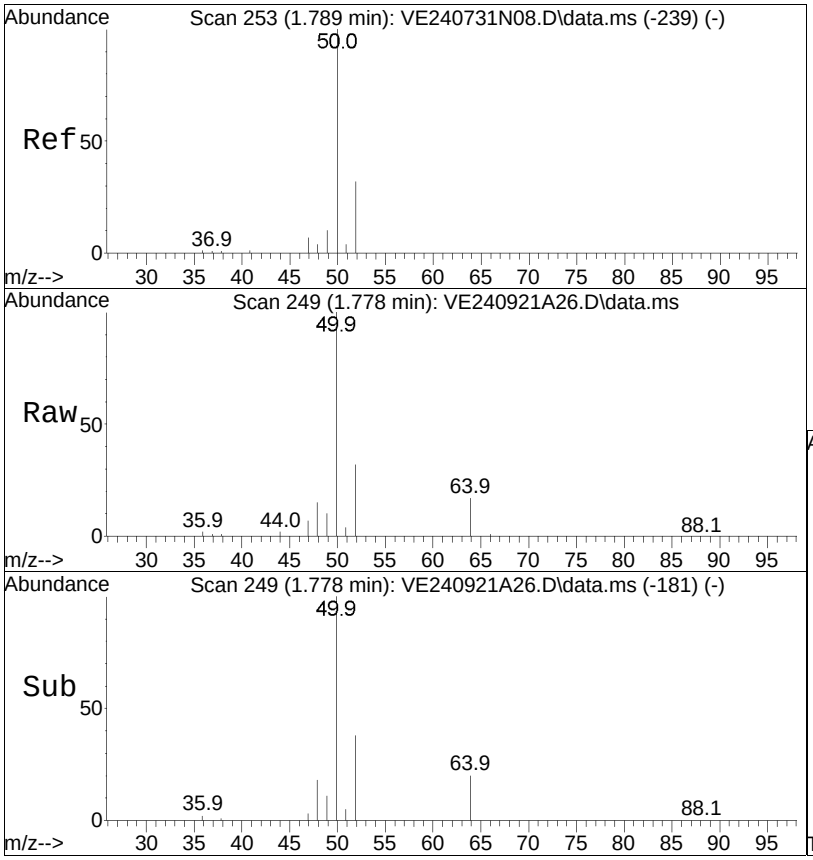



#2
Dichlorodifluoromethane
Concen: 13.72 ug/L
RT: 1.591 min Scan# 182
Delta R.T. 0.000 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 85 Resp: 77210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.7 | 21.7 | 45.1 |
| 50 | 13.8 | 11.8 | 24.4 |

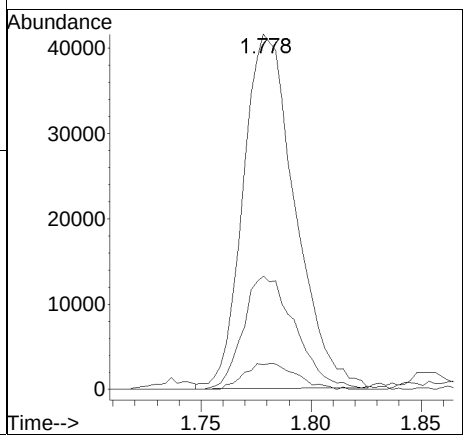


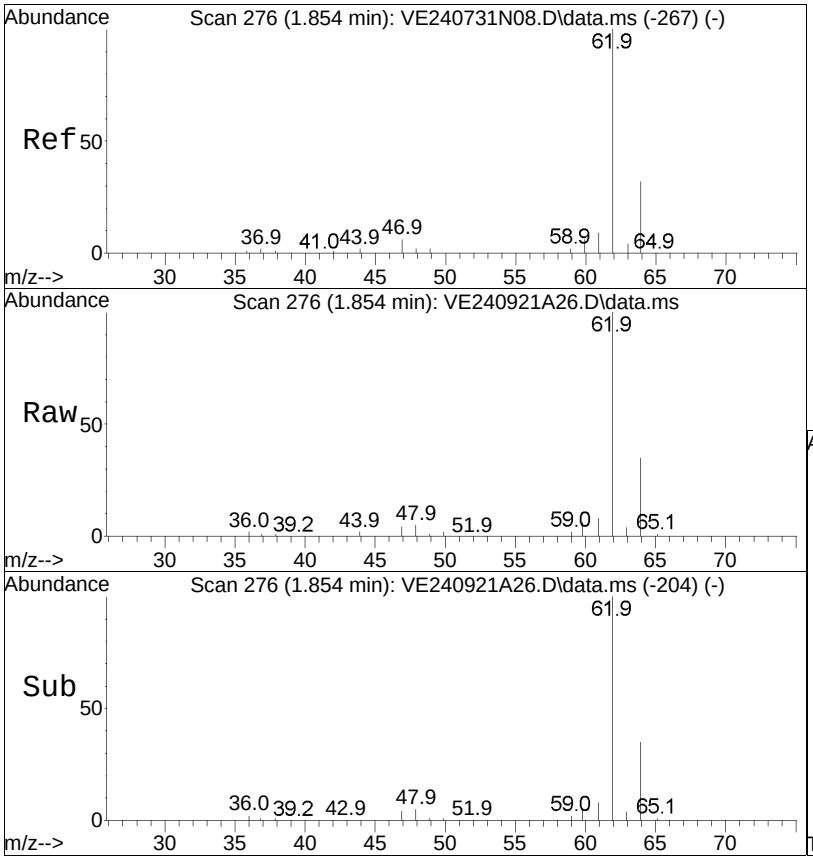



#3
Chloromethane
Concen: 10.86 ug/L
RT: 1.778 min Scan# 249
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 50 Resp: 68067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.2 | 14.9 | 54.9 |
| 47 | 7.4 | 0.0 | 28.0 |

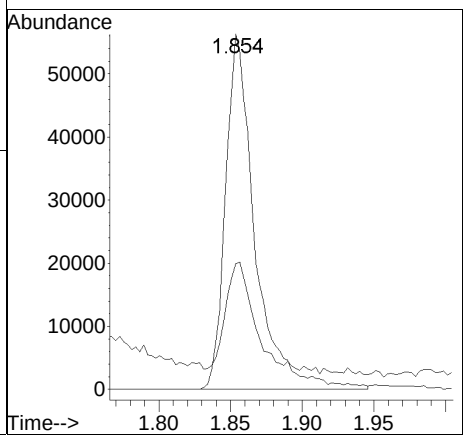


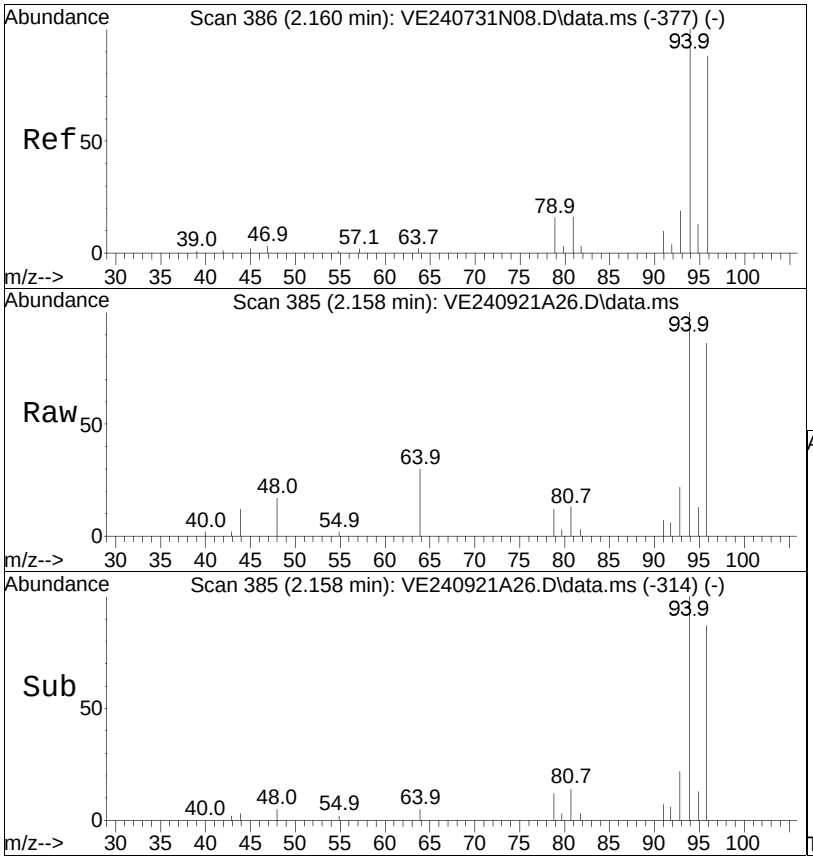



#4
Vinyl chloride
Concen: 13.80 ug/L
RT: 1.854 min Scan# 276
Delta R.T. -0.000 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 62 Resp: 80590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.0 | 8.1 | 48.1 |

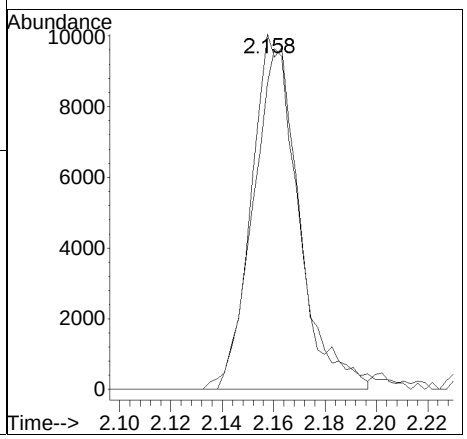


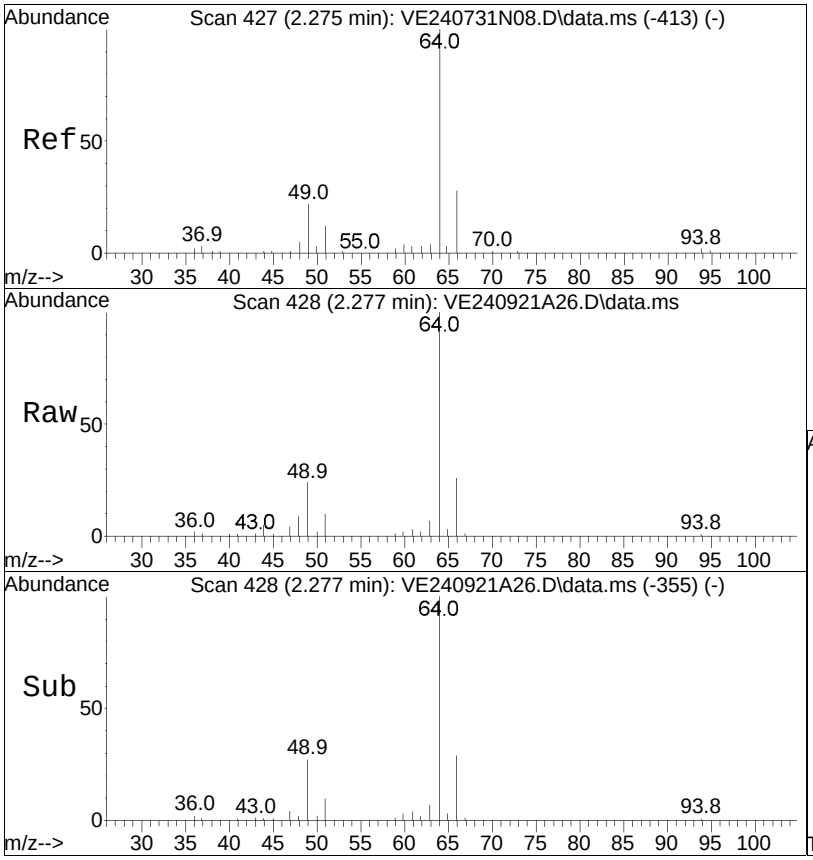



#5
Bromomethane
Concen: 7.56 ug/L
RT: 2.158 min Scan# 385
Delta R.T. -0.002 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 94 Resp: 12914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.9 | 68.2 | 108.2 |

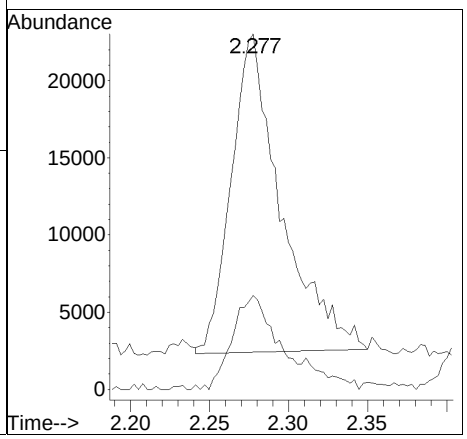


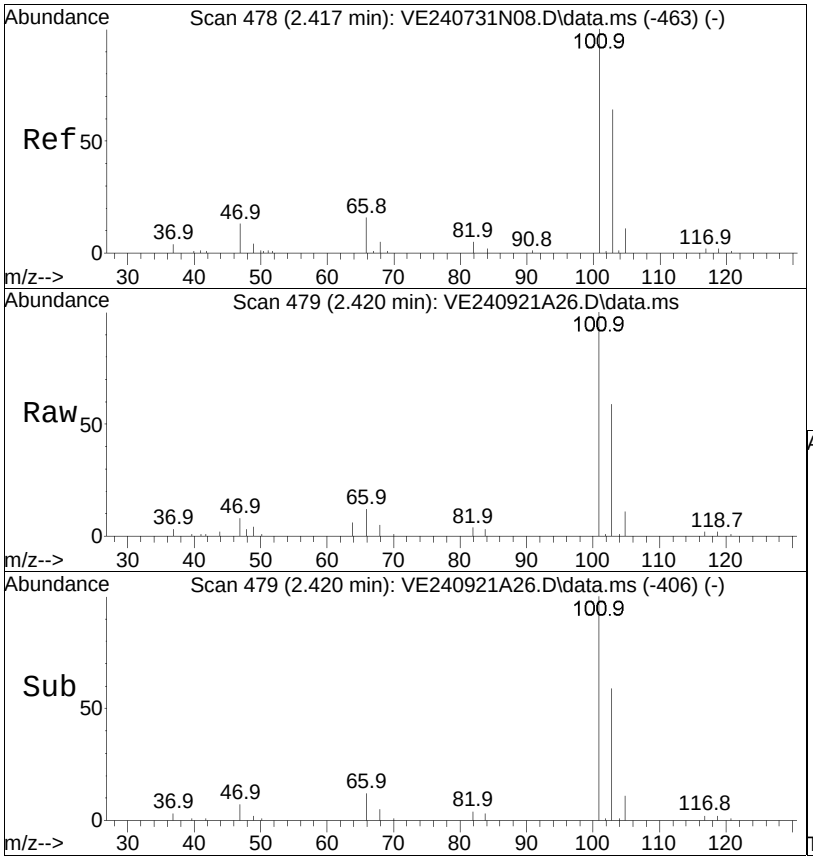



#6
Chloroethane
Concen: 12.86 ug/L
RT: 2.277 min Scan# 428
Delta R.T. 0.002 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 64 Resp: 45337

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 26.1 | 10.7 | 50.7 |

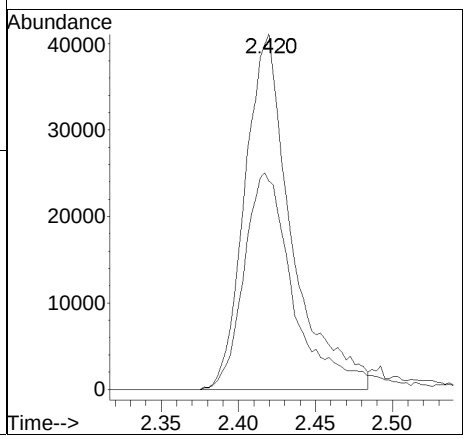


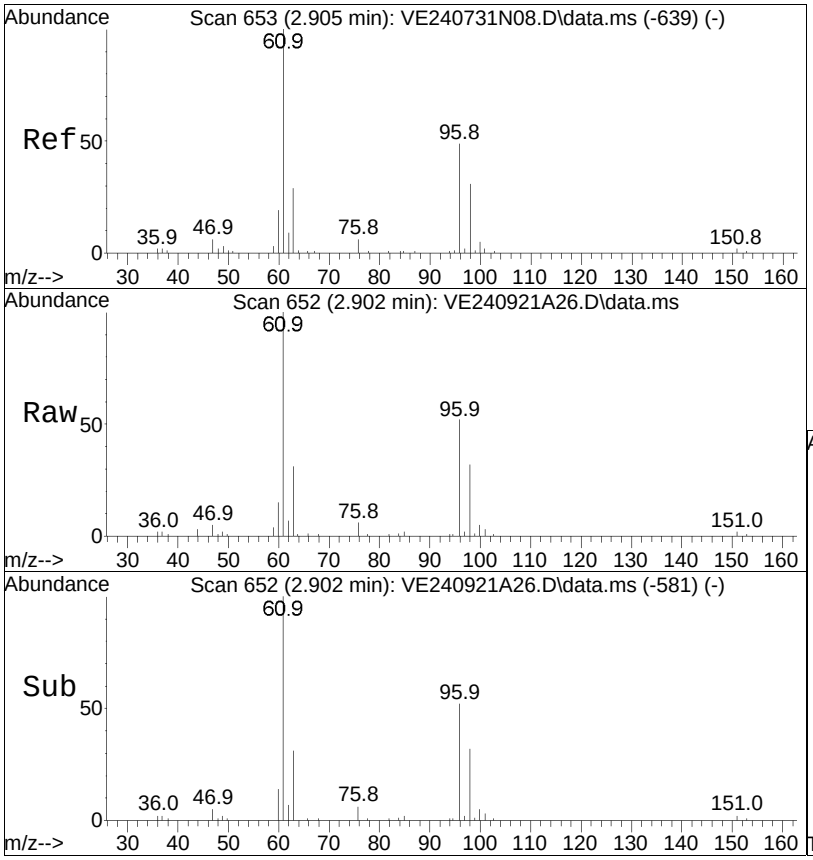



#7
Trichlorofluoromethane
Concen: 12.95 ug/L
RT: 2.420 min Scan# 479
Delta R.T. 0.003 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:101 Resp: 86907

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.0 | 48.2 | 72.2 |

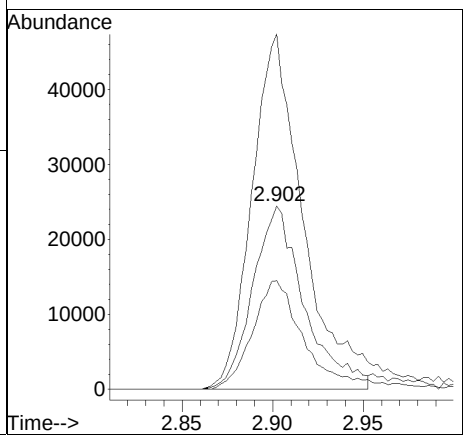


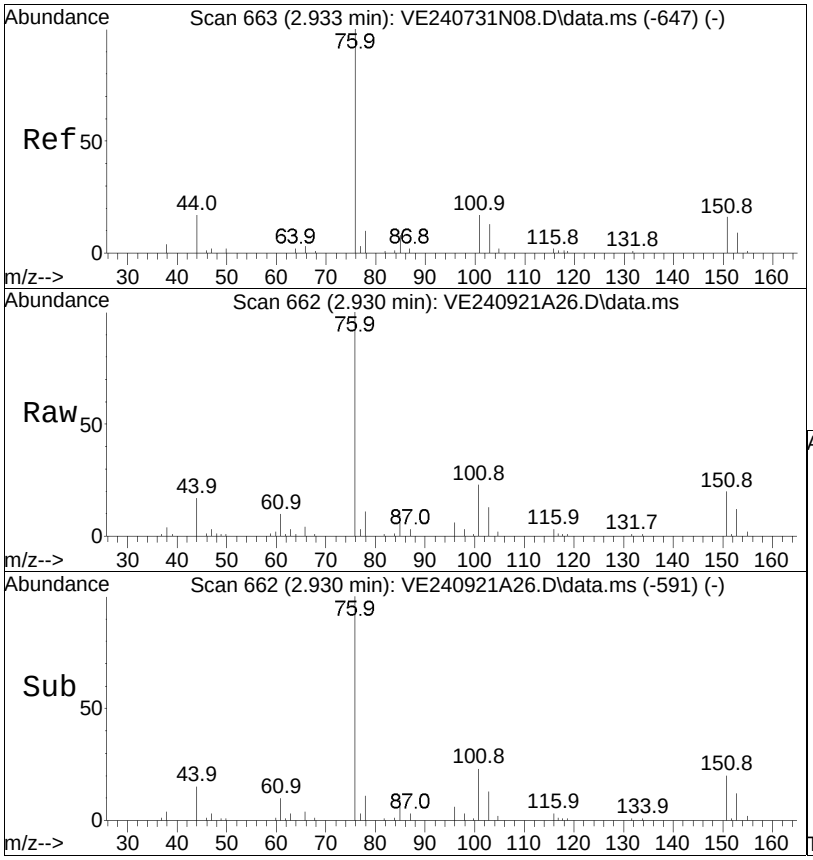



#10
1,1-Dichloroethene
Concen: 12.03 ug/L
RT: 2.902 min Scan# 652
Delta R.T. -0.003 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 96 Resp: 48367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 199.9 | 135.4 | 203.0 |
| 63 | 59.8 | 42.6 | 63.8 |

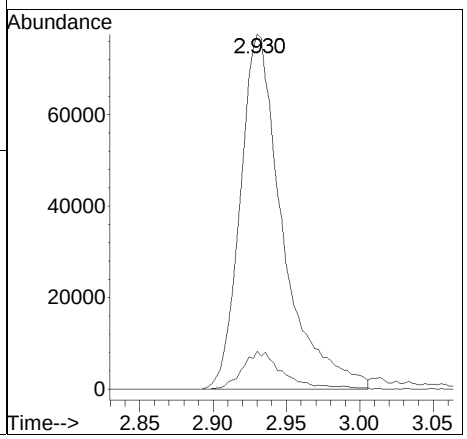


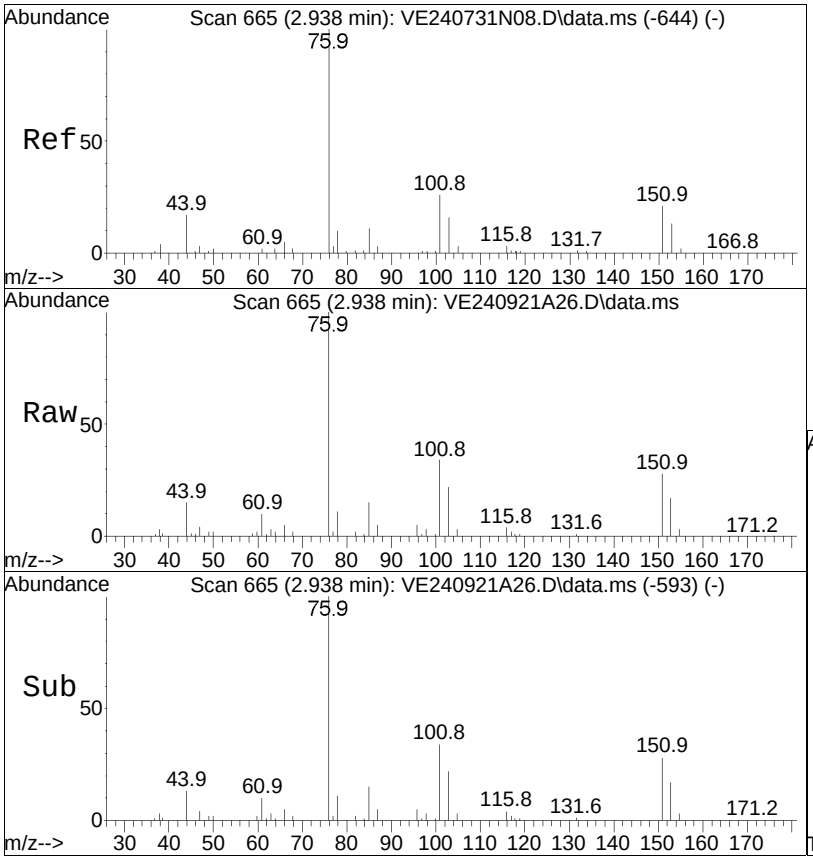



#11
Carbon disulfide
Concen: 12.61 ug/L
RT: 2.930 min Scan# 662
Delta R.T. -0.003 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 76 Resp: 156419

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.7 | 5.5 | 11.3 |

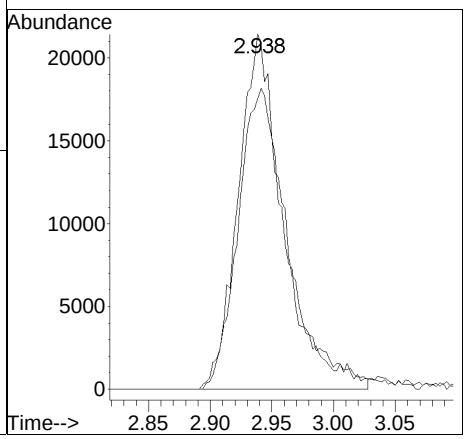


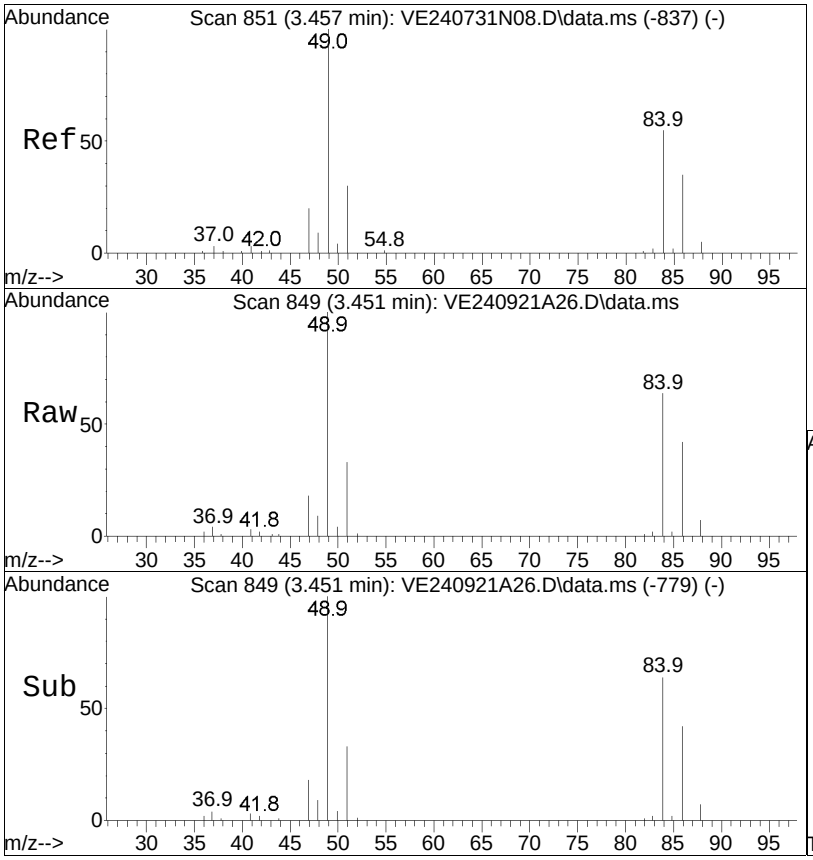



#12
Freon-113
Concen: 13.38 ug/L
RT: 2.938 min Scan# 665
Delta R.T. 0.000 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:101 Resp: 56064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 86.5 | 58.7 | 88.1 |

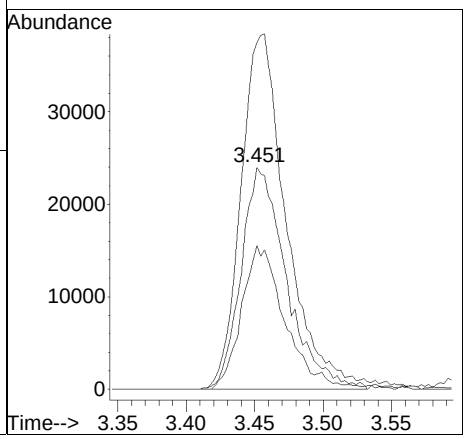


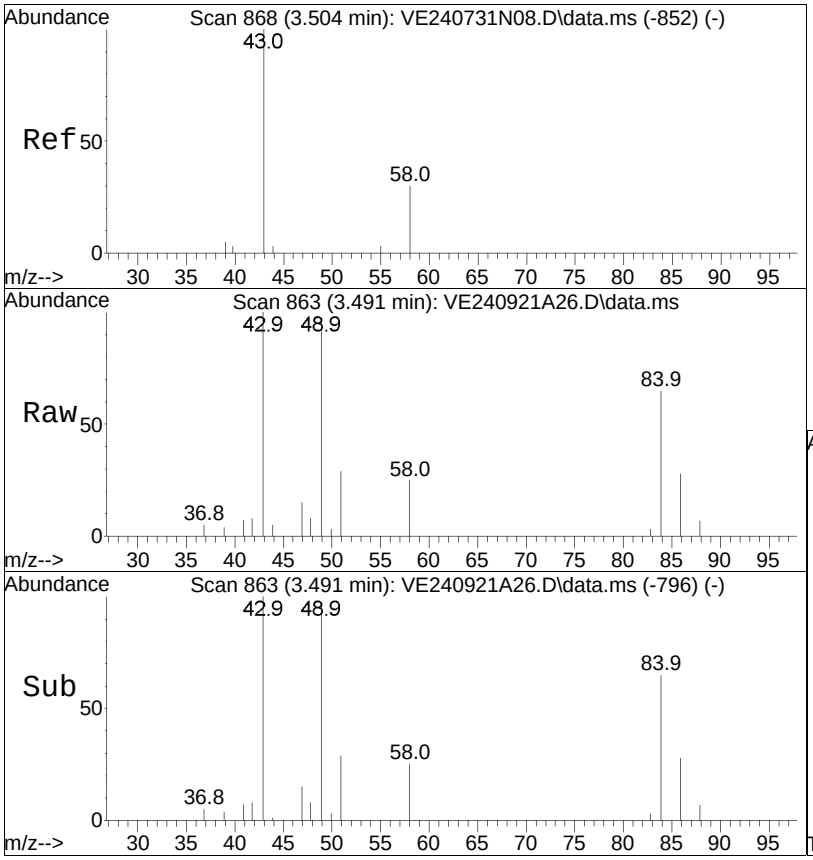



#15
Methylene chloride
Concen: 10.91 ug/L
RT: 3.451 min Scan# 849
Delta R.T. -0.006 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 84 Resp: 55322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 58.9 | 40.2 | 83.6 |
| 49 | 160.3 | 103.2 | 214.4 |

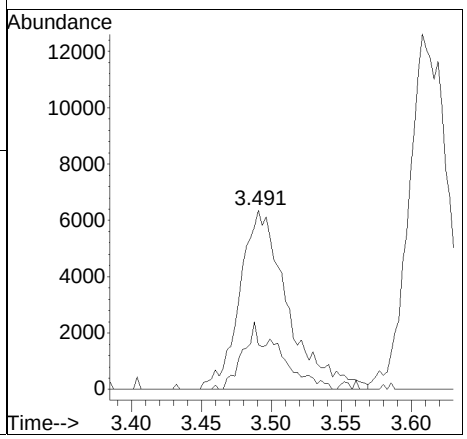


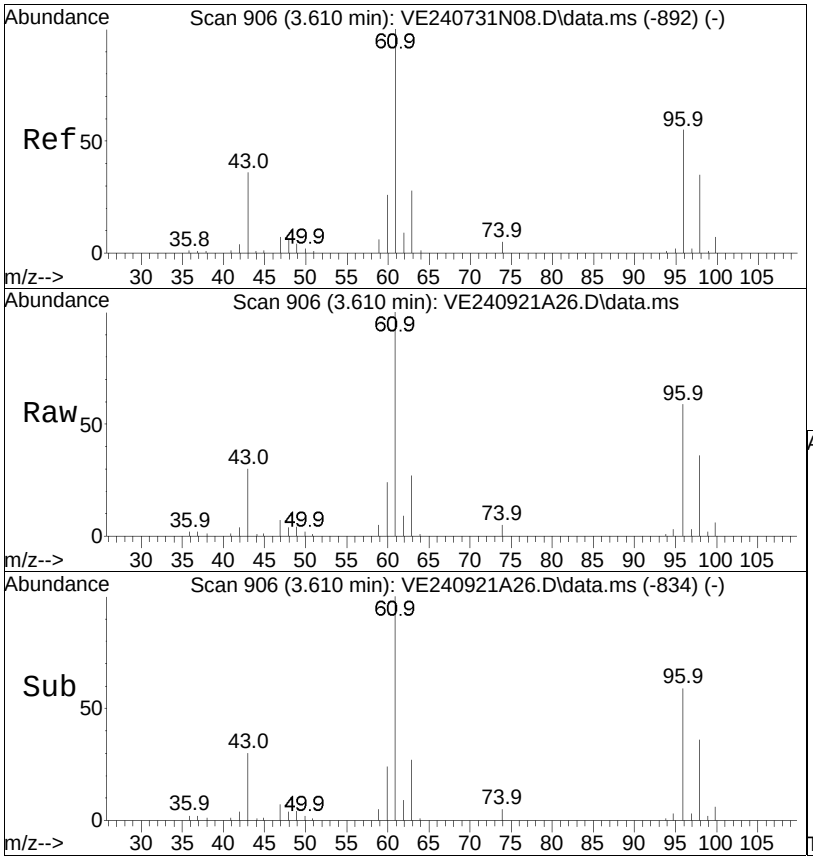



#17
Acetone
Concen: 8.23 ug/L
RT: 3.491 min Scan# 863
Delta R.T. -0.013 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 43 Resp: 15164

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 13.9 | 23.4 | 35.0# |

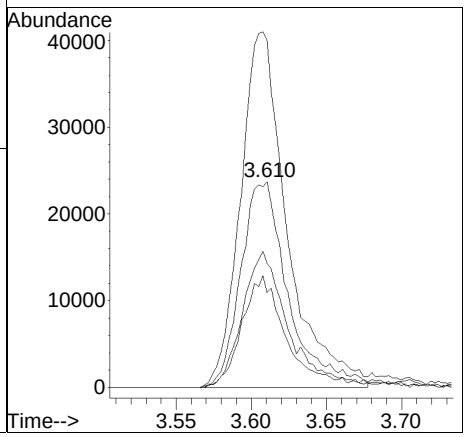


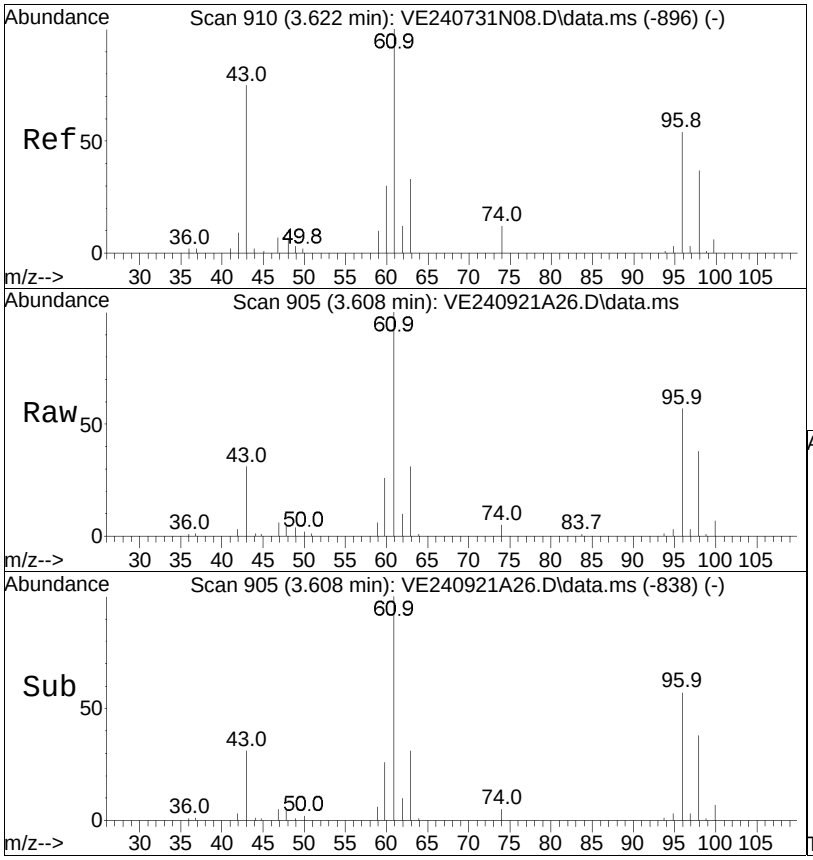



#18
trans-1,2-Dichloroethene
Concen: 12.08 ug/L
RT: 3.610 min Scan# 906
Delta R.T. 0.000 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 96 Resp: 52176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 169.7 | 93.5 | 194.1 |
| 98 | 63.0 | 37.8 | 78.6 |
| 63 | 50.1 | 29.7 | 61.7 |

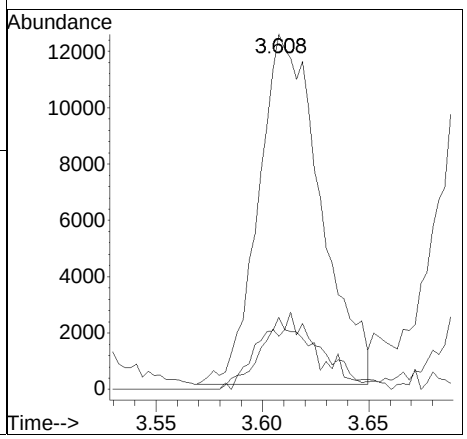


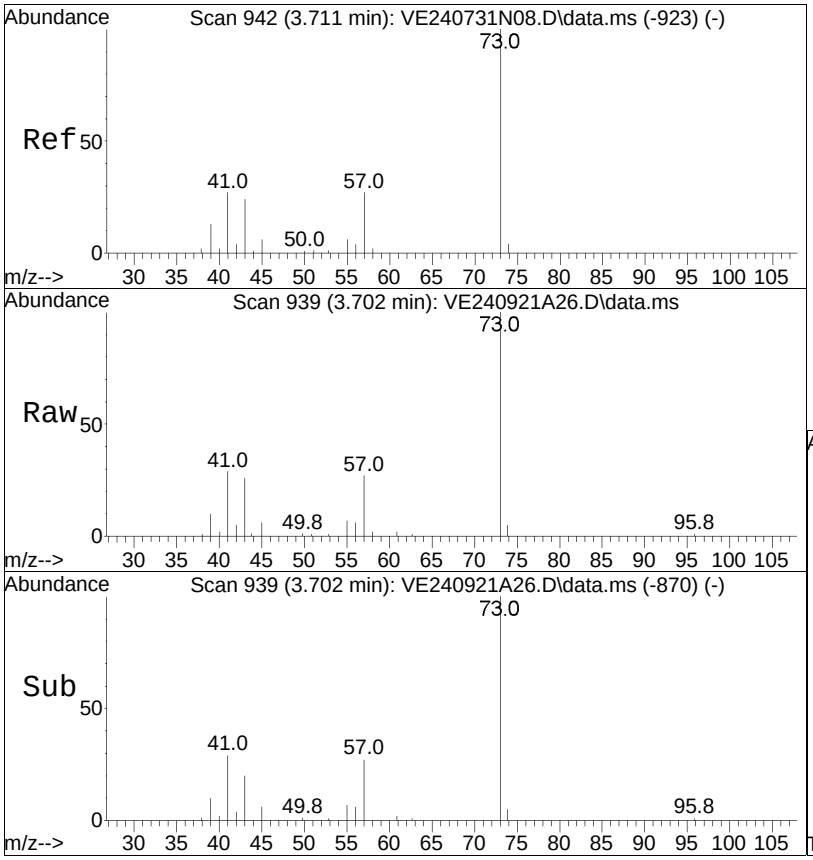



#19
Methyl acetate
Concen: 5.86 ug/L
RT: 3.608 min Scan# 905
Delta R.T. -0.014 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 43 Resp: 25139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 20.0 | 12.6 | 18.8# |
| 59 | 17.4 | 12.2 | 18.2 |

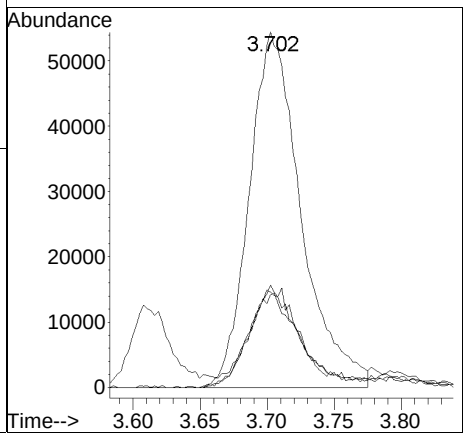


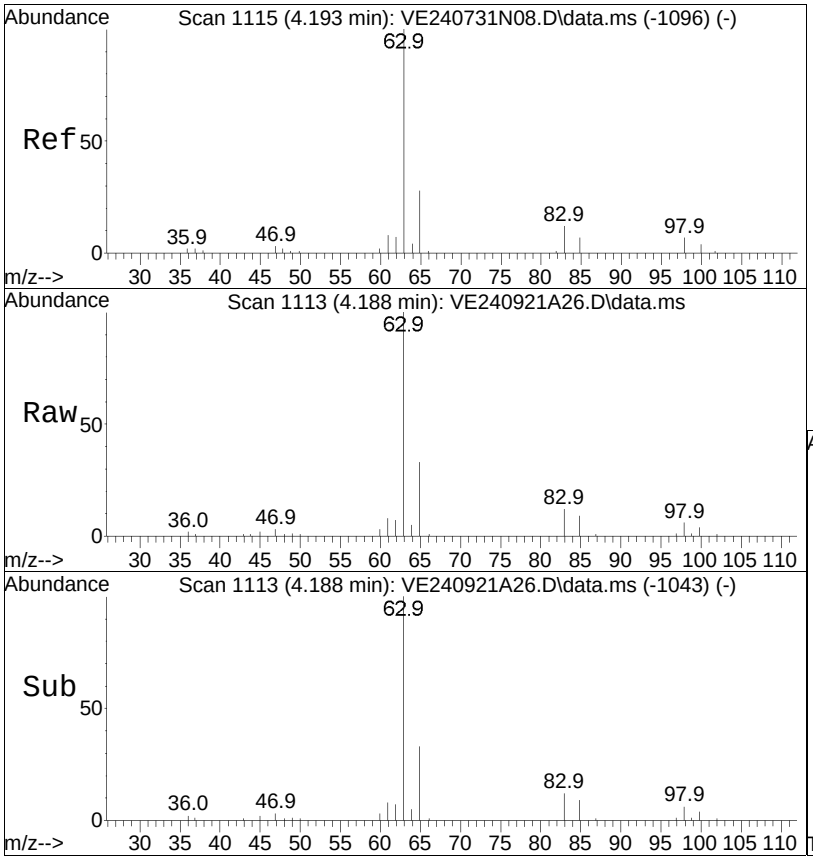



#21
Methyl tert-butyl ether
Concen: 9.11 ug/L
RT: 3.702 min Scan# 939
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 73 Resp: 146744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 27.6 | 16.1 | 33.3 |
| 43 | 20.9 | 17.0 | 35.2 |
| 41 | 26.9 | 18.7 | 38.9 |

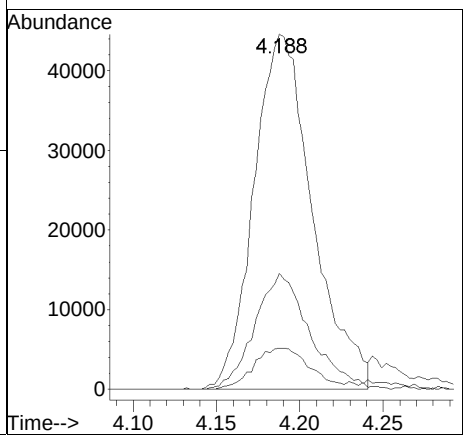


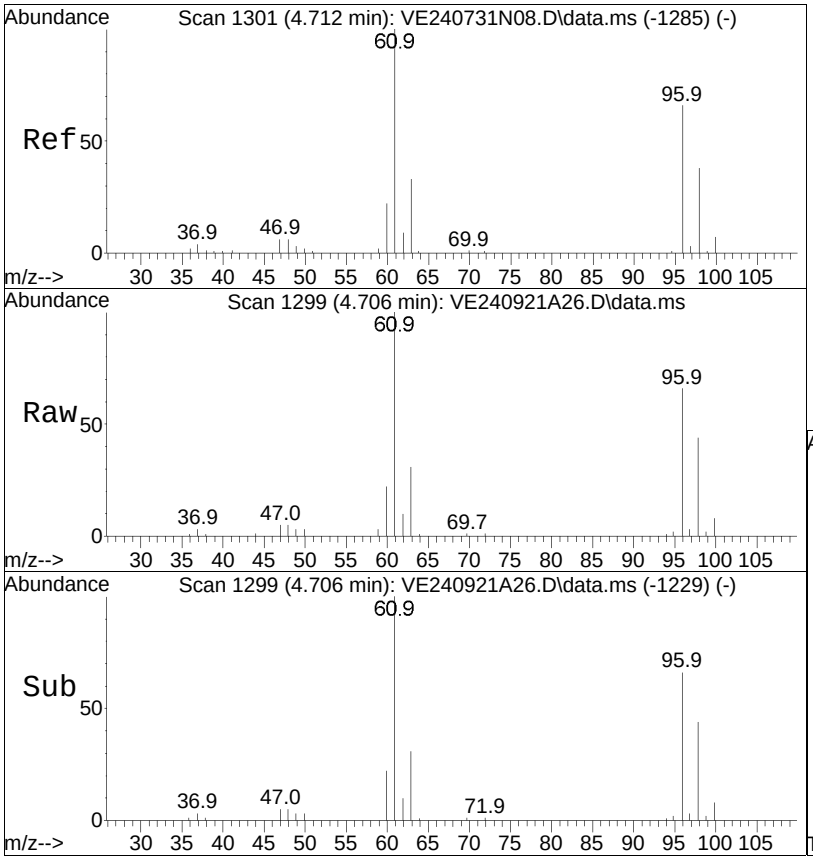



#25
1,1-Dichloroethane
Concen: 10.77 ug/L
RT: 4.188 min Scan# 1113
Delta R.T. -0.005 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 63 Resp: 109259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.4 | 10.3 | 50.3 |
| 83 | 11.2 | 0.0 | 33.1 |

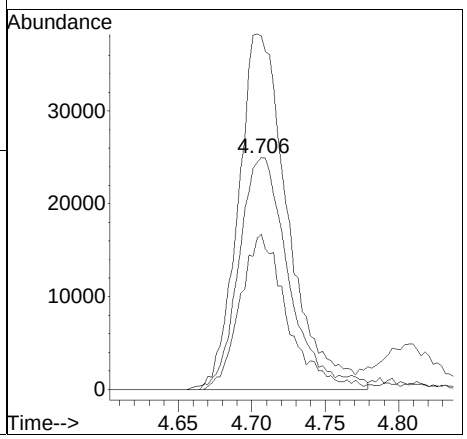


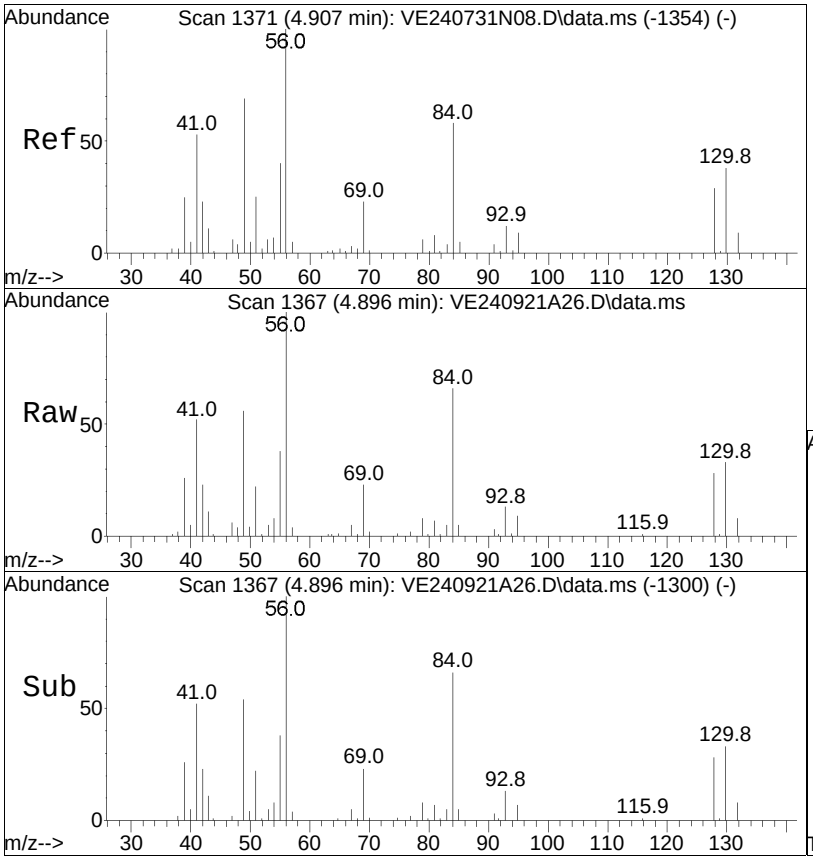



#30
cis-1,2-Dichloroethene
Concen: 11.43 ug/L
RT: 4.706 min Scan# 1299
Delta R.T. -0.006 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 96 Resp: 59188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.8 | 120.3 | 180.5 |
| 98 | 62.4 | 50.2 | 75.4 |

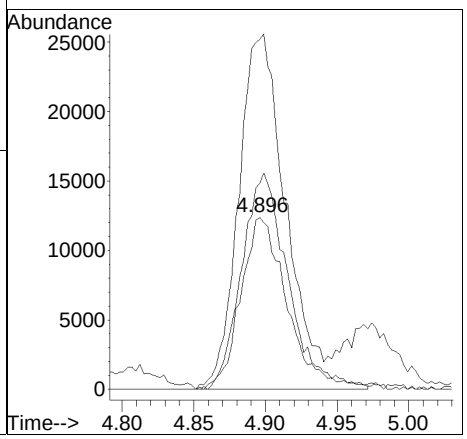


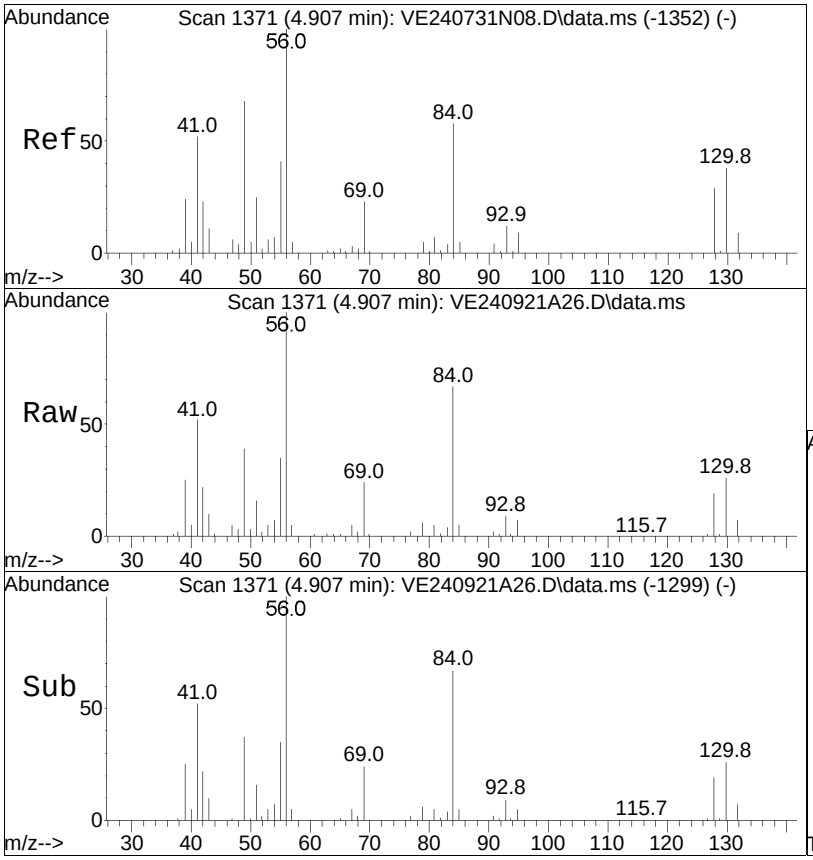



#33
Bromochloromethane
Concen: 12.25 ug/L
RT: 4.896 min Scan# 1367
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:128 Resp: 27822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 210.5 | 170.2 | 255.2 |
| 130 | 126.8 | 103.7 | 155.5 |

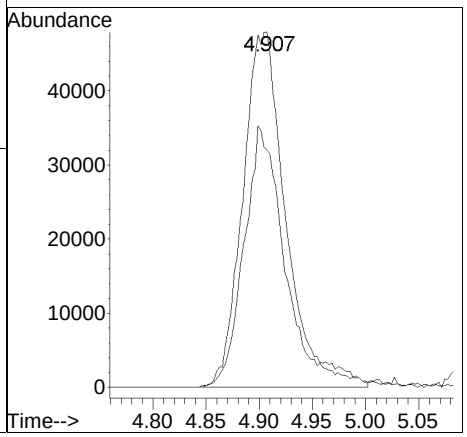


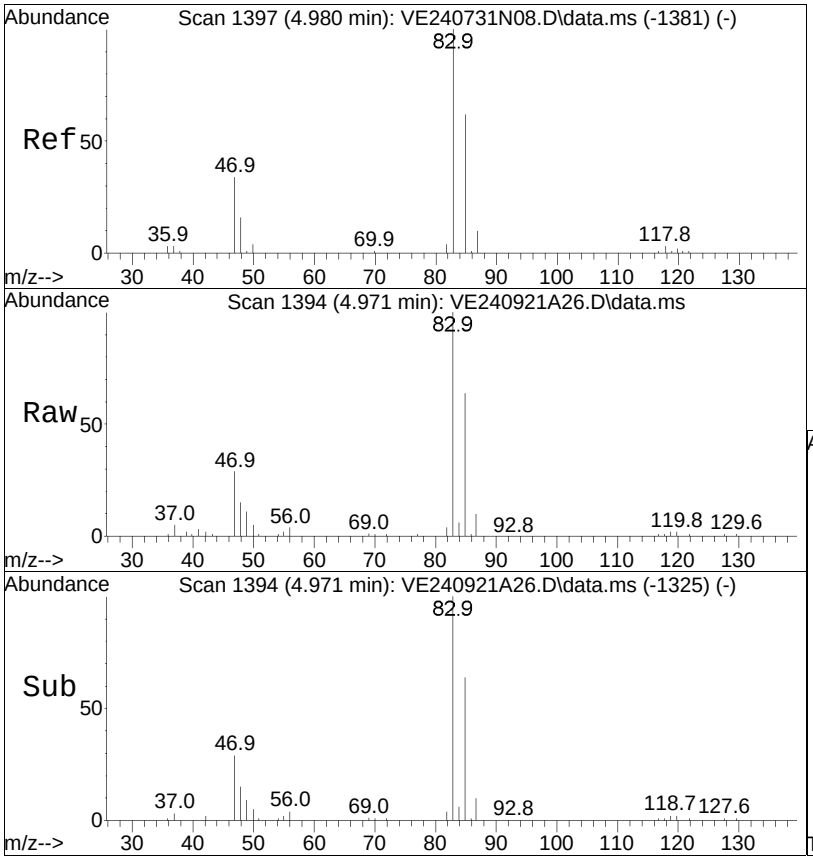



#34
Cyclohexane
Concen: 11.33 ug/L
RT: 4.907 min Scan# 1371
Delta R.T. 0.000 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 56 Resp: 134404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 67.1 | 44.5 | 92.5 |

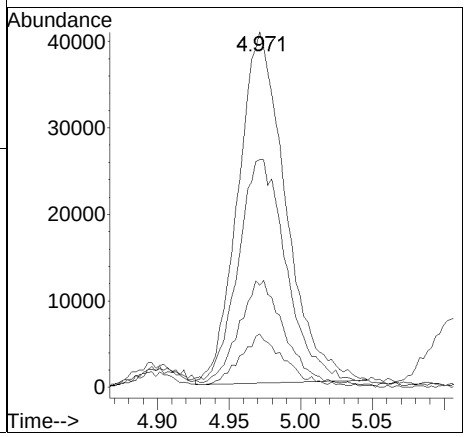


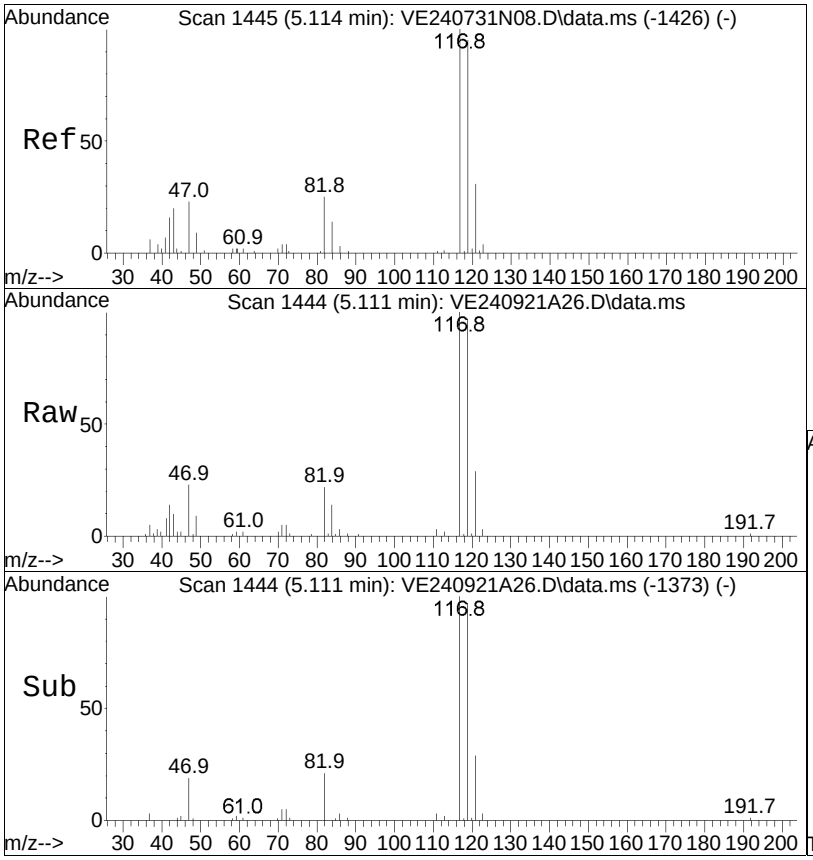



#35
Chloroform
Concen: 11.18 ug/L
RT: 4.971 min Scan# 1394
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 83 Resp: 94014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.4 | 41.3 | 85.9 |
| 47 | 28.6 | 20.9 | 43.3 |
| 48 | 12.8 | 10.3 | 21.5 |

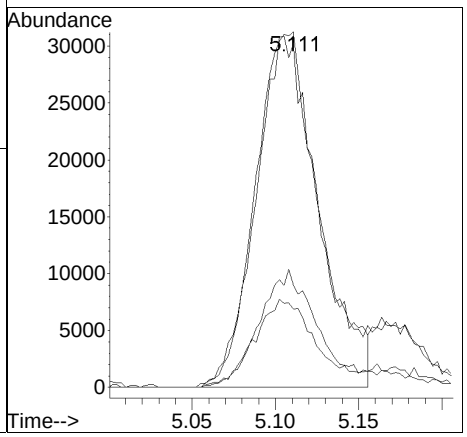


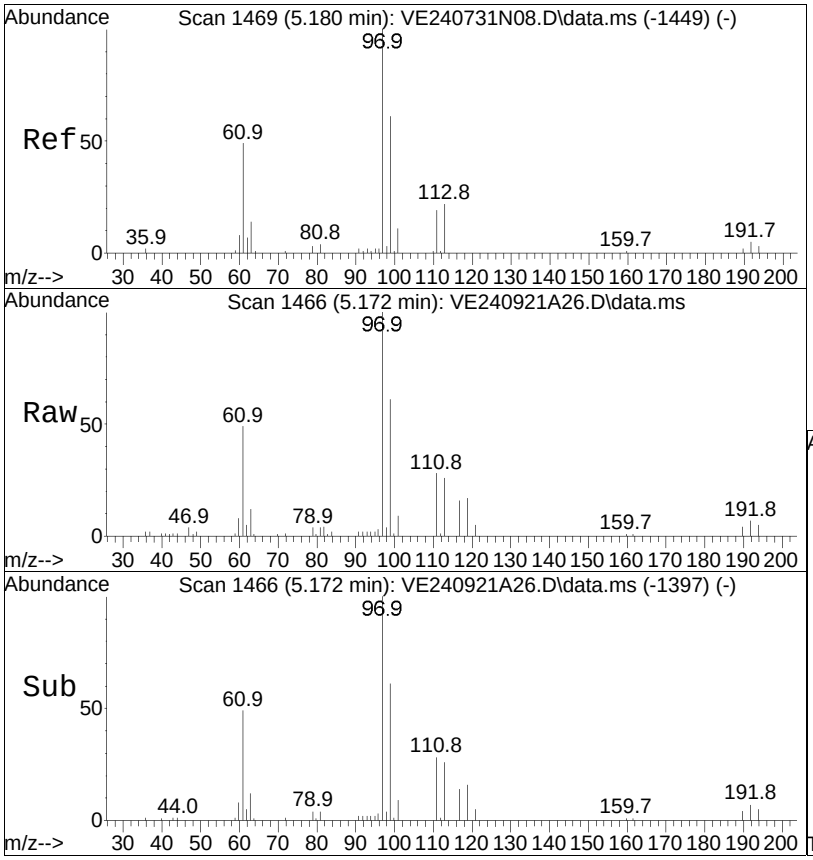



#37
Carbon tetrachloride
Concen: 12.92 ug/L
RT: 5.111 min Scan# 1444
Delta R.T. -0.003 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:117 Resp: 82981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.5 | 60.6 | 126.0 |
| 121 | 30.6 | 18.0 | 37.4 |
| 82 | 23.9 | 19.8 | 41.0 |

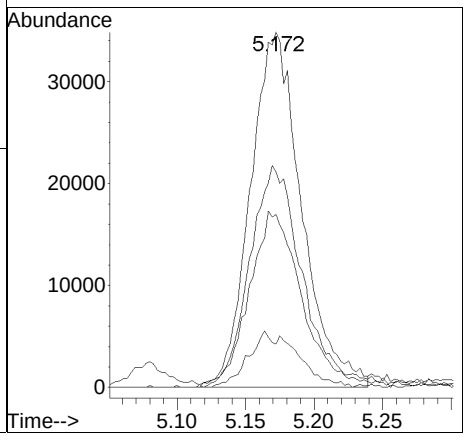


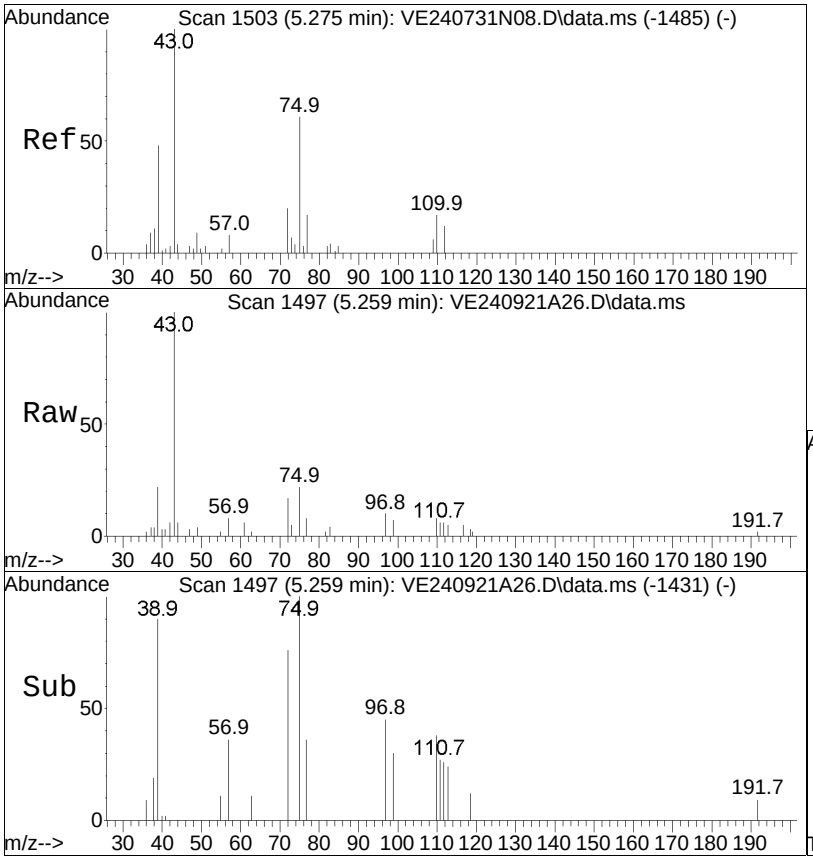



#40
1,1,1-Trichloroethane
Concen: 11.90 ug/L
RT: 5.172 min Scan# 1466
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 97 Resp: 90855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 40.2 | 83.4 |
| 61 | 48.9 | 36.9 | 76.5 |
| 63 | 8.2 | 8.3 | 17.3# |

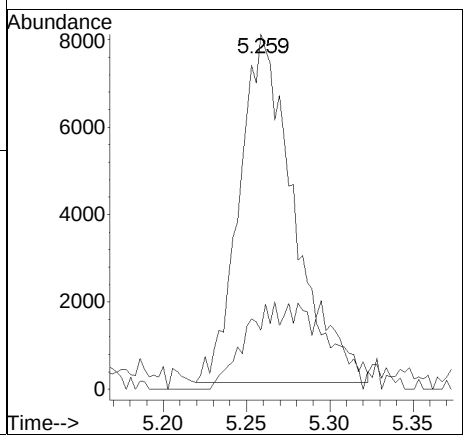


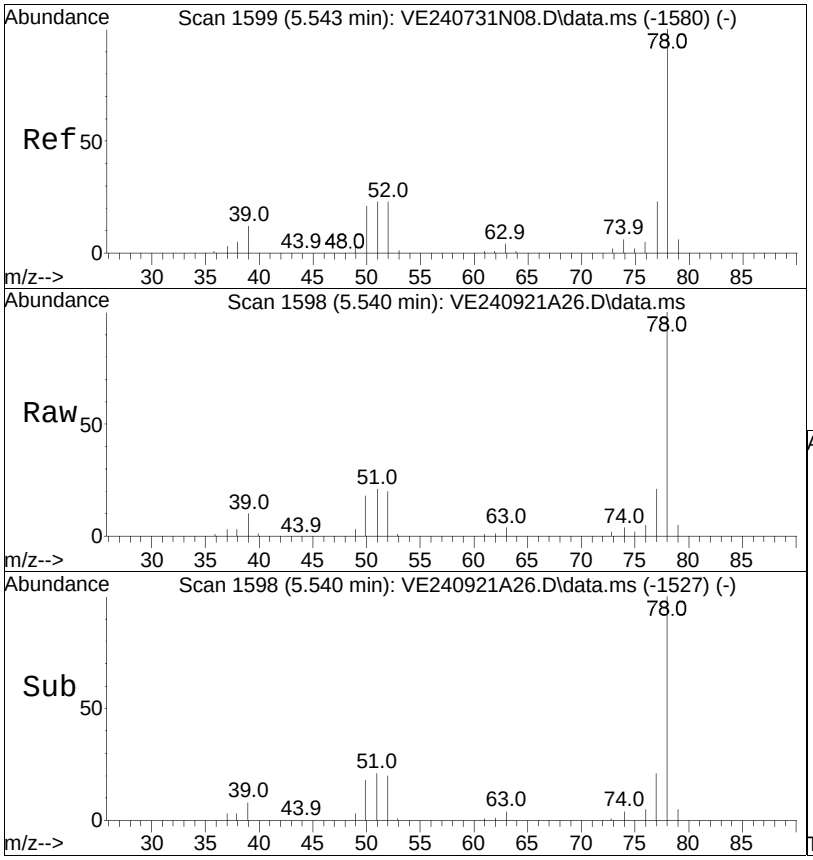



#42
2-Butanone
Concen: 6.86 ug/L
RT: 5.259 min Scan# 1497
Delta R.T. -0.016 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 43 Resp: 18048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 12.3 | 15.7 | 23.5# |

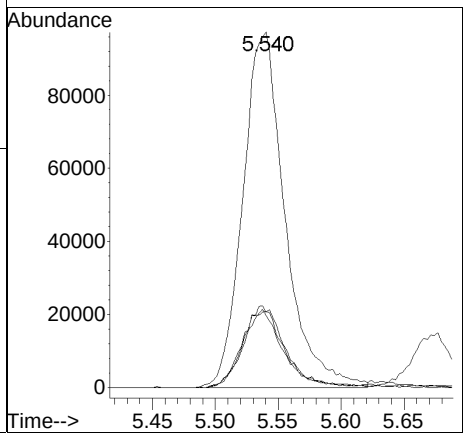


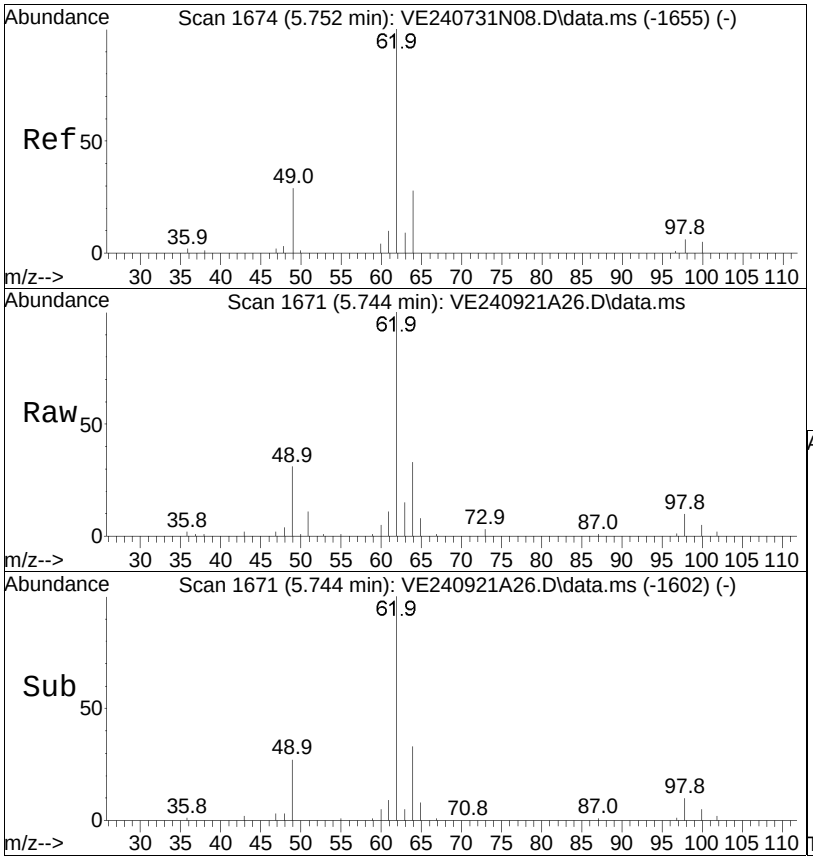



#45
Benzene
Concen: 11.38 ug/L
RT: 5.540 min Scan# 1598
Delta R.T. -0.003 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 78 Resp: 226356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.3 | 12.8 | 26.6 |
| 51 | 21.8 | 13.5 | 27.9 |
| 52 | 20.5 | 12.0 | 25.0 |

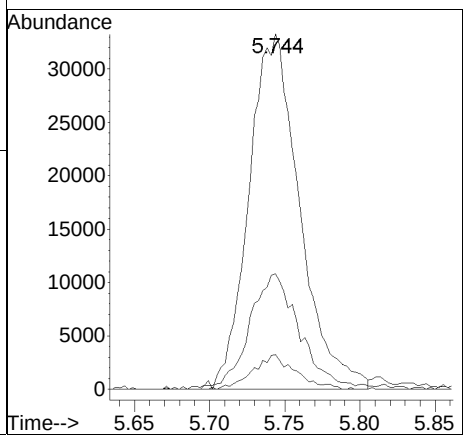


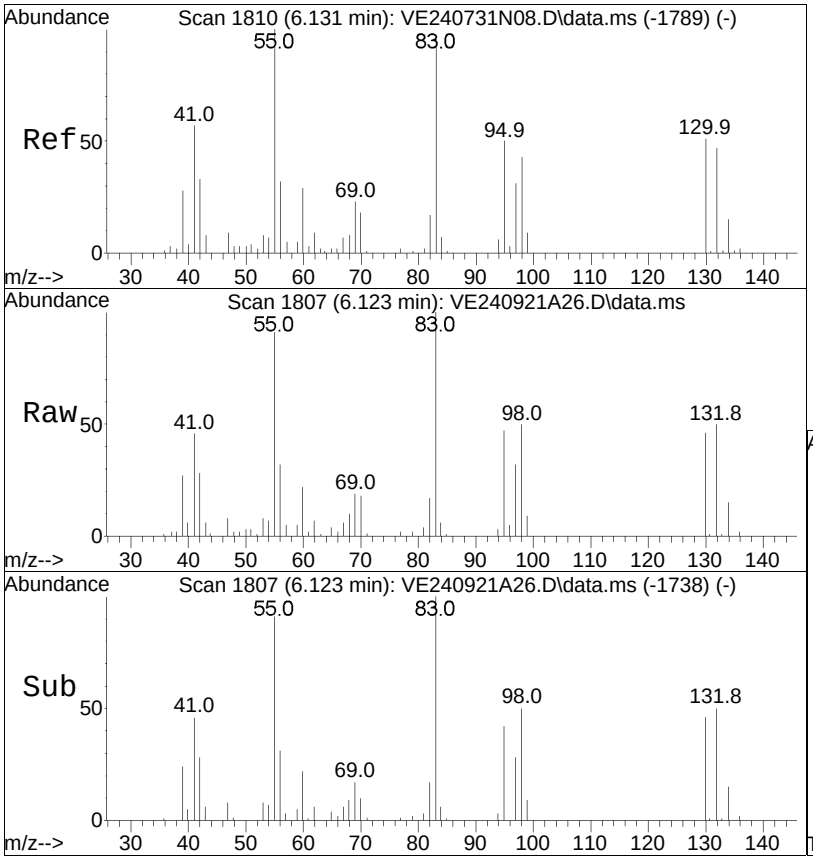



#48
1,2-Dichloroethane
Concen: 10.20 ug/L
RT: 5.744 min Scan# 1671
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 62 Resp: 78259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.1 | 12.0 | 52.0 |
| 98 | 8.3 | 0.0 | 29.1 |

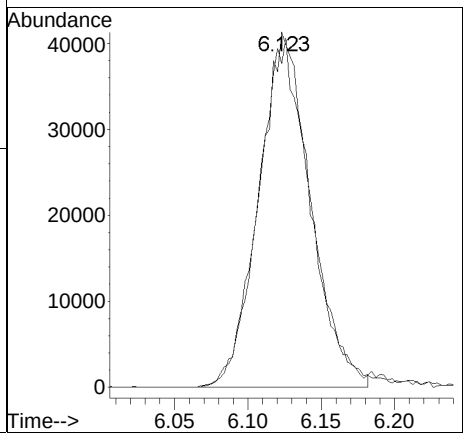


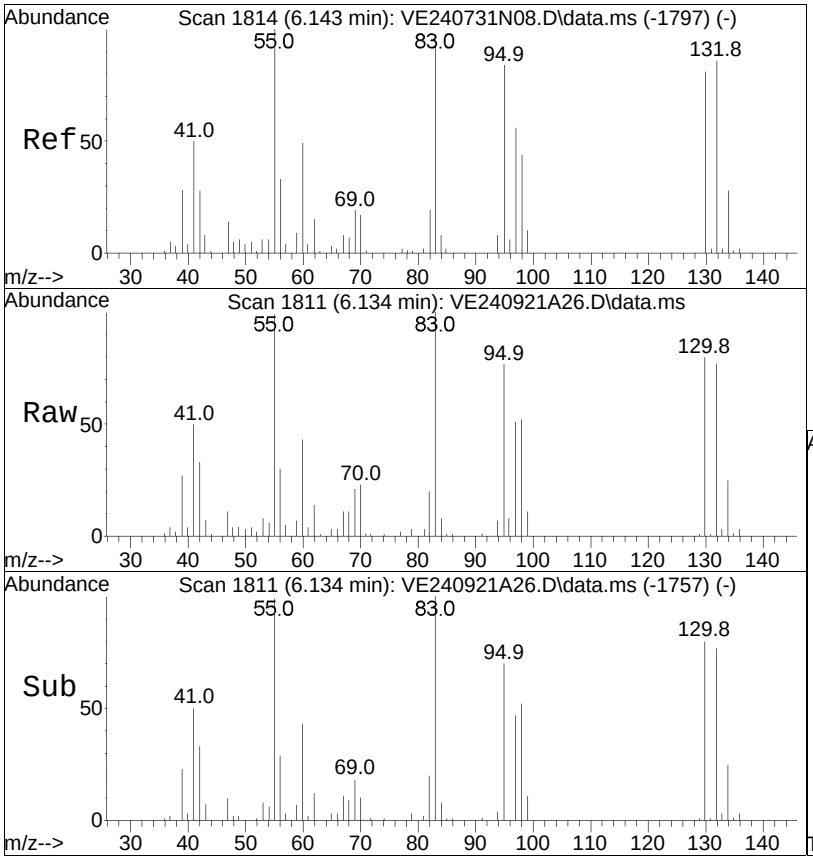



#51
Methyl cyclohexane
Concen: 11.37 ug/L
RT: 6.123 min Scan# 1807
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 83 Resp: 101617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 99.7 | 75.3 | 112.9 |

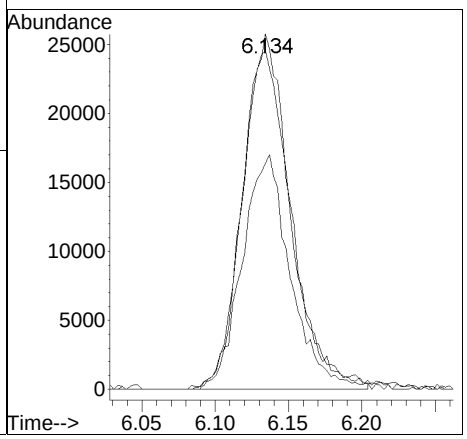


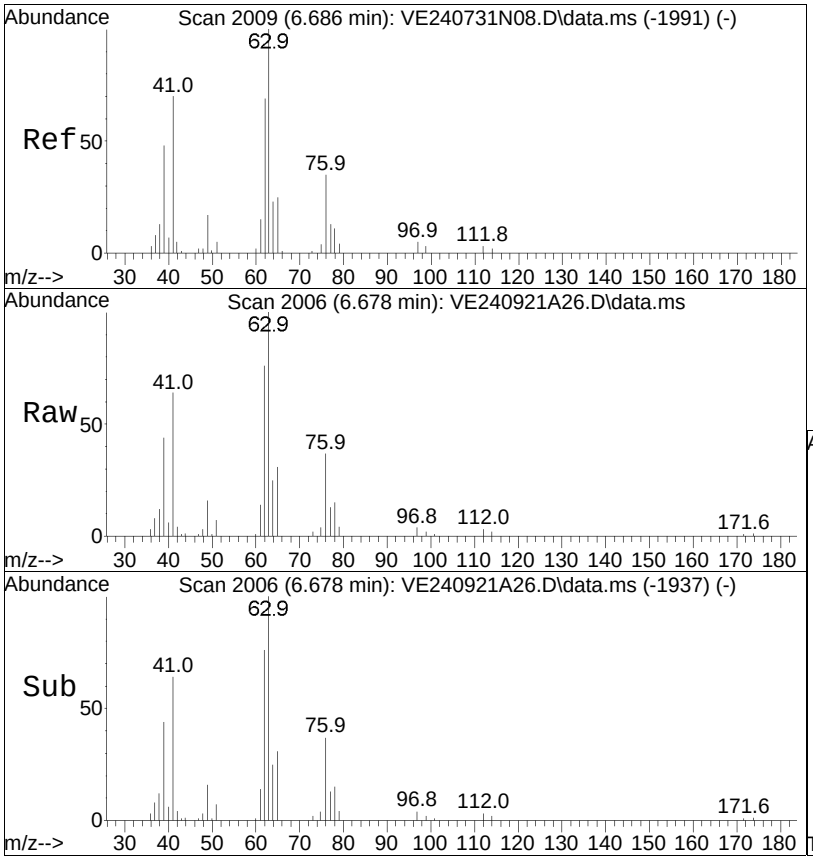



#52
Trichloroethene
Concen: 11.46 ug/L
RT: 6.134 min Scan# 1811
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 95 Resp: 57290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 68.2 | 50.2 | 75.2 |
| 130 | 101.2 | 78.2 | 117.4 |

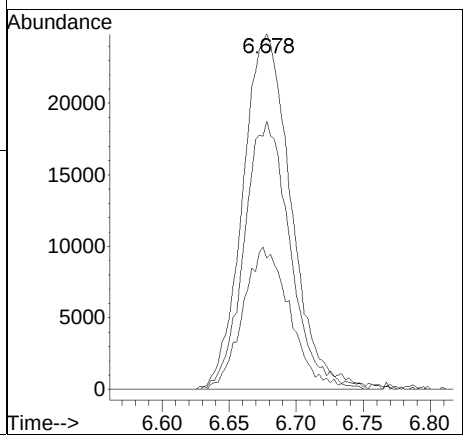


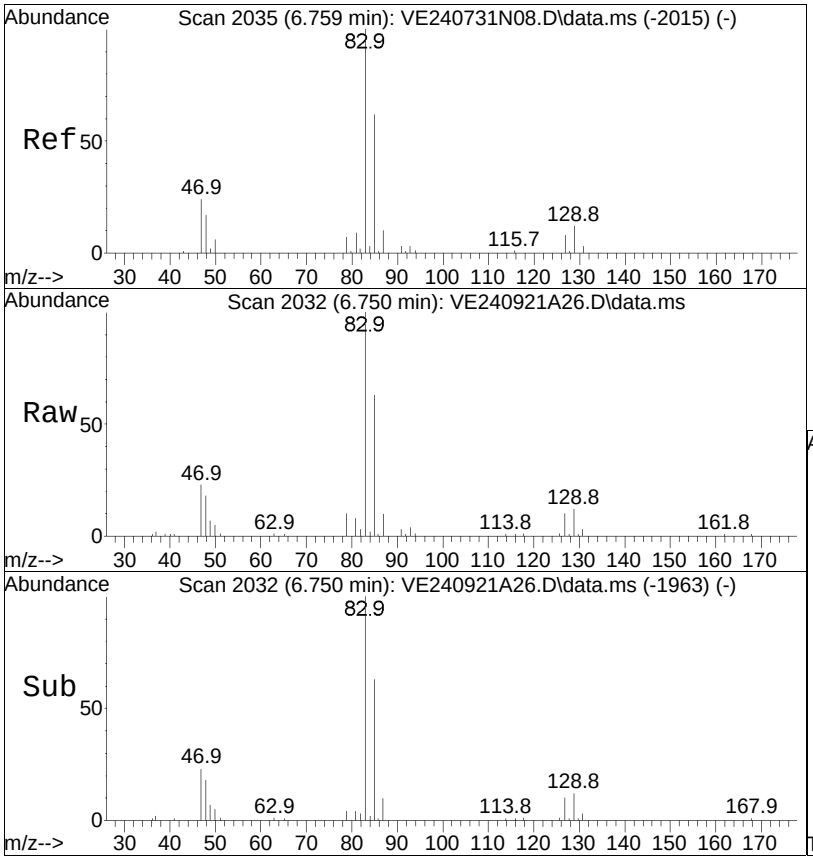



#55
1,2-Dichloropropane
Concen: 10.37 ug/L
RT: 6.678 min Scan# 2006
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 63 Resp: 62248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 72.6 | 58.4 | 87.6 |
| 76 | 39.2 | 28.7 | 43.1 |

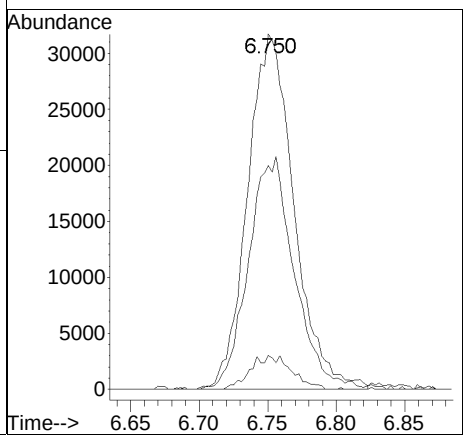


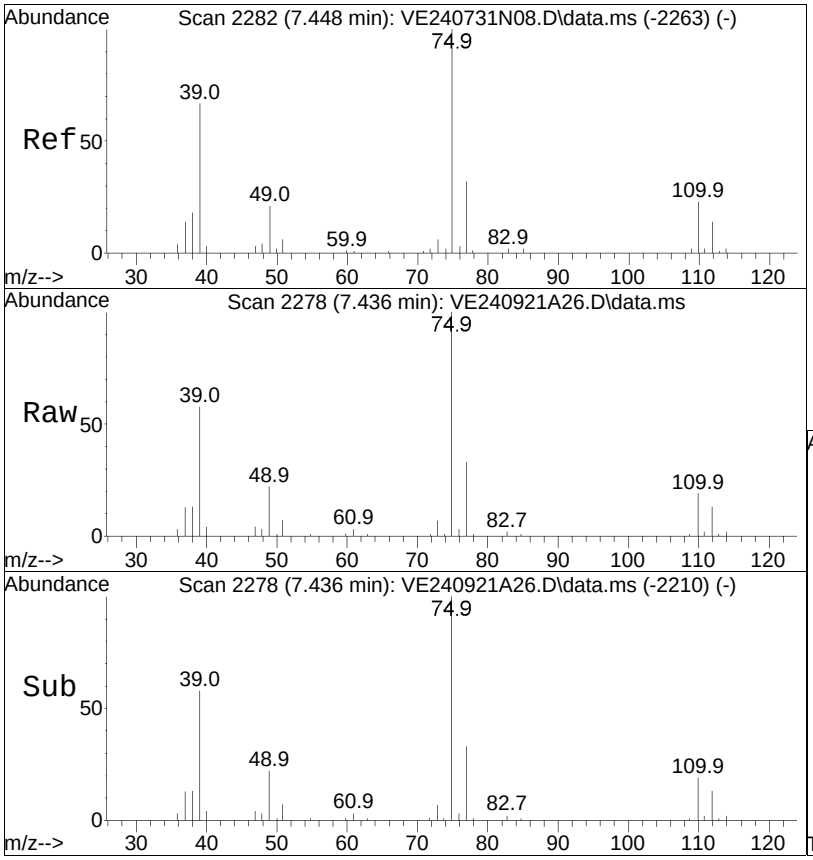



#58
Bromodichloromethane
Concen: 10.53 ug/L
RT: 6.750 min Scan# 2032
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 83 Resp: 74871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 46.6 | 69.8 |
| 127 | 8.5 | 6.2 | 9.4 |

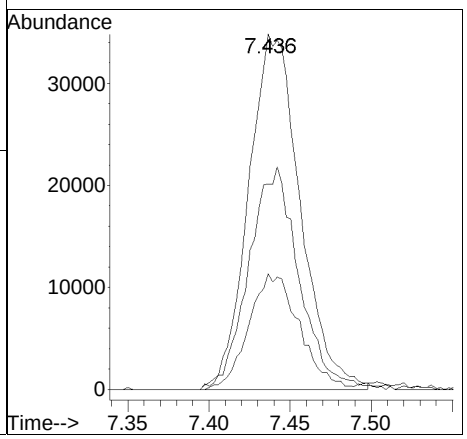


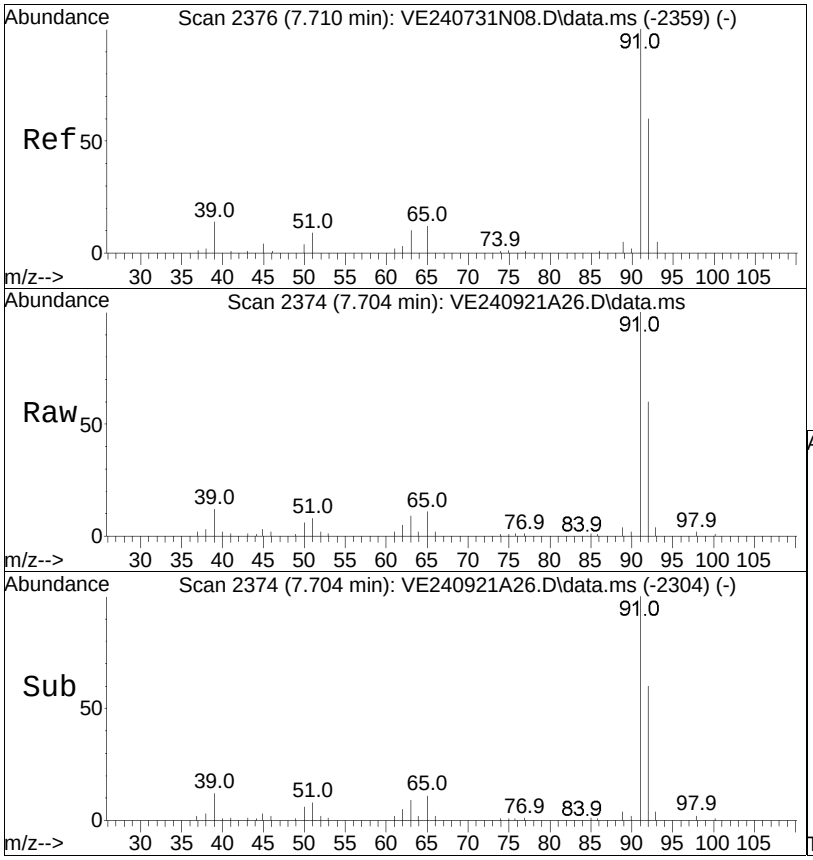



#62
cis-1,3-Dichloropropene
Concen: 9.63 ug/L
RT: 7.436 min Scan# 2278
Delta R.T. -0.012 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 75 Resp: 77134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.8 | 25.1 | 37.7 |
| 39 | 61.0 | 50.7 | 76.1 |

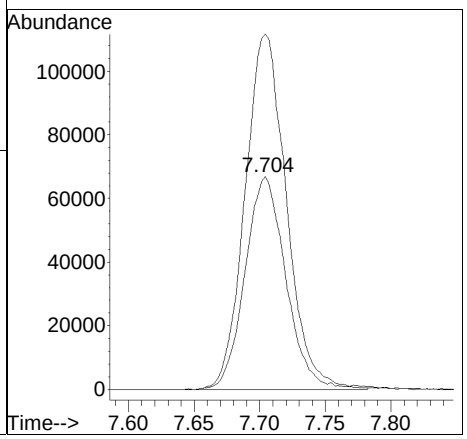


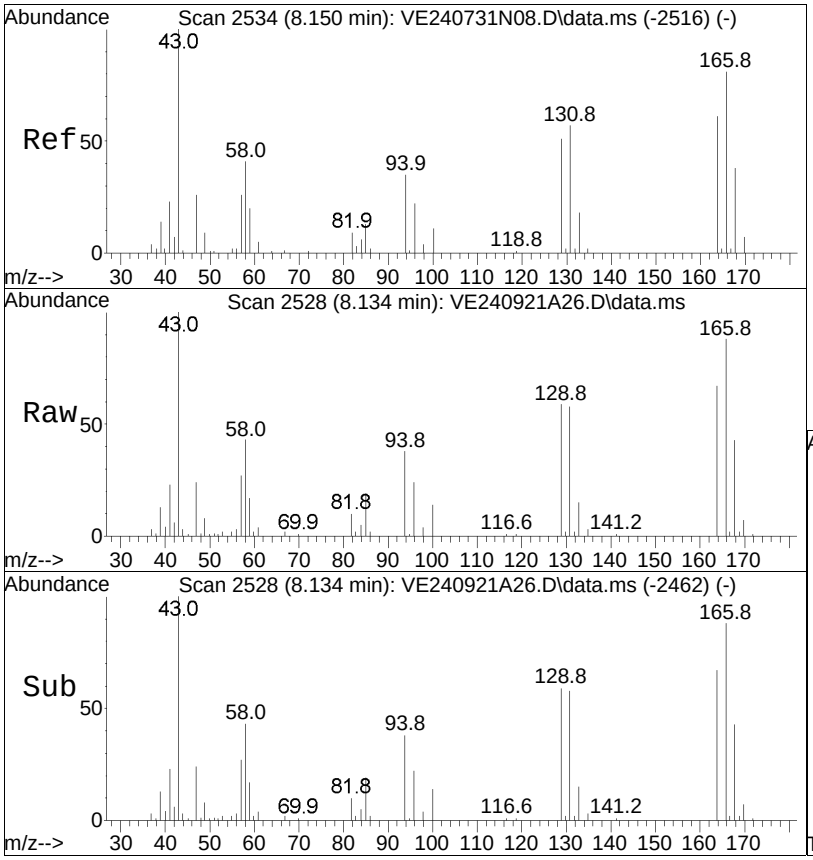



#65
Toluene
Concen: 11.13 ug/L
RT: 7.704 min Scan# 2374
Delta R.T. -0.006 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 92 Resp: 144790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 168.4 | 129.1 | 193.7 |

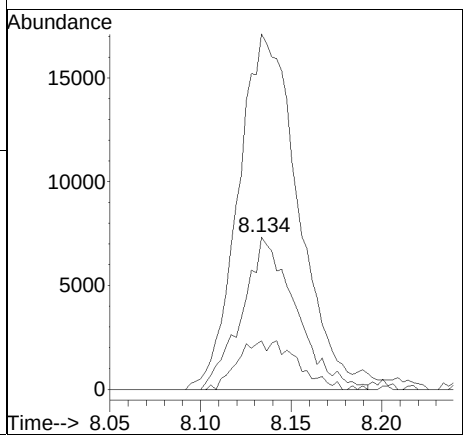


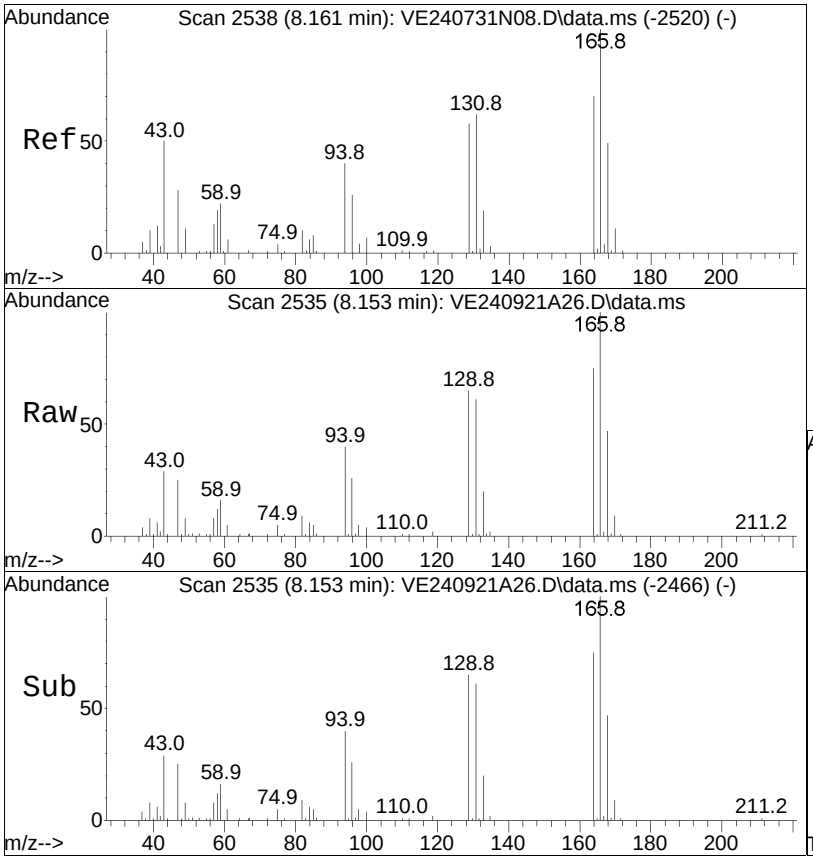



#66
4-Methyl-2-pentanone
Concen: 6.84 ug/L
RT: 8.134 min Scan# 2528
Delta R.T. -0.016 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 58 Resp: 15168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 17.4 | 27.9 | 41.9# |
| 43 | 259.1 | 225.7 | 338.5 |

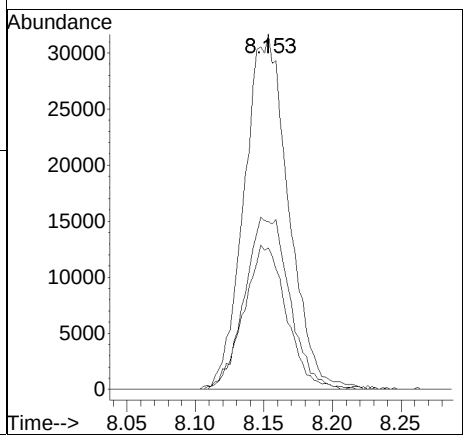


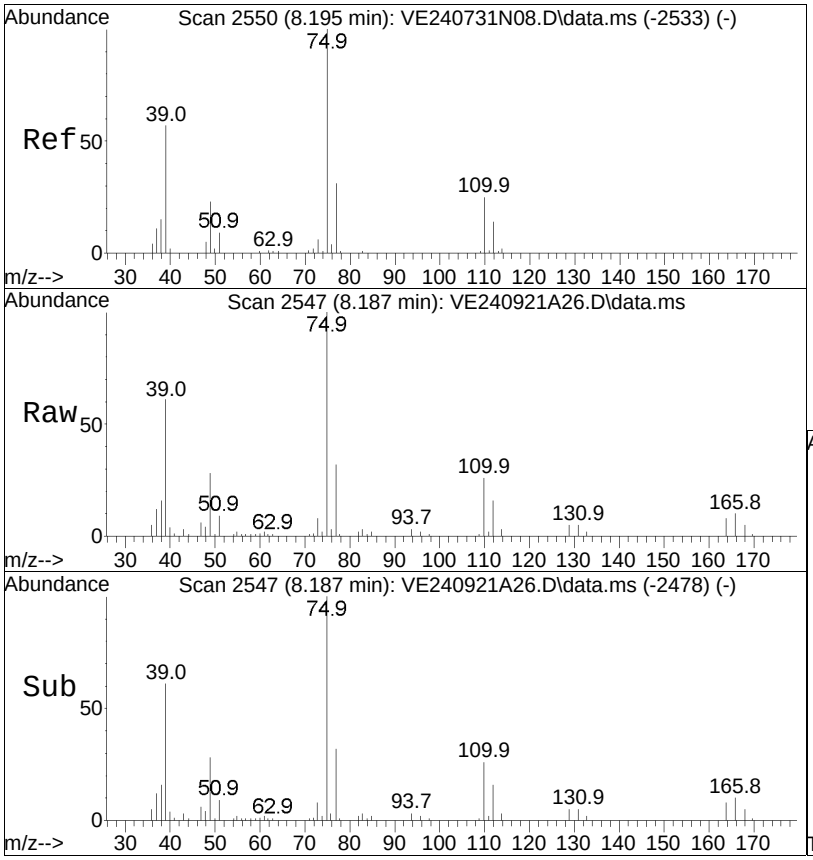



#67
Tetrachloroethene
Concen: 12.92 ug/L
RT: 8.153 min Scan# 2535
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:166 Resp: 71399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 49.0 | 25.8 | 65.8 |
| 94 | 39.1 | 24.3 | 64.3 |

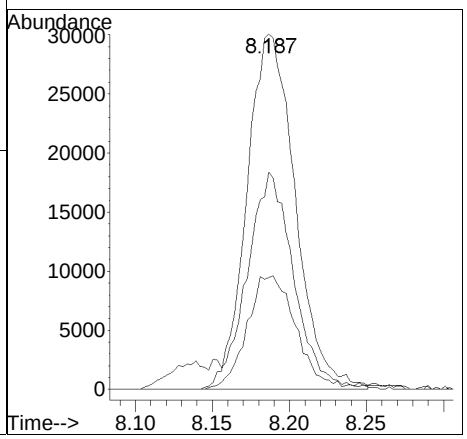


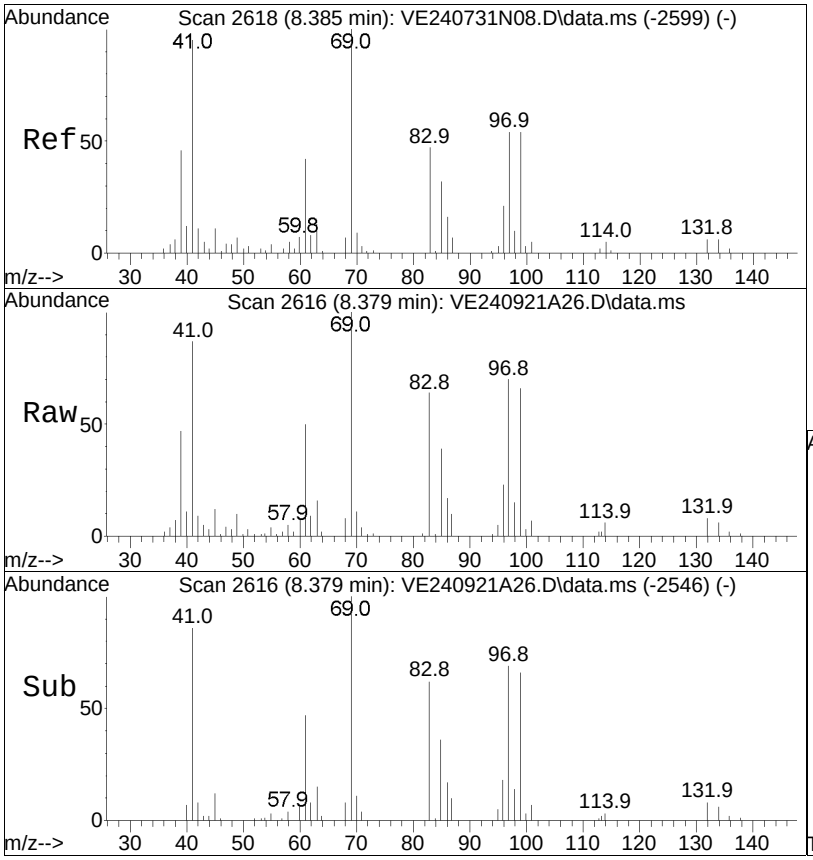



#69
trans-1,3-Dichloropropene
Concen: 8.98 ug/L
RT: 8.187 min Scan# 2547
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 75 Resp: 65776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 10.2 | 50.2 |
| 39 | 55.5 | 45.7 | 85.7 |

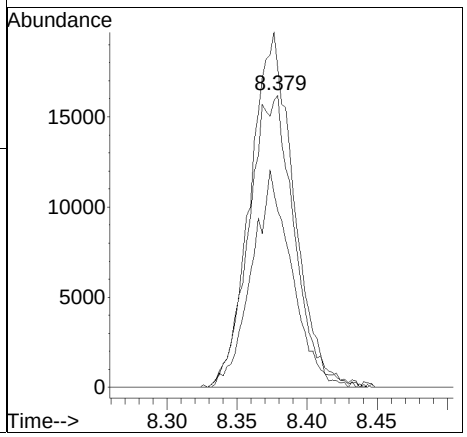


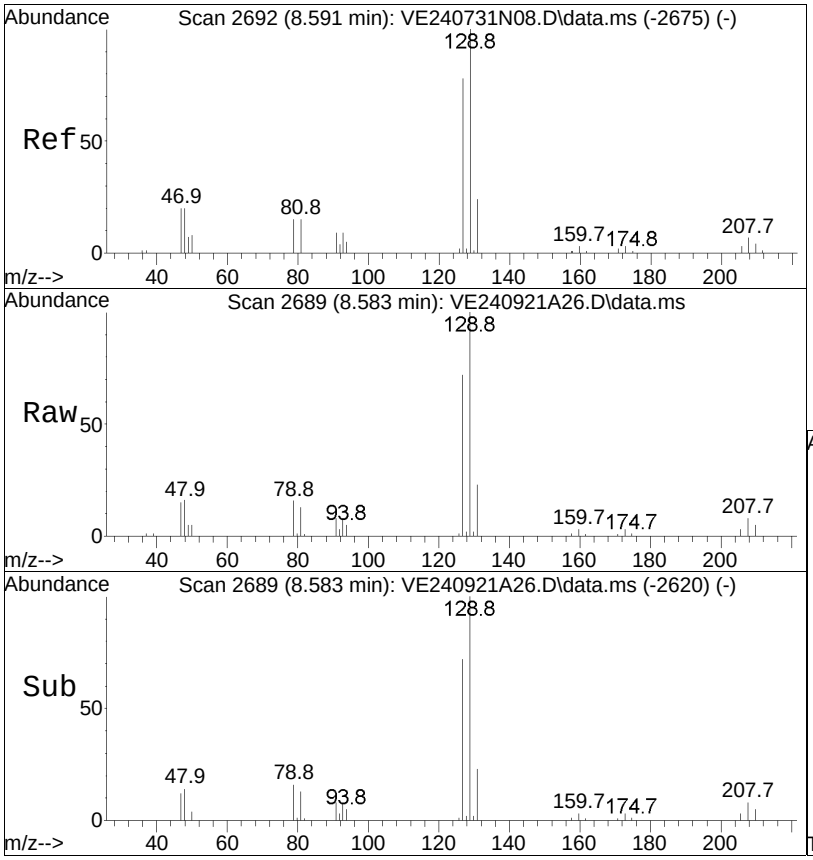



#72
1,1,2-Trichloroethane
Concen: 10.02 ug/L
RT: 8.379 min Scan# 2616
Delta R.T. -0.006 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 83 Resp: 36591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 116.8 | 99.2 | 139.2 |
| 85 | 65.6 | 48.7 | 88.7 |

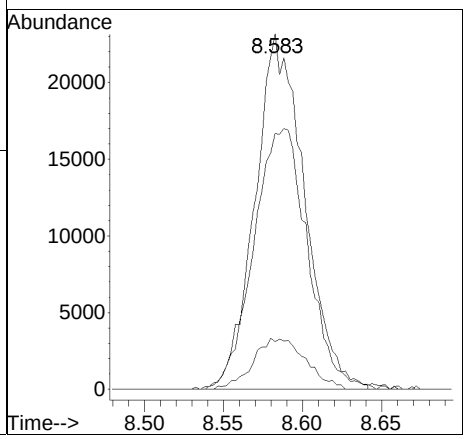


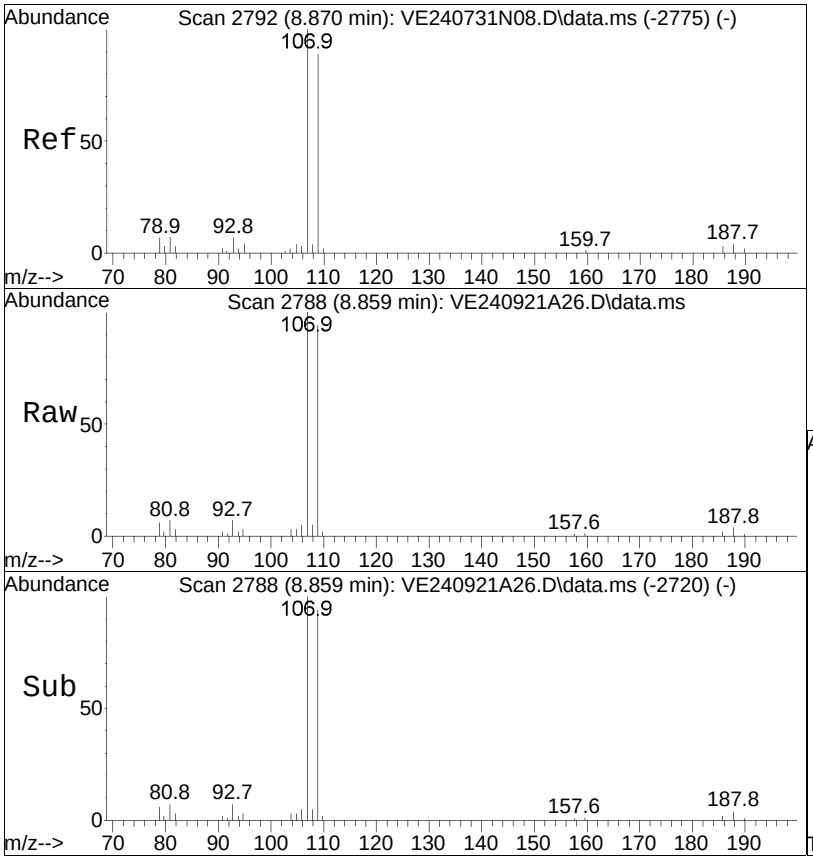



#73
Chlorodibromomethane
Concen: 9.89 ug/L
RT: 8.583 min Scan# 2689
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:129 Resp: 50482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 15.3 | 0.0 | 39.5 |
| 127 | 79.6 | 58.6 | 98.6 |

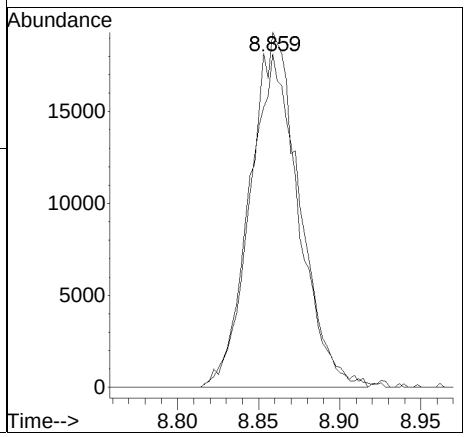


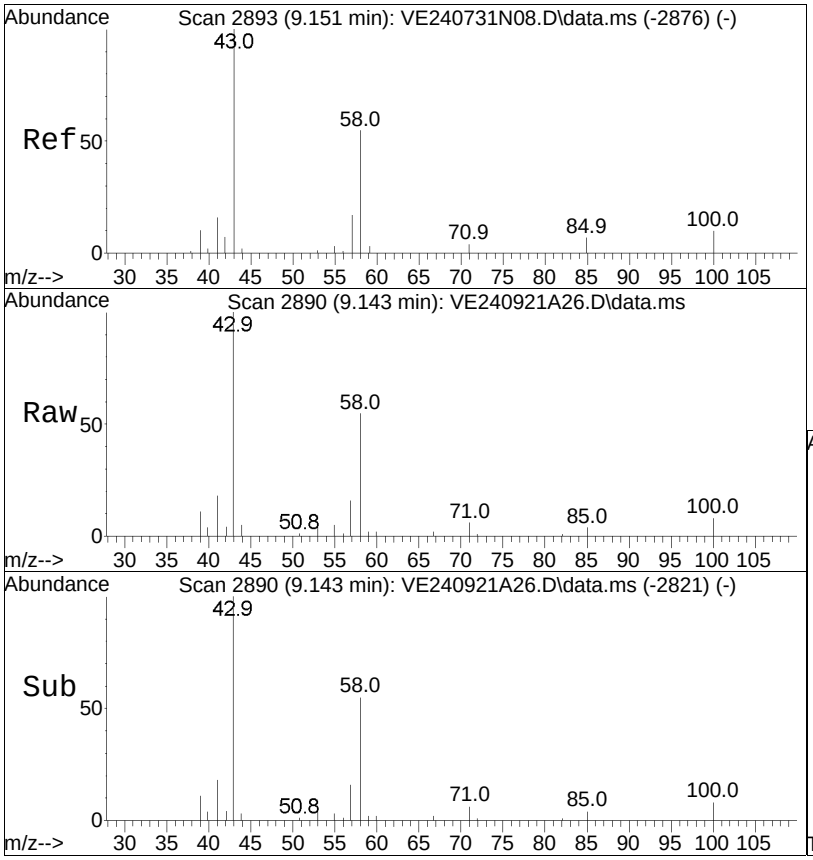



#75
1,2-Dibromoethane
Concen: 9.60 ug/L
RT: 8.859 min Scan# 2788
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:107 Resp: 41427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 91.6 | 66.3 | 99.5 |

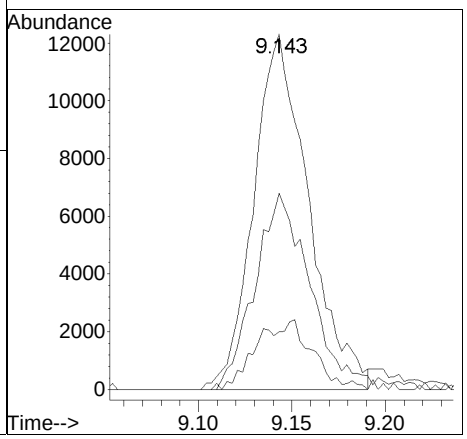


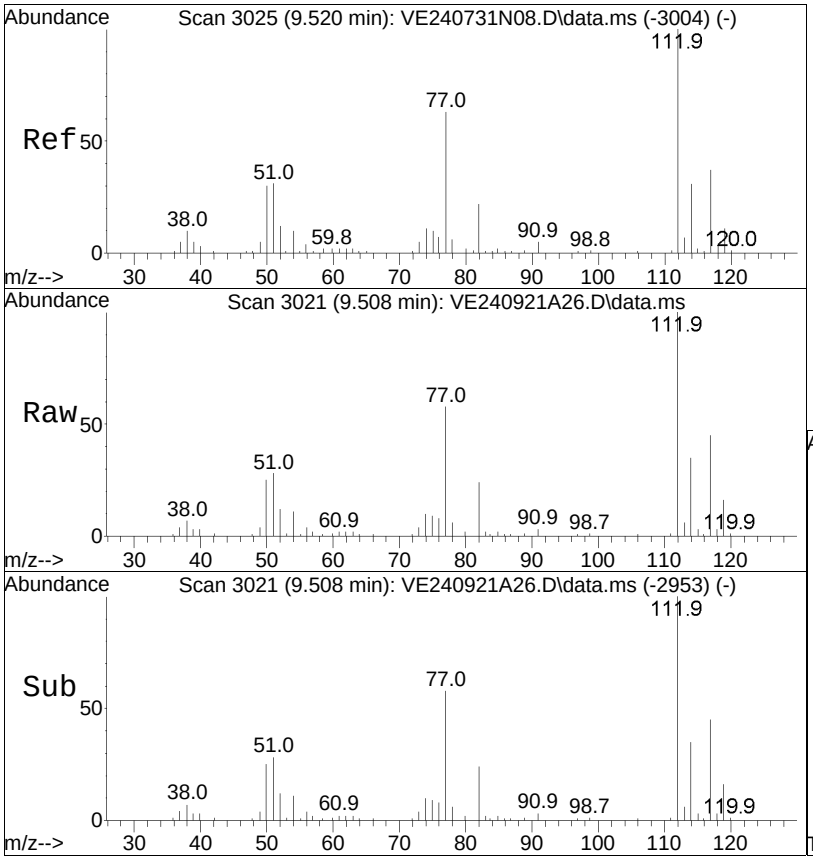



#77
2-Hexanone
Concen: 5.80 ug/L
RT: 9.143 min Scan# 2890
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 43 Resp: 25086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 55.3 | 42.5 | 63.7 |
| 57 | 8.0 | 13.9 | 20.9# |

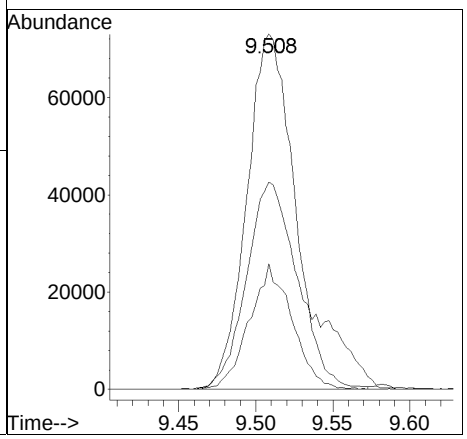


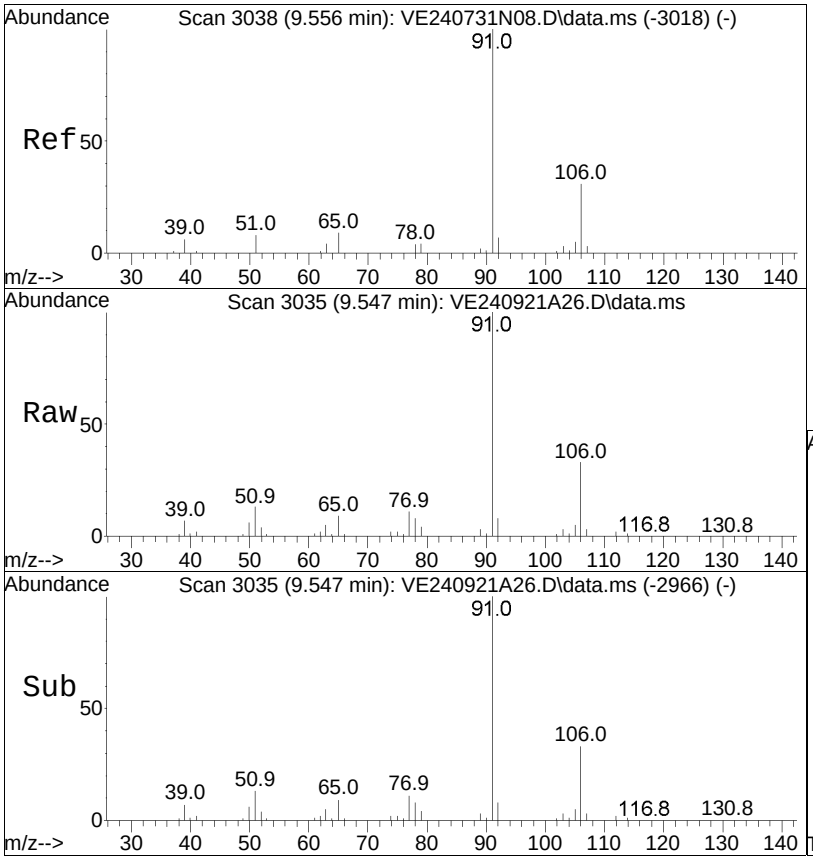



#78
Chlorobenzene
Concen: 11.26 ug/L
RT: 9.508 min Scan# 3021
Delta R.T. -0.012 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:112 Resp: 156070

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 73.9 | 46.9 | 70.3# |
| 114 | 31.9 | 23.8 | 35.6 |

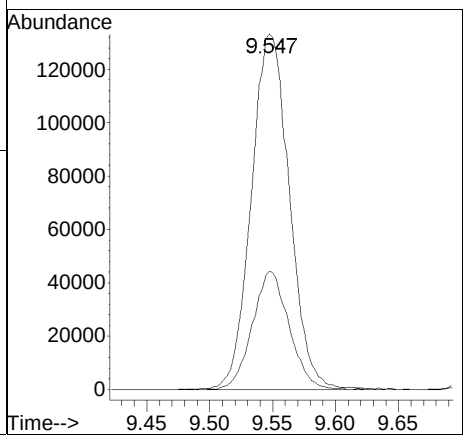


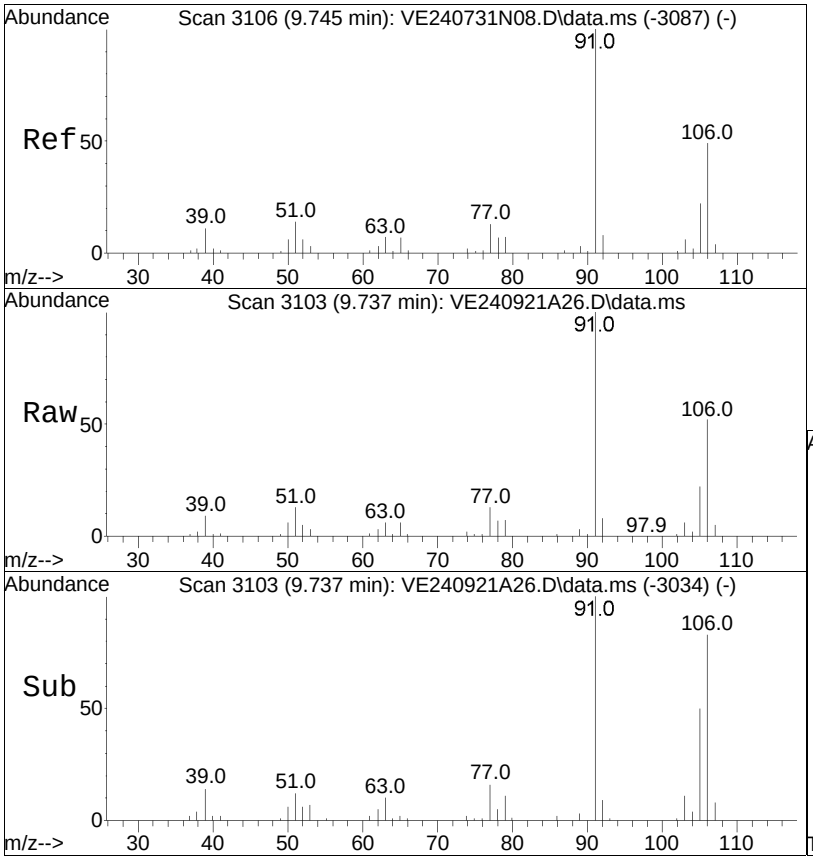



#79
Ethylbenzene
Concen: 11.14 ug/L
RT: 9.547 min Scan# 3035
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 91 Resp: 280884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.9 | 25.3 | 37.9 |

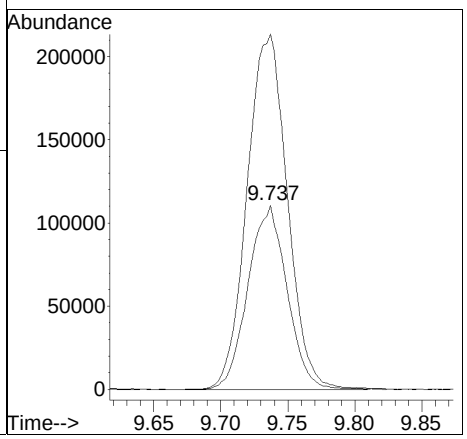


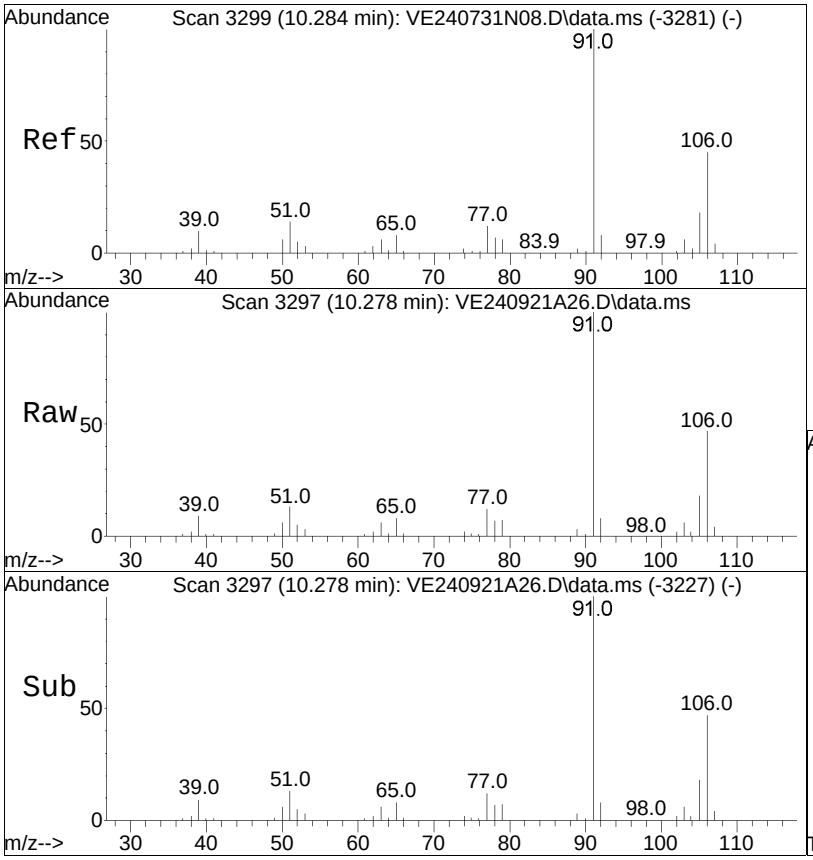



#81
p/m Xylene
Concen: 23.26 ug/L
RT: 9.737 min Scan# 3103
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:106 Resp: 223499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.9 | 163.3 | 244.9 |

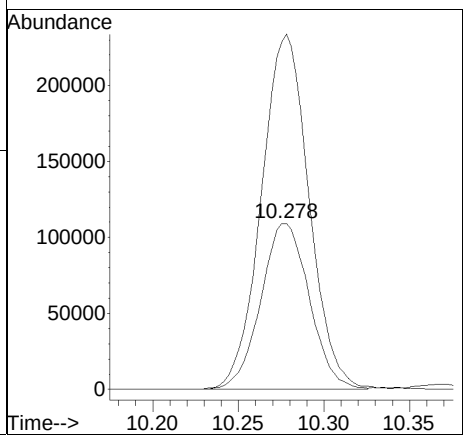


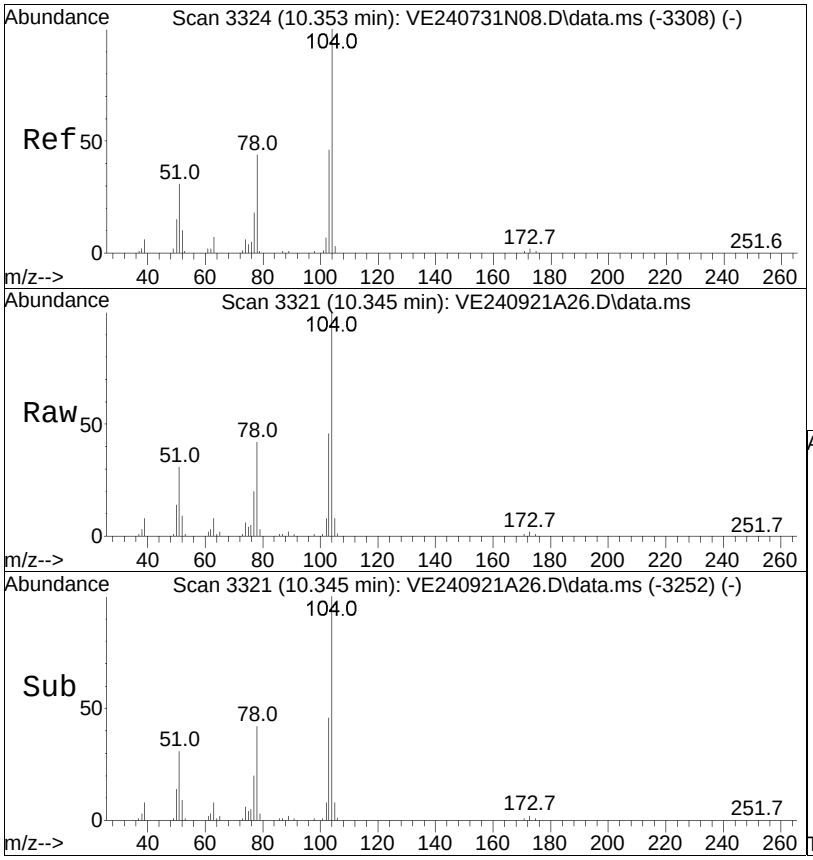



#82
o Xylene
Concen: 22.91 ug/L
RT: 10.278 min Scan# 3297
Delta R.T. -0.006 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:106 Resp: 215222

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.8 | 181.0 | 271.6 |

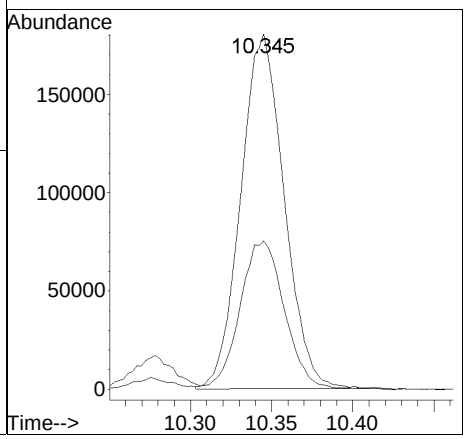


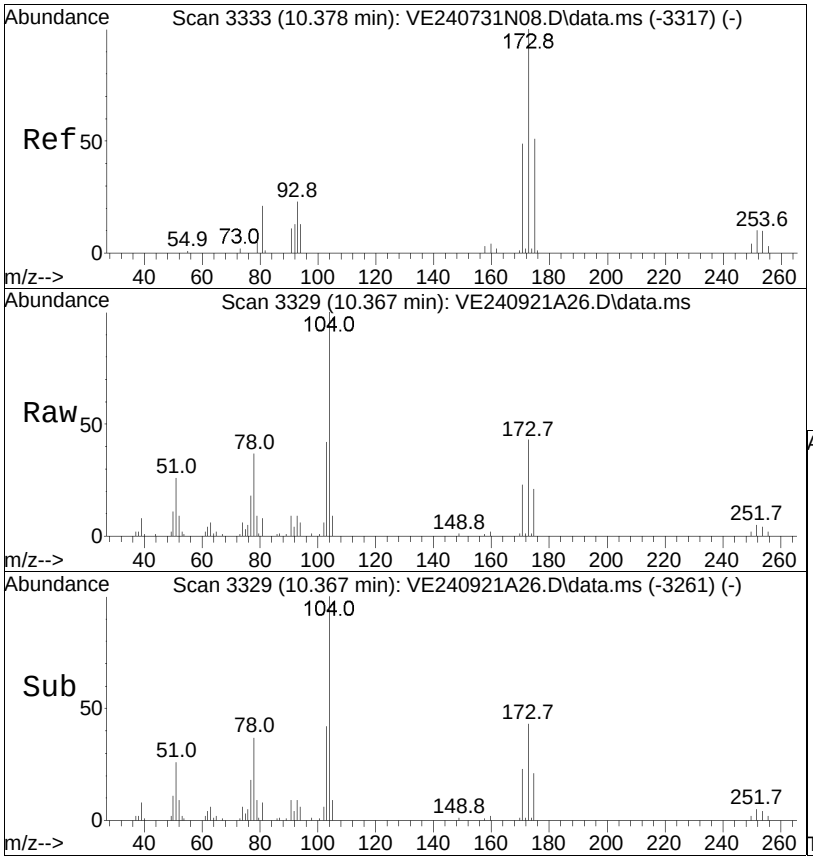



#83
Styrene
Concen: 21.76 ug/L
RT: 10.345 min Scan# 3321
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:104 Resp: 335158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 42.5 | 35.9 | 53.9 |

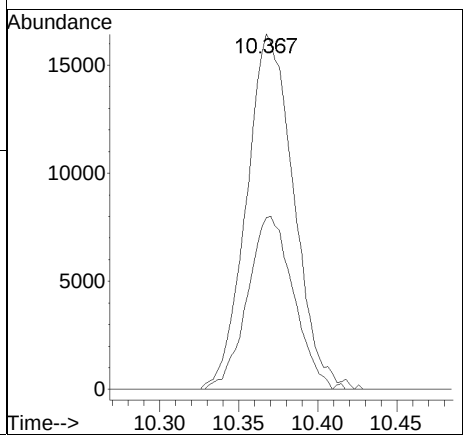


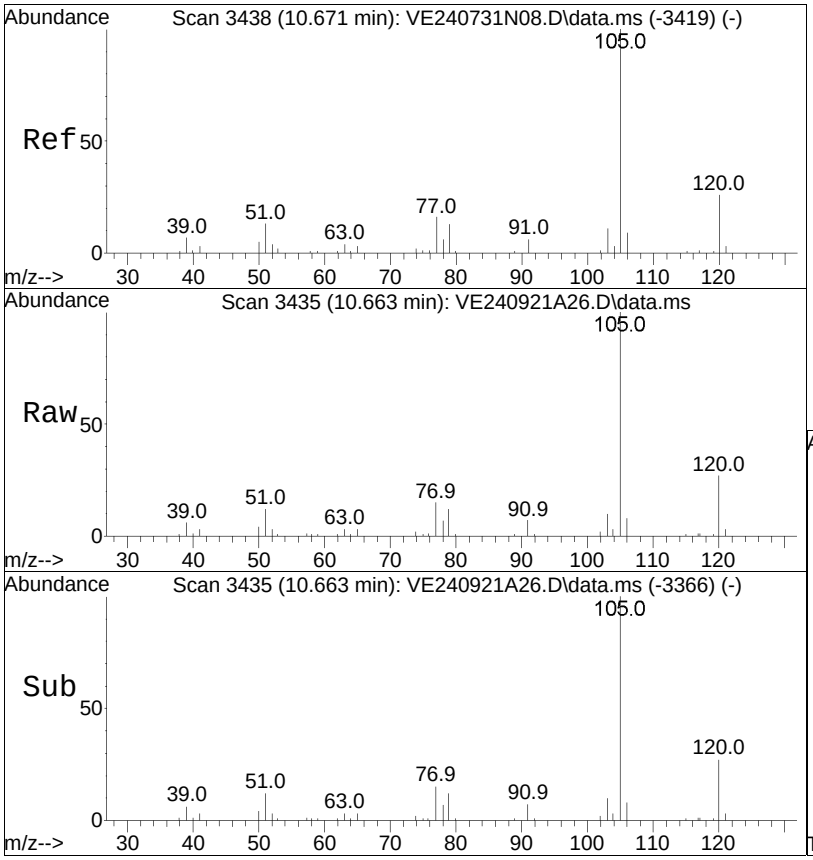



#85
Bromoform
Concen: 9.20 ug/L
RT: 10.367 min Scan# 3329
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:173 Resp: 34278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.3 | 32.9 | 72.9 |

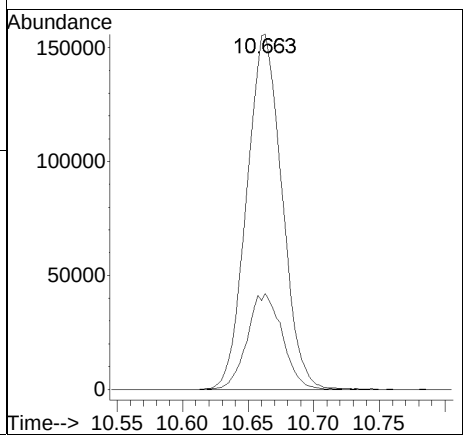


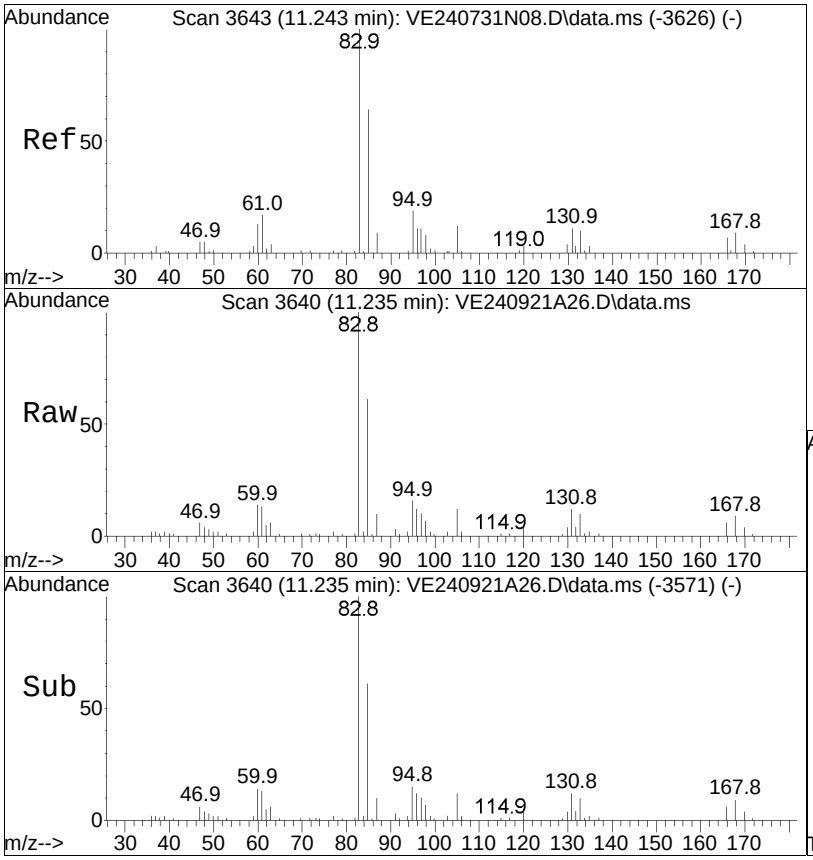



#87
Isopropylbenzene
Concen: 10.61 ug/L
RT: 10.663 min Scan# 3435
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:105 Resp: 291197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 4.8 | 44.8 |

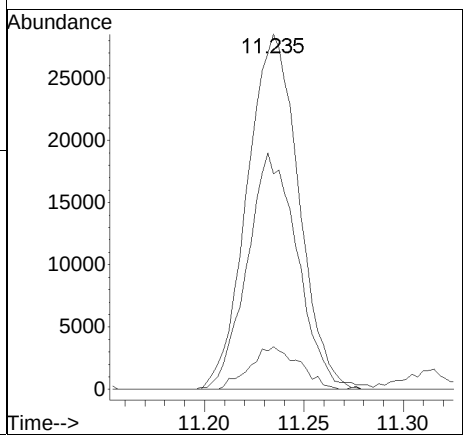


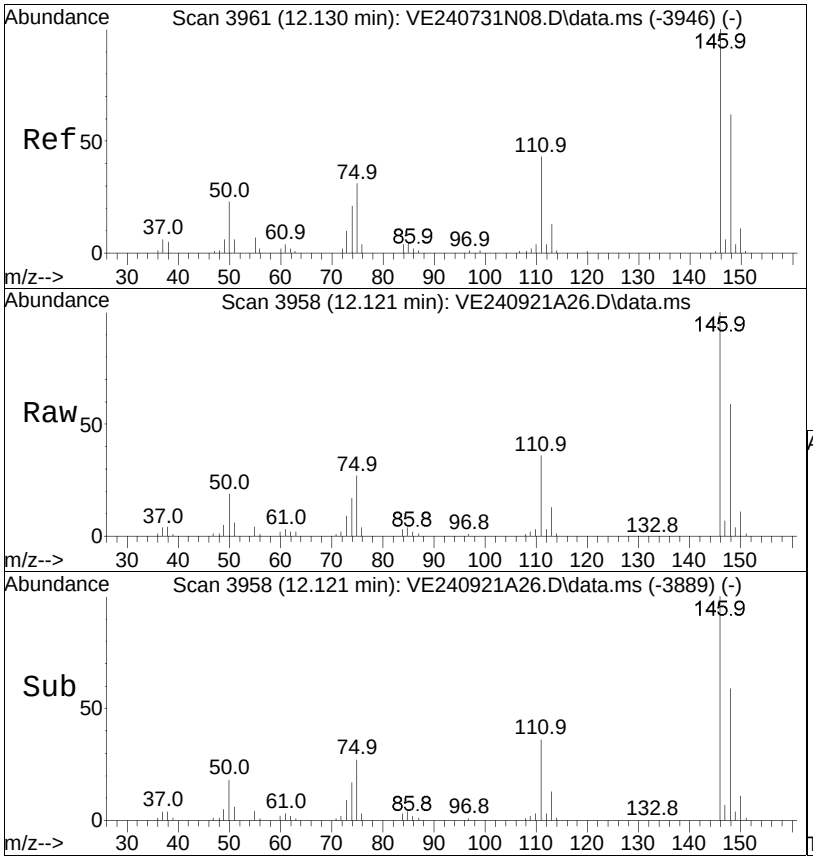



#92
1,1,2,2-Tetrachloroethane
Concen: 8.83 ug/L
RT: 11.235 min Scan# 3640
Delta R.T. -0.008 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion: 83 Resp: 51405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 11.6 | 0.0 | 28.6 |
| 85 | 65.4 | 47.4 | 87.4 |

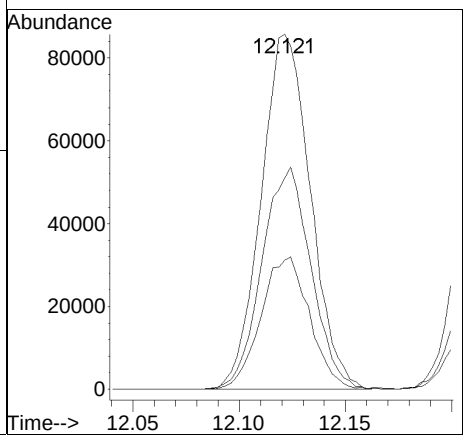


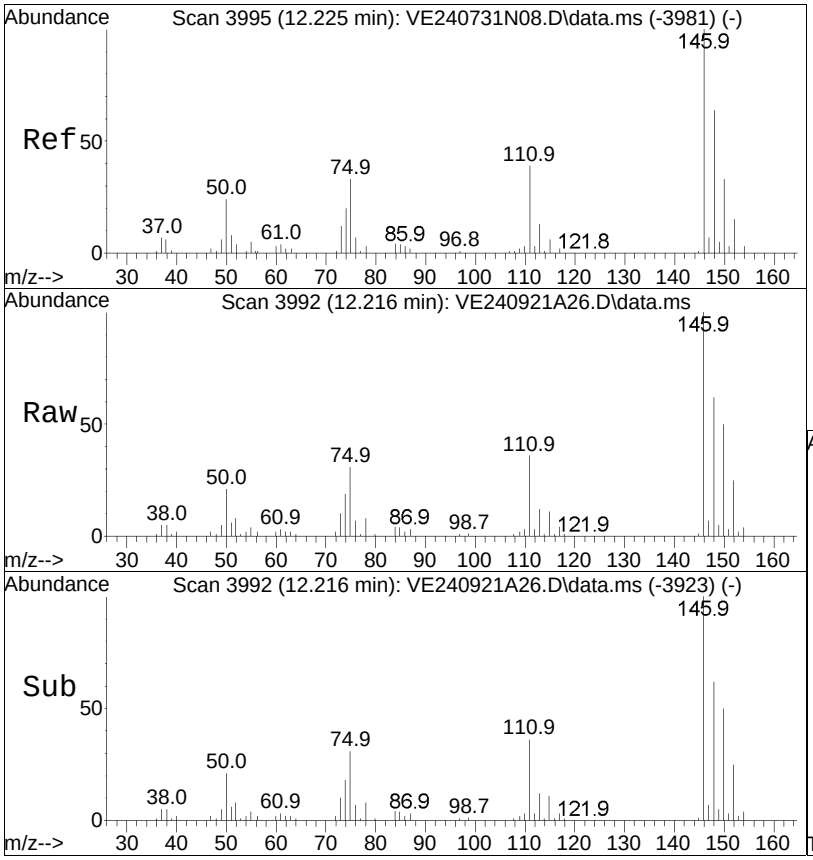



#105
1,3-Dichlorobenzene
Concen: 10.84 ug/L
RT: 12.121 min Scan# 3958
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:146 Resp: 138633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.8 | 27.9 | 57.9 |
| 148 | 62.3 | 42.4 | 88.2 |

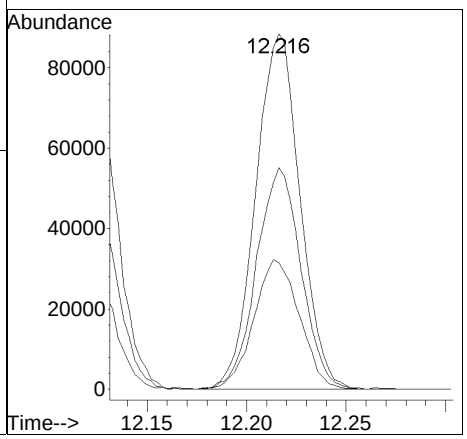


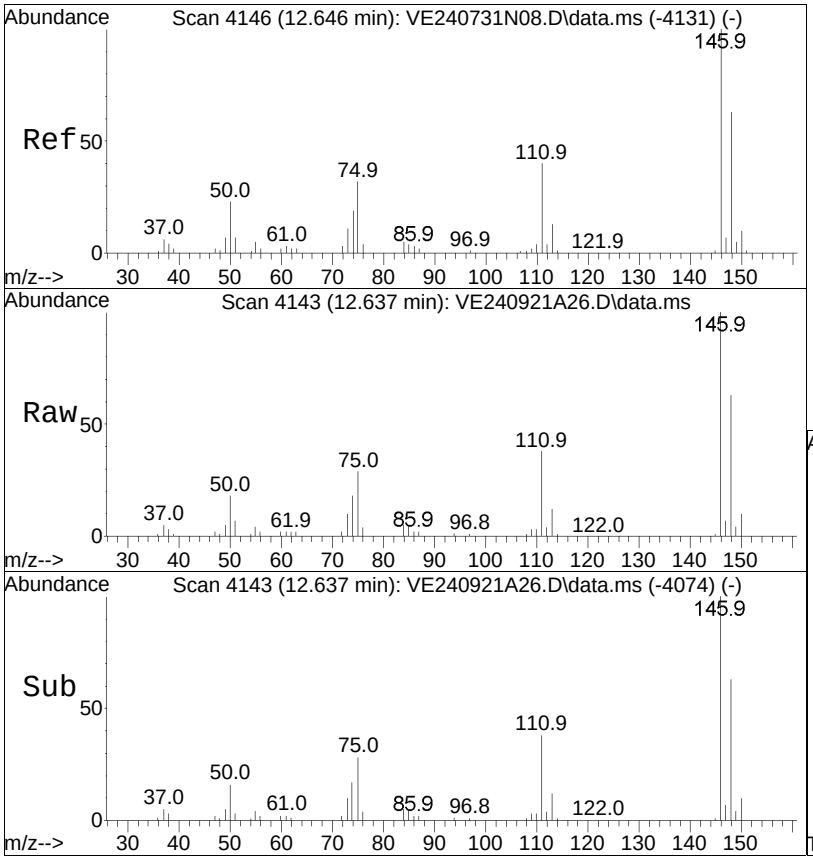



#106
1,4-Dichlorobenzene
Concen: 10.76 ug/L
RT: 12.216 min Scan# 3992
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:146 Resp: 137588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.6 | 31.4 | 47.0 |
| 148 | 62.7 | 49.8 | 74.8 |

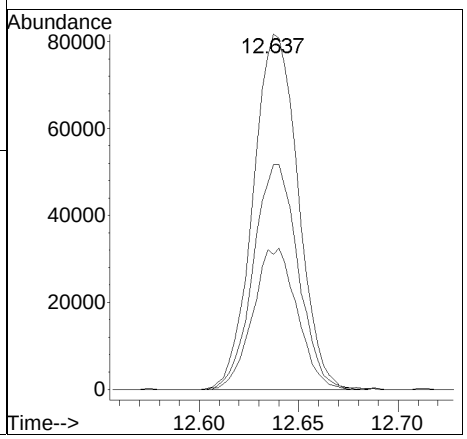


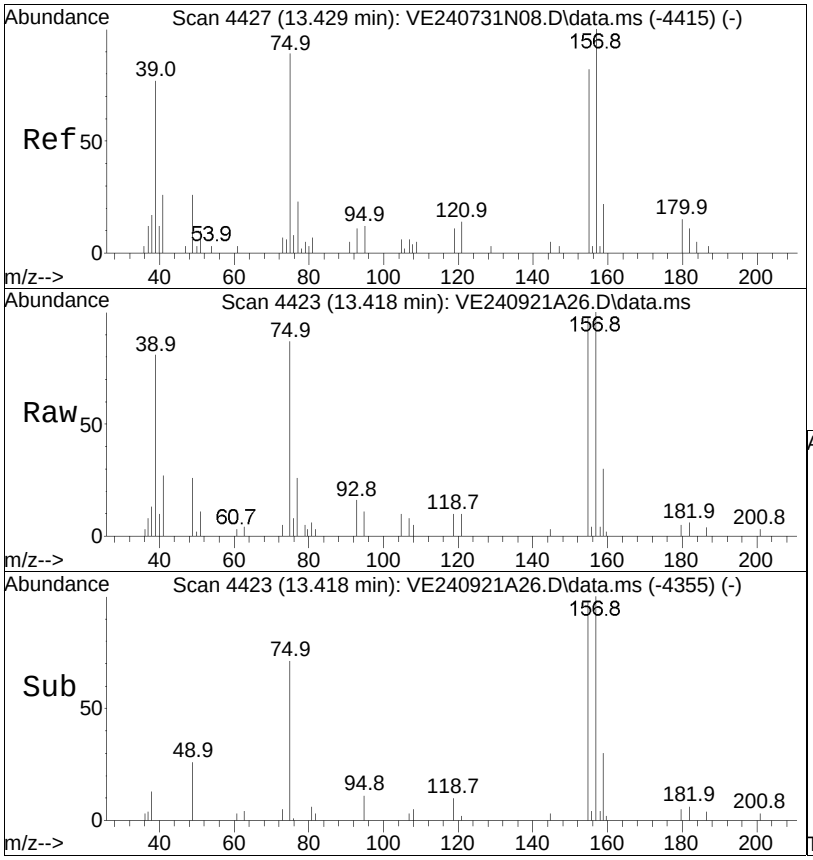



#109
1,2-Dichlorobenzene
Concen: 10.45 ug/L
RT: 12.637 min Scan# 4143
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:146 Resp: 128647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.2 | 26.4 | 54.8 |
| 148 | 62.8 | 41.7 | 86.7 |

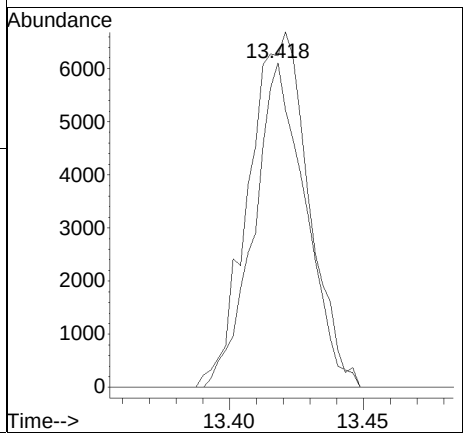


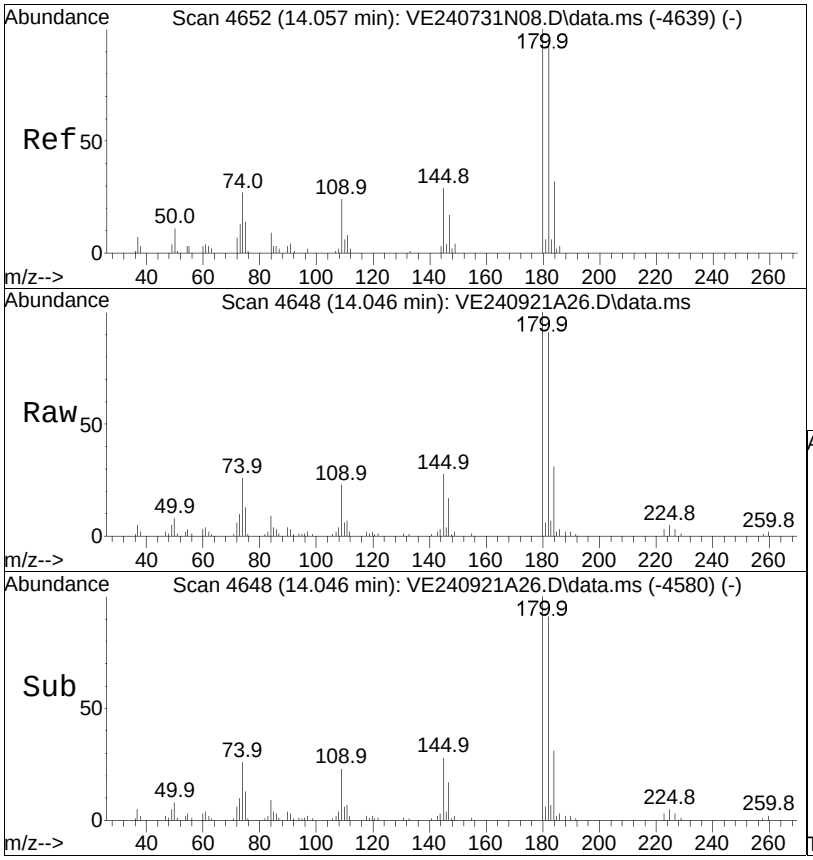



#111
1,2-Dibromo-3-chloropropane
Concen: 7.57 ug/L
RT: 13.418 min Scan# 4423
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:155 Resp: 8218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 127.4 | 95.1 | 142.7 |

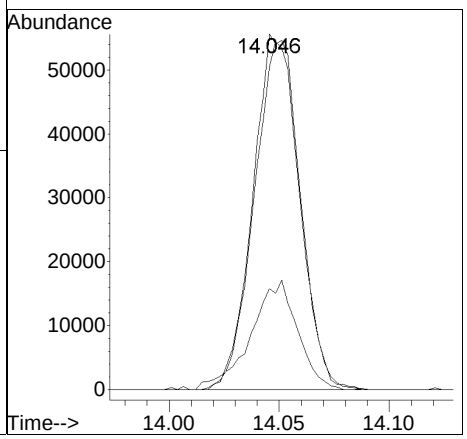


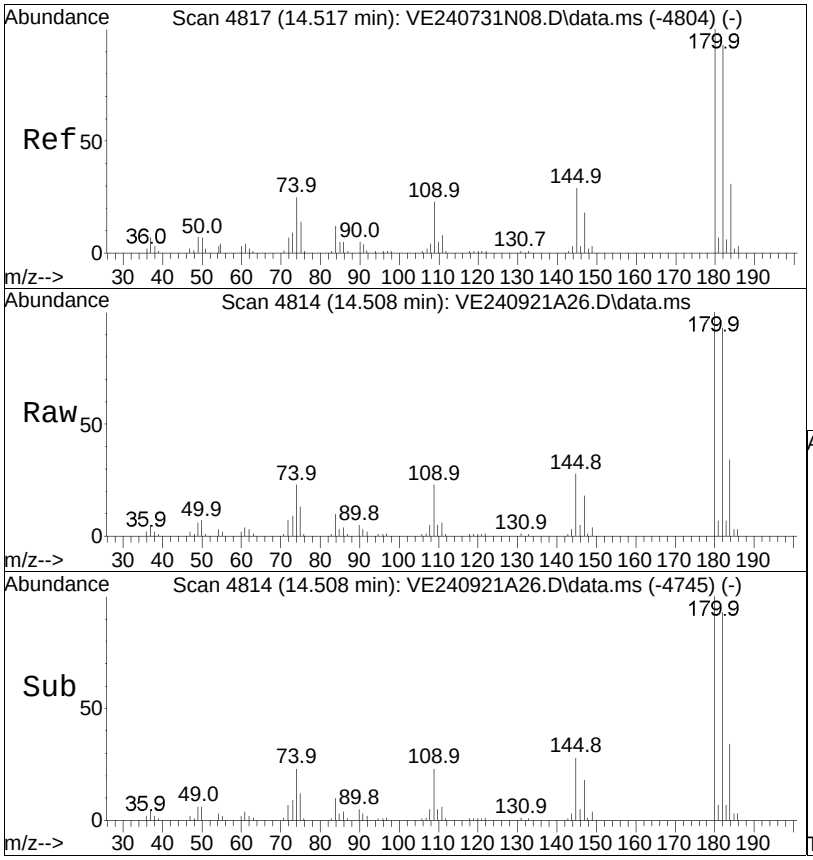



#114
1,2,4-Trichlorobenzene
Concen: 9.34 ug/L
RT: 14.046 min Scan# 4648
Delta R.T. -0.011 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:180 Resp: 82347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.2 | 75.4 | 113.2 |
| 145 | 30.6 | 26.0 | 39.0 |

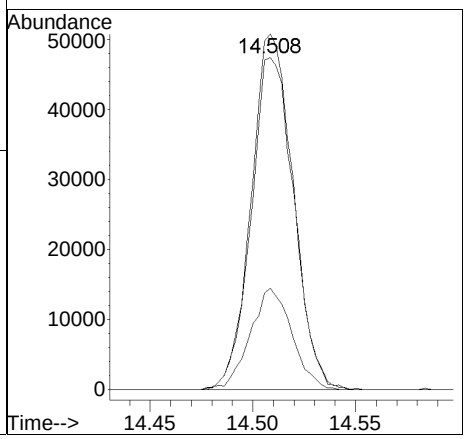





#116
1,2,3-Trichlorobenzene
Concen: 8.89 ug/L
RT: 14.508 min Scan# 4814
Delta R.T. -0.009 min
Lab File: VE240921A26.D
Acq: 21 Sep 2024 5:27 pm

Tgt Ion:180 Resp: 72031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.4 | 71.6 | 107.4 |
| 145 | 28.2 | 25.1 | 37.7 |



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A27.D
Acq On : 21 Sep 2024 5:52 pm
Operator : ELAINE:MJV
Sample : WG1974948-7,31,10,10,,a2
Misc : WG1974948,ICAL21358
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 23 08:25:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 5.956 | 96 | 252372 | 10.000 | ug/L | -0.01 |
| Standard Area 1 = 262722 | | | Recovery = 96.06% | | | |
| 63) Chlorobenzene-d5 | 9.489 | 117 | 189811 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 197518 | | | Recovery = 96.10% | | | |
| 84) 1,4-Dichlorobenzene-d4 | 12.199 | 152 | 114025 | 10.000 | ug/L | 0.00 |
| Standard Area 1 = 115520 | | | Recovery = 98.71% | | | |
| System Monitoring Compounds | | | | | | |
| 39) Dibromofluoromethane | 5.150 | 113 | 63850 | 10.807 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 108.07% | | | |
| 47) 1,2-Dichloroethane-d4 | 5.671 | 65 | 76631 | 9.721 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.21% | | | |
| 64) Toluene-d8 | 7.646 | 98 | 244738 | 9.789 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.89% | | | |
| 88) 4-Bromofluorobenzene | 10.986 | 95 | 91782 | 8.714 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 87.14% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.591 | 85 | 78591 | 13.890 | ug/L | 94 |
| 3) Chloromethane | 1.781 | 50 | 69720 | 11.067 | ug/L | 100 |
| 4) Vinyl chloride | 1.854 | 62 | 79970 | 13.621 | ug/L | 100 |
| 5) Bromomethane | 2.160 | 94 | 14750 | 8.527 | ug/L | 89 |
| 6) Chloroethane | 2.277 | 64 | 43668 | 12.320 | ug/L | 94 |
| 7) Trichlorofluoromethane | 2.417 | 101 | 89133 | 13.212 | ug/L | 95 |
| 10) 1,1-Dichloroethene | 2.902 | 96 | 51638 | 12.776 | ug/L | 85 |
| 11) Carbon disulfide | 2.930 | 76 | 161281 | 12.933 | ug/L | 99 |
| 12) Freon-113 | 2.944 | 101 | 56568 | 13.430 | ug/L | 86 |
| 15) Methylene chloride | 3.454 | 84 | 55416 | 10.869 | ug/L | 97 |
| 17) Acetone | 3.490 | 43 | 14203 | 7.670 | ug/L # | 74 |
| 18) trans-1,2-Dichloroethene | 3.608 | 96 | 53948 | 12.417 | ug/L | 85 |
| 19) Methyl acetate | 3.613 | 43 | 26004 | 6.024 | ug/L # | 89 |
| 21) Methyl tert-butyl ether | 3.702 | 73 | 155071 | 9.572 | ug/L | 94 |
| 25) 1,1-Dichloroethane | 4.188 | 63 | 118207 | 11.593 | ug/L | 77 |
| 30) cis-1,2-Dichloroethene | 4.709 | 96 | 60545 | 11.626 | ug/L | 99 |
| 33) Bromochloromethane | 4.899 | 128 | 27677 | 12.116 | ug/L | 98 |
| 34) Cyclohexane | 4.902 | 56 | 138092 | 11.573 | ug/L | 98 |
| 35) Chloroform | 4.971 | 83 | 91210 | 10.791 | ug/L | 99 |
| 37) Carbon tetrachloride | 5.108 | 117 | 81494 | 12.623 | ug/L | 91 |

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A27.D
Acq On : 21 Sep 2024 5:52 pm
Operator : ELAINE:MJV
Sample : WG1974948-7,31,10,10,,a2
Misc : WG1974948,ICAL21358
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 23 08:25:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240921A\VE240921A02.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 40) 1,1,1-Trichloroethane | 5.172 | 97 | 93215 | 12.143 | ug/L | | 93 |
| 42) 2-Butanone | 5.258 | 43 | 20940M1 | 7.915 | ug/L | | |
| 45) Benzene | 5.537 | 78 | 230027 | 11.506 | ug/L | | 95 |
| 48) 1,2-Dichloroethane | 5.744 | 62 | 80731 | 10.463 | ug/L | | 98 |
| 51) Methyl cyclohexane | 6.126 | 83 | 105800 | 11.776 | ug/L | | 95 |
| 52) Trichloroethene | 6.137 | 95 | 59311 | 11.801 | ug/L | | 96 |
| 55) 1,2-Dichloropropane | 6.681 | 63 | 63520 | 10.525 | ug/L | | 97 |
| 58) Bromodichloromethane | 6.750 | 83 | 77066 | 10.777 | ug/L | # | 92 |
| 62) cis-1,3-Dichloropropene | 7.439 | 75 | 79125 | 9.827 | ug/L | | 95 |
| 65) Toluene | 7.704 | 92 | 147646 | 11.297 | ug/L | | 94 |
| 66) 4-Methyl-2-pentanone | 8.139 | 58 | 16055 | 7.202 | ug/L | | 90 |
| 67) Tetrachloroethene | 8.153 | 166 | 72213 | 13.006 | ug/L | | 93 |
| 69) trans-1,3-Dichloropropene | 8.187 | 75 | 67792 | 9.213 | ug/L | | 90 |
| 72) 1,1,2-Trichloroethane | 8.379 | 83 | 37104 | 10.111 | ug/L | | 97 |
| 73) Chlorodibromomethane | 8.583 | 129 | 52315 | 10.196 | ug/L | | 96 |
| 75) 1,2-Dibromoethane | 8.856 | 107 | 42799 | 9.869 | ug/L | | 89 |
| 77) 2-Hexanone | 9.143 | 43 | 25420 | 5.852 | ug/L | # | 95 |
| 78) Chlorobenzene | 9.508 | 112 | 158919 | 11.411 | ug/L | | 93 |
| 79) Ethylbenzene | 9.547 | 91 | 291940 | 11.525 | ug/L | | 100 |
| 81) p/m Xylene | 9.731 | 106 | 230471 | 23.868 | ug/L | | 96 |
| 82) o Xylene | 10.278 | 106 | 220004 | 23.299 | ug/L | | 91 |
| 83) Styrene | 10.345 | 104 | 344663 | 22.263 | ug/L | | 96 |
| 85) Bromoform | 10.367 | 173 | 34999 | 9.434 | ug/L | | 95 |
| 87) Isopropylbenzene | 10.663 | 105 | 301663 | 11.048 | ug/L | | 96 |
| 92) 1,1,2,2-Tetrachloroethane | 11.235 | 83 | 54303 | 9.373 | ug/L | | 97 |
| 105) 1,3-Dichlorobenzene | 12.124 | 146 | 141678 | 11.129 | ug/L | | 95 |
| 106) 1,4-Dichlorobenzene | 12.216 | 146 | 139628 | 10.972 | ug/L | | 99 |
| 109) 1,2-Dichlorobenzene | 12.637 | 146 | 132909 | 10.851 | ug/L | | 97 |
| 111) 1,2-Dibromo-3-chloropr... | 13.418 | 155 | 8269 | 7.654 | ug/L | | 88 |
| 114) 1,2,4-Trichlorobenzene | 14.048 | 180 | 86016 | 9.797 | ug/L | | 97 |
| 116) 1,2,3-Trichlorobenzene | 14.508 | 180 | 76813 | 9.522 | ug/L | | 94 |

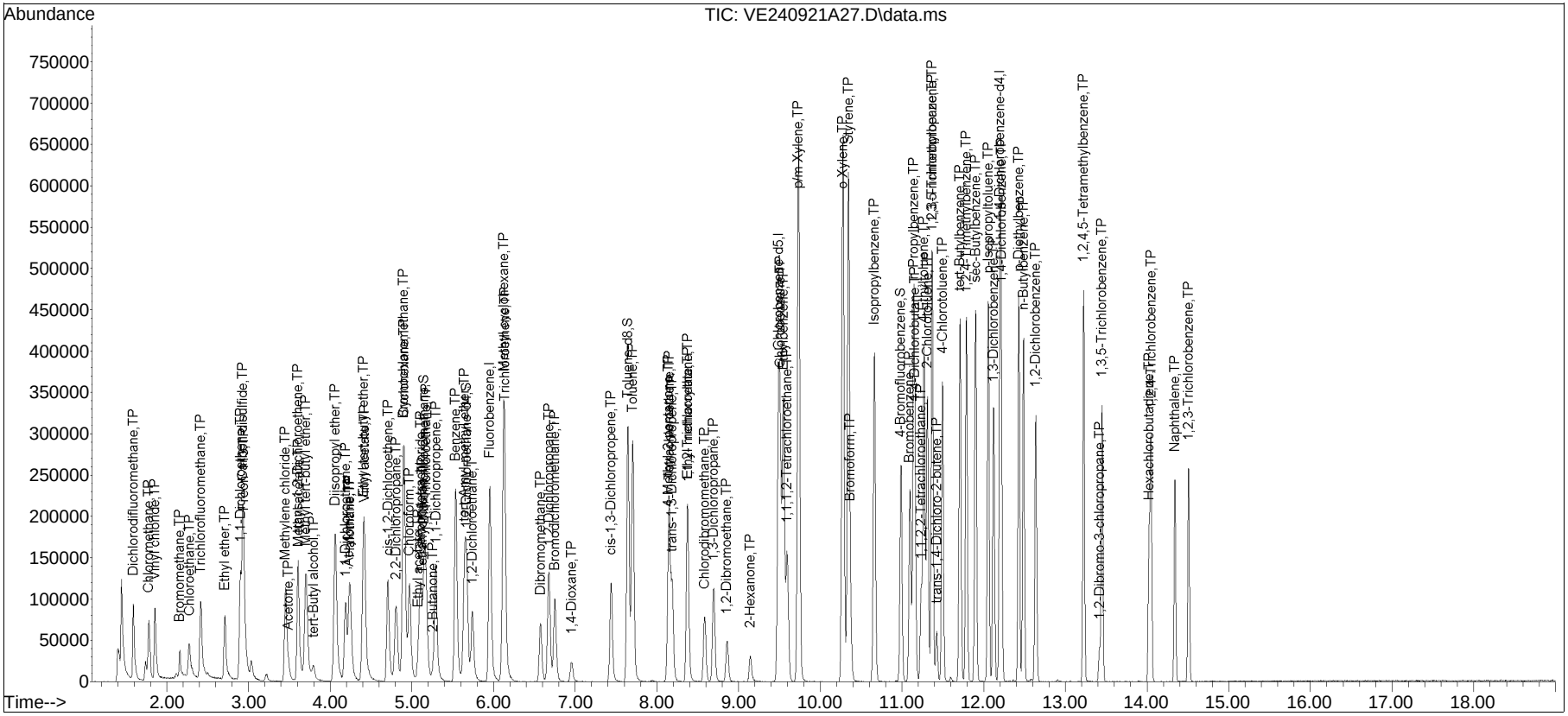
(#) = qualifier out of range (m) = manual integration (+) = signals summed

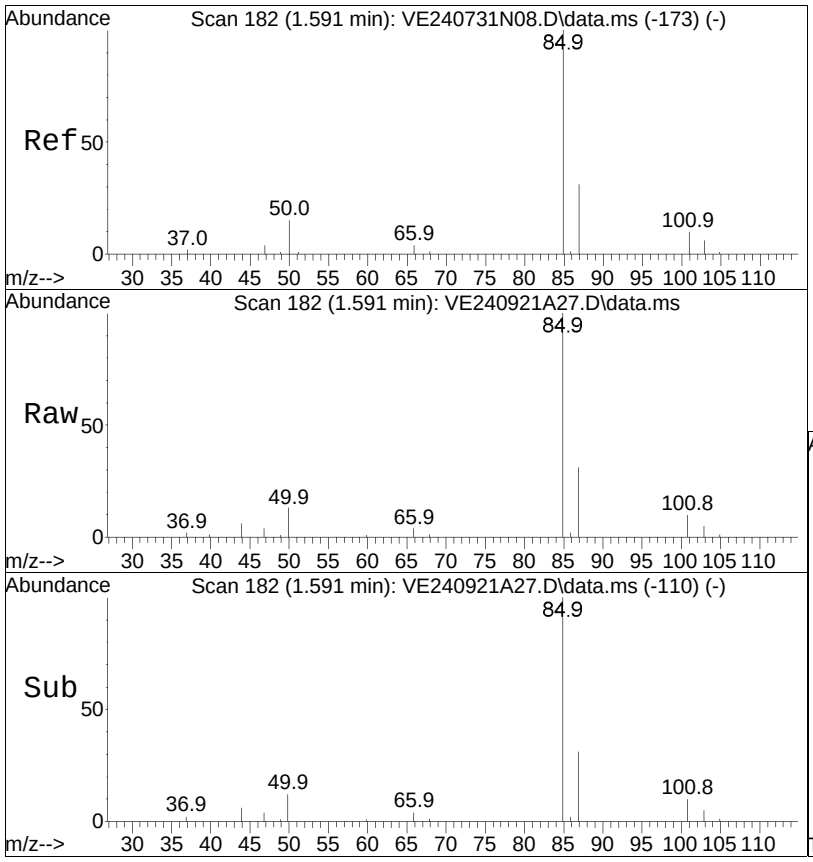
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A27.D
Acq On : 21 Sep 2024 5:52 pm
Operator : ELAINE:MJV
Sample : WG1974948-7,31,10,10,,a2
Misc : WG1974948,ICAL21358
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 23 08:25:31 2024
Quant Method : K:\Elaine\2024\240921A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

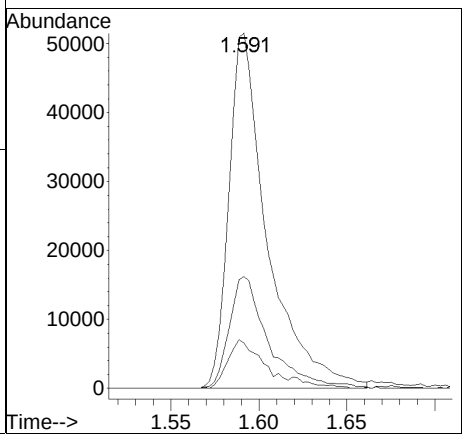


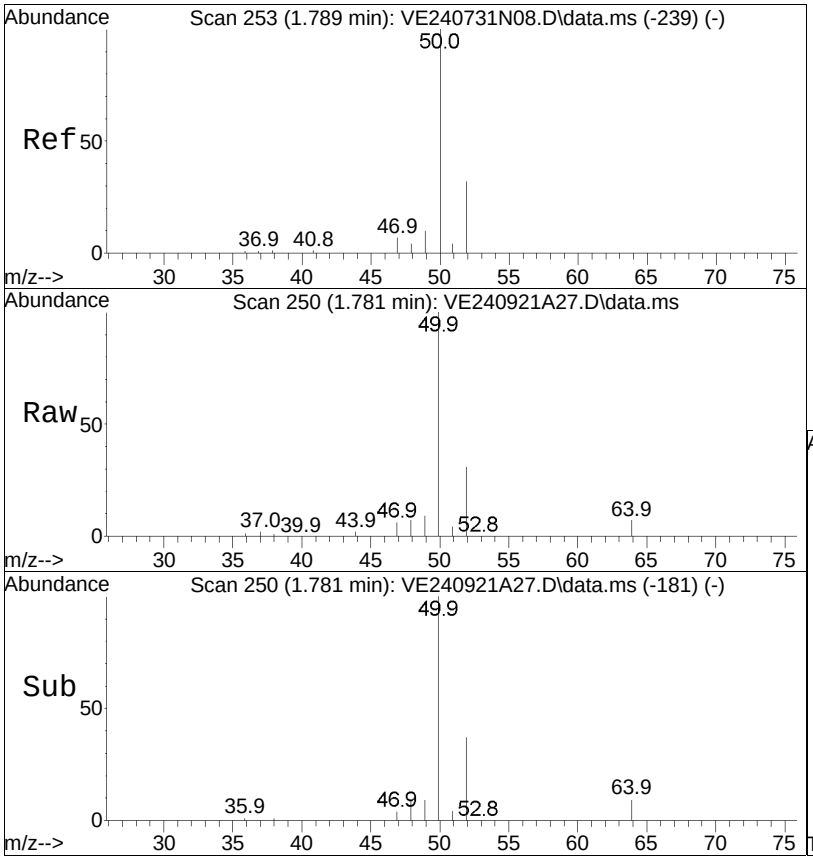



#2
Dichlorodifluoromethane
Concen: 13.89 ug/L
RT: 1.591 min Scan# 182
Delta R.T. 0.000 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 85 Resp: 78591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.1 | 21.7 | 45.1 |
| 50 | 12.3 | 11.8 | 24.4 |

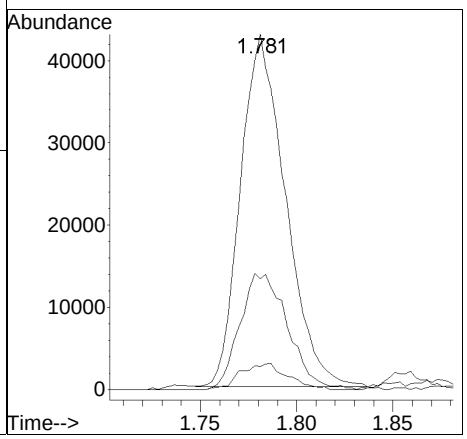


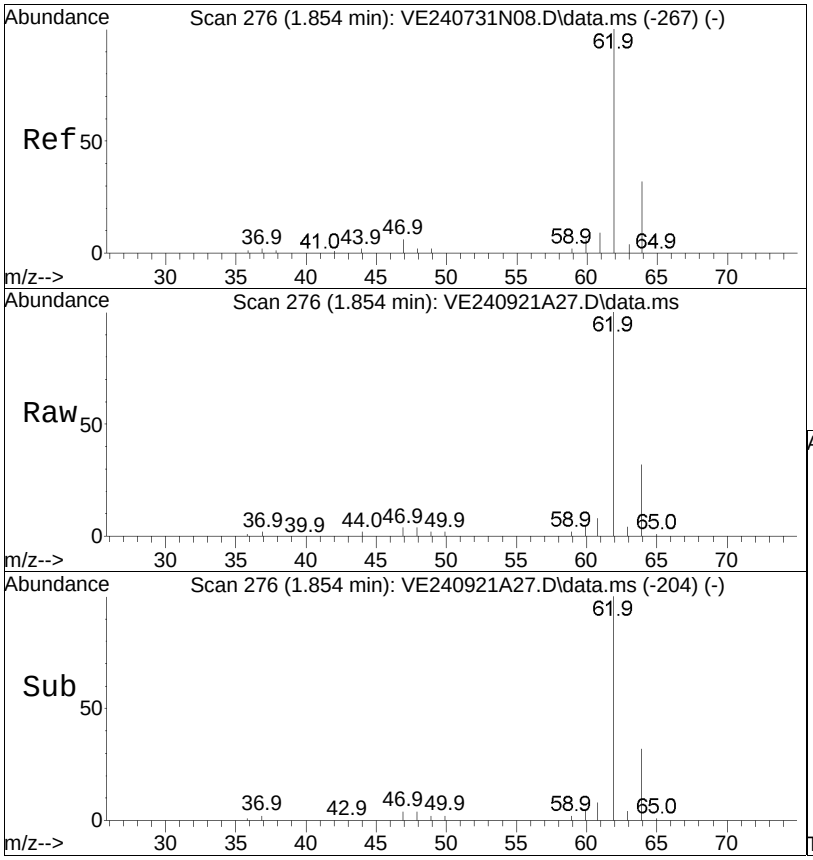



#3
Chloromethane
Concen: 11.07 ug/L
RT: 1.781 min Scan# 250
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 50 Resp: 69720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.7 | 14.9 | 54.9 |
| 47 | 7.7 | 0.0 | 28.0 |

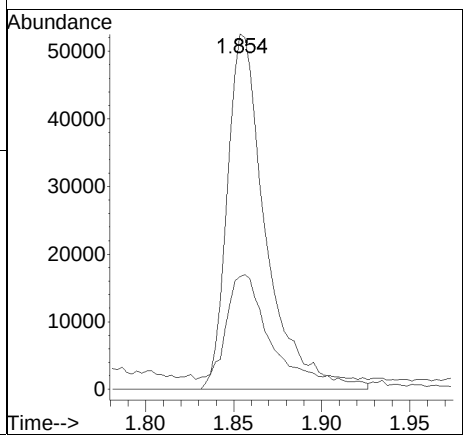


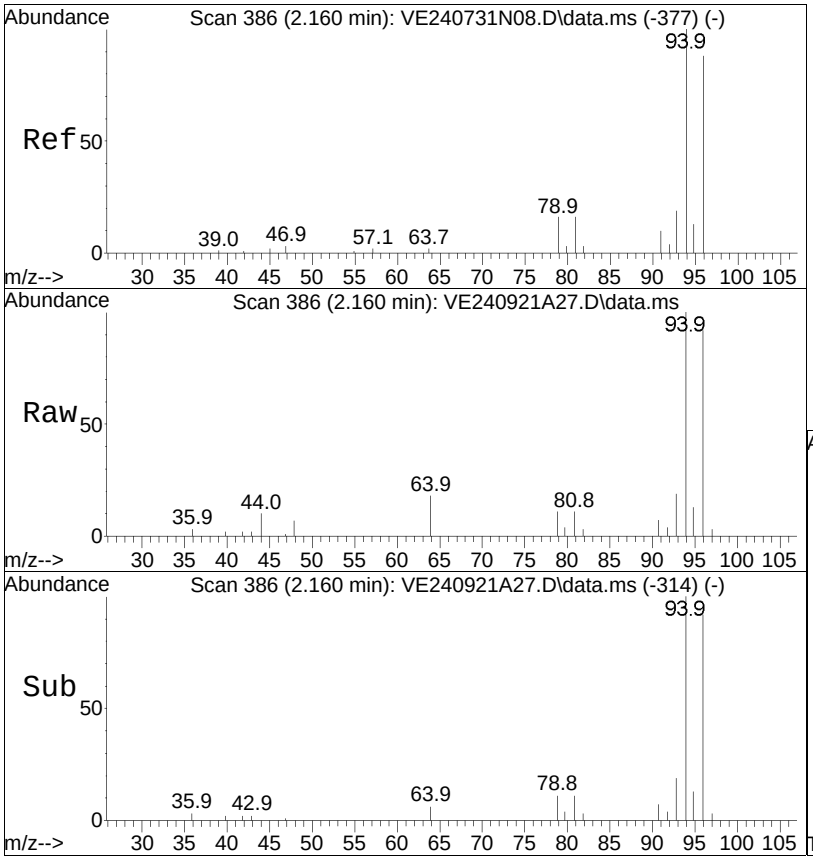



#4
Vinyl chloride
Concen: 13.62 ug/L
RT: 1.854 min Scan# 276
Delta R.T. -0.000 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 62 Resp: 79970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 28.1 | 8.1 | 48.1 |

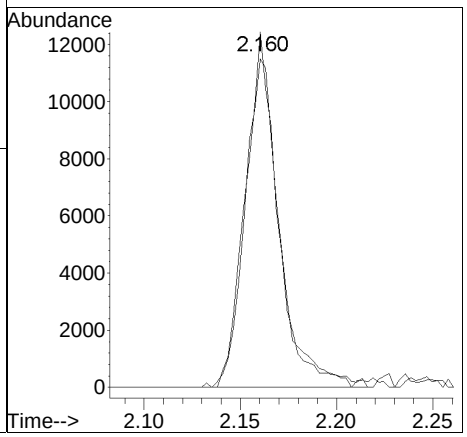


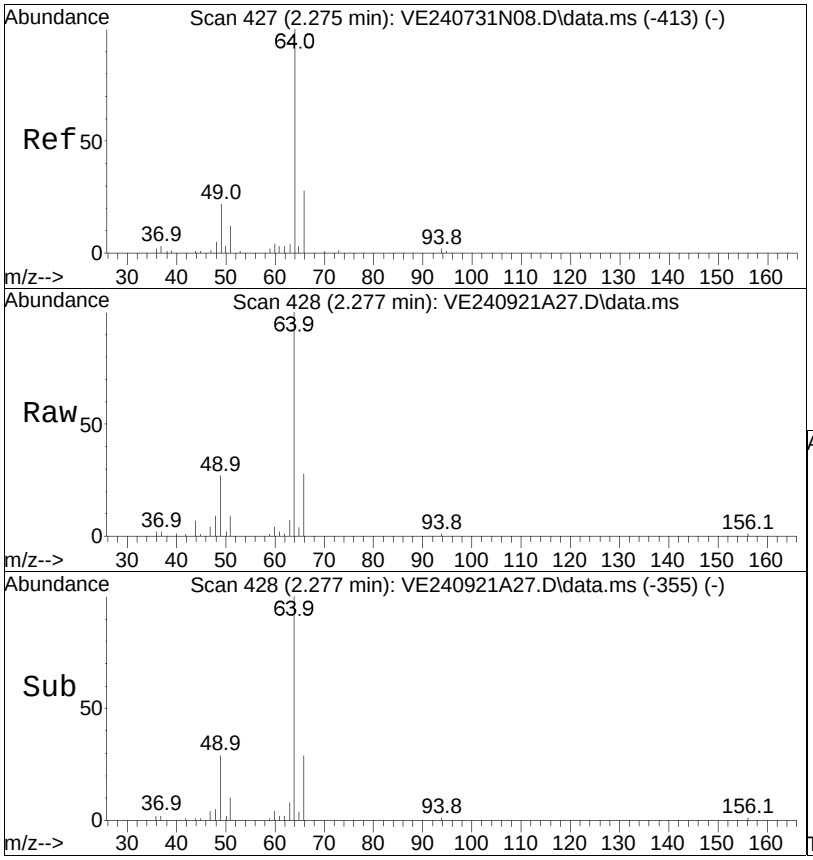



#5
Bromomethane
Concen: 8.53 ug/L
RT: 2.160 min Scan# 386
Delta R.T. 0.000 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 94 Resp: 14750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 98.4 | 68.2 | 108.2 |

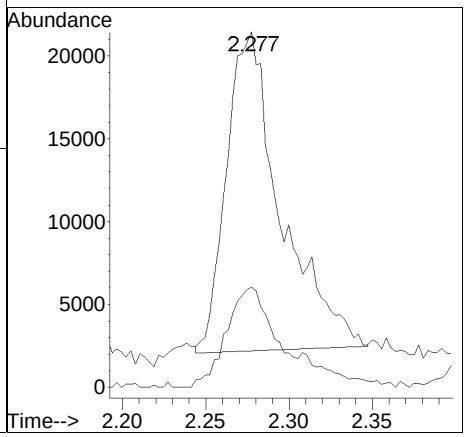


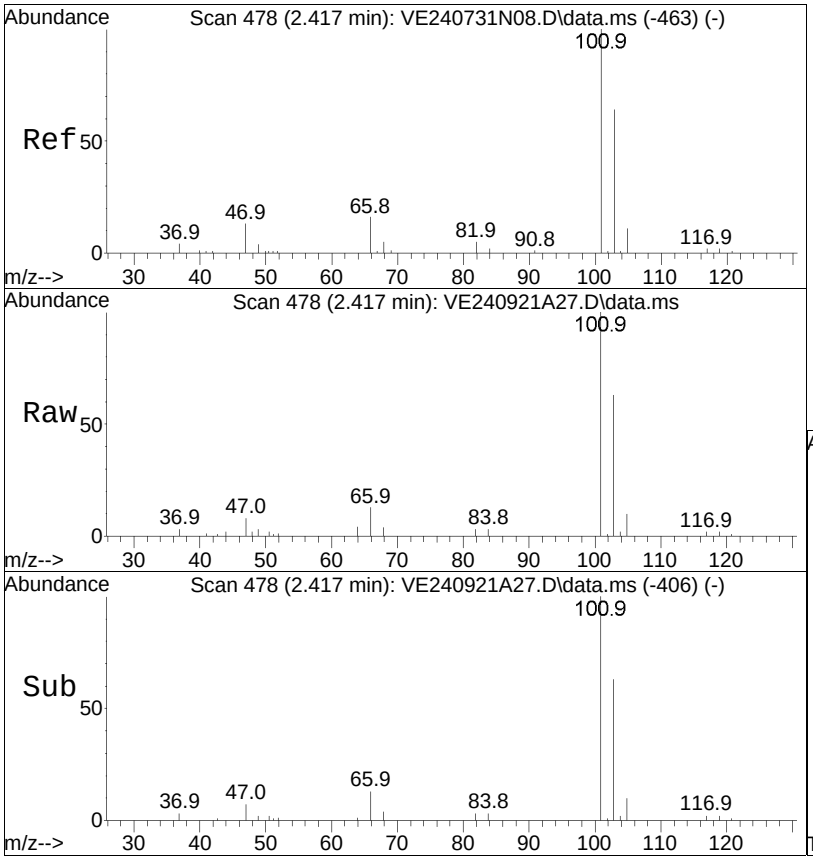



#6
Chloroethane
Concen: 12.32 ug/L
RT: 2.277 min Scan# 428
Delta R.T. 0.002 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 64 Resp: 43668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 27.5 | 10.7 | 50.7 |

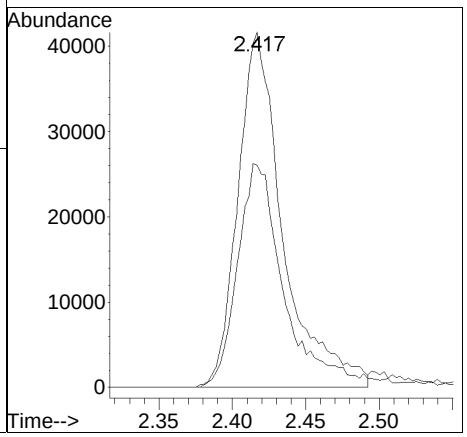


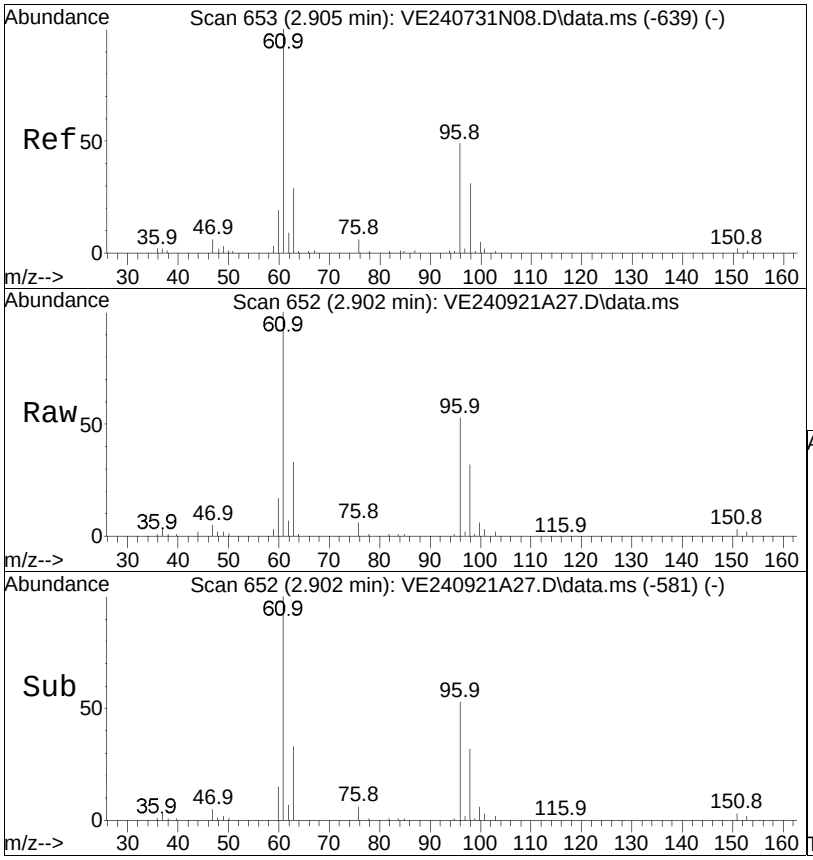



#7
Trichlorofluoromethane
Concen: 13.21 ug/L
RT: 2.417 min Scan# 478
Delta R.T. -0.000 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:101 Resp: 89133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.1 | 48.2 | 72.2 |

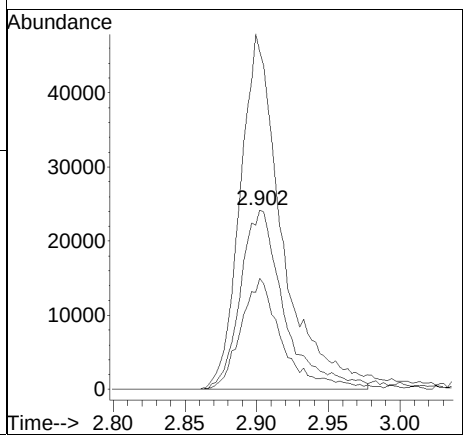


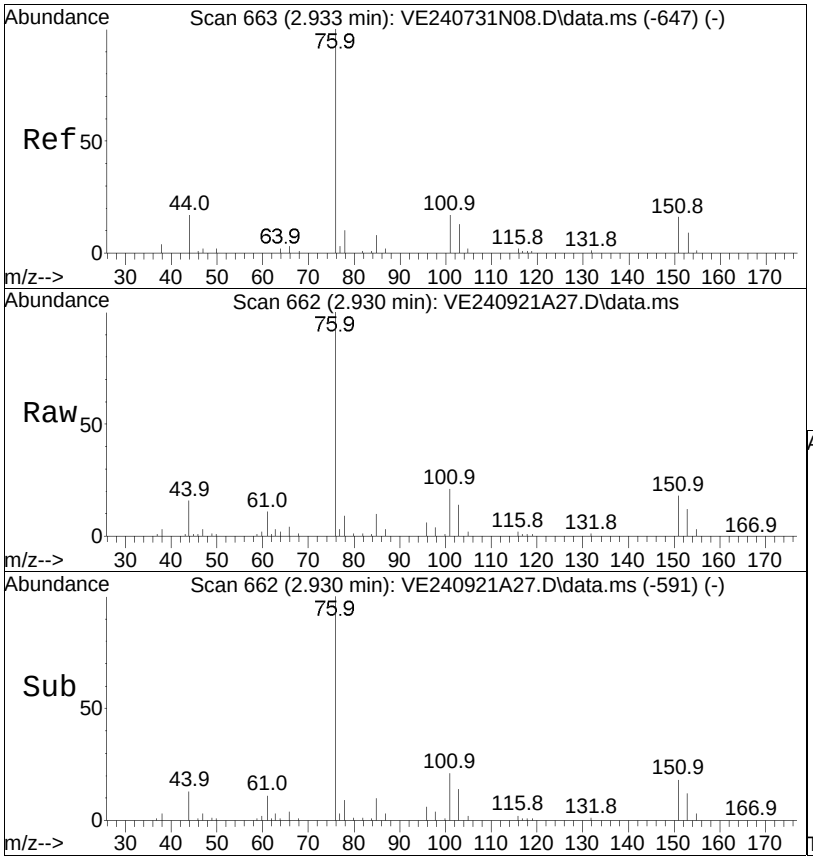



#10
1,1-Dichloroethene
Concen: 12.78 ug/L
RT: 2.902 min Scan# 652
Delta R.T. -0.003 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 96 Resp: 51638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 191.7 | 135.4 | 203.0 |
| 63 | 59.2 | 42.6 | 63.8 |

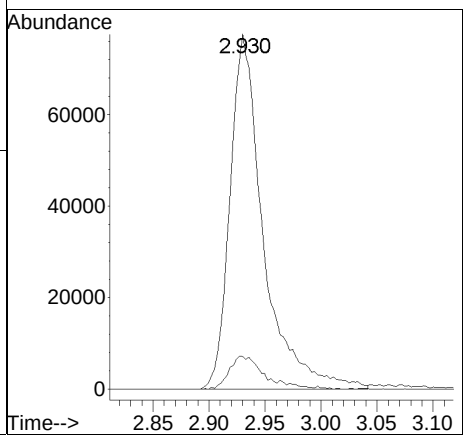


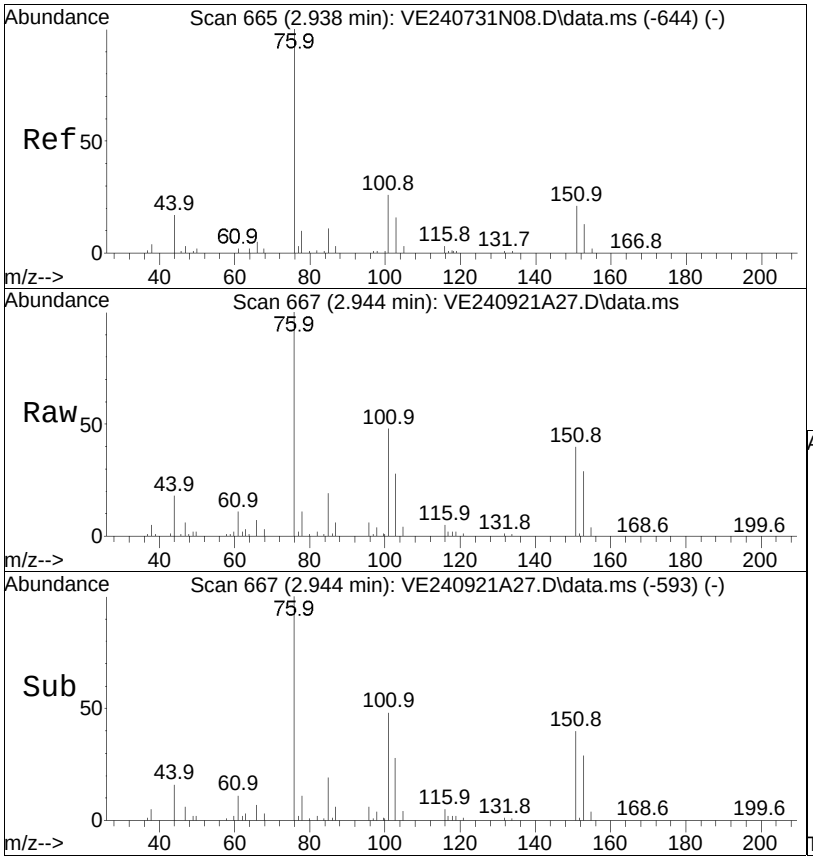



#11
Carbon disulfide
Concen: 12.93 ug/L
RT: 2.930 min Scan# 662
Delta R.T. -0.003 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 76 Resp: 161281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 5.5 | 11.3 |

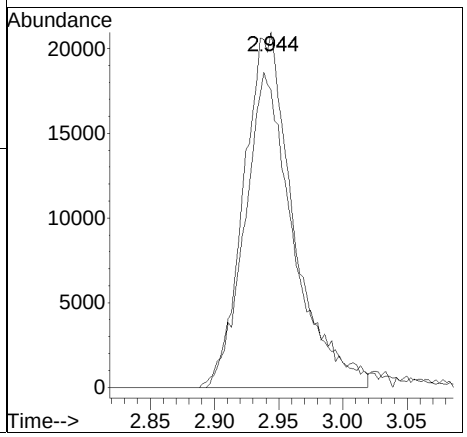


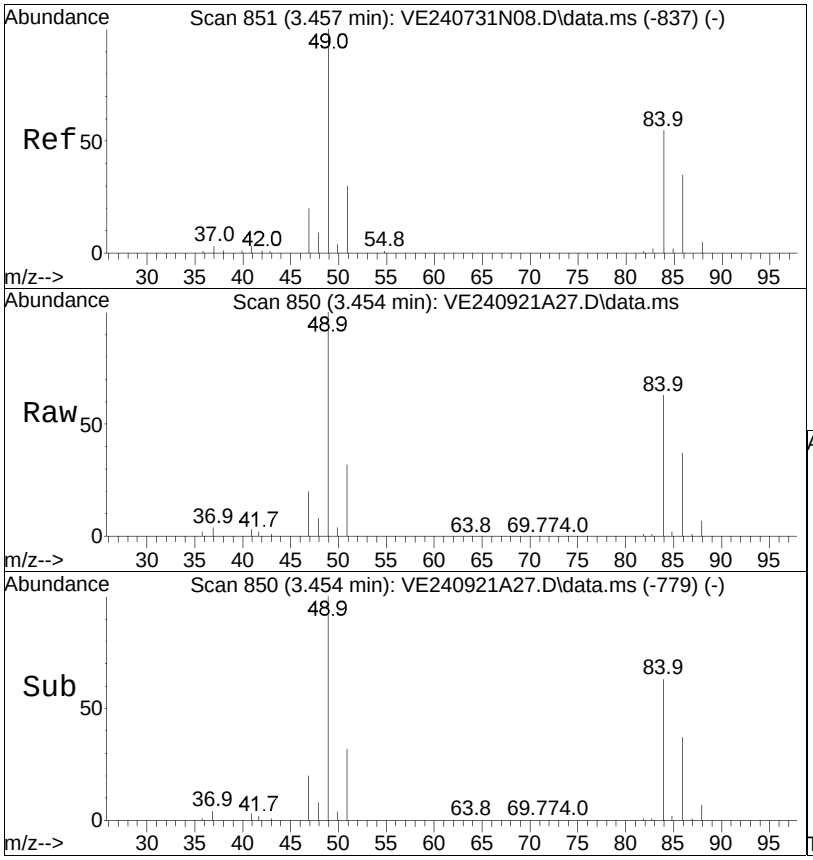



#12
Freon-113
Concen: 13.43 ug/L
RT: 2.944 min Scan# 667
Delta R.T. 0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:101 Resp: 56568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 85.1 | 58.7 | 88.1 |

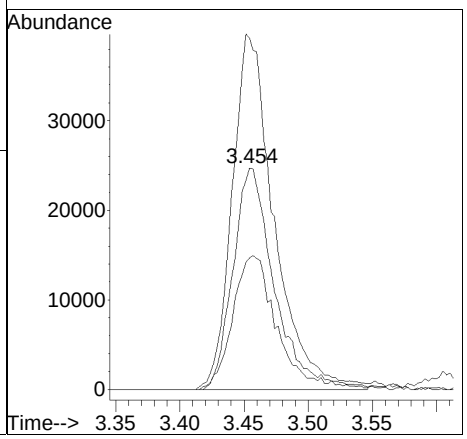


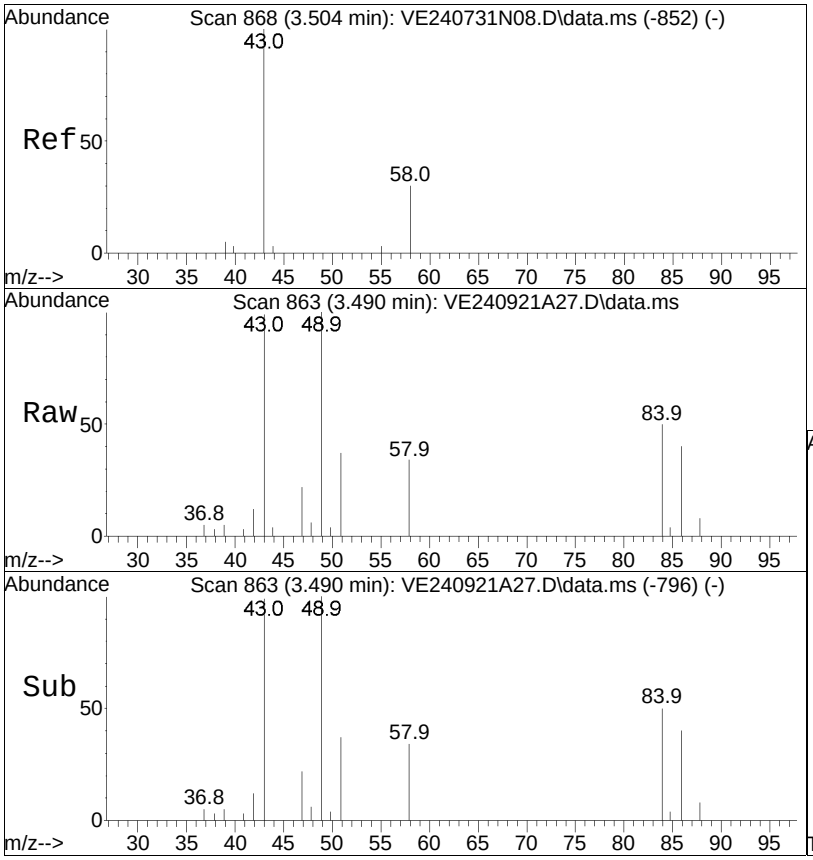



#15
Methylene chloride
Concen: 10.87 ug/L
RT: 3.454 min Scan# 850
Delta R.T. -0.003 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 84 Resp: 55416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 86 | 62.9 | 40.2 | 83.6 |
| 49 | 162.8 | 103.2 | 214.4 |

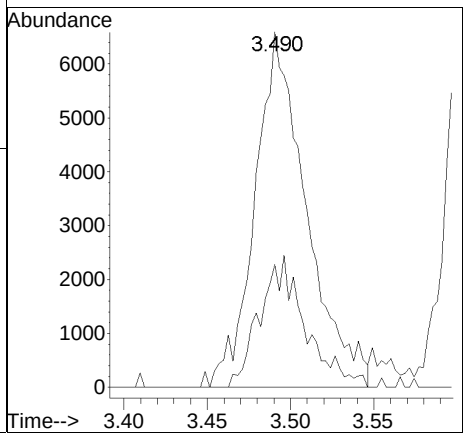


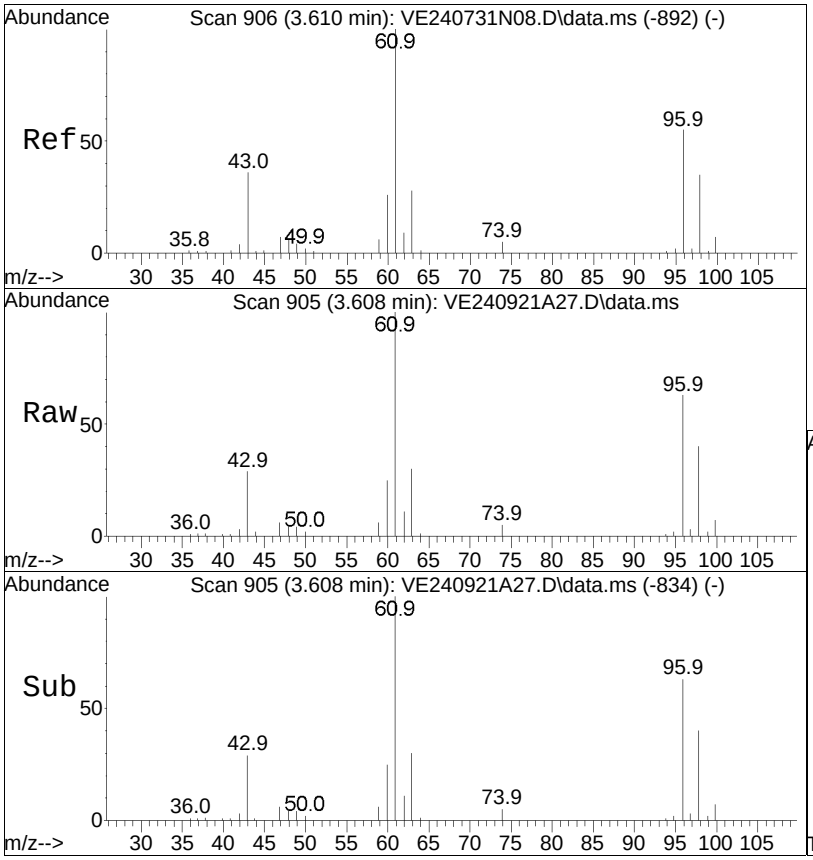



#17
Acetone
Concen: 7.67 ug/L
RT: 3.490 min Scan# 863
Delta R.T. -0.014 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 43 Resp: 14203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 15.1 | 23.4 | 35.0# |

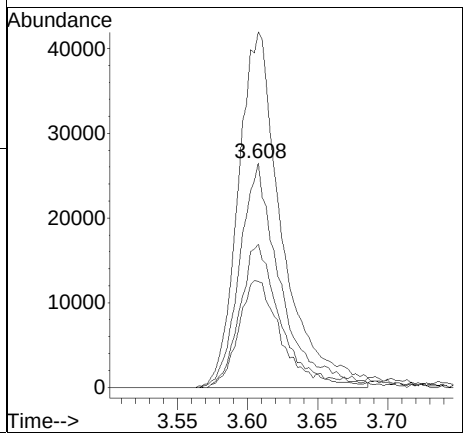


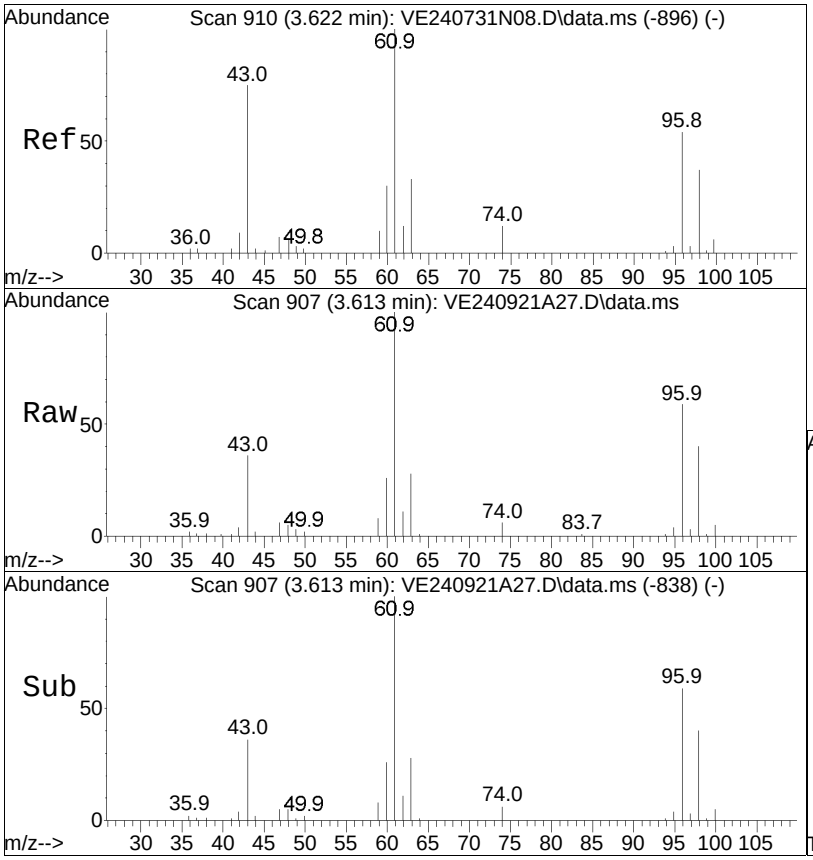



#18
trans-1,2-Dichloroethene
Concen: 12.42 ug/L
RT: 3.608 min Scan# 905
Delta R.T. -0.002 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 96 Resp: 53948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 169.7 | 93.5 | 194.1 |
| 98 | 64.3 | 37.8 | 78.6 |
| 63 | 50.3 | 29.7 | 61.7 |

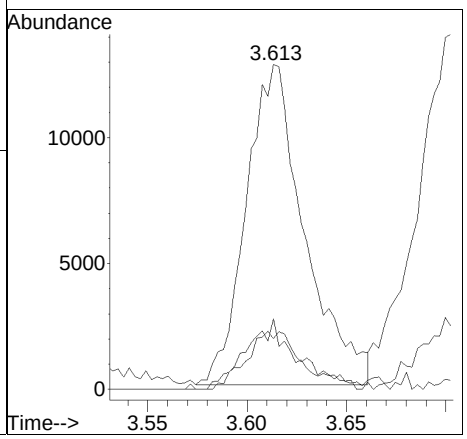


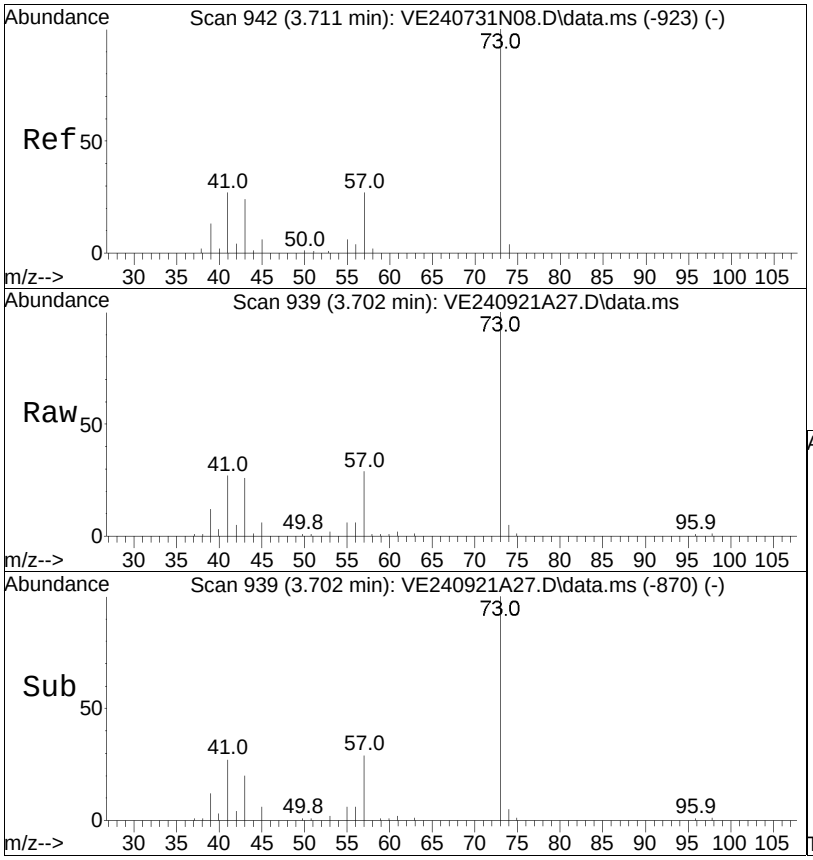



#19
Methyl acetate
Concen: 6.02 ug/L
RT: 3.613 min Scan# 907
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 43 Resp: 26004

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.4 | 12.6 | 18.8 |
| 59 | 9.0 | 12.2 | 18.2# |

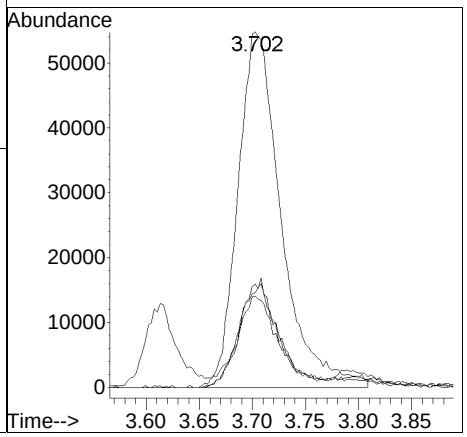


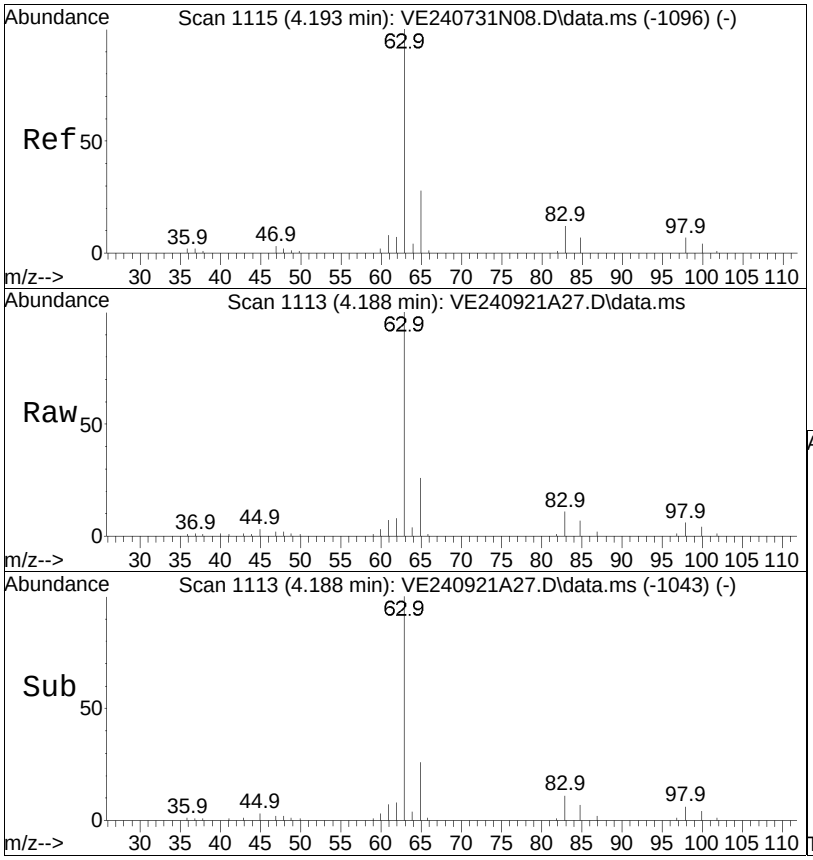



#21
Methyl tert-butyl ether
Concen: 9.57 ug/L
RT: 3.702 min Scan# 939
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 73 Resp: 155071

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 27.1 | 16.1 | 33.3 |
| 43 | 21.1 | 17.0 | 35.2 |
| 41 | 26.7 | 18.7 | 38.9 |

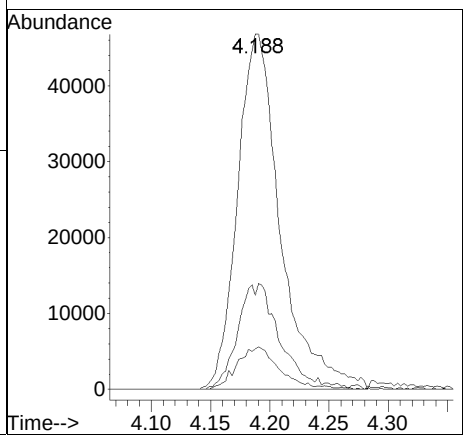


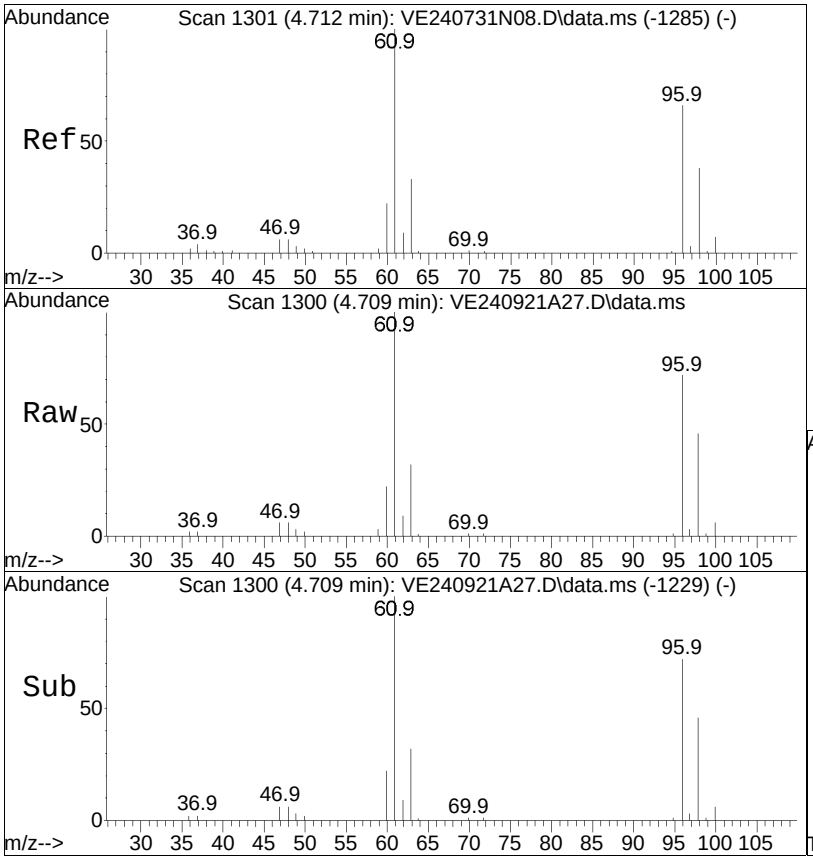



#25
1,1-Dichloroethane
Concen: 11.59 ug/L
RT: 4.188 min Scan# 1113
Delta R.T. -0.005 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 63 Resp: 118207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 13.0 | 10.3 | 50.3 |
| 83 | 11.6 | 0.0 | 33.1 |

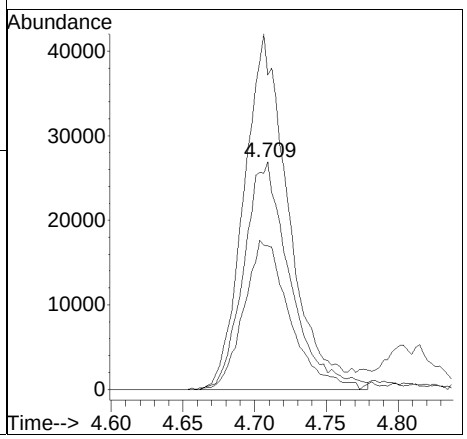


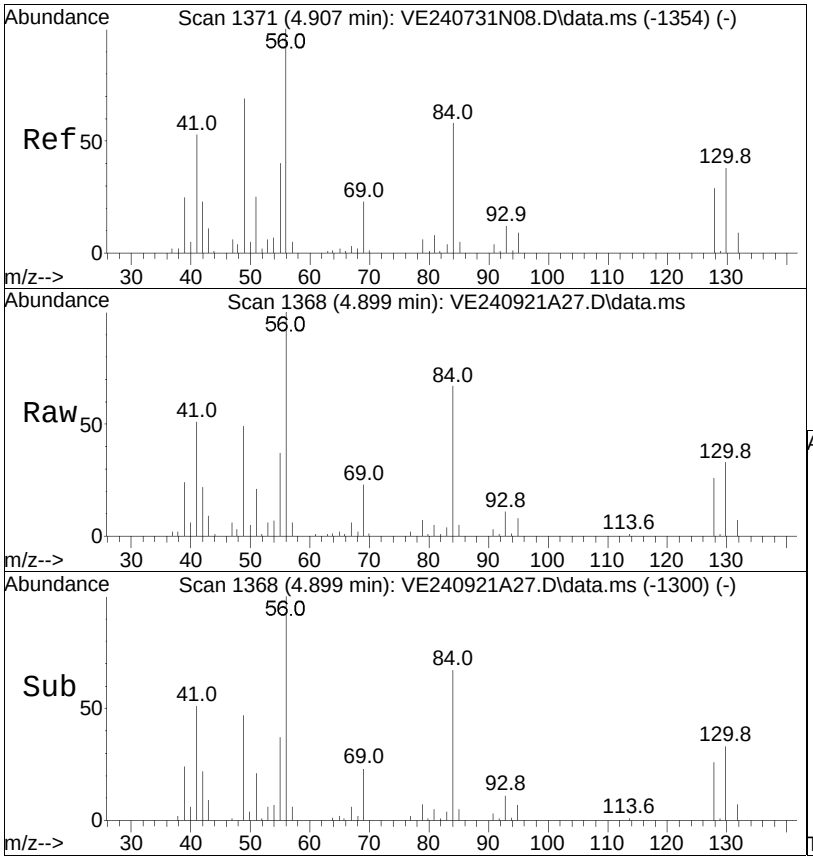



#30
cis-1,2-Dichloroethene
Concen: 11.63 ug/L
RT: 4.709 min Scan# 1300
Delta R.T. -0.003 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 96 Resp: 60545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.4 | 120.3 | 180.5 |
| 98 | 65.1 | 50.2 | 75.4 |

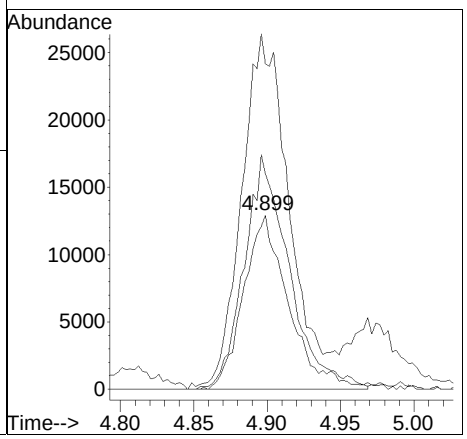


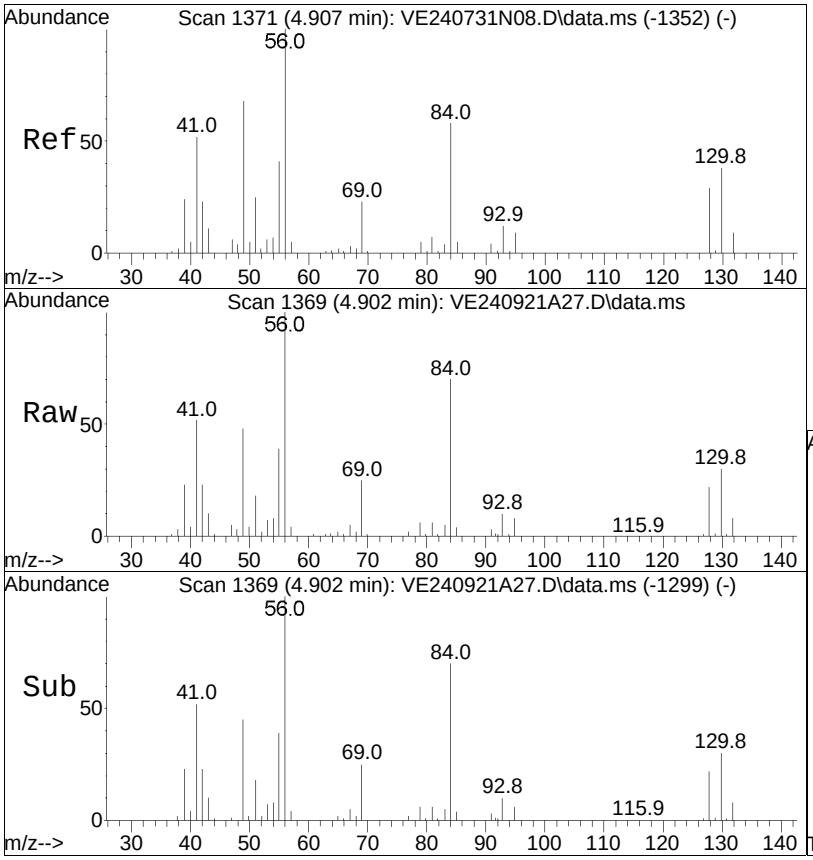



#33
Bromochloromethane
Concen: 12.12 ug/L
RT: 4.899 min Scan# 1368
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:128 Resp: 27677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 49 | 212.3 | 170.2 | 255.2 |
| 130 | 135.2 | 103.7 | 155.5 |

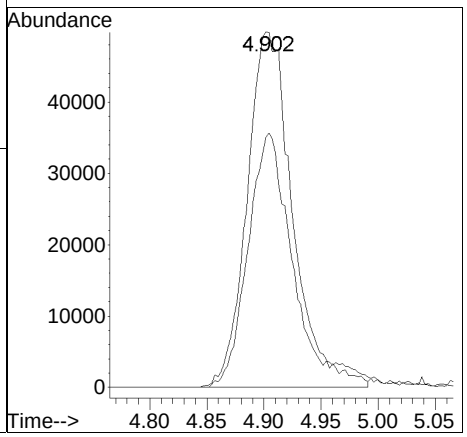


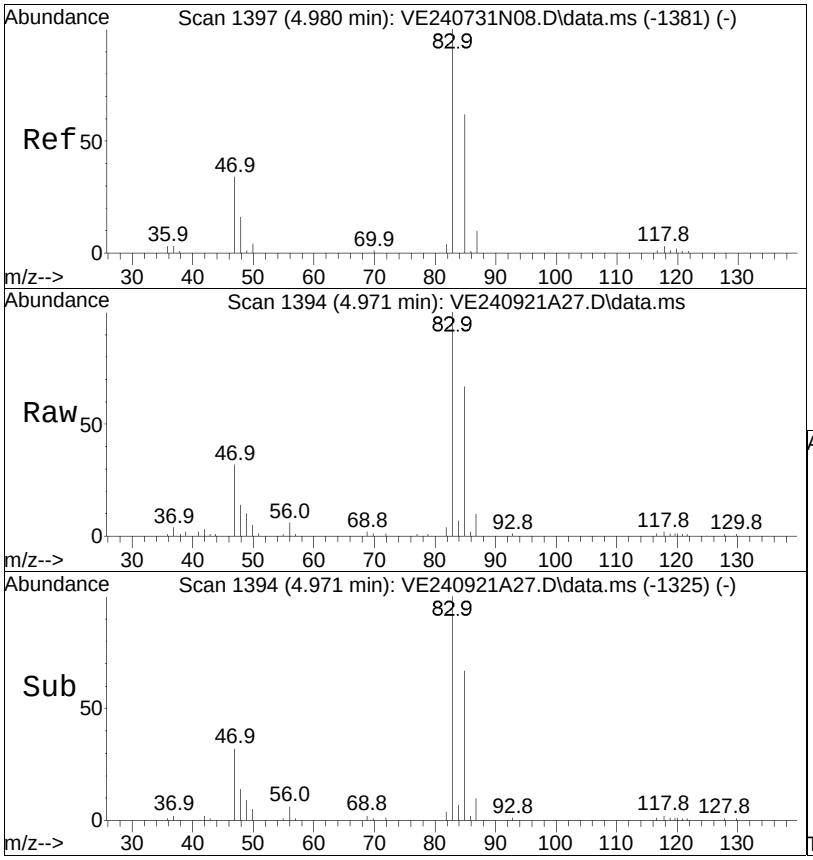



#34
Cyclohexane
Concen: 11.57 ug/L
RT: 4.902 min Scan# 1369
Delta R.T. -0.005 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 56 Resp: 138092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 66.9 | 44.5 | 92.5 |

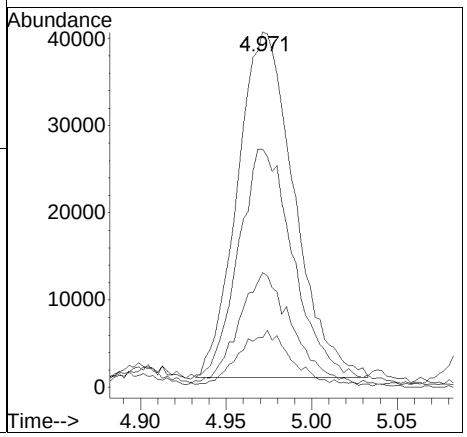


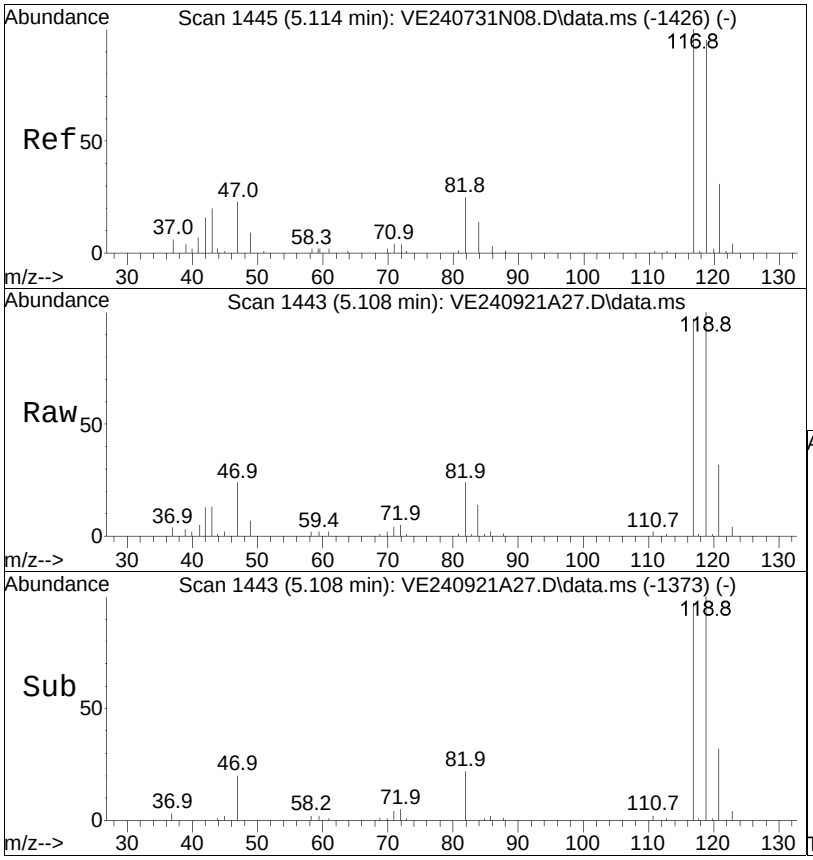



#35
Chloroform
Concen: 10.79 ug/L
RT: 4.971 min Scan# 1394
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 83 Resp: 91210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.5 | 41.3 | 85.9 |
| 47 | 30.8 | 20.9 | 43.3 |
| 48 | 15.3 | 10.3 | 21.5 |

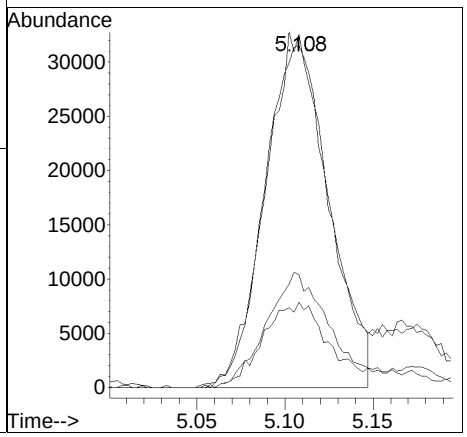


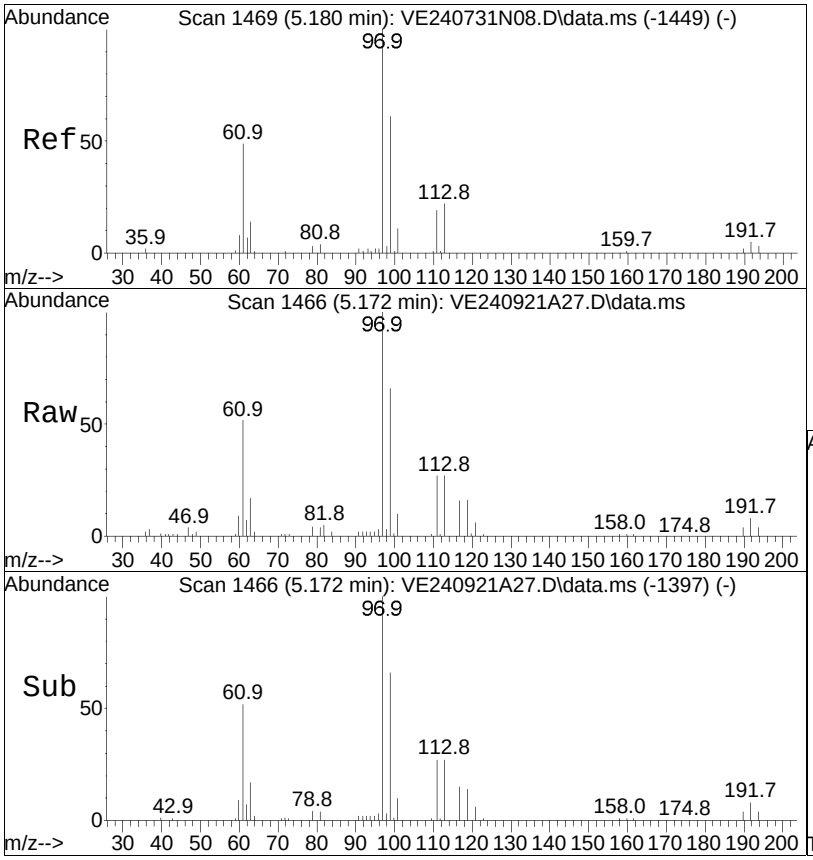



#37
Carbon tetrachloride
Concen: 12.62 ug/L
RT: 5.108 min Scan# 1443
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:117 Resp: 81494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 100.4 | 60.6 | 126.0 |
| 121 | 33.1 | 18.0 | 37.4 |
| 82 | 24.7 | 19.8 | 41.0 |

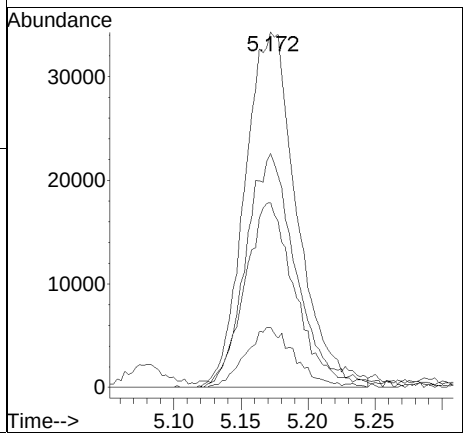


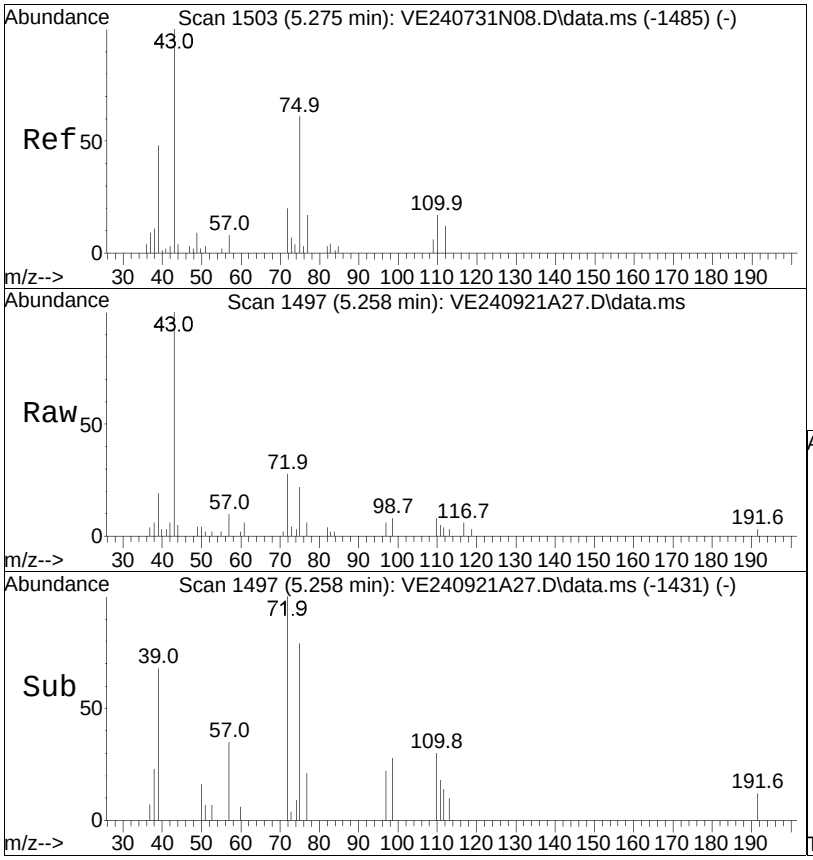



#40
1,1,1-Trichloroethane
Concen: 12.14 ug/L
RT: 5.172 min Scan# 1466
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 97 Resp: 93215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.7 | 40.2 | 83.4 |
| 61 | 47.6 | 36.9 | 76.5 |
| 63 | 15.7 | 8.3 | 17.3 |

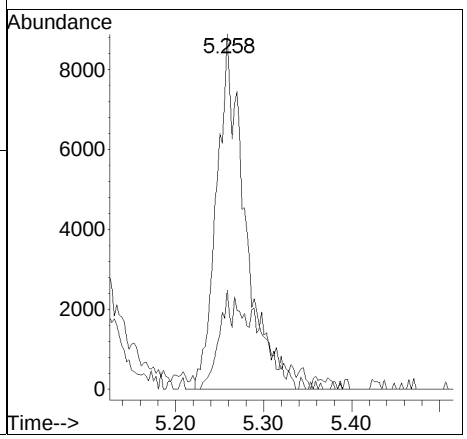


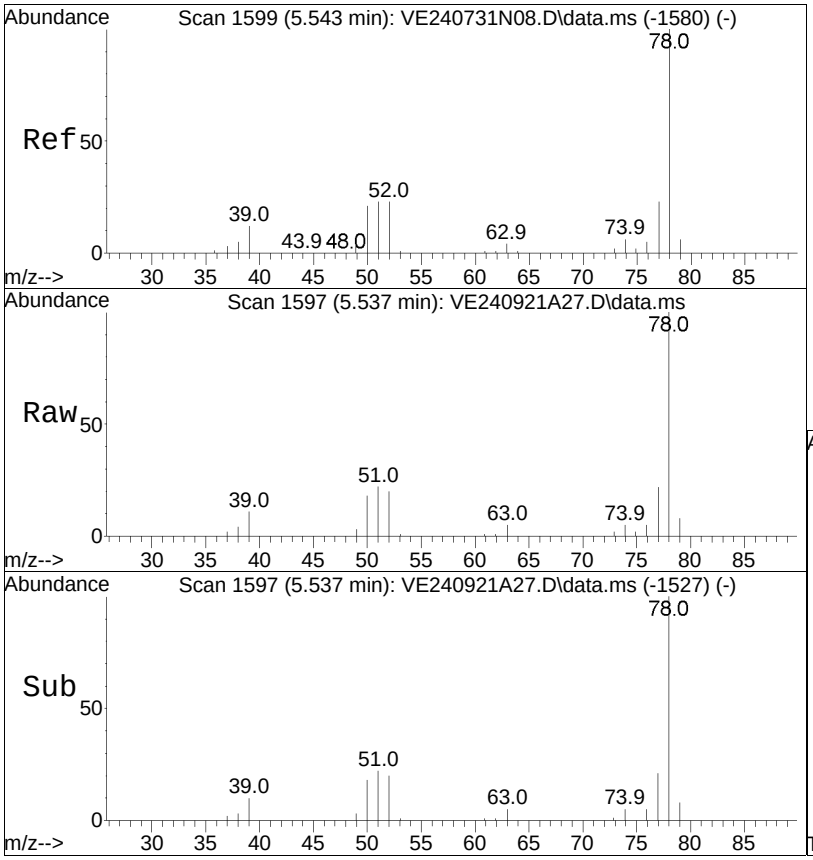



#42
2-Butanone
Concen: 7.91 ug/L M1
RT: 5.258 min Scan# 1497
Delta R.T. -0.017 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 43 Resp: 20940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 11.6 | 15.7 | 23.5# |

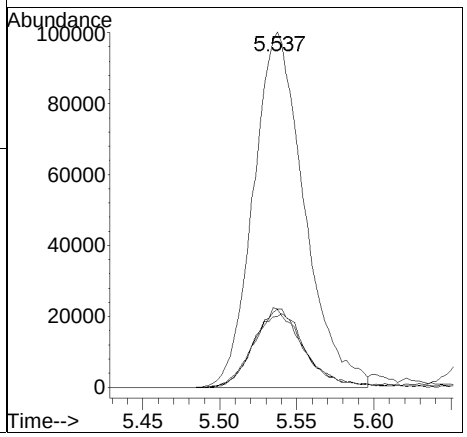


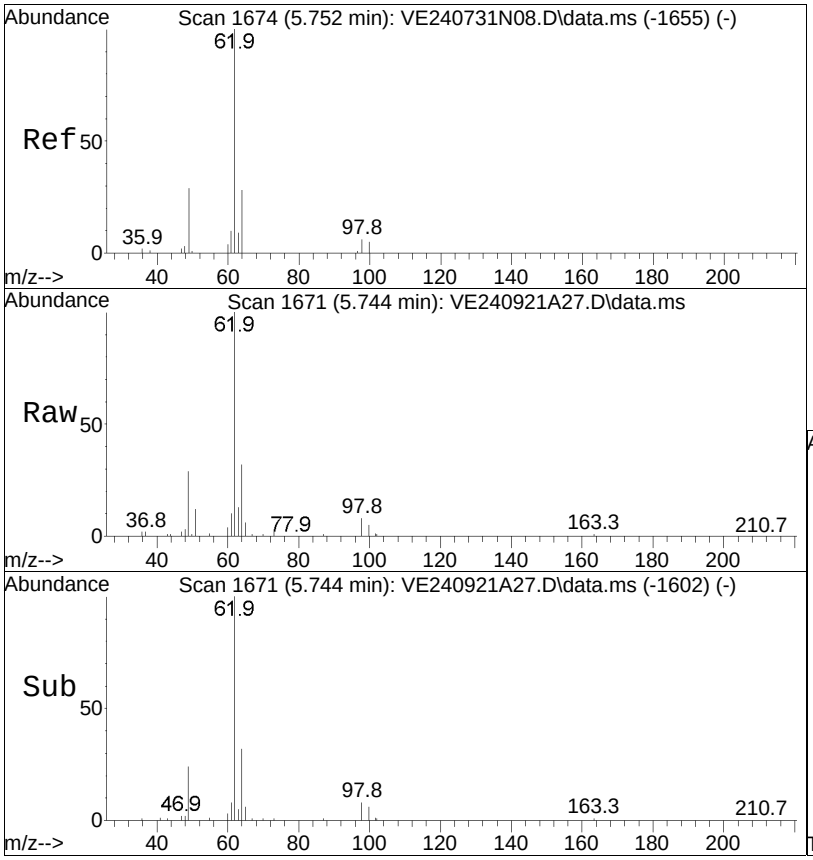



#45
Benzene
Concen: 11.51 ug/L
RT: 5.537 min Scan# 1597
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 78 Resp: 230027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.4 | 12.8 | 26.6 |
| 51 | 21.8 | 13.5 | 27.9 |
| 52 | 21.3 | 12.0 | 25.0 |

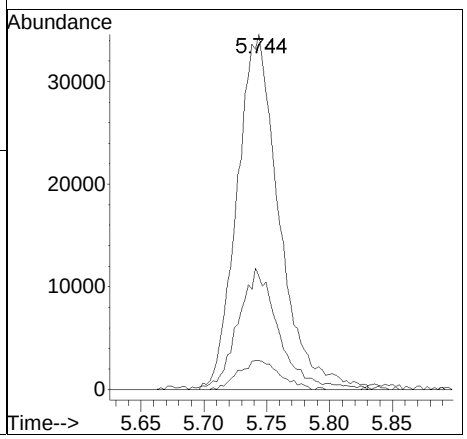


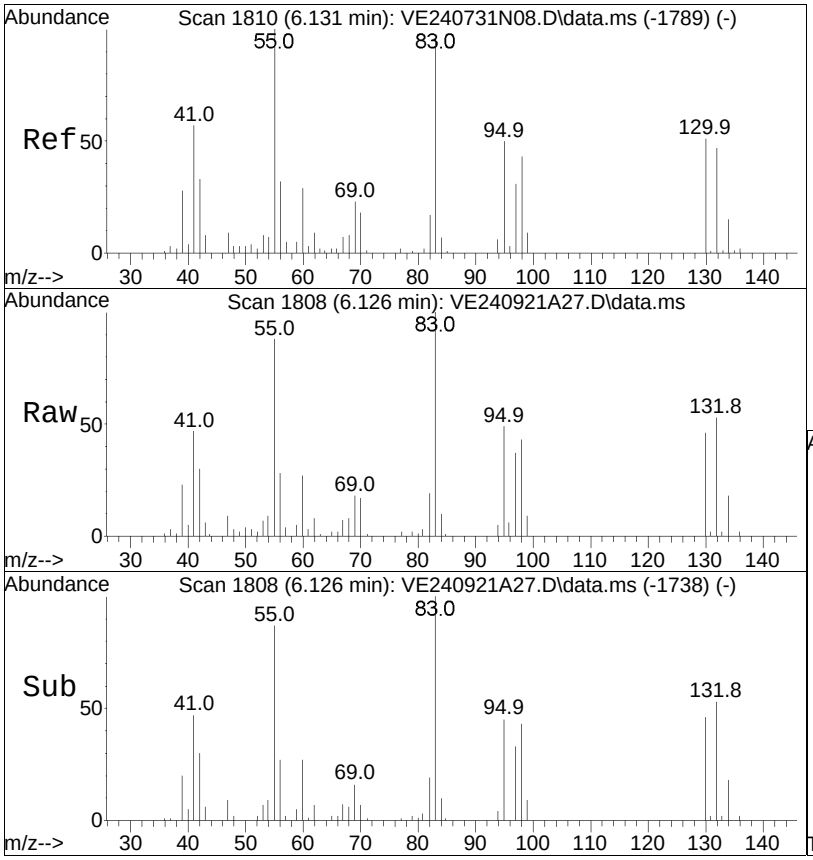



#48
1,2-Dichloroethane
Concen: 10.46 ug/L
RT: 5.744 min Scan# 1671
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 62 Resp: 80731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.0 | 12.0 | 52.0 |
| 98 | 8.0 | 0.0 | 29.1 |

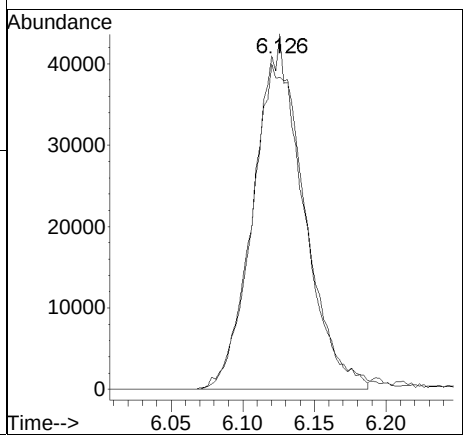


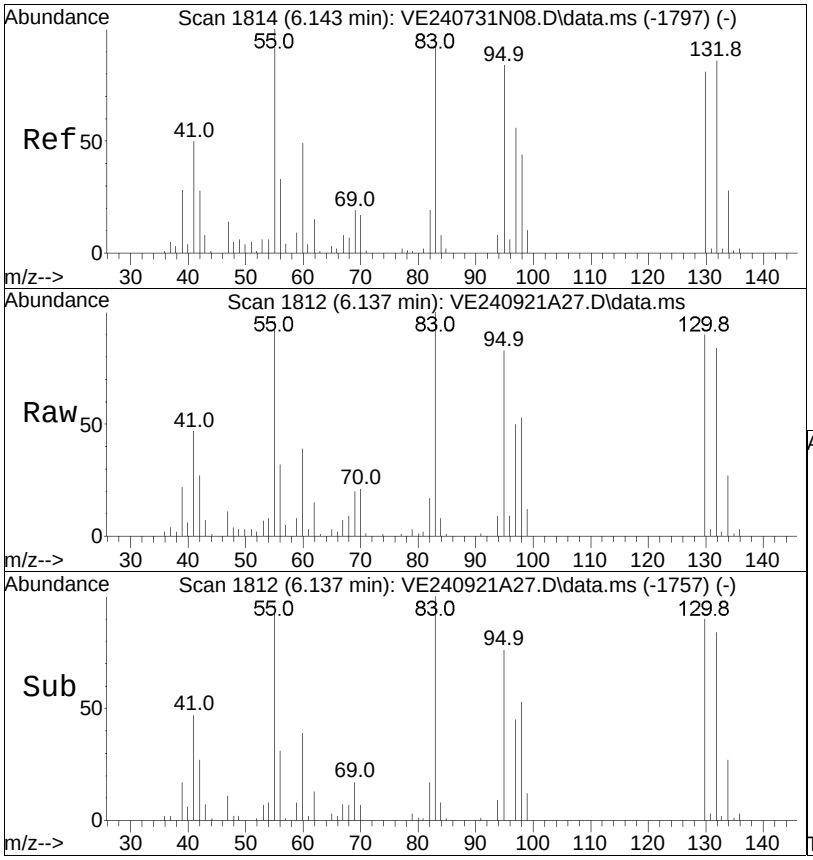



#51
Methyl cyclohexane
Concen: 11.78 ug/L
RT: 6.126 min Scan# 1808
Delta R.T. -0.005 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 83 Resp: 105800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 98.5 | 75.3 | 112.9 |

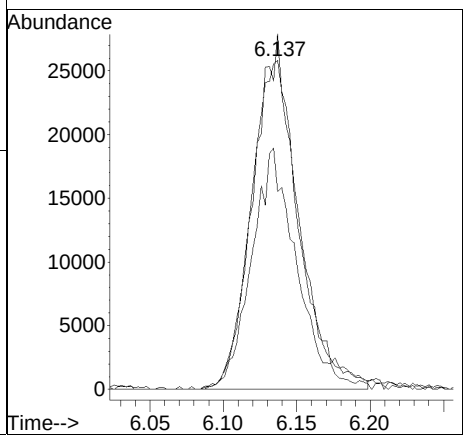


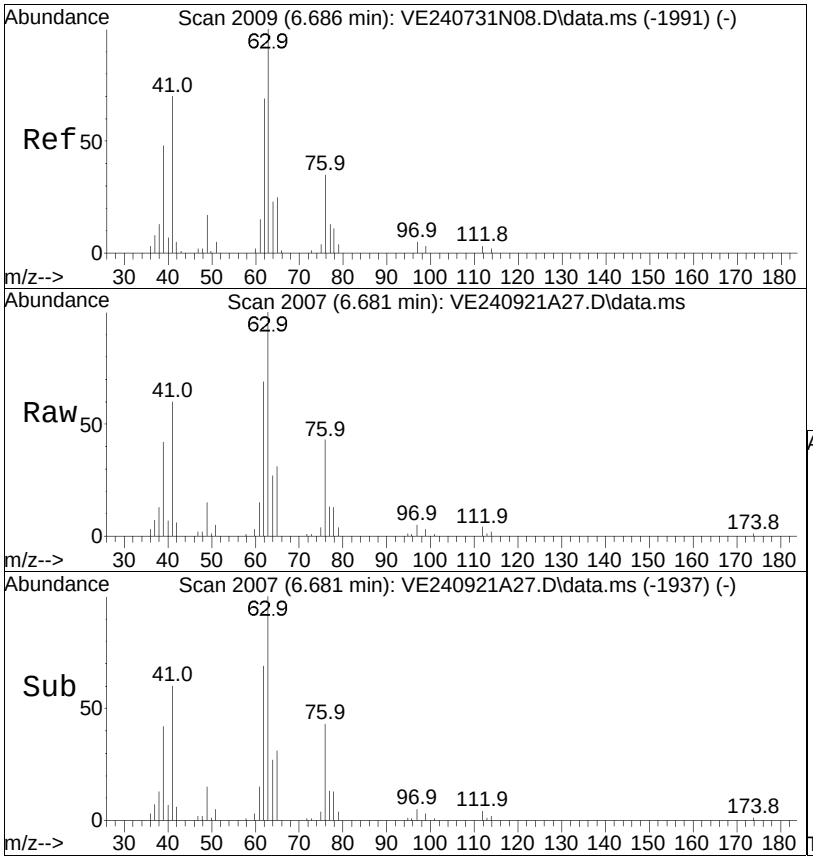



#52
Trichloroethene
Concen: 11.80 ug/L
RT: 6.137 min Scan# 1812
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 95 Resp: 59311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 68.0 | 50.2 | 75.2 |
| 130 | 100.3 | 78.2 | 117.4 |

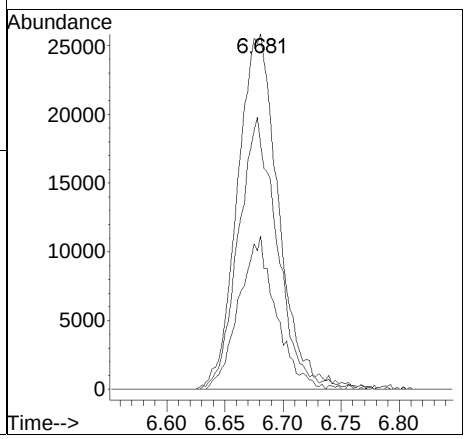


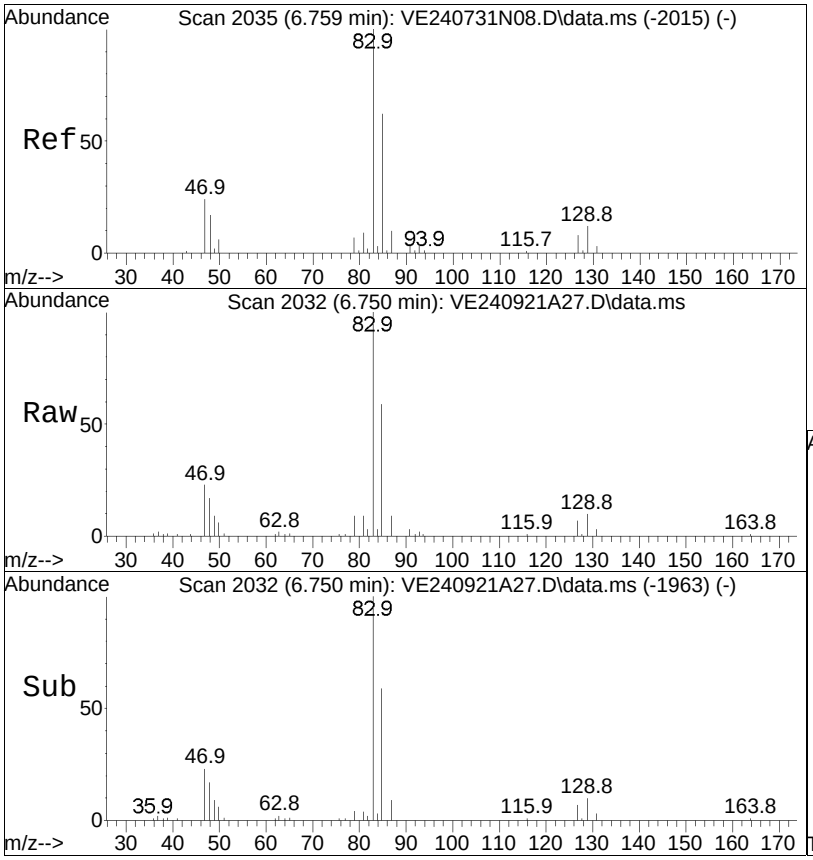



#55
1,2-Dichloropropane
Concen: 10.53 ug/L
RT: 6.681 min Scan# 2007
Delta R.T. -0.005 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 63 Resp: 63520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 71.8 | 58.4 | 87.6 |
| 76 | 39.0 | 28.7 | 43.1 |

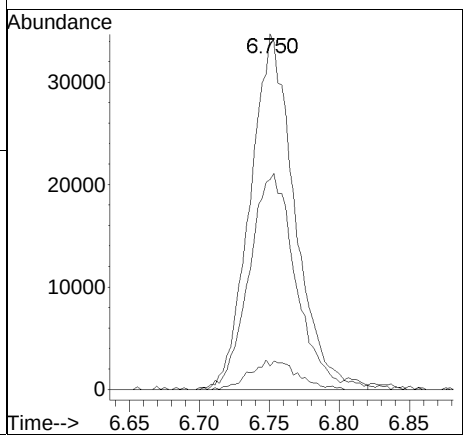


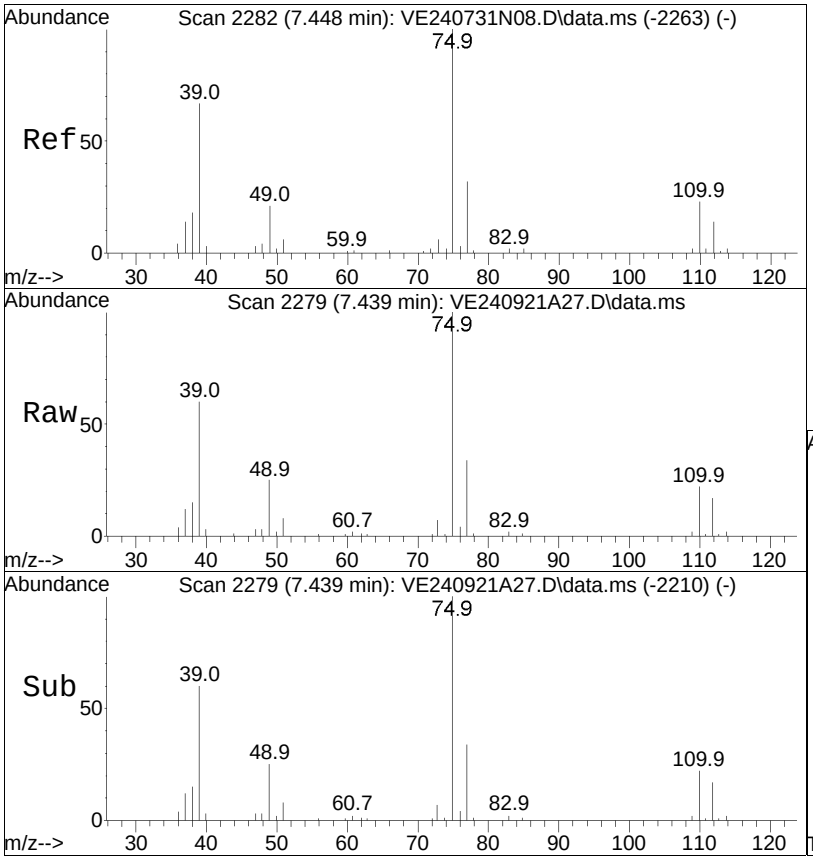



#58
Bromodichloromethane
Concen: 10.78 ug/L
RT: 6.750 min Scan# 2032
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 83 Resp: 77066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 46.6 | 69.8 |
| 127 | 3.9 | 6.2 | 9.4# |

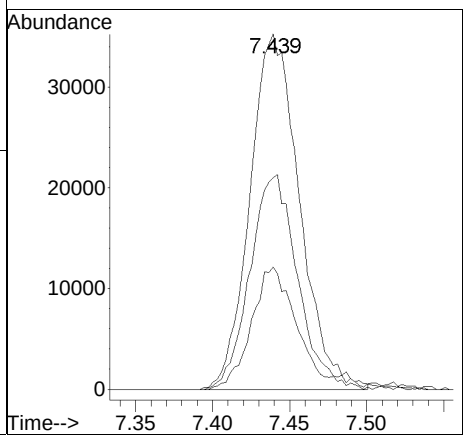


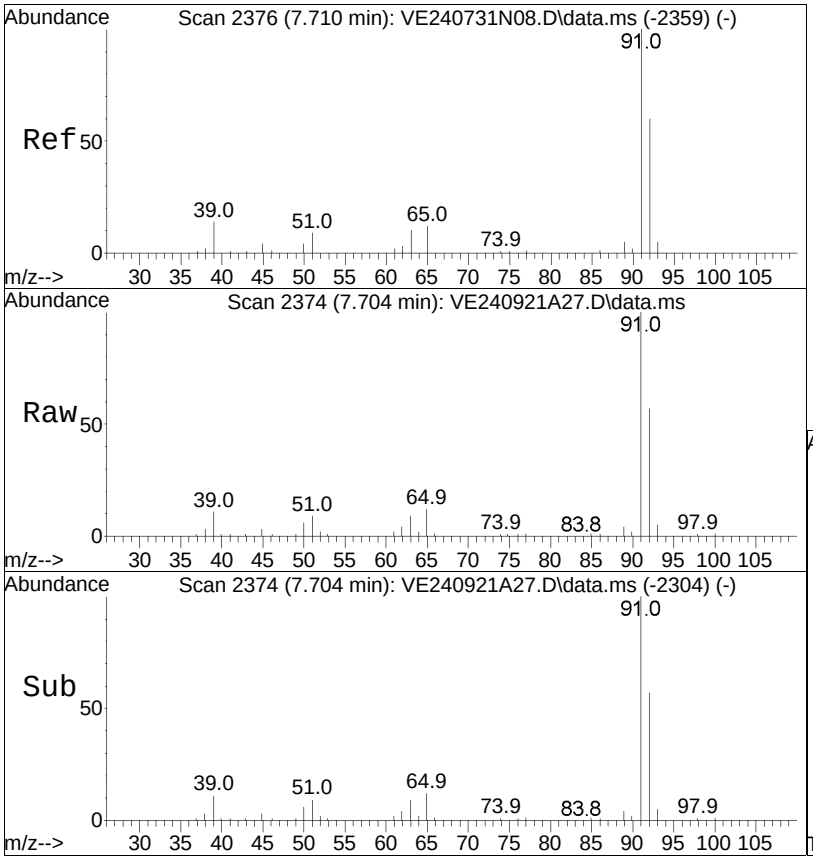



#62
cis-1,3-Dichloropropene
Concen: 9.83 ug/L
RT: 7.439 min Scan# 2279
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 75 Resp: 79125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 25.1 | 37.7 |
| 39 | 58.3 | 50.7 | 76.1 |

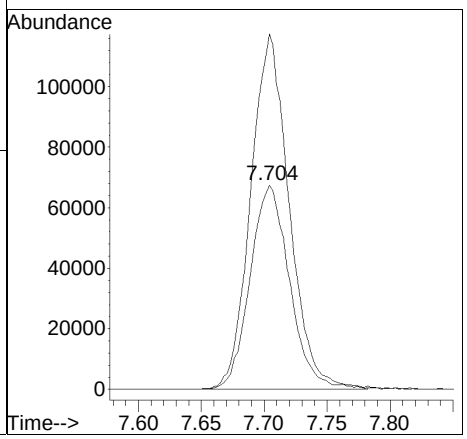


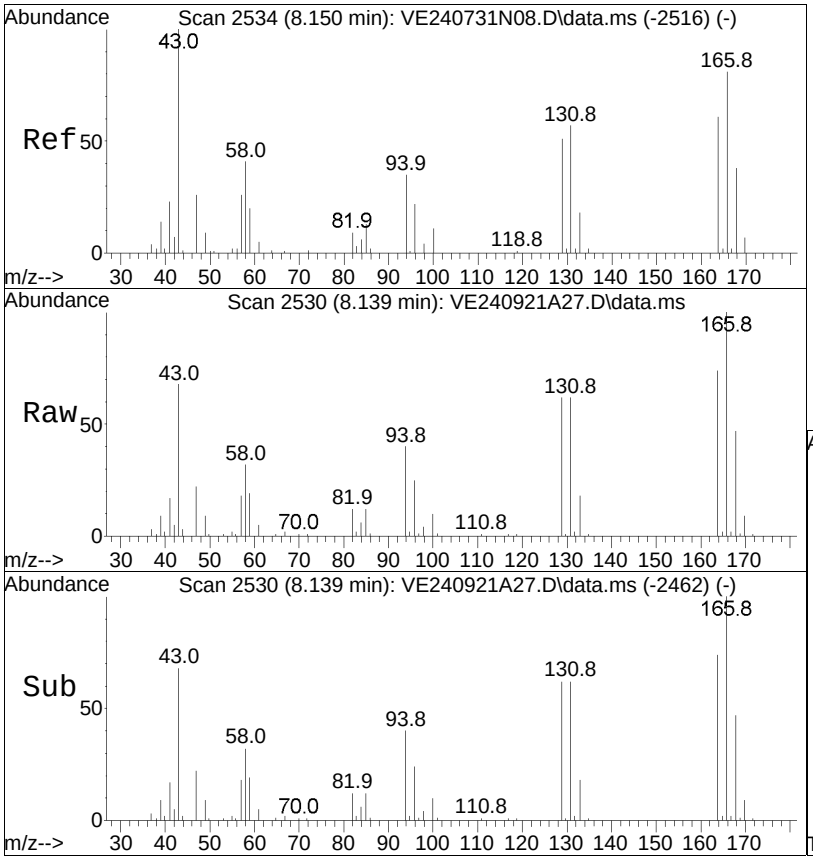



#65
Toluene
Concen: 11.30 ug/L
RT: 7.704 min Scan# 2374
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 92 Resp: 147646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 168.9 | 129.1 | 193.7 |

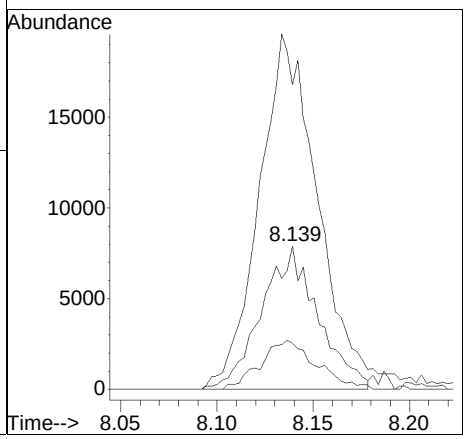


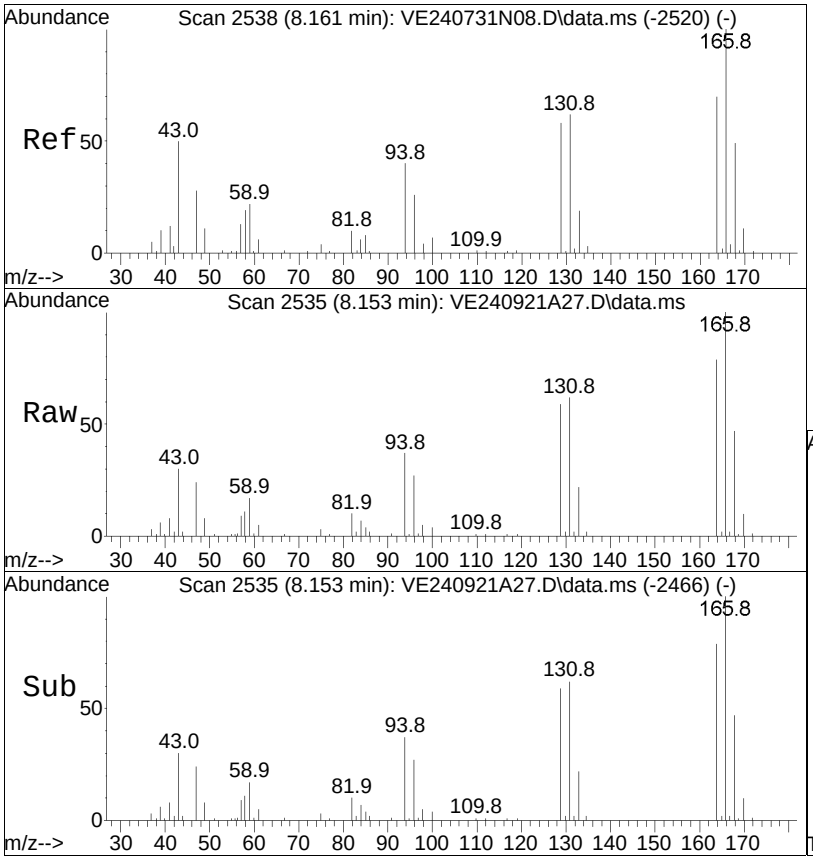



#66
4-Methyl-2-pentanone
Concen: 7.20 ug/L
RT: 8.139 min Scan# 2530
Delta R.T. -0.011 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 58 Resp: 16055

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 100 | 34.1 | 27.9 | 41.9 |
| 43 | 260.9 | 225.7 | 338.5 |

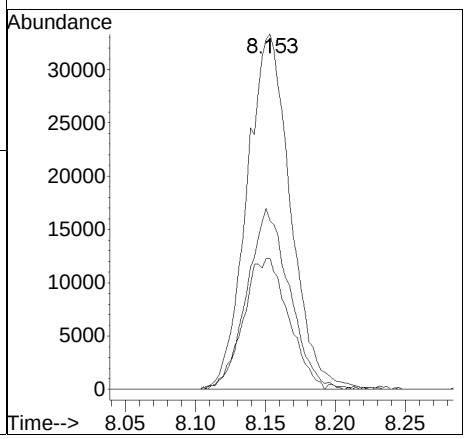


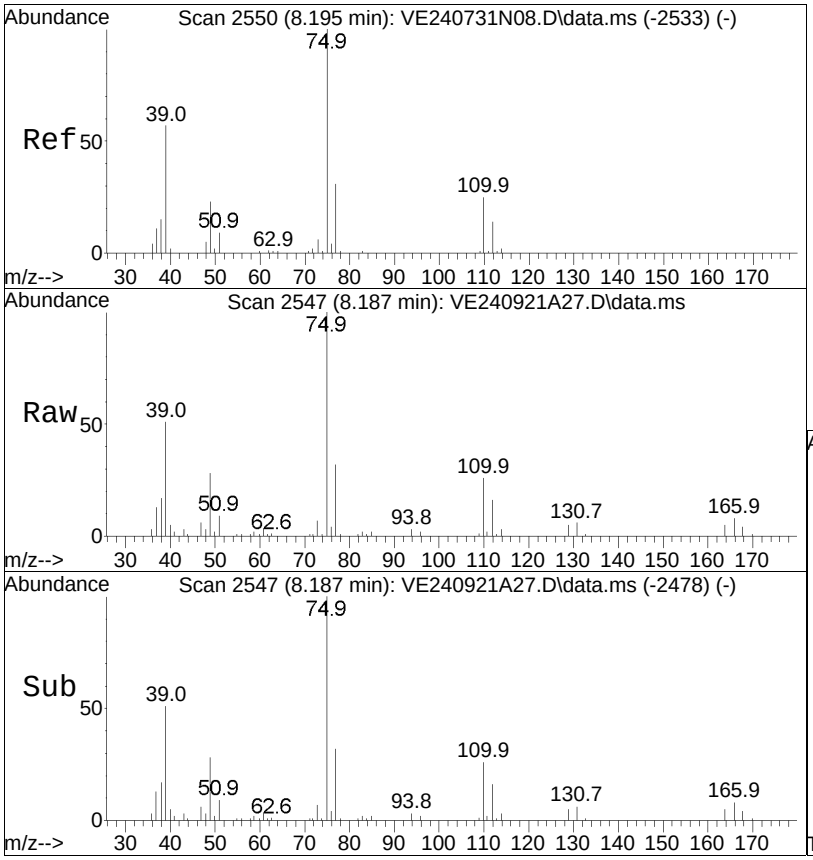



#67
Tetrachloroethene
Concen: 13.01 ug/L
RT: 8.153 min Scan# 2535
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:166 Resp: 72213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 49.4 | 25.8 | 65.8 |
| 94 | 38.3 | 24.3 | 64.3 |

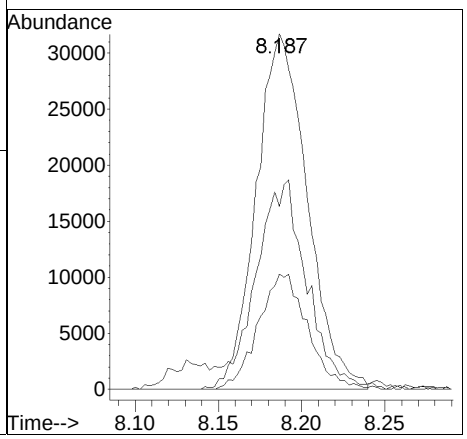


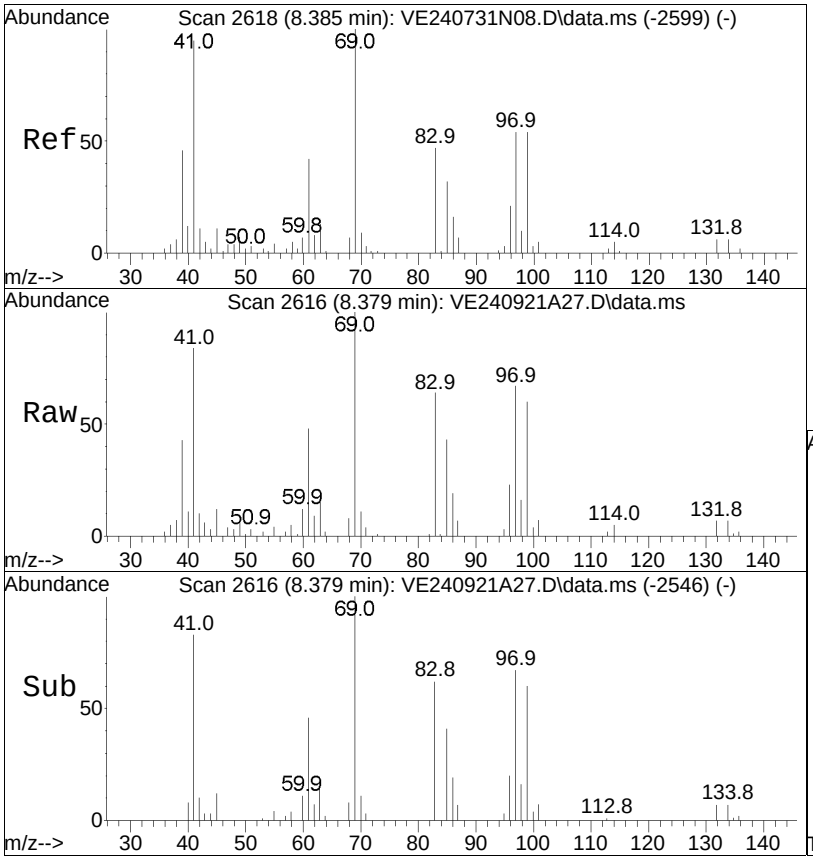



#69
trans-1,3-Dichloropropene
Concen: 9.21 ug/L
RT: 8.187 min Scan# 2547
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 75 Resp: 67792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.5 | 10.2 | 50.2 |
| 39 | 54.8 | 45.7 | 85.7 |

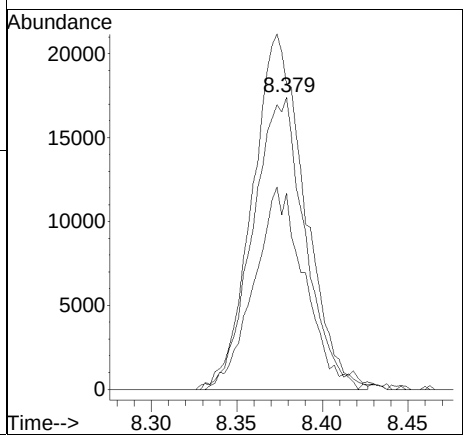


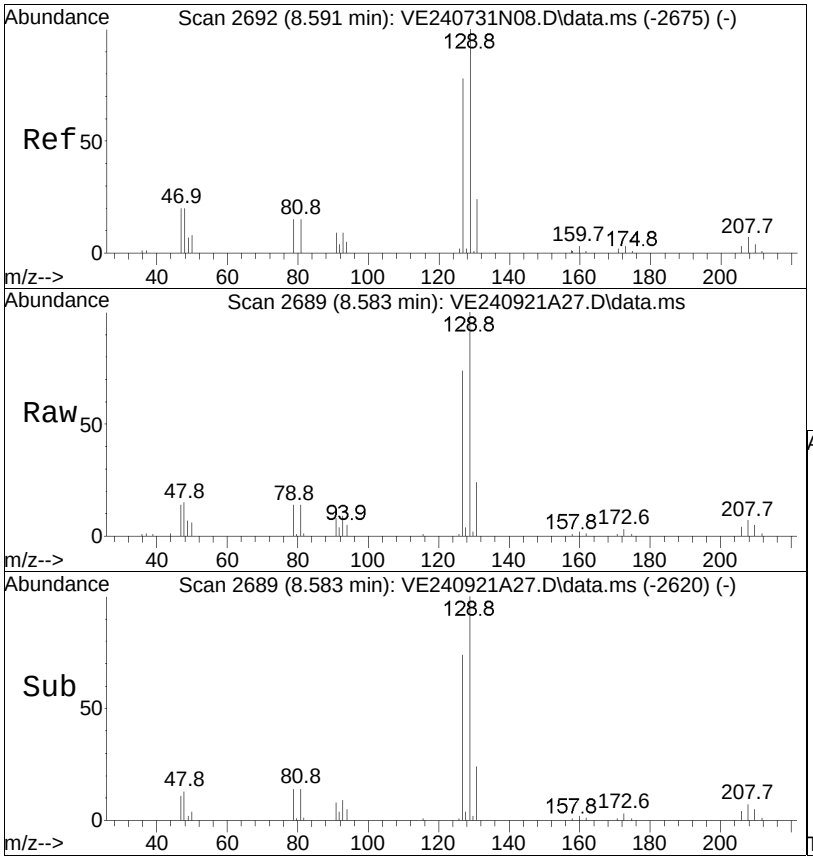



#72
1,1,2-Trichloroethane
Concen: 10.11 ug/L
RT: 8.379 min Scan# 2616
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 83 Resp: 37104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 97 | 122.4 | 99.2 | 139.2 |
| 85 | 66.4 | 48.7 | 88.7 |

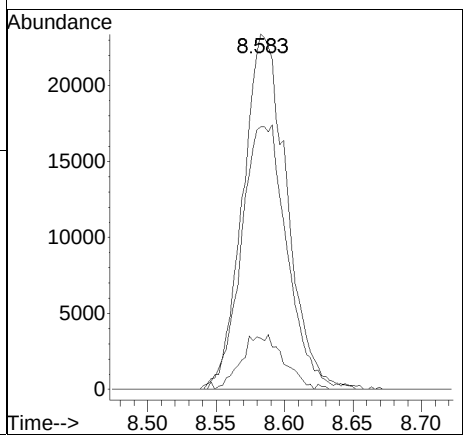


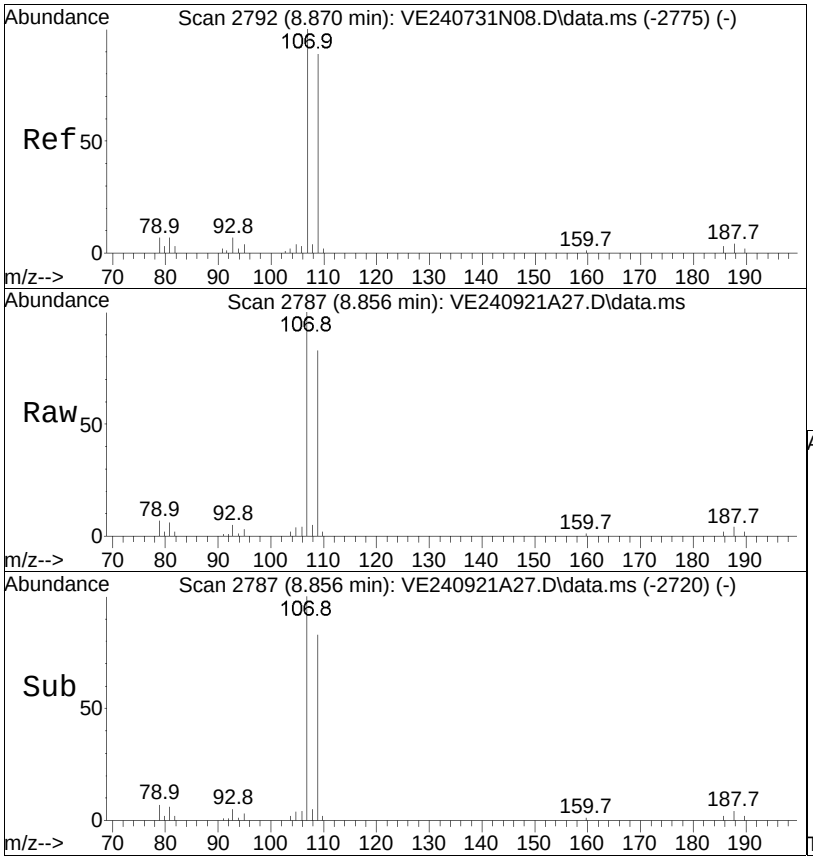



#73
Chlorodibromomethane
Concen: 10.20 ug/L
RT: 8.583 min Scan# 2689
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:129 Resp: 52315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 81 | 14.6 | 0.0 | 39.5 |
| 127 | 76.8 | 58.6 | 98.6 |

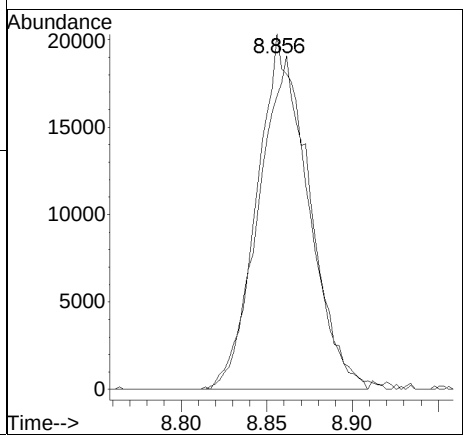


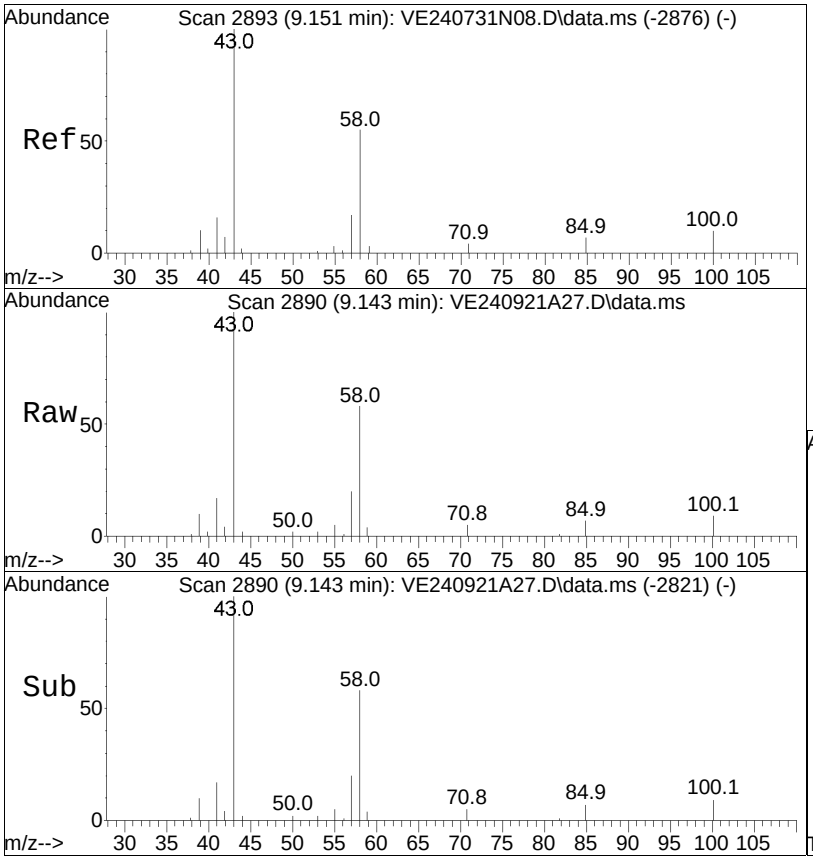



#75
1,2-Dibromoethane
Concen: 9.87 ug/L
RT: 8.856 min Scan# 2787
Delta R.T. -0.014 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:107 Resp: 42799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 92.6 | 66.3 | 99.5 |

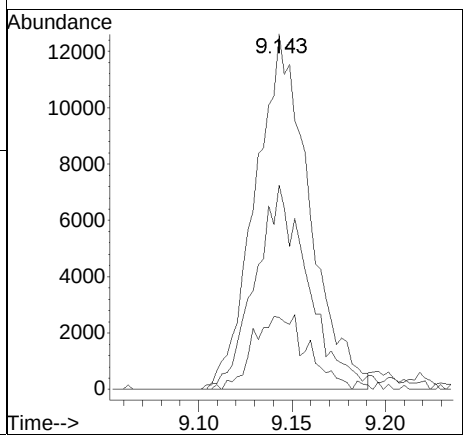


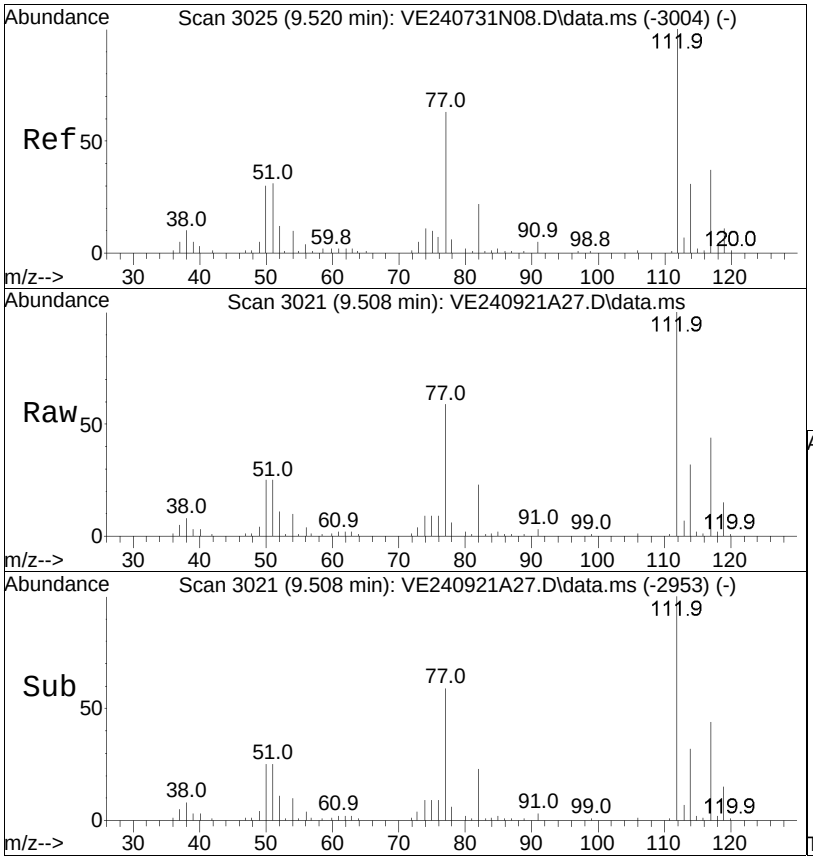



#77
2-Hexanone
Concen: 5.85 ug/L
RT: 9.143 min Scan# 2890
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 43 Resp: 25420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 55.7 | 42.5 | 63.7 |
| 57 | 21.1 | 13.9 | 20.9# |

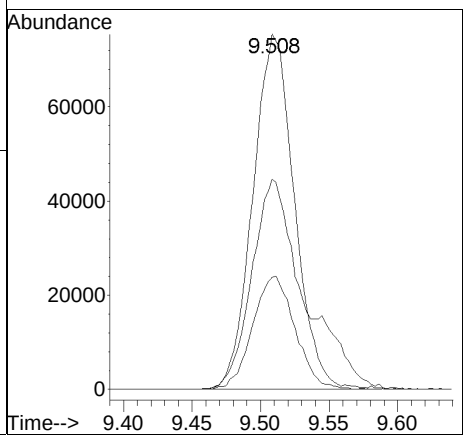


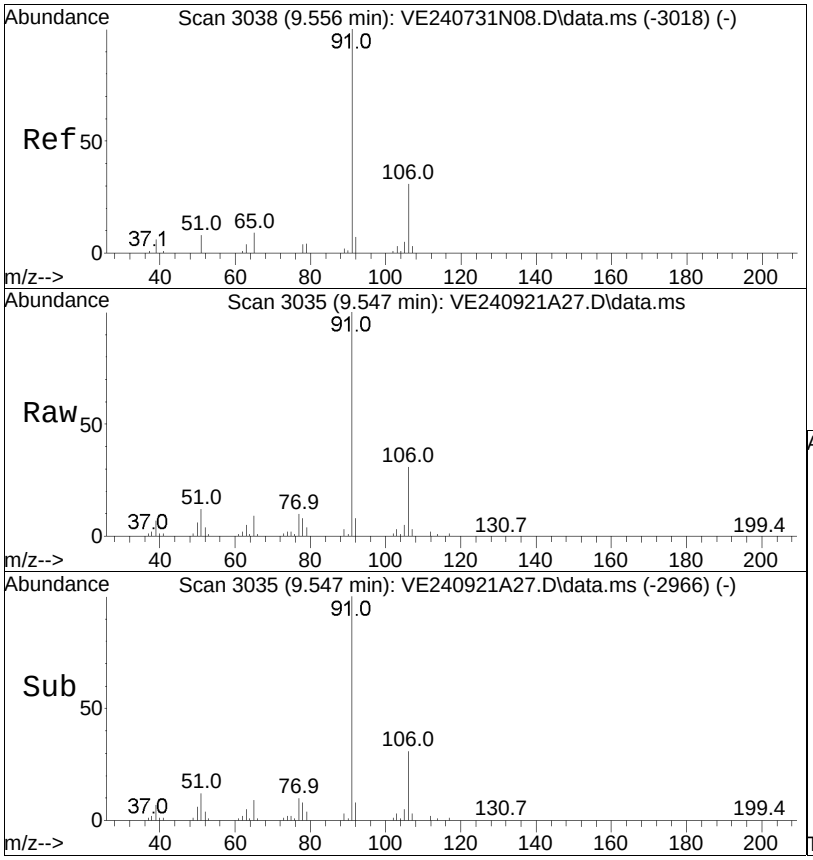



#78
Chlorobenzene
Concen: 11.41 ug/L
RT: 9.508 min Scan# 3021
Delta R.T. -0.012 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:112 Resp: 158919

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 77 | 64.0 | 46.9 | 70.3 |
| 114 | 32.5 | 23.8 | 35.6 |

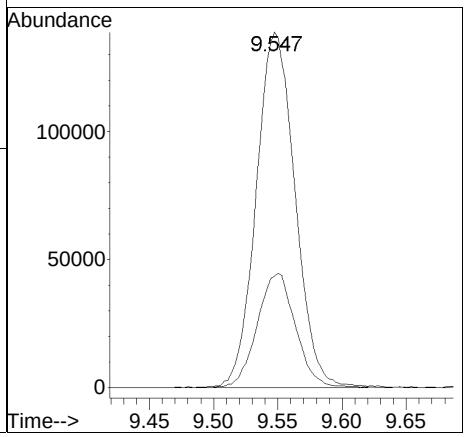


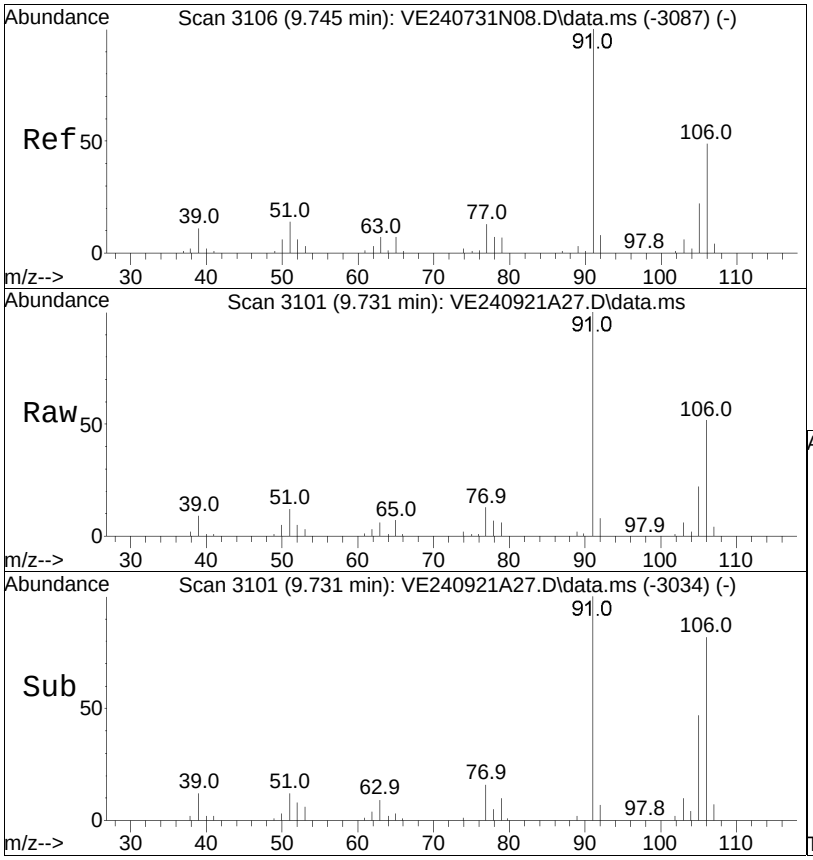



#79
Ethylbenzene
Concen: 11.53 ug/L
RT: 9.547 min Scan# 3035
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 91 Resp: 291940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.6 | 25.3 | 37.9 |

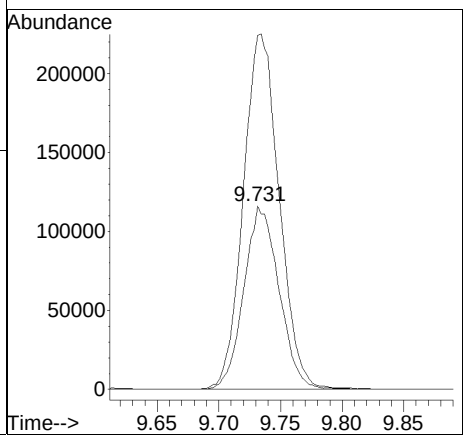


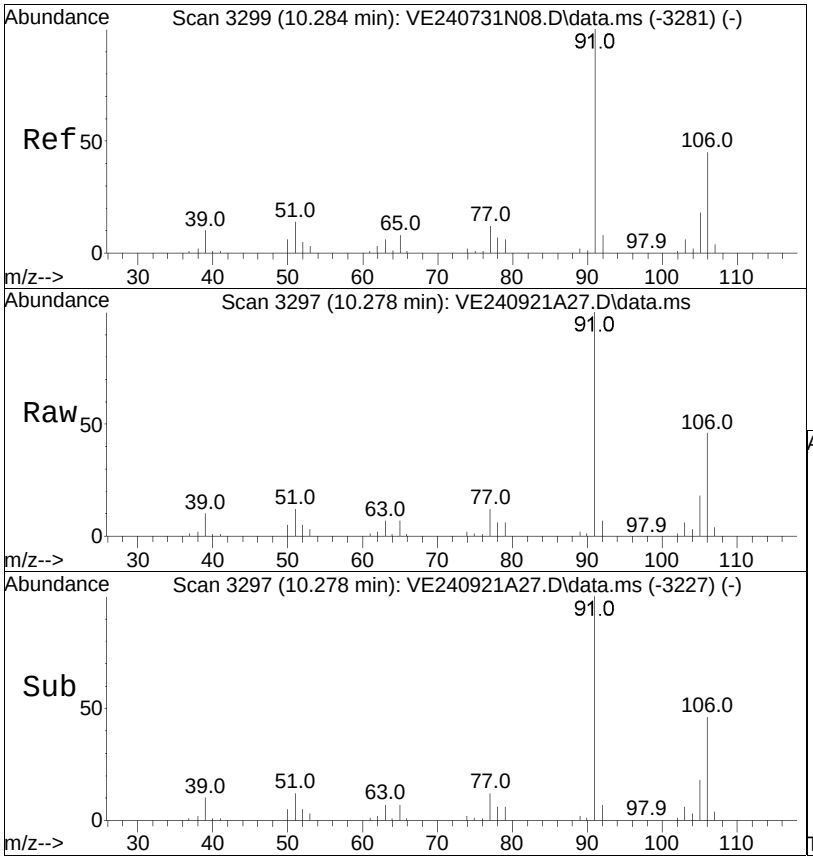



#81
p/m Xylene
Concen: 23.87 ug/L
RT: 9.731 min Scan# 3101
Delta R.T. -0.014 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:106 Resp: 230471

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 197.9 | 163.3 | 244.9 |

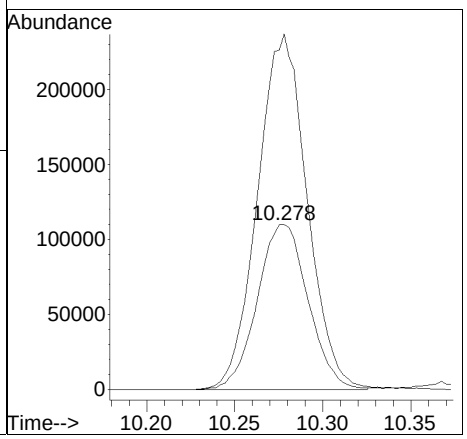


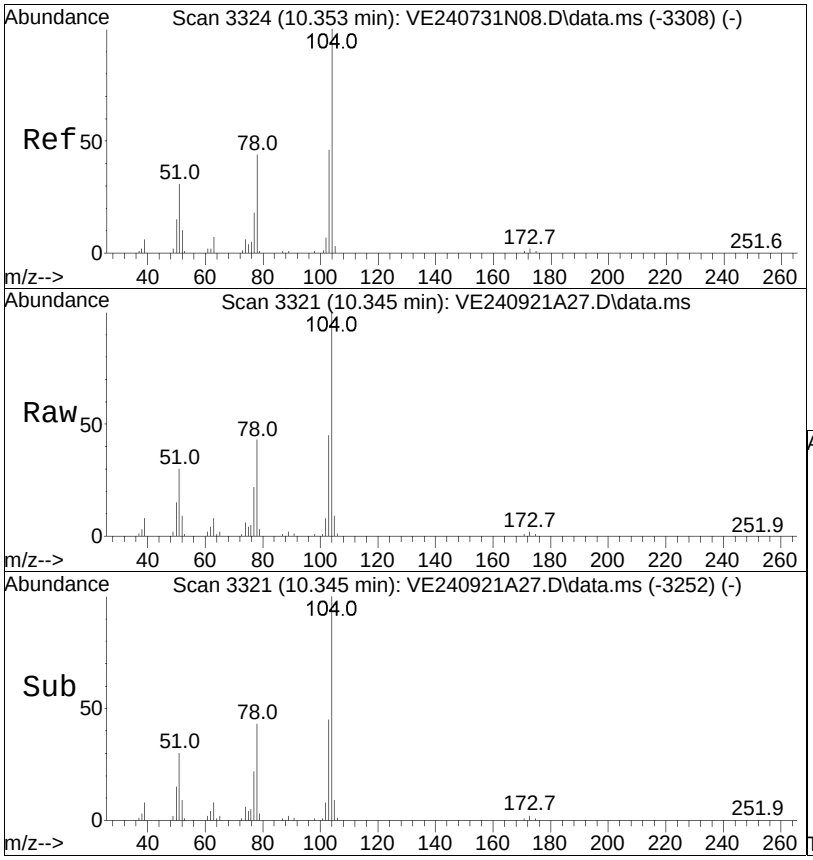



#82
o Xylene
Concen: 23.30 ug/L
RT: 10.278 min Scan# 3297
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:106 Resp: 220004

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.8 | 181.0 | 271.6 |

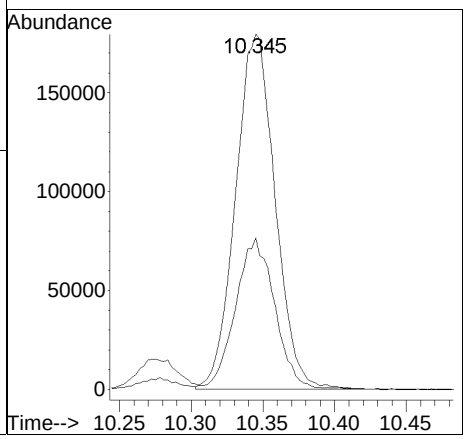


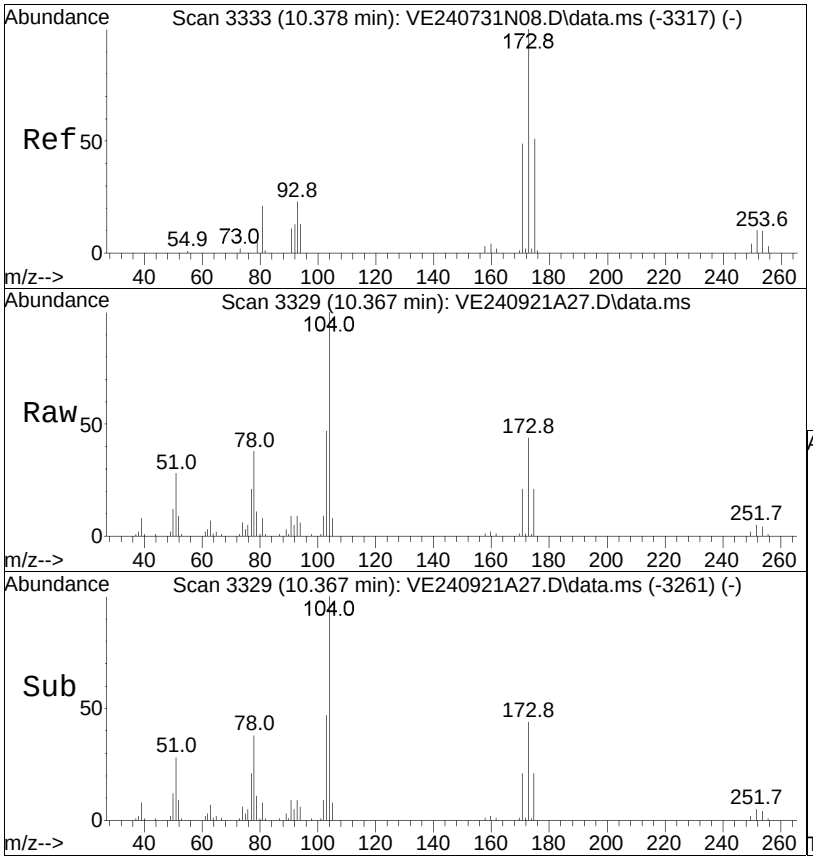



#83
Styrene
Concen: 22.26 ug/L
RT: 10.345 min Scan# 3321
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:104 Resp: 344663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 42.2 | 35.9 | 53.9 |

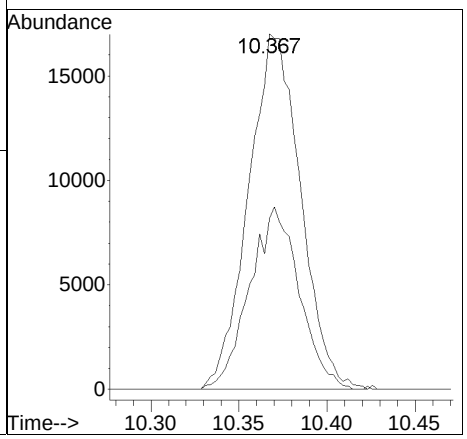


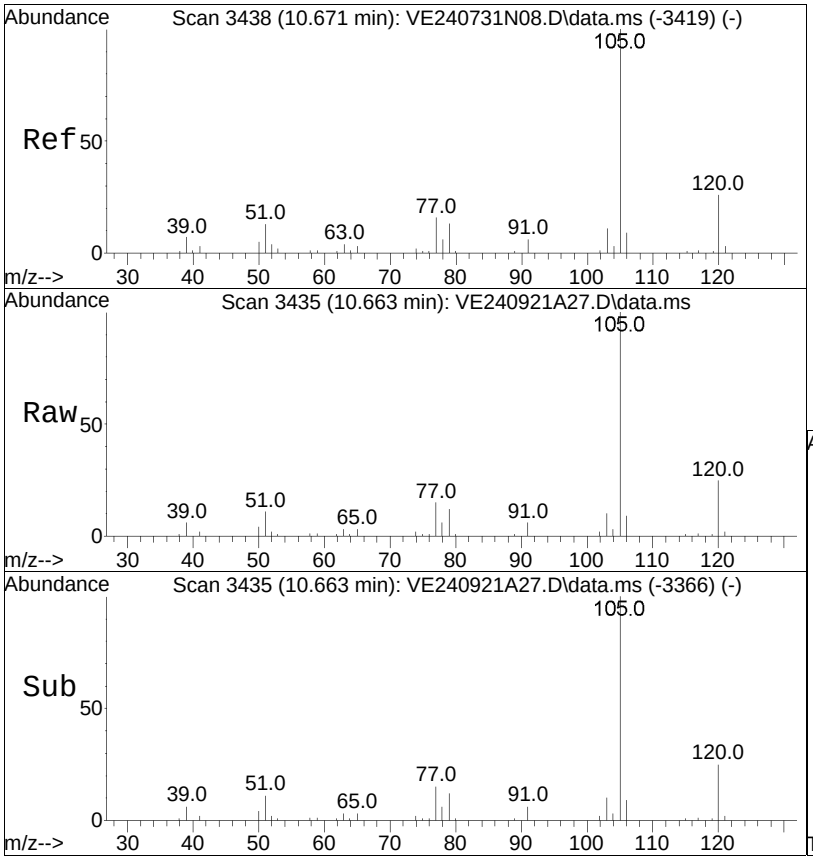



#85
Bromoform
Concen: 9.43 ug/L
RT: 10.367 min Scan# 3329
Delta R.T. -0.011 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:173 Resp: 34999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.0 | 32.9 | 72.9 |

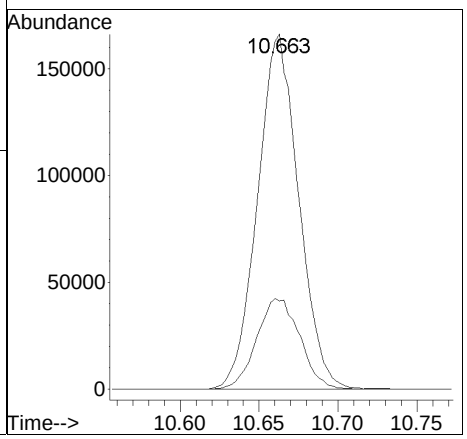


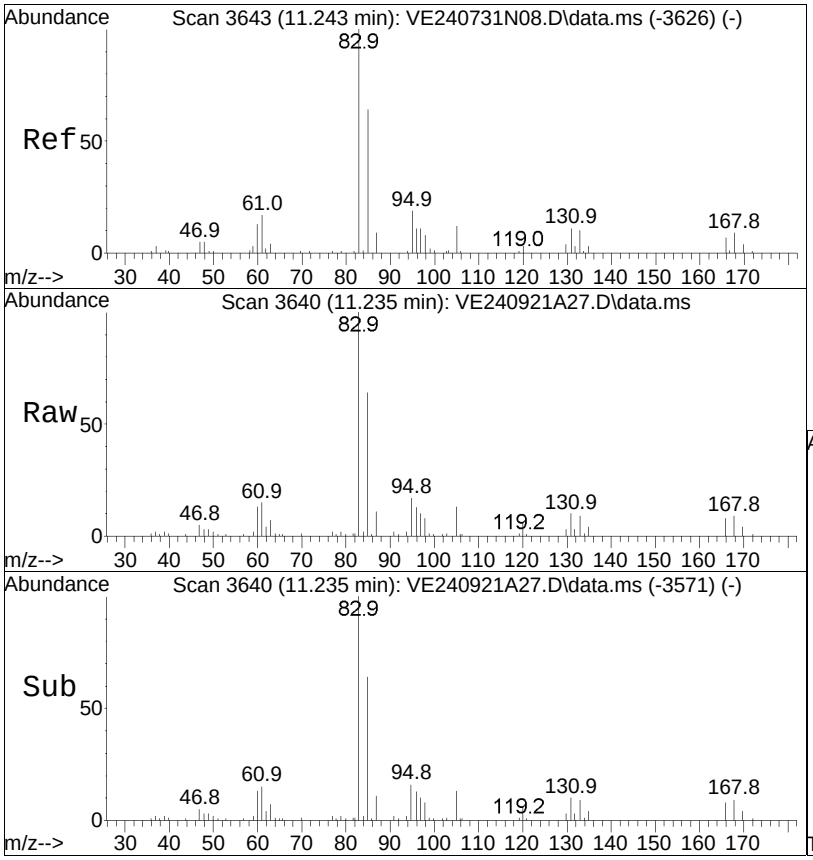



#87
Isopropylbenzene
Concen: 11.05 ug/L
RT: 10.663 min Scan# 3435
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:105 Resp: 301663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 4.8 | 44.8 |

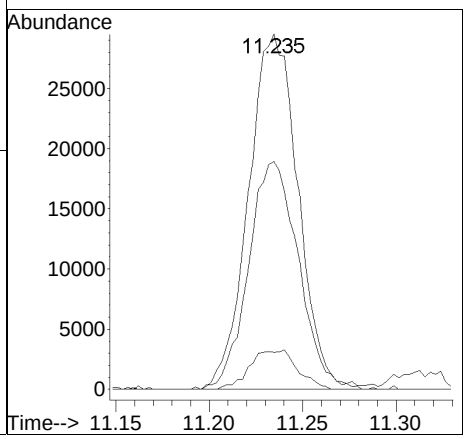


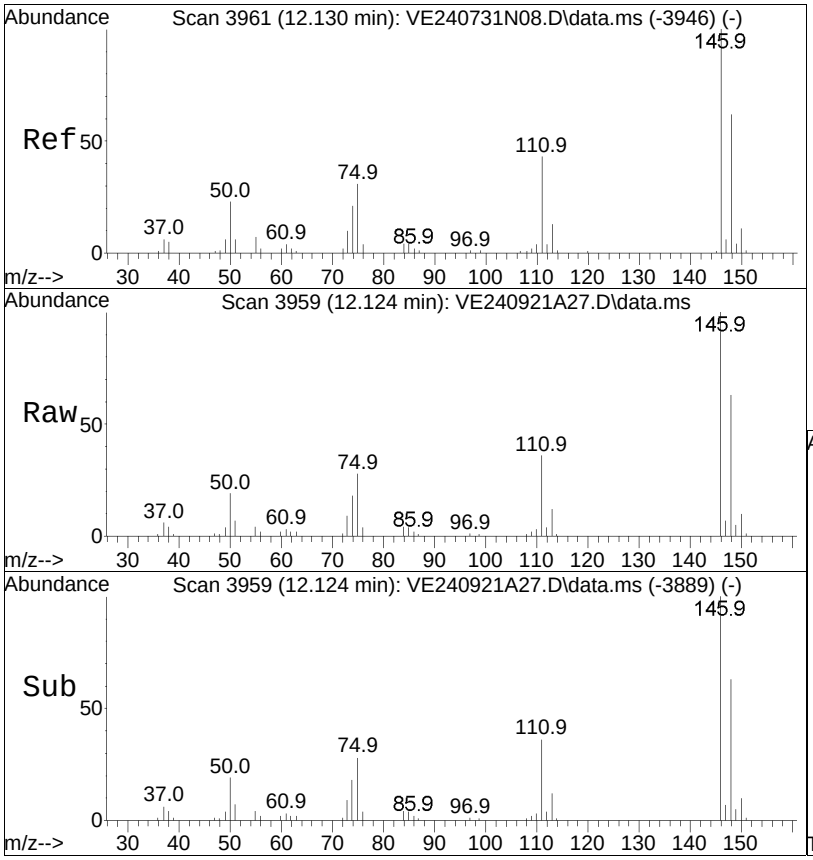



#92
1,1,2,2-Tetrachloroethane
Concen: 9.37 ug/L
RT: 11.235 min Scan# 3640
Delta R.T. -0.008 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion: 83 Resp: 54303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.6 | 0.0 | 28.6 |
| 85 | 65.1 | 47.4 | 87.4 |

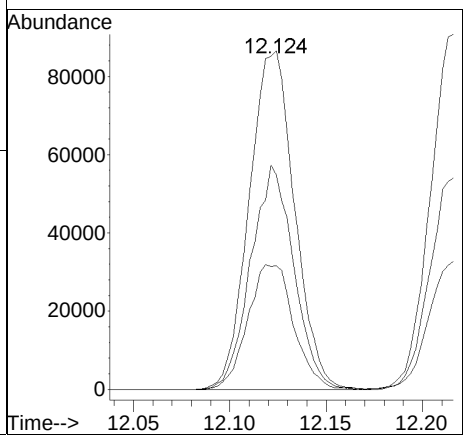


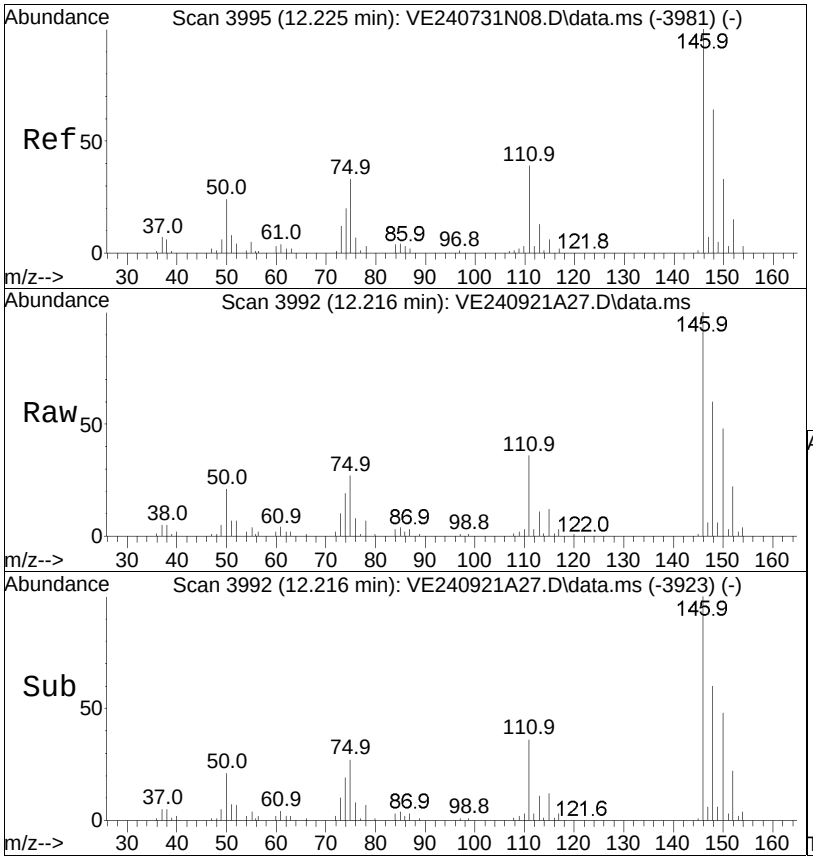



#105
1,3-Dichlorobenzene
Concen: 11.13 ug/L
RT: 12.124 min Scan# 3959
Delta R.T. -0.006 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:146 Resp: 141678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.4 | 27.9 | 57.9 |
| 148 | 62.7 | 42.4 | 88.2 |

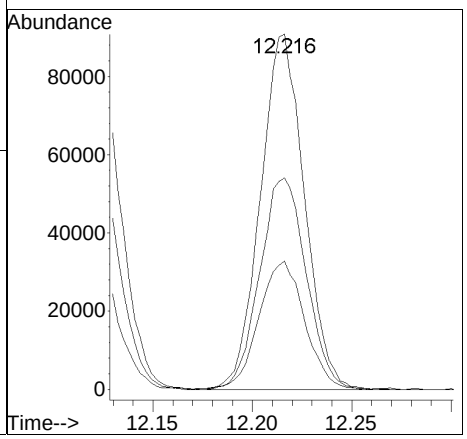


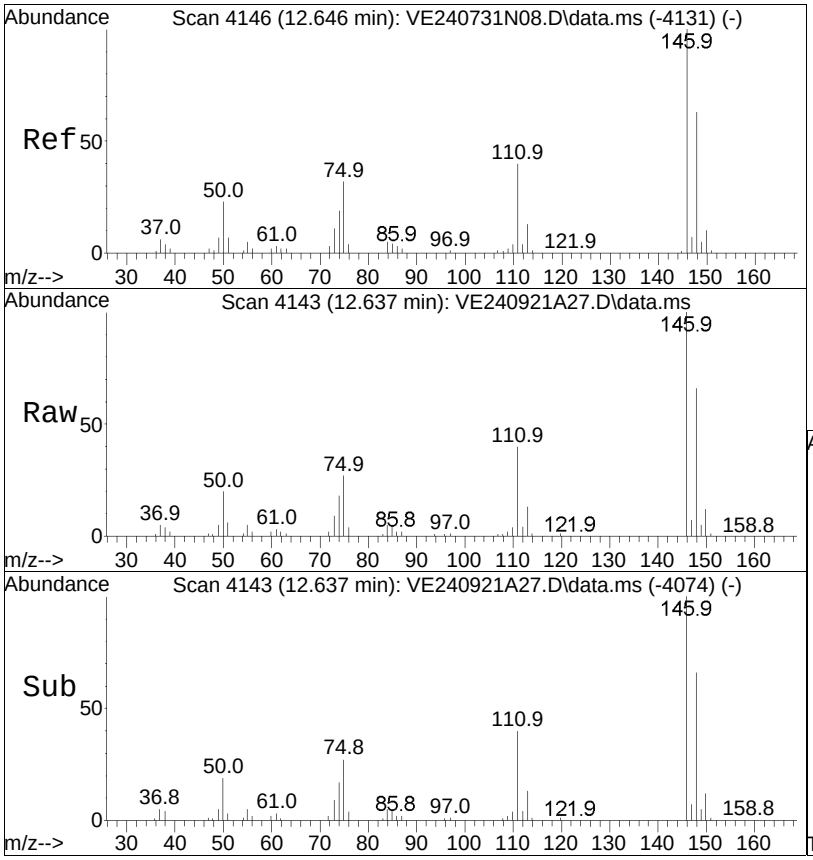



#106
1,4-Dichlorobenzene
Concen: 10.97 ug/L
RT: 12.216 min Scan# 3992
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:146 Resp: 139628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.7 | 31.4 | 47.0 |
| 148 | 62.8 | 49.8 | 74.8 |

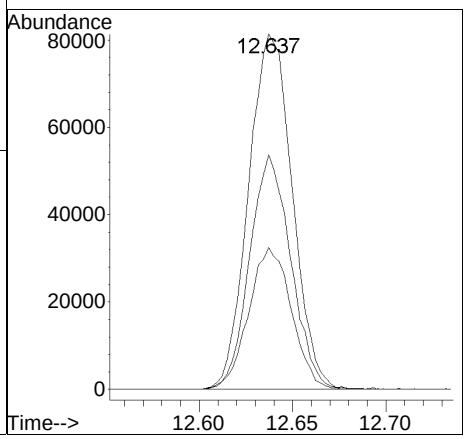


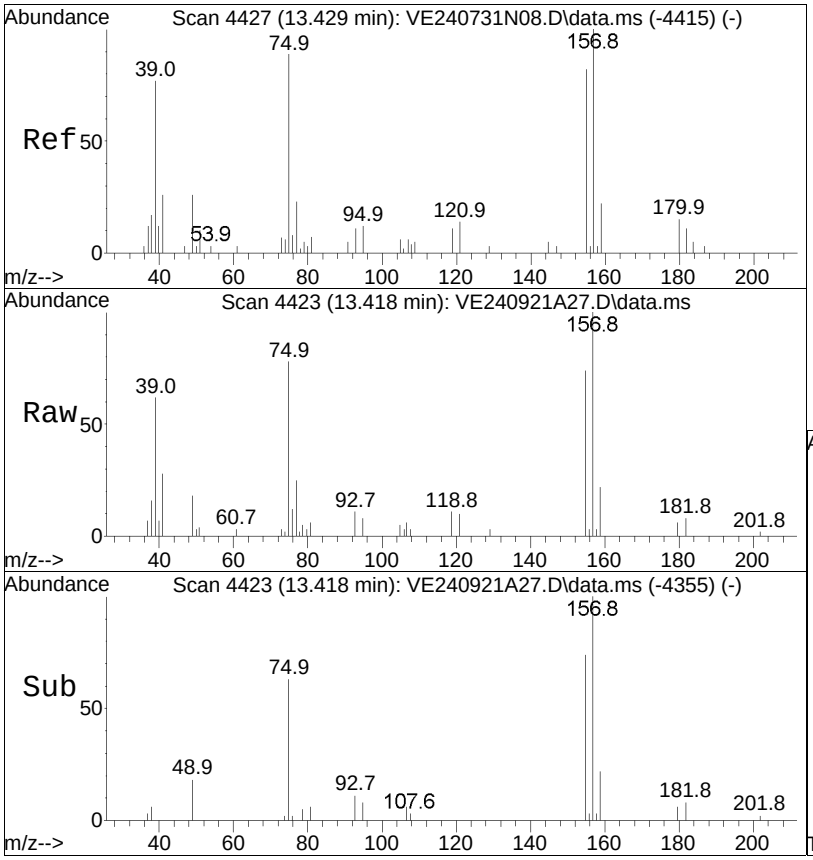



#109
1,2-Dichlorobenzene
Concen: 10.85 ug/L
RT: 12.637 min Scan# 4143
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:146 Resp: 132909

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.9 | 26.4 | 54.8 |
| 148 | 62.1 | 41.7 | 86.7 |

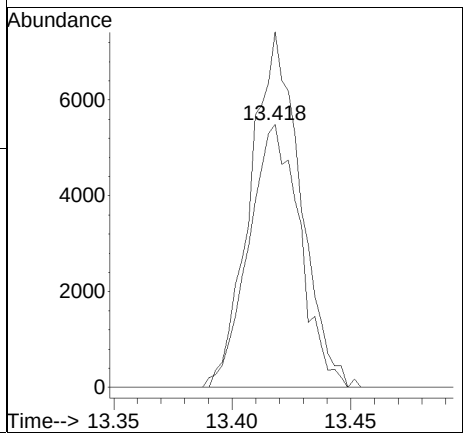


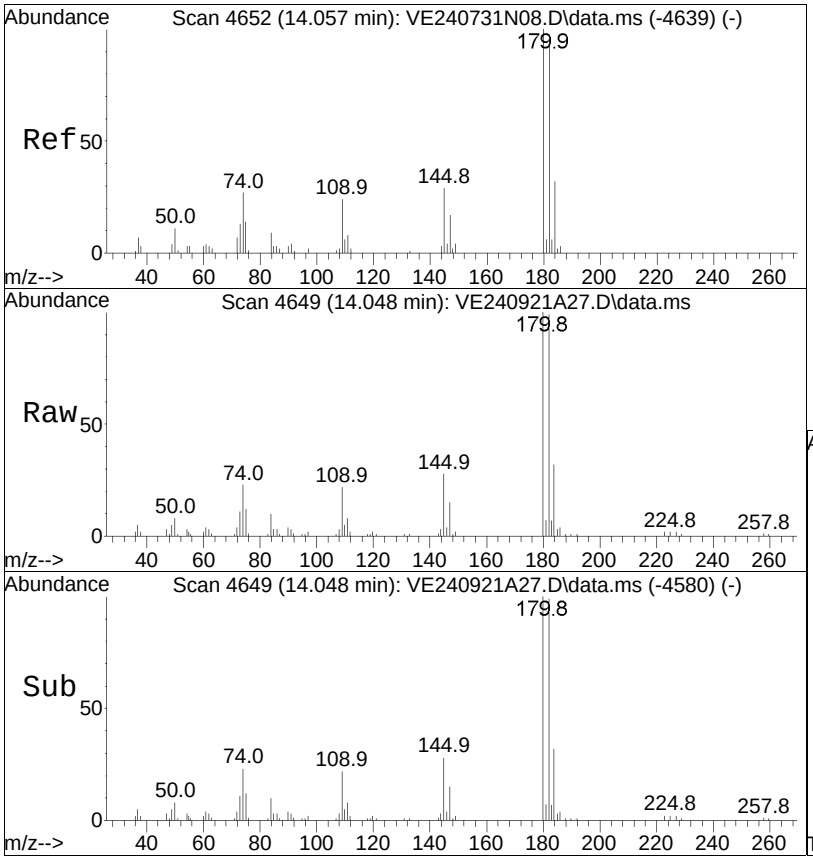



#111
1,2-Dibromo-3-chloropropane
Concen: 7.65 ug/L
RT: 13.418 min Scan# 4423
Delta R.T. -0.011 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:155 Resp: 8269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 155 | 100 | | |
| 157 | 131.7 | 95.1 | 142.7 |

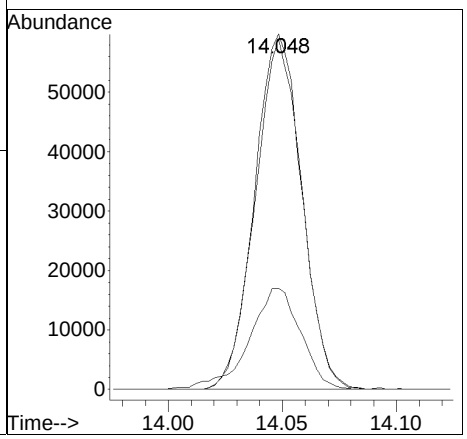


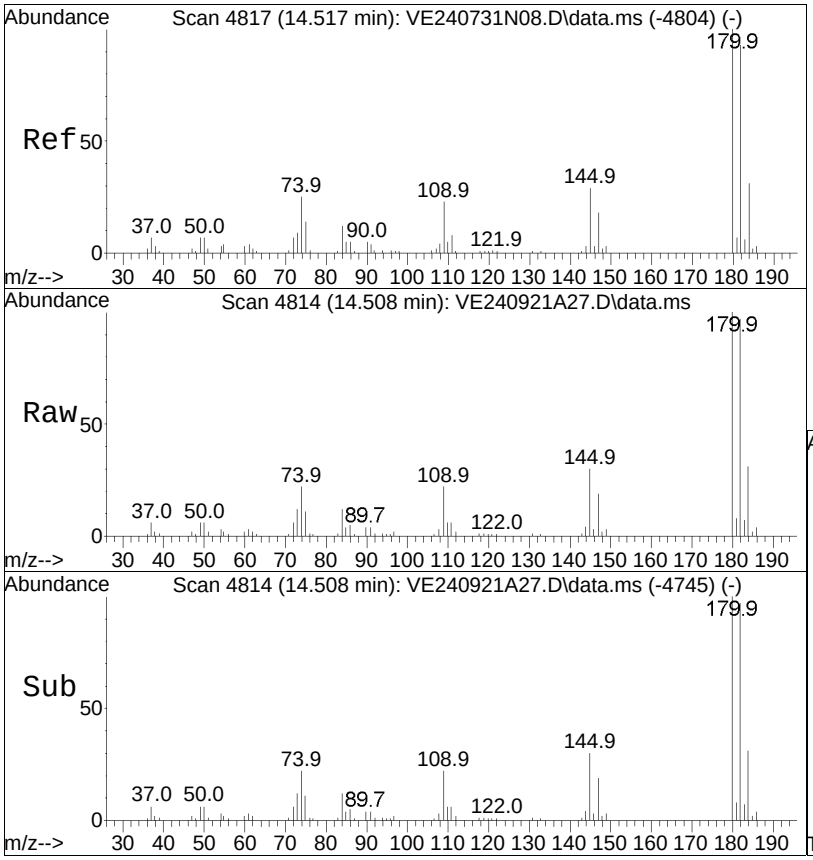



#114
1,2,4-Trichlorobenzene
Concen: 9.80 ug/L
RT: 14.048 min Scan# 4649
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:180 Resp: 86016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.5 | 75.4 | 113.2 |
| 145 | 31.1 | 26.0 | 39.0 |

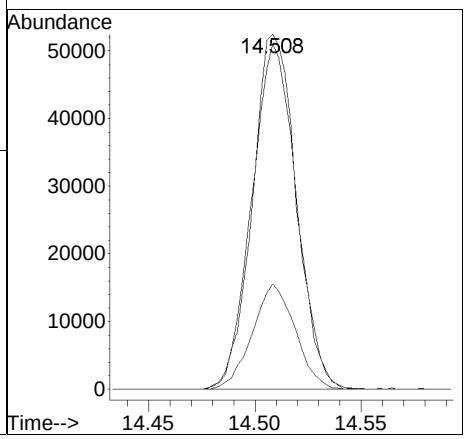





#116
1,2,3-Trichlorobenzene
Concen: 9.52 ug/L
RT: 14.508 min Scan# 4814
Delta R.T. -0.009 min
Lab File: VE240921A27.D
Acq: 21 Sep 2024 5:52 pm

Tgt Ion:180 Resp: 76813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.9 | 71.6 | 107.4 |
| 145 | 28.4 | 25.1 | 37.7 |

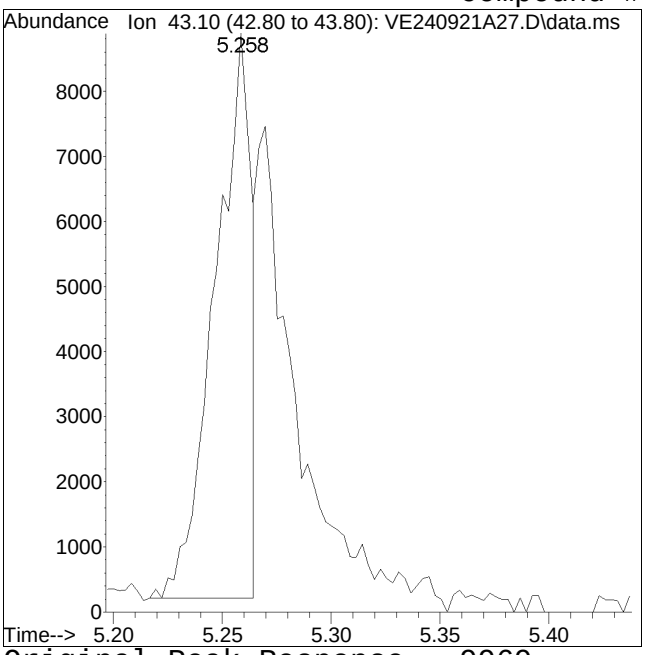


# Manual Integration Report

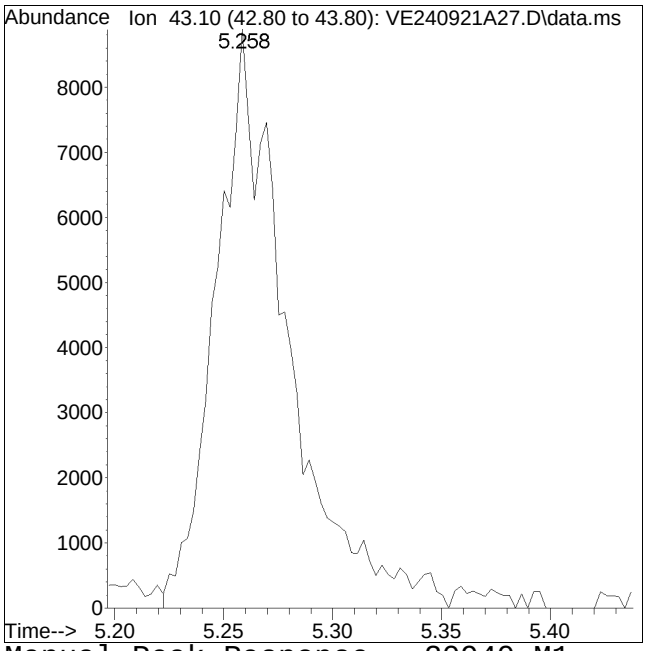
Data Path : K:\Elaine\2024\240921A\
Data File : VE240921A27.D
Date Inj'd : 9/21/2024 5:52 pm
Sample : WG1974948-7,31,10,10,,a2

QMethod : Elaine_240731N_8260.m
Operator : ELAINE:MJV
Instrument : Elaine
Quant Date : 9/23/2024 7:31 am

## Compound #42: 2-Butanone




Original Peak Response = 9969




Manual Peak Response = 20940 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * Uf * (1/Vo)

Where:
DF = Dilution Factor
Vo = Sample Volume Purged (mL)
Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: Amt * DF * (1/Wt)

Where:
DF = Dilution Factor
Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 23 2024, 12:55 pm

Work Group: WG1974932  for Department: 31 GC/MS - Volatiles

Created: 23-SEP-24  Due:  Operator: mjv

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2452702-01 | MW-1 | S | NYTCL-8260 | WATER | DONE | U | 0926 | 0920 | S0 | Vial-B |
| L2453053-06 | TRIP BLANK | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453366-01 | LMW-1 | S | NYTCL-8260-BTEX | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-02 | MW-2 | S | NYTCL-8260-BTEX | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-03 | MW-22 | S | NYTCL-8260 | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-04 | MW-69 | S | NYTCL-8260 | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-05 | MW-70 | S | NYTCL-8260 | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-06 | MW-92 | S | NYTCL-8260-BTEX | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-07 | MW-100 | S | NYTCL-8260 | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-09 | MW-104 | S | NYTCL-8260 | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-10 | MW-106 | S | NYTCL-8260-BTEX | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2453366-12 | RW-5 | S | NYTCL-8260-BTEX | WATER | SEC | U | 1001 | 0924 | S0 | Vial-B |
| L2454409-09 | B1-GW | S | NYTCL-8260 | WATER | DONE | U | 1004 | 0923 | 3A | Vial-B |
| WG1974932-1 | MS BFB Tune Standard | S | NYTCL-8260-BTEX | WATER | DACQ | U | | | | |
| WG1974932-1 | MS BFB Tune Standard | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974932-2 | Continuing Calibrati | S | NYTCL-8260-BTEX | WATER | DACQ | U | | | | |
| WG1974932-2 | Continuing Calibrati | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974932-3 | Laboratory Control S | S | NYTCL-8260-BTEX | WATER | DACQ | U | | | | |
| WG1974932-3 | Laboratory Control S | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974932-4 | LCS Duplicate | S | NYTCL-8260-BTEX | WATER | DACQ | U | | | | |
| WG1974932-4 | LCS Duplicate | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974932-5 | Laboratory Method Bl | S | NYTCL-8260-BTEX | WATER | DACQ | U | | | | |
| WG1974932-5 | Laboratory Method Bl | S | NYTCL-8260 | WATER | DONE | U | | | | |

Comments:

WG1974932-4  WG1974932-3

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 23 2024, 12:55 pm

Work Group: WG1974948  for Department: 31 GC/MS - Volatiles

Created: 23-SEP-24  Due:  Operator: mjv

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2452567-05 | MW0811-2-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-09 | OW-3-AOC-1-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-10 | OW-4-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-11 | OW-6/MW-3-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-12 | OW-7/MW-27-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-13 | PTOW1-1-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-14 | OW-5/MW-25-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-15 | OW-1-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-18 | OW-4/MW-28-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2452567-19 | OW-5-091224 | S | NYTCL-8260-R2 | WATER | DONE | U | 0926 | 0923 | S0 | Vial-B |
| L2453053-01 | MW-1SR | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453053-02 | MW-1DR2 | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453053-03 | MW-11S | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453053-04 | MW-11D | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453053-05 | DUP_091624 | S | NYTCL-8260 | WATER | DONE | U | 0930 | 0923 | S0 | Vial-B |
| L2453695-01 | 2024 0918 MW-3 | S | NYTCL-8260-R2 | WATER | DONE | U | 1002 | 0923 | 3C | Vial-B |
| L2453695-02 | 2024 0918 MW-2 | S | NYTCL-8260-R2 | WATER | DONE | U | 1002 | 0923 | 3C | Vial-B |
| WG1974948-1 | MS BFB Tune Standard | S | NYTCL-8260-R2 | WATER | DONE | U | | | | |
| WG1974948-1 | MS BFB Tune Standard | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974948-2 | Continuing Calibrati | S | NYTCL-8260-R2 | WATER | DONE | U | | | | |
| WG1974948-2 | Continuing Calibrati | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974948-3 | Laboratory Control S | S | NYTCL-8260 | WATER | DACQ | U | | | | |
| WG1974948-3 | Laboratory Control S | S | NYTCL-8260-R2 | WATER | DONE | U | | | | |
| WG1974948-4 | LCS Duplicate | S | NYTCL-8260-R2 | WATER | DONE | U | | | | |
| WG1974948-4 | LCS Duplicate | S | NYTCL-8260 | WATER | DACQ | U | | | | |
| WG1974948-5 | Laboratory Method Bl | S | NYTCL-8260 | WATER | DACQ | U | | | | |
| WG1974948-5 | Laboratory Method Bl | S | NYTCL-8260-R2 | WATER | DONE | U | | | | |
| WG1974948-6 | Matrix Spike | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974948-6 | Matrix Spike | S | NYTCL-8260-R2 | WATER | DACQ | U | | | | |
| WG1974948-7 | Matrix Spike Duplica | S | NYTCL-8260 | WATER | DONE | U | | | | |
| WG1974948-7 | Matrix Spike Duplica | S | NYTCL-8260-R2 | WATER | DACQ | U | | | | |

Comments:

| | |
|---|---|
| WG1974948-4 | WG1974948-3 |
| WG1974948-6 | L2453053-01 |
| WG1974948-7 | L2453053-01 |

Inst: Elaine
Initials: MAG
Date: **07/31/24**
Run: **N**

BFB: V10571
IS/SS: V10570
ICAL: V10561B,V10585
ICV: V10539, V10563, V10564, V10586, V10541, V10540

Method
GC: 8260
Autosampler: 8260
Concentrator: 8260

QC:_____ Seq:_____

| Vial | Data File | Sample | obs |
|---|---|---|---|
| 1 | VE240731NBF1 | BFB TUNE 17:25 | |
| 1 | VE240731N01 | BLK | |
| 2 | VE240731N02 | BLK | |
| 3 | VE240731N03 | I8260STD0.19PPB | |
| 4 | VE240731N04 | I8260STD0.19PPB | |
| 5 | VE240731N05 | I8260STD0.5PPB | |
| 6 | VE240731N06 | I8260STD0.5PPB | |
| 7 | VE240731N07 | I8260STD2PPB | |
| 8 | VE240731N08 | I8260STD10PPB | |
| 9 | VE240731N09 | I8260STD30PPB | |
| 10 | VE240731N10 | I8260STD80PPB | |
| 11 | VE240731N11 | I8260STD120PPB | |
| 12 | VE240731N12 | I8260STD200PPB | |
| 13 | VE240731N13 | BLK | |
| 14 | VE240731N14 | BLK | |
| 15 | VE240731N15 | BLK | |
| 16 | VE240731N16 | BLK | |
| 17 | VE240731N17 | C8260STD10PPB | |
| 18 | VE240731N18 | C8260STD10PPB | |
| 19 | VE240731N19 | BLK | |
| 20 | VE240731N20 | BLK | |
| 21 | VE240731N21 | METHOD BLK | |
| 22 | VE240731N22 | MDL LVL 11 | |
| 23 | VE240731N23 | MDL LVL 1 | |
| 24 | VE240731N24 | MDL LVL 2 | |
| 25 | VE240731N25 | BLK | |

Method

Inst: VOA105 BFB: V10618 GC: 8260

Initials: TMS IS/SS: V10637 Autosampler: 8260wate

Date: **09/06/24** ICAL: V10649B,V10651 Concentrator: 8260

Run: **N** ICV: V10652,V10620,V10621,V10638,V10653,V10654 QC:_____ Seq:_____

| Vial | Data File | Sample | |
|---|---|---|---|
| 1 | V05240906NBF1 | BFB TUNE | |
| 1 | V05240906N01 | BLK | |
| 2 | V05240906N02 | BLK | |
| 3 | V05240906N03 | I8260STD0.19PPB | |
| 4 | V05240906N04 | I8260STD0.19PPB | |
| 5 | V05240906N05 | I8260STD0.5PPB | |
| 6 | V05240906N06 | I8260STD0.5PPB | |
| 7 | V05240906N07 | I8260STD2PPB | |
| 8 | V05240906N08 | I8260STD2PPB | |
| 9 | V05240906N09 | I8260STD10PPB | |
| 10 | V05240906N10 | I8260STD30PPB | |
| 11 | V05240906N11 | I8260STD80PPB | |
| 12 | V05240906N12 | I8260STD120PPB | |
| 13 | V05240906N13 | I8260STD200PPB | |
| 14 | V05240906N14 | BLK | |
| 15 | V05240906N15 | BLK | |
| 16 | V05240906N16 | BLK | |
| 17 | V05240906N17 | BLK | |
| 18 | V05240906N18 | C8260STD10PPB | |
| 19 | V05240906N19 | C8260STD10PPB | |
| 20 | V05240906N20 | BLK | |
| 21 | V05240906N21 | BLK | |
| 22 | V05240906N22 | MDL 0.5PPB | |
| 23 | V05240906N23 | MDL 0.5PPB | |
| 24 | V05240906N24 | MDL 2PPB | |
| 25 | V05240906N25 | MDL 2PPB | |
| 26 | V05240906N26 | BLK | |

Method

Inst: VOA105 BFB: V10678 GC: 8260

Initials: PID IS/SS: V10670 Autosampler: 8260wate

Date: **09/22/24** ICAL: V10683A,V10679 Concentrator: 8260

Run: **A** QC:_____ Seq:_____

| Vial | Data File | Sample | | | |
|---|---|---|---|---|---|
| 1 | V05240922ABF1 | BFB TUNE 17:30 | | | |
| 1 | V05240922A01 | 8260 CCAL LCS | | | |
| 2 | V05240922A02 | 8260 CCAL LCSD | | | |
| 3 | V05240922A03 | 8260 CCAL | | | |
| 4 | V05240922A04 | BLK | | | |
| 5 | V05240922A05 | METHOD BLK | | | |
| 6 | V05240922A06 | I2454409-09,31,10,10,,a,r3a | NYTCL | | |
| 7 | V05240922A07 | I2453857-01,31,10,10,,a,r1b | PA8260CURVE | | |
| 8 | V05240922A08 | I2453857-02,31,10,10,,a,r1b | PA8260CURVE | | |
| 9 | V05240922A09 | I2453002-02,31,10,10,,a | NJ/15 | | |
| 10 | V05240922A10 | I2453002-01,31,10,10,,a | NJ/15 | | |
| 11 | V05240922A11 | I2453002-03,31,10,10,,a | NJ/15 | FB | |
| 12 | V05240922A12 | I2453002-04,31,10,10,,a | NJ/15 | TB | |
| 13 | V05240922A13 | I2453053-06,31,10,10,,a | NYCURVE | TB | |
| 14 | V05240922A14 | I2452702-01,31,10,10,,c | NYTCL | | |
| 15 | V05240922A15 | I2452787-03d,31,0.4,10,,c | NJ/NOTICs | WHITE,CLOUDY | pH>2 |
| 16 | V05240922A16 | BLK | | | |
| 17 | V05240922A17 | I2453366-03,31,10,10,,a | NYCURVE | | |
| 18 | V05240922A18 | I2453366-04,31,10,10,,a | NYCURVE | | |
| 19 | V05240922A19 | I2453366-05,31,10,10,,a | NYCURVE | | |
| 20 | V05240922A20 | I2453366-01,31,10,10,,a | NY/BTEX,MTBE | | |
| 21 | V05240922A21 | I2453366-02,31,10,10,,a | NY/BTEX,MTBE | | |
| 22 | V05240922A22 | I2453366-06d,31,5.0,10,,a | NY/BTEX,MTBE | SHEEN | pH<2 |
| 23 | V05240922A23 | I2453366-07d,31,5.0,10,,a | NYCURVE | SHEEN | pH<2 |
| 24 | V05240922A24 | I2453366-09,31,10,10,,a | NYCURVE | | |
| 25 | V05240922A25 | I2453366-10,31,10,10,,a | NY/BTEX,MTBE | | |
| 26 | V05240922A26 | I2453366-12,31,10,10,,a | NY/BTEX,MTBE | | |
| 27 | V05240922A27 | HSTD | | | |
| 28 | V05240922A28 | BLK | | | |
| 29 | V05240922A29 | BLK | | | |
| 30 | V05240922A30 | BLK | | | |
| 31 | V05240922A31 | BLK | | | |
| 32 | V05240922A32 | BLK | | | |

Inst: Elaine
Initials: LAC
Date: **09/21/24**
Run: **A**

BFB: V10678
IS/SS: V10670
ICAL: V10649C,V10679

Method
GC: 8260
Autosampler: 8260
Concentrator: 8260

QC:_____ Seq:_____

| Vial | Data File | Sample | | | obs |
|---|---|---|---|---|---|
| 1 | VE240921BF2 | BFB TUNE | | | |
| 1 | VE240921A01 | 8260 CCAL | | | |
| 2 | VE240921A02 | 8260 CCAL | | | |
| 3 | VE240921A03 | 8260 CCAL | | | |
| 4 | VE240921A04 | BLK | | | |
| 5 | VE240921A05 | METHOD BLK | | | |
| 6 | VE240921A06 | I2453695-01,31,10,10,,a | NYTCL CURVE | HS | pH<2 |
| 7 | VE240921A07 | I2453695-02,31,10,10,,a | NYTCL CURVE | HS | pH<2 |
| 8 | VE240921A08 | L2453695-03,31,10.0,10,,A,R3C | NYTCL CURVE | HS,SED | pH>2 |
| 9 | VE240921A09 | I2453053-01,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 10 | VE240921A10 | I2453053-02,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 11 | VE240921A11 | I2453053-03,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 12 | VE240921A12 | I2453053-04,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 13 | VE240921A13 | I2453053-05,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 14 | VE240921A14 | I2452567-05,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 15 | VE240921A15 | I2452567-09,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 16 | VE240921A16 | I2452567-10,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 17 | VE240921A17 | I2452567-11,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 18 | VE240921A18 | I2452567-12,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 19 | VE240921A19 | I2452567-13,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 20 | VE240921A20 | I2452567-14,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 21 | VE240921A21 | I2452567-15,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 22 | VE240921A22 | I2452567-16,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 23 | VE240921A23 | I2452567-18,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 24 | VE240921A24 | I2452567-19,31,10,10,,a | NYTCL CURVE | | pH<2 |
| 25 | VE240921A25 | L2452567-17d,31,1.0,10,,A | NYTCL CURVE | | pH<2 |
| 26 | VE240921A26 | I2453053-01MS,31,10,10,,a1 | NYTCL CURVE | | pH<2 |
| 27 | VE240921A27 | I2453053-01MSD,31,10,10,,a2 | NYTCL CURVE | | pH<2 |
| 28 | VE240921A28 | HSTD | | | |
| 29 | VE240921A29 | BLK | | | |
| 30 | VE240921A30 | BLK | | | |

# Semivolatiles Data- Method 8270

# Semivolatiles QC Summary

# Surrogate Recovery Summary
# Form 2
# Semivolatiles

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Water**

| CLIENT ID (LAB SAMPLE NO.) | S1 (2FP) | S2 (PHL) | S3 (NBZ) | S4 (FBP) | S5 (TBP) | S6 (TPH) | TOT OUT |
|---|---|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 19* | 19 | 76 | 70 | 28 | 80 | 1 |
| MW-1DR2 (L2453053-02) | 49 | 30 | 64 | 62 | 68 | 73 | 0 |
| MW-11S (L2453053-03) | 32 | 28 | 75 | 75 | 53 | 81 | 0 |
| MW-11D (L2453053-04) | 55 | 36 | 71 | 73 | 73 | 79 | 0 |
| DUP_091624 (L2453053-05) | 11* | 14 | 57 | 56 | 25 | 61 | 1 |
| WG1974465-1BLANK | 54 | 34 | 74 | 76 | 76 | 84 | 0 |
| WG1974465-2LCS | 16* | 19 | 74 | 71 | 26 | 82 | 1 |
| WG1974465-3LCSD | 61 | 42 | 73 | 74 | 86 | 84 | 0 |
| MW-1SRMS | 63 | 41 | 85 | 81 | 85 | 86 | 0 |
| MW-1SRMSD | 47 | 37 | 73 | 71 | 78 | 76 | 0 |

**QC LIMITS**

(21-120) 2FP = 2-FLUOROPHENOL
(10-120) PHL = PHENOL-D6
(23-120) NBZ = NITROBENZENE-D5
(15-120) FBP = 2-FLUOROBIPHENYL
(10-120) TBP = 2,4,6-TRIBROMOPHENOL
(41-149) TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

# Laboratory Control Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974465-2 Analysis Date : 09/21/24 11:56 | **File ID** | : 974465-2 |
| **LCSD Sample ID** | : WG1974465-3 Analysis Date : 09/21/24 12:20 | **File ID** | : 974465-3 |

| | Laboratory Control Sample | | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | | True (ug/l) | Found (ug/l) | %R | | RPD | Recovery Limits | RPD Limit |
| 3,3'-Dichlorobenzidine | 20 | 18. | 88 | | 20 | 16. | 82 | | 7 | 40-140 | 30 |
| 2,4-Dinitrotoluene | 20 | 17. | 85 | | 20 | 18. | 88 | | 3 | 48-143 | 30 |
| 2,6-Dinitrotoluene | 20 | 18. | 89 | | 20 | 20. | 99 | | 11 | 40-140 | 30 |
| 4-Chlorophenyl phenyl ether | 20 | 17. | 86 | | 20 | 18. | 89 | | 3 | 40-140 | 30 |
| 4-Bromophenyl phenyl ether | 20 | 18. | 90 | | 20 | 19. | 96 | | 6 | 40-140 | 30 |
| Bis(2-chloroisopropyl)ether | 20 | 5.7 | 28 | Q | 20 | 5.9 | 29 | Q | 4 | 40-140 | 30 |
| Bis(2-chloroethoxy)methane | 20 | 16. | 81 | | 20 | 18. | 89 | | 9 | 40-140 | 30 |
| Hexachlorocyclopentadiene | 20 | 13. | 64 | | 20 | 14. | 69 | | 8 | 40-140 | 30 |
| Isophorone | 20 | 16. | 82 | | 20 | 18. | 90 | | 9 | 40-140 | 30 |
| Nitrobenzene | 20 | 16. | 79 | | 20 | 17. | 85 | | 7 | 40-140 | 30 |
| NDPA/DPA | 20 | 17. | 85 | | 20 | 17. | 85 | | 0 | 40-140 | 30 |
| n-Nitrosodi-n-propylamine | 20 | 16. | 78 | | 20 | 18. | 92 | | 16 | 29-132 | 30 |
| Bis(2-ethylhexyl)phthalate | 20 | 17. | 87 | | 20 | 19. | 94 | | 8 | 40-140 | 30 |
| Butyl benzyl phthalate | 20 | 20. | 99 | | 20 | 20. | 99 | | 0 | 40-140 | 30 |
| Di-n-butylphthalate | 20 | 19. | 95 | | 20 | 20. | 99 | | 4 | 40-140 | 30 |
| Di-n-octylphthalate | 20 | 18. | 89 | | 20 | 19. | 95 | | 7 | 40-140 | 30 |
| Diethyl phthalate | 20 | 18. | 90 | | 20 | 19. | 93 | | 3 | 40-140 | 30 |
| Dimethyl phthalate | 20 | 19. | 94 | | 20 | 19. | 94 | | 0 | 40-140 | 30 |
| Biphenyl | 20 | 14. | 72 | | 20 | 16. | 80 | | 11 | 40-140 | 30 |
| 4-Chloroaniline | 20 | 9.9 | 49 | | 20 | 11. | 54 | | 10 | 40-140 | 30 |
| 2-Nitroaniline | 20 | 18. | 91 | | 20 | 19. | 97 | | 6 | 52-143 | 30 |
| 3-Nitroaniline | 20 | 18. | 92 | | 20 | 17. | 85 | | 8 | 25-145 | 30 |
| 4-Nitroaniline | 20 | 18. | 92 | | 20 | 19. | 93 | | 1 | 51-143 | 30 |
| Dibenzofuran | 20 | 16. | 78 | | 20 | 16. | 80 | | 3 | 40-140 | 30 |
| 1,2,4,5-Tetrachlorobenzene | 20 | 14. | 71 | | 20 | 15. | 77 | | 8 | 2-134 | 30 |
| Acetophenone | 20 | 16. | 79 | | 20 | 17. | 87 | | 10 | 39-129 | 30 |

# Laboratory Control Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974465-2 **Analysis Date** : 09/21/24 11:56 | **File ID** | : 974465-2 |
| **LCSD Sample ID** | : WG1974465-3 **Analysis Date** : 09/21/24 12:20 | **File ID** | : 974465-3 |

| | Laboratory Control Sample | | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| 2,4,6-Trichlorophenol | 20 | 4.3 | 21 | Q | 20 | 19. | 94 | 127 Q | 30-130 | 30 |
| p-Chloro-m-cresol | 20 | 15. | 76 | | 20 | 20. | 100 Q | 27 | 23-97 | 30 |
| 2-Chlorophenol | 20 | 5.5 | 28 | | 20 | 18. | 89 | 104 Q | 27-123 | 30 |
| 2,4-Dichlorophenol | 20 | 6.0 | 30 | | 20 | 19. | 96 | 105 Q | 30-130 | 30 |
| 2,4-Dimethylphenol | 20 | 15. | 76 | | 20 | 16. | 82 | 8 | 30-130 | 30 |
| 2-Nitrophenol | 20 | 4.9 | 24 | Q | 20 | 18. | 90 | 116 Q | 30-130 | 30 |
| 4-Nitrophenol | 20 | 1.8 | 9 | Q | 20 | 9.9 | 50 | 138 Q | 10-80 | 30 |
| 2,4-Dinitrophenol | 20 | 2.0 | 10 | Q | 20 | 17. | 85 | 158 Q | 20-130 | 30 |
| 4,6-Dinitro-o-cresol | 20 | 5.6 | 28 | | 20 | 21. | 105 | 116 Q | 20-164 | 30 |
| Phenol | 20 | 5.0 | 25 | | 20 | 10. | 52 | 70 Q | 12-110 | 30 |
| 2-Methylphenol | 20 | 14. | 69 | | 20 | 18. | 88 | 24 | 30-130 | 30 |
| 3-Methylphenol/4-Methylphenol | 20 | 13. | 64 | | 20 | 18. | 88 | 32 Q | 30-130 | 30 |
| 2,4,5-Trichlorophenol | 20 | 5.0 | 25 | Q | 20 | 20. | 100 | 120 Q | 30-130 | 30 |
| Carbazole | 20 | 18. | 88 | | 20 | 18. | 88 | 0 | 55-144 | 30 |
| Atrazine | 20 | 16. | 80 | | 20 | 16. | 80 | 0 | 40-140 | 30 |
| Benzaldehyde | 20 | 14. | 72 | | 20 | 16. | 80 | 11 | 40-140 | 30 |
| Caprolactam | 20 | 3.6 | 18 | | 20 | 3.5 | 18 | 0 | 10-130 | 30 |

# Matrix Spike Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 15:29 |
| **Matrix Spike** | : WG1974465-4 | **MS Analysis Date** | : 09/21/24 15:53 |
| **Matrix Spike Dup** | : WG1974465-5 | **MSD Analysis Date** | : 09/21/24 16:17 |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (ug/l)** | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | | **RPD** | **Recovery Limits** | **RPD Limit** |
| 3,3'-Dichlorobenzidine | ND | 20 | 16. | 80 | | 20 | 15. | 75 | | 6 | 40-140 | 30 |
| 2,4-Dinitrotoluene | ND | 20 | 18. | 90 | | 20 | 17. | 85 | | 6 | 48-143 | 30 |
| 2,6-Dinitrotoluene | ND | 20 | 22. | 110 | | 20 | 17. | 85 | | 26 | 40-140 | 30 |
| 4-Chlorophenyl phenyl ether | ND | 20 | 18. | 90 | | 20 | 16. | 80 | | 12 | 40-140 | 30 |
| 4-Bromophenyl phenyl ether | ND | 20 | 19. | 95 | | 20 | 17. | 85 | | 11 | 40-140 | 30 |
| Bis(2-chloroisopropyl)ether | ND | 20 | 6.3 | 32 | Q | 20 | 5.5 | 28 | Q | 14 | 40-140 | 30 |
| Bis(2-chloroethoxy)methane | ND | 20 | 18. | 90 | | 20 | 14. | 70 | | 25 | 40-140 | 30 |
| Hexachlorocyclopentadiene | ND | 20 | 16.J | 80 | | 20 | 14.J | 70 | | 13 | 40-140 | 30 |
| Isophorone | ND | 20 | 19. | 95 | | 20 | 16. | 80 | | 17 | 40-140 | 30 |
| Nitrobenzene | ND | 20 | 18. | 90 | | 20 | 16. | 80 | | 12 | 40-140 | 30 |
| NDPA/DPA | ND | 20 | 19. | 95 | | 20 | 16. | 80 | | 17 | 40-140 | 30 |
| n-Nitrosodi-n-propylamine | ND | 20 | 18. | 90 | | 20 | 17. | 85 | | 6 | 29-132 | 30 |
| Bis(2-ethylhexyl)phthalate | ND | 20 | 19. | 95 | | 20 | 17. | 85 | | 11 | 40-140 | 30 |
| Butyl benzyl phthalate | ND | 20 | 21. | 110 | | 20 | 18. | 90 | | 15 | 40-140 | 30 |
| Di-n-butylphthalate | ND | 20 | 21. | 110 | | 20 | 19. | 95 | | 10 | 40-140 | 30 |
| Di-n-octylphthalate | ND | 20 | 19. | 95 | | 20 | 18. | 90 | | 5 | 40-140 | 30 |
| Diethyl phthalate | ND | 20 | 19. | 95 | | 20 | 16. | 80 | | 17 | 40-140 | 30 |
| Dimethyl phthalate | ND | 20 | 21. | 110 | | 20 | 18. | 90 | | 15 | 40-140 | 30 |
| Biphenyl | ND | 20 | 18. | 90 | | 20 | 15. | 75 | | 18 | 40-140 | 30 |
| 4-Chloroaniline | ND | 20 | 12. | 60 | | 20 | 11. | 55 | | 9 | 40-140 | 30 |
| 2-Nitroaniline | ND | 20 | 22. | 110 | | 20 | 18. | 90 | | 20 | 52-143 | 30 |
| 3-Nitroaniline | ND | 20 | 18. | 90 | | 20 | 17. | 85 | | 6 | 25-145 | 30 |

# Matrix Spike Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 15:29 |
| **Matrix Spike** | : WG1974465-4 | **MS Analysis Date** | : 09/21/24 15:53 |
| **Matrix Spike Dup** | : WG1974465-5 | **MSD Analysis Date** | : 09/21/24 16:17 |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| 4-Nitroaniline | ND | 20 | 20. | 100 | | 20 | 17. | 85 | 16 | 51-143 | 30 |
| Dibenzofuran | ND | 20 | 17. | 85 | | 20 | 15. | 75 | 13 | 40-140 | 30 |
| 1,2,4,5-Tetrachlorobenzene | ND | 20 | 17. | 85 | | 20 | 14. | 70 | 19 | 2-134 | 30 |
| Acetophenone | ND | 20 | 17. | 85 | | 20 | 15. | 75 | 13 | 39-129 | 30 |
| 2,4,6-Trichlorophenol | ND | 20 | 22. | 110 | | 20 | 19. | 95 | 15 | 30-130 | 30 |
| p-Chloro-m-cresol | ND | 20 | 22. | 110 | Q | 20 | 17. | 85 | 26 | 23-97 | 30 |
| 2-Chlorophenol | ND | 20 | 17. | 85 | | 20 | 14. | 70 | 19 | 27-123 | 30 |
| 2,4-Dichlorophenol | ND | 20 | 20. | 100 | | 20 | 16. | 80 | 22 | 30-130 | 30 |
| 2,4-Dimethylphenol | ND | 20 | 18. | 90 | | 20 | 14. | 70 | 25 | 30-130 | 30 |
| 2-Nitrophenol | ND | 20 | 19. | 95 | | 20 | 16. | 80 | 17 | 30-130 | 30 |
| 4-Nitrophenol | ND | 20 | 12. | 60 | | 20 | 9.7J | 49 | 21 | 10-80 | 30 |
| 2,4-Dinitrophenol | ND | 20 | 18.J | 90 | | 20 | 15.J | 75 | 18 | 20-130 | 30 |
| 4,6-Dinitro-o-cresol | ND | 20 | 23. | 120 | | 20 | 19. | 95 | 19 | 20-164 | 30 |
| Phenol | ND | 20 | 11. | 55 | | 20 | 11. | 55 | 0 | 12-110 | 30 |
| 2-Methylphenol | ND | 20 | 17. | 85 | | 20 | 16. | 80 | 6 | 30-130 | 30 |
| 3-Methylphenol/4-Methylphenol | ND | 20 | 17. | 85 | | 20 | 14. | 70 | 19 | 30-130 | 30 |
| 2,4,5-Trichlorophenol | ND | 20 | 22. | 110 | | 20 | 18. | 90 | 20 | 30-130 | 30 |
| Carbazole | ND | 20 | 19. | 95 | | 20 | 17. | 85 | 11 | 55-144 | 30 |
| Atrazine | ND | 20 | 17. | 85 | | 20 | 15. | 75 | 13 | 40-140 | 30 |
| Benzaldehyde | ND | 20 | 17. | 85 | | 20 | 15. | 75 | 13 | 40-140 | 30 |
| Caprolactam | ND | 20 | 4.3J | 22 | | 20 | 3.7J | 19 | 15 | 10-130 | 30 |

# Method Blank Summary
# Form 4
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974465-1 | **Lab File ID** | : 974465-1 |
| **Instrument ID** | : SV106 | **Extraction Date** | : 09/20/24 |
| **Matrix** | : WATER | **Analysis Date** | : 09/21/24 11:33 |
| **Level** | : LOW | | |

| Client Sample No. | Lab Sample ID | Analysis Date |
|---|---|---|
| WG1974465-2LCS | WG1974465-2 | 09/21/24 11:56 |
| WG1974465-3LCSD | WG1974465-3 | 09/21/24 12:20 |
| MW-1SR | L2453053-01 | 09/21/24 15:29 |
| MW-1SRMS | WG1974465-4 | 09/21/24 15:53 |
| MW-1SRMSD | WG1974465-5 | 09/21/24 16:17 |
| MW-1DR2 | L2453053-02 | 09/21/24 16:40 |
| MW-11S | L2453053-03 | 09/21/24 17:04 |
| MW-11D | L2453053-04 | 09/21/24 17:28 |
| DUP_091624 | L2453053-05 | 09/21/24 17:51 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV106 | **Analysis Date** | : 06/24/24 16:32 |
| **Tune Standard** | : R1845372-31 | **Tune File ID** | : Tune1_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 41.3 |
| 68 | Less than 2.0% of mass 69 | 0.8 (1.7 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.2 (.5 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 46.2 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 7.2 |
| 275 | 10.0 - 60.0% of Base Peak | 25.9 |
| 365 | Greater than 1.0% of mass 198 | 3.1 |
| 441 | Present, but less than 24% of mass 442 | 16.5 |
| 442 | Base Peak, or >50% of mass 198 | 59.9 |
| 443 | 15.0 - 24.0% of mass 442 | 11.7 (19.6)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| ABNL9 | R1845372-9 | ABNL9 | 06/24/24 16:56 |
| ABNL8 | R1845372-8 | ABNL8 | 06/24/24 17:20 |
| ABNL7 | R1845372-7 | ABNL7 | 06/24/24 17:43 |
| ABNL6 | R1845372-6 | ABNL6 | 06/24/24 18:07 |
| ABNL5 | R1845372-5 | ABNL5 | 06/24/24 18:31 |
| ABNL4 | R1845372-4 | ABNL4 | 06/24/24 18:54 |
| ABNL3 | R1845372-3 | ABNL3 | 06/24/24 19:18 |
| ABNL2 | R1845372-2 | ABNL2 | 06/24/24 19:42 |
| ABNL1 | R1845372-1 | ABNL1 | 06/24/24 20:05 |
| AP9L9 | R1845372-27 | AP9L9 | 06/24/24 20:29 |
| AP9L8 | R1845372-26 | AP9L8 | 06/24/24 20:53 |
| AP9L7 | R1845372-25 | AP9L7 | 06/24/24 21:16 |
| AP9L6 | R1845372-24 | AP9L6 | 06/24/24 21:40 |
| AP9L5 | R1845372-23 | AP9L5 | 06/24/24 22:04 |
| AP9L4 | R1845372-22 | AP9L4 | 06/24/24 22:28 |
| AP9L3 | R1845372-21 | AP9L3 | 06/24/24 22:52 |
| AP9L2 | R1845372-20 | AP9L2 | 06/24/24 23:15 |
| AP9L1 | R1845372-19 | AP9L1 | 06/24/24 23:39 |
| ABN ICV Quant Report | R1845372-28 | ABNICV | 06/25/24 00:03 |
| AP9 ICV Quant Report | R1845372-30 | AP9ICV | 06/25/24 00:27 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV106 | **Analysis Date** | : 06/25/24 00:51 |
| **Tune Standard** | : R1845372-32 | **Tune File ID** | : Tune2_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 38.4 |
| 68 | Less than 2.0% of mass 69 | 0.7 (1.7 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.2 (.5 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 44.6 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 7 |
| 275 | 10.0 - 60.0% of Base Peak | 26.6 |
| 365 | Greater than 1.0% of mass 198 | 3.1 |
| 441 | Present, but less than 24% of mass 442 | 16.3 |
| 442 | Base Peak, or >50% of mass 198 | 62.7 |
| 443 | 15.0 - 24.0% of mass 442 | 12.2 (19.4)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| ADPL9 | R1845372-18 | ADPL9 | 06/25/24 01:14 |
| ADPL8 | R1845372-17 | ADPL8 | 06/25/24 01:38 |
| ADPL7 | R1845372-16 | ADPL7 | 06/25/24 02:02 |
| ADPL6 | R1845372-14 | ADPL6 | 06/25/24 02:26 |
| ADPL5 | R1845372-15 | ADPL5 | 06/25/24 02:49 |
| ADPL4 | R1845372-12 | ADPL4 | 06/25/24 03:13 |
| ADPL3 | R1845372-13 | ADPL3 | 06/25/24 03:37 |
| ADPL2 | R1845372-11 | ADPL2 | 06/25/24 04:01 |
| ADPL1 | R1845372-10 | ADPL1 | 06/25/24 04:24 |
| ADP ICV Quant Report | R1845372-29 | ADPICV | 06/25/24 04:48 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV106 | **Analysis Date** | : 09/21/24 09:45 |
| **Tune Standard** | : WG1974589-1 | **Tune File ID** | : DEG0921_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 25.3 |
| 68 | Less than 2.0% of mass 69 | 0.7 (1.7 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.1 (.3 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 40.2 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.6 |
| 275 | 10.0 - 60.0% of Base Peak | 27.2 |
| 365 | Greater than 1.0% of mass 198 | 3.3 |
| 441 | Present, but less than 24% of mass 442 | 15.7 |
| 442 | Base Peak, or >50% of mass 198 | 65 |
| 443 | 15.0 - 24.0% of mass 442 | 12.3 (19 )2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| WG1974589-6TFACTOR-B | WG1974589-6 | DEG0921 | 09/21/24 09:45 |
| WG1974589-7TFACTOR-P | WG1974589-7 | DEG0921 | 09/21/24 09:45 |
| WG1974589-3CCAL | WG1974589-3 | ABN0921 | 09/21/24 10:09 |
| WG1974589-4CCAL | WG1974589-4 | AP90921 | 09/21/24 10:33 |
| WG1974589-5CCAL | WG1974589-5 | ADP0921 | 09/21/24 10:56 |
| WG1974465-1BLANK | WG1974465-1 | 974465-1 | 09/21/24 11:33 |
| WG1974465-2LCS | WG1974465-2 | 974465-2 | 09/21/24 11:56 |
| WG1974465-3LCSD | WG1974465-3 | 974465-3 | 09/21/24 12:20 |
| MW-1SR | L2453053-01 | 53053-01 | 09/21/24 15:29 |
| WG1974465-4MS | WG1974465-4 | 974465-4 | 09/21/24 15:53 |
| WG1974465-5MSD | WG1974465-5 | 974465-5 | 09/21/24 16:17 |
| MW-1DR2 | L2453053-02 | 53053-02 | 09/21/24 16:40 |
| MW-11S | L2453053-03 | 53053-03 | 09/21/24 17:04 |
| MW-11D | L2453053-04 | 53053-04 | 09/21/24 17:28 |
| DUP_091624 | L2453053-05 | 53053-05 | 09/21/24 17:51 |

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV106 | **Analysis Date** | : 09/21/24 10:09:00 |
| **Sample No** | : WG1974589-3 | **Lab File ID** | : ABN0921 |

| | 1,4-Dichlorobenzene-d4 | | Naphthalene-d8 | | Acenaphthene-d10 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974589-3 | 33341 | 6.34 | 112751 | 7.78 | 79296 | 9.54 |
| Upper Limit | 66682 | 6.84 | 225502 | 8.28 | 158592 | 10.04 |
| Lower Limit | 16671 | 5.84 | 56376 | 7.28 | 39648 | 9.04 |
| Sample ID | | | | | | |
| WG1974589-4 CCAL | 31689 | 6.34 | 105914 | 7.78 | 73353 | 9.54 |
| WG1974589-5 CCAL | 28138 | 6.34 | - | - | 64764 | 9.54 |
| WG1974465-1 BLANK | 27426 | 6.33 | 96535 | 7.77 | 67135 | 9.54 |
| WG1974465-2 LCS | 28214 | 6.33 | 101613 | 7.78 | 69736 | 9.54 |
| WG1974465-3 LCSD | 28186 | 6.34 | 104192 | 7.78 | 72455 | 9.54 |
| MW-1SR | 29134 | 6.34 | 107325 | 7.78 | 73202 | 9.54 |
| MW-1SR MS | 28164 | 6.34 | 96752 | 7.78 | 71614 | 9.54 |
| MW-1SR MSD | 29513 | 6.34 | 102633 | 7.78 | 72627 | 9.54 |
| MW-1DR2 | 29096 | 6.34 | 104504 | 7.78 | 70457 | 9.54 |
| MW-11S | 28597 | 6.34 | 100840 | 7.78 | 72244 | 9.54 |
| MW-11D | 27673 | 6.34 | 101813 | 7.78 | 70001 | 9.54 |
| DUP_091624 | 30047 | 6.34 | 102729 | 7.78 | 71618 | 9.54 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV106 | **Analysis Date** | : 09/21/24 10:09:00 |
| **Sample No** | : WG1974589-3 | **Lab File ID** | : ABN0921 |

| | Phenanthrene-d10 | | Chrysene-d12 | | Perylene-d12 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974589-3 | 166718 | 10.98 | 180876 | 13.61 | 178984 | 15.07 |
| Upper Limit | 333436 | 11.48 | 361752 | 14.11 | 357968 | 15.57 |
| Lower Limit | 83359 | 10.48 | 90438 | 13.11 | 89492 | 14.57 |
| Sample ID | | | | | | |
| WG1974589-4 CCAL | 155138 | 10.98 | - | - | - | - |
| WG1974589-5 CCAL | 141997 | 10.98 | - | - | - | - |
| WG1974465-1 BLANK | 141229 | 10.98 | 160447 | 13.62 | 169704 | 15.07 |
| WG1974465-2 LCS | 150433 | 10.98 | 170395 | 13.61 | 169568 | 15.07 |
| WG1974465-3 LCSD | 151260 | 10.98 | 167140 | 13.61 | 173872 | 15.07 |
| MW-1SR | 154215 | 10.98 | 170344 | 13.61 | 175879 | 15.07 |
| MW-1SR MS | 147478 | 10.98 | 164358 | 13.61 | 165516 | 15.07 |
| MW-1SR MSD | 148693 | 10.98 | 165085 | 13.61 | 170654 | 15.07 |
| MW-1DR2 | 148629 | 10.98 | 168388 | 13.61 | 177180 | 15.07 |
| MW-11S | 151400 | 10.98 | 170418 | 13.61 | 174514 | 15.07 |
| MW-11D | 151722 | 10.98 | 169080 | 13.61 | 171490 | 15.07 |
| DUP_091624 | 154534 | 10.98 | 172013 | 13.61 | 178606 | 15.07 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14021-1
**Page:** 1

## ABN Extractables - EPA 8270E (WATER)

**Holding Time:** 7 days
**Container/Sample Preservation:** 2 - Amber 1000ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 83-32-9 | 2 | 1.06 | ug/l | 37-111 | 30 | 37-111 | 30 | 30 | | | |
| Benzidine | 92-87-5 | 20 | 8.14 | ug/l | 10-75 | 30 | 10-75 | 30 | 30 | | | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5 | 0.581 | ug/l | 39-98 | 30 | 39-98 | 30 | 30 | | | |
| Hexachlorobenzene | 118-74-1 | 2 | 0.69 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Bis(2-chloroethyl)ether | 111-44-4 | 2 | 0.884 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 2-Chloronaphthalene | 91-58-7 | 2 | 0.538 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 2 | 0.636 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 2 | 0.642 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 2 | 0.463 | ug/l | 36-97 | 30 | 36-97 | 30 | 30 | | | |
| 3,3'-Dichlorobenzidine | 91-94-1 | 5 | 0.854 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 2,4-Dinitrotoluene | 121-14-2 | 5 | 0.382 | ug/l | 48-143 | 30 | 48-143 | 30 | 30 | | | |
| 2,6-Dinitrotoluene | 606-20-2 | 5 | 0.368 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Azobenzene | 122-66-7 | 2 | 0.81 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Fluoranthene | 206-44-0 | 2 | 0.653 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | 2 | 0.795 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 4-Bromophenyl phenyl ether | 101-55-3 | 2 | 0.632 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 2 | 1.75 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Bis(2-chloroethoxy)methane | 111-91-1 | 5 | 1.49 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Hexachlorobutadiene | 87-68-3 | 2 | 0.6 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Hexachlorocyclopentadiene | 77-47-4 | 20 | 0.606 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Hexachloroethane | 67-72-1 | 2 | 0.44 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Isophorone | 78-59-1 | 5 | 0.657 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Naphthalene | 91-20-3 | 2 | 0.669 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Nitrobenzene | 98-95-3 | 2 | 0.656 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| NitrosoDiPhenylAmine(NDPA)/DPA | 86-30-6 | 2 | 0.65 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| n-Nitrosodi-n-propylamine | 621-64-7 | 5 | 0.771 | ug/l | 29-132 | 30 | 29-132 | 30 | 30 | | | |
| Bis(2-Ethylhexyl)phthalate | 117-81-7 | 3 | 1.51 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Butyl benzyl phthalate | 85-68-7 | 5 | 2.18 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Di-n-butylphthalate | 84-74-2 | 5 | 0.58 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Di-n-octylphthalate | 117-84-0 | 5 | 2.39 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Diethyl phthalate | 84-66-2 | 5 | 4.3 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Dimethyl phthalate | 131-11-3 | 5 | 4.44 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Benzo(a)anthracene | 56-55-3 | 2 | 0.767 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Benzo(a)pyrene | 50-32-8 | 2 | 0.447 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Benzo(b)fluoranthene | 205-99-2 | 2 | 0.814 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Benzo(k)fluoranthene | 207-08-9 | 2 | 0.816 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Chrysene | 218-01-9 | 2 | 0.828 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Acenaphthylene | 208-96-8 | 2 | 0.59 | ug/l | 45-123 | 30 | 45-123 | 30 | 30 | | | |
| Anthracene | 120-12-7 | 2 | 0.79 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Benzo(ghi)perylene | 191-24-2 | 2 | 0.77 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Fluorene | 86-73-7 | 2 | 1.05 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Phenanthrene | 85-01-8 | 2 | 0.992 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**ABN Extractables - EPA 8270E (WATER)**

**Holding Time:** 7 days
**Container/Sample Preservation:** 2 - Amber 1000ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibenzo(a,h)anthracene | 53-70-3 | 2 | 0.452 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 2 | 0.943 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Pyrene | 129-00-0 | 2 | 0.704 | ug/l | 26-127 | 30 | 26-127 | 30 | 30 | | | |
| Biphenyl | 92-52-4 | 2 | 0.635 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| Aniline | 62-53-3 | 2 | 0.482 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 4-Chloroaniline | 106-47-8 | 5 | 0.647 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 1-Methylnaphthalene | 90-12-0 | 2 | 0.595 | ug/l | 41-103 | 30 | 41-103 | 30 | 30 | | | |
| 2-Nitroaniline | 88-74-4 | 5 | 0.519 | ug/l | 52-143 | 30 | 52-143 | 30 | 30 | | | |
| 3-Nitroaniline | 99-09-2 | 5 | 0.574 | ug/l | 25-145 | 30 | 25-145 | 30 | 30 | | | |
| 4-Nitroaniline | 100-01-6 | 5 | 0.581 | ug/l | 51-143 | 30 | 51-143 | 30 | 30 | | | |
| Dibenzofuran | 132-64-9 | 2 | 0.823 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| 2-Methylnaphthalene | 91-57-6 | 2 | 0.677 | ug/l | 40-140 | 30 | 40-140 | 30 | 30 | | | |
| n-Nitrosodimethylamine | 62-75-9 | 2 | 0.524 | ug/l | 22-74 | 30 | 22-74 | 30 | 30 | | | |
| 2,4,6-Trichlorophenol | 88-06-2 | 5 | 0.494 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| P-Chloro-M-Cresol | 59-50-7 | 2 | 0.406 | ug/l | 23-97 | 30 | 23-97 | 30 | 30 | | | |
| 2-Chlorophenol | 95-57-8 | 2 | 0.405 | ug/l | 27-123 | 30 | 27-123 | 30 | 30 | | | |
| 2,4-Dichlorophenol | 120-83-2 | 5 | 0.527 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| 2,4-Dimethylphenol | 105-67-9 | 5 | 1.1 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| 2-Nitrophenol | 88-75-5 | 10 | 0.463 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| 4-Nitrophenol | 100-02-7 | 10 | 1.14 | ug/l | 10-80 | 30 | 10-80 | 30 | 30 | | | |
| 2,4-Dinitrophenol | 51-28-5 | 20 | 3.55 | ug/l | 20-130 | 30 | 20-130 | 30 | 30 | | | |
| 4,6-Dinitro-o-cresol | 534-52-1 | 10 | 5.42 | ug/l | 20-164 | 30 | 20-164 | 30 | 30 | | | |
| Pentachlorophenol | 87-86-5 | 10 | 1.95 | ug/l | 9-103 | 30 | 9-103 | 30 | 30 | | | |
| Phenol | 108-95-2 | 5 | 1.3 | ug/l | 12-110 | 30 | 12-110 | 30 | 30 | | | |
| 2-Methylphenol | 95-48-7 | 5 | 1.1 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| 3-Methylphenol/4-Methylphenol | 106-44-5 | 5 | 0.55 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| 2,4,5-Trichlorophenol | 95-95-4 | 5 | 0.381 | ug/l | 30-130 | 30 | 30-130 | 30 | 30 | | | |
| Benzoic Acid | 65-85-0 | 50 | 12.9 | ug/l | 10-164 | 30 | 10-164 | 30 | 30 | | | |
| Benzyl Alcohol | 100-51-6 | 2 | 0.698 | ug/l | 26-116 | 30 | 26-116 | 30 | 30 | | | |
| Carbazole | 86-74-8 | 2 | 0.759 | ug/l | 55-144 | 30 | 55-144 | 30 | 30 | | | |
| Pyridine | 110-86-1 | 3.5 | 0.905 | ug/l | 10-66 | 30 | 10-66 | 30 | 30 | | | |
| *2-Fluorophenol* | *367-12-4* | | | | | | | | | *21-120* | | |
| *Phenol-d6* | *13127-88-3* | | | | | | | | | *10-120* | | |
| *Nitrobenzene-d5* | *4165-60-0* | | | | | | | | | *23-120* | | |
| *2-Fluorobiphenyl* | *321-60-8* | | | | | | | | | *15-120* | | |
| *2,4,6-Tribromophenol* | *118-79-6* | | | | | | | | | *10-120* | | |
| *4-Terphenyl-d14* | *1718-51-0* | | | | | | | | | *41-149* | | |
| | | | | | | | | | | | | |
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***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14022-1
**Page:** 1

## ABN Extractables - EPA 8270E (SOIL)

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 83-32-9 | 133.6 | 17.3012 | ug/kg | 31-137 | 50 | 31-137 | 50 | 50 | | | |
| Benzidine | 92-87-5 | 551.1 | 181.028 | ug/kg | 10-66 | 50 | 10-66 | 50 | 50 | | | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 167 | 19.1048 | ug/kg | 38-107 | 50 | 38-107 | 50 | 50 | | | |
| Hexachlorobenzene | 118-74-1 | 100.2 | 18.704 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Bis(2-chloroethyl)ether | 111-44-4 | 150.3 | 22.6452 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 2-Chloronaphthalene | 91-58-7 | 167 | 16.5664 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 167 | 29.9932 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 167 | 28.724 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 167 | 29.1582 | ug/kg | 28-104 | 50 | 28-104 | 50 | 50 | | | |
| 3,3'-Dichlorobenzidine | 91-94-1 | 167 | 44.422 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 2,4-Dinitrotoluene | 121-14-2 | 167 | 33.4 | ug/kg | 40-132 | 50 | 40-132 | 50 | 50 | | | |
| 2,6-Dinitrotoluene | 606-20-2 | 167 | 28.6572 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Azobenzene | 122-66-7 | 167 | 16.032 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Fluoranthene | 206-44-0 | 100.2 | 19.1716 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | 167 | 17.869 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 4-Bromophenyl phenyl ether | 101-55-3 | 167 | 25.4842 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 200.4 | 28.5236 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Bis(2-chloroethoxy)methane | 111-91-1 | 180.36 | 16.7334 | ug/kg | 40-117 | 50 | 40-117 | 50 | 50 | | | |
| Hexachlorobutadiene | 87-68-3 | 167 | 24.4488 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Hexachlorocyclopentadiene | 77-47-4 | 477.62 | 151.302 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Hexachloroethane | 67-72-1 | 133.6 | 27.0206 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Isophorone | 78-59-1 | 150.3 | 21.6766 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Naphthalene | 91-20-3 | 167 | 20.3406 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Nitrobenzene | 98-95-3 | 150.3 | 24.716 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| NitrosoDiPhenylAmine(NDPA)/DPA | 86-30-6 | 133.6 | 19.0046 | ug/kg | 36-157 | 50 | 36-157 | 50 | 50 | | | |
| n-Nitrosodi-n-propylamine | 621-64-7 | 167 | 25.7848 | ug/kg | 32-121 | 50 | 32-121 | 50 | 50 | | | |
| Bis(2-Ethylhexyl)phthalate | 117-81-7 | 167 | 57.782 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Butyl benzyl phthalate | 85-68-7 | 167 | 42.084 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Di-n-butylphthalate | 84-74-2 | 167 | 31.6632 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Di-n-octylphthalate | 117-84-0 | 167 | 56.78 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Diethyl phthalate | 84-66-2 | 167 | 15.4642 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Dimethyl phthalate | 131-11-3 | 167 | 35.07 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(a)anthracene | 56-55-3 | 100.2 | 18.8042 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(a)pyrene | 50-32-8 | 133.6 | 40.748 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(b)fluoranthene | 205-99-2 | 100.2 | 28.1228 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(k)fluoranthene | 207-08-9 | 100.2 | 26.72 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Chrysene | 218-01-9 | 100.2 | 17.368 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Acenaphthylene | 208-96-8 | 133.6 | 25.7848 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Anthracene | 120-12-7 | 100.2 | 32.565 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(ghi)perylene | 191-24-2 | 133.6 | 19.6392 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Fluorene | 86-73-7 | 167 | 16.2324 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Phenanthrene | 85-01-8 | 100.2 | 20.3072 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**ABN Extractables - EPA 8270E (SOIL)**

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibenzo(a,h)anthracene | 53-70-3 | 100.2 | 19.3052 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 133.6 | 23.2798 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Pyrene | 129-00-0 | 100.2 | 16.5998 | ug/kg | 35-142 | 50 | 35-142 | 50 | 50 | | | |
| Biphenyl | 92-52-4 | 380.76 | 21.71 | ug/kg | 37-127 | 50 | 37-127 | 50 | 50 | | | |
| Aniline | 62-53-3 | 200.4 | 78.824 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 4-Chloroaniline | 106-47-8 | 167 | 30.394 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 1-Methylnaphthalene | 90-12-0 | 167 | 19.372 | ug/kg | 26-130 | 50 | 26-130 | 50 | 50 | | | |
| 2-Nitroaniline | 88-74-4 | 167 | 32.1976 | ug/kg | 47-134 | 50 | 47-134 | 50 | 50 | | | |
| 3-Nitroaniline | 99-09-2 | 167 | 31.4962 | ug/kg | 26-129 | 50 | 26-129 | 50 | 50 | | | |
| 4-Nitroaniline | 100-01-6 | 167 | 69.138 | ug/kg | 41-125 | 50 | 41-125 | 50 | 50 | | | |
| Dibenzofuran | 132-64-9 | 167 | 15.7982 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 2-Methylnaphthalene | 91-57-6 | 200.4 | 20.1736 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| n-Nitrosodimethylamine | 62-75-9 | 334 | 32.064 | ug/kg | 22-100 | 50 | 22-100 | 50 | 50 | | | |
| 2,4,6-Trichlorophenol | 88-06-2 | 100.2 | 31.6632 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| P-Chloro-M-Cresol | 59-50-7 | 167 | 24.883 | ug/kg | 26-103 | 50 | 26-103 | 50 | 50 | | | |
| 2-Chlorophenol | 95-57-8 | 167 | 19.7394 | ug/kg | 25-102 | 50 | 25-102 | 50 | 50 | | | |
| 2,4-Dichlorophenol | 120-83-2 | 150.3 | 26.8536 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| 2,4-Dimethylphenol | 105-67-9 | 167 | 55.11 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| 2-Nitrophenol | 88-75-5 | 360.72 | 62.792 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| 4-Nitrophenol | 100-02-7 | 233.8 | 68.136 | ug/kg | 11-114 | 50 | 11-114 | 50 | 50 | | | |
| 2,4-Dinitrophenol | 51-28-5 | 801.6 | 77.822 | ug/kg | 4-130 | 50 | 4-130 | 50 | 50 | | | |
| 4,6-Dinitro-o-cresol | 534-52-1 | 434.2 | 80.16 | ug/kg | 10-130 | 50 | 10-130 | 50 | 50 | | | |
| Pentachlorophenol | 87-86-5 | 133.6 | 36.74 | ug/kg | 17-109 | 50 | 17-109 | 50 | 50 | | | |
| Phenol | 108-95-2 | 167 | 25.217 | ug/kg | 26-90 | 50 | 26-90 | 50 | 50 | | | |
| 2-Methylphenol | 95-48-7 | 167 | 25.885 | ug/kg | 30-130. | 50 | 30-130. | 50 | 50 | | | |
| 3-Methylphenol/4-Methylphenol | 106-44-5 | 240.48 | 26.1522 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| 2,4,5-Trichlorophenol | 95-95-4 | 167 | 31.9972 | ug/kg | 30-130 | 50 | 30-130 | 50 | 50 | | | |
| Benzoic Acid | 65-85-0 | 541.08 | 169.004 | ug/kg | 10-110 | 50 | 10-110 | 50 | 50 | | | |
| Benzyl Alcohol | 100-51-6 | 167 | 51.102 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Carbazole | 86-74-8 | 167 | 16.2324 | ug/kg | 54-128 | 50 | 54-128 | 50 | 50 | | | |
| Pyridine | 110-86-1 | 180.36 | 63.46 | ug/kg | 10-93 | 50 | 10-93 | 50 | 50 | | | |
| *2-Fluorophenol* | *367-12-4* | | | | | | | | | *25-120* | | |
| *Phenol-d6* | *13127-88-3* | | | | | | | | | *10-120* | | |
| *Nitrobenzene-d5* | *4165-60-0* | | | | | | | | | *23-120* | | |
| *2-Fluorobiphenyl* | *321-60-8* | | | | | | | | | *30-120* | | |
| *2,4,6-Tribromophenol* | *118-79-6* | | | | | | | | | *10-136* | | |
| *4-Terphenyl-d14* | *1718-51-0* | | | | | | | | | *18-120* | | |
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***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Semivolatile Sample Data

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 15:29 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-01 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 15:29 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-01 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | ND | 5.0 | 0.35 | U |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 16:40 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-02 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 16:40 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-02 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | 1.5 | 5.0 | 0.35 | J |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:04 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-03 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:04 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-03 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | ND | 5.0 | 0.35 | U |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:28 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-04 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:28 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-04 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | 0.57 | 5.0 | 0.35 | J |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:51 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-05 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 17:51 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-05 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | ND | 5.0 | 0.35 | U |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974465-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974465-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 11:33 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 974465-1 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 5.0 | 1.8 | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 5.0 | 0.54 | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 5.0 | 0.84 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 2.0 | 0.39 | U |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 2.0 | 0.24 | U |
| 108-60-1 | Bis(2-chloroisopropyl)ether | ND | 2.0 | 0.40 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | ND | 5.0 | 0.84 | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 20 | 1.2 | U |
| 78-59-1 | Isophorone | ND | 5.0 | 0.86 | U |
| 98-95-3 | Nitrobenzene | ND | 2.0 | 0.20 | U |
| 86-30-6 | NDPA/DPA | ND | 2.0 | 0.92 | U |
| 621-64-7 | n-Nitrosodi-n-propylamine | ND | 5.0 | 0.91 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | ND | 3.0 | 1.4 | U |
| 85-68-7 | Butyl benzyl phthalate | ND | 5.0 | 2.6 | U |
| 84-74-2 | Di-n-butylphthalate | ND | 5.0 | 0.96 | U |
| 117-84-0 | Di-n-octylphthalate | ND | 5.0 | 2.3 | U |
| 84-66-2 | Diethyl phthalate | ND | 5.0 | 0.76 | U |
| 131-11-3 | Dimethyl phthalate | ND | 5.0 | 0.92 | U |
| 92-52-4 | Biphenyl | ND | 2.0 | 0.20 | U |
| 106-47-8 | 4-Chloroaniline | ND | 5.0 | 0.47 | U |
| 88-74-4 | 2-Nitroaniline | ND | 5.0 | 1.0 | U |
| 99-09-2 | 3-Nitroaniline | ND | 5.0 | 1.2 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974465-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974465-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 11:33 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E | **Dilution Factor** | : 1 |
| **Lab File ID** | : 974465-1 | **Analyst** | : ALS |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV106 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RTX5-MS |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 100-01-6 | 4-Nitroaniline | ND | 5.0 | 1.4 | U |
| 132-64-9 | Dibenzofuran | ND | 2.0 | 0.40 | U |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 10 | 0.24 | U |
| 98-86-2 | Acetophenone | ND | 5.0 | 0.92 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 59-50-7 | p-Chloro-m-cresol | ND | 2.0 | 0.61 | U |
| 95-57-8 | 2-Chlorophenol | ND | 2.0 | 0.65 | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 5.0 | 1.7 | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 5.0 | 2.0 | U |
| 88-75-5 | 2-Nitrophenol | ND | 10 | 2.0 | U |
| 100-02-7 | 4-Nitrophenol | ND | 10 | 1.4 | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 20 | 5.4 | U |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 10 | 2.3 | U |
| 108-95-2 | Phenol | ND | 5.0 | 0.35 | U |
| 95-48-7 | 2-Methylphenol | ND | 5.0 | 2.3 | U |
| 108-39-4/106-44-5 | 3-Methylphenol/4-Methylphenol | ND | 5.0 | 1.4 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 5.0 | 2.1 | U |
| 86-74-8 | Carbazole | ND | 2.0 | 0.31 | U |
| 1912-24-9 | Atrazine | ND | 10 | 1.0 | U |
| 100-52-7 | Benzaldehyde | ND | 5.0 | 1.1 | U |
| 105-60-2 | Caprolactam | ND | 10 | 1.2 | U |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 3:29 pm
Operator : SV106:als
Sample : L2453053-01,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 10:41:16 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.340 | 152 | 29134 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 87.38% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.340 | 152 | 29134 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 91.94% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 107325 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 95.19% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 107325 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 101.33% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 73202 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 92.31% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 73202 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 99.79% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 73202 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 113.03% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 154215 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 92.50% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 154215 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 108.60% | | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 170344 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 94.18% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 175879 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 98.27% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.310 | 112 | 3217 | 0.382 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 19.10% | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 4409 | 0.382 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 19.10% | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8958 | 0.760 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 76.00% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 19330 | 0.701 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 70.10% | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 2572 | 0.564 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 28.20% | | | | |
| 96) 4-Terphenyl-d14 | 12.569 | 244 | 33022 | 0.796 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 79.60% | | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 3:29 pm
Operator : SV106:als
Sample : L2453053-01,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 10:41:16 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 0.000 | | 0 | N.D. | | |
| 8) Phenol | 0.000 | | 0 | N.D. | d | |
| 14) Bis(2-chloroisopropyl)... | 0.000 | | 0 | N.D. | | |
| 15) 2-Methylphenol | 0.000 | | 0 | N.D. | | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 18) 3-Methylphenol/4-Methy... | 0.000 | | 0 | N.D. | | |
| 20) Nitrobenzene | 0.000 | | 0 | N.D. | | |
| 21) Isophorone | 0.000 | | 0 | N.D. | | |
| 22) 2-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 23) 2,4-Dimethylphenol | 0.000 | | 0 | N.D. | | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | | 0 | N.D. | | |
| 25) 2,4-Dichlorophenol | 0.000 | | 0 | N.D. | | |
| 28) Benzaldehyde | 0.000 | | 0 | N.D. | | |
| 29) Acetophenone | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 0.000 | | 0 | N.D. | | |
| 40) p-Chloro-m-cresol | 0.000 | | 0 | N.D. | | |
| 43) Hexachlorocyclopentadiene | 0.000 | | 0 | N.D. | | |
| 44) 2,4,6-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 45) 2,4,5-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 48) 2-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 51) Dimethyl phthalate | 0.000 | | 0 | N.D. | d | |
| 53) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 60) Caprolactam | 0.000 | | 0 | N.D. | | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | | 0 | N.D. | | |
| 62) Biphenyl | 0.000 | | 0 | N.D. | | |
| 64) 3-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. | | |
| 67) Dibenzofuran | 0.000 | | 0 | N.D. | | |
| 68) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 69) 4-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 72) Diethyl phthalate | 0.000 | | 0 | N.D. | | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | | 0 | N.D. | | |
| 75) 4-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 77) NDPA/DPA | 0.000 | | 0 | N.D. | | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 3:29 pm
Operator : SV106:als
Sample : L2453053-01,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 10:41:16 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 87) | Atrazine | 0.000 | | 0 | N.D. | | |
| 91) | Carbazole | 0.000 | | 0 | N.D. | | |
| 92) | Di-n-butylphthalate | 0.000 | | 0 | N.D. | | |
| 97) | Butyl benzyl phthalate | 0.000 | | 0 | N.D. | | |
| 106) | 3,3'-Dichlorobenzidine | 0.000 | | 0 | N.D. | | |
| 108) | Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | N.D. | d | |
| 109) | Di-n-octylphthalate | 0.000 | | 0 | N.D. | d | |

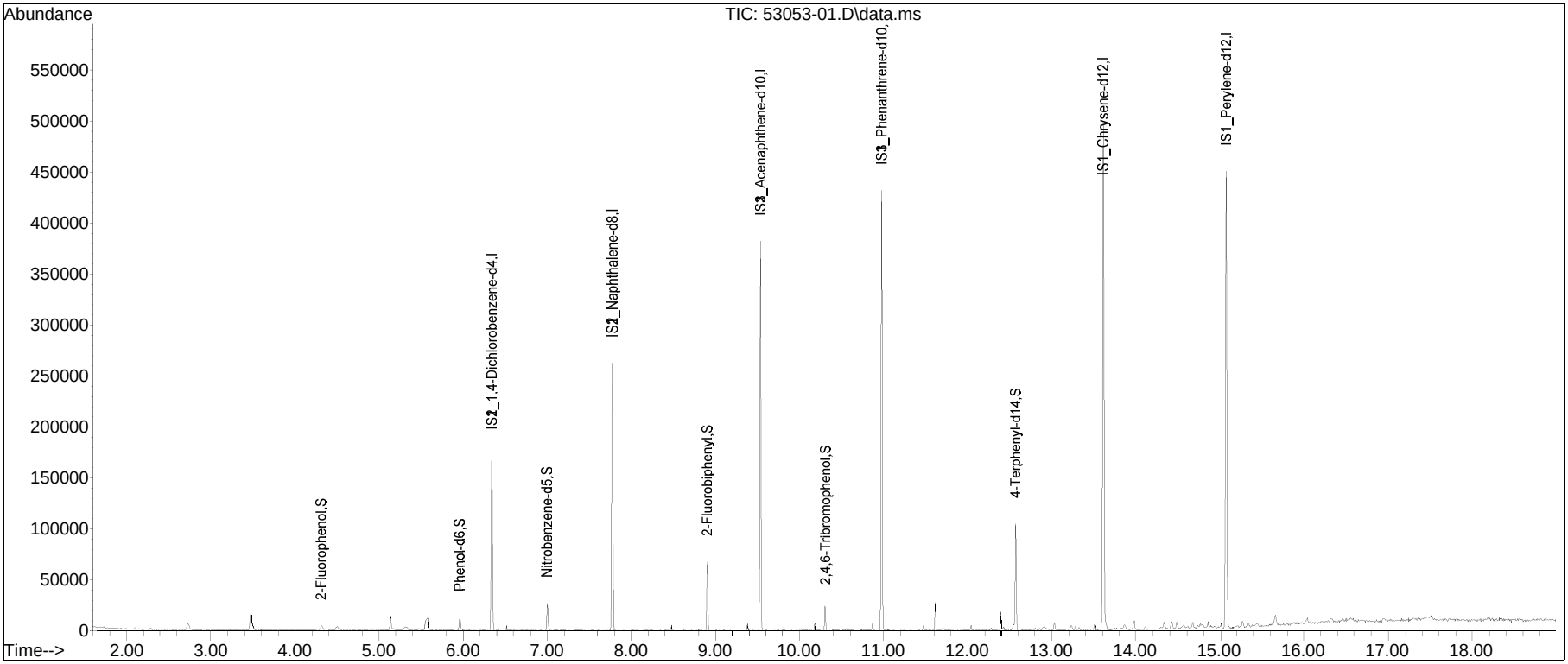
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 3:29 pm
Operator : SV106:als
Sample : L2453053-01,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 10:41:16 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 53053-01.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 3:29 pm | Instrument | : SV 106 |
| Sample | : L2453053-01,32,,gmr | Quant Date | : 9/21/2024 3:49 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 4:40 pm
Operator : SV106:als
Sample : L2453053-02,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 23 10:41:37 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.339 | 152 | 29096 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 87.27% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.339 | 152 | 29096 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 91.82% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 104504 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 92.69% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 104504 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 98.67% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 70457 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 88.85% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 70457 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 96.05% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 70457 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 108.79% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 148629 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 89.15% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 148629 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 104.67% | | | | |
| 104) IS1_Chrysene-d12 | 13.609 | 240 | 168388 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 93.10% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 177180 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 98.99% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 8204 | 0.976 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 48.80% | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 6903 | 0.600 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 30.00% | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 7505 | 0.637 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 63.70% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 16757 | 0.624 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 62.40% | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 5935 | 1.352 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 67.60% | | | | |
| 96) 4-Terphenyl-d14 | 12.568 | 244 | 29312 | 0.733 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 73.30% | | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 4:40 pm
Operator : SV106:als
Sample : L2453053-02,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 23 10:41:37 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 0.000 | | 0 | N.D. | | |
| 8) Phenol | 5.975 | 94 | 1825 | 0.153 | ug/ml# | 78 |
| 14) Bis(2-chloroisopropyl)... | 0.000 | | 0 | N.D. | | |
| 15) 2-Methylphenol | 0.000 | | 0 | N.D. | | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 18) 3-Methylphenol/4-Methy... | 0.000 | | 0 | N.D. | | |
| 20) Nitrobenzene | 0.000 | | 0 | N.D. | | |
| 21) Isophorone | 0.000 | | 0 | N.D. | | |
| 22) 2-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 23) 2,4-Dimethylphenol | 0.000 | | 0 | N.D. | | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | | 0 | N.D. | | |
| 25) 2,4-Dichlorophenol | 0.000 | | 0 | N.D. | | |
| 28) Benzaldehyde | 0.000 | | 0 | N.D. | | |
| 29) Acetophenone | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 0.000 | | 0 | N.D. | | |
| 40) p-Chloro-m-cresol | 0.000 | | 0 | N.D. | | |
| 43) Hexachlorocyclopentadiene | 0.000 | | 0 | N.D. | | |
| 44) 2,4,6-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 45) 2,4,5-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 48) 2-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 51) Dimethyl phthalate | 0.000 | | 0 | N.D. | d | |
| 53) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 60) Caprolactam | 0.000 | | 0 | N.D. | | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | | 0 | N.D. | | |
| 62) Biphenyl | 0.000 | | 0 | N.D. | | |
| 64) 3-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. | | |
| 67) Dibenzofuran | 0.000 | | 0 | N.D. | | |
| 68) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 69) 4-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 72) Diethyl phthalate | 0.000 | | 0 | N.D. | | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | | 0 | N.D. | | |
| 75) 4-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 77) NDPA/DPA | 0.000 | | 0 | N.D. | | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | N.D. | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 4:40 pm
Operator : SV106:als
Sample : L2453053-02,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 23 10:41:37 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 87) Atrazine | 0.000 | | 0 | | N.D. | |
| 91) Carbazole | 0.000 | | 0 | | N.D. | |
| 92) Di-n-butylphthalate | 0.000 | | 0 | | N.D. | |
| 97) Butyl benzyl phthalate | 0.000 | | 0 | | N.D. | |
| 106) 3,3'-Dichlorobenzidine | 0.000 | | 0 | | N.D. | |
| 108) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | | N.D. | |
| 109) Di-n-octylphthalate | 0.000 | | 0 | | N.D. | d |

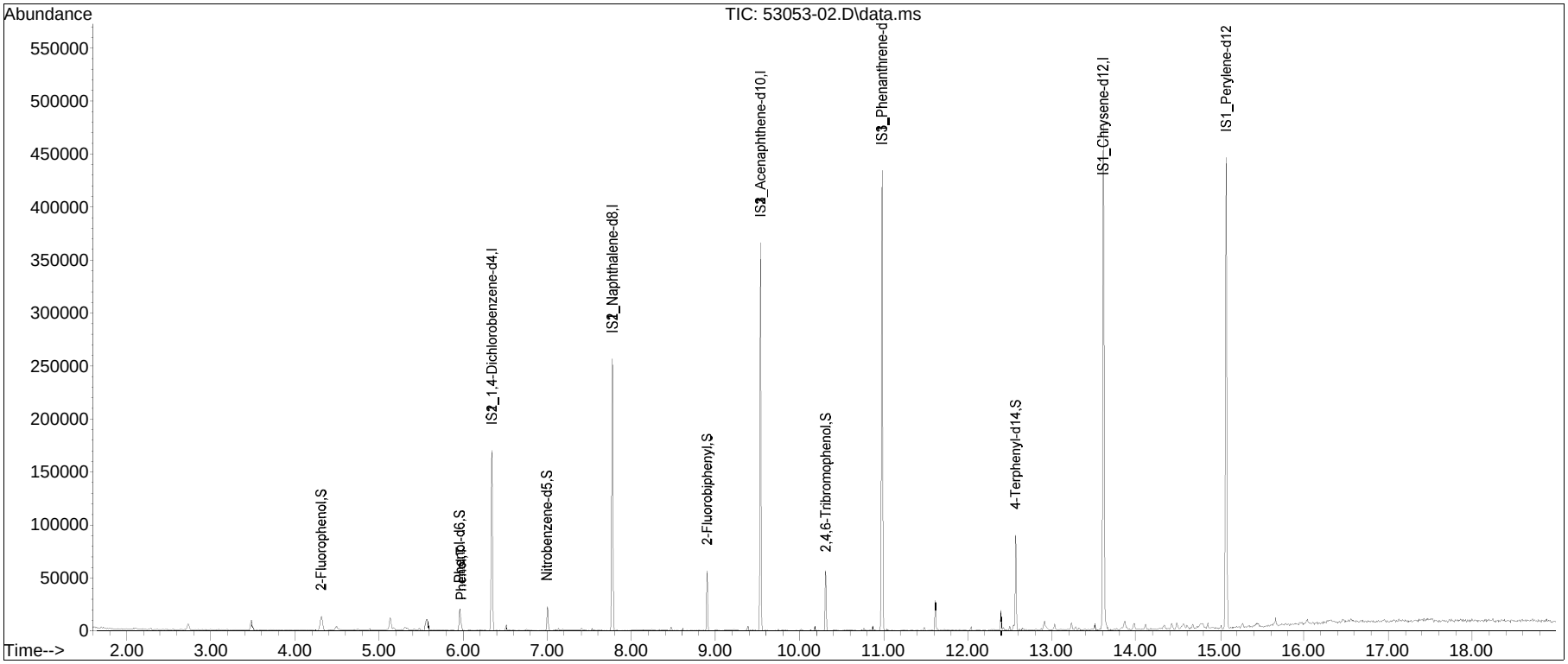
(#) = qualifier out of range (m) = manual integration (+) = signals summed

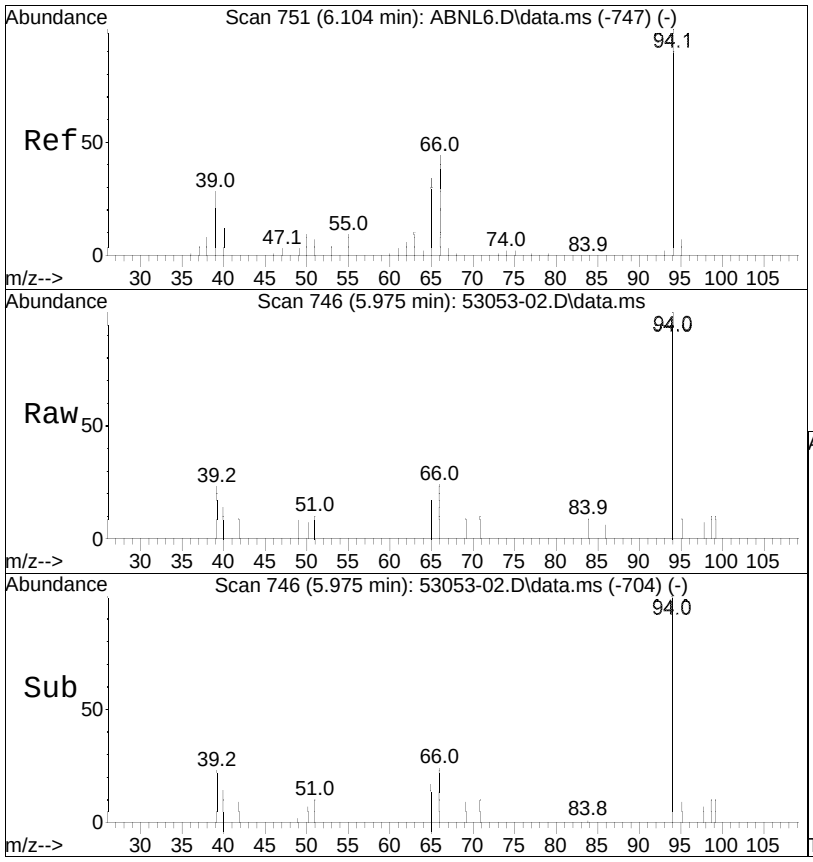
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 4:40 pm
Operator : SV106:als
Sample : L2453053-02,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 23 10:41:37 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•

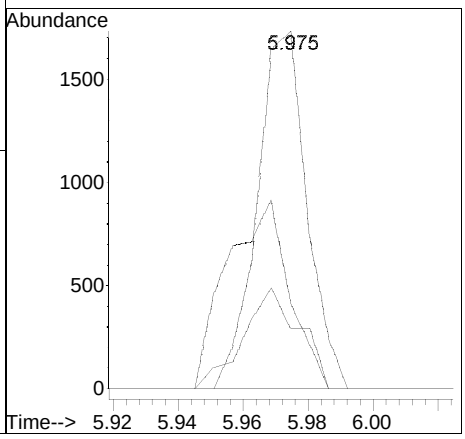





#8
Phenol
Concen: 0.15 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. -0.000 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 4:40 pm

Tgt Ion: 94 Resp: 1825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 31.9 | 26.0 | 39.0 |
| 66 | 65.9 | 33.8 | 50.8# |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 53053-02.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 4:40 pm | Instrument | : SV 106 |
| Sample | : L2453053-02,32,,gmr | Quant Date | : 9/21/2024 5:00 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 5:04 pm
Operator : SV106:als
Sample : L2453053-03,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 23 10:41:50 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.339 | 152 | 28597 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 85.77% | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.339 | 152 | 28597 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 90.24% | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 100840 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 89.44% | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 100840 | 4.000 | ug/ml | # 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 95.21% | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 72244 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 91.11% | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 72244 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 98.49% | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 72244 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 111.55% | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 151400 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 90.81% | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 151400 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 106.62% | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 170418 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 94.22% | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 174514 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 97.50% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 5281 | 0.639 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 31.95% | | | |
| 7) Phenol-d6 | 5.957 | 99 | 6236 | 0.551 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 27.55% | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8639 | 0.747 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 74.70% | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 19334 | 0.747 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 74.70% | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 4728 | 1.050 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 52.50% | | | |
| 96) 4-Terphenyl-d14 | 12.568 | 244 | 32828 | 0.806 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 80.60% | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 5:04 pm
Operator : SV106:als
Sample : L2453053-03,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 23 10:41:50 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 0.000 | | 0 | N.D. | | |
| 8) Phenol | 0.000 | | 0 | N.D. | | |
| 14) Bis(2-chloroisopropyl)... | 0.000 | | 0 | N.D. | | |
| 15) 2-Methylphenol | 0.000 | | 0 | N.D. | | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 18) 3-Methylphenol/4-Methy... | 0.000 | | 0 | N.D. | | |
| 20) Nitrobenzene | 0.000 | | 0 | N.D. | | |
| 21) Isophorone | 0.000 | | 0 | N.D. | | |
| 22) 2-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 23) 2,4-Dimethylphenol | 0.000 | | 0 | N.D. | | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | | 0 | N.D. | | |
| 25) 2,4-Dichlorophenol | 0.000 | | 0 | N.D. | | |
| 28) Benzaldehyde | 0.000 | | 0 | N.D. | | |
| 29) Acetophenone | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 0.000 | | 0 | N.D. | | |
| 40) p-Chloro-m-cresol | 0.000 | | 0 | N.D. | | |
| 43) Hexachlorocyclopentadiene | 0.000 | | 0 | N.D. | | |
| 44) 2,4,6-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 45) 2,4,5-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 48) 2-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 51) Dimethyl phthalate | 0.000 | | 0 | N.D. | d | |
| 53) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 60) Caprolactam | 0.000 | | 0 | N.D. | | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | | 0 | N.D. | | |
| 62) Biphenyl | 0.000 | | 0 | N.D. | | |
| 64) 3-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. | | |
| 67) Dibenzofuran | 0.000 | | 0 | N.D. | | |
| 68) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 69) 4-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 72) Diethyl phthalate | 0.000 | | 0 | N.D. | | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | | 0 | N.D. | | |
| 75) 4-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 77) NDPA/DPA | 0.000 | | 0 | N.D. | | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | N.D. | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 5:04 pm
Operator : SV106:als
Sample : L2453053-03,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 23 10:41:50 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 87) | Atrazine | 0.000 | | 0 | N.D. | | |
| 91) | Carbazole | 0.000 | | 0 | N.D. | | |
| 92) | Di-n-butylphthalate | 0.000 | | 0 | N.D. | | |
| 97) | Butyl benzyl phthalate | 0.000 | | 0 | N.D. | | |
| 106) | 3,3'-Dichlorobenzidine | 0.000 | | 0 | N.D. | | |
| 108) | Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | N.D. | | |
| 109) | Di-n-octylphthalate | 0.000 | | 0 | N.D. | d | |

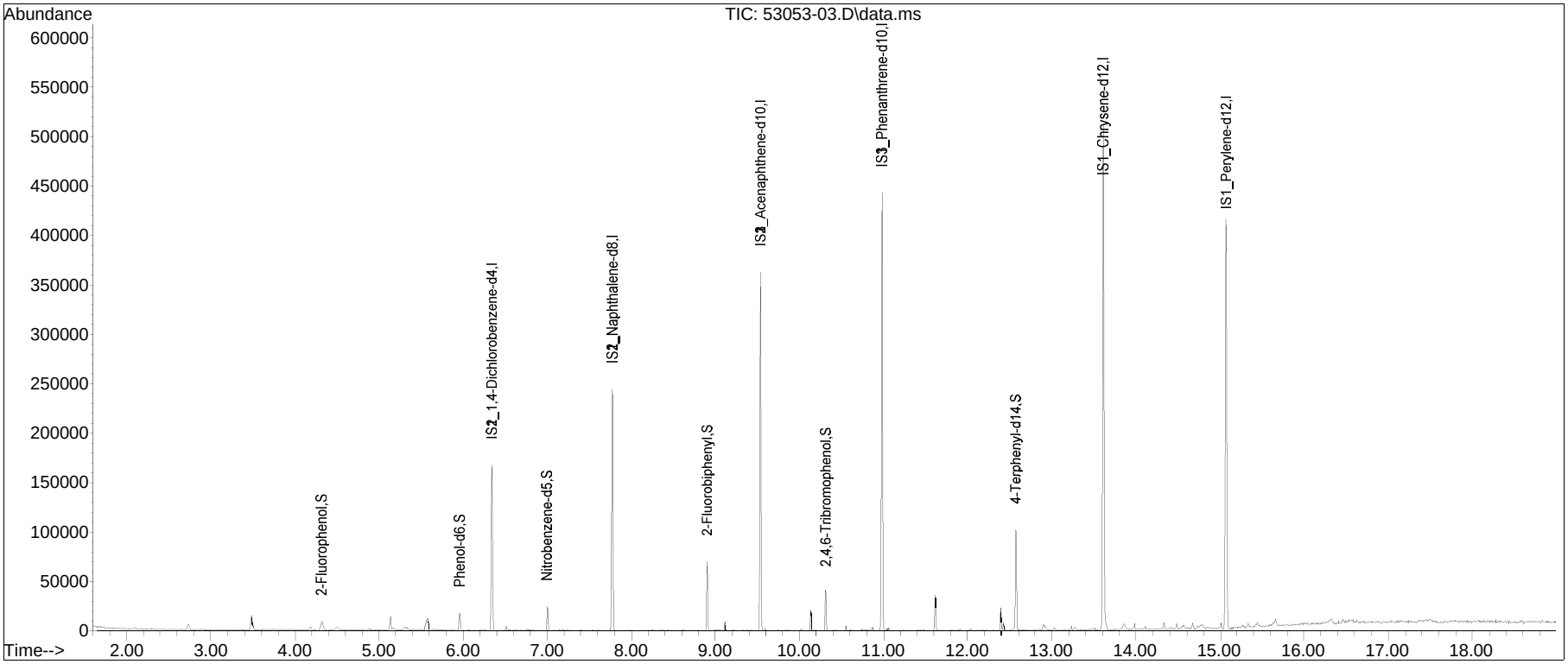
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 5:04 pm
Operator : SV106:als
Sample : L2453053-03,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 23 10:41:50 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 53053-03.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 5:04 pm | Instrument | : SV 106 |
| Sample | : L2453053-03,32,,gmr | Quant Date | : 9/21/2024 5:23 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 5:28 pm
Operator : SV106:als
Sample : L2453053-04,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 23 10:42:36 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.339 | 152 | 27673 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 83.00% | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.339 | 152 | 27673 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 87.33% | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 101813 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 90.30% | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 101813 | 4.000 | ug/ml | # 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 96.13% | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 70001 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 88.28% | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 70001 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 95.43% | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 70001 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 108.09% | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 151722 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 91.01% | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 151722 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 106.85% | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 169080 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 93.48% | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 171490 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 95.81% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.322 | 112 | 8746 | 1.093 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 54.65% | | | |
| 7) Phenol-d6 | 5.957 | 99 | 7888 | 0.720 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 36.00% | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 7913 | 0.707 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 70.70% | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 19053 | 0.729 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 72.90% | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 6328 | 1.450 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 72.50% | | | |
| 96) 4-Terphenyl-d14 | 12.568 | 244 | 32111 | 0.787 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 78.70% | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 5:28 pm
Operator : SV106:als
Sample : L2453053-04,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 23 10:42:36 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 0.000 | | 0 | N.D. | | |
| 8) Phenol | 5.975 | 94 | 643 | 0.057 | ug/ml# | 1 |
| 14) Bis(2-chloroisopropyl)... | 0.000 | | 0 | N.D. | | |
| 15) 2-Methylphenol | 0.000 | | 0 | N.D. | | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 18) 3-Methylphenol/4-Methy... | 0.000 | | 0 | N.D. | | |
| 20) Nitrobenzene | 0.000 | | 0 | N.D. | | |
| 21) Isophorone | 0.000 | | 0 | N.D. | | |
| 22) 2-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 23) 2,4-Dimethylphenol | 0.000 | | 0 | N.D. | | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | | 0 | N.D. | | |
| 25) 2,4-Dichlorophenol | 0.000 | | 0 | N.D. | | |
| 28) Benzaldehyde | 0.000 | | 0 | N.D. | | |
| 29) Acetophenone | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 0.000 | | 0 | N.D. | | |
| 40) p-Chloro-m-cresol | 0.000 | | 0 | N.D. | | |
| 43) Hexachlorocyclopentadiene | 0.000 | | 0 | N.D. | | |
| 44) 2,4,6-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 45) 2,4,5-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 48) 2-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 51) Dimethyl phthalate | 0.000 | | 0 | N.D. | d | |
| 53) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 60) Caprolactam | 0.000 | | 0 | N.D. | | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | | 0 | N.D. | | |
| 62) Biphenyl | 0.000 | | 0 | N.D. | | |
| 64) 3-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. | | |
| 67) Dibenzofuran | 0.000 | | 0 | N.D. | | |
| 68) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 69) 4-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 72) Diethyl phthalate | 0.000 | | 0 | N.D. | | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | | 0 | N.D. | | |
| 75) 4-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 77) NDPA/DPA | 0.000 | | 0 | N.D. | | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | N.D. | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 5:28 pm
Operator : SV106:als
Sample : L2453053-04,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 23 10:42:36 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 87) Atrazine | 0.000 | | 0 | | N.D. | |
| 91) Carbazole | 0.000 | | 0 | | N.D. | |
| 92) Di-n-butylphthalate | 0.000 | | 0 | | N.D. | |
| 97) Butyl benzyl phthalate | 0.000 | | 0 | | N.D. | |
| 106) 3,3'-Dichlorobenzidine | 0.000 | | 0 | | N.D. | |
| 108) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | | N.D. | |
| 109) Di-n-octylphthalate | 0.000 | | 0 | | N.D. | d |

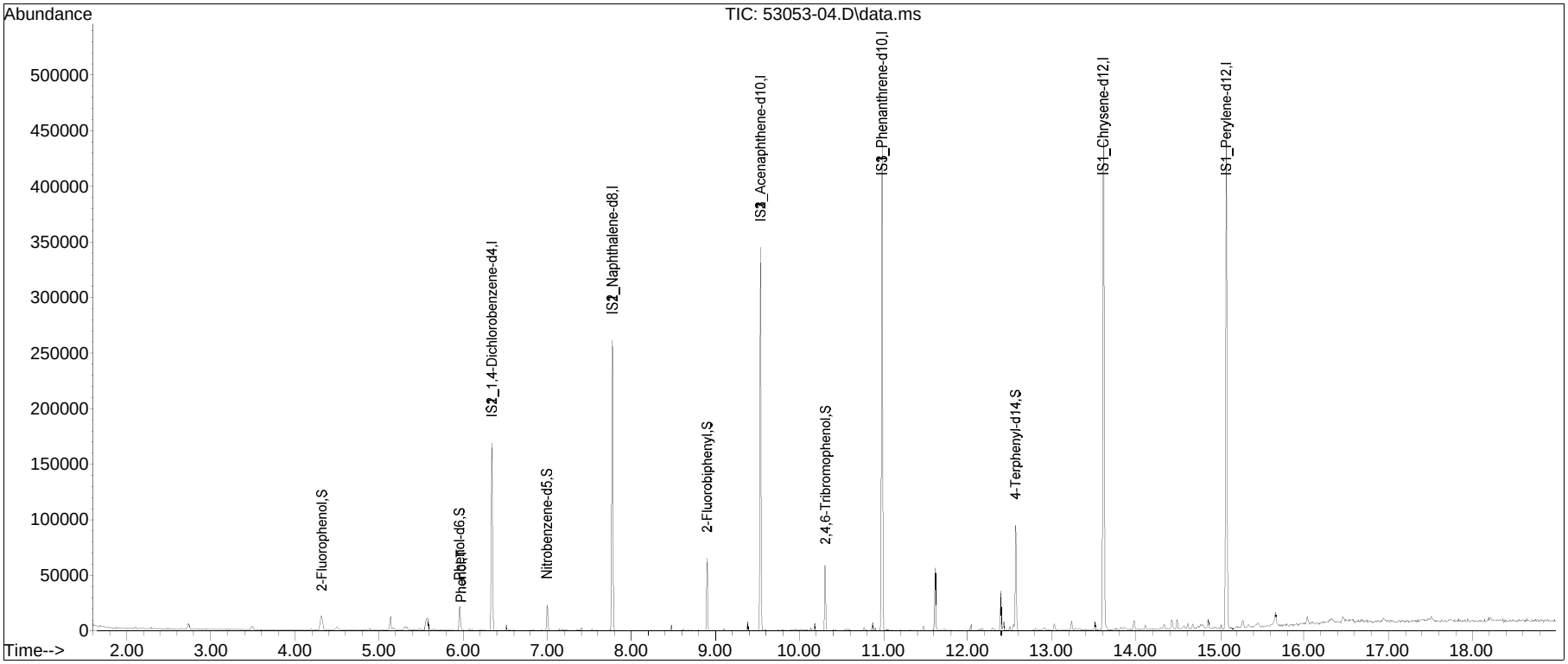
(#) = qualifier out of range (m) = manual integration (+) = signals summed

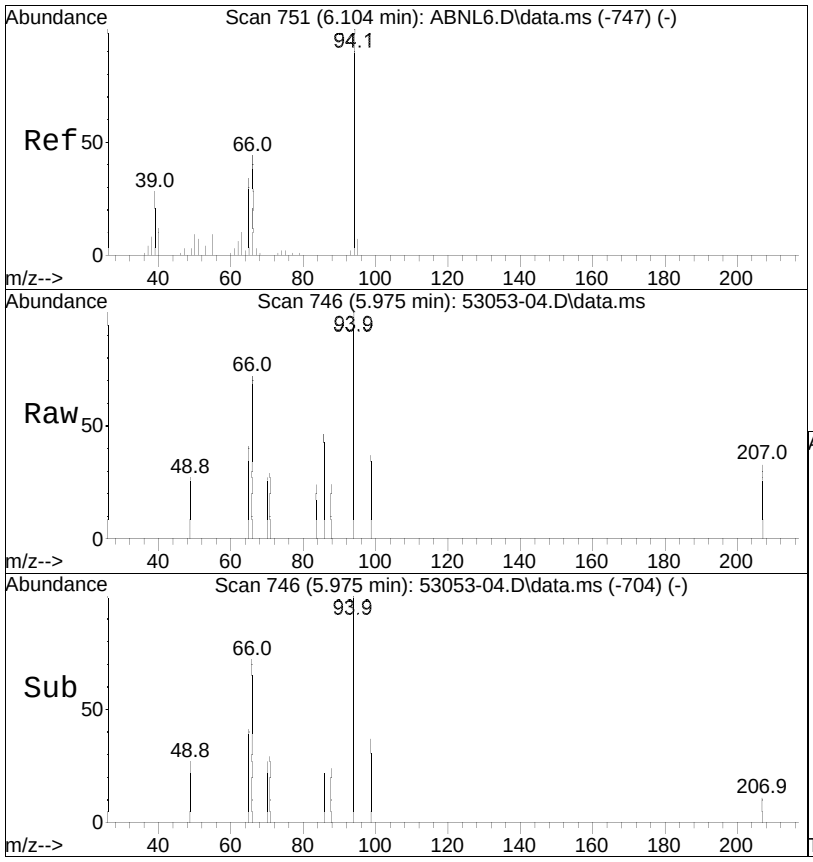
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 5:28 pm
Operator : SV106:als
Sample : L2453053-04,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 23 10:42:36 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•

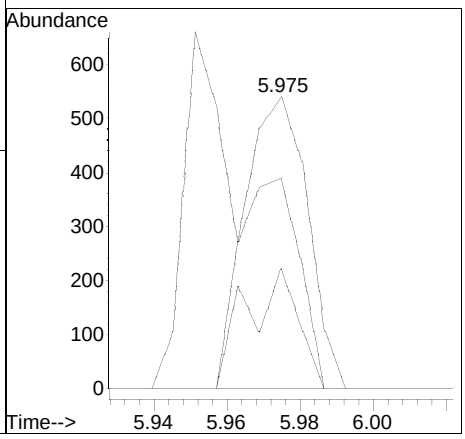





#8
Phenol
Concen: 0.06 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. -0.000 min
Lab File: 53053-04.D
Acq: 21 Sep 2024 5:28 pm

Tgt Ion: 94 Resp: 643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 0.0 | 26.0 | 39.0# |
| 66 | 139.7 | 33.8 | 50.8# |



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 53053-04.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 5:28 pm | Instrument | : SV 106 |
| Sample | : L2453053-04,32,,gmr | Quant Date | : 9/21/2024 5:47 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 5:51 pm
Operator : SV106:als
Sample : L2453053-05,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 10:42:56 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.340 | 152 | 30047 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 90.12% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.340 | 152 | 30047 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 94.82% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 102729 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 91.11% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 102729 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 96.99% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 71618 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 90.32% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 71618 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 97.63% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 71618 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 110.58% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 154534 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 92.69% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 154534 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 108.83% | | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 172013 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 95.10% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 178606 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 99.79% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.322 | 112 | 1835 | 0.211 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 10.55%# | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 3331 | 0.280 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 14.00%# | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 6880 | 0.566 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 56.60% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 14653 | 0.555 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 55.50% | | | | |
| 79) 2,4,6-Tribromophenol | 10.304 | 330 | 2270 | 0.509 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 25.45% | | | | |
| 96) 4-Terphenyl-d14 | 12.569 | 244 | 25198 | 0.606 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 60.60% | | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 5:51 pm
Operator : SV106:als
Sample : L2453053-05,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 10:42:56 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 0.000 | | 0 | N.D. | | |
| 8) Phenol | 0.000 | | 0 | N.D. | | |
| 14) Bis(2-chloroisopropyl)... | 0.000 | | 0 | N.D. | | |
| 15) 2-Methylphenol | 0.000 | | 0 | N.D. | | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 18) 3-Methylphenol/4-Methy... | 0.000 | | 0 | N.D. | | |
| 20) Nitrobenzene | 0.000 | | 0 | N.D. | | |
| 21) Isophorone | 0.000 | | 0 | N.D. | | |
| 22) 2-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 23) 2,4-Dimethylphenol | 0.000 | | 0 | N.D. | | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | | 0 | N.D. | | |
| 25) 2,4-Dichlorophenol | 0.000 | | 0 | N.D. | | |
| 28) Benzaldehyde | 0.000 | | 0 | N.D. | | |
| 29) Acetophenone | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 0.000 | | 0 | N.D. | | |
| 40) p-Chloro-m-cresol | 0.000 | | 0 | N.D. | | |
| 43) Hexachlorocyclopentadiene | 0.000 | | 0 | N.D. | | |
| 44) 2,4,6-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 45) 2,4,5-Trichlorophenol | 0.000 | | 0 | N.D. | | |
| 48) 2-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 51) Dimethyl phthalate | 0.000 | | 0 | N.D. | d | |
| 53) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 60) Caprolactam | 0.000 | | 0 | N.D. | | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | | 0 | N.D. | | |
| 62) Biphenyl | 0.000 | | 0 | N.D. | | |
| 64) 3-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. | | |
| 67) Dibenzofuran | 0.000 | | 0 | N.D. | | |
| 68) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 69) 4-Nitrophenol | 0.000 | | 0 | N.D. | | |
| 72) Diethyl phthalate | 0.000 | | 0 | N.D. | | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | | 0 | N.D. | | |
| 75) 4-Nitroaniline | 0.000 | | 0 | N.D. | | |
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 77) NDPA/DPA | 0.000 | | 0 | N.D. | | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | N.D. | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 5:51 pm
Operator : SV106:als
Sample : L2453053-05,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 10:42:56 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 87) Atrazine | 0.000 | | 0 | | N.D. | |
| 91) Carbazole | 0.000 | | 0 | | N.D. | |
| 92) Di-n-butylphthalate | 0.000 | | 0 | | N.D. | |
| 97) Butyl benzyl phthalate | 0.000 | | 0 | | N.D. | |
| 106) 3,3'-Dichlorobenzidine | 0.000 | | 0 | | N.D. | |
| 108) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | | N.D. | |
| 109) Di-n-octylphthalate | 0.000 | | 0 | | N.D. | d |

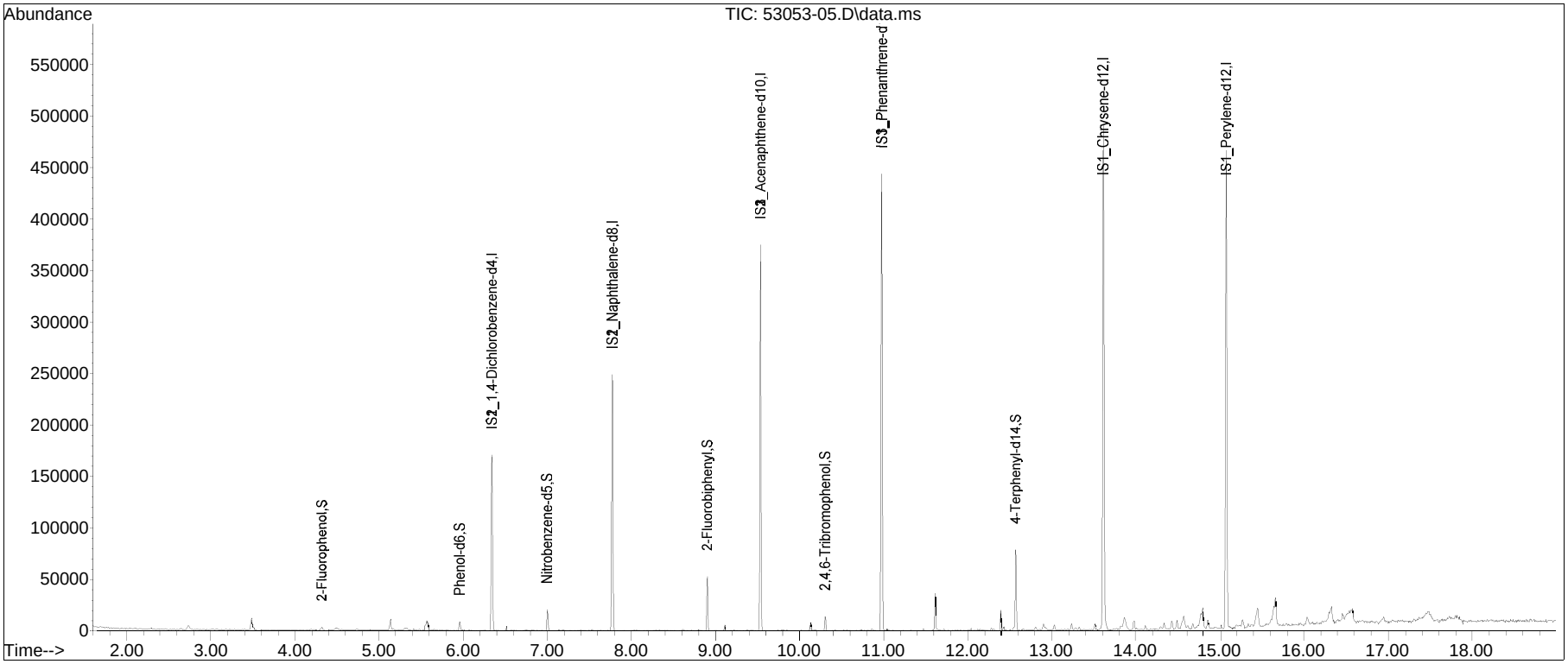
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 5:51 pm
Operator : SV106:als
Sample : L2453053-05,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 10:42:56 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 53053-05.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 5:51 pm | Instrument | : SV 106 |
| Sample | : L2453053-05,32,,gmr | Quant Date | : 9/21/2024 6:11 pm |

There are no manual integrations or false positives in this file.

# Semivolatiles Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV106** | **Ical Ref** | **: ICAL21231** |
| **Calibration dates** | **: 06/24/24 16:56 06/25/24 04:24** | | |

Calibration Files
L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | IS1_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 2) | t | N-Nitrosodimethylamine | 0.938 | 0.956 | 0.854 | 0.853 | 0.774 | 0.776 | 0.841 | 0.822 | 0.847 | 0.851 | 7.32 |
| 3) | t | Pyridine | 1.526 | 1.555 | 1.355 | 1.366 | 1.292 | 1.282 | 1.394 | 1.350 | 1.411 | 1.392 | 6.76 |
| 4) | S | 2-Fluorophenol | 1.089 | 1.386 | 1.143 | 1.143 | 1.065 | 1.079 | 1.163 | 1.151 | 1.186 | 1.156 | 8.25 |
| 5) | T | Aniline | 2.443 | 2.265 | 1.992 | 1.939 | 1.902 | 1.866 | 1.994 | 1.977 | 2.059 | 2.049 | 9.15 |
| 6) | t | 2-Chlorophenol | 1.386 | 1.452 | 1.391 | 1.240 | 1.207 | 1.148 | 1.258 | 1.242 | 1.266 | 1.288 | 7.73 |
| 7) | S | Phenol-d6 | 1.942 | 1.694 | 1.620 | 1.534 | 1.453 | 1.415 | 1.522 | 1.518 | 1.547 | 1.583 | 9.98 |
| 8) | T | Phenol | 1.941 | 1.738 | 1.608 | 1.689 | 1.523 | 1.491 | 1.603 | 1.574 | 1.610 | 1.642 | 8.23 |
| 9) | T | bis(2-Chloroethyl)ether | 1.531 | 1.511 | 1.439 | 1.305 | 1.256 | 1.224 | 1.308 | 1.272 | 1.289 | 1.348 | 8.51 |
| 10) | T | 1,3-Dichlorobenzene | 1.770 | 1.860 | 1.537 | 1.485 | 1.464 | 1.395 | 1.479 | 1.444 | 1.484 | 1.546 | 10.25 |
| 11) | T | 1,4-Dichlorobenzene | 1.885 | 1.638 | 1.678 | 1.555 | 1.449 | 1.398 | 1.506 | 1.482 | 1.494 | 1.565 | 9.52 |
| 12) | T | 1,2-Dichlorobenzene | 1.871 | 1.694 | 1.613 | 1.485 | 1.397 | 1.362 | 1.429 | 1.421 | 1.428 | 1.522 | 11.13 |
| 13) | t | Benzyl alcohol | 1.371 | 1.433 | 1.236 | 1.188 | 1.183 | 1.159 | 1.257 | 1.271 | 1.309 | 1.267 | 7.18 |
| 14) | T | bis(2-chloroisopropyl)ether | 2.653 | 2.552 | 2.257 | 2.073 | 2.015 | 1.932 | 2.079 | 1.986 | 1.948 | 2.166 | 12.30 |
| 15) | T | 2-Methylphenol | 1.300 | 1.270 | 1.235 | 1.174 | 1.110 | 1.086 | 1.178 | 1.131 | 1.160 | 1.183 | 6.14 |
| 16) | T | Hexachloroethane | 0.743 | 0.741 | 0.665 | 0.601 | 0.559 | 0.541 | 0.597 | 0.572 | 0.585 | 0.623 | 12.20 |
| 17) | T | n-Nitrosodi-n-propylamine | 1.092 | 1.105 | 1.007 | 1.074 | 1.024 | 0.994 | 1.084 | 1.053 | 1.080 | 1.057 | 3.76 |
| 18) | T | 3-Methylphenol/4-Methylphenol | 1.363 | 1.465 | 1.312 | 1.247 | 1.165 | 1.157 | 1.277 | 1.243 | 1.280 | 1.279 | 7.46 |
| 19) | S | Nitrobenzene-d5 | 1.858 | 1.740 | 1.746 | 1.543 | 1.455 | 1.453 | 1.603 | 1.562 | 1.608 | 1.619 | 8.50 |
| 20) | T | Nitrobenzene | 2.001 | 1.775 | 1.612 | 1.641 | 1.491 | 1.459 | 1.644 | 1.560 | 1.605 | 1.643 | 9.91 |
| 21) | T | Isophorone | 3.029 | 2.785 | 2.705 | 2.724 | 2.638 | 2.597 | 2.820 | 2.731 | 2.813 | 2.760 | 4.54 |
| 22) | T | 2-Nitrophenol | 0.681 | 0.806 | 0.655 | 0.635 | 0.660 | 0.645 | 0.712 | 0.705 | 0.728 | 0.692 | 7.72 |
| 23) | T | 2,4-Dimethylphenol | 1.634 | 1.347 | 1.227 | 1.258 | 1.205 | 1.186 | 1.292 | 1.260 | 1.305 | 1.301 | 10.34 |
| 24) | T | bis(2-Chloroethoxy)methane | 2.153 | 2.035 | 1.866 | 1.675 | 1.631 | 1.604 | 1.731 | 1.640 | 1.664 | 1.778 | 11.08 |
| 25) | T | 2,4-Dichlorophenol | 1.380 | 1.311 | 1.180 | 1.195 | 1.162 | 1.144 | 1.245 | 1.226 | 1.254 | 1.233 | 6.11 |
| 26) | T | 1,2,4-Trichlorobenzene | 1.956 | 1.639 | 1.621 | 1.445 | 1.368 | 1.313 | 1.454 | 1.378 | 1.416 | 1.510 | 13.26 |
| 27) | I | IS2_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 28) | T | Benzaldehyde | 1.111 | 1.153 | 1.214 | 1.183 | 1.184 | 1.173 | 1.252 | 1.213 | 1.203 | 1.187 | 3.40 |
| 29) | T | Acetophenone | 2.005 | 2.209 | 2.136 | 2.188 | 2.132 | 2.136 | 2.286 | 2.165 | 2.167 | 2.158 | 3.47 |
| 30) | T | m-Toluidine | 1.720 | 2.008 | 1.857 | 1.996 | 1.941 | 1.939 | 2.087 | 2.049 | 2.015 | 1.957 | 5.70 |
| 31) | T | 2-Chloroaniline | 1.443 | 1.808 | 1.812 | 1.652 | 1.707 | 1.684 | 1.822 | 1.726 | 1.729 | 1.709 | 6.81 |
| 32) | I | IS3_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 33) | t | 1,4-Dioxane | 0.788 | 0.714 | 0.628 | 0.587 | 0.537 | 0.492 | 0.510 | 0.488 | 0.517 | 0.584 | 18.21 |
| 34) | T | n-Decane | 1.716 | 1.735 | 1.686 | 1.811 | 1.628 | 1.542 | 1.639 | 1.564 | 1.638 | 1.662 | 5.08 |
| 35) | I | IS1_Naphthalene-d8 | ----------ISTD---------- | | | | | | | | | | |
| 36) | T | Naphthalene | 1.303 | 1.431 | 1.242 | 1.087 | 1.054 | 1.010 | 1.077 | 1.039 | 1.079 | 1.147 | 12.58 |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV106** | **Ical Ref** | **: ICAL21231** |
| **Calibration dates** | **: 06/24/24 16:56 06/25/24 04:24** | | |

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D

L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) | T | Benzoic Acid | | | 0.131 | 0.164 | 0.227 | 0.258 | 0.303 | 0.315 | 0.334 | *Q | 0.9992 |
| 38) | T | 4-Chloroaniline | 0.173 | 0.208 | 0.167 | 0.154 | 0.164 | 0.158 | 0.169 | 0.162 | 0.167 | 0.169 | 9.29 |
| 39) | T | Hexachlorobutadiene | 0.385 | 0.392 | 0.325 | 0.271 | 0.271 | 0.262 | 0.278 | 0.267 | 0.273 | 0.303 | 17.22 |
| 40) | T | p-Chloro-m-cresol | 0.374 | 0.367 | 0.322 | 0.323 | 0.324 | 0.322 | 0.351 | 0.345 | 0.357 | 0.343 | 6.06 |
| 41) | T | 2-Methylnaphthalene | 0.892 | 0.877 | 0.774 | 0.747 | 0.728 | 0.691 | 0.731 | 0.704 | 0.734 | 0.764 | 9.47 |
| 42) | T | 1-Methylnaphthalene | 0.299 | 0.327 | 0.311 | 0.289 | 0.272 | 0.266 | 0.285 | 0.276 | 0.287 | 0.290 | 6.72 |
| 43) | T | Hexachlorocyclopentadiene | 0.378 | 0.376 | 0.313 | 0.337 | 0.315 | 0.311 | 0.335 | 0.323 | 0.334 | 0.336 | 7.62 |
| 44) | T | 2,4,6-Trichlorophenol | 0.308 | 0.327 | 0.297 | 0.279 | 0.295 | 0.283 | 0.310 | 0.293 | 0.312 | 0.301 | 5.04 |
| 45) | T | 2,4,5-Trichlorophenol | 0.348 | 0.309 | 0.337 | 0.309 | 0.317 | 0.311 | 0.329 | 0.314 | 0.323 | 0.322 | 4.32 |
| 46) | S | 2-Fluorobiphenyl | 1.238 | 1.188 | 1.067 | 0.970 | 0.976 | 0.920 | 0.987 | 0.926 | 0.972 | 1.027 | 11.12 |
| 47) | T | 2-Chloronaphthalene | 0.931 | 0.978 | 0.829 | 0.784 | 0.761 | 0.738 | 0.778 | 0.744 | 0.771 | 0.813 | 10.49 |
| 48) | T | 2-Nitroaniline | 0.268 | 0.254 | 0.237 | 0.225 | 0.230 | 0.233 | 0.256 | 0.246 | 0.254 | 0.245 | 5.94 |
| 49) | T | 1,4-Dinitrobenzene | 0.102 | 0.146 | 0.128 | 0.126 | 0.121 | 0.122 | 0.139 | 0.136 | 0.140 | 0.129 | 10.28 |
| 50) | T | 1,3-Dinitrobenzene | 0.169 | 0.131 | 0.141 | 0.145 | 0.139 | 0.143 | 0.157 | 0.148 | 0.148 | 0.147 | 7.48 |
| 51) | T | Dimethyl phthalate | 1.130 | 1.111 | 1.037 | 0.925 | 0.941 | 0.923 | 0.970 | 0.913 | 0.952 | 0.989 | 8.42 |
| 52) | T | Acenaphthylene | 1.297 | 1.377 | 1.312 | 1.193 | 1.179 | 1.169 | 1.255 | 1.182 | 1.232 | 1.244 | 5.79 |
| 53) | T | 2,6-Dinitrotoluene | 0.236 | 0.213 | 0.202 | 0.202 | 0.210 | 0.206 | 0.221 | 0.209 | 0.216 | 0.213 | 5.02 |
| 54) | T | 1,2-Dinitrobenzene | 0.096 | 0.089 | 0.094 | 0.088 | 0.086 | 0.089 | 0.095 | 0.090 | 0.092 | 0.091 | 3.82 |
| 55) | I | IS2_Naphthalene-d8 | ----------ISTD---------- | | | | | | | | | | |
| 56) | T | a-Terpineol | 0.395 | 0.407 | 0.383 | 0.389 | 0.397 | 0.396 | 0.419 | 0.409 | 0.406 | 0.400 | 2.77 |
| 57) | T | 3-Chloroaniline | 0.202 | 0.187 | 0.203 | 0.200 | 0.200 | 0.199 | 0.208 | 0.203 | 0.203 | 0.201 | 2.82 |
| 58) | T | 2,6-Dichlorophenol | 0.300 | 0.375 | 0.339 | 0.357 | 0.362 | 0.374 | 0.392 | 0.378 | 0.378 | 0.362 | 7.68 |
| 59) | T | 1-chloro-2-nitrobenzene | 0.152 | 0.179 | 0.191 | 0.180 | 0.180 | 0.185 | 0.189 | 0.183 | 0.184 | 0.180 | 6.36 |
| 60) | T | Caprolactam | 0.150 | 0.175 | 0.213 | 0.215 | 0.213 | 0.225 | 0.244 | 0.230 | 0.227 | 0.210 | 14.05 |
| 61) | T | 1,2,4,5-Tetrachlorobenzene | 0.596 | 0.583 | 0.579 | 0.544 | 0.531 | 0.530 | 0.537 | 0.516 | 0.519 | 0.548 | 5.43 |
| 62) | T | Biphenyl | 1.132 | 1.104 | 1.120 | 1.094 | 1.057 | 1.061 | 1.093 | 1.046 | 1.050 | 1.084 | 2.94 |
| 63) | I | IS1_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 64) | T | 3-Nitroaniline | 0.248 | 0.338 | 0.326 | 0.319 | 0.317 | 0.318 | 0.331 | 0.337 | 0.341 | 0.319 | 8.83 |
| 65) | T | Acenaphthene | 1.363 | 1.314 | 1.204 | 1.106 | 1.083 | 1.042 | 1.074 | 1.080 | 1.107 | 1.153 | 9.97 |
| 66) | T | 2,4-Dinitrophenol | | | 0.174 | 0.168 | 0.187 | 0.215 | 0.242 | 0.250 | 0.257 | 0.213 | 17.56 |
| 67) | T | Dibenzofuran | 2.377 | 2.261 | 1.986 | 1.905 | 1.815 | 1.738 | 1.800 | 1.748 | 1.794 | 1.936 | 12.00 |
| 68) | T | 2,4-Dinitrotoluene | 0.506 | 0.560 | 0.460 | 0.452 | 0.441 | 0.460 | 0.460 | 0.463 | 0.471 | 0.475 | 7.73 |
| 69) | T | 4-Nitrophenol | 0.282 | 0.331 | 0.331 | 0.326 | 0.316 | 0.305 | 0.329 | 0.346 | 0.345 | 0.323 | 6.20 |
| 70) | T | 2,3,5,6-Tetrachlorophenol | 0.441 | 0.426 | 0.460 | 0.443 | 0.456 | 0.437 | 0.464 | 0.465 | 0.478 | 0.452 | 3.65 |
| 71) | T | 2,3,4,6-Tetrachlorophenol | 0.385 | 0.451 | 0.449 | 0.425 | 0.445 | 0.431 | 0.437 | 0.442 | 0.448 | 0.435 | 4.74 |
| 72) | T | Diethyl phthalate | 1.707 | 1.826 | 1.602 | 1.465 | 1.488 | 1.399 | 1.423 | 1.414 | 1.441 | 1.529 | 9.81 |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV106** | **Ical Ref** | **: ICAL21231** |
| **Calibration dates** | **: 06/24/24 16:56 06/25/24 04:24** | | |

Calibration Files
L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73) | T | Fluorene | 1.829 | 1.686 | 1.572 | 1.487 | 1.429 | 1.398 | 1.444 | 1.412 | 1.445 | 1.523 | 9.66 |
| 74) | T | 4-Chlorophenyl-phenylether | 0.920 | 0.966 | 0.887 | 0.754 | 0.766 | 0.703 | 0.750 | 0.723 | 0.745 | 0.801 | 11.96 |
| 75) | T | 4-Nitroaniline | 0.301 | 0.357 | 0.373 | 0.348 | 0.342 | 0.309 | 0.321 | 0.322 | 0.318 | 0.333 | 7.13 |
| 76) | T | 4,6-Dinitro-o-cresol | 0.180 | 0.212 | 0.253 | 0.269 | 0.274 | 0.278 | 0.297 | 0.314 | 0.317 | 0.266 | 17.15 |
| 77) | T | NDPA/DPA | 1.353 | 1.467 | 1.261 | 1.271 | 1.207 | 1.192 | 1.215 | 1.189 | 1.208 | 1.263 | 7.35 |
| 78) | T | Azobenzene | 1.586 | 1.589 | 1.442 | 1.406 | 1.365 | 1.340 | 1.427 | 1.407 | 1.451 | 1.446 | 6.06 |
| 79) | S | 2,4,6-Tribromophenol | 0.233 | 0.268 | 0.232 | 0.253 | 0.245 | 0.244 | 0.253 | 0.252 | 0.264 | 0.249 | 4.96 |
| 80) | T | 4-Bromophenyl-phenylether | 0.570 | 0.626 | 0.473 | 0.489 | 0.472 | 0.452 | 0.479 | 0.464 | 0.474 | 0.500 | 11.64 |
| 81) | T | Hexachlorobenzene | 0.612 | 0.703 | 0.623 | 0.558 | 0.532 | 0.505 | 0.528 | 0.526 | 0.532 | 0.569 | 11.29 |
| 82) | T | Pentachlorophenol | 0.346 | 0.345 | 0.300 | 0.323 | 0.361 | 0.371 | 0.392 | 0.404 | 0.409 | 0.361 | 10.19 |
| 83) | I | IS2_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 84) | T | Dichloran | 0.212 | 0.234 | 0.218 | 0.220 | 0.232 | 0.262 | 0.276 | 0.284 | 0.287 | 0.247 | 12.11 |
| 85) | T | Pentachloronitrobenzene | 0.234 | 0.253 | 0.232 | 0.279 | 0.261 | 0.290 | 0.299 | 0.290 | 0.294 | 0.270 | 9.62 |
| 86) | I | IS3_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 87) | T | Atrazine | 0.569 | 0.477 | 0.491 | 0.517 | 0.491 | 0.463 | 0.513 | 0.526 | 0.531 | 0.509 | 6.32 |
| 88) | I | IS1_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 89) | T | Phenanthrene | 1.330 | 1.366 | 1.146 | 1.122 | 0.987 | 0.987 | 1.054 | 1.012 | 1.050 | 1.117 | 12.71 |
| 90) | T | Anthracene | 1.346 | 1.213 | 1.150 | 1.084 | 0.998 | 1.020 | 1.080 | 1.029 | 1.074 | 1.111 | 9.97 |
| 91) | T | Carbazole | 1.222 | 1.101 | 1.027 | 1.019 | 0.920 | 0.926 | 0.999 | 0.969 | 0.976 | 1.018 | 9.28 |
| 92) | T | Di-n-butylphthalate | 1.297 | 1.305 | 1.177 | 1.136 | 1.122 | 1.124 | 1.225 | 1.169 | 1.201 | 1.195 | 5.79 |
| 93) | T | Fluoranthene | 1.673 | 1.551 | 1.365 | 1.334 | 1.226 | 1.231 | 1.329 | 1.288 | 1.296 | 1.366 | 10.96 |
| 94) | T | Benzidine | 0.623 | 0.736 | 0.752 | 0.737 | 0.709 | 0.734 | 0.804 | 0.785 | 0.794 | 0.741 | 7.34 |
| 95) | T | Pyrene | 1.722 | 1.662 | 1.471 | 1.406 | 1.298 | 1.301 | 1.394 | 1.337 | 1.368 | 1.440 | 10.65 |
| 96) | S | 4-Terphenyl-d14 | 1.271 | 1.253 | 1.090 | 1.079 | 0.978 | 0.959 | 1.041 | 1.000 | 1.009 | 1.076 | 10.62 |
| 97) | T | Butyl benzyl phthalate | 0.640 | 0.593 | 0.508 | 0.530 | 0.503 | 0.501 | 0.562 | 0.553 | 0.561 | 0.550 | 8.39 |
| 98) | I | IS2_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 99) | T | Diphenamid | 0.449 | 0.557 | 0.590 | 0.563 | 0.545 | 0.570 | 0.595 | 0.598 | 0.585 | 0.561 | 8.15 |
| 100) | I | IS3_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 101) | T | n-Octadecane | 0.566 | 0.464 | 0.504 | 0.501 | 0.489 | 0.462 | 0.516 | 0.501 | 0.475 | 0.498 | 6.39 |
| 102) | T | Parathion | 0.111 | 0.129 | 0.128 | 0.108 | 0.110 | 0.113 | 0.132 | 0.142 | 0.145 | 0.124 | 11.46 |
| 103) | T | 3,3'-Dimethylbenzidine | 0.534 | 0.640 | 0.710 | 0.782 | 0.830 | 0.801 | 0.917 | 0.934 | 0.966 | 0.791 | 18.10 |
| 104) | I | IS1_Chrysene-d12 | ----------ISTD---------- | | | | | | | | | | |
| 105) | T | Benzo[a]anthracene | 1.886 | 1.694 | 1.517 | 1.409 | 1.348 | 1.308 | 1.417 | 1.345 | 1.379 | 1.478 | 13.03 |
| 106) | T | 3,3'-Dichlorobenzidine | 0.472 | 0.521 | 0.444 | 0.457 | 0.464 | 0.489 | 0.527 | 0.507 | 0.521 | 0.489 | 6.37 |
| 107) | T | Chrysene | 1.853 | 1.775 | 1.481 | 1.363 | 1.296 | 1.258 | 1.301 | 1.256 | 1.277 | 1.429 | 16.08 |
| 108) | T | bis(2-Ethylhexyl)phthalate | 0.892 | 0.841 | 0.769 | 0.757 | 0.799 | 0.796 | 0.849 | 0.817 | 0.835 | 0.817 | 5.15 |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV106** | **Ical Ref** | **: ICAL21231** |
| **Calibration dates** | **: 06/24/24 16:56 06/25/24 04:24** | | |

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 109) | T | Di-n-octylphthalate | 1.452 | 1.362 | 1.285 | 1.241 | 1.299 | 1.297 | 1.432 | 1.390 | 1.413 | 1.352 | 5.49 |
| 110) | T | Benzo(b)fluoranthene | 1.696 | 1.671 | 1.537 | 1.403 | 1.294 | 1.235 | 1.381 | 1.329 | 1.326 | 1.430 | 11.62 |
| 111) | T | Benzo(k)fluoranthene | 1.681 | 1.662 | 1.379 | 1.328 | 1.239 | 1.269 | 1.288 | 1.171 | 1.188 | 1.356 | 14.02 |
| 112) | T | Benzo(a)pyrene | 1.402 | 1.440 | 1.283 | 1.193 | 1.133 | 1.161 | 1.230 | 1.175 | 1.157 | 1.242 | 8.96 |
| 113) | I | IS1_Perylene-d12 | ----------ISTD---------- | | | | | | | | | | |
| 114) | T | Indeno(1,2,3-cd)pyrene | 1.309 | 1.196 | 1.123 | 1.101 | 1.076 | 1.040 | 1.130 | 0.901 | 0.862 | 1.082 | 12.71 |
| 115) | T | Dibenzo[a,h]anthracene | 1.237 | 1.190 | 1.068 | 1.055 | 1.022 | 0.999 | 1.041 | 0.883 | 0.880 | 1.042 | 11.47 |
| 116) | T | Benzo(g,h,i)perylene | 1.225 | 1.168 | 1.042 | 1.002 | 0.980 | 0.938 | 0.975 | 0.728 | 0.620 | 0.964 | 19.83 |

# Response Factor Report SV 106

Method Path : I:\8270\SV106\240624RVTical\
Method File : FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024
Response Via : Initial Calibration

Calibration Files
L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | IS1_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 2) | t | N-Nitrosodimethylamine | 0.938 | 0.956 | 0.854 | 0.853 | 0.774 | 0.776 | 0.841 | 0.822 | 0.847 | 0.851 | 7.32 |
| 3) | t | Pyridine | 1.526 | 1.555 | 1.355 | 1.366 | 1.292 | 1.282 | 1.394 | 1.350 | 1.411 | 1.392 | 6.76 |
| 4) | S | 2-Fluorophenol | 1.089 | 1.386 | 1.143 | 1.143 | 1.065 | 1.079 | 1.163 | 1.151 | 1.186 | 1.156 | 8.25 |
| 5) | T | Aniline | 2.443 | 2.265 | 1.992 | 1.939 | 1.902 | 1.866 | 1.994 | 1.977 | 2.059 | 2.049 | 9.15 |
| 6) | t | 2-Chlorophenol | 1.386 | 1.452 | 1.391 | 1.240 | 1.207 | 1.148 | 1.258 | 1.242 | 1.266 | 1.288 | 7.73 |
| 7) | S | Phenol-d6 | 1.942 | 1.694 | 1.620 | 1.534 | 1.453 | 1.415 | 1.522 | 1.518 | 1.547 | 1.583 | 9.98 |
| 8) | T | Phenol | 1.941 | 1.738 | 1.608 | 1.689 | 1.523 | 1.491 | 1.603 | 1.574 | 1.610 | 1.642 | 8.23 |
| 9) | T | bis(2-Chloroethyl)ether | 1.531 | 1.511 | 1.439 | 1.305 | 1.256 | 1.224 | 1.308 | 1.272 | 1.289 | 1.348 | 8.51 |
| 10) | T | 1,3-Dichlorobenzene | 1.770 | 1.860 | 1.537 | 1.485 | 1.464 | 1.395 | 1.479 | 1.444 | 1.484 | 1.546 | 10.25 |
| 11) | T | 1,4-Dichlorobenzene | 1.885 | 1.638 | 1.678 | 1.555 | 1.449 | 1.398 | 1.506 | 1.482 | 1.494 | 1.565 | 9.52 |
| 12) | T | 1,2-Dichlorobenzene | 1.871 | 1.694 | 1.613 | 1.485 | 1.397 | 1.362 | 1.429 | 1.421 | 1.428 | 1.522 | 11.13 |
| 13) | t | Benzyl alcohol | 1.371 | 1.433 | 1.236 | 1.188 | 1.183 | 1.159 | 1.257 | 1.271 | 1.309 | 1.267 | 7.18 |
| 14) | T | bis(2-chloroisopropyl)ether | 2.653 | 2.552 | 2.257 | 2.073 | 2.015 | 1.932 | 2.079 | 1.986 | 1.948 | 2.166 | 12.30 |
| 15) | T | 2-Methylphenol | 1.300 | 1.270 | 1.235 | 1.174 | 1.110 | 1.086 | 1.178 | 1.131 | 1.160 | 1.183 | 6.14 |
| 16) | T | Hexachloroethane | 0.743 | 0.741 | 0.665 | 0.601 | 0.559 | 0.541 | 0.597 | 0.572 | 0.585 | 0.623 | 12.20 |
| 17) | T | n-Nitrosodi-n-propylamine | 1.092 | 1.105 | 1.007 | 1.074 | 1.024 | 0.994 | 1.084 | 1.053 | 1.080 | 1.057 | 3.76 |
| 18) | T | 3-Methylphenol/4-Methylphenol | 1.363 | 1.465 | 1.312 | 1.247 | 1.165 | 1.157 | 1.277 | 1.243 | 1.280 | 1.279 | 7.46 |
| 19) | S | Nitrobenzene-d5 | 1.858 | 1.740 | 1.746 | 1.543 | 1.455 | 1.453 | 1.603 | 1.562 | 1.608 | 1.619 | 8.50 |
| 20) | T | Nitrobenzene | 2.001 | 1.775 | 1.612 | 1.641 | 1.491 | 1.459 | 1.644 | 1.560 | 1.605 | 1.643 | 9.91 |
| 21) | T | Isophorone | 3.029 | 2.785 | 2.705 | 2.724 | 2.638 | 2.597 | 2.820 | 2.731 | 2.813 | 2.760 | 4.54 |
| 22) | T | 2-Nitrophenol | 0.681 | 0.806 | 0.655 | 0.635 | 0.660 | 0.645 | 0.712 | 0.705 | 0.728 | 0.692 | 7.72 |
| 23) | T | 2,4-Dimethylphenol | 1.634 | 1.347 | 1.227 | 1.258 | 1.205 | 1.186 | 1.292 | 1.260 | 1.305 | 1.301 | 10.34 |
| 24) | T | bis(2-Chloroethoxy)methane | 2.153 | 2.035 | 1.866 | 1.675 | 1.631 | 1.604 | 1.731 | 1.640 | 1.664 | 1.778 | 11.08 |
| 25) | T | 2,4-Dichlorophenol | 1.380 | 1.311 | 1.180 | 1.195 | 1.162 | 1.144 | 1.245 | 1.226 | 1.254 | 1.233 | 6.11 |
| 26) | T | 1,2,4-Trichlorobenzene | 1.956 | 1.639 | 1.621 | 1.445 | 1.368 | 1.313 | 1.454 | 1.378 | 1.416 | 1.510 | 13.26 |
| 27) | I | IS2_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 28) | T | Benzaldehyde | 1.111 | 1.153 | 1.214 | 1.183 | 1.184 | 1.173 | 1.252 | 1.213 | 1.203 | 1.187 | 3.40 |
| 29) | T | Acetophenone | 2.005 | 2.209 | 2.136 | 2.188 | 2.132 | 2.136 | 2.286 | 2.165 | 2.167 | 2.158 | 3.47 |
| 30) | T | m-Toluidine | 1.720 | 2.008 | 1.857 | 1.996 | 1.941 | 1.939 | 2.087 | 2.049 | 2.015 | 1.957 | 5.70 |
| 31) | T | 2-Chloroaniline | 1.443 | 1.808 | 1.812 | 1.652 | 1.707 | 1.684 | 1.822 | 1.726 | 1.729 | 1.709 | 6.81 |
| 32) | I | IS3_1,4-Dichlorobenzene-d4 | ----------ISTD---------- | | | | | | | | | | |
| 33) | t | 1,4-Dioxane | 0.788 | 0.714 | 0.628 | 0.587 | 0.537 | 0.492 | 0.510 | 0.488 | 0.517 | 0.584 | 18.21 |
| 34) | T | n-Decane | 1.716 | 1.735 | 1.686 | 1.811 | 1.628 | 1.542 | 1.639 | 1.564 | 1.638 | 1.662 | 5.08 |
| 35) | I | IS1_Naphthalene-d8 | ----------ISTD---------- | | | | | | | | | | |
| 36) | T | Naphthalene | 1.303 | 1.431 | 1.242 | 1.087 | 1.054 | 1.010 | 1.077 | 1.039 | 1.079 | 1.147 | 12.58 |
| 37) | T | Benzoic Acid | | | 0.131 | 0.164 | 0.227 | 0.258 | 0.303 | 0.315 | 0.334 | *Q | 0.9992 |
| 38) | T | 4-Chloroaniline | 0.173 | 0.208 | 0.167 | 0.154 | 0.164 | 0.158 | 0.169 | 0.162 | 0.167 | 0.169 | 9.29 |
| 39) | T | Hexachlorobutadiene | 0.385 | 0.392 | 0.325 | 0.271 | 0.271 | 0.262 | 0.278 | 0.267 | 0.273 | 0.303 | 17.22 |
| 40) | T | p-Chloro-m-cresol | 0.374 | 0.367 | 0.322 | 0.323 | 0.324 | 0.322 | 0.351 | 0.345 | 0.357 | 0.343 | 6.06 |
| 41) | T | 2-Methylnaphthalene | 0.892 | 0.877 | 0.774 | 0.747 | 0.728 | 0.691 | 0.731 | 0.704 | 0.734 | 0.764 | 9.47 |
| 42) | T | 1-Methylnaphthalene | 0.299 | 0.327 | 0.311 | 0.289 | 0.272 | 0.266 | 0.285 | 0.276 | 0.287 | 0.290 | 6.72 |
| 43) | T | Hexachlorocyclopentadiene | 0.378 | 0.376 | 0.313 | 0.337 | 0.315 | 0.311 | 0.335 | 0.323 | 0.334 | 0.336 | 7.62 |
| 44) | T | 2,4,6-Trichlorophenol | 0.308 | 0.327 | 0.297 | 0.279 | 0.295 | 0.283 | 0.310 | 0.293 | 0.312 | 0.301 | 5.04 |
| 45) | T | 2,4,5-Trichlorophenol | 0.348 | 0.309 | 0.337 | 0.309 | 0.317 | 0.311 | 0.329 | 0.314 | 0.323 | 0.322 | 4.32 |

Response Factor Report SV 106

Method Path : I:\8270\SV106\240624RVTical\
Method File : FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024
Response Via : Initial Calibration

Calibration Files
L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46) | S | 2-Fluorobiphenyl | 1.238 | 1.188 | 1.067 | 0.970 | 0.976 | 0.920 | 0.987 | 0.926 | 0.972 | 1.027 | 11.12 |
| 47) | T | 2-Chloronaphthalene | 0.931 | 0.978 | 0.829 | 0.784 | 0.761 | 0.738 | 0.778 | 0.744 | 0.771 | 0.813 | 10.49 |
| 48) | T | 2-Nitroaniline | 0.268 | 0.254 | 0.237 | 0.225 | 0.230 | 0.233 | 0.256 | 0.246 | 0.254 | 0.245 | 5.94 |
| 49) | T | 1,4-Dinitrobenzene | 0.102 | 0.146 | 0.128 | 0.126 | 0.121 | 0.122 | 0.139 | 0.136 | 0.140 | 0.129 | 10.28 |
| 50) | T | 1,3-Dinitrobenzene | 0.169 | 0.131 | 0.141 | 0.145 | 0.139 | 0.143 | 0.157 | 0.148 | 0.148 | 0.147 | 7.48 |
| 51) | T | Dimethyl phthalate | 1.130 | 1.111 | 1.037 | 0.925 | 0.941 | 0.923 | 0.970 | 0.913 | 0.952 | 0.989 | 8.42 |
| 52) | T | Acenaphthylene | 1.297 | 1.377 | 1.312 | 1.193 | 1.179 | 1.169 | 1.255 | 1.182 | 1.232 | 1.244 | 5.79 |
| 53) | T | 2,6-Dinitrotoluene | 0.236 | 0.213 | 0.202 | 0.202 | 0.210 | 0.206 | 0.221 | 0.209 | 0.216 | 0.213 | 5.02 |
| 54) | T | 1,2-Dinitrobenzene | 0.096 | 0.089 | 0.094 | 0.088 | 0.086 | 0.089 | 0.095 | 0.090 | 0.092 | 0.091 | 3.82 |
| 55) | I | IS2_Naphthalene-d8 | ----------ISTD---------- | | | | | | | | | | |
| 56) | T | a-Terpineol | 0.395 | 0.407 | 0.383 | 0.389 | 0.397 | 0.396 | 0.419 | 0.409 | 0.406 | 0.400 | 2.77 |
| 57) | T | 3-Chloroaniline | 0.202 | 0.187 | 0.203 | 0.200 | 0.200 | 0.199 | 0.208 | 0.203 | 0.203 | 0.201 | 2.82 |
| 58) | T | 2,6-Dichlorophenol | 0.300 | 0.375 | 0.339 | 0.357 | 0.362 | 0.374 | 0.392 | 0.378 | 0.378 | 0.362 | 7.68 |
| 59) | T | 1-chloro-2-nitrobenzene | 0.152 | 0.179 | 0.191 | 0.180 | 0.180 | 0.185 | 0.189 | 0.183 | 0.184 | 0.180 | 6.36 |
| 60) | T | Caprolactam | 0.150 | 0.175 | 0.213 | 0.215 | 0.213 | 0.225 | 0.244 | 0.230 | 0.227 | 0.210 | 14.05 |
| 61) | T | 1,2,4,5-Tetrachlorobenzene | 0.596 | 0.583 | 0.579 | 0.544 | 0.531 | 0.530 | 0.537 | 0.516 | 0.519 | 0.548 | 5.43 |
| 62) | T | Biphenyl | 1.132 | 1.104 | 1.120 | 1.094 | 1.057 | 1.061 | 1.093 | 1.046 | 1.050 | 1.084 | 2.94 |
| 63) | I | IS1_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 64) | T | 3-Nitroaniline | 0.248 | 0.338 | 0.326 | 0.319 | 0.317 | 0.318 | 0.331 | 0.337 | 0.341 | 0.319 | 8.83 |
| 65) | T | Acenaphthene | 1.363 | 1.314 | 1.204 | 1.106 | 1.083 | 1.042 | 1.074 | 1.080 | 1.107 | 1.153 | 9.97 |
| 66) | T | 2,4-Dinitrophenol | | | 0.174 | 0.168 | 0.187 | 0.215 | 0.242 | 0.250 | 0.257 | 0.213 | 17.56 |
| 67) | T | Dibenzofuran | 2.377 | 2.261 | 1.986 | 1.905 | 1.815 | 1.738 | 1.800 | 1.748 | 1.794 | 1.936 | 12.00 |
| 68) | T | 2,4-Dinitrotoluene | 0.506 | 0.560 | 0.460 | 0.452 | 0.441 | 0.460 | 0.460 | 0.463 | 0.471 | 0.475 | 7.73 |
| 69) | T | 4-Nitrophenol | 0.282 | 0.331 | 0.331 | 0.326 | 0.316 | 0.305 | 0.329 | 0.346 | 0.345 | 0.323 | 6.20 |
| 70) | T | 2,3,5,6-Tetrachlorophenol | 0.441 | 0.426 | 0.460 | 0.443 | 0.456 | 0.437 | 0.464 | 0.465 | 0.478 | 0.452 | 3.65 |
| 71) | T | 2,3,4,6-Tetrachlorophenol | 0.385 | 0.451 | 0.449 | 0.425 | 0.445 | 0.431 | 0.437 | 0.442 | 0.448 | 0.435 | 4.74 |
| 72) | T | Diethyl phthalate | 1.707 | 1.826 | 1.602 | 1.465 | 1.488 | 1.399 | 1.423 | 1.414 | 1.441 | 1.529 | 9.81 |
| 73) | T | Fluorene | 1.829 | 1.686 | 1.572 | 1.487 | 1.429 | 1.398 | 1.444 | 1.412 | 1.445 | 1.523 | 9.66 |
| 74) | T | 4-Chlorophenyl-phenylether | 0.920 | 0.966 | 0.887 | 0.754 | 0.766 | 0.703 | 0.750 | 0.723 | 0.745 | 0.801 | 11.96 |
| 75) | T | 4-Nitroaniline | 0.301 | 0.357 | 0.373 | 0.348 | 0.342 | 0.309 | 0.321 | 0.322 | 0.318 | 0.333 | 7.13 |
| 76) | T | 4,6-Dinitro-o-cresol | 0.180 | 0.212 | 0.253 | 0.269 | 0.274 | 0.278 | 0.297 | 0.314 | 0.317 | 0.266 | 17.15 |
| 77) | T | NDPA/DPA | 1.353 | 1.467 | 1.261 | 1.271 | 1.207 | 1.192 | 1.215 | 1.189 | 1.208 | 1.263 | 7.35 |
| 78) | T | Azobenzene | 1.586 | 1.589 | 1.442 | 1.406 | 1.365 | 1.340 | 1.427 | 1.407 | 1.451 | 1.446 | 6.06 |
| 79) | S | 2,4,6-Tribromophenol | 0.233 | 0.268 | 0.232 | 0.253 | 0.245 | 0.244 | 0.253 | 0.252 | 0.264 | 0.249 | 4.96 |
| 80) | T | 4-Bromophenyl-phenylether | 0.570 | 0.626 | 0.473 | 0.489 | 0.472 | 0.452 | 0.479 | 0.464 | 0.474 | 0.500 | 11.64 |
| 81) | T | Hexachlorobenzene | 0.612 | 0.703 | 0.623 | 0.558 | 0.532 | 0.505 | 0.528 | 0.526 | 0.532 | 0.569 | 11.29 |
| 82) | T | Pentachlorophenol | 0.346 | 0.345 | 0.300 | 0.323 | 0.361 | 0.371 | 0.392 | 0.404 | 0.409 | 0.361 | 10.19 |
| 83) | I | IS2_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 84) | T | Dichloran | 0.212 | 0.234 | 0.218 | 0.220 | 0.232 | 0.262 | 0.276 | 0.284 | 0.287 | 0.247 | 12.11 |
| 85) | T | Pentachloronitrobenzene | 0.234 | 0.253 | 0.232 | 0.279 | 0.261 | 0.290 | 0.299 | 0.290 | 0.294 | 0.270 | 9.62 |
| 86) | I | IS3_Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 87) | T | Atrazine | 0.569 | 0.477 | 0.491 | 0.517 | 0.491 | 0.463 | 0.513 | 0.526 | 0.531 | 0.509 | 6.32 |
| 88) | I | IS1_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 89) | T | Phenanthrene | 1.330 | 1.366 | 1.146 | 1.122 | 0.987 | 0.987 | 1.054 | 1.012 | 1.050 | 1.117 | 12.71 |
| 90) | T | Anthracene | 1.346 | 1.213 | 1.150 | 1.084 | 0.998 | 1.020 | 1.080 | 1.029 | 1.074 | 1.111 | 9.97 |

Response Factor Report SV 106

Method Path : I:\8270\SV106\240624RVTical\
Method File : FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024
Response Via : Initial Calibration

Calibration Files
L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
L8 =ADPL8.D L9 =ADPL9.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 91) | T | Carbazole | 1.222 | 1.101 | 1.027 | 1.019 | 0.920 | 0.926 | 0.999 | 0.969 | 0.976 | 1.018 | 9.28 |
| 92) | T | Di-n-butylphthalate | 1.297 | 1.305 | 1.177 | 1.136 | 1.122 | 1.124 | 1.225 | 1.169 | 1.201 | 1.195 | 5.79 |
| 93) | T | Fluoranthene | 1.673 | 1.551 | 1.365 | 1.334 | 1.226 | 1.231 | 1.329 | 1.288 | 1.296 | 1.366 | 10.96 |
| 94) | T | Benzidine | 0.623 | 0.736 | 0.752 | 0.737 | 0.709 | 0.734 | 0.804 | 0.785 | 0.794 | 0.741 | 7.34 |
| 95) | T | Pyrene | 1.722 | 1.662 | 1.471 | 1.406 | 1.298 | 1.301 | 1.394 | 1.337 | 1.368 | 1.440 | 10.65 |
| 96) | S | 4-Terphenyl-d14 | 1.271 | 1.253 | 1.090 | 1.079 | 0.978 | 0.959 | 1.041 | 1.000 | 1.009 | 1.076 | 10.62 |
| 97) | T | Butyl benzyl phthalate | 0.640 | 0.593 | 0.508 | 0.530 | 0.503 | 0.501 | 0.562 | 0.553 | 0.561 | 0.550 | 8.39 |
| 98) | I | IS2_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 99) | T | Diphenamid | 0.449 | 0.557 | 0.590 | 0.563 | 0.545 | 0.570 | 0.595 | 0.598 | 0.585 | 0.561 | 8.15 |
| 100) | I | IS3_Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | | | |
| 101) | T | n-Octadecane | 0.566 | 0.464 | 0.504 | 0.501 | 0.489 | 0.462 | 0.516 | 0.501 | 0.475 | 0.498 | 6.39 |
| 102) | T | Parathion | 0.111 | 0.129 | 0.128 | 0.108 | 0.110 | 0.113 | 0.132 | 0.142 | 0.145 | 0.124 | 11.46 |
| 103) | T | 3,3'-Dimethylbenzidine | 0.534 | 0.640 | 0.710 | 0.782 | 0.830 | 0.801 | 0.917 | 0.934 | 0.966 | 0.791 | 18.10 |
| 104) | I | IS1_Chrysene-d12 | ----------ISTD---------- | | | | | | | | | | |
| 105) | T | Benzo[a]anthracene | 1.886 | 1.694 | 1.517 | 1.409 | 1.348 | 1.308 | 1.417 | 1.345 | 1.379 | 1.478 | 13.03 |
| 106) | T | 3,3'-Dichlorobenzidine | 0.472 | 0.521 | 0.444 | 0.457 | 0.464 | 0.489 | 0.527 | 0.507 | 0.521 | 0.489 | 6.37 |
| 107) | T | Chrysene | 1.853 | 1.775 | 1.481 | 1.363 | 1.296 | 1.258 | 1.301 | 1.256 | 1.277 | 1.429 | 16.08 |
| 108) | T | bis(2-Ethylhexyl)phthalate | 0.892 | 0.841 | 0.769 | 0.757 | 0.799 | 0.796 | 0.849 | 0.817 | 0.835 | 0.817 | 5.15 |
| 109) | T | Di-n-octylphthalate | 1.452 | 1.362 | 1.285 | 1.241 | 1.299 | 1.297 | 1.432 | 1.390 | 1.413 | 1.352 | 5.49 |
| 110) | T | Benzo(b)fluoranthene | 1.696 | 1.671 | 1.537 | 1.403 | 1.294 | 1.235 | 1.381 | 1.329 | 1.326 | 1.430 | 11.62 |
| 111) | T | Benzo(k)fluoranthene | 1.681 | 1.662 | 1.379 | 1.328 | 1.239 | 1.269 | 1.288 | 1.171 | 1.188 | 1.356 | 14.02 |
| 112) | T | Benzo(a)pyrene | 1.402 | 1.440 | 1.283 | 1.193 | 1.133 | 1.161 | 1.230 | 1.175 | 1.157 | 1.242 | 8.96 |
| 113) | I | IS1_Perylene-d12 | ----------ISTD---------- | | | | | | | | | | |
| 114) | T | Indeno(1,2,3-cd)pyrene | 1.309 | 1.196 | 1.123 | 1.101 | 1.076 | 1.040 | 1.130 | 0.901 | 0.862 | 1.082 | 12.71 |
| 115) | T | Dibenzo[a,h]anthracene | 1.237 | 1.190 | 1.068 | 1.055 | 1.022 | 0.999 | 1.041 | 0.883 | 0.880 | 1.042 | 11.47 |
| 116) | T | Benzo(g,h,i)perylene | 1.225 | 1.168 | 1.042 | 1.002 | 0.980 | 0.938 | 0.975 | 0.728 | 0.620 | 0.964 | 19.83 |

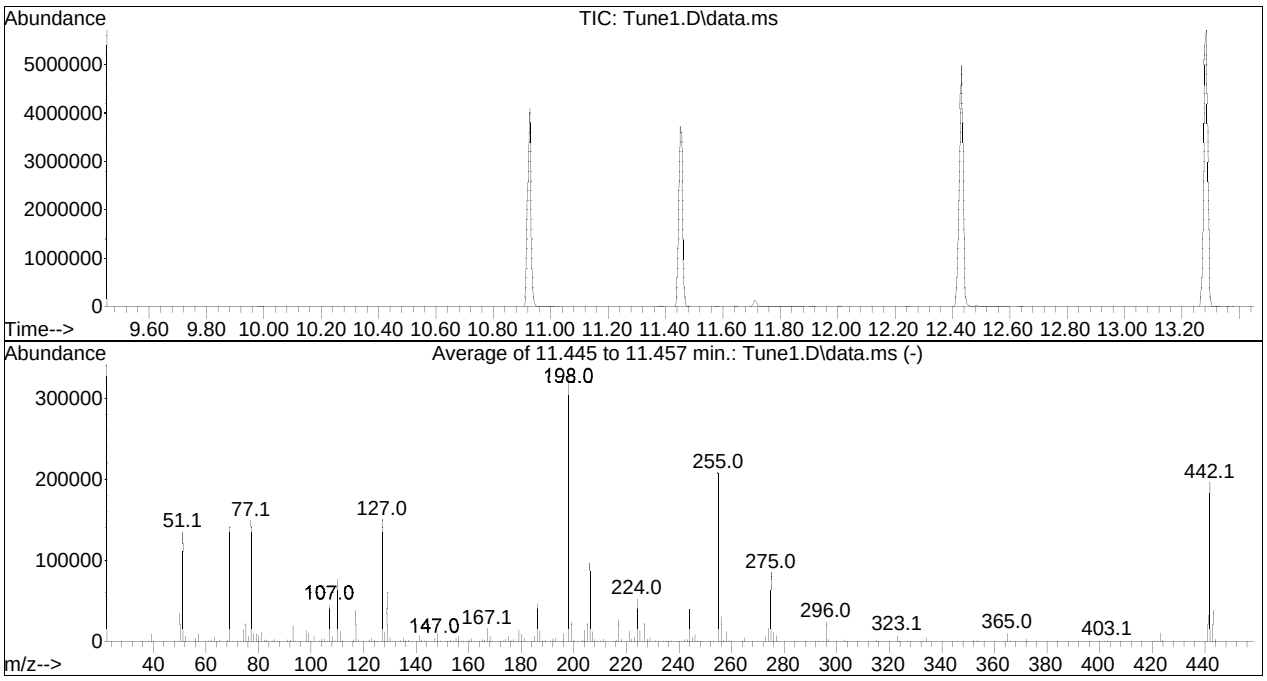
(#) = Out of Range

# DFTPP

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune1.D
Acq On : 24 Jun 2024 4:32 pm
Operator : SV106:ljg
Sample : Tune1 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024



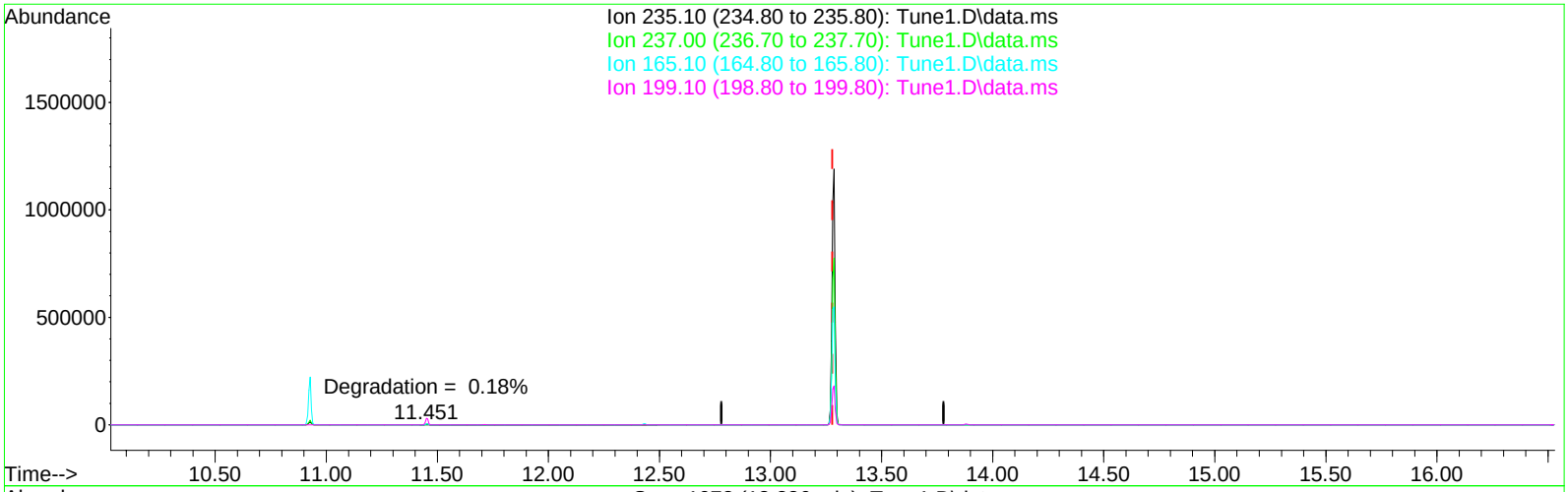

Spectrum Information: Average of 11.445 to 11.457 min.

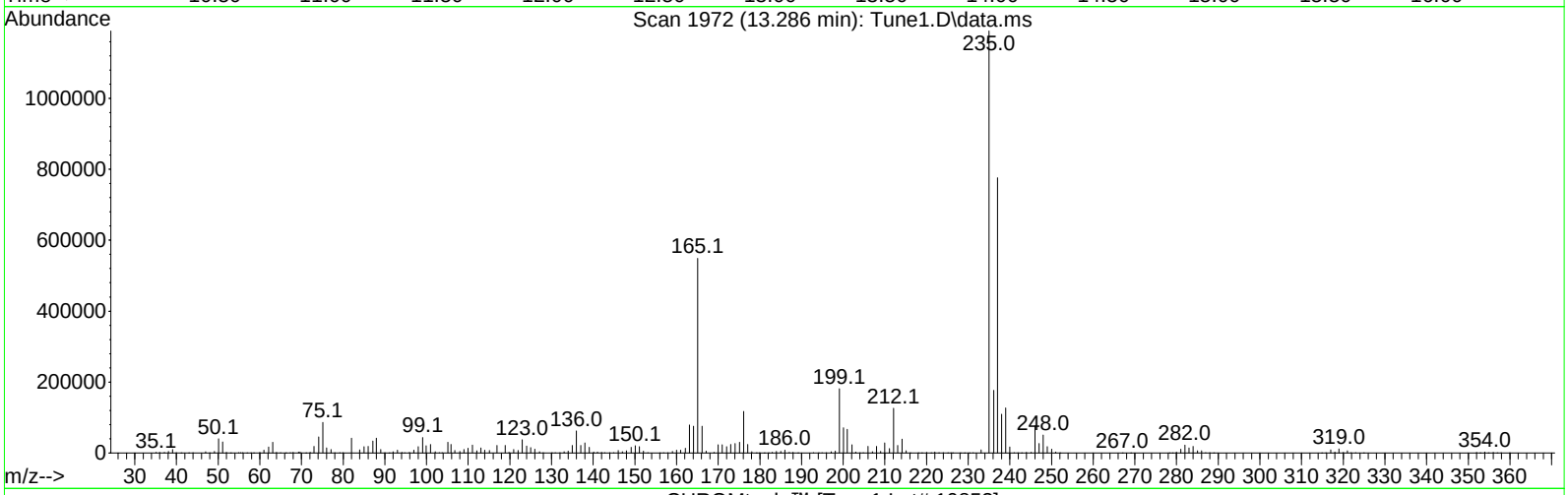
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 41.3 | 134464 | PASS |
| 68 | 69 | 0.00 | 2 | 1.7 | 2440 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 142152 | PASS |
| 70 | 69 | 0.00 | 2 | 0.5 | 780 | PASS |
| 127 | 198 | 10 | 80 | 46.2 | 150395 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 325269 | PASS |
| 199 | 198 | 5 | 9 | 7.2 | 23345 | PASS |
| 275 | 198 | 10 | 60 | 25.9 | 84395 | PASS |
| 365 | 198 | 1 | 100 | 3.1 | 9998 | PASS |
| 441 | 442 | 0.01 | 24 | 16.5 | 32150 | PASS |
| 442 | 198 | 50 | 100 | 59.9 | 194960 | PASS |
| 443 | 442 | 15 | 24 | 19.6 | 38192 | PASS |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune1.D
Acq On : 24 Jun 2024 4:32 pm
Operator : SV106:ljg
Sample : Tune1 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 24 20:27:19 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune1 Lot# 10853]

(6) DDT (T)

13.286min (+ 0.006) 186.42

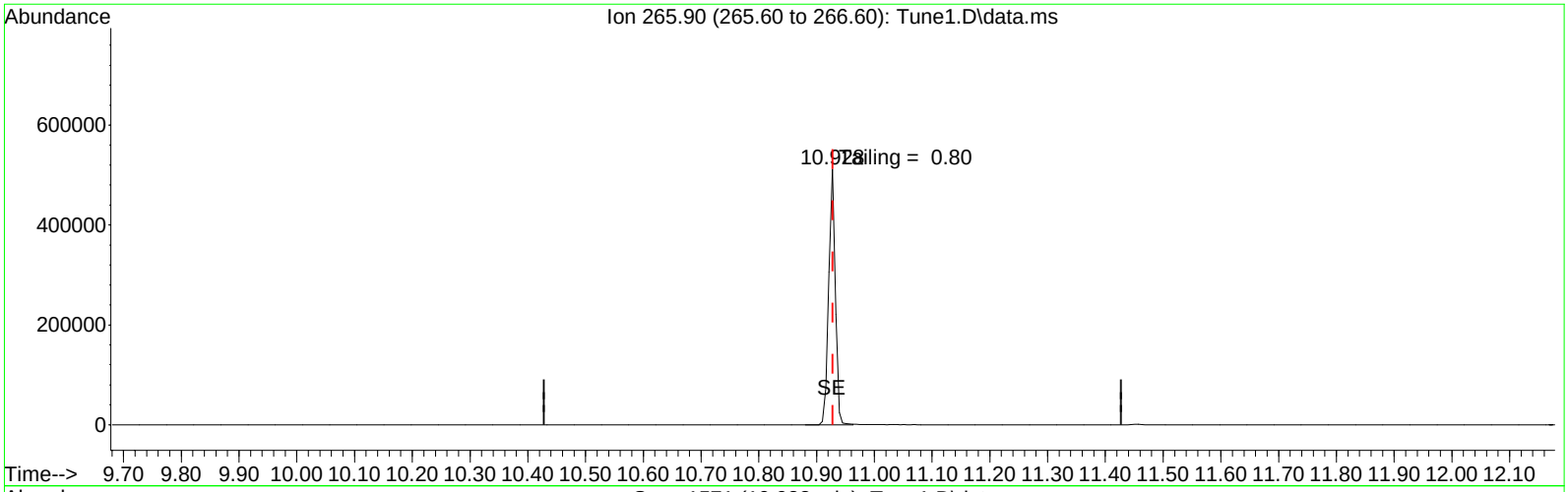
response 1136338

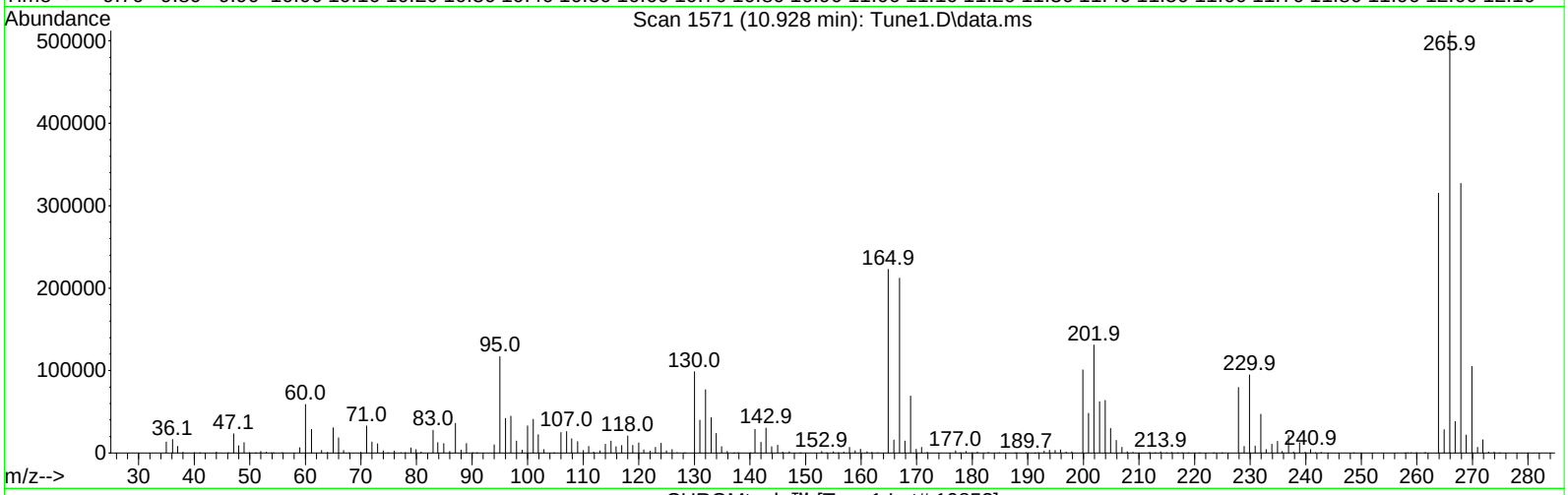
| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 63.30 | 64.70 |
| 165.10 | 44.50 | 48.03 |
| 199.10 | 14.80 | 15.43 |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune1.D
Acq On : 24 Jun 2024 4:32 pm
Operator : SV106:ljg
Sample : Tune1 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 24 20:27:19 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune1 Lot# 10853]

(1) Pentachlorophenol (T)

10.928min (-0.001) 194.55

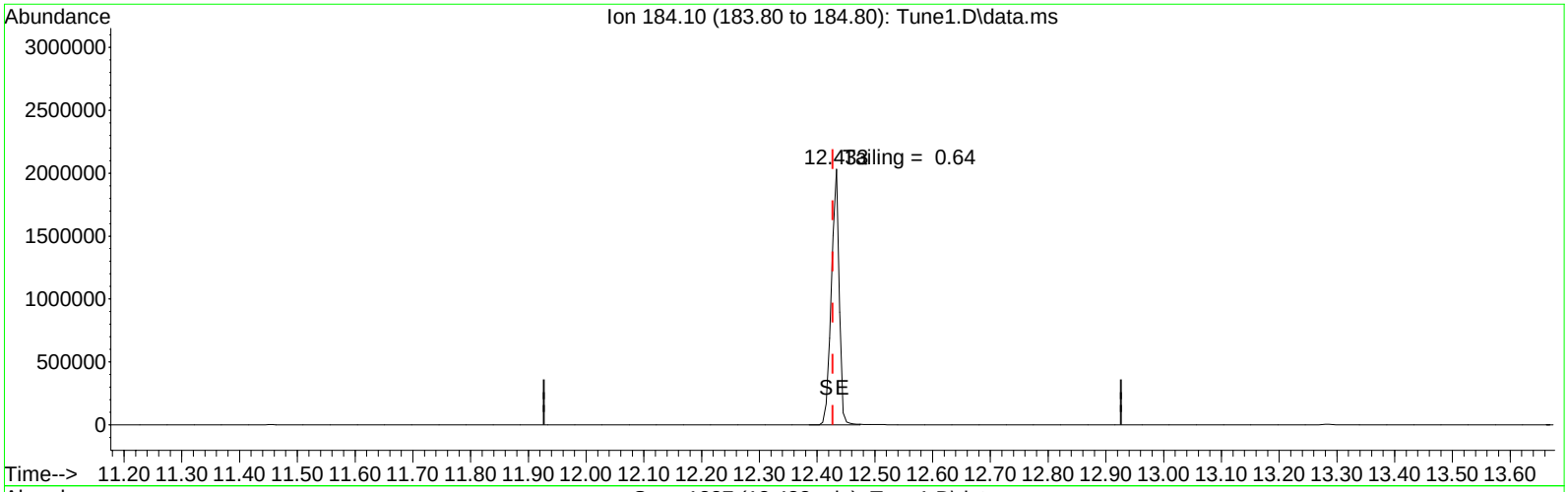
response 408616

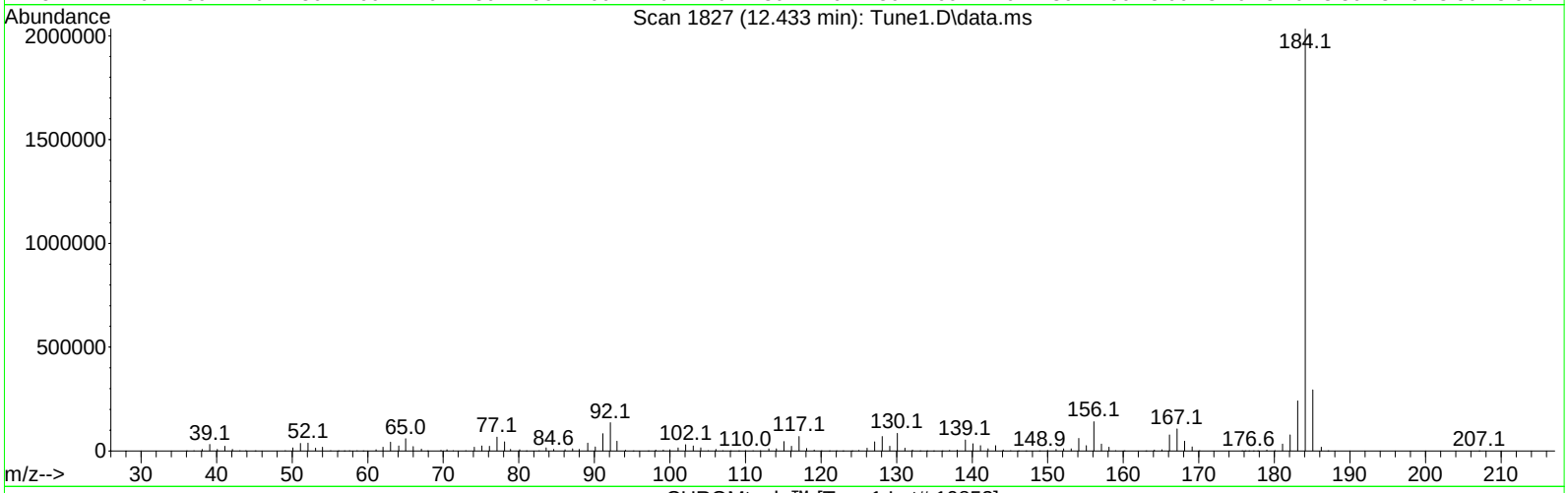
| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune1.D
Acq On : 24 Jun 2024 4:32 pm
Operator : SV106:ljg
Sample : Tune1 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 24 20:27:19 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune1 Lot# 10853]

(3) Benzidine (T)

12.433min (+ 0.006) 189.54

response 1929529

| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL9.D
Acq On : 24 Jun 2024 4:56 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL50 Lot# 10778
Misc : WG1939040
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 05:56:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 32717 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 95.08% | | | |
| 35) IS1_Naphthalene-d8 | 7.892 | 136 | 116482 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 96.13% | | | |
| 63) IS1_Acenaphthene-d10 | 9.657 | 164 | 76080 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 95.79% | | | |
| 88) IS1_Phenanthrene-d10 | 11.098 | 188 | 164872 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 93.60% | | | |
| 104) IS1_Chrysene-d12 | 13.757 | 240 | 165960 | 4.000 | ug/ml | # 0.01 |
| Standard Area 1 = 174707 | | | Recovery = 94.99% | | | |
| 113) IS1_Perylene-d12 | 15.221 | 264 | 170773 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 87.34% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.581 | 112 | 484863 | 52.419 | ug/ml | 0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 2620.95%# | | | |
| 7) Phenol-d6 | 6.104 | 99 | 632521 | 52.936 | ug/ml | 0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 2646.80%# | | | |
| 19) Nitrobenzene-d5 | 7.122 | 82 | 657496 | 51.389 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 5138.90%# | | | |
| 46) 2-Fluorobiphenyl | 9.016 | 172 | 1414928 | 52.386 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 5238.60%# | | | |
| 79) 2,4,6-Tribromophenol | 10.433 | 330 | 251000 | 62.012 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 3100.60%# | | | |
| 96) 4-Terphenyl-d14 | 12.692 | 244 | 2078553 | 58.541 | ug/ml | 0.01 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 5854.10%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.157 | 74 | 346550 | 53.715 | ug/ml# | 72 |
| 3) Pyridine | 2.198 | 79 | 576884 | 59.734 | ug/ml# | 65 |
| 5) Aniline | 6.063 | 93 | 841924 | 54.465 | ug/ml | 99 |
| 6) 2-Chlorophenol | 6.210 | 128 | 517763 | 51.486 | ug/ml | 99 |
| 8) Phenol | 6.122 | 94 | 658232 | 51.701 | ug/ml | 91 |
| 9) Bis(2-chloroethyl)ether | 6.186 | 93 | 527037 | 52.422 | ug/ml# | 76 |
| 10) 1,3-Dichlorobenzene | 6.392 | 146 | 606734 | 52.135 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 6.486 | 146 | 611062 | 50.265 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 583898 | 52.614 | ug/ml | 99 |
| 13) Benzyl alcohol | 6.681 | 79 | 535471 | 55.065 | ug/ml | 92 |
| 14) Bis(2-chloroisopropyl)... | 6.851 | 45 | 796608 | 53.609 | ug/ml# | 52 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL9.D
Acq On : 24 Jun 2024 4:56 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL50 Lot# 10778
Misc : WG1939040
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 05:56:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.845 | 108 | 474449 | 52.371 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 239091 | 48.237 | ug/ml# | 53 |
| 17) n-Nitrosodi-n-propylamine | 7.004 | 70 | 441666 | 52.203 | ug/ml# | 90 |
| 18) 3-Methylphenol/4-Methy... | 7.033 | 108 | 523630 | 53.173 | ug/ml | 99 |
| 20) Nitrobenzene | 7.145 | 77 | 656482 | 53.331 | ug/ml | 92 |
| 21) Isophorone | 7.428 | 82 | 1150385 | 52.676 | ug/ml# | 93 |
| 22) 2-Nitrophenol | 7.498 | 139 | 297532 | 58.452 | ug/ml# | 89 |
| 23) 2,4-Dimethylphenol | 7.604 | 107 | 533668 | 51.750 | ug/ml | 93 |
| 24) Bis(2-chloroethoxy)met... | 7.698 | 93 | 680698 | 49.681 | ug/ml# | 96 |
| 25) 2,4-Dichlorophenol | 7.769 | 162 | 512698 | 54.545 | ug/ml | 97 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 578950 | 50.427 | ug/ml | 98 |
| 36) Naphthalene | 7.916 | 128 | 1570488 | 50.574 | ug/ml | 99 |
| 37) Benzoic Acid | 7.792 | 105 | 486643 | 54.483 | ug/ml | 95 |
| 38) 4-Chloroaniline | 7.998 | 65 | 242854 | 52.152 | ug/ml | 90 |
| 39) Hexachlorobutadiene | 8.080 | 225 | 397688 | 49.660 | ug/ml | 99 |
| 40) p-Chloro-m-cresol | 8.522 | 107 | 519164 | 54.542 | ug/ml | 94 |
| 41) 2-Methylnaphthalene | 8.633 | 142 | 1068269 | 51.630 | ug/ml# | 94 |
| 42) 1-Methylnaphthalene | 8.727 | 115 | 418575 | 48.386 | ug/ml | 77 |
| 43) Hexachlorocyclopentadiene | 8.810 | 237 | 485636 | 61.086 | ug/ml | 99 |
| 44) 2,4,6-Trichlorophenol | 8.927 | 196 | 453661 | 58.652 | ug/ml | 97 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 470572 | 55.857 | ug/ml | 98 |
| 47) 2-Chloronaphthalene | 9.110 | 162 | 1121885 | 51.853 | ug/ml | 98 |
| 48) 2-Nitroaniline | 9.227 | 138 | 369880 | 59.038 | ug/ml | 99 |
| 49) 1,4-Dinitrobenzene | 9.363 | 168 | 203442 | 61.307 | ug/ml | 86 |
| 50) 1,3-Dinitrobenzene | 9.439 | 168 | 216044 | 56.942 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.439 | 163 | 1385638 | 48.459 | ug/ml# | 99 |
| 52) Acenaphthylene | 9.516 | 152 | 1794194 | 53.328 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.480 | 165 | 315063 | 54.862 | ug/ml | 88 |
| 54) 1,2-Dinitrobenzene | 9.527 | 168 | 134287 | 59.461 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.639 | 138 | 324497 | 58.265 | ug/ml | 94 |
| 65) Acenaphthene | 9.692 | 154 | 1053017 | 55.894 | ug/ml | 93 |
| 66) 2,4-Dinitrophenol | 9.739 | 184 | 244160 | 65.424 | ug/ml | 92 |
| 67) Dibenzofuran | 9.863 | 168 | 1706078 | 51.723 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.874 | 165 | 447959 | 59.122 | ug/ml | 96 |
| 69) 4-Nitrophenol | 9.827 | 65 | 328543 | 54.981 | ug/ml# | 83 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.951 | 232 | 454854 | 67.824 | ug/ml | 99 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.998 | 232 | 426460 | 64.769 | ug/ml | 97 |
| 72) Diethyl phthalate | 10.133 | 149 | 1370032 | 49.913 | ug/ml | 98 |
| 73) Fluorene | 10.198 | 166 | 1374365 | 53.032 | ug/ml | 95 |
| 74) 4-Chlorophenyl phenyl ... | 10.216 | 204 | 708419 | 51.959 | ug/ml | 89 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL9.D
Acq On : 24 Jun 2024 4:56 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL50 Lot# 10778
Misc : WG1939040
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 05:56:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 75) 4-Nitroaniline | 10.239 | 138 | 302645 | 55.479 | ug/ml# | 82 |
| 76) 4,6-Dinitro-o-cresol | 10.269 | 198 | 301830 | 70.707 | ug/ml# | 67 |
| 77) NDPA/DPA | 10.333 | 169 | 1148670 | 53.823 | ug/ml | 96 |
| 78) Azobenzene | 10.368 | 77 | 1379449 | 50.728 | ug/ml | 99 |
| 80) 4-Bromophenyl phenyl e... | 10.686 | 248 | 450424M3 | 55.451 | ug/ml | |
| 81) Hexachlorobenzene | 10.739 | 284 | 506275 | 53.834 | ug/ml# | 80 |
| 82) Pentachlorophenol | 10.933 | 266 | 389063 | 71.000 | ug/ml | 99 |
| 89) Phenanthrene | 11.127 | 178 | 2163617 | 53.153 | ug/ml | 99 |
| 90) Anthracene | 11.174 | 178 | 2212811 | 54.951 | ug/ml | 99 |
| 91) Carbazole | 11.345 | 167 | 2012029 | 54.613 | ug/ml | 100 |
| 92) Di-n-butylphthalate | 11.733 | 149 | 2475111 | 55.123 | ug/ml | 99 |
| 93) Fluoranthene | 12.286 | 202 | 2670017 | 57.292 | ug/ml# | 91 |
| 94) Benzidine | 12.439 | 184 | 1635964 | 61.233 | ug/ml# | 94 |
| 95) Pyrene | 12.504 | 202 | 2820132 | 57.308 | ug/ml | 100 |
| 97) Butyl benzyl phthalate | 13.215 | 149 | 1156504 | 60.560 | ug/ml | 96 |
| 105) Benzo(a)anthracene | 13.745 | 228 | 2861362 | 53.298 | ug/ml | 100 |
| 106) 3,3'-Dichlorobenzidine | 13.745 | 252 | 1081792 | 58.501 | ug/ml# | 96 |
| 107) Chrysene | 13.786 | 228 | 2650129 | 50.014 | ug/ml | 99 |
| 108) Bis(2-ethylhexyl)phtha... | 13.857 | 149 | 1731431 | 54.397 | ug/ml# | 95 |
| 109) Di-n-octylphthalate | 14.545 | 149 | 2930404 | 56.200 | ug/ml# | 75 |
| 110) Benzo(b)fluoranthene | 14.862 | 252 | 2750629 | 56.118 | ug/ml# | 92 |
| 111) Benzo(k)fluoranthene | 14.892 | 252 | 2464317M3 | 51.471 | ug/ml | |
| 112) Benzo(a)pyrene | 15.174 | 252 | 2400552 | 54.683 | ug/ml# | 91 |
| 114) Indeno(1,2,3-cd)pyrene | 16.221 | 276 | 1840389M6 | 43.859 | ug/mL | |
| 115) Dibenzo(a,h)anthracene | 16.245 | 278 | 1877445 | 47.055 | ug/ml# | 86 |
| 116) Benzo(ghi)perylene | 16.474 | 276 | 1323180 | 33.589 | ug/ml# | 82 |

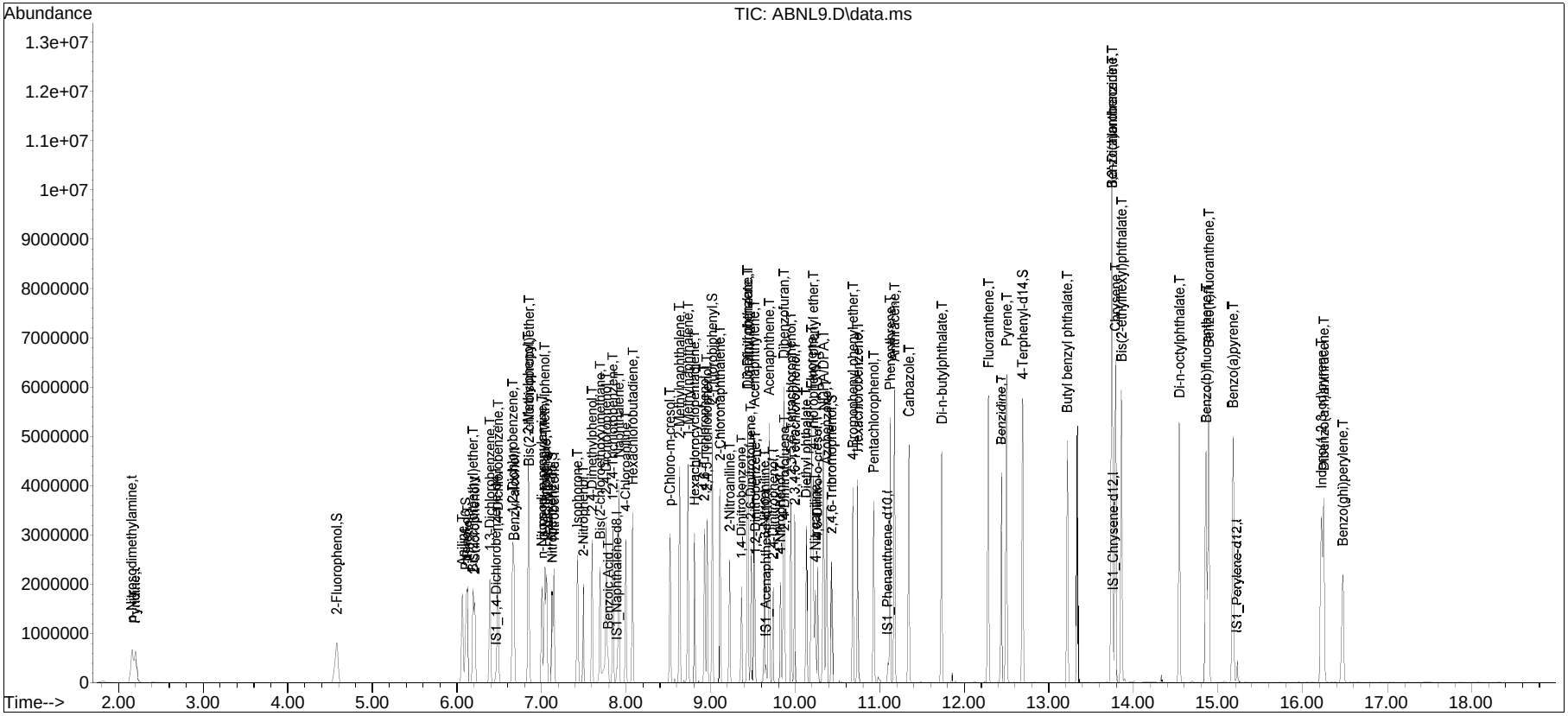
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL9.D
Acq On : 24 Jun 2024 4:56 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL50 Lot# 10778
Misc : WG1939040
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 05:56:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

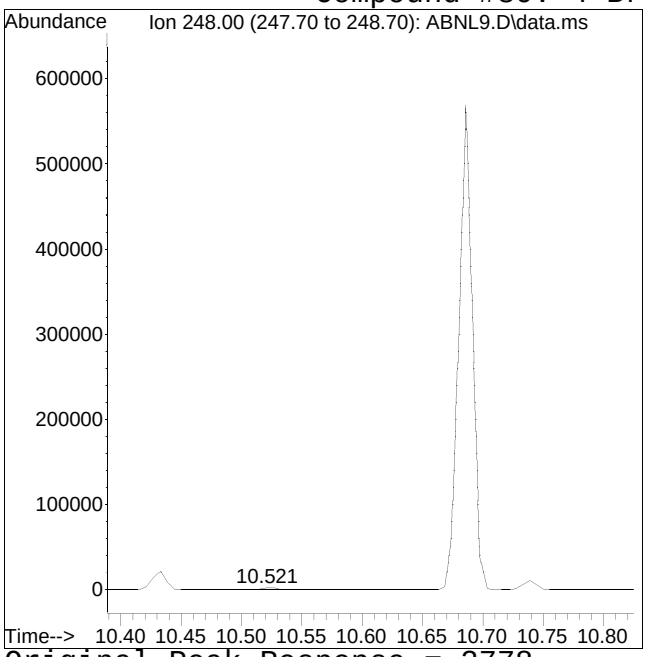
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•

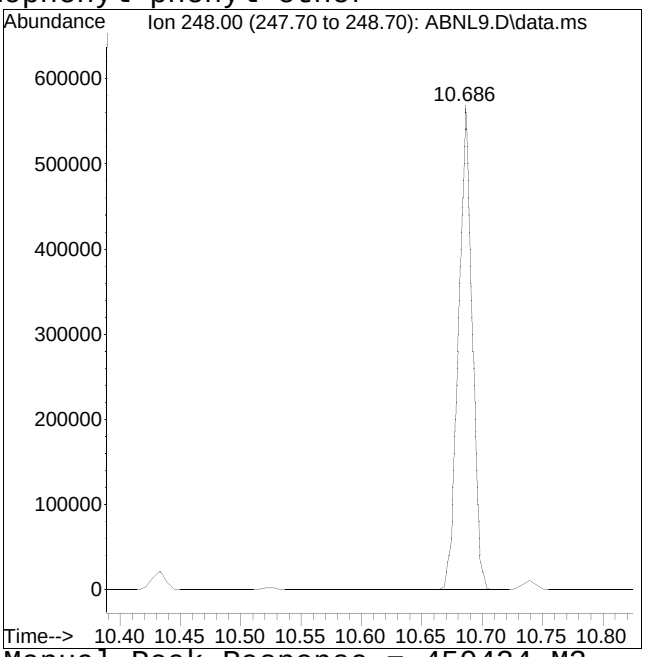


Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL9.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 4:56 pm Instrument : SV 106
Sample : IL2,32,,ABNL50 Lot# 10778 Quant Date : 6/25/2024 5:34 am

Compound #80: 4-Bromophenyl phenyl ether



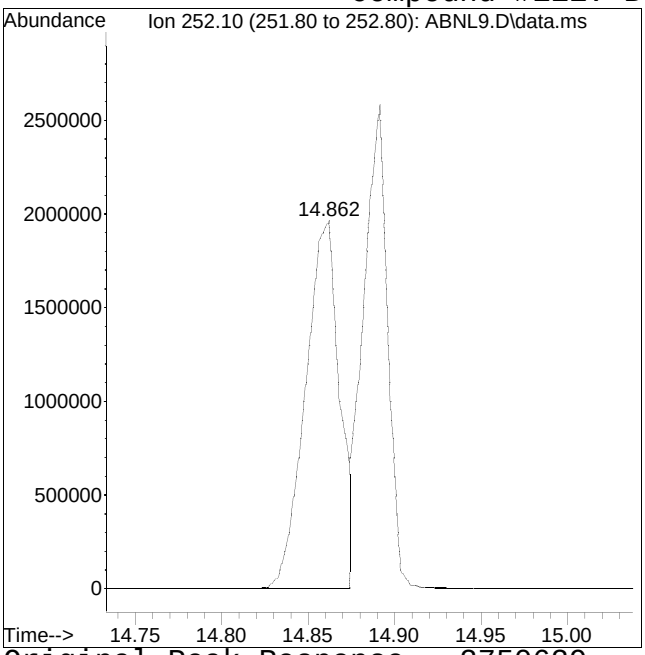

Original Peak Response = 2778 Manual Peak Response = 450424 M3

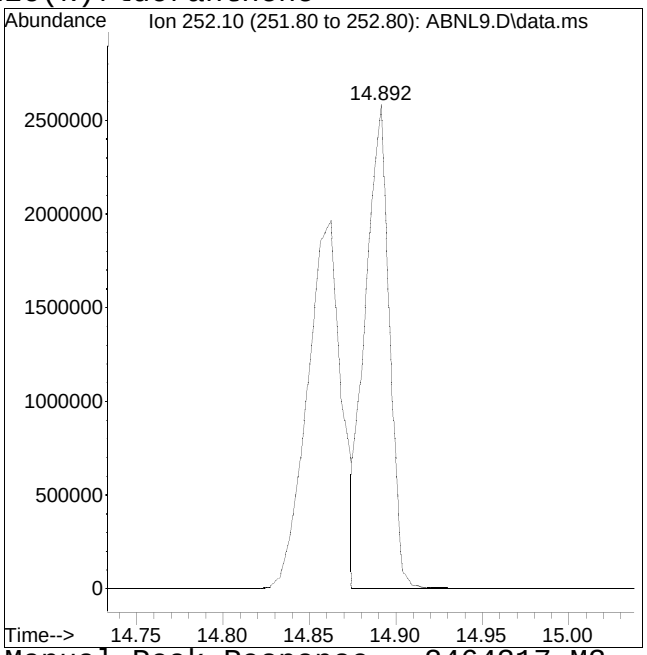
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL9.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 4:56 pm Instrument : SV 106
Sample : IL2,32,,ABNL50 Lot# 10778 Quant Date : 6/25/2024 5:34 am

Compound #111: Benzo(k)fluoranthene



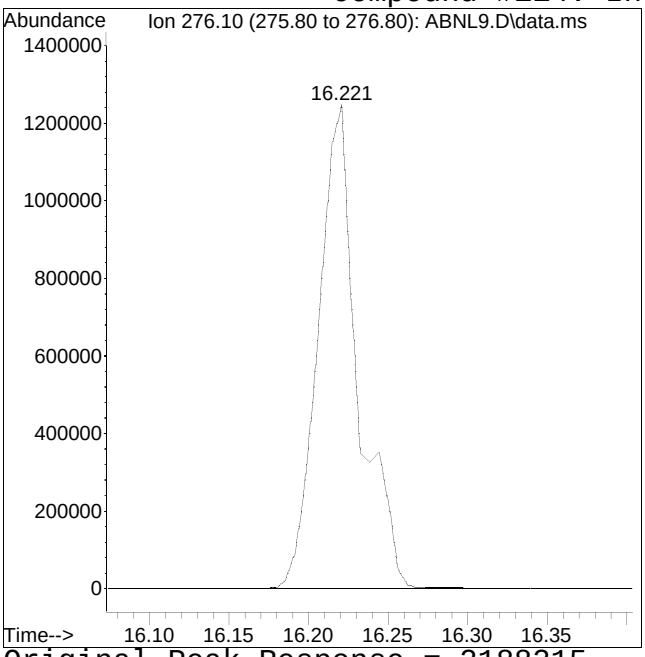




Original Peak Response = 2750629 Manual Peak Response = 2464317 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

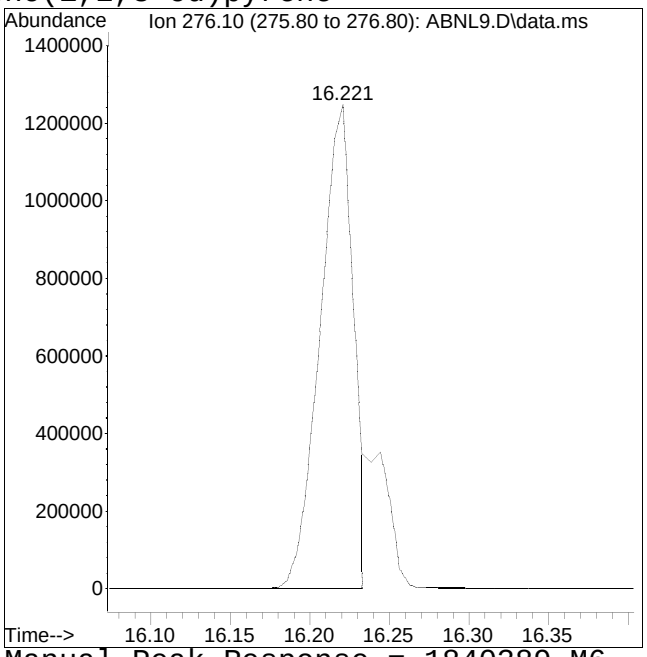
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL9.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 4:56 pm Instrument : SV 106
Sample : IL2,32,,ABNL50 Lot# 10778 Quant Date : 6/25/2024 5:34 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 2188215




Manual Peak Response = 1840389 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL8.D
Acq On : 24 Jun 2024 5:20 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL25 Lot# 10779
Misc : WG1939040
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 05:55:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 33019 | 4.000 ug/ml | # 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 95.95% | | |
| 35) IS1_Naphthalene-d8 | 7.887 | 136 | 118189 | 4.000 ug/ml | # 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 97.53% | | |
| 63) IS1_Acenaphthene-d10 | 9.657 | 164 | 76354 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 96.13% | | |
| 88) IS1_Phenanthrene-d10 | 11.098 | 188 | 169867 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 96.44% | | |
| 104) IS1_Chrysene-d12 | 13.751 | 240 | 174167 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 99.69% | | |
| 113) IS1_Perylene-d12 | 15.221 | 264 | 190607 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 97.48% | | |
| System Monitoring Compounds | | | | | |
| 4) 2-Fluorophenol | 4.575 | 112 | 237510 | 25.442 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 1272.10%# | | |
| 7) Phenol-d6 | 6.098 | 99 | 313213 | 25.973 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 1298.65%# | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 322364 | 24.965 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 2496.50%# | | |
| 46) 2-Fluorobiphenyl | 9.016 | 172 | 683862 | 24.953 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 2495.30%# | | |
| 79) 2,4,6-Tribromophenol | 10.428 | 330 | 120340 | 29.624 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 1481.20%# | | |
| 96) 4-Terphenyl-d14 | 12.686 | 244 | 1062138 | 29.035 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 2903.50%# | | |
| Target Compounds | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.152 | 74 | 169555 | 26.041 ug/ml# | 72 |
| 3) Pyridine | 2.193 | 79 | 278686 | 28.593 ug/ml# | 66 |
| 5) Aniline | 6.057 | 93 | 408055 | 26.156 ug/ml | 99 |
| 6) 2-Chlorophenol | 6.204 | 128 | 256233 | 25.247 ug/ml | 100 |
| 8) Phenol | 6.110 | 94 | 324899 | 25.286 ug/ml | 91 |
| 9) Bis(2-chloroethyl)ether | 6.187 | 93 | 262476 | 25.868 ug/ml# | 75 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 297987 | 25.371 ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 305850 | 24.928 ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 293321 | 26.189 ug/ml | 99 |
| 13) Benzyl alcohol | 6.669 | 79 | 262244 | 26.721 ug/ml | 91 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 409819 | 27.327 ug/ml# | 55 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL8.D
Acq On : 24 Jun 2024 5:20 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL25 Lot# 10779
Misc : WG1939040
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 05:55:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.840 | 108 | 233353 | 25.523 | ug/ml | 97 |
| 16) Hexachloroethane | 7.051 | 117 | 118082 | 23.605 | ug/ml# | 51 |
| 17) n-Nitrosodi-n-propylamine | 6.998 | 70 | 217266 | 25.445 | ug/ml# | 90 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 256559 | 25.815 | ug/ml | 98 |
| 20) Nitrobenzene | 7.140 | 77 | 322030 | 25.921 | ug/ml | 92 |
| 21) Isophorone | 7.422 | 82 | 563506 | 25.567 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.498 | 139 | 145422 | 28.308 | ug/ml# | 90 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 260041 | 24.986 | ug/ml | 93 |
| 24) Bis(2-chloroethoxy)met... | 7.692 | 93 | 338538 | 24.483 | ug/ml | 97 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 252916 | 26.661 | ug/ml | 96 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 284342 | 24.540 | ug/ml | 98 |
| 36) Naphthalene | 7.910 | 128 | 767174 | 24.348 | ug/ml | 99 |
| 37) Benzoic Acid | 7.751 | 105 | 232608 | 27.348 | ug/ml | 96 |
| 38) 4-Chloroaniline | 7.992 | 65 | 119766 | 25.348 | ug/ml | 90 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 197178 | 24.266 | ug/ml | 99 |
| 40) p-Chloro-m-cresol | 8.522 | 107 | 254908 | 26.393 | ug/ml | 93 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 520103 | 24.774 | ug/ml# | 94 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 203926 | 23.233 | ug/ml | 78 |
| 43) Hexachlorocyclopentadiene | 8.810 | 237 | 238503 | 29.567 | ug/ml | 99 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 216636 | 27.603 | ug/ml | 97 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 231634 | 27.098 | ug/ml | 98 |
| 47) 2-Chloronaphthalene | 9.110 | 162 | 549791 | 25.044 | ug/ml | 97 |
| 48) 2-Nitroaniline | 9.222 | 138 | 181912 | 28.616 | ug/ml | 98 |
| 49) 1,4-Dinitrobenzene | 9.357 | 168 | 100201 | 29.759 | ug/ml | 87 |
| 50) 1,3-Dinitrobenzene | 9.433 | 168 | 109410 | 28.420 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.433 | 163 | 674367 | 23.244 | ug/ml# | 99 |
| 52) Acenaphthylene | 9.510 | 152 | 873316 | 25.582 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.475 | 165 | 154706 | 26.550 | ug/ml | 87 |
| 54) 1,2-Dinitrobenzene | 9.516 | 168 | 66227 | 28.901 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.628 | 138 | 160872 | 28.782 | ug/ml | 93 |
| 65) Acenaphthene | 9.686 | 154 | 515334 | 27.256 | ug/ml | 92 |
| 66) 2,4-Dinitrophenol | 9.728 | 184 | 119484 | 32.073 | ug/ml | 92 |
| 67) Dibenzofuran | 9.857 | 168 | 834268 | 25.202 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.863 | 165 | 221103 | 29.077 | ug/ml | 96 |
| 69) 4-Nitrophenol | 9.822 | 65 | 165093 | 27.529 | ug/ml# | 83 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.951 | 232 | 221732 | 32.944 | ug/ml | 99 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.992 | 232 | 210898 | 31.916 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.128 | 149 | 674982 | 24.502 | ug/ml | 97 |
| 73) Fluorene | 10.192 | 166 | 673937 | 25.911 | ug/ml | 95 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 344854 | 25.203 | ug/ml | 89 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL8.D
Acq On : 24 Jun 2024 5:20 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL25 Lot# 10779
Misc : WG1939040
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 05:55:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.228 | 138 | 153735 | 28.080 | ug/ml# | 83 |
| 76) | 4,6-Dinitro-o-cresol | 10.257 | 198 | 149905 | 34.991 | ug/ml# | 66 |
| 77) | NDPA/DPA | 10.328 | 169 | 567620 | 26.501 | ug/ml | 97 |
| 78) | Azobenzene | 10.363 | 77 | 671206 | 24.594 | ug/ml | 98 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 221514M3 | 27.173 | ug/ml | |
| 81) | Hexachlorobenzene | 10.733 | 284 | 250937 | 26.587 | ug/ml# | 80 |
| 82) | Pentachlorophenol | 10.927 | 266 | 192805 | 35.059 | ug/ml | 100 |
| 89) | Phenanthrene | 11.122 | 178 | 1074767 | 25.627 | ug/ml | 99 |
| 90) | Anthracene | 11.169 | 178 | 1092831 | 26.340 | ug/ml | 99 |
| 91) | Carbazole | 11.339 | 167 | 1028776 | 27.103 | ug/ml | 99 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 1241508 | 26.836 | ug/ml | 99 |
| 93) | Fluoranthene | 12.280 | 202 | 1367094 | 28.472 | ug/ml# | 91 |
| 94) | Benzidine | 12.433 | 184 | 833166 | 30.268 | ug/ml# | 94 |
| 95) | Pyrene | 12.498 | 202 | 1419120 | 27.990 | ug/ml | 100 |
| 97) | Butyl benzyl phthalate | 13.216 | 149 | 587626 | 29.866 | ug/ml | 95 |
| 105) | Benzo(a)anthracene | 13.739 | 228 | 1463603 | 25.977 | ug/ml | 100 |
| 106) | 3,3'-Dichlorobenzidine | 13.739 | 252 | 552003 | 28.444 | ug/ml# | 96 |
| 107) | Chrysene | 13.780 | 228 | 1367208 | 24.587 | ug/ml | 99 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.857 | 149 | 889141 | 26.618 | ug/ml# | 94 |
| 109) | Di-n-octylphthalate | 14.539 | 149 | 1513217 | 27.653 | ug/ml# | 75 |
| 110) | Benzo(b)fluoranthene | 14.857 | 252 | 1446447 | 28.119 | ug/ml# | 91 |
| 111) | Benzo(k)fluoranthene | 14.880 | 252 | 1274585 | 25.367 | ug/ml# | 92 |
| 112) | Benzo(a)pyrene | 15.168 | 252 | 1279446M3 | 27.771 | ug/ml | |
| 114) | Indeno(1,2,3-cd)pyrene | 16.215 | 276 | 1073913M6 | 22.929 | ug/mL | |
| 115) | Dibenzo(a,h)anthracene | 16.239 | 278 | 1052473 | 23.633 | ug/ml# | 86 |
| 116) | Benzo(ghi)perylene | 16.468 | 276 | 867244 | 19.724 | ug/ml# | 82 |

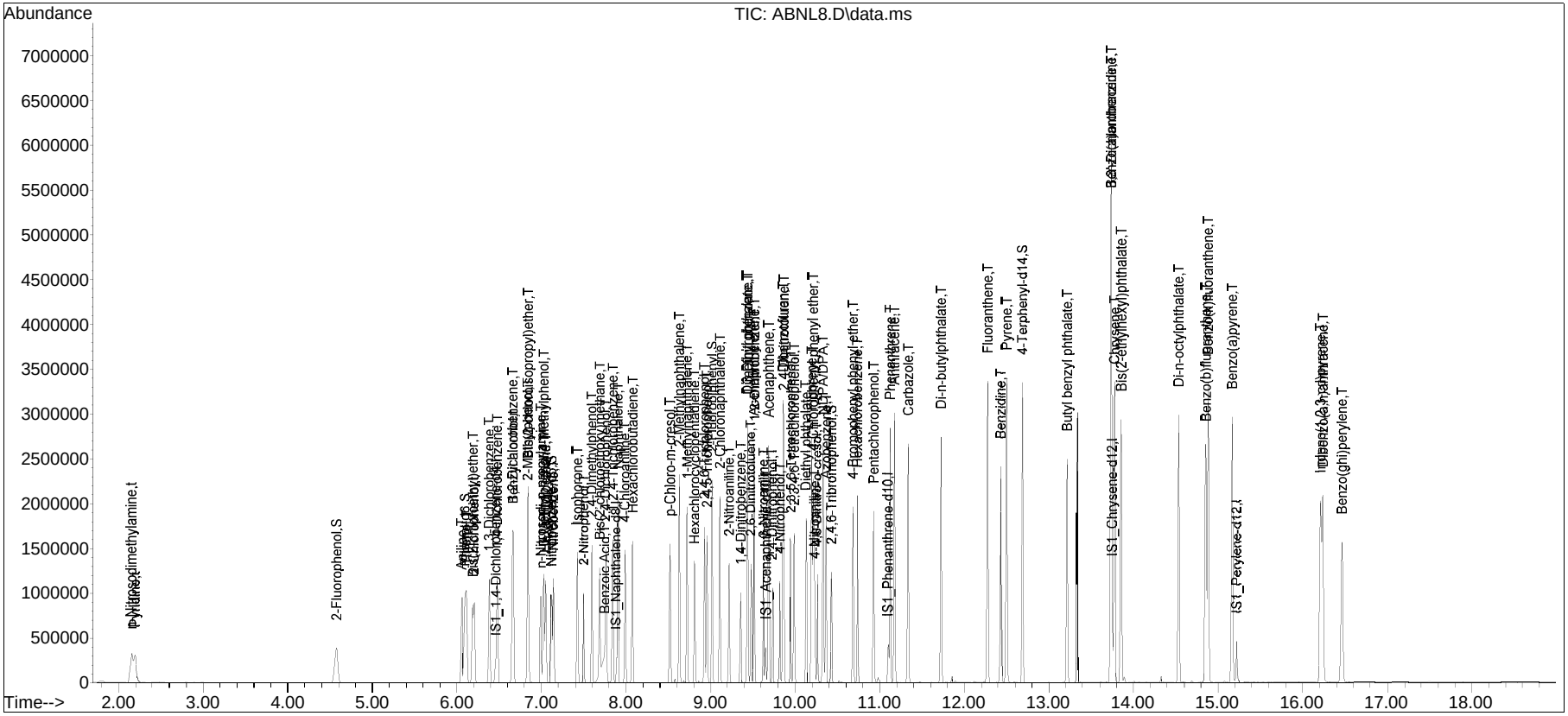
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL8.D
Acq On : 24 Jun 2024 5:20 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL25 Lot# 10779
Misc : WG1939040
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 05:55:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

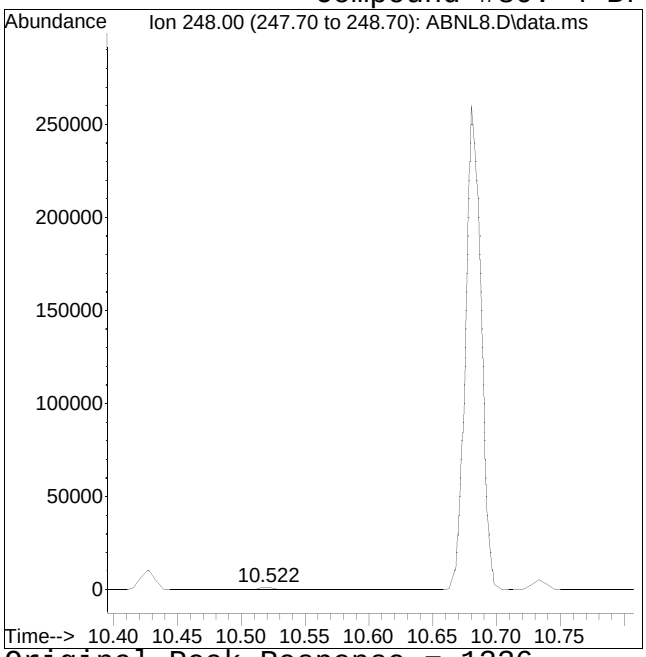
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•

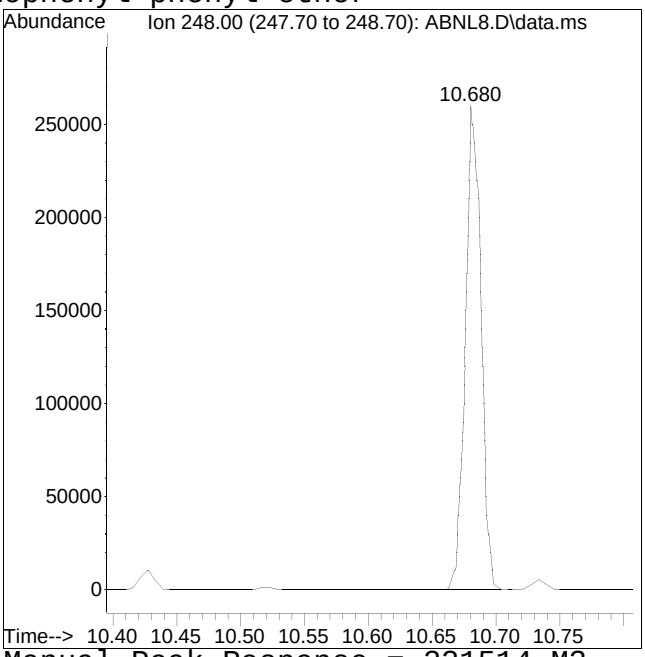


# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL8.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 5:20 pm Instrument : SV 106
Sample : IL3,32,,ABNL25 Lot# 10779 Quant Date : 6/25/2024 5:34 am

## Compound #80: 4-Bromophenyl phenyl ether



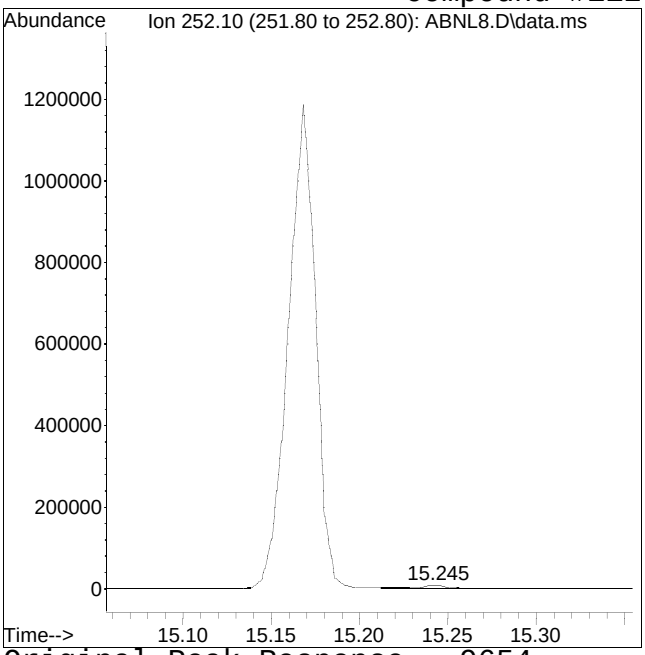

Original Peak Response = 1336 Manual Peak Response = 221514 M3

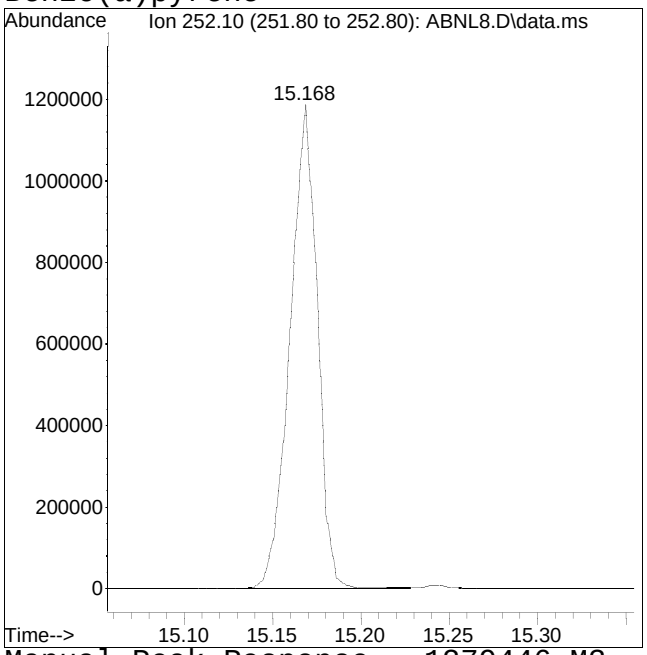
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL8.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 5:20 pm Instrument : SV 106
Sample : IL3,32,,ABNL25 Lot# 10779 Quant Date : 6/25/2024 5:34 am

Compound #112: Benzo(a)pyrene



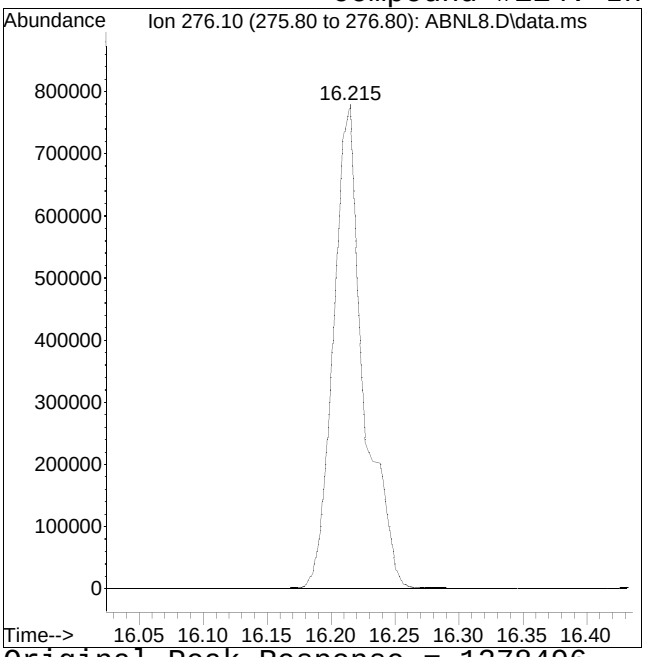

Original Peak Response = 9654 Manual Peak Response = 1279446 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

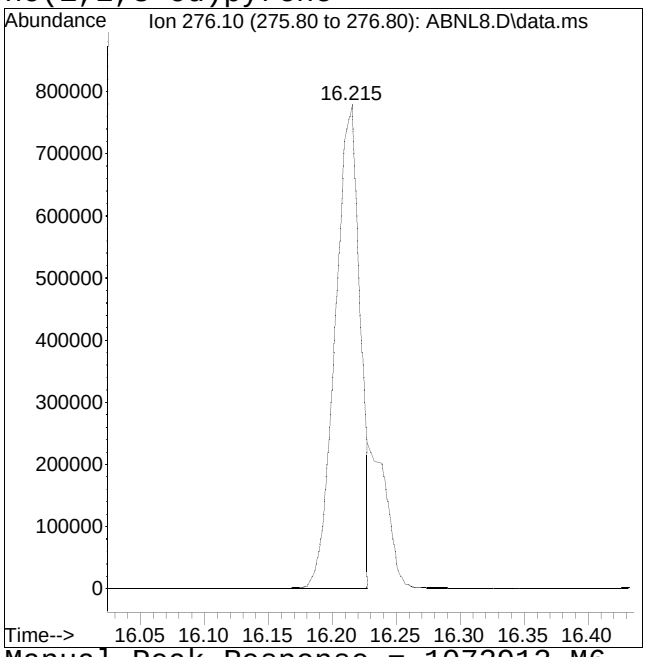
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL8.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 5:20 pm Instrument : SV 106
Sample : IL3,32,,ABNL25 Lot# 10779 Quant Date : 6/25/2024 5:34 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 1278496




Manual Peak Response = 1073913 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL7.D
Acq On : 24 Jun 2024 5:43 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10780
Misc : WG1939040
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 25 05:54:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 33998 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 98.80% | | | |
| 35) IS1_Naphthalene-d8 | 7.887 | 136 | 120937 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 99.80% | | | |
| 63) IS1_Acenaphthene-d10 | 9.657 | 164 | 80608 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 101.49% | | | |
| 88) IS1_Phenanthrene-d10 | 11.098 | 188 | 172374 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 97.86% | | | |
| 104) IS1_Chrysene-d12 | 13.745 | 240 | 173028 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 99.04% | | | |
| 113) IS1_Perylene-d12 | 15.221 | 264 | 190260 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 97.31% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.569 | 112 | 98879 | 10.287 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 514.35%# | | | |
| 7) Phenol-d6 | 6.093 | 99 | 129362 | 10.418 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 520.90%# | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 136275 | 10.250 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 1025.00%# | | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 298392 | 10.641 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 1064.10%# | | | |
| 79) 2,4,6-Tribromophenol | 10.428 | 330 | 51001 | 11.892 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 594.60%# | | | |
| 96) 4-Terphenyl-d14 | 12.686 | 244 | 448569 | 12.084 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 1208.40%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.146 | 74 | 71445 | 10.657 | ug/ml# | 71 |
| 3) Pyridine | 2.187 | 79 | 118475 | 11.805 | ug/ml# | 66 |
| 5) Aniline | 6.051 | 93 | 169471 | 10.550 | ug/ml | 100 |
| 6) 2-Chlorophenol | 6.198 | 128 | 106942 | 10.234 | ug/ml | 100 |
| 8) Phenol | 6.110 | 94 | 136242 | 10.298 | ug/ml# | 91 |
| 9) Bis(2-chloroethyl)ether | 6.181 | 93 | 111165 | 10.640 | ug/ml# | 75 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 125722 | 10.396 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 127977 | 10.130 | ug/ml | 100 |
| 12) 1,2-Dichlorobenzene | 6.657 | 146 | 121496 | 10.535 | ug/ml | 98 |
| 13) Benzyl alcohol | 6.669 | 79 | 106868 | 10.576 | ug/ml | 94 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 176726 | 11.445 | ug/ml# | 56 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL7.D
Acq On : 24 Jun 2024 5:43 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10780
Misc : WG1939040
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 25 05:54:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.840 | 108 | 100114 | 10.635 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 50737 | 9.851 | ug/ml# | 52 |
| 17) n-Nitrosodi-n-propylamine | 6.993 | 70 | 92145 | 10.481 | ug/ml# | 90 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 108575 | 10.610 | ug/ml | 98 |
| 20) Nitrobenzene | 7.134 | 77 | 139715 | 10.922 | ug/ml | 91 |
| 21) Isophorone | 7.416 | 82 | 239645 | 10.560 | ug/ml | 93 |
| 22) 2-Nitrophenol | 7.498 | 139 | 60502 | 11.438 | ug/ml# | 89 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 109786 | 10.245 | ug/ml | 91 |
| 24) Bis(2-chloroethoxy)met... | 7.687 | 93 | 147145 | 10.335 | ug/ml | 97 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 105835 | 10.835 | ug/ml | 96 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 123619 | 10.362 | ug/ml | 98 |
| 36) Naphthalene | 7.910 | 128 | 325650 | 10.100 | ug/ml | 99 |
| 37) Benzoic Acid | 7.710 | 105 | 91700 | 11.073 | ug/ml | 96 |
| 38) 4-Chloroaniline | 7.992 | 65 | 50979 | 10.544 | ug/ml | 91 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 84040 | 10.108 | ug/ml | 98 |
| 40) p-Chloro-m-cresol | 8.516 | 107 | 106171 | 10.743 | ug/ml | 95 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 221157 | 10.295 | ug/ml# | 93 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 86121 | 9.589 | ug/ml | 80 |
| 43) Hexachlorocyclopentadiene | 8.804 | 237 | 101147 | 12.254 | ug/ml | 99 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 93810 | 11.682 | ug/ml | 98 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 99391 | 11.363 | ug/ml | 97 |
| 47) 2-Chloronaphthalene | 9.110 | 162 | 235262 | 10.473 | ug/ml | 97 |
| 48) 2-Nitroaniline | 9.222 | 138 | 77367 | 11.894 | ug/ml | 97 |
| 49) 1,4-Dinitrobenzene | 9.357 | 168 | 42058 | 12.207 | ug/ml | 87 |
| 50) 1,3-Dinitrobenzene | 9.434 | 168 | 47548 | 12.070 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.428 | 163 | 293217 | 9.877 | ug/ml# | 98 |
| 52) Acenaphthylene | 9.510 | 152 | 379388 | 10.861 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 66760 | 11.197 | ug/ml | 88 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 28669 | 12.227 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.628 | 138 | 66639 | 11.293 | ug/ml | 91 |
| 65) Acenaphthene | 9.686 | 154 | 216464 | 10.844 | ug/ml | 90 |
| 66) 2,4-Dinitrophenol | 9.728 | 184 | 48836 | 12.623 | ug/ml# | 89 |
| 67) Dibenzofuran | 9.857 | 168 | 362712 | 10.379 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 92663 | 11.543 | ug/ml | 95 |
| 69) 4-Nitrophenol | 9.816 | 65 | 66265 | 10.466 | ug/ml# | 83 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 93502 | 13.159 | ug/ml | 98 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 88033 | 12.619 | ug/ml | 96 |
| 72) Diethyl phthalate | 10.122 | 149 | 286731 | 9.859 | ug/ml | 98 |
| 73) Fluorene | 10.192 | 166 | 290969 | 10.597 | ug/ml | 95 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 151106 | 10.460 | ug/ml | 88 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL7.D
Acq On : 24 Jun 2024 5:43 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10780
Misc : WG1939040
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 25 05:54:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.216 | 138 | 64740 | 11.201 | ug/ml | # | 88 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 59863 | 13.236 | ug/ml | # | 66 |
| 77) | NDPA/DPA | 10.328 | 169 | 244751 | 10.824 | ug/ml | | 97 |
| 78) | Azobenzene | 10.357 | 77 | 287583 | 9.981 | ug/ml | | 97 |
| 80) | 4-Bromophenyl phenyl e... | 10.681 | 248 | 96586 | 11.223 | ug/ml | # | 84 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 106470 | 10.685 | ug/ml | # | 81 |
| 82) | Pentachlorophenol | 10.928 | 266 | 78930 | 13.595 | ug/ml | | 100 |
| 89) | Phenanthrene | 11.116 | 178 | 454080 | 10.670 | ug/ml | | 99 |
| 90) | Anthracene | 11.169 | 178 | 465546 | 11.058 | ug/ml | | 99 |
| 91) | Carbazole | 11.333 | 167 | 430627 | 11.180 | ug/ml | | 99 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 527892 | 11.245 | ug/ml | | 99 |
| 93) | Fluoranthene | 12.275 | 202 | 572546 | 11.751 | ug/ml | # | 91 |
| 94) | Benzidine | 12.427 | 184 | 346393 | 12.401 | ug/ml | # | 94 |
| 95) | Pyrene | 12.492 | 202 | 600708 | 11.676 | ug/ml | | 100 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 241983 | 12.120 | ug/ml | | 94 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 612774 | 10.948 | ug/ml | | 100 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 227768 | 11.814 | ug/ml | # | 96 |
| 107) | Chrysene | 13.774 | 228 | 562978 | 10.191 | ug/ml | | 99 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.857 | 149 | 367256 | 11.067 | ug/ml | # | 95 |
| 109) | Di-n-octylphthalate | 14.539 | 149 | 619510 | 11.396 | ug/ml | # | 75 |
| 110) | Benzo(b)fluoranthene | 14.851 | 252 | 597526 | 11.693 | ug/ml | # | 91 |
| 111) | Benzo(k)fluoranthene | 14.874 | 252 | 557100 | 11.160 | ug/ml | # | 91 |
| 112) | Benzo(a)pyrene | 15.163 | 252 | 532009 | 11.624 | ug/ml | # | 91 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.210 | 276 | 537324M6 | 11.493 | ug/mL | | |
| 115) | Dibenzo(a,h)anthracene | 16.233 | 278 | 495383 | 11.144 | ug/ml | # | 87 |
| 116) | Benzo(ghi)perylene | 16.468 | 276 | 463569 | 10.562 | ug/ml | # | 82 |

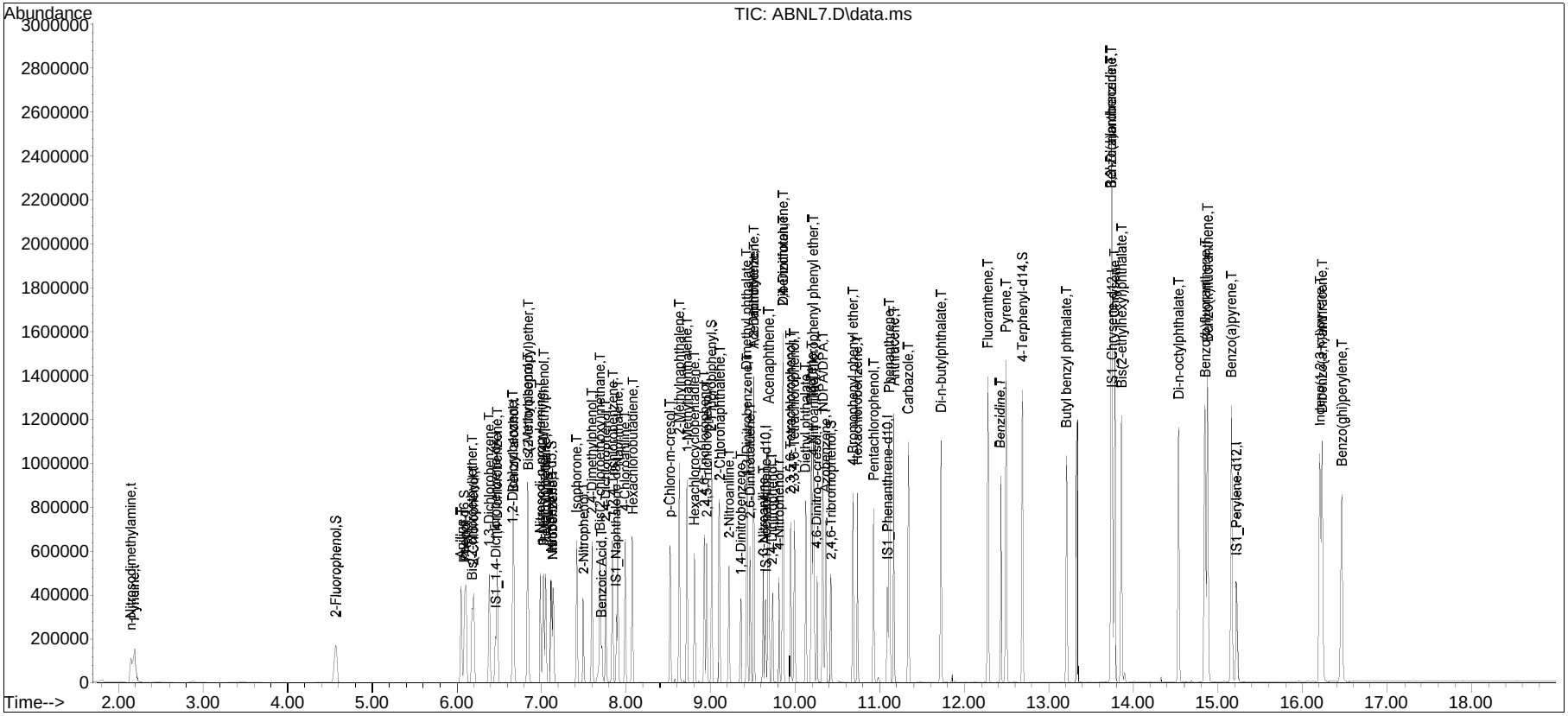
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL7.D
Acq On : 24 Jun 2024 5:43 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10780
Misc : WG1939040
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 25 05:54:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

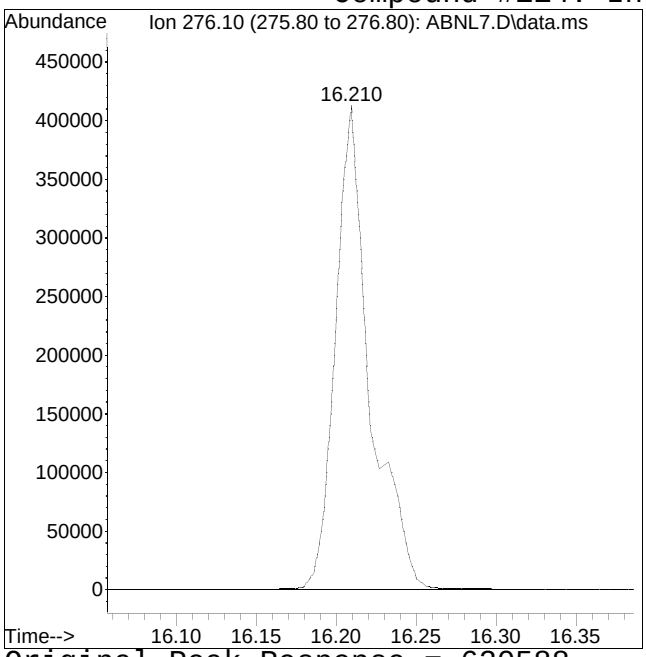
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•



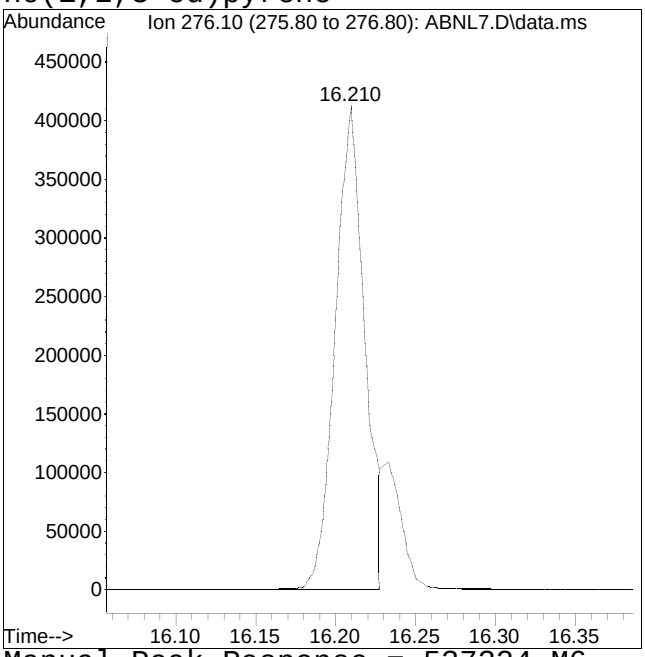
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL7.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 5:43 pm Instrument : SV 106
Sample : IL4,32,,ABNL10 Lot# 10780 Quant Date : 6/25/2024 5:34 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 620588




Manual Peak Response = 537324 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL6.D
Acq On : 24 Jun 2024 6:07 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10781
Misc : WG1939040
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 05:53:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 34411 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 100.00% | | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 121176 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 100.00% | | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 79426 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 100.00% | | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 176143 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 100.00% | | | |
| 104) IS1_Chrysene-d12 | 13.745 | 240 | 174707 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 100.00% | | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 195526 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.569 | 112 | 46416 | 4.771 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 238.55%# | | | |
| 7) Phenol-d6 | 6.093 | 99 | 60873 | 4.844 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 242.20%# | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 62503 | 4.645 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 464.50%# | | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 139378 | 4.960 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 496.00%# | | | |
| 79) 2,4,6-Tribromophenol | 10.428 | 330 | 24197 | 5.726 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 286.30%# | | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 211086 | 5.565 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 556.50%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.146 | 74 | 33390 | 4.921 | ug/ml# | 74 |
| 3) Pyridine | 2.187 | 79 | 55126 | 5.427 | ug/ml# | 67 |
| 5) Aniline | 6.051 | 93 | 80259 | 4.936 | ug/ml | 99 |
| 6) 2-Chlorophenol | 6.198 | 128 | 49372 | 4.668 | ug/ml | 97 |
| 8) Phenol | 6.104 | 94 | 64117 | 4.788 | ug/ml | 91 |
| 9) Bis(2-chloroethyl)ether | 6.181 | 93 | 52631 | 4.977 | ug/ml# | 76 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 60018 | 4.903 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 60113 | 4.701 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 6.657 | 146 | 58576 | 5.018 | ug/ml | 99 |
| 13) Benzyl alcohol | 6.669 | 79 | 49863 | 4.875 | ug/ml | 91 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 83104 | 5.317 | ug/ml# | 57 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL6.D
Acq On : 24 Jun 2024 6:07 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10781
Misc : WG1939040
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 05:53:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.840 | 108 | 46693 | 4.900 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 23284 | 4.466 | ug/ml# | 49 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 42735 | 4.802 | ug/ml# | 91 |
| 18) 3-Methylphenol/4-Methy... | 7.022 | 108 | 49775 | 4.806 | ug/ml | 99 |
| 20) Nitrobenzene | 7.134 | 77 | 62771 | 4.848 | ug/ml | 92 |
| 21) Isophorone | 7.416 | 82 | 111710 | 4.863 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.498 | 139 | 27744 | 5.182 | ug/ml# | 91 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 51002 | 4.702 | ug/ml | 93 |
| 24) Bis(2-chloroethoxy)met... | 7.687 | 93 | 69008 | 4.789 | ug/ml | 98 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 49224 | 4.979 | ug/ml | 96 |
| 26) 1,2,4-Trichlorobenzene | 7.839 | 180 | 56472 | 4.677 | ug/ml | 97 |
| 36) Naphthalene | 7.910 | 128 | 152912 | 4.733 | ug/ml | 99 |
| 37) Benzoic Acid | 7.687 | 105 | 39124 | 4.912 | ug/ml | 95 |
| 38) 4-Chloroaniline | 7.992 | 65 | 23934 | 4.941 | ug/ml | 88 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 39649 | 4.759 | ug/ml | 99 |
| 40) p-Chloro-m-cresol | 8.516 | 107 | 48736 | 4.922 | ug/ml | 95 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 104599 | 4.860 | ug/ml | 93 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 40244 | 4.472 | ug/ml | 80 |
| 43) Hexachlorocyclopentadiene | 8.804 | 237 | 47070 | 5.691 | ug/ml | 97 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 42928 | 5.335 | ug/ml | 99 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 47052 | 5.369 | ug/ml | 95 |
| 47) 2-Chloronaphthalene | 9.104 | 162 | 111763 | 4.966 | ug/ml | 97 |
| 48) 2-Nitroaniline | 9.222 | 138 | 35258 | 5.410 | ug/ml | 99 |
| 49) 1,4-Dinitrobenzene | 9.357 | 168 | 18490 | 5.356 | ug/ml | 91 |
| 50) 1,3-Dinitrobenzene | 9.428 | 168 | 21627 | 5.479 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.428 | 163 | 139733 | 4.698 | ug/ml# | 98 |
| 52) Acenaphthylene | 9.510 | 152 | 177144 | 5.061 | ug/ml | 99 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 31275 | 5.235 | ug/ml | 87 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 13415 | 5.710 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.622 | 138 | 31539 | 5.424 | ug/ml | 91 |
| 65) Acenaphthene | 9.686 | 154 | 103447 | 5.260 | ug/ml | 91 |
| 66) 2,4-Dinitrophenol | 9.728 | 184 | 21336 | 5.784 | ug/ml# | 88 |
| 67) Dibenzofuran | 9.857 | 168 | 172560 | 5.011 | ug/ml | 96 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 45671 | 5.774 | ug/ml | 94 |
| 69) 4-Nitrophenol | 9.810 | 65 | 30284 | 4.854 | ug/ml# | 85 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 43397 | 6.198 | ug/ml | 100 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 42811 | 6.228 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.122 | 149 | 138908 | 4.847 | ug/ml | 99 |
| 73) Fluorene | 10.186 | 166 | 138840 | 5.132 | ug/ml | 94 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 69797 | 4.904 | ug/ml | 89 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL6.D
Acq On : 24 Jun 2024 6:07 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10781
Misc : WG1939040
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 05:53:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 75) 4-Nitroaniline | 10.216 | 138 | 30722 | 5.394 | ug/ml# | 89 |
| 76) 4,6-Dinitro-o-cresol | 10.251 | 198 | 27648 | 6.204 | ug/ml# | 65 |
| 77) NDPA/DPA | 10.322 | 169 | 118352 | 5.312 | ug/ml | 97 |
| 78) Azobenzene | 10.357 | 77 | 133021 | 4.686 | ug/ml | 96 |
| 80) 4-Bromophenyl phenyl e... | 10.680 | 248 | 44876 | 5.292 | ug/ml# | 83 |
| 81) Hexachlorobenzene | 10.733 | 284 | 50132 | 5.106 | ug/ml# | 81 |
| 82) Pentachlorophenol | 10.927 | 266 | 36832 | 6.438 | ug/ml | 98 |
| 89) Phenanthrene | 11.116 | 178 | 217401 | 4.999 | ug/ml | 99 |
| 90) Anthracene | 11.169 | 178 | 224653 | 5.222 | ug/ml | 99 |
| 91) Carbazole | 11.333 | 167 | 203798 | 5.178 | ug/ml | 99 |
| 92) Di-n-butylphthalate | 11.727 | 149 | 247507 | 5.159 | ug/ml | 100 |
| 93) Fluoranthene | 12.274 | 202 | 271130 | 5.446 | ug/ml# | 90 |
| 94) Benzidine | 12.427 | 184 | 161558 | 5.660 | ug/ml# | 94 |
| 95) Pyrene | 12.492 | 202 | 286461 | 5.449 | ug/ml | 99 |
| 97) Butyl benzyl phthalate | 13.210 | 149 | 110253 | 5.404 | ug/ml | 96 |
| 105) Benzo(a)anthracene | 13.733 | 228 | 285698 | 5.055 | ug/ml | 99 |
| 106) 3,3'-Dichlorobenzidine | 13.733 | 252 | 106752 | 5.484 | ug/ml# | 95 |
| 107) Chrysene | 13.768 | 228 | 274645 | 4.924 | ug/ml | 99 |
| 108) Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 173922 | 5.191 | ug/ml# | 94 |
| 109) Di-n-octylphthalate | 14.533 | 149 | 283349 | 5.162 | ug/ml# | 75 |
| 110) Benzo(b)fluoranthene | 14.845 | 252 | 269679 | 5.226 | ug/ml# | 92 |
| 111) Benzo(k)fluoranthene | 14.874 | 252 | 277054 | 5.497 | ug/ml# | 92 |
| 112) Benzo(a)pyrene | 15.163 | 252 | 253581 | 5.487 | ug/ml# | 90 |
| 114) Indeno(1,2,3-cd)pyrene | 16.204 | 276 | 254150M6 | 5.290 | ug/mL | |
| 115) Dibenzo(a,h)anthracene | 16.227 | 278 | 244207 | 5.346 | ug/ml# | 87 |
| 116) Benzo(ghi)perylene | 16.462 | 276 | 229314 | 5.084 | ug/ml# | 82 |

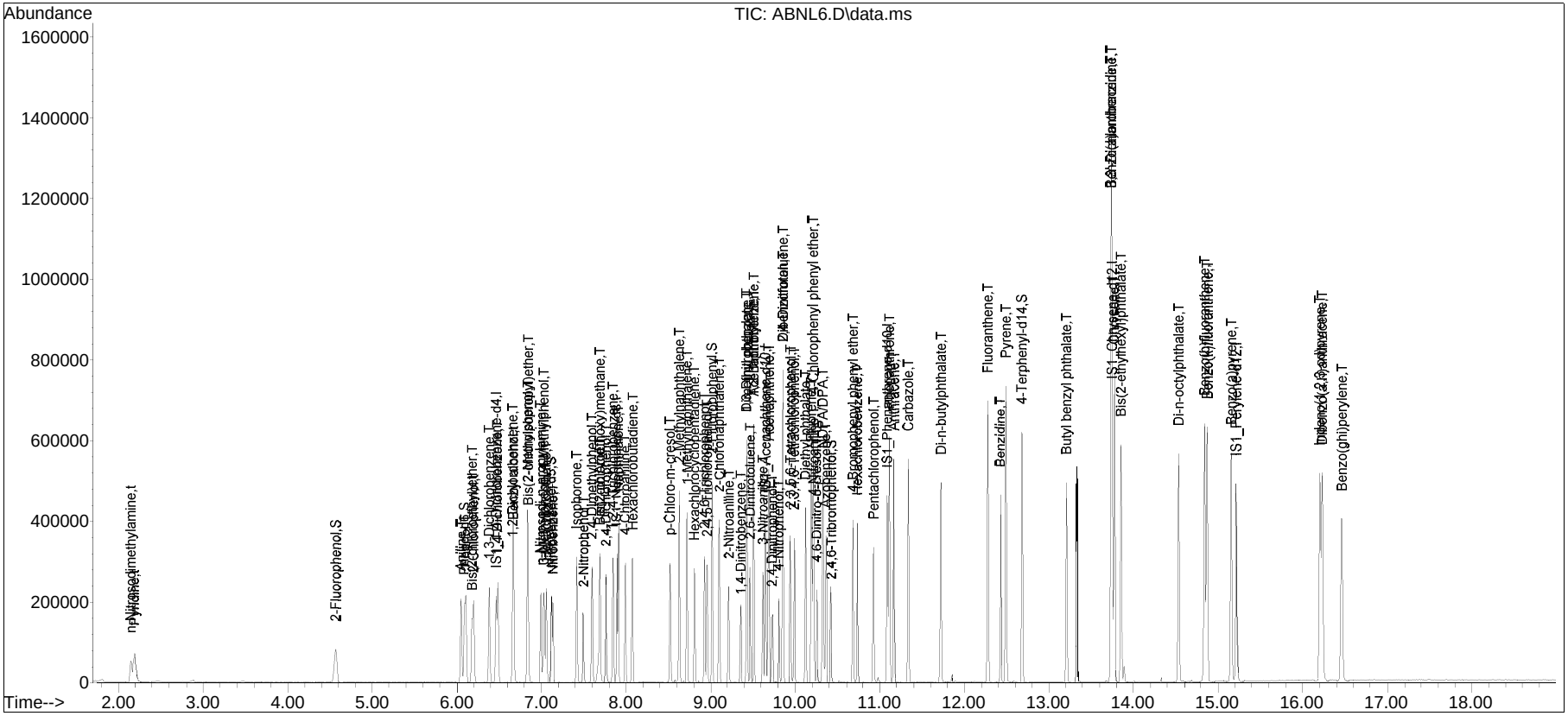
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL6.D
Acq On : 24 Jun 2024 6:07 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10781
Misc : WG1939040
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 05:53:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

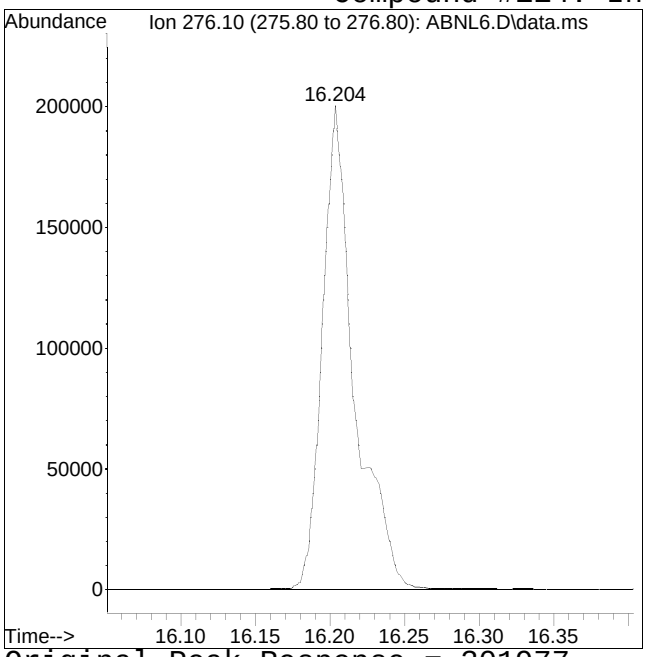
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•



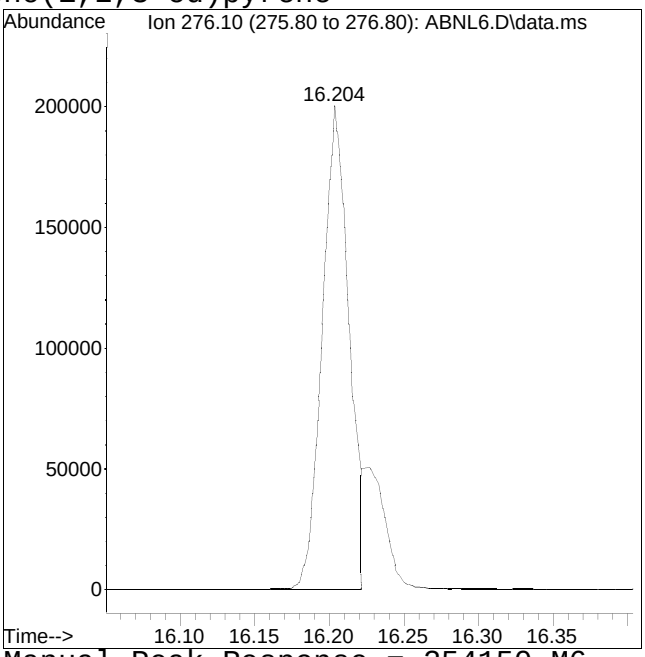
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL6.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 6:07 pm Instrument : SV 106
Sample : IL5,32,,ABNL5 Lot# 10781 Quant Date : 6/25/2024 5:34 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 301977




Manual Peak Response = 254150 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL5.D
Acq On : 24 Jun 2024 6:31 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL2.5 Lot# 10782
Misc : WG1939040
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 05:52:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 34165 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 99.29% | | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 121152 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 99.98% | | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 78435 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 98.75% | | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 181142 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 102.84% | | | |
| 104) IS1_Chrysene-d12 | 13.745 | 240 | 180502 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 103.32% | | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 197954 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 101.24% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.569 | 112 | 22732 | 2.353 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 117.65%# | | | |
| 7) Phenol-d6 | 6.092 | 99 | 31025 | 2.486 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 124.30%# | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 31078 | 2.326 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 232.60%# | | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 73907 | 2.631 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 263.10%# | | | |
| 79) 2,4,6-Tribromophenol | 10.422 | 330 | 11988 | 2.873 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 143.65%# | | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 110752 | 2.839 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 283.90%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.146 | 74 | 16530 | 2.454 | ug/ml# | 73 |
| 3) Pyridine | 2.193 | 79 | 27593 | 2.736 | ug/ml# | 68 |
| 5) Aniline | 6.051 | 93 | 40608 | 2.516 | ug/ml | 100 |
| 6) 2-Chlorophenol | 6.198 | 128 | 25772 | 2.454 | ug/ml | 98 |
| 8) Phenol | 6.104 | 94 | 32514 | 2.446 | ug/ml | 91 |
| 9) Bis(2-chloroethyl)ether | 6.181 | 93 | 26824 | 2.555 | ug/ml# | 71 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 31266 | 2.573 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 30948 | 2.438 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 6.657 | 146 | 29829 | 2.574 | ug/ml | 98 |
| 13) Benzyl alcohol | 6.669 | 79 | 25253 | 2.487 | ug/ml | 90 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 43021 | 2.772 | ug/ml# | 58 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL5.D
Acq On : 24 Jun 2024 6:31 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL2.5 Lot# 10782
Misc : WG1939040
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 05:52:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.839 | 108 | 23701 | 2.505 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 11929 | 2.305 | ug/ml# | 47 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 21864 | 2.475 | ug/ml# | 87 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 24874 | 2.419 | ug/ml# | 94 |
| 20) Nitrobenzene | 7.139 | 77 | 31837 | 2.477 | ug/ml | 92 |
| 21) Isophorone | 7.416 | 82 | 56332 | 2.470 | ug/ml | 93 |
| 22) 2-Nitrophenol | 7.498 | 139 | 14092 | 2.651 | ug/ml# | 91 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 25723 | 2.389 | ug/ml | 95 |
| 24) Bis(2-chloroethoxy)met... | 7.686 | 93 | 34818 | 2.434 | ug/ml | 99 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 24809 | 2.528 | ug/ml | 96 |
| 26) 1,2,4-Trichlorobenzene | 7.839 | 180 | 29209 | 2.436 | ug/ml | 97 |
| 36) Naphthalene | 7.910 | 128 | 79805 | 2.471 | ug/ml | 99 |
| 37) Benzoic Acid | 7.669 | 105 | 17182 | 2.297 | ug/ml | 95 |
| 38) 4-Chloroaniline | 7.992 | 65 | 12394 | 2.559 | ug/ml | 84 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 20530 | 2.465 | ug/ml | 99 |
| 40) p-Chloro-m-cresol | 8.522 | 107 | 24529 | 2.478 | ug/ml | 96 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 55092 | 2.560 | ug/ml | 97 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 20578 | 2.287 | ug/ml | 79 |
| 43) Hexachlorocyclopentadiene | 8.804 | 237 | 23851 | 2.884 | ug/ml | 99 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 22303 | 2.772 | ug/ml | 98 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 24004 | 2.739 | ug/ml | 95 |
| 47) 2-Chloronaphthalene | 9.104 | 162 | 57615 | 2.560 | ug/ml | 96 |
| 48) 2-Nitroaniline | 9.222 | 138 | 17382 | 2.667 | ug/ml | 99 |
| 49) 1,4-Dinitrobenzene | 9.351 | 168 | 9137 | 2.647 | ug/ml | 94 |
| 50) 1,3-Dinitrobenzene | 9.428 | 168 | 10499 | 2.661 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.428 | 163 | 71248 | 2.396 | ug/ml | 97 |
| 52) Acenaphthylene | 9.510 | 152 | 89245 | 2.550 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 15889 | 2.660 | ug/ml | 87 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 6478 | 2.758 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.622 | 138 | 15521 | 2.703 | ug/ml | 90 |
| 65) Acenaphthene | 9.686 | 154 | 53091 | 2.733 | ug/ml | 93 |
| 66) 2,4-Dinitrophenol | 9.728 | 184 | 9149 | 2.701 | ug/ml | 92 |
| 67) Dibenzofuran | 9.857 | 168 | 88957 | 2.616 | ug/ml | 98 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 21597 | 2.765 | ug/ml | 93 |
| 69) 4-Nitrophenol | 9.810 | 65 | 15513 | 2.518 | ug/ml# | 84 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 22373 | 3.236 | ug/ml | 96 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 21822 | 3.215 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.122 | 149 | 72940 | 2.578 | ug/ml | 97 |
| 73) Fluorene | 10.186 | 166 | 70032 | 2.621 | ug/ml | 95 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 37527 | 2.670 | ug/ml# | 88 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL5.D
Acq On : 24 Jun 2024 6:31 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL2.5 Lot# 10782
Misc : WG1939040
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 05:52:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.210 | 138 | 16748 | 2.978 | ug/ml | # | 88 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 13444 | 3.055 | ug/ml | # | 66 |
| 77) | NDPA/DPA | 10.322 | 169 | 59164 | 2.689 | ug/ml | | 97 |
| 78) | Azobenzene | 10.357 | 77 | 66922 | 2.387 | ug/ml | | 95 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 23158 | 2.765 | ug/ml | # | 83 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 26093 | 2.691 | ug/ml | # | 80 |
| 82) | Pentachlorophenol | 10.927 | 266 | 17699 | 3.133 | ug/ml | | 99 |
| 89) | Phenanthrene | 11.116 | 178 | 111757 | 2.499 | ug/ml | | 99 |
| 90) | Anthracene | 11.163 | 178 | 113025 | 2.555 | ug/ml | | 99 |
| 91) | Carbazole | 11.333 | 167 | 104159 | 2.573 | ug/ml | | 98 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 127043 | 2.575 | ug/ml | | 99 |
| 93) | Fluoranthene | 12.274 | 202 | 138839 | 2.712 | ug/ml | # | 92 |
| 94) | Benzidine | 12.427 | 184 | 80269 | 2.735 | ug/ml | # | 95 |
| 95) | Pyrene | 12.492 | 202 | 146929 | 2.718 | ug/ml | | 100 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 56984 | 2.716 | ug/ml | | 95 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 152051 | 2.604 | ug/ml | | 100 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 52387 | 2.605 | ug/ml | # | 95 |
| 107) | Chrysene | 13.768 | 228 | 146202 | 2.537 | ug/ml | | 99 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 90089 | 2.602 | ug/ml | | 95 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 146591 | 2.585 | ug/ml | # | 75 |
| 110) | Benzo(b)fluoranthene | 14.845 | 252 | 146018 | 2.739 | ug/ml | # | 92 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 139804 | 2.685 | ug/ml | # | 91 |
| 112) | Benzo(a)pyrene | 15.157 | 252 | 127828 | 2.677 | ug/ml | # | 90 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.204 | 276 | 133184M6 | 2.738 | ug/mL | | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 126489 | 2.735 | ug/ml | # | 87 |
| 116) | Benzo(ghi)perylene | 16.456 | 276 | 121194 | 2.654 | ug/ml | # | 82 |

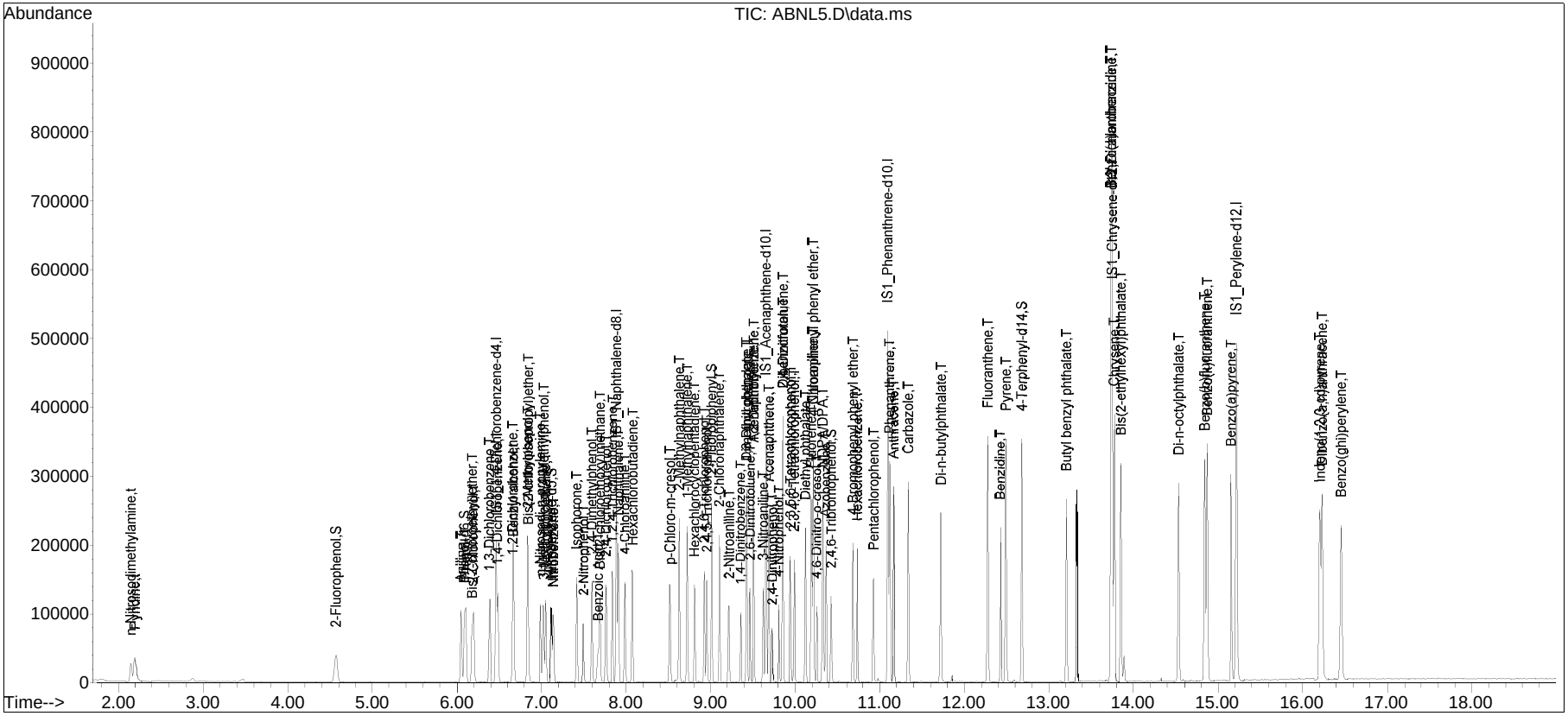
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL5.D
Acq On : 24 Jun 2024 6:31 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL2.5 Lot# 10782
Misc : WG1939040
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 05:52:15 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

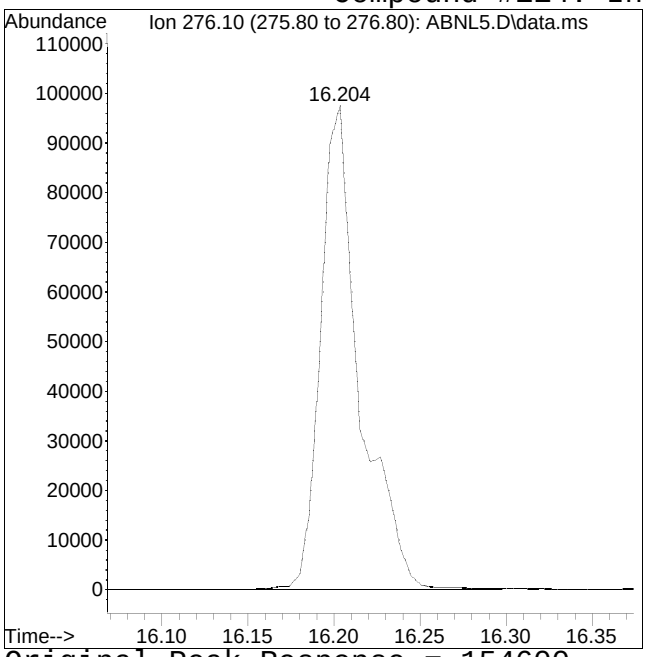
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•



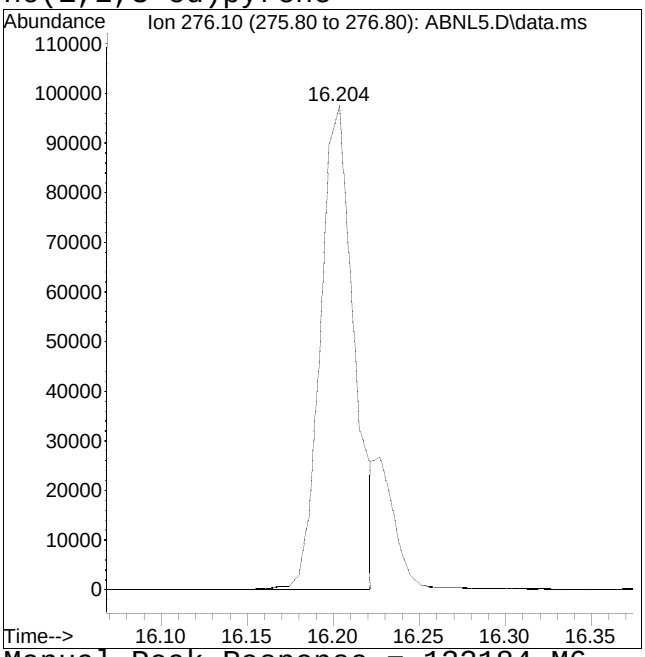
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL5.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 6:31 pm Instrument : SV 106
Sample : IL6,32,,ABNL2.5 Lot# 10782Quant Date : 6/25/2024 5:34 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 154600




Manual Peak Response = 133184 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL4.D
Acq On : 24 Jun 2024 6:54 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL1 Lot# 10783
Misc : WG1939040
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 25 05:51:23 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 33252 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 96.63% | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 119186 | 4.000 ug/ml # | 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 98.36% | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 75761 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 95.39% | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 166179 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 94.34% | | |
| 104) IS1_Chrysene-d12 | 13.739 | 240 | 173865 | 4.000 ug/ml # | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 99.52% | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 197182 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 100.85% | | |
| System Monitoring Compounds | | | | | |
| 4) 2-Fluorophenol | 4.569 | 112 | 9505 | 1.011 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 50.55% | | |
| 7) Phenol-d6 | 6.092 | 99 | 12748 | 1.050 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 52.50% | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 12826 | 0.986 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 98.60% | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 28908 | 1.046 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 104.60% | | |
| 79) 2,4,6-Tribromophenol | 10.422 | 330 | 4791 | 1.189 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 59.45% | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 44844 | 1.253 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 125.30% | | |
| Target Compounds | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.157 | 74 | 7093 | 1.082 ug/ml# | 72 |
| 3) Pyridine | 2.210 | 79 | 11353 | 1.157 ug/ml# | 66 |
| 5) Aniline | 6.051 | 93 | 16121 | 1.026 ug/ml | 97 |
| 6) 2-Chlorophenol | 6.198 | 128 | 10307 | 1.008 ug/ml | 99 |
| 8) Phenol | 6.104 | 94 | 14037 | 1.085 ug/ml | 96 |
| 9) Bis(2-chloroethyl)ether | 6.181 | 93 | 10847 | 1.062 ug/ml# | 75 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 12342 | 1.043 ug/ml | 94 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 12924 | 1.046 ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 12347 | 1.095 ug/ml | 99 |
| 13) Benzyl alcohol | 6.669 | 79 | 9873 | 0.999 ug/ml | 93 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 17236 | 1.141 ug/ml# | 60 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL4.D
Acq On : 24 Jun 2024 6:54 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL1 Lot# 10783
Misc : WG1939040
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 25 05:51:23 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.839 | 108 | 9758 | 1.060 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 4997 | 0.992 | ug/ml# | 37 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 8932 | 1.039 | ug/ml# | 87 |
| 18) 3-Methylphenol/4-Methy... | 7.022 | 108 | 10370 | 1.036 | ug/ml | 97 |
| 20) Nitrobenzene | 7.139 | 77 | 13642 | 1.090 | ug/ml# | 88 |
| 21) Isophorone | 7.416 | 82 | 22645 | 1.020 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.498 | 139 | 5278 | 1.020 | ug/ml# | 89 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 10461 | 0.998 | ug/ml | 94 |
| 24) Bis(2-chloroethoxy)met... | 7.686 | 93 | 13928 | 1.000 | ug/ml# | 96 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 9935 | 1.040 | ug/ml | 97 |
| 26) 1,2,4-Trichlorobenzene | 7.839 | 180 | 12012 | 1.029 | ug/ml | 98 |
| 36) Naphthalene | 7.910 | 128 | 32375 | 1.019 | ug/ml | 99 |
| 37) Benzoic Acid | 7.657 | 105 | 4874 | 0.825 | ug/ml | 94 |
| 38) 4-Chloroaniline | 7.986 | 65 | 4591 | 0.964 | ug/ml | 96 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 8062 | 0.984 | ug/ml | 95 |
| 40) p-Chloro-m-cresol | 8.516 | 107 | 9616 | 0.987 | ug/ml | 98 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 22268 | 1.052 | ug/ml | 95 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 8612 | 0.973 | ug/ml | 78 |
| 43) Hexachlorocyclopentadiene | 8.804 | 237 | 10048 | 1.235 | ug/ml | 98 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 8325 | 1.052 | ug/ml | 98 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 9193 | 1.066 | ug/ml | 94 |
| 47) 2-Chloronaphthalene | 9.104 | 162 | 23370 | 1.056 | ug/ml | 93 |
| 48) 2-Nitroaniline | 9.222 | 138 | 6702 | 1.045 | ug/ml | 94 |
| 49) 1,4-Dinitrobenzene | 9.351 | 168 | 3764 | 1.109 | ug/ml | 89 |
| 50) 1,3-Dinitrobenzene | 9.428 | 168 | 4327 | 1.115 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.428 | 163 | 27563 | 0.942 | ug/ml# | 98 |
| 52) Acenaphthylene | 9.510 | 152 | 35549 | 1.033 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 6019 | 1.024 | ug/ml | 89 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 2615 | 1.132 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.622 | 138 | 6050 | 1.091 | ug/ml | 86 |
| 65) Acenaphthene | 9.686 | 154 | 20952 | 1.117 | ug/ml | 88 |
| 66) 2,4-Dinitrophenol | 9.727 | 184 | 3177 | 1.186 | ug/ml | 95 |
| 67) Dibenzofuran | 9.857 | 168 | 36089 | 1.099 | ug/ml | 98 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 8563 | 1.135 | ug/ml | 92 |
| 69) 4-Nitrophenol | 9.810 | 65 | 6170 | 1.037 | ug/ml# | 85 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 8394 | 1.257 | ug/ml | 97 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 8059 | 1.229 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.122 | 149 | 27754 | 1.015 | ug/ml | 96 |
| 73) Fluorene | 10.192 | 166 | 28173 | 1.092 | ug/ml | 95 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 14281 | 1.052 | ug/ml | 89 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL4.D
Acq On : 24 Jun 2024 6:54 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL1 Lot# 10783
Misc : WG1939040
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 25 05:51:23 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.210 | 138 | 6596 | 1.214 | ug/ml# | 88 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 5104 | 1.201 | ug/ml# | 68 |
| 77) | NDPA/DPA | 10.322 | 169 | 24066 | 1.132 | ug/ml | 98 |
| 78) | Azobenzene | 10.357 | 77 | 26637 | 0.984 | ug/ml | 96 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 9267 | 1.146 | ug/ml# | 84 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 10567 | 1.128 | ug/ml# | 82 |
| 82) | Pentachlorophenol | 10.927 | 266 | 6127 | 1.123 | ug/ml | 90 |
| 89) | Phenanthrene | 11.116 | 178 | 46605 | 1.136 | ug/ml | 98 |
| 90) | Anthracene | 11.163 | 178 | 45055 | 1.110 | ug/ml | 100 |
| 91) | Carbazole | 11.333 | 167 | 42319 | 1.140 | ug/ml | 99 |
| 92) | Di-n-butylphthalate | 11.721 | 149 | 47196 | 1.043 | ug/ml | 99 |
| 93) | Fluoranthene | 12.274 | 202 | 55429 | 1.180 | ug/ml# | 90 |
| 94) | Benzidine | 12.427 | 184 | 30613 | 1.137 | ug/ml# | 93 |
| 95) | Pyrene | 12.492 | 202 | 58429 | 1.178 | ug/ml | 98 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 21998 | 1.143 | ug/ml | 94 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 61253 | 1.089 | ug/ml | 98 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 19850 | 1.025 | ug/ml# | 95 |
| 107) | Chrysene | 13.768 | 228 | 59264 | 1.068 | ug/ml | 100 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 32891 | 0.986 | ug/ml# | 94 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 53959 | 0.988 | ug/ml# | 75 |
| 110) | Benzo(b)fluoranthene | 14.845 | 252 | 60994 | 1.188 | ug/ml# | 92 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 57734 | 1.151 | ug/ml# | 92 |
| 112) | Benzo(a)pyrene | 15.157 | 252 | 51841 | 1.127 | ug/ml# | 94 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.204 | 276 | 54265M6 | 1.120 | ug/mL | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 52016 | 1.129 | ug/ml# | 86 |
| 116) | Benzo(ghi)perylene | 16.456 | 276 | 49379 | 1.086 | ug/ml# | 83 |

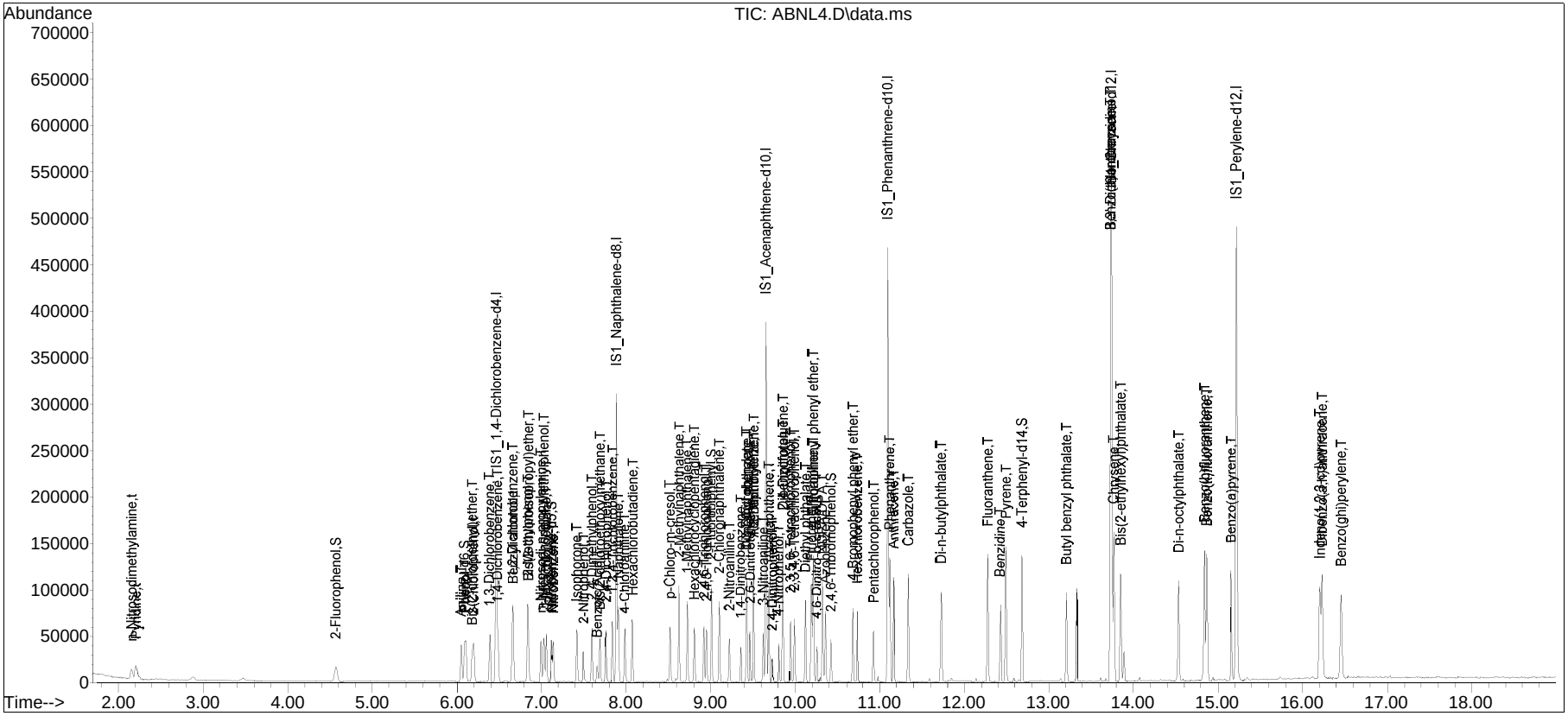
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL4.D
Acq On : 24 Jun 2024 6:54 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL1 Lot# 10783
Misc : WG1939040
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 25 05:51:23 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

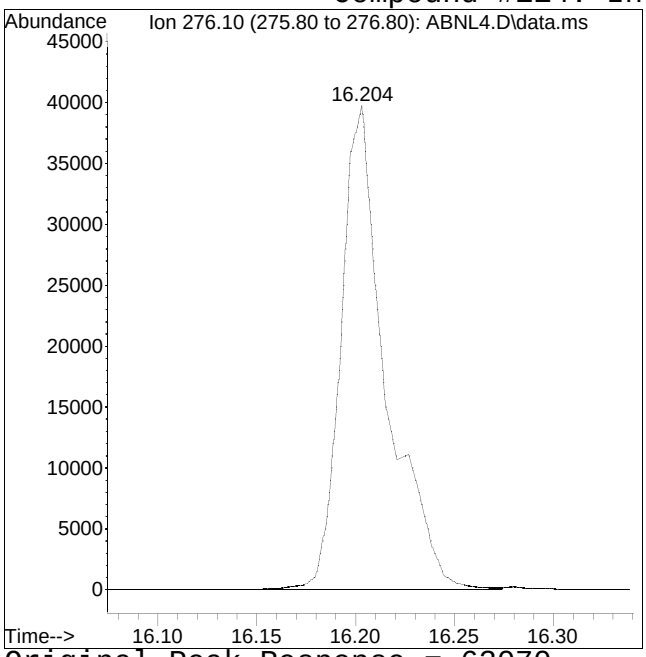
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•



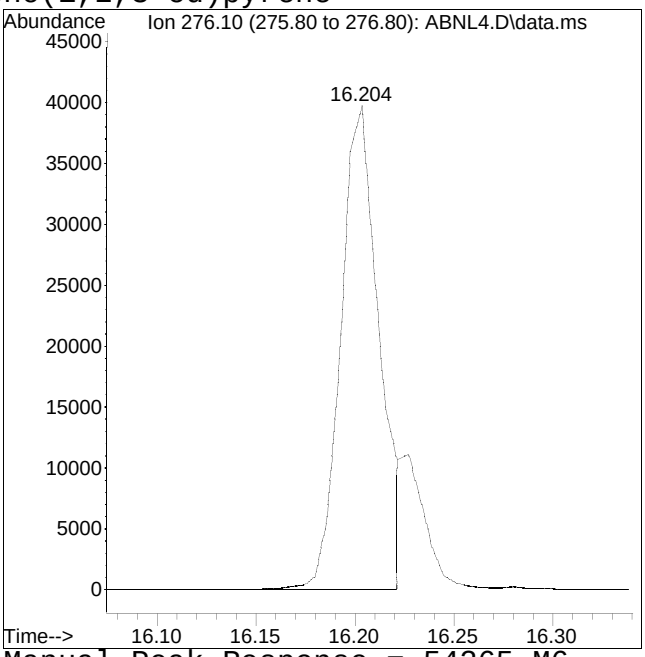
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL4.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 6:54 pm Instrument : SV 106
Sample : IL7,32,,ABNL1 Lot# 10783 Quant Date : 6/25/2024 5:34 am

## Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 63070




Manual Peak Response = 54265 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL3.D
Acq On : 24 Jun 2024 7:18 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL0.5 Lot# 10784
Misc : WG1939040
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 25 06:02:16 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 32391 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 94.13% | | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 113586 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 93.74% | | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 72453 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 91.22% | | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 159947 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 90.81% | | | |
| 104) IS1_Chrysene-d12 | 13.739 | 240 | 165980 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 95.00% | | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 186363 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 95.31% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.575 | 112 | 4629 | 0.505 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 25.25% | | | |
| 7) Phenol-d6 | 6.092 | 99 | 6559 | 0.554 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 27.70% | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 7068 | 0.558 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 55.80% | | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 15156 | 0.575 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 57.50% | | | |
| 79) 2,4,6-Tribromophenol | 10.422 | 330 | 2101 | 0.545 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 27.25% | | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 21790 | 0.633 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 63.30% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.157 | 74 | 3457 | 0.541 | ug/ml# | 69 |
| 3) Pyridine | 2.210 | 79 | 5488 | 0.574 | ug/ml# | 74 |
| 5) Aniline | 6.051 | 93 | 8064 | 0.527 | ug/ml | 98 |
| 6) 2-Chlorophenol | 6.198 | 128 | 5633 | 0.566 | ug/ml | 95 |
| 8) Phenol | 6.104 | 94 | 6512 | 0.517 | ug/ml# | 87 |
| 9) Bis(2-chloroethyl)ether | 6.187 | 93 | 5827 | 0.585 | ug/ml# | 79 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 6223 | 0.540 | ug/ml | 96 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 6794 | 0.564 | ug/ml | 92 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 6532 | 0.595 | ug/ml | 98 |
| 13) Benzyl alcohol | 6.669 | 79 | 5006 | 0.520 | ug/ml | 95 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 9139 | 0.621 | ug/ml# | 58 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL3.D
Acq On : 24 Jun 2024 7:18 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL0.5 Lot# 10784
Misc : WG1939040
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 25 06:02:16 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.839 | 108 | 5000 | 0.557 | ug/ml | 98 |
| 16) Hexachloroethane | 7.051 | 117 | 2693 | 0.549 | ug/ml# | 51 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 4078 | 0.487 | ug/ml# | 85 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 5313 | 0.545 | ug/ml | 94 |
| 20) Nitrobenzene | 7.139 | 77 | 6525 | 0.535 | ug/ml# | 88 |
| 21) Isophorone | 7.422 | 82 | 10954 | 0.507 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.498 | 139 | 2652 | 0.526 | ug/ml# | 91 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 4966 | 0.486 | ug/ml | 96 |
| 24) Bis(2-chloroethoxy)met... | 7.686 | 93 | 7556 | 0.557 | ug/ml# | 96 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 4778 | 0.513 | ug/ml | 95 |
| 26) 1,2,4-Trichlorobenzene | 7.839 | 180 | 6565 | 0.578 | ug/ml | 96 |
| 36) Naphthalene | 7.910 | 128 | 17639 | 0.583 | ug/ml | 98 |
| 37) Benzoic Acid | 7.651 | 105 | 1855 | 0.465 | ug/ml# | 86 |
| 38) 4-Chloroaniline | 7.992 | 65 | 2373 | 0.523 | ug/ml | 92 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 4619 | 0.591 | ug/ml | 95 |
| 40) p-Chloro-m-cresol | 8.516 | 107 | 4568 | 0.492 | ug/ml | 97 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 10991 | 0.545 | ug/ml# | 92 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 4410 | 0.523 | ug/ml | 74 |
| 43) Hexachlorocyclopentadiene | 8.810 | 237 | 4441 | 0.573 | ug/ml# | 90 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 4214 | 0.559 | ug/ml | 94 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 4787 | 0.583 | ug/ml | 96 |
| 47) 2-Chloronaphthalene | 9.104 | 162 | 11776 | 0.558 | ug/ml | 99 |
| 48) 2-Nitroaniline | 9.222 | 138 | 3369 | 0.551 | ug/ml | 93 |
| 49) 1,4-Dinitrobenzene | 9.351 | 168 | 1818 | 0.562 | ug/ml | 91 |
| 50) 1,3-Dinitrobenzene | 9.428 | 168 | 1997 | 0.540 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.428 | 163 | 14729 | 0.528 | ug/ml | 99 |
| 52) Acenaphthylene | 9.510 | 152 | 18626 | 0.568 | ug/ml | 98 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 2872 | 0.513 | ug/ml | 91 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 1334 | 0.606 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.622 | 138 | 2948 | 0.556 | ug/ml# | 80 |
| 65) Acenaphthene | 9.686 | 154 | 10908 | 0.608 | ug/ml | 92 |
| 66) 2,4-Dinitrophenol | 9.727 | 184 | 1578 | 0.777 | ug/ml# | 78 |
| 67) Dibenzofuran | 9.857 | 168 | 17986 | 0.573 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 4169 | 0.578 | ug/ml | 95 |
| 69) 4-Nitrophenol | 9.810 | 65 | 2994 | 0.526 | ug/ml | 87 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 4162 | 0.652 | ug/ml | 94 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 4066 | 0.648 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.122 | 149 | 14511 | 0.555 | ug/ml | 98 |
| 73) Fluorene | 10.186 | 166 | 14234 | 0.577 | ug/ml | 98 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 8032 | 0.619 | ug/ml# | 84 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL3.D
Acq On : 24 Jun 2024 7:18 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL0.5 Lot# 10784
Misc : WG1939040
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 25 06:02:16 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.210 | 138 | 3375 | 0.650 | ug/ml | # | 88 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 2290 | 0.563 | ug/ml | # | 60 |
| 77) | NDPA/DPA | 10.322 | 169 | 11420 | 0.562 | ug/ml | # | 93 |
| 78) | Azobenzene | 10.357 | 77 | 13064 | 0.504 | ug/ml | | 95 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 4283 | 0.554 | ug/ml | # | 85 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 5638 | 0.630 | ug/ml | # | 82 |
| 82) | Pentachlorophenol | 10.927 | 266 | 2716 | 0.520 | ug/ml | | 96 |
| 89) | Phenanthrene | 11.116 | 178 | 22912 | 0.580 | ug/ml | | 98 |
| 90) | Anthracene | 11.163 | 178 | 23000 | 0.589 | ug/ml | | 97 |
| 91) | Carbazole | 11.333 | 167 | 20524 | 0.574 | ug/ml | | 100 |
| 92) | Di-n-butylphthalate | 11.721 | 149 | 23542 | 0.540 | ug/ml | | 99 |
| 93) | Fluoranthene | 12.274 | 202 | 27289 | 0.604 | ug/ml | # | 92 |
| 94) | Benzidine | 12.427 | 184 | 15029 | 0.580 | ug/ml | # | 96 |
| 95) | Pyrene | 12.492 | 202 | 29403 | 0.616 | ug/ml | | 99 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 10165 | 0.549 | ug/ml | # | 98 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 31479 | 0.586 | ug/ml | | 100 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 9210 | 0.498 | ug/ml | | 98 |
| 107) | Chrysene | 13.768 | 228 | 30717 | 0.580 | ug/ml | | 99 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 15961 | 0.501 | ug/ml | # | 93 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 26660 | 0.511 | ug/ml | # | 75 |
| 110) | Benzo(b)fluoranthene | 14.839 | 252 | 31884 | 0.650 | ug/ml | # | 93 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 28603 | 0.597 | ug/ml | # | 90 |
| 112) | Benzo(a)pyrene | 15.157 | 252 | 26611 | 0.606 | ug/ml | # | 93 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.204 | 276 | 26167M6 | 0.571 | ug/mL | | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 24873 | 0.571 | ug/ml | # | 88 |
| 116) | Benzo(ghi)perylene | 16.456 | 276 | 24280M1 | 0.565 | ug/ml | | |

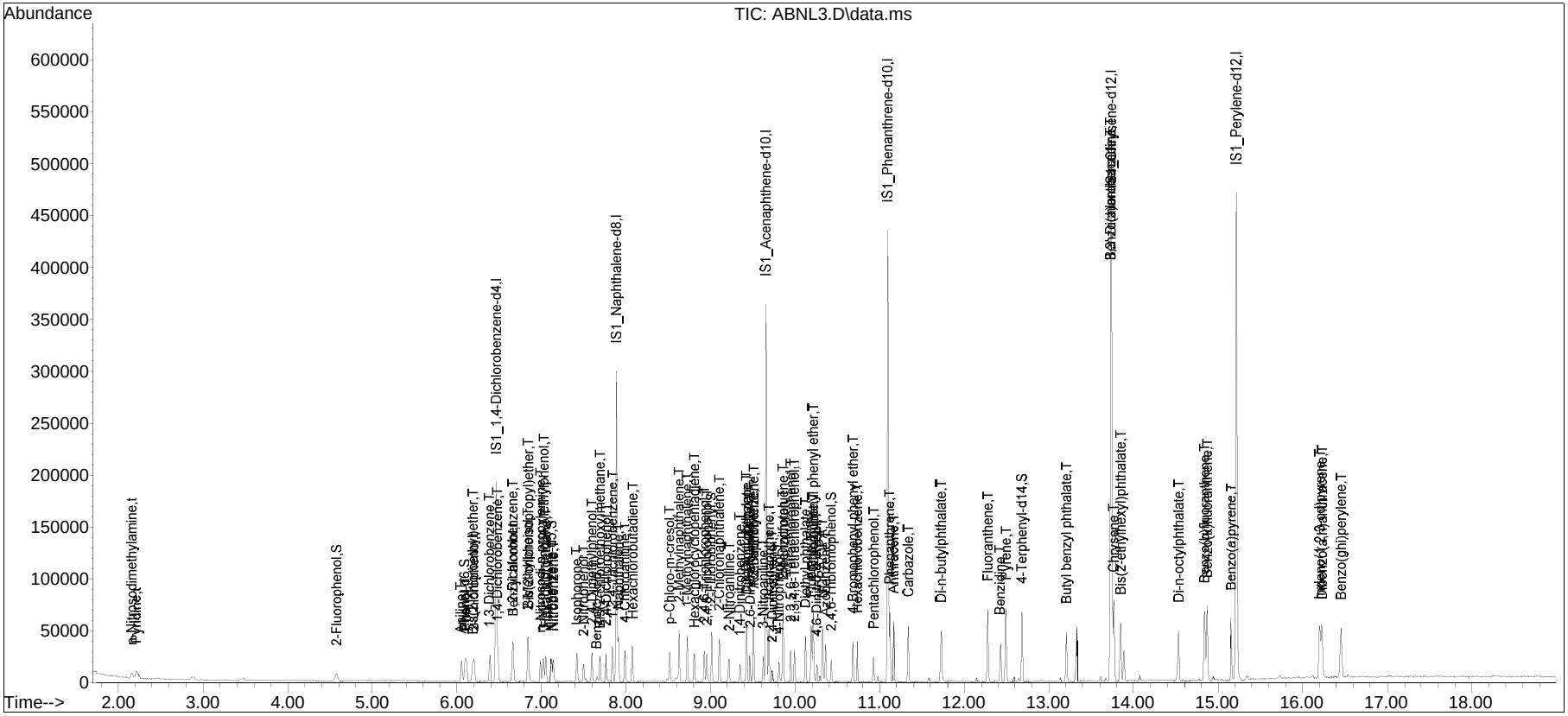
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL3.D
Acq On : 24 Jun 2024 7:18 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL0.5 Lot# 10784
Misc : WG1939040
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 25 06:02:16 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

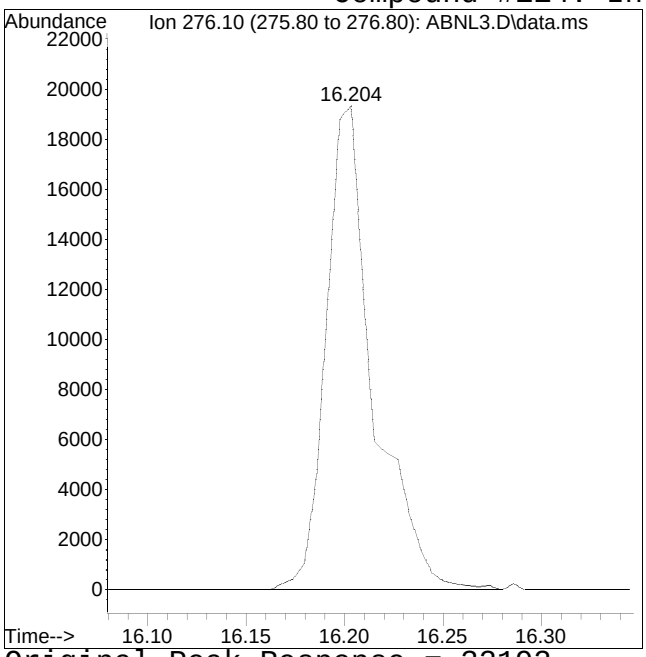
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•



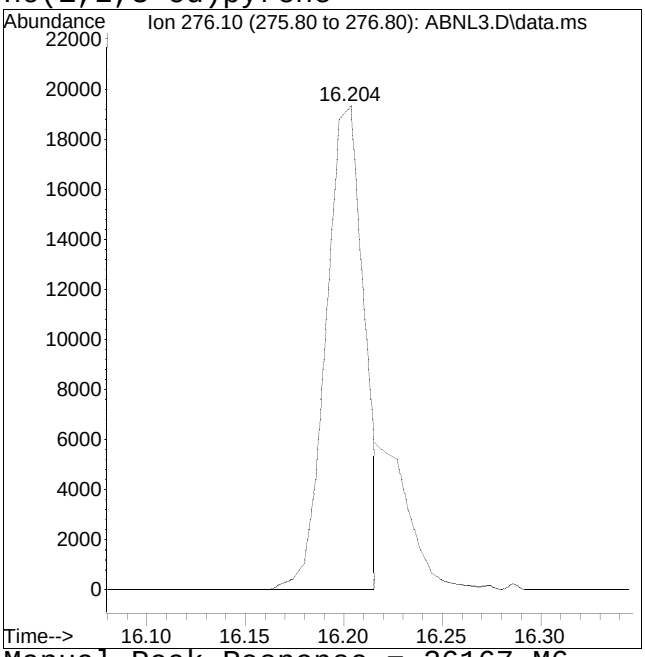
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL3.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:18 pm Instrument : SV 106
Sample : IL8,32,,ABNL0.5 Lot# 10784Quant Date : 6/25/2024 5:33 am

## Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 32192



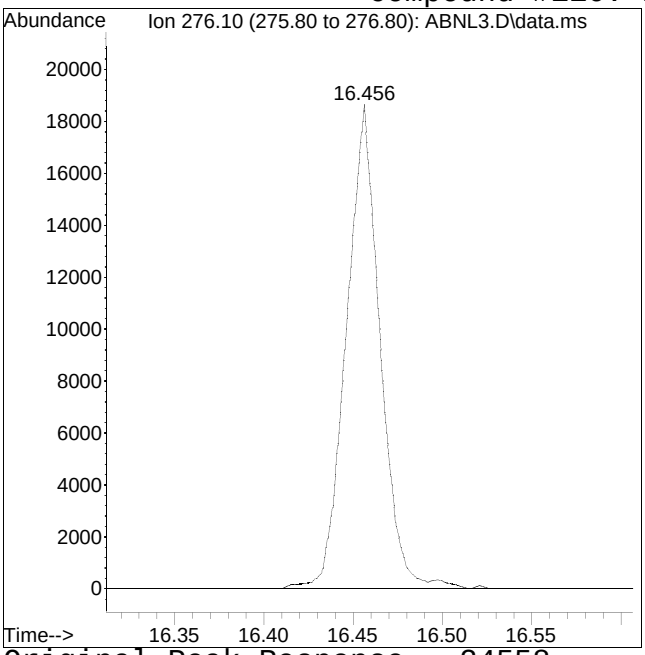

Manual Peak Response = 26167 M6

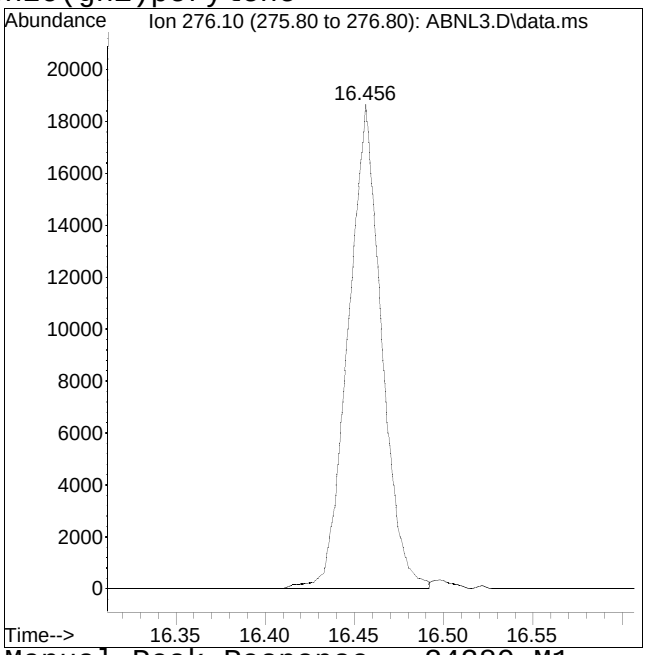
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL3.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:18 pm Instrument : SV 106
Sample : IL8,32,,ABNL0.5 Lot# 10784Quant Date : 6/25/2024 5:33 am

Compound #116: Benzo(ghi)perylene




Original Peak Response = 24558 Manual Peak Response = 24280 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL2.D
Acq On : 24 Jun 2024 7:42 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.2 Lot# 10785
Misc : WG1939040
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 05:49:27 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 32157 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 93.45% | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 111078 | 4.000 ug/ml # | 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 91.67% | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 71285 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 89.75% | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 160145 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 90.92% | | |
| 104) IS1_Chrysene-d12 | 13.745 | 240 | 163949 | 4.000 ug/ml # | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 93.84% | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 181432 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 92.79% | | |
| System Monitoring Compounds | | | | | |
| 4) 2-Fluorophenol | 4.581 | 112 | 2228 | 0.245 ug/ml | 0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 12.25%# | | |
| 7) Phenol-d6 | 6.092 | 99 | 2724 | 0.232 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 11.60%# | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 2797 | 0.222 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 22.20%# | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 6598 | 0.256 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 25.60%# | | |
| 79) 2,4,6-Tribromophenol | 10.422 | 330 | 956 | 0.252 ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 12.60%# | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 10033 | 0.291 ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 29.10%# | | |
| Target Compounds | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.163 | 74 | 1537 | 0.242 ug/ml# | 80 |
| 3) Pyridine | 2.222 | 79 | 2501 | 0.263 ug/ml# | 60 |
| 5) Aniline | 6.057 | 93 | 3642 | 0.240 ug/ml | 97 |
| 6) 2-Chlorophenol | 6.198 | 128 | 2335 | 0.236 ug/ml | 99 |
| 8) Phenol | 6.110 | 94 | 2795 | 0.223 ug/ml# | 88 |
| 9) Bis(2-chloroethyl)ether | 6.186 | 93 | 2430 | 0.246 ug/ml# | 76 |
| 10) 1,3-Dichlorobenzene | 6.386 | 146 | 2991 | 0.261 ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 2633M3 | 0.220 ug/ml | |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 2723 | 0.250 ug/ml | 92 |
| 13) Benzyl alcohol | 6.669 | 79 | 2304 | 0.241 ug/ml# | 89 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 4104 | 0.281 ug/ml# | 57 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL2.D
Acq On : 24 Jun 2024 7:42 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.2 Lot# 10785
Misc : WG1939040
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 05:49:27 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.839 | 108 | 2042 | 0.229 | ug/ml# | 96 |
| 16) Hexachloroethane | 7.051 | 117 | 1192 | 0.245 | ug/ml# | 48 |
| 17) n-Nitrosodi-n-propylamine | 6.998 | 70 | 1776 | 0.214 | ug/ml# | 59 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 2355 | 0.243 | ug/ml# | 91 |
| 20) Nitrobenzene | 7.139 | 77 | 2854 | 0.236 | ug/ml# | 86 |
| 21) Isophorone | 7.422 | 82 | 4478 | 0.209 | ug/ml# | 91 |
| 22) 2-Nitrophenol | 7.498 | 139 | 1296 | 0.259 | ug/ml# | 88 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 2165 | 0.214 | ug/ml | 90 |
| 24) Bis(2-chloroethoxy)met... | 7.692 | 93 | 3272 | 0.243 | ug/ml# | 91 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 2108 | 0.228 | ug/ml | 93 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 2635 | 0.234 | ug/ml | 89 |
| 36) Naphthalene | 7.910 | 128 | 7948 | 0.268 | ug/ml | 97 |
| 37) Benzoic Acid | 7.657 | 105 | 412M2 | 0.280 | ug/ml | |
| 38) 4-Chloroaniline | 7.992 | 65 | 1156 | 0.260 | ug/ml# | 68 |
| 39) Hexachlorobutadiene | 8.081 | 225 | 2177 | 0.285 | ug/ml | 90 |
| 40) p-Chloro-m-cresol | 8.516 | 107 | 2038 | 0.225 | ug/ml# | 89 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 4870M3 | 0.247 | ug/ml | |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 1817 | 0.220 | ug/ml | 89 |
| 43) Hexachlorocyclopentadiene | 8.810 | 237 | 2090 | 0.276 | ug/ml# | 93 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 1818 | 0.246 | ug/ml | 84 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 1717 | 0.214 | ug/ml | 93 |
| 47) 2-Chloronaphthalene | 9.104 | 162 | 5430 | 0.263 | ug/ml | 95 |
| 48) 2-Nitroaniline | 9.222 | 138 | 1412 | 0.236 | ug/ml | 93 |
| 49) 1,4-Dinitrobenzene | 9.357 | 168 | 811M3 | 0.256 | ug/ml | |
| 50) 1,3-Dinitrobenzene | 9.427 | 168 | 730 | 0.202 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.427 | 163 | 6172 | 0.226 | ug/ml# | 93 |
| 52) Acenaphthylene | 9.510 | 152 | 7648 | 0.238 | ug/ml | 98 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 1183 | 0.216 | ug/ml | 90 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 495M3 | 0.230 | ug/ml | |
| 64) 3-Nitroaniline | 9.622 | 138 | 1204 | 0.231 | ug/ml# | 60 |
| 65) Acenaphthene | 9.686 | 154 | 4683 | 0.265 | ug/ml | 85 |
| 66) 2,4-Dinitrophenol | 9.733 | 184 | 426M2 | 0.457 | ug/ml | |
| 67) Dibenzofuran | 9.857 | 168 | 8058 | 0.261 | ug/ml | 98 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 1997 | 0.281 | ug/ml | 88 |
| 69) 4-Nitrophenol | 9.816 | 65 | 1178 | 0.210 | ug/ml | 87 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 1518 | 0.242 | ug/ml | 90 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.986 | 232 | 1609 | 0.261 | ug/ml | 95 |
| 72) Diethyl phthalate | 10.122 | 149 | 6507 | 0.253 | ug/ml | 99 |
| 73) Fluorene | 10.186 | 166 | 6010 | 0.248 | ug/ml | 90 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 3442 | 0.269 | ug/ml# | 82 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL2.D
Acq On : 24 Jun 2024 7:42 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.2 Lot# 10785
Misc : WG1939040
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 05:49:27 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.210 | 138 | 1274 | 0.249 | ug/ml | 92 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 755 | 0.189 | ug/ml# | 62 |
| 77) | NDPA/DPA | 10.322 | 169 | 5230 | 0.262 | ug/ml | 97 |
| 78) | Azobenzene | 10.357 | 77 | 5664 | 0.222 | ug/ml | 97 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 2231 | 0.293 | ug/ml# | 78 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 2504 | 0.284 | ug/ml# | 84 |
| 82) | Pentachlorophenol | 10.927 | 266 | 1228 | 0.239 | ug/ml | 88 |
| 89) | Phenanthrene | 11.116 | 178 | 10935 | 0.277 | ug/ml | 98 |
| 90) | Anthracene | 11.169 | 178 | 9713 | 0.248 | ug/ml | 97 |
| 91) | Carbazole | 11.333 | 167 | 8819 | 0.246 | ug/ml | 96 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 10453 | 0.240 | ug/ml | 99 |
| 93) | Fluoranthene | 12.274 | 202 | 12420 | 0.274 | ug/ml# | 92 |
| 94) | Benzidine | 12.427 | 184 | 5894 | 0.227 | ug/ml# | 83 |
| 95) | Pyrene | 12.492 | 202 | 13308 | 0.278 | ug/ml | 99 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 4746 | 0.256 | ug/ml | 93 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 13886 | 0.262 | ug/ml | 98 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 4267 | 0.234 | ug/ml | 99 |
| 107) | Chrysene | 13.768 | 228 | 14549 | 0.278 | ug/ml | 98 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 6894 | 0.219 | ug/ml# | 98 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 11164 | 0.217 | ug/ml# | 76 |
| 110) | Benzo(b)fluoranthene | 14.845 | 252 | 13701 | 0.283 | ug/ml# | 92 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 13627 | 0.288 | ug/ml# | 91 |
| 112) | Benzo(a)pyrene | 15.157 | 252 | 11806 | 0.272 | ug/ml# | 92 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.203 | 276 | 10846M1 | 0.243 | ug/mL | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 10791 | 0.255 | ug/ml# | 90 |
| 116) | Benzo(ghi)perylene | 16.456 | 276 | 10598 | 0.253 | ug/ml# | 85 |

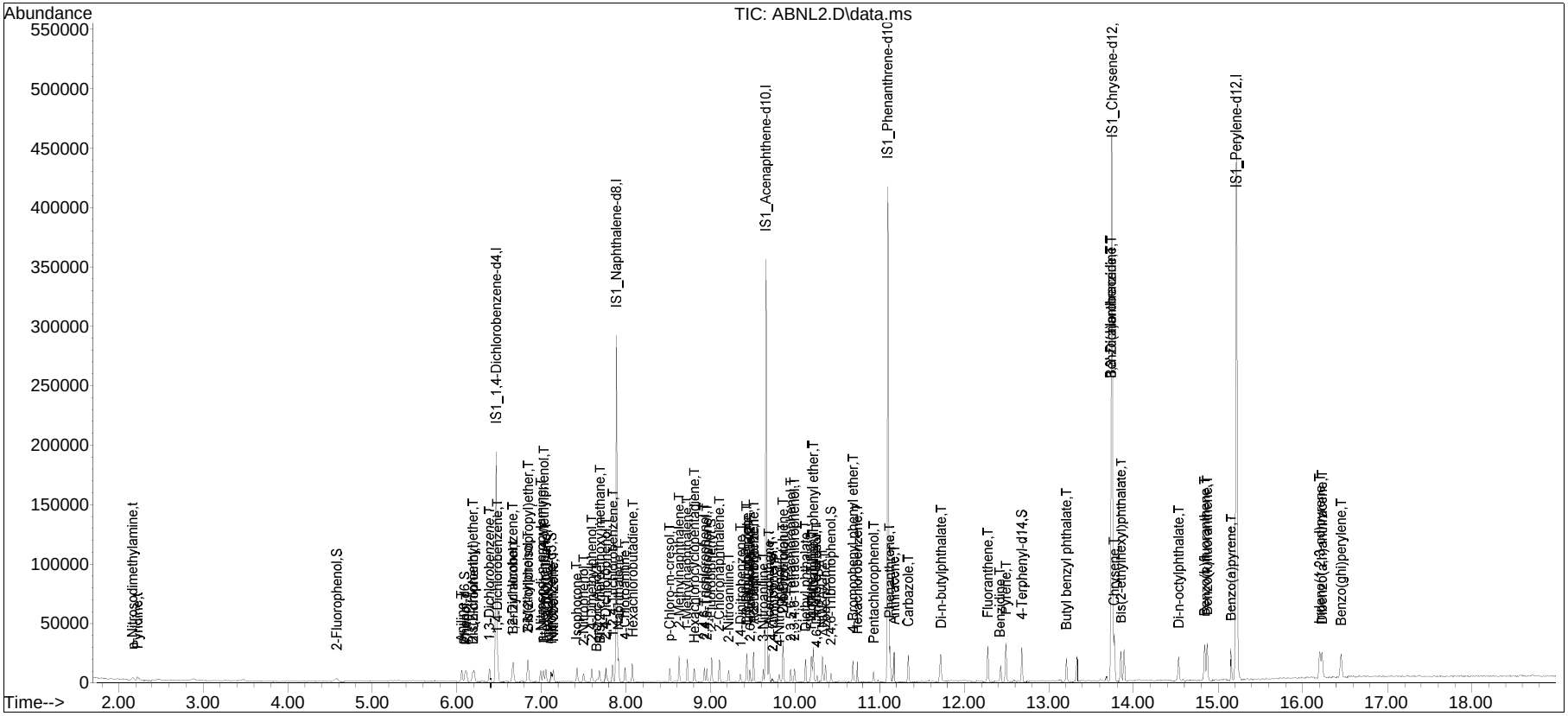
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL2.D
Acq On : 24 Jun 2024 7:42 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.2 Lot# 10785
Misc : WG1939040
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 05:49:27 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

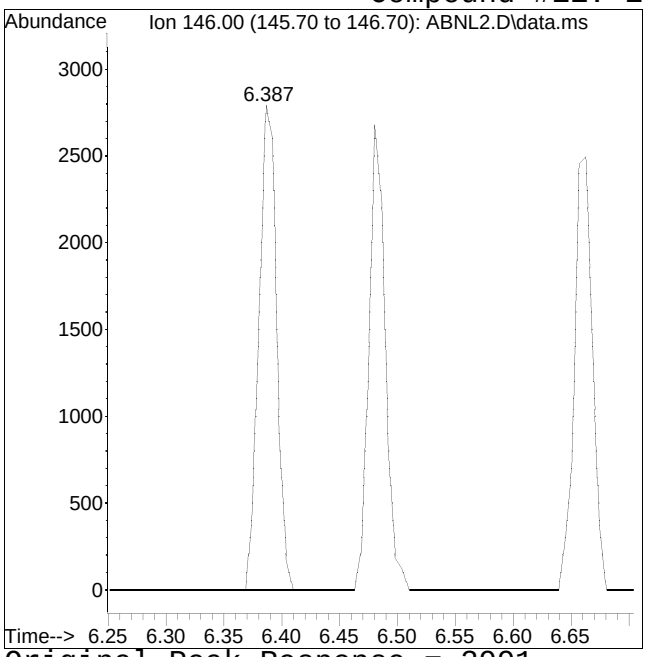
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•

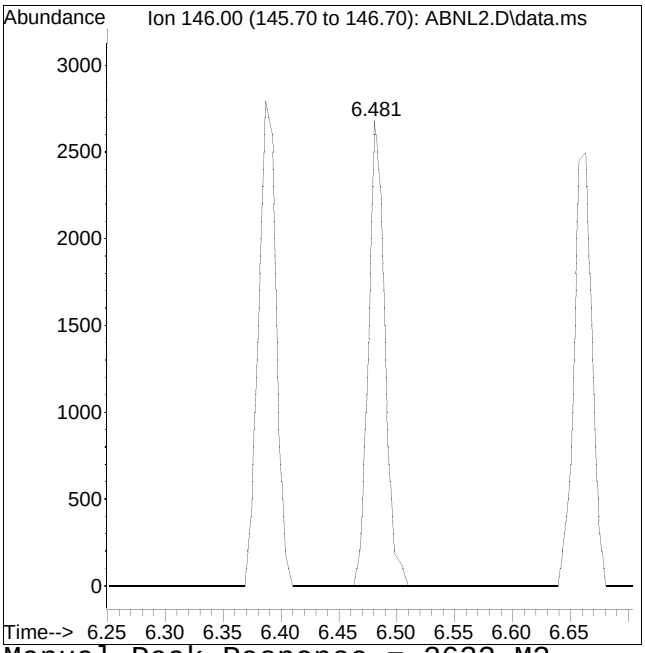


Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

Compound #11: 1,4-Dichlorobenzene



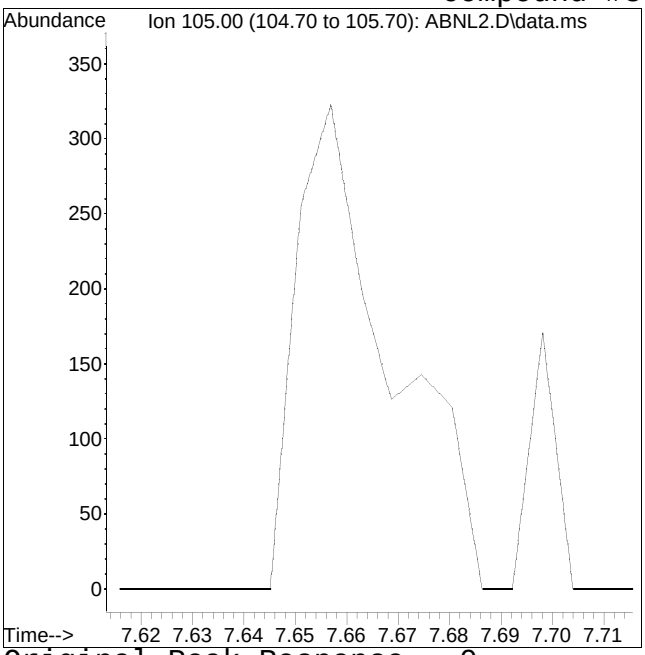

Original Peak Response = 2991 Manual Peak Response = 2633 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

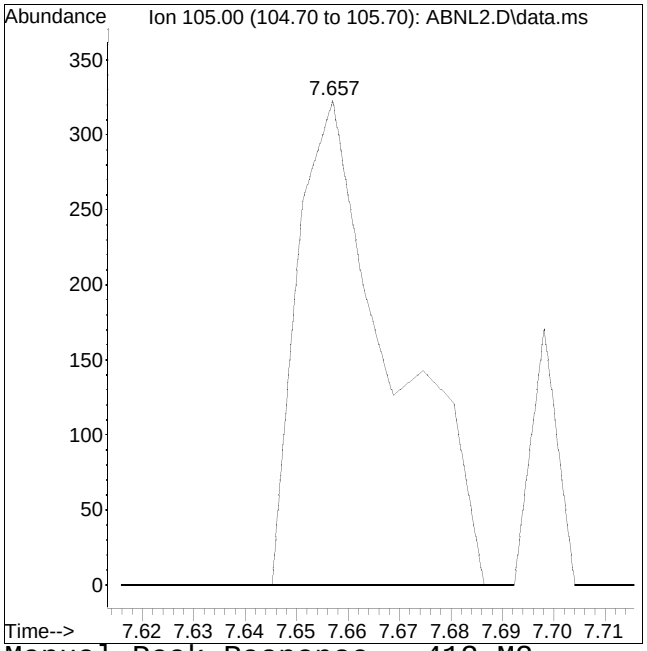
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

## Compound #37: Benzoic Acid




Original Peak Response = 0



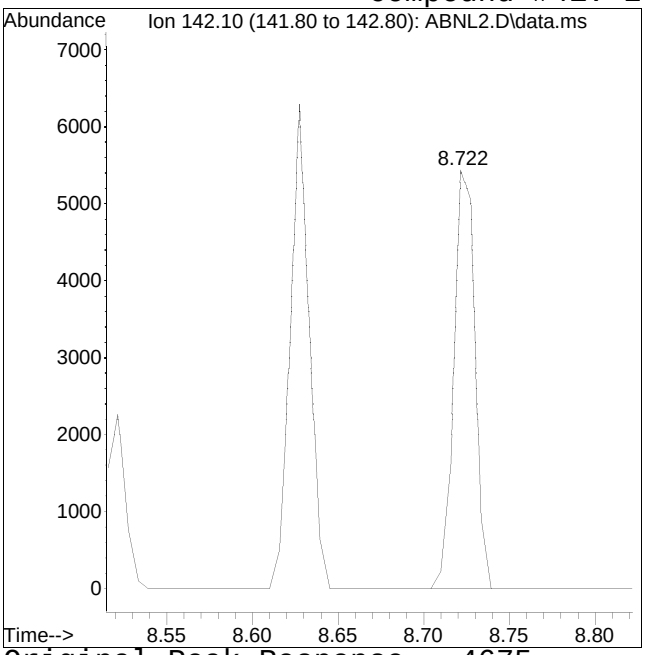

Manual Peak Response = 412 M2

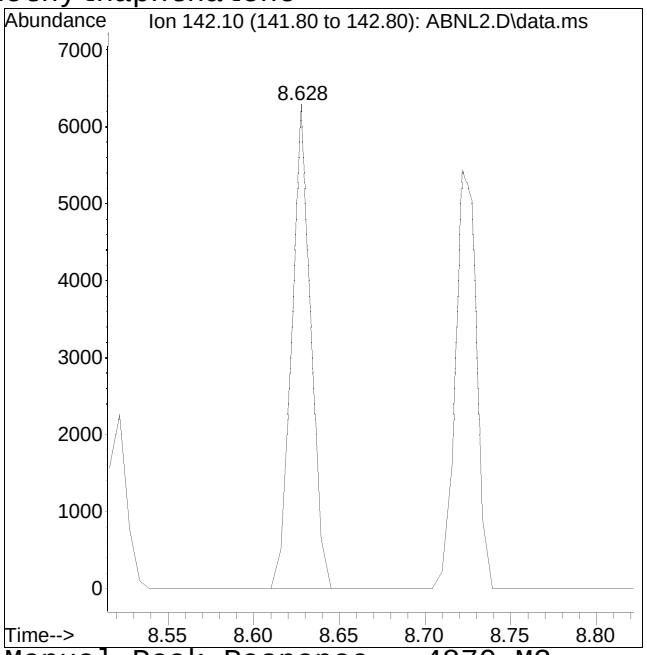
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

Compound #41: 2-Methylnaphthalene



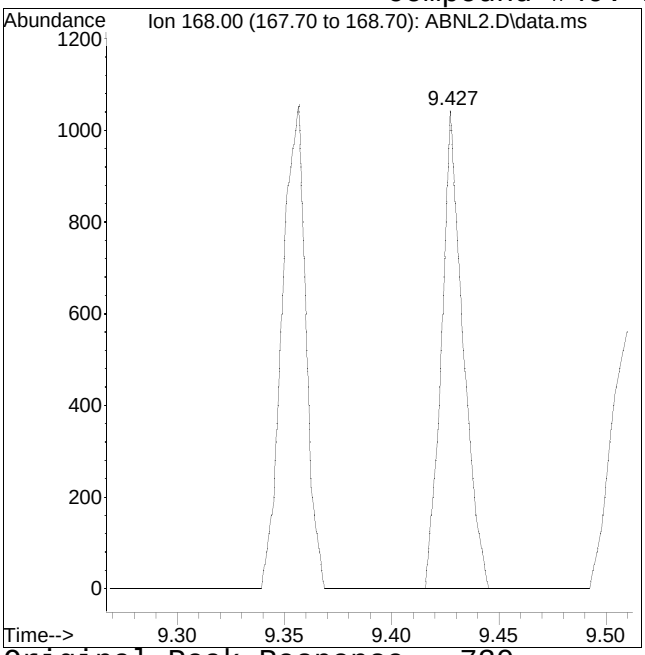



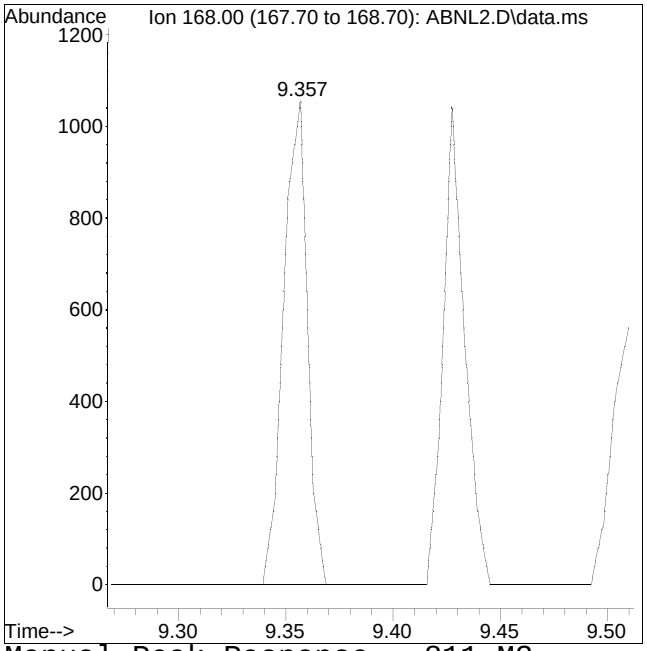

Original Peak Response = 4675 Manual Peak Response = 4870 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

Compound #49: 1,4-Dinitrobenzene



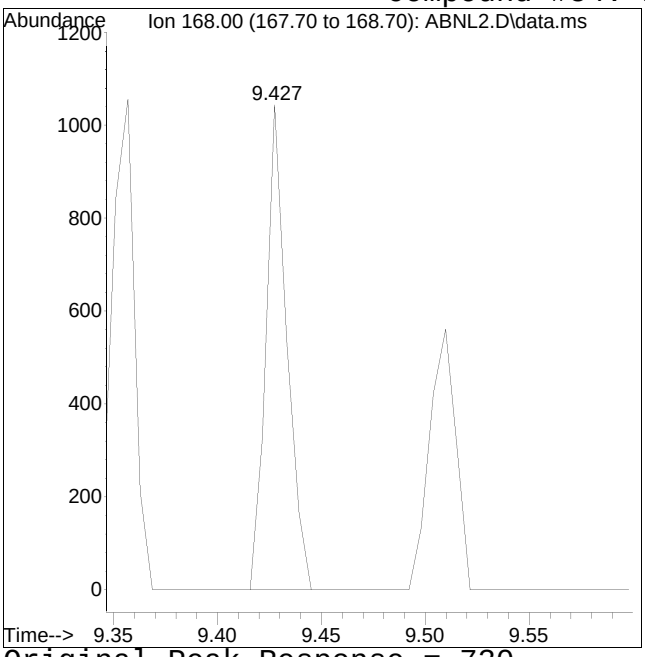




Original Peak Response = 730 Manual Peak Response = 811 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

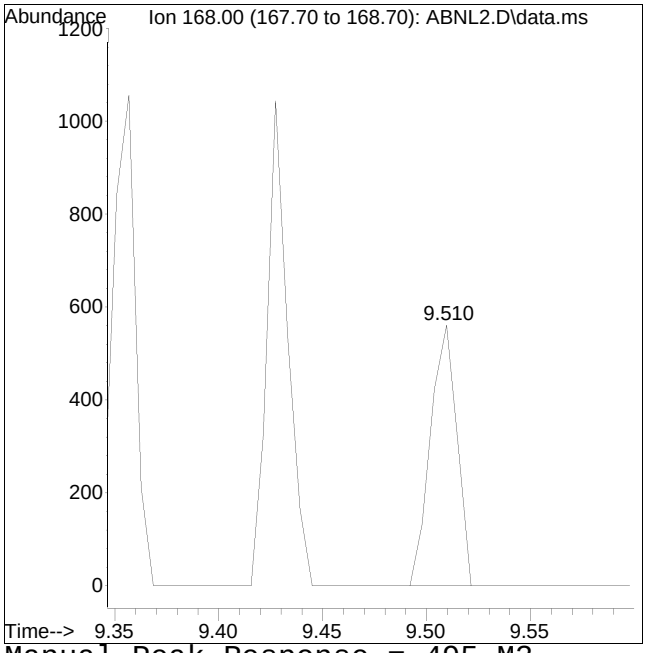
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

Compound #54: 1,2-Dinitrobenzene




Original Peak Response = 730



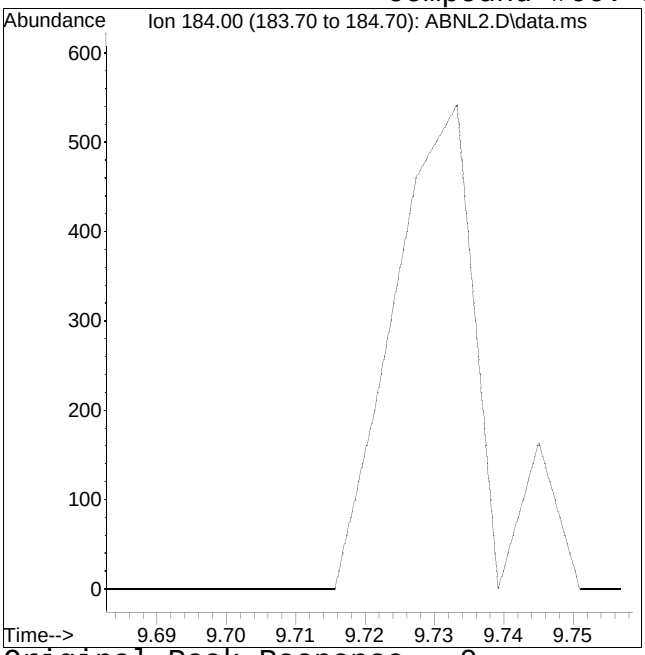

Manual Peak Response = 495 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

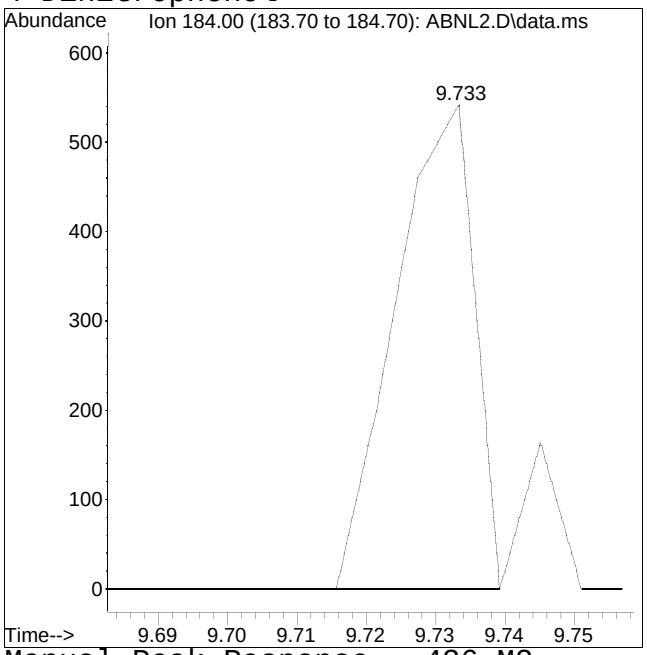
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

## Compound #66: 2,4-Dinitrophenol




Original Peak Response = 0



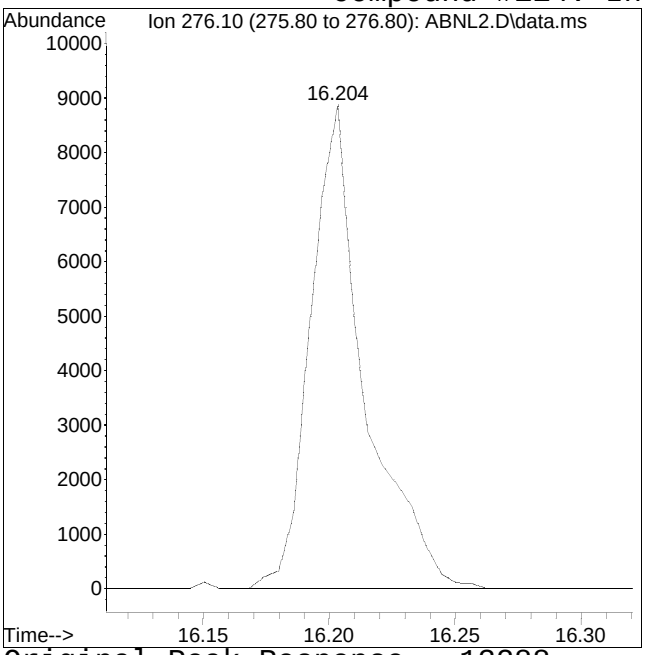

Manual Peak Response = 426 M2

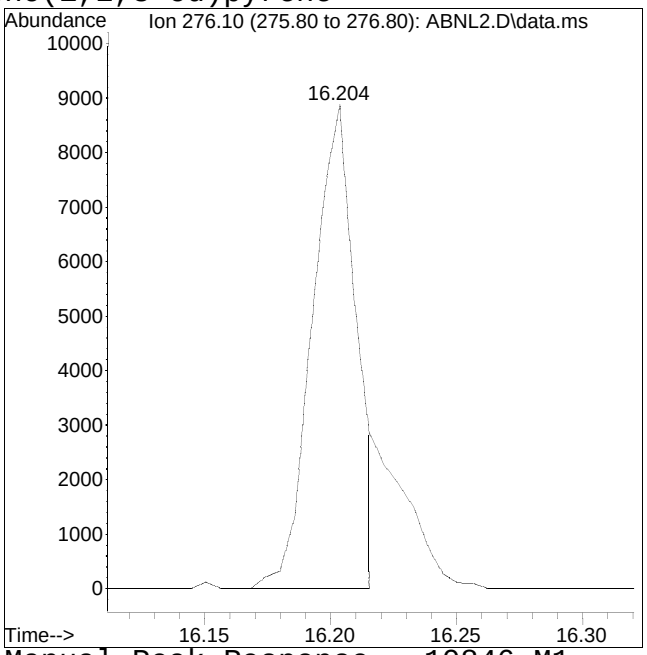
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 7:42 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.2 Lot# 10785Quant Date : 6/25/2024 5:33 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 13288 Manual Peak Response = 10846 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL1.D
Acq On : 24 Jun 2024 8:05 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.1 Lot# 10786
Misc : WG1939040
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 25 10:15:14 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 30958 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 89.97% | | | |
| 35) IS1_Naphthalene-d8 | 7.887 | 136 | 110543 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 91.23% | | | |
| 63) IS1_Acenaphthene-d10 | 9.651 | 164 | 68462 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 86.20% | | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 154950 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 87.97% | | | |
| 104) IS1_Chrysene-d12 | 13.745 | 240 | 160753 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 92.01% | | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 178931 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 91.51% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.569 | 112 | 843 | 0.094 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 4.70%# | | | |
| 7) Phenol-d6 | 6.093 | 99 | 1503 | 0.123 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 6.15%# | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 1438 | 0.115 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 11.50%# | | | |
| 46) 2-Fluorobiphenyl | 9.010 | 172 | 3422 | 0.121 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 12.10%# | | | |
| 79) 2,4,6-Tribromophenol | 10.422 | 330 | 399M2 | 0.094 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 4.70%# | | | |
| 96) 4-Terphenyl-d14 | 12.686 | 244 | 4923 | 0.118 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 11.80%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.163 | 74 | 726 | 0.110 | ug/ml# | 79 |
| 3) Pyridine | 2.246 | 79 | 1181 | 0.110 | ug/ml# | 57 |
| 5) Aniline | 6.057 | 93 | 1891 | 0.119 | ug/ml# | 84 |
| 6) 2-Chlorophenol | 6.204 | 128 | 1073 | 0.108 | ug/ml# | 71 |
| 8) Phenol | 6.110 | 94 | 1502 | 0.118 | ug/ml# | 92 |
| 9) Bis(2-chloroethyl)ether | 6.187 | 93 | 1185 | 0.114 | ug/ml# | 61 |
| 10) 1,3-Dichlorobenzene | 6.387 | 146 | 1370 | 0.114 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 1459 | 0.120 | ug/ml | 95 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 1448M3 | 0.123 | ug/ml | |
| 13) Benzyl alcohol | 6.669 | 79 | 1061 | 0.108 | ug/ml | 94 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL1.D
Acq On : 24 Jun 2024 8:05 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.1 Lot# 10786
Misc : WG1939040
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 25 10:15:14 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 2053 | 0.122 | ug/ml# | 55 |
| 15) 2-Methylphenol | 6.840 | 108 | 1006 | 0.110 | ug/ml# | 78 |
| 16) Hexachloroethane | 7.051 | 117 | 575 | 0.119 | ug/ml# | 52 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 845 | 0.103 | ug/ml# | 59 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 1055 | 0.107 | ug/ml# | 90 |
| 20) Nitrobenzene | 7.140 | 77 | 1549 | 0.122 | ug/ml# | 88 |
| 21) Isophorone | 7.422 | 82 | 2344 | 0.110 | ug/ml# | 65 |
| 22) 2-Nitrophenol | 7.498 | 139 | 527 | 0.098 | ug/ml# | 31 |
| 23) 2,4-Dimethylphenol | 7.592 | 107 | 1265 | 0.126 | ug/ml# | 63 |
| 24) Bis(2-chloroethoxy)met... | 7.692 | 93 | 1666 | 0.121 | ug/ml# | 50 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 1068 | 0.112 | ug/ml# | 67 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 1514 | 0.130 | ug/ml# | 69 |
| 36) Naphthalene | 7.910 | 128 | 3600 | 0.114 | ug/ml# | 88 |
| 37) Benzoic Acid | 0.000 | | 0 | N.D. | | |
| 38) 4-Chloroaniline | 7.992 | 65 | 478M2 | 0.102 | ug/ml | |
| 39) Hexachlorobutadiene | 8.075 | 225 | 1064 | 0.127 | ug/ml | 96 |
| 40) p-Chloro-m-cresol | 8.522 | 107 | 1033 | 0.109 | ug/ml# | 78 |
| 41) 2-Methylnaphthalene | 8.628 | 142 | 2466M3 | 0.117 | ug/ml | |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 827 | 0.103 | ug/ml | 93 |
| 43) Hexachlorocyclopentadiene | 8.804 | 237 | 1046 | 0.113 | ug/ml# | 86 |
| 44) 2,4,6-Trichlorophenol | 8.928 | 196 | 852 | 0.103 | ug/ml# | 81 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 963 | 0.108 | ug/ml# | 76 |
| 47) 2-Chloronaphthalene | 9.110 | 162 | 2572 | 0.115 | ug/ml | 96 |
| 48) 2-Nitroaniline | 9.222 | 138 | 742 | 0.110 | ug/ml | 97 |
| 49) 1,4-Dinitrobenzene | 9.351 | 168 | 282M2 | 0.079 | ug/ml | |
| 50) 1,3-Dinitrobenzene | 9.428 | 168 | 467M2 | 0.115 | ug/ml | |
| 51) Dimethyl phthalate | 9.422 | 163 | 3122 | 0.114 | ug/ml# | 77 |
| 52) Acenaphthylene | 9.510 | 152 | 3583 | 0.104 | ug/ml# | 86 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 653 | 0.111 | ug/ml# | 53 |
| 54) 1,2-Dinitrobenzene | 9.504 | 168 | 264M2 | 0.105 | ug/ml | |
| 64) 3-Nitroaniline | 9.622 | 138 | 425M2 | 0.078 | ug/ml | |
| 65) Acenaphthene | 9.681 | 154 | 2333 | 0.118 | ug/ml# | 84 |
| 66) 2,4-Dinitrophenol | 0.000 | | 0 | N.D. d | | |
| 67) Dibenzofuran | 9.857 | 168 | 4069 | 0.123 | ug/ml | 96 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 866 | 0.107 | ug/ml# | 85 |
| 69) 4-Nitrophenol | 9.810 | 65 | 483M3 | 0.087 | ug/ml | |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 754 | 0.097 | ug/ml# | 73 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.992 | 232 | 659 | 0.089 | ug/ml# | 70 |
| 72) Diethyl phthalate | 10.122 | 149 | 2922 | 0.112 | ug/ml# | 87 |
| 73) Fluorene | 10.186 | 166 | 3131 | 0.120 | ug/ml# | 94 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL1.D
Acq On : 24 Jun 2024 8:05 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.1 Lot# 10786
Misc : WG1939040
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 25 10:15:14 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 74) | 4-Chlorophenyl phenyl ... | 10.210 | 204 | 1574 | 0.115 | ug/ml# | 84 |
| 75) | 4-Nitroaniline | 10.210 | 138 | 516 | 0.091 | ug/ml# | 69 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 308M2 | 0.068 | ug/ml | |
| 77) | NDPA/DPA | 10.328 | 169 | 2316 | 0.107 | ug/ml | 95 |
| 78) | Azobenzene | 10.357 | 77 | 2715 | 0.110 | ug/ml | 96 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 976 | 0.114 | ug/ml# | 82 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 1047 | 0.108 | ug/ml# | 33 |
| 82) | Pentachlorophenol | 10.928 | 266 | 592 | 0.096 | ug/ml# | 19 |
| 89) | Phenanthrene | 11.116 | 178 | 5154 | 0.119 | ug/ml | 97 |
| 90) | Anthracene | 11.163 | 178 | 5216M3 | 0.121 | ug/ml | |
| 91) | Carbazole | 11.333 | 167 | 4735 | 0.120 | ug/ml | 95 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 5025 | 0.109 | ug/ml# | 79 |
| 93) | Fluoranthene | 12.274 | 202 | 6479 | 0.122 | ug/ml# | 88 |
| 94) | Benzidine | 12.427 | 184 | 2415 | 0.084 | ug/ml# | 68 |
| 95) | Pyrene | 12.492 | 202 | 6669 | 0.120 | ug/ml | 97 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 2481 | 0.116 | ug/ml# | 85 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 7580 | 0.128 | ug/ml | 94 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 1896 | 0.096 | ug/ml# | 89 |
| 107) | Chrysene | 13.769 | 228 | 7446 | 0.130 | ug/ml | 96 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 3583 | 0.109 | ug/ml# | 94 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 5836 | 0.107 | ug/ml# | 77 |
| 110) | Benzo(b)fluoranthene | 14.845 | 252 | 6815 | 0.119 | ug/ml# | 92 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 6756 | 0.124 | ug/ml# | 88 |
| 112) | Benzo(a)pyrene | 15.163 | 252 | 5634 | 0.113 | ug/ml# | 93 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.204 | 276 | 5854M6 | 0.121 | ug/mL | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 5532 | 0.119 | ug/ml# | 89 |
| 116) | Benzo(ghi)perylene | 16.457 | 276 | 5478M6 | 0.127 | ug/ml | |

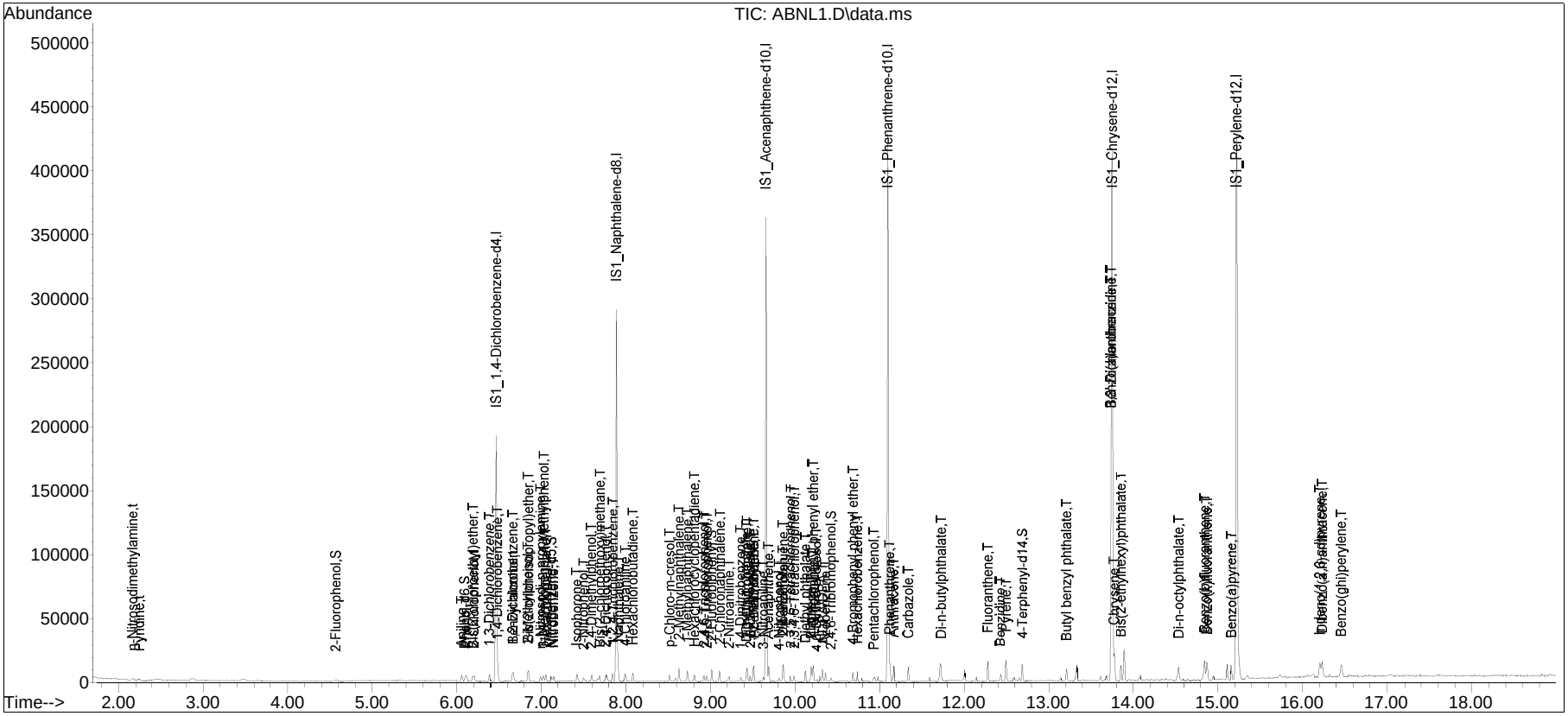
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNL1.D
Acq On : 24 Jun 2024 8:05 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.1 Lot# 10786
Misc : WG1939040
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 25 10:15:14 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

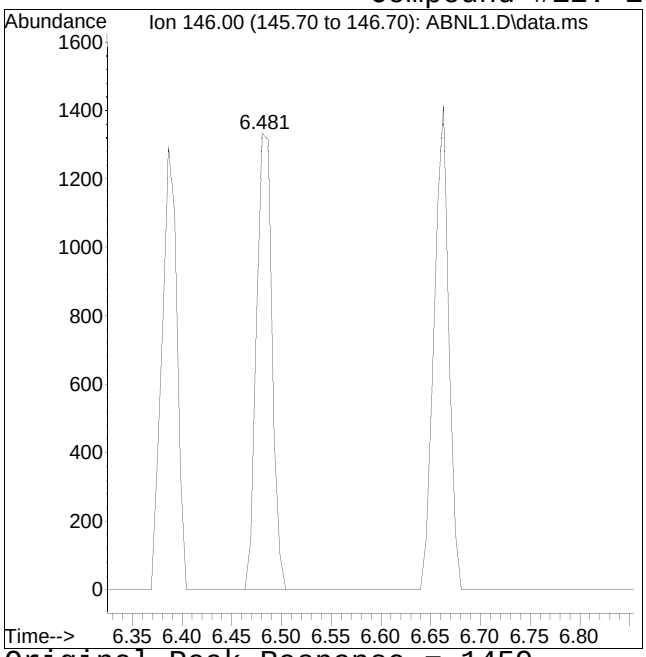
Sub List : ABNical - ABN ical sublistTical\ABNL6.D•

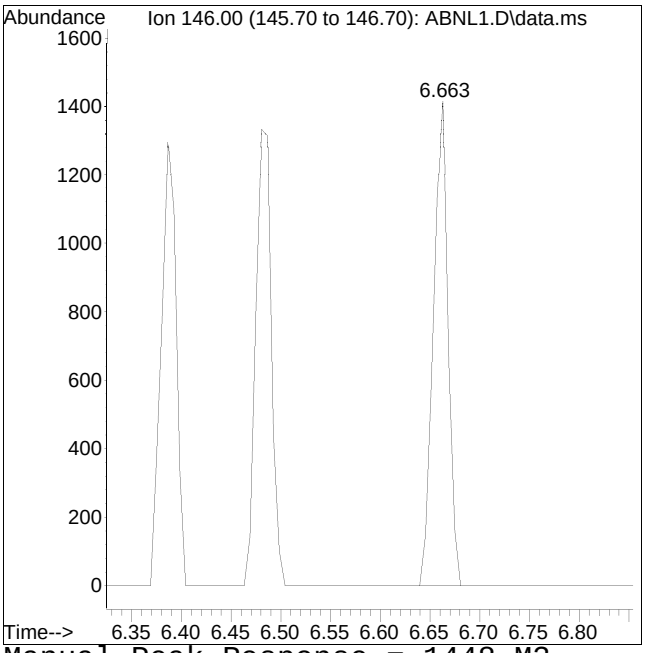


# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

## Compound #12: 1,2-Dichlorobenzene



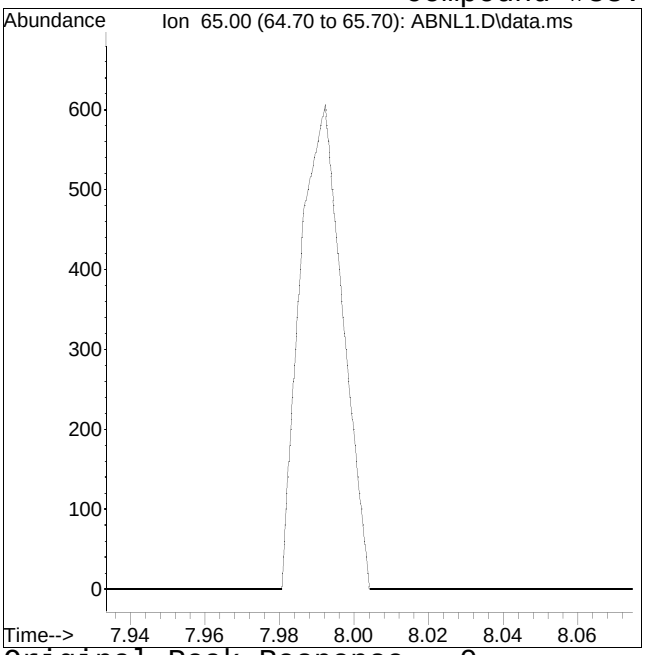

Original Peak Response = 1459 Manual Peak Response = 1448 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

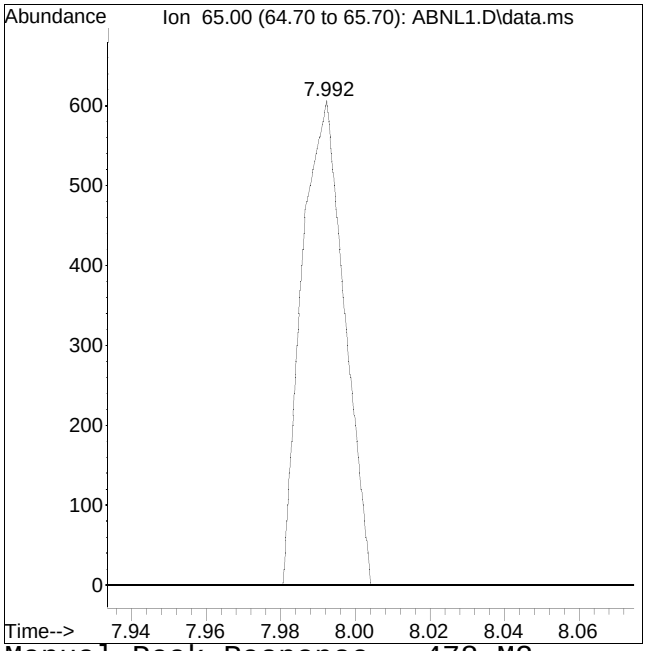
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

## Compound #38: 4-Chloroaniline




Original Peak Response = 0



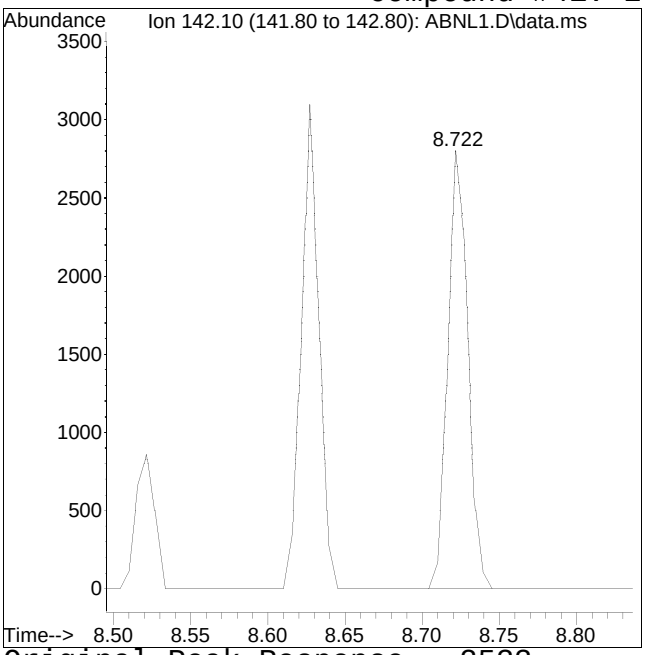

Manual Peak Response = 478 M2

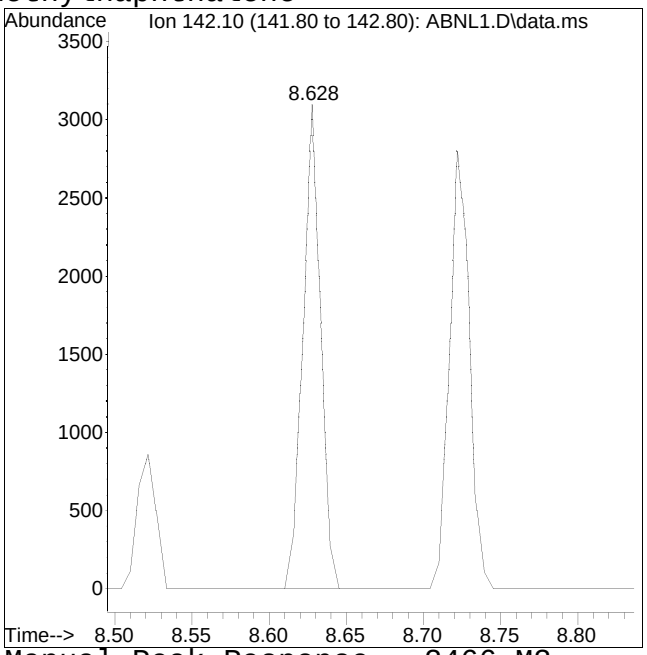
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #41: 2-Methylnaphthalene



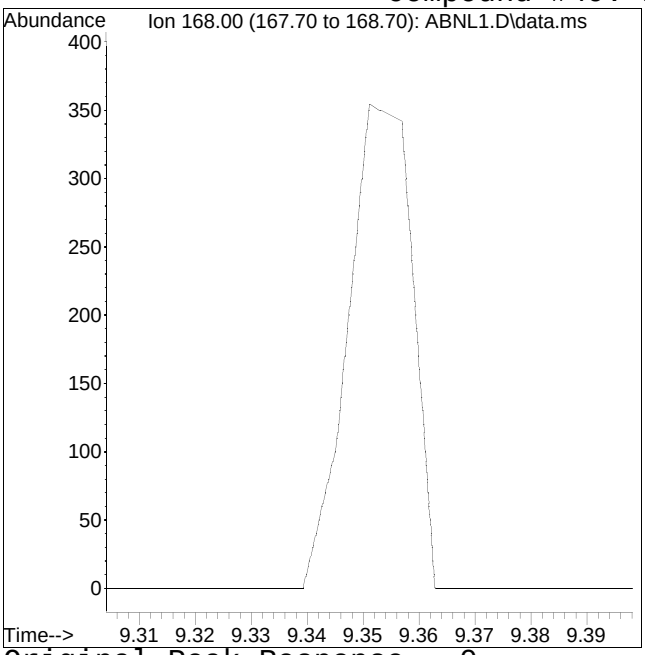

Original Peak Response = 2533 Manual Peak Response = 2466 M3

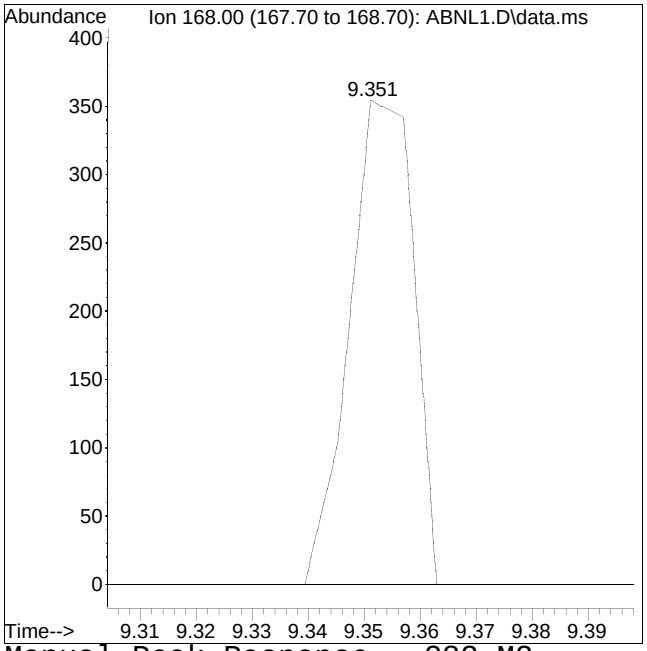
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #49: 1,4-Dinitrobenzene



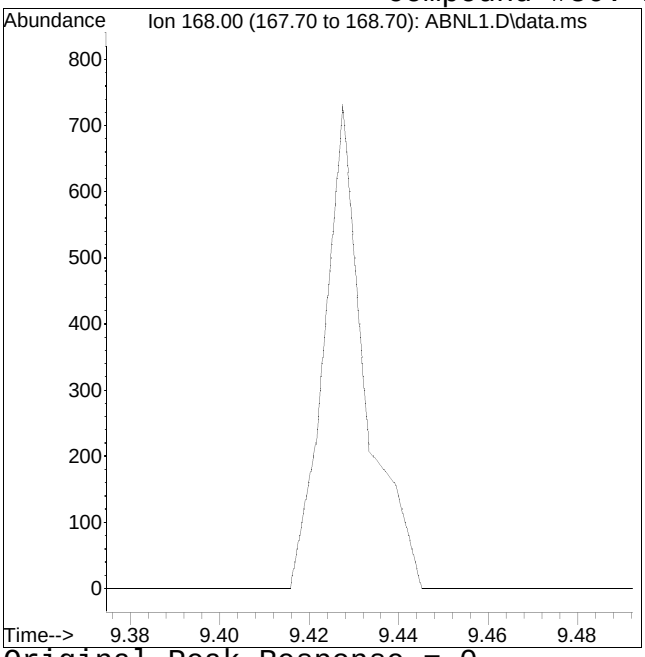



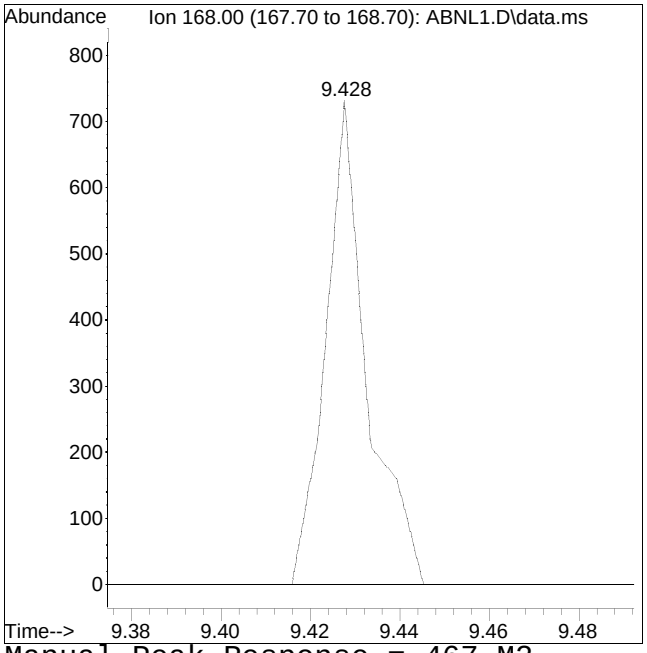

Original Peak Response = 0 Manual Peak Response = 282 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #50: 1,3-Dinitrobenzene



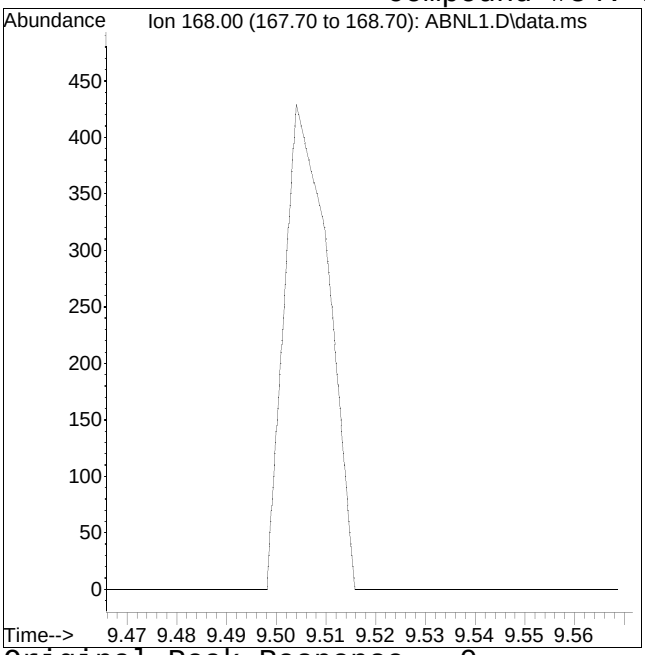




Original Peak Response = 0 Manual Peak Response = 467 M2
M2 = Peak not found by automatic integration algorithm.

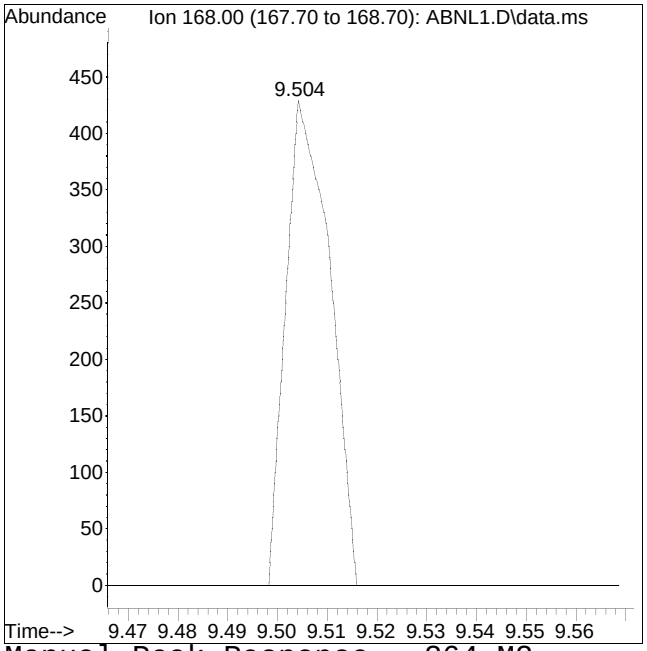
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

## Compound #54: 1,2-Dinitrobenzene




Original Peak Response = 0



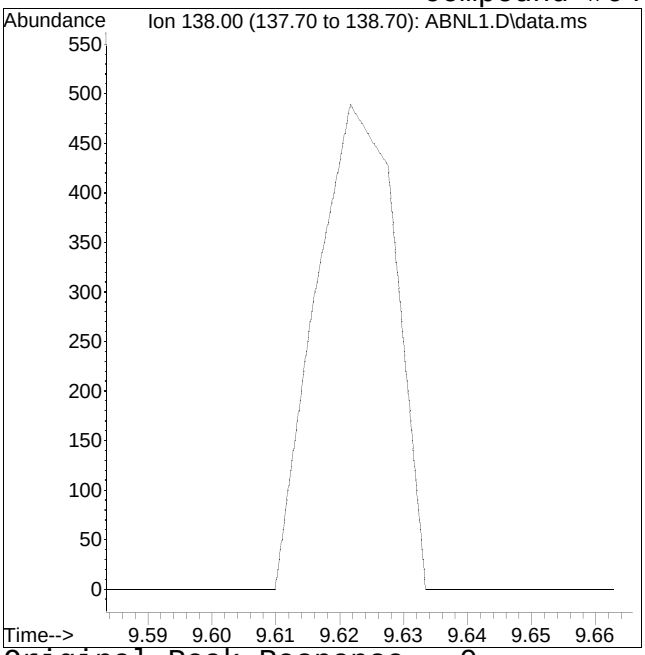

Manual Peak Response = 264 M2

M2 = Peak not found by automatic integration algorithm.

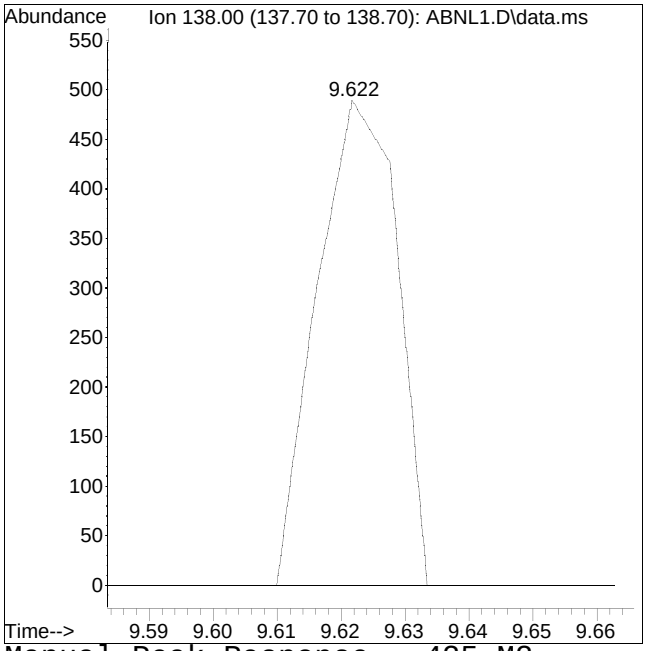
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

## Compound #64: 3-Nitroaniline




Original Peak Response = 0



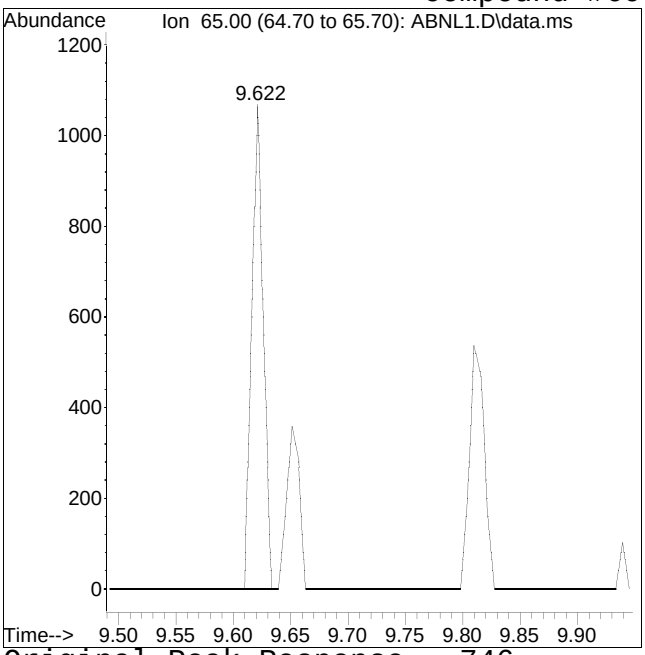

Manual Peak Response = 425 M2

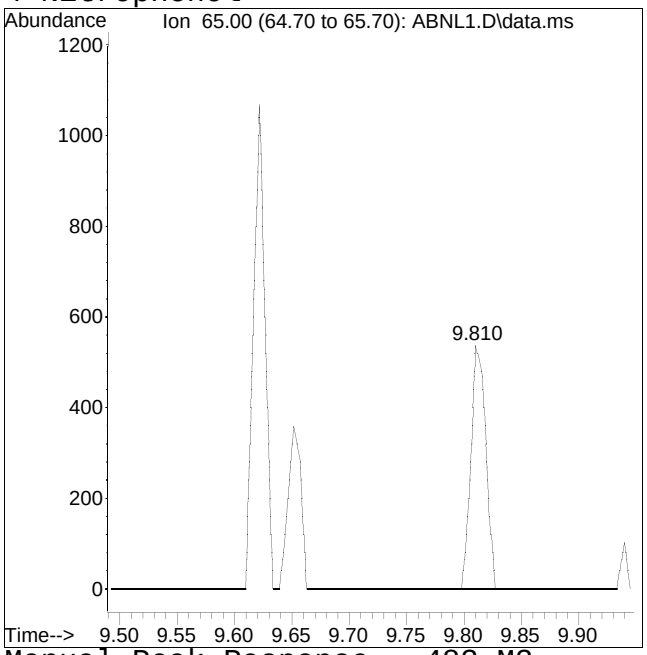
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #69: 4-Nitrophenol



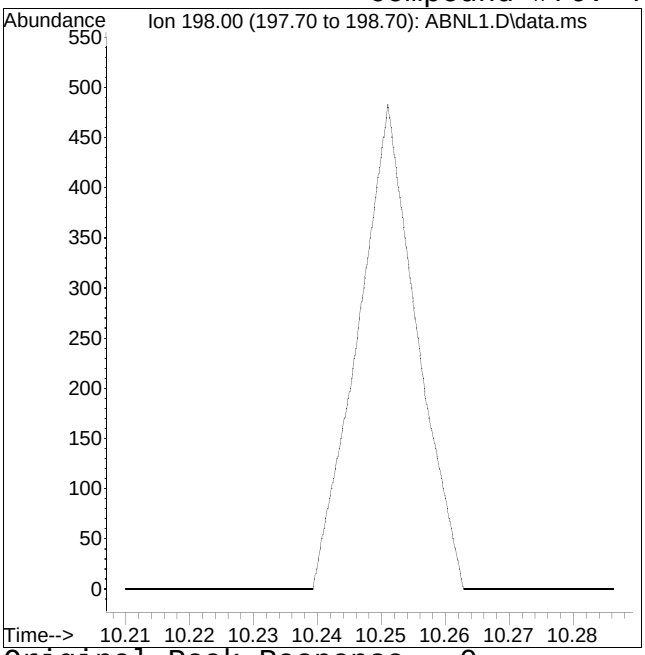

Original Peak Response = 746 Manual Peak Response = 483 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

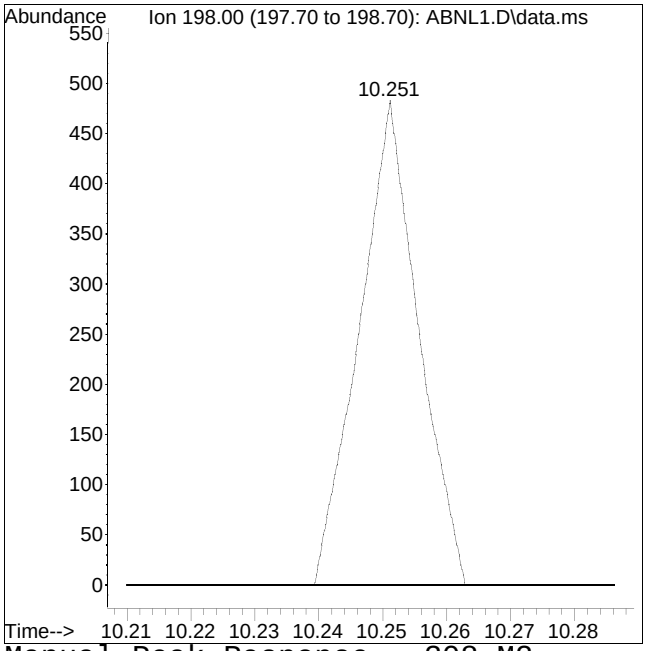
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #76: 4,6-Dinitro-o-cresol




Original Peak Response = 0



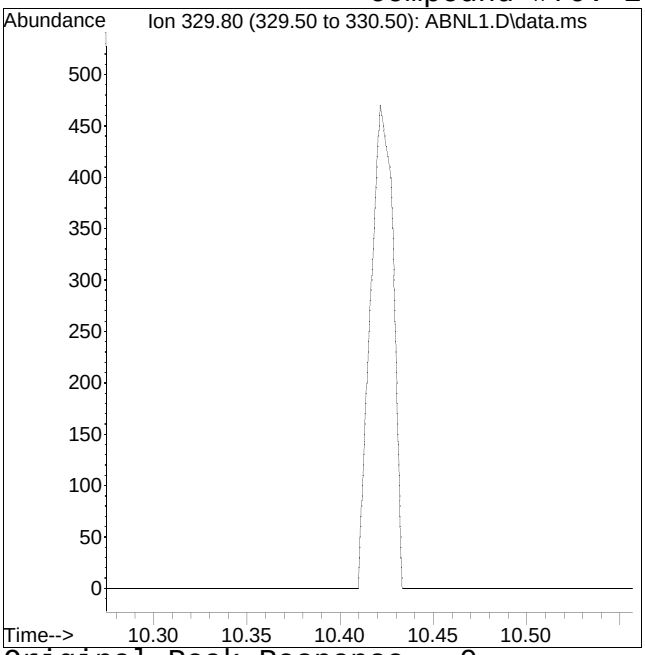

Manual Peak Response = 308 M2

M2 = Peak not found by automatic integration algorithm.

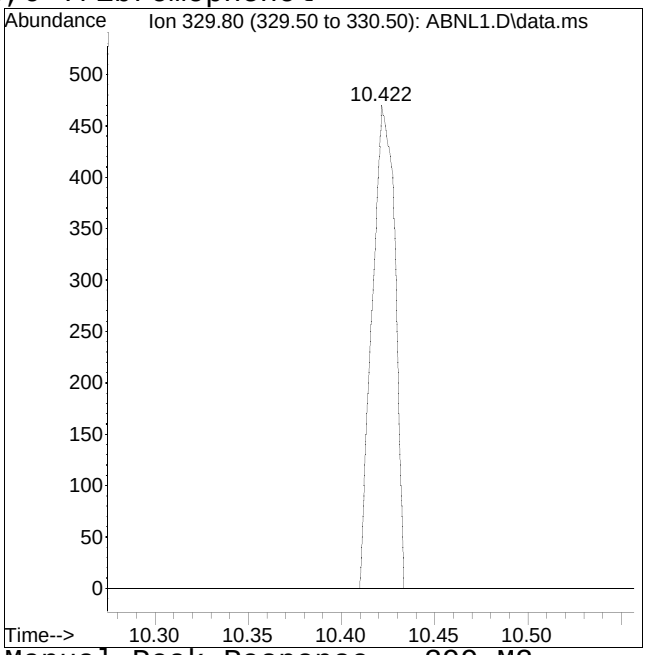
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #79: 2,4,6-Tribromophenol




Original Peak Response = 0



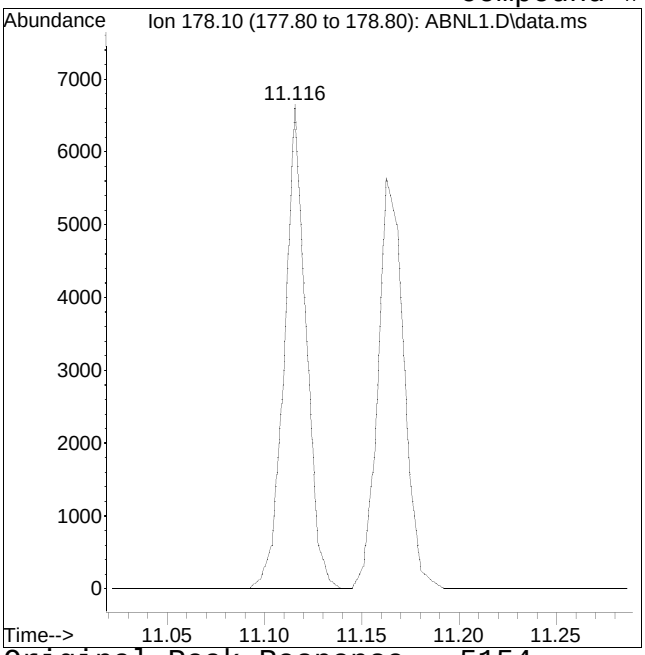

Manual Peak Response = 399 M2

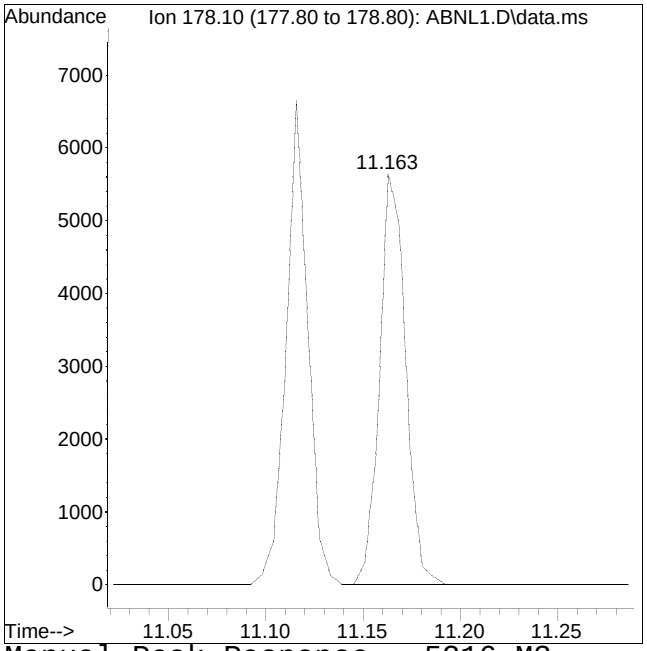
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #90: Anthracene



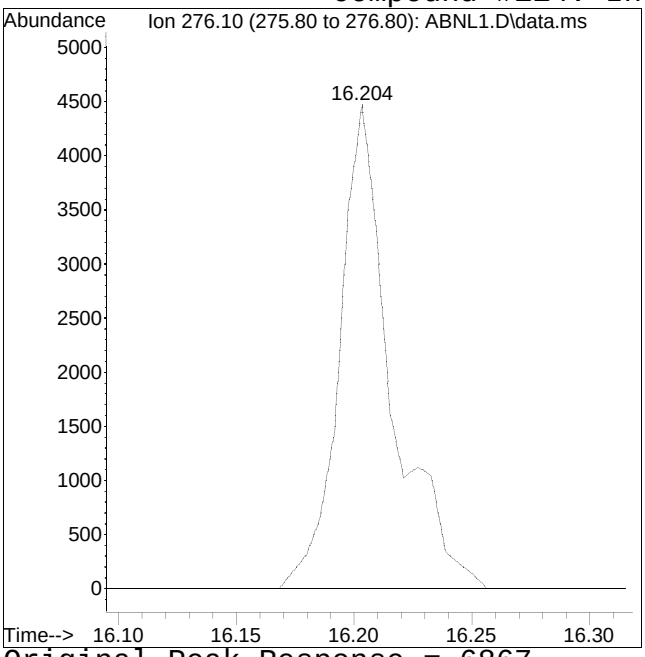

Original Peak Response = 5154 Manual Peak Response = 5216 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

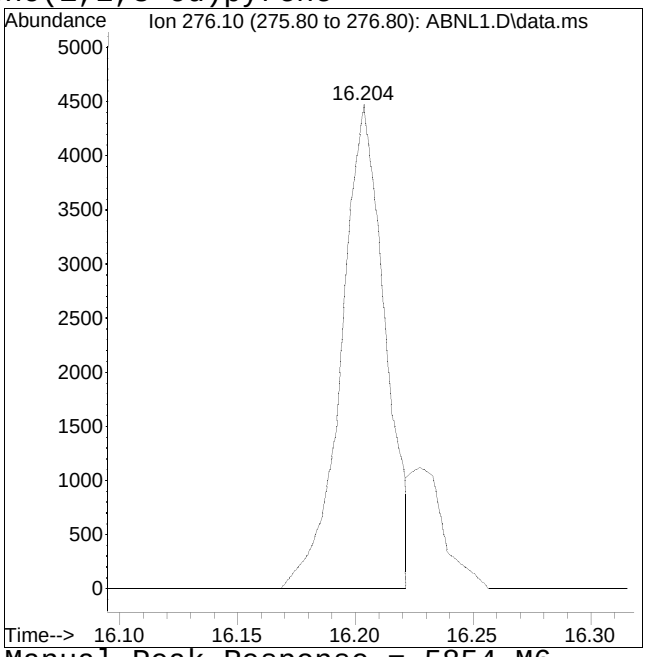
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 6867



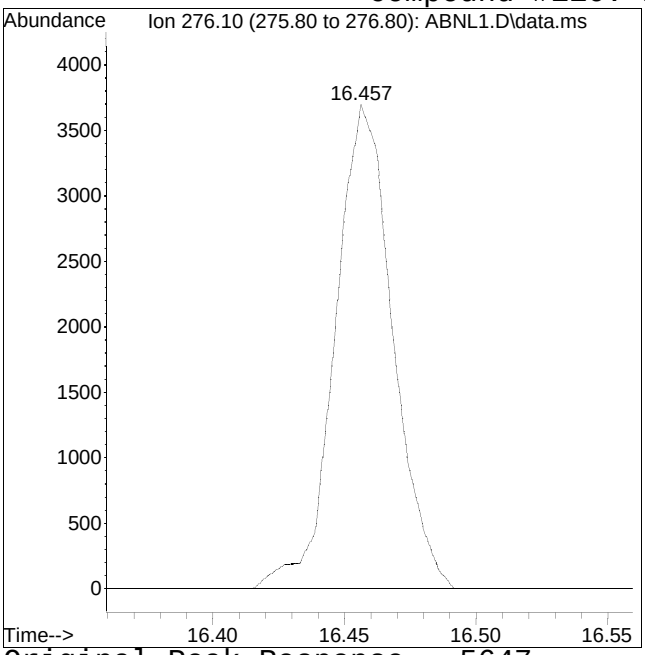

Manual Peak Response = 5854 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

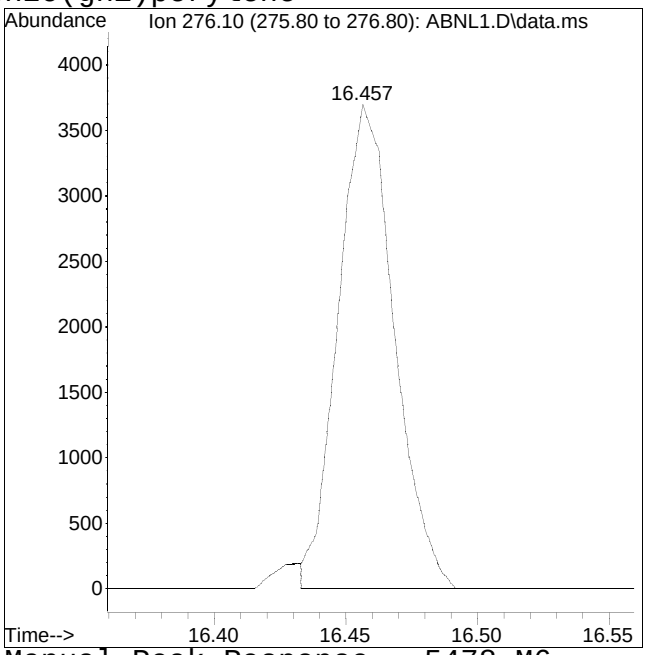
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 8:05 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.1 Lot# 1078Quant Date : 6/25/2024 10:16 am

Compound #116: Benzo(ghi)perylene




Original Peak Response = 5647




Manual Peak Response = 5478 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L9.D
Acq On : 24 Jun 2024 8:29 pm
Operator : SV106:ljg
Sample : IL2,32,,AP9L50 Lot# 10787
Misc : WG1939040
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 25 06:09:48 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 33960 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = | 105.99% | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 119399 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = | 104.54% | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 75921 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = | 103.70% | | |
| 98) IS2_Phenanthrene-d10 | 11.098 | 188 | 171923 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = | 99.56% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 510854 | 54.930 | ug/ml | 97 |
| 29) Acetophenone | 6.963 | 105 | 920034 | 54.699 | ug/ml# | 82 |
| 30) m-Toluidine | 7.063 | 106 | 855291 | 59.791 | ug/ml | 94 |
| 31) 2-Chloroaniline | 7.463 | 127 | 734153 | 53.409 | ug/ml | 98 |
| 56) a-Terpineol | 7.969 | 59 | 606188 | 61.469 | ug/ml# | 86 |
| 57) 3-Chloroaniline | 7.975 | 65 | 303336 | 56.096 | ug/ml# | 71 |
| 58) 2,6-Dichlorophenol | 8.010 | 162 | 563445 | 62.979 | ug/ml | 95 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 274806 | 53.627 | ug/ml# | 1 |
| 60) Caprolactam | 8.339 | 55 | 338633 | 64.464 | ug/ml# | 77 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 774819 | 56.359 | ug/ml | 98 |
| 62) Biphenyl | 9.110 | 154 | 1567351 | 58.268 | ug/ml | 99 |
| 84) Dichloran | 10.798 | 206 | 272093 | 74.901 | ug/ml# | 66 |
| 85) Pentachloronitrobenzene | 10.945 | 237 | 278837 | 63.283 | ug/ml# | 76 |
| 99) Diphenamid | 12.010 | 167 | 1257803 | 64.842 | ug/ml | 83 |

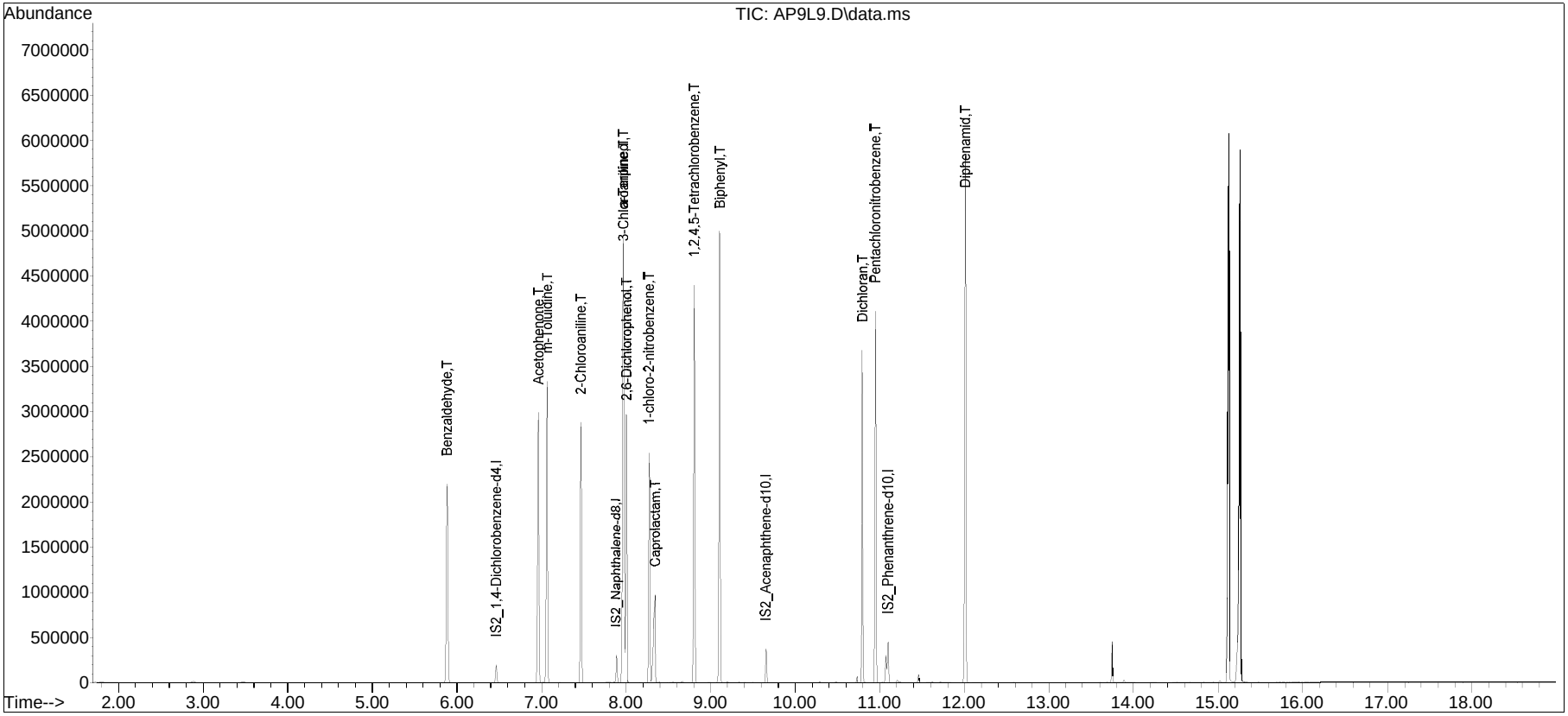
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L9.D
Acq On : 24 Jun 2024 8:29 pm
Operator : SV106:ljg
Sample : IL2,32,,AP9L50 Lot# 10787
Misc : WG1939040
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 25 06:09:48 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L9.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 8:29 pm | Instrument | : SV 106 |
| Sample | : IL2,32,,AP9L50 Lot# 10787 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L8.D
Acq On : 24 Jun 2024 8:53 pm
Operator : SV106:ljg
Sample : IL3,32,,AP9L25 Lot# 10788
Misc : WG1939040
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 25 06:09:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.457 | 152 | 28691 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 89.54% | | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 100289 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 87.81% | | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 61635 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 84.18% | | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 137090 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 79.39% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.881 | 105 | 217516 | 27.684 | ug/ml | 97 |
| 29) Acetophenone | 6.957 | 105 | 388282 | 27.324 | ug/ml# | 83 |
| 30) m-Toluidine | 7.057 | 106 | 367364 | 30.397 | ug/ml | 93 |
| 31) 2-Chloroaniline | 7.463 | 127 | 309450 | 26.647 | ug/ml | 98 |
| 56) a-Terpineol | 7.963 | 59 | 256052 | 30.912 | ug/ml# | 86 |
| 57) 3-Chloroaniline | 7.975 | 65 | 127450 | 28.061 | ug/ml# | 71 |
| 58) 2,6-Dichlorophenol | 8.004 | 162 | 236684 | 31.496 | ug/ml | 94 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 114678 | 26.643 | ug/ml# | 1 |
| 60) Caprolactam | 8.322 | 55 | 144383 | 32.723 | ug/ml# | 79 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 323702 | 28.032 | ug/ml | 97 |
| 62) Biphenyl | 9.104 | 154 | 655521 | 29.014 | ug/ml | 99 |
| 84) Dichloran | 10.792 | 206 | 109245 | 37.043 | ug/ml# | 66 |
| 85) Pentachloronitrobenzene | 10.945 | 237 | 111560 | 31.187 | ug/ml# | 75 |
| 99) Diphenamid | 12.010 | 167 | 512204 | 33.114 | ug/ml | 84 |

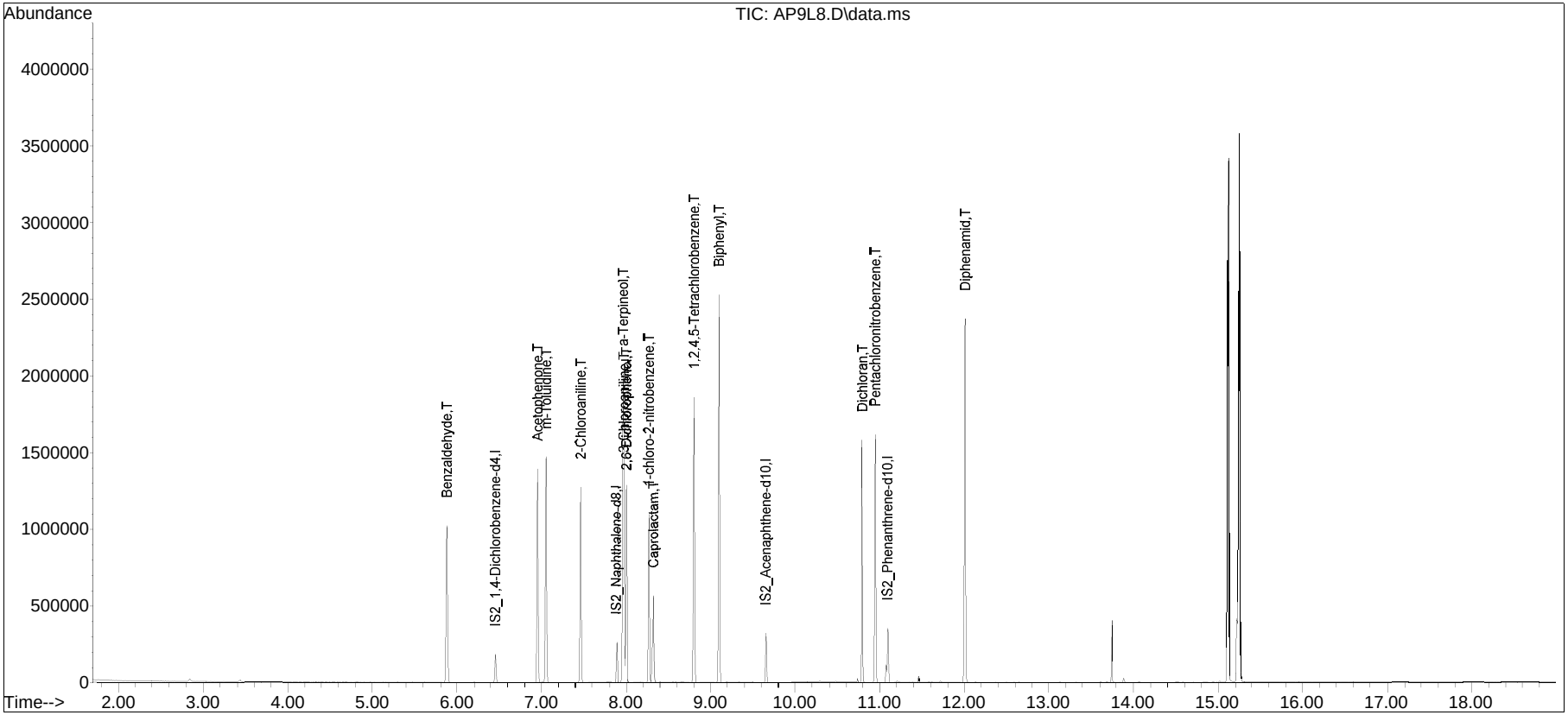
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L8.D
Acq On : 24 Jun 2024 8:53 pm
Operator : SV106:ljg
Sample : IL3,32,,AP9L25 Lot# 10788
Misc : WG1939040
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 25 06:09:20 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L8.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 8:53 pm | Instrument | : SV 106 |
| Sample | : IL3,32,,AP9L25 Lot# 10788 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L7.D
Acq On : 24 Jun 2024 9:16 pm
Operator : SV106:ljg
Sample : IL4,32,,AP9L10 Lot# 10789
Misc : WG1939040
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 25 06:08:55 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 31002 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 96.75% | | |
| 55) IS2_Naphthalene-d8 | 7.887 | 136 | 112283 | 4.000 ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 98.31% | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 72435 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 98.94% | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 166745 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 96.56% | | |
| System Monitoring Compounds | | | | | |
| Target Compounds | | | | | Qvalue |
| 28) Benzaldehyde | 5.881 | 105 | 97066 | 11.433 ug/ml | 96 |
| 29) Acetophenone | 6.957 | 105 | 177152 | 11.537 ug/ml# | 83 |
| 30) m-Toluidine | 7.057 | 106 | 161767 | 12.388 ug/ml | 95 |
| 31) 2-Chloroaniline | 7.463 | 127 | 141228 | 11.255 ug/ml | 98 |
| 56) a-Terpineol | 7.957 | 59 | 117691 | 12.690 ug/ml# | 86 |
| 57) 3-Chloroaniline | 7.969 | 65 | 58293 | 11.463 ug/ml# | 73 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 110126 | 13.089 ug/ml | 93 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 52979 | 10.994 ug/ml# | 1 |
| 60) Caprolactam | 8.310 | 55 | 68449 | 13.856 ug/ml# | 79 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 150713 | 11.657 ug/ml | 98 |
| 62) Biphenyl | 9.104 | 154 | 306877 | 12.132 ug/ml | 99 |
| 84) Dichloran | 10.792 | 206 | 49912 | 14.401 ug/ml# | 66 |
| 85) Pentachloronitrobenzene | 10.945 | 237 | 54100 | 12.869 ug/ml# | 76 |
| 99) Diphenamid | 12.004 | 167 | 247915 | 13.177 ug/ml | 83 |

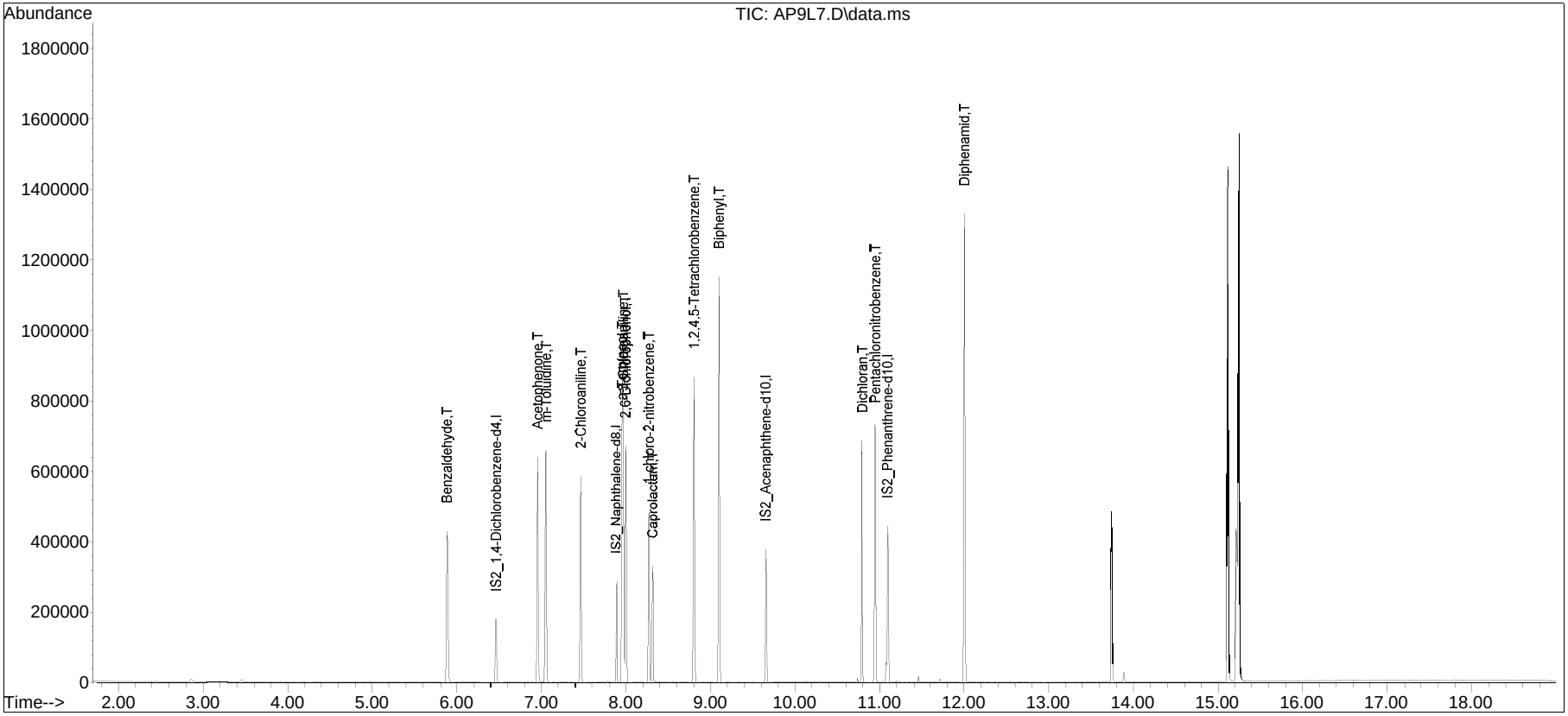
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L7.D
Acq On : 24 Jun 2024 9:16 pm
Operator : SV106:ljg
Sample : IL4,32,,AP9L10 Lot# 10789
Misc : WG1939040
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 25 06:08:55 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L7.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 9:16 pm | Instrument | : SV 106 |
| Sample | : IL4,32,,AP9L10 Lot# 10789 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L6.D
Acq On : 24 Jun 2024 9:40 pm
Operator : SV106:ljg
Sample : IL5,32,,AP9L5 Lot# 10790
Misc : WG1939040
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 25 06:08:29 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 32042 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = | 100.00% | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 114213 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = | 100.00% | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 73214 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = | 100.00% | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 172677 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = | 100.00% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 46979 | 5.354 | ug/ml | 97 |
| 29) Acetophenone | 6.957 | 105 | 85554 | 5.391 | ug/ml# | 84 |
| 30) m-Toluidine | 7.057 | 106 | 77680 | 5.755 | ug/ml | 98 |
| 31) 2-Chloroaniline | 7.463 | 127 | 67462 | 5.202 | ug/ml | 98 |
| 56) a-Terpineol | 7.957 | 59 | 56477 | 5.987 | ug/ml# | 86 |
| 57) 3-Chloroaniline | 7.969 | 65 | 28437 | 5.498 | ug/ml# | 72 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 53425 | 6.243 | ug/ml | 94 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 26468 | 5.400 | ug/ml# | 1 |
| 60) Caprolactam | 8.304 | 55 | 32080 | 6.384 | ug/ml# | 79 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 75712 | 5.757 | ug/ml# | 96 |
| 62) Biphenyl | 9.104 | 154 | 151430 | 5.885 | ug/ml | 99 |
| 84) Dichloran | 10.792 | 206 | 24006 | 6.853 | ug/ml# | 65 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 26571 | 6.253 | ug/ml# | 76 |
| 99) Diphenamid | 12.004 | 167 | 122990 | 6.313 | ug/ml | 82 |

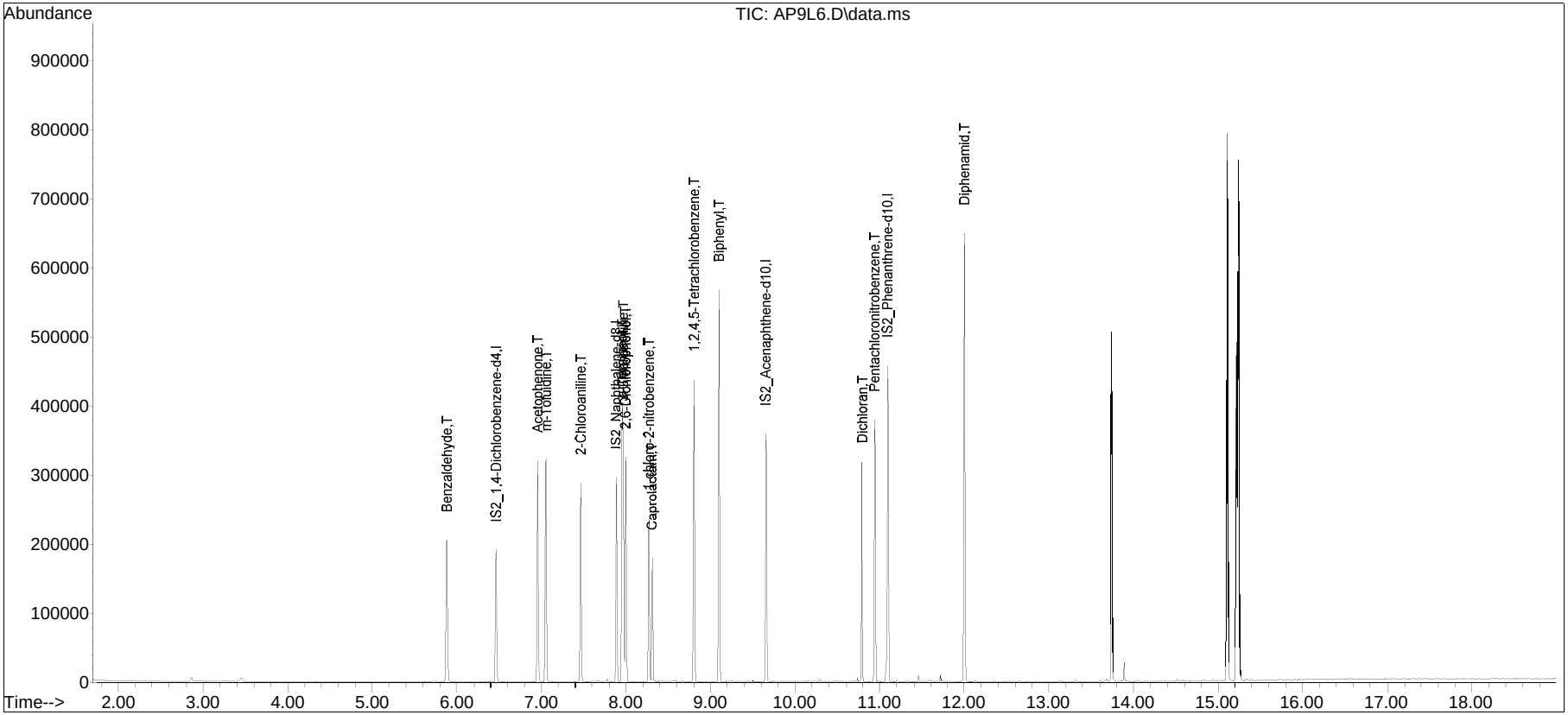
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L6.D
Acq On : 24 Jun 2024 9:40 pm
Operator : SV106:ljg
Sample : IL5,32,,AP9L5 Lot# 10790
Misc : WG1939040
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 25 06:08:29 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L6.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 9:40 pm | Instrument | : SV 106 |
| Sample | : IL5,32,,AP9L5 Lot# 10790 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L5.D
Acq On : 24 Jun 2024 10:04 pm
Operator : SV106:ljg
Sample : IL6,32,,AP9L2.5 Lot# 10791
Misc : WG1939040
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 25 06:08:02 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 31187 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 97.33% | | | |
| 55) IS2_Naphthalene-d8 | 7.887 | 136 | 111550 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 97.67% | | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 71188 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 97.23% | | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 161108 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 93.30% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 23076 | 2.702 | ug/ml | 99 |
| 29) Acetophenone | 6.957 | 105 | 41556 | 2.690 | ug/ml# | 84 |
| 30) m-Toluidine | 7.057 | 106 | 37833 | 2.880 | ug/ml | 95 |
| 31) 2-Chloroaniline | 7.463 | 127 | 33265 | 2.635 | ug/ml | 96 |
| 56) a-Terpineol | 7.957 | 59 | 27669 | 3.003 | ug/ml# | 86 |
| 57) 3-Chloroaniline | 7.969 | 65 | 13967 | 2.765 | ug/ml# | 71 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 25265 | 3.023 | ug/ml | 91 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 12518 | 2.615 | ug/ml# | 1 |
| 60) Caprolactam | 8.298 | 55 | 14825 | 3.021 | ug/ml# | 78 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 37037 | 2.884 | ug/ml# | 94 |
| 62) Biphenyl | 9.104 | 154 | 73701 | 2.933 | ug/ml | 99 |
| 84) Dichloran | 10.792 | 206 | 10305 | 3.025 | ug/ml# | 67 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 11593 | 2.806 | ug/ml# | 77 |
| 99) Diphenamid | 12.004 | 167 | 54877 | 3.019 | ug/ml | 83 |

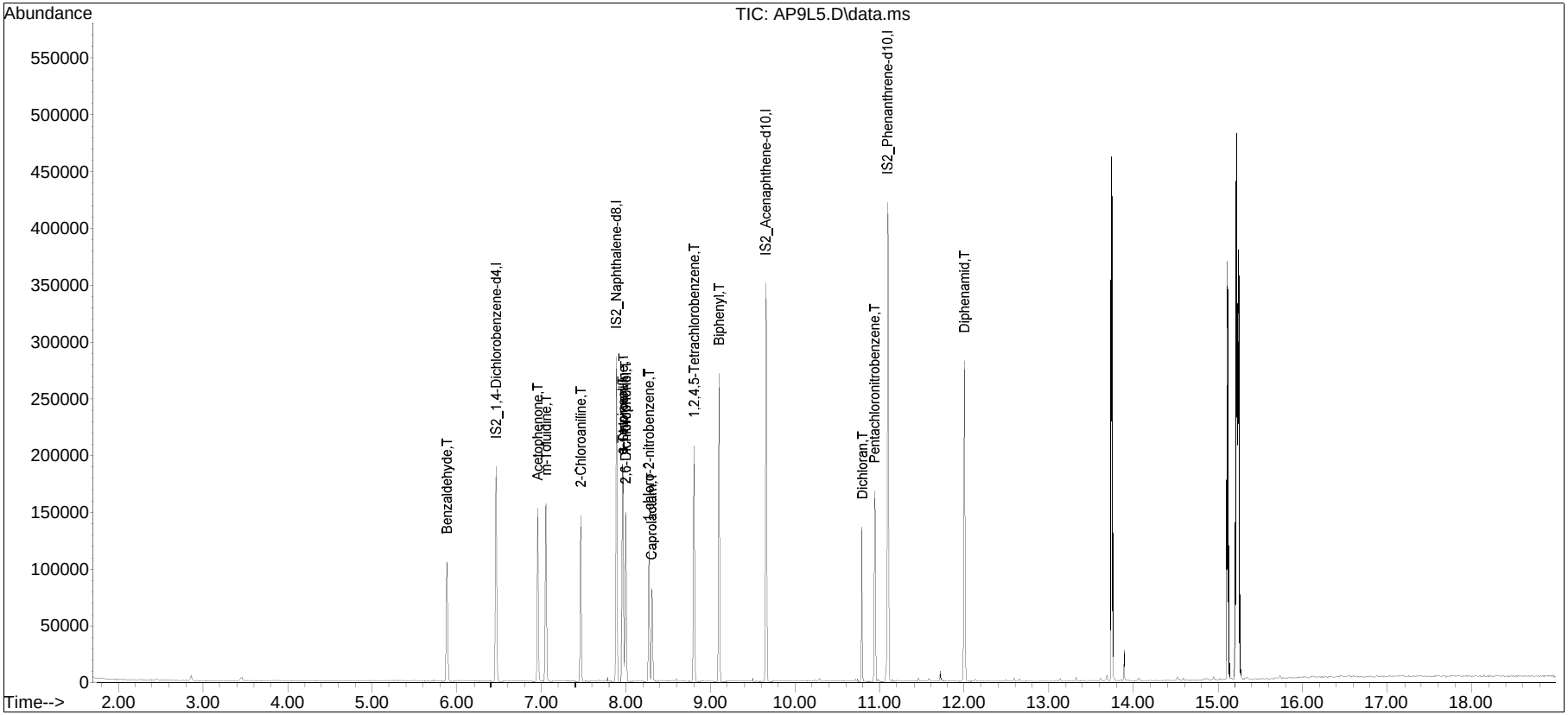
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L5.D
Acq On : 24 Jun 2024 10:04 pm
Operator : SV106:ljg
Sample : IL6,32,,AP9L2.5 Lot# 10791
Misc : WG1939040
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 25 06:08:02 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L5.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 10:04 pm | Instrument | : SV 106 |
| Sample | : IL6,32,,AP9L2.5 Lot# 10791 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L4.D
Acq On : 24 Jun 2024 10:28 pm
Operator : SV106:ljg
Sample : IL7,32,,AP9L1 Lot# 10792
Misc : WG1939040
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 25 06:07:37 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 31295 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 97.67% | | |
| 55) IS2_Naphthalene-d8 | 7.887 | 136 | 111566 | 4.000 ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 97.68% | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 68179 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 93.12% | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 160802 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 93.12% | | |
| System Monitoring Compounds | | | | | |
| Target Compounds | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 9257 | 1.080 ug/ml | 97 |
| 29) Acetophenone | 6.957 | 105 | 17120 | 1.105 ug/ml# | 86 |
| 30) m-Toluidine | 7.057 | 106 | 15619 | 1.185 ug/ml | 91 |
| 31) 2-Chloroaniline | 7.463 | 127 | 12926 | 1.020 ug/ml | 96 |
| 56) a-Terpineol | 7.957 | 59 | 10854 | 1.178 ug/ml# | 84 |
| 57) 3-Chloroaniline | 7.969 | 65 | 5581 | 1.105 ug/ml# | 70 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 9965 | 1.192 ug/ml | 93 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 5017 | 1.048 ug/ml# | 1 |
| 60) Caprolactam | 8.298 | 55 | 5985 | 1.219 ug/ml# | 78 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 15172 | 1.181 ug/ml | 94 |
| 62) Biphenyl | 9.104 | 154 | 30504 | 1.214 ug/ml | 97 |
| 84) Dichloran | 10.792 | 206 | 3743 | 1.147 ug/ml# | 70 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 4753 | 1.201 ug/ml# | 74 |
| 99) Diphenamid | 12.004 | 167 | 22624 | 1.247 ug/ml# | 82 |

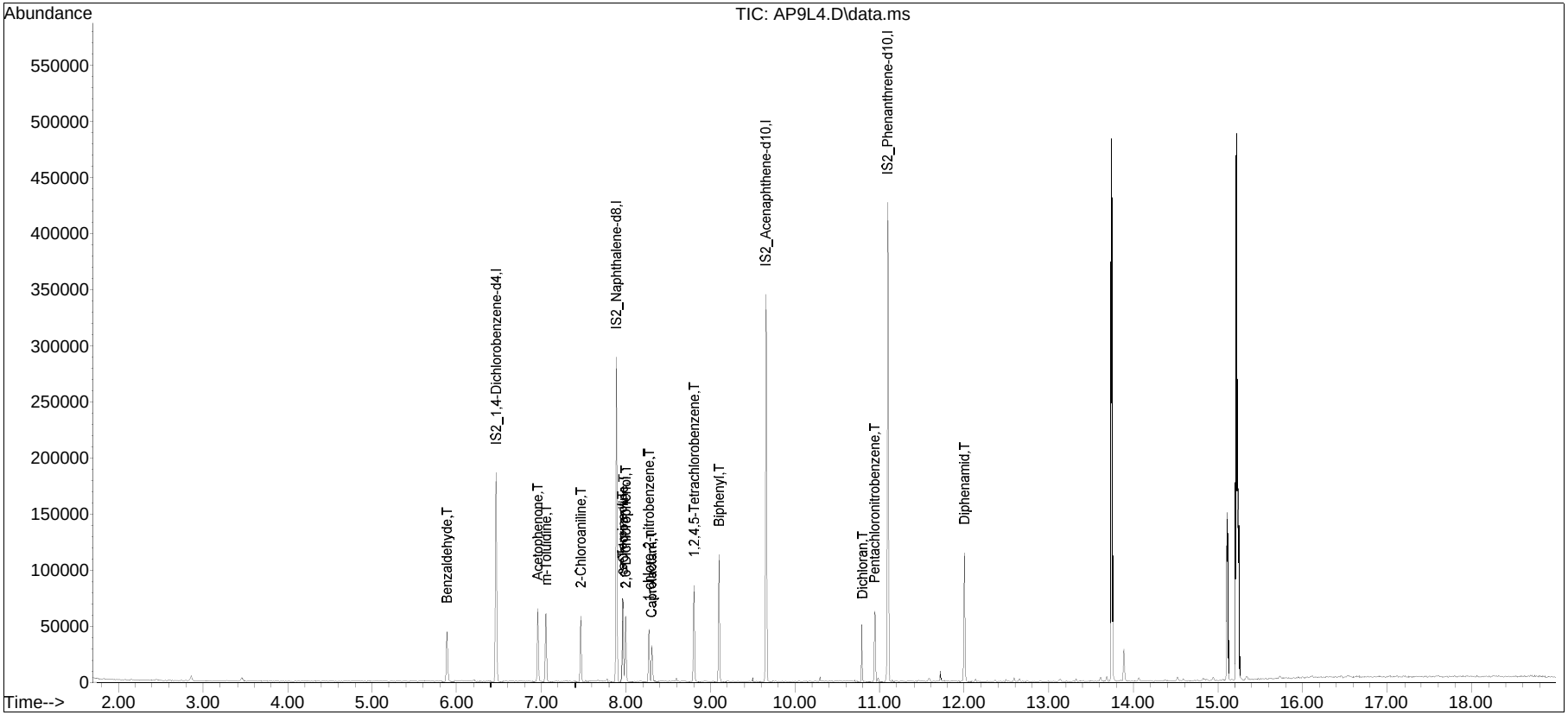
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L4.D
Acq On : 24 Jun 2024 10:28 pm
Operator : SV106:ljg
Sample : IL7,32,,AP9L1 Lot# 10792
Misc : WG1939040
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 25 06:07:37 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L4.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 10:28 pm | Instrument | : SV 106 |
| Sample | : IL7,32,,AP9L1 Lot# 10792 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L3.D
Acq On : 24 Jun 2024 10:52 pm
Operator : SV106:ljg
Sample : IL8,32,,AP9L0.5 Lot# 10793
Misc : WG1939040
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 25 06:07:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 32258 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = | 100.67% | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 113710 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = | 99.56% | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 71361 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = | 97.47% | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 160057 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = | 92.69% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 4894 | 0.554 | ug/ml | 95 |
| 29) Acetophenone | 6.957 | 105 | 8612 | 0.539 | ug/ml# | 86 |
| 30) m-Toluidine | 7.057 | 106 | 7488 | 0.551 | ug/ml | 95 |
| 31) 2-Chloroaniline | 7.463 | 127 | 7306 | 0.560 | ug/ml | 98 |
| 56) a-Terpineol | 7.957 | 59 | 5447 | 0.580 | ug/ml# | 80 |
| 57) 3-Chloroaniline | 7.969 | 65 | 2881 | 0.559 | ug/ml | 78 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 4821 | 0.566 | ug/ml | 95 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 2709 | 0.555 | ug/ml# | 1 |
| 60) Caprolactam | 8.298 | 55 | 3021 | 0.604 | ug/ml# | 75 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 8224 | 0.628 | ug/ml | 91 |
| 62) Biphenyl | 9.104 | 154 | 15925 | 0.622 | ug/ml | 98 |
| 84) Dichloran | 10.792 | 206 | 1945 | 0.570 | ug/ml# | 57 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 2070 | 0.500 | ug/ml# | 77 |
| 99) Diphenamid | 12.004 | 167 | 11803 | 0.654 | ug/ml# | 81 |

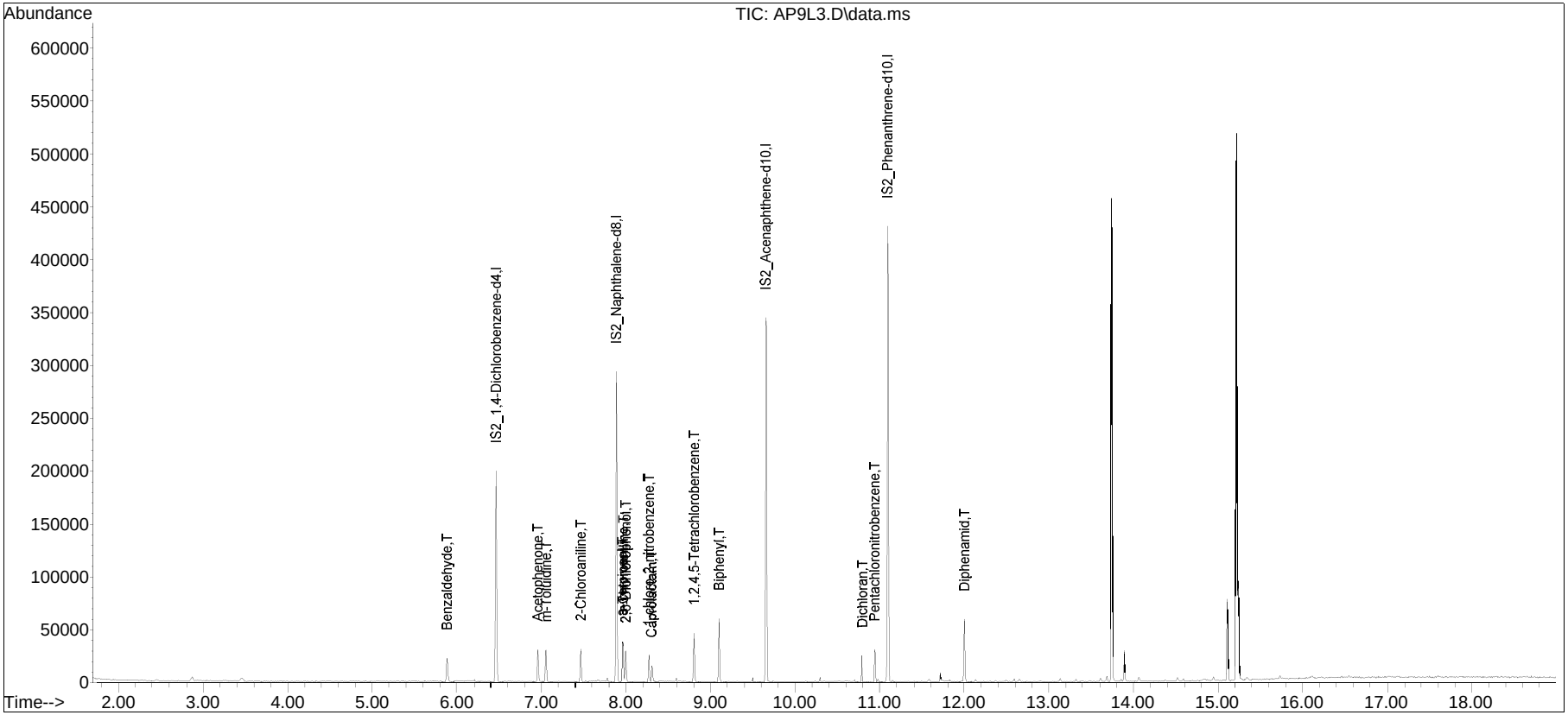
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L3.D
Acq On : 24 Jun 2024 10:52 pm
Operator : SV106:ljg
Sample : IL8,32,,AP9L0.5 Lot# 10793
Misc : WG1939040
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 25 06:07:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9L3.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/24/2024 10:52 pm | Instrument | : SV 106 |
| Sample | : IL8,32,,AP9L0.5 Lot# 10793 | Quant Date | : 6/25/2024 5:35 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L2.D
Acq On : 24 Jun 2024 11:15 pm
Operator : SV106:ljg
Sample : IL9,32,,AP9L0.2 Lot# 10794
Misc : WG1939040
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 25 06:06:41 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 34135 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 106.53% | | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 116946 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 102.39% | | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 72779 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 99.41% | | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 167902 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 97.23% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.893 | 105 | 1968 | 0.211 | ug/ml | 86 |
| 29) Acetophenone | 6.963 | 105 | 3770 | 0.223 | ug/ml# | 94 |
| 30) m-Toluidine | 7.057 | 106 | 3427 | 0.238 | ug/ml | 92 |
| 31) 2-Chloroaniline | 7.463 | 127 | 3086 | 0.223 | ug/ml# | 90 |
| 56) a-Terpineol | 7.957 | 59 | 2380 | 0.246 | ug/ml# | 80 |
| 57) 3-Chloroaniline | 7.975 | 65 | 1094 | 0.207 | ug/ml | 80 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 2192 | 0.250 | ug/ml | 88 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 1047 | 0.209 | ug/ml# | 1 |
| 60) Caprolactam | 8.304 | 55 | 1022M6 | 0.199 | ug/ml | |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 3410 | 0.253 | ug/ml# | 95 |
| 62) Biphenyl | 9.104 | 154 | 6457 | 0.245 | ug/ml | 96 |
| 84) Dichloran | 10.786 | 206 | 853 | 0.245 | ug/ml# | 57 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 922 | 0.218 | ug/ml# | 72 |
| 99) Diphenamid | 12.004 | 167 | 4675 | 0.247 | ug/ml# | 80 |

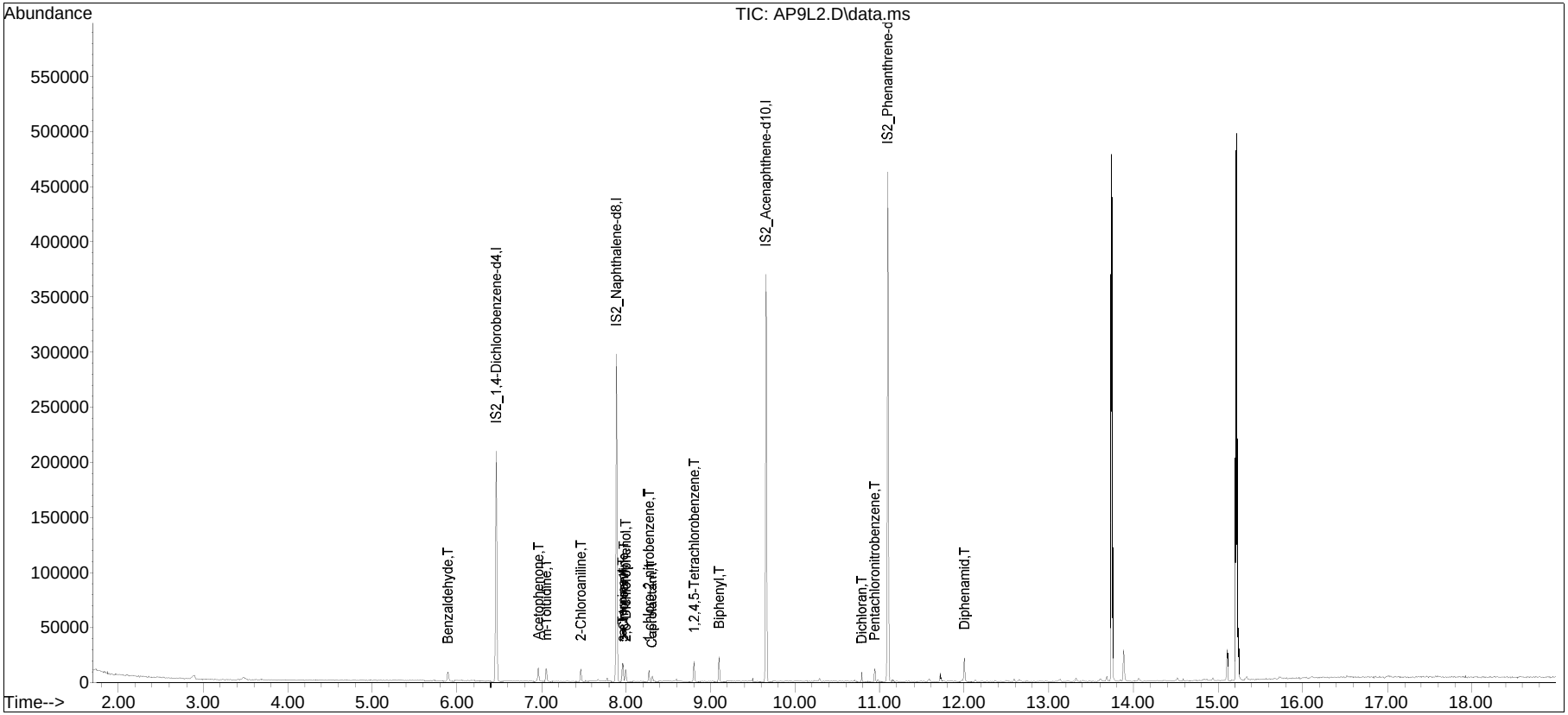
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L2.D
Acq On : 24 Jun 2024 11:15 pm
Operator : SV106:ljg
Sample : IL9,32,,AP9L0.2 Lot# 10794
Misc : WG1939040
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 25 06:06:41 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

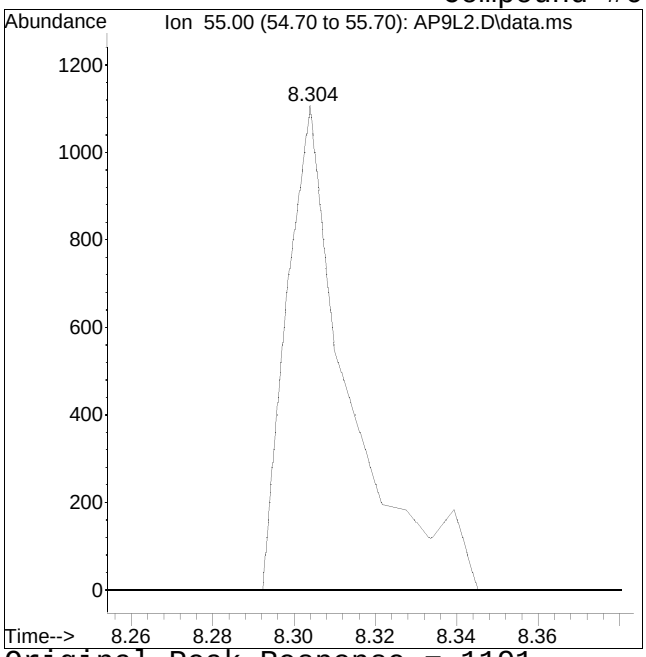
Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



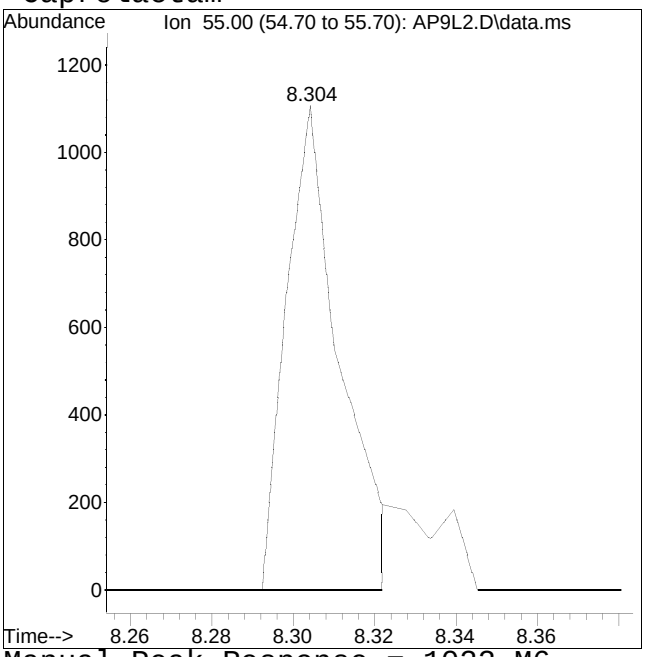
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : AP9L2.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 11:15 pm Instrument : SV 106
Sample : IL9,32,,AP9L0.2 Lot# 10794Quant Date : 6/25/2024 5:35 am

Compound #60: Caprolactam




Original Peak Response = 1191




Manual Peak Response = 1022 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L1.D
Acq On : 24 Jun 2024 11:39 pm
Operator : SV106:ljg
Sample : IL10,32,,AP9L0.1 Lot# 10795
Misc : WG1939040
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 25 06:05:40 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 31818 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 99.30% | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 109777 | 4.000 ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 96.12% | | |
| 83) IS2_Acenaphthene-d10 | 9.657 | 164 | 67656 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 92.41% | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 150420 | 4.000 ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 87.11% | | |
| System Monitoring Compounds | | | | | |
| Target Compounds | | | | | Qvalue |
| 28) Benzaldehyde | 5.892 | 105 | 884 | 0.101 ug/ml | 84 |
| 29) Acetophenone | 6.963 | 105 | 1595 | 0.101 ug/ml# | 69 |
| 30) m-Toluidine | 7.057 | 106 | 1368 | 0.102 ug/ml# | 89 |
| 31) 2-Chloroaniline | 7.463 | 127 | 1148 | 0.089 ug/ml# | 42 |
| 56) a-Terpineol | 7.957 | 59 | 1085 | 0.120 ug/ml | 93 |
| 57) 3-Chloroaniline | 7.969 | 65 | 555 | 0.112 ug/ml# | 35 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 822 | 0.100 ug/ml# | 88 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 416M2 | 0.088 ug/ml | |
| 60) Caprolactam | 8.310 | 55 | 411M2 | 0.085 ug/ml | |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 1637 | 0.130 ug/ml# | 87 |
| 62) Biphenyl | 9.104 | 154 | 3108 | 0.126 ug/ml | 94 |
| 84) Dichloran | 10.786 | 206 | 359M2 | 0.111 ug/ml | |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 395M2 | 0.101 ug/ml | |
| 99) Diphenamid | 12.004 | 167 | 1690 | 0.100 ug/ml# | 81 |

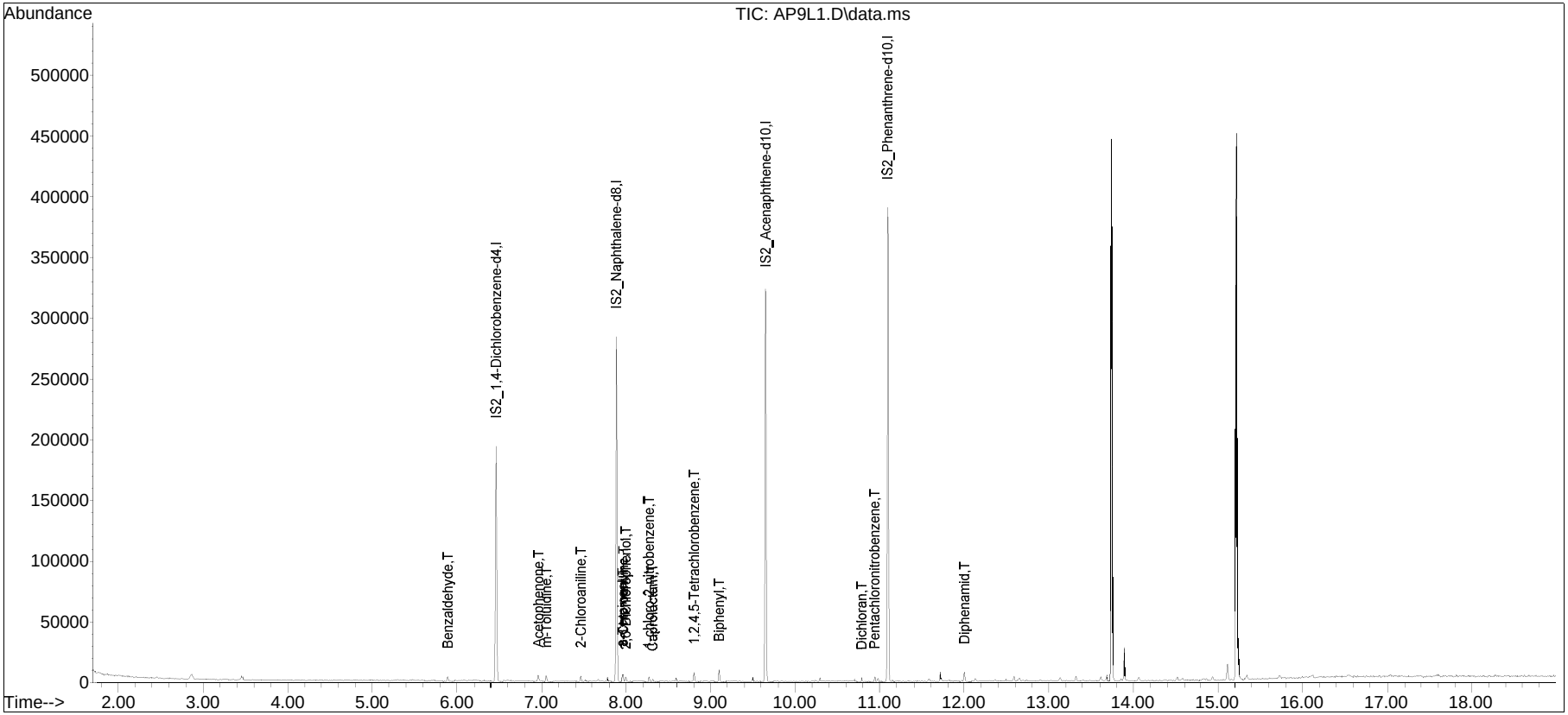
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9L1.D
Acq On : 24 Jun 2024 11:39 pm
Operator : SV106:ljg
Sample : IL10,32,,AP9L0.1 Lot# 10795
Misc : WG1939040
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 25 06:05:40 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 05:32:01 2024
Response via : Initial Calibration

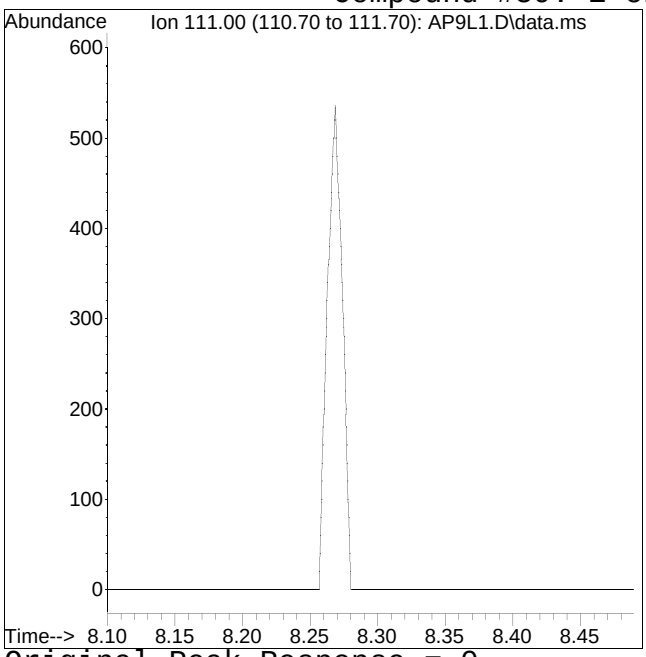
Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•



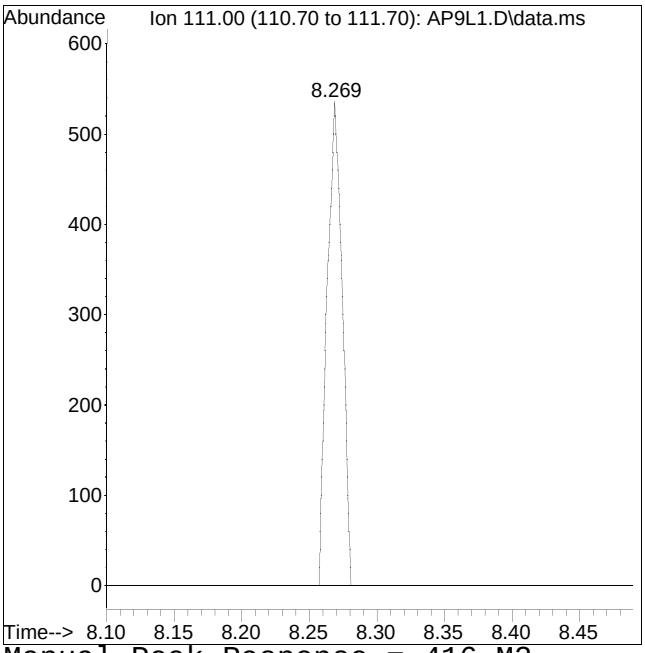
Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : AP9L1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 11:39 pm Instrument : SV 106
Sample : IL10,32,,AP9L0.1 Lot# 1079Quant Date : 6/25/2024 5:35 am

Compound #59: 1-chloro-2-nitrobenzene




Original Peak Response = 0



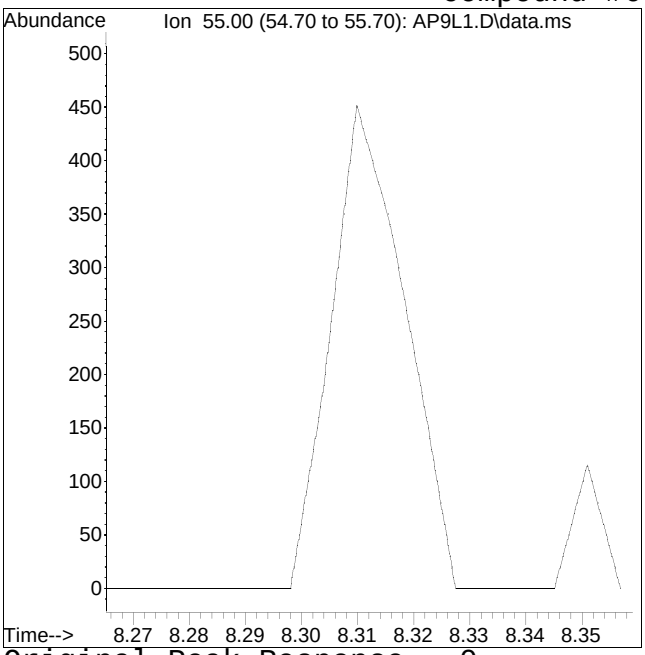

Manual Peak Response = 416 M2

M2 = Peak not found by automatic integration algorithm.

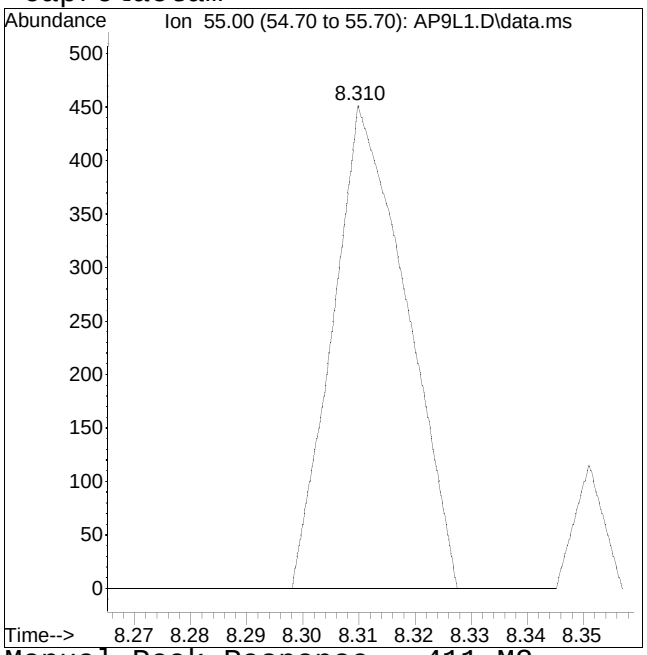
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : AP9L1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 11:39 pm Instrument : SV 106
Sample : IL10,32,,AP9L0.1 Lot# 1079Quant Date : 6/25/2024 5:35 am

## Compound #60: Caprolactam




Original Peak Response = 0



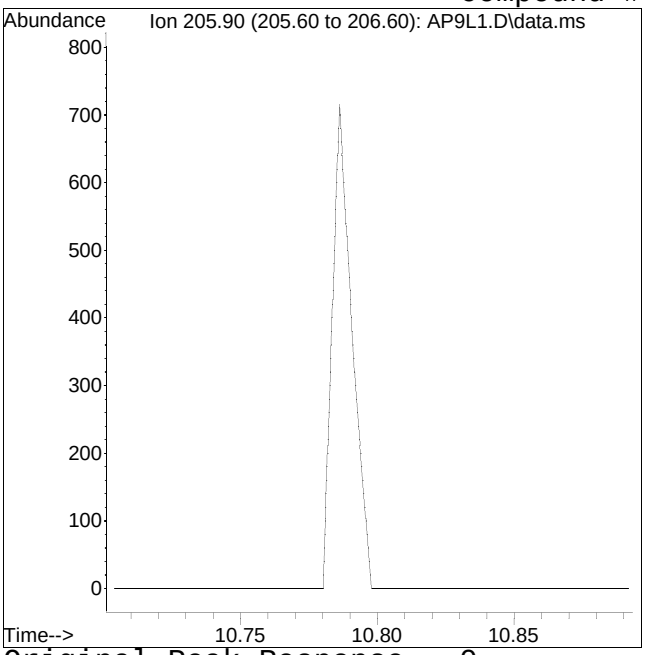

Manual Peak Response = 411 M2

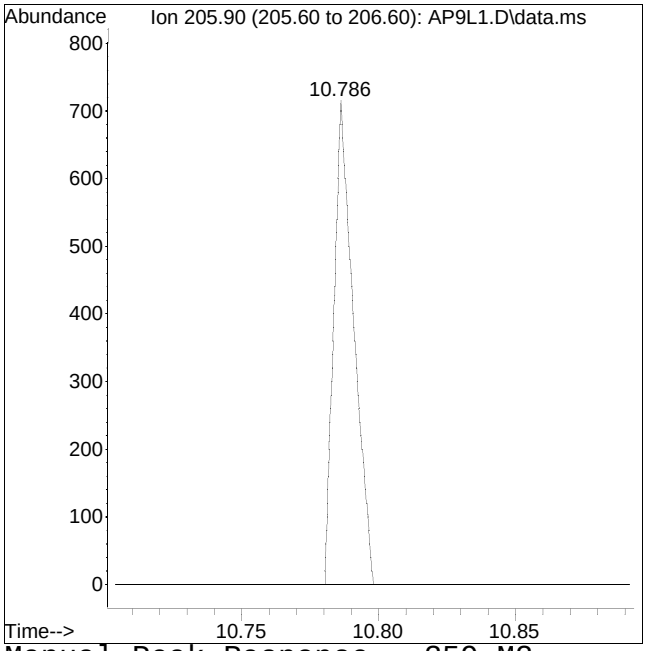
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : AP9L1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 11:39 pm Instrument : SV 106
Sample : IL10,32,,AP9L0.1 Lot# 1079Quant Date : 6/25/2024 5:35 am

Compound #84: Dichloran



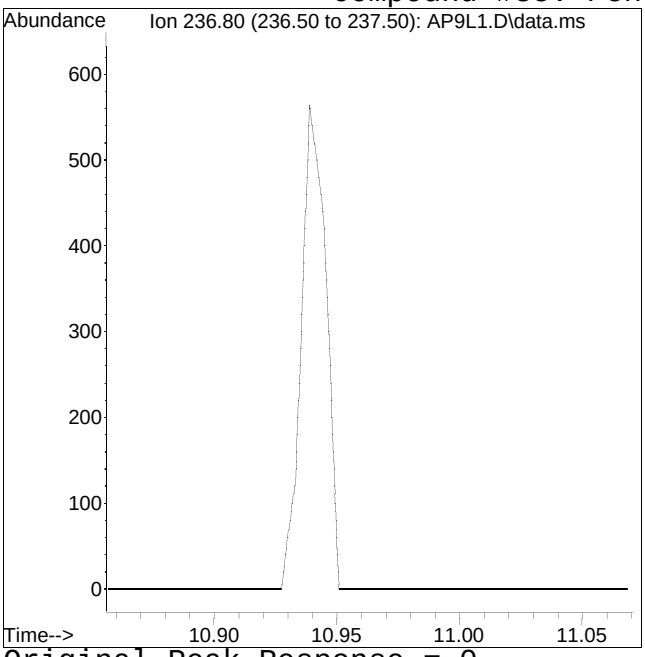




Original Peak Response = 0 Manual Peak Response = 359 M2
M2 = Peak not found by automatic integration algorithm.

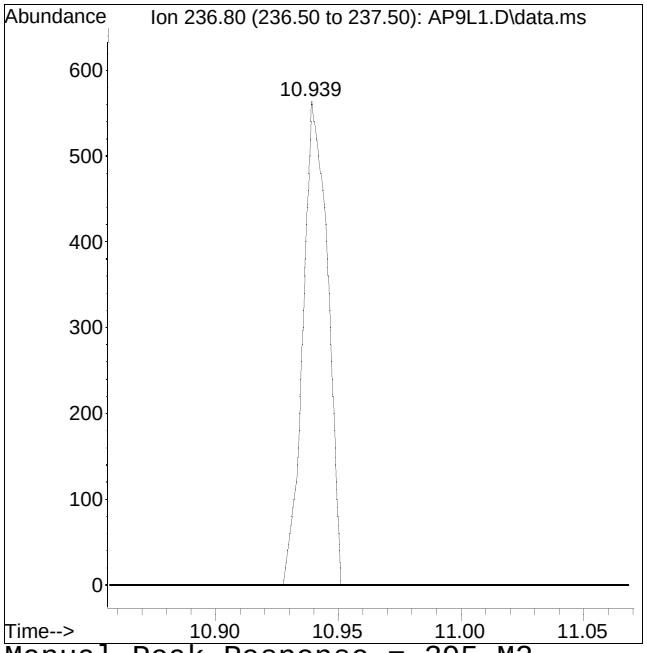
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : AP9L1.D Operator : SV106:ljg
Date Inj'd : 6/24/2024 11:39 pm Instrument : SV 106
Sample : IL10,32,,AP9L0.1 Lot# 1079Quant Date : 6/25/2024 5:35 am

## Compound #85: Pentachloronitrobenzene




Original Peak Response = 0




Manual Peak Response = 395 M2

M2 = Peak not found by automatic integration algorithm.

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|---|
| 1 | I | IS1_1,4-Dichlorobenzene-d4 | | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 2 | t | n-Nitrosodimethylamine | | 0.851 | 0.816 | 4.1 | 97 | -0.02 |
| 3 | t | Pyridine | | 1.392 | 1.335 | 4.1 | 96 | -0.02 |
| 4 | S | 2-Fluorophenol | | 1.156 | 1.067 | 7.7 | 91 | -0.01 |
| 5 | T | Aniline | | 2.049 | 1.842 | 10.1 | 91 | 0.00 |
| 6 | t | 2-Chlorophenol | | 1.288 | 1.197 | 7.1 | 96 | 0.00 |
| 7 | S | Phenol-d6 | | 1.583 | 1.468 | 7.3 | 96 | 0.00 |
| 8 | T | Phenol | | 1.642 | 1.549 | 5.7 | 96 | 0.00 |
| 9 | T | Bis(2-chloroethyl)ether | | 1.348 | 1.264 | 6.2 | 95 | 0.00 |
| 10 | T | 1,3-Dichlorobenzene | | 1.546 | 1.411 | 8.7 | 93 | 0.00 |
| 11 | T | 1,4-Dichlorobenzene | | 1.565 | 1.483 | 5.2 | 98 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | | 1.522 | 1.374 | 9.7 | 93 | 0.00 |
| 13 | t | Benzyl alcohol | | 1.267 | 1.198 | 5.4 | 95 | 0.00 |
| 14 | T | Bis(2-chloroisopropyl)ether | | 2.166 | 2.053 | 5.2 | 98 | 0.00 |
| 15 | T | 2-Methylphenol | | 1.183 | 1.086 | 8.2 | 92 | 0.00 |
| 16 | T | Hexachloroethane | | 0.623 | 0.570 | 8.5 | 97 | 0.00 |
| 17 | T | n-Nitrosodi-n-propylamine | | 1.057 | 1.014 | 4.1 | 94 | 0.00 |
| 18 | T | 3-Methylphenol/4-Methylphen | | 1.279 | 1.202 | 6.0 | 96 | 0.00 |
| 19 | S | Nitrobenzene-d5 | | 1.619 | 1.489 | 8.0 | 95 | 0.00 |
| 20 | T | Nitrobenzene | | 1.643 | 1.519 | 7.5 | 96 | 0.00 |
| 21 | T | Isophorone | | 2.760 | 2.659 | 3.7 | 94 | 0.00 |
| 22 | T | 2-Nitrophenol | | 0.692 | 0.662 | 4.3 | 95 | 0.00 |
| 23 | T | 2,4-Dimethylphenol | | 1.301 | 1.126 | 13.5 | 88 | 0.00 |
| 24 | T | Bis(2-chloroethoxy)methane | | 1.778 | 1.670 | 6.1 | 96 | 0.00 |
| 25 | T | 2,4-Dichlorophenol | | 1.233 | 1.197 | 2.9 | 96 | 0.00 |
| 26 | T | 1,2,4-Trichlorobenzene | | 1.510 | 1.365 | 9.6 | 96 | 0.00 |
| 35 | I | IS1_Naphthalene-d8 | | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 36 | T | Naphthalene | | 1.147 | 1.016 | 11.4 | 97 | 0.00 |
| 37 | T | Benzoic Acid | * | 5.000 | 4.412 | 11.8 | 90 | 0.00 |
| 38 | T | 4-Chloroaniline | | 0.169 | 0.157 | 7.1 | 96 | 0.00 |
| 39 | T | Hexachlorobutadiene | | 0.303 | 0.263 | 13.2 | 97 | 0.00 |
| 40 | T | p-Chloro-m-cresol | | 0.343 | 0.327 | 4.7 | 98 | 0.00 |
| 41 | T | 2-Methylnaphthalene | | 0.764 | 0.705 | 7.7 | 98 | 0.00 |
| 42 | T | 1-Methylnaphthalene | | 0.290 | 0.267 | 7.9 | 97 | 0.00 |
| 43 | T | Hexachlorocyclopentadiene | | 0.336 | 0.313 | 6.8 | 97 | 0.00 |
| 44 | T | 2,4,6-Trichlorophenol | | 0.301 | 0.284 | 5.6 | 97 | 0.00 |
| 45 | T | 2,4,5-Trichlorophenol | | 0.322 | 0.310 | 3.7 | 96 | 0.00 |
| 46 | S | 2-Fluorobiphenyl | | 1.027 | 0.935 | 9.0 | 98 | 0.00 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 2-Chloronaphthalene | 0.813 | 0.749 | 7.9 | 98 | 0.00 |
| 48 | T | 2-Nitroaniline | 0.245 | 0.239 | 2.4 | 99 | 0.00 |
| 49 | T | 1,4-Dinitrobenzene | 0.129 | 0.126 | 2.3 | 100 | 0.00 |
| 50 | T | 1,3-Dinitrobenzene | 0.147 | 0.143 | 2.7 | 97 | 0.00 |
| 51 | T | Dimethyl phthalate | 0.989 | 0.951 | 3.8 | 99 | 0.00 |
| 52 | T | Acenaphthylene | 1.244 | 1.209 | 2.8 | 100 | 0.00 |
| 53 | T | 2,6-Dinitrotoluene | 0.213 | 0.205 | 3.8 | 96 | 0.00 |
| 54 | T | 1,2-Dinitrobenzene | 0.091 | 0.085 | 6.6 | 92 | 0.00 |
| 63 | I | IS1_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 64 | T | 3-Nitroaniline | 0.319 | 0.328 | -2.8 | 99 | 0.00 |
| 65 | T | Acenaphthene | 1.153 | 1.072 | 7.0 | 98 | 0.00 |
| 66 | T | 2,4-Dinitrophenol | 0.213 | 0.204 | 4.2 | 91 | 0.00 |
| 67 | T | Dibenzofuran | 1.936 | 1.758 | 9.2 | 97 | 0.00 |
| 68 | T | 2,4-Dinitrotoluene | 0.475 | 0.449 | 5.5 | 93 | 0.00 |
| 69 | T | 4-Nitrophenol | 0.323 | 0.320 | 0.9 | 100 | 0.00 |
| 70 | T | 2,3,5,6-Tetrachlorophenol | 0.452 | 0.456 | -0.9 | 100 | 0.00 |
| 71 | T | 2,3,4,6-Tetrachlorophenol | 0.435 | 0.446 | -2.5 | 99 | 0.00 |
| 72 | T | Diethyl phthalate | 1.529 | 1.455 | 4.8 | 100 | 0.00 |
| 73 | T | Fluorene | 1.523 | 1.420 | 6.8 | 97 | 0.00 |
| 74 | T | 4-Chlorophenyl phenyl ether | 0.801 | 0.756 | 5.6 | 103 | 0.00 |
| 75 | T | 4-Nitroaniline | 0.333 | 0.319 | 4.2 | 99 | 0.00 |
| 76 | T | 4,6-Dinitro-o-cresol | 0.266 | 0.288 | -8.3 | 99 | 0.00 |
| 77 | T | NDPA/DPA | 1.263 | 1.194 | 5.5 | 96 | 0.00 |
| 78 | T | Azobenzene | 1.446 | 1.375 | 4.9 | 98 | 0.00 |
| 79 | S | 2,4,6-Tribromophenol | 0.249 | 0.254 | -2.0 | 100 | 0.00 |
| 80 | T | 4-Bromophenyl phenyl ether | 0.500 | 0.473 | 5.4 | 100 | 0.00 |
| 81 | T | Hexachlorobenzene | 0.569 | 0.516 | 9.3 | 98 | 0.00 |
| 82 | T | Pentachlorophenol | 0.361 | 0.378 | -4.7 | 98 | 0.00 |
| 88 | I | IS1_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 89 | T | Phenanthrene | 1.117 | 0.986 | 11.7 | 98 | 0.00 |
| 90 | T | Anthracene | 1.111 | 1.025 | 7.7 | 99 | 0.00 |
| 91 | T | Carbazole | 1.018 | 0.940 | 7.7 | 100 | 0.00 |
| 92 | T | Di-n-butylphthalate | 1.195 | 1.135 | 5.0 | 100 | 0.00 |
| 93 | T | Fluoranthene | 1.366 | 1.247 | 8.7 | 100 | 0.00 |
| 94 | T | Benzidine | 0.741 | 0.742 | -0.1 | 100 | 0.00 |
| 95 | T | Pyrene | 1.440 | 1.328 | 7.8 | 101 | 0.00 |
| 96 | S | 4-Terphenyl-d14 | 1.076 | 0.986 | 8.4 | 101 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 97 | T | Butyl benzyl phthalate | 0.550 | 0.505 | 8.2 | 99 | 0.00 |
| 104 | I | IS1_Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 105 | T | Benzo(a)anthracene | 1.478 | 1.321 | 10.6 | 99 | 0.00 |
| 106 | T | 3,3'-Dichlorobenzidine | 0.489 | 0.482 | 1.4 | 97 | 0.00 |
| 107 | T | Chrysene | 1.429 | 1.262 | 11.7 | 99 | 0.00 |
| 108 | T | Bis(2-ethylhexyl)phthalate | 0.817 | 0.794 | 2.8 | 98 | 0.00 |
| 109 | T | Di-n-octylphthalate | 1.352 | 1.323 | 2.1 | 100 | 0.00 |
| 110 | T | Benzo(b)fluoranthene | 1.430 | 1.320 | 7.7 | 105 | 0.00 |
| 111 | T | Benzo(k)fluoranthene | 1.356 | 1.212 | 10.6 | 94 | 0.00 |
| 112 | T | Benzo(a)pyrene | 1.242 | 1.190 | 4.2 | 101 | 0.00 |
| 113 | I | IS1_Perylene-d12 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 114 | T | Indeno(1,2,3-cd)pyrene | 1.082 | 1.059 | 2.1 | 99 | 0.00 |
| 115 | T | Dibenzo(a,h)anthracene | 1.042 | 1.042 | 0.0 | 102 | 0.00 |
| 116 | T | Benzo(ghi)perylene | 0.964 | 0.989 | -2.6 | 103 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.463 | 152 | 31737 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 34411 | | | Recovery = 92.23% | | | |
| 35) IS1_Naphthalene-d8 | 7.886 | 136 | 116701 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 121176 | | | Recovery = 96.31% | | | |
| 63) IS1_Acenaphthene-d10 | 9.657 | 164 | 76011 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79426 | | | Recovery = 95.70% | | | |
| 88) IS1_Phenanthrene-d10 | 11.092 | 188 | 173714 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 176143 | | | Recovery = 98.62% | | | |
| 104) IS1_Chrysene-d12 | 13.739 | 240 | 171631 | 4.000 | ug/ml # | 0.00 |
| Standard Area 1 = 174707 | | | Recovery = 98.24% | | | |
| 113) IS1_Perylene-d12 | 15.215 | 264 | 190344 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 195526 | | | Recovery = 97.35% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.557 | 112 | 42312 | 4.613 | ug/ml | -0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 230.65%# | | | |
| 7) Phenol-d6 | 6.092 | 99 | 58244 | 4.638 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 231.90%# | | | |
| 19) Nitrobenzene-d5 | 7.116 | 82 | 59067 | 4.599 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 459.90%# | | | |
| 46) 2-Fluorobiphenyl | 9.016 | 172 | 136405 | 4.552 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 455.20%# | | | |
| 79) 2,4,6-Tribromophenol | 10.427 | 330 | 24098 | 5.087 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 254.35%# | | | |
| 96) 4-Terphenyl-d14 | 12.680 | 244 | 214054 | 4.583 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 458.30%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 2.128 | 74 | 32356 | 4.791 | ug/ml# | 70 |
| 3) Pyridine | 2.163 | 79 | 52962 | 4.794 | ug/ml# | 65 |
| 5) Aniline | 6.051 | 93 | 73085 | 4.497 | ug/ml | 100 |
| 6) 2-Chlorophenol | 6.198 | 128 | 47473 | 4.646 | ug/ml | 98 |
| 8) Phenol | 6.104 | 94 | 61436 | 4.716 | ug/ml | 91 |
| 9) Bis(2-chloroethyl)ether | 6.181 | 93 | 50154 | 4.688 | ug/ml# | 74 |
| 10) 1,3-Dichlorobenzene | 6.386 | 146 | 55987 | 4.563 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 6.481 | 146 | 58849 | 4.740 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 6.663 | 146 | 54515 | 4.514 | ug/ml | 98 |
| 13) Benzyl alcohol | 6.669 | 79 | 47507 | 4.724 | ug/ml | 94 |
| 14) Bis(2-chloroisopropyl)... | 6.845 | 45 | 81450 | 4.739 | ug/ml# | 59 |

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2-Methylphenol | 6.839 | 108 | 43064 | 4.590 | ug/ml | 97 |
| 16) Hexachloroethane | 7.051 | 117 | 22610 | 4.576 | ug/ml# | 48 |
| 17) n-Nitrosodi-n-propylamine | 6.992 | 70 | 40232 | 4.798 | ug/ml# | 89 |
| 18) 3-Methylphenol/4-Methy... | 7.028 | 108 | 47704 | 4.701 | ug/ml | 100 |
| 20) Nitrobenzene | 7.139 | 77 | 60250 | 4.621 | ug/ml | 93 |
| 21) Isophorone | 7.416 | 82 | 105479 | 4.816 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.498 | 139 | 26262 | 4.785 | ug/ml# | 92 |
| 23) 2,4-Dimethylphenol | 7.598 | 107 | 44685 | 4.327 | ug/ml | 96 |
| 24) Bis(2-chloroethoxy)met... | 7.692 | 93 | 66268 | 4.698 | ug/ml | 98 |
| 25) 2,4-Dichlorophenol | 7.763 | 162 | 47496 | 4.855 | ug/ml | 97 |
| 26) 1,2,4-Trichlorobenzene | 7.845 | 180 | 54145 | 4.519 | ug/ml | 96 |
| 36) Naphthalene | 7.910 | 128 | 148264 | 4.432 | ug/ml | 99 |
| 37) Benzoic Acid | 7.686 | 105 | 35144 | 4.412 | ug/ml | 98 |
| 38) 4-Chloroaniline | 7.992 | 65 | 22958 | 4.655 | ug/ml | 88 |
| 39) Hexachlorobutadiene | 8.080 | 225 | 38426 | 4.352 | ug/ml | 99 |
| 40) p-Chloro-m-cresol | 8.522 | 107 | 47677 | 4.769 | ug/ml | 96 |
| 41) 2-Methylnaphthalene | 8.627 | 142 | 102902 | 4.615 | ug/ml | 94 |
| 42) 1-Methylnaphthalene | 8.722 | 115 | 38995 | 4.606 | ug/ml | 84 |
| 43) Hexachlorocyclopentadiene | 8.810 | 237 | 45649 | 4.661 | ug/ml | 99 |
| 44) 2,4,6-Trichlorophenol | 8.927 | 196 | 41492 | 4.732 | ug/ml | 96 |
| 45) 2,4,5-Trichlorophenol | 8.957 | 196 | 45219 | 4.816 | ug/ml | 98 |
| 47) 2-Chloronaphthalene | 9.110 | 162 | 109202 | 4.606 | ug/ml | 96 |
| 48) 2-Nitroaniline | 9.222 | 138 | 34832 | 4.876 | ug/ml | 98 |
| 49) 1,4-Dinitrobenzene | 9.357 | 168 | 18421 | 4.900 | ug/ml | 88 |
| 50) 1,3-Dinitrobenzene | 9.427 | 168 | 20889 | 4.876 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.427 | 163 | 138787 | 4.810 | ug/ml# | 99 |
| 52) Acenaphthylene | 9.510 | 152 | 176343 | 4.859 | ug/ml | 100 |
| 53) 2,6-Dinitrotoluene | 9.469 | 165 | 29955 | 4.822 | ug/ml | 89 |
| 54) 1,2-Dinitrobenzene | 9.510 | 168 | 12362 | 4.666 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.622 | 138 | 31209 | 5.142 | ug/ml | 92 |
| 65) Acenaphthene | 9.686 | 154 | 101856 | 4.650 | ug/ml | 90 |
| 66) 2,4-Dinitrophenol | 9.727 | 184 | 19408 | 4.789 | ug/ml | 91 |
| 67) Dibenzofuran | 9.857 | 168 | 167081 | 4.541 | ug/ml | 98 |
| 68) 2,4-Dinitrotoluene | 9.857 | 165 | 42694 | 4.732 | ug/ml | 94 |
| 69) 4-Nitrophenol | 9.816 | 65 | 30360 | 4.940 | ug/ml# | 84 |
| 70) 2,3,5,6-Tetrachlorophenol | 9.945 | 232 | 43280 | 5.037 | ug/ml | 99 |
| 71) 2,3,4,6-Tetrachlorophenol | 9.992 | 232 | 42390 | 5.129 | ug/ml | 98 |
| 72) Diethyl phthalate | 10.122 | 149 | 138268 | 4.757 | ug/ml | 99 |
| 73) Fluorene | 10.192 | 166 | 134876 | 4.662 | ug/ml | 94 |
| 74) 4-Chlorophenyl phenyl ... | 10.210 | 204 | 71803 | 4.715 | ug/ml | 88 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ABNL6.D
Sub List : ABNical - ABN ical sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 75) | 4-Nitroaniline | 10.216 | 138 | 30300 | 4.795 | ug/ml# | 88 |
| 76) | 4,6-Dinitro-o-cresol | 10.251 | 198 | 27327 | 5.403 | ug/ml# | 65 |
| 77) | NDPA/DPA | 10.327 | 169 | 113489 | 4.730 | ug/ml | 96 |
| 78) | Azobenzene | 10.357 | 77 | 130690 | 4.756 | ug/ml | 95 |
| 80) | 4-Bromophenyl phenyl e... | 10.680 | 248 | 44914 | 4.727 | ug/ml# | 86 |
| 81) | Hexachlorobenzene | 10.733 | 284 | 49006 | 4.535 | ug/ml# | 81 |
| 82) | Pentachlorophenol | 10.927 | 266 | 35912 | 5.232 | ug/ml | 96 |
| 89) | Phenanthrene | 11.116 | 178 | 214102 | 4.413 | ug/ml | 99 |
| 90) | Anthracene | 11.169 | 178 | 222491 | 4.612 | ug/ml | 99 |
| 91) | Carbazole | 11.333 | 167 | 204021 | 4.616 | ug/ml | 99 |
| 92) | Di-n-butylphthalate | 11.727 | 149 | 246456 | 4.748 | ug/ml | 100 |
| 93) | Fluoranthene | 12.274 | 202 | 270824 | 4.566 | ug/ml# | 91 |
| 94) | Benzidine | 12.427 | 184 | 161127 | 5.004 | ug/ml# | 94 |
| 95) | Pyrene | 12.492 | 202 | 288357 | 4.612 | ug/ml | 99 |
| 97) | Butyl benzyl phthalate | 13.210 | 149 | 109619 | 4.588 | ug/ml | 95 |
| 105) | Benzo(a)anthracene | 13.733 | 228 | 283411 | 4.469 | ug/ml | 99 |
| 106) | 3,3'-Dichlorobenzidine | 13.733 | 252 | 103514 | 4.933 | ug/ml# | 96 |
| 107) | Chrysene | 13.768 | 228 | 270744 | 4.416 | ug/ml | 100 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.851 | 149 | 170402 | 4.860 | ug/ml# | 95 |
| 109) | Di-n-octylphthalate | 14.533 | 149 | 283833 | 4.891 | ug/ml# | 75 |
| 110) | Benzo(b)fluoranthene | 14.845 | 252 | 283245 | 4.615 | ug/ml# | 92 |
| 111) | Benzo(k)fluoranthene | 14.868 | 252 | 259962 | 4.468 | ug/ml# | 91 |
| 112) | Benzo(a)pyrene | 15.156 | 252 | 255240 | 4.791 | ug/ml# | 90 |
| 114) | Indeno(1,2,3-cd)pyrene | 16.198 | 276 | 251892M6 | 4.892 | ug/mL | |
| 115) | Dibenzo(a,h)anthracene | 16.227 | 278 | 248022 | 5.004 | ug/ml# | 87 |
| 116) | Benzo(ghi)perylene | 16.456 | 276 | 235381 | 5.131 | ug/ml# | 82 |

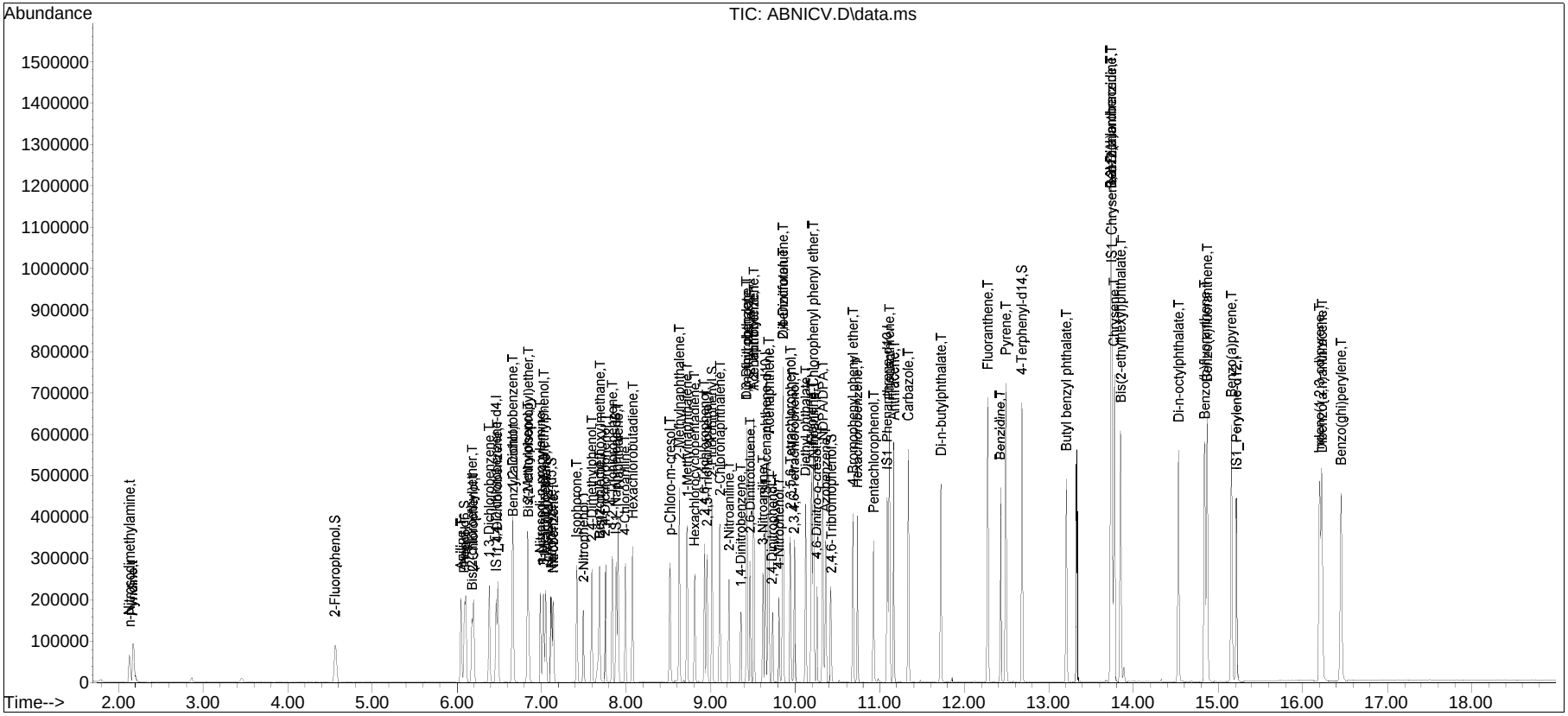
(#) = qualifier out of range (m) = manual integration (+) = signals summed

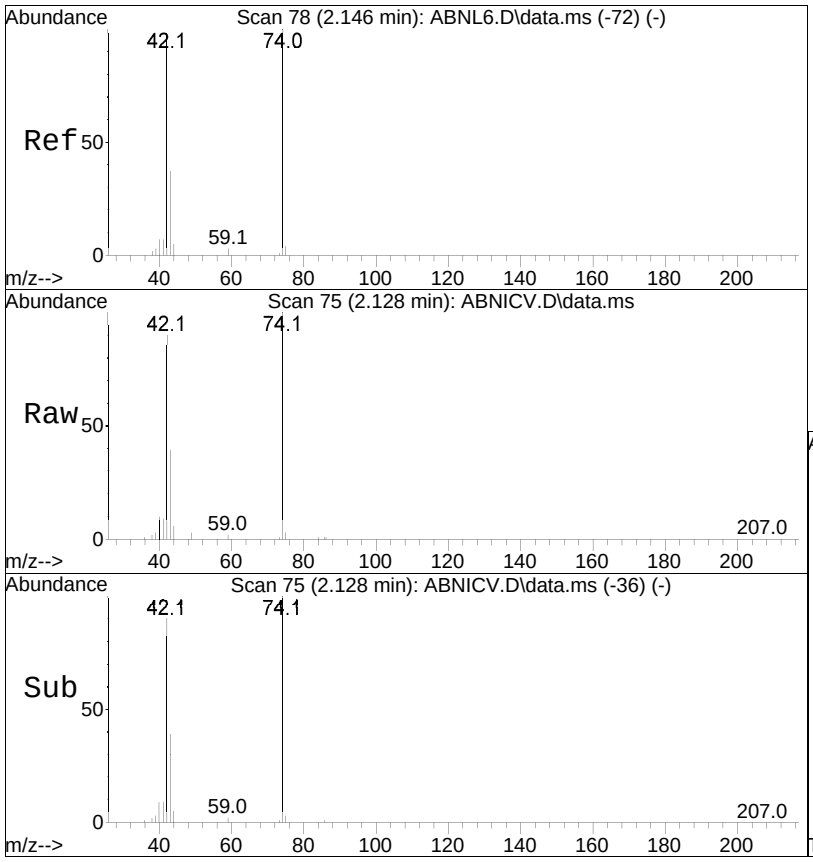
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ABNICV.D
Acq On : 25 Jun 2024 12:03 am
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10805
Misc : WG1939040,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 25 06:32:52 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublistTical\ABNL6.D•

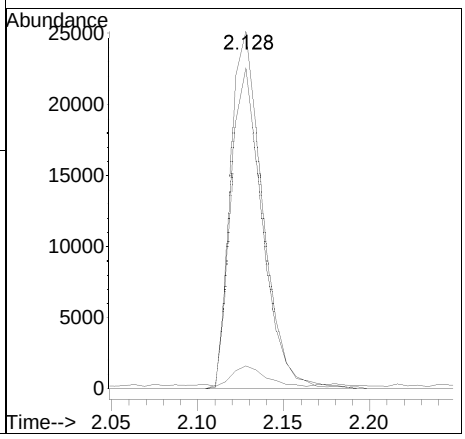


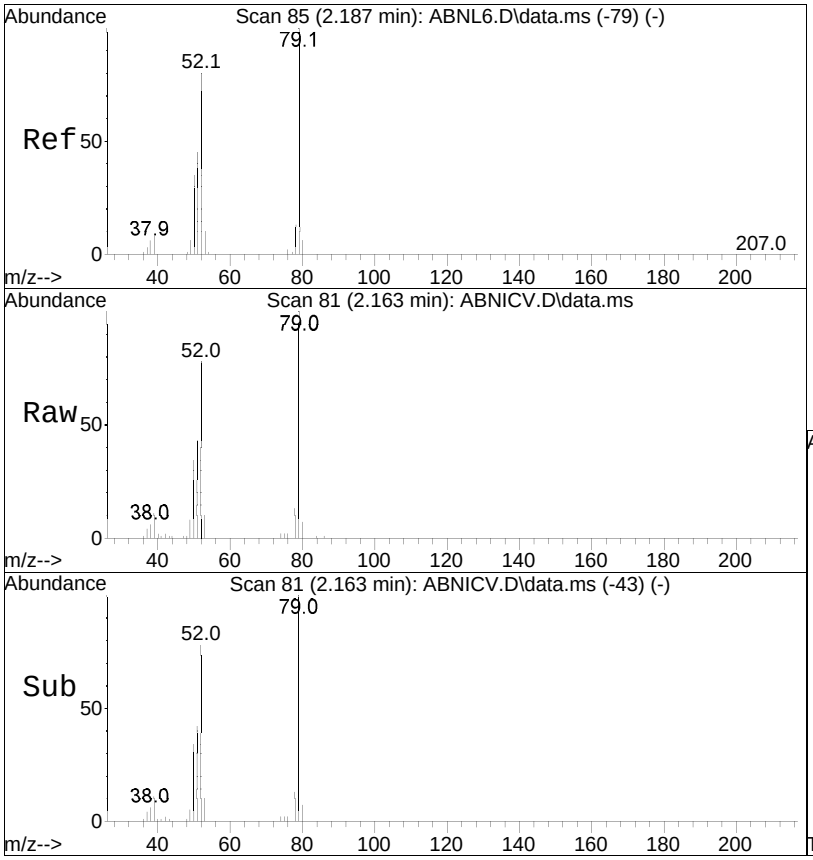



#2
n-Nitrosodimethylamine
Concen: 4.79 ug/ml
RT: 2.128 min Scan# 75
Delta R.T. -0.018 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 74 Resp: 32356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 42 | 89.0 | 100.0 | 150.0# |
| 44 | 5.8 | 6.7 | 10.1# |

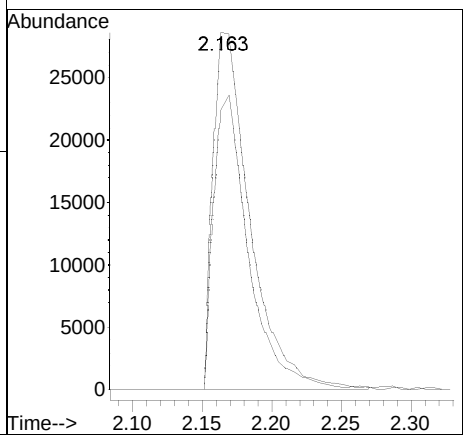


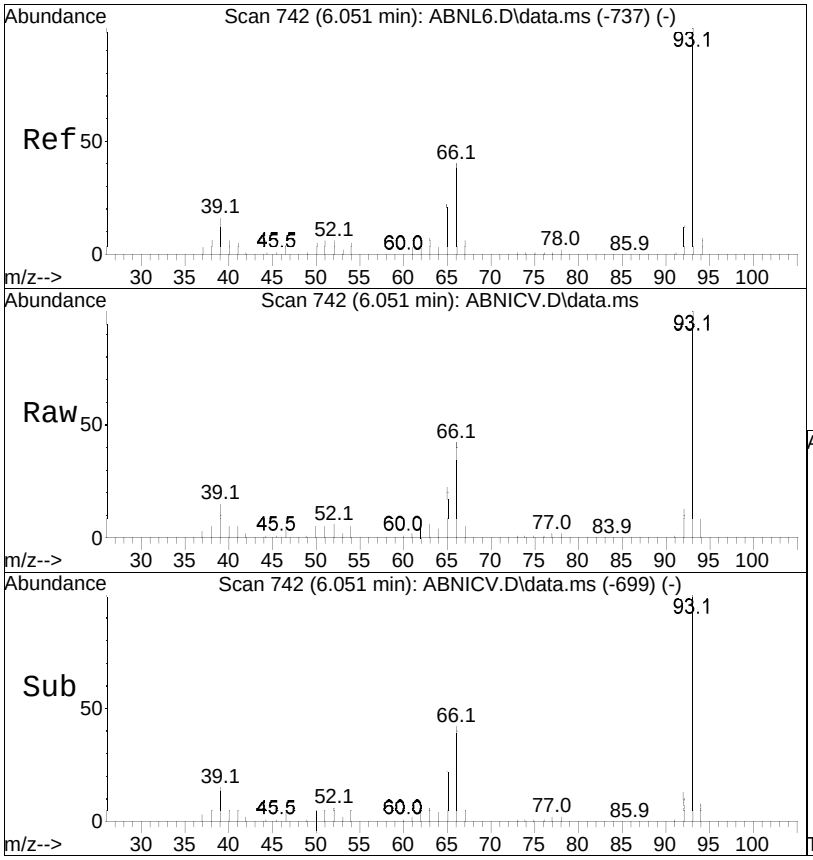



#3
Pyridine
Concen: 4.79 ug/ml
RT: 2.163 min Scan# 81
Delta R.T. -0.024 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 79 Resp: 52962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 79 | 100 | | |
| 52 | 77.8 | 93.1 | 139.7# |

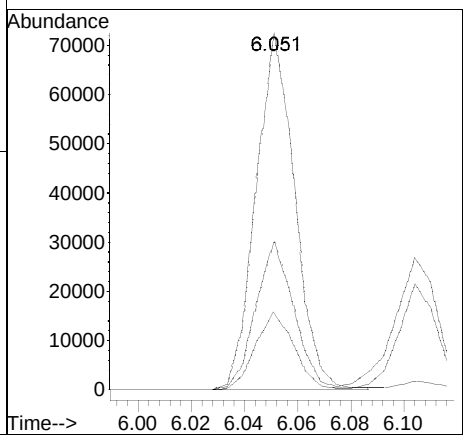


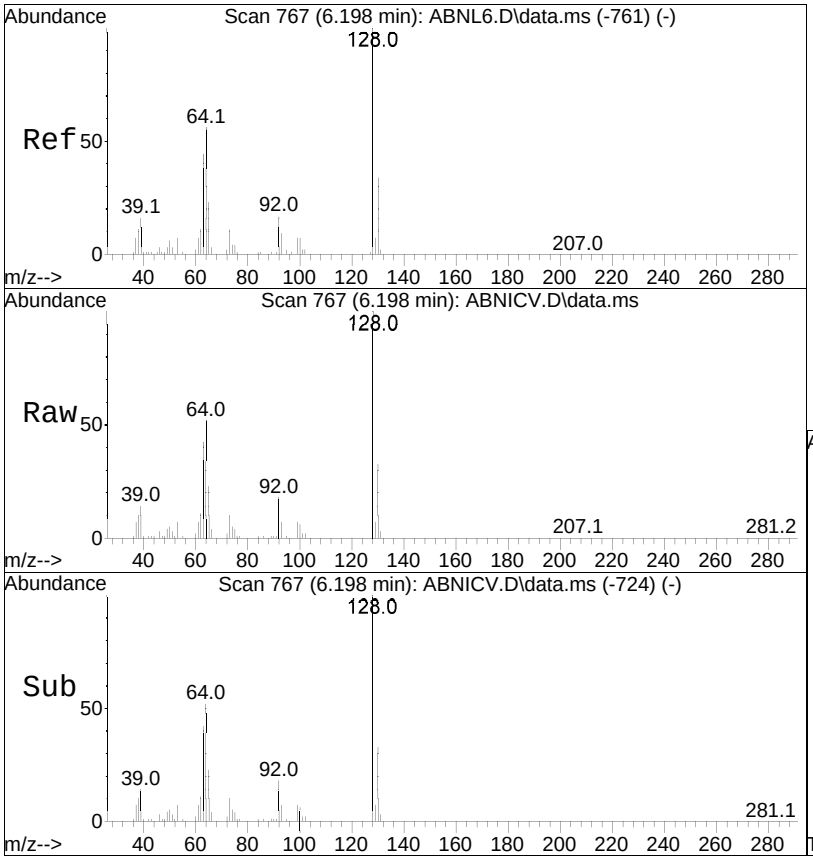



#5
Aniline
Concen: 4.50 ug/ml
RT: 6.051 min Scan# 742
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 93 Resp: 73085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 66 | 41.1 | 32.6 | 49.0 |
| 65 | 21.8 | 17.6 | 26.4 |

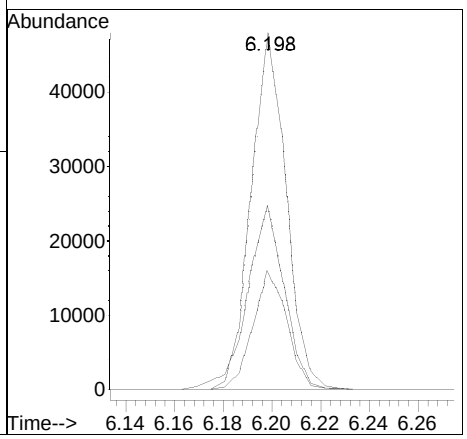


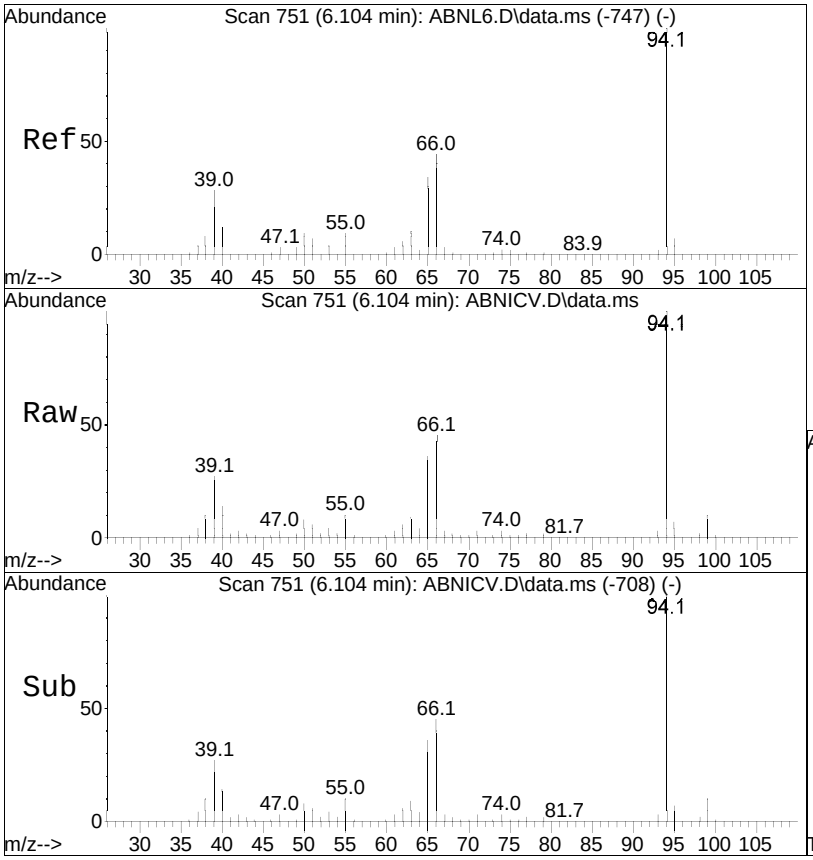



#6
2-Chlorophenol
Concen: 4.65 ug/ml
RT: 6.198 min Scan# 767
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:128 Resp: 47473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 64 | 54.7 | 45.1 | 67.7 |
| 130 | 32.8 | 26.2 | 39.4 |

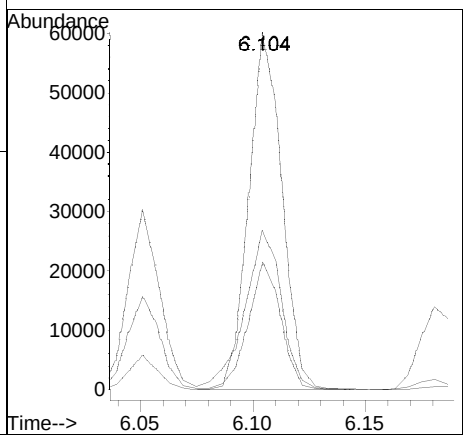


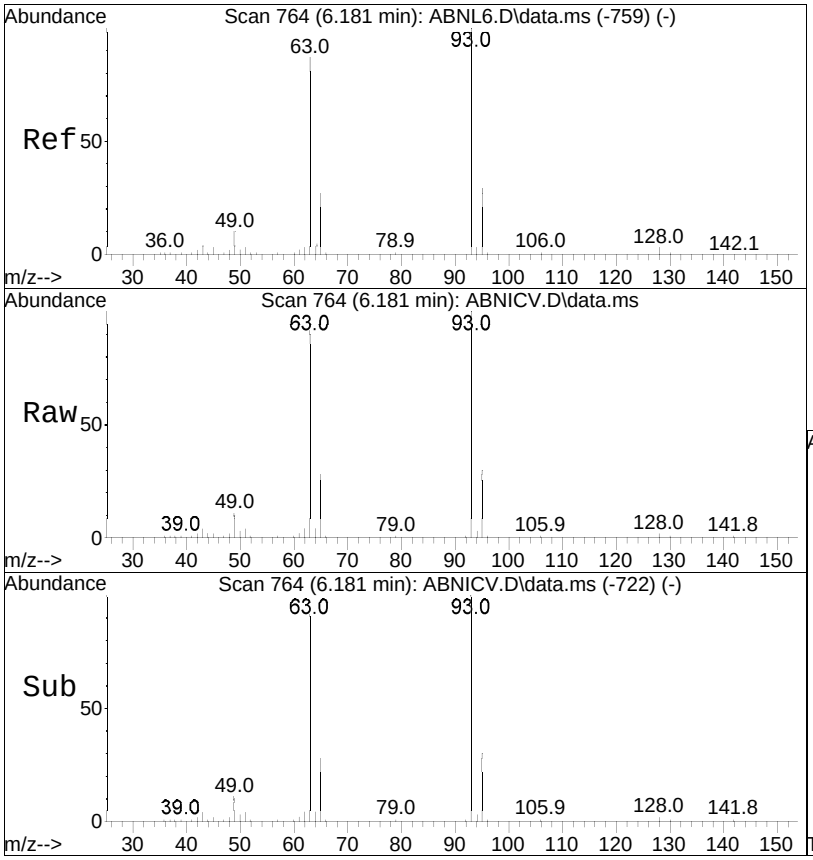



#8
Phenol
Concen: 4.72 ug/ml
RT: 6.104 min Scan# 751
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 94 Resp: 61436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 35.7 | 26.0 | 39.0 |
| 66 | 50.0 | 33.8 | 50.8 |

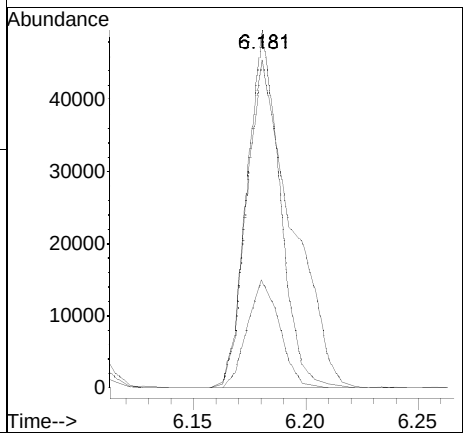


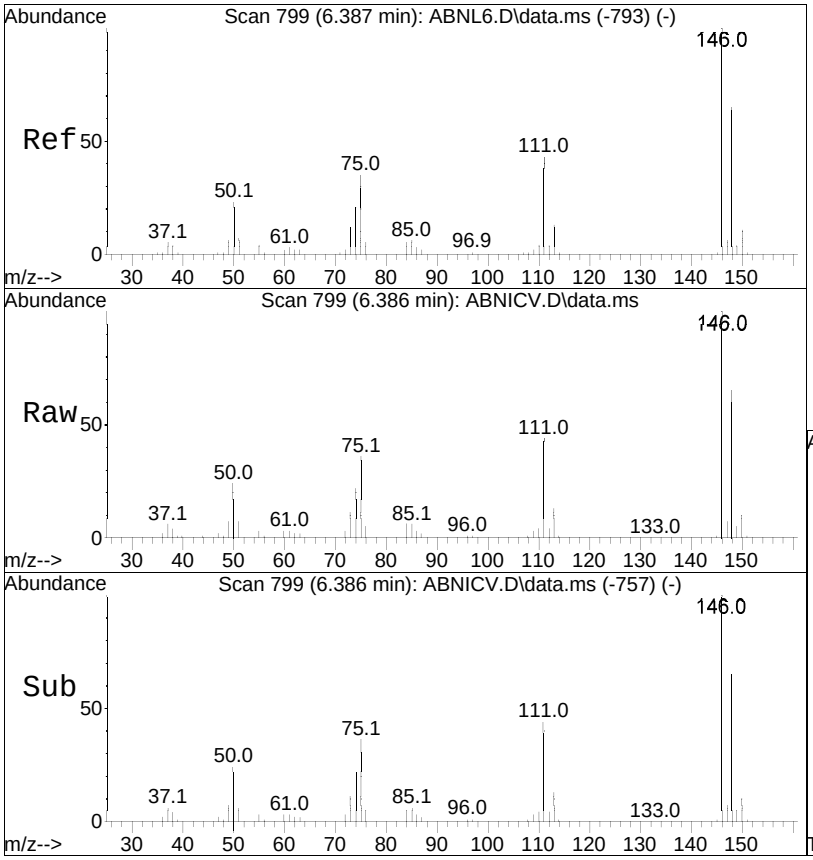



#9
Bis(2-chloroethyl)ether
Concen: 4.69 ug/ml
RT: 6.181 min Scan# 764
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 93 Resp: 50154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 125.7 | 74.6 | 111.8# |
| 95 | 29.8 | 25.9 | 38.9 |

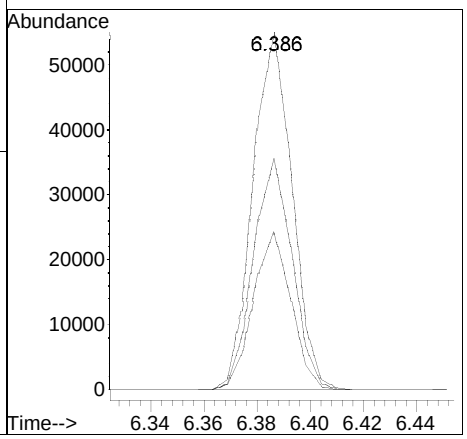


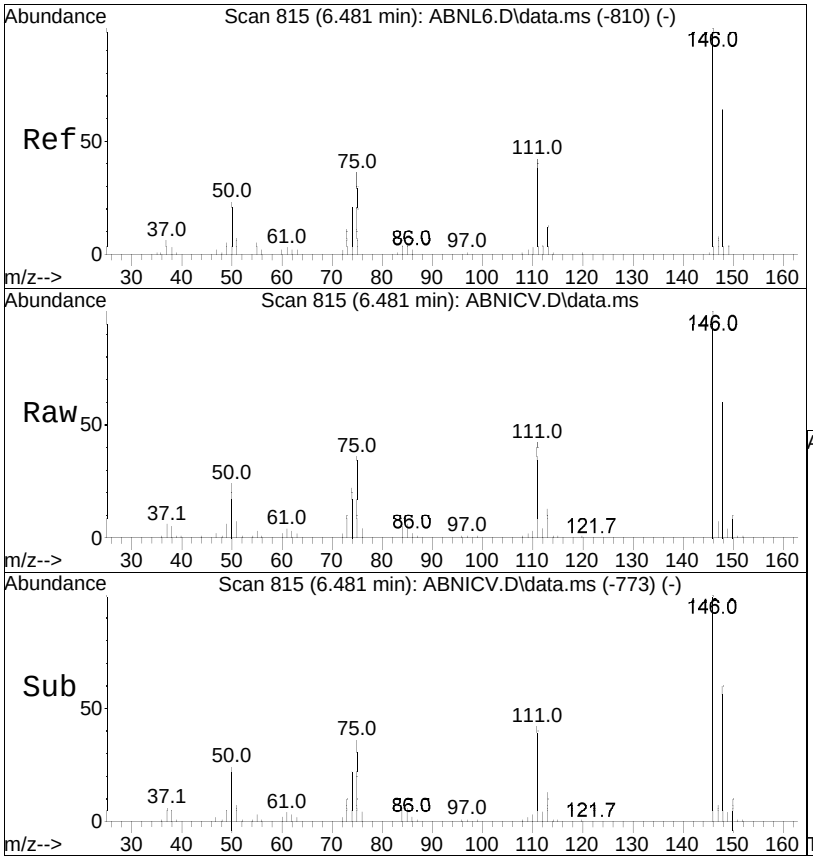



#10
1,3-Dichlorobenzene
Concen: 4.56 ug/ml
RT: 6.386 min Scan# 799
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:146 Resp: 55987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 34.3 | 51.5 |
| 148 | 64.2 | 50.8 | 76.2 |

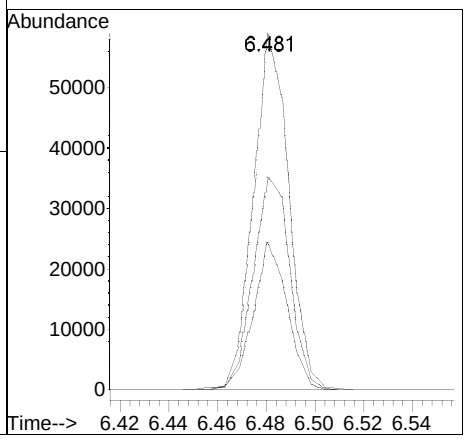


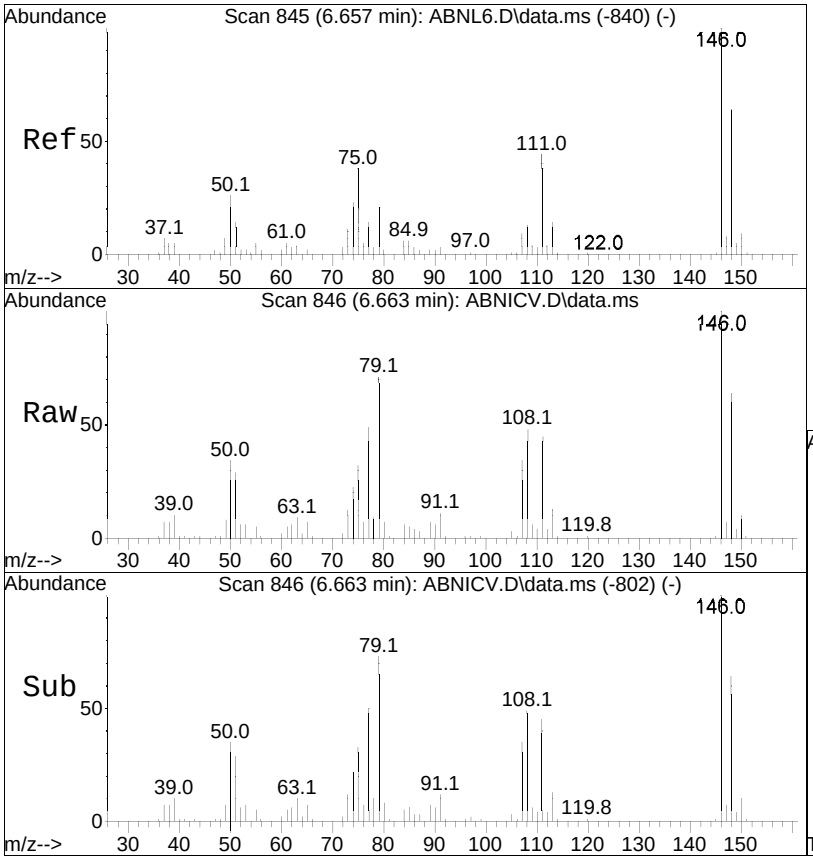



#11
1,4-Dichlorobenzene
Concen: 4.74 ug/ml
RT: 6.481 min Scan# 815
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:146 Resp: 58849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 148 | 62.1 | 50.7 | 76.1 |
| 111 | 40.3 | 33.4 | 50.0 |

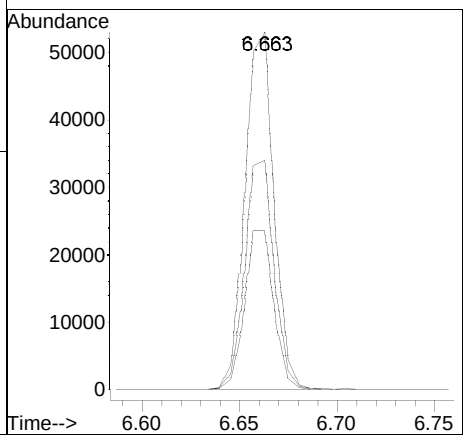


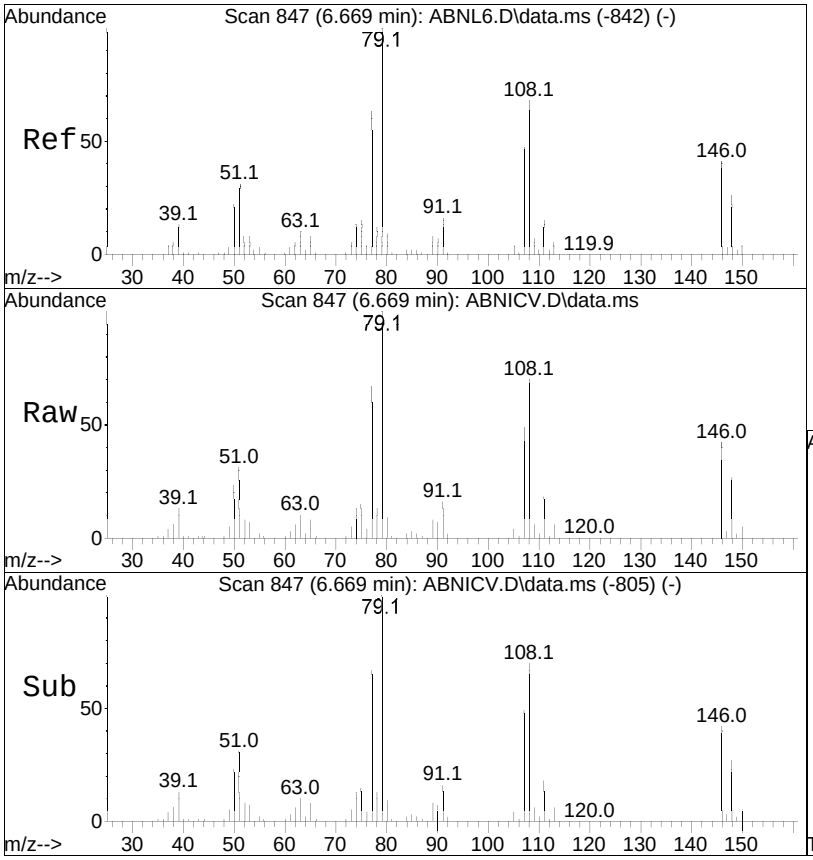



#12
1,2-Dichlorobenzene
Concen: 4.51 ug/ml
RT: 6.663 min Scan# 846
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:146 Resp: 54515

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.8 | 34.6 | 52.0 |
| 148 | 64.5 | 50.2 | 75.4 |

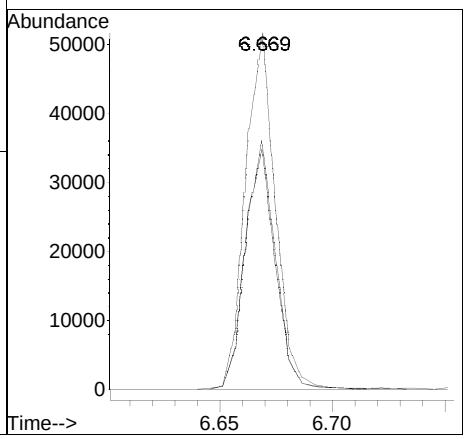


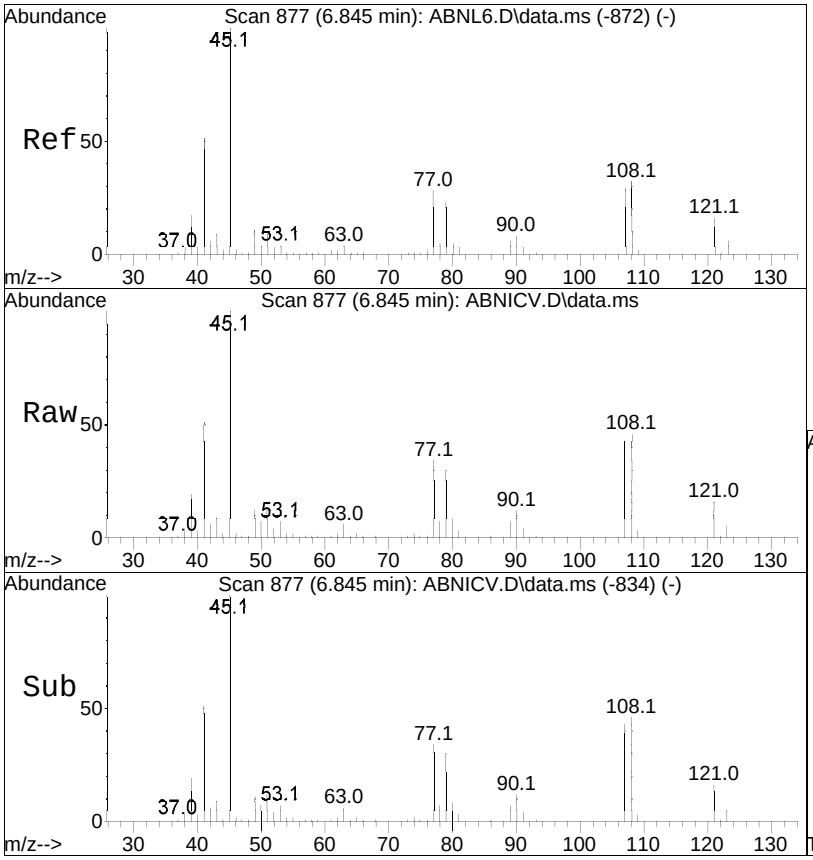



#13
Benzyl alcohol
Concen: 4.72 ug/ml
RT: 6.669 min Scan# 847
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 79 Resp: 47507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 79 | 100 | | |
| 77 | 68.0 | 54.9 | 82.3 |
| 108 | 69.6 | 63.1 | 94.7 |

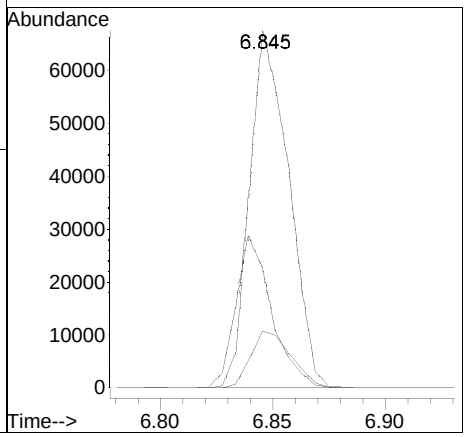


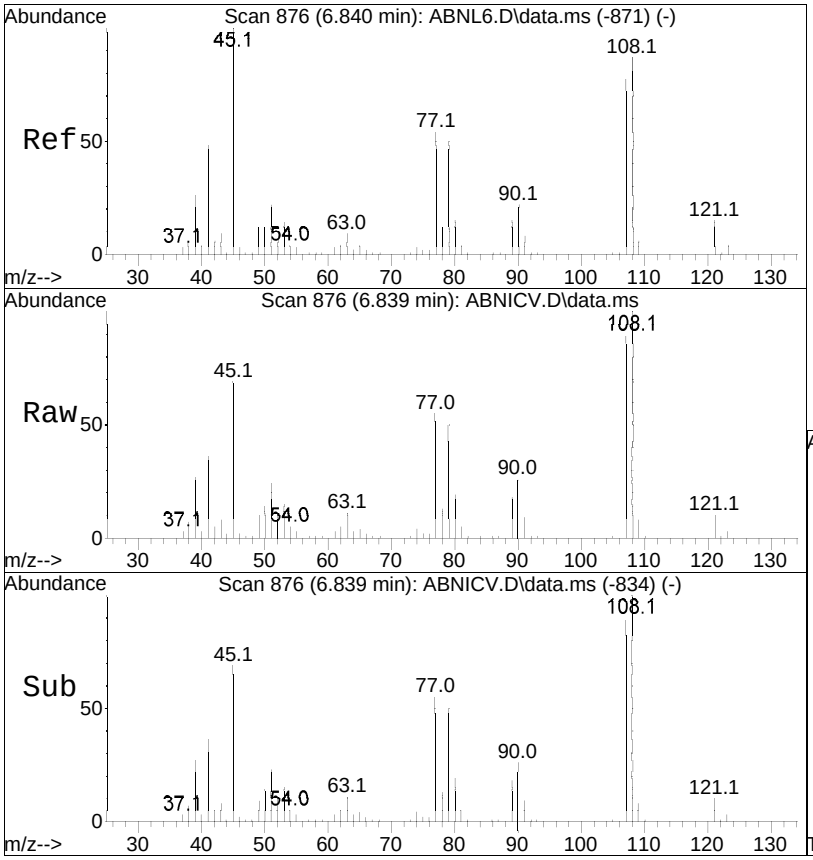



#14
Bis(2-chloroisopropyl)ether
Concen: 4.74 ug/ml
RT: 6.845 min Scan# 877
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 45 Resp: 81450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 121 | 16.2 | 9.8 | 14.6# |
| 77 | 39.0 | 6.1 | 9.1# |

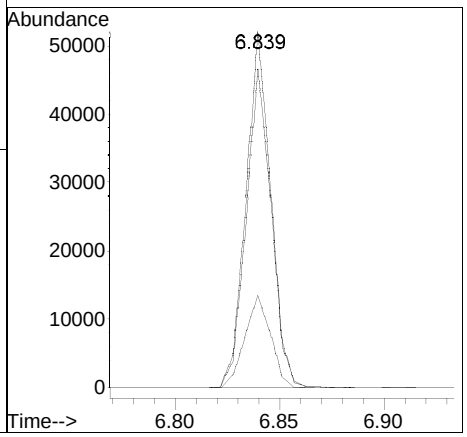


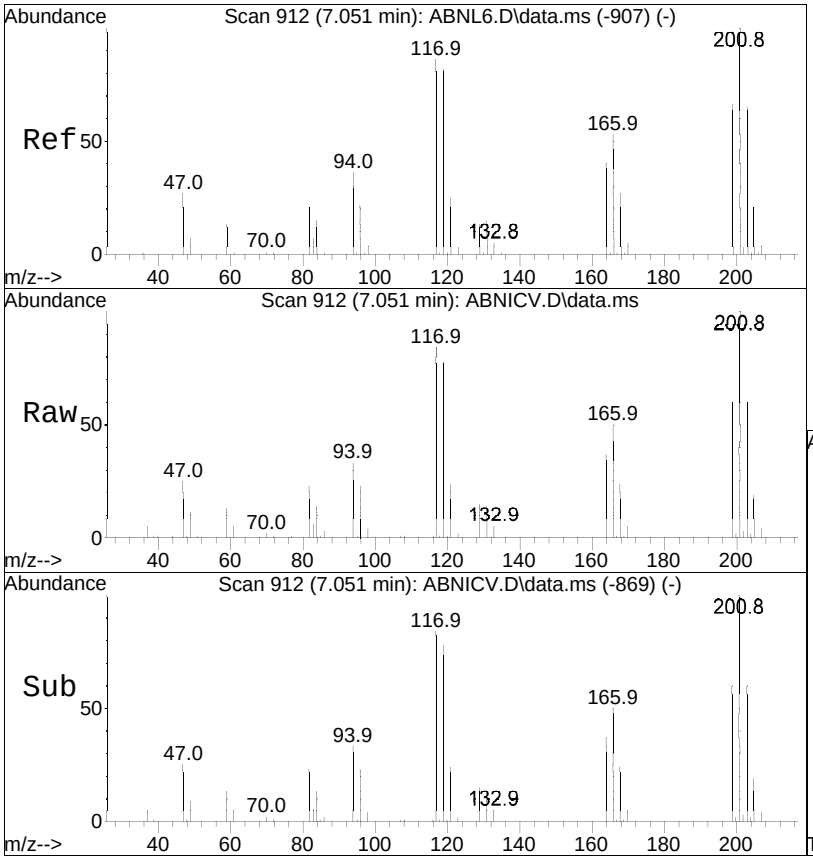



#15
2-Methylphenol
Concen: 4.59 ug/ml
RT: 6.839 min Scan# 876
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:108 Resp: 43064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 90.4 | 70.7 | 106.1 |
| 90 | 26.9 | 18.7 | 28.1 |

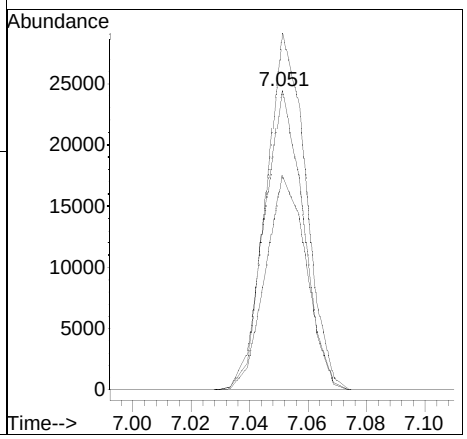


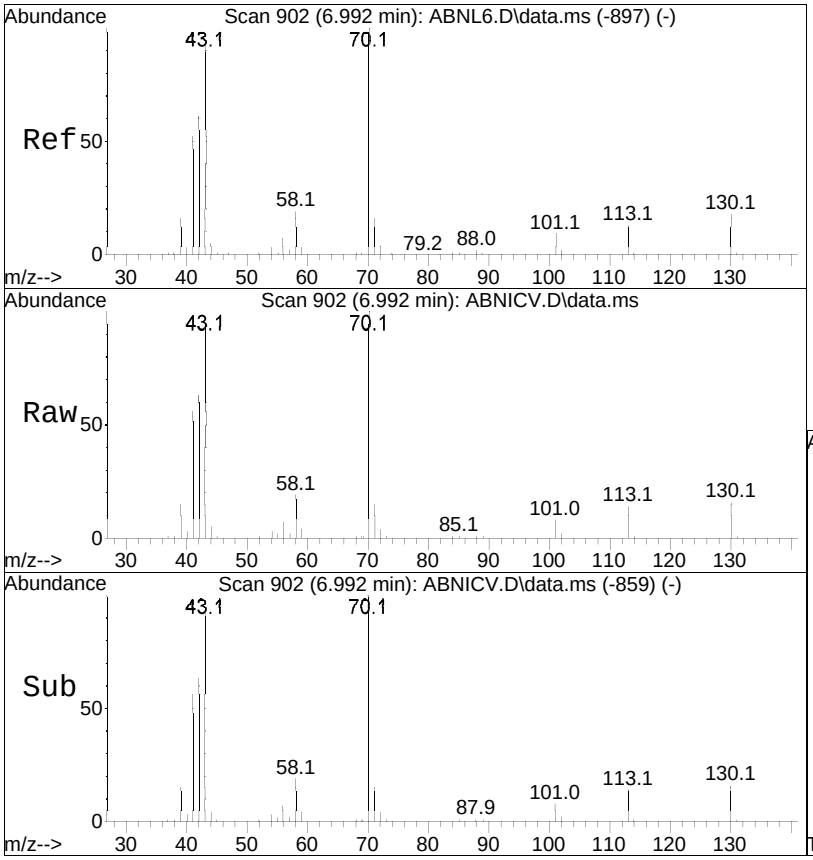



#16
Hexachloroethane
Concen: 4.58 ug/ml
RT: 7.051 min Scan# 912
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:117 Resp: 22610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 121.0 | 58.6 | 87.8# |
| 199 | 75.5 | 36.9 | 55.3# |

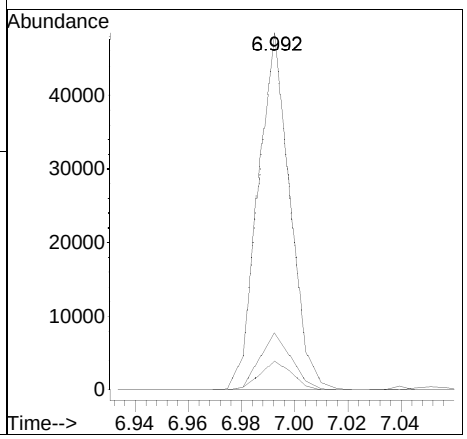


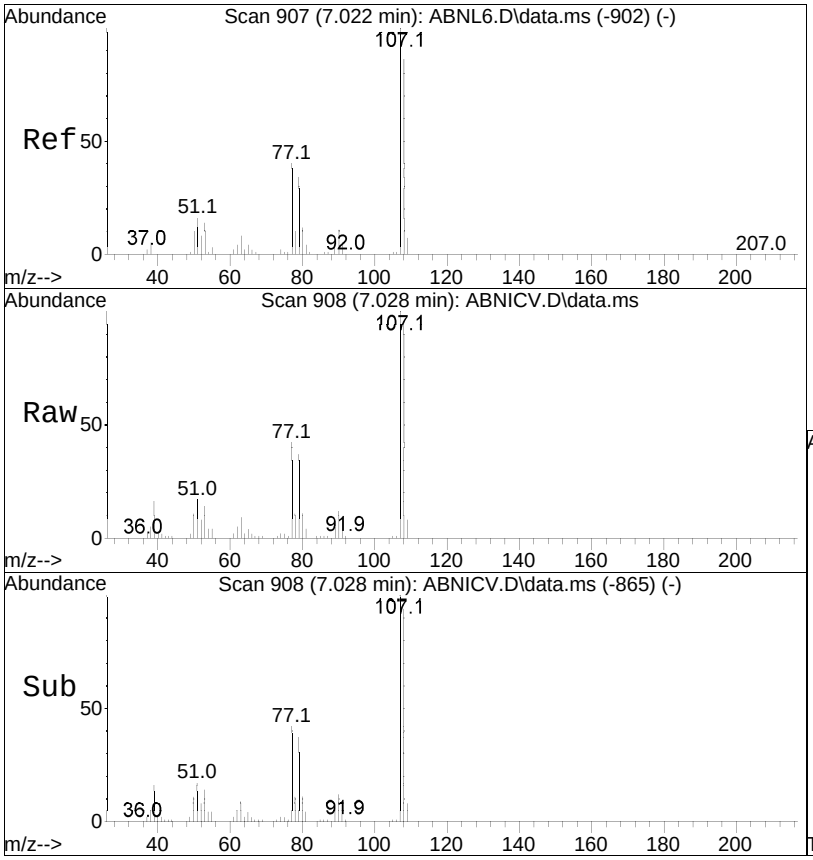



#17
n-Nitrosodi-n-propylamine
Concen: 4.80 ug/ml
RT: 6.992 min Scan# 902
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 70 Resp: 40232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 15.9 | 18.2 | 27.4# |
| 101 | 8.1 | 7.8 | 11.8 |

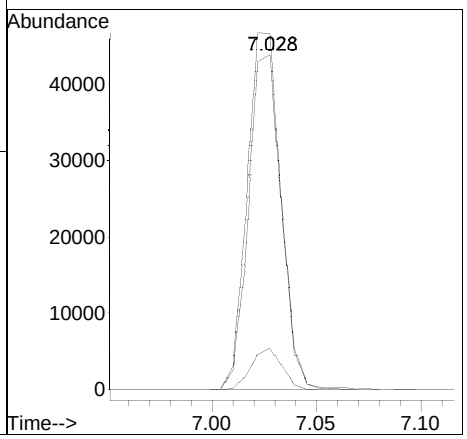


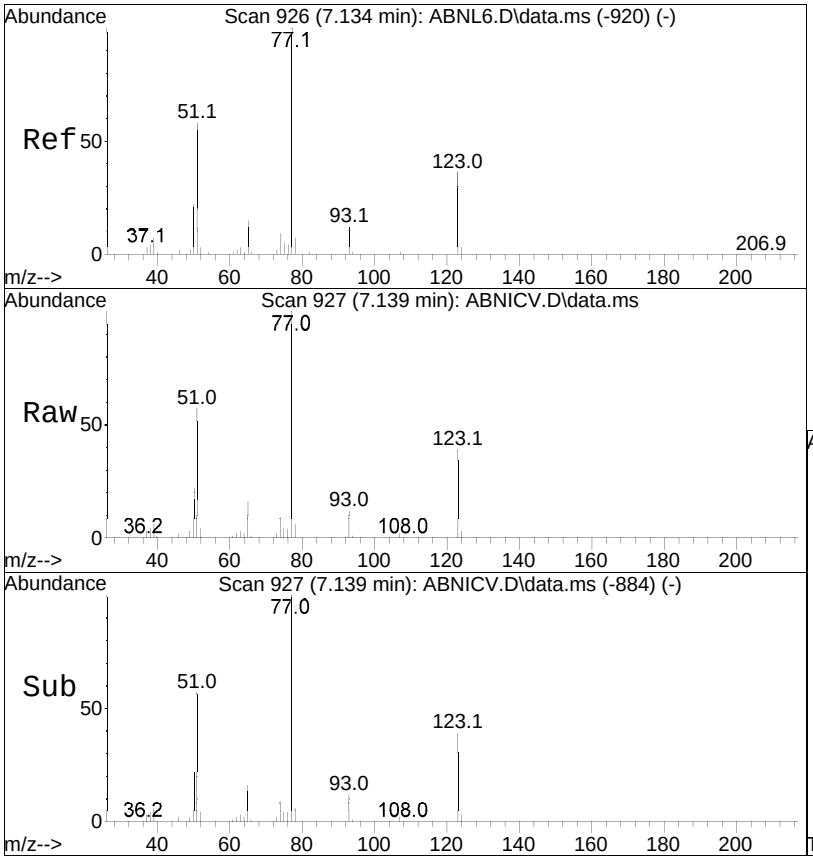



#18
3-Methylphenol/4-Methylphenol
Concen: 4.70 ug/ml
RT: 7.028 min Scan# 908
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:108 Resp: 47704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 110.4 | 88.6 | 132.8 |
| 90 | 11.8 | 8.8 | 13.2 |

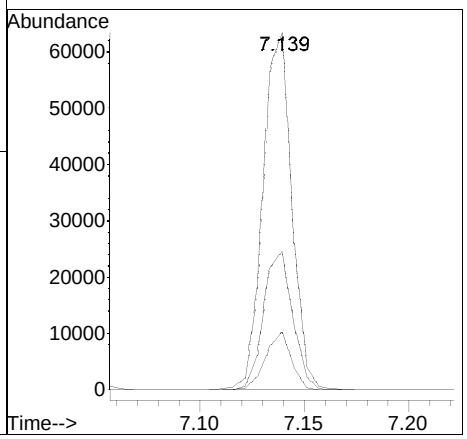


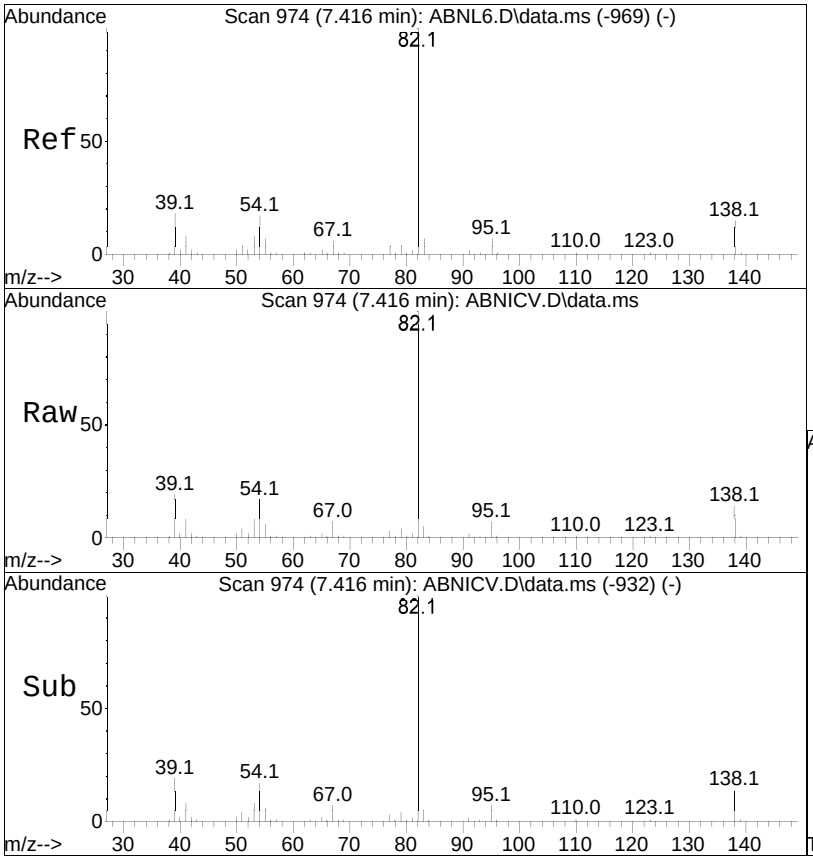



#20
Nitrobenzene
Concen: 4.62 ug/ml
RT: 7.139 min Scan# 927
Delta R.T. 0.005 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 77 Resp: 60250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 39.2 | 36.3 | 54.5 |
| 65 | 14.6 | 11.6 | 17.4 |

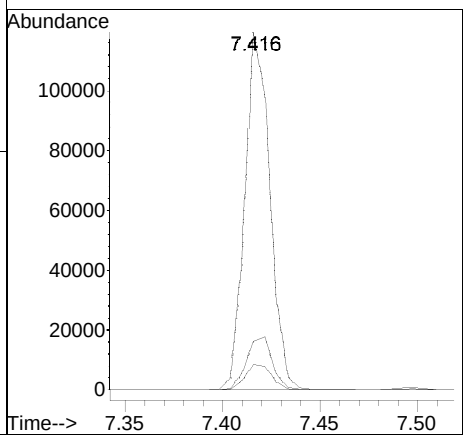


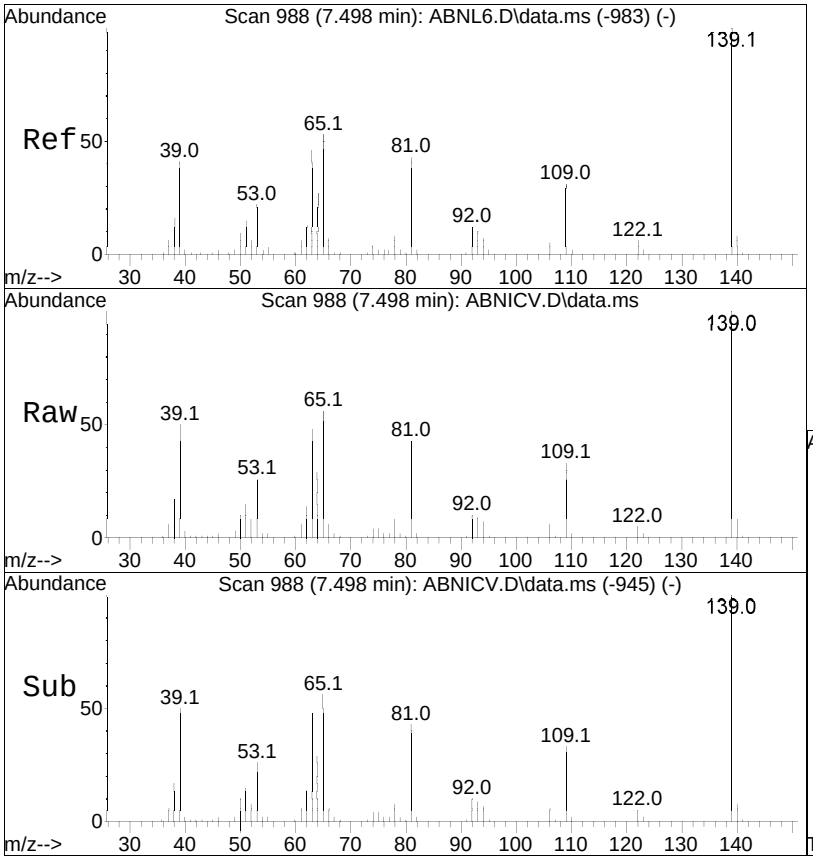



#21
Isophorone
Concen: 4.82 ug/ml
RT: 7.416 min Scan# 974
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 82 Resp: 105479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 15.3 | 14.7 | 22.1 |
| 95 | 7.5 | 5.2 | 7.8 |

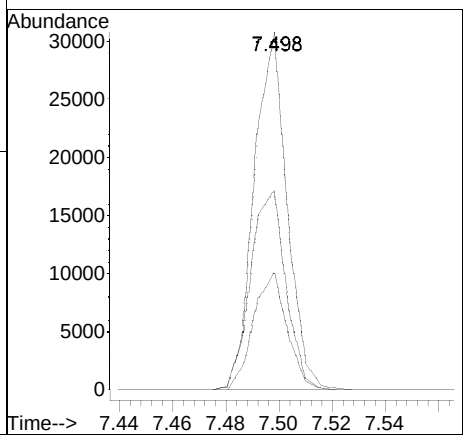


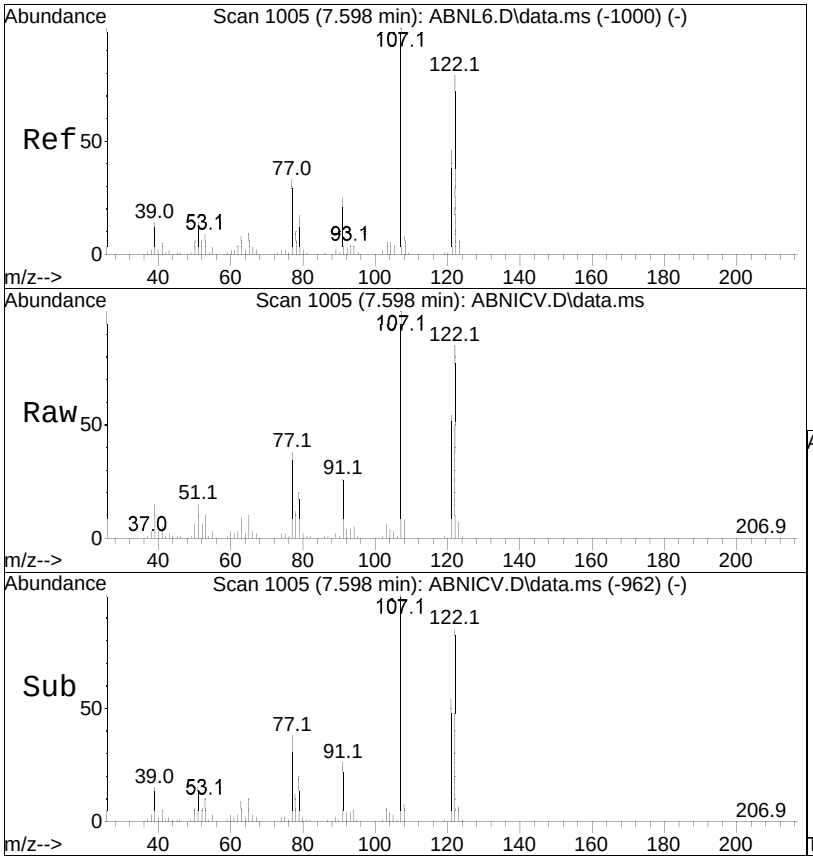



#22
2-Nitrophenol
Concen: 4.78 ug/ml
RT: 7.498 min Scan# 988
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:139 Resp: 26262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 33.8 | 19.4 | 29.0# |
| 65 | 60.1 | 46.1 | 69.1 |

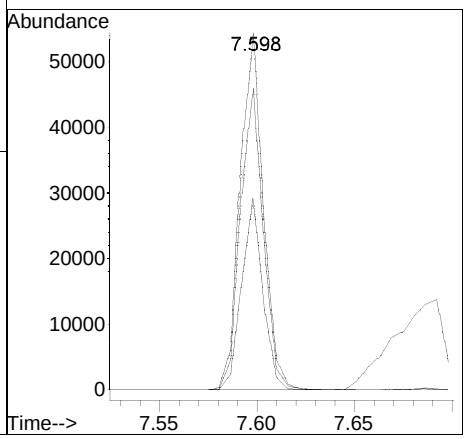


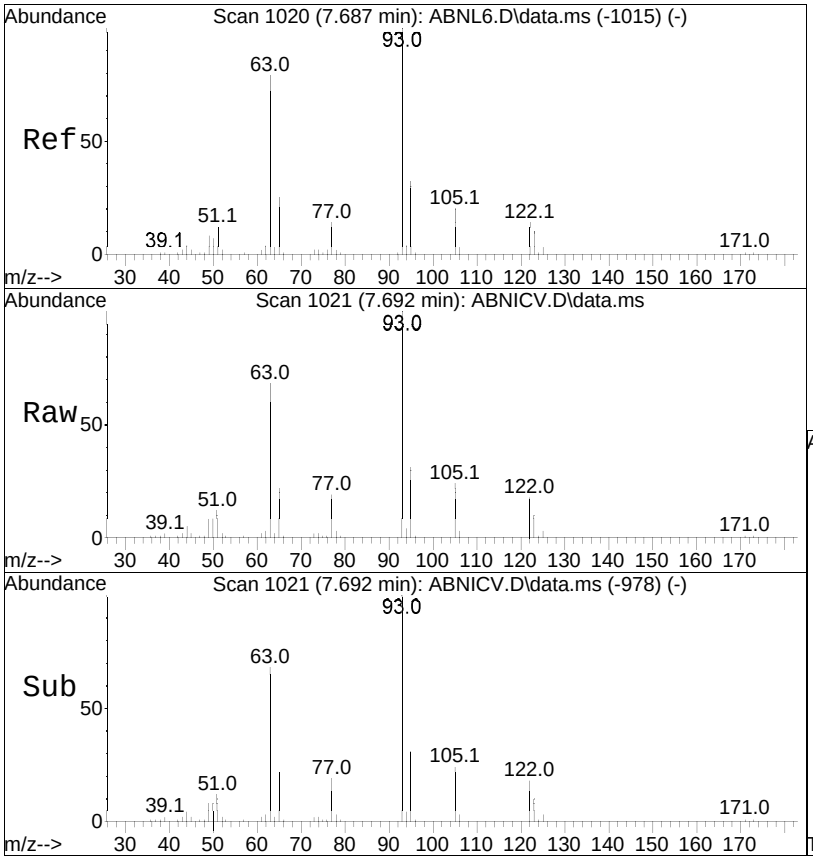



#23
2,4-Dimethylphenol
Concen: 4.33 ug/ml
RT: 7.598 min Scan# 1005
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:107 Resp: 44685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 49.3 | 40.0 | 60.0 |
| 122 | 83.2 | 70.2 | 105.4 |

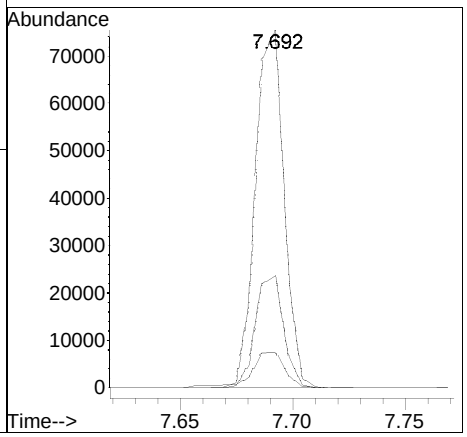


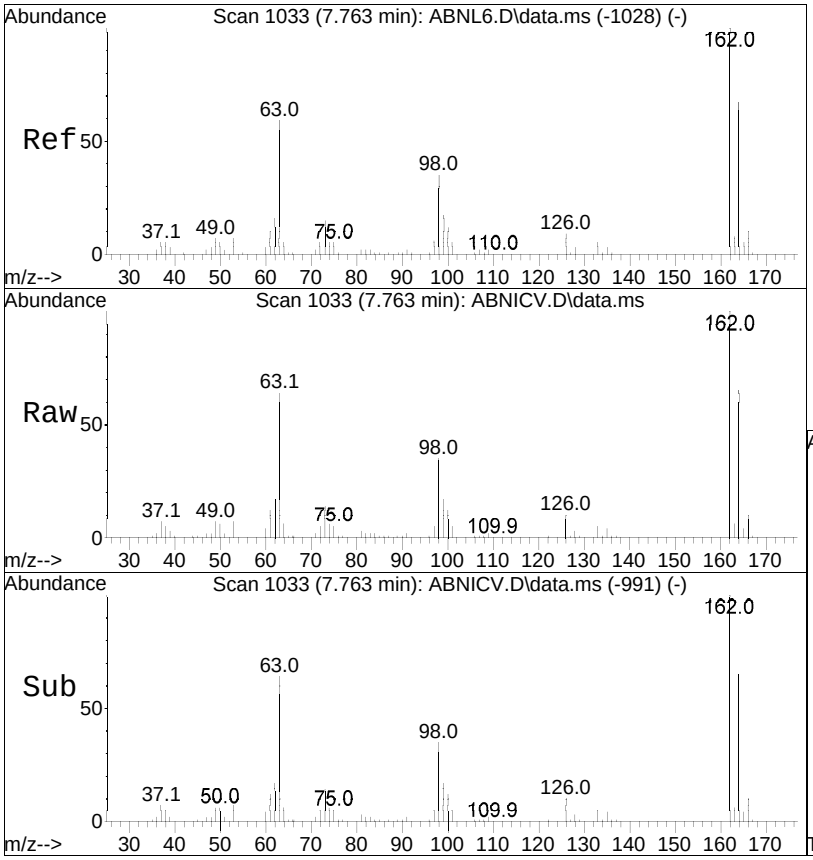



#24
Bis(2-chloroethoxy)methane
Concen: 4.70 ug/ml
RT: 7.692 min Scan# 1021
Delta R.T. 0.005 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 93 Resp: 66268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 31.0 | 25.8 | 38.8 |
| 123 | 12.0 | 10.1 | 15.1 |

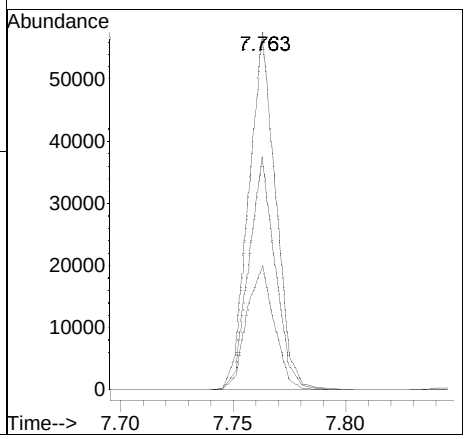


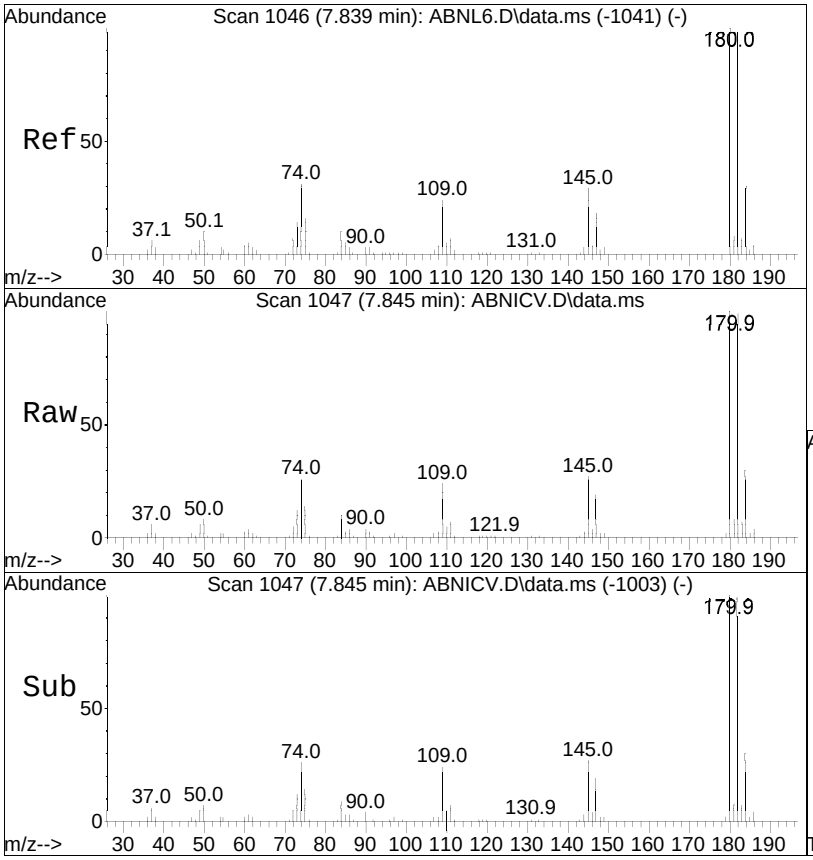



#25
2,4-Dichlorophenol
Concen: 4.86 ug/ml
RT: 7.763 min Scan# 1033
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:162 Resp: 47496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 63.6 | 51.0 | 76.4 |
| 98 | 35.5 | 32.2 | 48.2 |

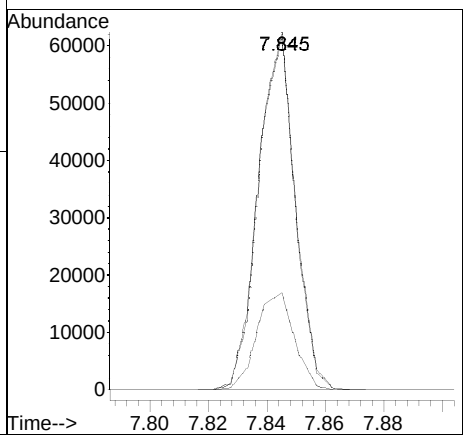


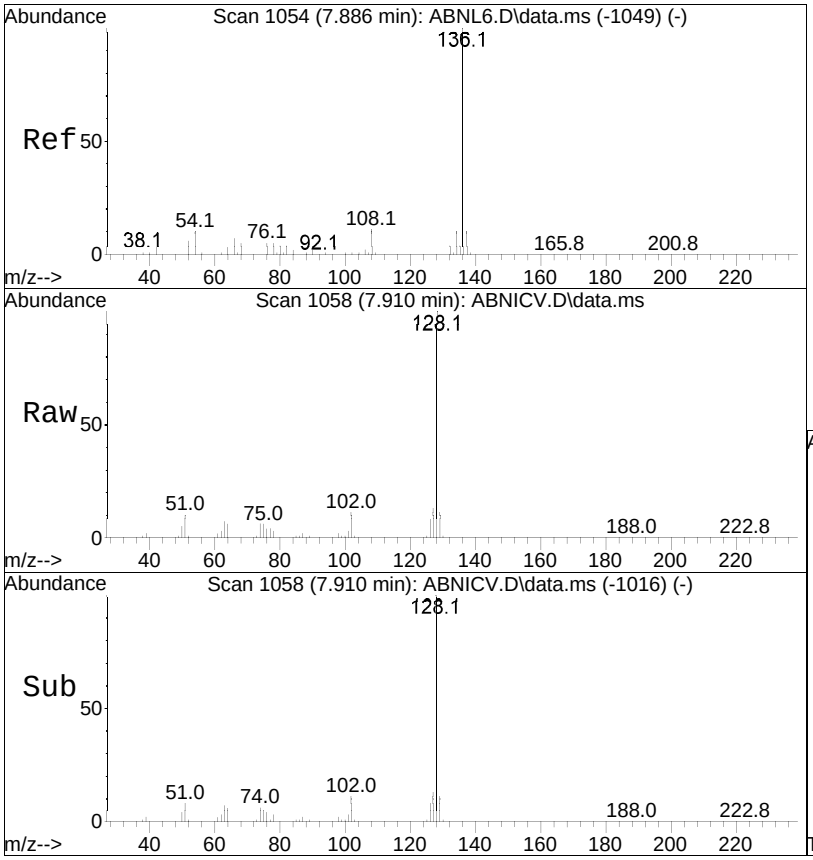



#26
1,2,4-Trichlorobenzene
Concen: 4.52 ug/ml
RT: 7.845 min Scan# 1047
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:180 Resp: 54145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.5 | 76.0 | 114.0 |
| 145 | 28.0 | 25.7 | 38.5 |

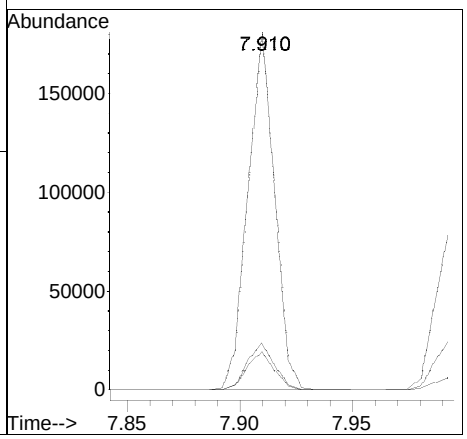


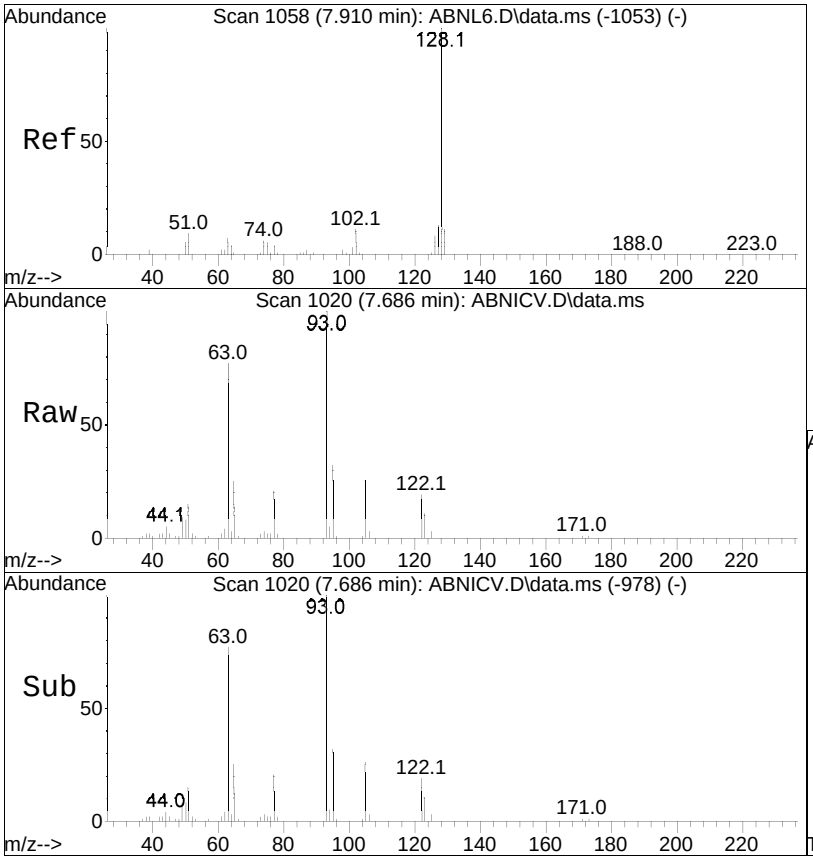



#36
Naphthalene
Concen: 4.43 ug/ml
RT: 7.910 min Scan# 1058
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:128 Resp: 148264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.9 | 8.7 | 13.1 |
| 127 | 13.4 | 10.3 | 15.5 |

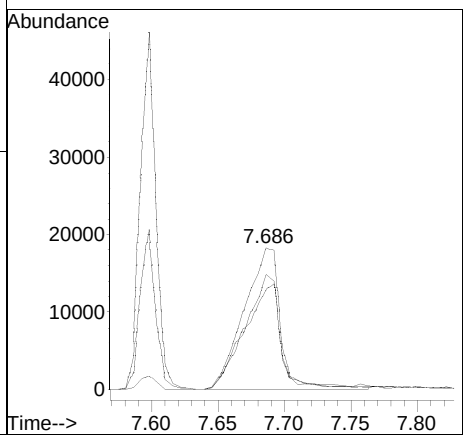


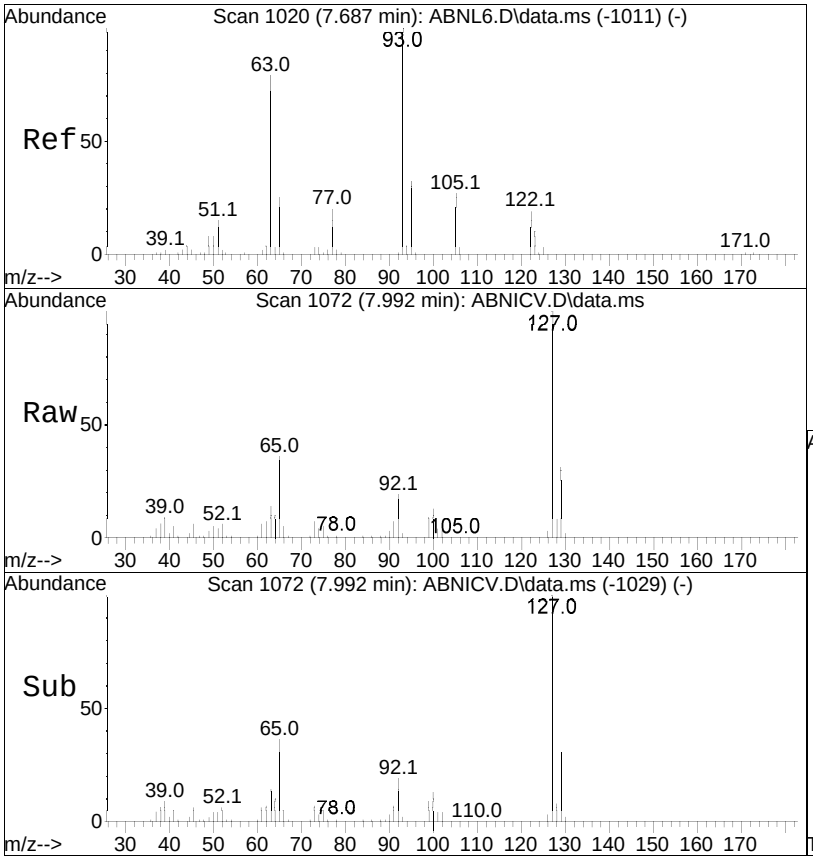



#37
Benzoic Acid
Concen: 4.41 ug/ml
RT: 7.686 min Scan# 1020
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:105 Resp: 35144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 122 | 74.1 | 59.9 | 89.9 |
| 77 | 78.4 | 60.1 | 90.1 |

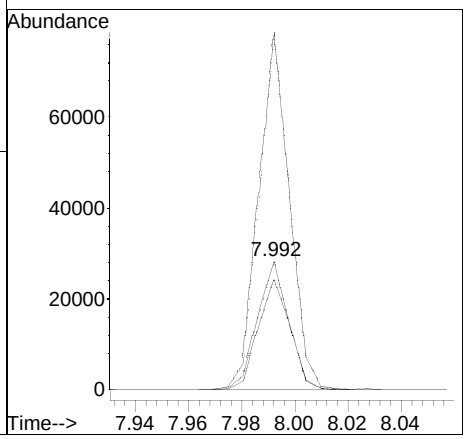


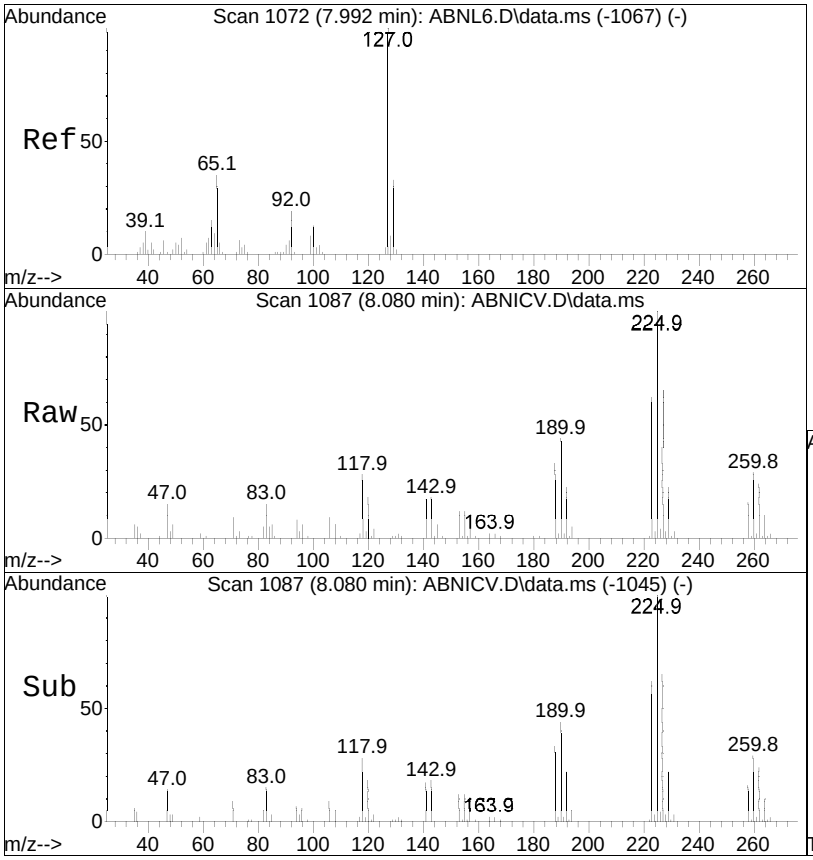



#38
4-Chloroaniline
Concen: 4.65 ug/ml
RT: 7.992 min Scan# 1072
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 65 Resp: 22958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 272.3 | 237.6 | 356.4 |
| 129 | 87.3 | 76.3 | 114.5 |

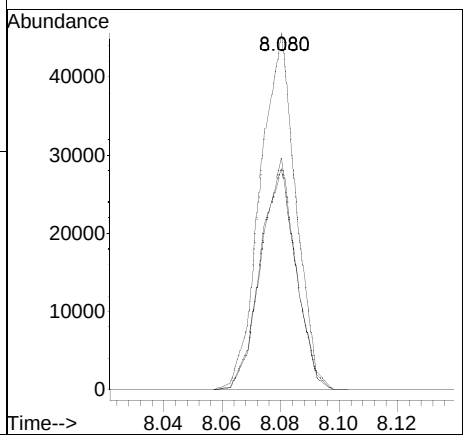


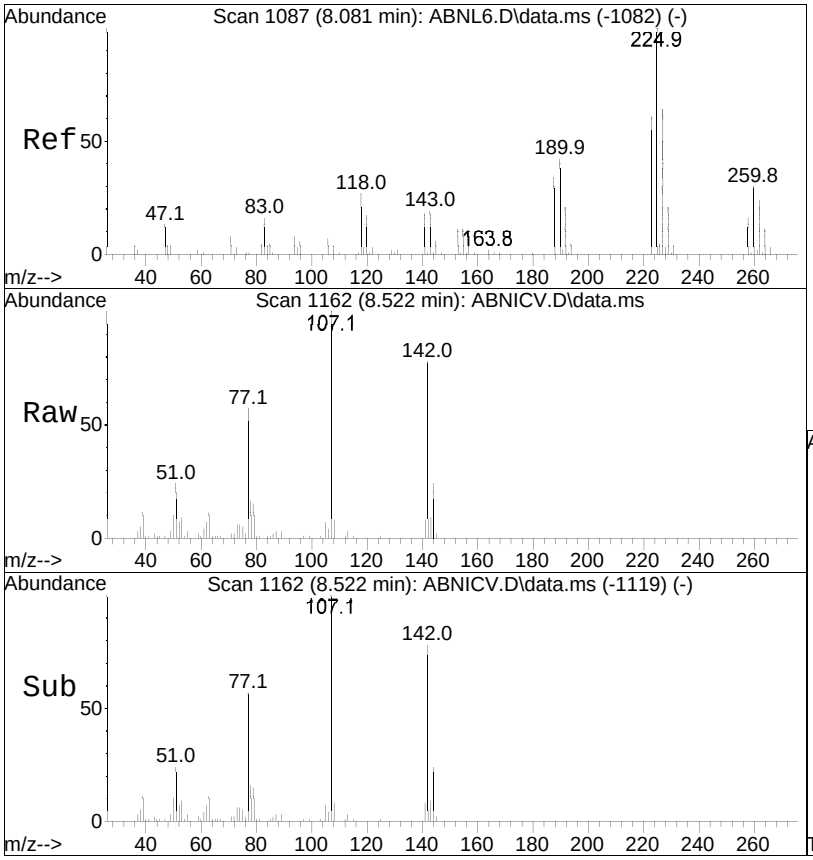



#39
Hexachlorobutadiene
Concen: 4.35 ug/ml
RT: 8.080 min Scan# 1087
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:225 Resp: 38426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.8 | 50.3 | 75.5 |
| 227 | 63.2 | 52.2 | 78.2 |

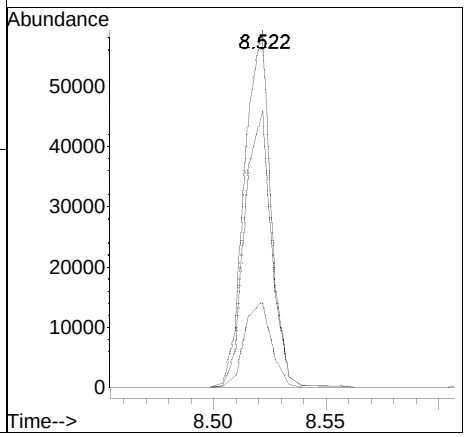


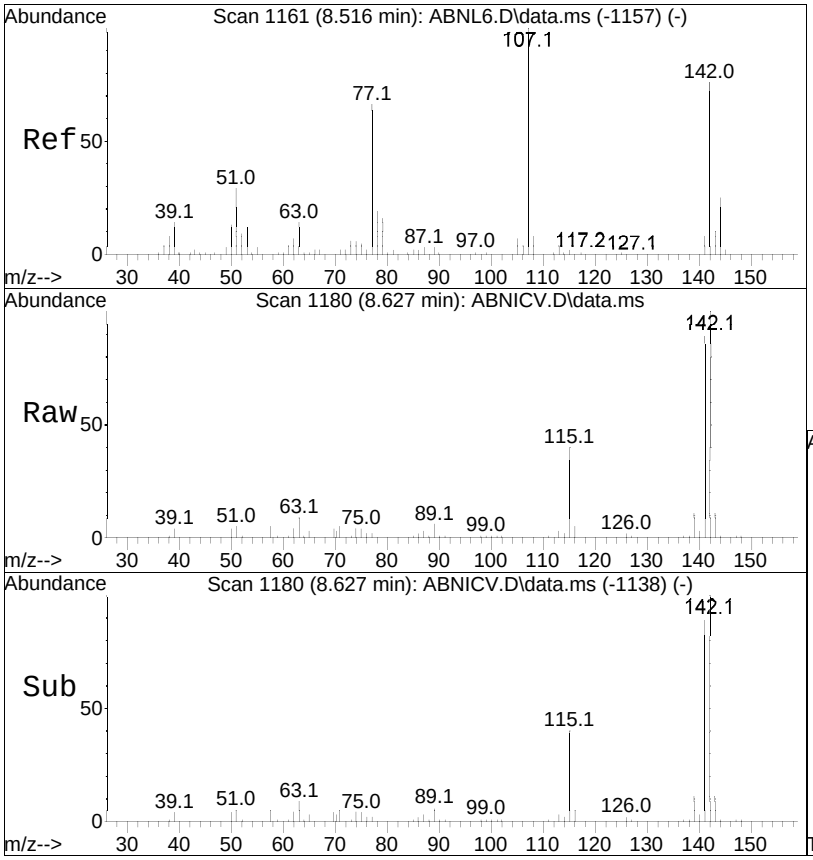



#40
p-Chloro-m-cresol
Concen: 4.77 ug/ml
RT: 8.522 min Scan# 1162
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:107 Resp: 47677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 144 | 24.7 | 20.9 | 31.3 |
| 142 | 78.9 | 66.1 | 99.1 |

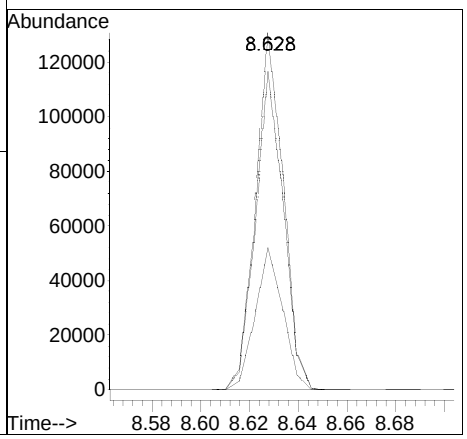


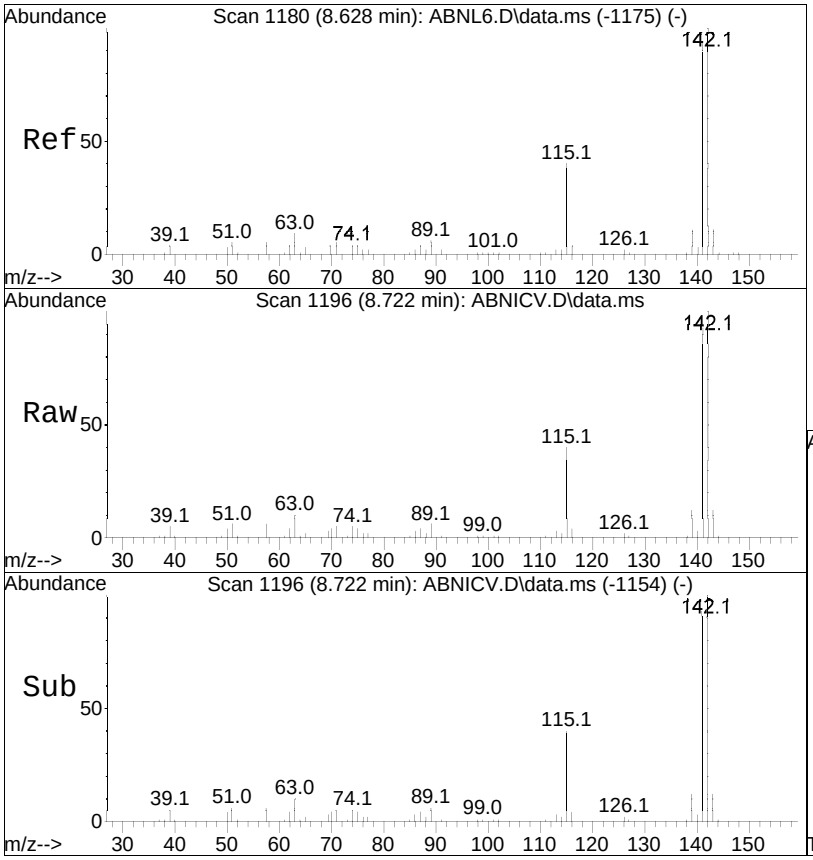



#41
2-Methylnaphthalene
Concen: 4.62 ug/ml
RT: 8.627 min Scan# 1180
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:142 Resp: 102902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.9 | 69.6 | 104.4 |
| 115 | 39.9 | 26.6 | 40.0 |

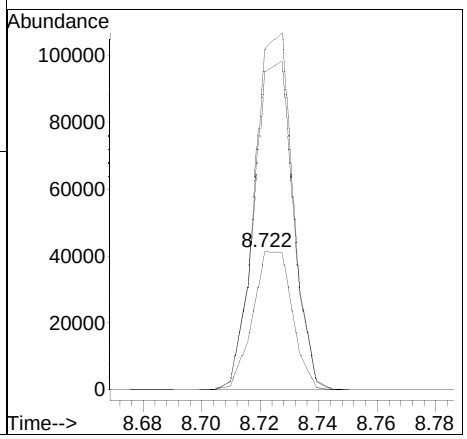


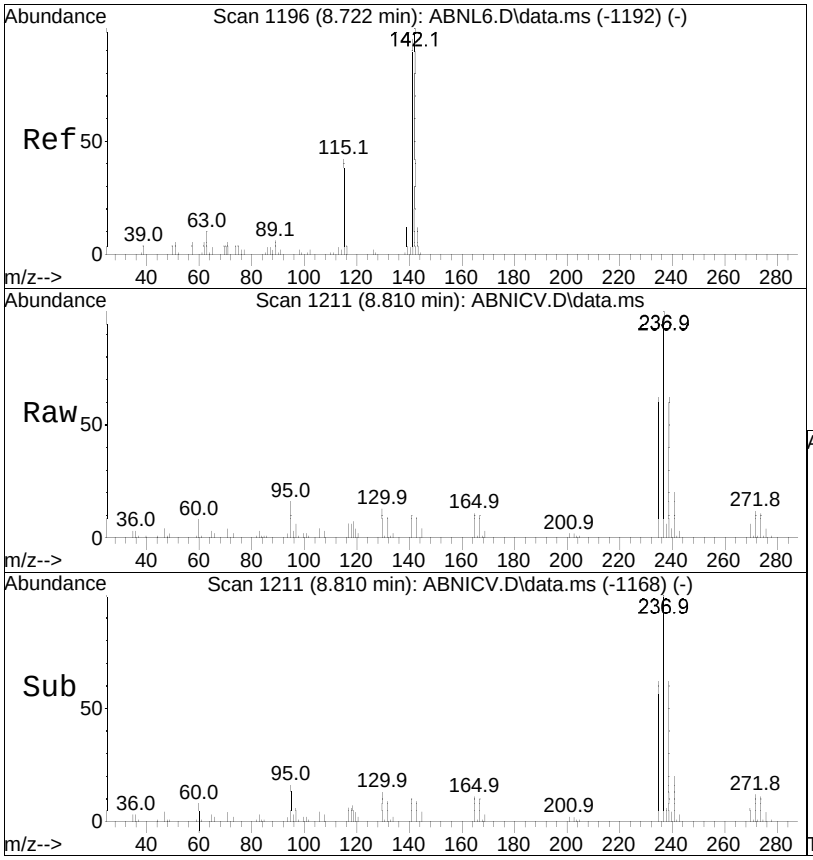



#42
1-Methylnaphthalene
Concen: 4.61 ug/ml
RT: 8.722 min Scan# 1196
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:115 Resp: 38995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 115 | 100 | | |
| 141 | 233.9 | 207.8 | 311.6 |
| 142 | 250.3 | 226.8 | 340.2 |

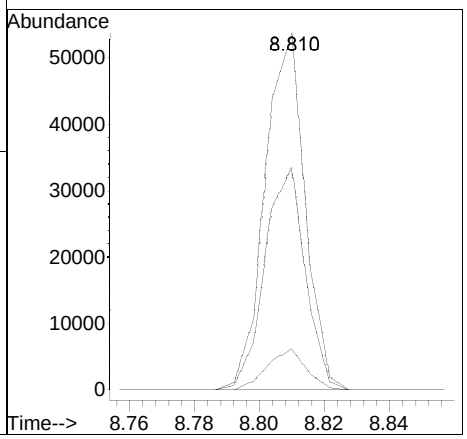


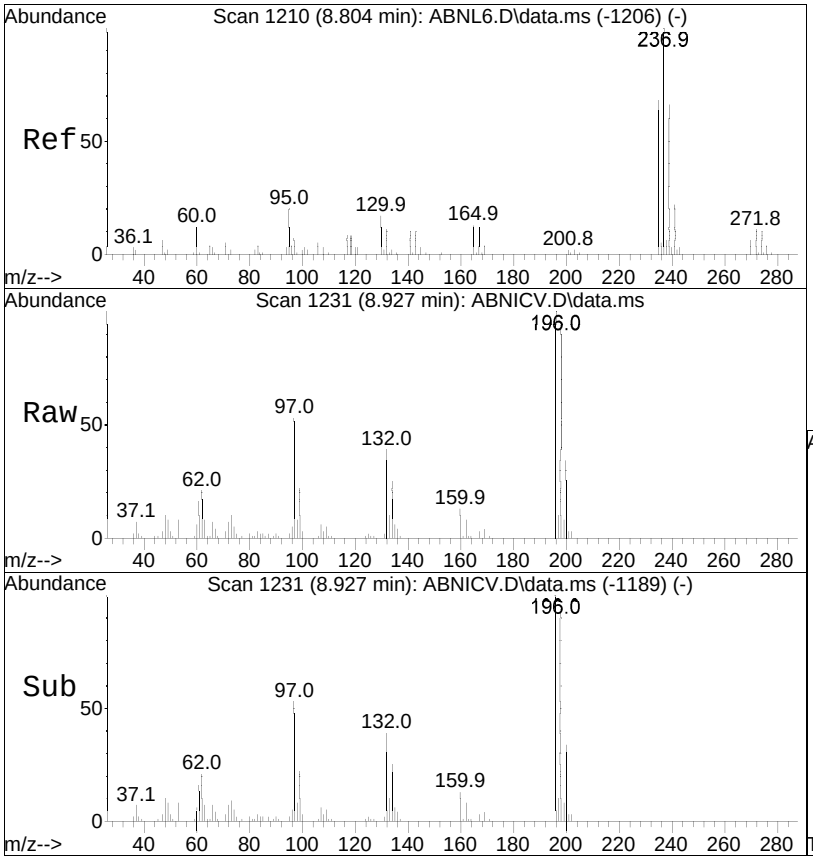



#43
Hexachlorocyclopentadiene
Concen: 4.66 ug/ml
RT: 8.810 min Scan# 1211
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:237 Resp: 45649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 235 | 63.1 | 49.7 | 74.5 |
| 272 | 11.3 | 9.8 | 14.6 |

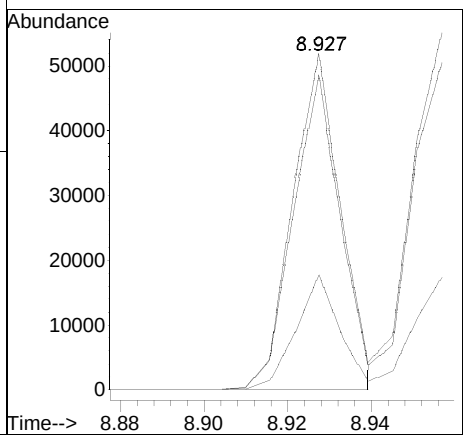


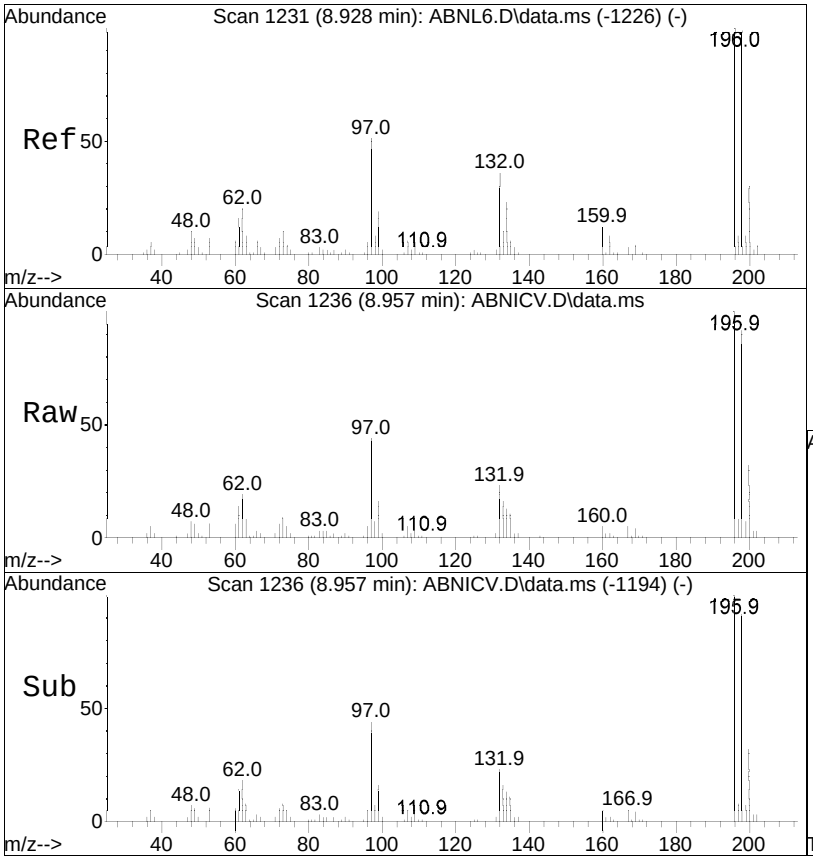



#44
2,4,6-Trichlorophenol
Concen: 4.73 ug/ml
RT: 8.927 min Scan# 1231
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:196 Resp: 41492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 92.6 | 77.5 | 116.3 |
| 200 | 31.3 | 23.8 | 35.6 |

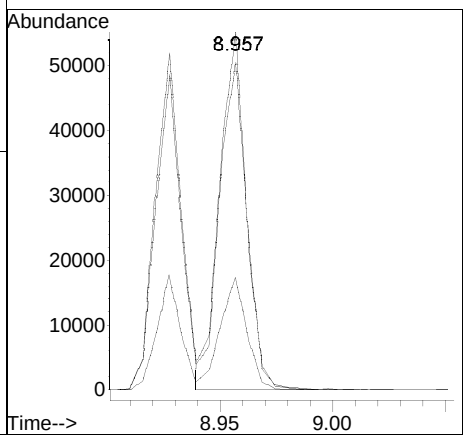


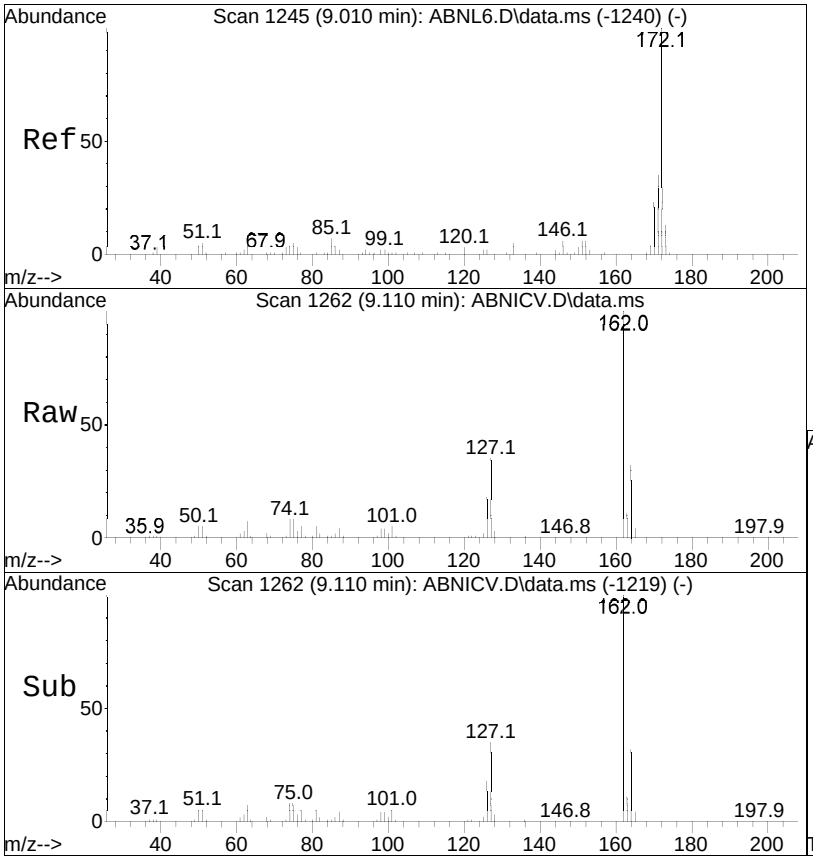



#45
2,4,5-Trichlorophenol
Concen: 4.82 ug/ml
RT: 8.957 min Scan# 1236
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:196 Resp: 45219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 31.7 | 25.4 | 38.0 |
| 198 | 95.0 | 78.0 | 117.0 |

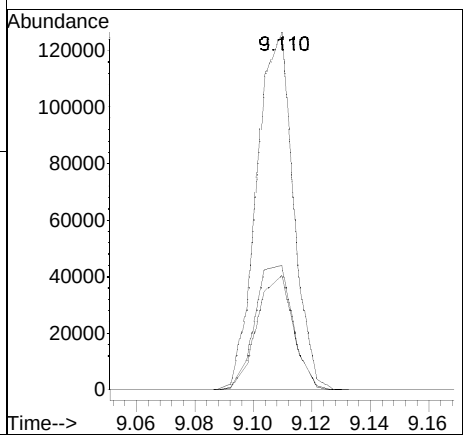


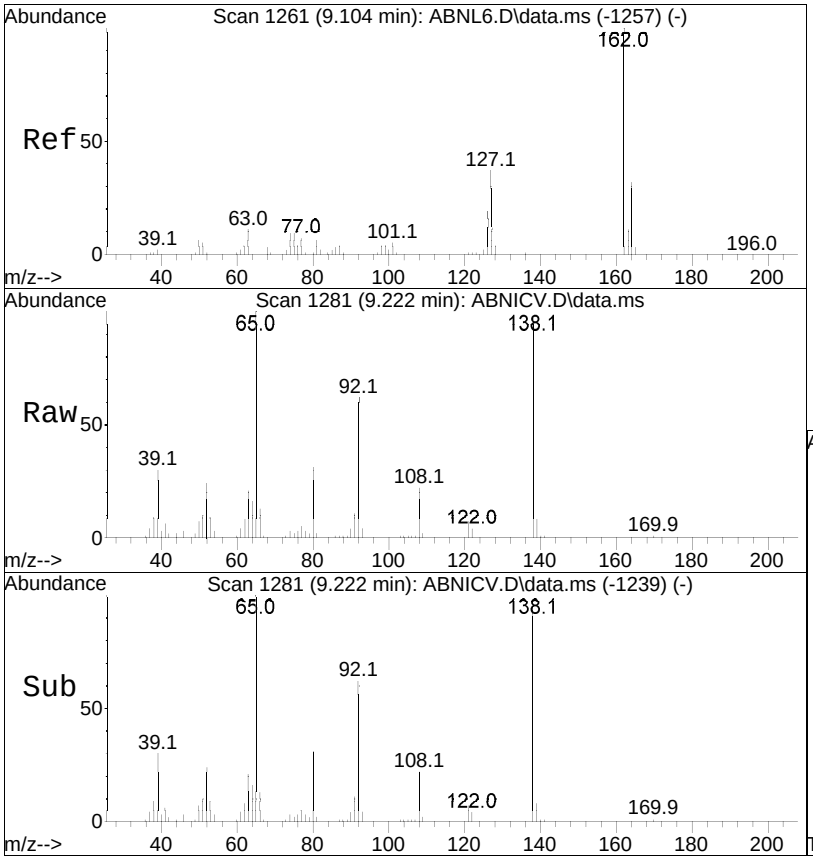



#47
2-Chloronaphthalene
Concen: 4.61 ug/ml
RT: 9.110 min Scan# 1262
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:162 Resp: 109202

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 36.4 | 32.2 | 48.4 |
| 164 | 32.2 | 25.7 | 38.5 |

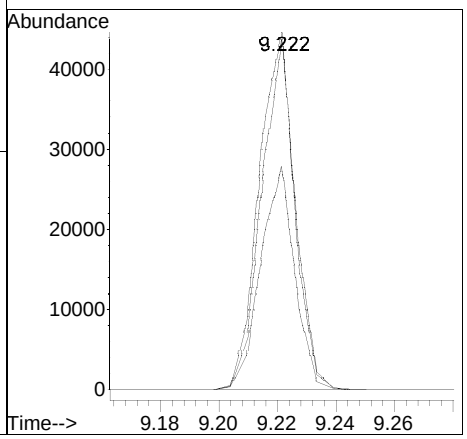


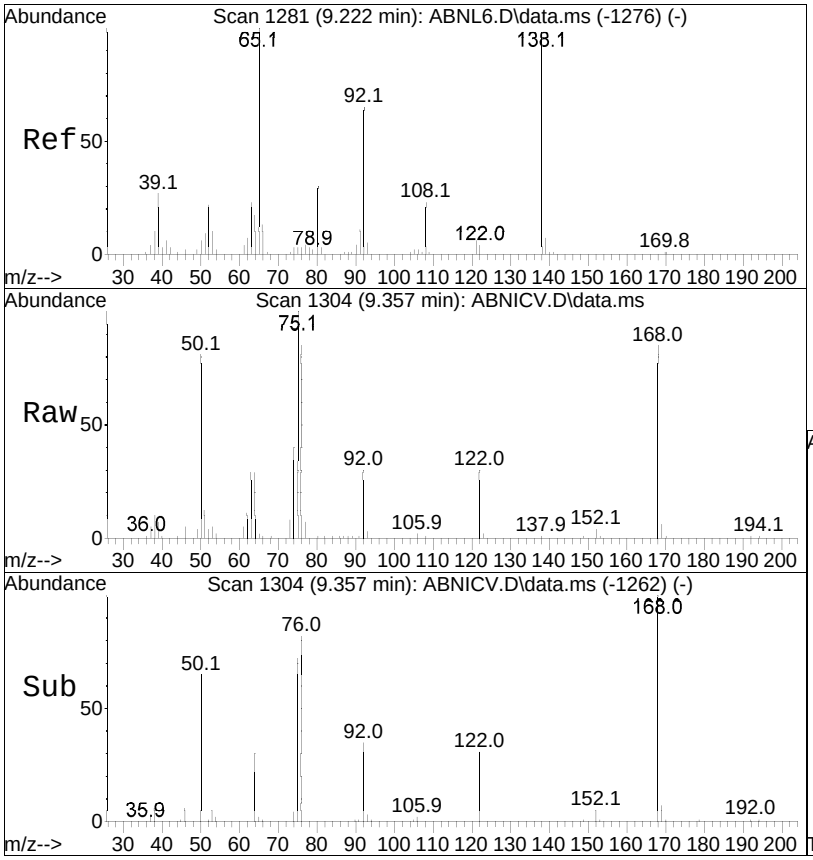



#48
2-Nitroaniline
Concen: 4.88 ug/ml
RT: 9.222 min Scan# 1281
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:138 Resp: 34832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 64.4 | 53.5 | 80.3 |
| 65 | 106.6 | 86.3 | 129.5 |

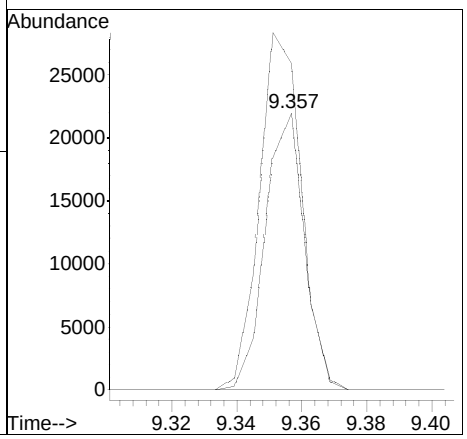


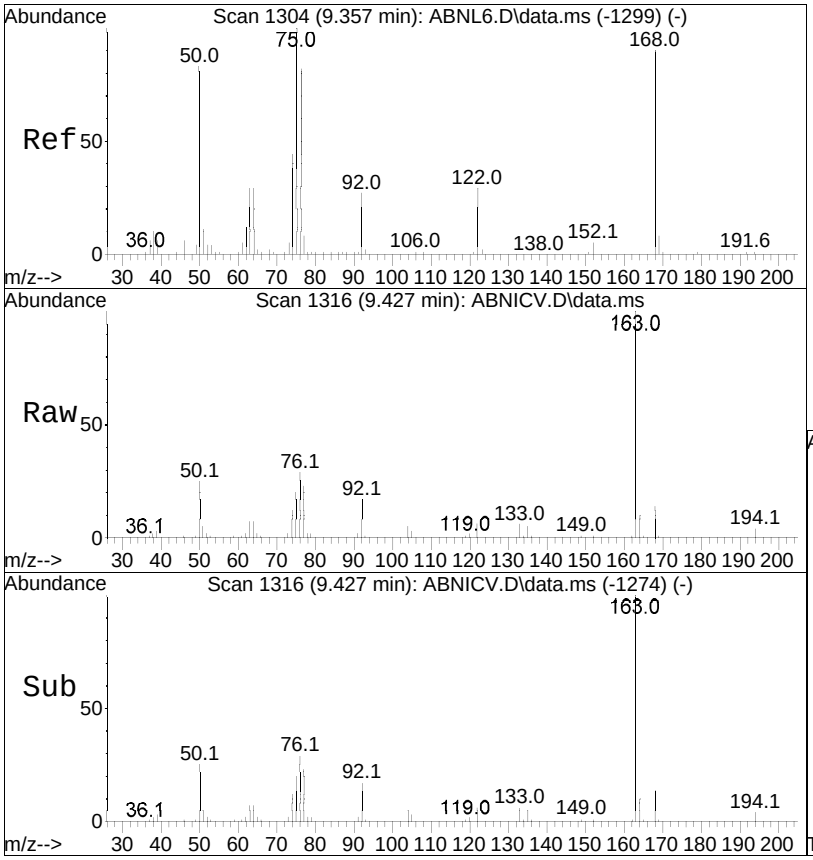



#49
1,4-Dinitrobenzene
Concen: 4.90 ug/ml
RT: 9.357 min Scan# 1304
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:168 Resp: 18421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 137.4 | 121.8 | 182.8 |

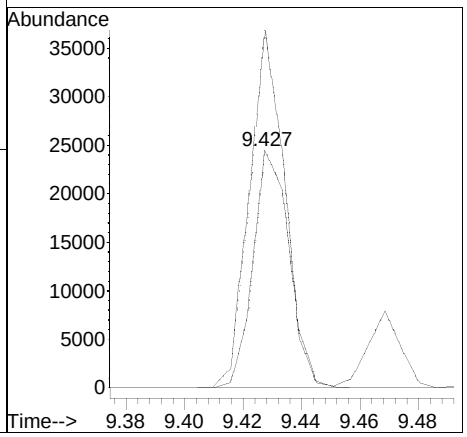


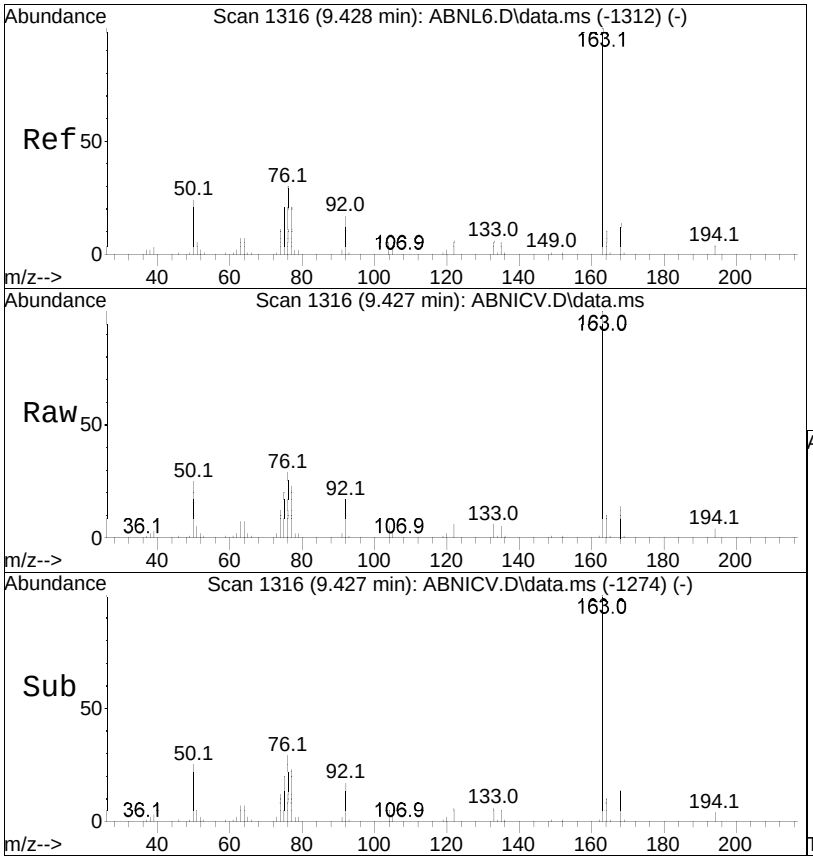



#50
1,3-Dinitrobenzene
Concen: 4.88 ug/ml
RT: 9.427 min Scan# 1316
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:168 Resp: 20889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 146.4 | 22.7 | 34.1# |

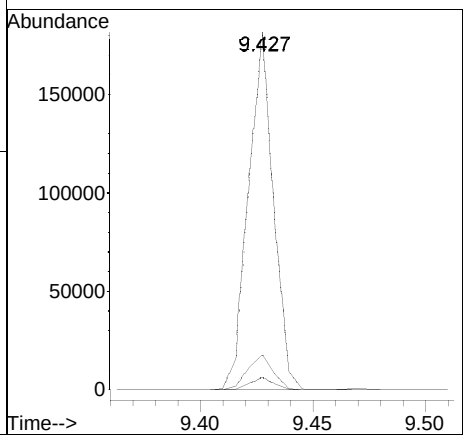


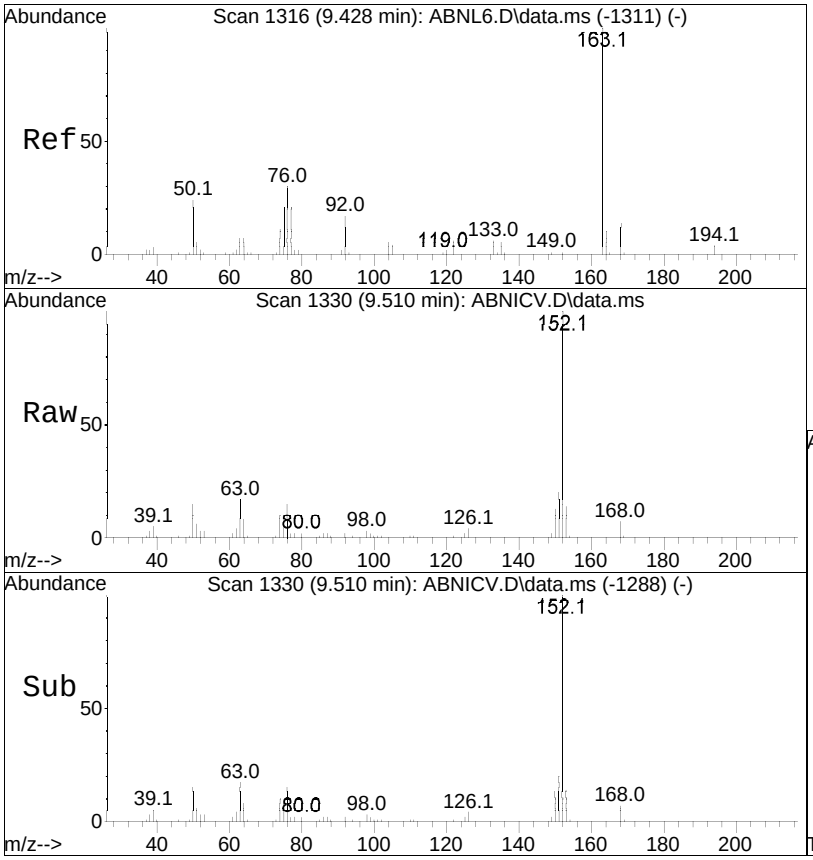



#51
Dimethyl phthalate
Concen: 4.81 ug/ml
RT: 9.427 min Scan# 1316
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:163 Resp: 138787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.4 | 3.5 | 5.3# |
| 164 | 10.1 | 7.9 | 11.9 |

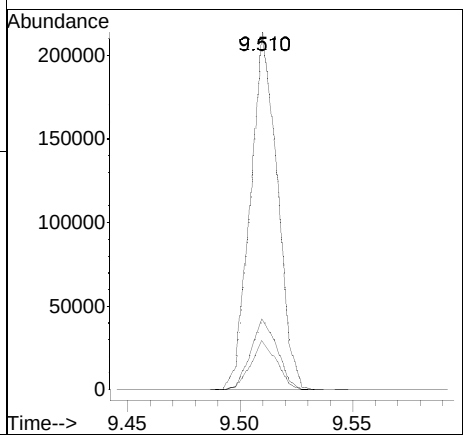


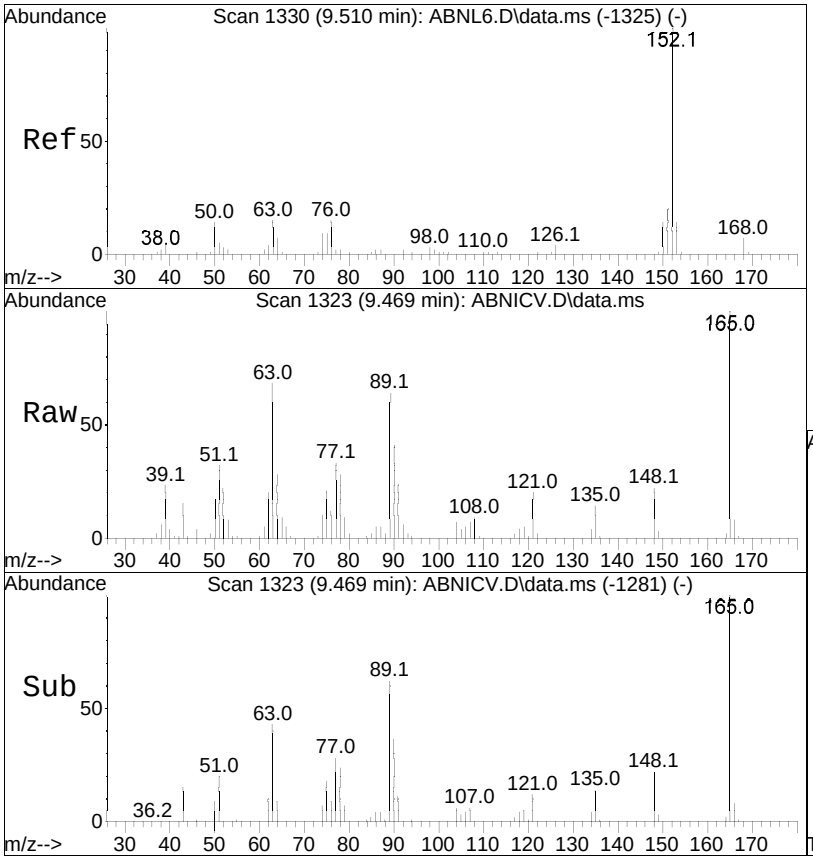



#52
Acenaphthylene
Concen: 4.86 ug/ml
RT: 9.510 min Scan# 1330
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:152 Resp: 176343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.7 | 15.8 | 23.6 |
| 153 | 13.4 | 10.5 | 15.7 |

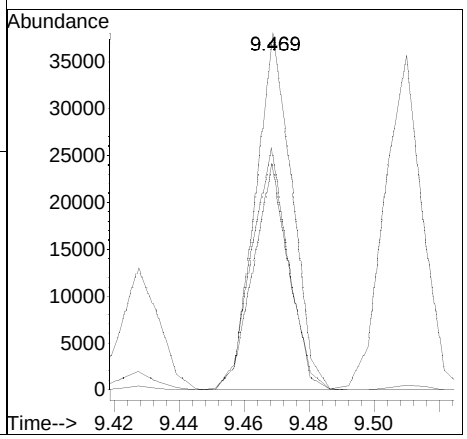


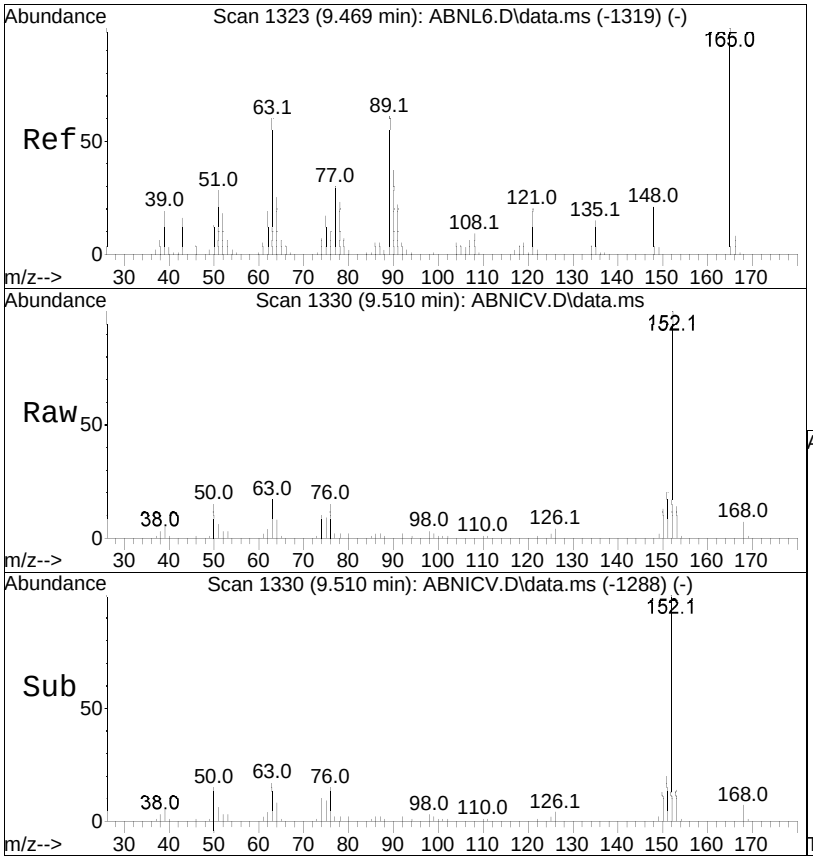



#53
2,6-Dinitrotoluene
Concen: 4.82 ug/ml
RT: 9.469 min Scan# 1323
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:165 Resp: 29955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 62.1 | 54.2 | 81.2 |
| 63 | 67.4 | 64.2 | 96.2 |

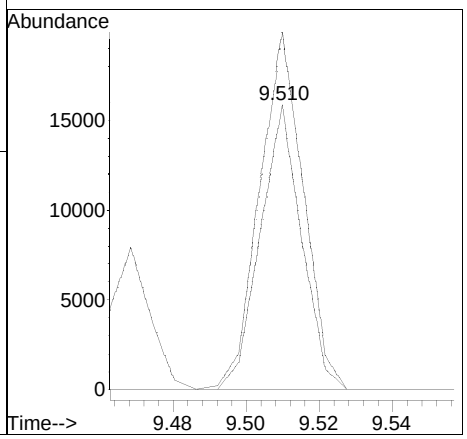


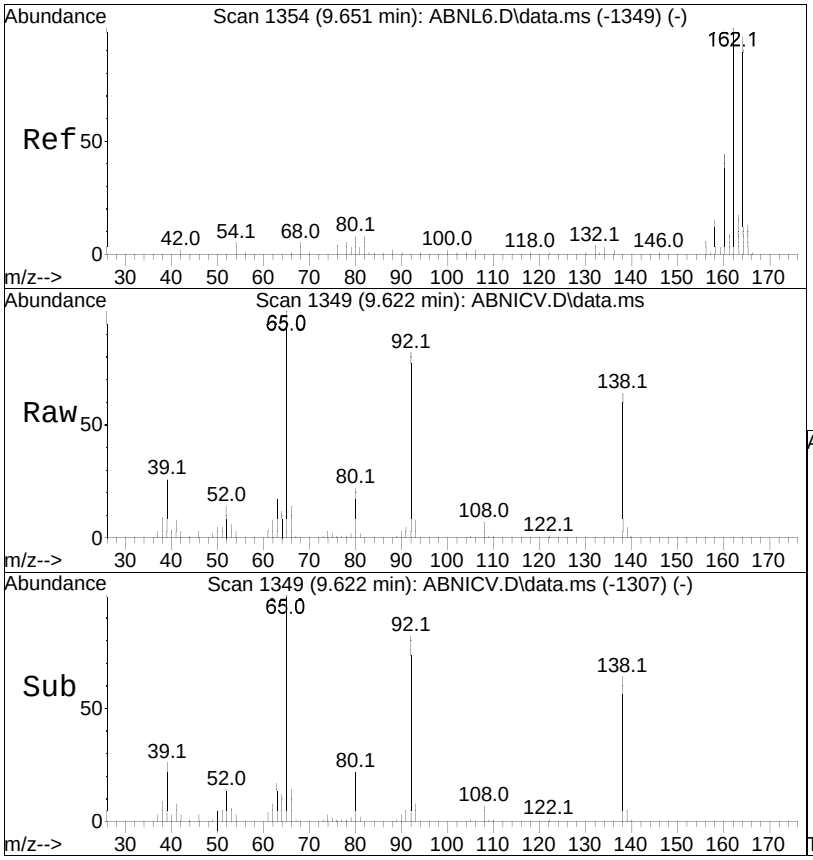



#54
1,2-Dinitrobenzene
Concen: 4.67 ug/ml
RT: 9.510 min Scan# 1330
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:168 Resp: 12362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 133.3 | 30.9 | 46.3# |

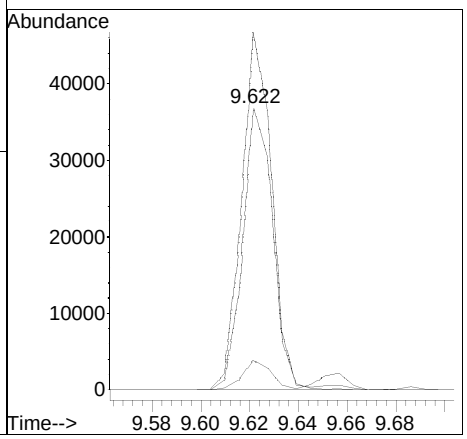


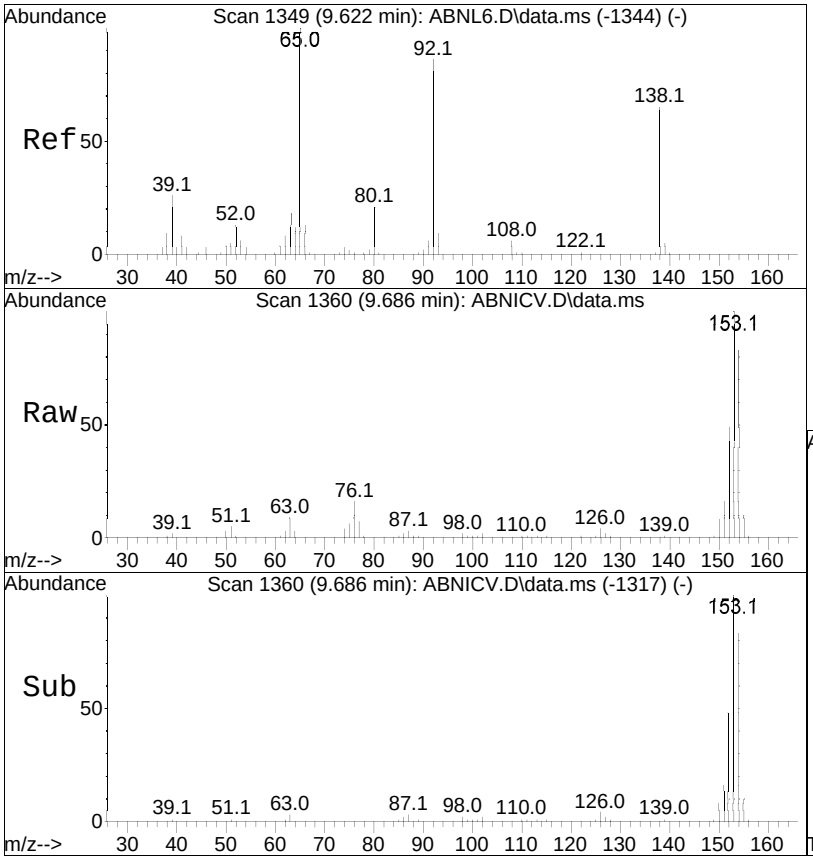



#64
3-Nitroaniline
Concen: 5.14 ug/ml
RT: 9.622 min Scan# 1349
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:138 Resp: 31209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 126.5 | 93.4 | 140.2 |
| 108 | 10.3 | 9.5 | 14.3 |

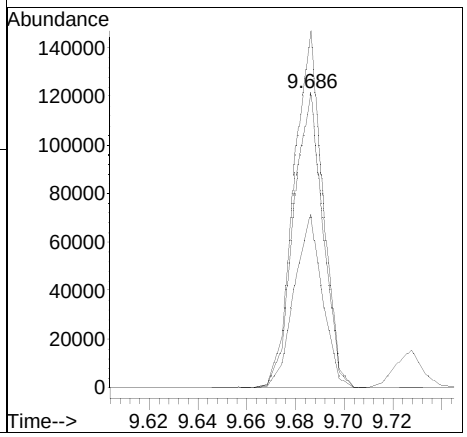


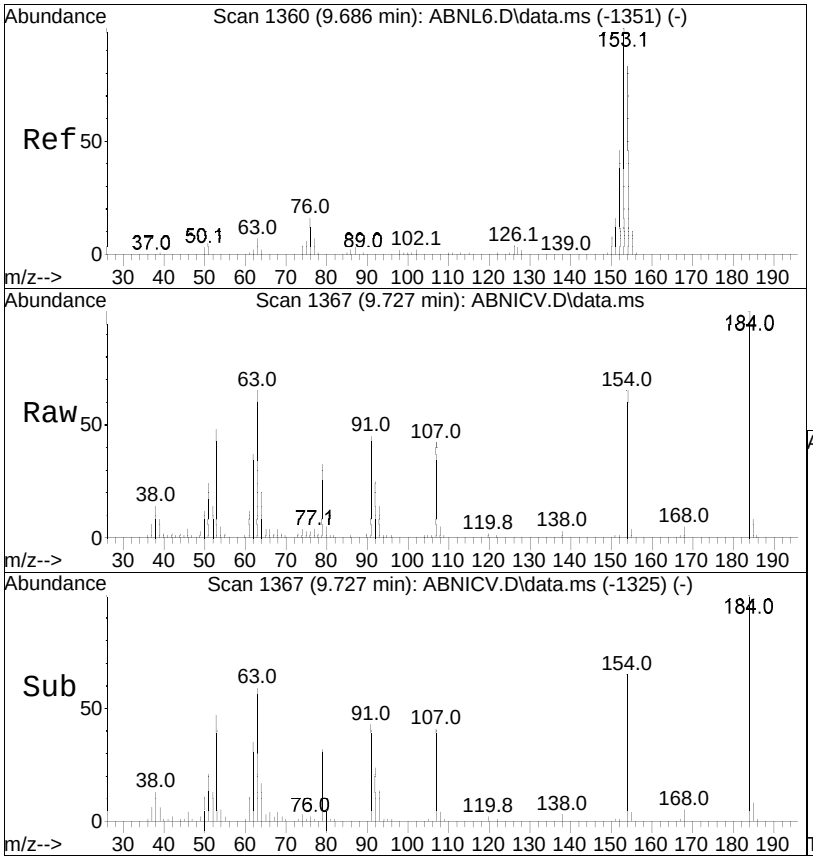



#65
Acenaphthene
Concen: 4.65 ug/ml
RT: 9.686 min Scan# 1360
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:154 Resp: 101856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 118.5 | 85.3 | 127.9 |
| 152 | 56.5 | 41.4 | 62.0 |

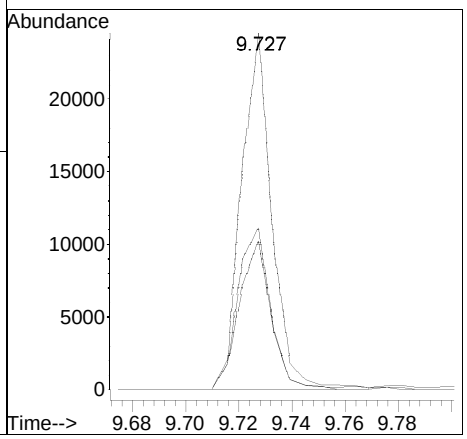


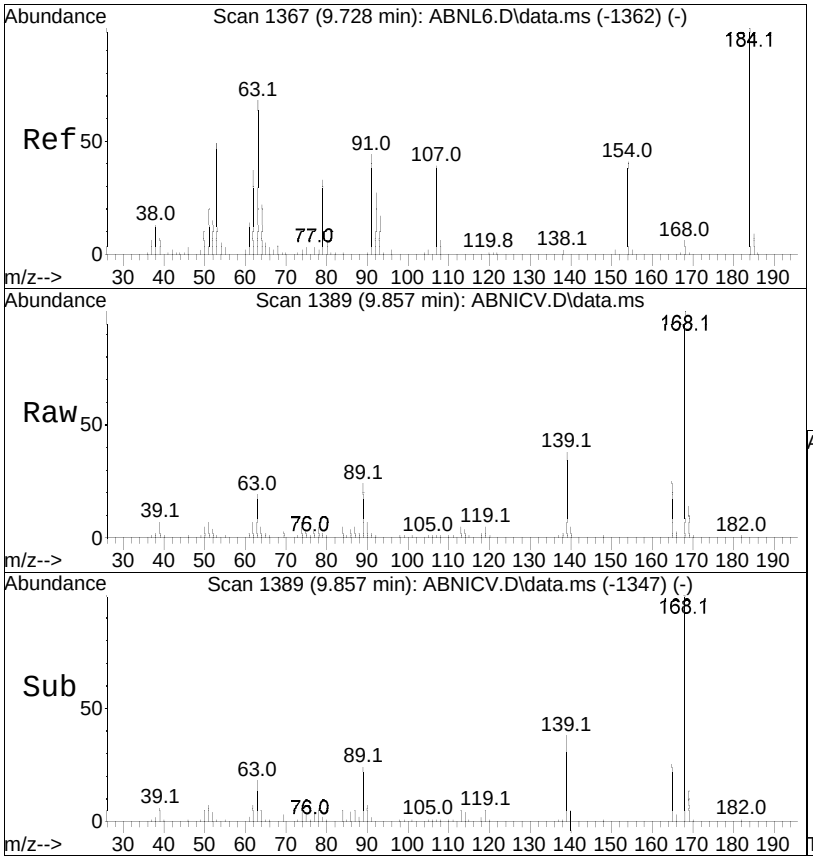



#66
2,4-Dinitrophenol
Concen: 4.79 ug/ml
RT: 9.727 min Scan# 1367
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:184 Resp: 19408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 107 | 44.0 | 37.7 | 56.5 |
| 91 | 49.1 | 46.3 | 69.5 |

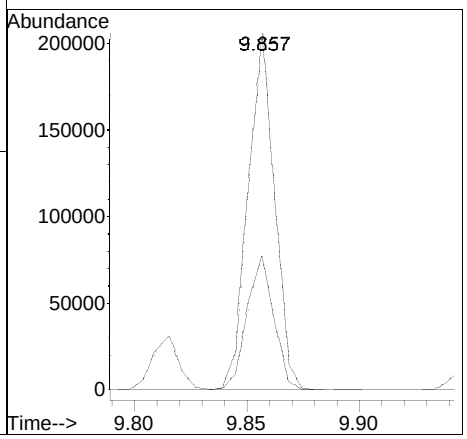


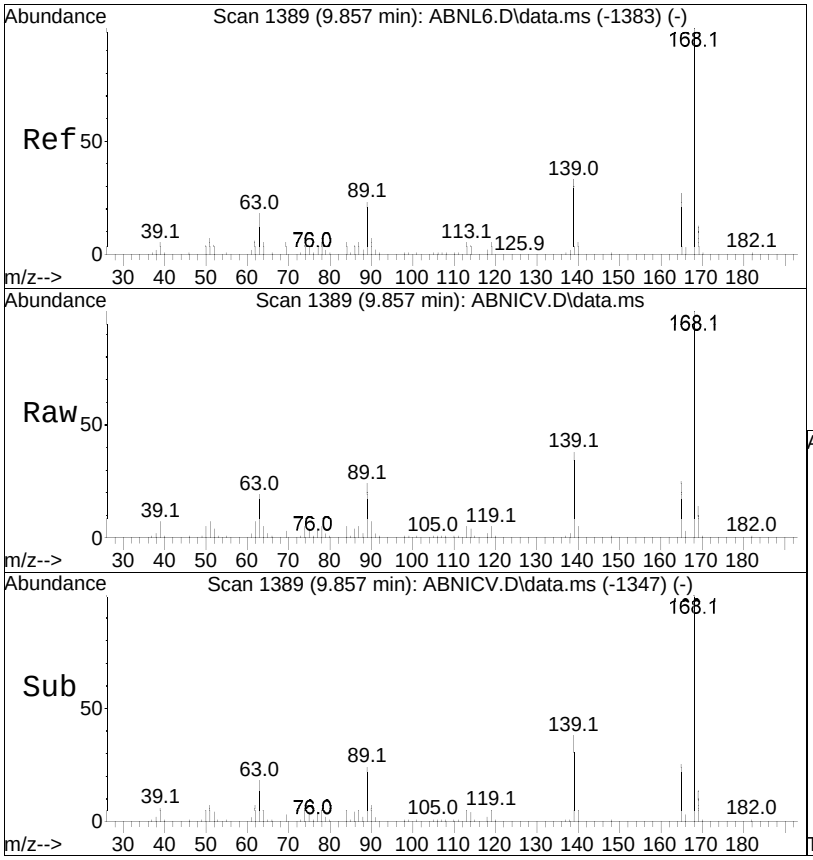



#67
Dibenzofuran
Concen: 4.54 ug/ml
RT: 9.857 min Scan# 1389
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:168 Resp: 167081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 38.2 | 31.4 | 47.2 |

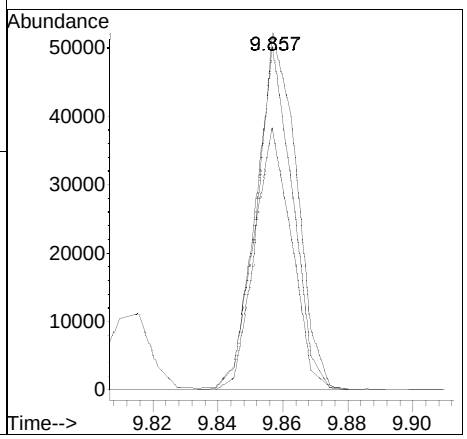


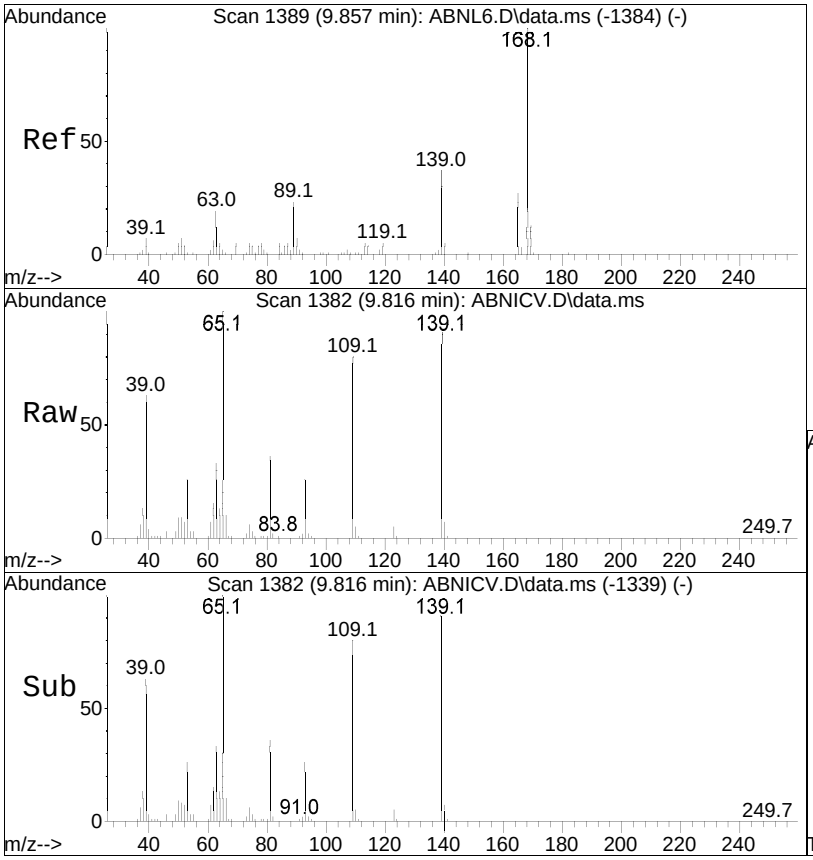



#68
2,4-Dinitrotoluene
Concen: 4.73 ug/ml
RT: 9.857 min Scan# 1389
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:165 Resp: 42694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 92.3 | 72.0 | 108.0 |
| 63 | 73.8 | 52.7 | 79.1 |

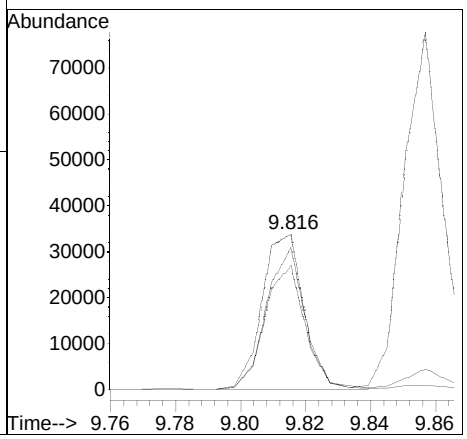


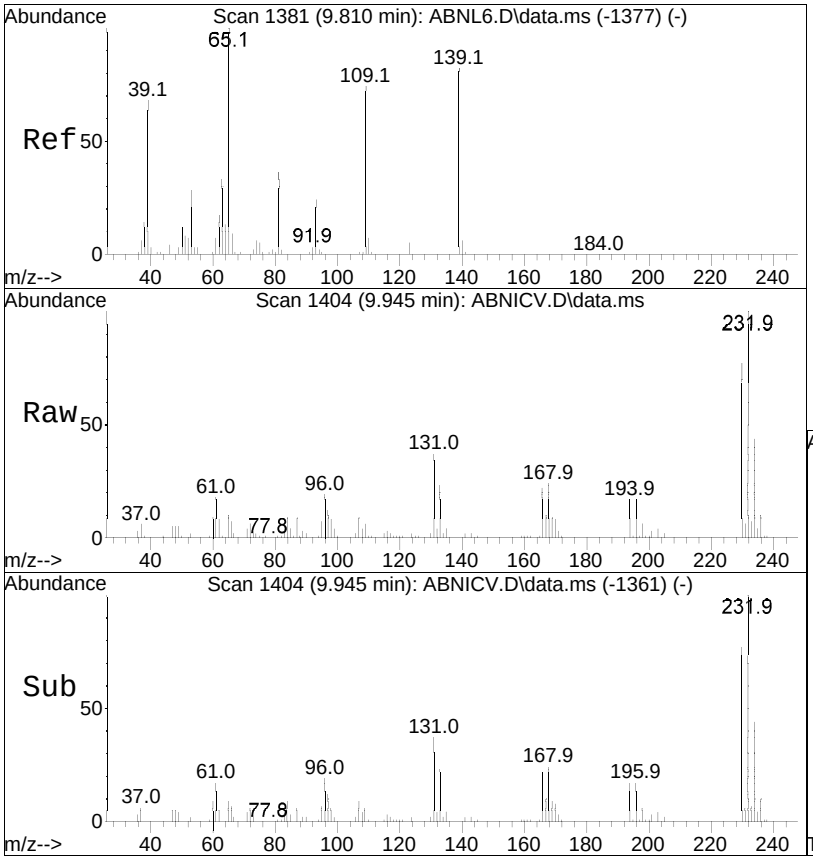



#69
4-Nitrophenol
Concen: 4.94 ug/ml
RT: 9.816 min Scan# 1382
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 65 Resp: 30360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 76.3 | 47.4 | 71.2# |
| 139 | 84.1 | 76.6 | 115.0 |

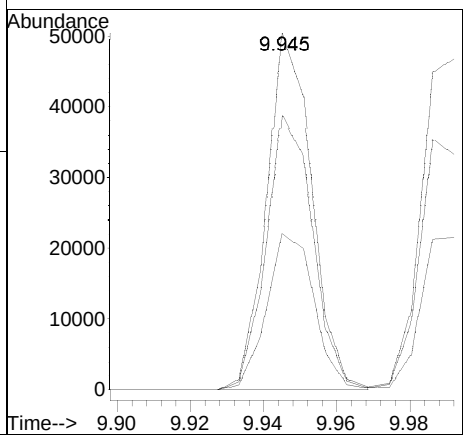


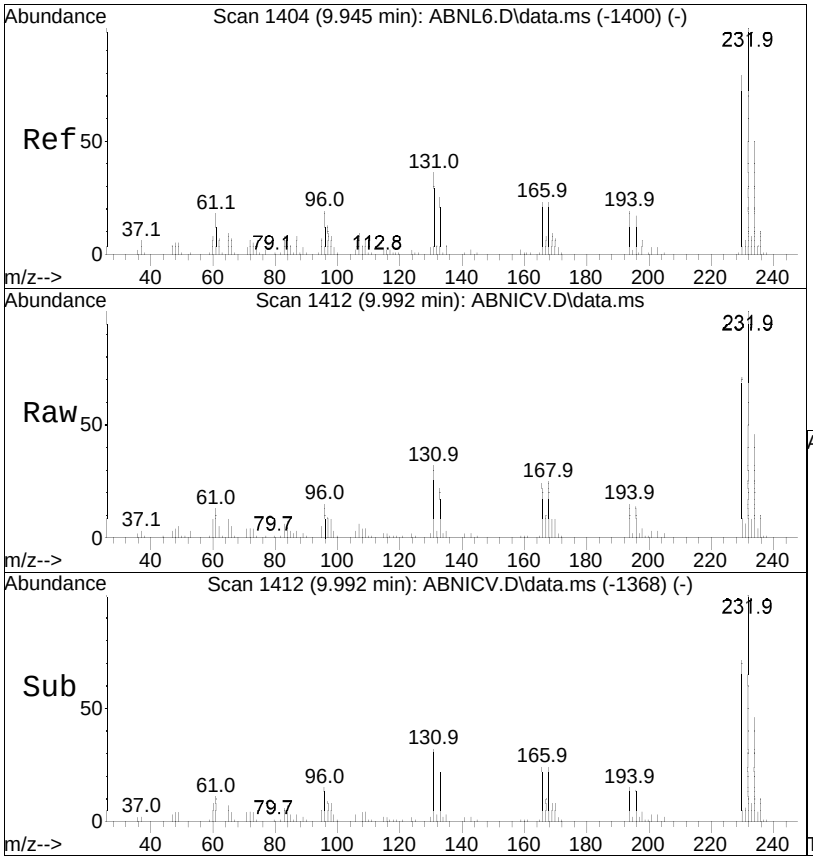



#70
2,3,5,6-Tetrachlorophenol
Concen: 5.04 ug/ml
RT: 9.945 min Scan# 1404
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:232 Resp: 43280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 232 | 100 | | |
| 230 | 79.5 | 64.2 | 96.4 |
| 234 | 46.3 | 38.1 | 57.1 |

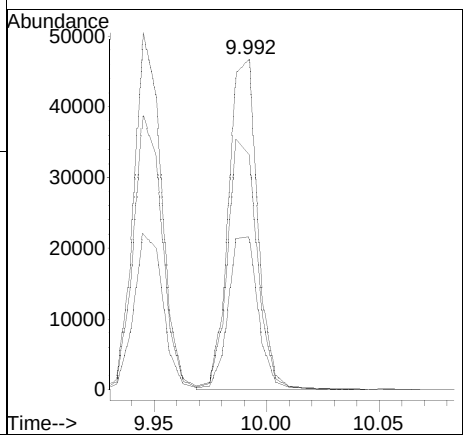


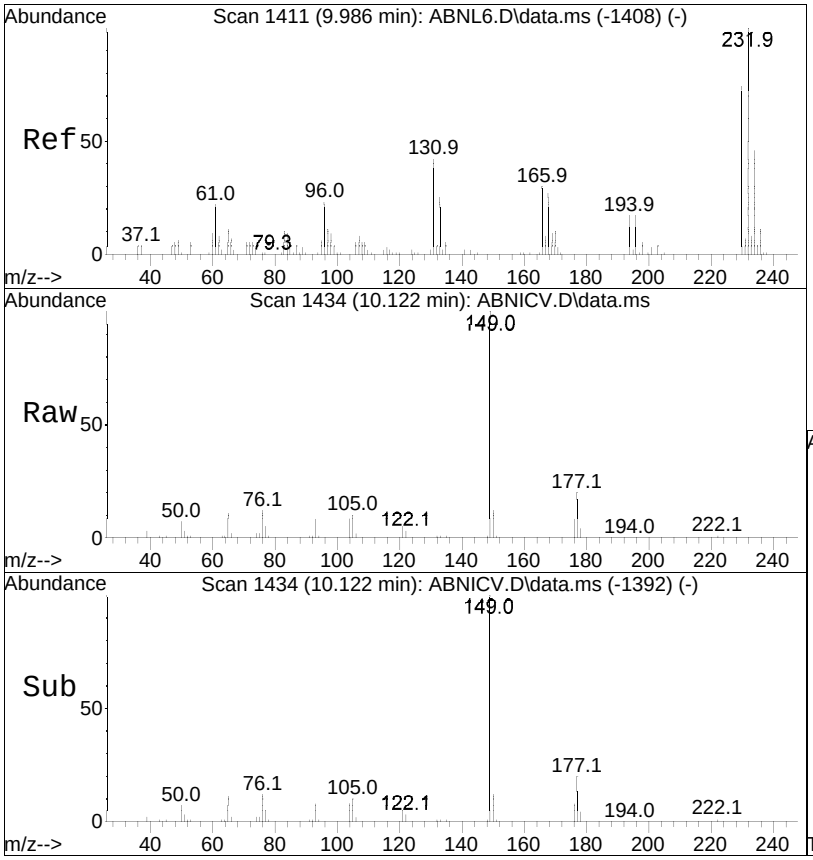



#71
2,3,4,6-Tetrachlorophenol
Concen: 5.13 ug/ml
RT: 9.992 min Scan# 1412
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:232 Resp: 42390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 232 | 100 | | |
| 230 | 76.6 | 61.8 | 92.8 |
| 234 | 47.4 | 36.2 | 54.2 |

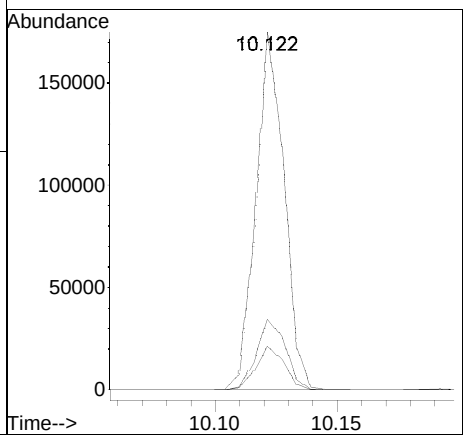


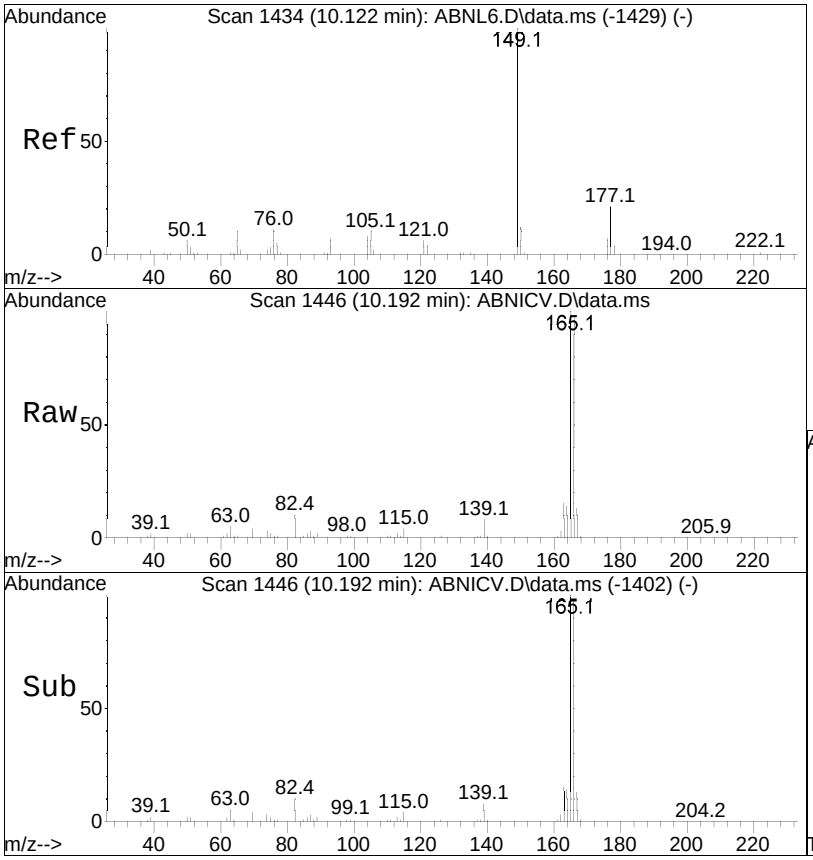



#72
Diethyl phthalate
Concen: 4.76 ug/ml
RT: 10.122 min Scan# 1434
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:149 Resp: 138268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 20.5 | 16.1 | 24.1 |
| 150 | 12.4 | 9.4 | 14.2 |

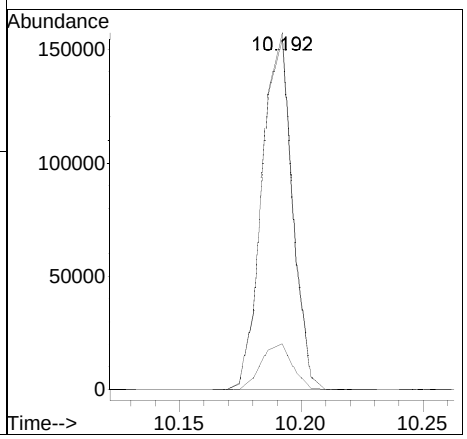


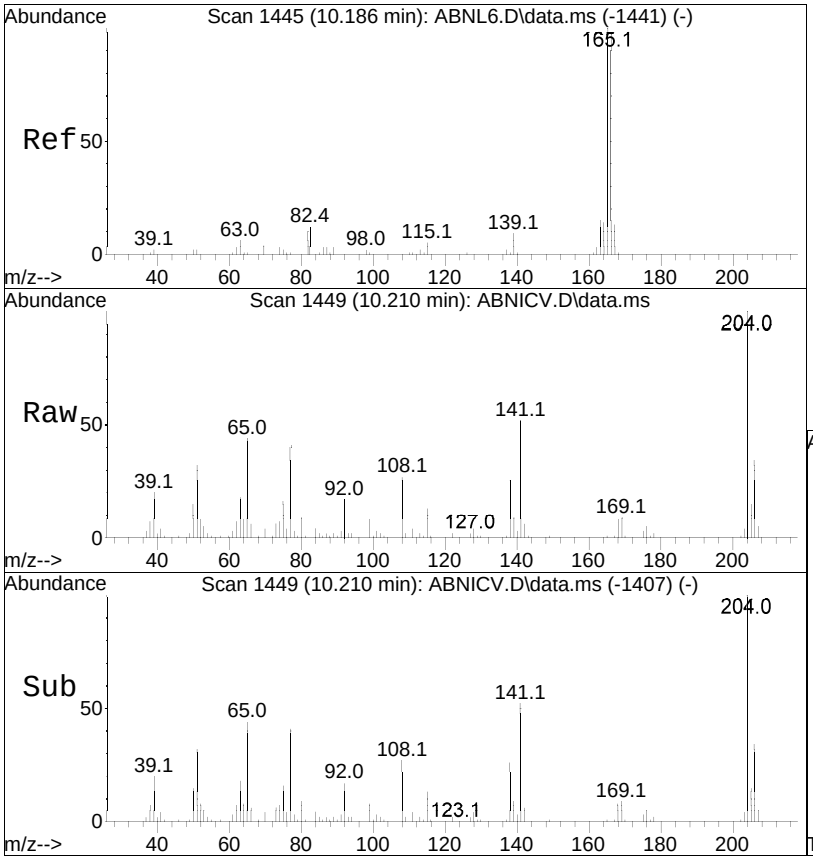



#73
Fluorene
Concen: 4.66 ug/ml
RT: 10.192 min Scan# 1446
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:166 Resp: 134876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.6 | 76.2 | 114.2 |
| 167 | 13.8 | 10.6 | 15.8 |

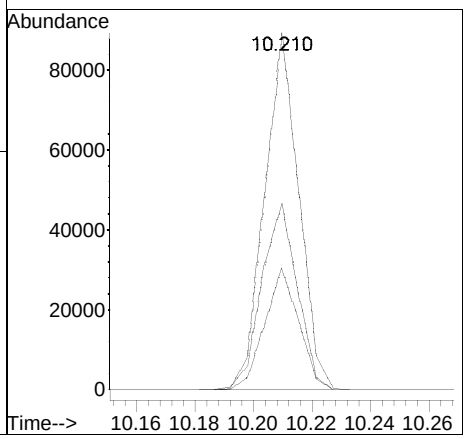


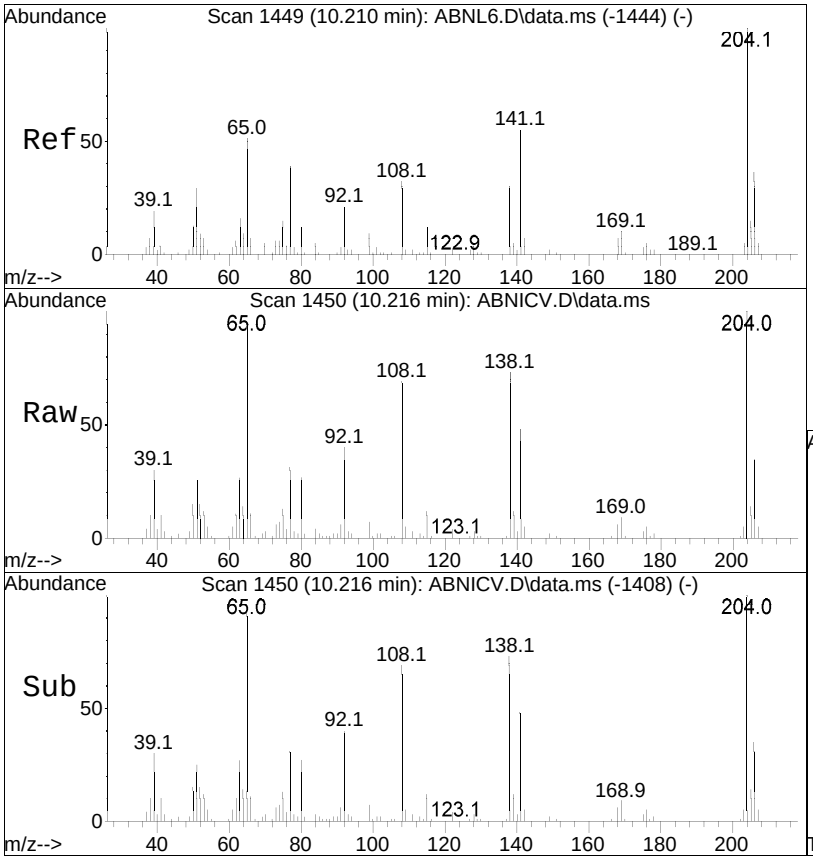



#74
4-Chlorophenyl phenyl ether
Concen: 4.72 ug/ml
RT: 10.210 min Scan# 1449
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:204 Resp: 71803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 204 | 100 | | |
| 206 | 34.2 | 25.8 | 38.6 |
| 141 | 54.5 | 53.6 | 80.4 |

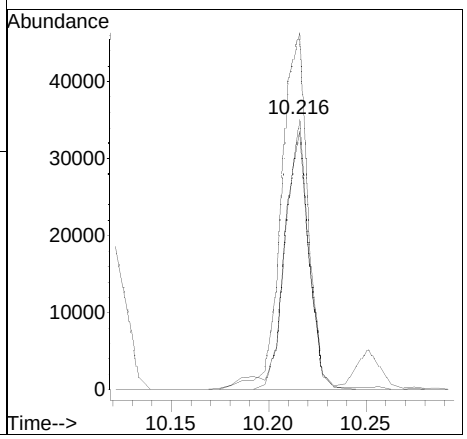


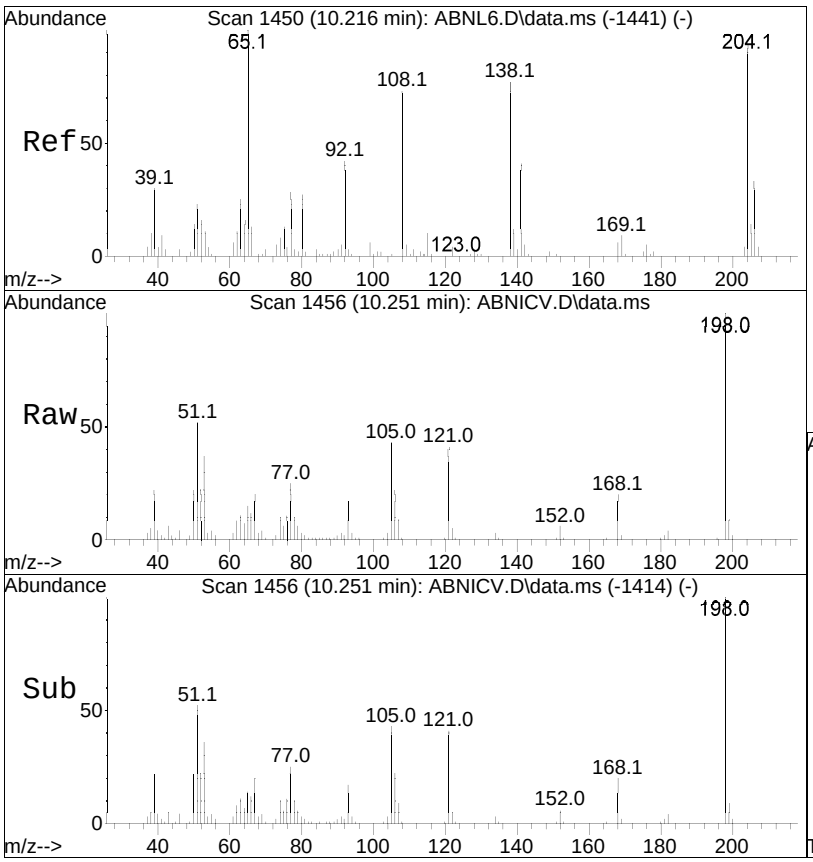



#75
4-Nitroaniline
Concen: 4.80 ug/ml
RT: 10.216 min Scan# 1450
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:138 Resp: 30300

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 93.9 | 52.1 | 78.1# |
| 65 | 142.9 | 115.0 | 172.6 |

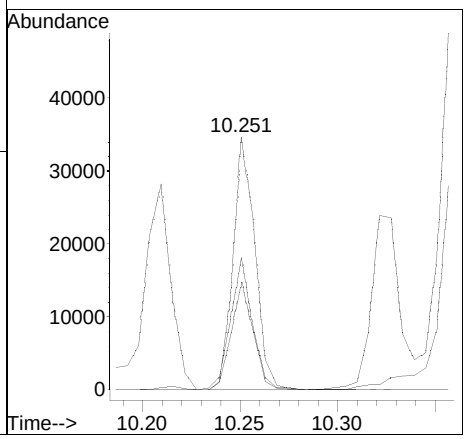


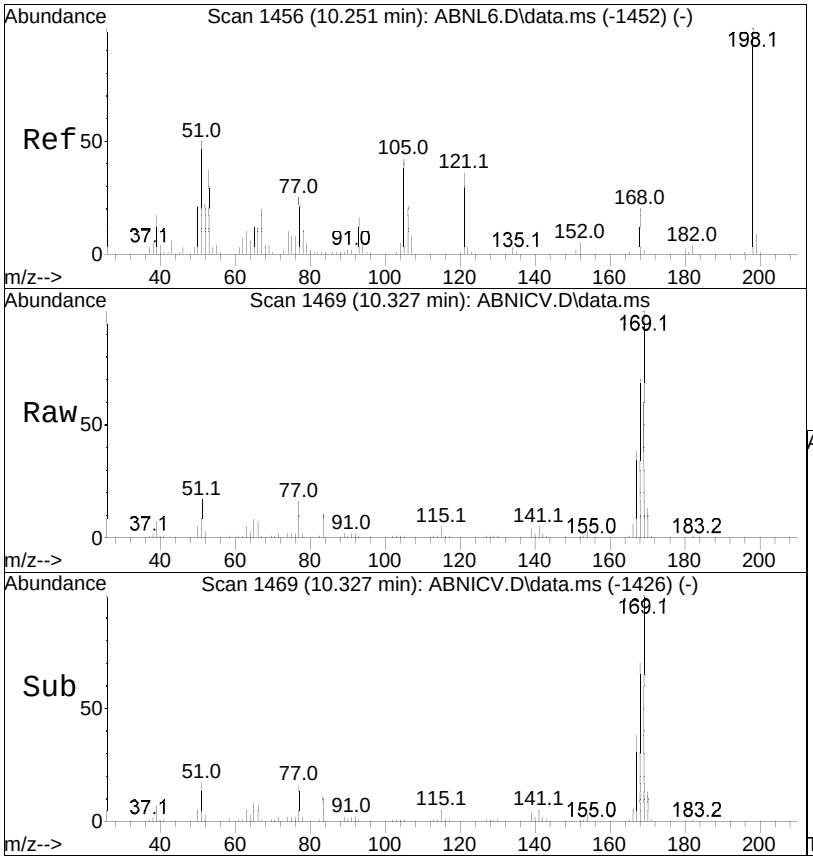



#76
4,6-Dinitro-o-cresol
Concen: 5.40 ug/ml
RT: 10.251 min Scan# 1456
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:198 Resp: 27327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 52.6 | 76.0 | 114.0# |
| 105 | 42.7 | 45.6 | 68.4# |

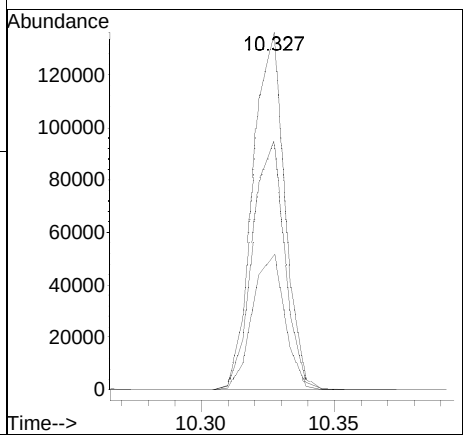


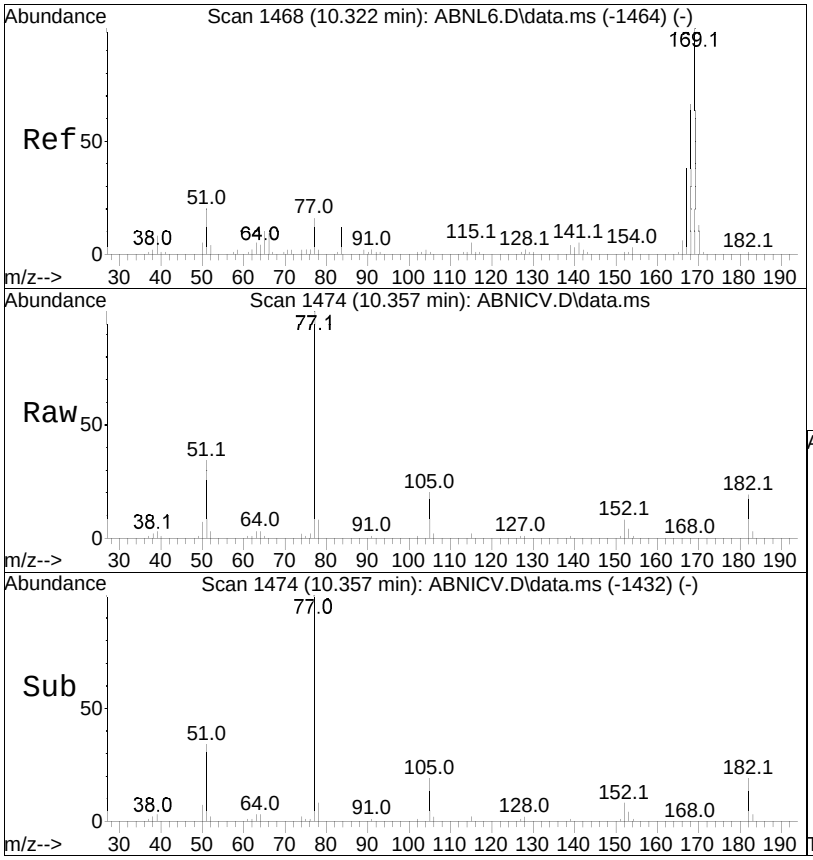



#77
NDPA/DPA
Concen: 4.73 ug/ml
RT: 10.327 min Scan# 1469
Delta R.T. 0.005 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:169 Resp: 113489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 70.7 | 54.0 | 81.0 |
| 167 | 38.8 | 28.6 | 42.8 |

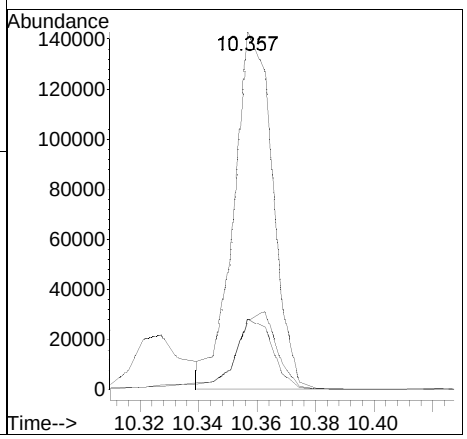


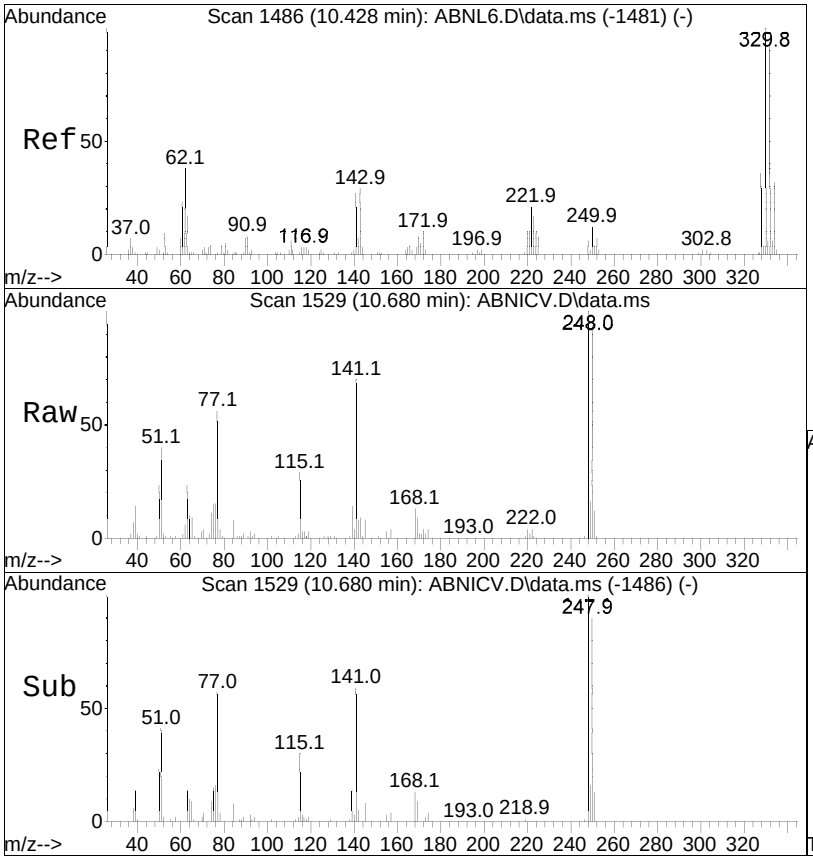



#78
Azobenzene
Concen: 4.76 ug/ml
RT: 10.357 min Scan# 1474
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion: 77 Resp: 130690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 182 | 24.0 | 17.4 | 26.2 |
| 105 | 21.5 | 15.4 | 23.2 |

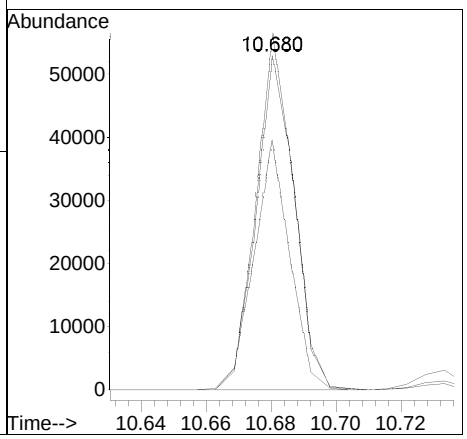


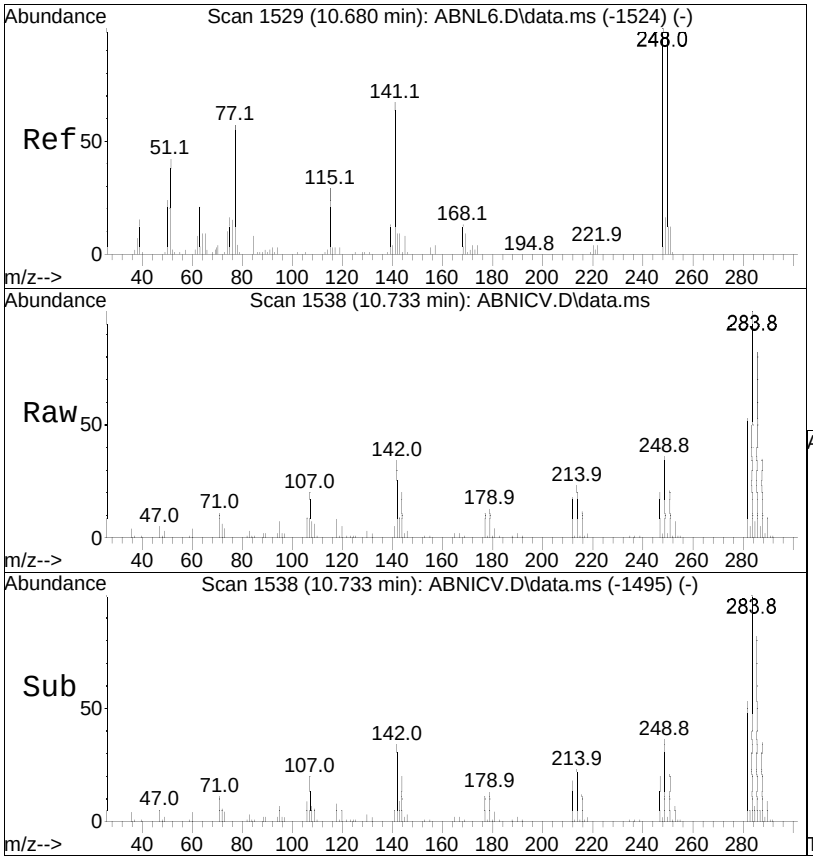



#80
4-Bromophenyl phenyl ether
Concen: 4.73 ug/ml
RT: 10.680 min Scan# 1529
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:248 Resp: 44914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 141 | 67.7 | 76.6 | 114.8# |
| 250 | 96.8 | 77.3 | 115.9 |

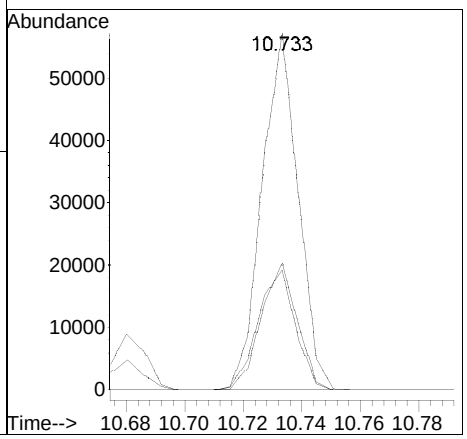


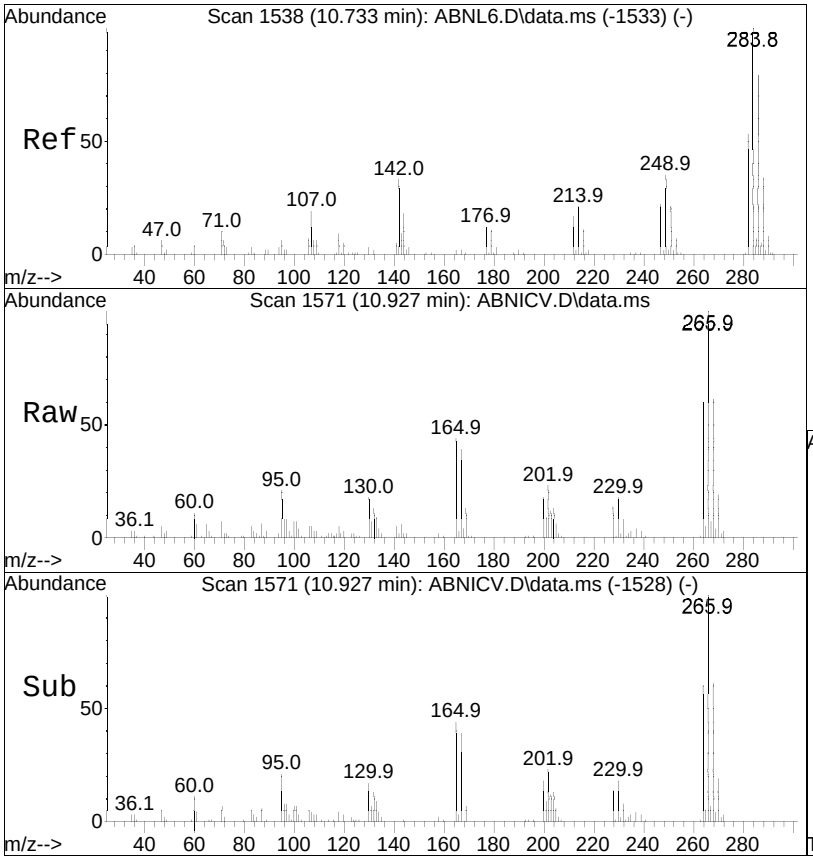



#81
Hexachlorobenzene
Concen: 4.53 ug/ml
RT: 10.733 min Scan# 1538
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:284 Resp: 49006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 35.0 | 41.9 | 62.9# |
| 249 | 35.5 | 24.1 | 36.1 |

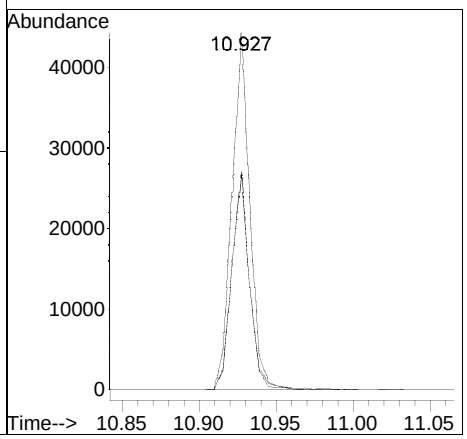


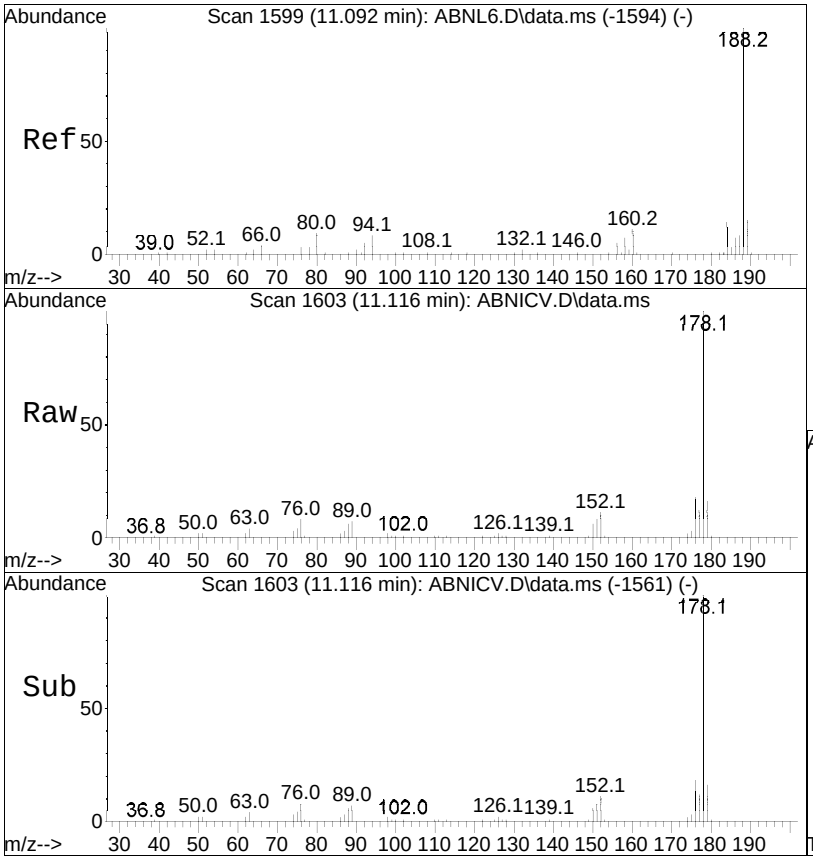



#82
Pentachlorophenol
Concen: 5.23 ug/ml
RT: 10.927 min Scan# 1571
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:266 Resp: 35912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 59.2 | 49.7 | 74.5 |
| 268 | 60.4 | 50.5 | 75.7 |

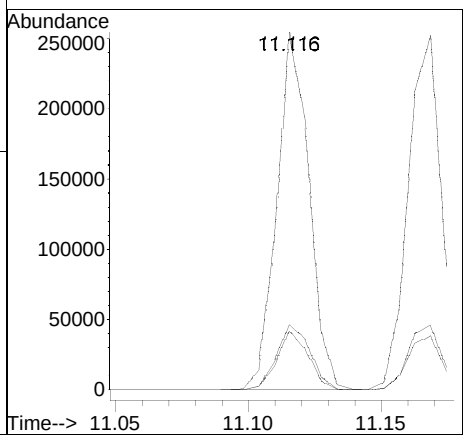


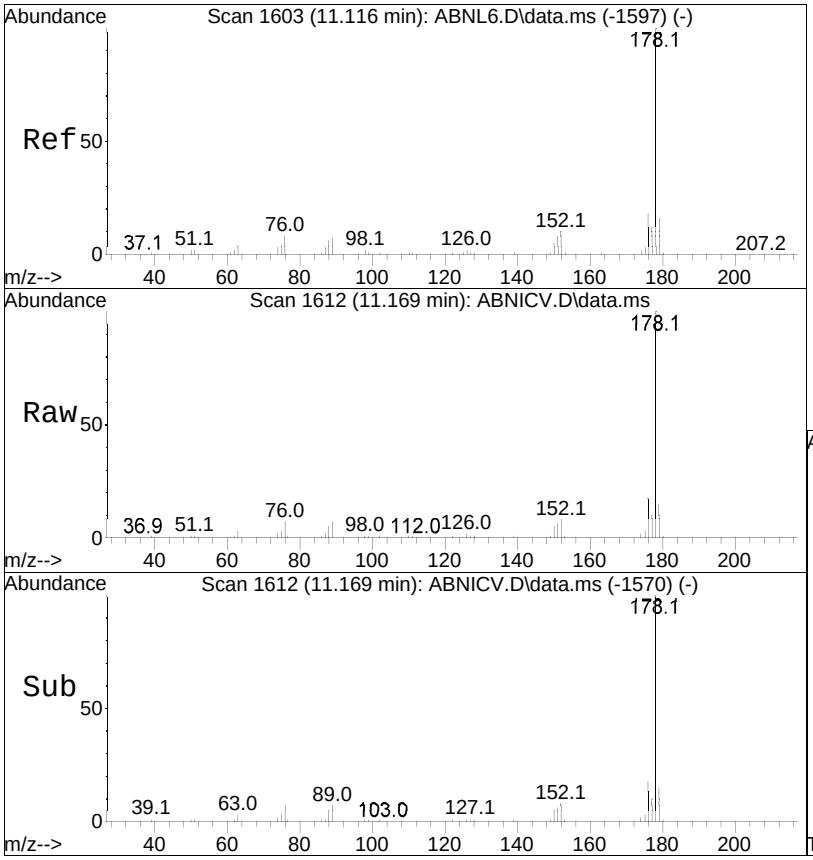



#89
Phenanthrene
Concen: 4.41 ug/ml
RT: 11.116 min Scan# 1603
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:178 Resp: 214102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.1 | 12.2 | 18.2 |
| 176 | 18.9 | 15.4 | 23.2 |

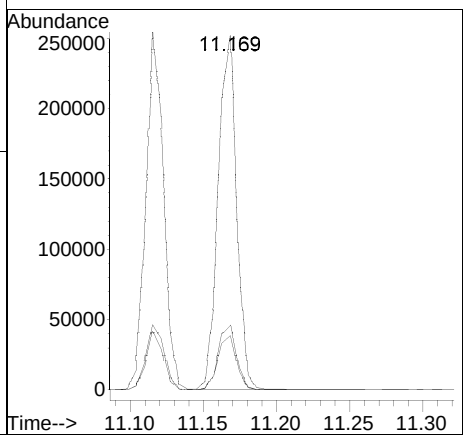


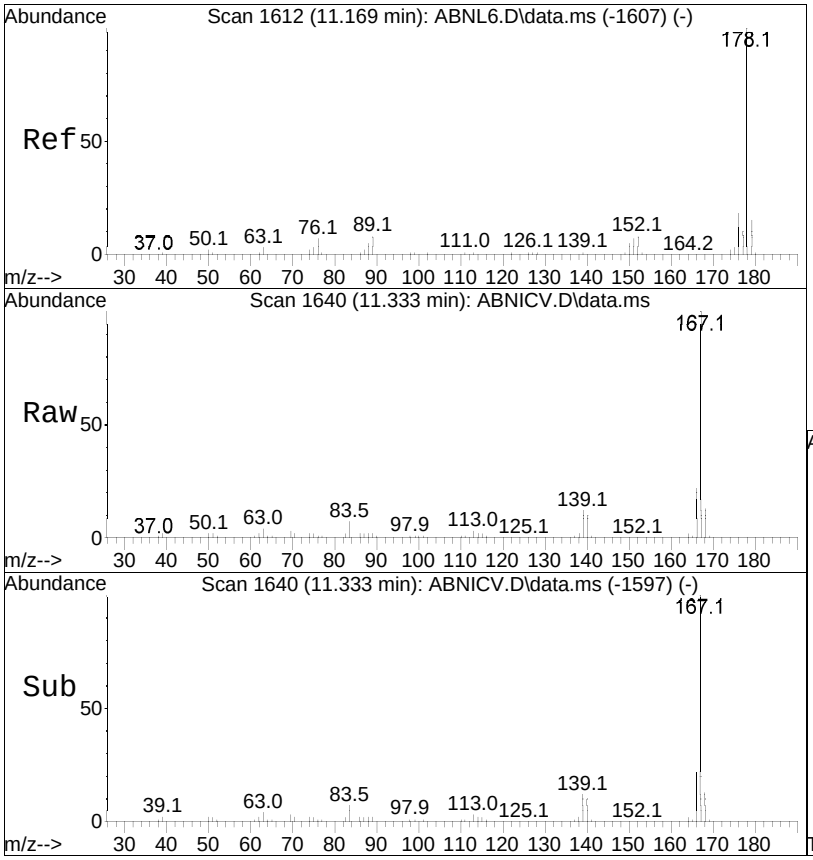



#90
Anthracene
Concen: 4.61 ug/ml
RT: 11.169 min Scan# 1612
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:178 Resp: 222491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.5 | 12.0 | 18.0 |
| 176 | 18.3 | 14.6 | 22.0 |

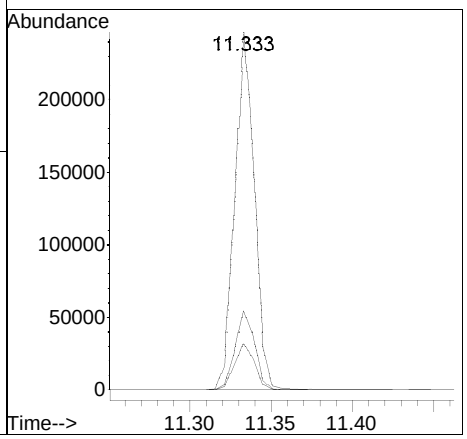


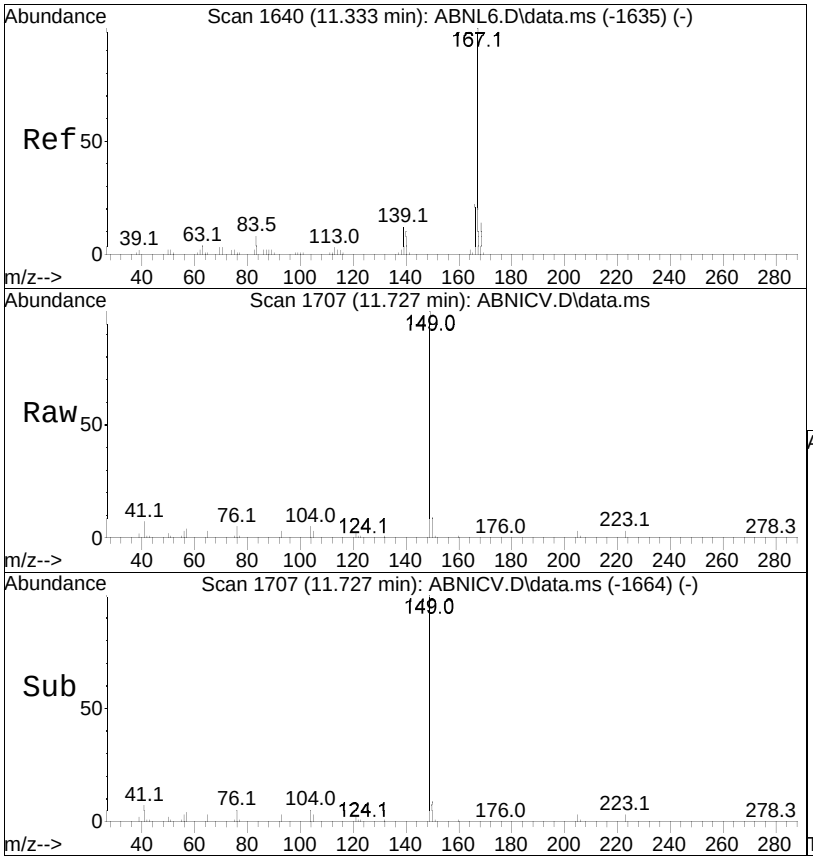



#91
Carbazole
Concen: 4.62 ug/ml
RT: 11.333 min Scan# 1640
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:167 Resp: 204021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 168 | 13.3 | 10.6 | 15.8 |
| 166 | 22.2 | 17.4 | 26.0 |

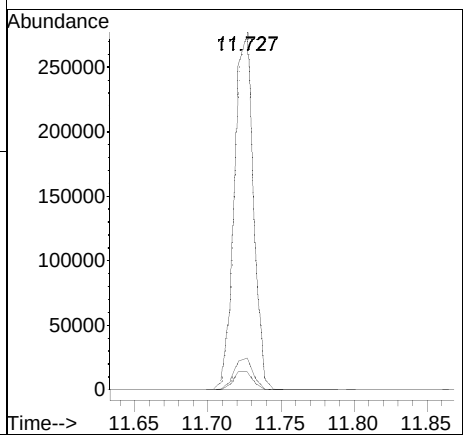


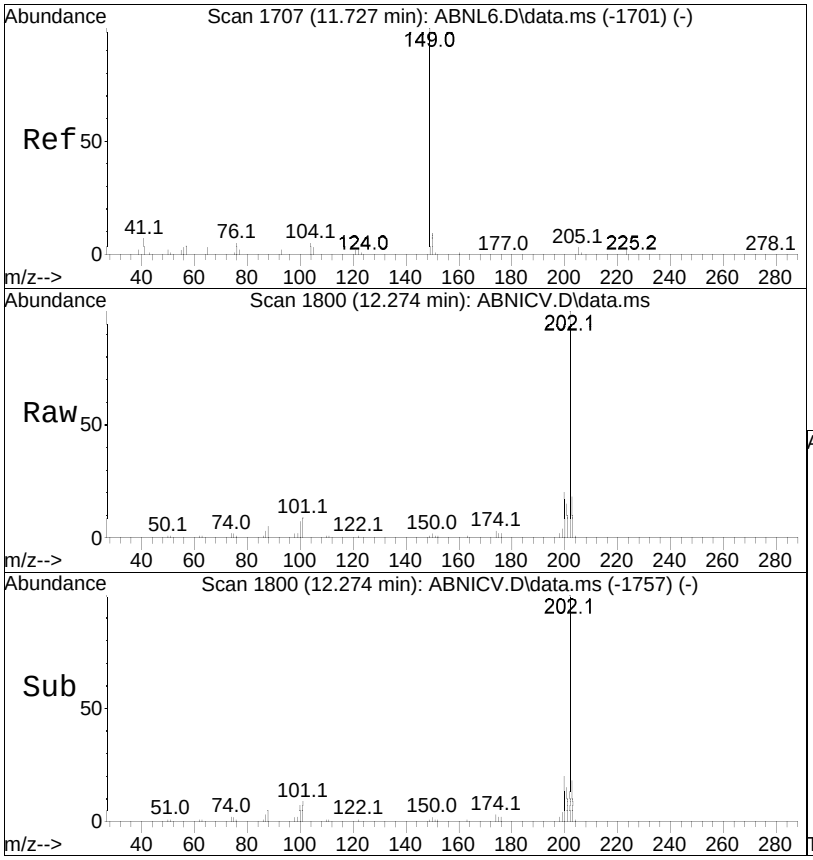



#92
Di-n-butylphthalate
Concen: 4.75 ug/ml
RT: 11.727 min Scan# 1707
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:149 Resp: 246456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 8.9 | 7.0 | 10.6 |
| 104 | 5.4 | 4.5 | 6.7 |

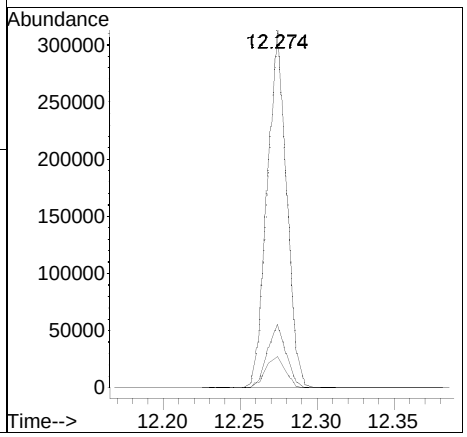


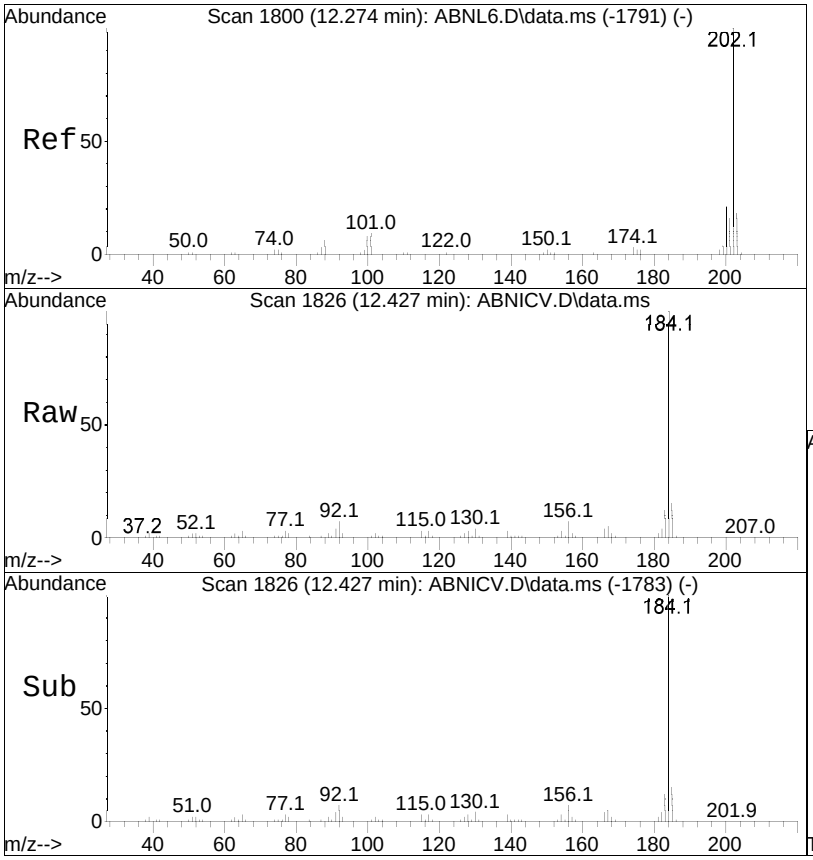



#93
Fluoranthene
Concen: 4.57 ug/ml
RT: 12.274 min Scan# 1800
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:202 Resp: 270824

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.2 | 13.5 | 20.3# |
| 203 | 17.4 | 13.6 | 20.4 |

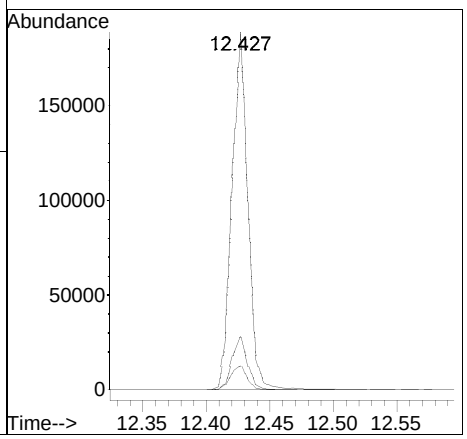


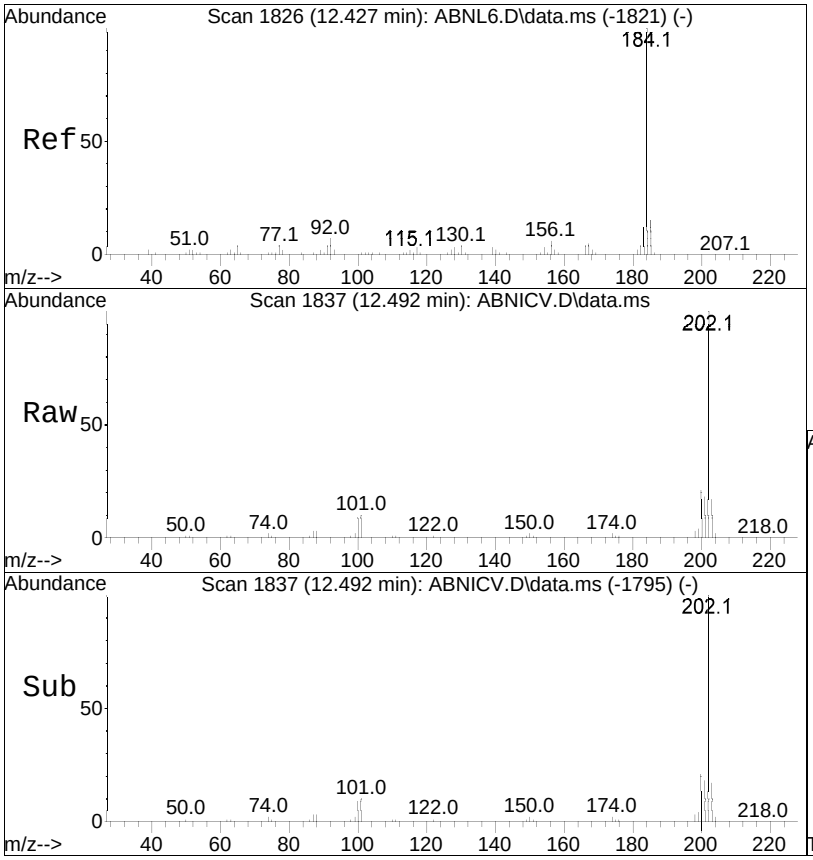



#94
Benzidine
Concen: 5.00 ug/ml
RT: 12.427 min Scan# 1826
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:184 Resp: 161127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 92 | 7.1 | 9.1 | 13.7# |
| 185 | 14.7 | 11.1 | 16.7 |

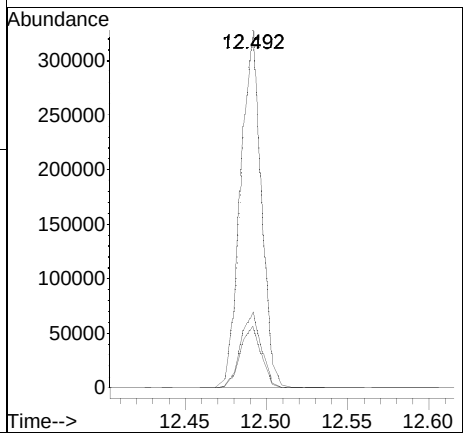


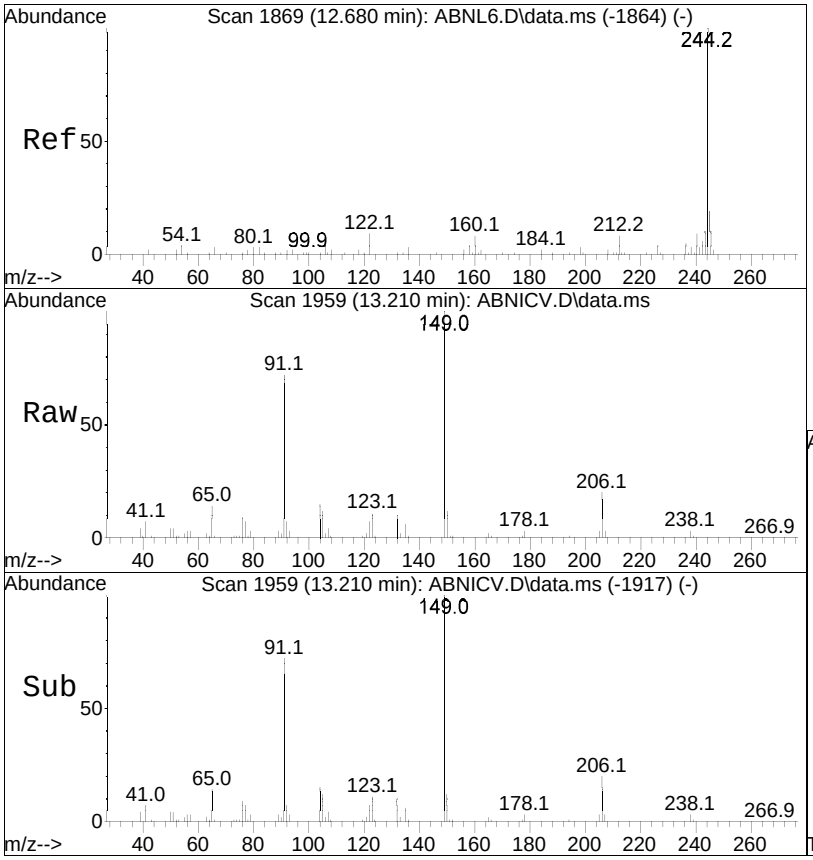



#95
Pyrene
Concen: 4.61 ug/ml
RT: 12.492 min Scan# 1837
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:202 Resp: 288357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 16.7 | 25.1 |
| 203 | 17.6 | 14.2 | 21.4 |

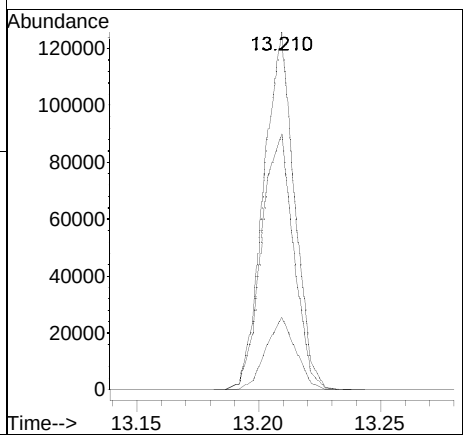


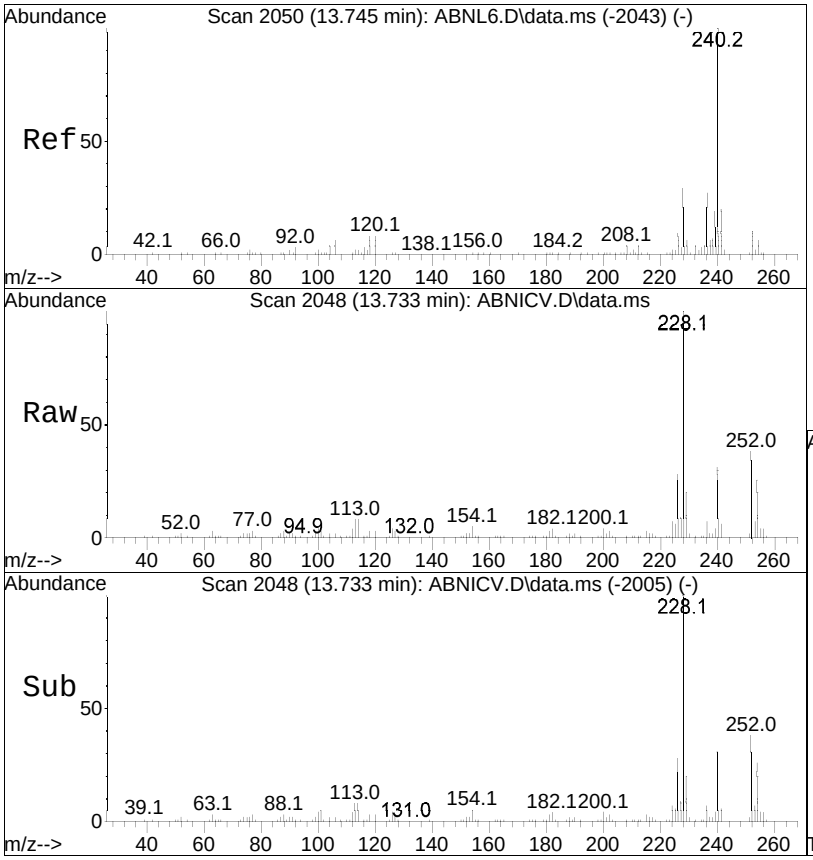



#97
Butyl benzyl phthalate
Concen: 4.59 ug/ml
RT: 13.210 min Scan# 1959
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:149 Resp: 109619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 74.8 | 63.3 | 94.9 |
| 206 | 19.8 | 13.9 | 20.9 |

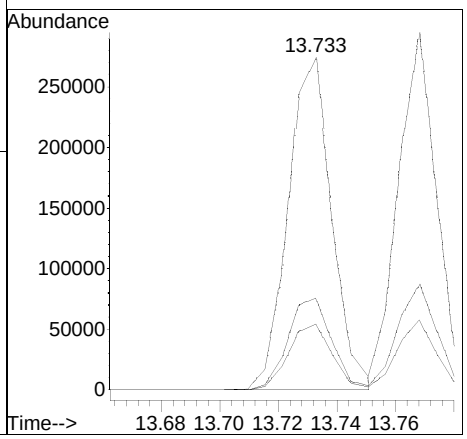


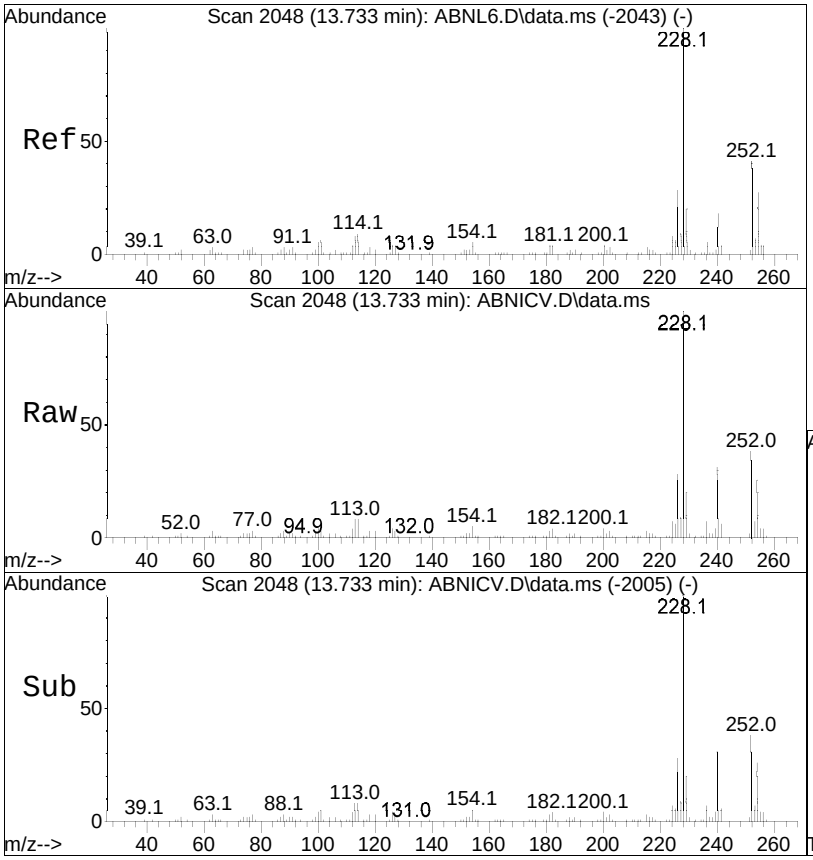



#105
Benzo(a)anthracene
Concen: 4.47 ug/ml
RT: 13.733 min Scan# 2048
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:228 Resp: 283411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 27.9 | 22.2 | 33.4 |
| 229 | 20.0 | 15.6 | 23.4 |

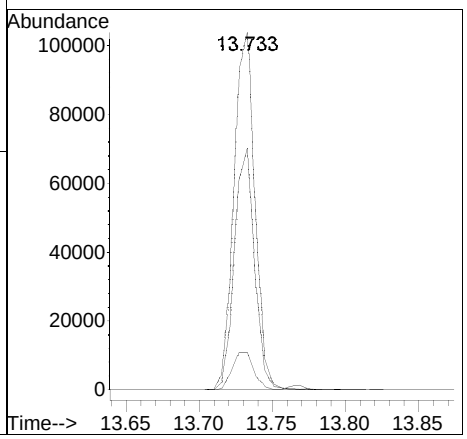


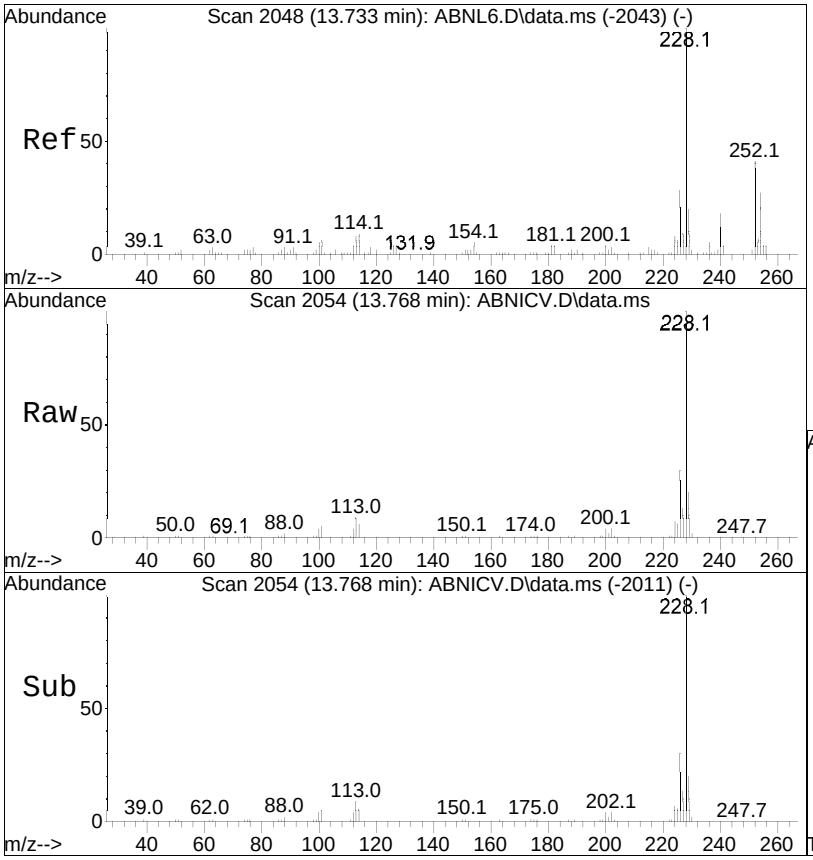



#106
3,3'-Dichlorobenzidine
Concen: 4.93 ug/ml
RT: 13.733 min Scan# 2048
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:252 Resp: 103514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 11.0 | 14.5 | 21.7# |
| 254 | 64.8 | 51.2 | 76.8 |

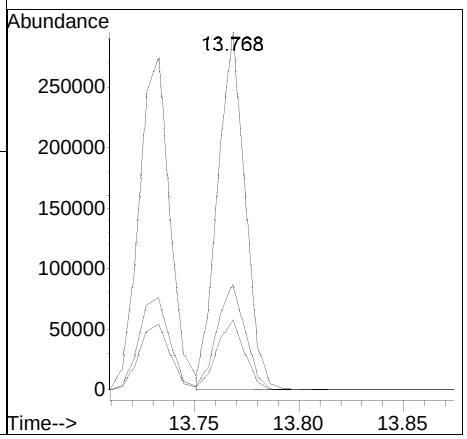


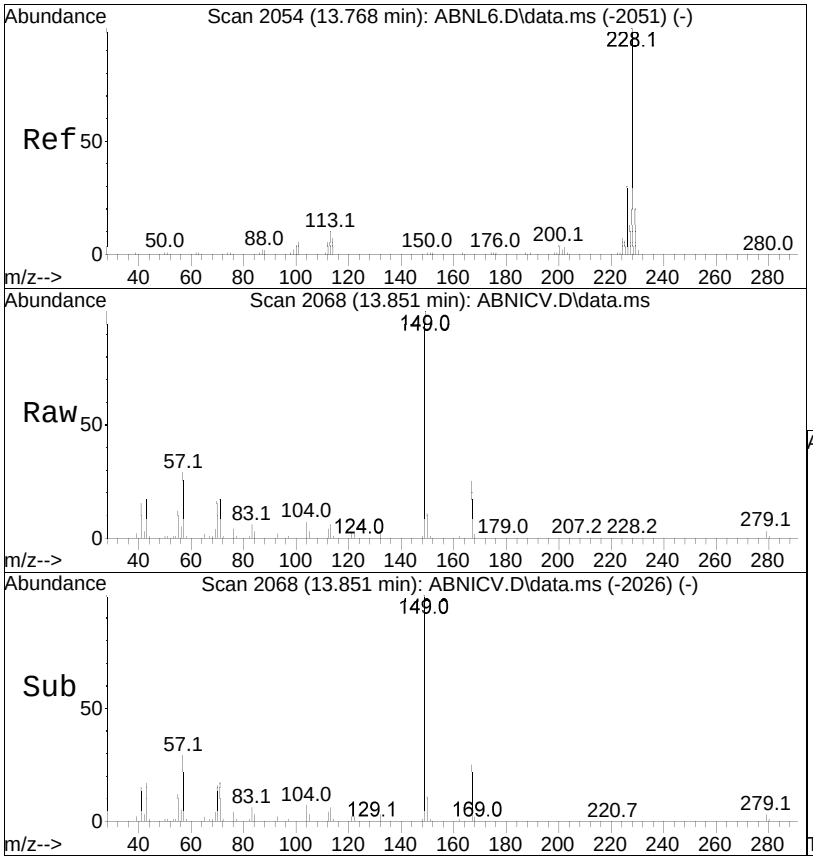



#107
Chrysene
Concen: 4.42 ug/ml
RT: 13.768 min Scan# 2054
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:228 Resp: 270744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.2 | 24.0 | 36.0 |
| 229 | 19.5 | 15.8 | 23.8 |

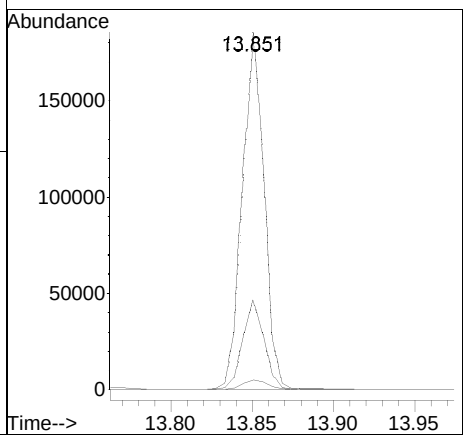


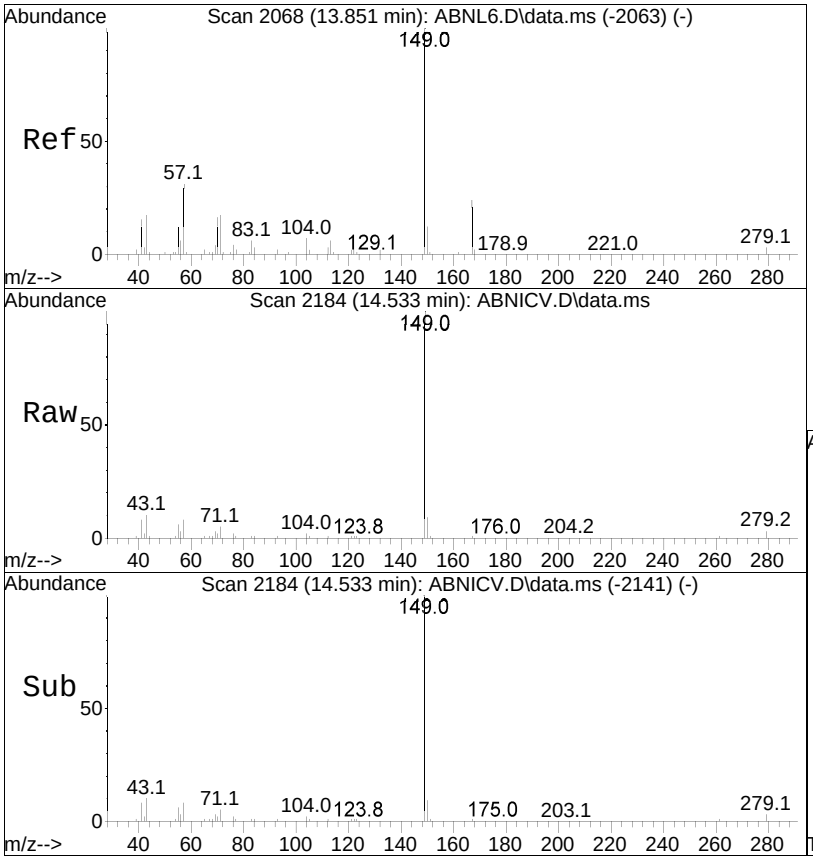



#108
Bis(2-ethylhexyl)phthalate
Concen: 4.86 ug/ml
RT: 13.851 min Scan# 2068
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:149 Resp: 170402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.9 | 22.1 | 33.1 |
| 279 | 2.9 | 3.0 | 4.4# |

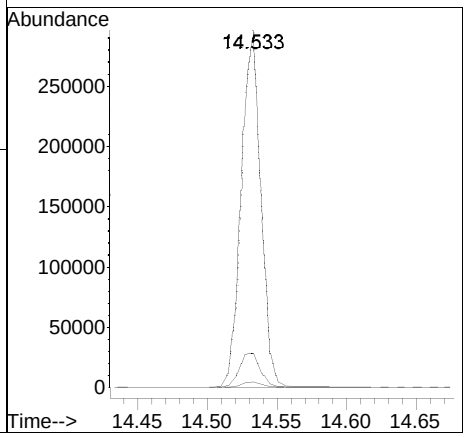


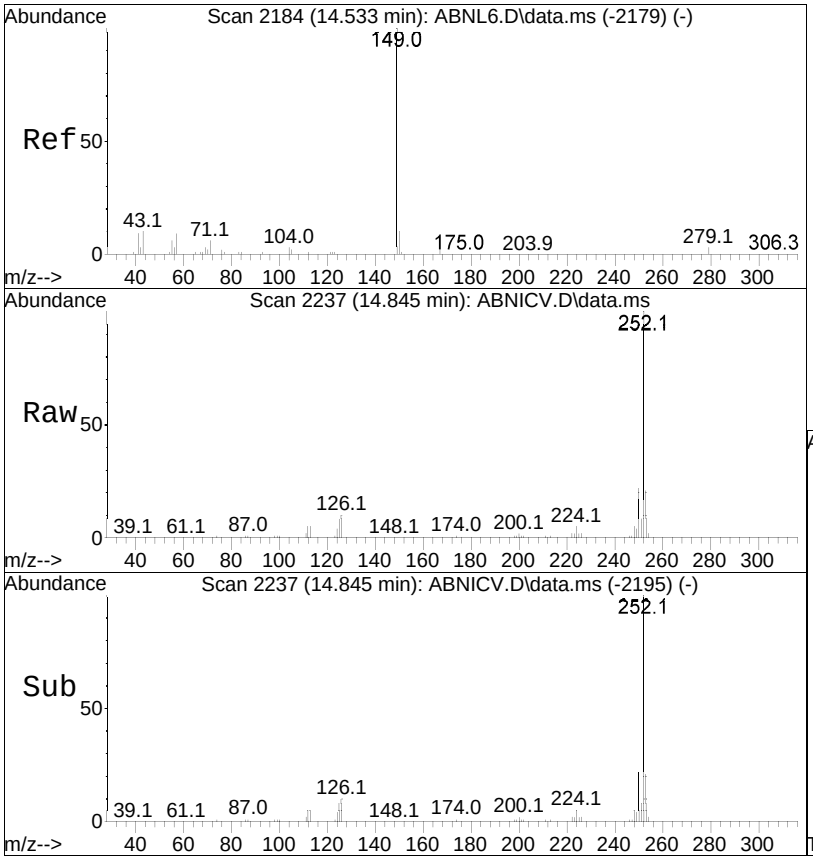



#109
Di-n-octylphthalate
Concen: 4.89 ug/ml
RT: 14.533 min Scan# 2184
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:149 Resp: 283833

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 10.5 | 18.8 | 28.2# |
| 167 | 1.5 | 1.3 | 1.9 |

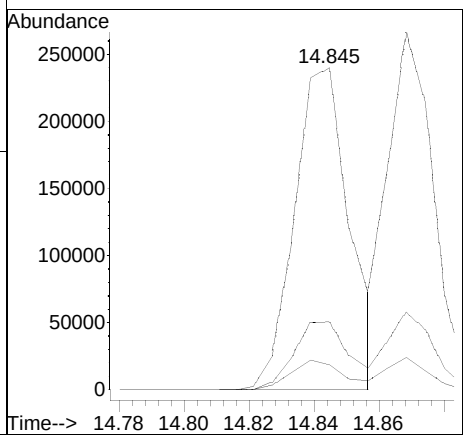


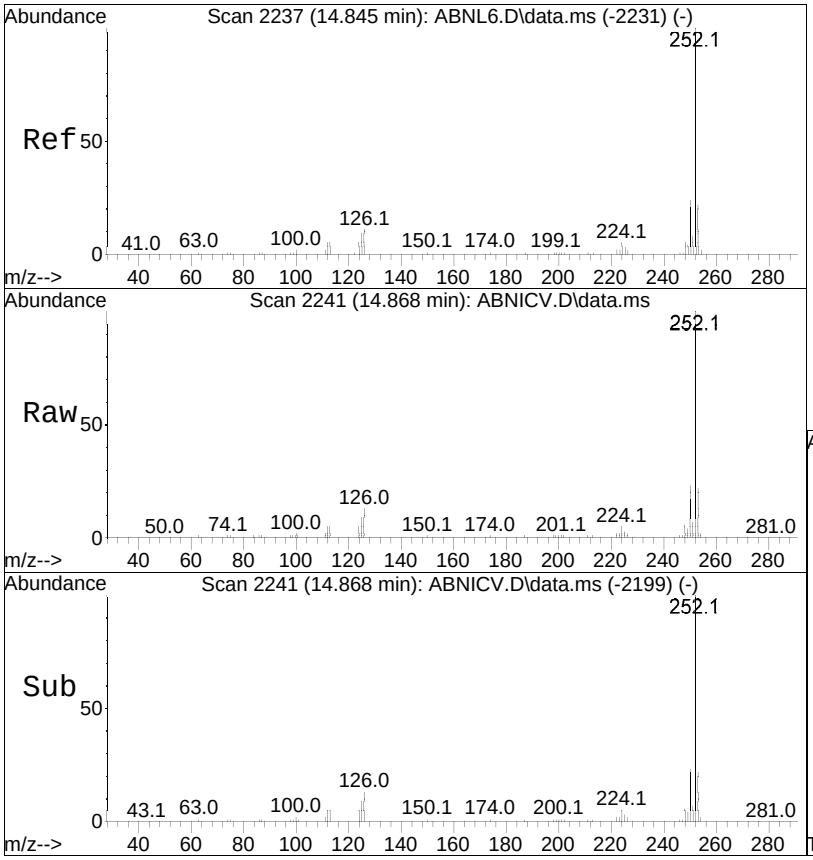



#110
Benzo(b)fluoranthene
Concen: 4.62 ug/ml
RT: 14.845 min Scan# 2237
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:252 Resp: 283245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 9.1 | 13.3 | 19.9# |
| 253 | 21.5 | 17.1 | 25.7 |

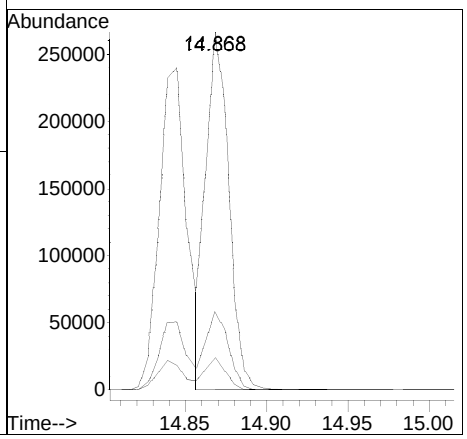


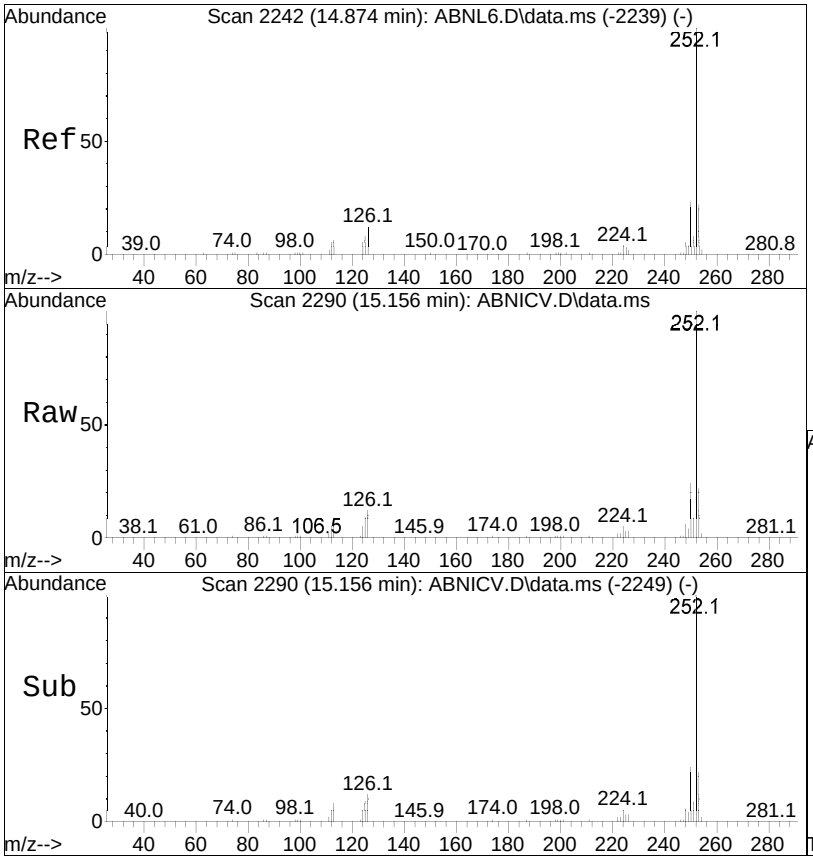



#111
Benzo(k)fluoranthene
Concen: 4.47 ug/ml
RT: 14.868 min Scan# 2241
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:252 Resp: 259962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 8.1 | 13.0 | 19.6# |
| 253 | 21.8 | 16.8 | 25.2 |

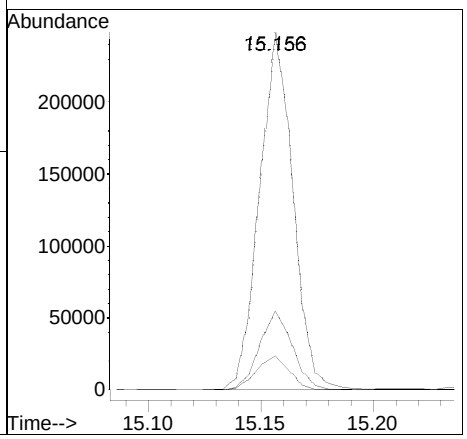


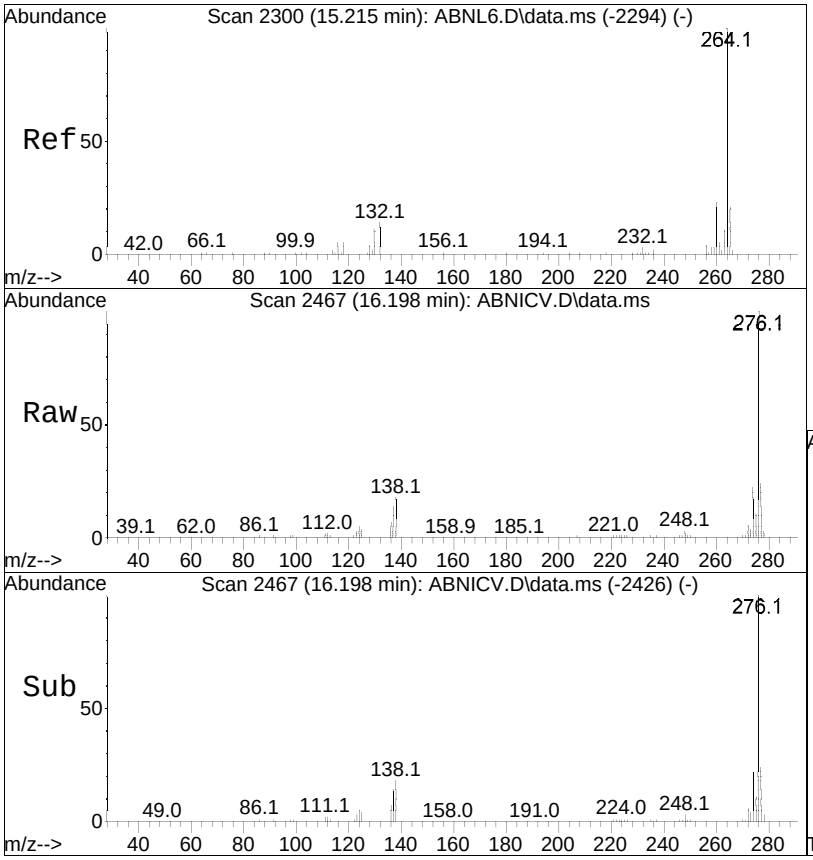



#112
Benzo(a)pyrene
Concen: 4.79 ug/ml
RT: 15.156 min Scan# 2290
Delta R.T. -0.007 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:252 Resp: 255240

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 9.6 | 14.2 | 21.2# |
| 253 | 22.2 | 16.9 | 25.3 |

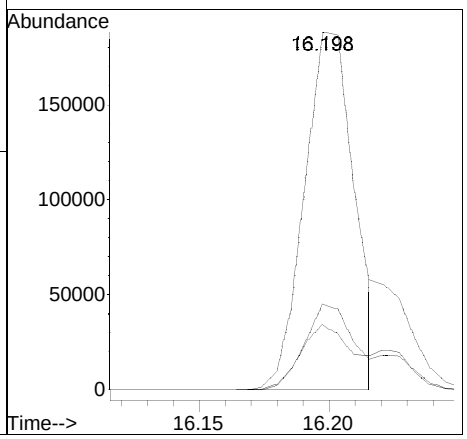


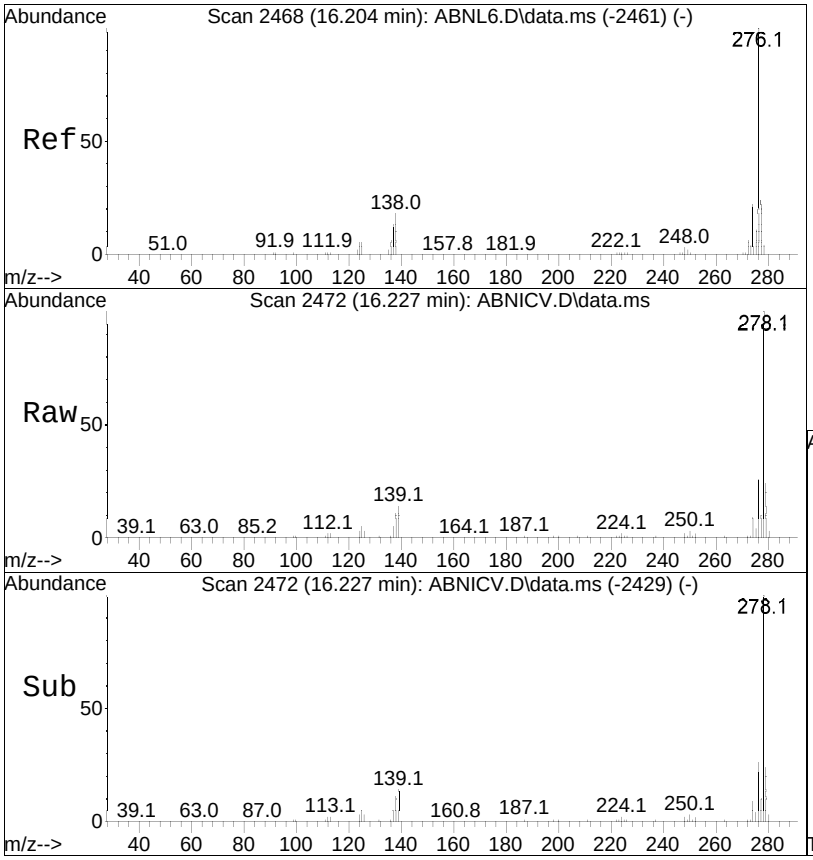



#114
Indeno(1,2,3-cd)pyrene
Concen: 4.89 ug/mL M6
RT: 16.198 min Scan# 2467
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:276 Resp: 251892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 27.5 | 25.1 | 37.7 |
| 277 | 31.3 | 18.6 | 28.0# |

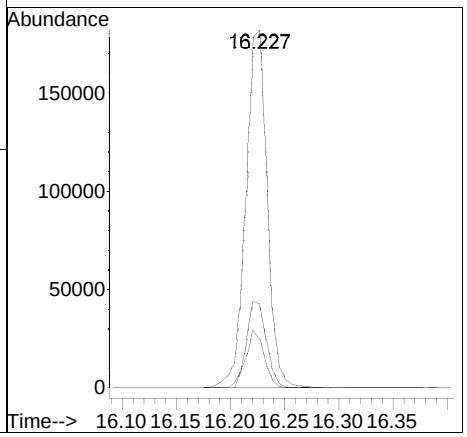


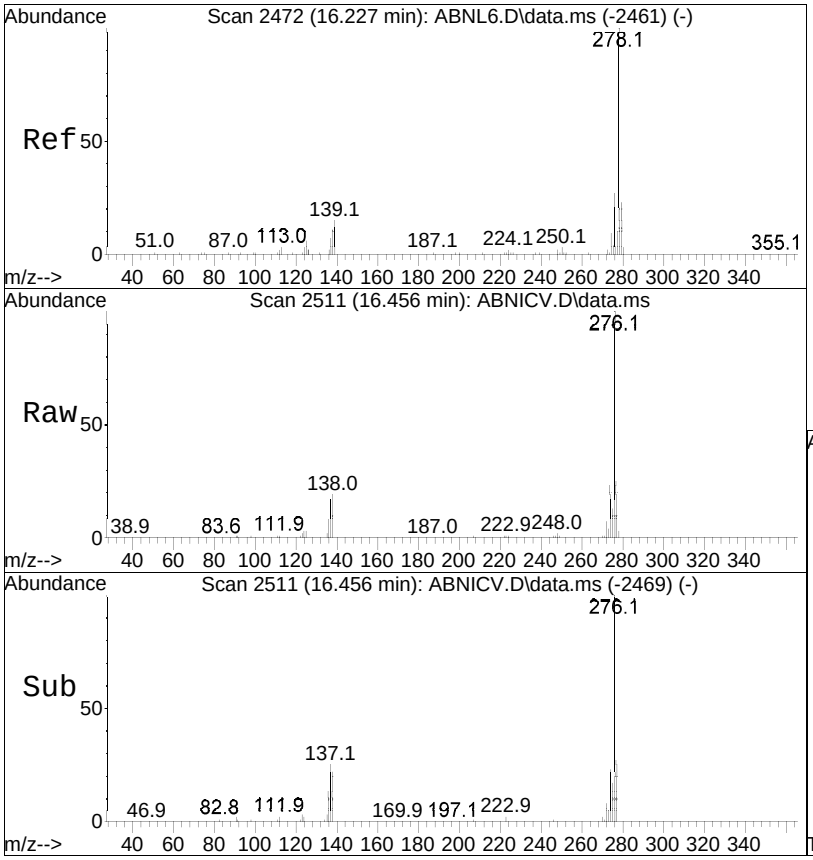



#115
Dibenzo(a,h)anthracene
Concen: 5.00 ug/ml
RT: 16.227 min Scan# 2472
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:278 Resp: 248022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 13.9 | 20.8 | 31.2# |
| 279 | 23.1 | 18.3 | 27.5 |

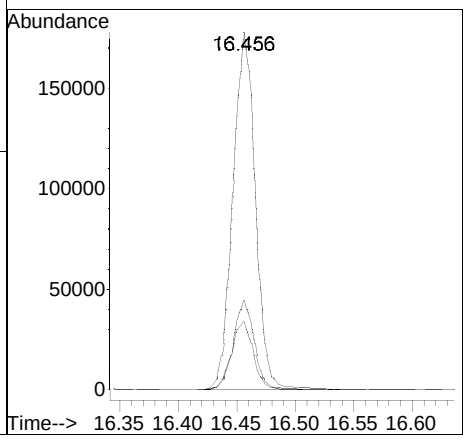





#116
Benzo(ghi)perylene
Concen: 5.13 ug/ml
RT: 16.456 min Scan# 2511
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 25 Jun 2024 12:03 am

Tgt Ion:276 Resp: 235381

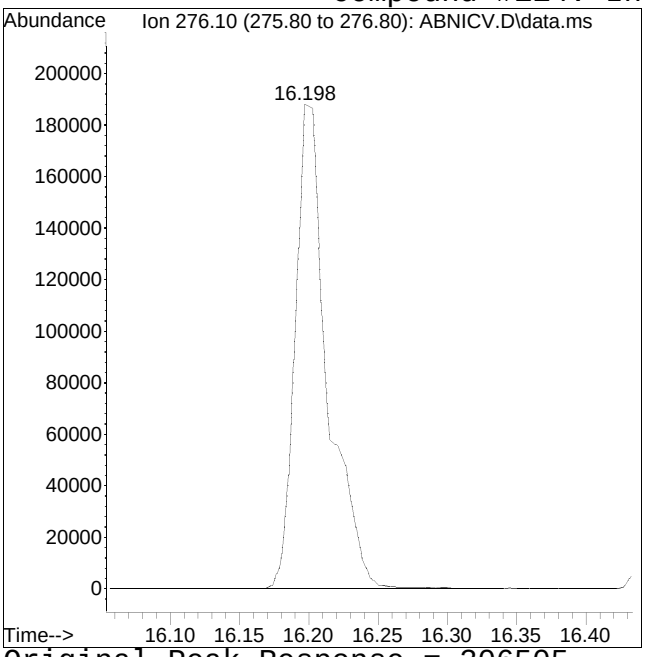
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.7 | 29.2 | 43.8# |
| 277 | 23.4 | 18.8 | 28.2 |



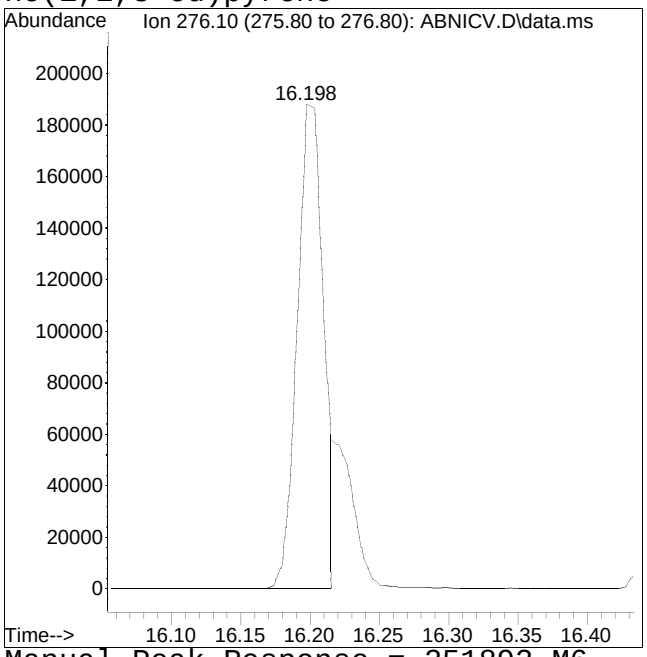
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ABNICV.D Operator : SV106:ljg
Date Inj'd : 6/25/2024 12:03 am Instrument : SV 106
Sample : CQICV1,32,,ABNICV Lot# 108Quant Date : 6/25/2024 6:33 am

## Compound #114: Indeno(1,2,3-cd)pyrene




Original Peak Response = 306505




Manual Peak Response = 251892 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9ICV.D
Acq On : 25 Jun 2024 12:27 am
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10806
Misc : WG1939040
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 25 06:34:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 27 | I | IS2_1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 28 | T | Benzaldehyde | 1.187 | 1.160 | 2.3 | 95 | 0.00 |
| 29 | T | Acetophenone | 2.158 | 2.023 | 6.3 | 91 | 0.00 |
| 30 | T | m-Toluidine | 1.957 | 1.877 | 4.1 | 93 | 0.00 |
| 31 | T | 2-Chloroaniline | 1.709 | 1.610 | 5.8 | 91 | 0.00 |
| 55 | I | IS2_Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 56 | T | a-Terpineol | 0.400 | 0.364 | 9.0 | 87 | 0.00 |
| 57 | T | 3-Chloroaniline | 0.201 | 0.203 | -1.0 | 96 | 0.00 |
| 58 | T | 2,6-Dichlorophenol | 0.362 | 0.343 | 5.2 | 86 | 0.00 |
| 59 | T | 1-chloro-2-nitrobenzene | 0.180 | 0.173 | 3.9 | 88 | 0.00 |
| 60 | T | Caprolactam | 0.210 | 0.198 | 5.7 | 83 | 0.00 |
| 61 | T | 1,2,4,5-Tetrachlorobenzene | 0.548 | 0.493 | 10.0 | 87 | 0.00 |
| 62 | T | Biphenyl | 1.084 | 0.982 | 9.4 | 87 | 0.00 |
| 83 | I | IS2_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 84 | T | Dichloran | 0.247 | 0.224 | 9.3 | 79 | 0.00 |
| 85 | T | Pentachloronitrobenzene | 0.270 | 0.251 | 7.0 | 80 | 0.00 |
| 98 | I | IS2_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 87 | 0.00 |
| 99 | T | Diphenamid | 0.561 | 0.515 | 8.2 | 78 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9ICV.D
Acq On : 25 Jun 2024 12:27 am
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10806
Misc : WG1939040
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 25 06:34:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.463 | 152 | 30658 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32042 | | | Recovery = 95.68% | | | |
| 55) IS2_Naphthalene-d8 | 7.886 | 136 | 107328 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 114213 | | | Recovery = 93.97% | | | |
| 83) IS2_Acenaphthene-d10 | 9.651 | 164 | 67752 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 73214 | | | Recovery = 92.54% | | | |
| 98) IS2_Phenanthrene-d10 | 11.092 | 188 | 149597 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 172677 | | | Recovery = 86.63% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.887 | 105 | 44470 | 4.886 | ug/ml | 100 |
| 29) Acetophenone | 6.957 | 105 | 77542 | 4.688 | ug/ml# | 83 |
| 30) m-Toluidine | 7.057 | 106 | 71933 | 4.796 | ug/ml | 94 |
| 31) 2-Chloroaniline | 7.463 | 127 | 61713 | 4.711 | ug/ml | 97 |
| 56) a-Terpineol | 7.963 | 59 | 48862 | 4.551 | ug/ml# | 85 |
| 57) 3-Chloroaniline | 7.975 | 65 | 27239 | 5.059 | ug/ml# | 64 |
| 58) 2,6-Dichlorophenol | 7.998 | 162 | 46077 | 4.748 | ug/ml | 94 |
| 59) 1-chloro-2-nitrobenzene | 8.269 | 111 | 23253 | 4.809 | ug/ml# | 1 |
| 60) Caprolactam | 8.304 | 55 | 26621 | 4.724 | ug/ml# | 78 |
| 61) 1,2,4,5-Tetrachloroben... | 8.804 | 216 | 66156 | 4.495 | ug/ml | 98 |
| 62) Biphenyl | 9.104 | 154 | 131777 | 4.530 | ug/ml | 99 |
| 84) Dichloran | 10.792 | 206 | 19006 | 4.541 | ug/ml# | 66 |
| 85) Pentachloronitrobenzene | 10.939 | 237 | 21268 | 4.649 | ug/ml# | 74 |
| 99) Diphenamid | 12.004 | 167 | 96271 | 4.586 | ug/ml | 83 |

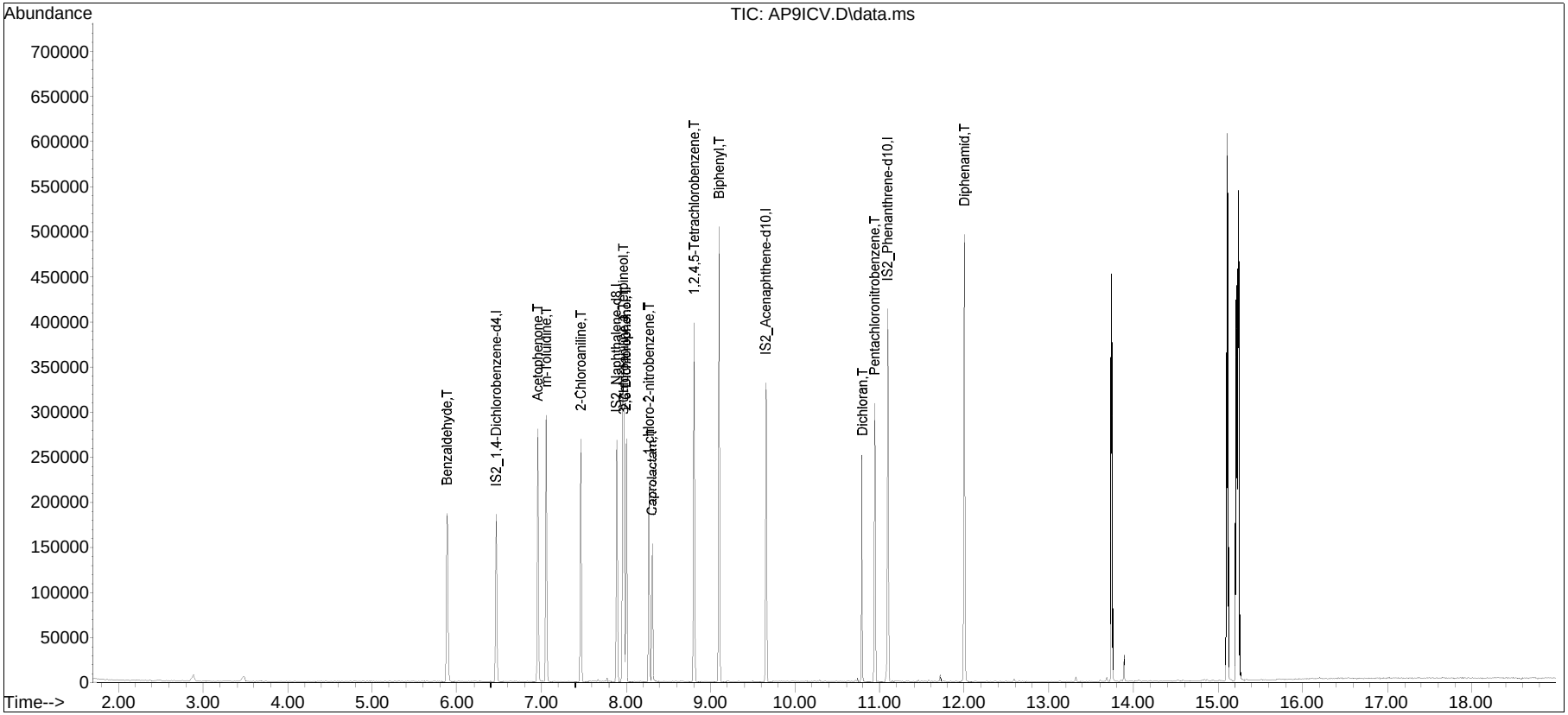
(#) = qualifier out of range (m) = manual integration (+) = signals summed

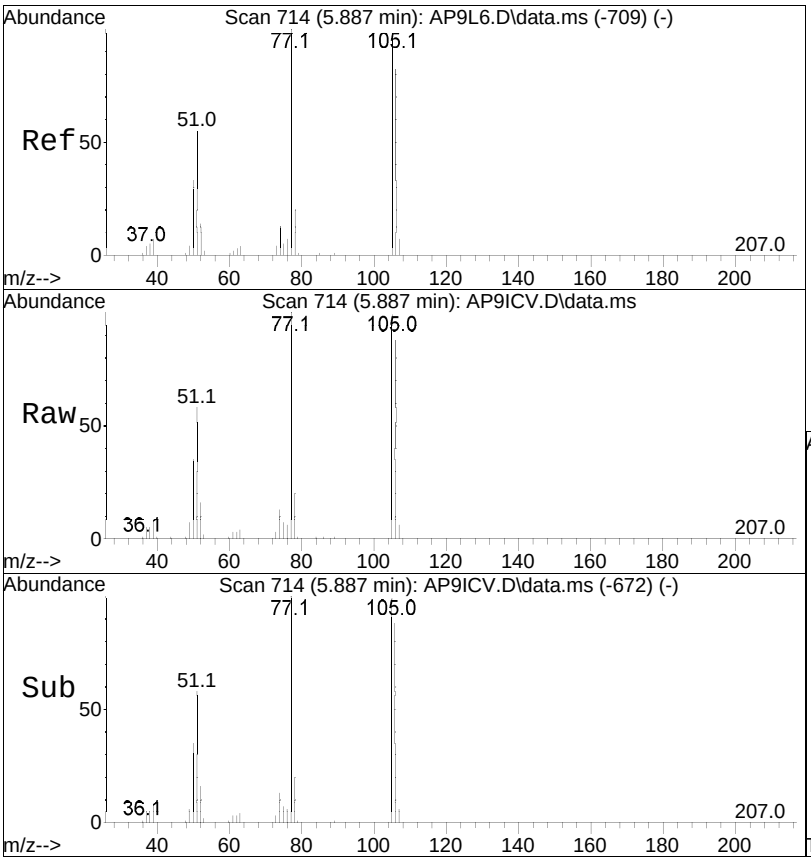
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : AP9ICV.D
Acq On : 25 Jun 2024 12:27 am
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10806
Misc : WG1939040
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 25 06:34:07 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistTical\AP9L6.D•

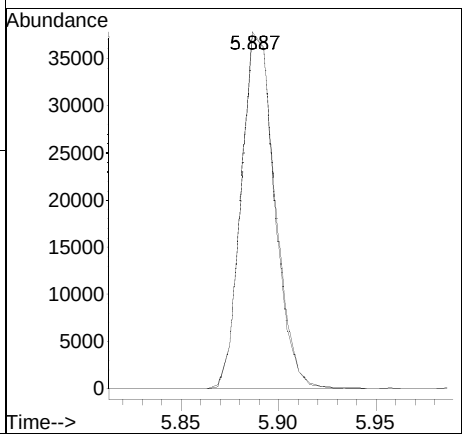


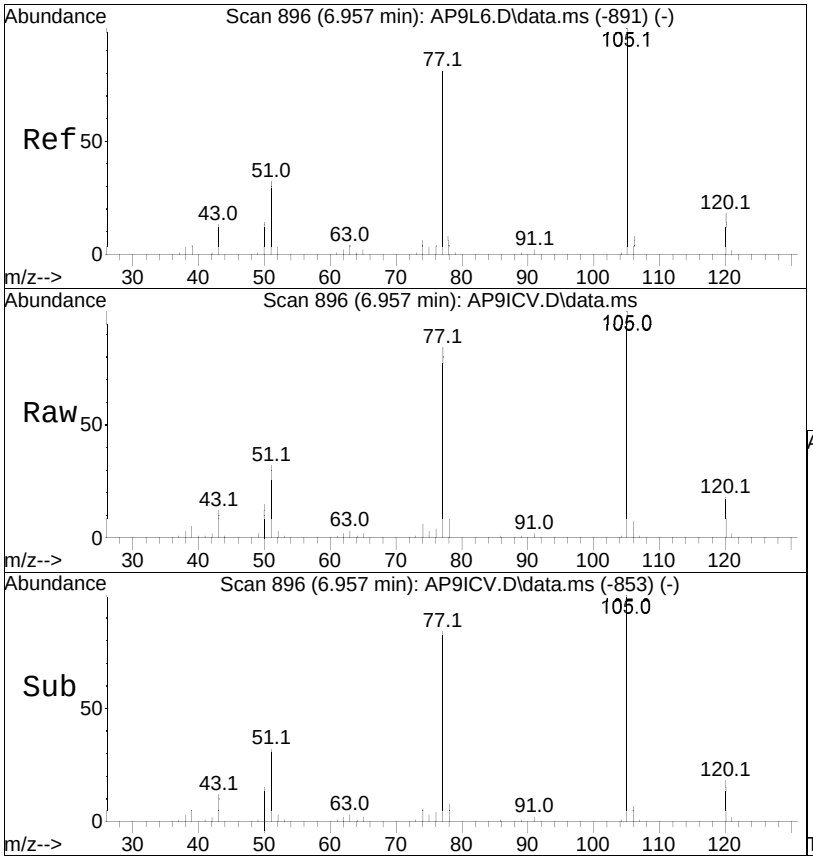



#28
Benzaldehyde
Concen: 4.89 ug/ml
RT: 5.887 min Scan# 714
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:105 Resp: 44470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 77 | 102.6 | 82.2 | 123.4 |

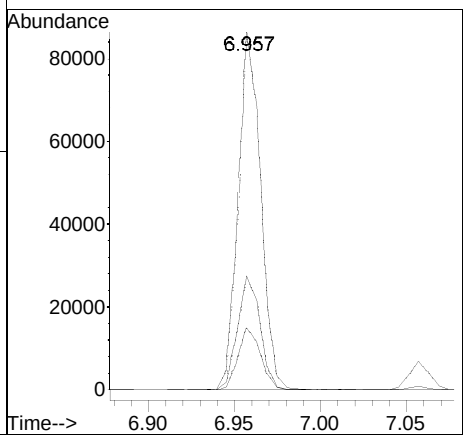


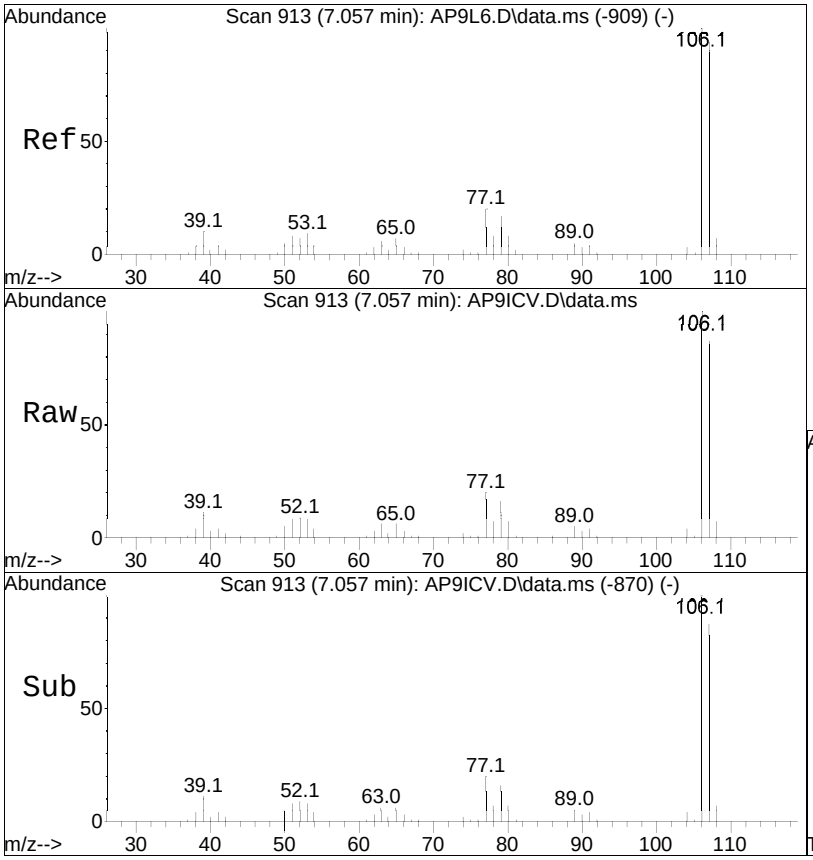



#29
Acetophenone
Concen: 4.69 ug/ml
RT: 6.957 min Scan# 896
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:105 Resp: 77542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 17.7 | 20.5 | 30.7# |
| 51 | 32.6 | 34.9 | 52.3# |

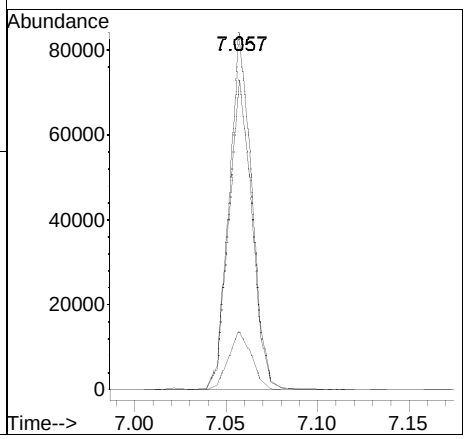


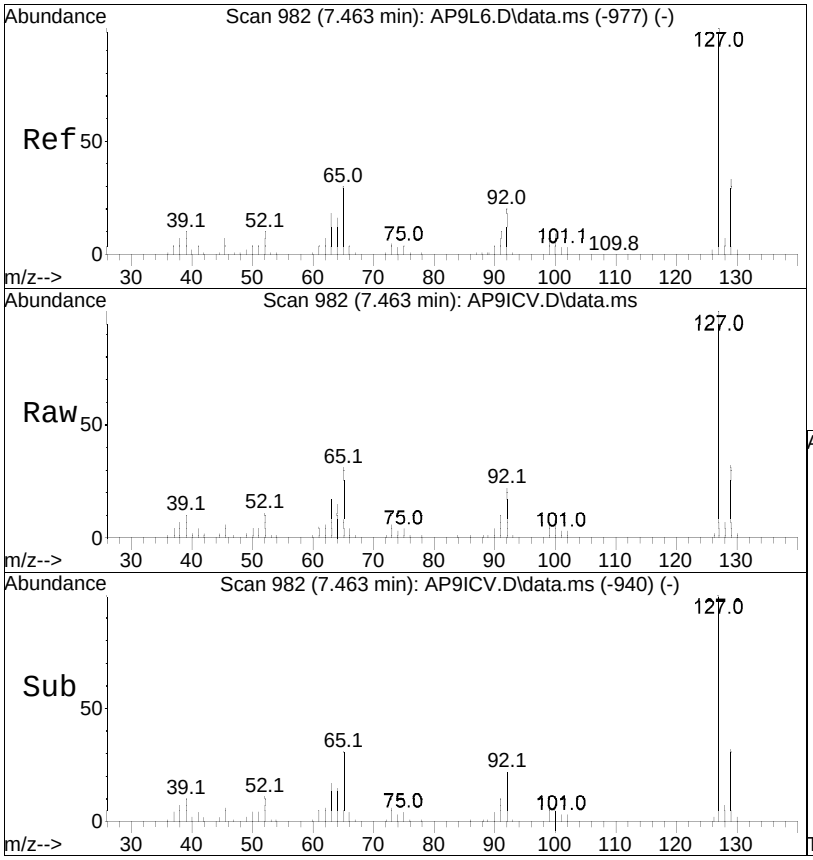



#30
m-Toluidine
Concen: 4.80 ug/ml
RT: 7.057 min Scan# 913
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:106 Resp: 71933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 107 | 88.7 | 75.7 | 113.5 |
| 79 | 16.8 | 11.8 | 17.8 |

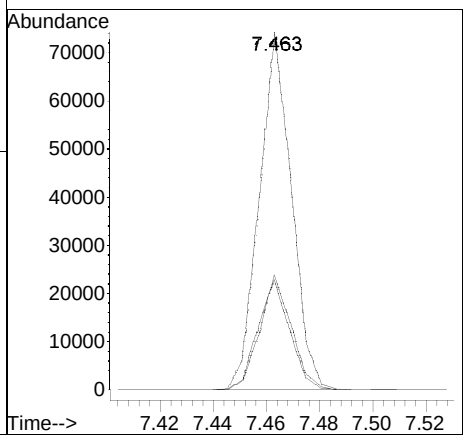


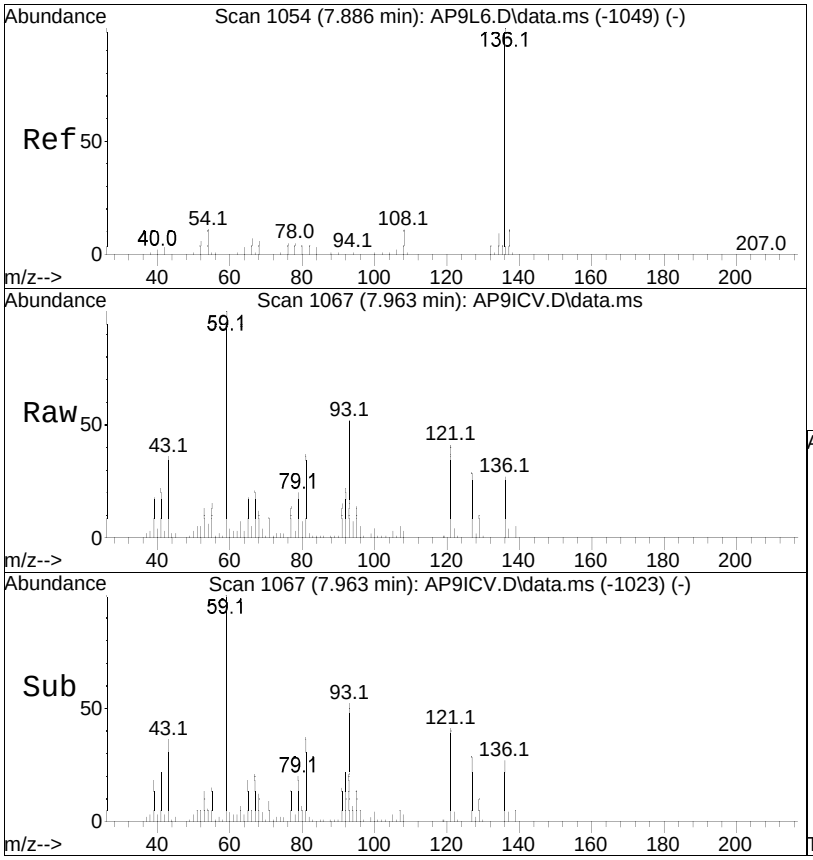



#31
2-Chloroaniline
Concen: 4.71 ug/ml
RT: 7.463 min Scan# 982
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:127 Resp: 61713

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 127 | 100 | | |
| 129 | 31.4 | 25.9 | 38.9 |
| 65 | 30.6 | 26.3 | 39.5 |

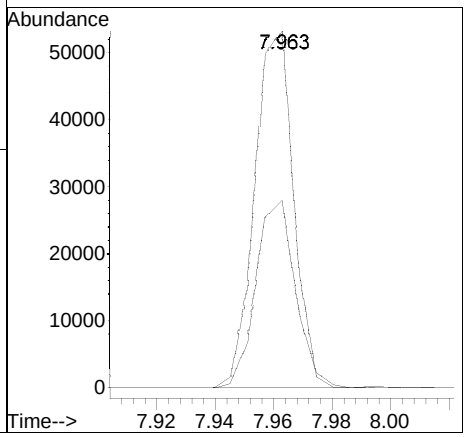


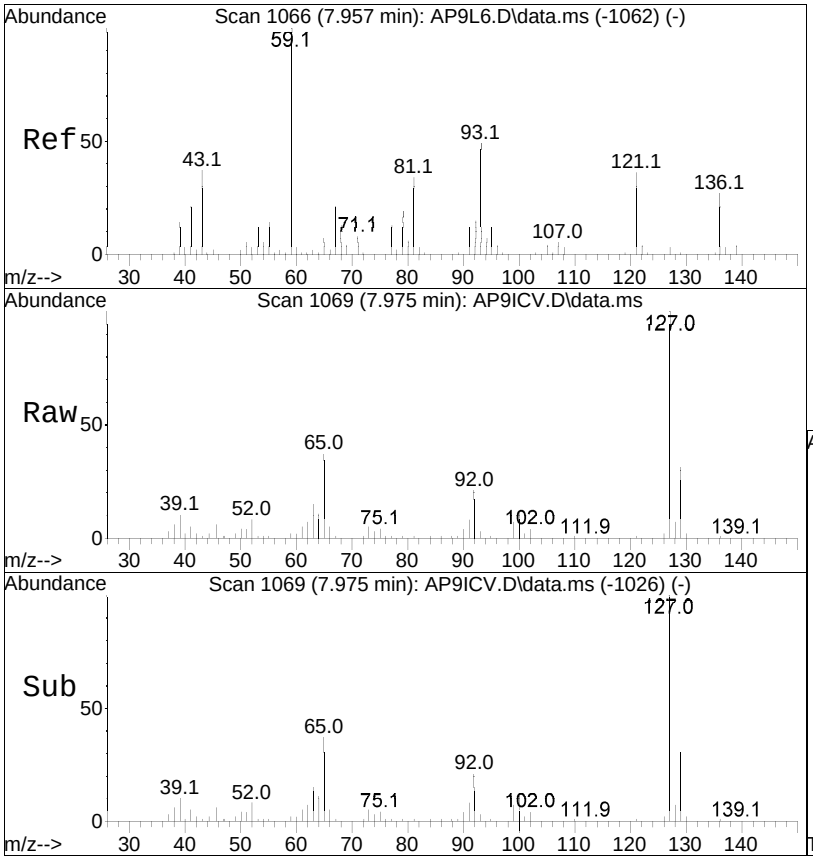



#56
a-Terpineol
Concen: 4.55 ug/ml
RT: 7.963 min Scan# 1067
Delta R.T. 0.006 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion: 59 Resp: 48862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 93 | 54.3 | 35.6 | 53.4# |

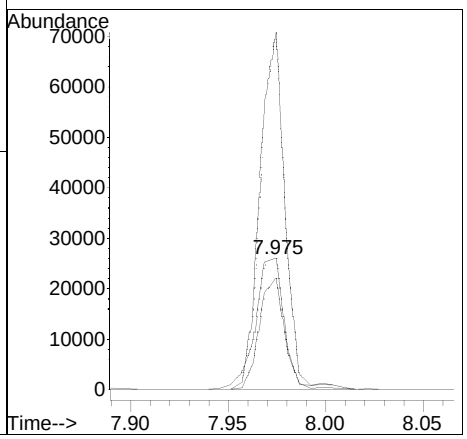


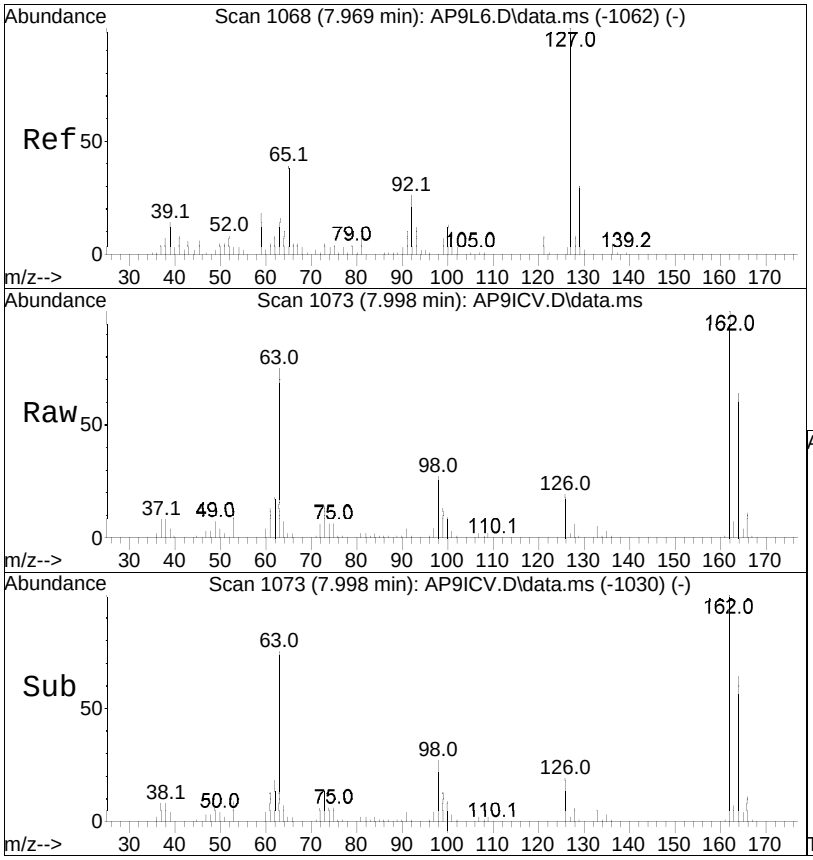



#57
3-Chloroaniline
Concen: 5.06 ug/ml
RT: 7.975 min Scan# 1069
Delta R.T. 0.006 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion: 65 Resp: 27239

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 227.1 | 243.2 | 364.8# |
| 129 | 73.0 | 78.8 | 118.2# |

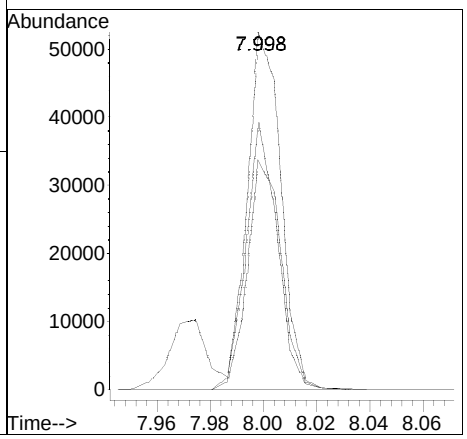


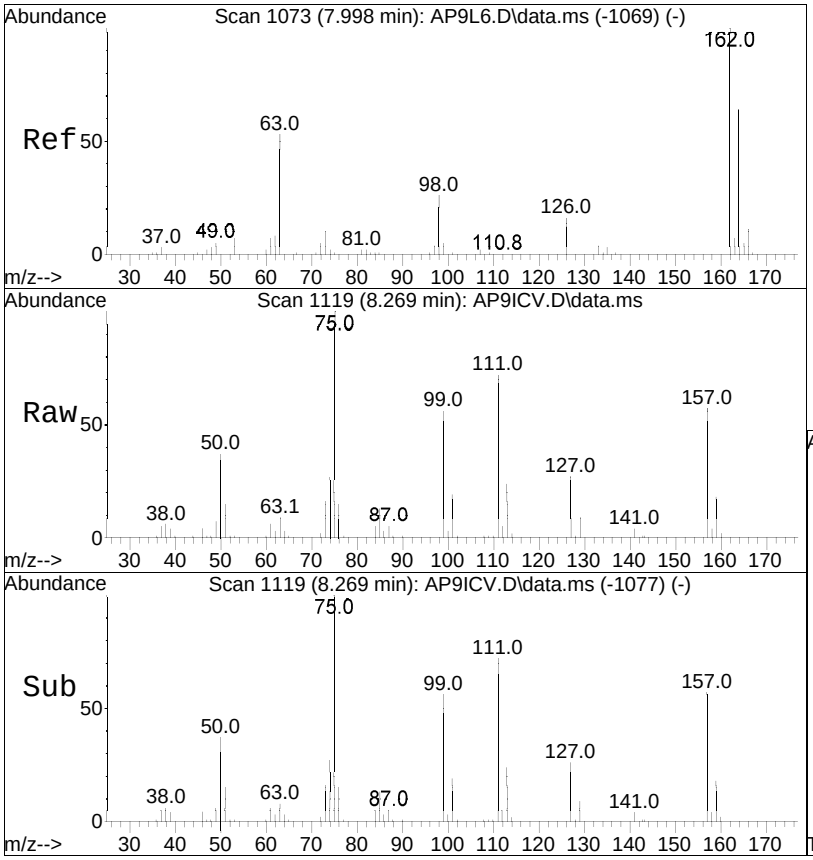



#58
2,6-Dichlorophenol
Concen: 4.75 ug/ml
RT: 7.998 min Scan# 1073
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:162 Resp: 46077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 64.6 | 51.1 | 76.7 |
| 63 | 67.7 | 60.8 | 91.2 |

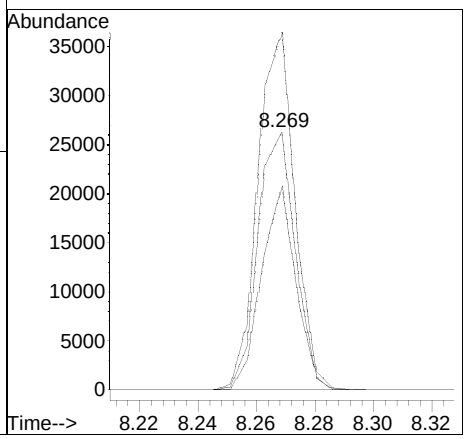


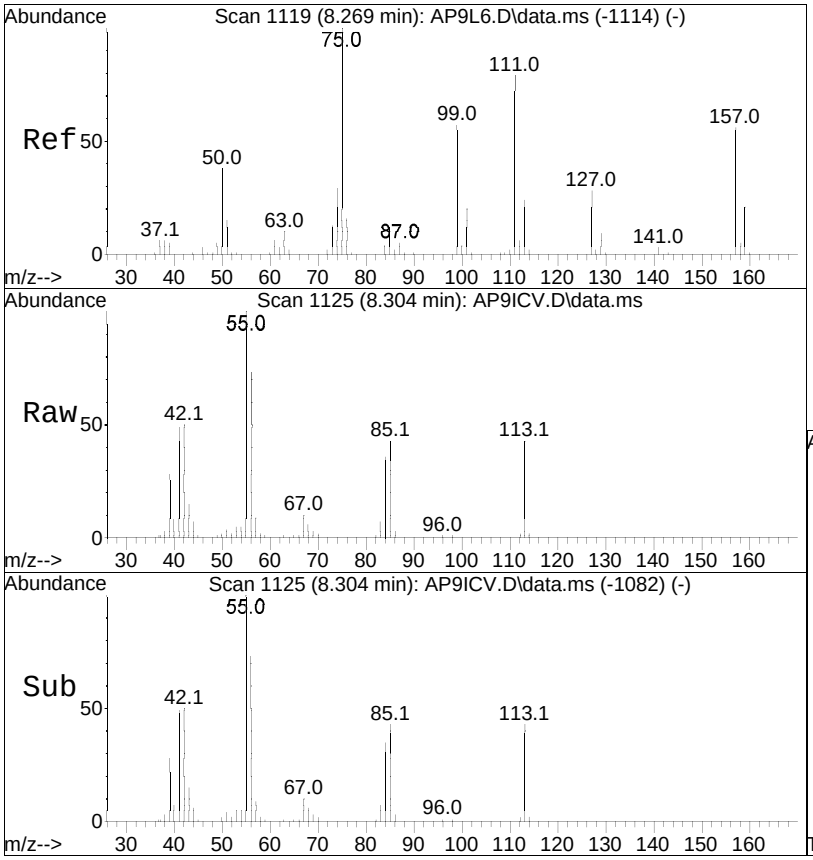



#59
1-chloro-2-nitrobenzene
Concen: 4.81 ug/ml
RT: 8.269 min Scan# 1119
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:111 Resp: 23253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 157 | 72.8 | 0.0 | 0.0# |
| 75 | 137.0 | 28.2 | 42.2# |

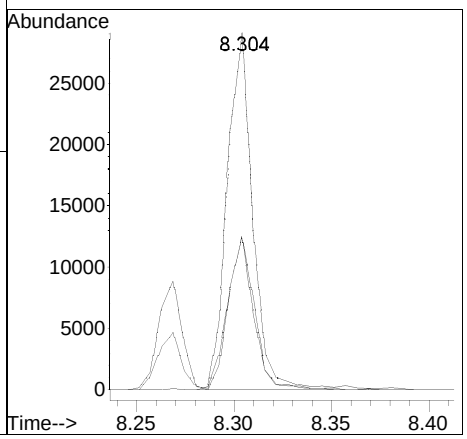


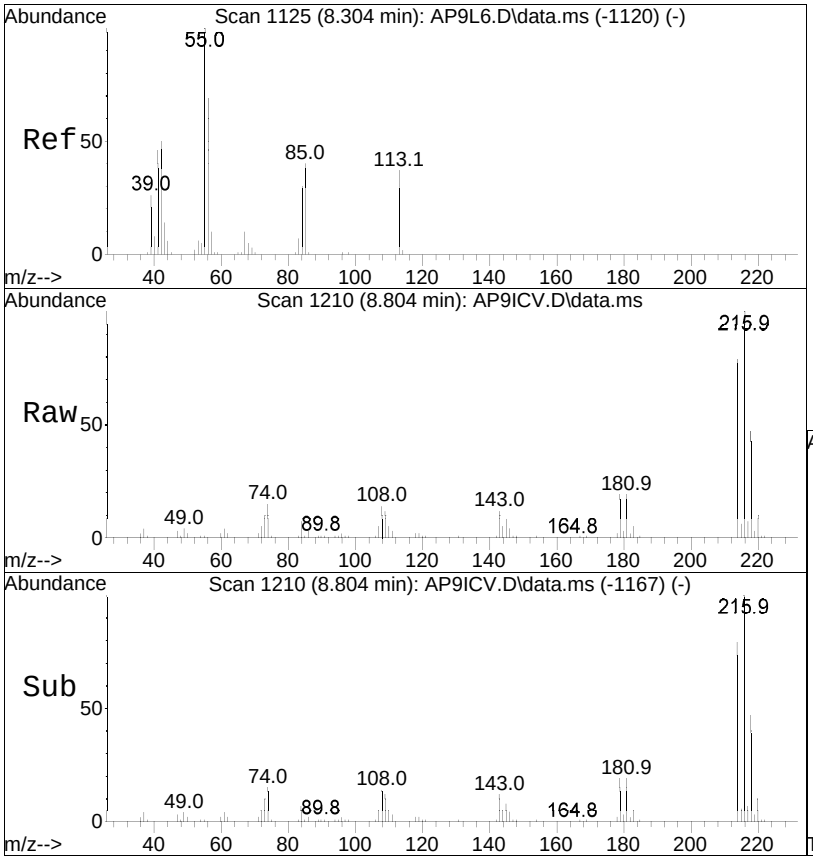



#60
Caprolactam
Concen: 4.72 ug/ml
RT: 8.304 min Scan# 1125
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion: 55 Resp: 26621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 85 | 43.8 | 19.8 | 29.6# |
| 113 | 43.8 | 29.6 | 44.4 |

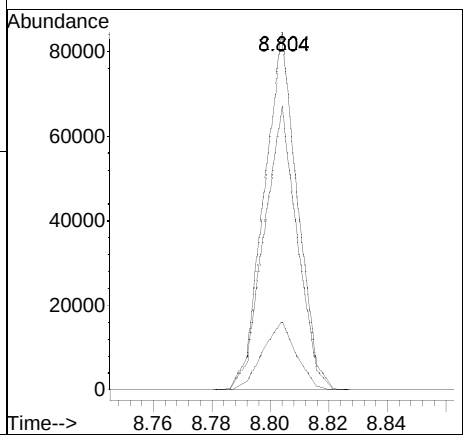


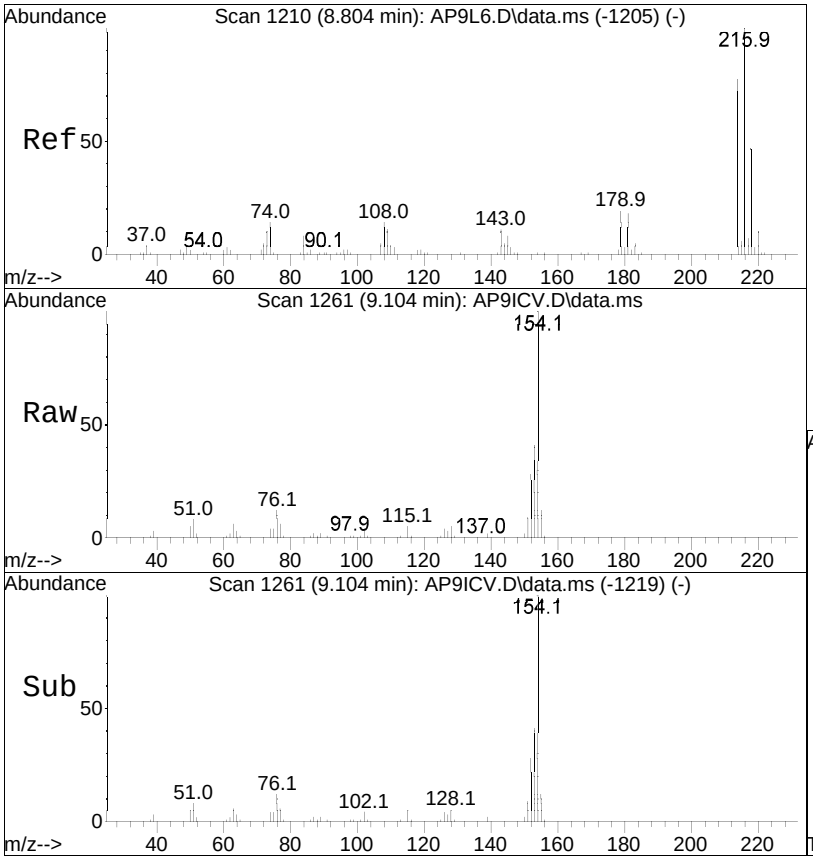



#61
1,2,4,5-Tetrachlorobenzene
Concen: 4.50 ug/ml
RT: 8.804 min Scan# 1210
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:216 Resp: 66156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 79.5 | 63.7 | 95.5 |
| 179 | 19.3 | 19.0 | 28.6 |

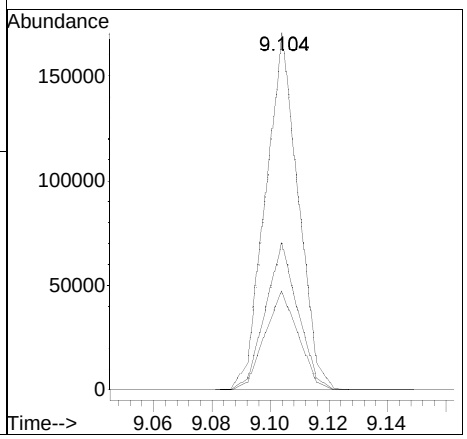


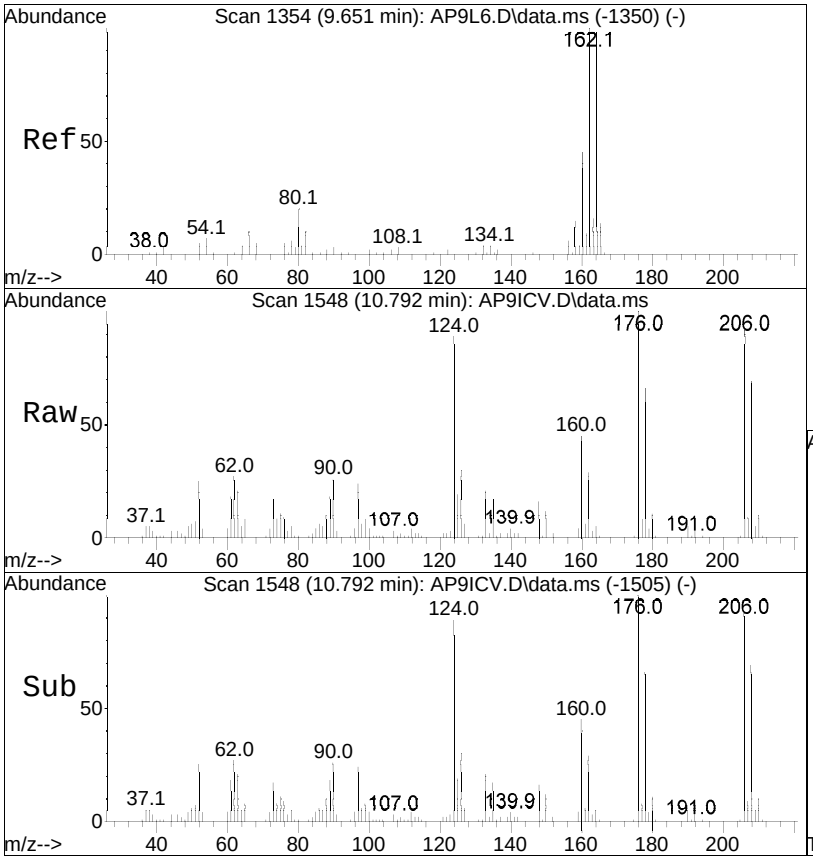



#62
Biphenyl
Concen: 4.53 ug/ml
RT: 9.104 min Scan# 1261
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:154 Resp: 131777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 41.3 | 32.3 | 48.5 |
| 152 | 28.7 | 22.5 | 33.7 |

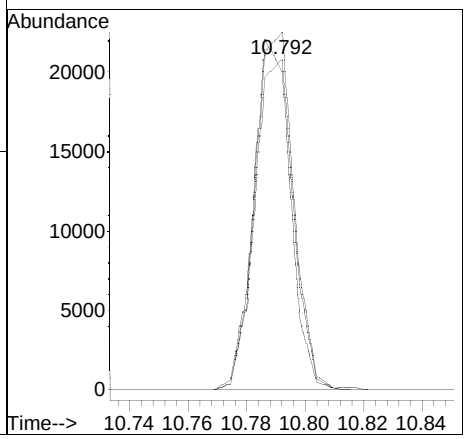


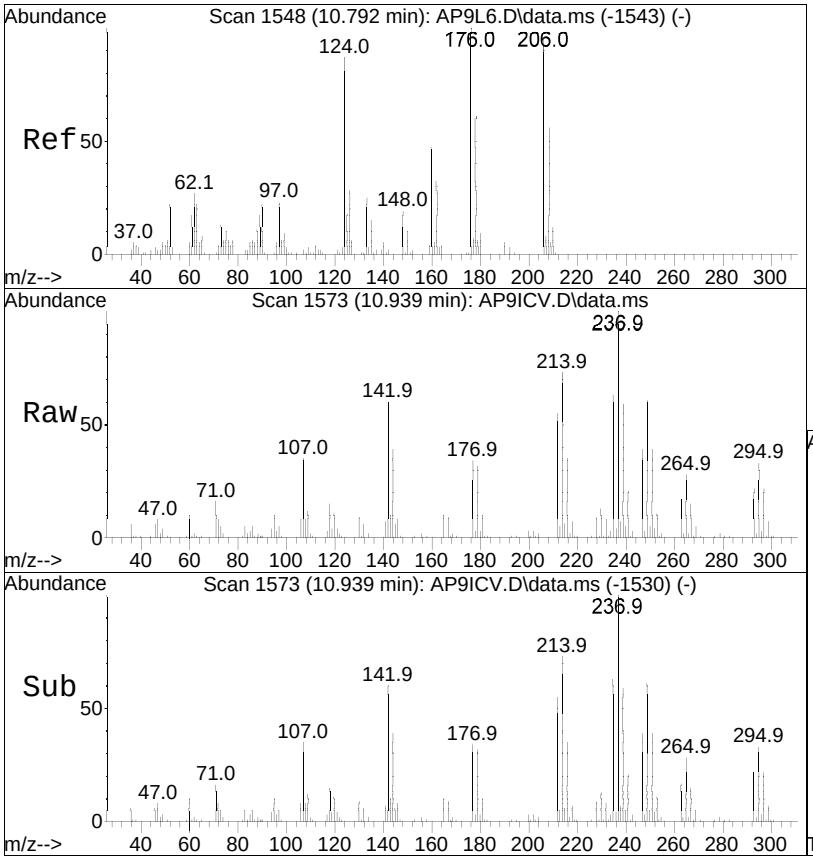



#84
Dichloran
Concen: 4.54 ug/ml
RT: 10.792 min Scan# 1548
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:206 Resp: 19006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 206 | 100 | | |
| 176 | 108.8 | 104.6 | 157.0 |
| 124 | 101.1 | 130.5 | 195.7# |

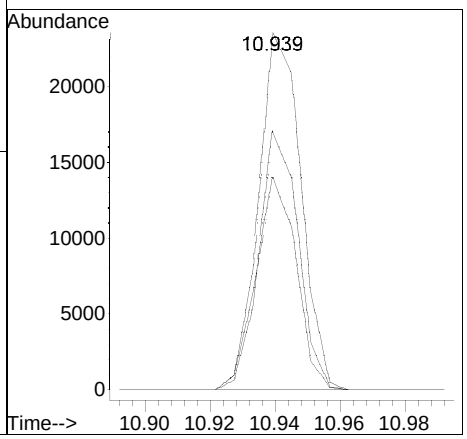


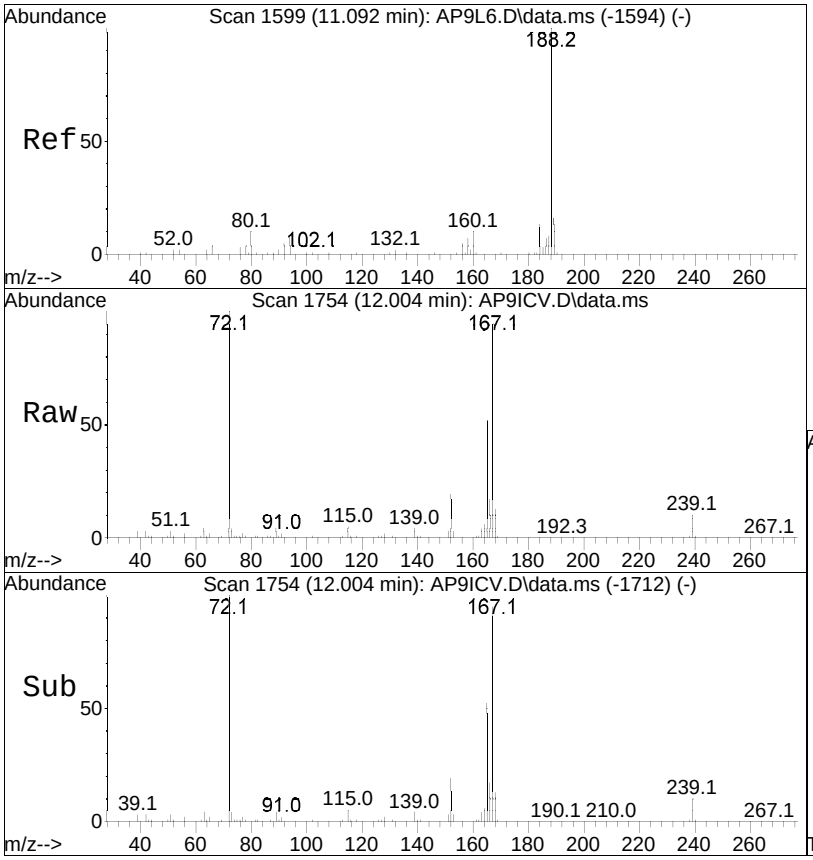



#85
Pentachloronitrobenzene
Concen: 4.65 ug/ml
RT: 10.939 min Scan# 1573
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:237 Resp: 21268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 142 | 56.9 | 77.0 | 115.4# |
| 214 | 67.4 | 58.2 | 87.4 |

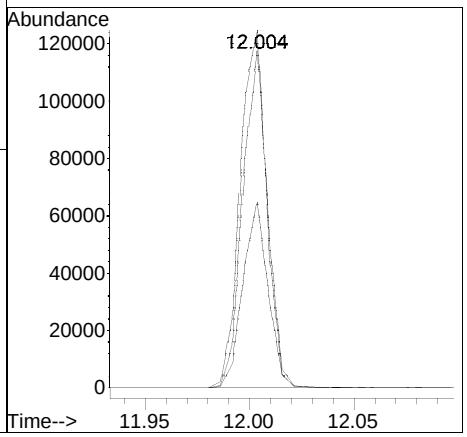





#99
Diphenamid
Concen: 4.59 ug/ml
RT: 12.004 min Scan# 1754
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 25 Jun 2024 12:27 am

Tgt Ion:167 Resp: 96271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 72 | 111.8 | 109.7 | 164.5 |
| 165 | 56.5 | 41.8 | 62.6 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : AP9ICV.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 12:27 am | Instrument | : SV 106 |
| Sample | : CQICV2,32,,AP9ICV Lot# 108 | Quant Date | : 6/25/2024 6:34 am |

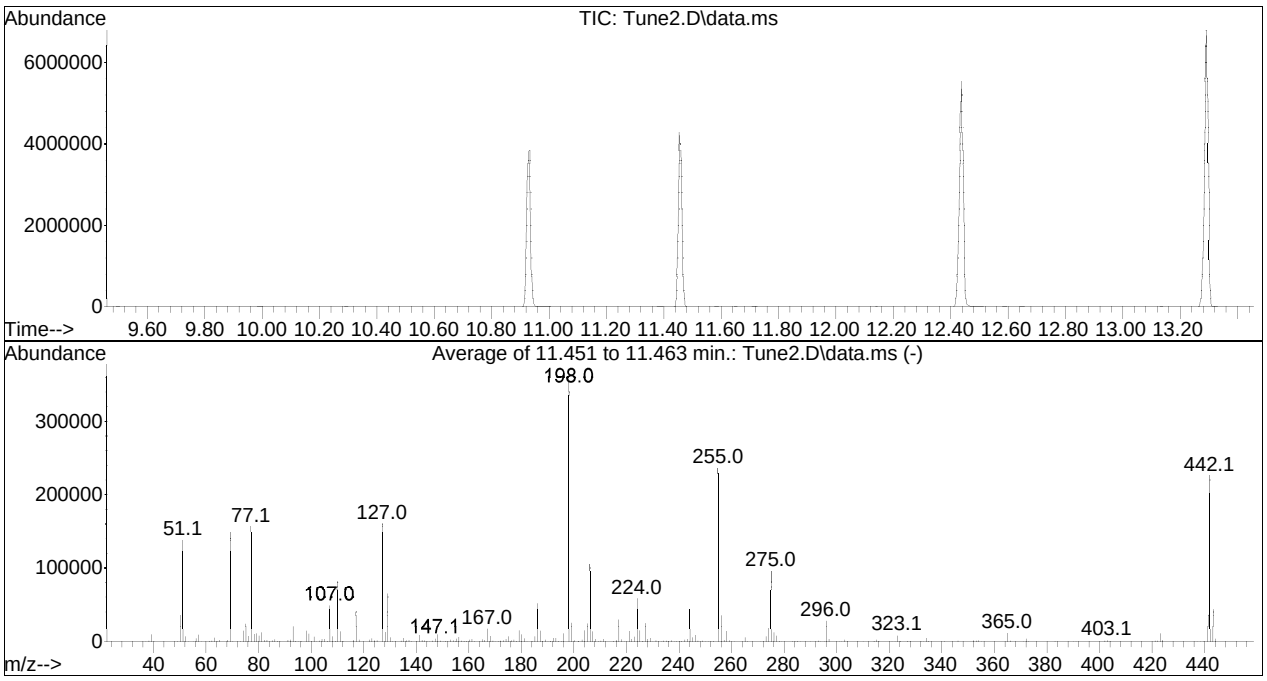
There are no manual integrations or false positives in this file.

# DFTPP

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune2.D
Acq On : 25 Jun 2024 12:51 am
Operator : SV106:ljg
Sample : Tune2 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024



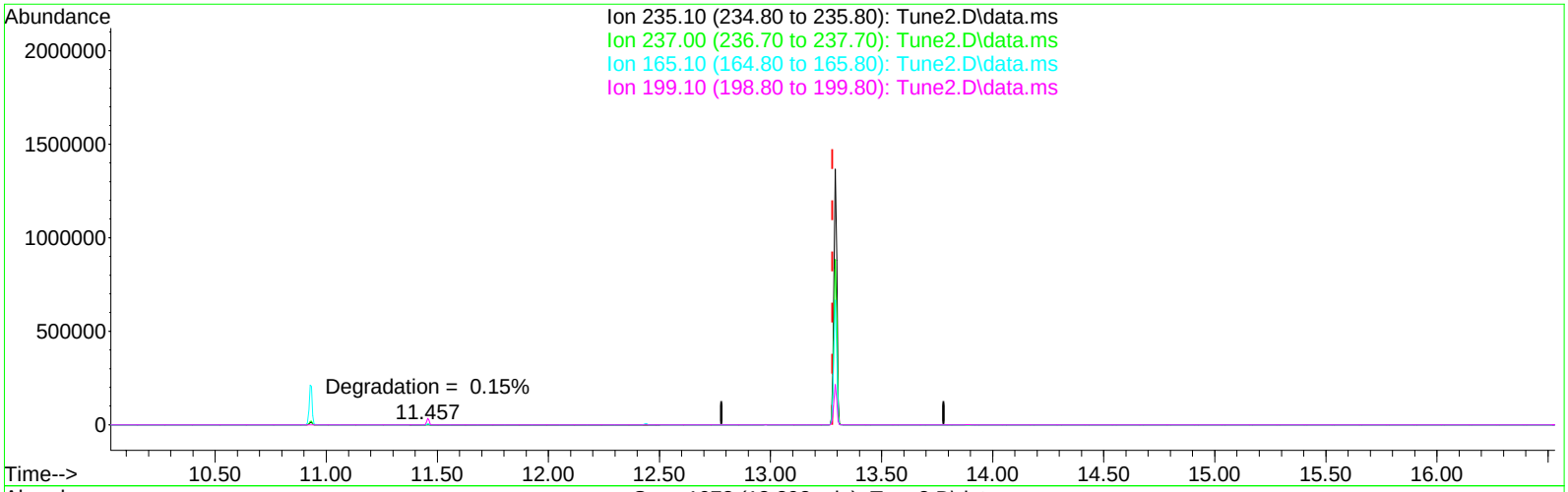

Spectrum Information: Average of 11.451 to 11.463 min.

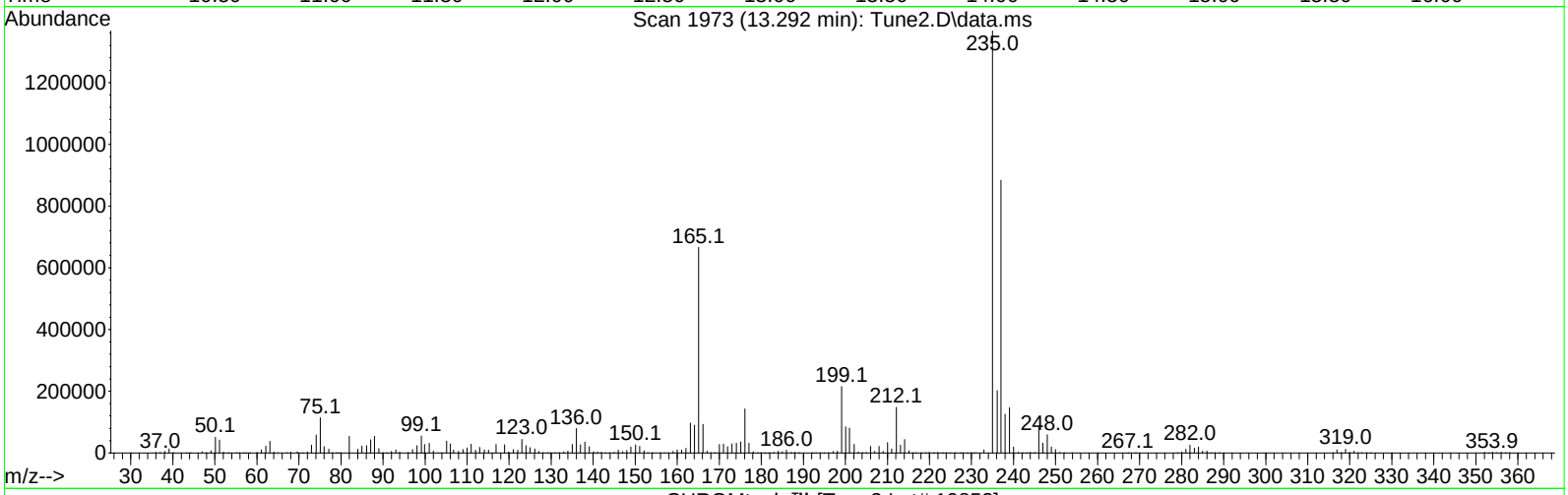
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 38.4 | 137891 | PASS |
| 68 | 69 | 0.00 | 2 | 1.7 | 2453 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 148637 | PASS |
| 70 | 69 | 0.00 | 2 | 0.5 | 712 | PASS |
| 127 | 198 | 10 | 80 | 44.6 | 160304 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 359445 | PASS |
| 199 | 198 | 5 | 9 | 7.0 | 25279 | PASS |
| 275 | 198 | 10 | 60 | 26.6 | 95504 | PASS |
| 365 | 198 | 1 | 100 | 3.1 | 11195 | PASS |
| 441 | 442 | 0.01 | 24 | 16.3 | 36658 | PASS |
| 442 | 198 | 50 | 100 | 62.7 | 225269 | PASS |
| 443 | 442 | 15 | 24 | 19.4 | 43760 | PASS |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune2.D
Acq On : 25 Jun 2024 12:51 am
Operator : SV106:ljg
Sample : Tune2 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 25 05:23:43 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune2 Lot# 10853]

(6) DDT (T)

13.292min (+ 0.012) 205.49

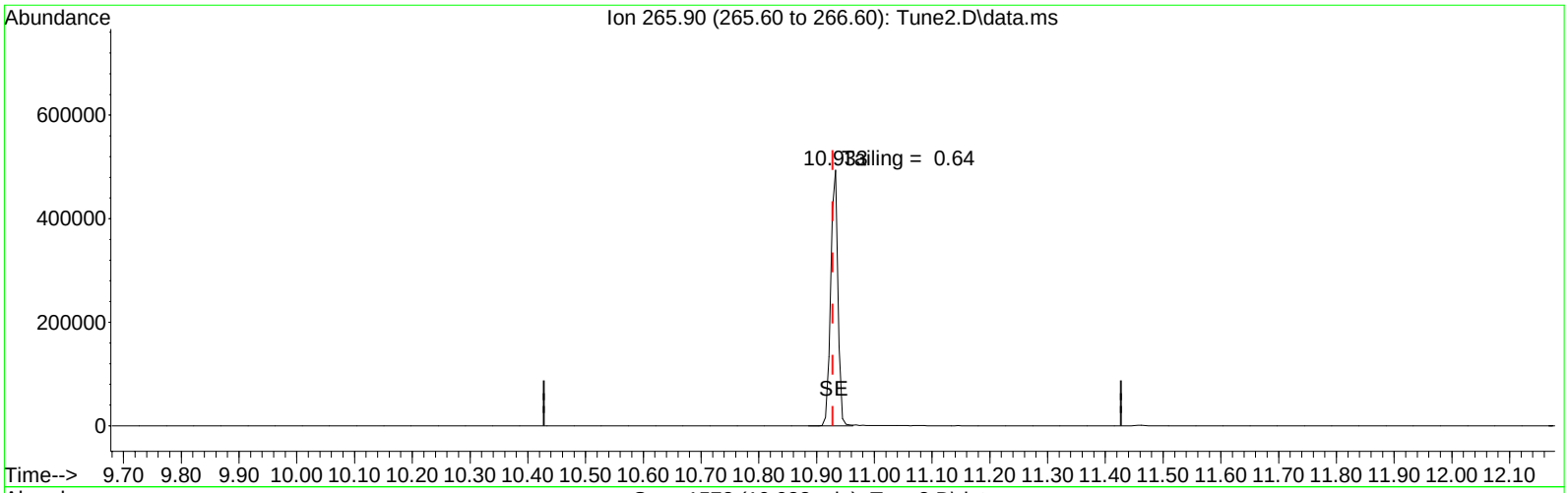
response 1252623

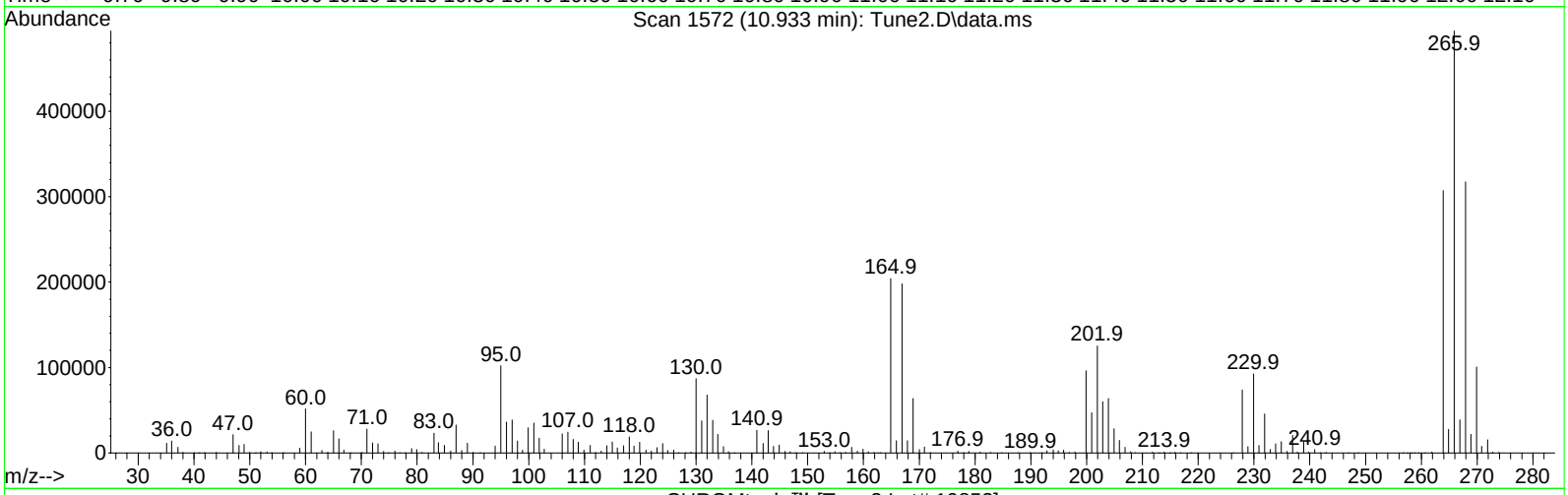
| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 63.30 | 64.41 |
| 165.10 | 44.50 | 47.74 |
| 199.10 | 14.80 | 15.51 |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune2.D
Acq On : 25 Jun 2024 12:51 am
Operator : SV106:ljg
Sample : Tune2 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 25 05:23:43 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune2 Lot# 10853]

(1) Pentachlorophenol (T)

10.933min (+ 0.005) 208.83

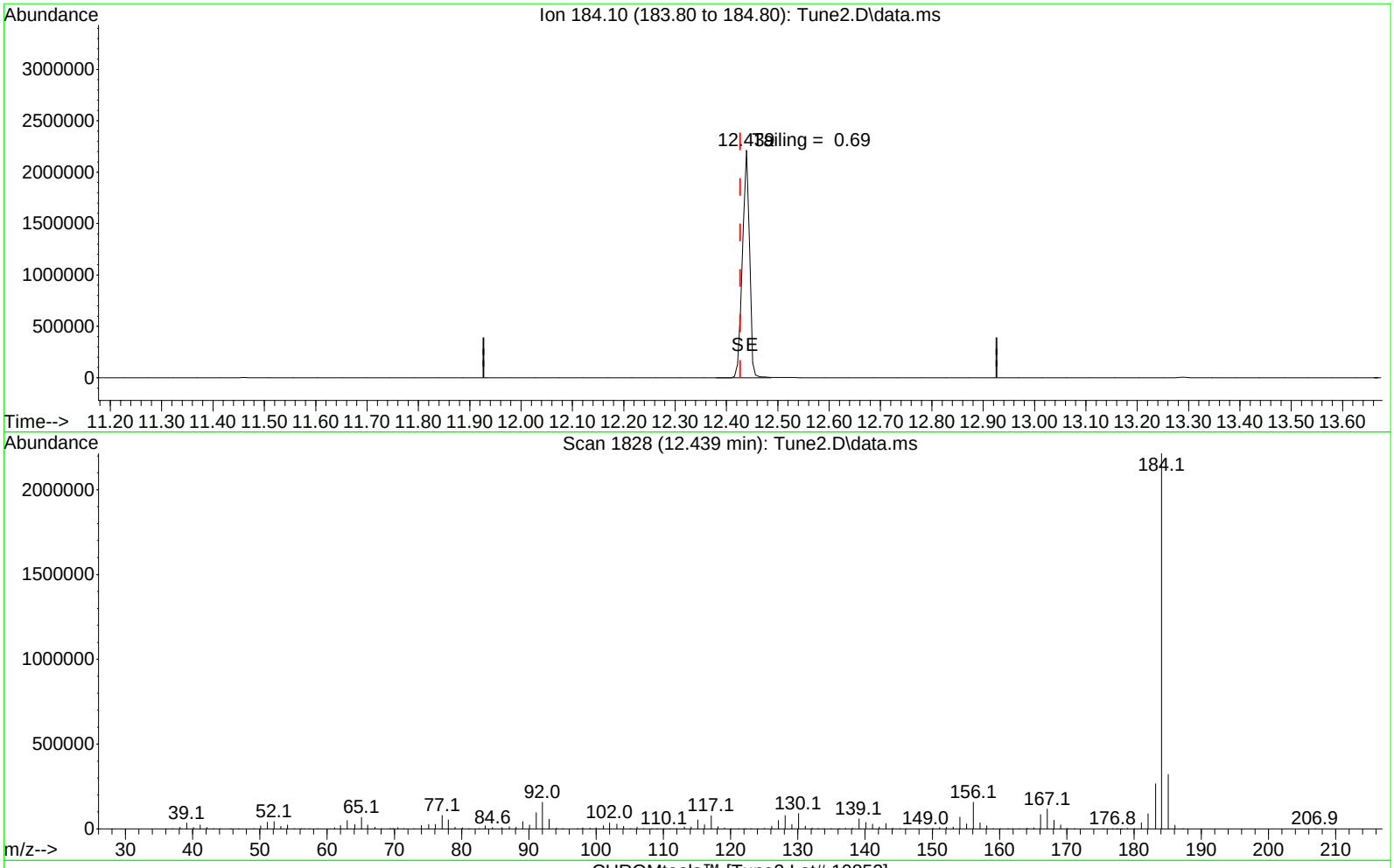
response 438622

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240624RVTical\
Data File : Tune2.D
Acq On : 25 Jun 2024 12:51 am
Operator : SV106:ljg
Sample : Tune2 Lot# 10853
Misc : WG1939040
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Jun 25 05:23:43 2024
Quant Method : I:\8270\SV106\240624RVTical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 21 23:55:18 2024
Response via : Initial Calibration




CHROMtools™ [Tune2 Lot# 10853]

(3) Benzidine (T)

12.439min (+ 0.012) 207.58

response 2113145

| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL9.D
Acq On : 25 Jun 2024 1:14 am
Operator : SV106:ljg
Sample : IL2,32,,ADPL50 Lot# 10796
Misc : WG1939040
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 25 10:13:17 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 33017 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = | 100.79% | | |
| 86) IS3_Acenaphthene-d10 | 9.657 | 164 | 71723 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = | 93.80% | | |
| 100) IS3_Phenanthrene-d10 | 11.098 | 188 | 171323 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 180522 | | | Recovery = | 94.90% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.887 | 88 | 213408 | 44.234 | ug/ml# | 100 |
| 34) n-Decane | 6.363 | 57 | 675848 | 49.265 | ug/ml# | 44 |
| 87) Atrazine | 10.874 | 200 | 476191 | 52.207 | ug/ml | 94 |
| 101) n-Octadecane | 11.074 | 57 | 1016939 | 47.722 | ug/ml# | 1 |
| 102) Parathion | 11.886 | 109 | 310962 | 58.476 | ug/ml | 98 |
| 103) 3,3'-Dimethylbenzidine | 13.180 | 212 | 2068015 | 61.068 | ug/ml | 100 |

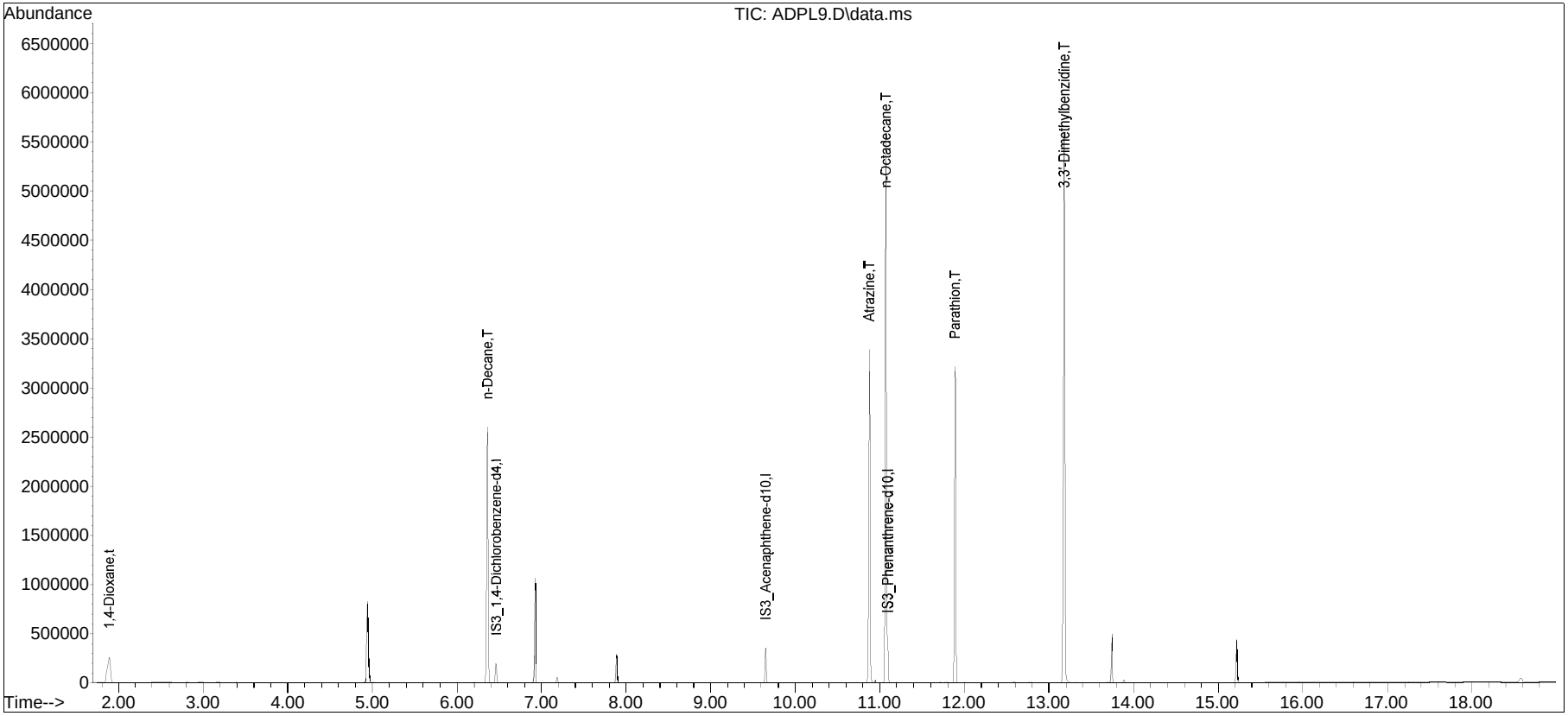
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL9.D
Acq On : 25 Jun 2024 1:14 am
Operator : SV106:ljg
Sample : IL2,32,,ADPL50 Lot# 10796
Misc : WG1939040
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 25 10:13:17 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL9.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 1:14 am | Instrument | : SV 106 |
| Sample | : IL2,32,,ADPL50 Lot# 10796 | Quant Date | : 6/25/2024 10:14 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL8.D
Acq On : 25 Jun 2024 1:38 am
Operator : SV106:ljg
Sample : IL3,32,,ADPL25 Lot# 10797
Misc : WG1939040
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 25 10:13:06 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 32) | IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 33304 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 32759 | | | Recovery = | 101.66% | | |
| 86) | IS3_Acenaphthene-d10 | 9.651 | 164 | 75831 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 76462 | | | Recovery = | 99.17% | | |
| 100) | IS3_Phenanthrene-d10 | 11.098 | 188 | 183808 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 180522 | | | Recovery = | 101.82% | | |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | Qvalue |
| 33) | 1,4-Dioxane | 1.857 | 88 | 101538 | 20.865 | ug/ml# | 100 |
| 34) | n-Decane | 6.357 | 57 | 325546 | 23.526 | ug/ml# | 43 |
| 87) | Atrazine | 10.874 | 200 | 249095 | 25.830 | ug/ml | 95 |
| 101) | n-Octadecane | 11.074 | 57 | 575419 | 25.169 | ug/ml# | 1 |
| 102) | Parathion | 11.886 | 109 | 163023 | 28.574 | ug/ml | 99 |
| 103) | 3,3'-Dimethylbenzidine | 13.174 | 212 | 1073064 | 29.535 | ug/ml | 100 |

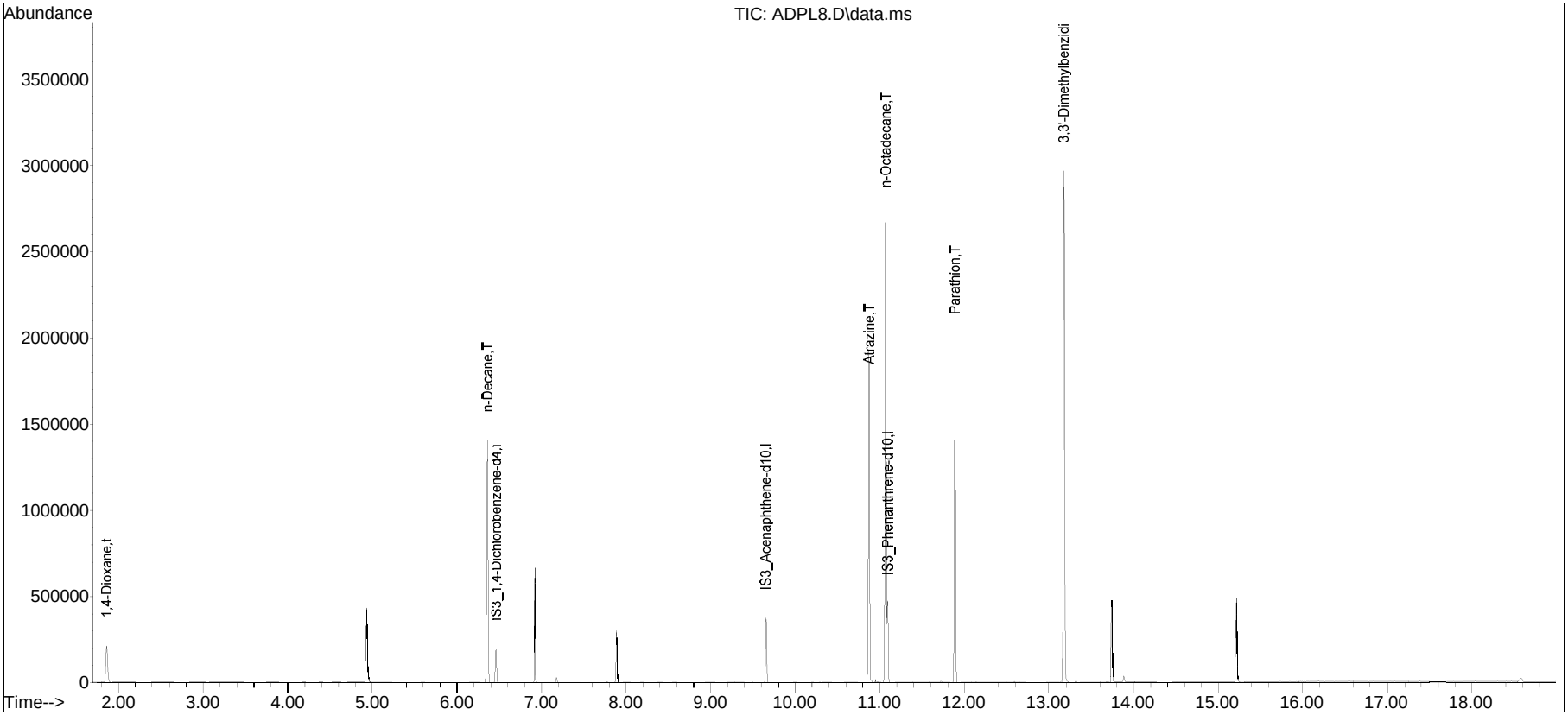
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL8.D
Acq On : 25 Jun 2024 1:38 am
Operator : SV106:ljg
Sample : IL3,32,,ADPL25 Lot# 10797
Misc : WG1939040
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 25 10:13:06 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL8.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 1:38 am | Instrument | : SV 106 |
| Sample | : IL3,32,,ADPL25 Lot# 10797 | Quant Date | : 6/25/2024 10:13 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL7.D
Acq On : 25 Jun 2024 2:02 am
Operator : SV106:ljg
Sample : IL4,32,,ADPL10 Lot# 10798
Misc : WG1939040
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 25 10:12:55 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 32) | IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 32637 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 32759 | | | Recovery = | 99.63% | | |
| 86) | IS3_Acenaphthene-d10 | 9.651 | 164 | 75339 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 76462 | | | Recovery = | 98.53% | | |
| 100) | IS3_Phenanthrene-d10 | 11.092 | 188 | 178525 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 180522 | | | Recovery = | 98.89% | | |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | Qvalue |
| 33) | 1,4-Dioxane | 1.857 | 88 | 41610 | 8.725 | ug/ml# | 100 |
| 34) | n-Decane | 6.357 | 57 | 133762 | 9.864 | ug/ml# | 42 |
| 87) | Atrazine | 10.869 | 200 | 96679 | 10.091 | ug/ml | 95 |
| 101) | n-Octadecane | 11.074 | 57 | 230341 | 10.373 | ug/ml# | 1 |
| 102) | Parathion | 11.886 | 109 | 58843 | 10.619 | ug/ml | 97 |
| 103) | 3,3'-Dimethylbenzidine | 13.174 | 212 | 409416 | 11.602 | ug/ml | 99 |

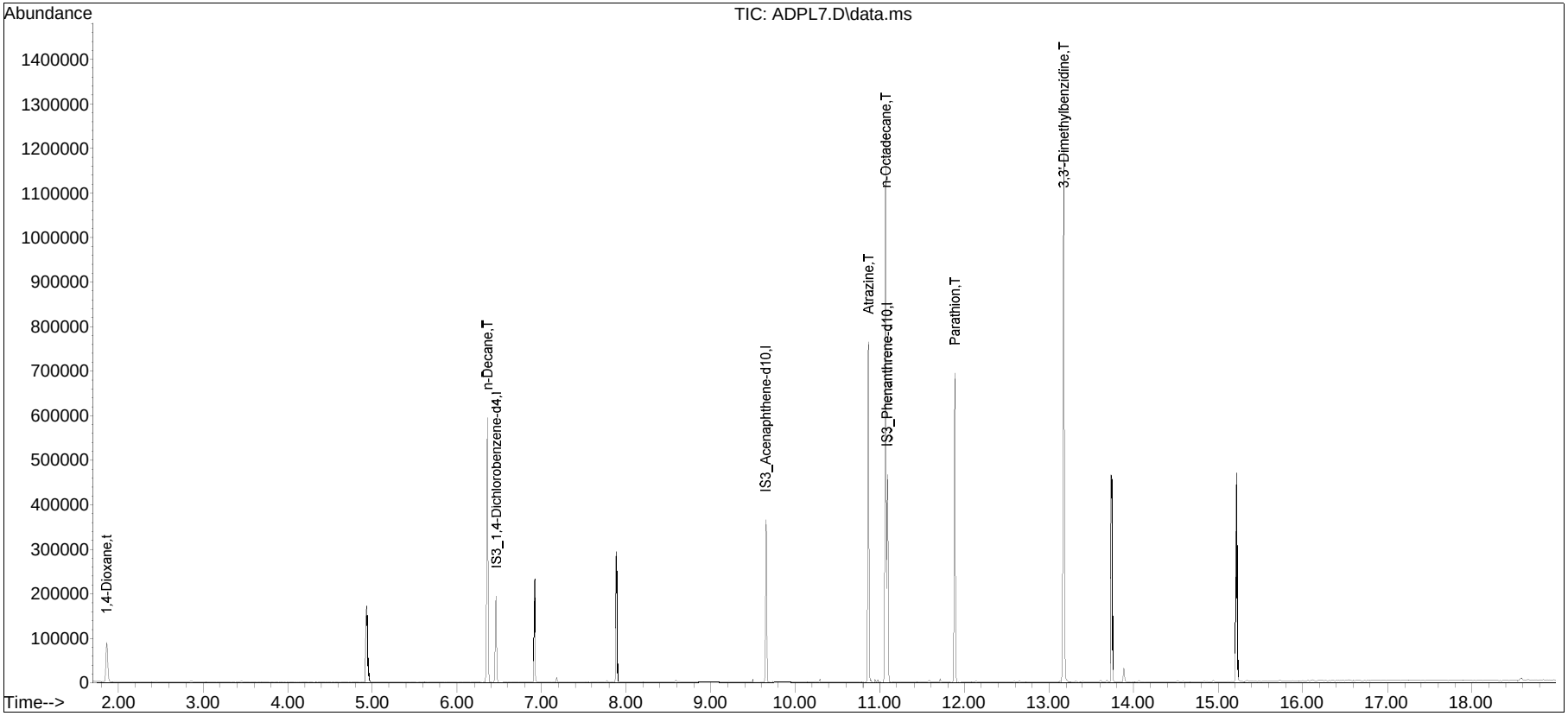
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL7.D
Acq On : 25 Jun 2024 2:02 am
Operator : SV106:ljg
Sample : IL4,32,,ADPL10 Lot# 10798
Misc : WG1939040
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 25 10:12:55 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL7.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 2:02 am | Instrument | : SV 106 |
| Sample | : IL4,32,,ADPL10 Lot# 10798 | Quant Date | : 6/25/2024 10:13 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL6.D
Acq On : 25 Jun 2024 2:26 am
Operator : SV106:ljg
Sample : IL5,32,,ADPL5 Lot# 10799
Misc : WG1939040
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 25 10:12:45 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 32759 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = | 100.00% | | |
| 86) IS3_Acenaphthene-d10 | 9.651 | 164 | 76462 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = | 100.00% | | |
| 100) IS3_Phenanthrene-d10 | 11.098 | 188 | 180522 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = | 100.00% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.863 | 88 | 20128 | 4.205 | ug/ml# | 100 |
| 34) n-Decane | 6.357 | 57 | 63146 | 4.639 | ug/ml# | 42 |
| 87) Atrazine | 10.863 | 200 | 44293 | 4.555 | ug/ml | 97 |
| 101) n-Octadecane | 11.074 | 57 | 104215 | 4.641 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 25479 | 4.547 | ug/ml | 99 |
| 103) 3,3'-Dimethylbenzidine | 13.174 | 212 | 180859 | 5.069 | ug/ml | 100 |

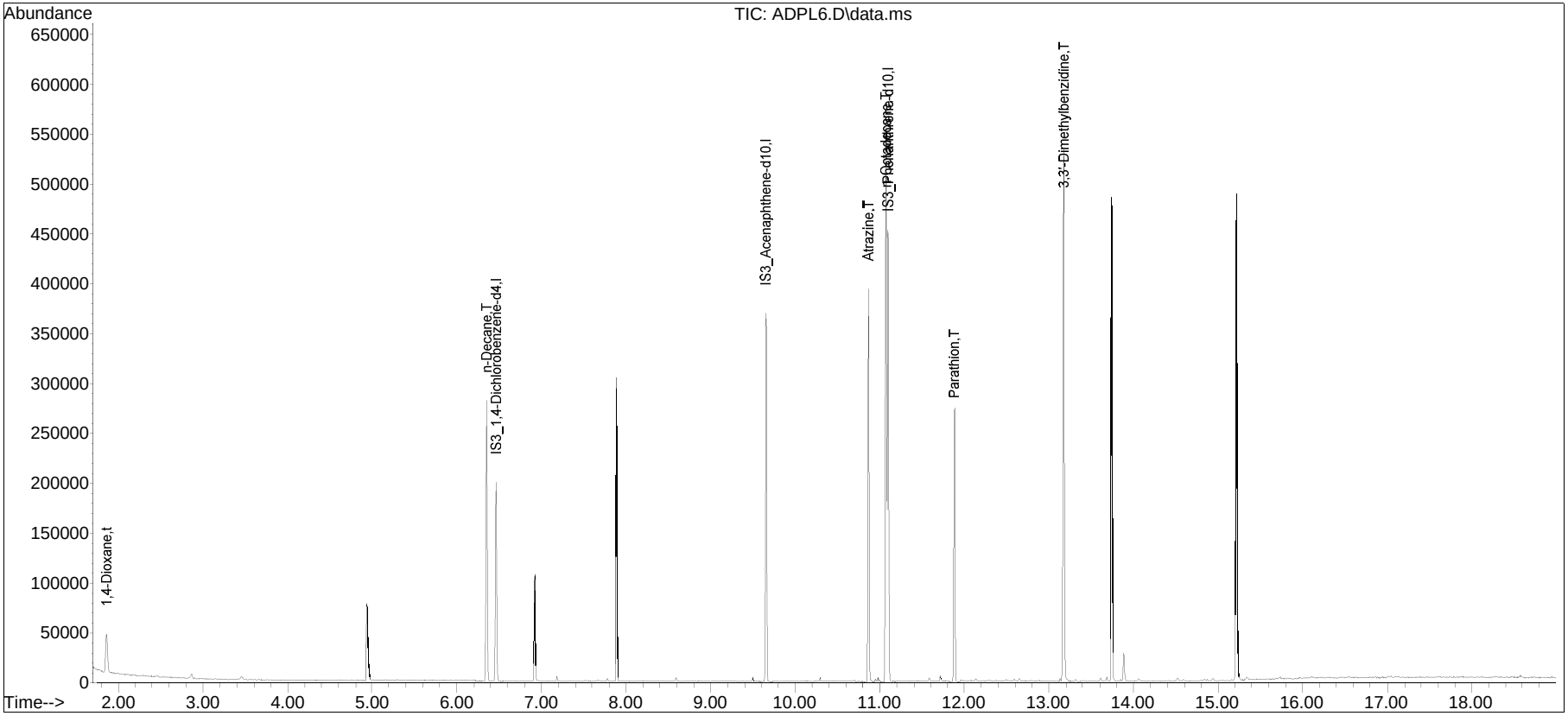
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL6.D
Acq On : 25 Jun 2024 2:26 am
Operator : SV106:ljg
Sample : IL5,32,,ADPL5 Lot# 10799
Misc : WG1939040
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 25 10:12:45 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL6.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 2:26 am | Instrument | : SV 106 |
| Sample | : IL5,32,,ADPL5 Lot# 10799 | Quant Date | : 6/25/2024 10:13 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL5.D
Acq On : 25 Jun 2024 2:49 am
Operator : SV106:ljg
Sample : IL6,32,,ADPL2.5 Lot# 10800
Misc : WG1939040
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 25 10:12:34 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 31407 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = | 95.87% | | |
| 86) IS3_Acenaphthene-d10 | 9.651 | 164 | 72577 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = | 94.92% | | |
| 100) IS3_Phenanthrene-d10 | 11.092 | 188 | 169004 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = | 93.62% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.863 | 88 | 10534 | 2.295 | ug/ml# | 100 |
| 34) n-Decane | 6.357 | 57 | 31955 | 2.449 | ug/ml# | 42 |
| 87) Atrazine | 10.863 | 200 | 22254 | 2.411 | ug/ml | 96 |
| 101) n-Octadecane | 11.075 | 57 | 51657 | 2.457 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 11573 | 2.206 | ug/ml | 96 |
| 103) 3,3'-Dimethylbenzidine | 13.174 | 212 | 87693 | 2.625 | ug/ml | 99 |

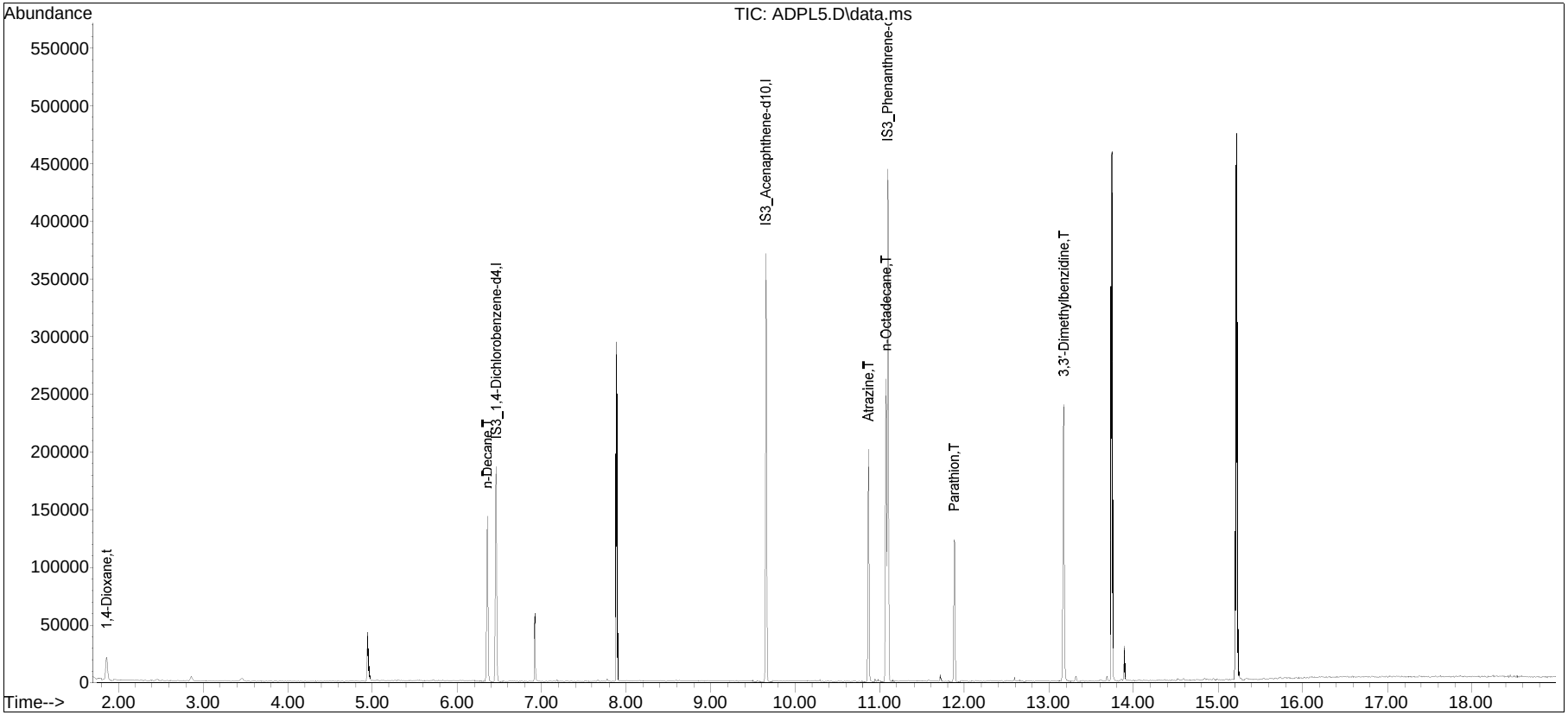
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL5.D
Acq On : 25 Jun 2024 2:49 am
Operator : SV106:ljg
Sample : IL6,32,,ADPL2.5 Lot# 10800
Misc : WG1939040
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 25 10:12:34 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL5.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 2:49 am | Instrument | : SV 106 |
| Sample | : IL6,32,,ADPL2.5 Lot# 10800 | Quant Date | : 6/25/2024 10:13 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL4.D
Acq On : 25 Jun 2024 3:13 am
Operator : SV106:ljg
Sample : IL7,32,,ADPL1 Lot# 10801
Misc : WG1939040
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 25 10:12:24 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 32) | IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 30616 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 32759 | | | Recovery = 93.46% | | | |
| 86) | IS3_Acenaphthene-d10 | 9.657 | 164 | 68292 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 76462 | | | Recovery = 89.31% | | | |
| 100) | IS3_Phenanthrene-d10 | 11.098 | 188 | 158970 | 4.000 | ug/ml | 0.00 |
| | Standard Area 1 = 180522 | | | Recovery = 88.06% | | | |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | Qvalue |
| 33) | 1,4-Dioxane | 1.863 | 88 | 4493 | 1.004 | ug/ml# | 100 |
| 34) | n-Decane | 6.357 | 57 | 13858 | 1.089 | ug/ml# | 39 |
| 87) | Atrazine | 10.863 | 200 | 8830 | 1.017 | ug/ml | 93 |
| 101) | n-Octadecane | 11.074 | 57 | 19907 | 1.007 | ug/ml# | 1 |
| 102) | Parathion | 11.880 | 109 | 4303 | 0.872 | ug/ml | 96 |
| 103) | 3,3'-Dimethylbenzidine | 13.174 | 212 | 31093 | 0.990 | ug/ml | 99 |

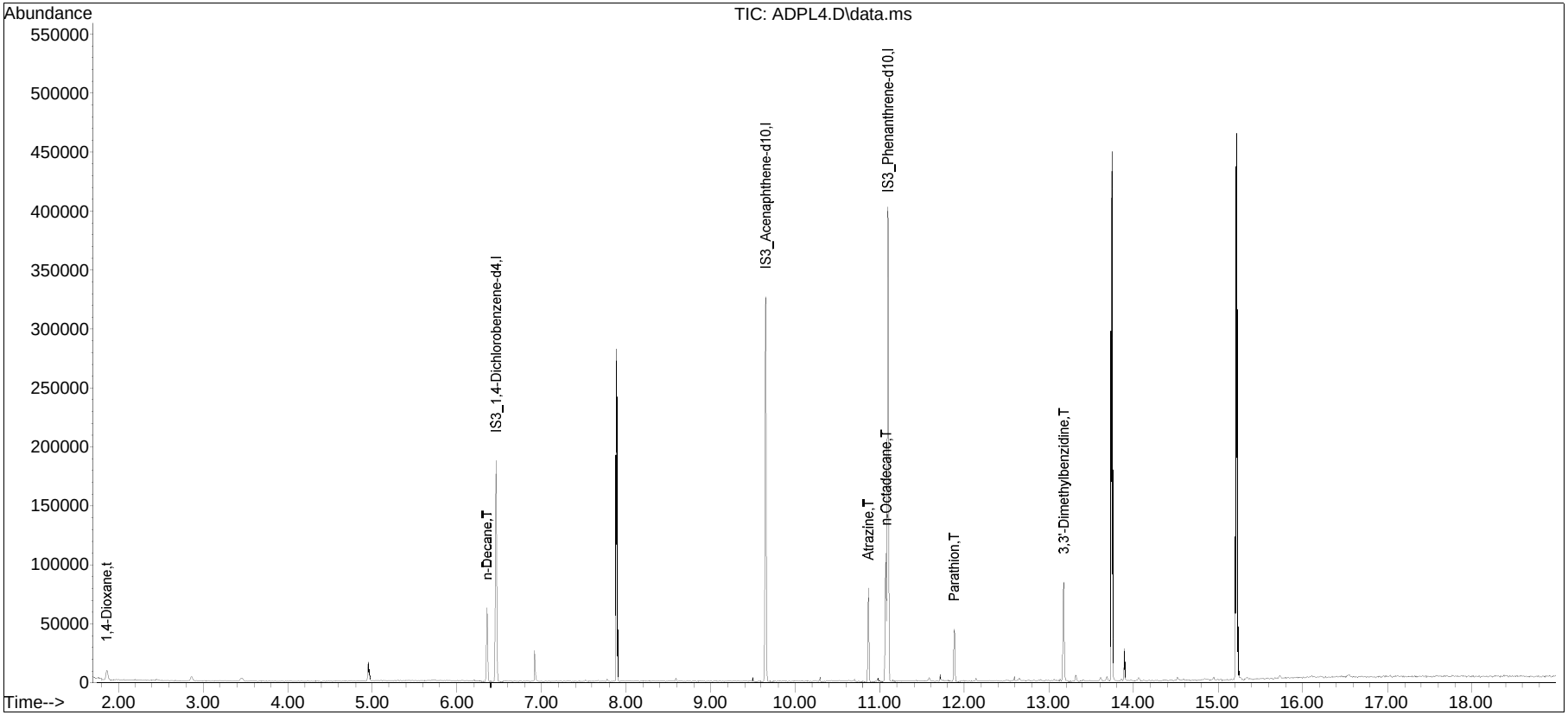
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL4.D
Acq On : 25 Jun 2024 3:13 am
Operator : SV106:ljg
Sample : IL7,32,,ADPL1 Lot# 10801
Misc : WG1939040
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 25 10:12:24 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL4.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 3:13 am | Instrument | : SV 106 |
| Sample | : IL7,32,,ADPL1 Lot# 10801 | Quant Date | : 6/25/2024 10:13 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL3.D
Acq On : 25 Jun 2024 3:37 am
Operator : SV106:ljg
Sample : IL8,32,,ADPL0.5 Lot# 10802
Misc : WG1939040
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 25 10:12:13 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 30341 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = 92.62% | | | |
| 86) IS3_Acenaphthene-d10 | 9.651 | 164 | 67449 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = 88.21% | | | |
| 100) IS3_Phenanthrene-d10 | 11.092 | 188 | 158557 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = 87.83% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.863 | 88 | 2381M6 | 0.537 | ug/ml | |
| 34) n-Decane | 6.357 | 57 | 6394 | 0.507 | ug/ml# | 39 |
| 87) Atrazine | 10.863 | 200 | 4137 | 0.482 | ug/ml | 99 |
| 101) n-Octadecane | 11.074 | 57 | 9983 | 0.506 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 2532 | 0.514 | ug/ml | 90 |
| 103) 3,3'-Dimethylbenzidine | 13.168 | 212 | 14072 | 0.449 | ug/ml | 99 |

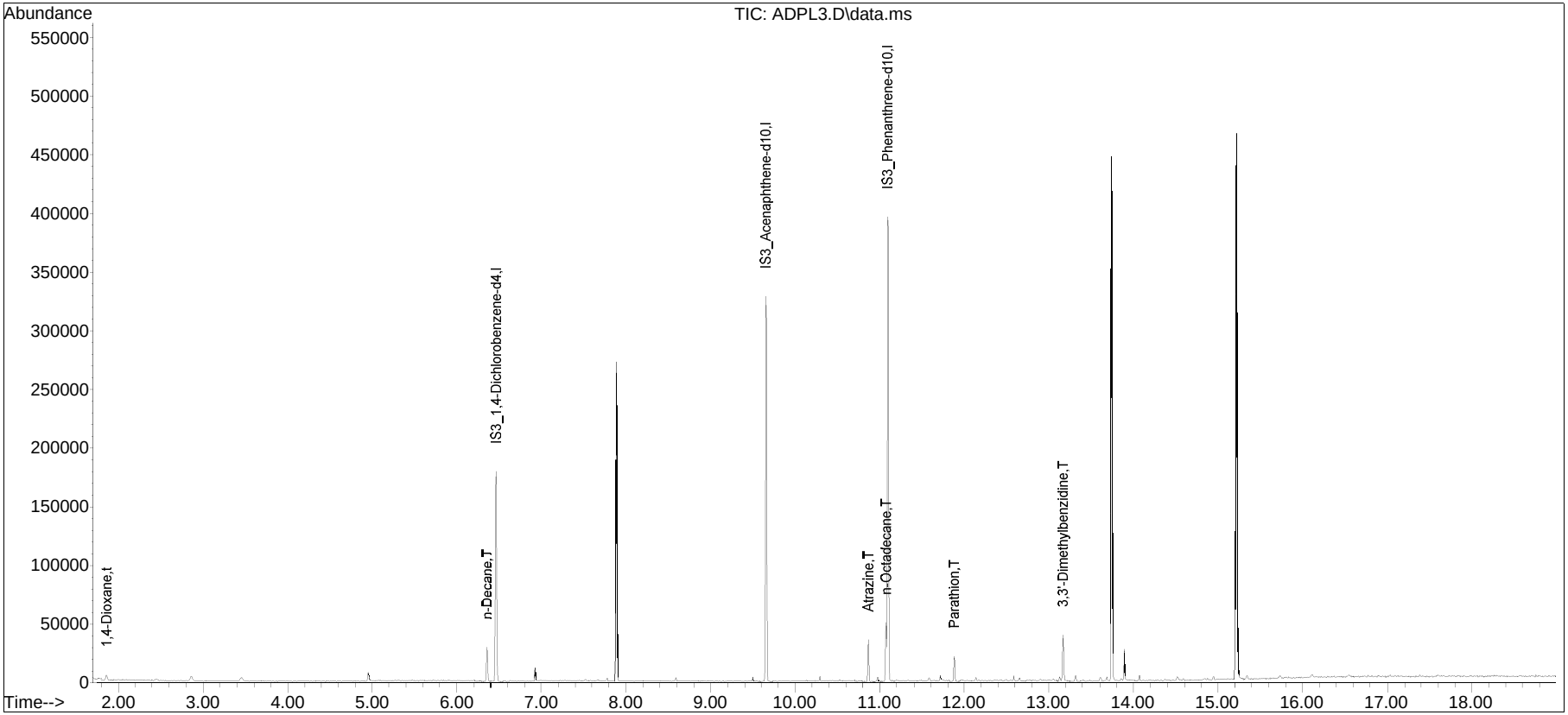
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL3.D
Acq On : 25 Jun 2024 3:37 am
Operator : SV106:ljg
Sample : IL8,32,,ADPL0.5 Lot# 10802
Misc : WG1939040
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 25 10:12:13 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

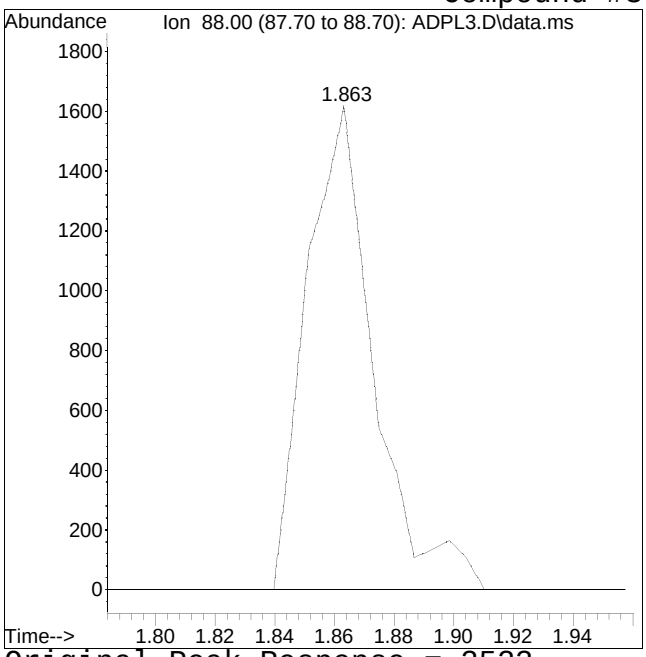
Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



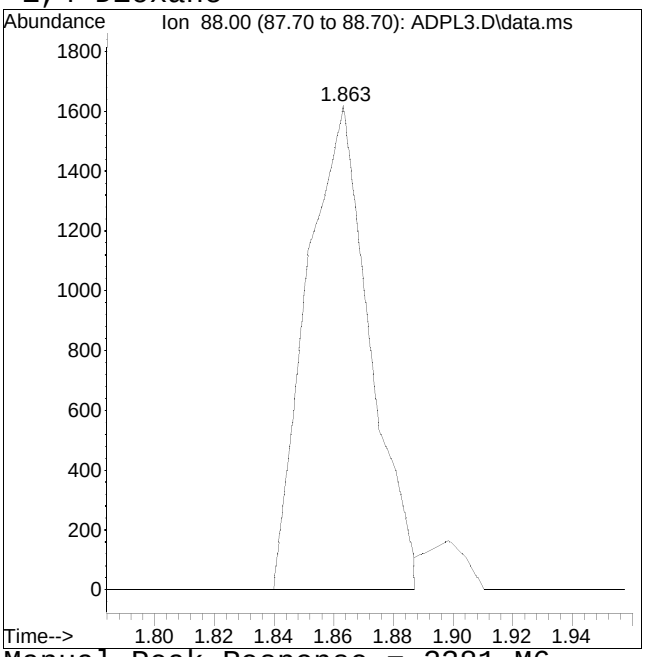
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ADPL3.D Operator : SV106:ljg
Date Inj'd : 6/25/2024 3:37 am Instrument : SV 106
Sample : IL8,32,,ADPL0.5 Lot# 10802Quant Date : 6/25/2024 10:12 am

## Compound #33: 1,4-Dioxane




Original Peak Response = 2523




Manual Peak Response = 2381 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL2.D
Acq On : 25 Jun 2024 4:01 am
Operator : SV106:ljg
Sample : IL9,32,,ADPL0.2 Lot# 10803
Misc : WG1939040
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jun 25 10:11:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 31931 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = | 97.47% | | |
| 86) IS3_Acenaphthene-d10 | 9.651 | 164 | 68863 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = | 90.06% | | |
| 100) IS3_Phenanthrene-d10 | 11.092 | 188 | 158571 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = | 87.84% | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.869 | 88 | 1140 | 0.244 | ug/ml# | 100 |
| 34) n-Decane | 6.357 | 57 | 2770 | 0.209 | ug/ml# | 46 |
| 87) Atrazine | 10.863 | 200 | 1642 | 0.187 | ug/ml | 98 |
| 101) n-Octadecane | 11.075 | 57 | 3681 | 0.187 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 1023 | 0.208 | ug/ml# | 67 |
| 103) 3,3'-Dimethylbenzidine | 13.174 | 212 | 5078 | 0.162 | ug/ml# | 96 |

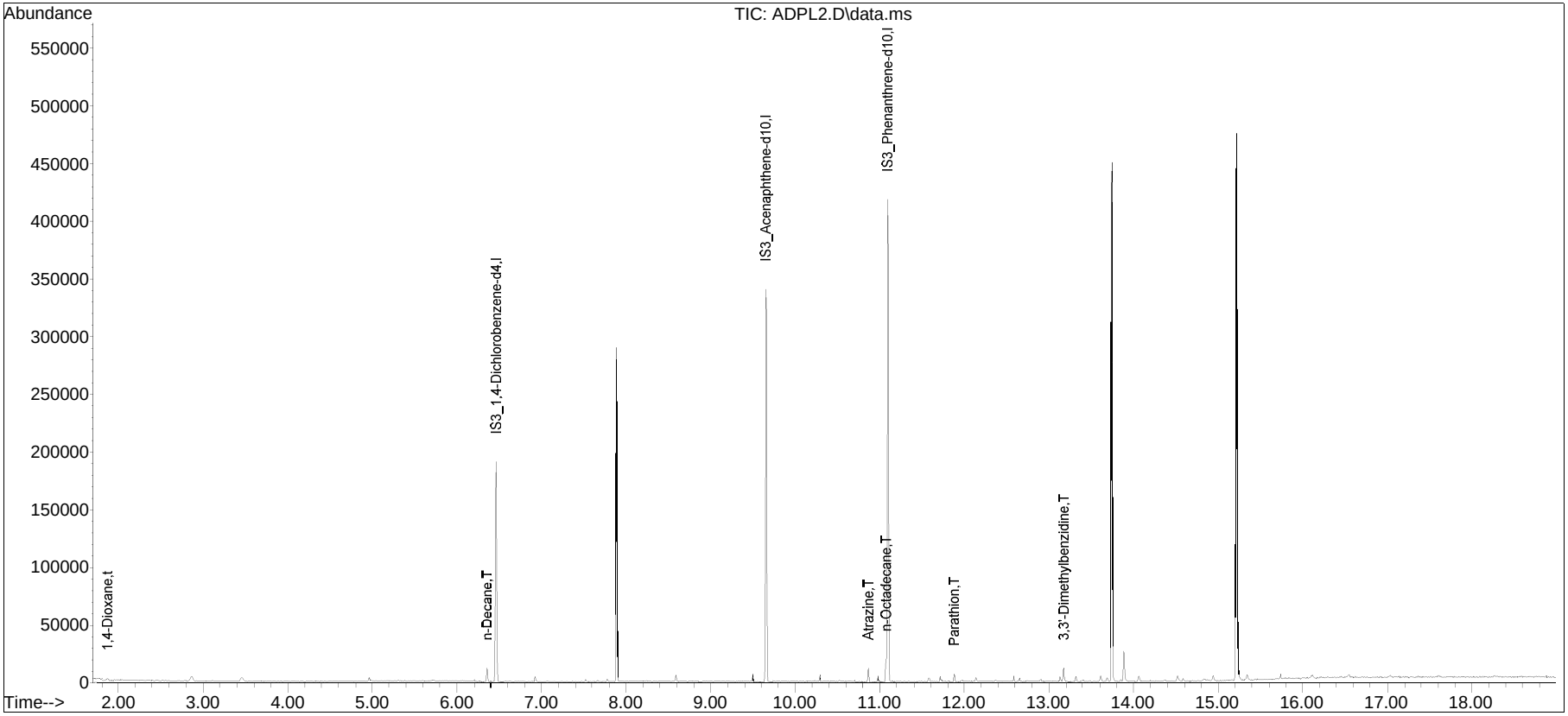
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL2.D
Acq On : 25 Jun 2024 4:01 am
Operator : SV106:ljg
Sample : IL9,32,,ADPL0.2 Lot# 10803
Misc : WG1939040
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jun 25 10:11:11 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



# Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPL2.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 4:01 am | Instrument | : SV 106 |
| Sample | : IL9,32,,ADPL0.2 Lot# 10803 | Quant Date | : 6/25/2024 10:11 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL1.D
Acq On : 25 Jun 2024 4:24 am
Operator : SV106:ljg
Sample : IL10,32,,ADPL0.1 Lot# 10804
Misc : WG1939040
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 25 10:10:33 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 31706 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = 96.79% | | | |
| 86) IS3_Acenaphthene-d10 | 9.651 | 164 | 74255 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = 97.11% | | | |
| 100) IS3_Phenanthrene-d10 | 11.092 | 188 | 175220 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = 97.06% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.857 | 88 | 625 | 0.135 | ug/ml# | 100 |
| 34) n-Decane | 6.357 | 57 | 1360 | 0.103 | ug/ml# | 34 |
| 87) Atrazine | 10.863 | 200 | 1057 | 0.112 | ug/ml# | 33 |
| 101) n-Octadecane | 11.074 | 57 | 2480 | 0.114 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 486M2 | 0.089 | ug/ml | |
| 103) 3,3'-Dimethylbenzidine | 13.174 | 212 | 2340 | 0.068 | ug/ml# | 75 |

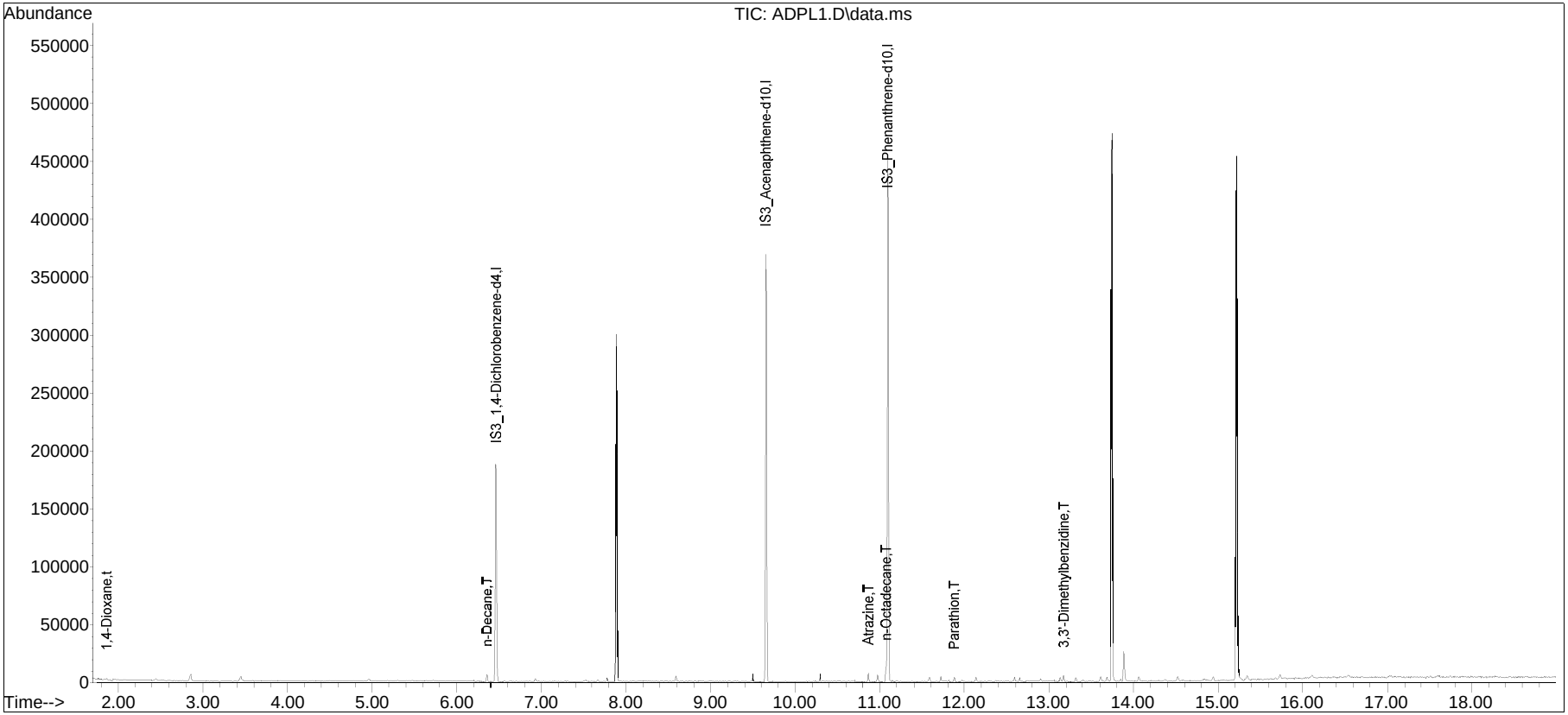
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPL1.D
Acq On : 25 Jun 2024 4:24 am
Operator : SV106:ljg
Sample : IL10,32,,ADPL0.1 Lot# 10804
Misc : WG1939040
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 25 10:10:33 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:36:24 2024
Response via : Initial Calibration

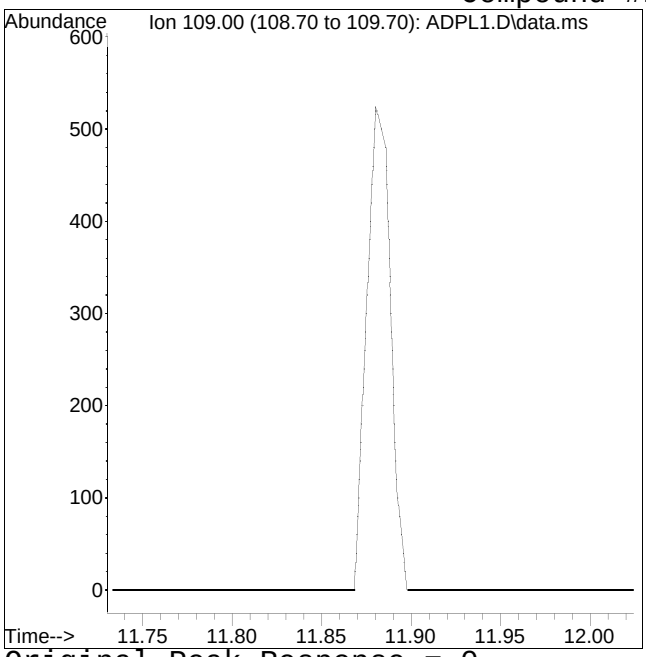
Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•



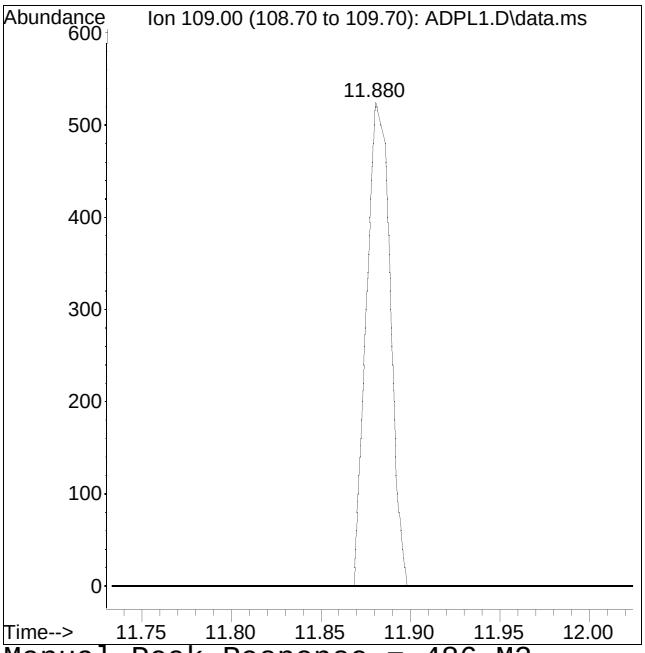
# Manual Integration Report

Data Path : I:\8270\SV106\240624RVTicaQMethod : FS240624SV106.m
Data File : ADPL1.D Operator : SV106:ljg
Date Inj'd : 6/25/2024 4:24 am Instrument : SV 106
Sample : IL10,32,,ADPL0.1 Lot# 1080Quant Date : 6/25/2024 10:11 am

## Compound #102: Parathion




Original Peak Response = 0




Manual Peak Response = 486 M2

M2 = Peak not found by automatic integration algorithm.

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPICV.D
Acq On : 25 Jun 2024 4:48 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10807
Misc : WG1939040
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 25 06:34:43 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 32 | I | IS3_1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 91 | 0.00 |
| 33 | t | 1,4-Dioxane | 0.584 | 0.502 | 14.0 | 93 | 0.00 |
| 34 | T | n-Decane | 1.662 | 1.657 | 0.3 | 98 | 0.00 |
| 86 | I | IS3_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 87 | T | Atrazine | 0.509 | 0.442 | 13.2 | 86 | 0.00 |
| 100 | I | IS3_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 101 | T | n-Octadecane | 0.498 | 0.485 | 2.6 | 94 | 0.00 |
| 102 | T | Parathion | 0.124 | 0.111 | 10.5 | 89 | 0.00 |
| 103 | T | 3,3'-Dimethylbenzidine | 0.791 | 0.752 | 4.9 | 84 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPICV.D
Acq On : 25 Jun 2024 4:48 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10807
Misc : WG1939040
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 25 06:34:43 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240624RVTical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.463 | 152 | 29795 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 32759 | | | Recovery = 90.95% | | | |
| 86) IS3_Acenaphthene-d10 | 9.657 | 164 | 68746 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 76462 | | | Recovery = 89.91% | | | |
| 100) IS3_Phenanthrene-d10 | 11.098 | 188 | 162297 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 180522 | | | Recovery = 89.90% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.857 | 88 | 18691 | 4.293 | ug/ml# | 100 |
| 34) n-Decane | 6.357 | 57 | 61707 | 4.984 | ug/ml# | 43 |
| 87) Atrazine | 10.863 | 200 | 38018 | 4.349 | ug/ml | 95 |
| 101) n-Octadecane | 11.074 | 57 | 98298 | 4.869 | ug/ml# | 1 |
| 102) Parathion | 11.880 | 109 | 22600 | 4.486 | ug/ml | 98 |
| 103) 3,3'-Dimethylbenzidine | 13.174 | 212 | 152633 | 4.758 | ug/ml | 100 |

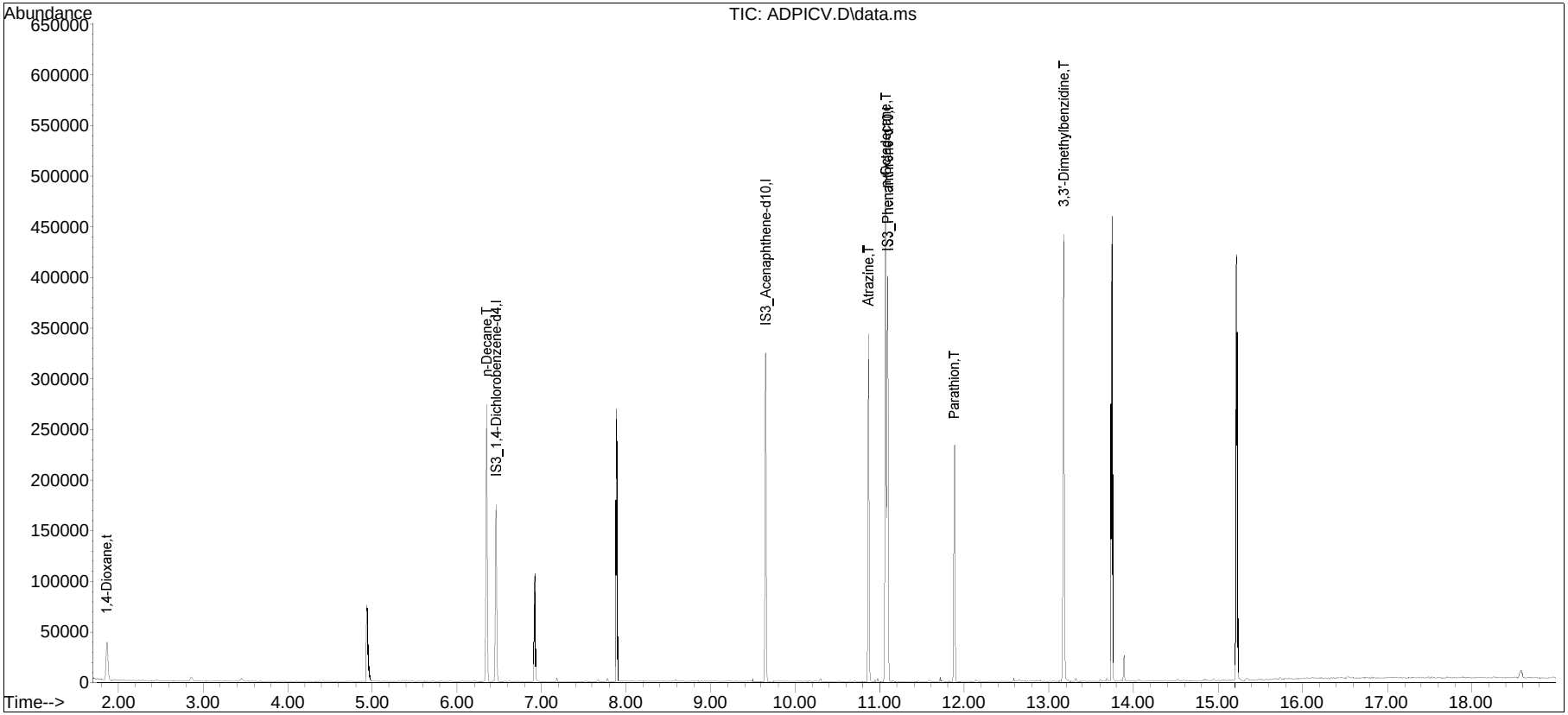
(#) = qualifier out of range (m) = manual integration (+) = signals summed

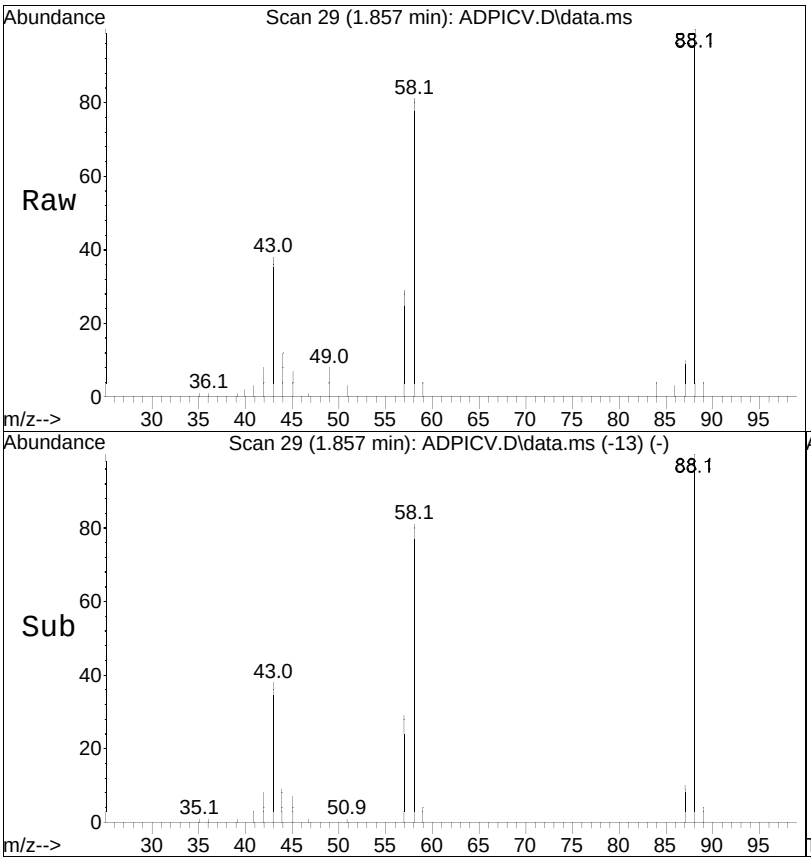
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240624RVTical\
Data File : ADPICV.D
Acq On : 25 Jun 2024 4:48 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10807
Misc : WG1939040
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 25 06:34:43 2024
Quant Method : I:\8270\SV106\240624RVTical\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Jun 25 06:28:35 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistTical\ADPL6.D•

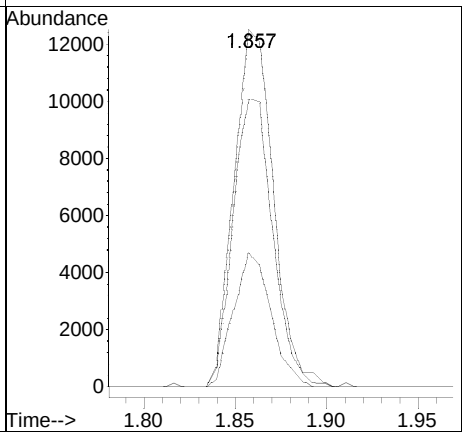


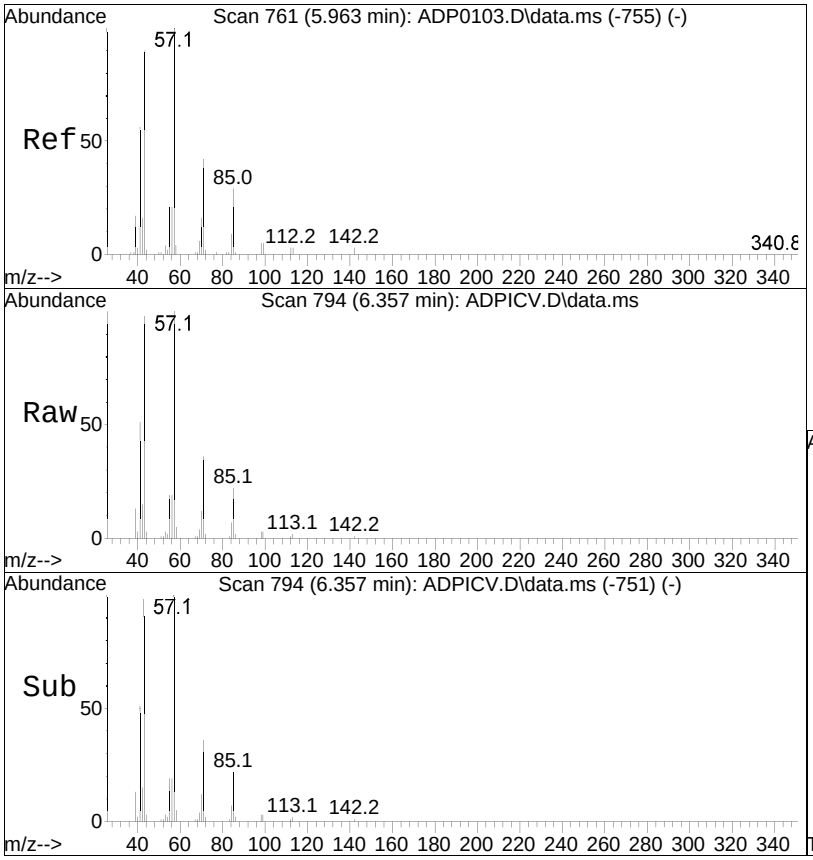



#33
1,4-Dioxane
Concen: 4.29 ug/ml
RT: 1.857 min Scan# 29
Delta R.T. -0.006 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion: 88 Resp: 18691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 58 | 80.8 | 0.0 | 0.0# |
| 43 | 35.7 | 0.0 | 0.0# |

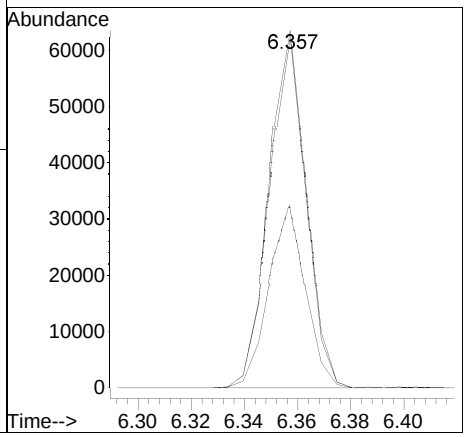


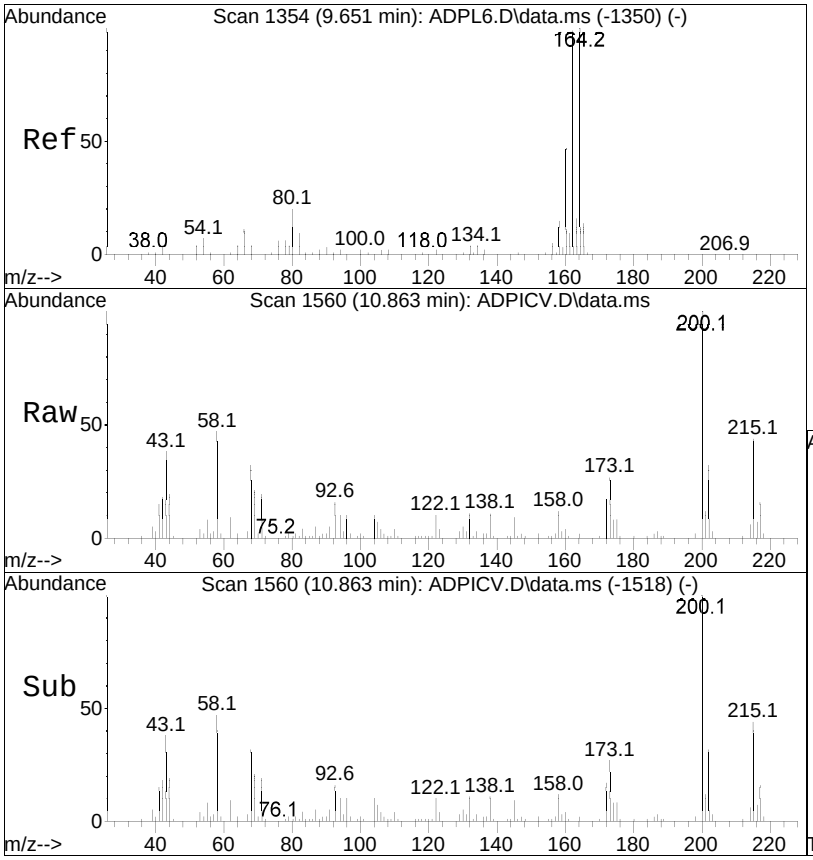



#34
n-Decane
Concen: 4.98 ug/ml
RT: 6.357 min Scan# 794
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion: 57 Resp: 61707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 96.3 | 0.2 | 0.2# |
| 41 | 50.3 | 0.2 | 0.2# |

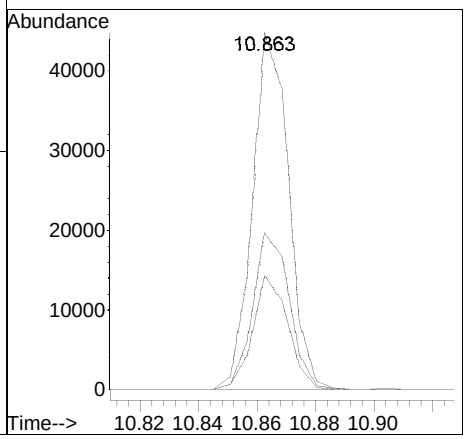


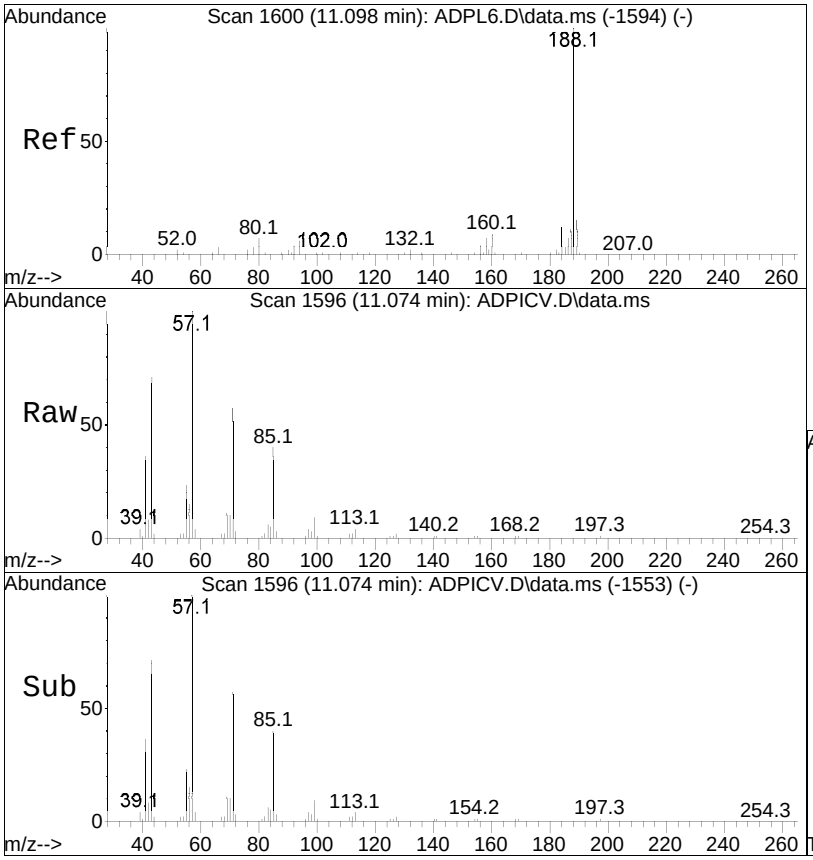



#87
Atrazine
Concen: 4.35 ug/ml
RT: 10.863 min Scan# 1560
Delta R.T. -0.000 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion:200 Resp: 38018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 202 | 31.4 | 25.8 | 38.6 |
| 215 | 44.8 | 40.2 | 60.4 |

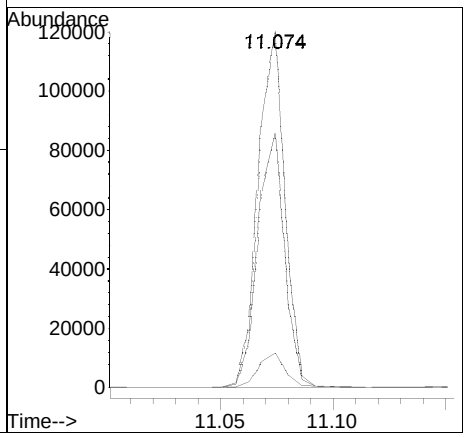


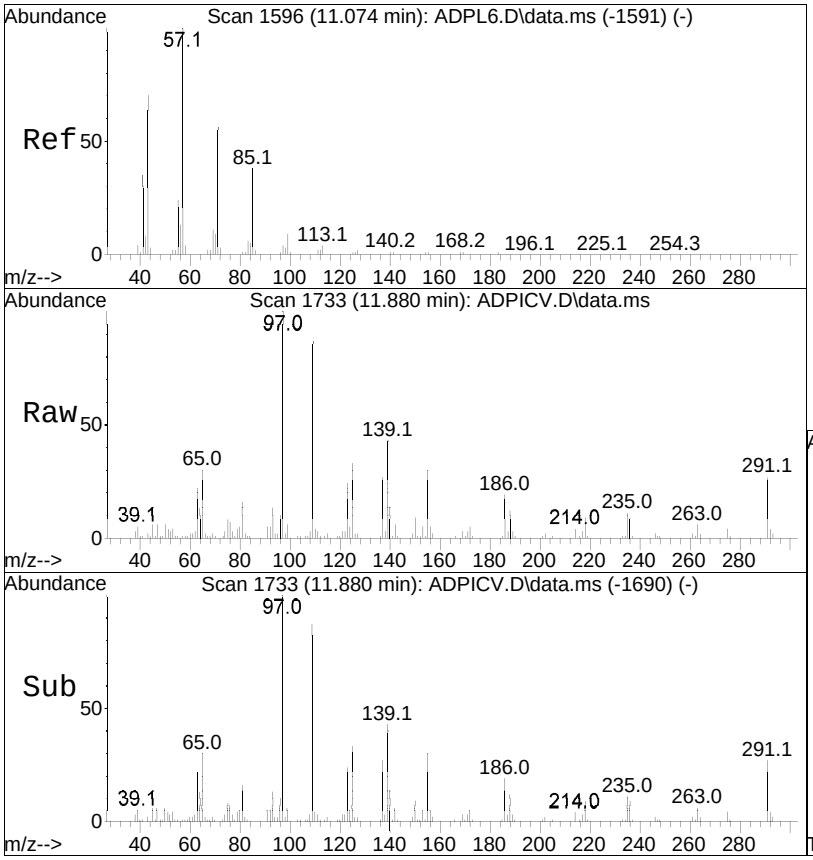



#101
n-Octadecane
Concen: 4.87 ug/ml
RT: 11.074 min Scan# 1596
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion: 57 Resp: 98298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 71.5 | 9.0 | 13.6# |
| 70 | 10.0 | 0.2 | 0.2# |

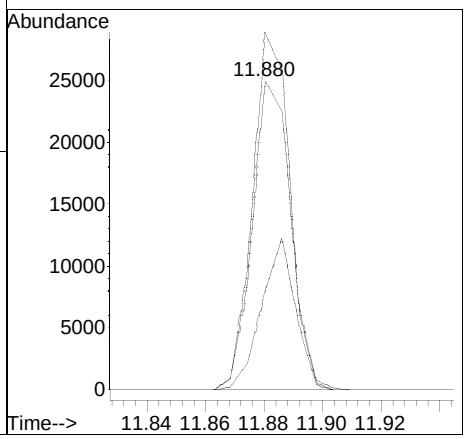


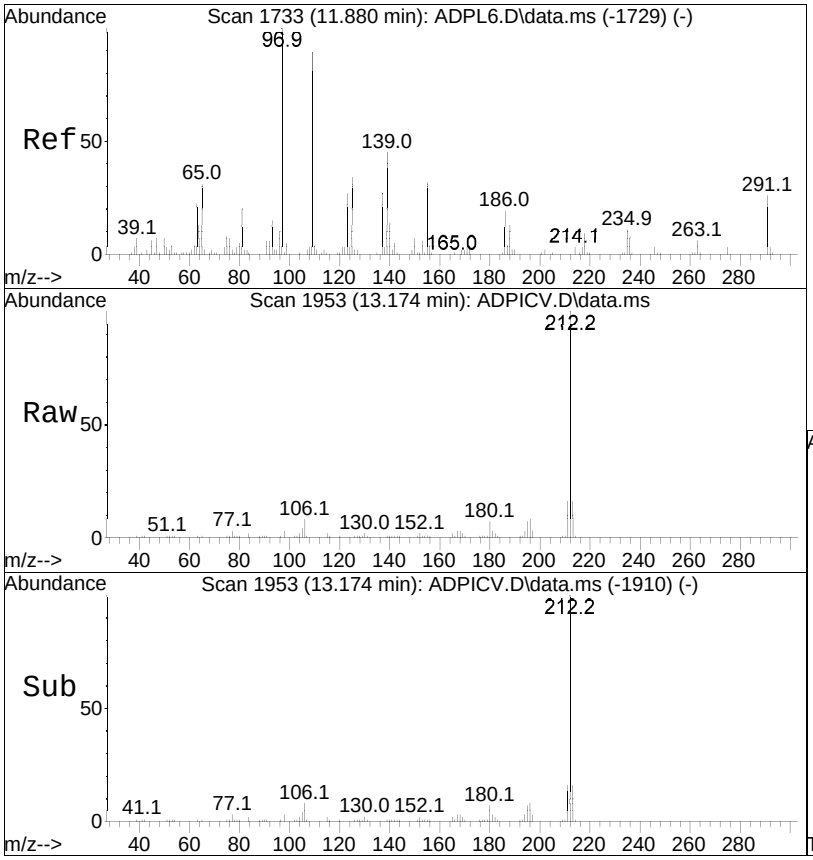



#102
Parathion
Concen: 4.49 ug/ml
RT: 11.880 min Scan# 1733
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion:109 Resp: 22600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 109 | 100 | | |
| 97 | 112.1 | 87.4 | 131.2 |
| 291 | 43.6 | 34.2 | 51.2 |

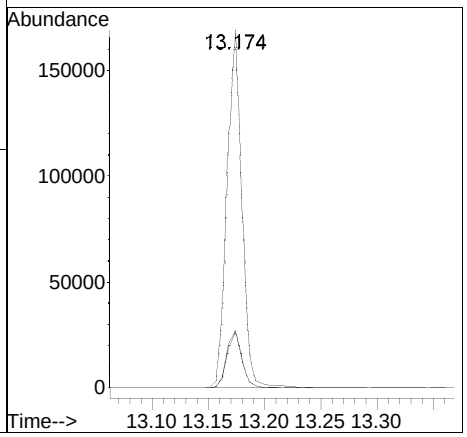





#103
3,3'-Dimethylbenzidine
Concen: 4.76 ug/ml
RT: 13.174 min Scan# 1953
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 25 Jun 2024 4:48 am

Tgt Ion:212 Resp: 152633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 211 | 15.9 | 12.9 | 19.3 |
| 213 | 16.5 | 13.2 | 19.8 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240624RVTica | QMethod | : FS240624SV106.m |
| Data File | : ADPICV.D | Operator | : SV106:ljg |
| Date Inj'd | : 6/25/2024 4:48 am | Instrument | : SV 106 |
| Sample | : CQICV3,32,,ADPICV Lot# 108 | Quant Date | : 6/25/2024 6:35 am |

There are no manual integrations or false positives in this file.

## Evaluate Relative Error Report SV 106

Method Path : I:\8270\SV106\240624RVTical\
Method File : FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Jun 25 06:28:35 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 37 | T Benzoic Acid | Q | ug/ml | 5.0 | 4.700 | -6.0 | 0.50 | 0.589 | 17.8 |

## Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 37 | T Benzoic Acid | Quadratic | 0.999198 | 0.003511 | 0.293629 | -0.026998 |

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV106 | **Calibration Date** | : 09/21/24 10:09 | | |
| **Lab File ID** | : ABN0921 | **Init. Calib. Date(s)** | : 06/24/24 | 06/25/24 | |
| **Sample No** | : WG1974589-3 | **Init. Calib. Times** | : 16:56 | 04:24 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| IS1_1,4-Dichlorobenzene-d4 | 1 | 1 | - | 0 | 20 | 97 | 0 |
| n-Nitrosodimethylamine | 0.851 | 0.82 | - | 3.6 | 20 | 102 | 0 |
| Pyridine | 1.392 | 1.232 | - | 11.5 | 20 | 93 | 0 |
| 2-Fluorophenol | 1.156 | 1.172 | - | -1.4 | 20 | 105 | 0 |
| Aniline | 2.049 | 1.881 | - | 8.2 | 20 | 98 | 0 |
| 2-Chlorophenol | 1.288 | 1.204 | - | 6.5 | 20 | 102 | 0 |
| Phenol-d6 | 1.583 | 1.482 | - | 6.4 | 20 | 101 | 0 |
| Phenol | 1.642 | 1.601 | - | 2.5 | 20 | 104 | 0 |
| Bis(2-chloroethyl)ether | 1.348 | 1.163 | - | 13.7 | 20 | 92 | 0 |
| 1,3-Dichlorobenzene | 1.546 | 1.461 | - | 5.5 | 20 | 101 | 0 |
| 1,4-Dichlorobenzene | 1.565 | 1.455 | - | 7 | 20 | 101 | 0 |
| 1,2-Dichlorobenzene | 1.522 | 1.365 | - | 10.3 | 20 | 97 | 0 |
| Benzyl alcohol | 1.267 | 1.228 | - | 3.1 | 20 | 103 | 0 |
| Bis(2-chloroisopropyl)ethe | 2.166 | 0.703 | - | 67.5* | 20 | 35 | 0 |
| 2-Methylphenol | 1.183 | 1.191 | - | -0.7 | 20 | 106 | 0 |
| Hexachloroethane | 0.623 | 0.542 | - | 13 | 20 | 97 | 0 |
| n-Nitrosodi-n-propylamine | 1.057 | 0.996 | - | 5.8 | 20 | 97 | 0 |
| 3-Methylphenol/4-Methylphe | 1.279 | 1.287 | - | -0.6 | 20 | 108 | 0 |
| Nitrobenzene-d5 | 1.619 | 1.5 | - | 7.4 | 20 | 100 | 0 |
| Nitrobenzene | 1.643 | 1.477 | - | 10.1 | 20 | 98 | 0 |
| Isophorone | 2.76 | 2.652 | - | 3.9 | 20 | 99 | 0 |
| 2-Nitrophenol | 0.692 | 0.677 | - | 2.2 | 20 | 102 | 0 |
| 2,4-Dimethylphenol | 1.301 | 1.267 | - | 2.6 | 20 | 104 | 0 |
| Bis(2-chloroethoxy)methane | 1.778 | 1.496 | - | 15.9 | 20 | 90 | 0 |
| 2,4-Dichlorophenol | 1.233 | 1.191 | - | 3.4 | 20 | 101 | 0 |
| 1,2,4-Trichlorobenzene | 1.51 | 1.394 | - | 7.7 | 20 | 103 | 0 |
| IS1_Naphthalene-d8 | 1 | 1 | - | 0 | 20 | 93 | 0 |
| Naphthalene | 1.147 | 1.044 | - | 9 | 20 | 96 | 0 |
| Benzoic Acid | 5 | 5.297 | - | -5.9 | 20 | 106 | 0 |
| 4-Chloroaniline | 0.169 | 0.148 | - | 12.4 | 20 | 87 | 0 |
| Hexachlorobutadiene | 0.303 | 0.311 | - | -2.6 | 20 | 111 | 0 |
| p-Chloro-m-cresol | 0.343 | 0.358 | - | -4.4 | 20 | 104 | 0 |
| 2-Methylnaphthalene | 0.764 | 0.767 | - | -0.4 | 20 | 103 | 0 |
| 1-Methylnaphthalene | 0.29 | 0.295 | - | -1.7 | 20 | 103 | 0 |
| Hexachlorocyclopentadiene | 0.336 | 0.374 | - | -11.3 | 20 | 112 | 0 |
| 2,4,6-Trichlorophenol | 0.301 | 0.326 | - | -8.3 | 20 | 107 | 0 |
| 2,4,5-Trichlorophenol | 0.322 | 0.347 | - | -7.8 | 20 | 104 | 0 |
| 2-Fluorobiphenyl | 1.027 | 0.952 | - | 7.3 | 20 | 96 | 0 |
| 2-Chloronaphthalene | 0.813 | 0.804 | - | 1.1 | 20 | 101 | 0 |
| 2-Nitroaniline | 0.245 | 0.25 | - | -2 | 20 | 100 | 0 |
| 1,4-Dinitrobenzene | 0.129 | 0.141 | - | -9.3 | 20 | 108 | 0 |
| 1,3-Dinitrobenzene | 0.147 | 0.153 | - | -4.1 | 20 | 100 | 0 |
| Dimethyl phthalate | 0.989 | 1.005 | - | -1.6 | 20 | 101 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV106 | **Calibration Date** | : 09/21/24 10:09 | | |
| **Lab File ID** | : ABN0921 | **Init. Calib. Date(s)** | : 06/24/24 | 06/25/24 | |
| **Sample No** | : WG1974589-3 | **Init. Calib. Times** | : 16:56 | 04:24 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Acenaphthylene | 1.244 | 1.193 | - | 4.1 | 20 | 95 | 0 |
| 2,6-Dinitrotoluene | 0.213 | 0.213 | - | 0 | 20 | 96 | 0 |
| 1,2-Dinitrobenzene | 0.091 | 0.092 | - | -1.1 | 20 | 97 | 0 |
| IS1_Acenaphthene-d10 | 1 | 1 | - | 0 | 20 | 100 | 0 |
| 3-Nitroaniline | 0.319 | 0.323 | - | -1.3 | 20 | 101 | 0 |
| Acenaphthene | 1.153 | 1.079 | - | 6.4 | 20 | 103 | 0 |
| 2,4-Dinitrophenol | 0.213 | 0.239 | - | -12.2 | 20 | 111 | 0 |
| Dibenzofuran | 1.936 | 1.702 | - | 12.1 | 20 | 98 | 0 |
| 2,4-Dinitrotoluene | 0.475 | 0.45 | - | 5.3 | 20 | 98 | 0 |
| 4-Nitrophenol | 0.323 | 0.287 | - | 11.1 | 20 | 94 | 0 |
| 2,3,5,6-Tetrachlorophenol | 0.452 | 0.479 | - | -6 | 20 | 109 | 0 |
| 2,3,4,6-Tetrachlorophenol | 0.435 | 0.474 | - | -9 | 20 | 110 | 0 |
| Diethyl phthalate | 1.529 | 1.428 | - | 6.6 | 20 | 102 | 0 |
| Fluorene | 1.523 | 1.386 | - | 9 | 20 | 99 | 0 |
| 4-Chlorophenyl phenyl ethe | 0.801 | 0.776 | - | 3.1 | 20 | 110 | 0 |
| 4-Nitroaniline | 0.333 | 0.339 | - | -1.8 | 20 | 109 | 0 |
| 4,6-Dinitro-o-cresol | 0.266 | 0.316 | - | -18.8 | 20 | 113 | 0 |
| NDPA/DPA | 1.263 | 1.178 | - | 6.7 | 20 | 99 | 0 |
| Azobenzene | 1.446 | 1.409 | - | 2.6 | 20 | 105 | 0 |
| 2,4,6-Tribromophenol | 0.249 | 0.253 | - | -1.6 | 20 | 104 | 0 |
| 4-Bromophenyl phenyl ether | 0.5 | 0.509 | - | -1.8 | 20 | 112 | 0 |
| Hexachlorobenzene | 0.569 | 0.55 | - | 3.3 | 20 | 109 | 0 |
| Pentachlorophenol | 0.361 | 0.391 | - | -8.3 | 20 | 105 | 0 |
| IS1_Phenanthrene-d10 | 1 | 1 | - | 0 | 20 | 95 | 0 |
| Phenanthrene | 1.117 | 1.047 | - | 6.3 | 20 | 100 | 0 |
| Anthracene | 1.111 | 1.052 | - | 5.3 | 20 | 98 | 0 |
| Carbazole | 1.018 | 0.95 | - | 6.7 | 20 | 97 | 0 |
| Di-n-butylphthalate | 1.195 | 1.237 | - | -3.5 | 20 | 104 | 0 |
| Fluoranthene | 1.366 | 1.3 | - | 4.8 | 20 | 100 | 0 |
| Benzidine | 0.741 | 0.817 | - | -10.3 | 20 | 105 | 0 |
| Pyrene | 1.44 | 1.389 | - | 3.5 | 20 | 101 | 0 |
| 4-Terphenyl-d14 | 1.076 | 1.081 | - | -0.5 | 20 | 107 | 0 |
| Butyl benzyl phthalate | 0.55 | 0.558 | - | -1.5 | 20 | 105 | 0 |
| IS1_Chrysene-d12 | 1 | 1 | - | 0 | 20 | 104 | 0 |
| Benzo(a)anthracene | 1.478 | 1.322 | - | 10.6 | 20 | 105 | 0 |
| 3,3'-Dichlorobenzidine | 0.489 | 0.513 | - | -4.9 | 20 | 109 | 0 |
| Chrysene | 1.429 | 1.215 | - | 15 | 20 | 100 | 0 |
| Bis(2-ethylhexyl)phthalate | 0.817 | 0.798 | - | 2.3 | 20 | 104 | 0 |
| Di-n-octylphthalate | 1.352 | 1.344 | - | 0.6 | 20 | 107 | 0 |
| Benzo(b)fluoranthene | 1.43 | 1.311 | - | 8.3 | 20 | 110 | 0 |
| Benzo(k)fluoranthene | 1.356 | 1.161 | - | 14.4 | 20 | 95 | 0 |
| Benzo(a)pyrene | 1.242 | 1.148 | - | 7.6 | 20 | 102 | 0 |
| IS1_Perylene-d12 | 1 | 1 | - | 0 | 20 | 92 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV106 | **Calibration Date** | : 09/21/24 10:09 | | |
| **Lab File ID** | : ABN0921 | **Init. Calib. Date(s)** | : 06/24/24 | 06/25/24 | |
| **Sample No** | : WG1974589-3 | **Init. Calib. Times** | : 16:56 | 04:24 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | 1.082 | 1.136 | - | -5 | 20 | 100 | 0 |
| Dibenzo(a,h)anthracene | 1.042 | 1.092 | - | -4.8 | 20 | 100 | 0 |
| Benzo(ghi)perylene | 0.964 | 1.059 | - | -9.9 | 20 | 103 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV106 | **Calibration Date** | : 09/21/24 10:33 | | |
| **Lab File ID** | : AP90921 | **Init. Calib. Date(s)** | : 06/24/24 | 06/25/24 | |
| **Sample No** | : WG1974589-4 | **Init. Calib. Times** | : 16:56 | 04:24 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| IS2_1,4-Dichlorobenzene-d4 | 1 | 1 | - | 0 | 20 | 99 | 0 |
| Benzaldehyde | 1.187 | 1.021 | - | 14 | 20 | 86 | 0 |
| Acetophenone | 2.158 | 1.778 | - | 17.6 | 20 | 82 | 0 |
| m-Toluidine | 1.957 | 1.655 | - | 15.4 | 20 | 84 | 0 |
| 2-Chloroaniline | 1.709 | 1.421 | - | 16.9 | 20 | 83 | 0 |
| IS2_Naphthalene-d8 | 1 | 1 | - | 0 | 20 | 93 | 0 |
| a-Terpineol | 0.4 | 0.245 | - | 38.8* | 20 | 57 | 0 |
| 3-Chloroaniline | 0.201 | 0.168 | - | 16.4 | 20 | 78 | 0 |
| 2,6-Dichlorophenol | 0.362 | 0.331 | - | 8.6 | 20 | 82 | 0 |
| 1-chloro-2-nitrobenzene | 0.18 | 0.165 | - | 8.3 | 20 | 82 | 0 |
| Caprolactam | 0.21 | 0.107 | - | 49* | 20 | 44 | 0 |
| 1,2,4,5-Tetrachlorobenzene | 0.548 | 0.488 | - | 10.9 | 20 | 85 | 0 |
| Biphenyl | 1.084 | 0.934 | - | 13.8 | 20 | 82 | 0 |
| IS2_Acenaphthene-d10 | 1 | 1 | - | 0 | 20 | 100 | 0 |
| Dichloran | 0.247 | 0.228 | - | 7.7 | 20 | 87 | 0 |
| Pentachloronitrobenzene | 0.27 | 0.278 | - | -3 | 20 | 96 | 0 |
| IS2_Phenanthrene-d10 | 1 | 1 | - | 0 | 20 | 90 | 0 |
| Diphenamid | 0.561 | 0.518 | - | 7.7 | 20 | 82 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV106 | **Calibration Date** | : 09/21/24 10:56 | | |
| **Lab File ID** | : ADP0921 | **Init. Calib. Date(s)** | : 06/24/24 | 06/25/24 | |
| **Sample No** | : WG1974589-5 | **Init. Calib. Times** | : 16:56 | 04:24 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| IS3_1,4-Dichlorobenzene-d4 | 1 | 1 | - | 0 | 20 | 86 | 0 |
| 1,4-Dioxane | 0.584 | 0.523 | - | 10.4 | 20 | 91 | 0 |
| n-Decane | 1.662 | 0.975 | - | 41.3* | 20 | 54 | 0 |
| IS3_Acenaphthene-d10 | 1 | 1 | - | 0 | 20 | 85 | 0 |
| Atrazine | 0.509 | 0.502 | - | 1.4 | 20 | 92 | 0 |
| IS3_Phenanthrene-d10 | 1 | 1 | - | 0 | 20 | 79 | 0 |
| n-Octadecane | 0.498 | 0.309 | - | 38* | 20 | 53 | 0 |
| Parathion | 0.124 | 0.137 | - | -10.5 | 20 | 96 | 0 |
| 3,3'-Dimethylbenzidine | 0.791 | 0.961 | - | -21.5* | 20 | 94 | 0 |

*** Value outside of QC limits.**

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|---|
| 1 | I | IS1_1,4-Dichlorobenzene-d4 | | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 2 | t | n-Nitrosodimethylamine | | 0.851 | 0.820 | 3.6 | 102 | 0.00 |
| 3 | t | Pyridine | | 1.392 | 1.232 | 11.5 | 93 | 0.00 |
| 4 | S | 2-Fluorophenol | | 1.156 | 1.172 | -1.4 | 105 | 0.00 |
| 5 | T | Aniline | | 2.049 | 1.881 | 8.2 | 98 | 0.00 |
| 6 | t | 2-Chlorophenol | | 1.288 | 1.204 | 6.5 | 102 | 0.00 |
| 7 | S | Phenol-d6 | | 1.583 | 1.482 | 6.4 | 101 | 0.00 |
| 8 | T | Phenol | | 1.642 | 1.601 | 2.5 | 104 | 0.00 |
| 9 | T | Bis(2-chloroethyl)ether | | 1.348 | 1.163 | 13.7 | 92 | 0.00 |
| 10 | T | 1,3-Dichlorobenzene | | 1.546 | 1.461 | 5.5 | 101 | 0.00 |
| 11 | T | 1,4-Dichlorobenzene | | 1.565 | 1.455 | 7.0 | 101 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | | 1.522 | 1.365 | 10.3 | 97 | 0.00 |
| 13 | t | Benzyl alcohol | | 1.267 | 1.228 | 3.1 | 103 | 0.00 |
| 14 | T | Bis(2-chloroisopropyl)ether | | 2.166 | 0.703 | 67.5# | 35# | 0.00 |
| 15 | T | 2-Methylphenol | | 1.183 | 1.191 | -0.7 | 106 | 0.00 |
| 16 | T | Hexachloroethane | | 0.623 | 0.542 | 13.0 | 97 | 0.00 |
| 17 | T | n-Nitrosodi-n-propylamine | | 1.057 | 0.996 | 5.8 | 97 | 0.00 |
| 18 | T | 3-Methylphenol/4-Methylphen | | 1.279 | 1.287 | -0.6 | 108 | 0.00 |
| 19 | S | Nitrobenzene-d5 | | 1.619 | 1.500 | 7.4 | 100 | 0.00 |
| 20 | T | Nitrobenzene | | 1.643 | 1.477 | 10.1 | 98 | 0.00 |
| 21 | T | Isophorone | | 2.760 | 2.652 | 3.9 | 99 | 0.00 |
| 22 | T | 2-Nitrophenol | | 0.692 | 0.677 | 2.2 | 102 | 0.00 |
| 23 | T | 2,4-Dimethylphenol | | 1.301 | 1.267 | 2.6 | 104 | 0.00 |
| 24 | T | Bis(2-chloroethoxy)methane | | 1.778 | 1.496 | 15.9 | 90 | 0.00 |
| 25 | T | 2,4-Dichlorophenol | | 1.233 | 1.191 | 3.4 | 101 | 0.00 |
| 26 | T | 1,2,4-Trichlorobenzene | | 1.510 | 1.394 | 7.7 | 103 | 0.00 |
| 35 | I | IS1_Naphthalene-d8 | | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 36 | T | Naphthalene | | 1.147 | 1.044 | 9.0 | 96 | 0.00 |
| 37 | T | Benzoic Acid | * | 5.000 | 5.297 | -5.9 | 106 | 0.00 |
| 38 | T | 4-Chloroaniline | | 0.169 | 0.148 | 12.4 | 87 | 0.00 |
| 39 | T | Hexachlorobutadiene | | 0.303 | 0.311 | -2.6 | 111 | 0.00 |
| 40 | T | p-Chloro-m-cresol | | 0.343 | 0.358 | -4.4 | 104 | 0.00 |
| 41 | T | 2-Methylnaphthalene | | 0.764 | 0.767 | -0.4 | 103 | 0.00 |
| 42 | T | 1-Methylnaphthalene | | 0.290 | 0.295 | -1.7 | 103 | 0.00 |
| 43 | T | Hexachlorocyclopentadiene | | 0.336 | 0.374 | -11.3 | 112 | 0.00 |
| 44 | T | 2,4,6-Trichlorophenol | | 0.301 | 0.326 | -8.3 | 107 | 0.00 |
| 45 | T | 2,4,5-Trichlorophenol | | 0.322 | 0.347 | -7.8 | 104 | 0.00 |
| 46 | S | 2-Fluorobiphenyl | | 1.027 | 0.952 | 7.3 | 96 | 0.00 |

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 2-Chloronaphthalene | 0.813 | 0.804 | 1.1 | 101 | 0.00 |
| 48 | T | 2-Nitroaniline | 0.245 | 0.250 | -2.0 | 100 | 0.00 |
| 49 | T | 1,4-Dinitrobenzene | 0.129 | 0.141 | -9.3 | 108 | 0.00 |
| 50 | T | 1,3-Dinitrobenzene | 0.147 | 0.153 | -4.1 | 100 | 0.00 |
| 51 | T | Dimethyl phthalate | 0.989 | 1.005 | -1.6 | 101 | 0.00 |
| 52 | T | Acenaphthylene | 1.244 | 1.193 | 4.1 | 95 | 0.00 |
| 53 | T | 2,6-Dinitrotoluene | 0.213 | 0.213 | 0.0 | 96 | 0.00 |
| 54 | T | 1,2-Dinitrobenzene | 0.091 | 0.092 | -1.1 | 97 | 0.00 |
| 63 | I | IS1_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 64 | T | 3-Nitroaniline | 0.319 | 0.323 | -1.3 | 101 | 0.00 |
| 65 | T | Acenaphthene | 1.153 | 1.079 | 6.4 | 103 | 0.00 |
| 66 | T | 2,4-Dinitrophenol | 0.213 | 0.239 | -12.2 | 111 | 0.00 |
| 67 | T | Dibenzofuran | 1.936 | 1.702 | 12.1 | 98 | 0.00 |
| 68 | T | 2,4-Dinitrotoluene | 0.475 | 0.450 | 5.3 | 98 | 0.00 |
| 69 | T | 4-Nitrophenol | 0.323 | 0.287 | 11.1 | 94 | 0.00 |
| 70 | T | 2,3,5,6-Tetrachlorophenol | 0.452 | 0.479 | -6.0 | 109 | 0.00 |
| 71 | T | 2,3,4,6-Tetrachlorophenol | 0.435 | 0.474 | -9.0 | 110 | 0.00 |
| 72 | T | Diethyl phthalate | 1.529 | 1.428 | 6.6 | 102 | 0.00 |
| 73 | T | Fluorene | 1.523 | 1.386 | 9.0 | 99 | 0.00 |
| 74 | T | 4-Chlorophenyl phenyl ether | 0.801 | 0.776 | 3.1 | 110 | 0.00 |
| 75 | T | 4-Nitroaniline | 0.333 | 0.339 | -1.8 | 109 | 0.00 |
| 76 | T | 4,6-Dinitro-o-cresol | 0.266 | 0.316 | -18.8 | 113 | 0.00 |
| 77 | T | NDPA/DPA | 1.263 | 1.178 | 6.7 | 99 | 0.00 |
| 78 | T | Azobenzene | 1.446 | 1.409 | 2.6 | 105 | 0.00 |
| 79 | S | 2,4,6-Tribromophenol | 0.249 | 0.253 | -1.6 | 104 | 0.00 |
| 80 | T | 4-Bromophenyl phenyl ether | 0.500 | 0.509 | -1.8 | 112 | 0.00 |
| 81 | T | Hexachlorobenzene | 0.569 | 0.550 | 3.3 | 109 | 0.00 |
| 82 | T | Pentachlorophenol | 0.361 | 0.391 | -8.3 | 105 | 0.00 |
| 88 | I | IS1_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 89 | T | Phenanthrene | 1.117 | 1.047 | 6.3 | 100 | 0.00 |
| 90 | T | Anthracene | 1.111 | 1.052 | 5.3 | 98 | 0.00 |
| 91 | T | Carbazole | 1.018 | 0.950 | 6.7 | 97 | 0.00 |
| 92 | T | Di-n-butylphthalate | 1.195 | 1.237 | -3.5 | 104 | 0.00 |
| 93 | T | Fluoranthene | 1.366 | 1.300 | 4.8 | 100 | 0.00 |
| 94 | T | Benzidine | 0.741 | 0.817 | -10.3 | 105 | 0.00 |
| 95 | T | Pyrene | 1.440 | 1.389 | 3.5 | 101 | 0.00 |
| 96 | S | 4-Terphenyl-d14 | 1.076 | 1.081 | -0.5 | 107 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 97 | T | Butyl benzyl phthalate | 0.550 | 0.558 | -1.5 | 105 | 0.00 |
| 104 | I | IS1_Chrysene-d12 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 105 | T | Benzo(a)anthracene | 1.478 | 1.322 | 10.6 | 105 | 0.00 |
| 106 | T | 3,3'-Dichlorobenzidine | 0.489 | 0.513 | -4.9 | 109 | 0.00 |
| 107 | T | Chrysene | 1.429 | 1.215 | 15.0 | 100 | 0.00 |
| 108 | T | Bis(2-ethylhexyl)phthalate | 0.817 | 0.798 | 2.3 | 104 | 0.00 |
| 109 | T | Di-n-octylphthalate | 1.352 | 1.344 | 0.6 | 107 | 0.00 |
| 110 | T | Benzo(b)fluoranthene | 1.430 | 1.311 | 8.3 | 110 | 0.00 |
| 111 | T | Benzo(k)fluoranthene | 1.356 | 1.161 | 14.4 | 95 | 0.00 |
| 112 | T | Benzo(a)pyrene | 1.242 | 1.148 | 7.6 | 102 | 0.00 |
| 113 | I | IS1_Perylene-d12 | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 114 | T | Indeno(1,2,3-cd)pyrene | 1.082 | 1.136 | -5.0 | 100 | 0.00 |
| 115 | T | Dibenzo(a,h)anthracene | 1.042 | 1.092 | -4.8 | 100 | 0.00 |
| 116 | T | Benzo(ghi)perylene | 0.964 | 1.059 | -9.9 | 103 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.340 | 152 | 33341 | 4.000 | ug/ml | | 0.00 |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 112751 | 4.000 | ug/ml | # | 0.00 |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 79296 | 4.000 | ug/ml | | 0.00 |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 166718 | 4.000 | ug/ml | | 0.00 |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 180876 | 4.000 | ug/ml | # | 0.00 |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 178984 | 4.000 | ug/ml | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 48840 | 5.068 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 253.40%# | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 61777 | 4.683 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 234.15%# | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 62509 | 4.633 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 463.30%# | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 134110 | 4.632 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 463.20%# | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 25093 | 5.077 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 253.85%# | | | | |
| 96) 4-Terphenyl-d14 | 12.569 | 244 | 225381 | 5.028 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 502.80%# | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) n-Nitrosodimethylamine | 1.987 | 74 | 34177 | 4.817 | ug/ml | # | 49 |
| 3) Pyridine | 2.022 | 79 | 51341 | 4.424 | ug/ml | # | 31 |
| 5) Aniline | 5.922 | 93 | 78375 | 4.590 | ug/ml | | 93 |
| 6) 2-Chlorophenol | 6.063 | 128 | 50183 | 4.675 | ug/ml | | 90 |
| 8) Phenol | 5.975 | 94 | 66721 | 4.876 | ug/ml | | 95 |
| 9) Bis(2-chloroethyl)ether | 6.063 | 93 | 48450 | 4.311 | ug/ml | | 95 |
| 10) 1,3-Dichlorobenzene | 6.257 | 146 | 60885 | 4.723 | ug/ml | | 99 |
| 11) 1,4-Dichlorobenzene | 6.357 | 146 | 60633 | 4.648 | ug/ml | | 99 |
| 12) 1,2-Dichlorobenzene | 6.534 | 146 | 56906 | 4.485 | ug/ml | | 98 |
| 13) Benzyl alcohol | 6.551 | 79 | 51167 | 4.843 | ug/ml | | 94 |
| 14) Bis(2-chloroisopropyl)... | 6.734 | 45 | 29291 | 1.622 | ug/ml | # | 1 |
| 15) 2-Methylphenol | 6.722 | 108 | 49616 | 5.034 | ug/ml | | 98 |
| 16) Hexachloroethane | 6.928 | 117 | 22575 | 4.349 | ug/ml | # | 31 |
| 17) n-Nitrosodi-n-propylamine | 6.881 | 70 | 41504 | 4.711 | ug/ml | # | 89 |
| 18) 3-Methylphenol/4-Methy... | 6.910 | 108 | 53650 | 5.033 | ug/ml | | 97 |
| 20) Nitrobenzene | 7.022 | 77 | 61549 | 4.494 | ug/ml | | 93 |
| 21) Isophorone | 7.304 | 82 | 110543 | 4.805 | ug/ml | # | 92 |
| 22) 2-Nitrophenol | 7.381 | 139 | 28214 | 4.893 | ug/ml | # | 88 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 23) 2,4-Dimethylphenol | 7.487 | 107 | 52795 | 4.867 | ug/ml | 92 |
| 24) Bis(2-chloroethoxy)met... | 7.587 | 93 | 62356 | 4.208 | ug/ml | 96 |
| 25) 2,4-Dichlorophenol | 7.645 | 162 | 49633 | 4.829 | ug/ml | 95 |
| 26) 1,2,4-Trichlorobenzene | 7.728 | 180 | 58098 | 4.616 | ug/ml | 98 |
| 36) Naphthalene | 7.792 | 128 | 147178 | 4.553 | ug/ml | 100 |
| 37) Benzoic Acid | 7.575 | 105 | 41495 | 5.297 | ug/ml | 98 |
| 38) 4-Chloroaniline | 7.881 | 65 | 20789 | 4.362 | ug/ml | 92 |
| 39) Hexachlorobutadiene | 7.957 | 225 | 43884 | 5.144 | ug/ml | 98 |
| 40) p-Chloro-m-cresol | 8.410 | 107 | 50518 | 5.231 | ug/ml | 98 |
| 41) 2-Methylnaphthalene | 8.516 | 142 | 108091 | 5.018 | ug/ml# | 94 |
| 42) 1-Methylnaphthalene | 8.610 | 115 | 41551M3 | 5.079 | ug/ml | |
| 43) Hexachlorocyclopentadiene | 8.686 | 237 | 52775 | 5.577 | ug/ml | 100 |
| 44) 2,4,6-Trichlorophenol | 8.810 | 196 | 45891M3 | 5.417 | ug/ml | |
| 45) 2,4,5-Trichlorophenol | 8.839 | 196 | 48852 | 5.385 | ug/ml | 98 |
| 47) 2-Chloronaphthalene | 8.992 | 162 | 113357 | 4.949 | ug/ml | 94 |
| 48) 2-Nitroaniline | 9.110 | 138 | 35188 | 5.099 | ug/ml | 88 |
| 49) 1,4-Dinitrobenzene | 9.257 | 168 | 19910 | 5.482 | ug/ml | 83 |
| 50) 1,3-Dinitrobenzene | 9.328 | 168 | 21548 | 5.206 | ug/ml# | 1 |
| 51) Dimethyl phthalate | 9.322 | 163 | 141632 | 5.080 | ug/ml# | 99 |
| 52) Acenaphthylene | 9.398 | 152 | 168183 | 4.796 | ug/ml | 99 |
| 53) 2,6-Dinitrotoluene | 9.363 | 165 | 30081 | 5.011 | ug/ml# | 88 |
| 54) 1,2-Dinitrobenzene | 9.404 | 168 | 12981 | 5.072 | ug/ml# | 1 |
| 64) 3-Nitroaniline | 9.516 | 138 | 32011 | 5.056 | ug/ml | 93 |
| 65) Acenaphthene | 9.569 | 154 | 106954 | 4.681 | ug/ml | 97 |
| 66) 2,4-Dinitrophenol | 9.622 | 184 | 23670 | 5.598 | ug/ml | 91 |
| 67) Dibenzofuran | 9.745 | 168 | 168727 | 4.396 | ug/ml | 96 |
| 68) 2,4-Dinitrotoluene | 9.751 | 165 | 44642 | 4.743 | ug/ml | 99 |
| 69) 4-Nitrophenol | 9.698 | 65 | 28429M3 | 4.434 | ug/ml | |
| 70) 2,3,5,6-Tetrachlorophenol | 9.828 | 232 | 47455M3 | 5.294 | ug/ml | |
| 71) 2,3,4,6-Tetrachlorophenol | 9.869 | 232 | 47024 | 5.454 | ug/ml | 99 |
| 72) Diethyl phthalate | 10.022 | 149 | 141529 | 4.668 | ug/ml | 97 |
| 73) Fluorene | 10.075 | 166 | 137406 | 4.552 | ug/ml | 97 |
| 74) 4-Chlorophenyl phenyl ... | 10.104 | 204 | 76885 | 4.840 | ug/ml# | 86 |
| 75) 4-Nitroaniline | 10.104 | 138 | 33639 | 5.103 | ug/ml# | 70 |
| 76) 4,6-Dinitro-o-cresol | 10.139 | 198 | 31334 | 5.939 | ug/ml# | 53 |
| 77) NDPA/DPA | 10.216 | 169 | 116718 | 4.663 | ug/ml | 99 |
| 78) Azobenzene | 10.251 | 77 | 139681 | 4.873 | ug/ml | 98 |
| 80) 4-Bromophenyl phenyl e... | 10.575 | 248 | 50439M3 | 5.089 | ug/ml | |
| 81) Hexachlorobenzene | 10.610 | 284 | 54543 | 4.838 | ug/ml# | 81 |
| 82) Pentachlorophenol | 10.804 | 266 | 38748 | 5.412 | ug/ml | 99 |
| 89) Phenanthrene | 11.004 | 178 | 218109M3 | 4.684 | ug/ml | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 90) Anthracene | 11.051 | 178 | 219302 | 4.737 | ug/ml | 100 |
| 91) Carbazole | 11.222 | 167 | 197957 | 4.667 | ug/ml | 98 |
| 92) Di-n-butylphthalate | 11.627 | 149 | 257703 | 5.173 | ug/ml | 100 |
| 93) Fluoranthene | 12.157 | 202 | 270860 | 4.758 | ug/ml# | 91 |
| 94) Benzidine | 12.316 | 184 | 170358 | 5.512 | ug/ml# | 93 |
| 95) Pyrene | 12.369 | 202 | 289439 | 4.823 | ug/ml | 100 |
| 97) Butyl benzyl phthalate | 13.104 | 149 | 116250 | 5.070 | ug/ml | 94 |
| 105) Benzo(a)anthracene | 13.604 | 228 | 298935M3 | 4.472 | ug/ml | |
| 106) 3,3'-Dichlorobenzidine | 13.610 | 252 | 115882 | 5.240 | ug/ml# | 96 |
| 107) Chrysene | 13.639 | 228 | 274666 | 4.251 | ug/ml | 99 |
| 108) Bis(2-ethylhexyl)phtha... | 13.751 | 149 | 180531 | 4.886 | ug/ml# | 92 |
| 109) Di-n-octylphthalate | 14.439 | 149 | 303759 | 4.967 | ug/ml# | 66 |
| 110) Benzo(b)fluoranthene | 14.704 | 252 | 296517M3 | 4.585 | ug/ml | |
| 111) Benzo(k)fluoranthene | 14.733 | 252 | 262418 | 4.279 | ug/ml# | 91 |
| 112) Benzo(a)pyrene | 15.015 | 252 | 259448M2 | 4.621 | ug/ml | |
| 114) Indeno(1,2,3-cd)pyrene | 16.039 | 276 | 254194 | 5.250 | ug/mL# | 85 |
| 115) Dibenzo(a,h)anthracene | 16.068 | 278 | 244403 | 5.243 | ug/ml# | 87 |
| 116) Benzo(ghi)perylene | 16.280 | 276 | 237002 | 5.494 | ug/ml# | 81 |

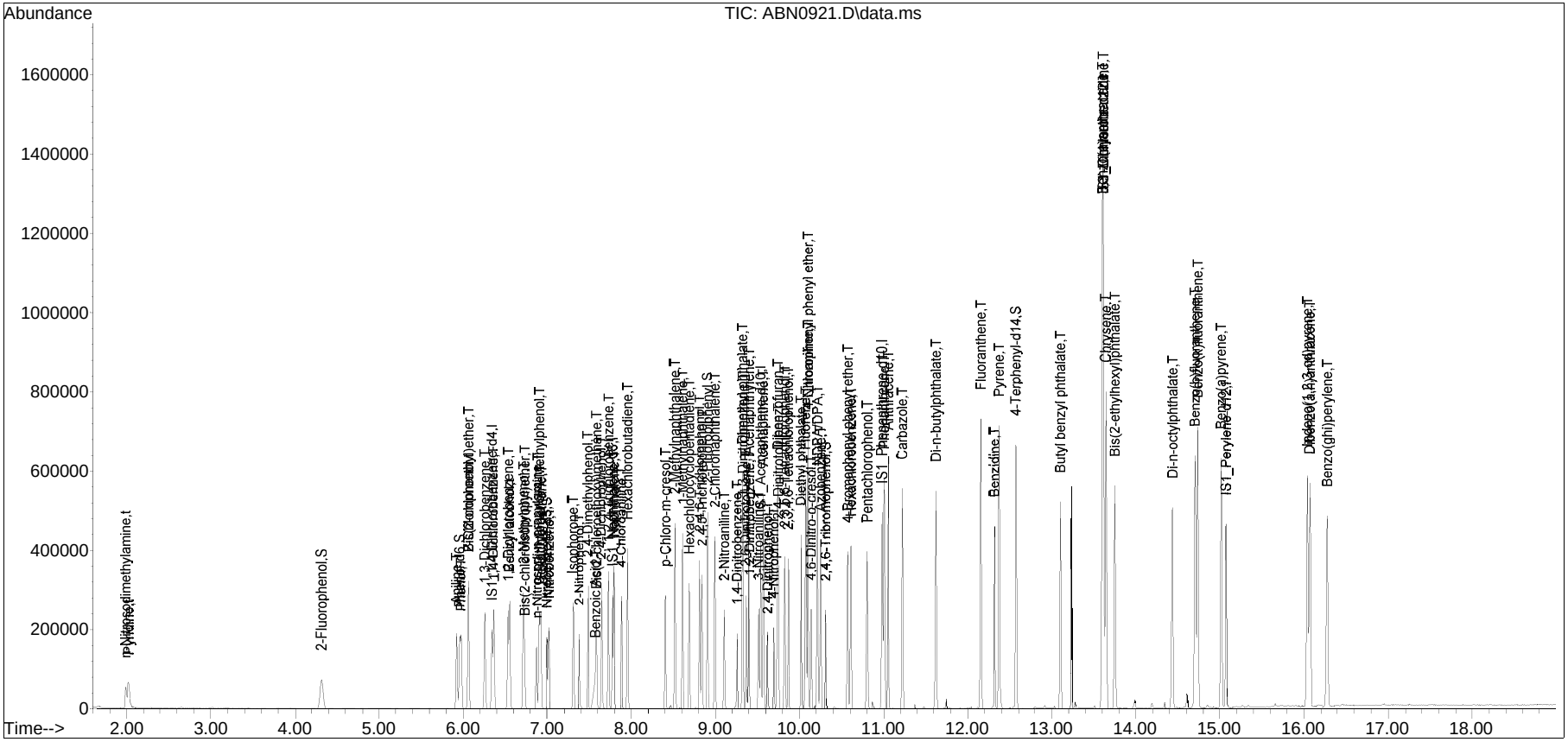
(#) = qualifier out of range (m) = manual integration (+) = signals summed

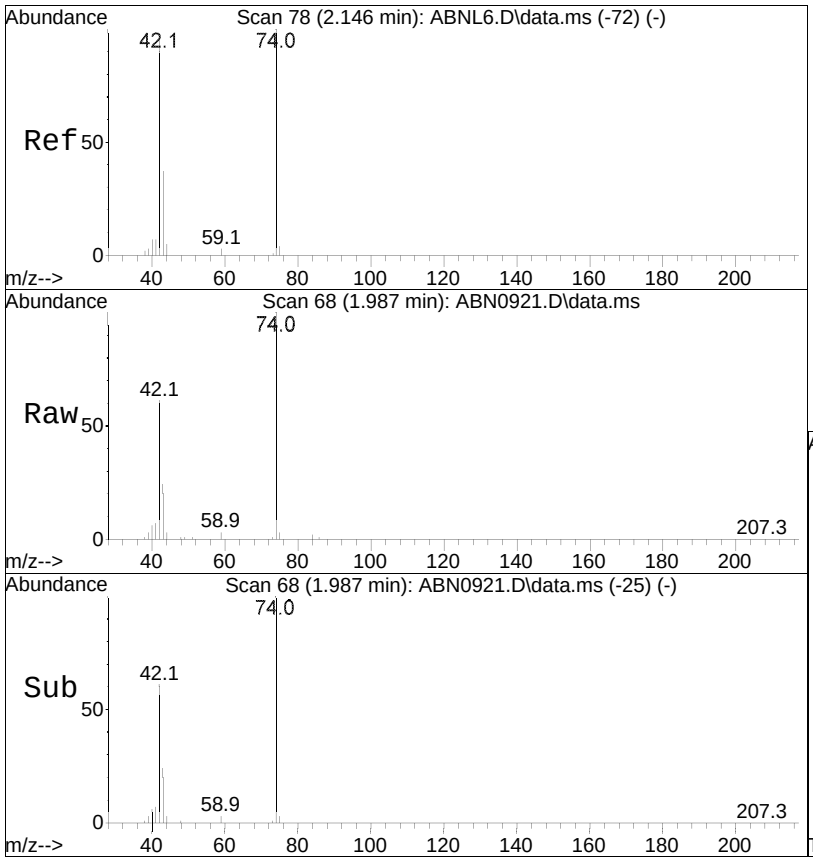
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ABN0921.D
Acq On : 21 Sep 2024 10:09 am
Operator : SV106:als
Sample : WG1974589-3,32,,ABN 10908 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 21 11:22:41 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:23:33 2024
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

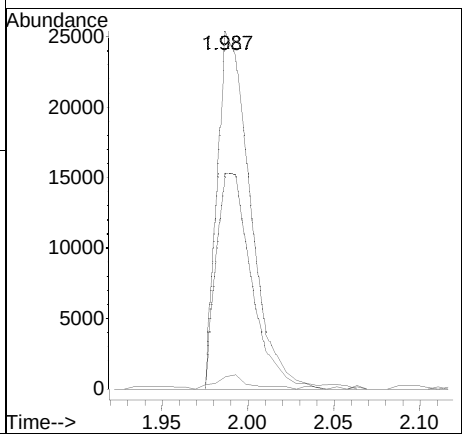


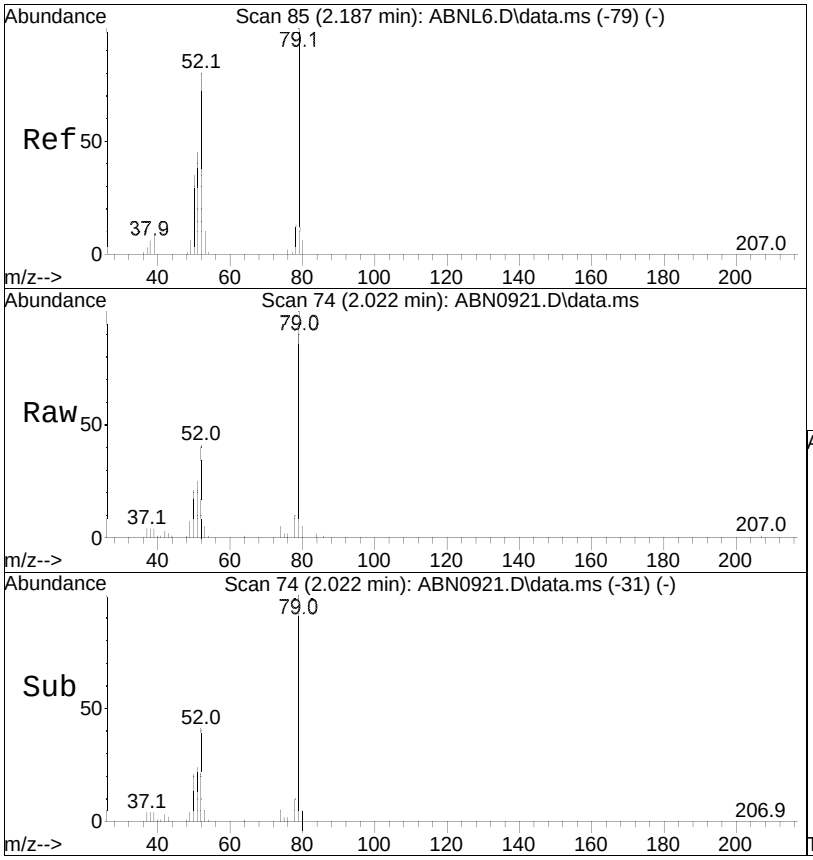



#2
n-Nitrosodimethylamine
Concen: 4.82 ug/ml
RT: 1.987 min Scan# 68
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 74 Resp: 34177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 42 | 63.5 | 100.0 | 150.0# |
| 44 | 3.8 | 6.7 | 10.1# |

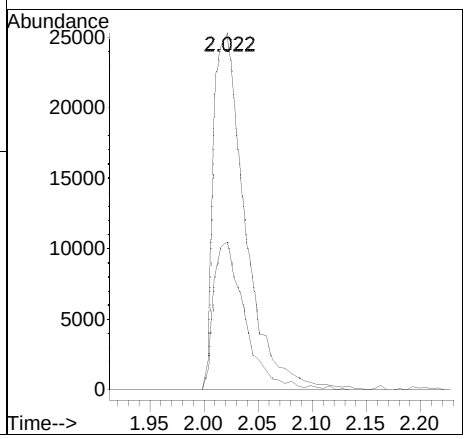


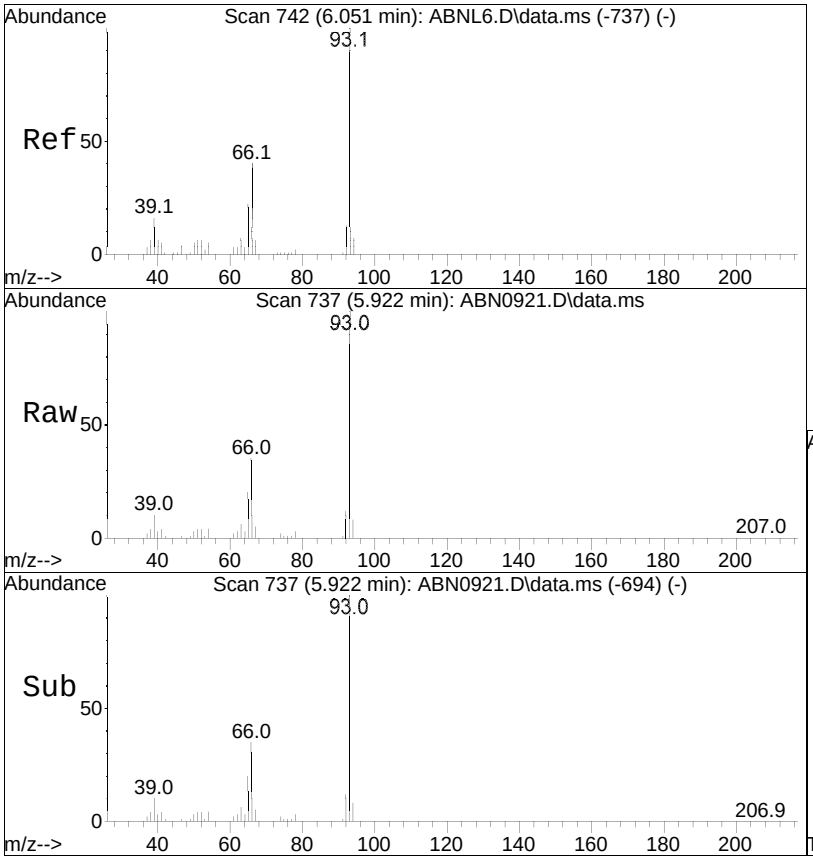



#3
Pyridine
Concen: 4.42 ug/ml
RT: 2.022 min Scan# 74
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 79 Resp: 51341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 79 | 100 | | |
| 52 | 40.9 | 93.1 | 139.7# |

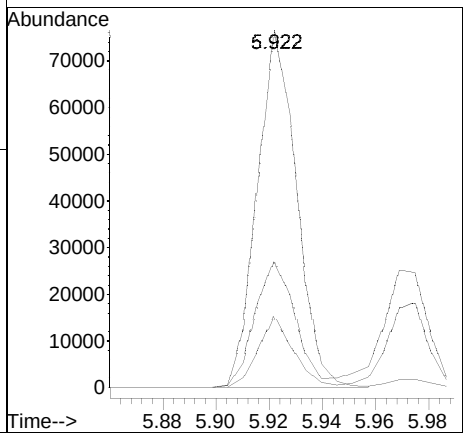


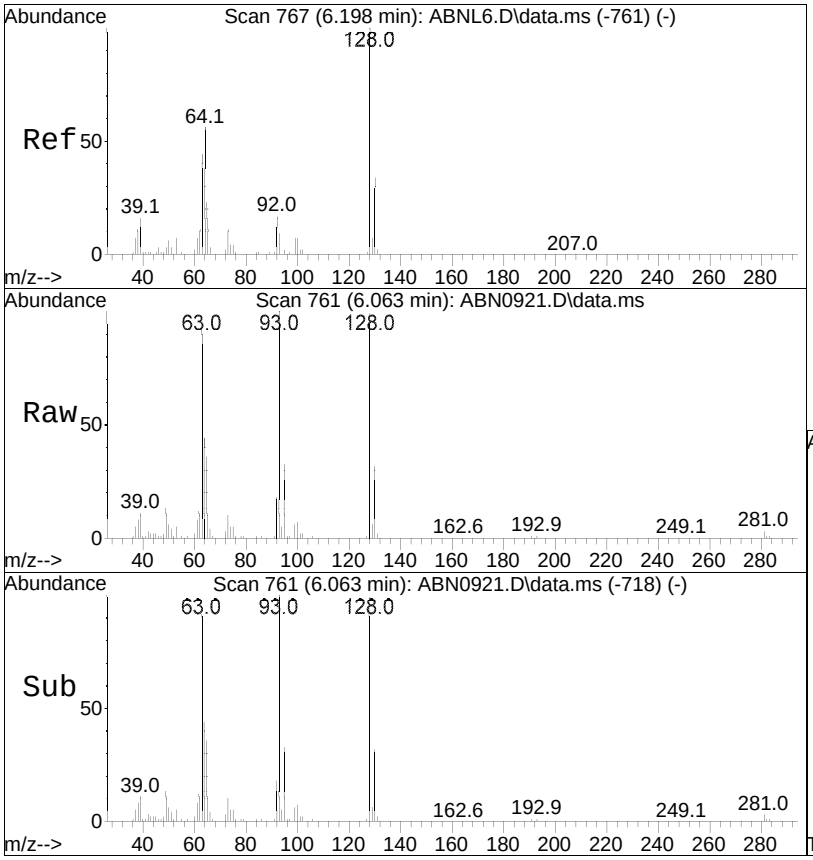



#5
Aniline
Concen: 4.59 ug/ml
RT: 5.922 min Scan# 737
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 93 Resp: 78375

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 66 | 37.2 | 32.6 | 49.0 |
| 65 | 18.1 | 17.6 | 26.4 |

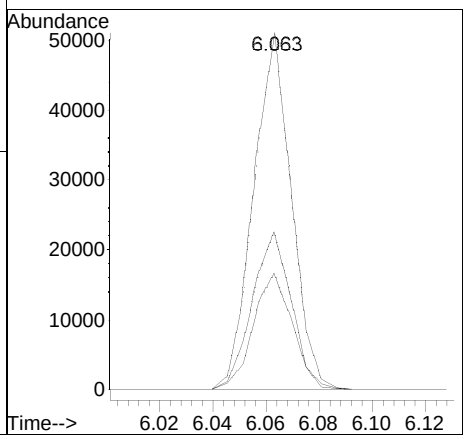


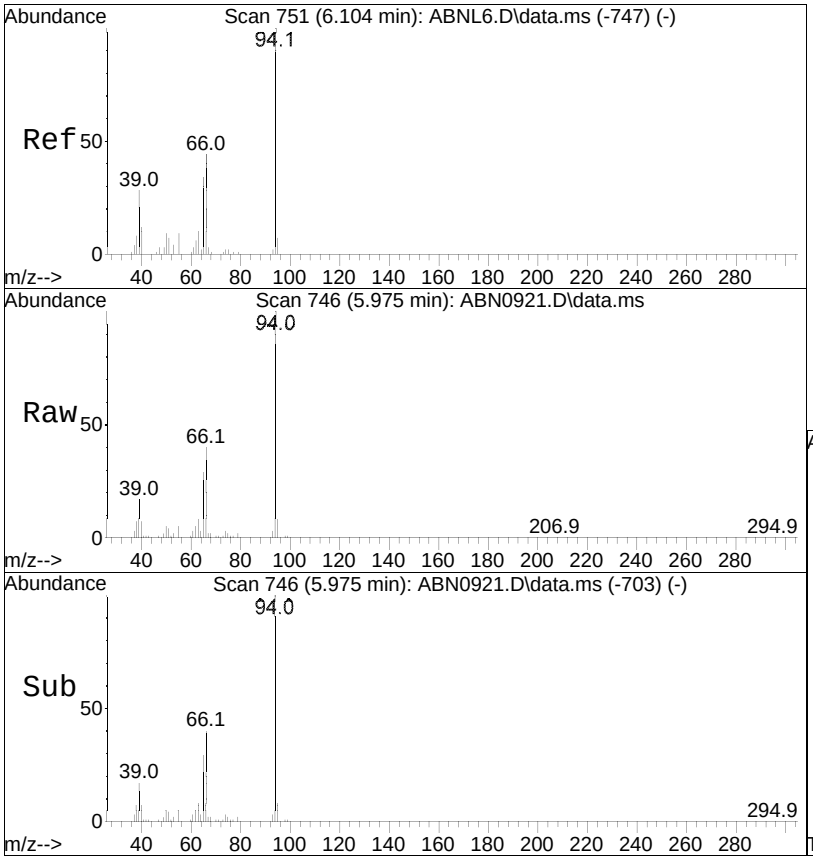



#6
2-Chlorophenol
Concen: 4.68 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:128 Resp: 50183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 64 | 45.8 | 45.1 | 67.7 |
| 130 | 33.8 | 26.2 | 39.4 |

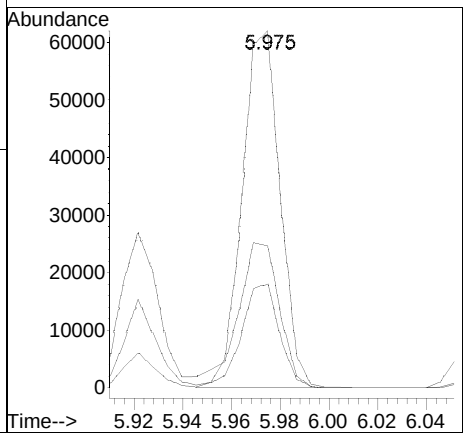


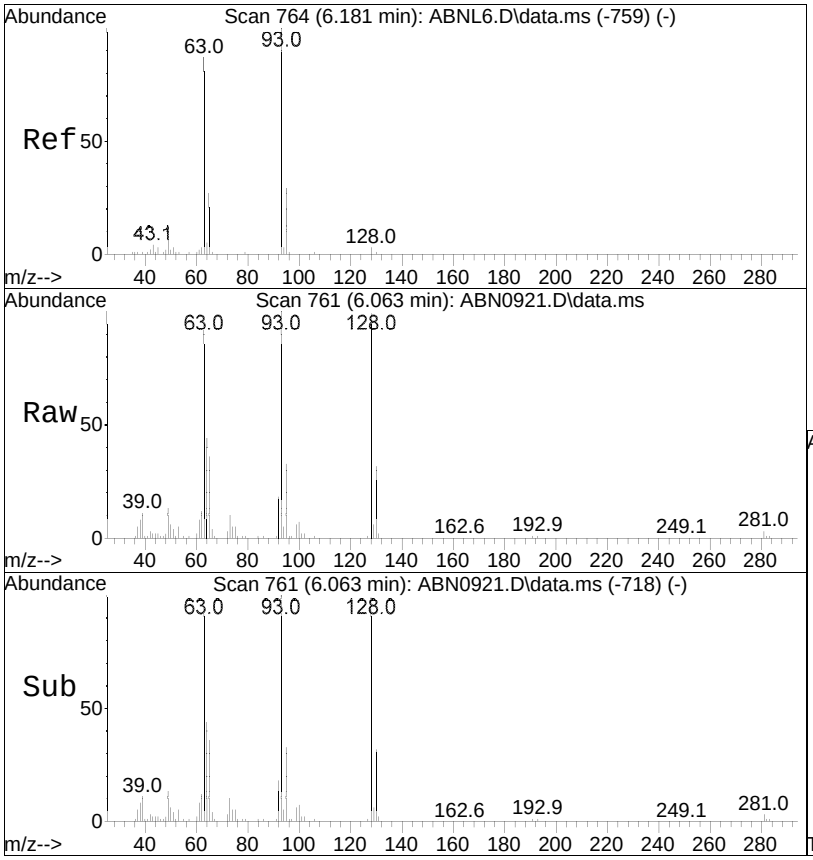



#8
Phenol
Concen: 4.88 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 94 Resp: 66721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 29.4 | 26.0 | 39.0 |
| 66 | 44.7 | 33.8 | 50.8 |

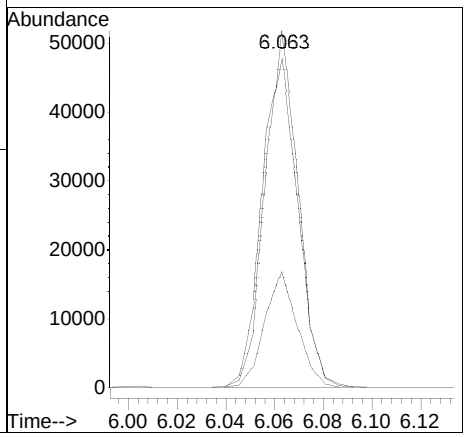


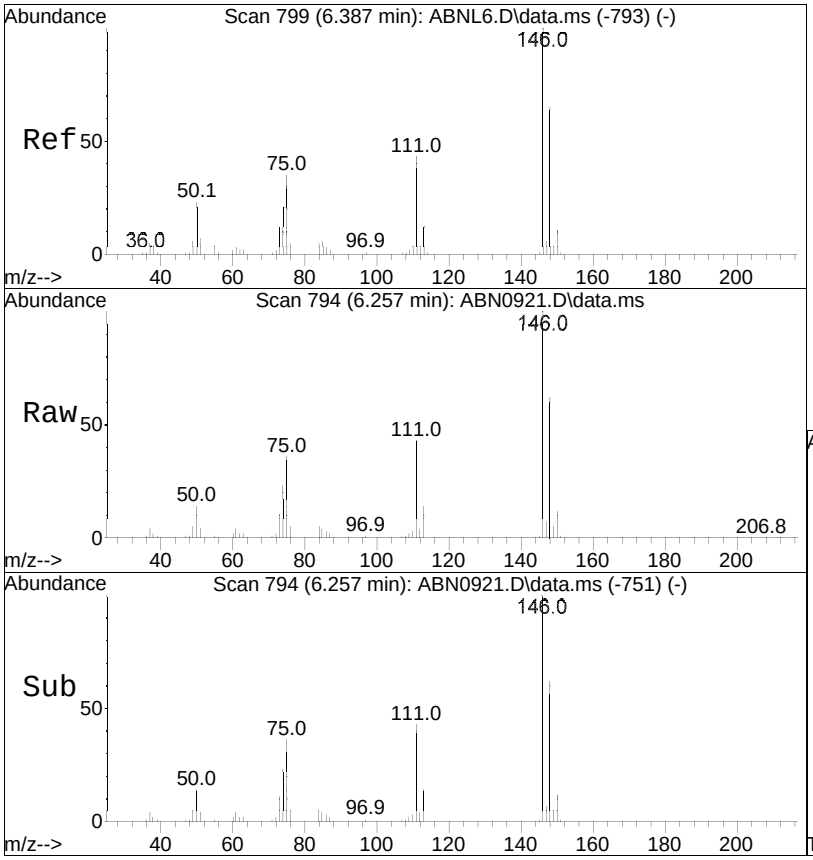



#9
Bis(2-chloroethyl)ether
Concen: 4.31 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 93 Resp: 48450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 100.2 | 74.6 | 111.8 |
| 95 | 32.4 | 25.9 | 38.9 |

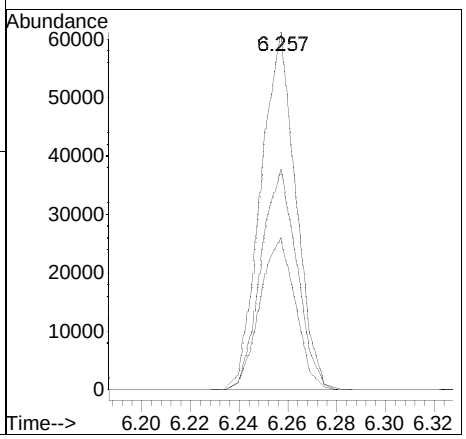


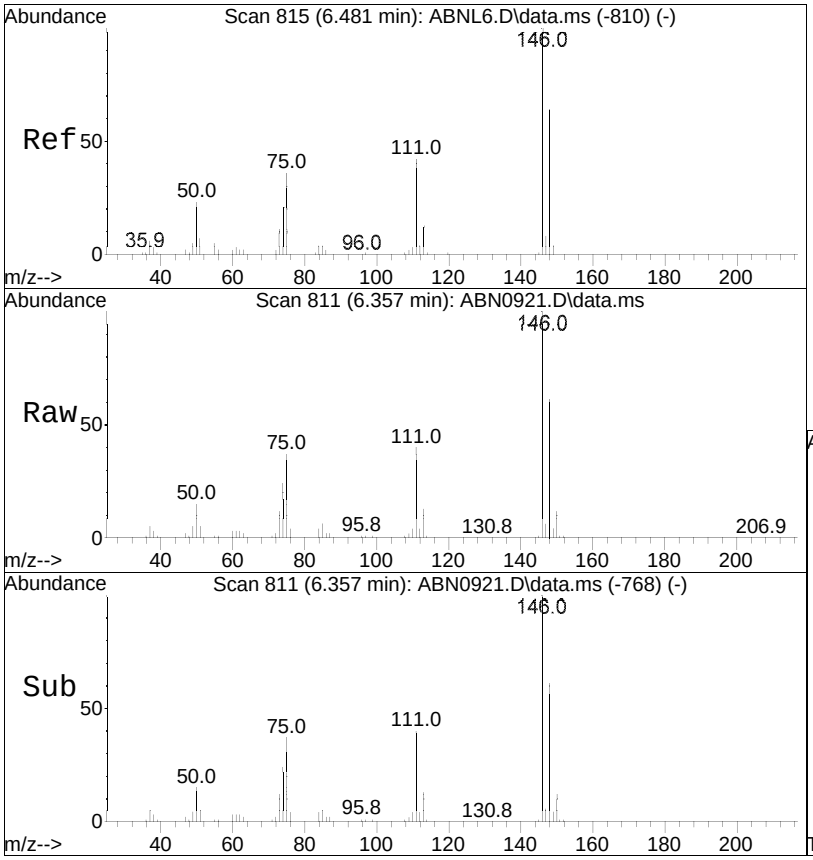



#10
1,3-Dichlorobenzene
Concen: 4.72 ug/ml
RT: 6.257 min Scan# 794
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:146 Resp: 60885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.3 | 34.3 | 51.5 |
| 148 | 63.0 | 50.8 | 76.2 |

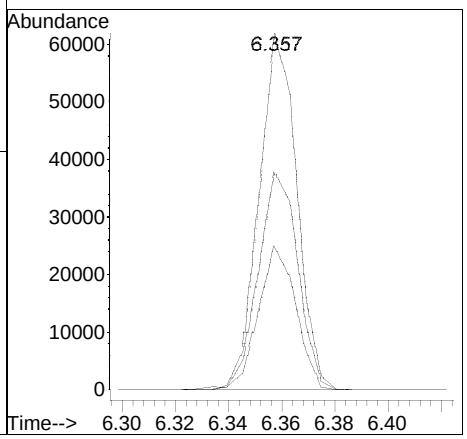


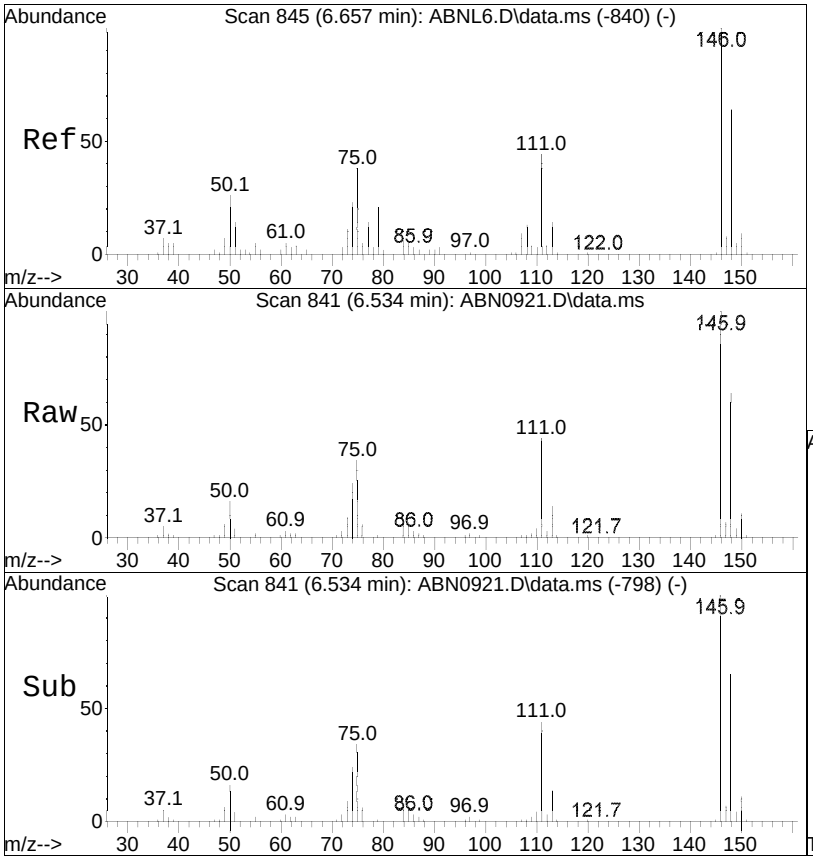



#11
1,4-Dichlorobenzene
Concen: 4.65 ug/ml
RT: 6.357 min Scan# 811
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:146 Resp: 60633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 148 | 64.2 | 50.7 | 76.1 |
| 111 | 40.9 | 33.4 | 50.0 |

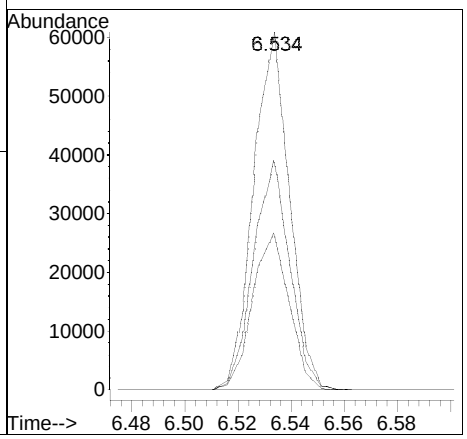


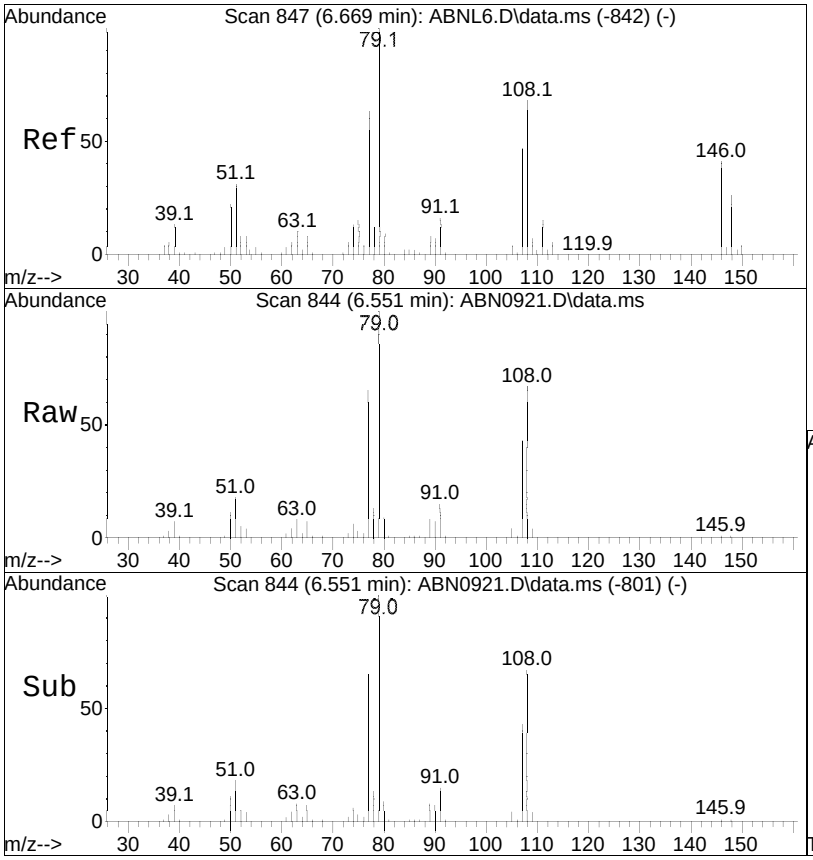



#12
1,2-Dichlorobenzene
Concen: 4.48 ug/ml
RT: 6.534 min Scan# 841
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:146 Resp: 56906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.8 | 34.6 | 52.0 |
| 148 | 64.8 | 50.2 | 75.4 |

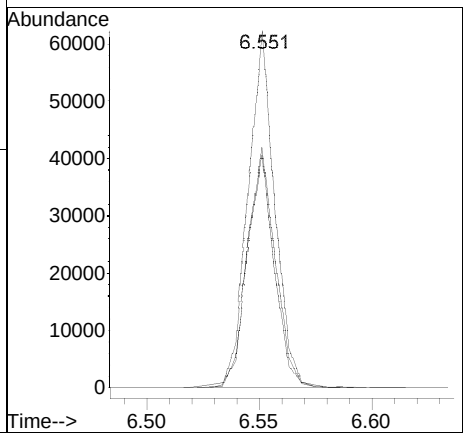


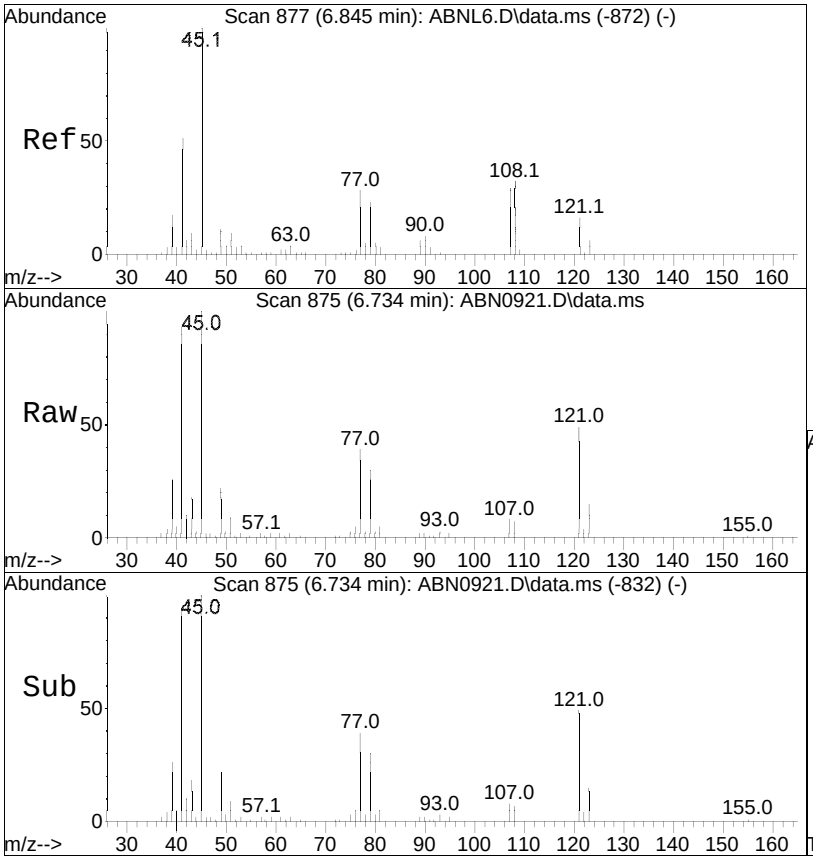



#13
Benzyl alcohol
Concen: 4.84 ug/ml
RT: 6.551 min Scan# 844
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 79 Resp: 51167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 79 | 100 | | |
| 77 | 66.5 | 54.9 | 82.3 |
| 108 | 70.8 | 63.1 | 94.7 |

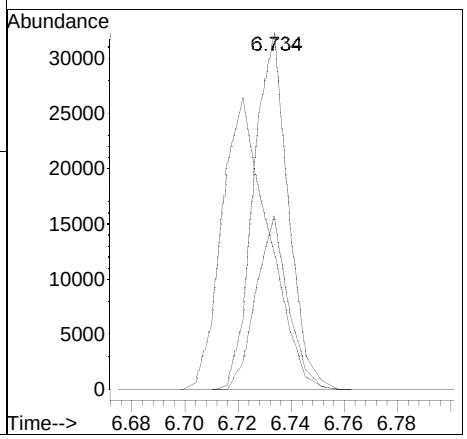


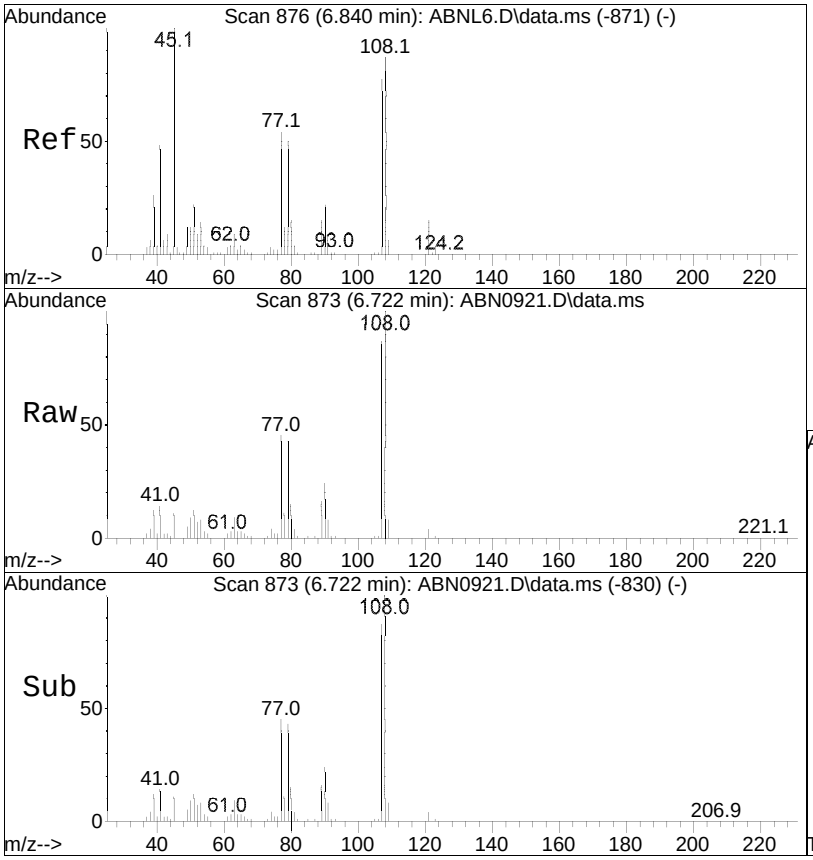



#14
Bis(2-chloroisopropyl)ether
Concen: 1.62 ug/ml
RT: 6.734 min Scan# 875
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 45 Resp: 29291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 121 | 45.4 | 9.8 | 14.6# |
| 77 | 109.5 | 6.1 | 9.1# |

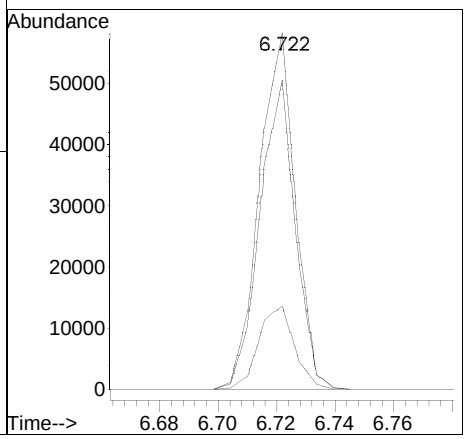


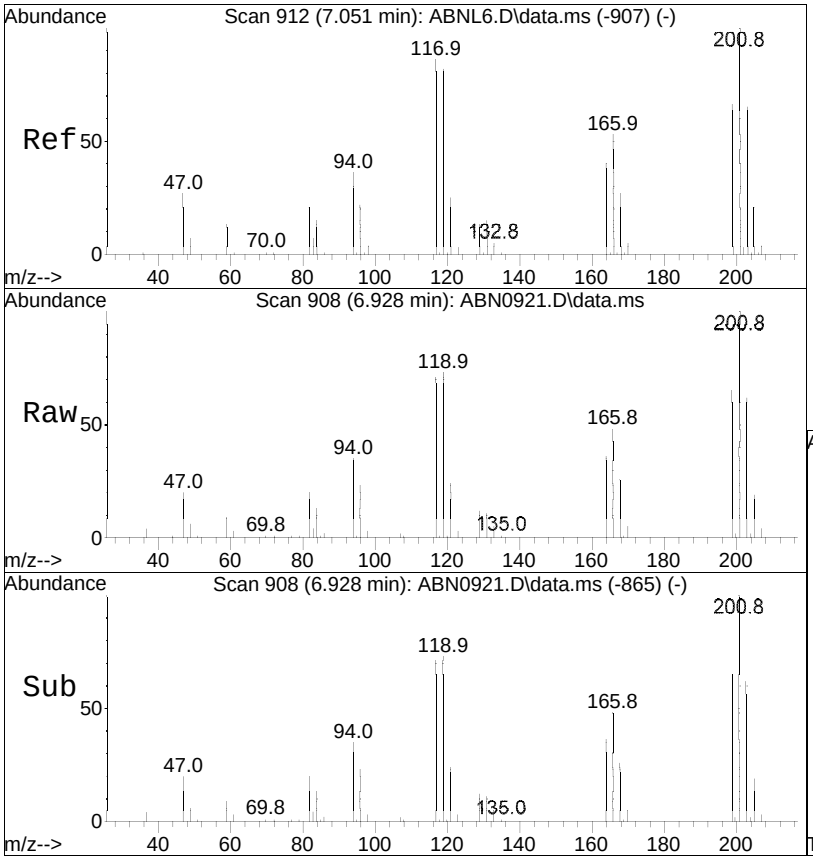



#15
2-Methylphenol
Concen: 5.03 ug/ml
RT: 6.722 min Scan# 873
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:108 Resp: 49616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 85.5 | 70.7 | 106.1 |
| 90 | 23.4 | 18.7 | 28.1 |

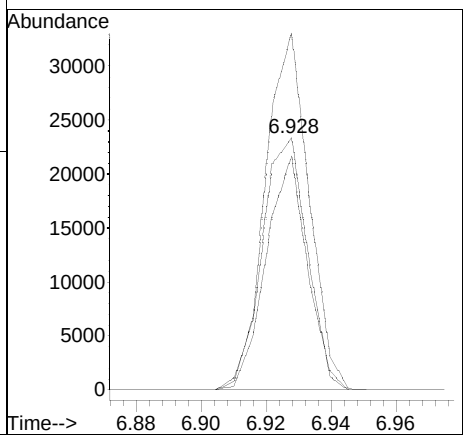


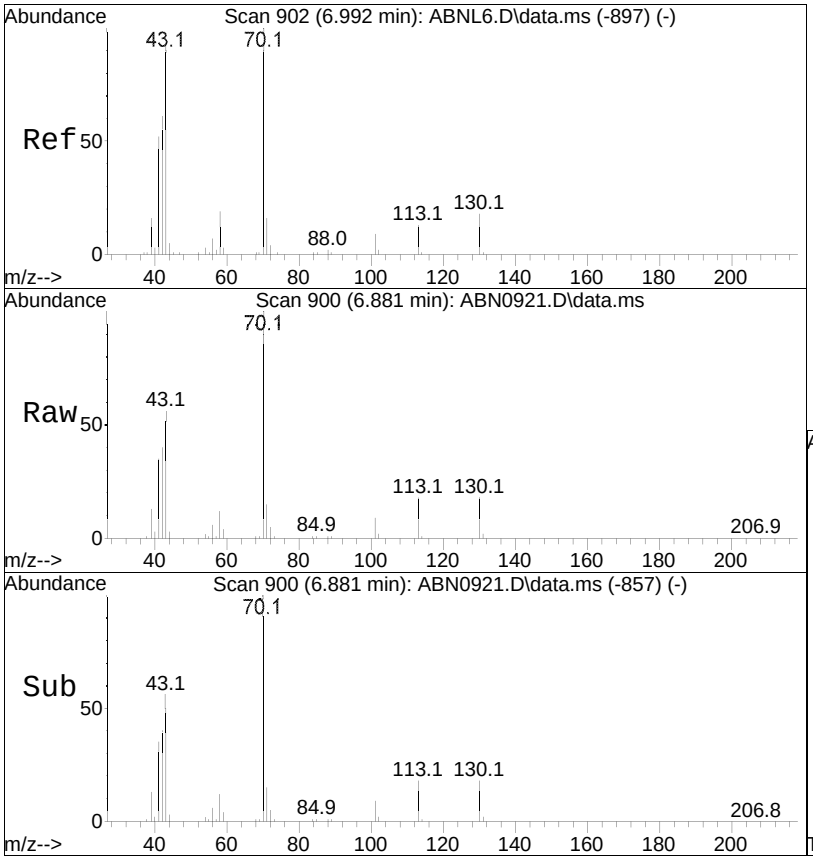



#16
Hexachloroethane
Concen: 4.35 ug/ml
RT: 6.928 min Scan# 908
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:117 Resp: 22575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 136.2 | 58.6 | 87.8# |
| 199 | 84.9 | 36.9 | 55.3# |

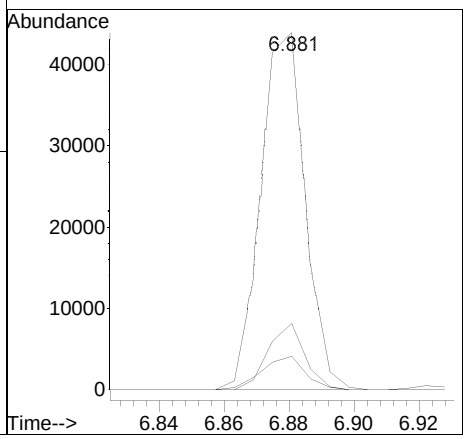


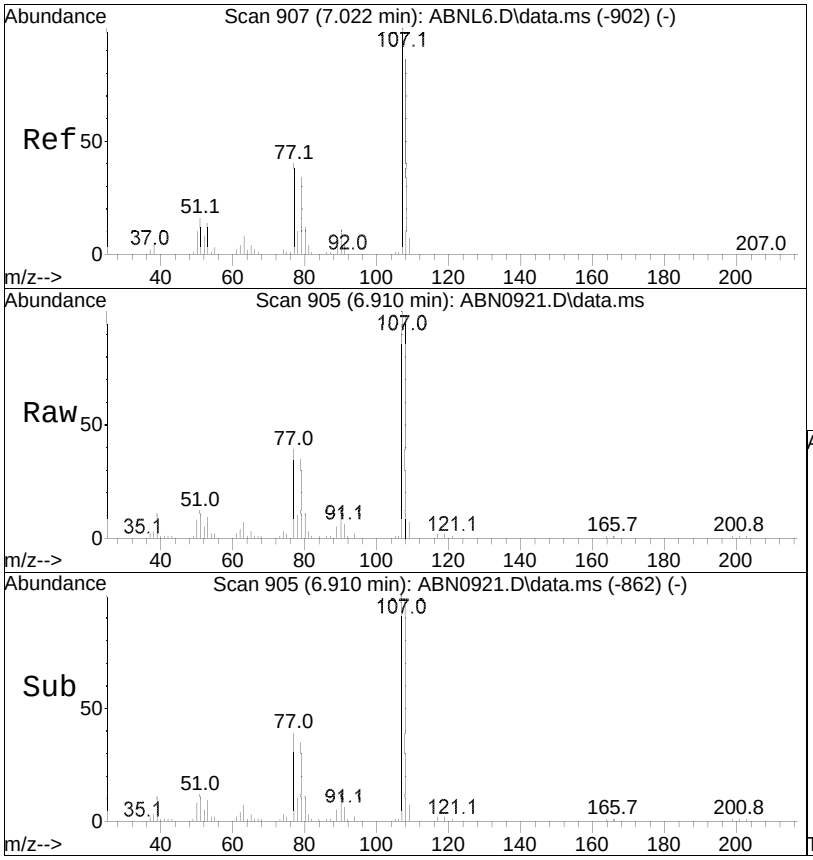



#17
n-Nitrosodi-n-propylamine
Concen: 4.71 ug/ml
RT: 6.881 min Scan# 900
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 70 Resp: 41504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 15.4 | 18.2 | 27.4# |
| 101 | 9.2 | 7.8 | 11.8 |

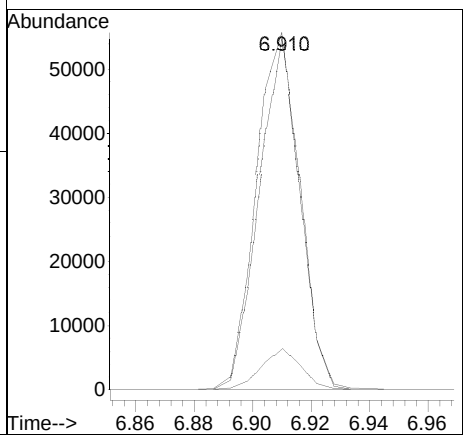


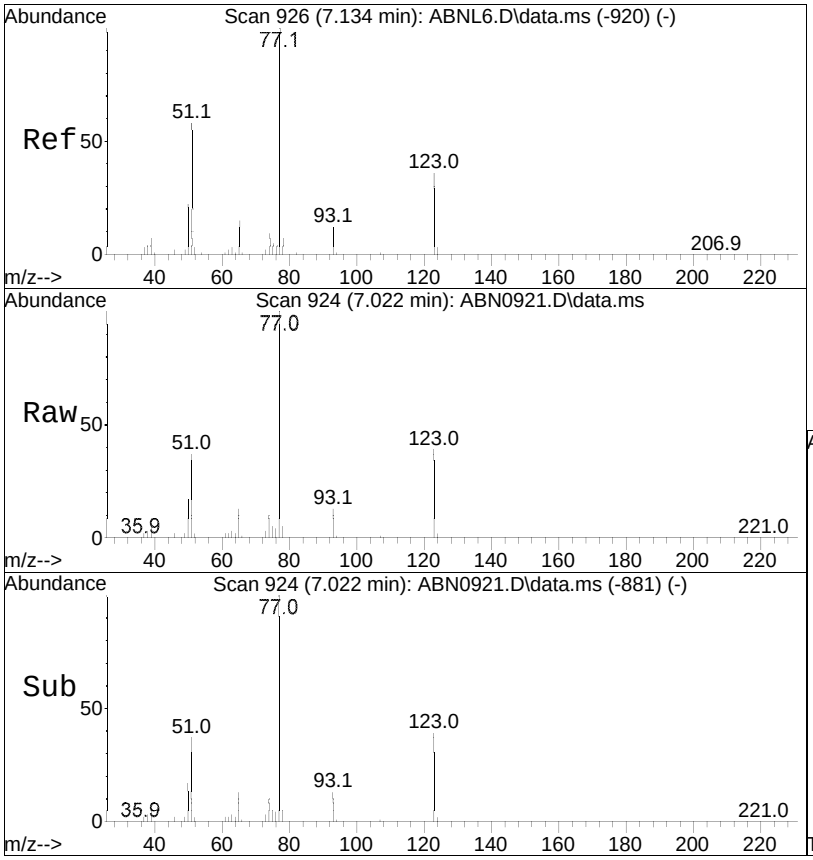



#18
3-Methylphenol/4-Methylphenol
Concen: 5.03 ug/ml
RT: 6.910 min Scan# 905
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:108 Resp: 53650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 106.9 | 88.6 | 132.8 |
| 90 | 11.3 | 8.8 | 13.2 |

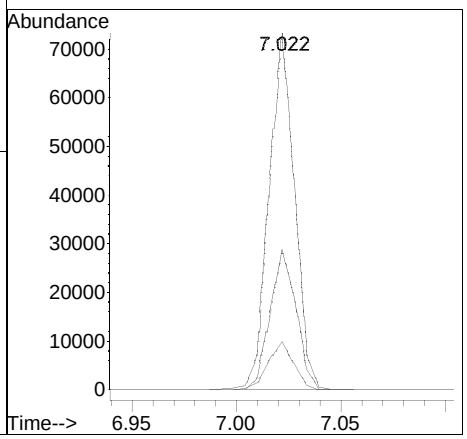


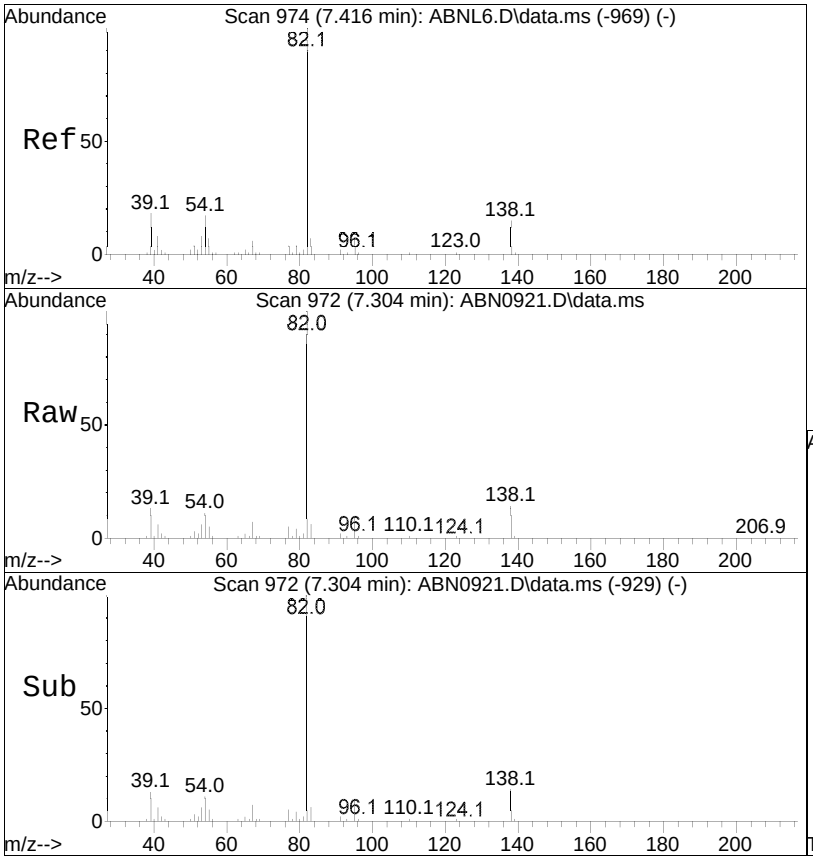



#20
Nitrobenzene
Concen: 4.49 ug/ml
RT: 7.022 min Scan# 924
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 77 Resp: 61549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 40.1 | 36.3 | 54.5 |
| 65 | 13.8 | 11.6 | 17.4 |

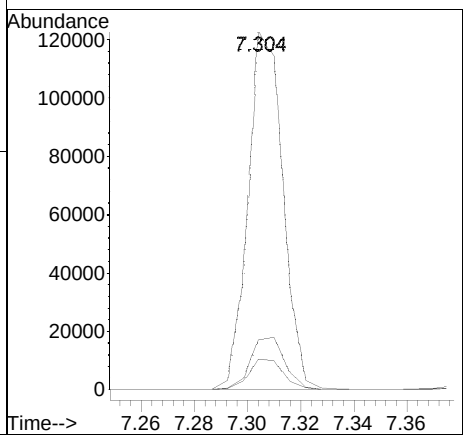


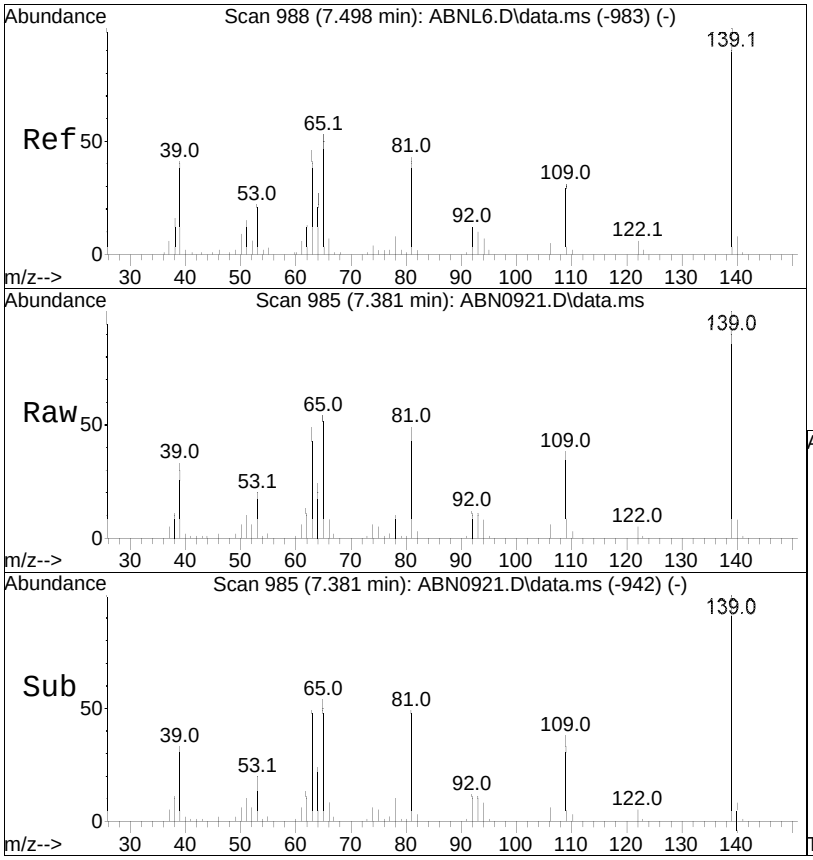



#21
Isophorone
Concen: 4.80 ug/ml
RT: 7.304 min Scan# 972
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 82 Resp: 110543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 14.5 | 14.7 | 22.1# |
| 95 | 8.5 | 5.2 | 7.8# |

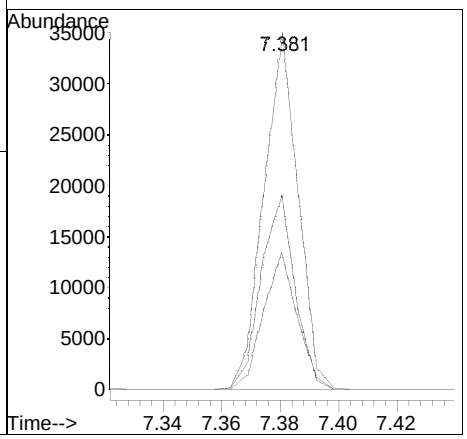


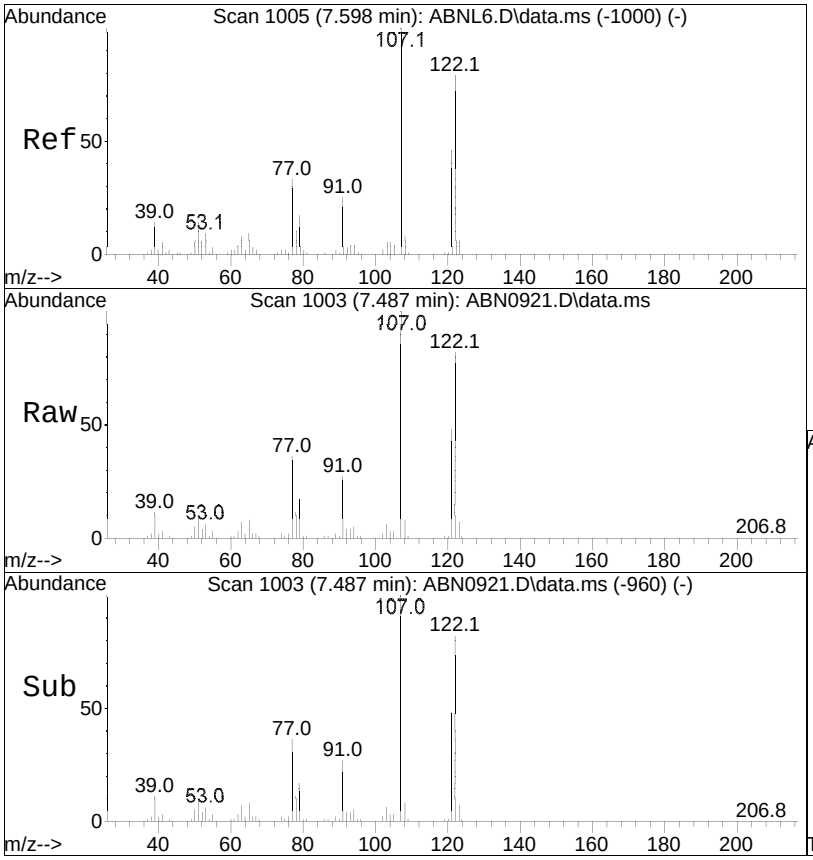



#22
2-Nitrophenol
Concen: 4.89 ug/ml
RT: 7.381 min Scan# 985
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:139 Resp: 28214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 38.3 | 19.4 | 29.0# |
| 65 | 54.3 | 46.1 | 69.1 |

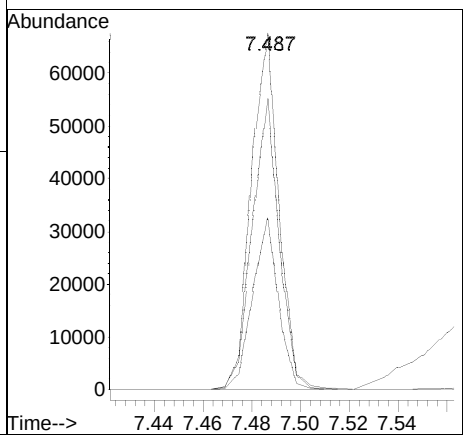


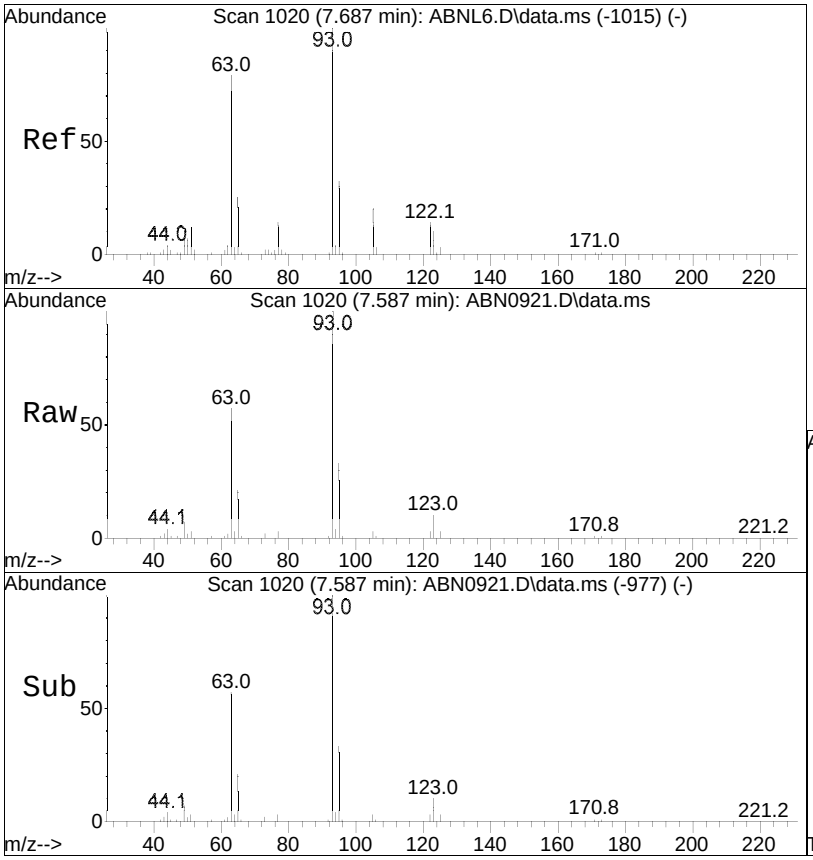



#23
2,4-Dimethylphenol
Concen: 4.87 ug/ml
RT: 7.487 min Scan# 1003
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:107 Resp: 52795

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 45.2 | 40.0 | 60.0 |
| 122 | 79.6 | 70.2 | 105.4 |

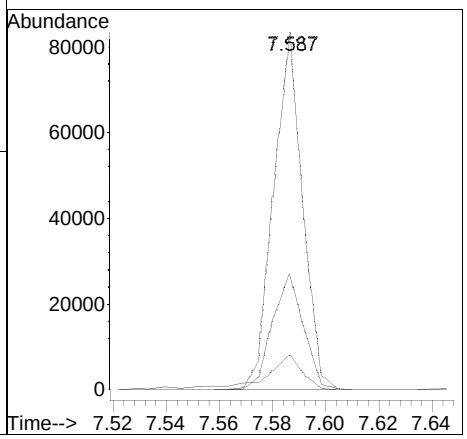


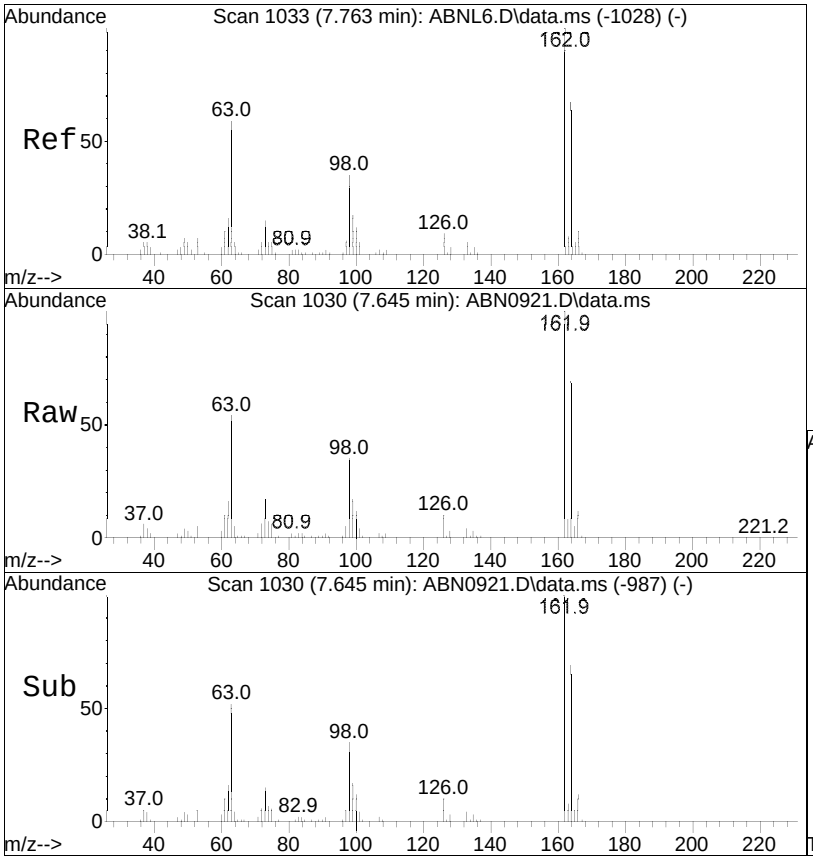



#24
Bis(2-chloroethoxy)methane
Concen: 4.21 ug/ml
RT: 7.587 min Scan# 1020
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 93 Resp: 62356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 35.1 | 25.8 | 38.8 |
| 123 | 13.3 | 10.1 | 15.1 |

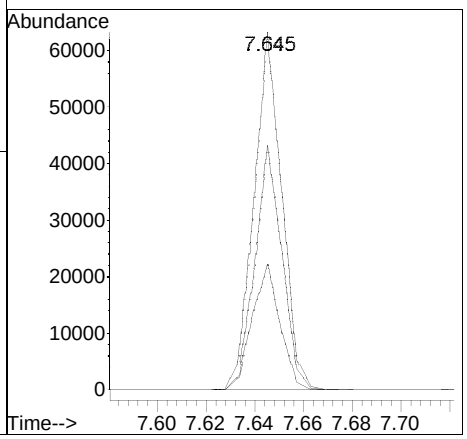


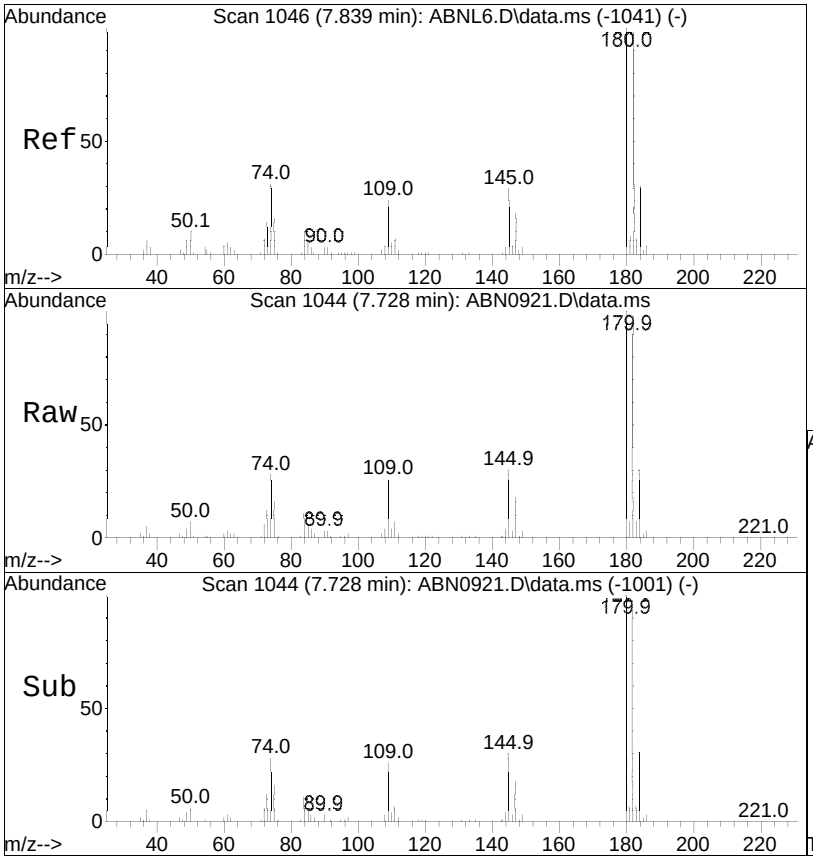



#25
2,4-Dichlorophenol
Concen: 4.83 ug/ml
RT: 7.645 min Scan# 1030
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:162 Resp: 49633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 66.4 | 51.0 | 76.4 |
| 98 | 35.4 | 32.2 | 48.2 |

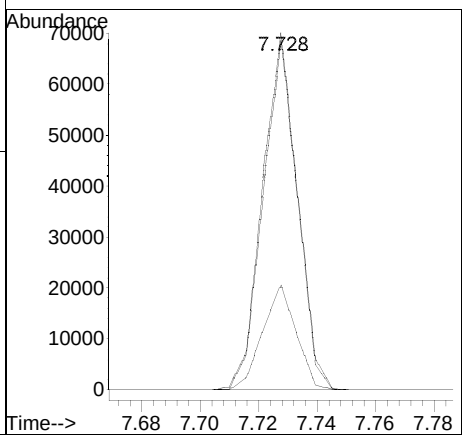


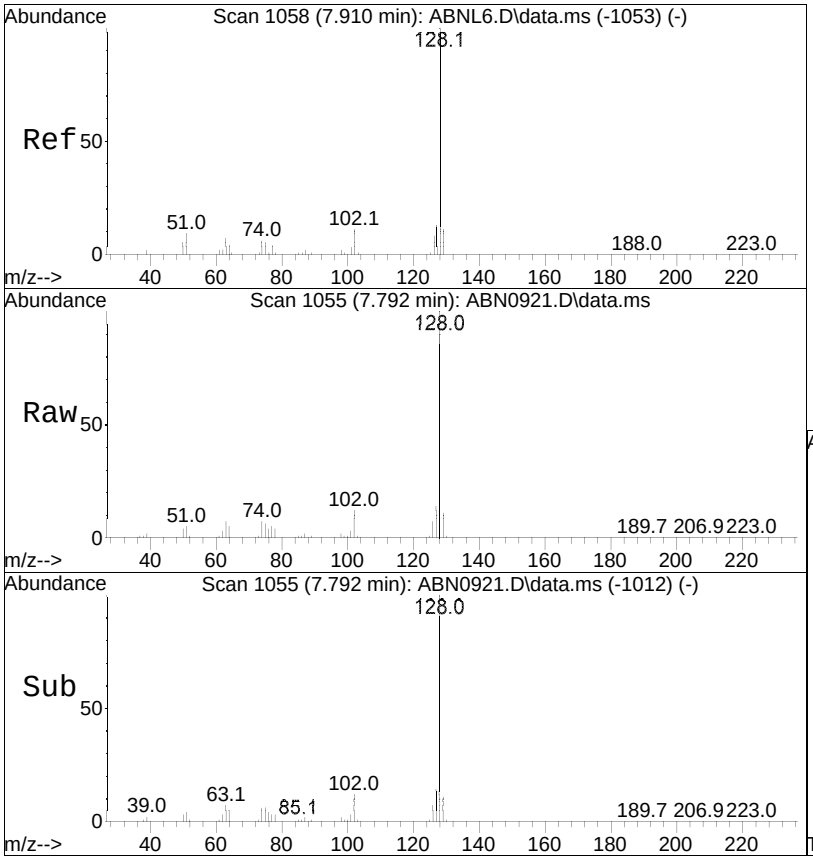



#26
1,2,4-Trichlorobenzene
Concen: 4.62 ug/ml
RT: 7.728 min Scan# 1044
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:180 Resp: 58098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.4 | 76.0 | 114.0 |
| 145 | 28.4 | 25.7 | 38.5 |

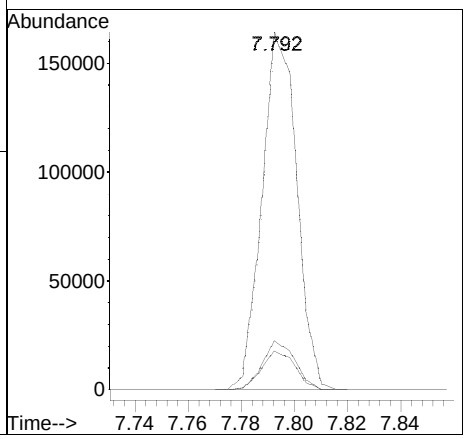


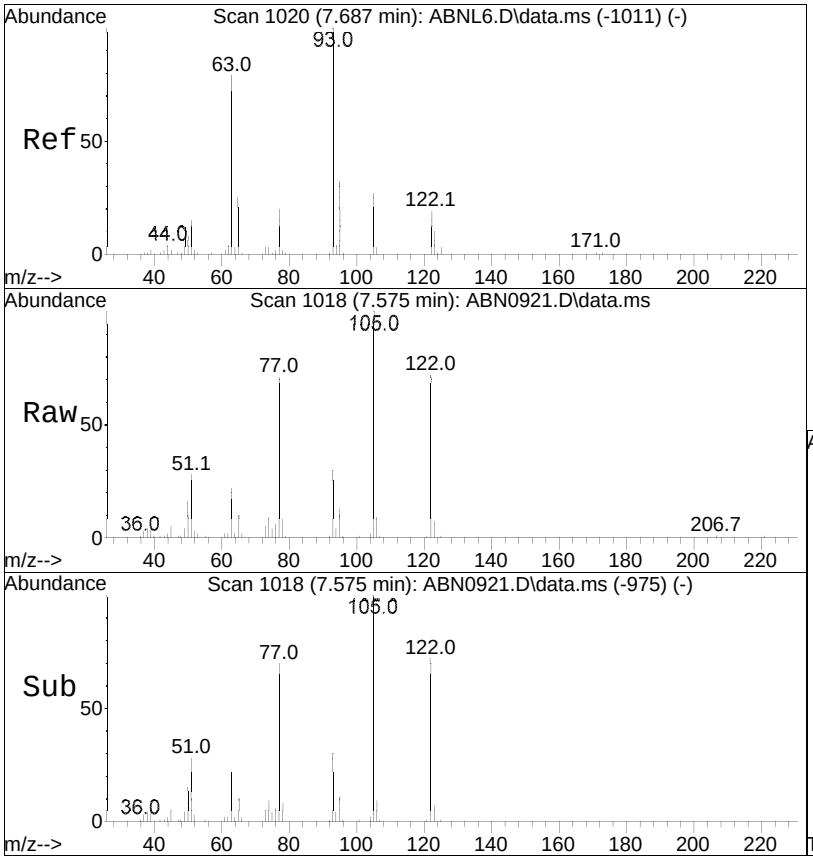



#36
Naphthalene
Concen: 4.55 ug/ml
RT: 7.792 min Scan# 1055
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:128 Resp: 147178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.8 | 8.7 | 13.1 |
| 127 | 13.1 | 10.3 | 15.5 |

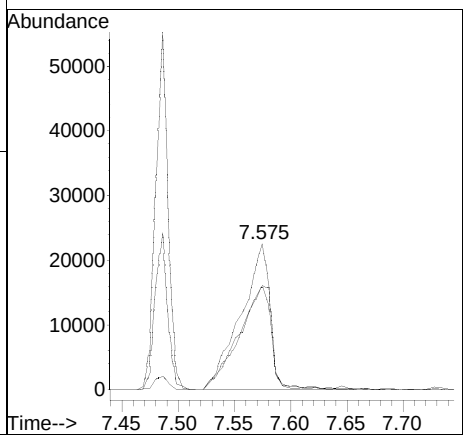


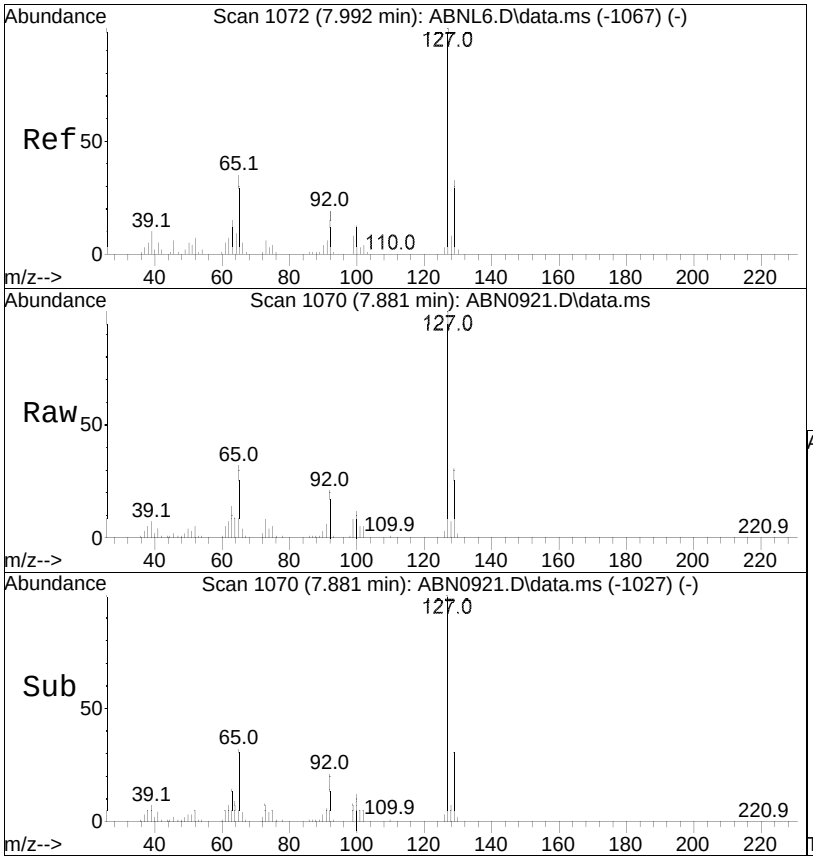



#37
Benzoic Acid
Concen: 5.30 ug/ml
RT: 7.575 min Scan# 1018
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:105 Resp: 41495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 122 | 76.9 | 59.9 | 89.9 |
| 77 | 76.5 | 60.1 | 90.1 |

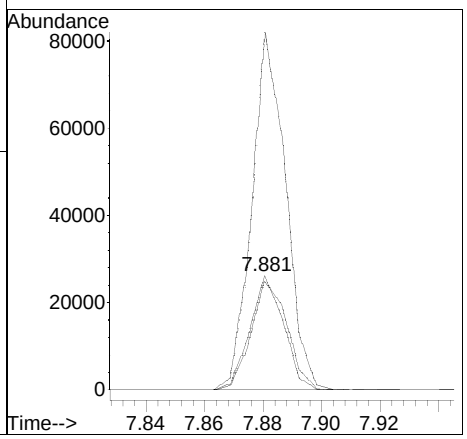


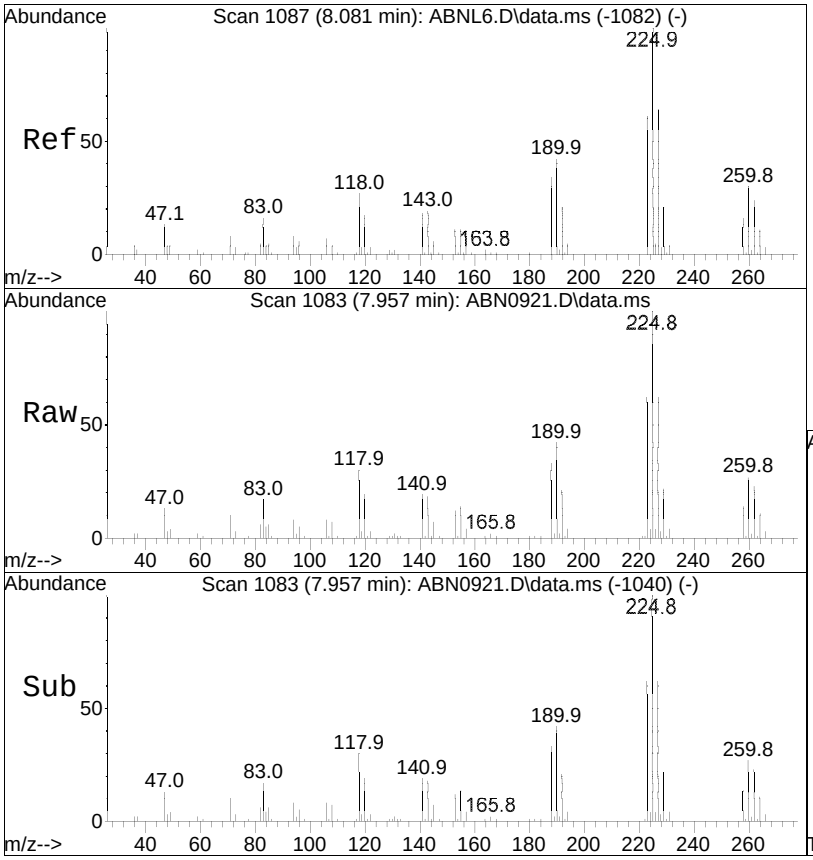



#38
4-Chloroaniline
Concen: 4.36 ug/ml
RT: 7.881 min Scan# 1070
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 65 Resp: 20789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 312.1 | 237.6 | 356.4 |
| 129 | 102.0 | 76.3 | 114.5 |

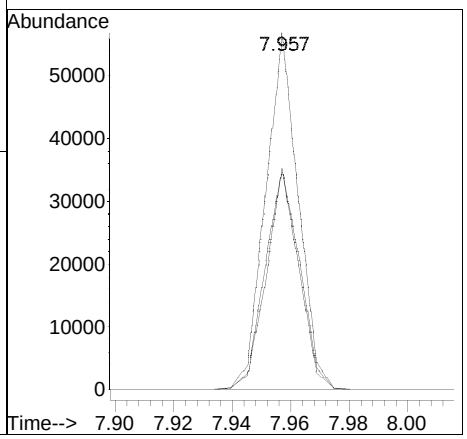


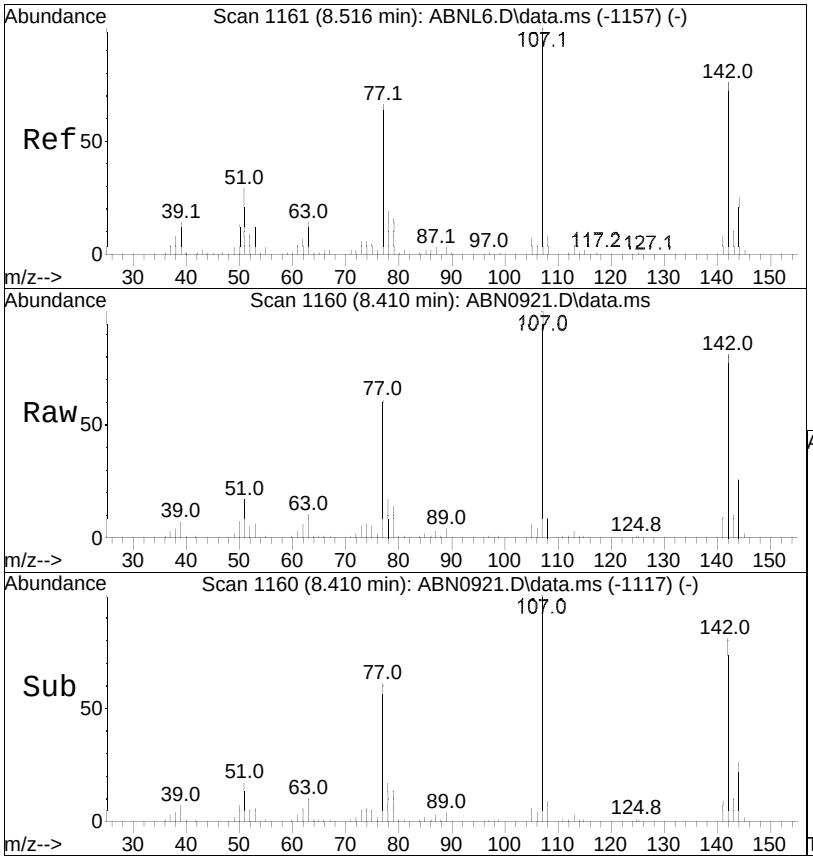



#39
Hexachlorobutadiene
Concen: 5.14 ug/ml
RT: 7.957 min Scan# 1083
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:225 Resp: 43884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.5 | 50.3 | 75.5 |
| 227 | 63.4 | 52.2 | 78.2 |

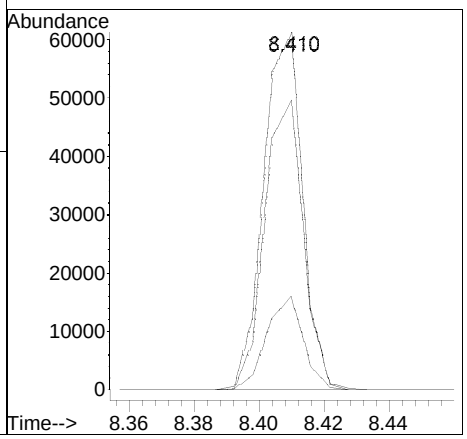


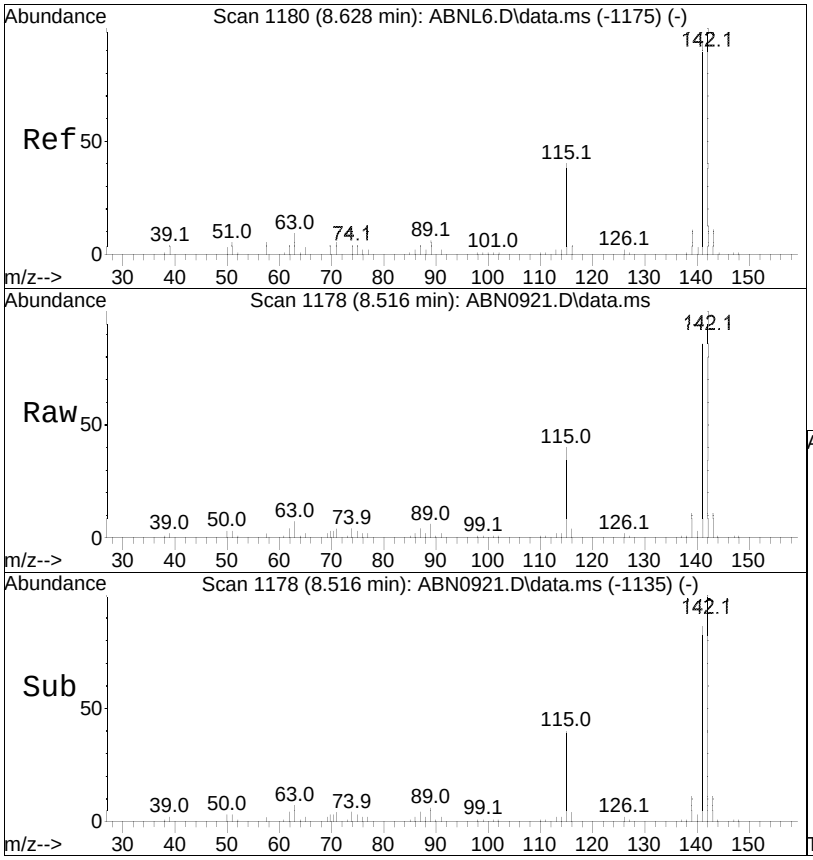



#40
p-Chloro-m-cresol
Concen: 5.23 ug/ml
RT: 8.410 min Scan# 1160
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:107 Resp: 50518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 144 | 24.9 | 20.9 | 31.3 |
| 142 | 80.8 | 66.1 | 99.1 |

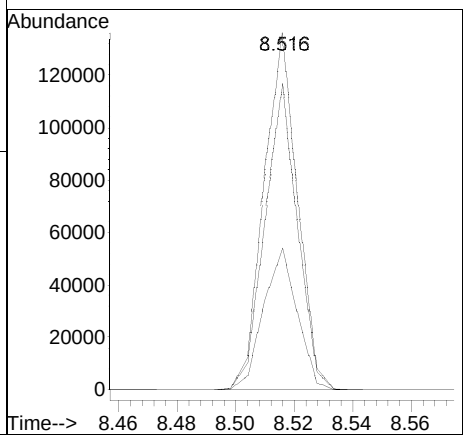


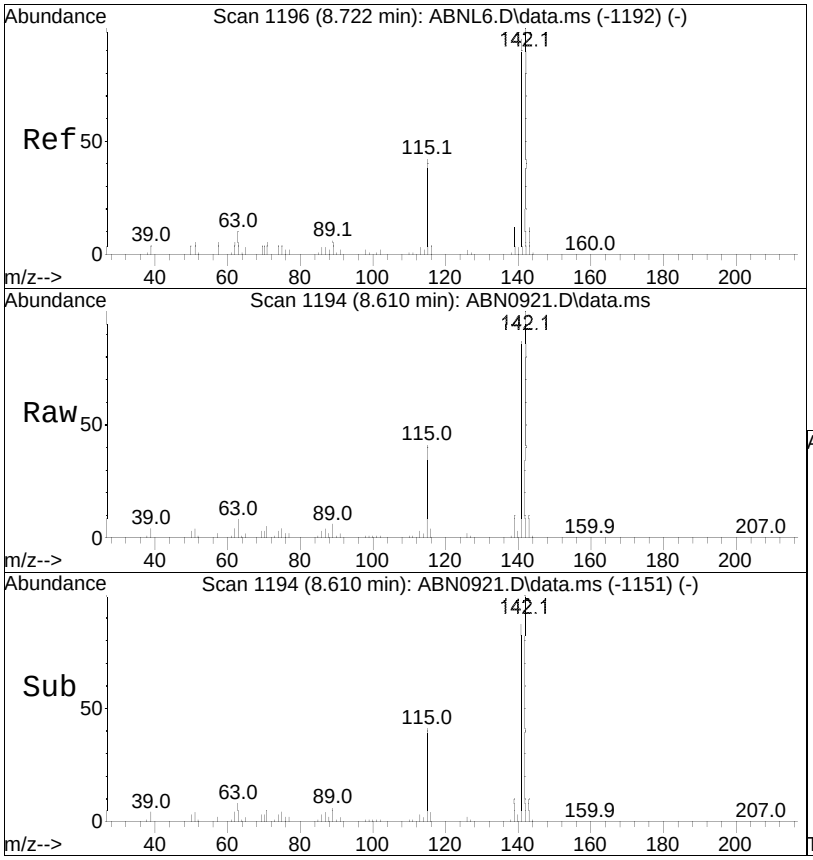



#41
2-Methylnaphthalene
Concen: 5.02 ug/ml
RT: 8.516 min Scan# 1178
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:142 Resp: 108091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 83.4 | 69.6 | 104.4 |
| 115 | 40.1 | 26.6 | 40.0# |

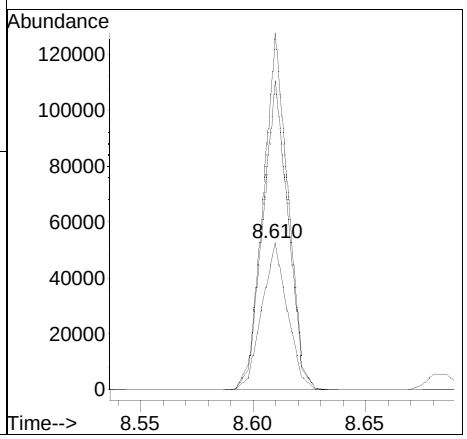


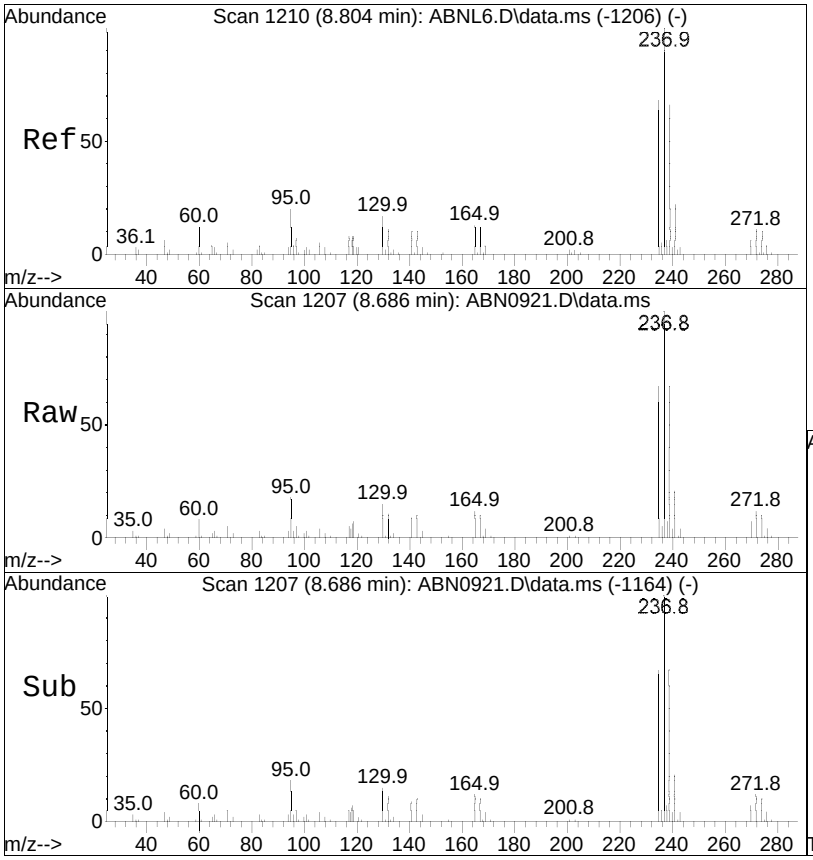



#42
1-Methylnaphthalene
Concen: 5.08 ug/ml M3
RT: 8.610 min Scan# 1194
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:115 Resp: 41551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 115 | 100 | | |
| 141 | 217.0 | 207.8 | 311.6 |
| 142 | 260.1 | 226.8 | 340.2 |

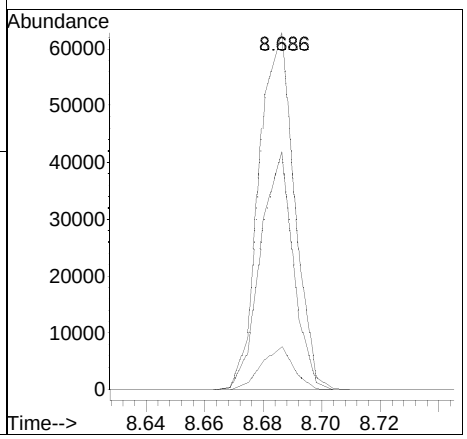


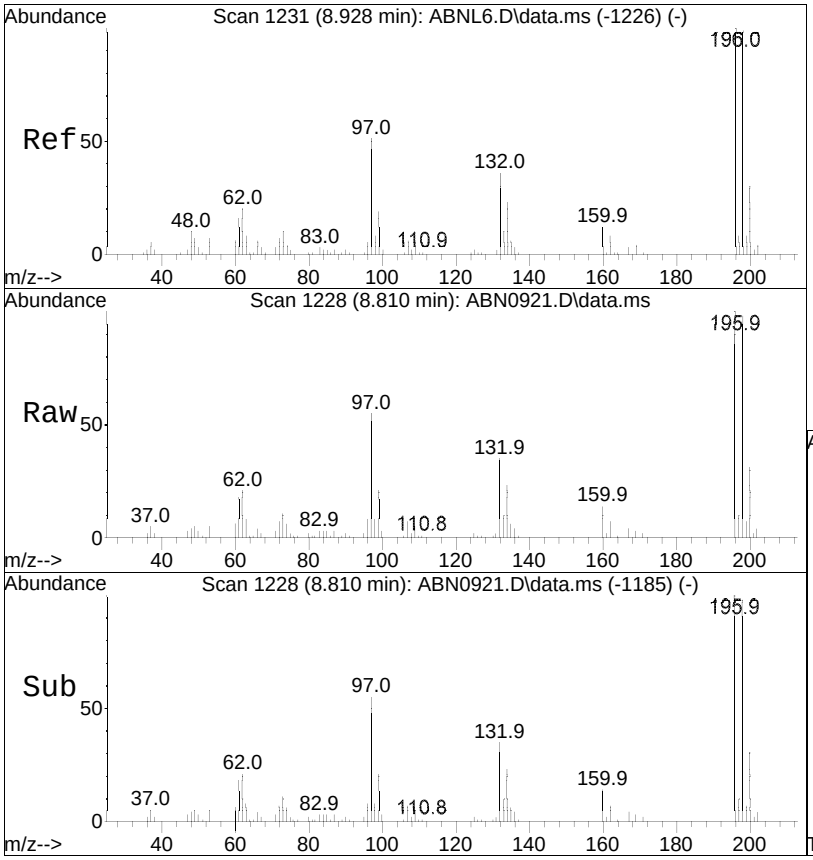



#43
Hexachlorocyclopentadiene
Concen: 5.58 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:237 Resp: 52775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 235 | 62.1 | 49.7 | 74.5 |
| 272 | 11.1 | 9.8 | 14.6 |

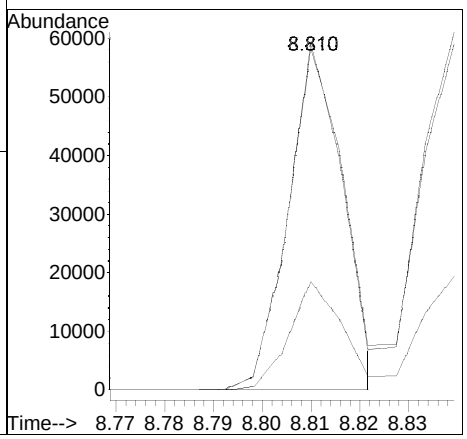


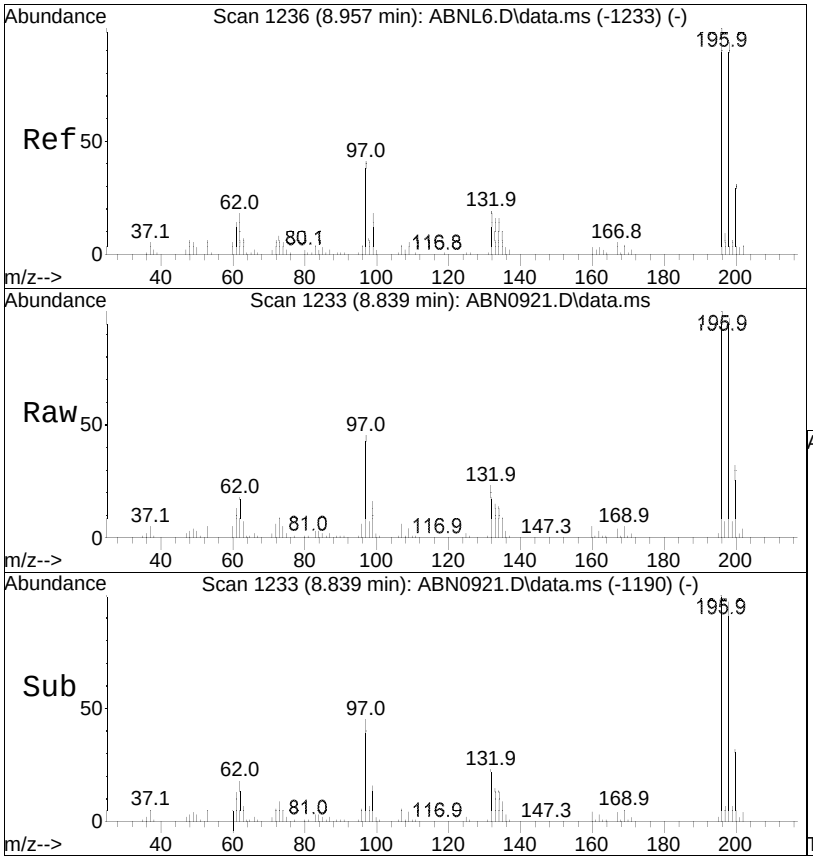



#44
2,4,6-Trichlorophenol
Concen: 5.42 ug/ml M3
RT: 8.810 min Scan# 1228
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:196 Resp: 45891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 101.1 | 77.5 | 116.3 |
| 200 | 30.6 | 23.8 | 35.6 |

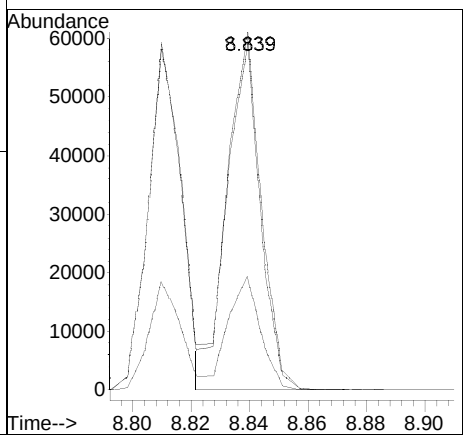


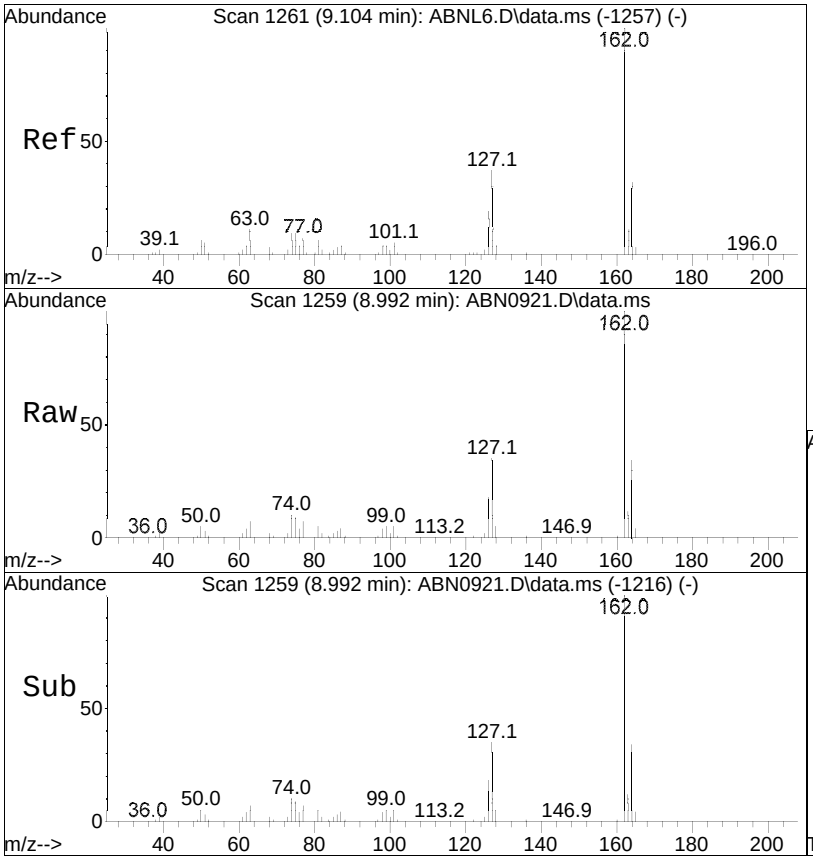



#45
2,4,5-Trichlorophenol
Concen: 5.39 ug/ml
RT: 8.839 min Scan# 1233
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:196 Resp: 48852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 31.0 | 25.4 | 38.0 |
| 198 | 94.7 | 78.0 | 117.0 |

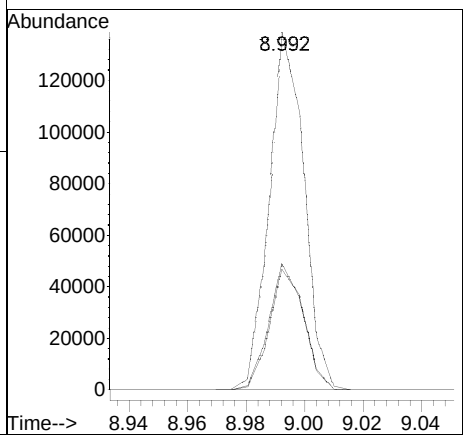


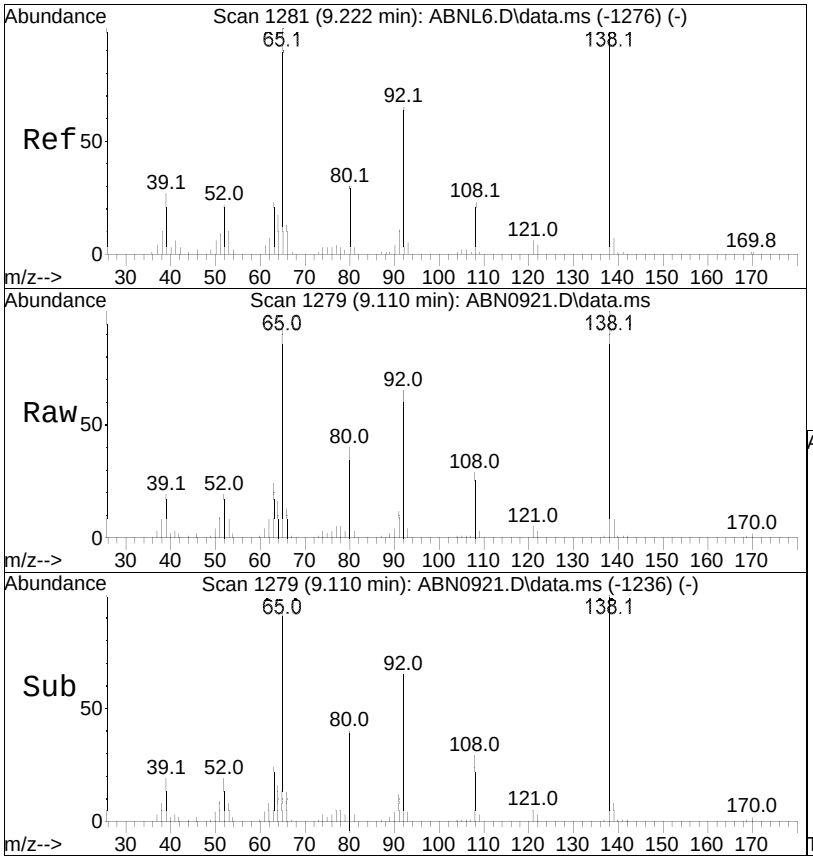



#47
2-Chloronaphthalene
Concen: 4.95 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:162 Resp: 113357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 35.0 | 32.2 | 48.4 |
| 164 | 34.0 | 25.7 | 38.5 |

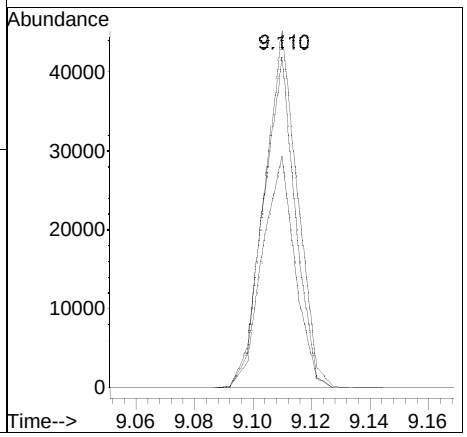


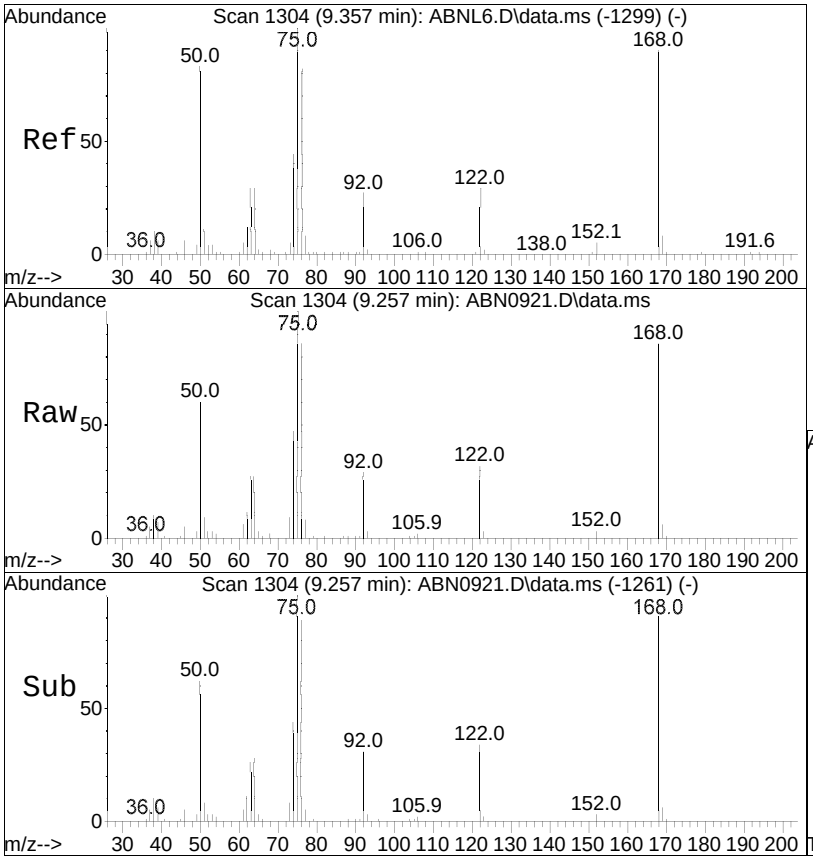



#48
2-Nitroaniline
Concen: 5.10 ug/ml
RT: 9.110 min Scan# 1279
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:138 Resp: 35188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 64.3 | 53.5 | 80.3 |
| 65 | 89.7 | 86.3 | 129.5 |

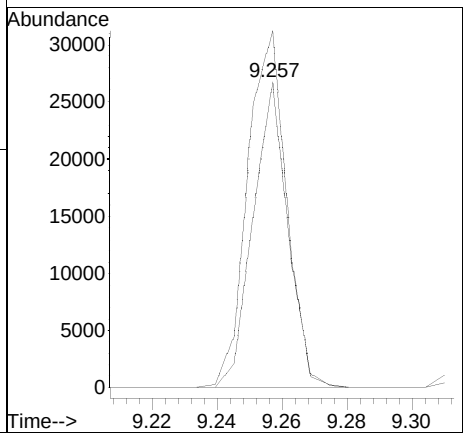


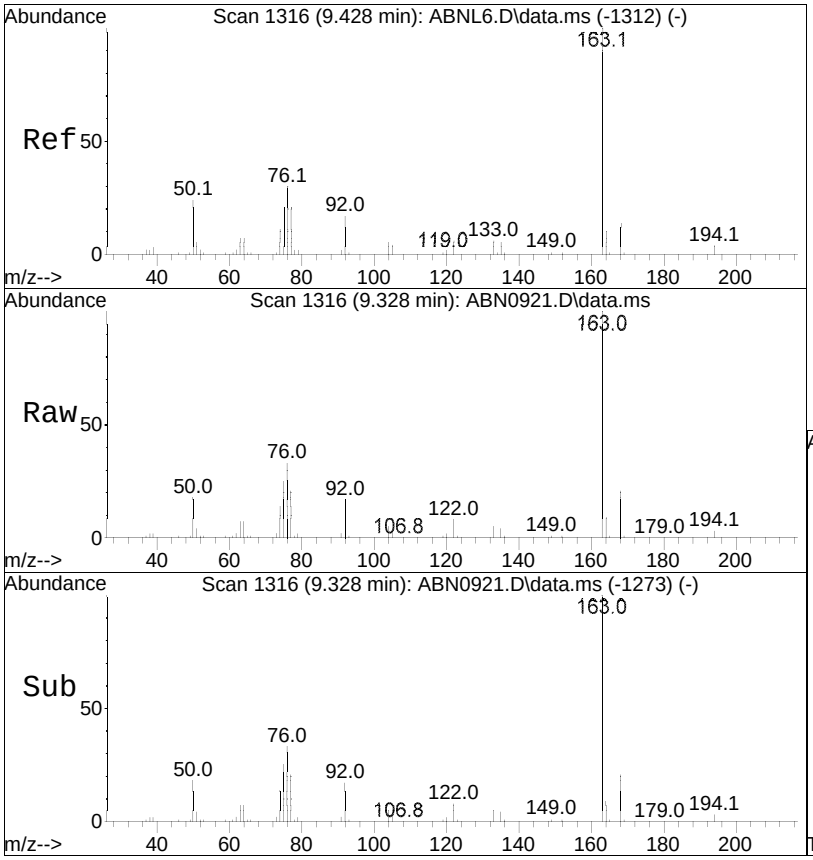



#49
1,4-Dinitrobenzene
Concen: 5.48 ug/ml
RT: 9.257 min Scan# 1304
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:168 Resp: 19910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 130.0 | 121.8 | 182.8 |

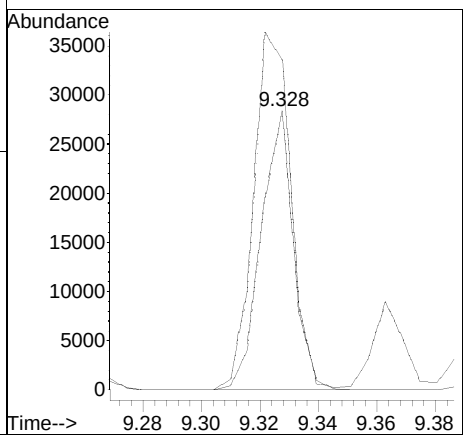


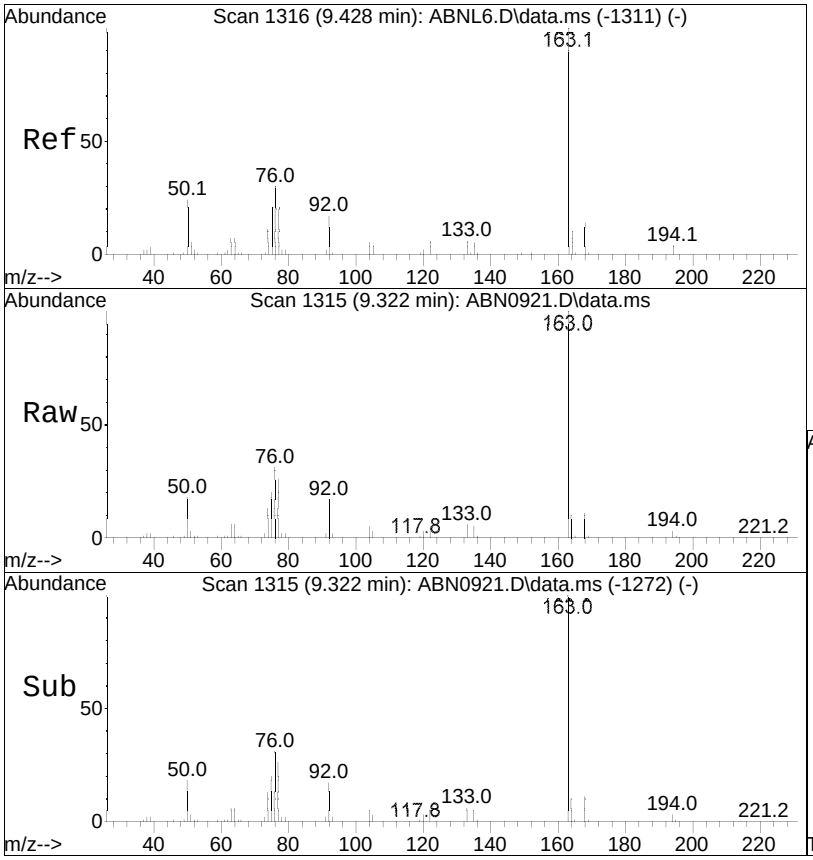



#50
1,3-Dinitrobenzene
Concen: 5.21 ug/ml
RT: 9.328 min Scan# 1316
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:168 Resp: 21548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 148.2 | 22.7 | 34.1# |

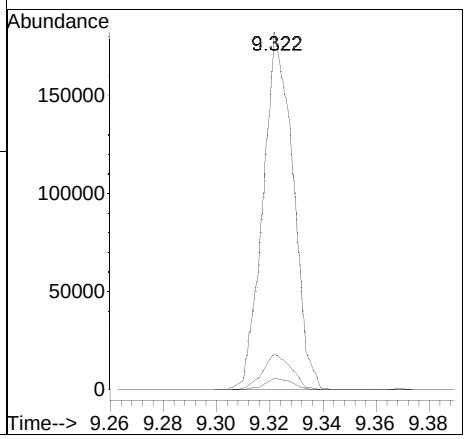


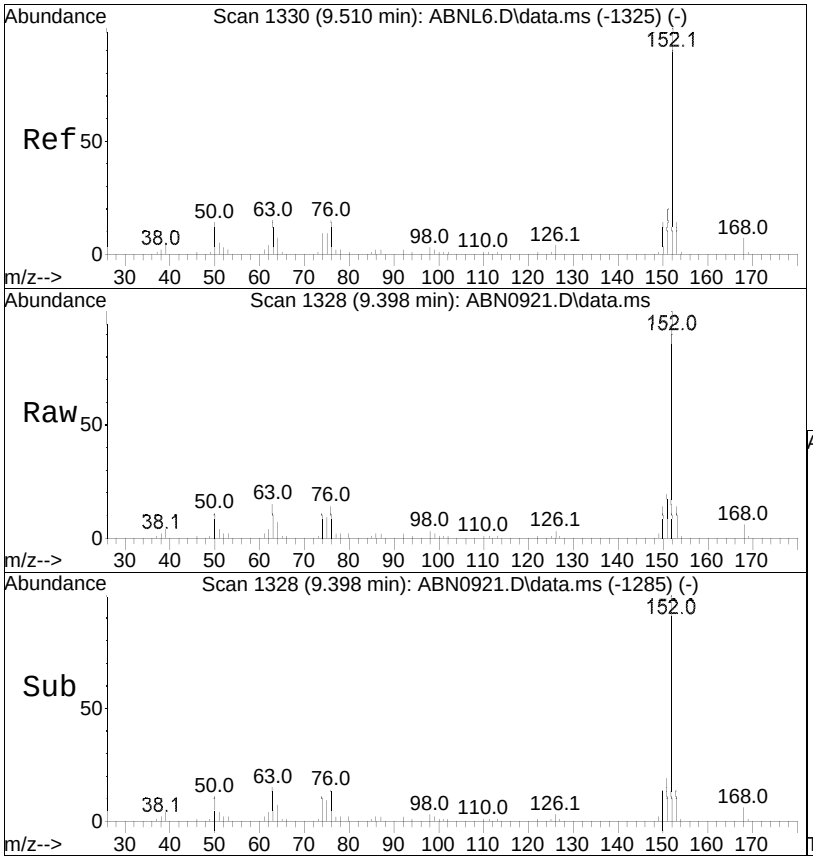



#51
Dimethyl phthalate
Concen: 5.08 ug/ml
RT: 9.322 min Scan# 1315
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:163 Resp: 141632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.2 | 3.5 | 5.3# |
| 164 | 9.9 | 7.9 | 11.9 |

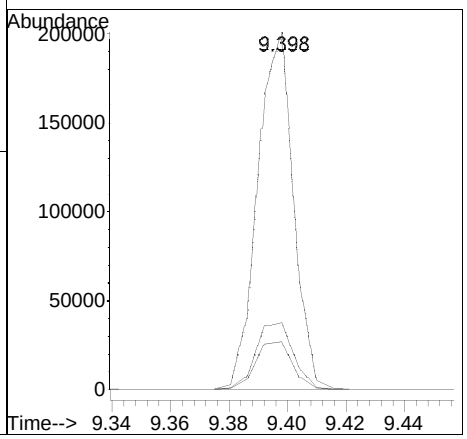


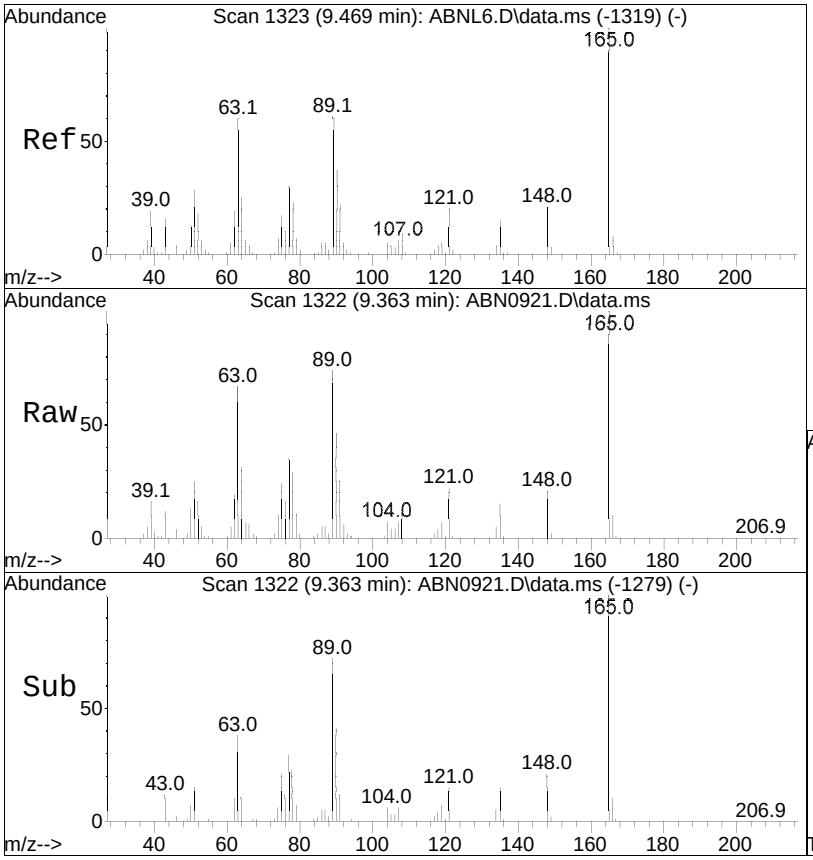



#52
Acenaphthylene
Concen: 4.80 ug/ml
RT: 9.398 min Scan# 1328
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:152 Resp: 168183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.9 | 15.8 | 23.6 |
| 153 | 14.1 | 10.5 | 15.7 |

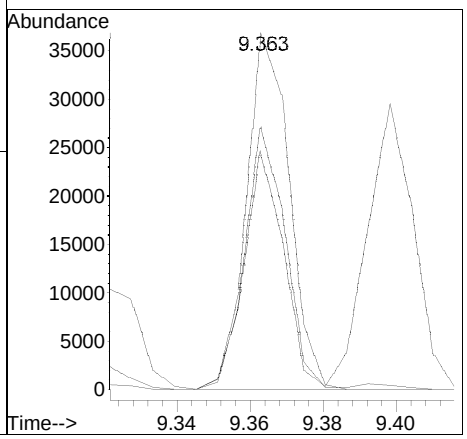


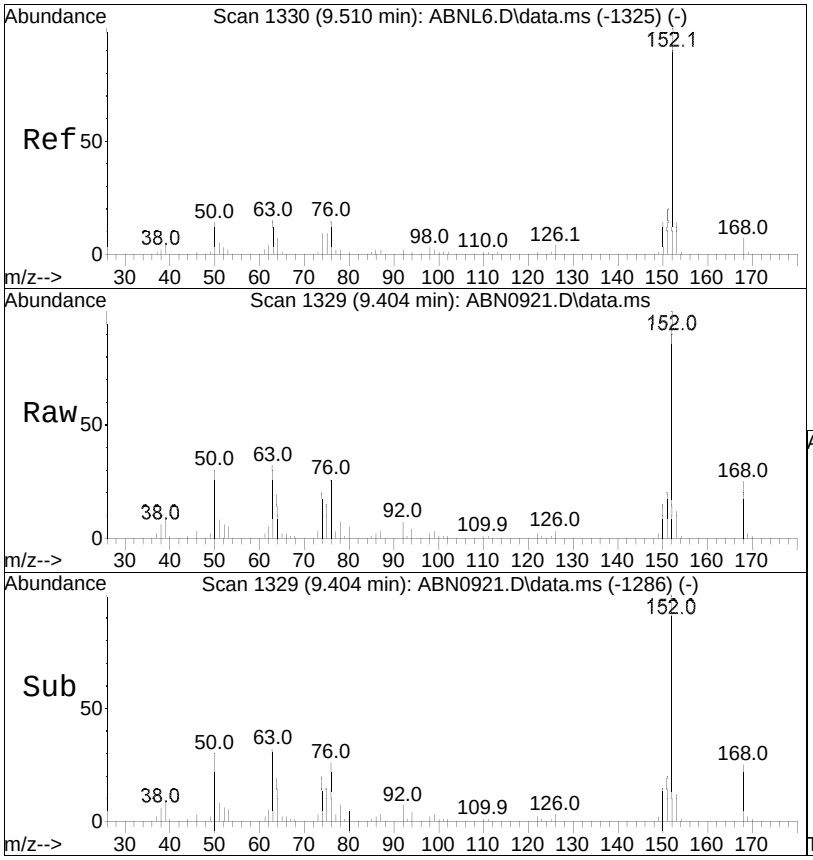



#53
2,6-Dinitrotoluene
Concen: 5.01 ug/ml
RT: 9.363 min Scan# 1322
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:165 Resp: 30081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 69.3 | 54.2 | 81.2 |
| 63 | 61.8 | 64.2 | 96.2# |

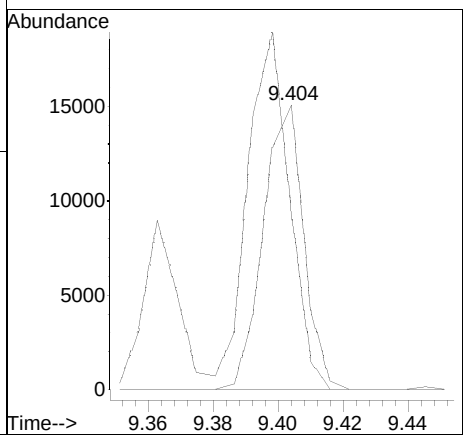


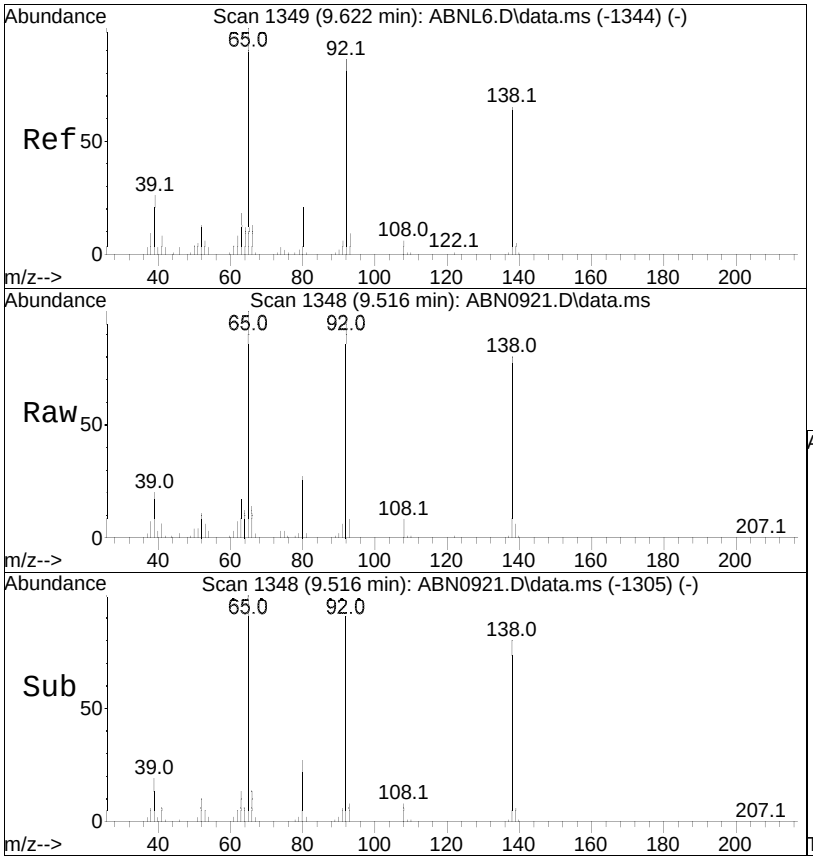



#54
1,2-Dinitrobenzene
Concen: 5.07 ug/ml
RT: 9.404 min Scan# 1329
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:168 Resp: 12981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 75 | 128.6 | 30.9 | 46.3# |

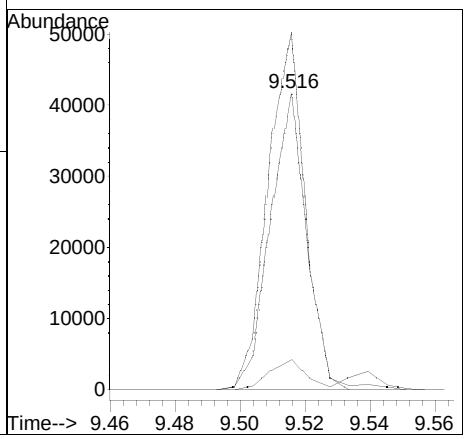


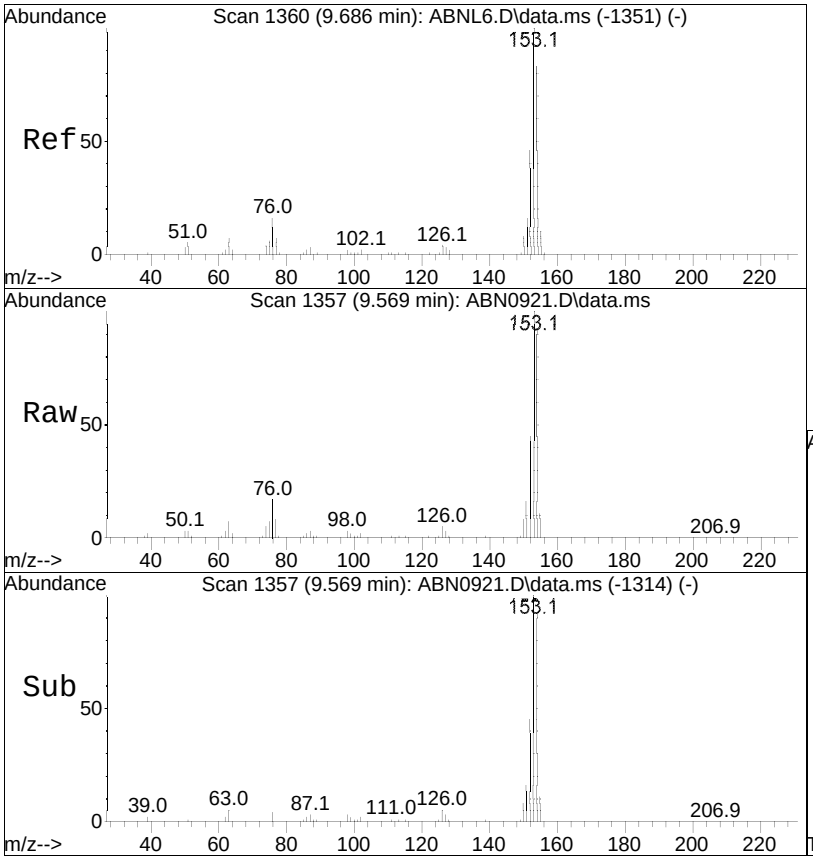



#64
3-Nitroaniline
Concen: 5.06 ug/ml
RT: 9.516 min Scan# 1348
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:138 Resp: 32011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 124.7 | 93.4 | 140.2 |
| 108 | 10.6 | 9.5 | 14.3 |

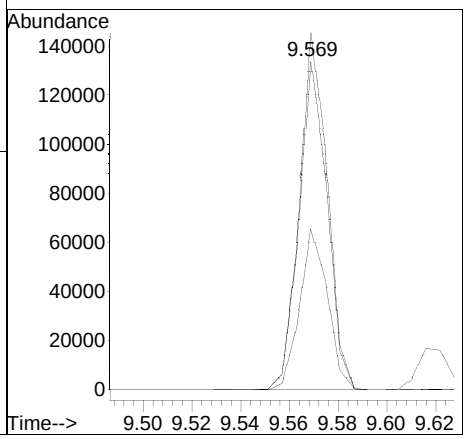


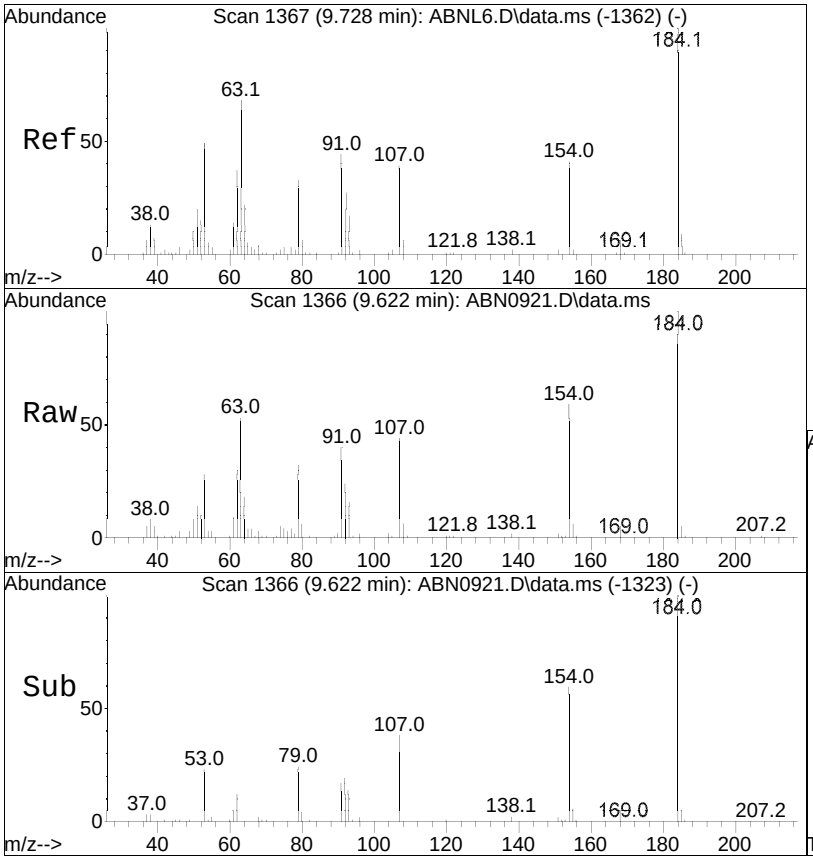



#65
Acenaphthene
Concen: 4.68 ug/ml
RT: 9.569 min Scan# 1357
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:154 Resp: 106954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 108.4 | 85.3 | 127.9 |
| 152 | 48.7 | 41.4 | 62.0 |

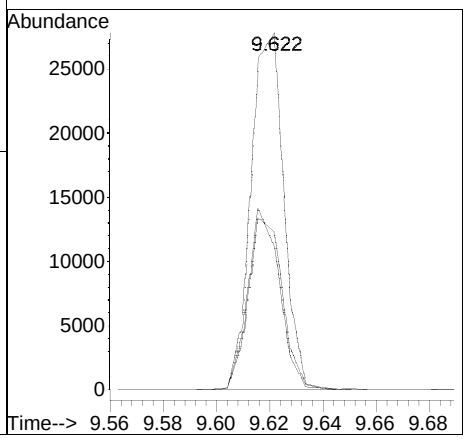


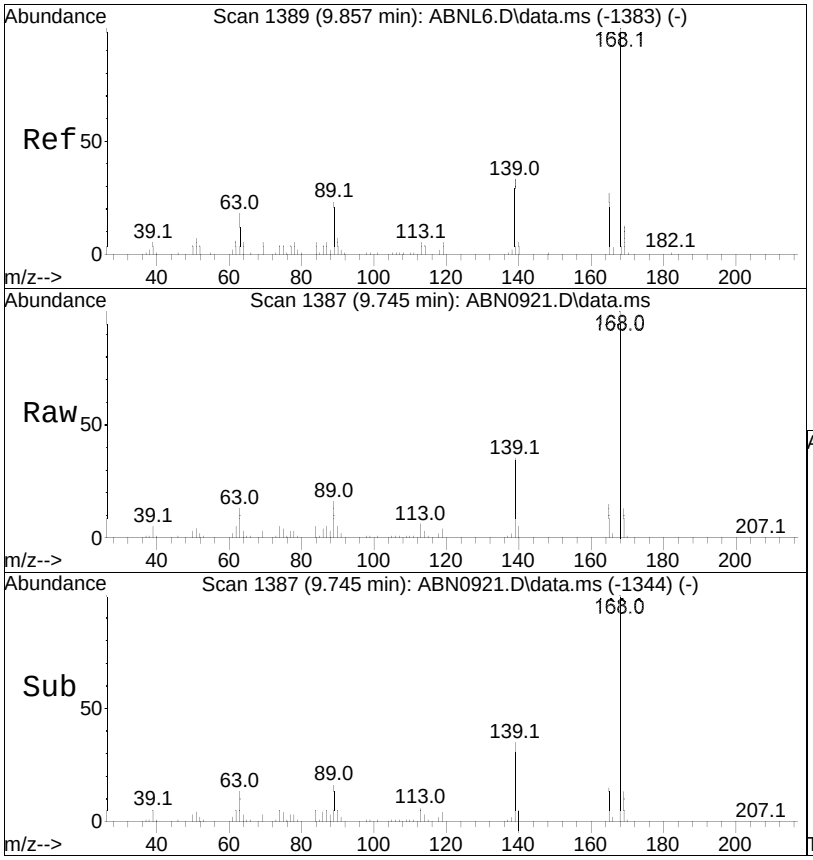



#66
2,4-Dinitrophenol
Concen: 5.60 ug/ml
RT: 9.622 min Scan# 1366
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:184 Resp: 23670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 107 | 50.5 | 37.7 | 56.5 |
| 91 | 49.3 | 46.3 | 69.5 |

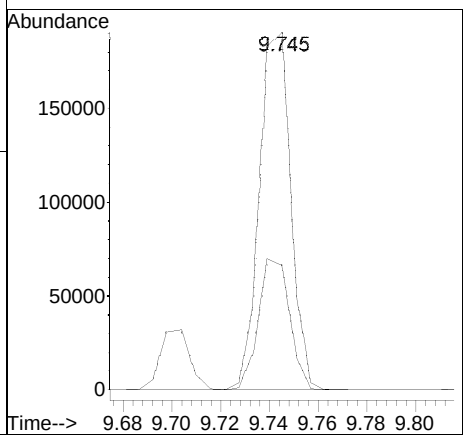


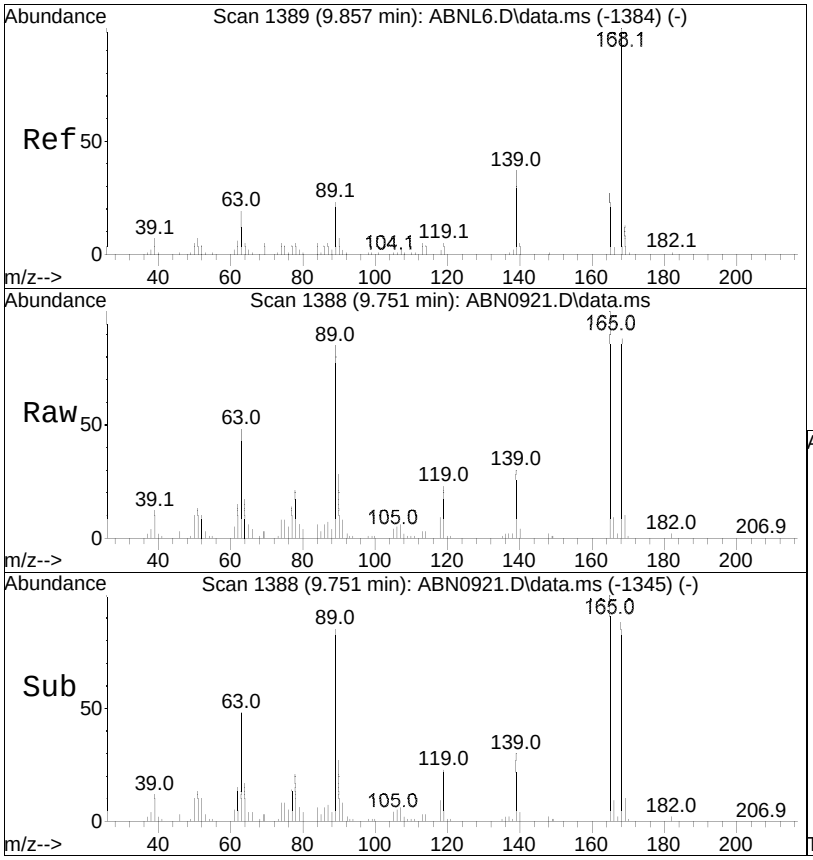



#67
Dibenzofuran
Concen: 4.40 ug/ml
RT: 9.745 min Scan# 1387
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:168 Resp: 168727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 36.9 | 31.4 | 47.2 |

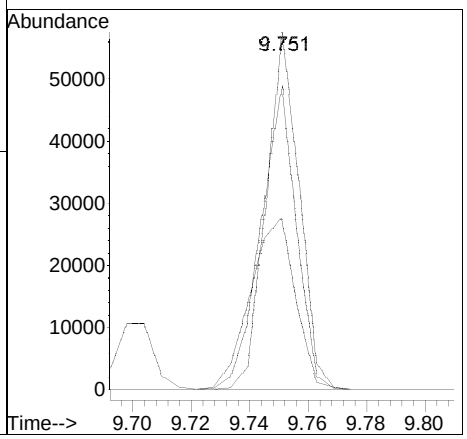


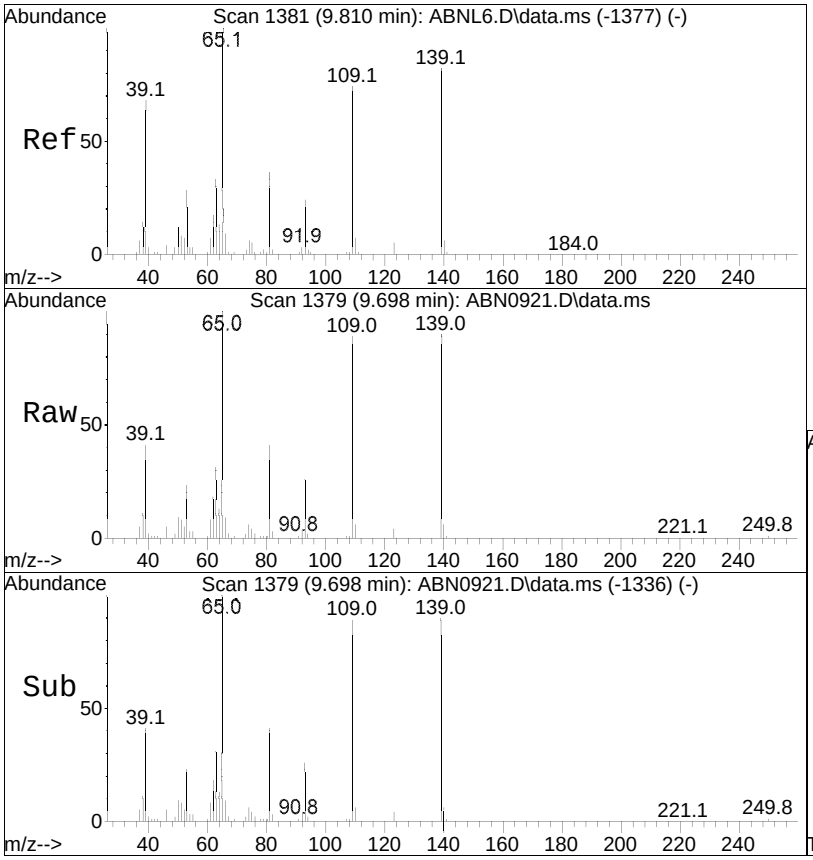



#68
2,4-Dinitrotoluene
Concen: 4.74 ug/ml
RT: 9.751 min Scan# 1388
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:165 Resp: 44642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 92.3 | 72.0 | 108.0 |
| 63 | 65.9 | 52.7 | 79.1 |

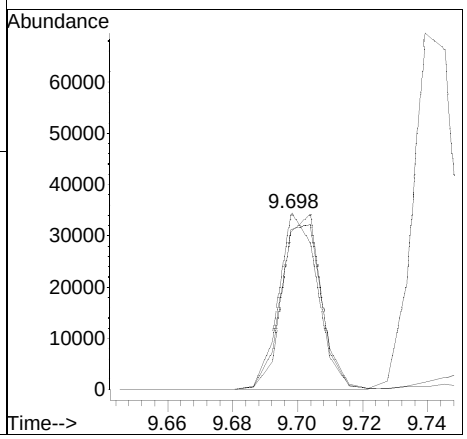


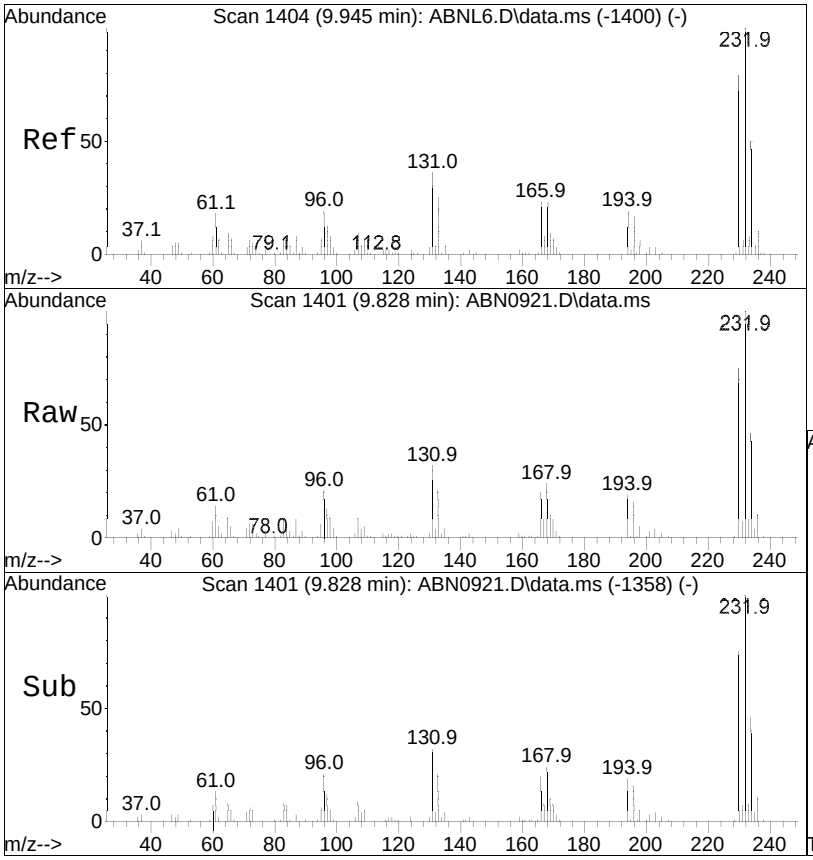



#69
4-Nitrophenol
Concen: 4.43 ug/ml M3
RT: 9.698 min Scan# 1379
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 65 Resp: 28429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 100.6 | 47.4 | 71.2# |
| 139 | 97.2 | 76.6 | 115.0 |

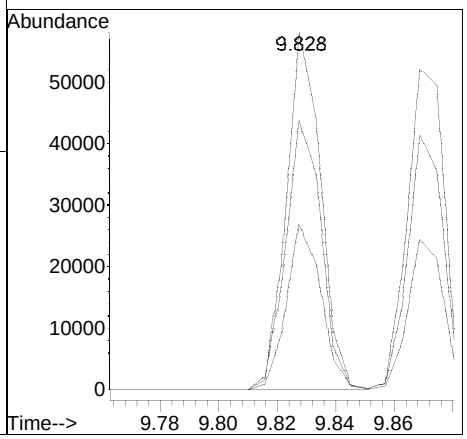


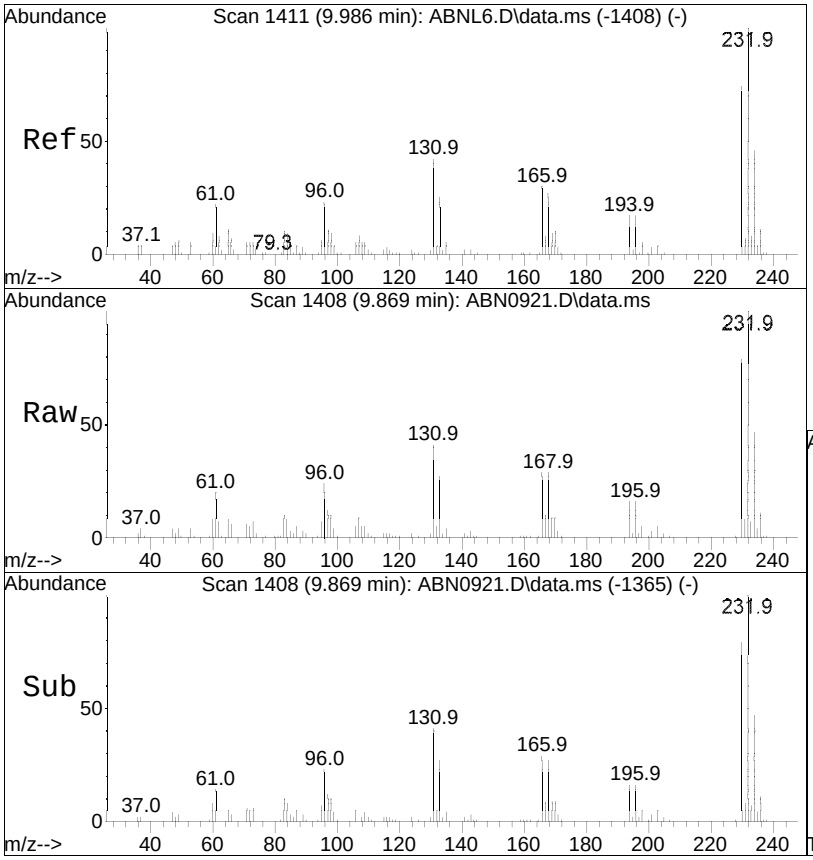



#70
2,3,5,6-Tetrachlorophenol
Concen: 5.29 ug/ml M3
RT: 9.828 min Scan# 1401
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:232 Resp: 47455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 232 | 100 | | |
| 230 | 78.4 | 64.2 | 96.4 |
| 234 | 47.0 | 38.1 | 57.1 |

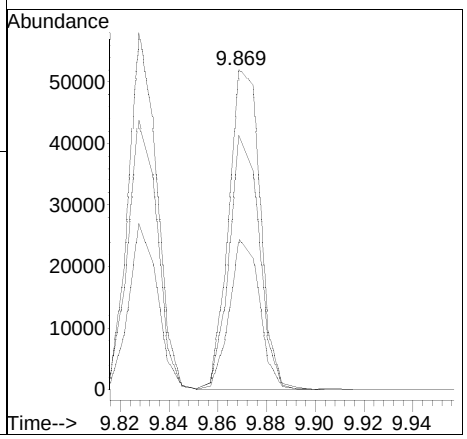


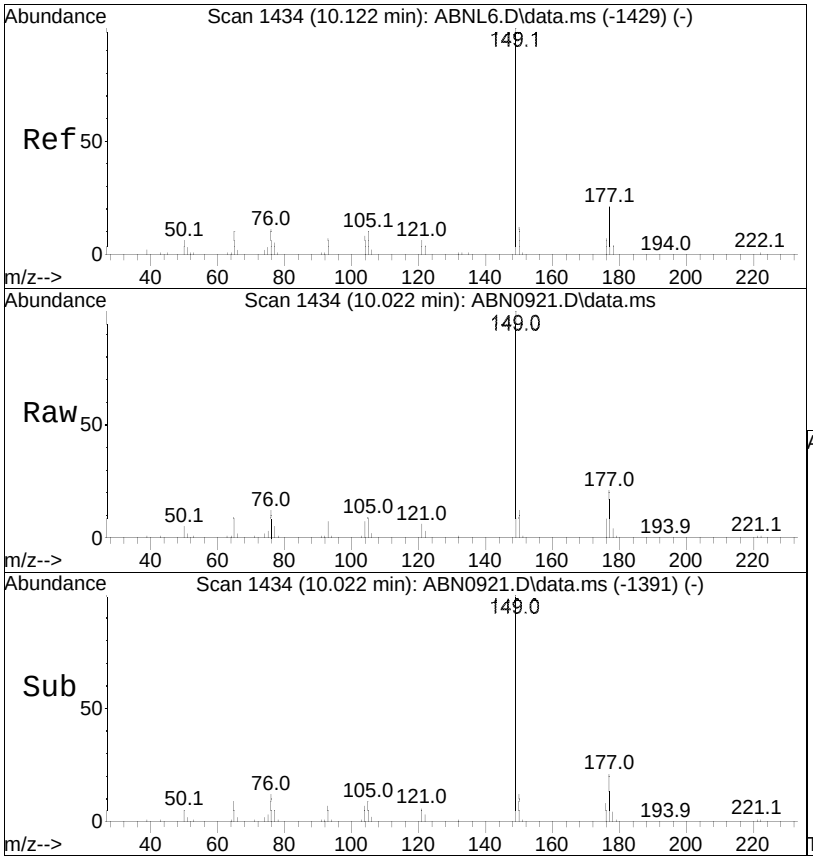



#71
2,3,4,6-Tetrachlorophenol
Concen: 5.45 ug/ml
RT: 9.869 min Scan# 1408
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:232 Resp: 47024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 232 | 100 | | |
| 230 | 75.7 | 61.8 | 92.8 |
| 234 | 45.0 | 36.2 | 54.2 |

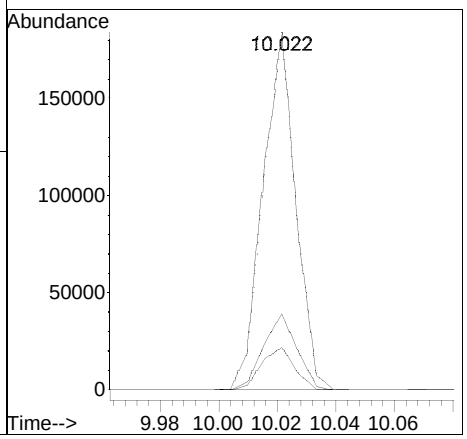


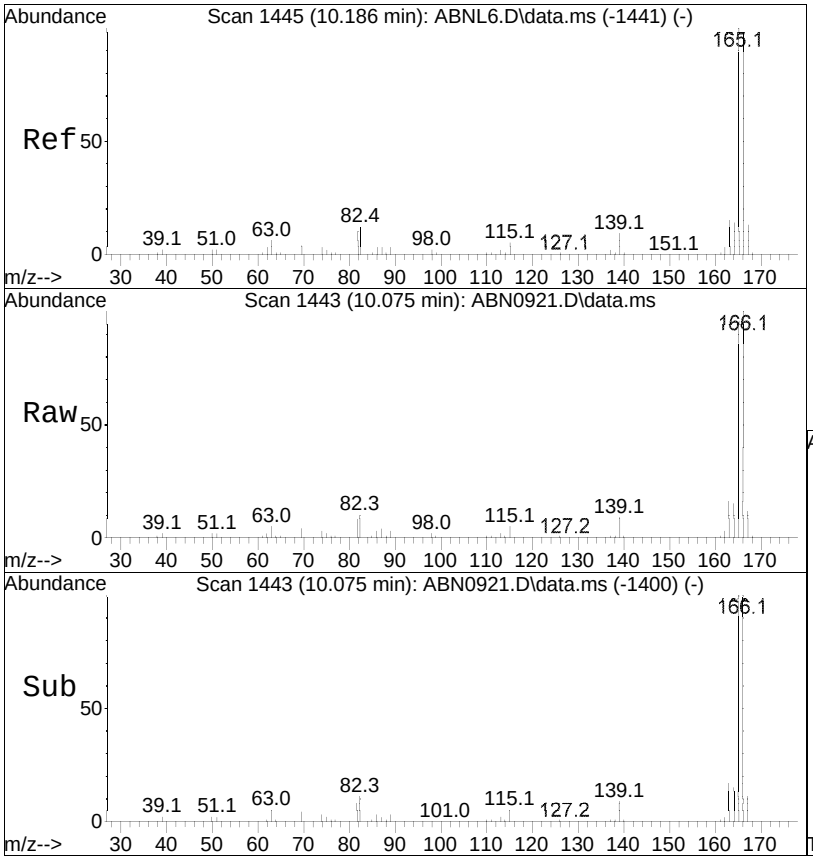



#72
Diethyl phthalate
Concen: 4.67 ug/ml
RT: 10.022 min Scan# 1434
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:149 Resp: 141529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 21.8 | 16.1 | 24.1 |
| 150 | 12.2 | 9.4 | 14.2 |

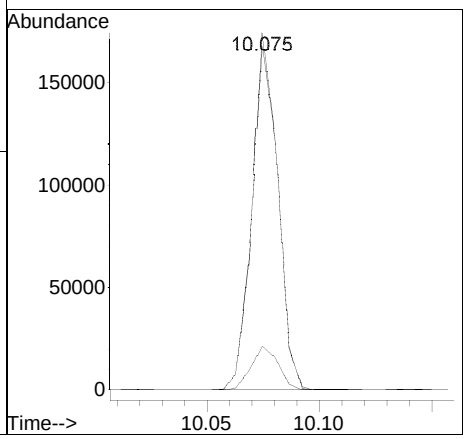


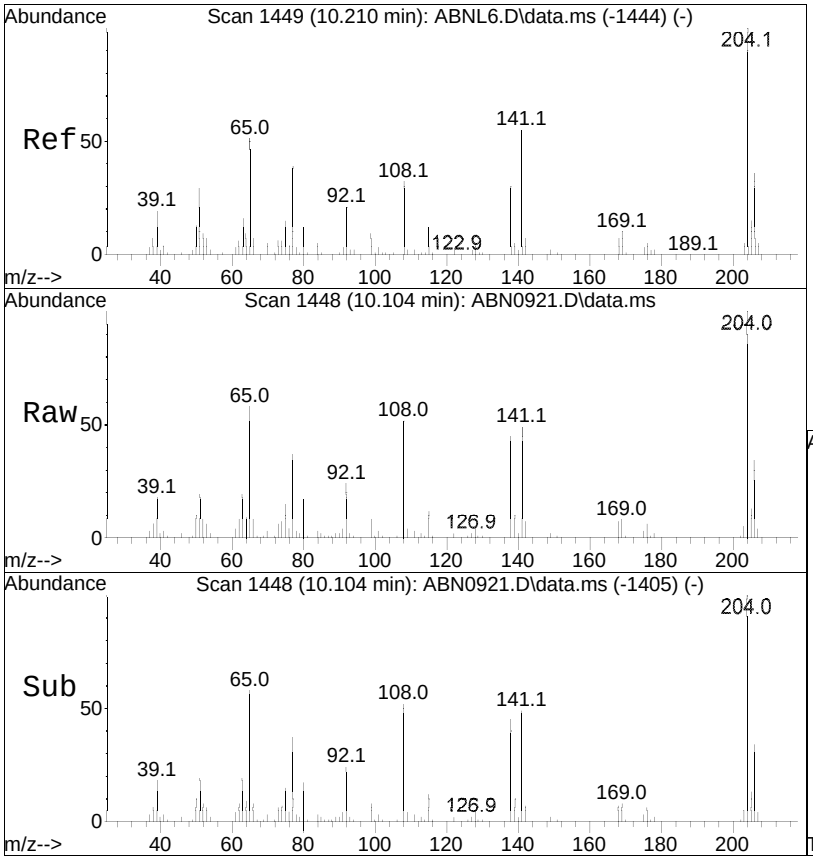



#73
Fluorene
Concen: 4.55 ug/ml
RT: 10.075 min Scan# 1443
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:166 Resp: 137406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 98.8 | 76.2 | 114.2 |
| 167 | 13.3 | 10.6 | 15.8 |

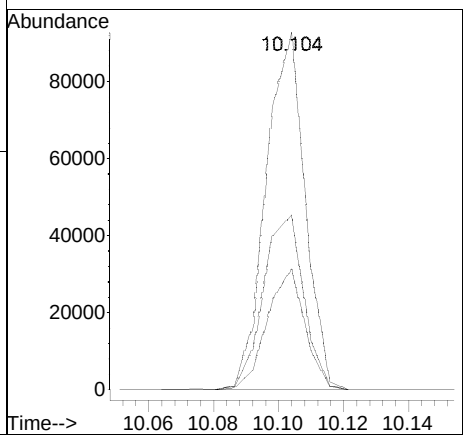


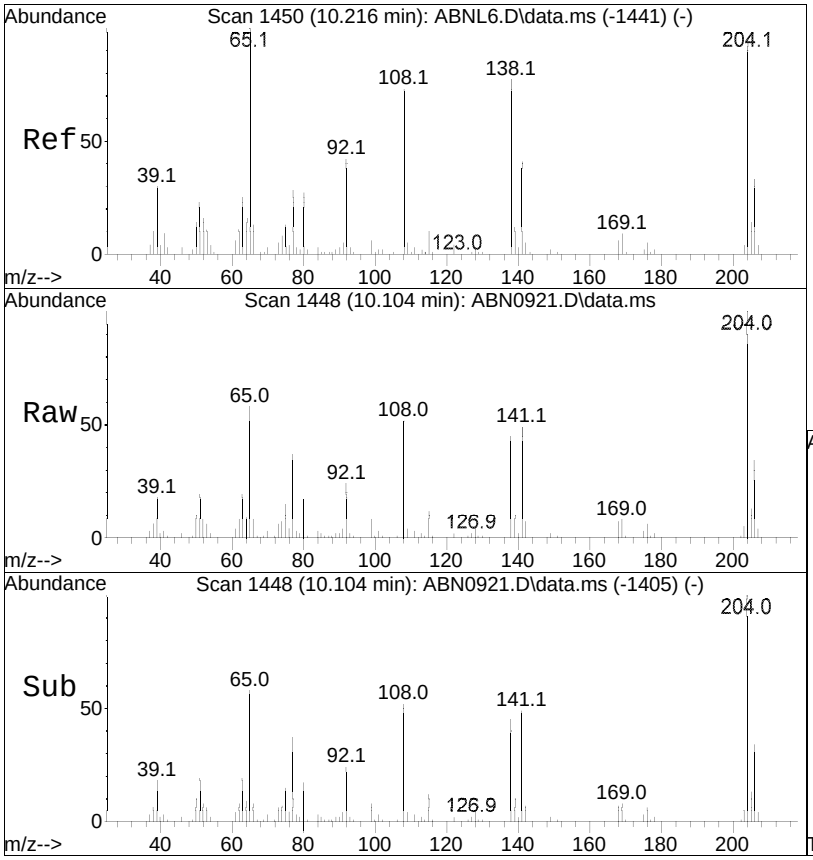



#74
4-Chlorophenyl phenyl ether
Concen: 4.84 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:204 Resp: 76885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 204 | 100 | | |
| 206 | 32.8 | 25.8 | 38.6 |
| 141 | 50.9 | 53.6 | 80.4# |

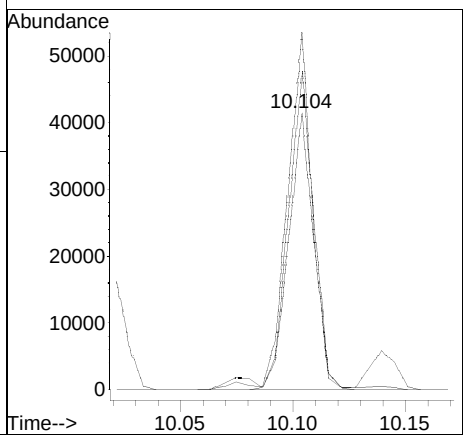


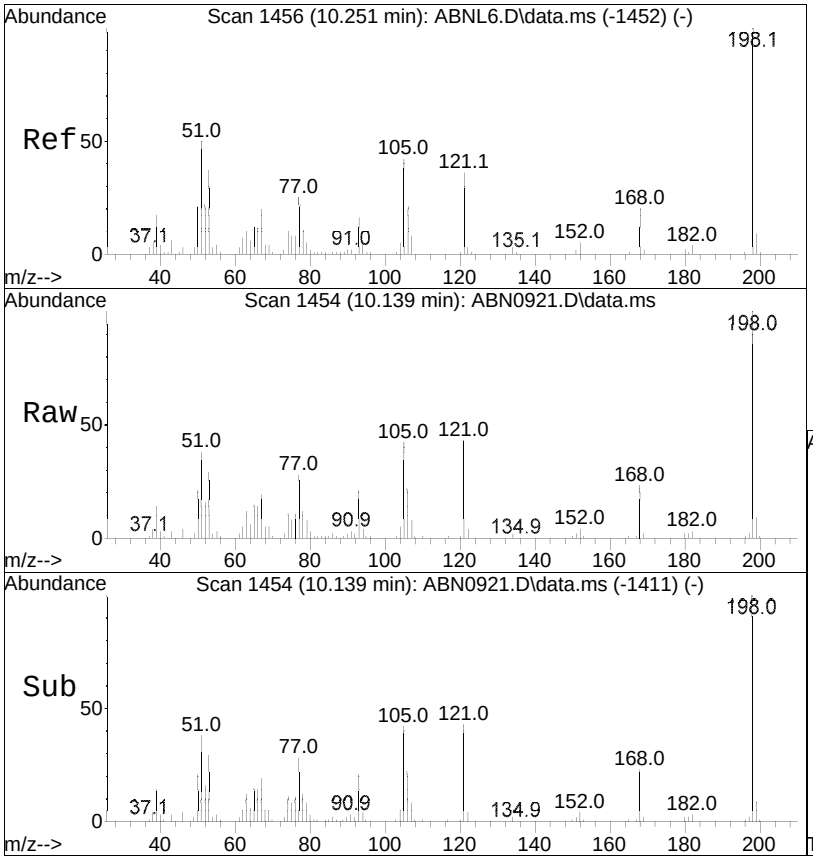



#75
4-Nitroaniline
Concen: 5.10 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:138 Resp: 33639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 110.5 | 52.1 | 78.1# |
| 65 | 122.9 | 115.0 | 172.6 |

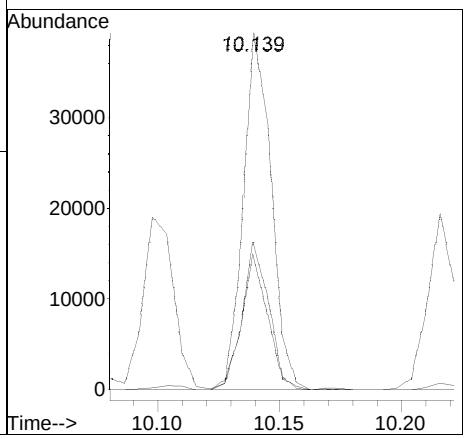


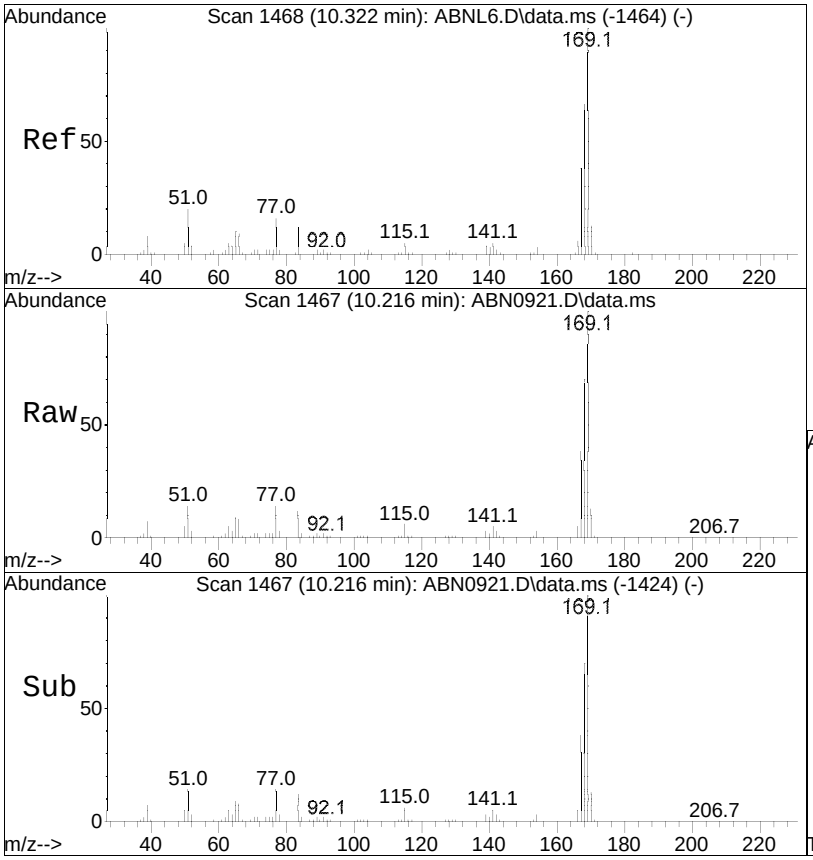



#76
4,6-Dinitro-o-cresol
Concen: 5.94 ug/ml
RT: 10.139 min Scan# 1454
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:198 Resp: 31334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 35.5 | 76.0 | 114.0# |
| 105 | 39.6 | 45.6 | 68.4# |

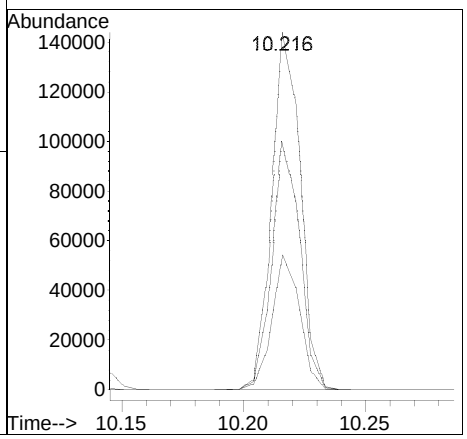


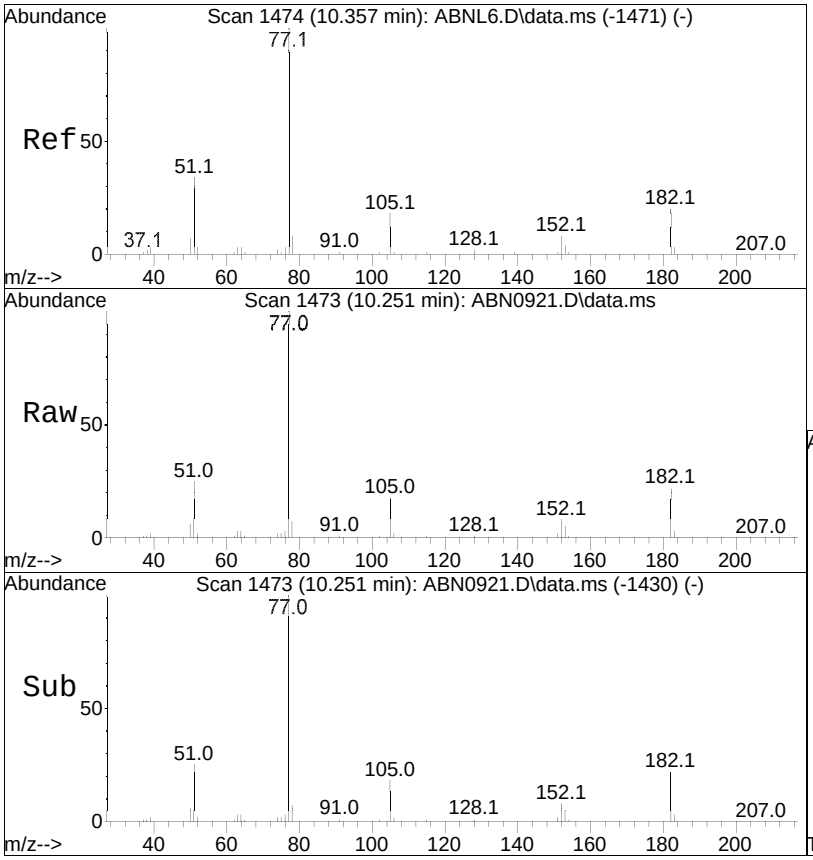



#77
NDPA/DPA
Concen: 4.66 ug/ml
RT: 10.216 min Scan# 1467
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:169 Resp: 116718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 68.4 | 54.0 | 81.0 |
| 167 | 36.9 | 28.6 | 42.8 |

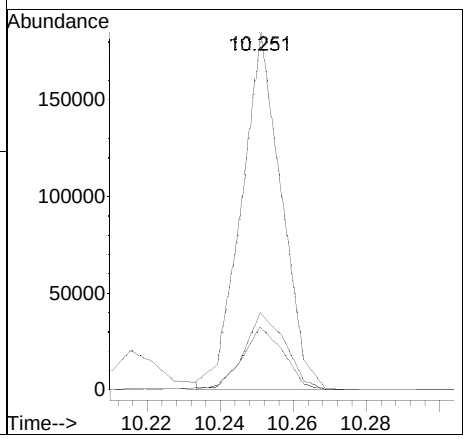


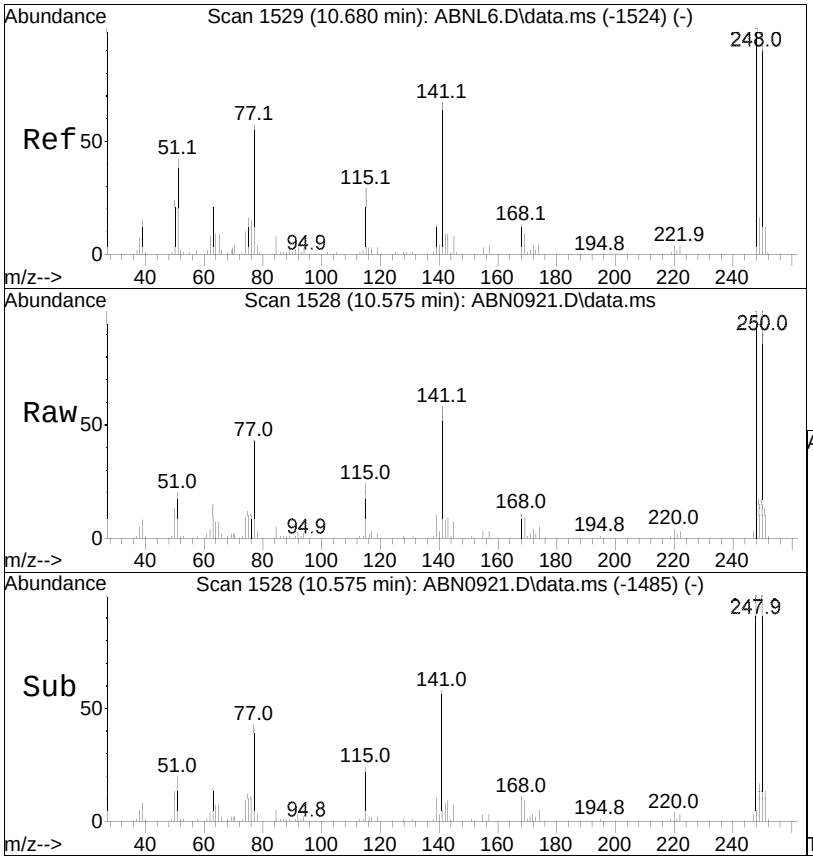



#78
Azobenzene
Concen: 4.87 ug/ml
RT: 10.251 min Scan# 1473
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion: 77 Resp: 139681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 182 | 23.1 | 17.4 | 26.2 |
| 105 | 19.0 | 15.4 | 23.2 |

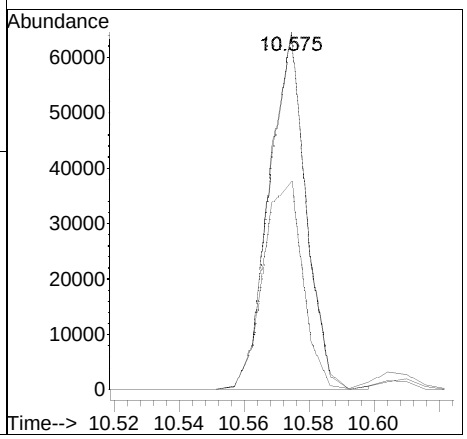


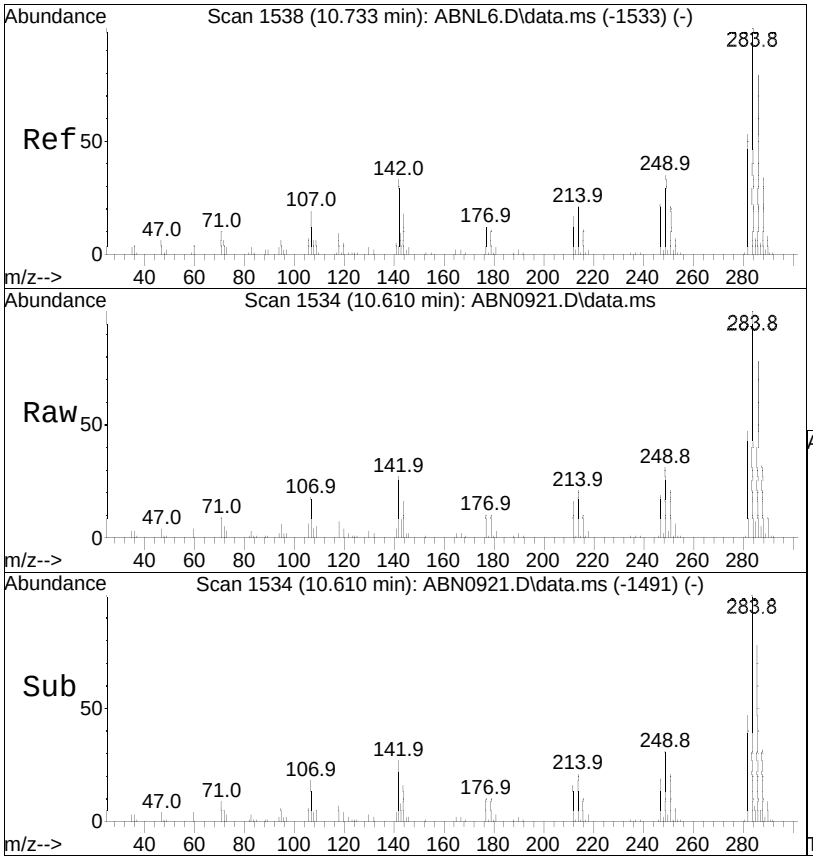



#80
4-Bromophenyl phenyl ether
Concen: 5.09 ug/ml M3
RT: 10.575 min Scan# 1528
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:248 Resp: 50439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 141 | 62.7 | 76.6 | 114.8# |
| 250 | 98.3 | 77.3 | 115.9 |

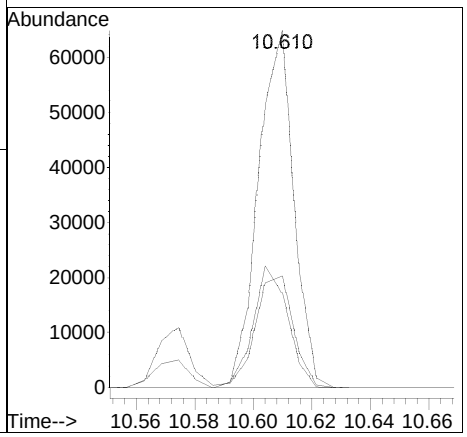


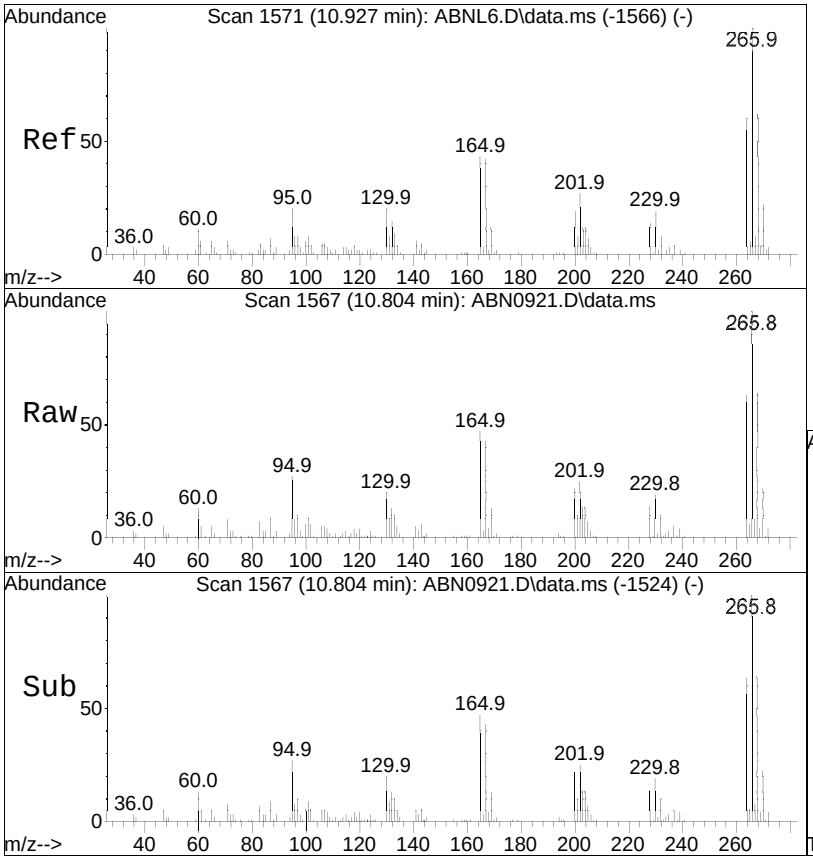



#81
Hexachlorobenzene
Concen: 4.84 ug/ml
RT: 10.610 min Scan# 1534
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:284 Resp: 54543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 33.7 | 41.9 | 62.9# |
| 249 | 34.0 | 24.1 | 36.1 |

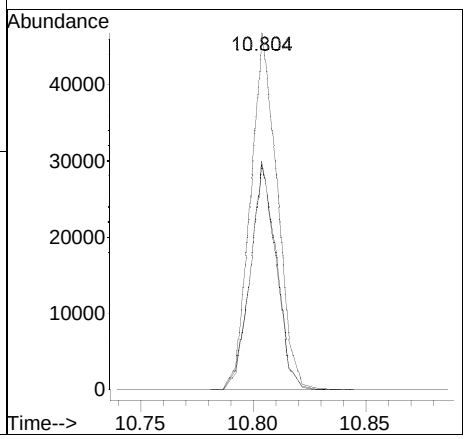


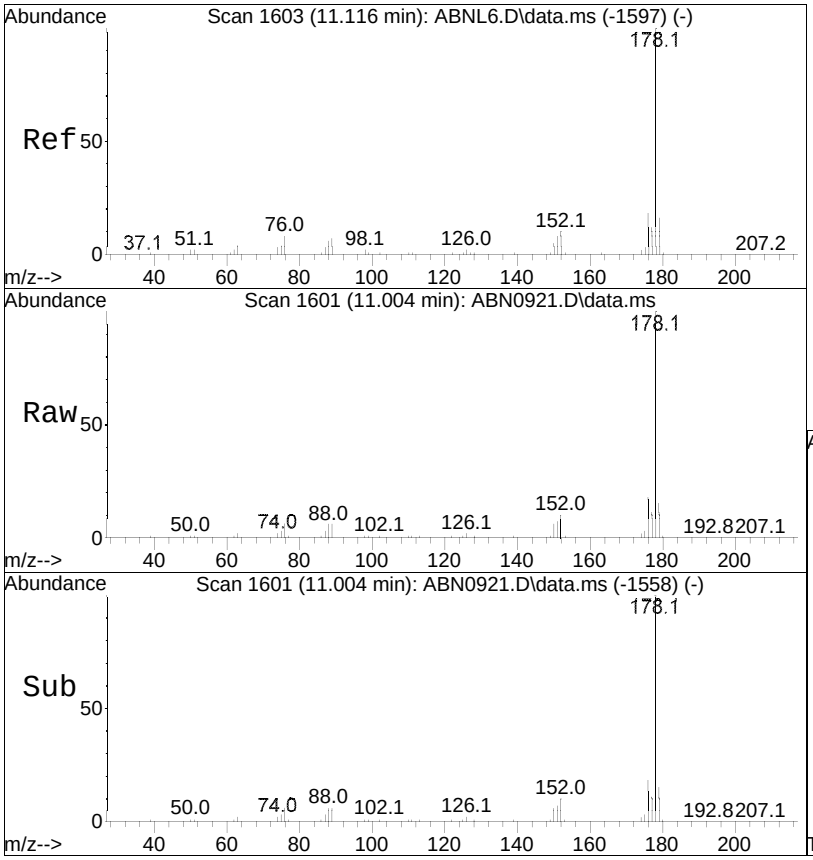



#82
Pentachlorophenol
Concen: 5.41 ug/ml
RT: 10.804 min Scan# 1567
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:266 Resp: 38748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.2 | 49.7 | 74.5 |
| 268 | 61.3 | 50.5 | 75.7 |

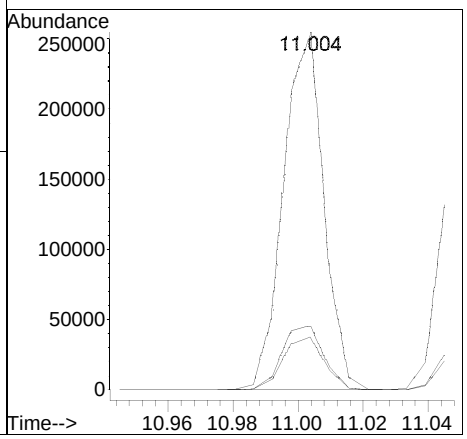


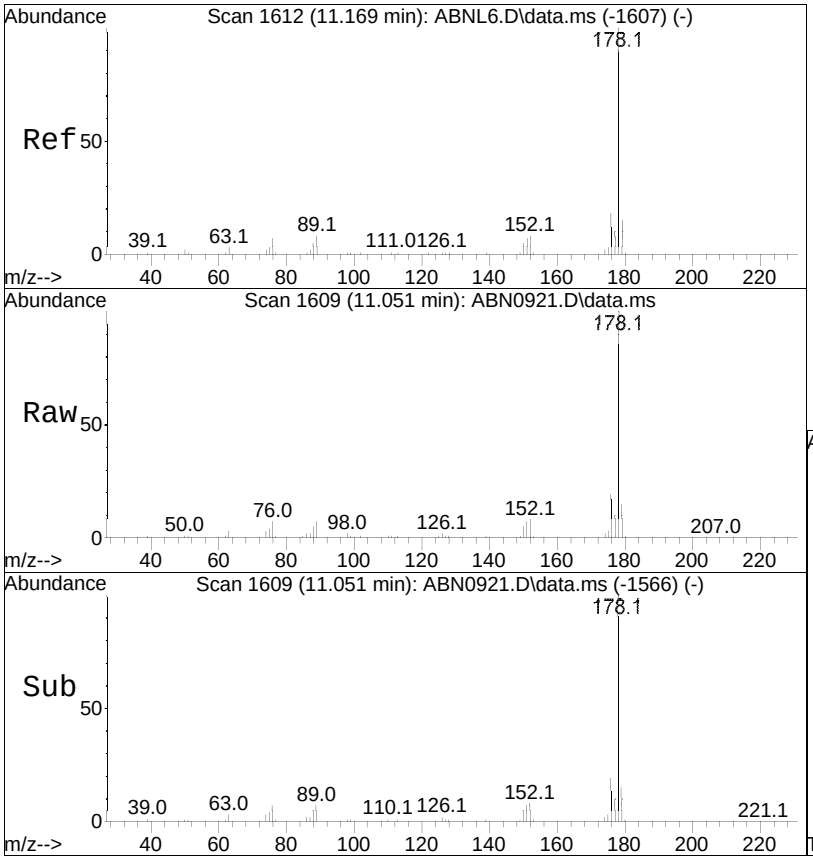



#89
Phenanthrene
Concen: 4.68 ug/ml M3
RT: 11.004 min Scan# 1601
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:178 Resp: 218109

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.2 | 12.2 | 18.2 |
| 176 | 18.7 | 15.4 | 23.2 |

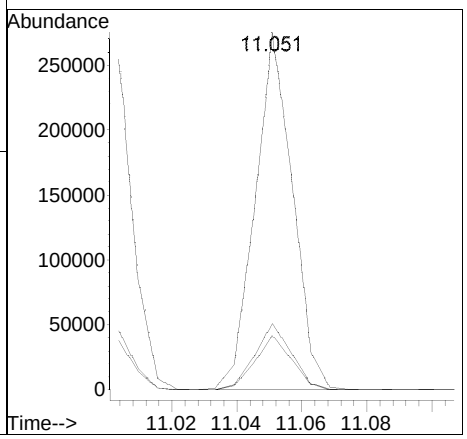


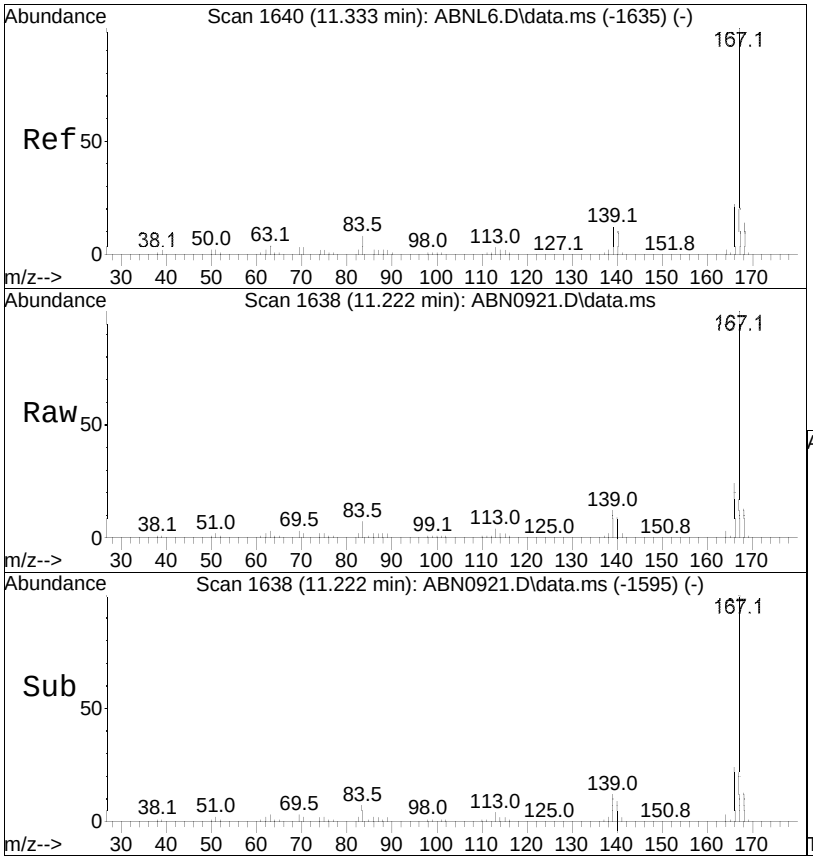



#90
Anthracene
Concen: 4.74 ug/ml
RT: 11.051 min Scan# 1609
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:178 Resp: 219302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 14.9 | 12.0 | 18.0 |
| 176 | 18.3 | 14.6 | 22.0 |

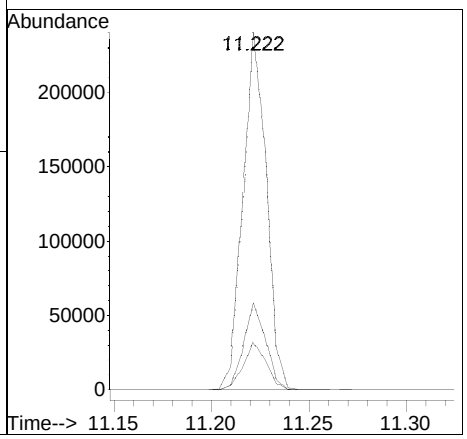


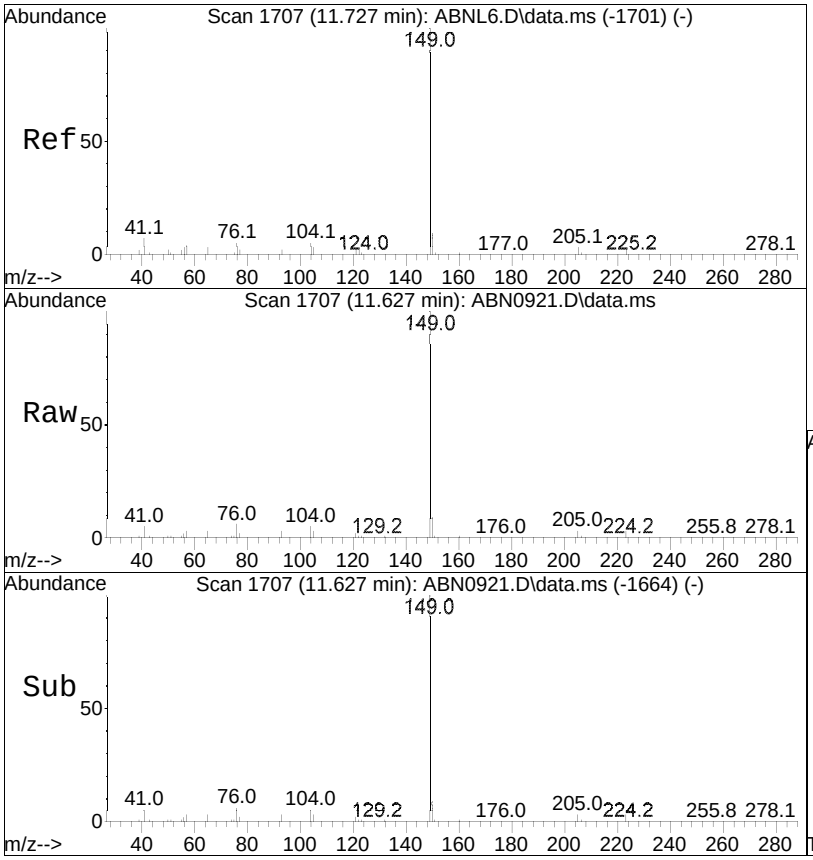



#91
Carbazole
Concen: 4.67 ug/ml
RT: 11.222 min Scan# 1638
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:167 Resp: 197957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 168 | 13.3 | 10.6 | 15.8 |
| 166 | 23.1 | 17.4 | 26.0 |

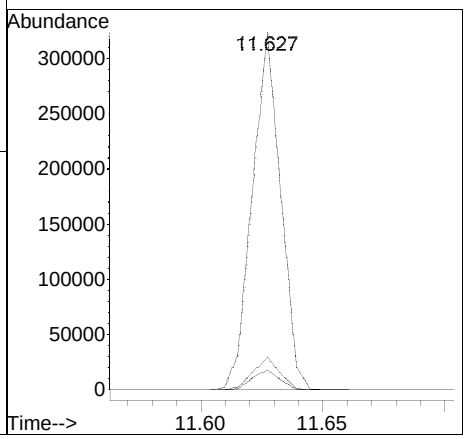


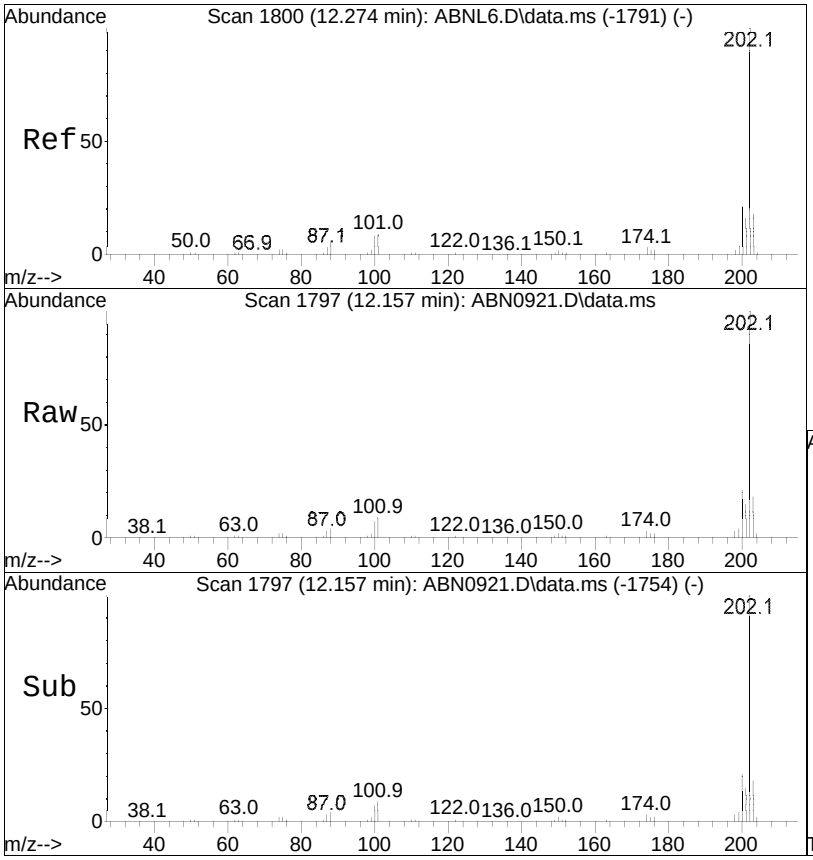



#92
Di-n-butylphthalate
Concen: 5.17 ug/ml
RT: 11.627 min Scan# 1707
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:149 Resp: 257703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 8.7 | 7.0 | 10.6 |
| 104 | 5.5 | 4.5 | 6.7 |

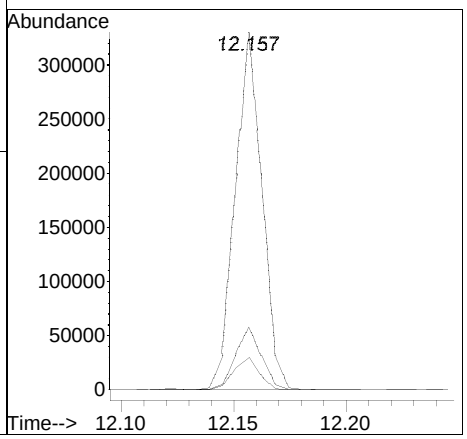


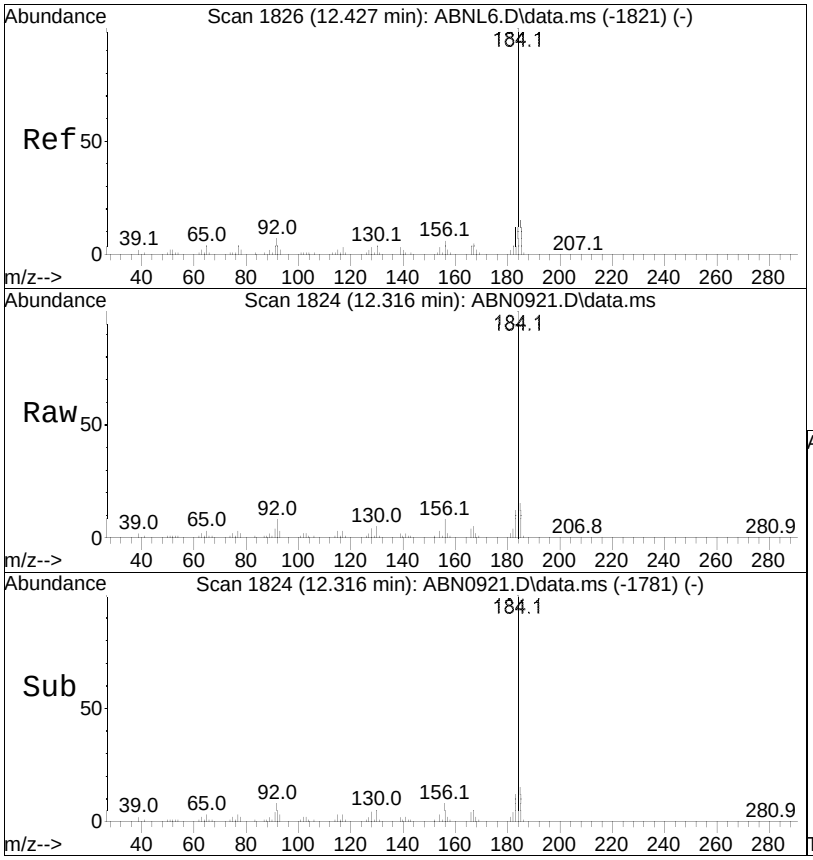



#93
Fluoranthene
Concen: 4.76 ug/ml
RT: 12.157 min Scan# 1797
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:202 Resp: 270860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 8.9 | 13.5 | 20.3# |
| 203 | 17.1 | 13.6 | 20.4 |

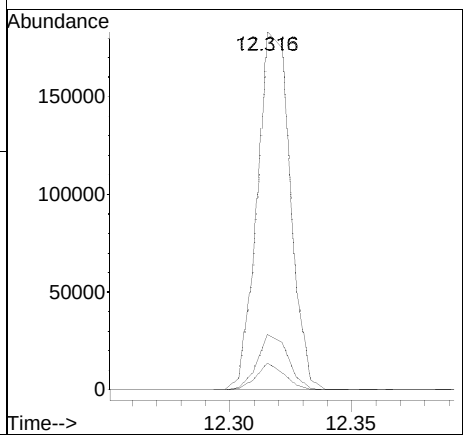


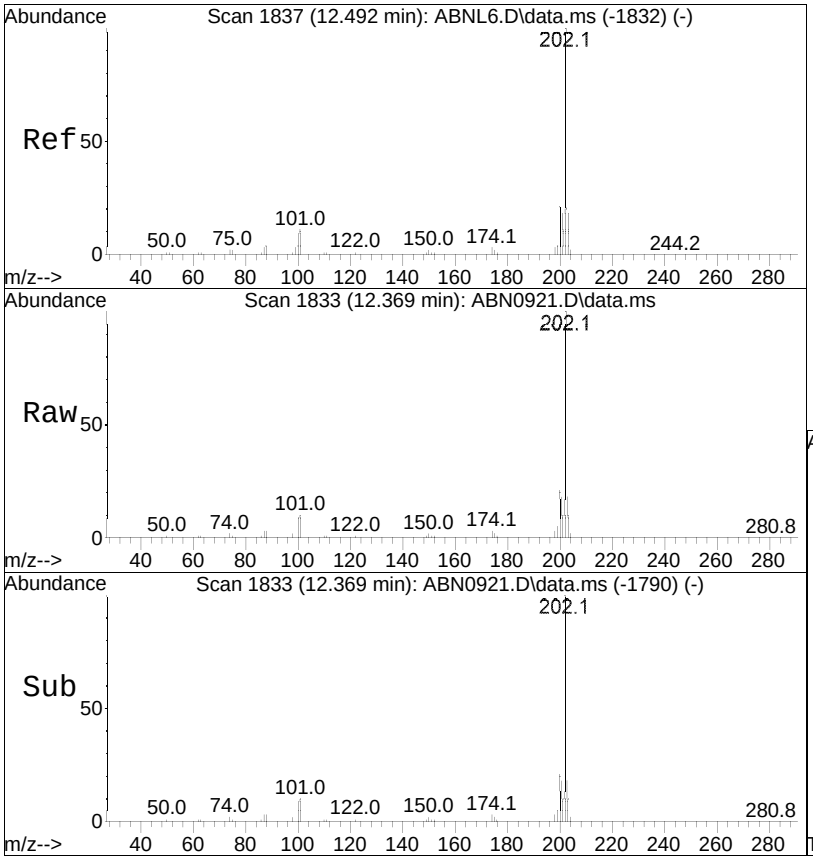



#94
Benzidine
Concen: 5.51 ug/ml
RT: 12.316 min Scan# 1824
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:184 Resp: 170358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 92 | 6.5 | 9.1 | 13.7# |
| 185 | 14.5 | 11.1 | 16.7 |

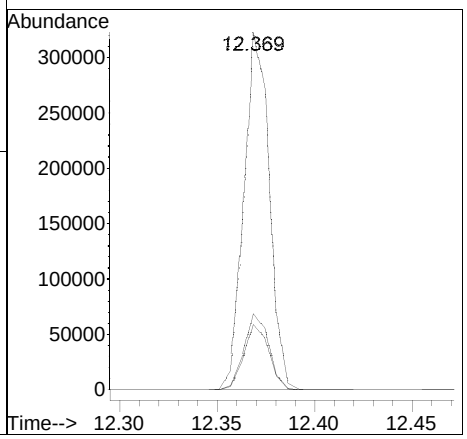


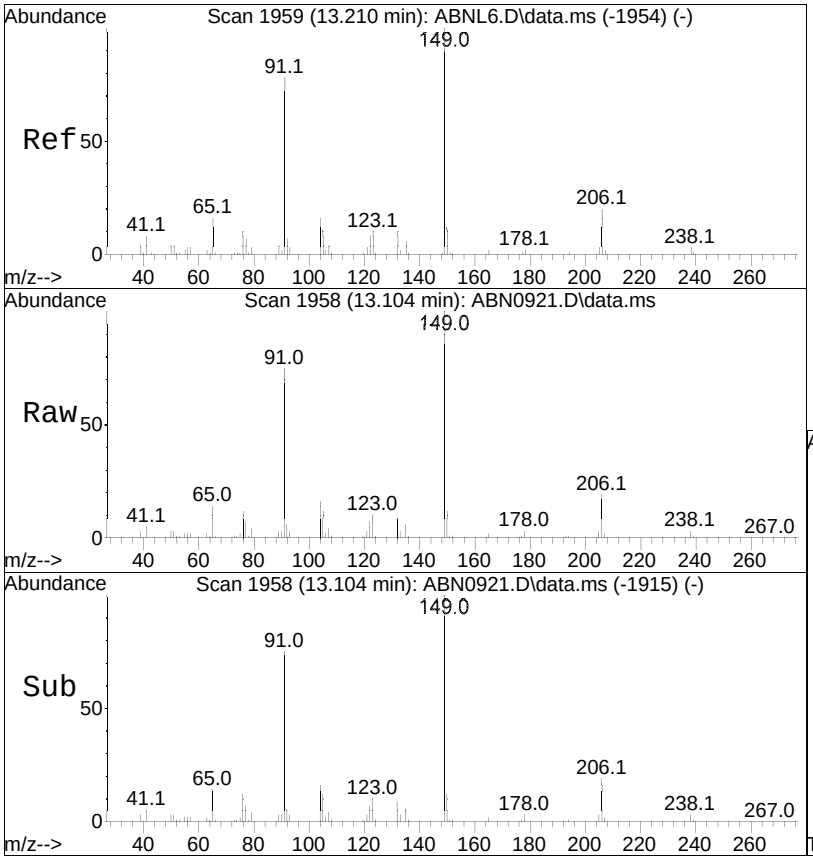



#95
Pyrene
Concen: 4.82 ug/ml
RT: 12.369 min Scan# 1833
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:202 Resp: 289439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.0 | 16.7 | 25.1 |
| 203 | 18.1 | 14.2 | 21.4 |

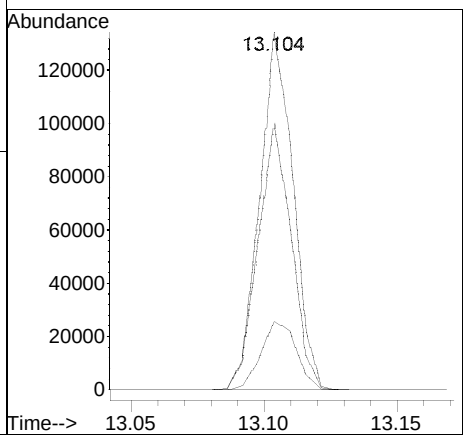


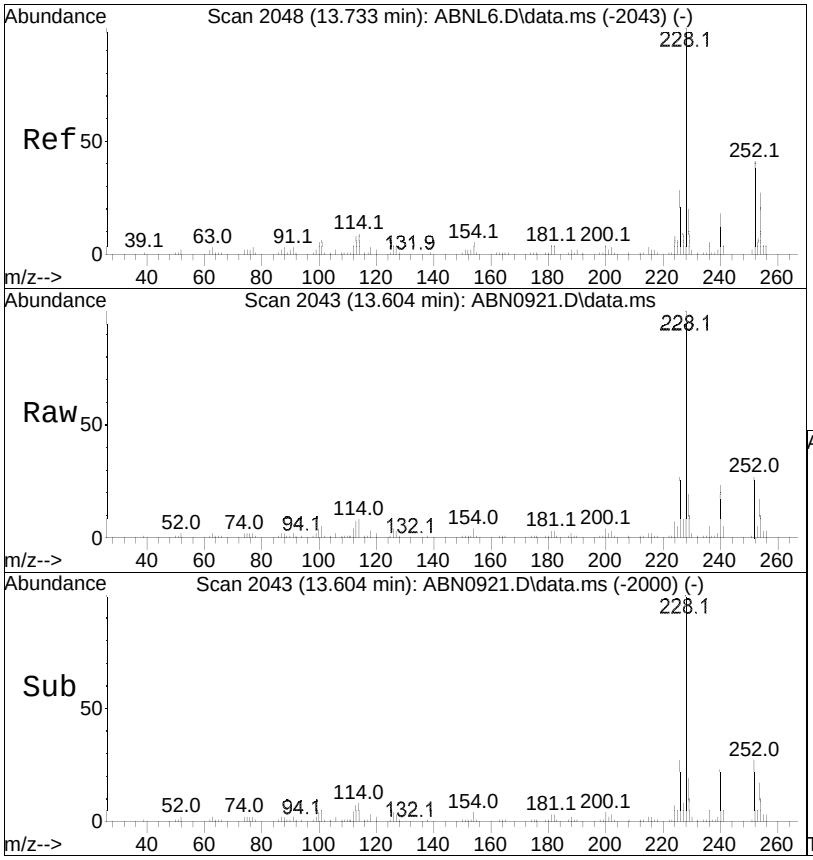



#97
Butyl benzyl phthalate
Concen: 5.07 ug/ml
RT: 13.104 min Scan# 1958
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:149 Resp: 116250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 74.0 | 63.3 | 94.9 |
| 206 | 20.3 | 13.9 | 20.9 |

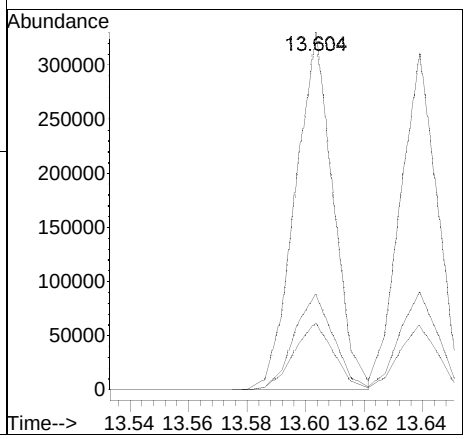


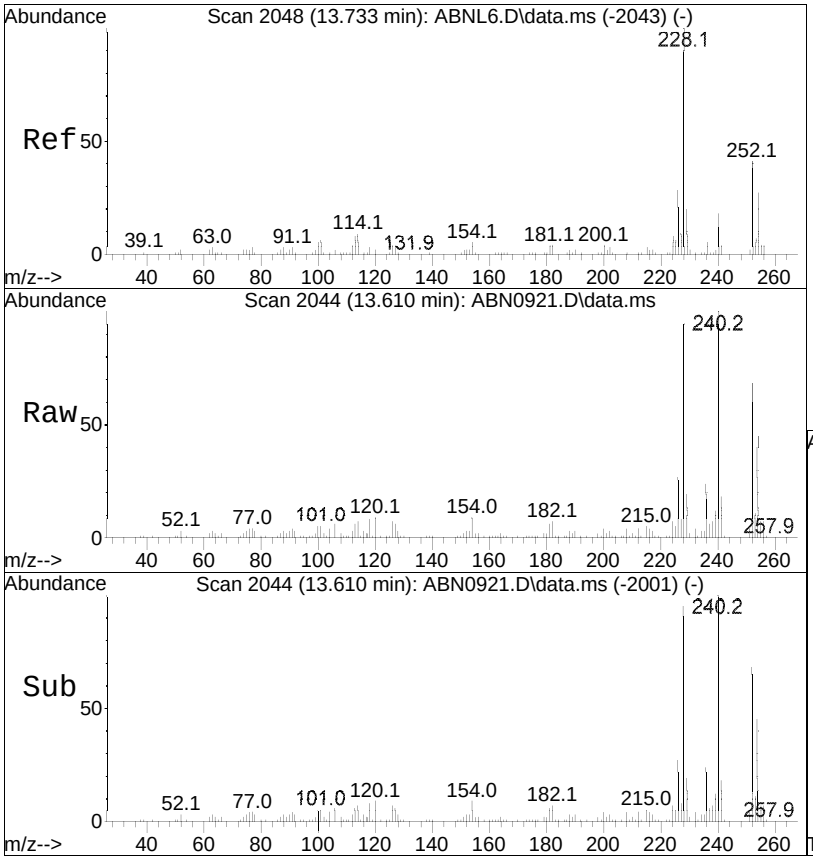



#105
Benzo(a)anthracene
Concen: 4.47 ug/ml M3
RT: 13.604 min Scan# 2043
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:228 Resp: 298935

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 27.8 | 22.2 | 33.4 |
| 229 | 19.6 | 15.6 | 23.4 |

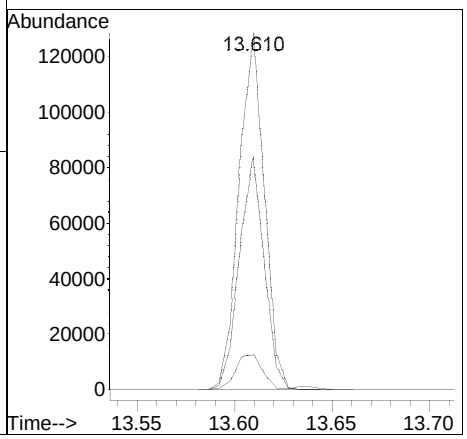


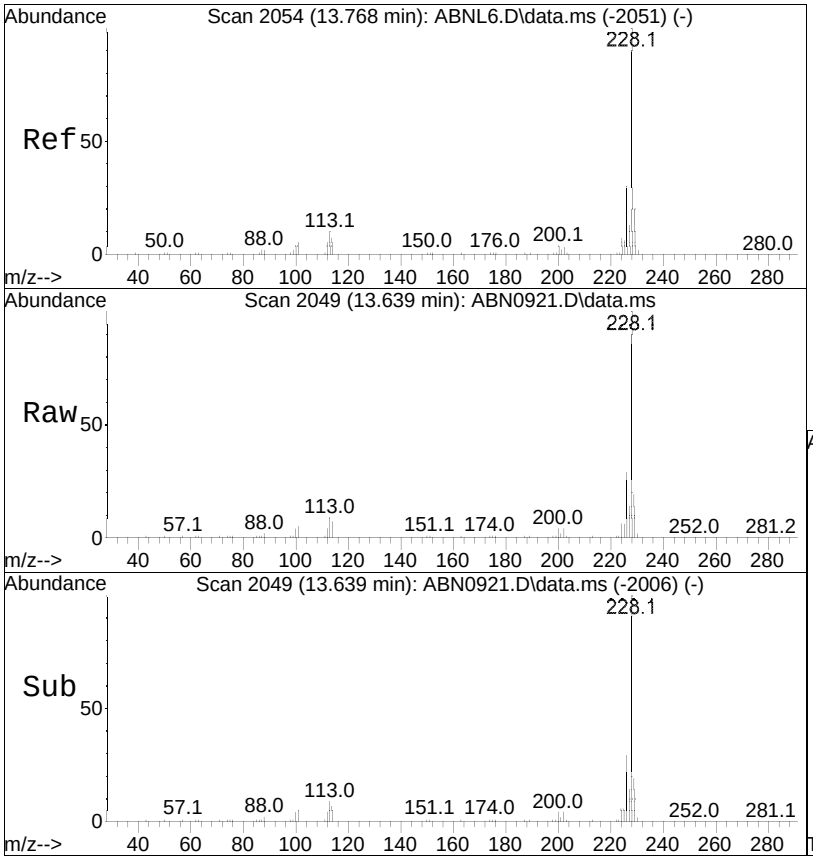



#106
3,3'-Dichlorobenzidine
Concen: 5.24 ug/ml
RT: 13.610 min Scan# 2044
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:252 Resp: 115882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 10.7 | 14.5 | 21.7# |
| 254 | 64.2 | 51.2 | 76.8 |

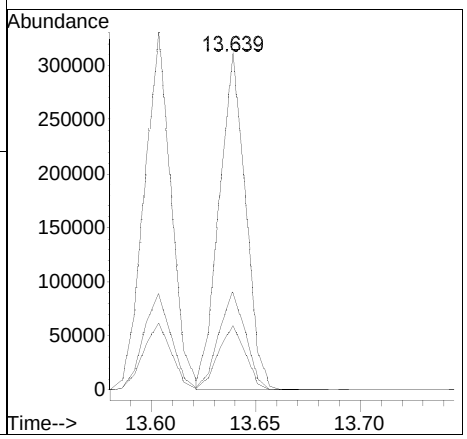


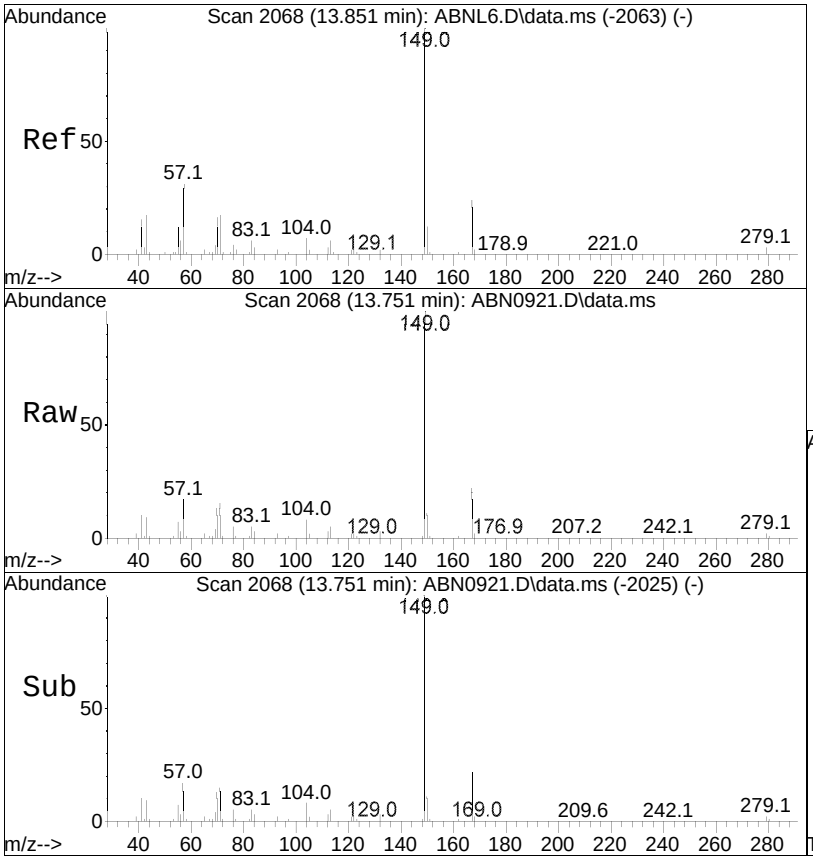



#107
Chrysene
Concen: 4.25 ug/ml
RT: 13.639 min Scan# 2049
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:228 Resp: 274666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.6 | 24.0 | 36.0 |
| 229 | 19.6 | 15.8 | 23.8 |

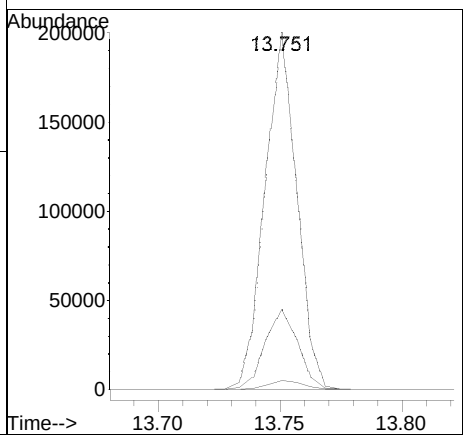


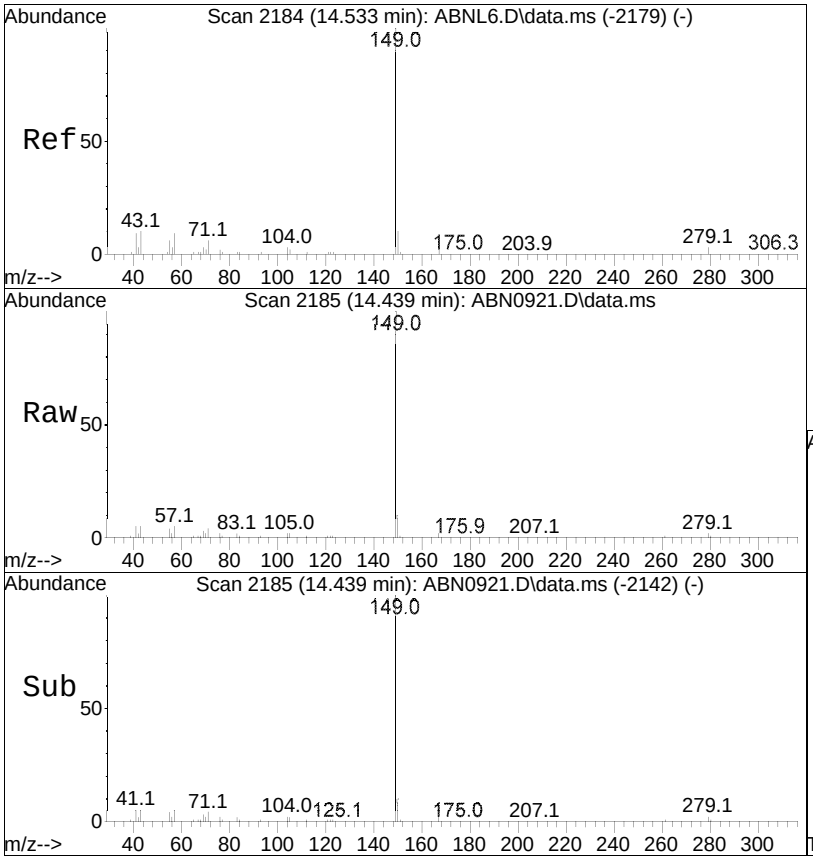



#108
Bis(2-ethylhexyl)phthalate
Concen: 4.89 ug/ml
RT: 13.751 min Scan# 2068
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:149 Resp: 180531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.3 | 22.1 | 33.1 |
| 279 | 2.6 | 3.0 | 4.4# |

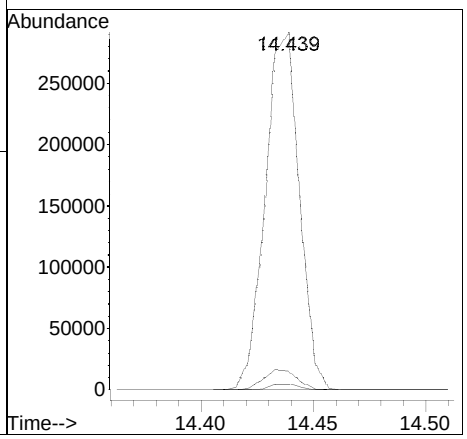


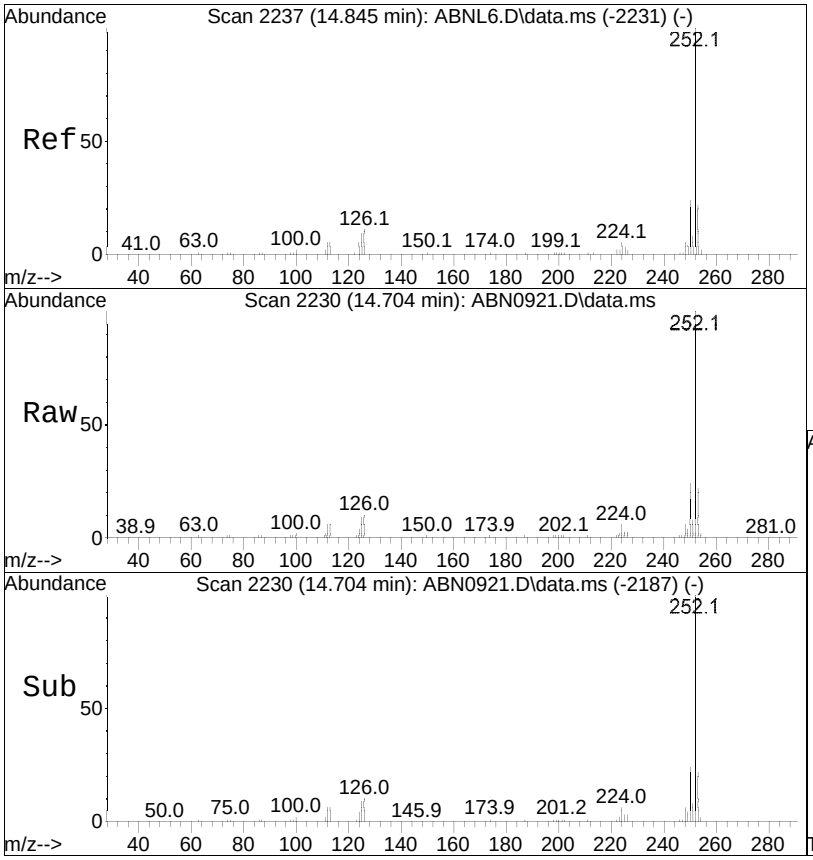



#109
Di-n-octylphthalate
Concen: 4.97 ug/ml
RT: 14.439 min Scan# 2185
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:149 Resp: 303759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 5.8 | 18.8 | 28.2# |
| 167 | 1.6 | 1.3 | 1.9 |

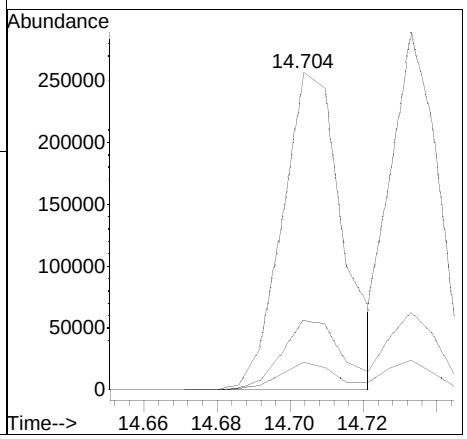


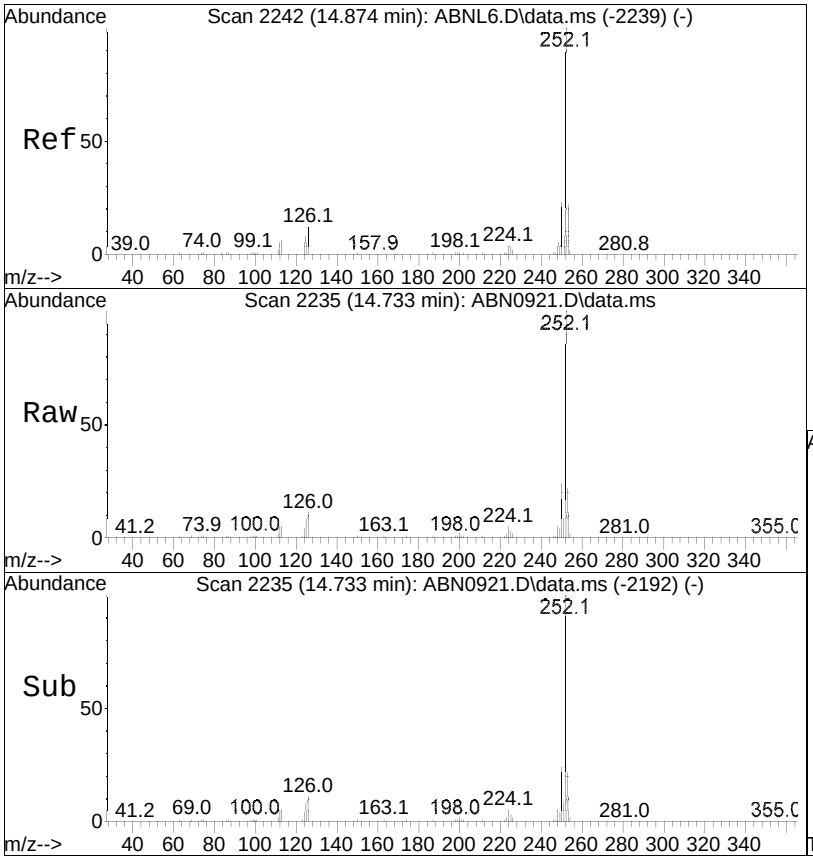



#110
Benzo(b)fluoranthene
Concen: 4.58 ug/ml M3
RT: 14.704 min Scan# 2230
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:252 Resp: 296517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 7.6 | 13.3 | 19.9# |
| 253 | 22.1 | 17.1 | 25.7 |

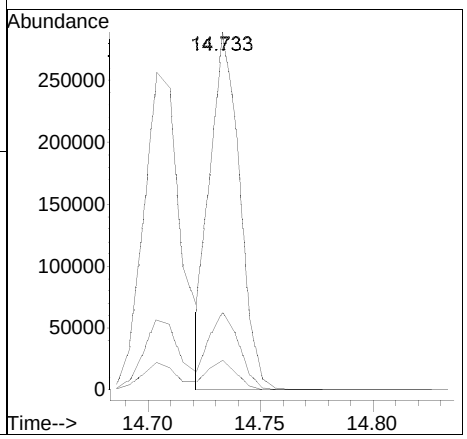


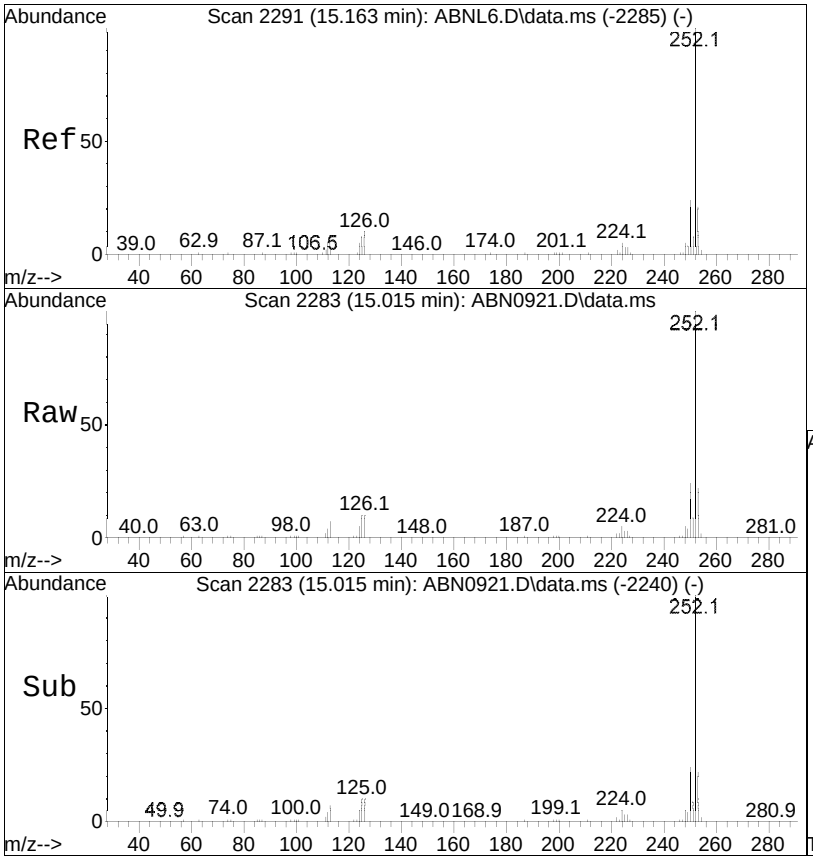



#111
Benzo(k)fluoranthene
Concen: 4.28 ug/ml
RT: 14.733 min Scan# 2235
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:252 Resp: 262418

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 8.6 | 13.0 | 19.6# |
| 253 | 22.2 | 16.8 | 25.2 |

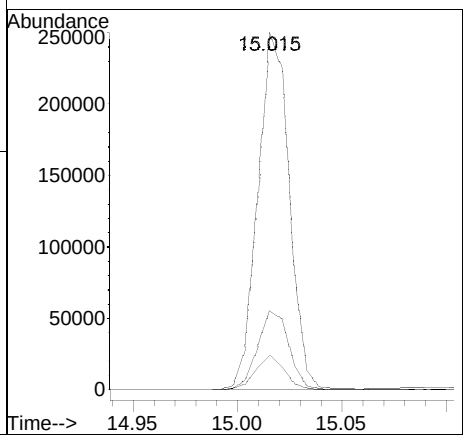


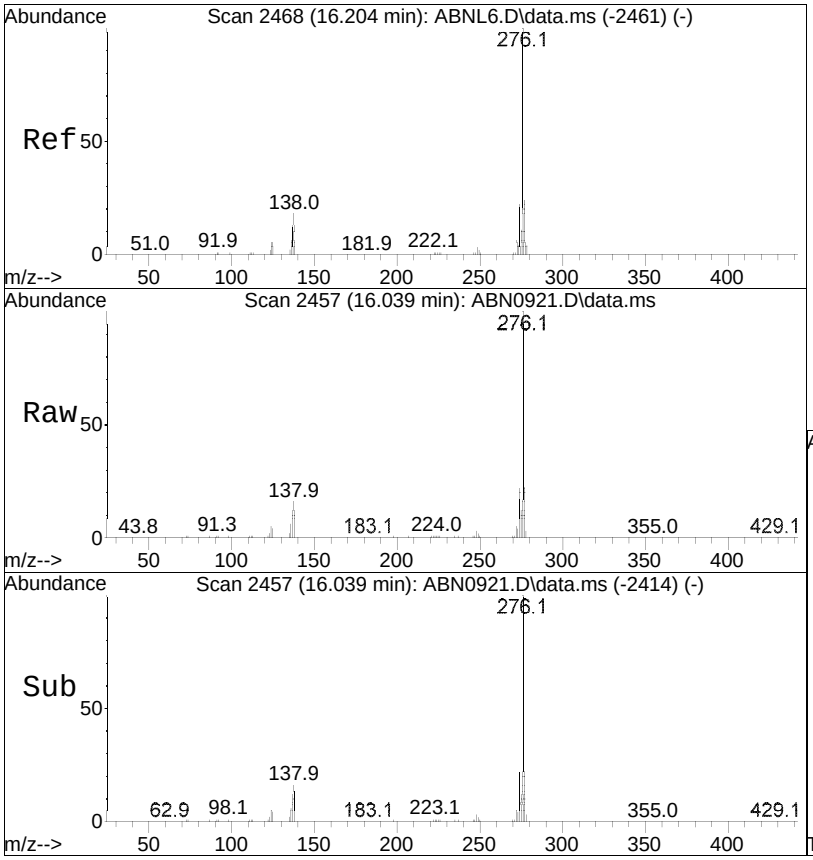



#112
Benzo(a)pyrene
Concen: 4.62 ug/ml M2
RT: 15.015 min Scan# 2283
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:252 Resp: 259448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 9.0 | 14.2 | 21.2# |
| 253 | 22.2 | 16.9 | 25.3 |

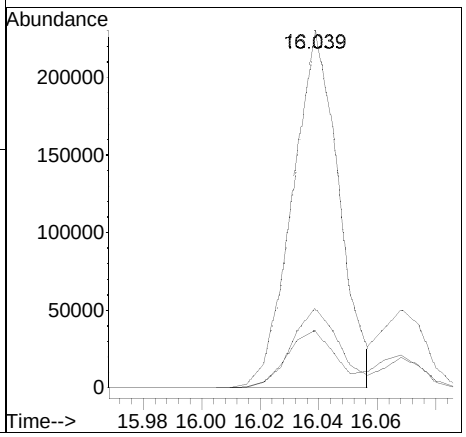


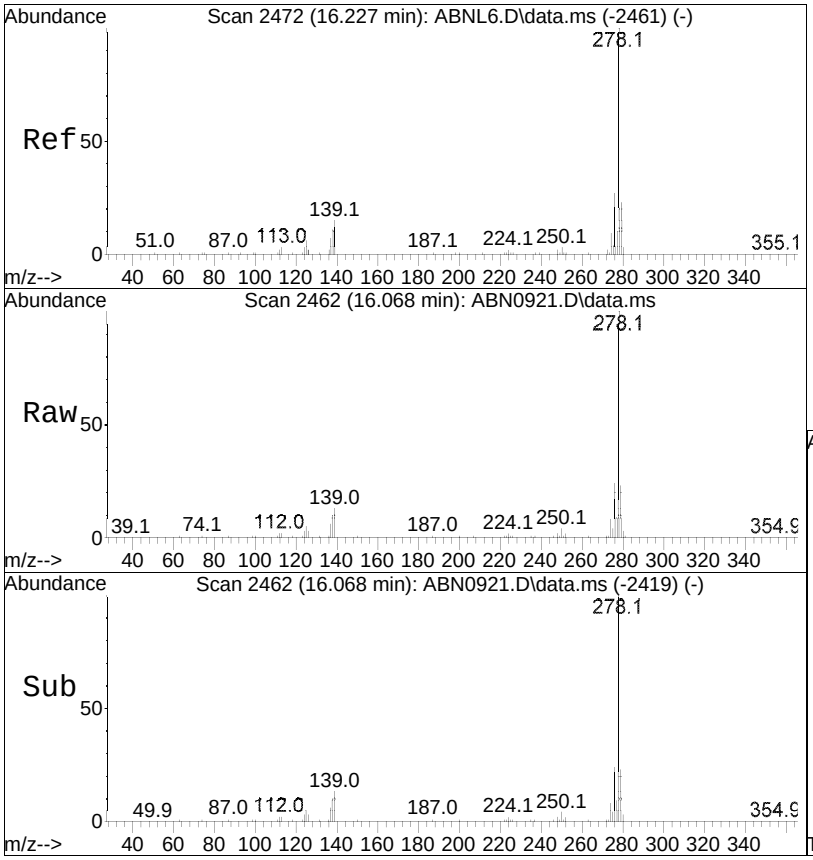



#114
Indeno(1,2,3-cd)pyrene
Concen: 5.25 ug/mL
RT: 16.039 min Scan# 2457
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:276 Resp: 254194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 16.7 | 25.1 | 37.7# |
| 277 | 23.1 | 18.6 | 28.0 |

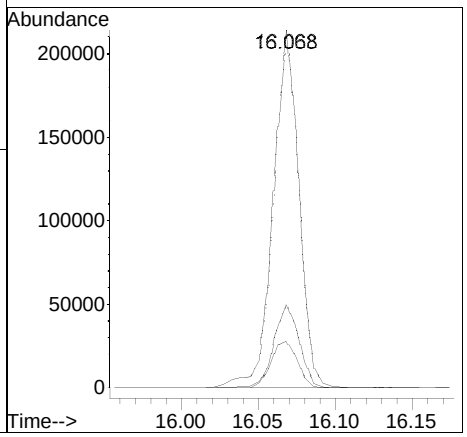


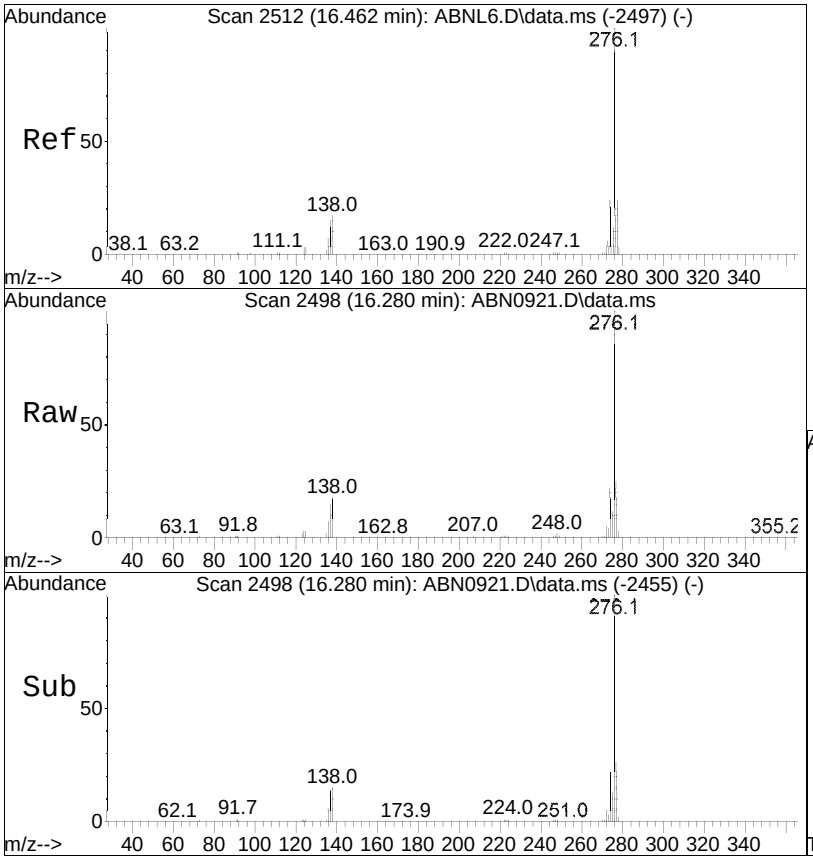



#115
Dibenzo(a,h)anthracene
Concen: 5.24 ug/ml
RT: 16.068 min Scan# 2462
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:278 Resp: 244403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 13.5 | 20.8 | 31.2# |
| 279 | 23.3 | 18.3 | 27.5 |

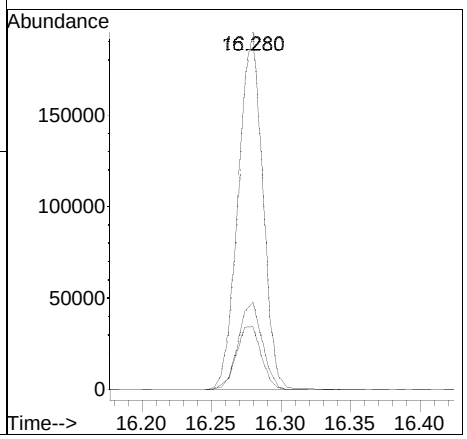





#116
Benzo(ghi)perylene
Concen: 5.49 ug/ml
RT: 16.280 min Scan# 2498
Delta R.T. 0.000 min
Lab File: ABN0921.D
Acq: 21 Sep 2024 10:09 am

Tgt Ion:276 Resp: 237002

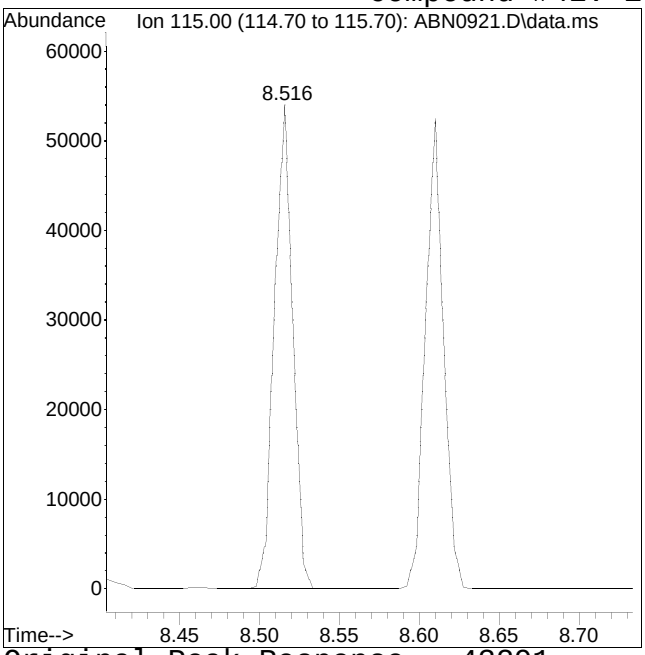
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.5 | 29.2 | 43.8# |
| 277 | 24.3 | 18.8 | 28.2 |

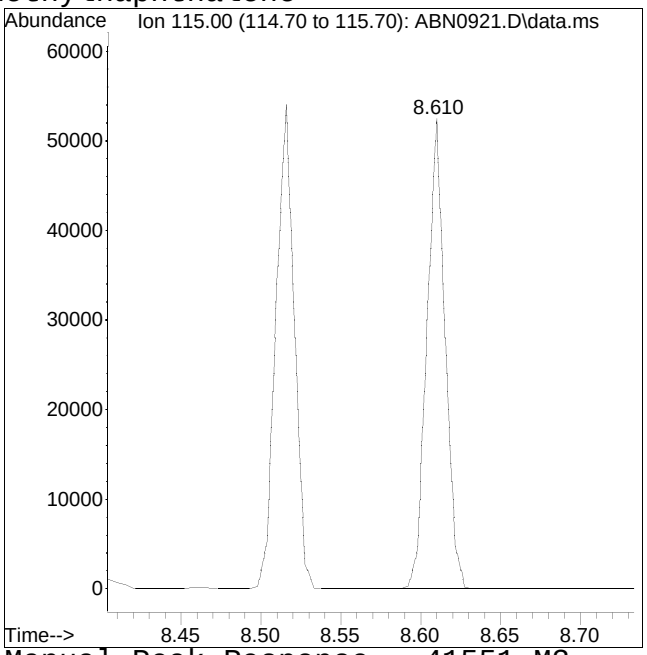


# Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

## Compound #42: 1-Methylnaphthalene



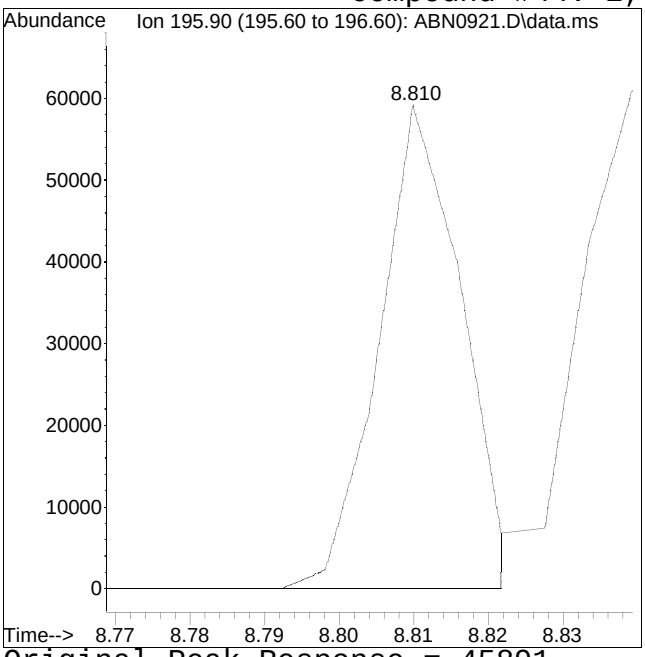

Original Peak Response = 43291 Manual Peak Response = 41551 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

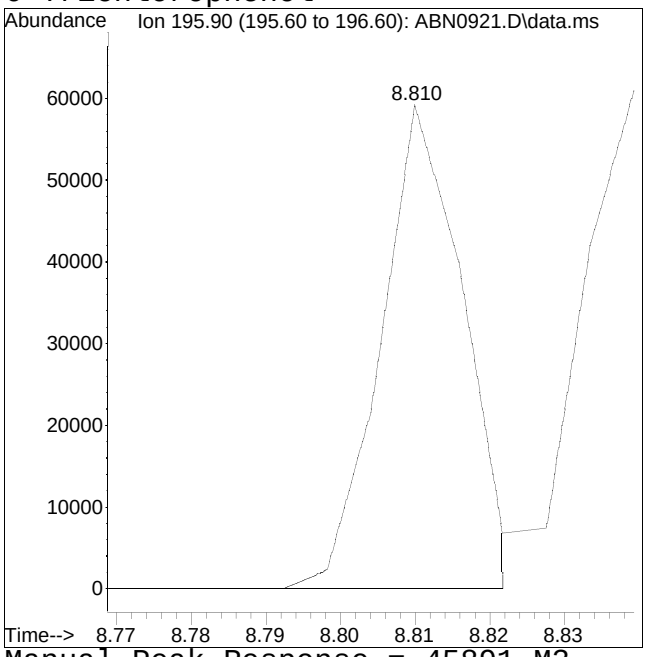
# Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

## Compound #44: 2,4,6-Trichlorophenol




Original Peak Response = 45891



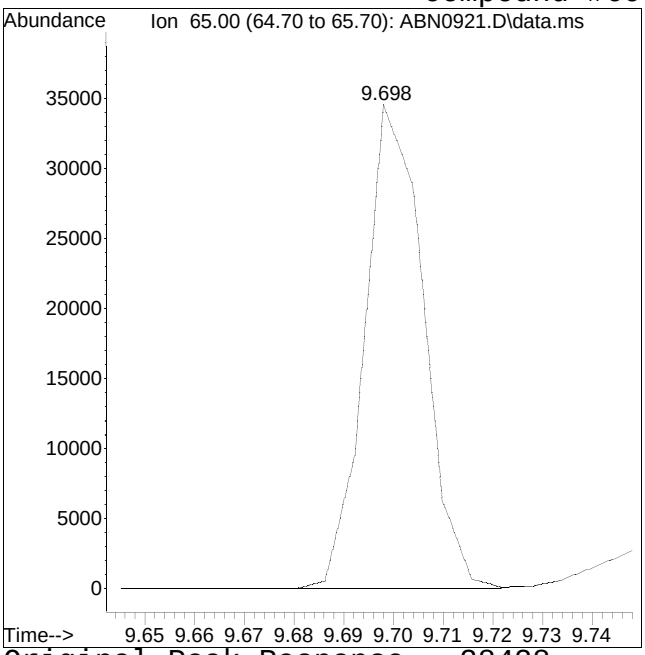

Manual Peak Response = 45891 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

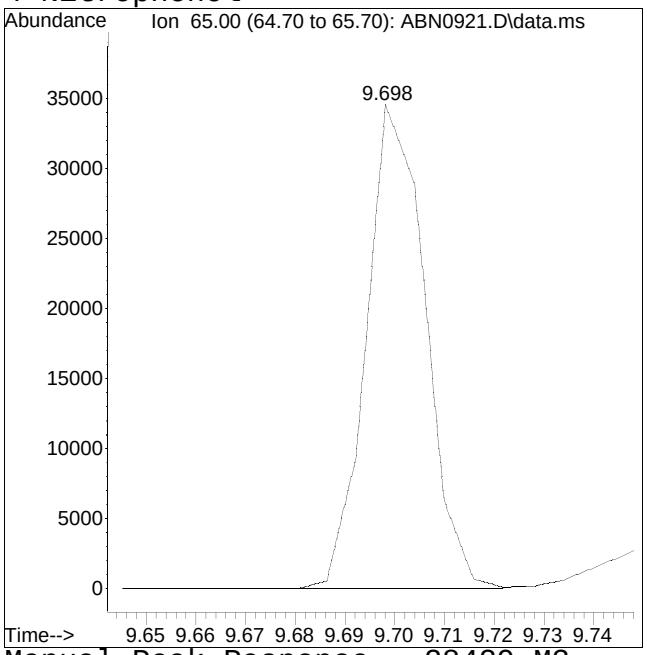
# Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

## Compound #69: 4-Nitrophenol




Original Peak Response = 28428



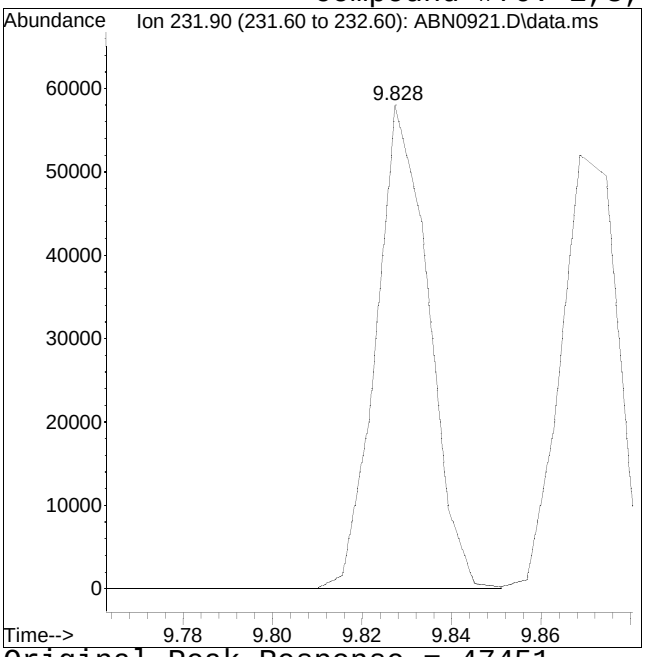

Manual Peak Response = 28429 M3

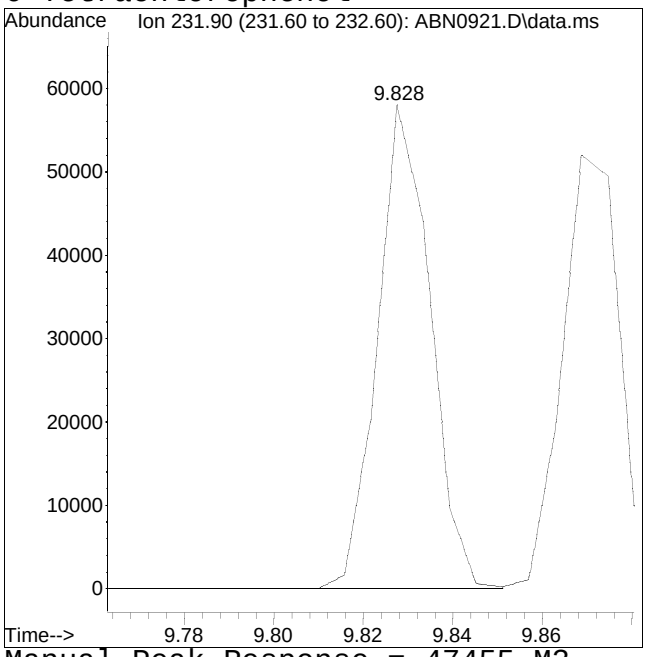
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #70: 2,3,5,6-Tetrachlorophenol



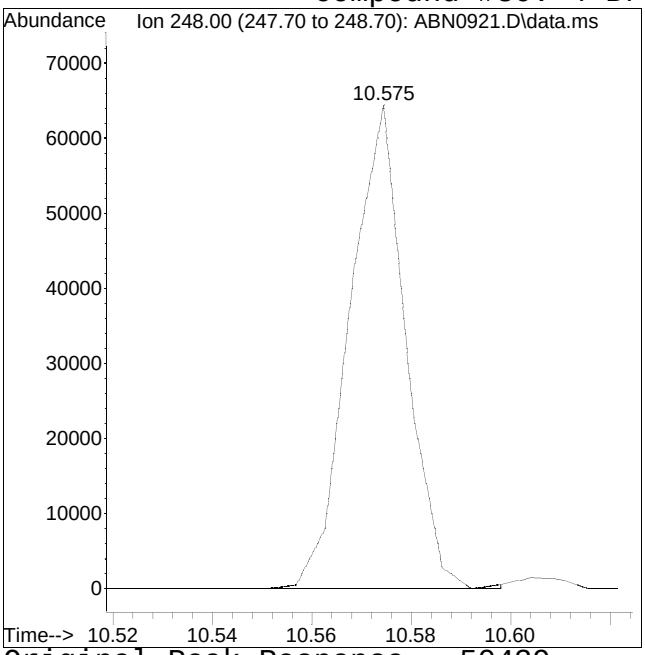

Original Peak Response = 47451 Manual Peak Response = 47455 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

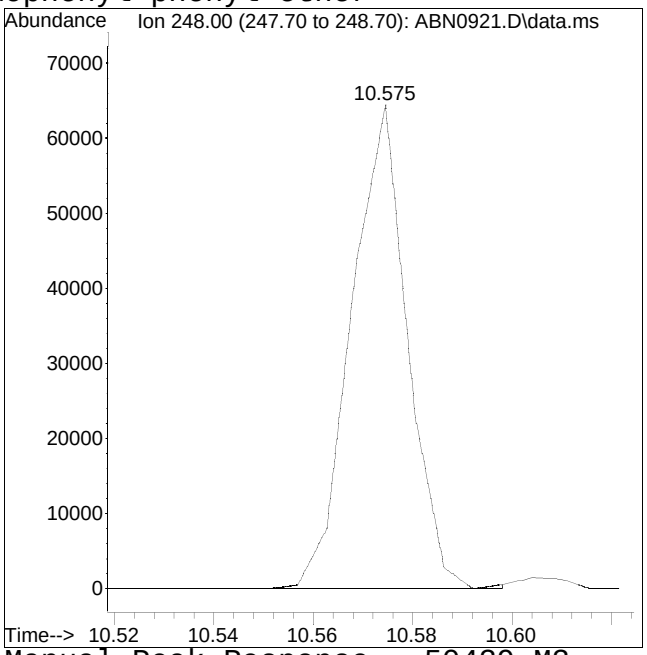
Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #80: 4-Bromophenyl phenyl ether




Original Peak Response = 50439



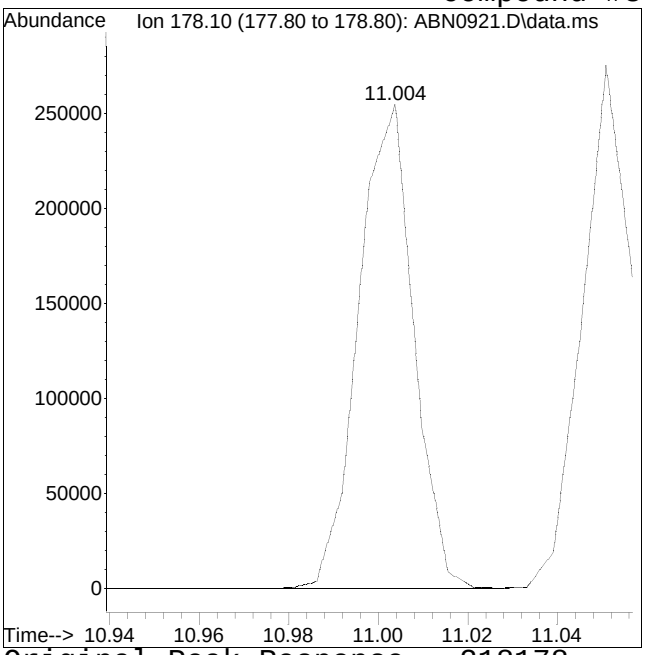

Manual Peak Response = 50439 M3

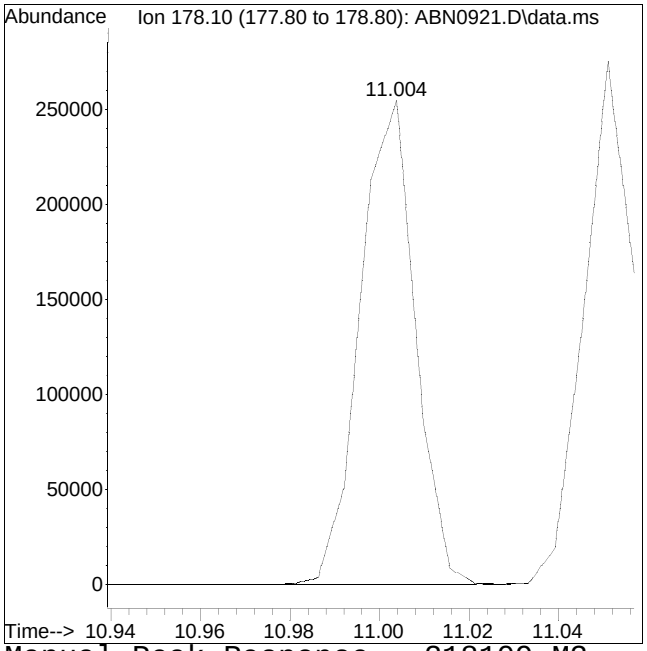
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #89: Phenanthrene



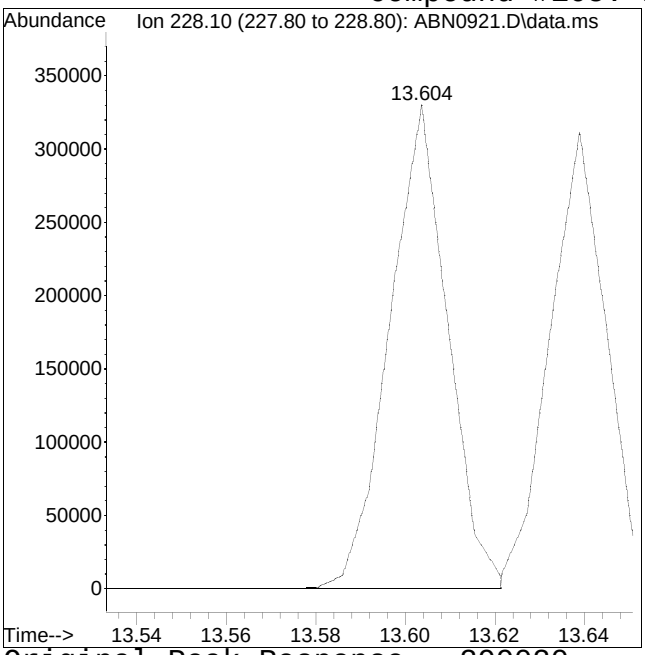

Original Peak Response = 218178 Manual Peak Response = 218109 M3

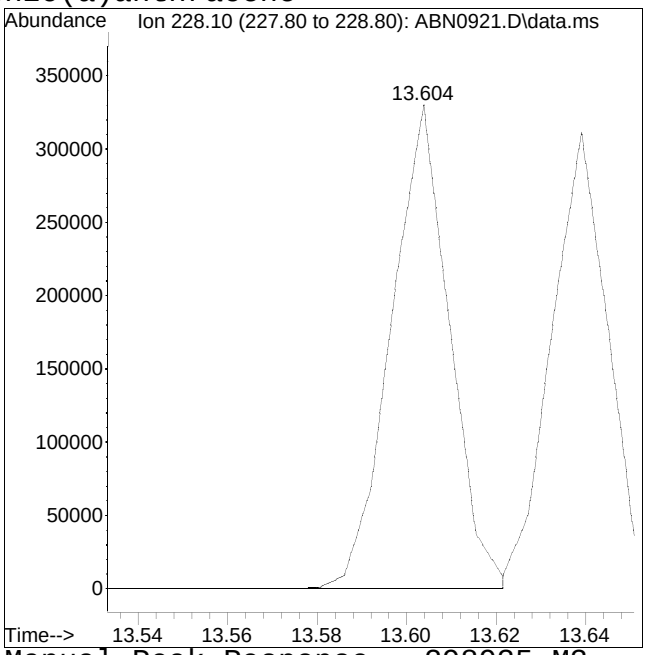
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #105: Benzo(a)anthracene



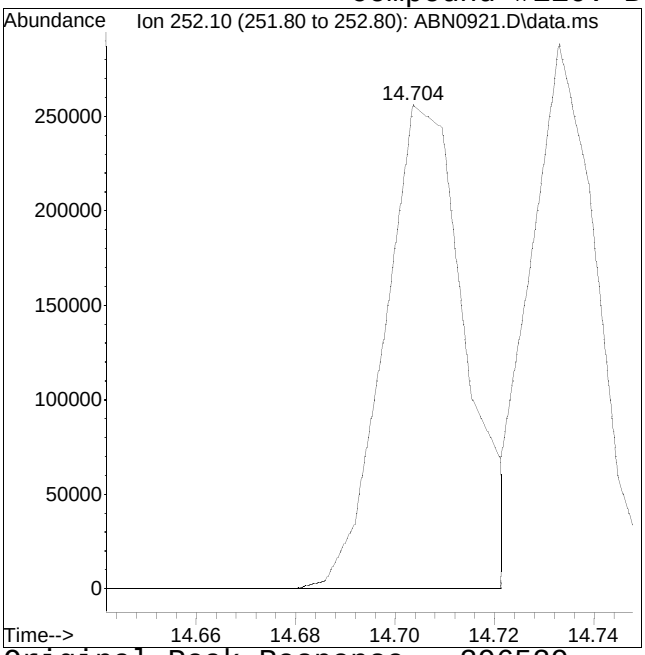

Original Peak Response = 299020 Manual Peak Response = 298935 M3

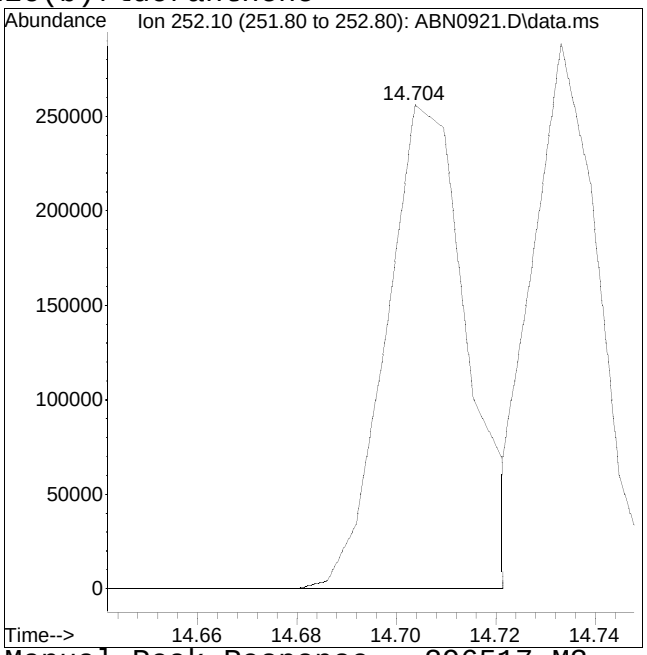
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #110: Benzo(b)fluoranthene



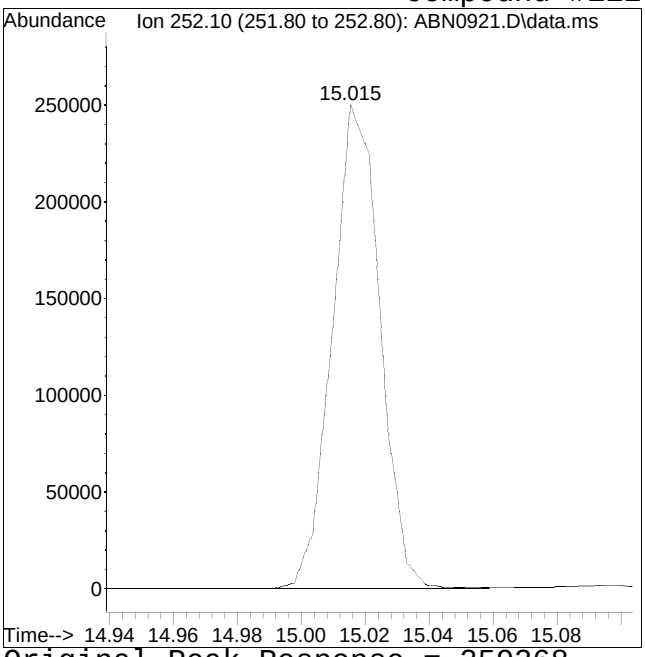

Original Peak Response = 296529 Manual Peak Response = 296517 M3

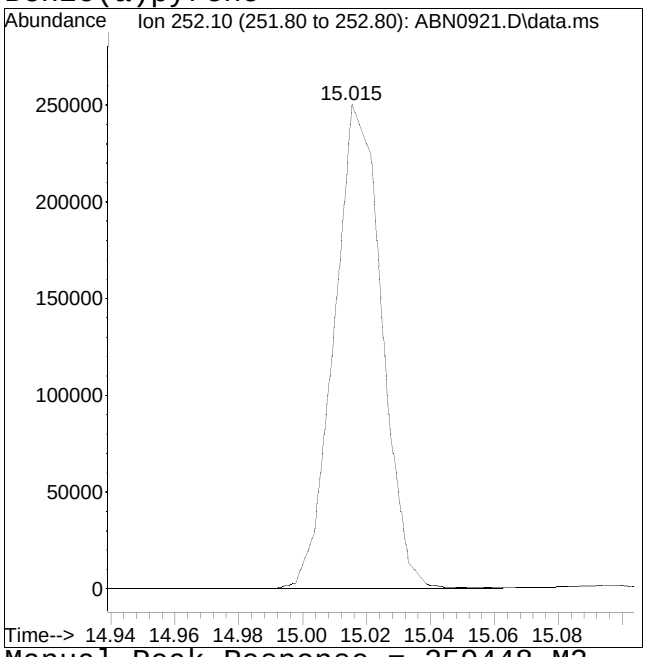
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : ABN0921.D Operator : SV106:als
Date Inj'd : 9/21/2024 10:09 am Instrument : SV 106
Sample : WG1974589-3,32,,ABN 10908 Quant Date : 9/21/2024 11:23 am

Compound #112: Benzo(a)pyrene




Original Peak Response = 259268 Manual Peak Response = 259448 M2
M2 = Peak not found by automatic integration algorithm.

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240921RVT\
Data File : AP90921.D
Acq On : 21 Sep 2024 10:33 am
Operator : SV106:als
Sample : WG1974589-4,32,,AP9 10909 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 21 11:23:17 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:09 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 27 | I | IS2_1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 28 | T | Benzaldehyde | 1.187 | 1.021 | 14.0 | 86 | 0.00 |
| 29 | T | Acetophenone | 2.158 | 1.778 | 17.6 | 82 | 0.00 |
| 30 | T | m-Toluidine | 1.957 | 1.655 | 15.4 | 84 | 0.00 |
| 31 | T | 2-Chloroaniline | 1.709 | 1.421 | 16.9 | 83 | 0.00 |
| 55 | I | IS2_Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 56 | T | a-Terpineol | 0.400 | 0.245 | 38.8# | 57 | 0.00 |
| 57 | T | 3-Chloroaniline | 0.201 | 0.168 | 16.4 | 78 | 0.00 |
| 58 | T | 2,6-Dichlorophenol | 0.362 | 0.331 | 8.6 | 82 | 0.00 |
| 59 | T | 1-chloro-2-nitrobenzene | 0.180 | 0.165 | 8.3 | 82 | 0.00 |
| 60 | T | Caprolactam | 0.210 | 0.107 | 49.0# | 44# | 0.00 |
| 61 | T | 1,2,4,5-Tetrachlorobenzene | 0.548 | 0.488 | 10.9 | 85 | 0.00 |
| 62 | T | Biphenyl | 1.084 | 0.934 | 13.8 | 82 | 0.00 |
| 83 | I | IS2_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 84 | T | Dichloran | 0.247 | 0.228 | 7.7 | 87 | 0.00 |
| 85 | T | Pentachloronitrobenzene | 0.270 | 0.278 | -3.0 | 96 | 0.00 |
| 98 | I | IS2_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 99 | T | Diphenamid | 0.561 | 0.518 | 7.7 | 82 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : AP90921.D
Acq On : 21 Sep 2024 10:33 am
Operator : SV106:als
Sample : WG1974589-4,32,,AP9 10909 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 21 11:23:17 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:09 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.340 | 152 | 31689 | 4.000 | ug/ml | 0.00 |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 105914 | 4.000 | ug/ml | 0.00 |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 73353 | 4.000 | ug/ml | 0.00 |
| 98) IS2_Phenanthrene-d10 | 10.980 | 188 | 155138 | 4.000 | ug/ml | 0.00 |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 28) Benzaldehyde | 5.751 | 105 | 40450 | 4.300 | ug/ml | 98 |
| 29) Acetophenone | 6.845 | 105 | 70441 | 4.120 | ug/ml# | 72 |
| 30) m-Toluidine | 6.945 | 106 | 65566 | 4.229 | ug/ml | 97 |
| 31) 2-Chloroaniline | 7.345 | 127 | 56284 | 4.156 | ug/ml | 95 |
| 56) a-Terpineol | 7.851 | 59 | 32405 | 3.059 | ug/ml# | 51 |
| 57) 3-Chloroaniline | 7.863 | 65 | 22181 | 4.175 | ug/ml | 79 |
| 58) 2,6-Dichlorophenol | 7.887 | 162 | 43762 | 4.570 | ug/ml | 97 |
| 59) 1-chloro-2-nitrobenzene | 8.157 | 111 | 21830 | 4.575 | ug/ml# | 1 |
| 60) Caprolactam | 8.198 | 55 | 14140 | 2.543 | ug/ml# | 6 |
| 61) 1,2,4,5-Tetrachloroben... | 8.687 | 216 | 64600 | 4.448 | ug/ml | 97 |
| 62) Biphenyl | 8.992 | 154 | 123676 | 4.308 | ug/ml | 99 |
| 84) Dichloran | 10.675 | 206 | 20896 | 4.611 | ug/ml# | 63 |
| 85) Pentachloronitrobenzene | 10.822 | 237 | 25520 | 5.152 | ug/ml# | 73 |
| 99) Diphenamid | 11.898 | 167 | 100374 | 4.611 | ug/ml | 81 |

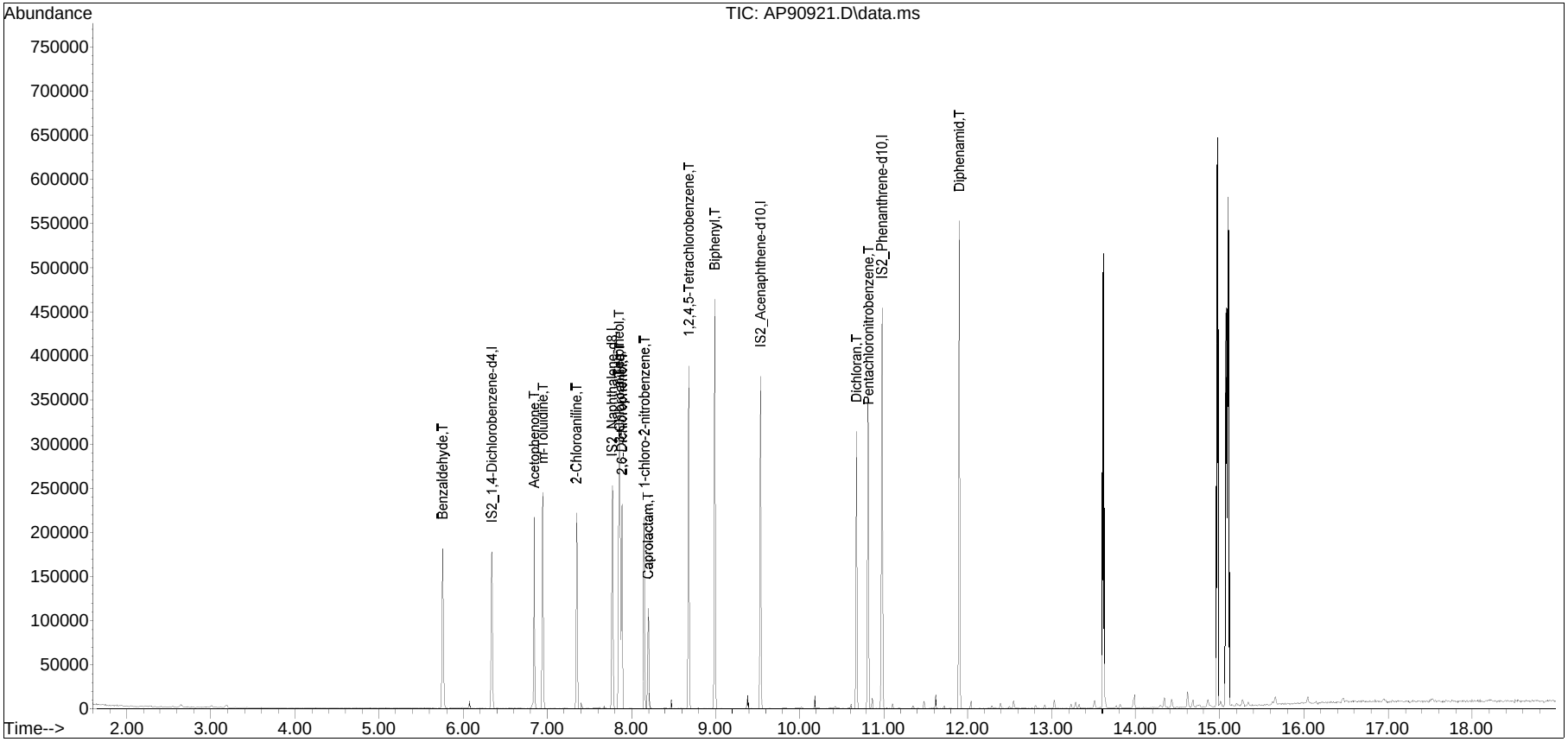
(#) = qualifier out of range (m) = manual integration (+) = signals summed

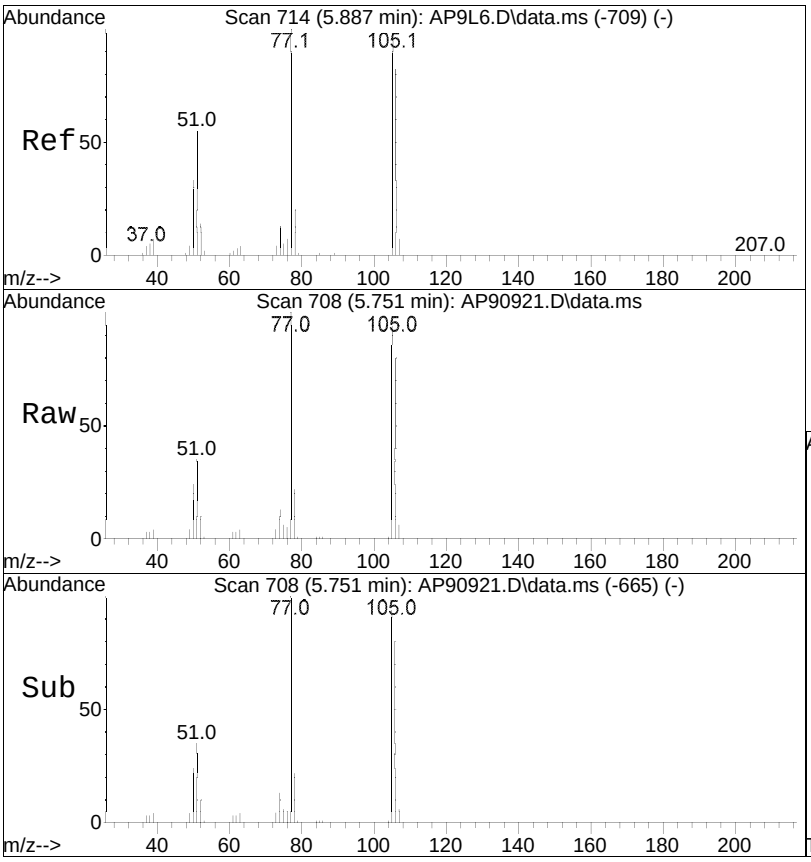
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : AP90921.D
Acq On : 21 Sep 2024 10:33 am
Operator : SV106:als
Sample : WG1974589-4,32,,AP9 10909 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 21 11:23:17 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:09 2024
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

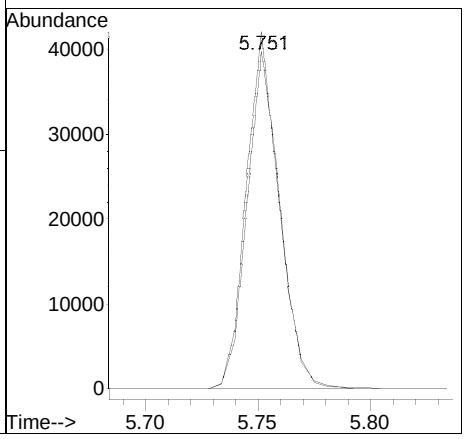


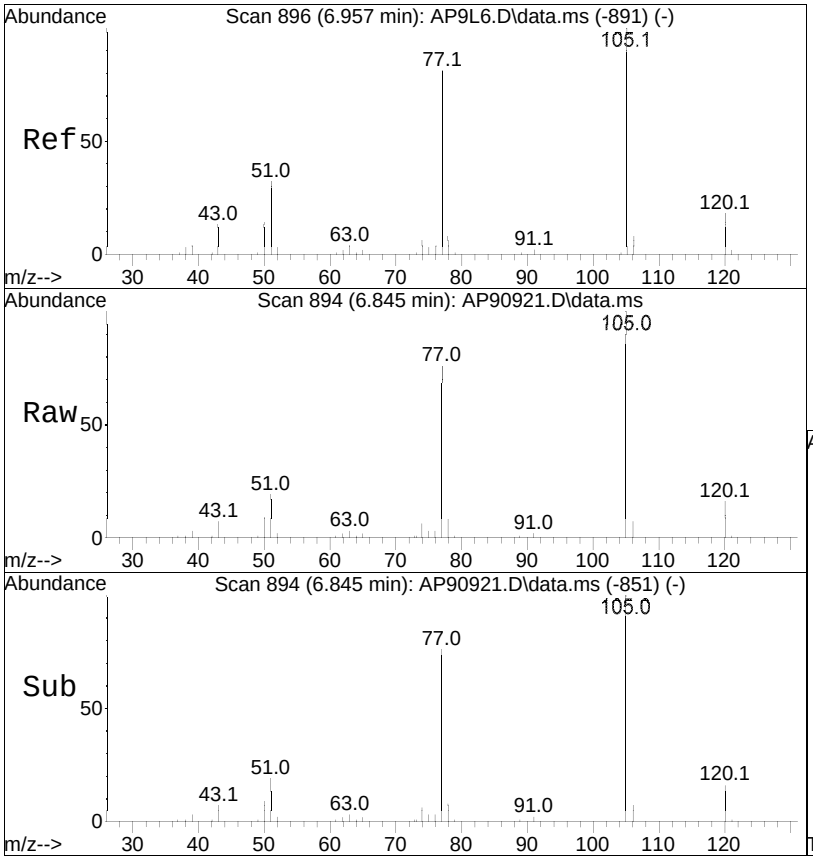



#28
Benzaldehyde
Concen: 4.30 ug/ml
RT: 5.751 min Scan# 708
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:105 Resp: 40450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 77 | 105.0 | 82.2 | 123.4 |

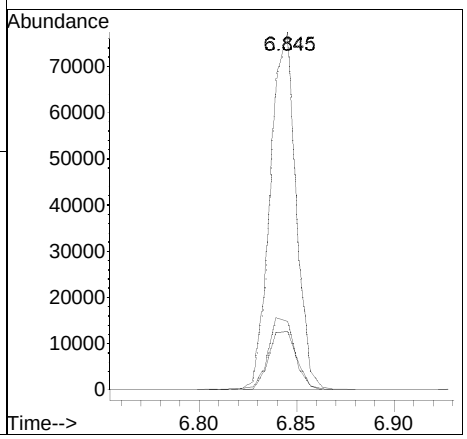


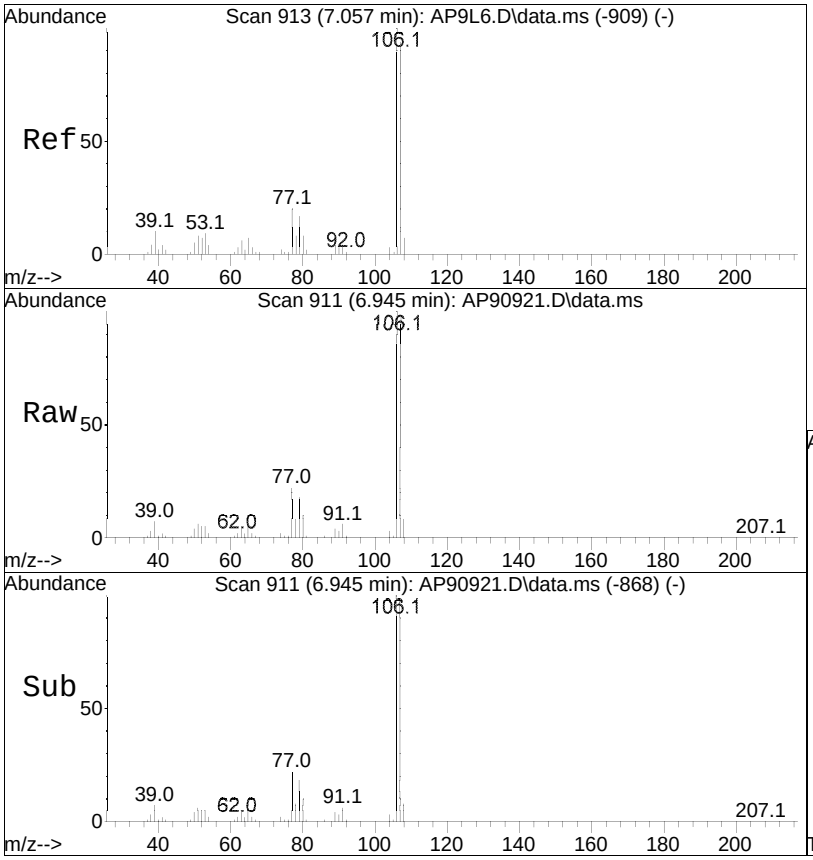



#29
Acetophenone
Concen: 4.12 ug/ml
RT: 6.845 min Scan# 894
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:105 Resp: 70441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 17.8 | 20.5 | 30.7# |
| 51 | 21.1 | 34.9 | 52.3# |

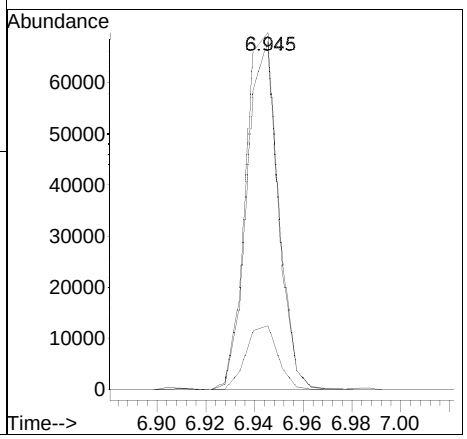


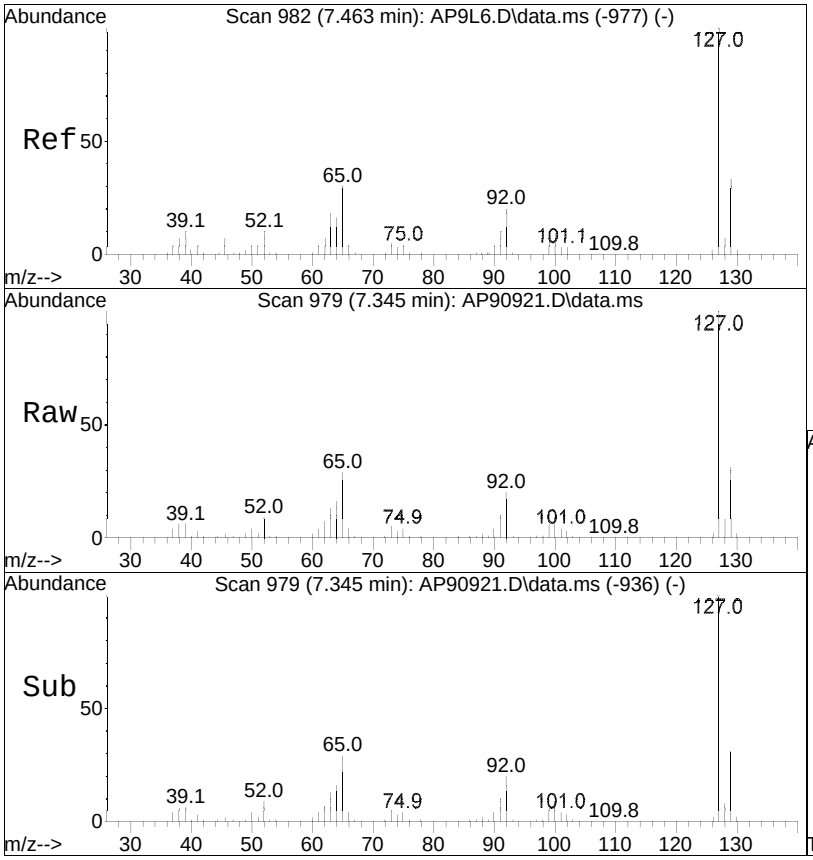



#30
m-Toluidine
Concen: 4.23 ug/ml
RT: 6.945 min Scan# 911
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:106 Resp: 65566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 107 | 92.7 | 75.7 | 113.5 |
| 79 | 17.6 | 11.8 | 17.8 |

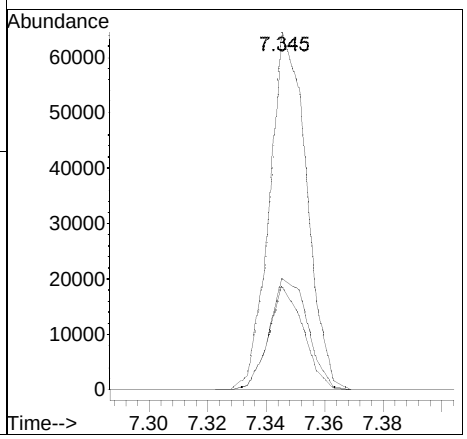


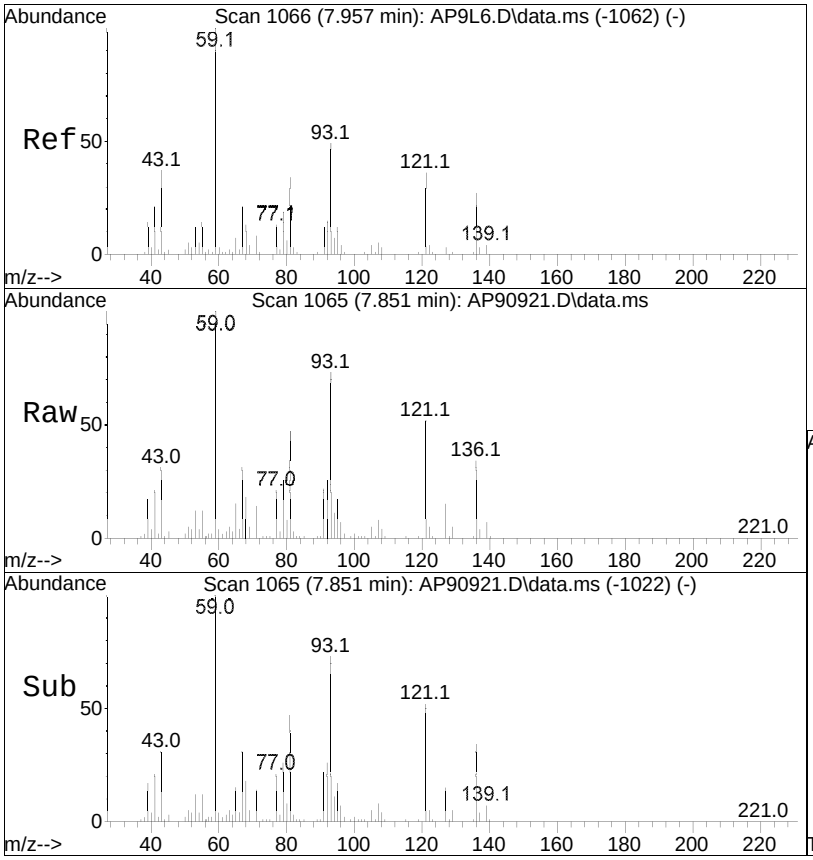



#31
2-Chloroaniline
Concen: 4.16 ug/ml
RT: 7.345 min Scan# 979
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:127 Resp: 56284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 127 | 100 | | |
| 129 | 32.5 | 25.9 | 38.9 |
| 65 | 27.5 | 26.3 | 39.5 |

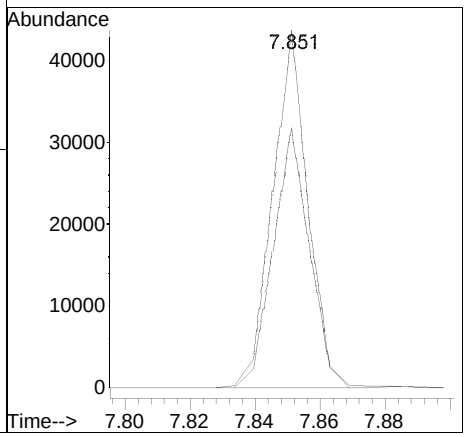


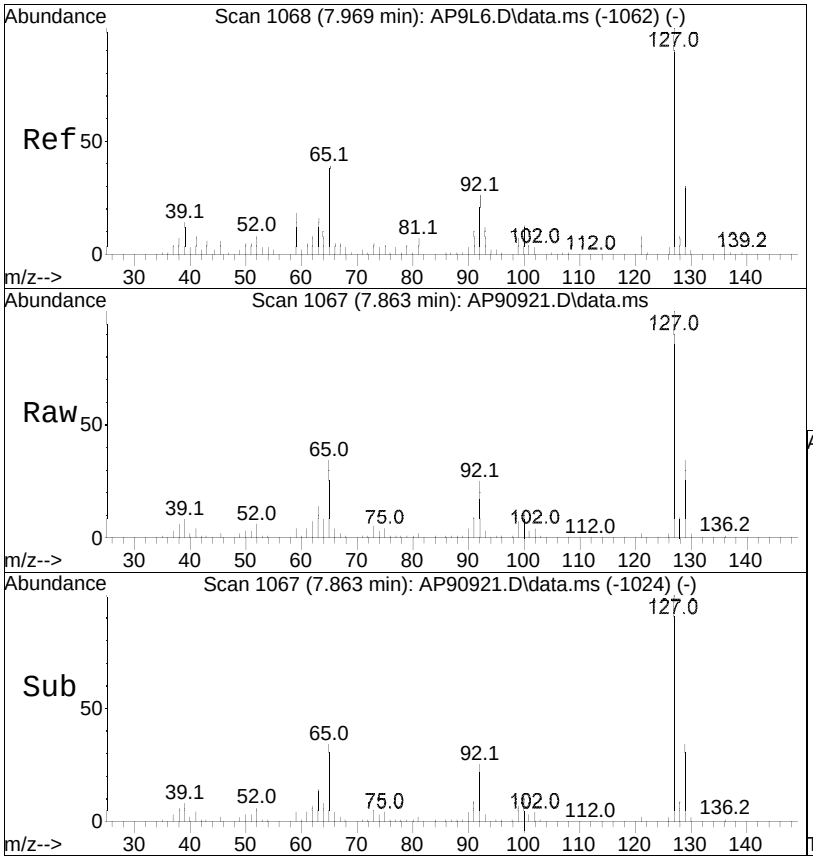



#56
a-Terpineol
Concen: 3.06 ug/ml
RT: 7.851 min Scan# 1065
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion: 59 Resp: 32405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 93 | 76.1 | 35.6 | 53.4# |

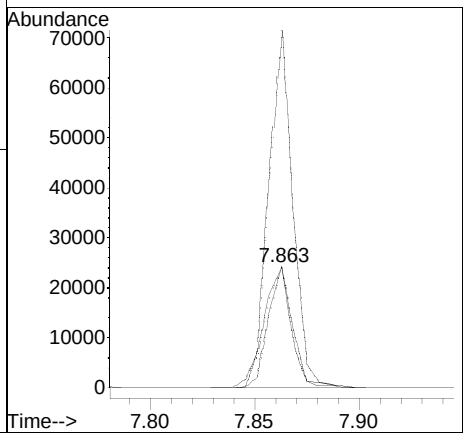


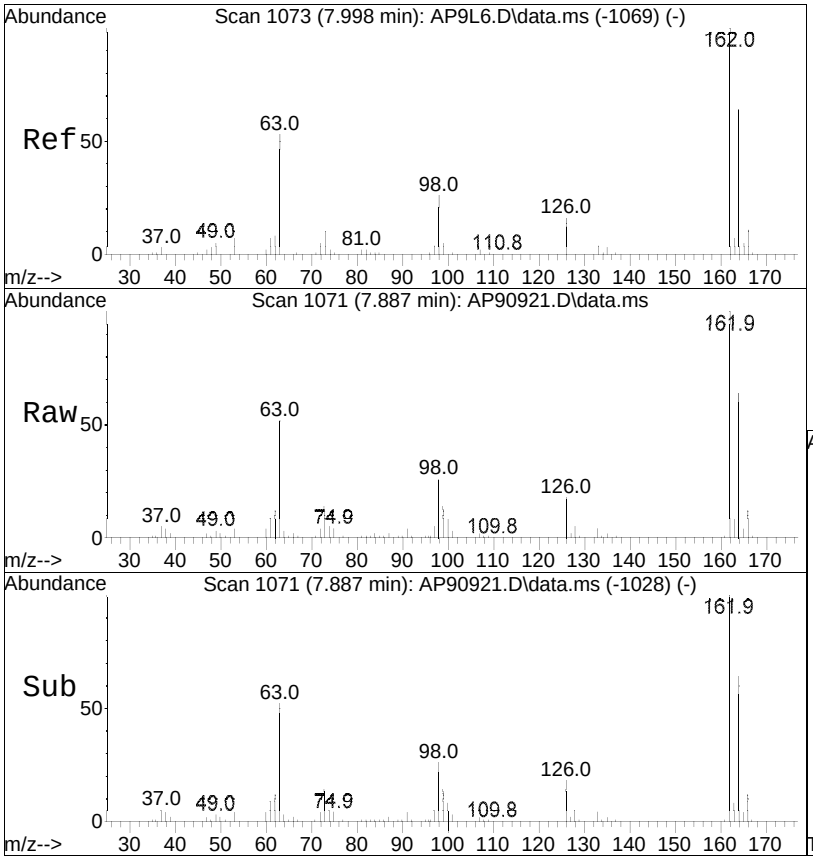



#57
3-Chloroaniline
Concen: 4.17 ug/ml
RT: 7.863 min Scan# 1067
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion: 65 Resp: 22181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 255.9 | 243.2 | 364.8 |
| 129 | 87.1 | 78.8 | 118.2 |

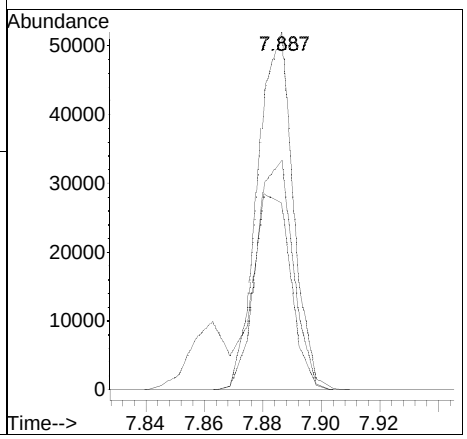


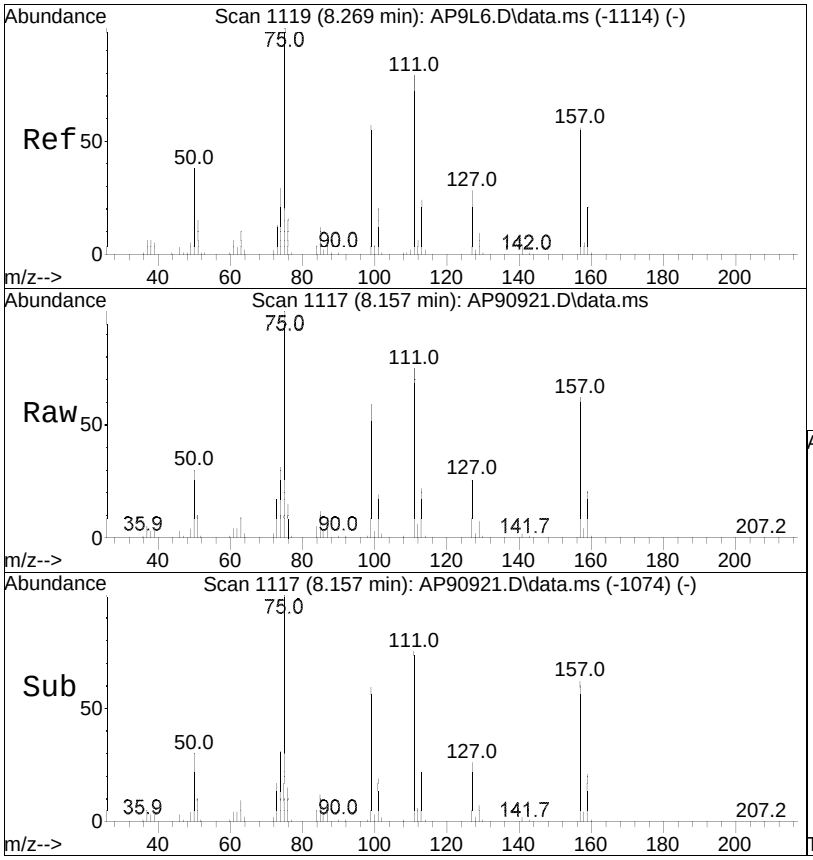



#58
2,6-Dichlorophenol
Concen: 4.57 ug/ml
RT: 7.887 min Scan# 1071
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:162 Resp: 43762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 66.4 | 51.1 | 76.7 |
| 63 | 78.2 | 60.8 | 91.2 |

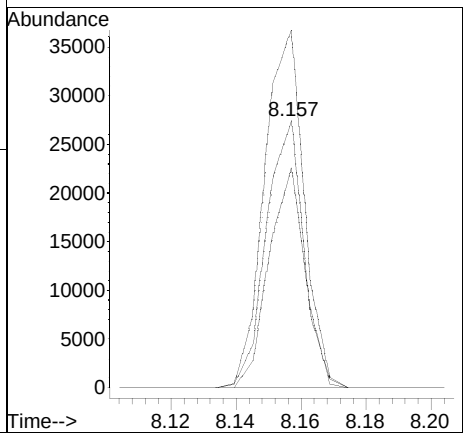


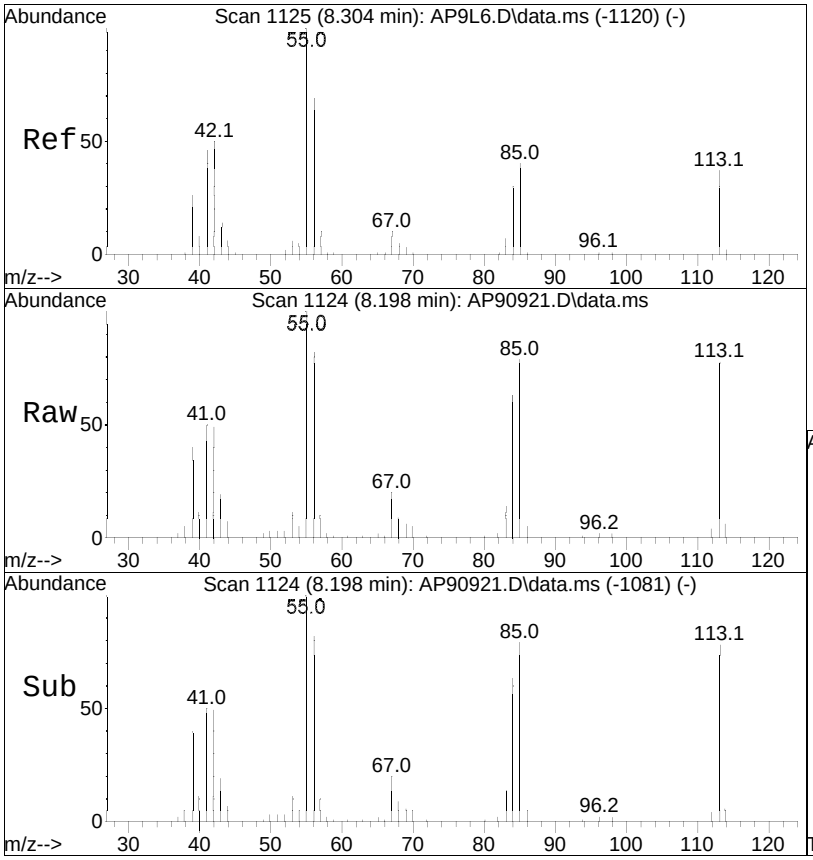



#59
1-chloro-2-nitrobenzene
Concen: 4.57 ug/ml
RT: 8.157 min Scan# 1117
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:111 Resp: 21830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 157 | 79.6 | 0.0 | 0.0# |
| 75 | 141.5 | 28.2 | 42.2# |

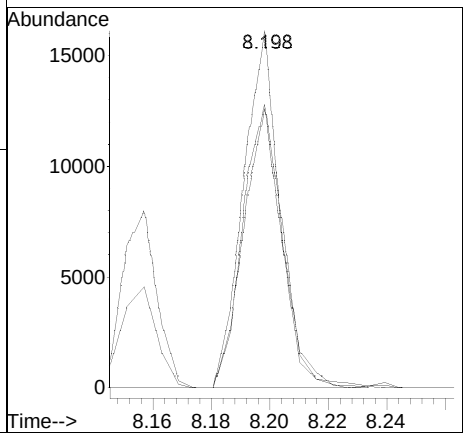


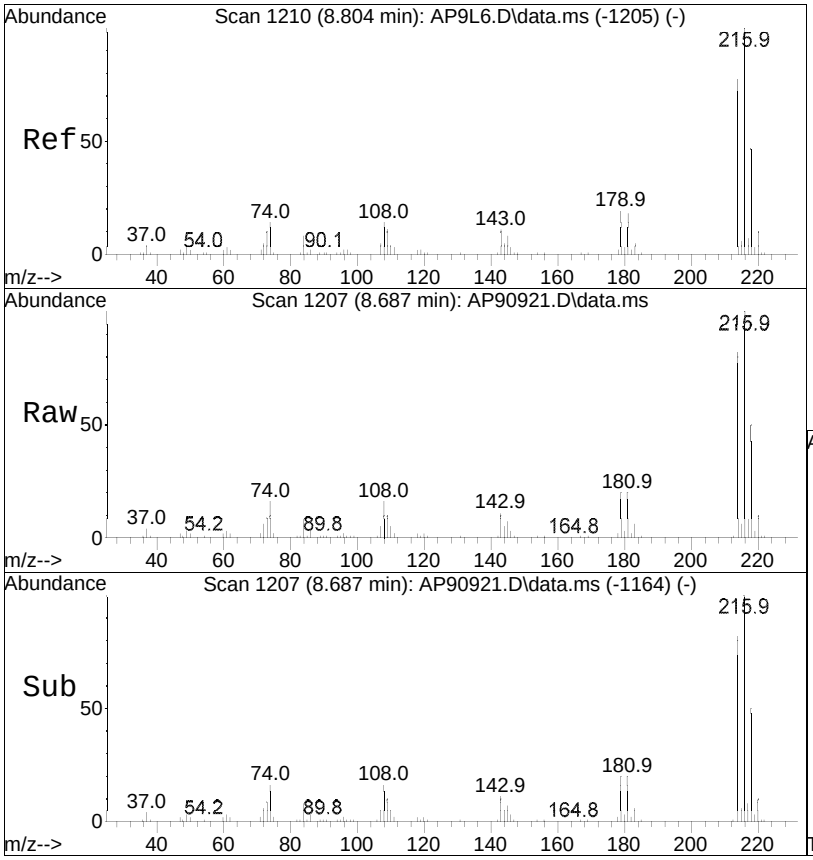



#60
Caprolactam
Concen: 2.54 ug/ml
RT: 8.198 min Scan# 1124
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion: 55 Resp: 14140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 85 | 87.3 | 19.8 | 29.6# |
| 113 | 80.7 | 29.6 | 44.4# |

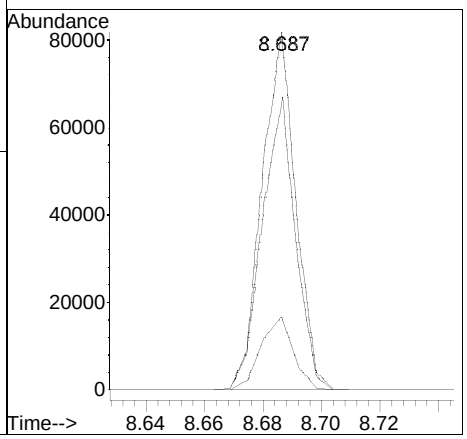


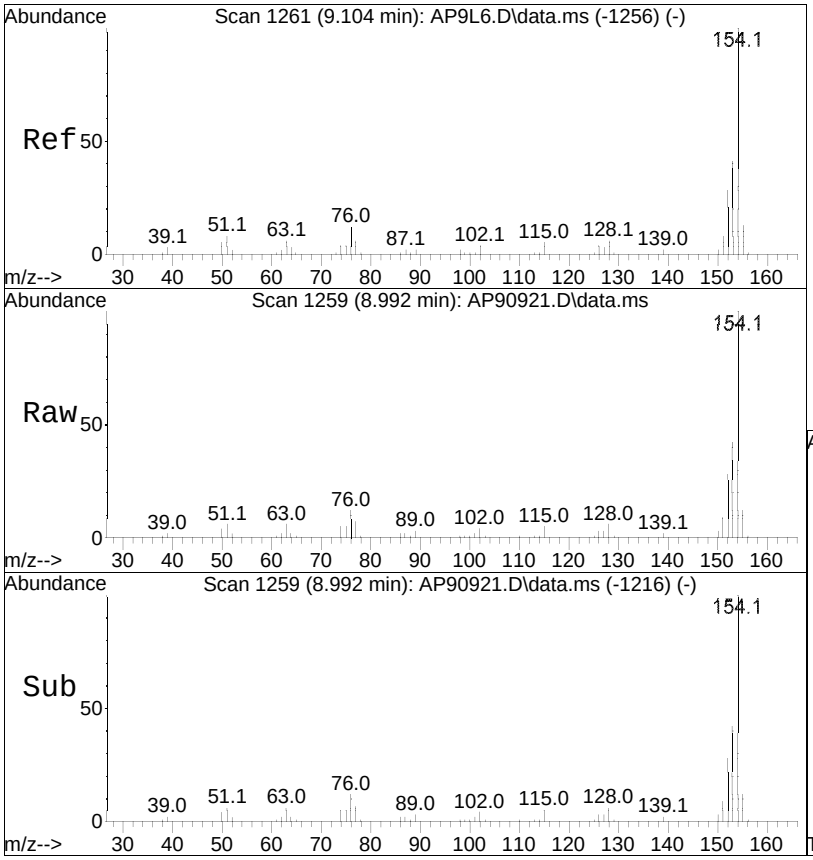



#61
1,2,4,5-Tetrachlorobenzene
Concen: 4.45 ug/ml
RT: 8.687 min Scan# 1207
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:216 Resp: 64600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 80.9 | 63.7 | 95.5 |
| 179 | 19.8 | 19.0 | 28.6 |

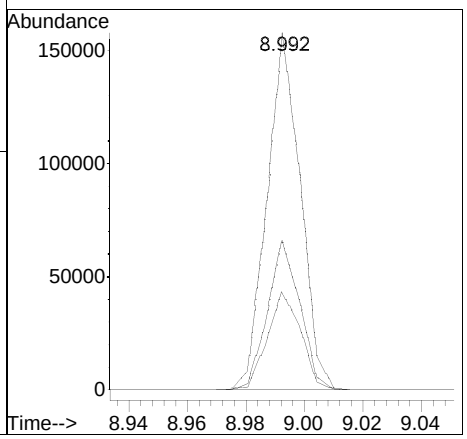


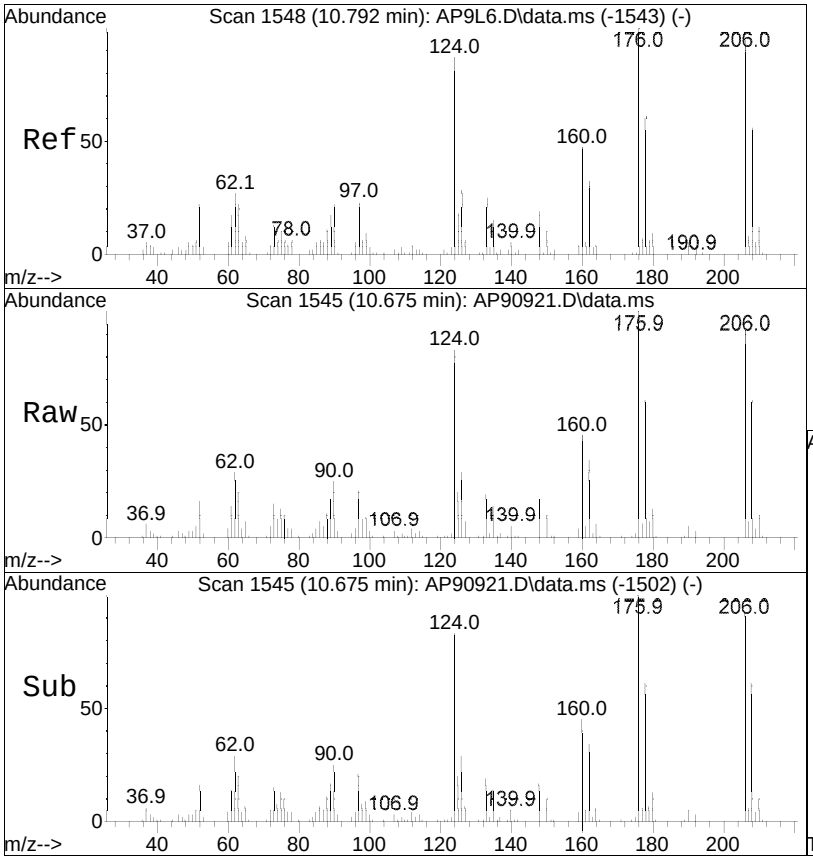



#62
Biphenyl
Concen: 4.31 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:154 Resp: 123676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 41.0 | 32.3 | 48.5 |
| 152 | 27.9 | 22.5 | 33.7 |

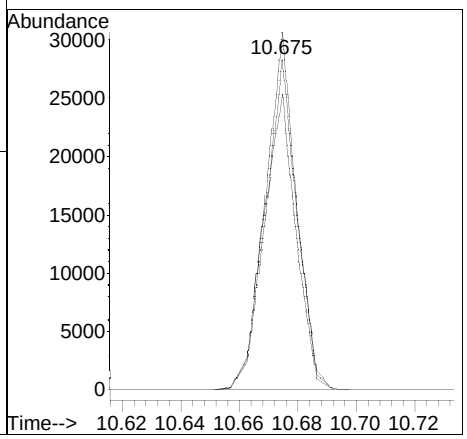


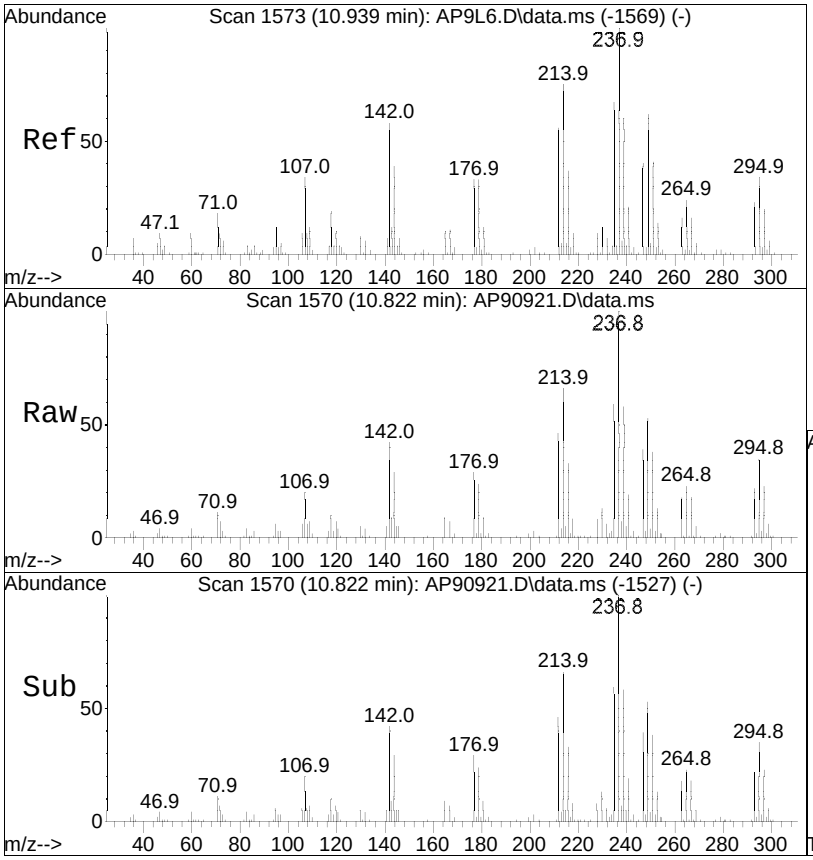



#84
Dichloran
Concen: 4.61 ug/ml
RT: 10.675 min Scan# 1545
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:206 Resp: 20896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 206 | 100 | | |
| 176 | 108.2 | 104.6 | 157.0 |
| 124 | 93.7 | 130.5 | 195.7# |

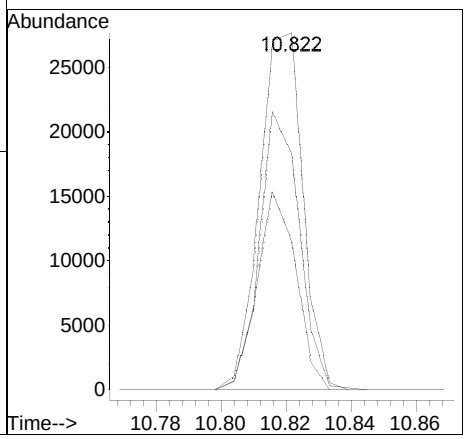


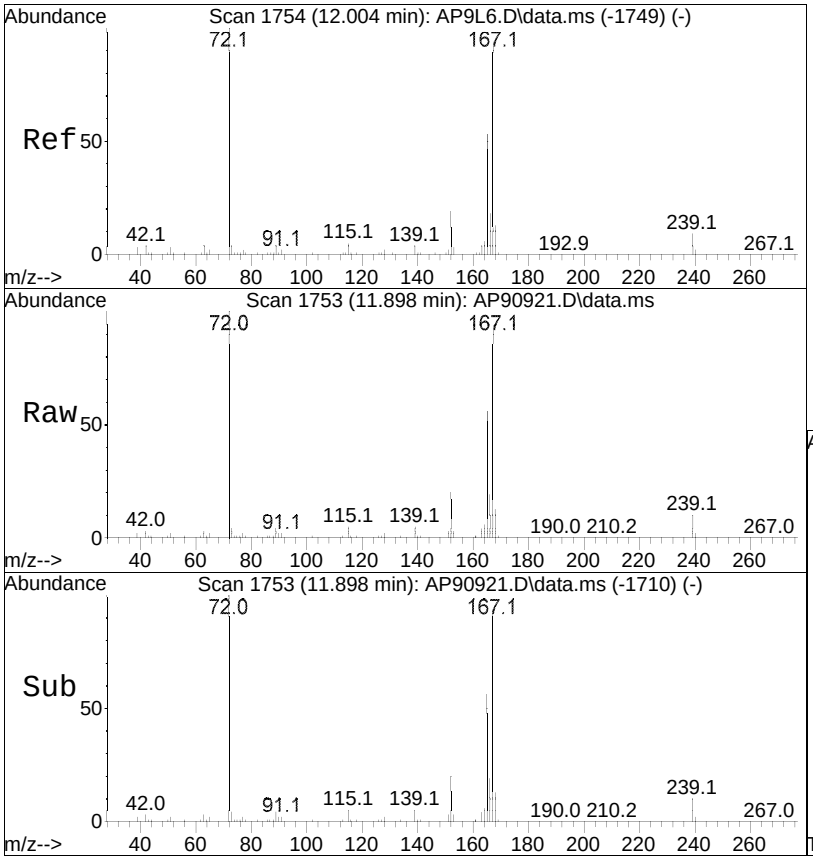



#85
Pentachloronitrobenzene
Concen: 5.15 ug/ml
RT: 10.822 min Scan# 1570
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:237 Resp: 25520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 142 | 50.2 | 77.0 | 115.4# |
| 214 | 71.5 | 58.2 | 87.4 |

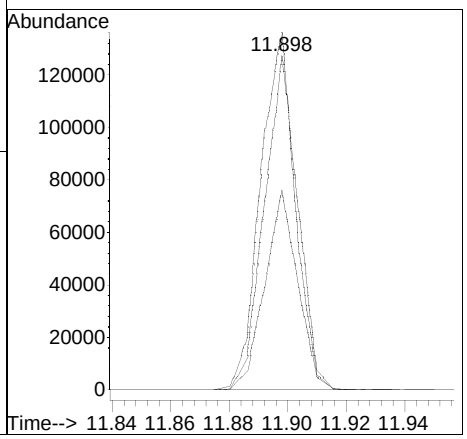





#99
Diphenamid
Concen: 4.61 ug/ml
RT: 11.898 min Scan# 1753
Delta R.T. 0.000 min
Lab File: AP90921.D
Acq: 21 Sep 2024 10:33 am

Tgt Ion:167 Resp: 100374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 72 | 110.1 | 109.7 | 164.5 |
| 165 | 58.9 | 41.8 | 62.6 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : AP90921.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 10:33 am | Instrument | : SV 106 |
| Sample | : WG1974589-4,32,,AP9 10909 | Quant Date | : 9/21/2024 11:24 am |

There are no manual integrations or false positives in this file.

# Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\240921RVT\
Data File : ADP0921.D
Acq On : 21 Sep 2024 10:56 am
Operator : SV106:als
Sample : WG1974589-5,32,,ADP 10751 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 21 11:23:49 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:42 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 32 | I | IS3_1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 33 | t | 1,4-Dioxane | 0.584 | 0.523 | 10.4 | 91 | 0.00 |
| 34 | T | n-Decane | 1.662 | 0.975 | 41.3# | 54 | 0.00 |
| 86 | I | IS3_Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 85 | 0.00 |
| 87 | T | Atrazine | 0.509 | 0.502 | 1.4 | 92 | 0.00 |
| 100 | I | IS3_Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 79 | 0.00 |
| 101 | T | n-Octadecane | 0.498 | 0.309 | 38.0# | 53 | 0.00 |
| 102 | T | Parathion | 0.124 | 0.137 | -10.5 | 96 | 0.00 |
| 103 | T | 3,3'-Dimethylbenzidine | 0.791 | 0.961 | -21.5# | 94 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ADP0921.D
Acq On : 21 Sep 2024 10:56 am
Operator : SV106:als
Sample : WG1974589-5,32,,ADP 10751 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 21 11:23:49 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:42 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.340 | 152 | 28138 | 4.000 | ug/ml | 0.00 |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 64764 | 4.000 | ug/ml | 0.00 |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 141997 | 4.000 | ug/ml | 0.00 |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 33) 1,4-Dioxane | 1.728 | 88 | 18392 | 4.473 | ug/ml# | 89 |
| 34) n-Decane | 6.234 | 57 | 34301 | 2.934 | ug/ml# | 51 |
| 87) Atrazine | 10.763 | 200 | 40610 | 4.931 | ug/ml | 96 |
| 101) n-Octadecane | 10.975 | 57 | 54824 | 3.104 | ug/ml# | 1 |
| 102) Parathion | 11.780 | 109 | 24382 | 5.532 | ug/ml | 97 |
| 103) 3,3'-Dimethylbenzidine | 13.057 | 212 | 170592 | 6.078 | ug/ml | 98 |

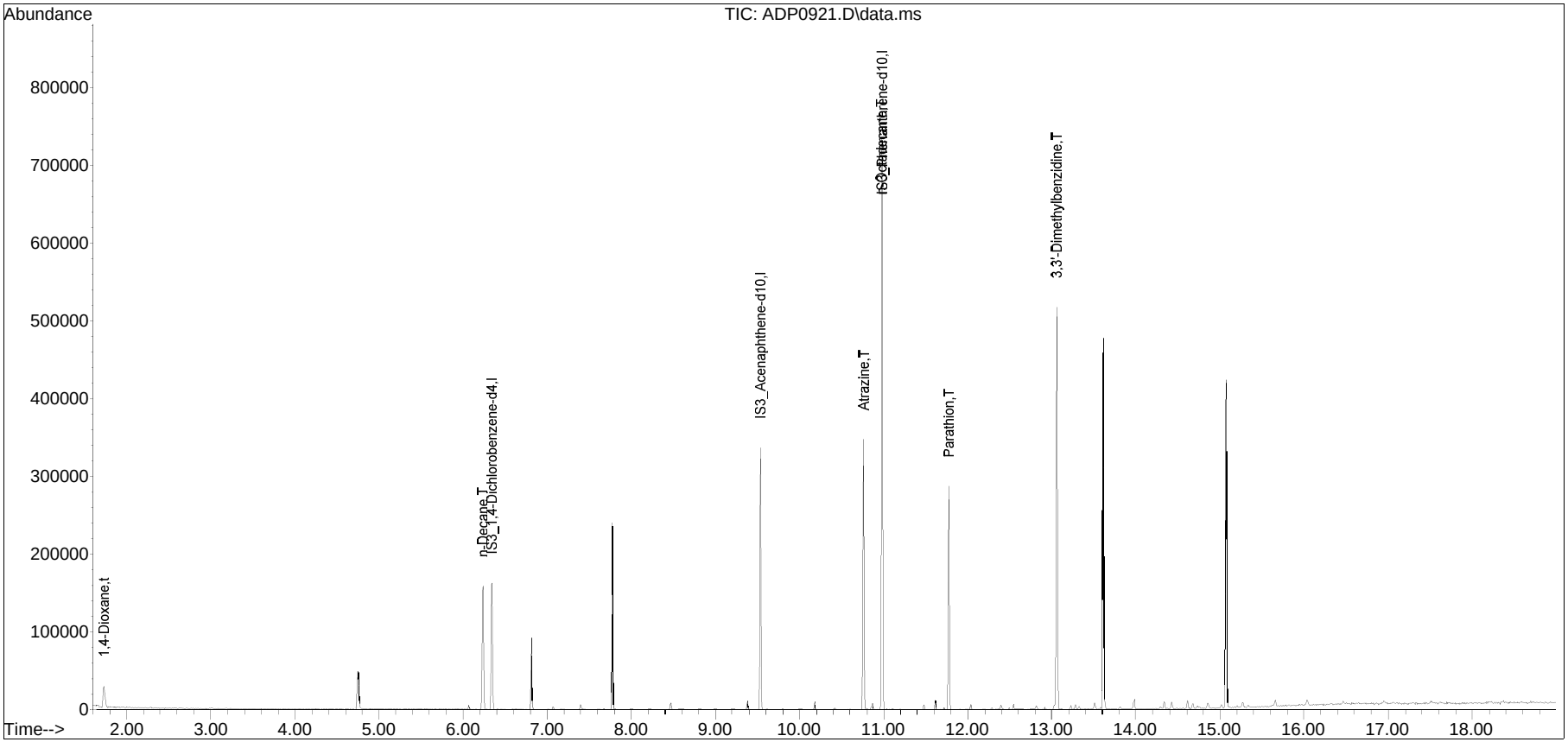
(#) = qualifier out of range (m) = manual integration (+) = signals summed

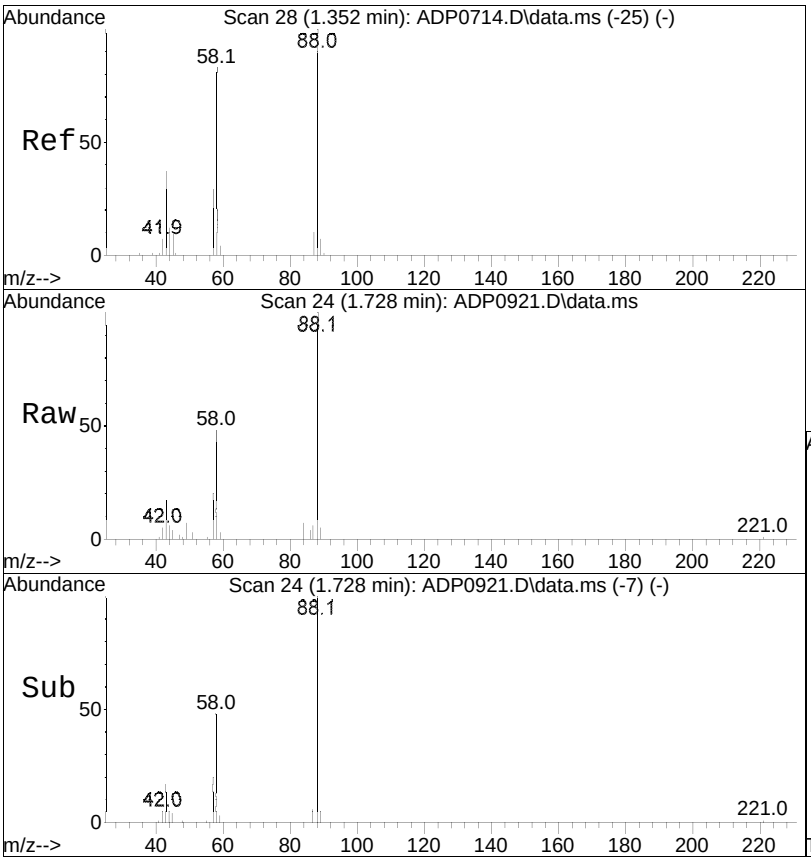
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : ADP0921.D
Acq On : 21 Sep 2024 10:56 am
Operator : SV106:als
Sample : WG1974589-5,32,,ADP 10751 gmr0914A
Misc : WG1974589,,ical21231
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 21 11:23:49 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:42 2024
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

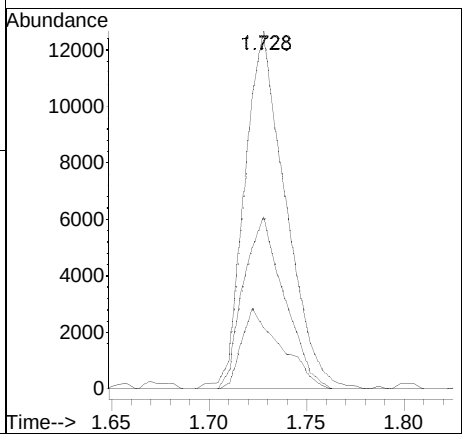


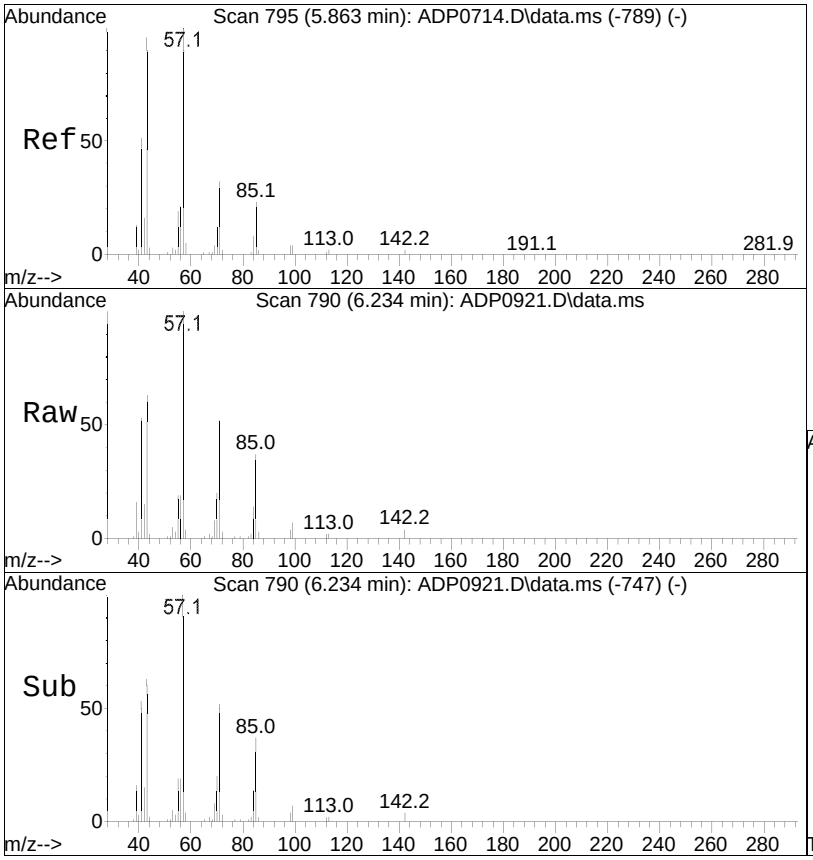



#33
1,4-Dioxane
Concen: 4.47 ug/ml
RT: 1.728 min Scan# 24
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion: 88 Resp: 18392

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 58 | 48.1 | 44.8 | 67.2 |
| 43 | 21.9 | 22.4 | 33.6# |

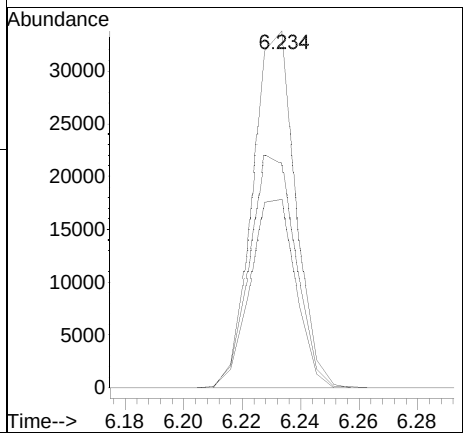


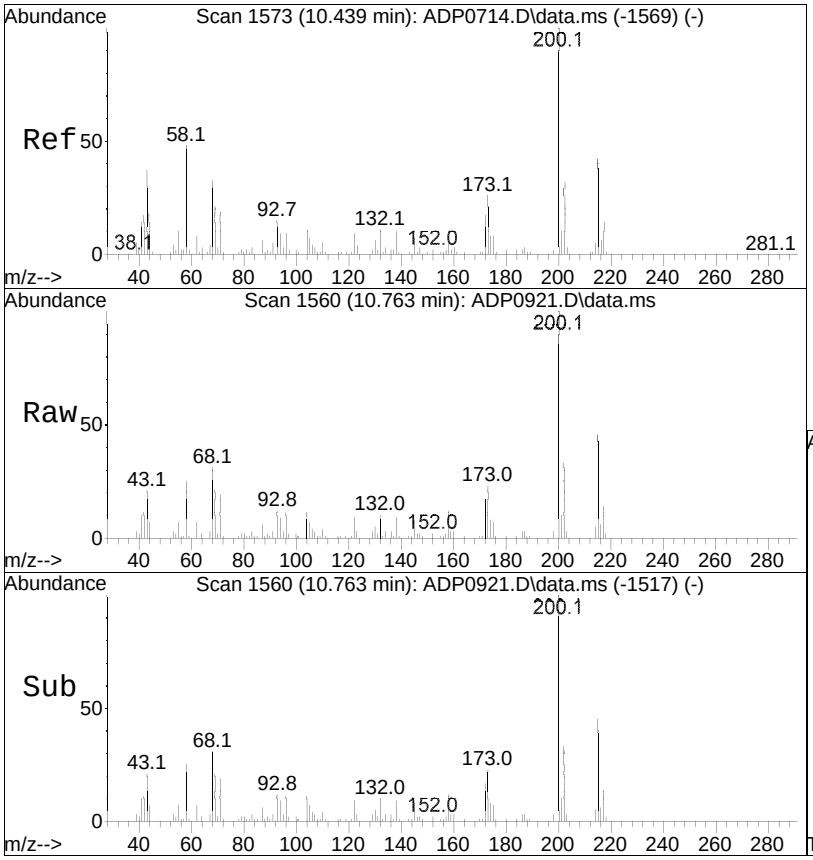



#34
n-Decane
Concen: 2.93 ug/ml
RT: 6.234 min Scan# 790
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion: 57 Resp: 34301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 70.0 | 0.2 | 0.2# |
| 41 | 56.3 | 0.2 | 0.2# |

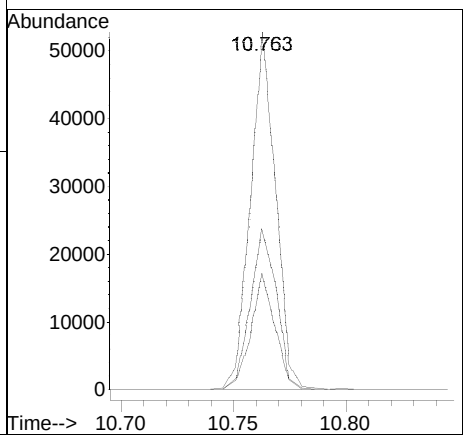


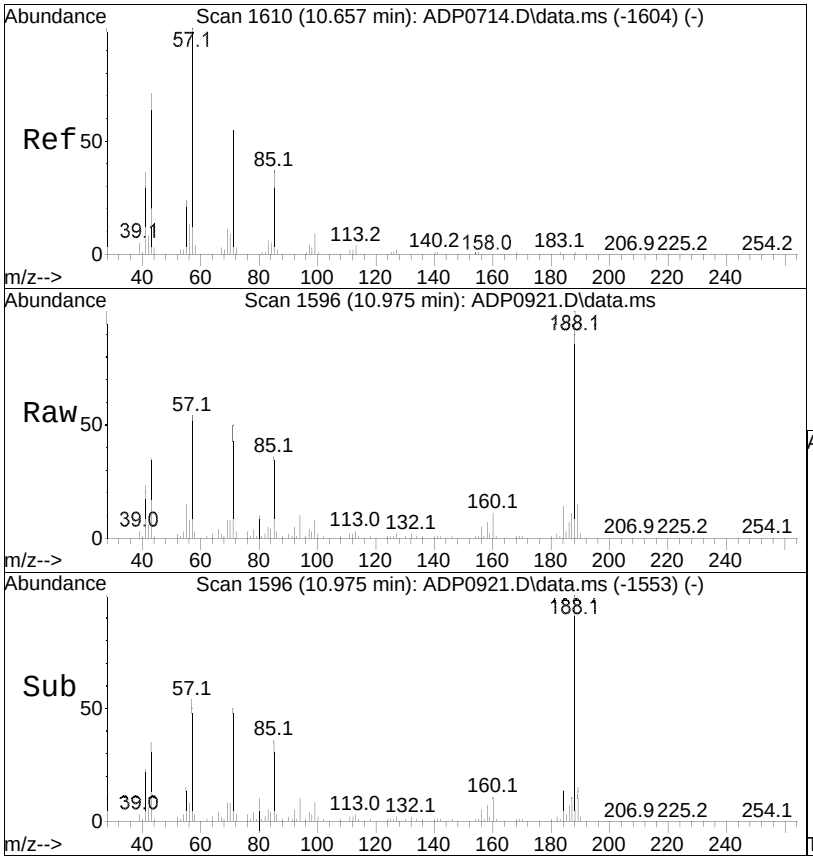



#87
Atrazine
Concen: 4.93 ug/ml
RT: 10.763 min Scan# 1560
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion:200 Resp: 40610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 202 | 31.3 | 25.8 | 38.6 |
| 215 | 46.6 | 40.2 | 60.4 |

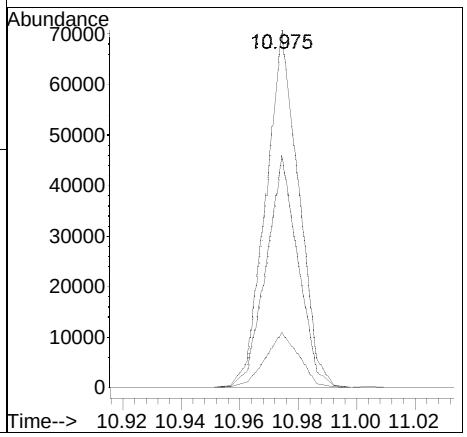


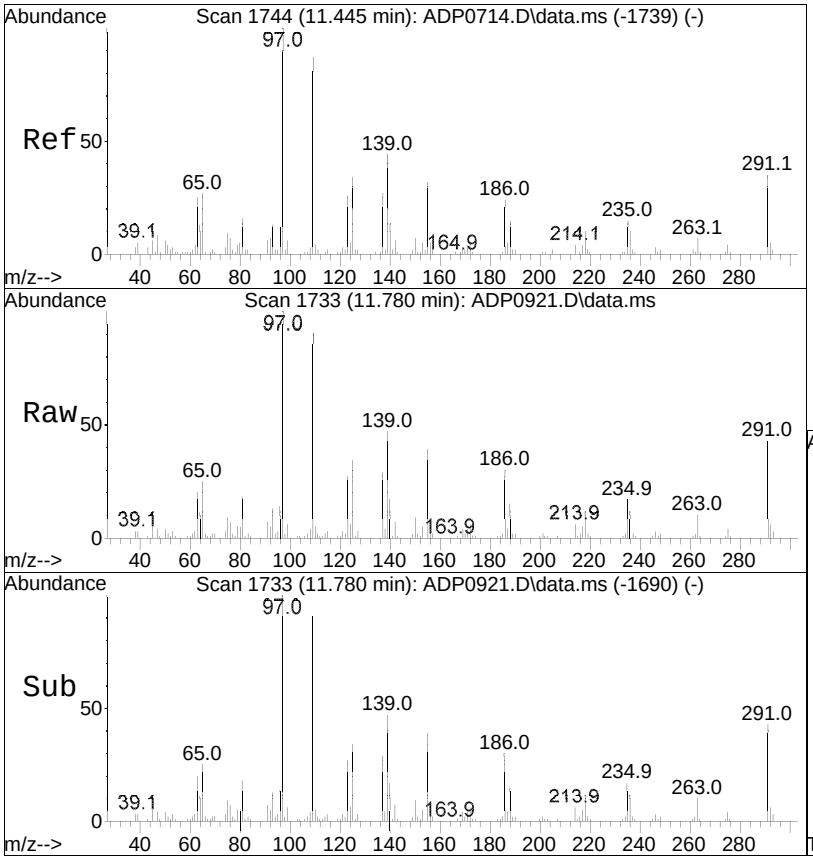



#101
n-Octadecane
Concen: 3.10 ug/ml
RT: 10.975 min Scan# 1596
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion: 57 Resp: 54824

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 63.4 | 9.0 | 13.6# |
| 70 | 16.0 | 0.2 | 0.2# |

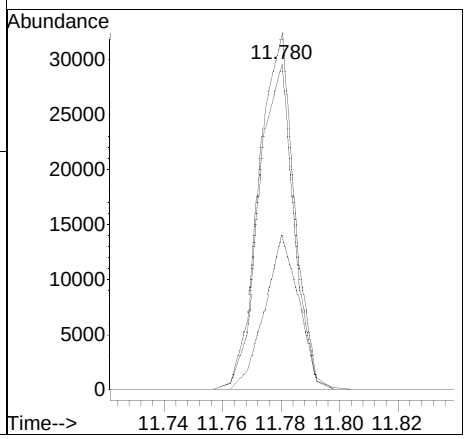


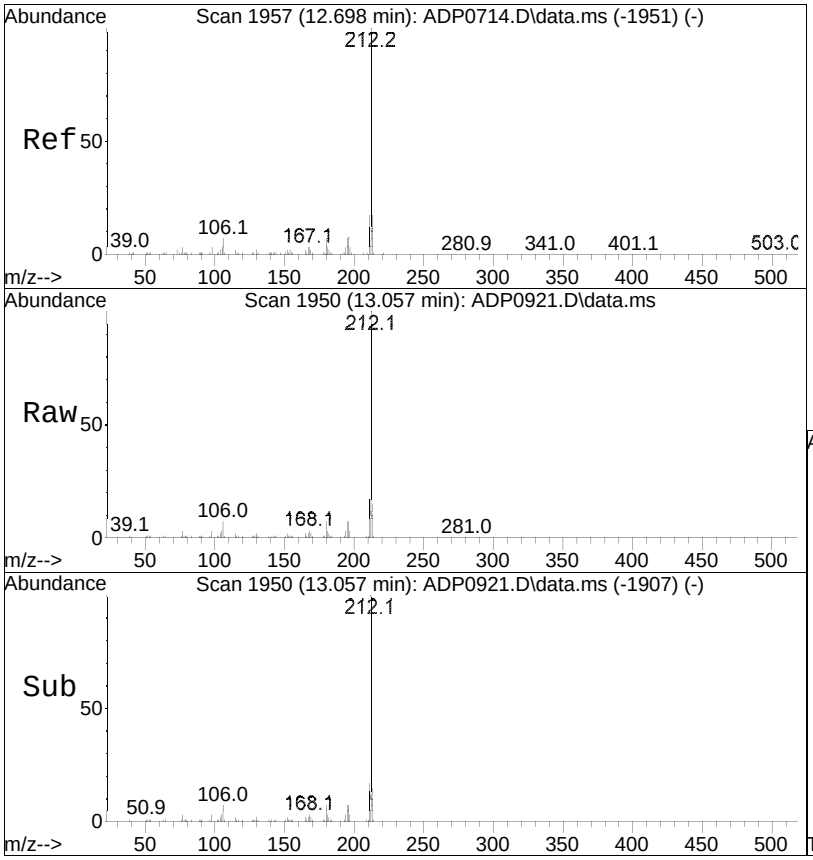



#102
Parathion
Concen: 5.53 ug/ml
RT: 11.780 min Scan# 1733
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion:109 Resp: 24382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 109 | 100 | | |
| 97 | 111.1 | 87.4 | 131.2 |
| 291 | 46.3 | 34.2 | 51.2 |

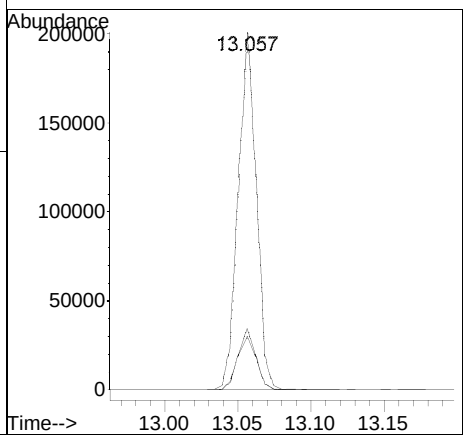





#103
3,3'-Dimethylbenzidine
Concen: 6.08 ug/ml
RT: 13.057 min Scan# 1950
Delta R.T. 0.000 min
Lab File: ADP0921.D
Acq: 21 Sep 2024 10:56 am

Tgt Ion:212 Resp: 170592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 212 | 100 | | |
| 211 | 17.0 | 12.9 | 19.3 |
| 213 | 16.1 | 13.2 | 19.8 |



# Manual Integration Report

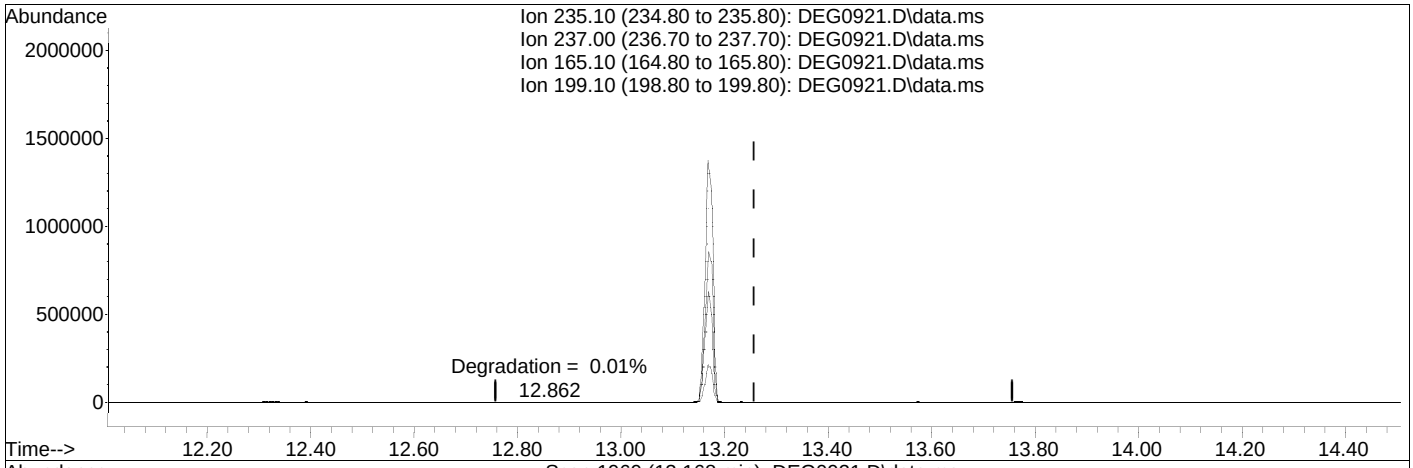
| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : ADP0921.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 10:56 am | Instrument | : SV 106 |
| Sample | : WG1974589-5,32,,ADP 10751 | Quant Date | : 9/21/2024 11:24 am |

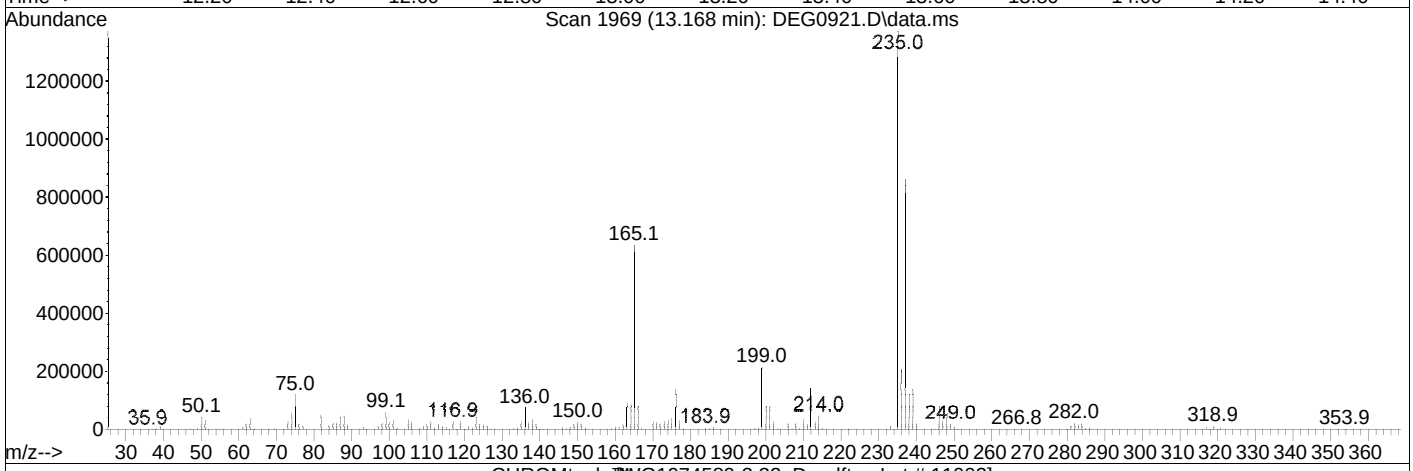
There are no manual integrations or false positives in this file.

# Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240921RVT\
Data File : DEG0921.D
Acq On : 21 Sep 2024 9:45 am
Operator : SV106:gmr
Sample : WG1974589-2,32,,Degdftpp Lot # 11002
Misc : WG1974589,,ical21231
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 21 10:10:07 2024
Quant Method : I:\8270\SV106\240921RVT\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Sep 16 21:13:37 2024
Response via : Initial Calibration




CHROMtools [WG1974589-2,32,,Degdftpp Lot # 11002]

(6) DDT (T)

13.168min (-0.089) 217.23

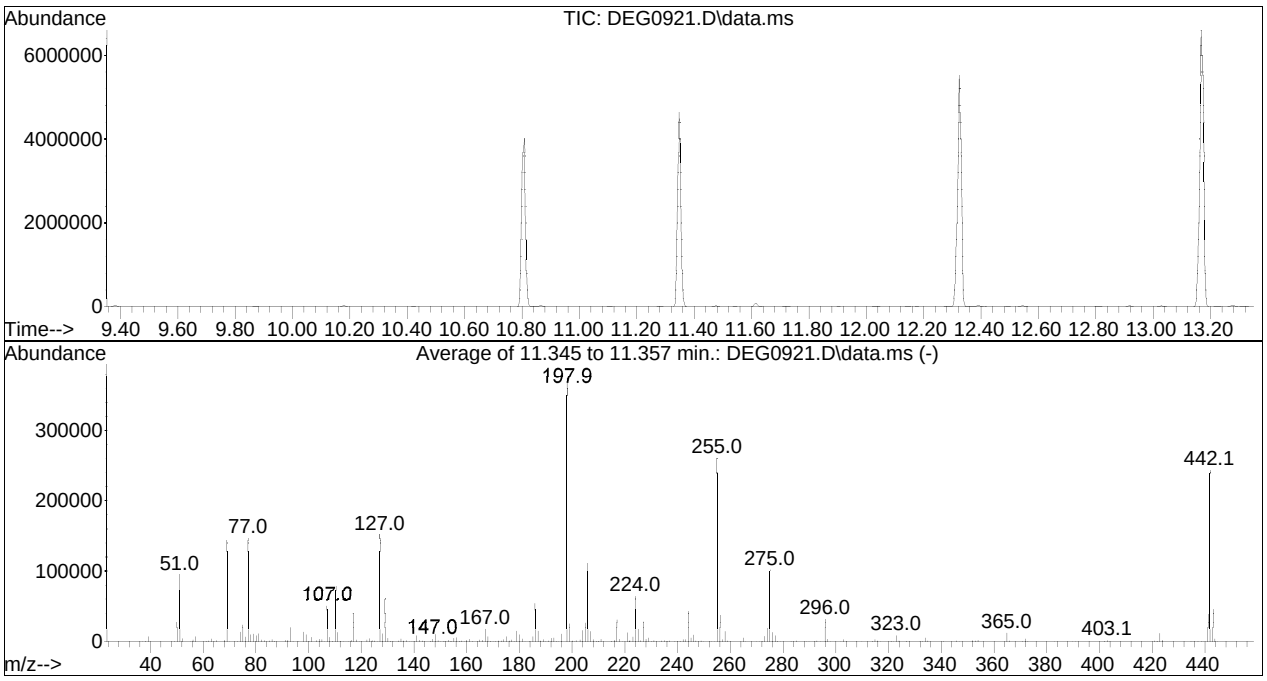
response 1324168

| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 63.30 | 63.68 |
| 165.10 | 44.50 | 44.22 |
| 199.10 | 14.80 | 15.52 |

Data Path : I:\8270\SV106\240921RVT\
Data File : DEG0921.D
Acq On : 21 Sep 2024 9:45 am
Operator : SV106:gmr
Sample : WG1974589-1,32,,Degdftpp Lot # 11002
Misc : WG1974589,,ical21231
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Sat Sep 21 11:24:40 2024



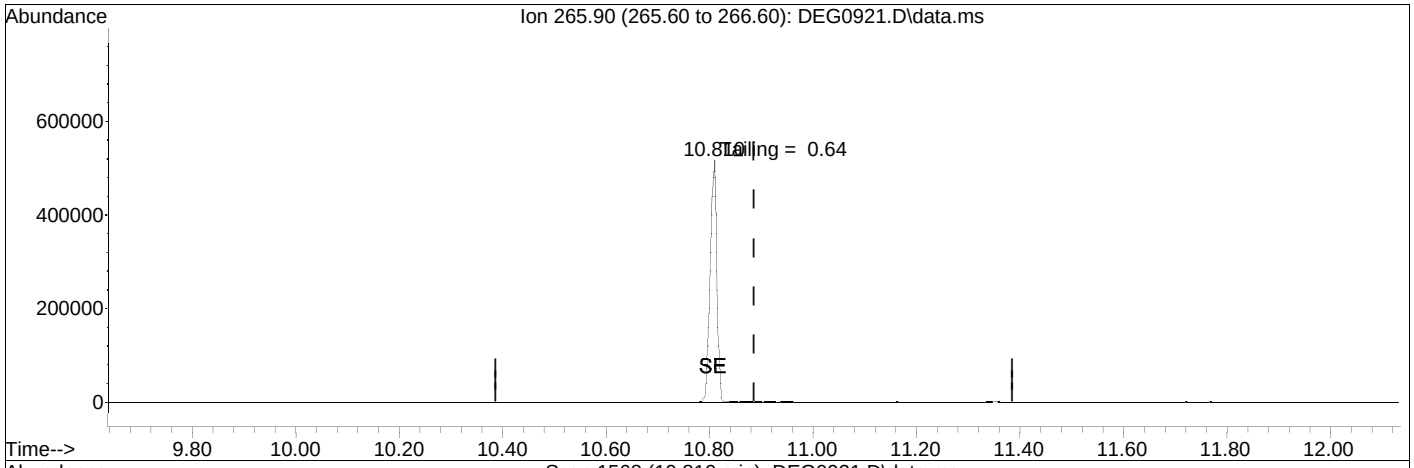

Spectrum Information: Average of 11.345 to 11.357 min.

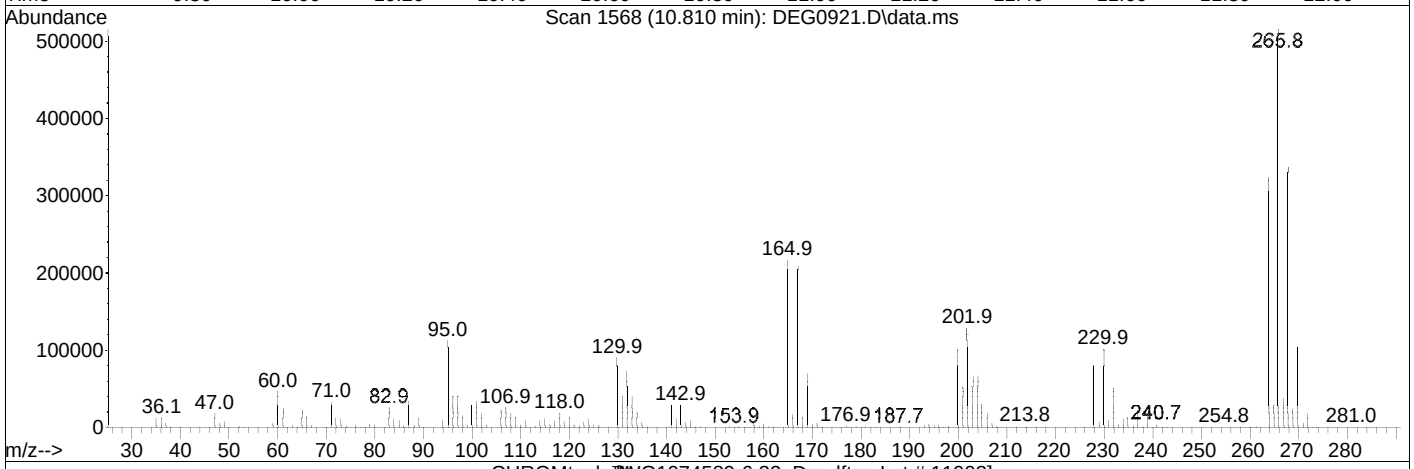
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 25.3 | 94933 | PASS |
| 68 | 69 | 0.00 | 2 | 1.7 | 2479 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 143843 | PASS |
| 70 | 69 | 0.00 | 2 | 0.3 | 472 | PASS |
| 127 | 198 | 10 | 80 | 40.2 | 151032 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 375317 | PASS |
| 199 | 198 | 5 | 9 | 6.6 | 24847 | PASS |
| 275 | 198 | 10 | 60 | 27.2 | 102128 | PASS |
| 365 | 198 | 1 | 100 | 3.3 | 12221 | PASS |
| 441 | 442 | 0.01 | 24 | 15.7 | 38341 | PASS |
| 442 | 198 | 50 | 100 | 65.0 | 243797 | PASS |
| 443 | 442 | 15 | 24 | 19.0 | 46331 | PASS |

# Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240921RVT\
Data File : DEG0921.D
Acq On : 21 Sep 2024 9:45 am
Operator : SV106:gmr
Sample : WG1974589-6,32,,Degdftpp Lot # 11002
Misc : WG1974589,,ical21231
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 21 10:10:07 2024
Quant Method : I:\8270\SV106\240921RVT\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Sep 16 21:13:37 2024
Response via : Initial Calibration




CHROMtools [WG1974589-6,32,,Degdftpp Lot # 11002]

(1) Pentachlorophenol (T)

10.810min (-0.076) 210.15

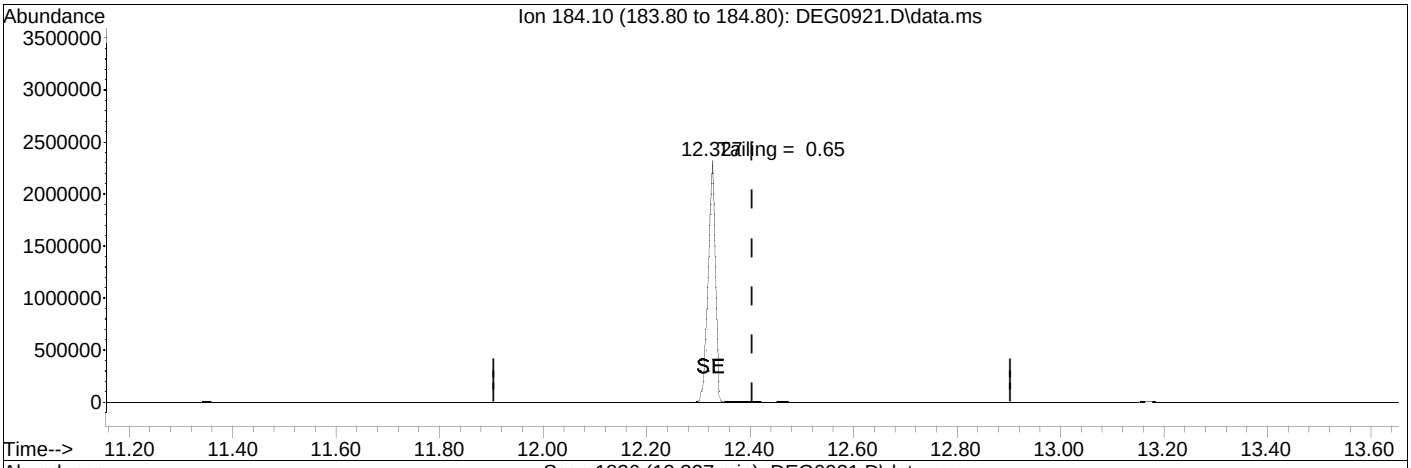
response 441381

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report (Qedit)

Data Path : I:\8270\SV106\240921RVT\
Data File : DEG0921.D
Acq On : 21 Sep 2024 9:45 am
Operator : SV106:gmr
Sample : WG1974589-7,32,,Degdftpp Lot # 11002
Misc : WG1974589,,ical21231
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 21 10:10:07 2024
Quant Method : I:\8270\SV106\240921RVT\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Sep 16 21:13:37 2024
Response via : Initial Calibration




CHROMtools [WG1974589-7,32,,Degdftpp Lot # 11002]

(3) Benzidine (T)

12.327min (-0.077) 208.19

response 2119404

| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-1.D
Acq On : 21 Sep 2024 11:33 am
Operator : SV106:als
Sample : WG1974465-1,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 09:05:06 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.333 | 152 | 27426 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 82.26% | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.333 | 152 | 27426 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 86.55% | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.333 | 152 | 27426 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 28138 | | | Recovery = 97.47% | | | |
| 35) IS1_Naphthalene-d8 | 7.769 | 136 | 96535 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 85.62% | | | |
| 55) IS2_Naphthalene-d8 | 7.769 | 136 | 96535 | 4.000 | ug/ml | # 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 91.14% | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 67135 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 84.66% | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 67135 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 91.52% | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 67135 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 103.66% | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 141229 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 84.71% | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 141229 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 99.46% | | | |
| 104) IS1_Chrysene-d12 | 13.615 | 240 | 160447 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 88.71% | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 169704 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 94.82% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.304 | 112 | 8575 | 1.082 | ug/ml | -0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 54.10% | | | |
| 7) Phenol-d6 | 5.951 | 99 | 7414 | 0.683 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 34.15% | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8200 | 0.739 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 73.90% | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 18839 | 0.760 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 76.00% | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 6392 | 1.528 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 76.40% | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-1.D
Acq On : 21 Sep 2024 11:33 am
Operator : SV106:als
Sample : WG1974465-1,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 09:05:06 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 96) 4-Terphenyl-d14 | 12.574 | 244 | 31801 | 0.837 | ug/ml | 0.00 |

Spiked Amount 1.000 Range 30 - 130 Recovery = 83.70%

| Target Compounds | | | | Qvalue |
|---|---|---|---|---|
| 6) 2-Chlorophenol | 0.000 | 0 | N.D. | |
| 8) Phenol | 0.000 | 0 | N.D. | |
| 14) Bis(2-chloroisopropyl)... | 0.000 | 0 | N.D. | |
| 15) 2-Methylphenol | 0.000 | 0 | N.D. | |
| 17) n-Nitrosodi-n-propylamine | 0.000 | 0 | N.D. | d |
| 18) 3-Methylphenol/4-Methy... | 0.000 | 0 | N.D. | |
| 20) Nitrobenzene | 0.000 | 0 | N.D. | |
| 21) Isophorone | 0.000 | 0 | N.D. | |
| 22) 2-Nitrophenol | 0.000 | 0 | N.D. | |
| 23) 2,4-Dimethylphenol | 0.000 | 0 | N.D. | |
| 24) Bis(2-chloroethoxy)met... | 0.000 | 0 | N.D. | |
| 25) 2,4-Dichlorophenol | 0.000 | 0 | N.D. | |
| 28) Benzaldehyde | 0.000 | 0 | N.D. | |
| 29) Acetophenone | 0.000 | 0 | N.D. | |
| 38) 4-Chloroaniline | 0.000 | 0 | N.D. | |
| 40) p-Chloro-m-cresol | 0.000 | 0 | N.D. | |
| 43) Hexachlorocyclopentadiene | 0.000 | 0 | N.D. | |
| 44) 2,4,6-Trichlorophenol | 0.000 | 0 | N.D. | |
| 45) 2,4,5-Trichlorophenol | 0.000 | 0 | N.D. | |
| 48) 2-Nitroaniline | 0.000 | 0 | N.D. | |
| 51) Dimethyl phthalate | 0.000 | 0 | N.D. | d |
| 53) 2,6-Dinitrotoluene | 0.000 | 0 | N.D. | d |
| 60) Caprolactam | 0.000 | 0 | N.D. | |
| 61) 1,2,4,5-Tetrachloroben... | 0.000 | 0 | N.D. | |
| 62) Biphenyl | 0.000 | 0 | N.D. | |
| 64) 3-Nitroaniline | 0.000 | 0 | N.D. | |
| 66) 2,4-Dinitrophenol | 0.000 | 0 | N.D. | |
| 67) Dibenzofuran | 0.000 | 0 | N.D. | |
| 68) 2,4-Dinitrotoluene | 0.000 | 0 | N.D. | d |
| 69) 4-Nitrophenol | 0.000 | 0 | N.D. | |
| 72) Diethyl phthalate | 0.000 | 0 | N.D. | |
| 74) 4-Chlorophenyl phenyl ... | 0.000 | 0 | N.D. | |
| 75) 4-Nitroaniline | 0.000 | 0 | N.D. | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-1.D
Acq On : 21 Sep 2024 11:33 am
Operator : SV106:als
Sample : WG1974465-1,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 09:05:06 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 76) 4,6-Dinitro-o-cresol | 0.000 | | 0 | | N.D. | |
| 77) NDPA/DPA | 0.000 | | 0 | | N.D. | |
| 80) 4-Bromophenyl phenyl e... | 0.000 | | 0 | | N.D. | |
| 87) Atrazine | 0.000 | | 0 | | N.D. | |
| 91) Carbazole | 0.000 | | 0 | | N.D. | |
| 92) Di-n-butylphthalate | 0.000 | | 0 | | N.D. | |
| 97) Butyl benzyl phthalate | 0.000 | | 0 | | N.D. | |
| 106) 3,3'-Dichlorobenzidine | 0.000 | | 0 | | N.D. | |
| 108) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | | N.D. | |
| 109) Di-n-octylphthalate | 0.000 | | 0 | | N.D. | d |

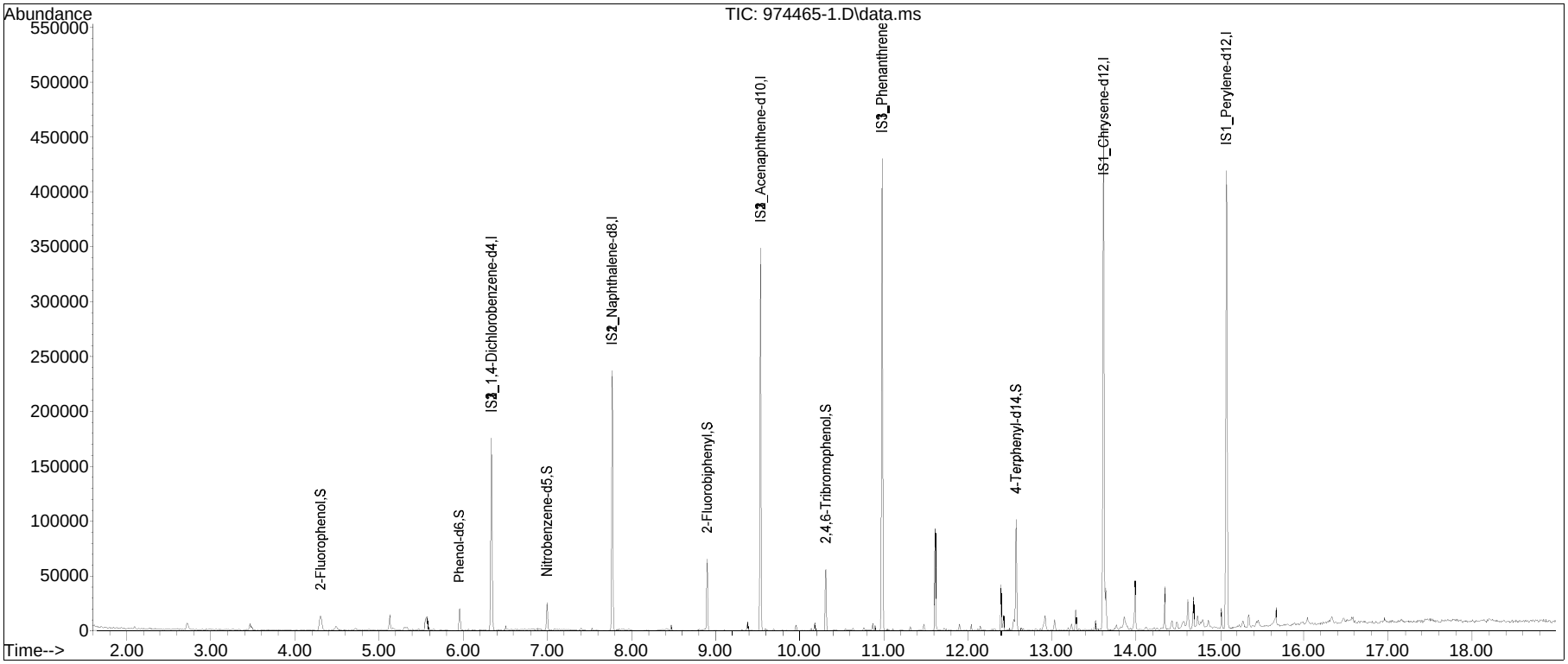
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-1.D
Acq On : 21 Sep 2024 11:33 am
Operator : SV106:als
Sample : WG1974465-1,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 22 09:05:06 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MARVT\AP90921.D•




FS240624SV106.m Mon Sep 23 11:15:43 2024 Page: 5

Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 974465-1.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 11:33 am | Instrument | : SV 106 |
| Sample | : WG1974465-1,32,,gmr | Quant Date | : 9/21/2024 11:52 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-2.D
Acq On : 21 Sep 2024 11:56 am
Operator : SV106:als
Sample : WG1974465-2,32,,gmr,sc(ok)
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 09:11:04 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.333 | 152 | 28214 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 84.62% | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.333 | 152 | 28214 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 89.03% | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.333 | 152 | 28214 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 28138 | | | Recovery = 100.27% | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 101613 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 90.12% | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 101613 | 4.000 | ug/ml | # 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 95.94% | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 69736 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 87.94% | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 69736 | 4.000 | ug/ml | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 95.07% | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 69736 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 107.68% | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 150433 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 90.23% | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 150433 | 4.000 | ug/ml | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 105.94% | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 170395 | 4.000 | ug/ml | # 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 94.21% | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 169568 | 4.000 | ug/ml | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 94.74% | | | |
| System Monitoring Compounds | | | | | | |
| 4) 2-Fluorophenol | 4.328 | 112 | 2547M3 | 0.312 | ug/ml | 0.01 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 15.60% | | | |
| 7) Phenol-d6 | 5.957 | 99 | 4340 | 0.389 | ug/ml | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 19.45% | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8466 | 0.742 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 74.20% | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 18642 | 0.714 | ug/ml | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 71.40% | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 2265 | 0.521 | ug/ml | 0.00 |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-2.D
Acq On : 21 Sep 2024 11:56 am
Operator : SV106:als
Sample : WG1974465-2,32,,gmr,sc(ok)
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 09:11:04 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 26.05% | | | |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 81.50% | | | |
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 6.063 | 128 | 4992 | 0.550 | ug/ml | 90 |
| 8) Phenol | 5.969 | 94 | 5800 | 0.501 | ug/ml | 93 |
| 14) Bis(2-chloroisopropyl)... | 6.733 | 45 | 8706 | 0.570 | ug/ml# | 1 |
| 15) 2-Methylphenol | 6.722 | 108 | 11503 | 1.379 | ug/ml | 98 |
| 17) n-Nitrosodi-n-propylamine | 6.875 | 70 | 11703 | 1.570 | ug/ml | 96 |
| 18) 3-Methylphenol/4-Methy... | 6.910 | 108 | 11555 | 1.281 | ug/ml | 98 |
| 20) Nitrobenzene | 7.022 | 77 | 18328 | 1.581 | ug/ml | 90 |
| 21) Isophorone | 7.304 | 82 | 32042 | 1.646 | ug/ml# | 92 |
| 22) 2-Nitrophenol | 7.380 | 139 | 2390 | 0.490 | ug/ml# | 94 |
| 23) 2,4-Dimethylphenol | 7.486 | 107 | 13959 | 1.521 | ug/ml | 90 |
| 24) Bis(2-chloroethoxy)met... | 7.586 | 93 | 20251 | 1.615 | ug/ml# | 95 |
| 25) 2,4-Dichlorophenol | 7.645 | 162 | 5233 | 0.602 | ug/ml | 91 |
| 28) Benzaldehyde | 5.751 | 105 | 12132 | 1.448 | ug/ml | 98 |
| 29) Acetophenone | 6.839 | 105 | 24025 | 1.578 | ug/ml# | 74 |
| 38) 4-Chloroaniline | 7.880 | 65 | 4238M3 | 0.987 | ug/ml | |
| 40) p-Chloro-m-cresol | 8.404 | 107 | 13198 | 1.516 | ug/ml | 91 |
| 43) Hexachlorocyclopentadiene | 8.686 | 237 | 11005 | 1.290 | ug/ml | 98 |
| 44) 2,4,6-Trichlorophenol | 8.810 | 196 | 3261 | 0.427 | ug/ml | 92 |
| 45) 2,4,5-Trichlorophenol | 8.839 | 196 | 4062M3 | 0.497 | ug/ml | |
| 48) 2-Nitroaniline | 9.110 | 138 | 11306 | 1.818 | ug/ml | 87 |
| 51) Dimethyl phthalate | 9.322 | 163 | 47079 | 1.874 | ug/ml# | 99 |
| 53) 2,6-Dinitrotoluene | 9.363 | 165 | 9613 | 1.777 | ug/ml# | 86 |
| 60) Caprolactam | 8.192 | 55 | 1937 | 0.363 | ug/ml# | 1 |
| 61) 1,2,4,5-Tetrachloroben... | 8.686 | 216 | 19883 | 1.427 | ug/ml | 98 |
| 62) Biphenyl | 8.992 | 154 | 39561 | 1.436 | ug/ml | 98 |
| 64) 3-Nitroaniline | 9.510 | 138 | 10282 | 1.847 | ug/ml | 91 |
| 66) 2,4-Dinitrophenol | 9.616 | 184 | 760 | 0.204 | ug/ml# | 1 |
| 67) Dibenzofuran | 9.739 | 168 | 52633 | 1.559 | ug/ml | 95 |
| 68) 2,4-Dinitrotoluene | 9.751 | 165 | 14020 | 1.694 | ug/ml | 99 |
| 69) 4-Nitrophenol | 9.698 | 65 | 1037 | 0.184 | ug/ml# | 55 |
| 72) Diethyl phthalate | 10.016 | 149 | 48087 | 1.803 | ug/ml | 96 |
| 74) 4-Chlorophenyl phenyl ... | 10.104 | 204 | 24059 | 1.722 | ug/ml# | 84 |
| 75) 4-Nitroaniline | 10.098 | 138 | 10702 | 1.846 | ug/ml# | 66 |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-2.D
Acq On : 21 Sep 2024 11:56 am
Operator : SV106:als
Sample : WG1974465-2,32,,gmr,sc(ok)
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 09:11:04 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 76) | 4,6-Dinitro-o-cresol | 10.139 | 198 | 2577 | 0.555 | ug/ml# | 50 |
| 77) | NDPA/DPA | 10.216 | 169 | 37388 | 1.699 | ug/ml | 98 |
| 80) | 4-Bromophenyl phenyl e... | 10.574 | 248 | 15704 | 1.802 | ug/ml# | 83 |
| 87) | Atrazine | 10.763 | 200 | 14287 | 1.611 | ug/ml | 95 |
| 91) | Carbazole | 11.221 | 167 | 67295 | 1.758 | ug/ml | 99 |
| 92) | Di-n-butylphthalate | 11.627 | 149 | 85403 | 1.900 | ug/ml | 99 |
| 97) | Butyl benzyl phthalate | 13.104 | 149 | 40858 | 1.975 | ug/ml | 92 |
| 106) | 3,3'-Dichlorobenzidine | 13.610 | 252 | 36454 | 1.750 | ug/ml# | 93 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.751 | 149 | 60763 | 1.746 | ug/ml# | 92 |
| 109) | Di-n-octylphthalate | 14.439 | 149 | 102670 | 1.782 | ug/ml# | 66 |

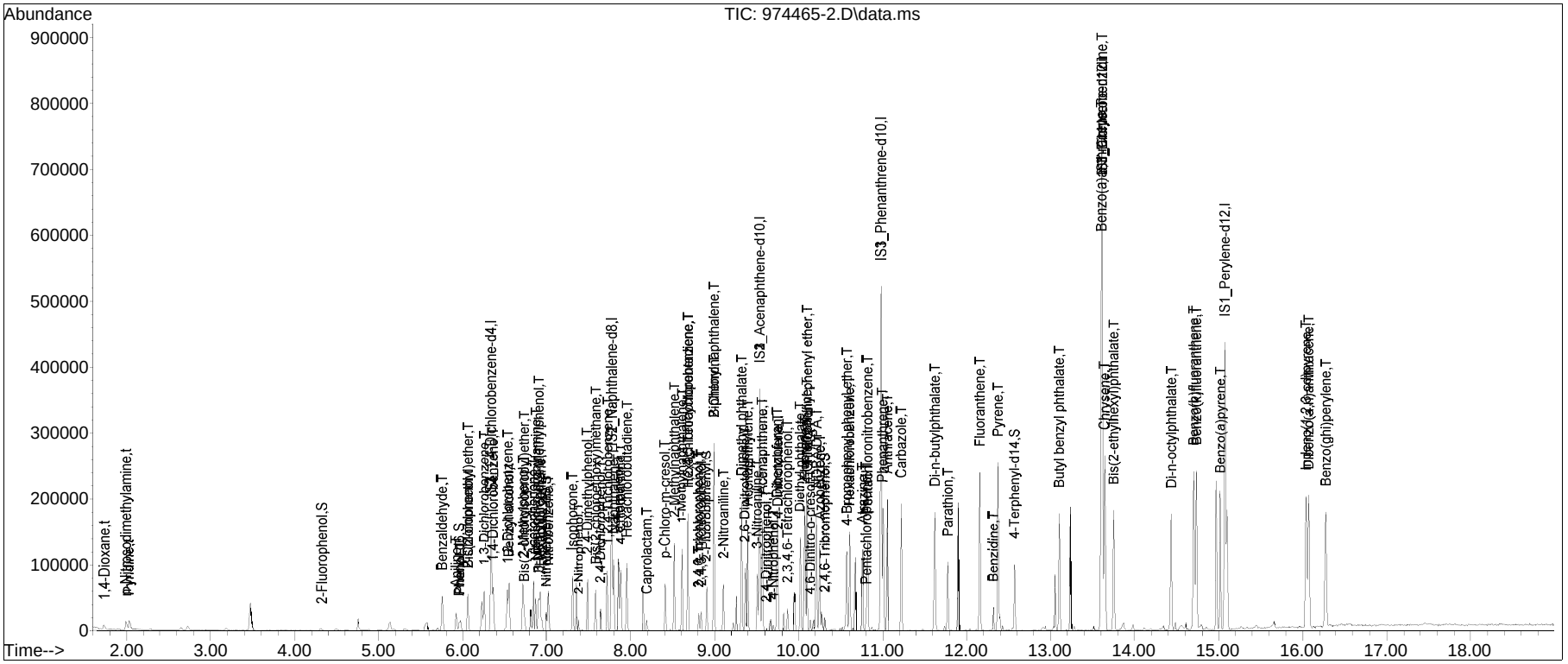
(#) = qualifier out of range (m) = manual integration (+) = signals summed

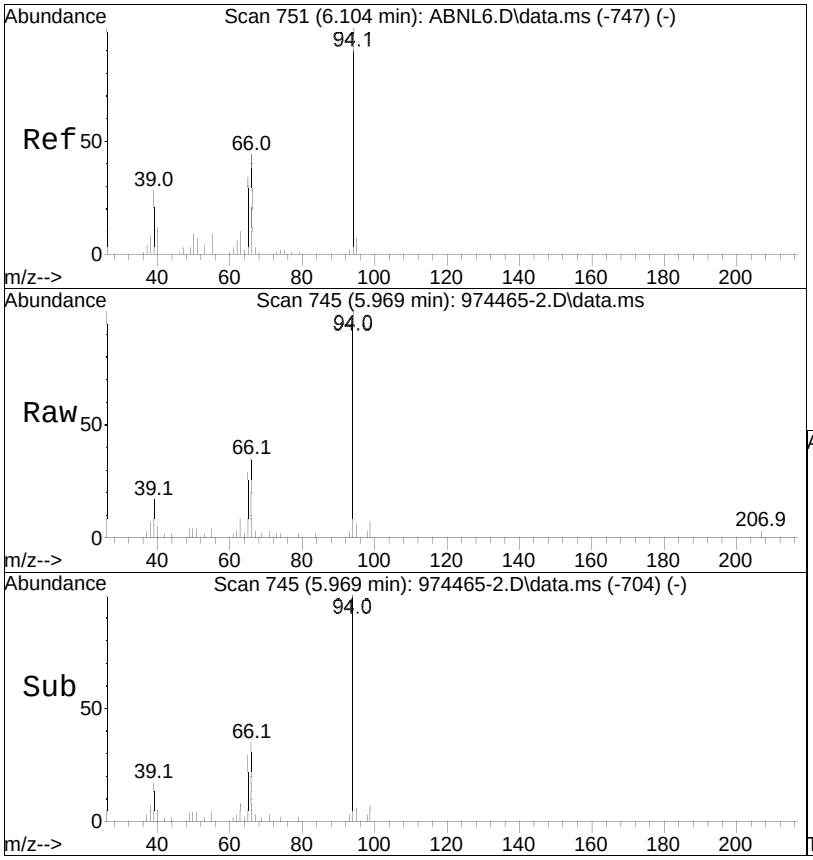
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-2.D
Acq On : 21 Sep 2024 11:56 am
Operator : SV106:als
Sample : WG1974465-2,32,,gmr,sc(ok)
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 22 09:11:04 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MARVT\AP90921.D•

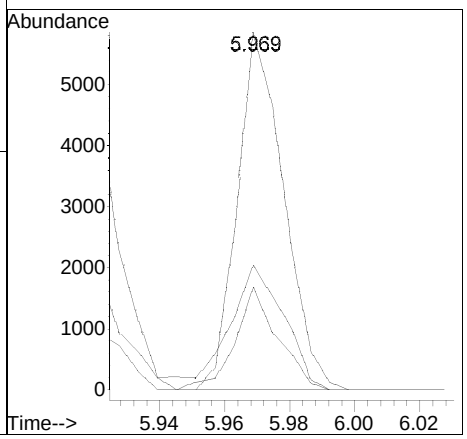


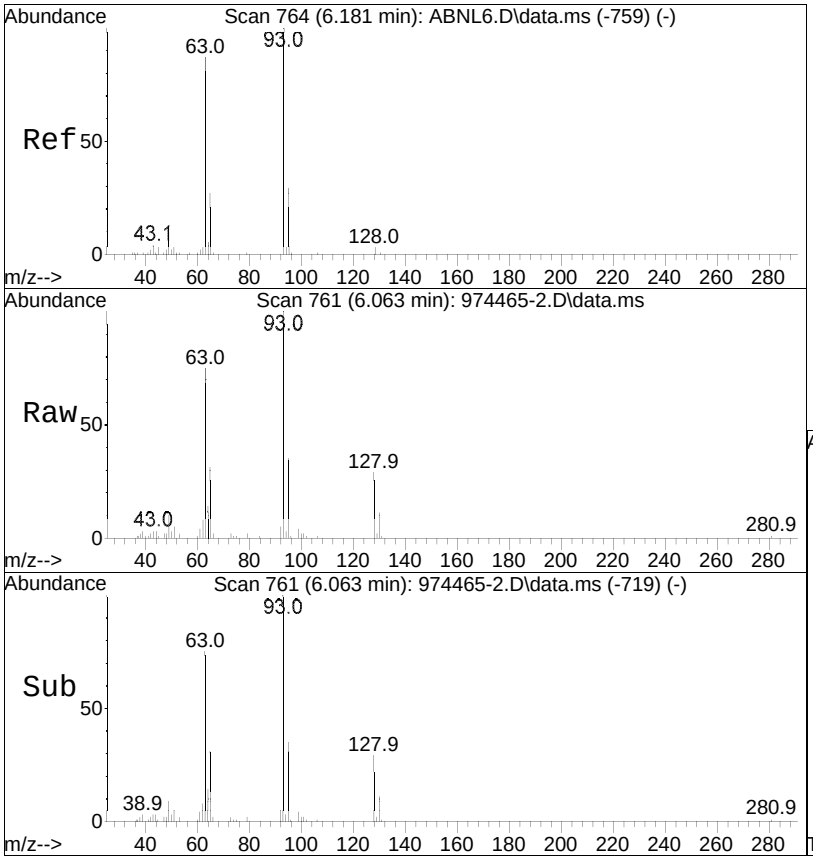



#8
Phenol
Concen: 0.50 ug/ml
RT: 5.969 min Scan# 745
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 94 Resp: 5800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 26.5 | 26.0 | 39.0 |
| 66 | 39.7 | 33.8 | 50.8 |

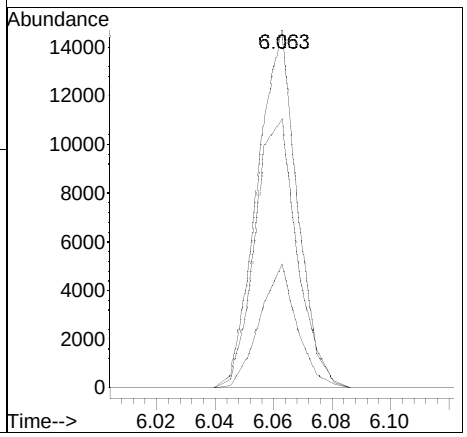


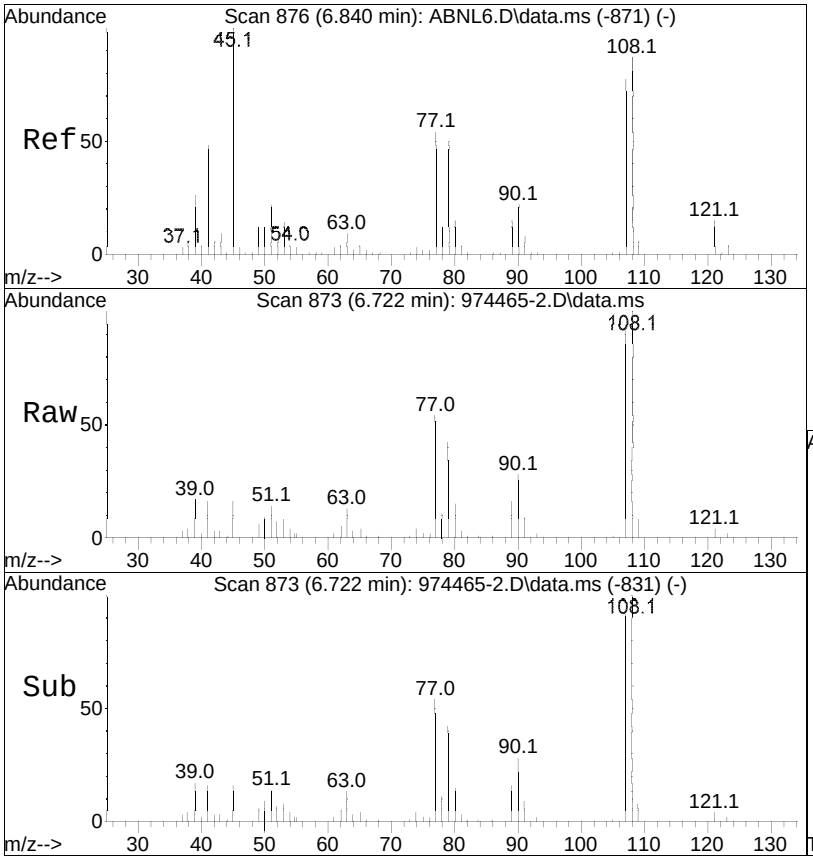



#9
Bis(2-chloroethyl)ether
Concen: 1.45 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 93 Resp: 13831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 79.2 | 74.6 | 111.8 |
| 95 | 32.5 | 25.9 | 38.9 |

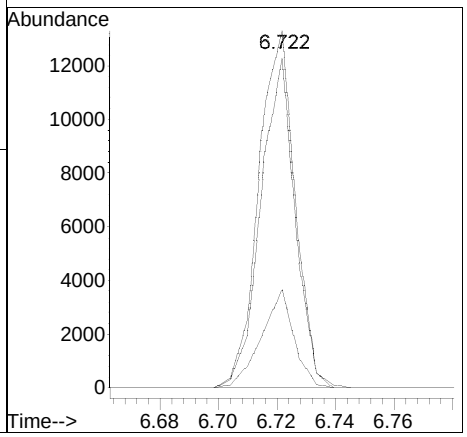


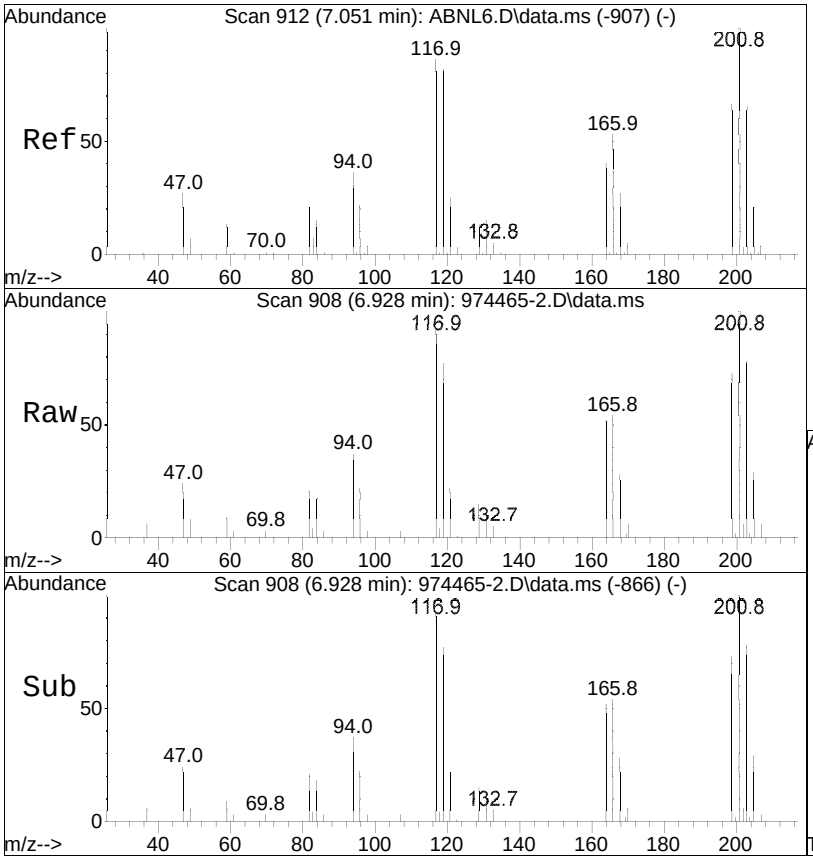



#15
2-Methylphenol
Concen: 1.38 ug/ml
RT: 6.722 min Scan# 873
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:108 Resp: 11503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 86.7 | 70.7 | 106.1 |
| 90 | 24.7 | 18.7 | 28.1 |

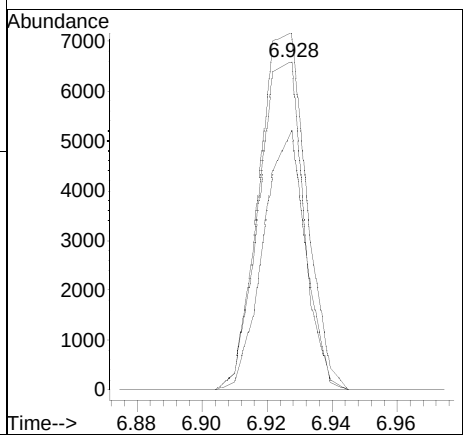


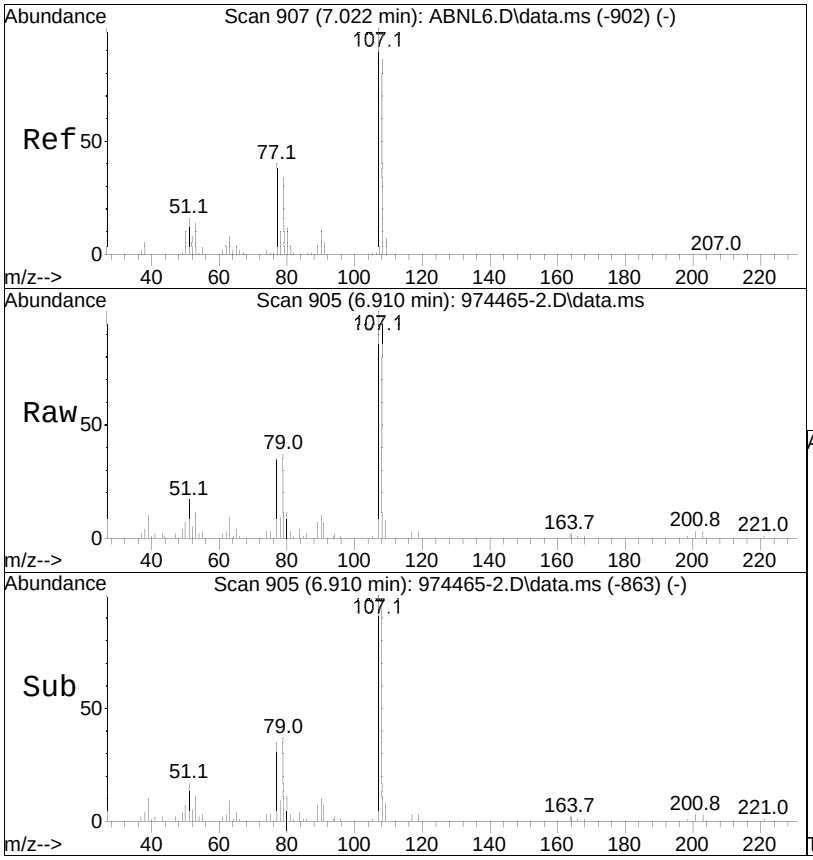



#16
Hexachloroethane
Concen: 1.43 ug/ml
RT: 6.928 min Scan# 908
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:117 Resp: 6279

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 116.0 | 58.6 | 87.8# |
| 199 | 75.3 | 36.9 | 55.3# |

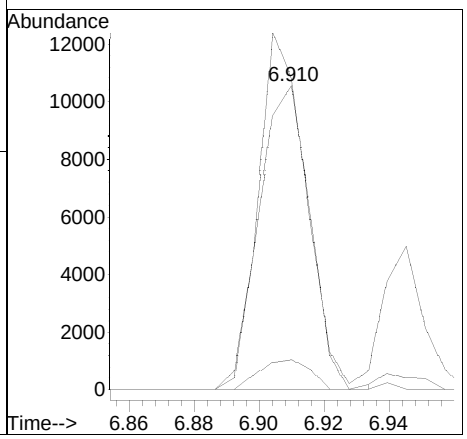


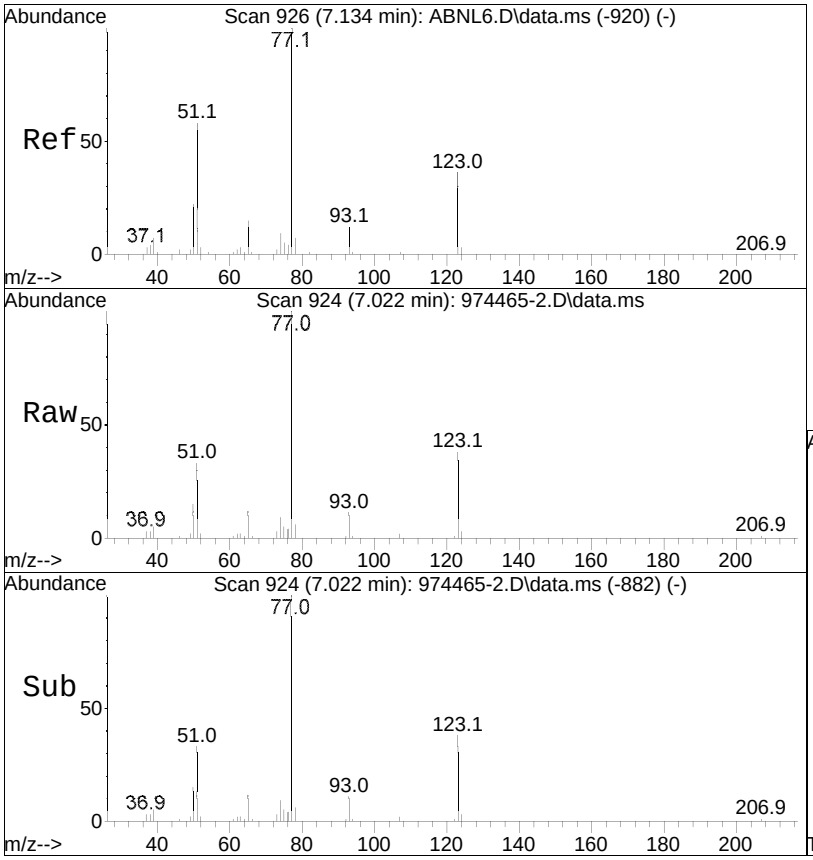



#18
3-Methylphenol/4-Methylphenol
Concen: 1.28 ug/ml
RT: 6.910 min Scan# 905
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:108 Resp: 11555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 108.4 | 88.6 | 132.8 |
| 90 | 9.9 | 8.8 | 13.2 |

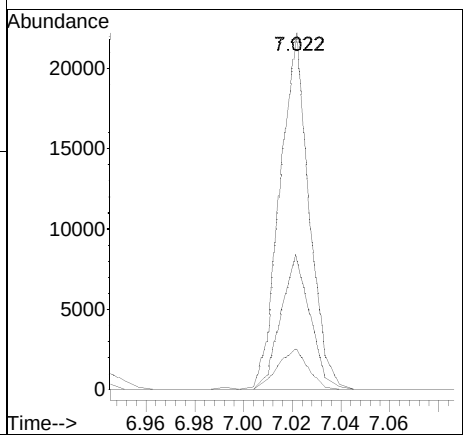


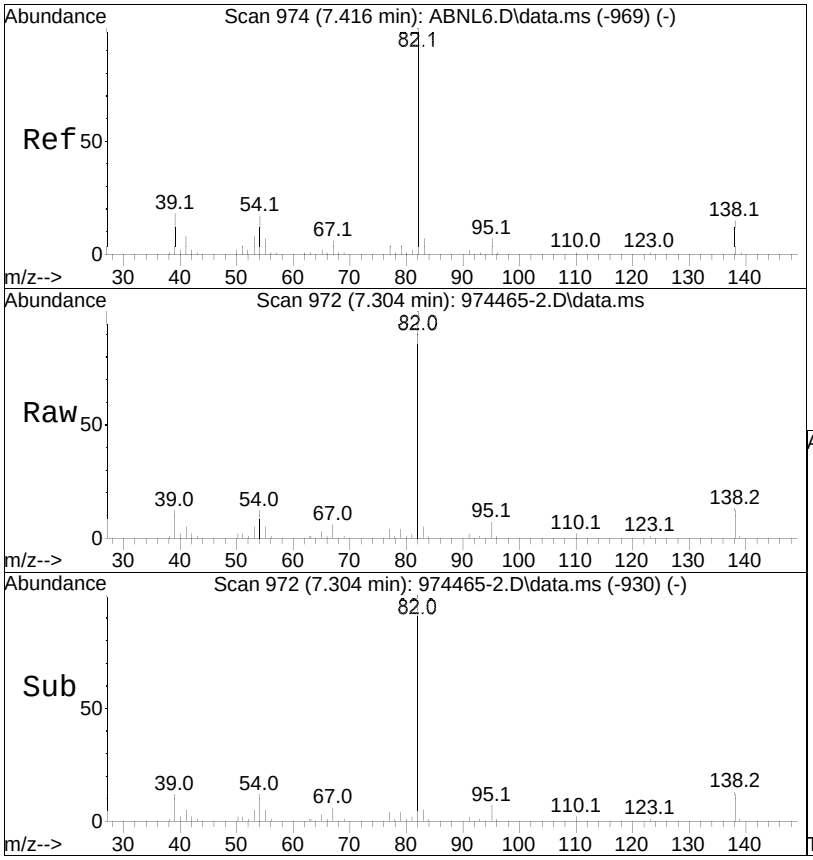



#20
Nitrobenzene
Concen: 1.58 ug/ml
RT: 7.022 min Scan# 924
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 77 Resp: 18328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 37.9 | 36.3 | 54.5 |
| 65 | 12.0 | 11.6 | 17.4 |

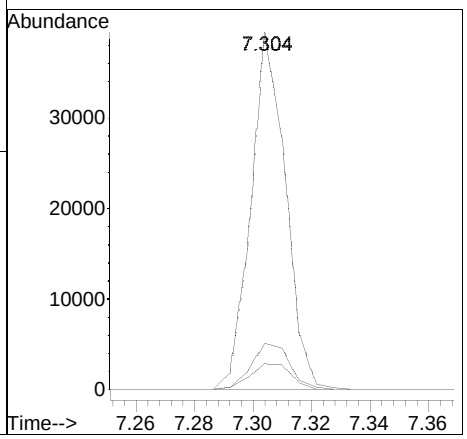


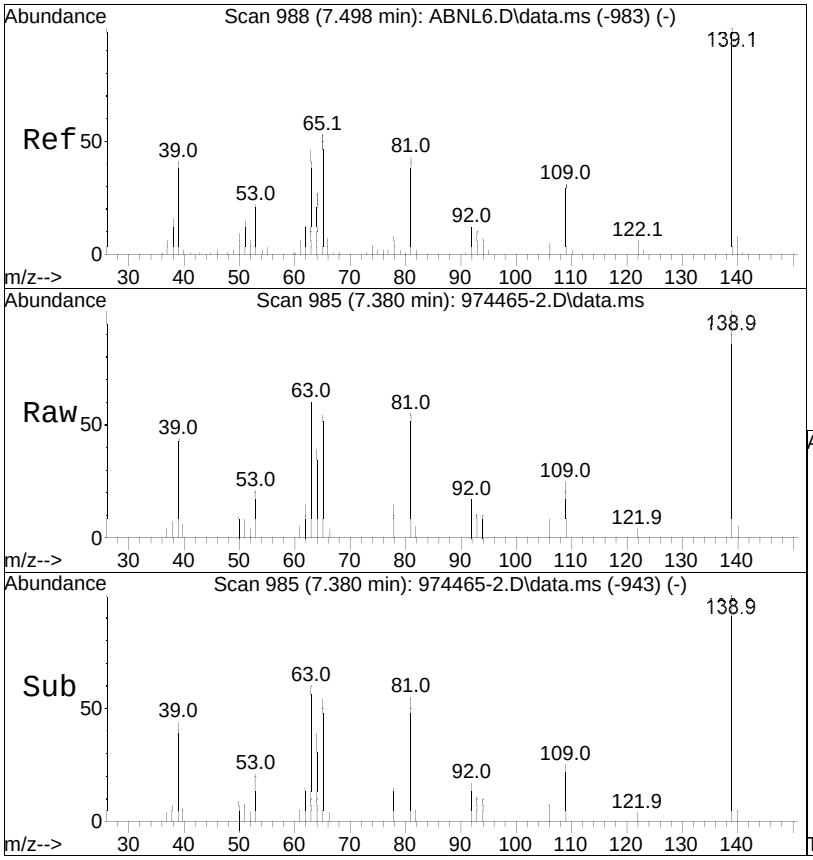



#21
Isophorone
Concen: 1.65 ug/ml
RT: 7.304 min Scan# 972
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 82 Resp: 32042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 14.5 | 14.7 | 22.1# |
| 95 | 8.8 | 5.2 | 7.8# |

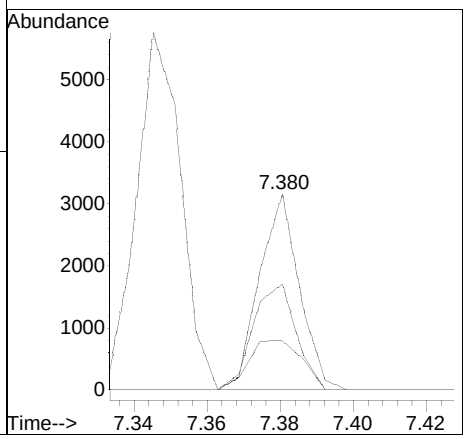


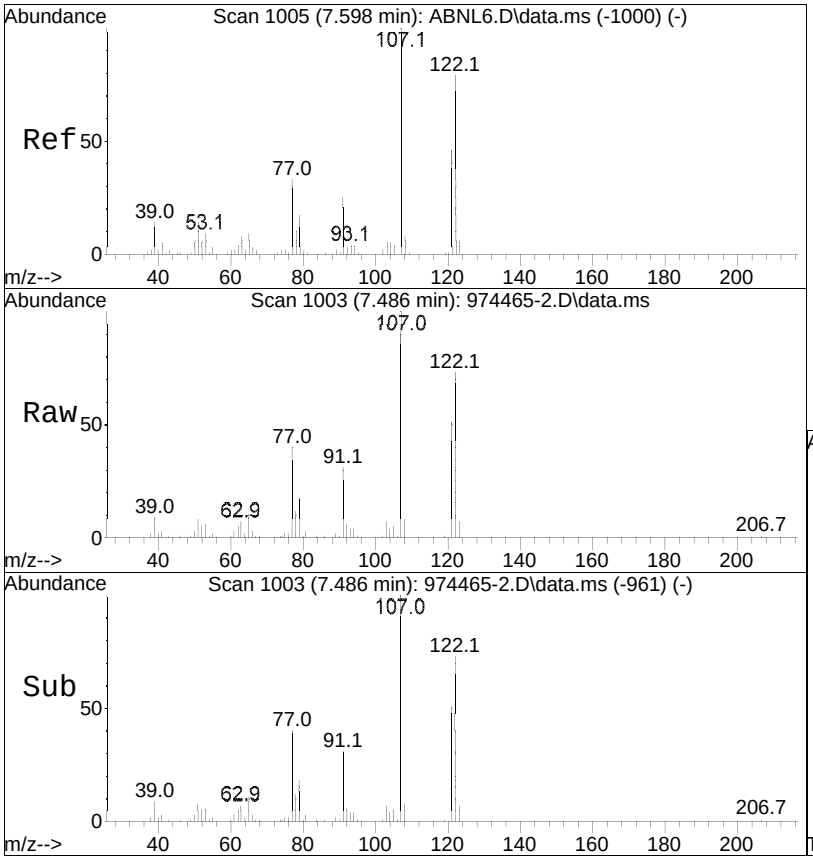



#22
2-Nitrophenol
Concen: 0.49 ug/ml
RT: 7.380 min Scan# 985
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:139 Resp: 2390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 33.4 | 19.4 | 29.0# |
| 65 | 58.3 | 46.1 | 69.1 |

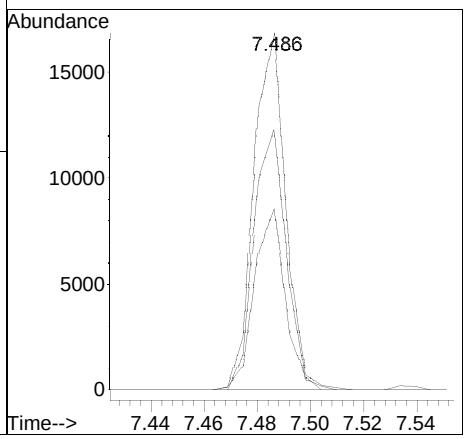


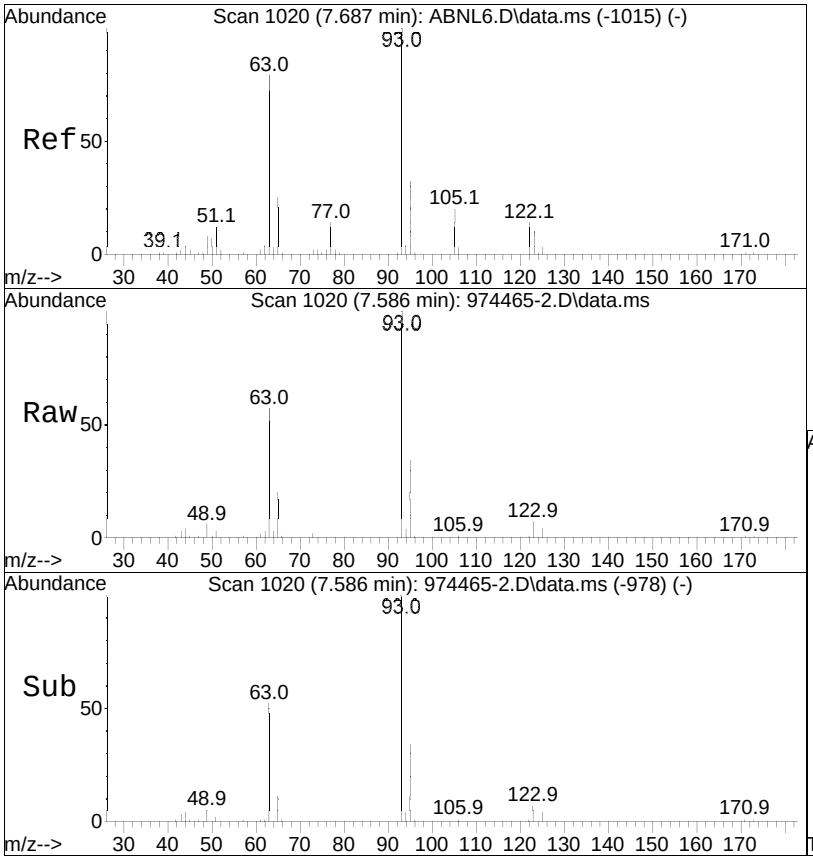



#23
2,4-Dimethylphenol
Concen: 1.52 ug/ml
RT: 7.486 min Scan# 1003
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:107 Resp: 13959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 49.5 | 40.0 | 60.0 |
| 122 | 74.3 | 70.2 | 105.4 |

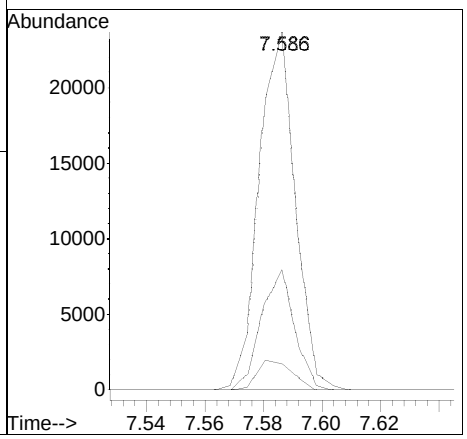


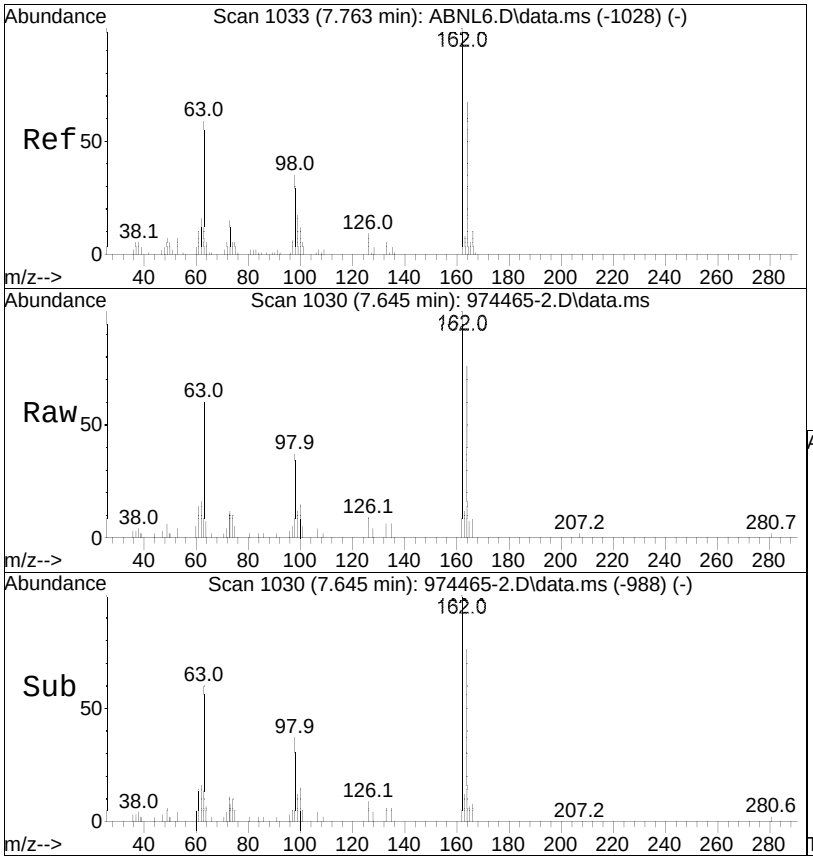



#24
Bis(2-chloroethoxy)methane
Concen: 1.61 ug/ml
RT: 7.586 min Scan# 1020
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 93 Resp: 20251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 31.0 | 25.8 | 38.8 |
| 123 | 8.0 | 10.1 | 15.1# |

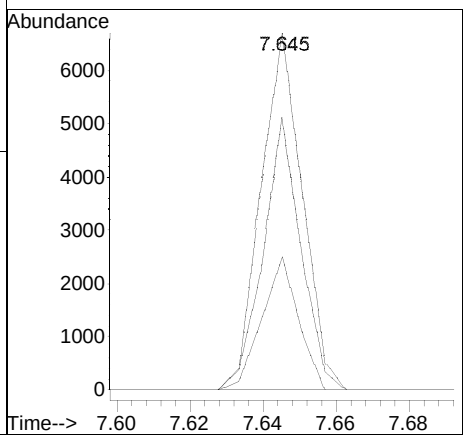


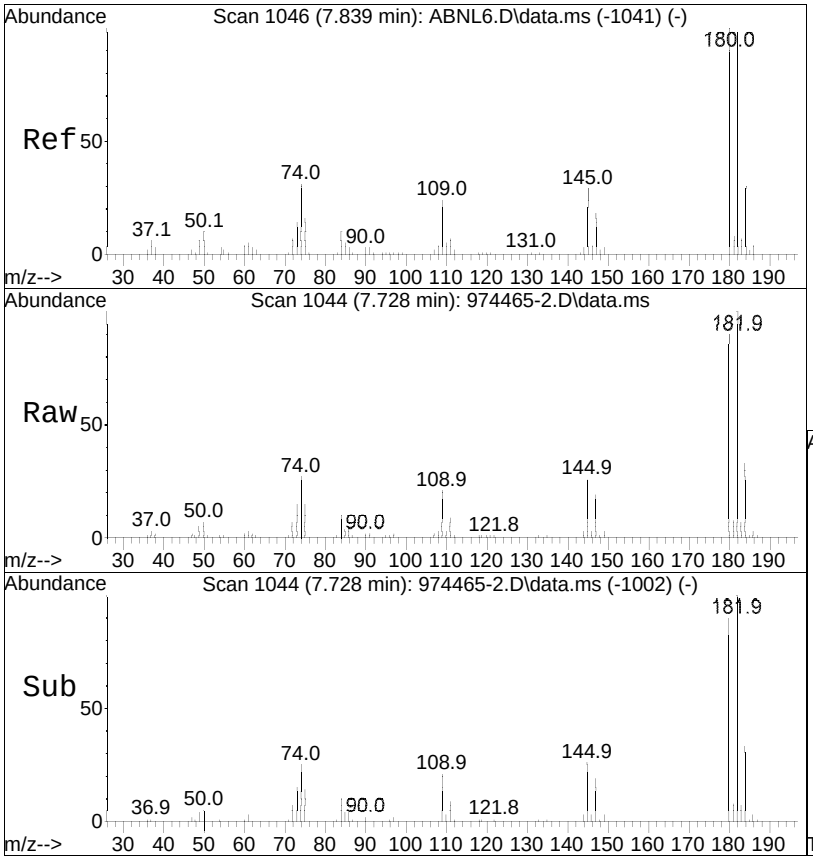



#25
2,4-Dichlorophenol
Concen: 0.60 ug/ml
RT: 7.645 min Scan# 1030
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:162 Resp: 5233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 69.7 | 51.0 | 76.4 |
| 98 | 33.1 | 32.2 | 48.2 |

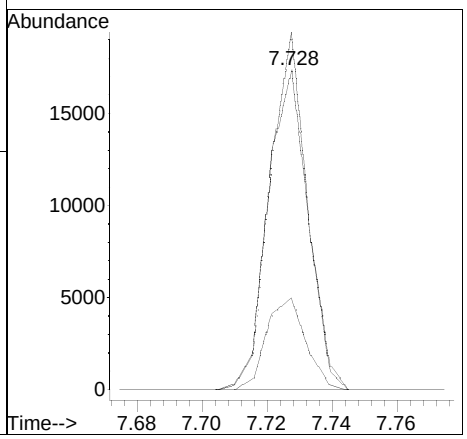


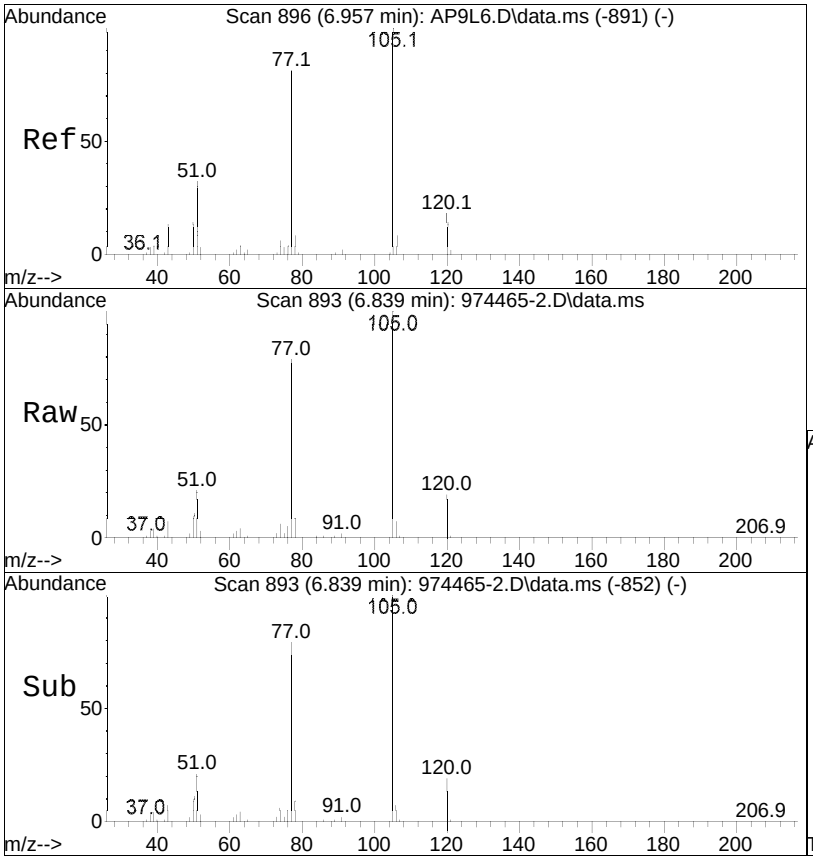



#26
1,2,4-Trichlorobenzene
Concen: 1.40 ug/ml
RT: 7.728 min Scan# 1044
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:180 Resp: 14880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 102.9 | 76.0 | 114.0 |
| 145 | 28.0 | 25.7 | 38.5 |

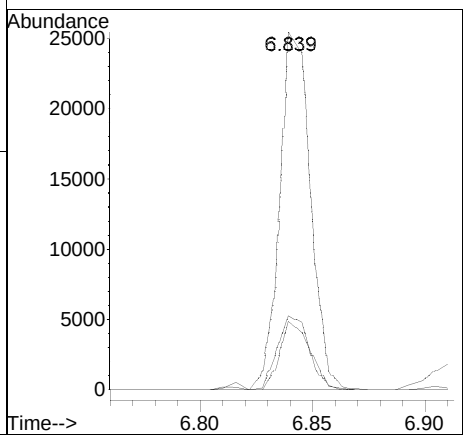


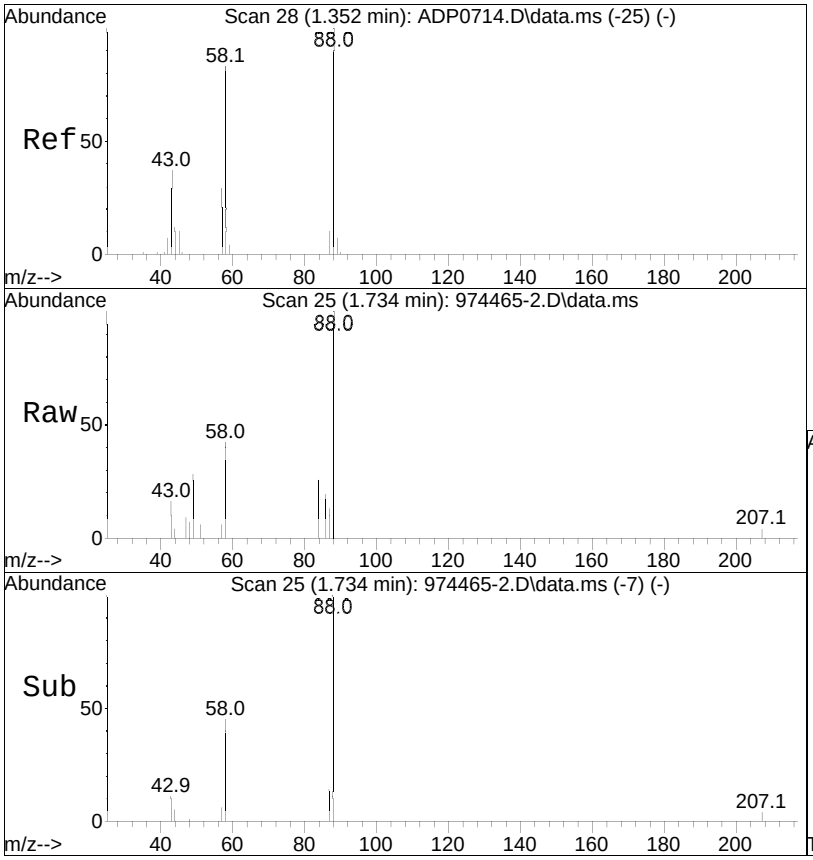



#29
Acetophenone
Concen: 1.58 ug/ml
RT: 6.839 min Scan# 893
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:105 Resp: 24025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 18.9 | 20.5 | 30.7# |
| 51 | 22.3 | 34.9 | 52.3# |

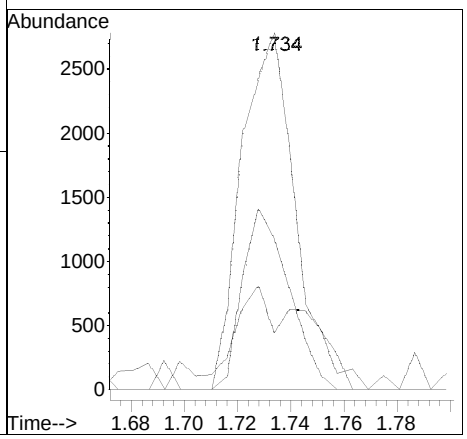


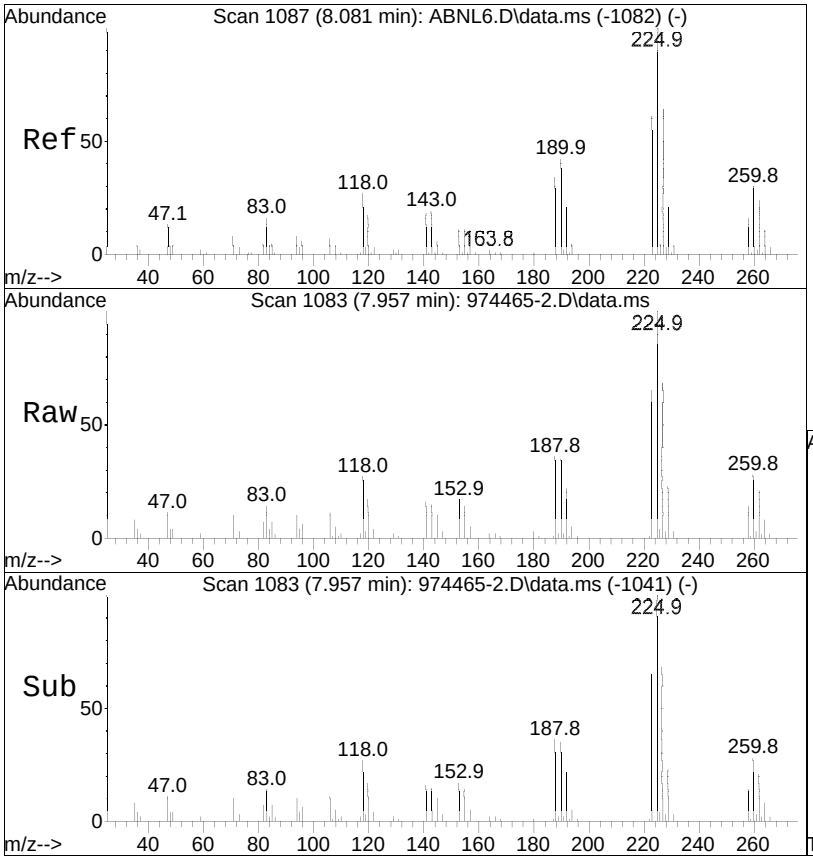



#33
1,4-Dioxane
Concen: 0.95 ug/ml
RT: 1.734 min Scan# 25
Delta R.T. 0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 88 Resp: 3898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 58 | 43.9 | 44.8 | 67.2# |
| 43 | 41.5 | 22.4 | 33.6# |

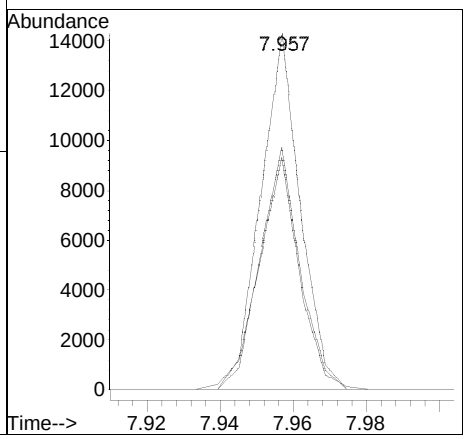


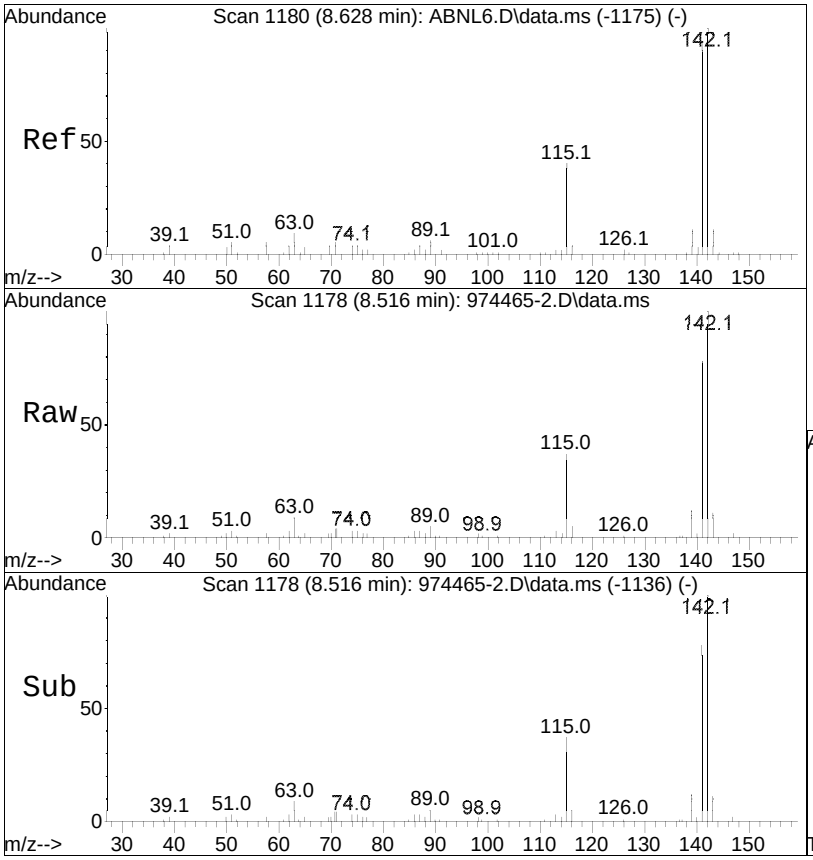



#39
Hexachlorobutadiene
Concen: 1.39 ug/ml
RT: 7.957 min Scan# 1083
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:225 Resp: 10684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 66.8 | 50.3 | 75.5 |
| 227 | 68.4 | 52.2 | 78.2 |

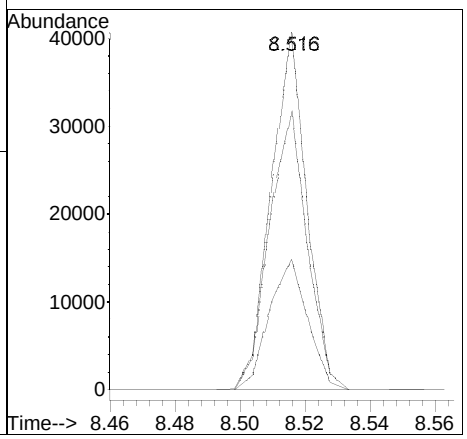


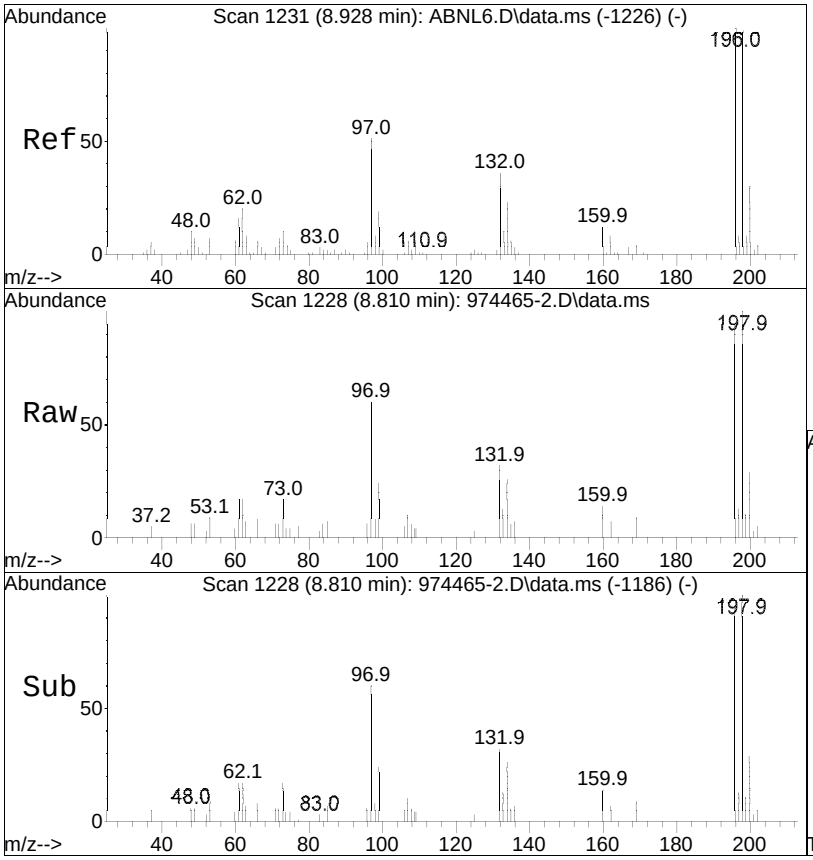



#41
2-Methylnaphthalene
Concen: 1.58 ug/ml
RT: 8.516 min Scan# 1178
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:142 Resp: 30759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 82.5 | 69.6 | 104.4 |
| 115 | 39.4 | 26.6 | 40.0 |

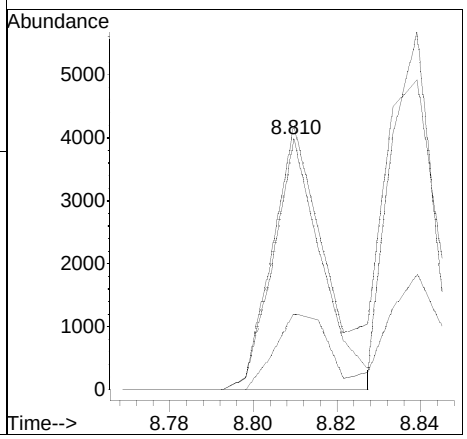


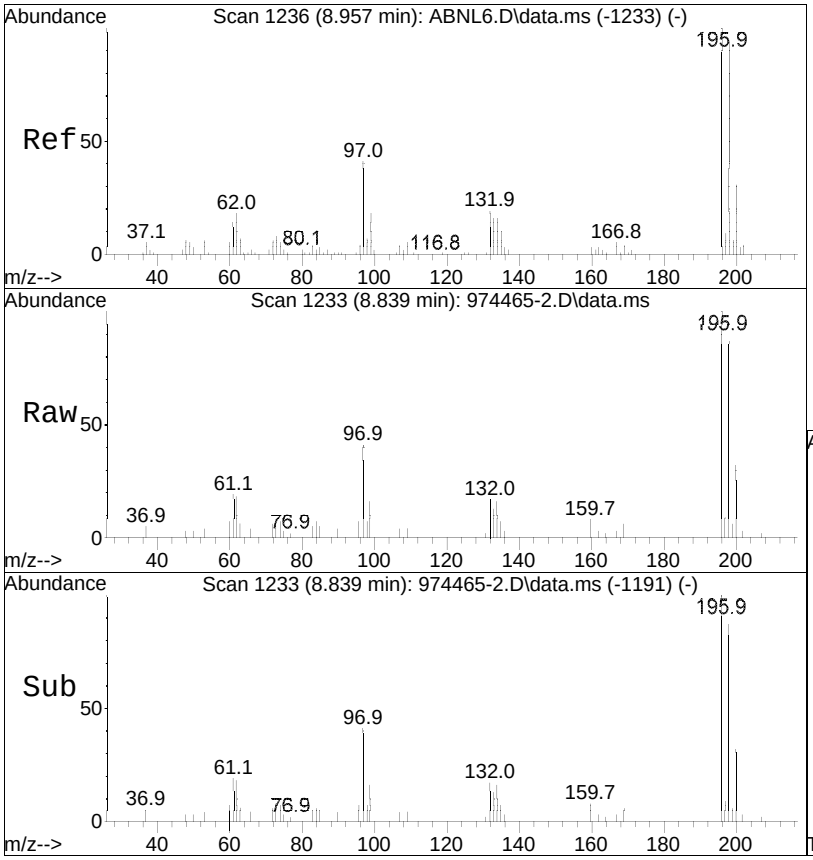



#44
2,4,6-Trichlorophenol
Concen: 0.43 ug/ml
RT: 8.810 min Scan# 1228
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:196 Resp: 3261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 105.6 | 77.5 | 116.3 |
| 200 | 32.4 | 23.8 | 35.6 |

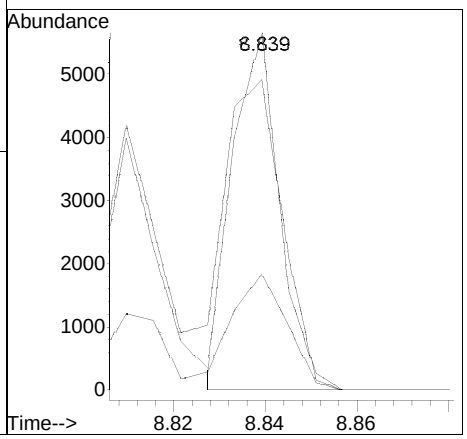


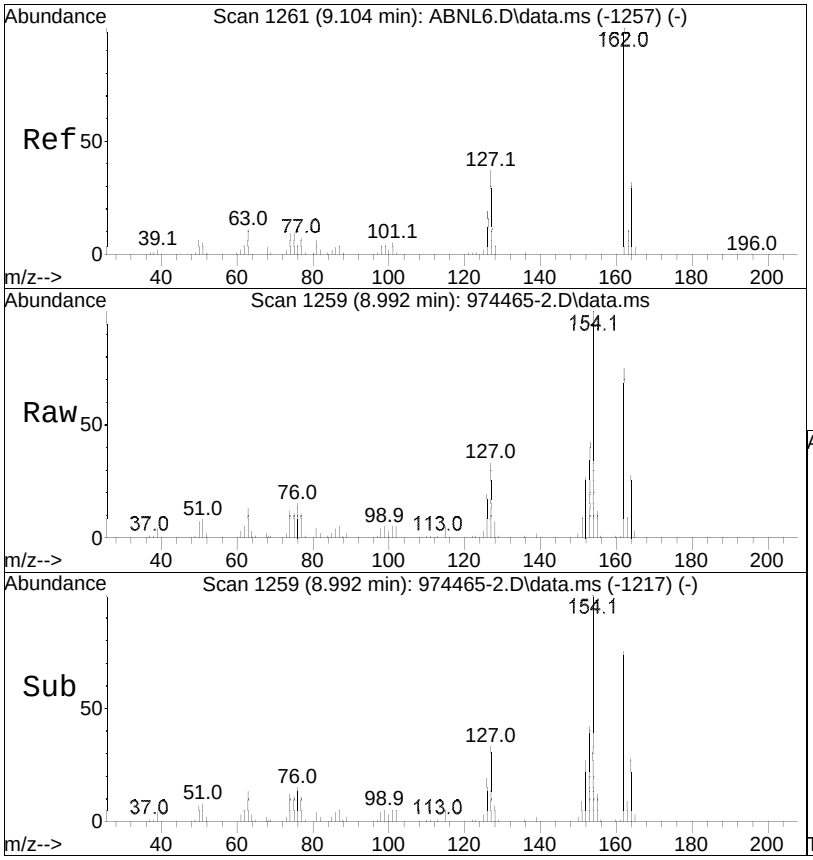



#45
2,4,5-Trichlorophenol
Concen: 0.50 ug/ml M3
RT: 8.839 min Scan# 1233
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:196 Resp: 4062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 26.0 | 25.4 | 38.0 |
| 198 | 84.8 | 78.0 | 117.0 |

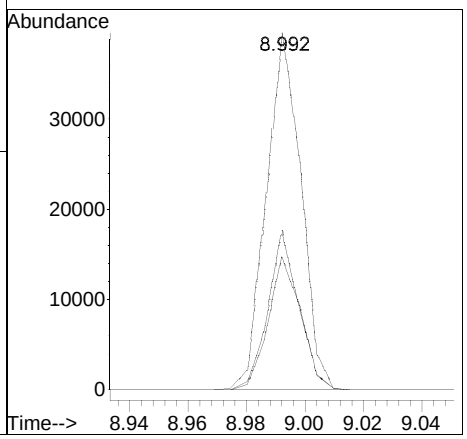


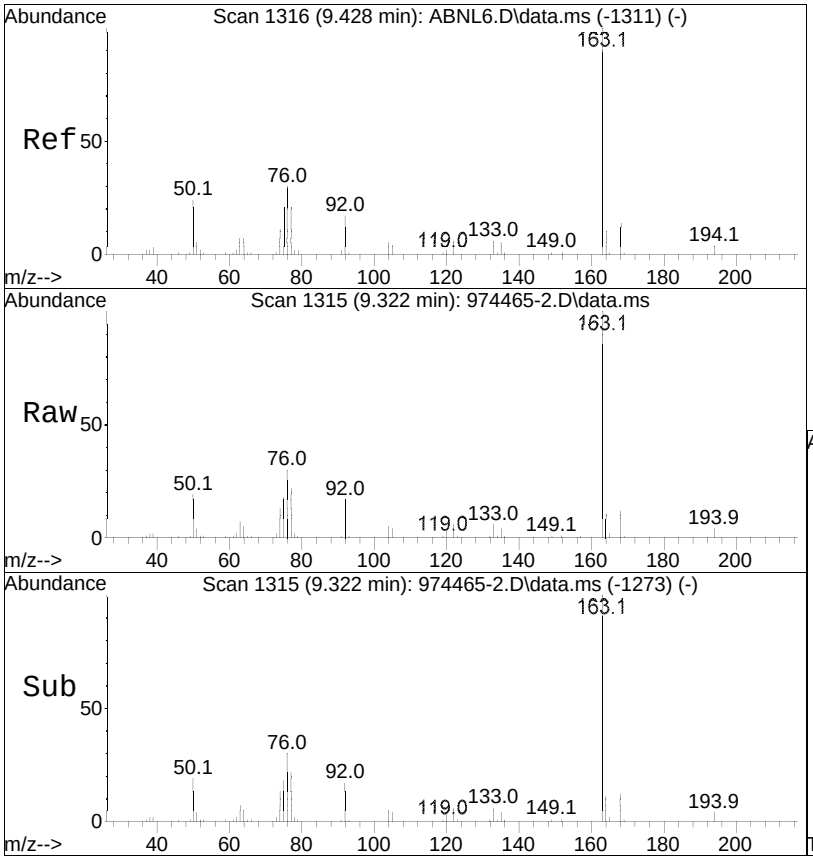



#47
2-Chloronaphthalene
Concen: 1.56 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:162 Resp: 32233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 39.8 | 32.2 | 48.4 |
| 164 | 35.5 | 25.7 | 38.5 |

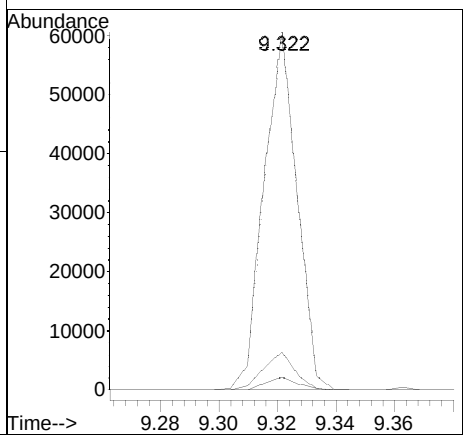


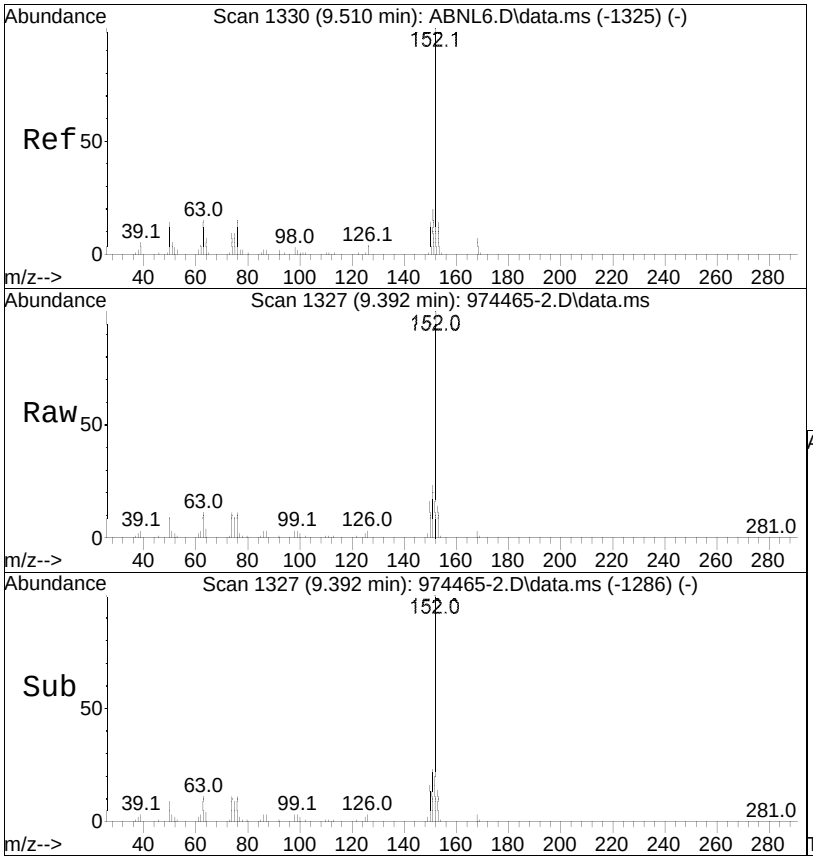



#51
Dimethyl phthalate
Concen: 1.87 ug/ml
RT: 9.322 min Scan# 1315
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:163 Resp: 47079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.3 | 3.5 | 5.3# |
| 164 | 10.1 | 7.9 | 11.9 |

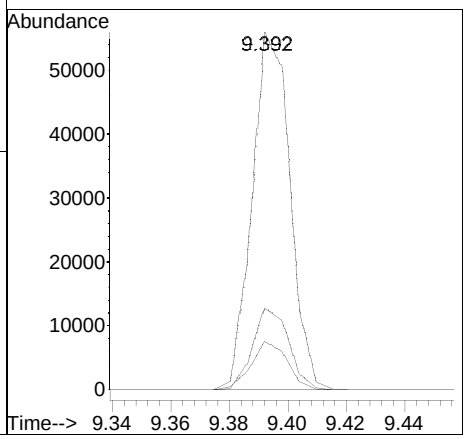


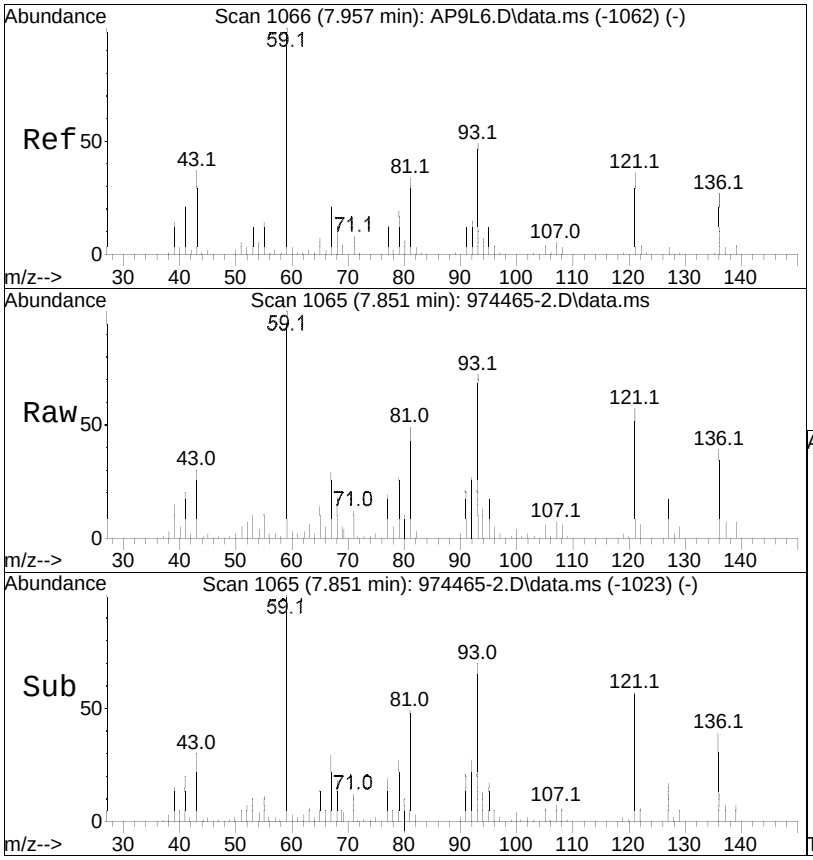



#52
Acenaphthylene
Concen: 1.57 ug/ml
RT: 9.392 min Scan# 1327
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:152 Resp: 49695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 22.0 | 15.8 | 23.6 |
| 153 | 13.2 | 10.5 | 15.7 |

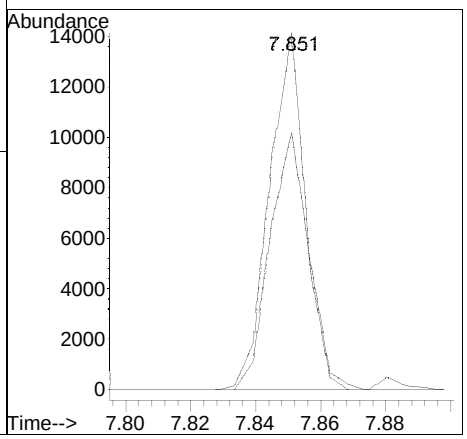


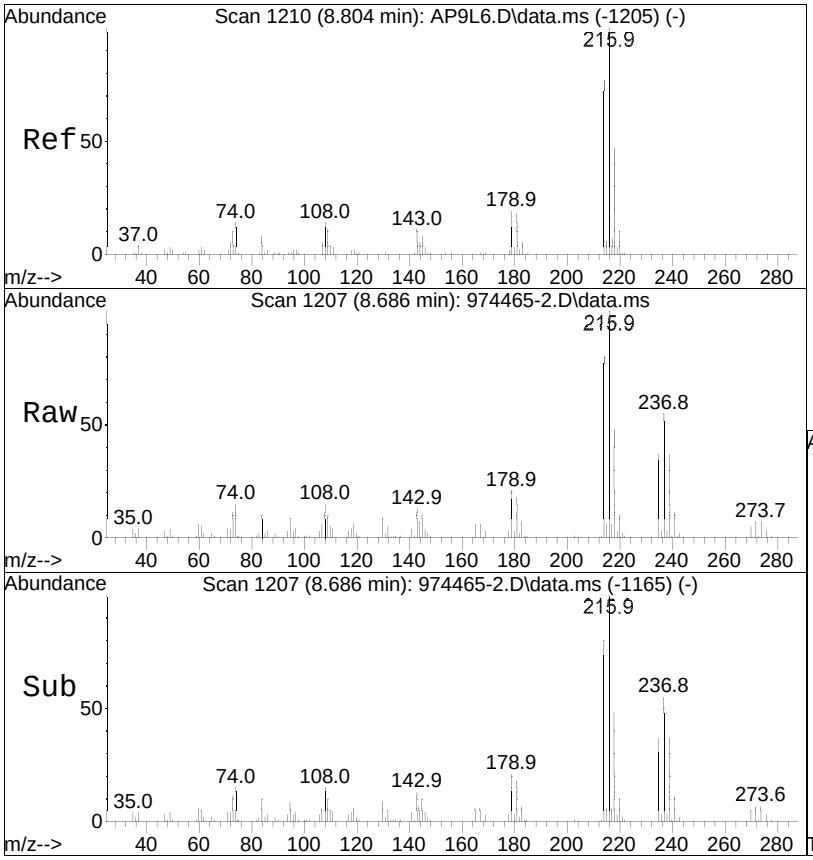



#56
a-Terpineol
Concen: 1.06 ug/ml
RT: 7.851 min Scan# 1065
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 59 Resp: 10738

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 93 | 78.4 | 35.6 | 53.4# |

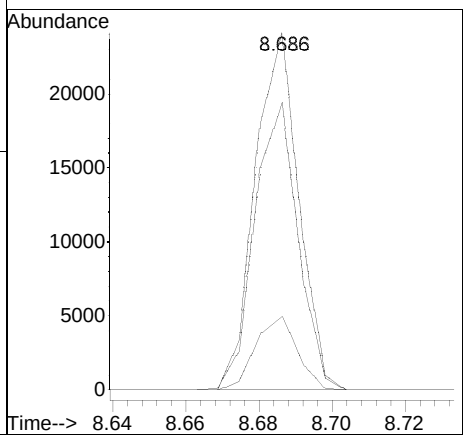


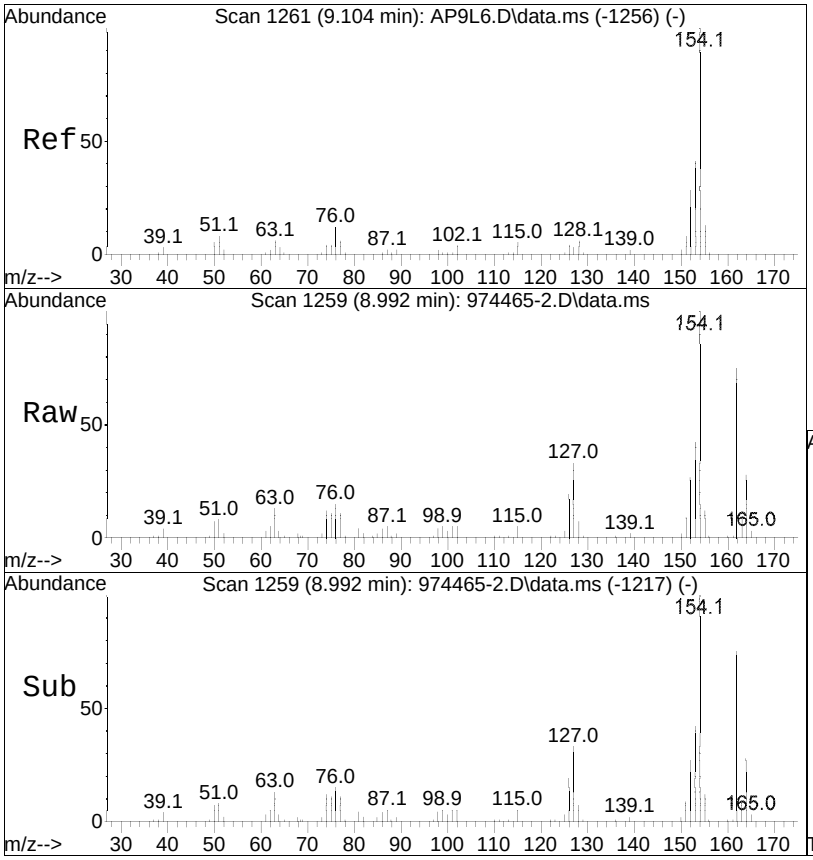



#61
1,2,4,5-Tetrachlorobenzene
Concen: 1.43 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:216 Resp: 19883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 80.1 | 63.7 | 95.5 |
| 179 | 19.8 | 19.0 | 28.6 |

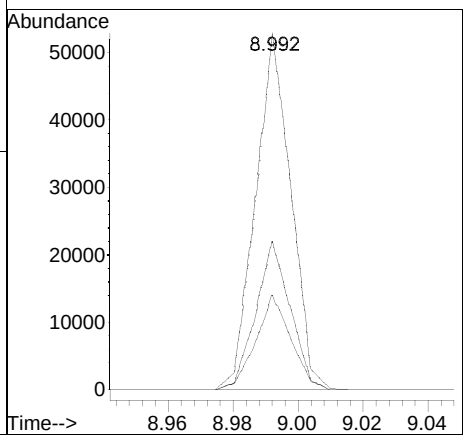


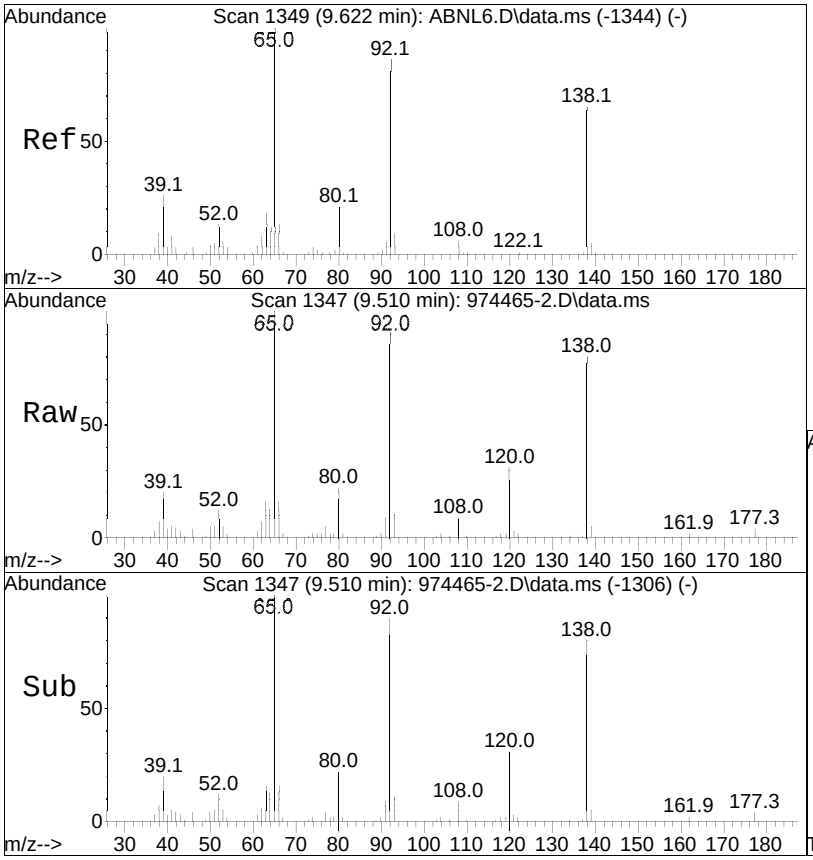



#62
Biphenyl
Concen: 1.44 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:154 Resp: 39561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 40.8 | 32.3 | 48.5 |
| 152 | 26.6 | 22.5 | 33.7 |

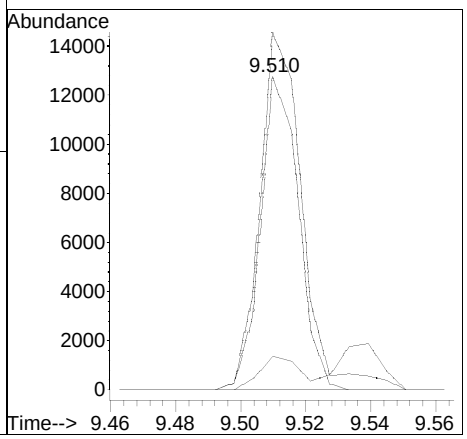


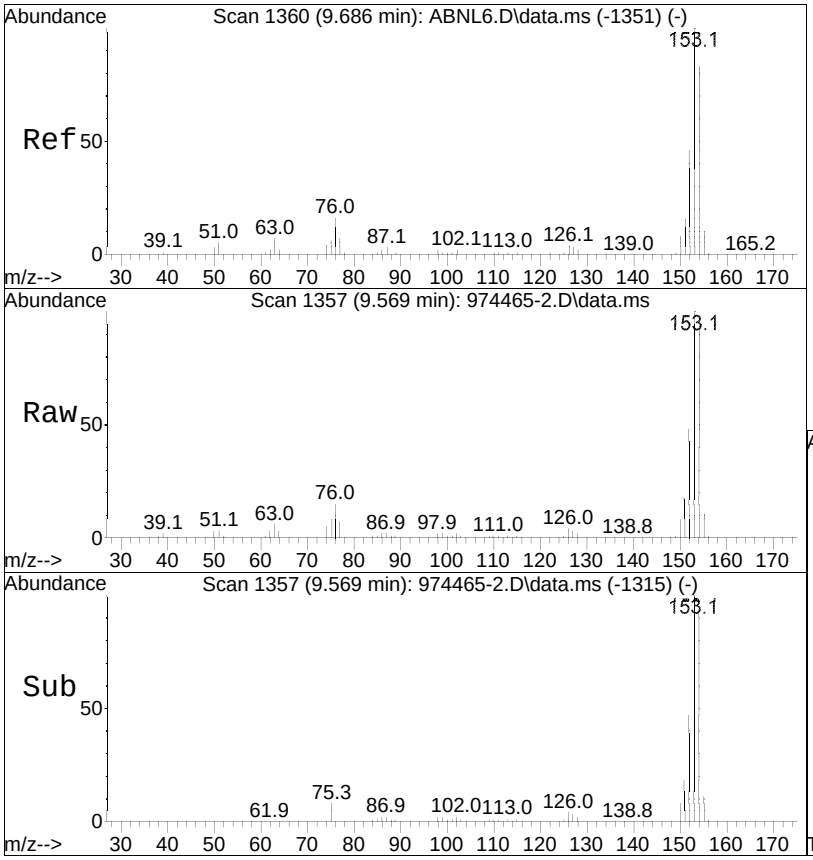



#64
3-Nitroaniline
Concen: 1.85 ug/ml
RT: 9.510 min Scan# 1347
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:138 Resp: 10282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 127.0 | 93.4 | 140.2 |
| 108 | 11.5 | 9.5 | 14.3 |

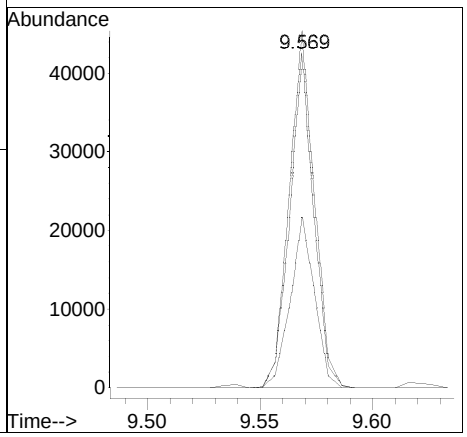


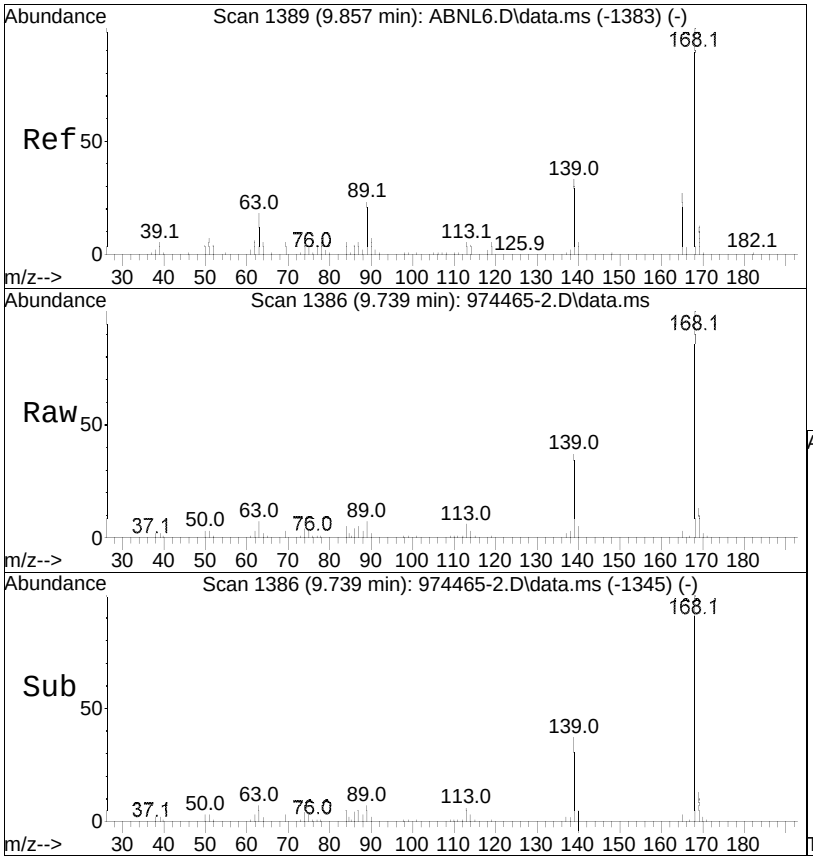



#65
Acenaphthene
Concen: 1.56 ug/ml
RT: 9.569 min Scan# 1357
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:154 Resp: 31444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 111.4 | 85.3 | 127.9 |
| 152 | 51.7 | 41.4 | 62.0 |

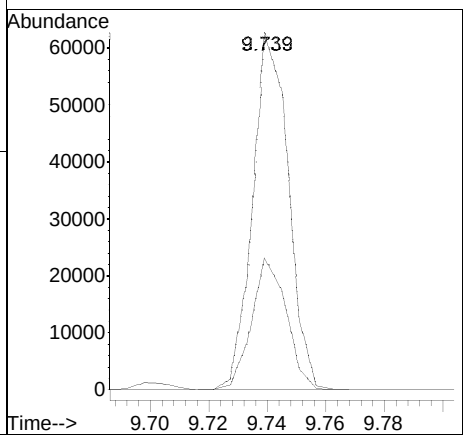


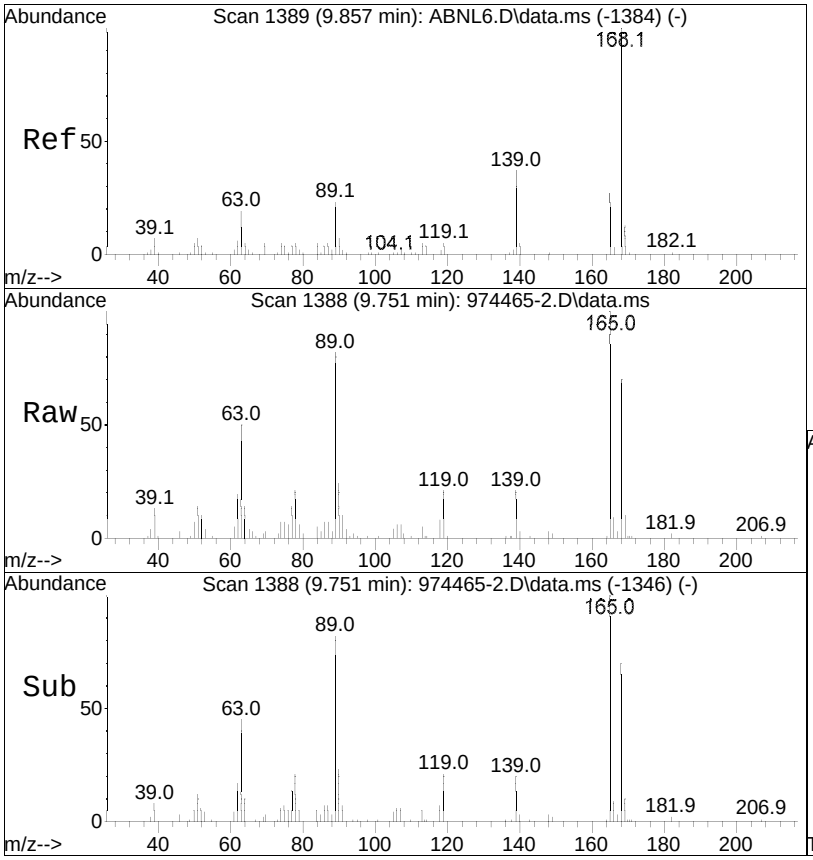



#67
Dibenzofuran
Concen: 1.56 ug/ml
RT: 9.739 min Scan# 1386
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:168 Resp: 52633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 36.2 | 31.4 | 47.2 |

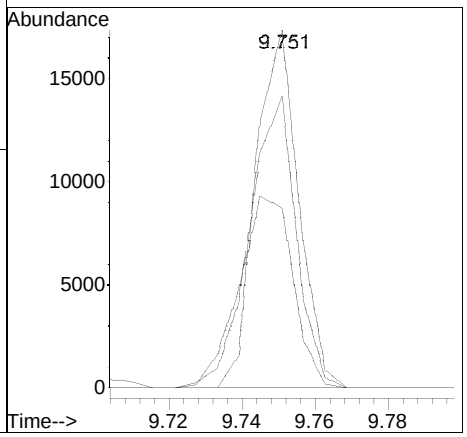


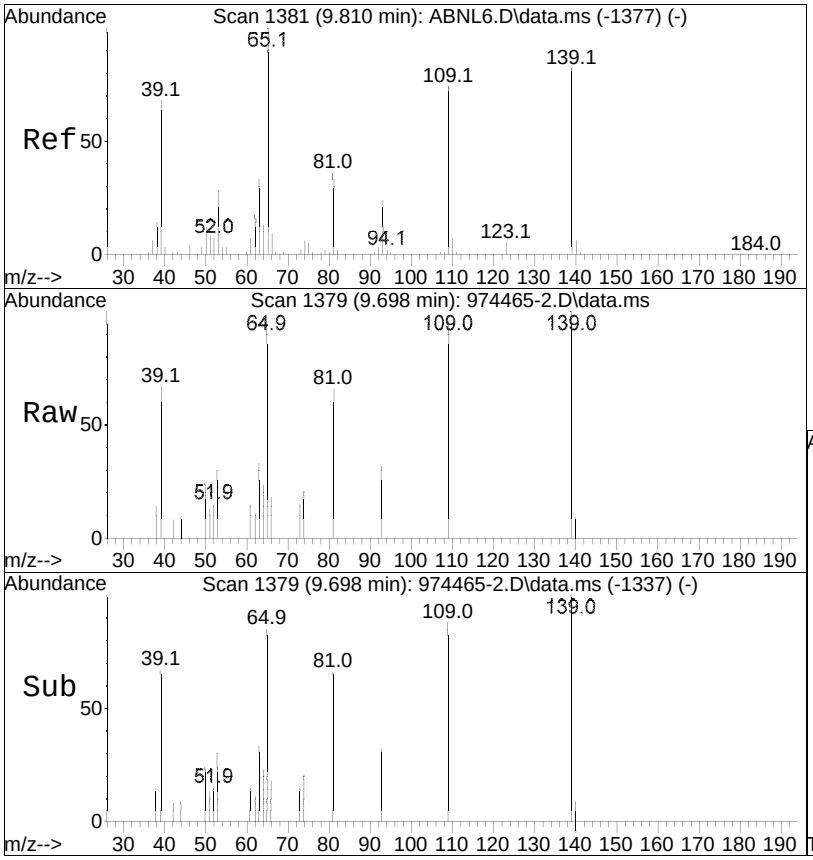



#68
2,4-Dinitrotoluene
Concen: 1.69 ug/ml
RT: 9.751 min Scan# 1388
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:165 Resp: 14020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 89.5 | 72.0 | 108.0 |
| 63 | 68.0 | 52.7 | 79.1 |

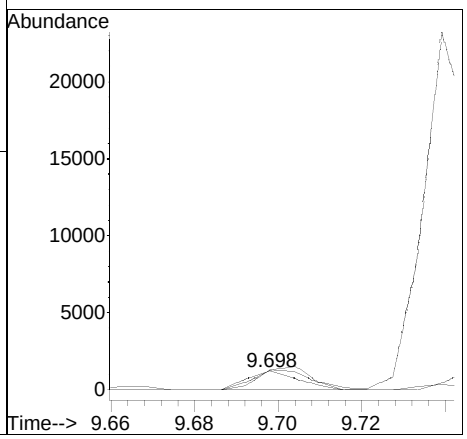


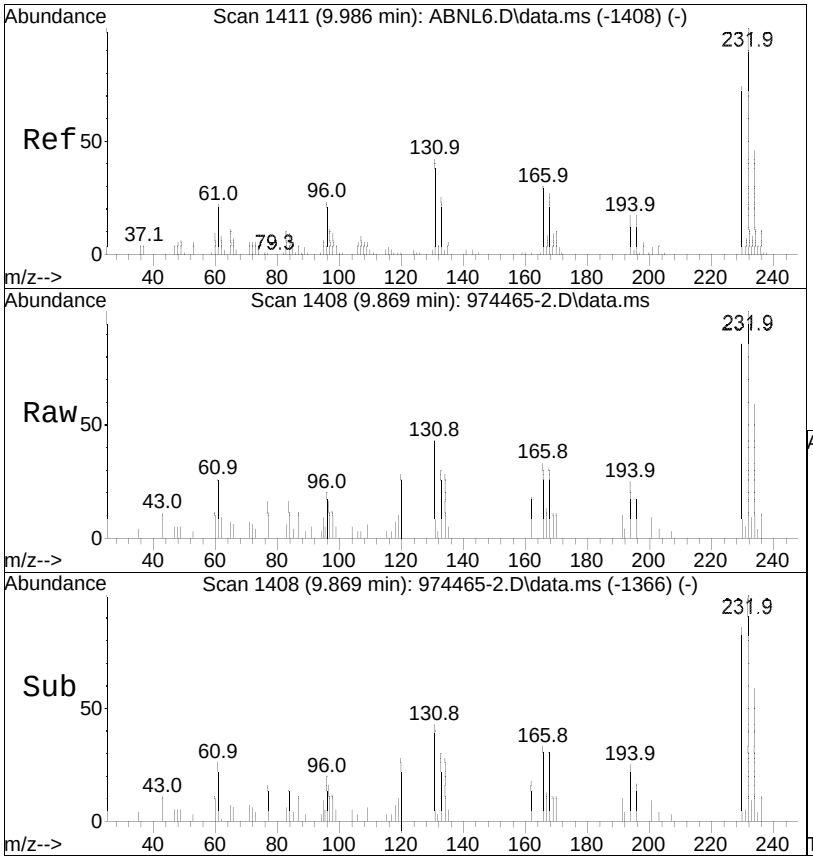



#69
4-Nitrophenol
Concen: 0.18 ug/ml
RT: 9.698 min Scan# 1379
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 65 Resp: 1037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 133.1 | 47.4 | 71.2# |
| 139 | 107.4 | 76.6 | 115.0 |

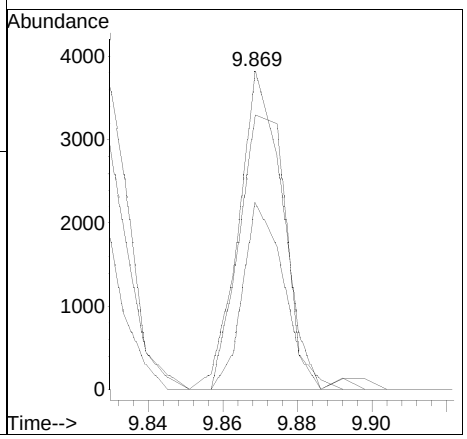


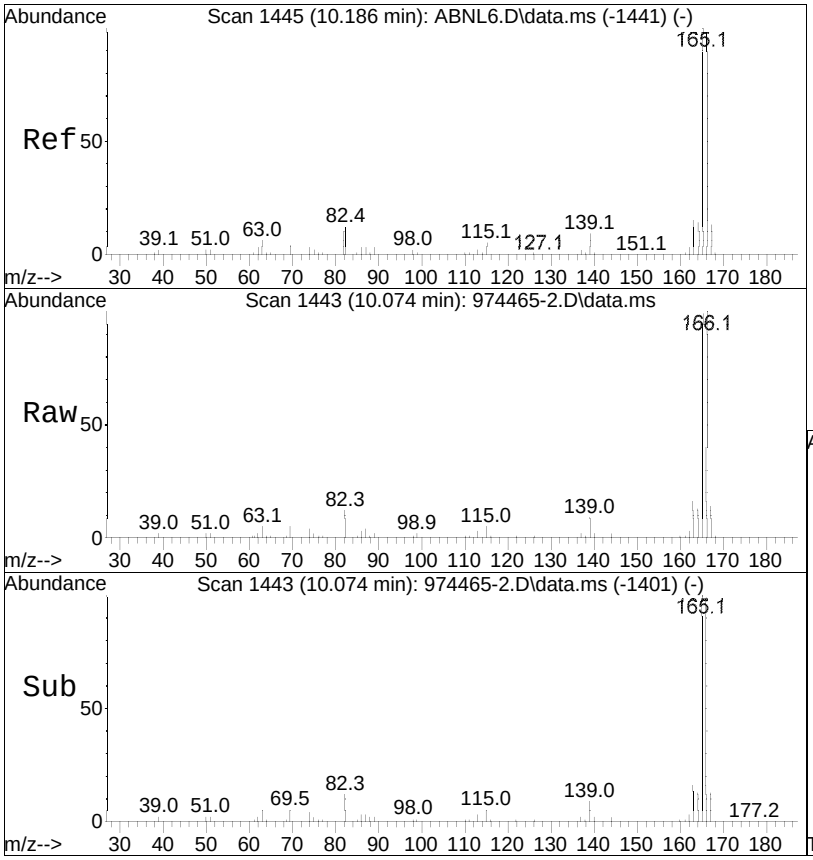



#71
2,3,4,6-Tetrachlorophenol
Concen: 0.42 ug/ml M3
RT: 9.869 min Scan# 1408
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:232 Resp: 3179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 232 | 100 | | |
| 230 | 87.1 | 61.8 | 92.8 |
| 234 | 49.5 | 36.2 | 54.2 |

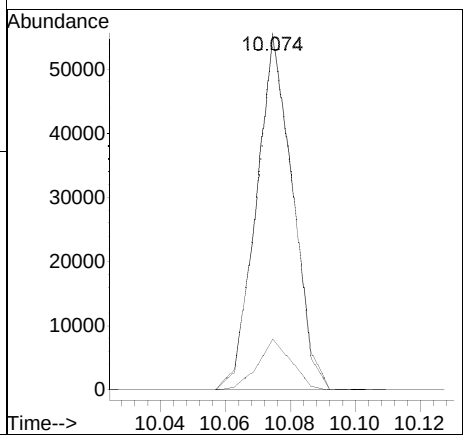


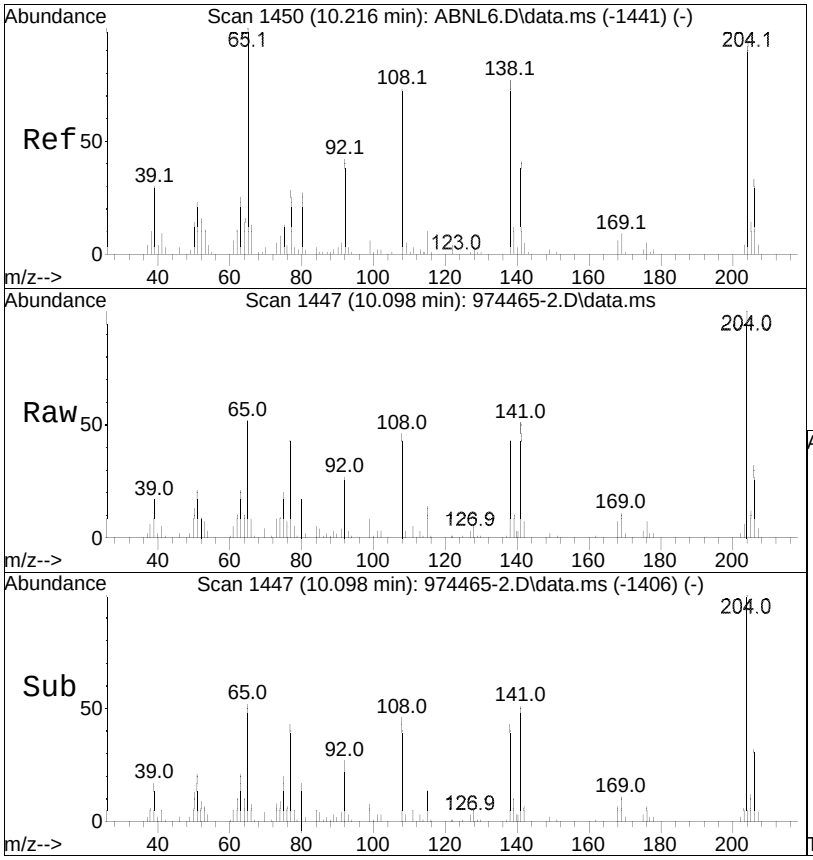



#73
Fluorene
Concen: 1.61 ug/ml
RT: 10.074 min Scan# 1443
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:166 Resp: 42843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 100.1 | 76.2 | 114.2 |
| 167 | 13.5 | 10.6 | 15.8 |

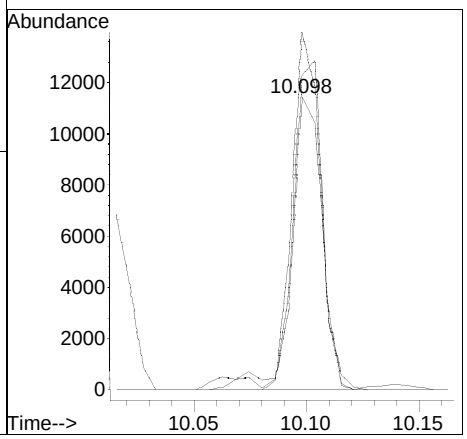


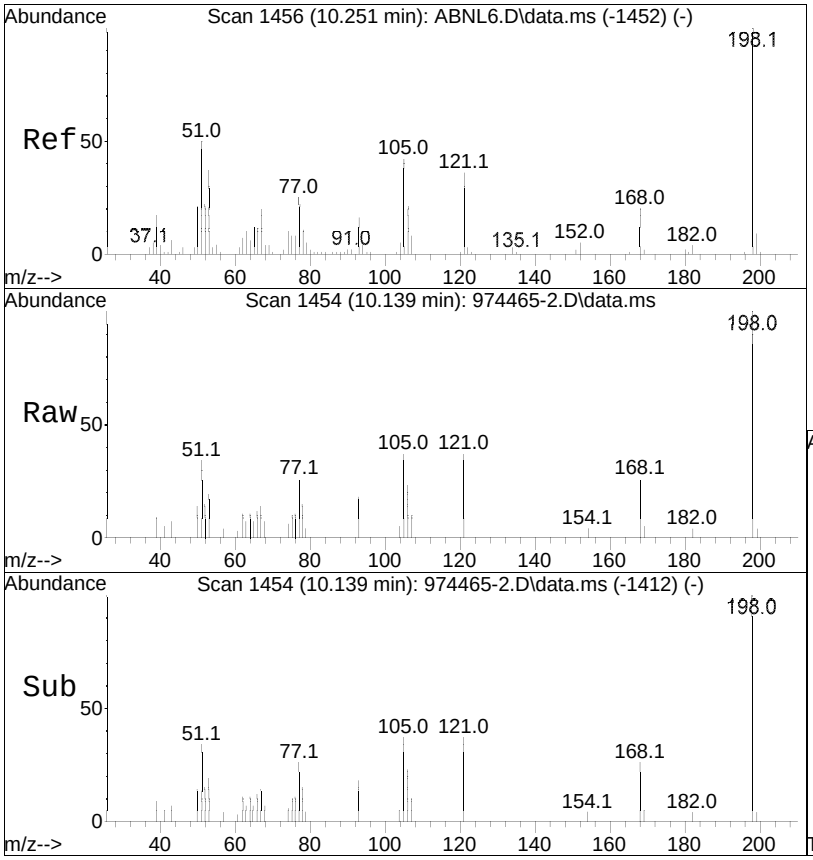



#75
4-Nitroaniline
Concen: 1.85 ug/ml
RT: 10.098 min Scan# 1447
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:138 Resp: 10702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 107.8 | 52.1 | 78.1# |
| 65 | 112.7 | 115.0 | 172.6# |

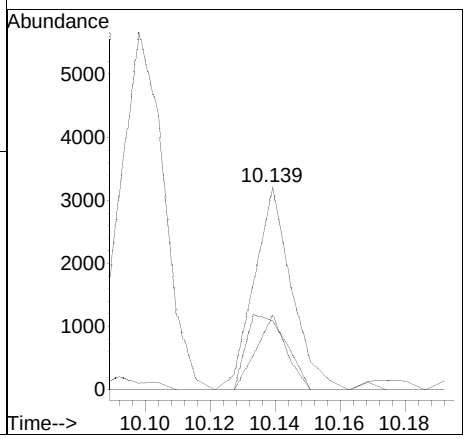


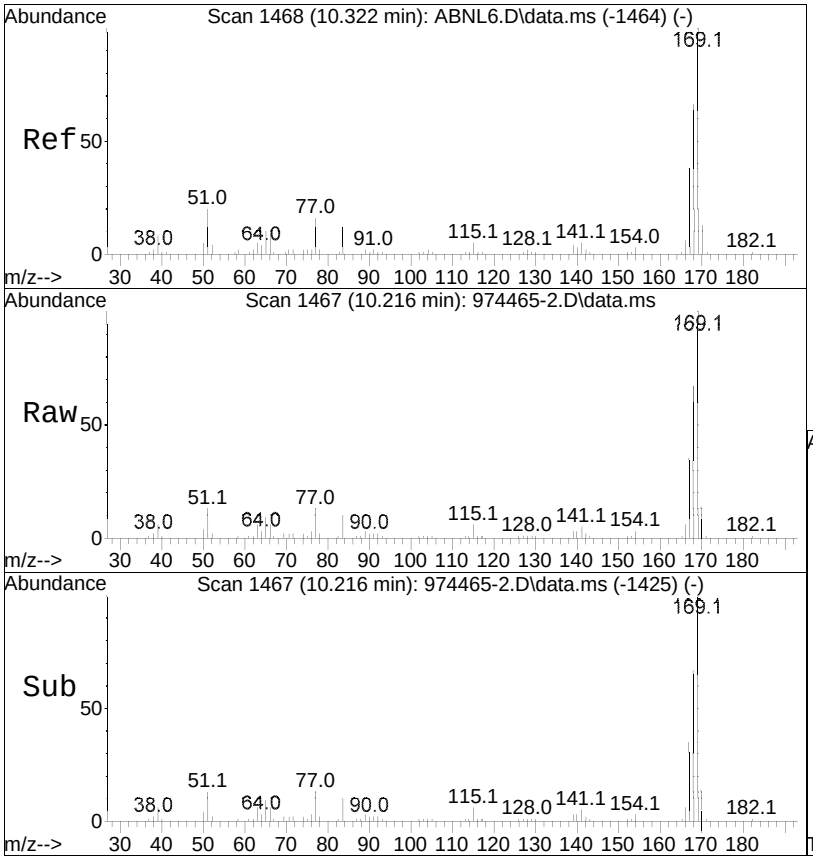



#76
4,6-Dinitro-o-cresol
Concen: 0.56 ug/ml
RT: 10.139 min Scan# 1454
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:198 Resp: 2577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 39.3 | 76.0 | 114.0# |
| 105 | 29.5 | 45.6 | 68.4# |

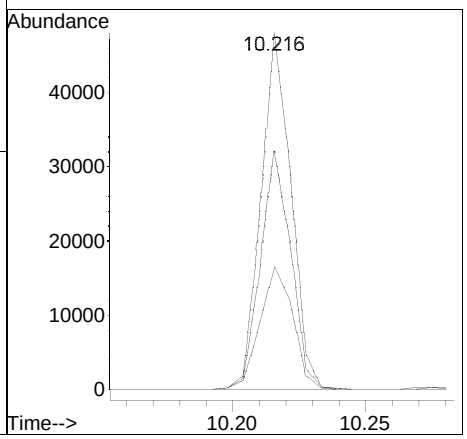


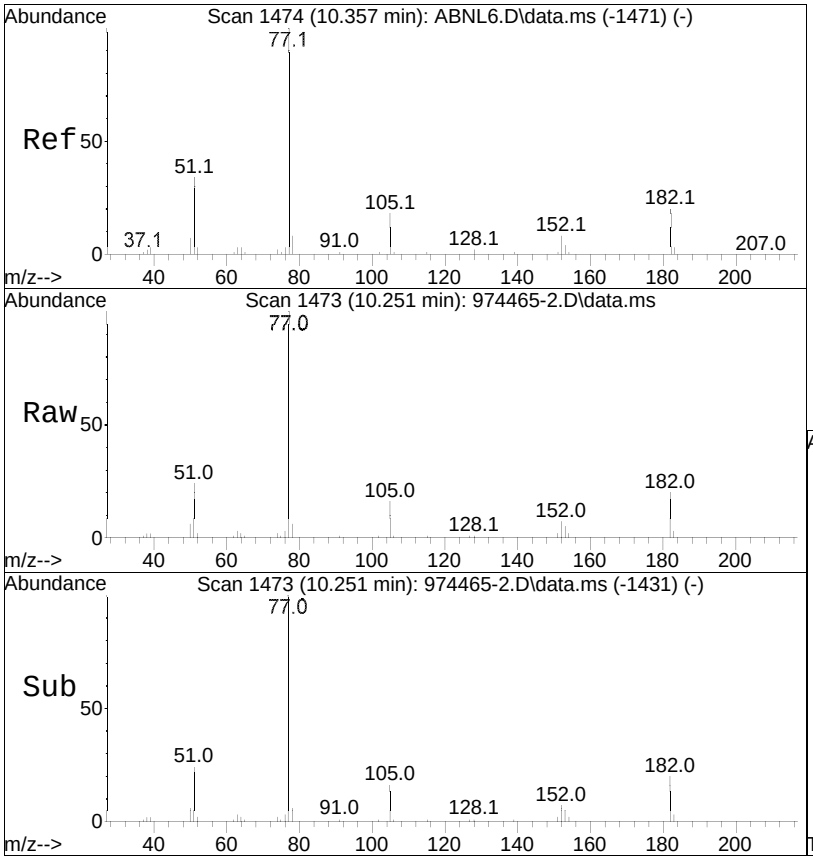



#77
NDPA/DPA
Concen: 1.70 ug/ml
RT: 10.216 min Scan# 1467
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:169 Resp: 37388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 68.1 | 54.0 | 81.0 |
| 167 | 38.0 | 28.6 | 42.8 |

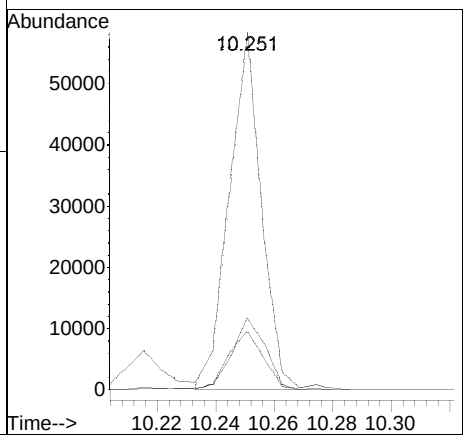


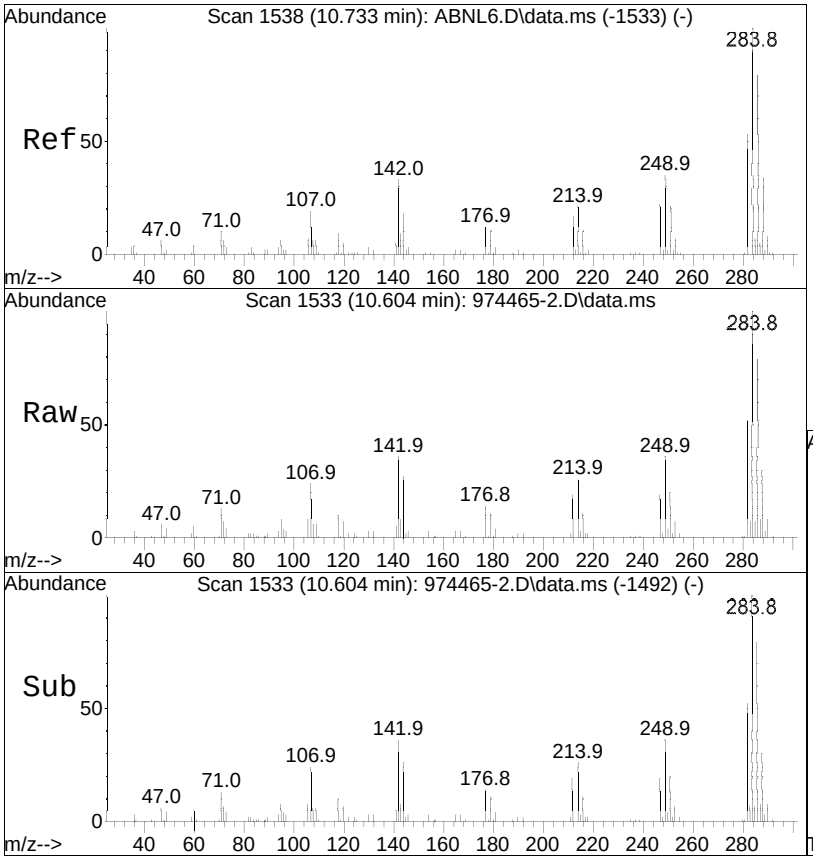



#78
Azobenzene
Concen: 1.76 ug/ml
RT: 10.251 min Scan# 1473
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion: 77 Resp: 44416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 182 | 21.9 | 17.4 | 26.2 |
| 105 | 18.2 | 15.4 | 23.2 |

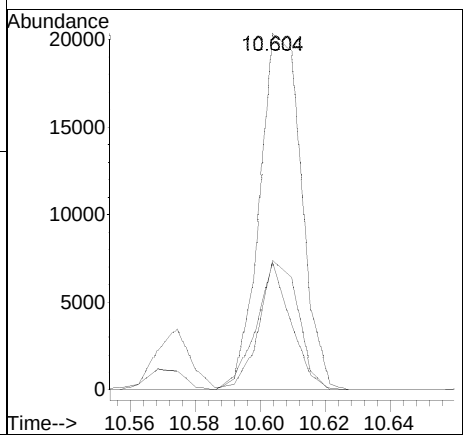


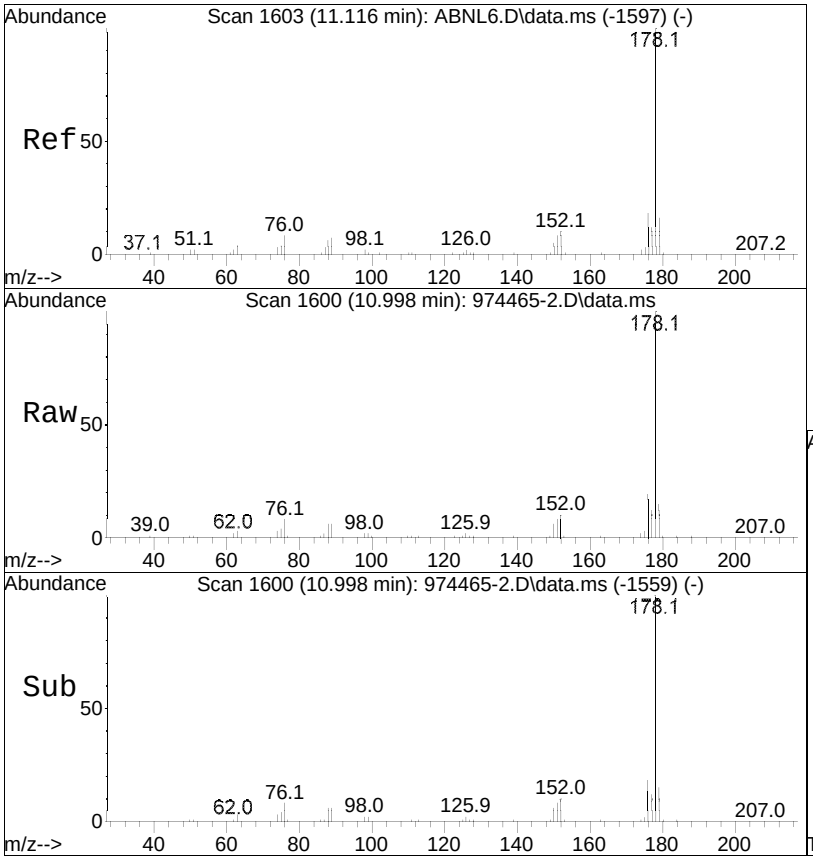



#81
Hexachlorobenzene
Concen: 1.83 ug/ml
RT: 10.604 min Scan# 1533
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:284 Resp: 18146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 30.5 | 41.9 | 62.9# |
| 249 | 33.8 | 24.1 | 36.1 |

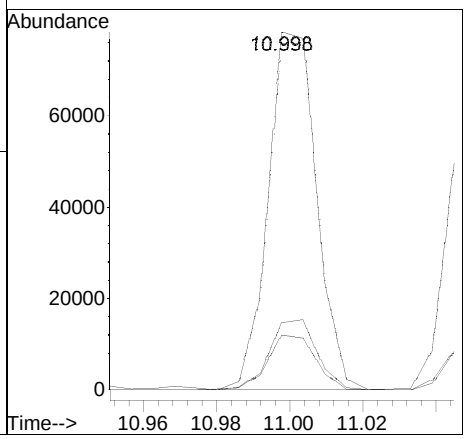


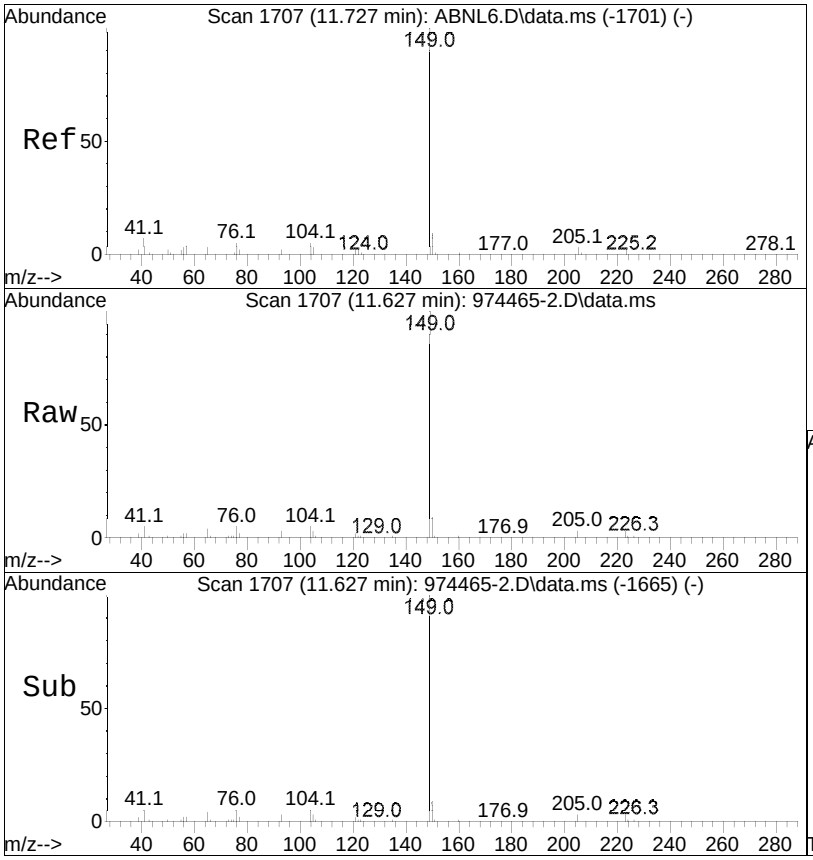



#89
Phenanthrene
Concen: 1.71 ug/ml
RT: 10.998 min Scan# 1600
Delta R.T. -0.006 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:178 Resp: 71673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.3 | 12.2 | 18.2 |
| 176 | 19.3 | 15.4 | 23.2 |

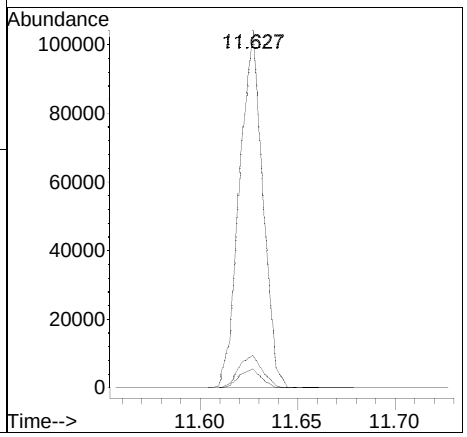


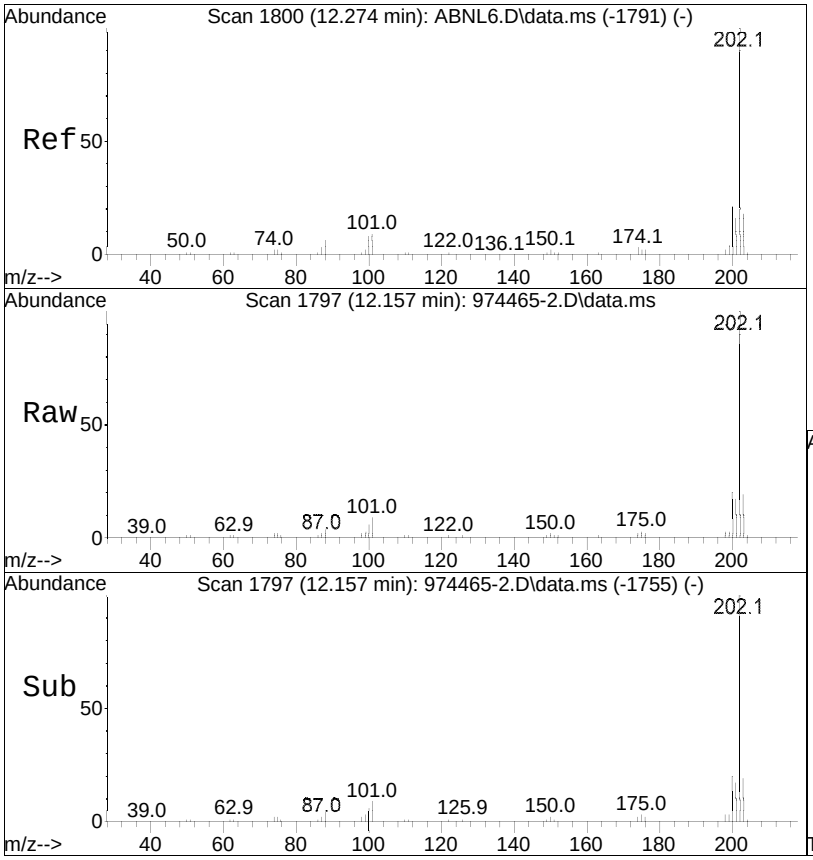



#92
Di-n-butylphthalate
Concen: 1.90 ug/ml
RT: 11.627 min Scan# 1707
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:149 Resp: 85403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.5 | 7.0 | 10.6 |
| 104 | 5.4 | 4.5 | 6.7 |

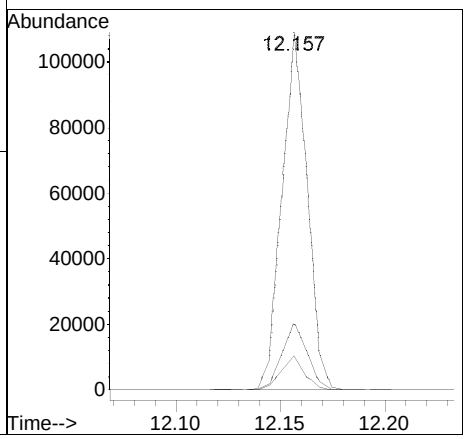


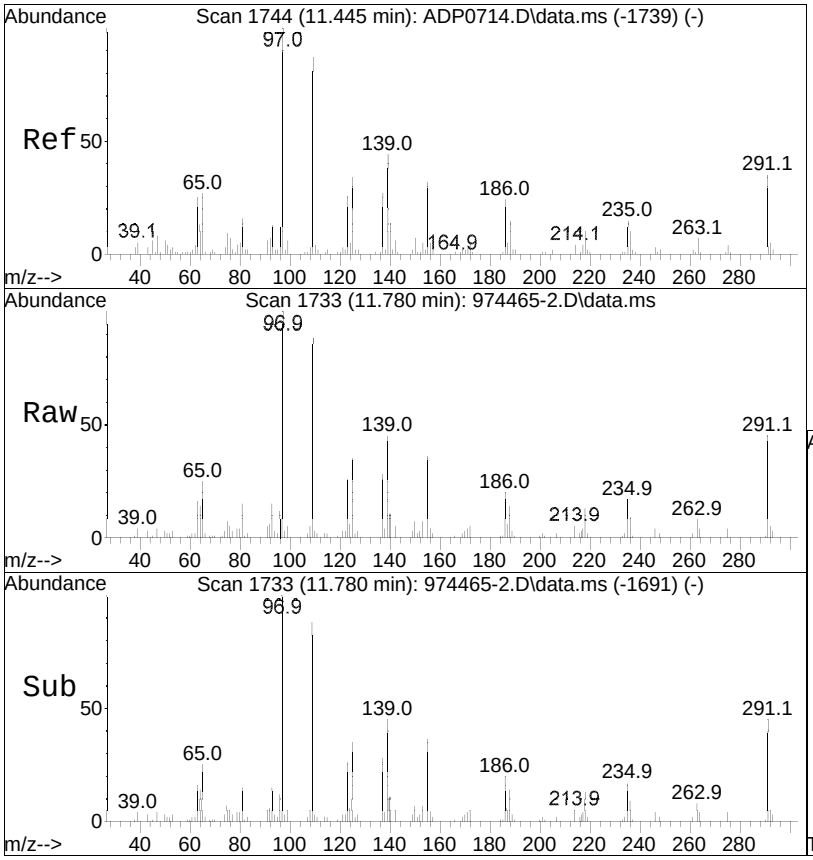



#93
Fluoranthene
Concen: 1.76 ug/ml
RT: 12.157 min Scan# 1797
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:202 Resp: 90583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 8.8 | 13.5 | 20.3# |
| 203 | 18.8 | 13.6 | 20.4 |

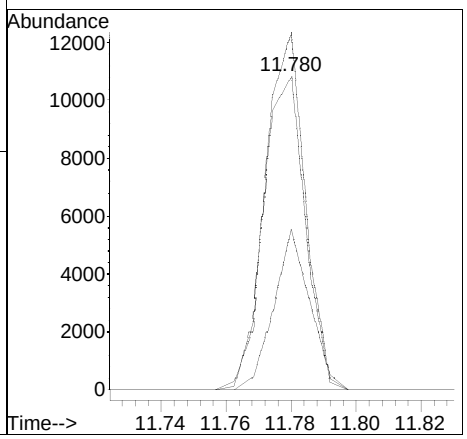


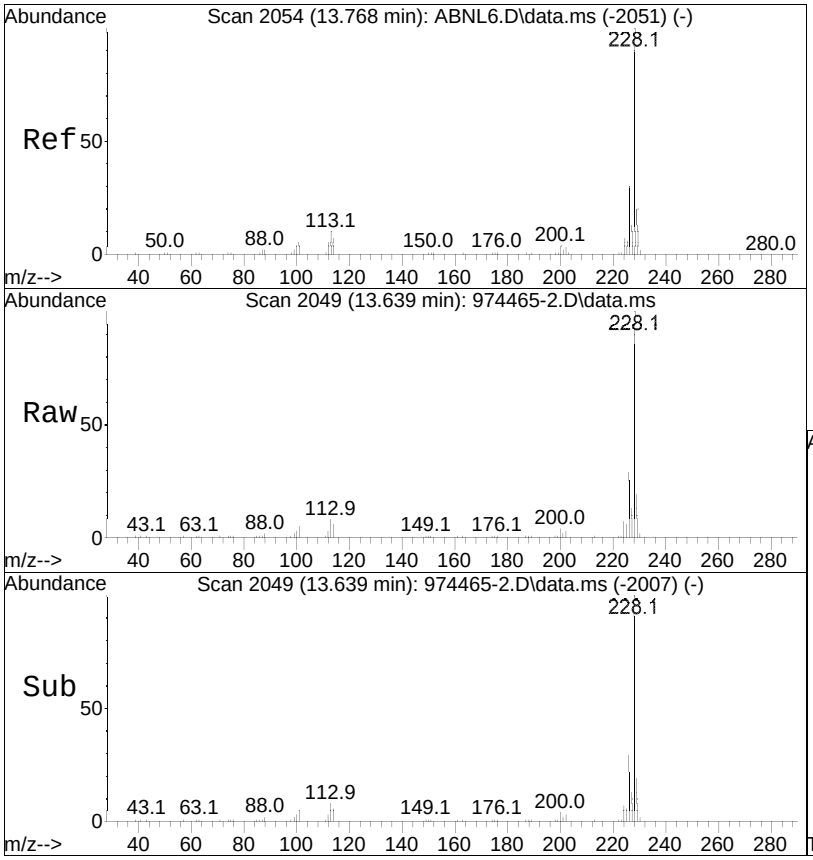



#102
Parathion
Concen: 2.06 ug/ml
RT: 11.780 min Scan# 1733
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:109 Resp: 9597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 109 | 100 | | |
| 97 | 109.2 | 87.4 | 131.2 |
| 291 | 44.3 | 34.2 | 51.2 |

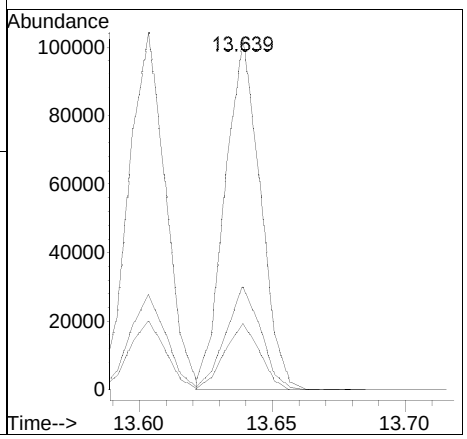


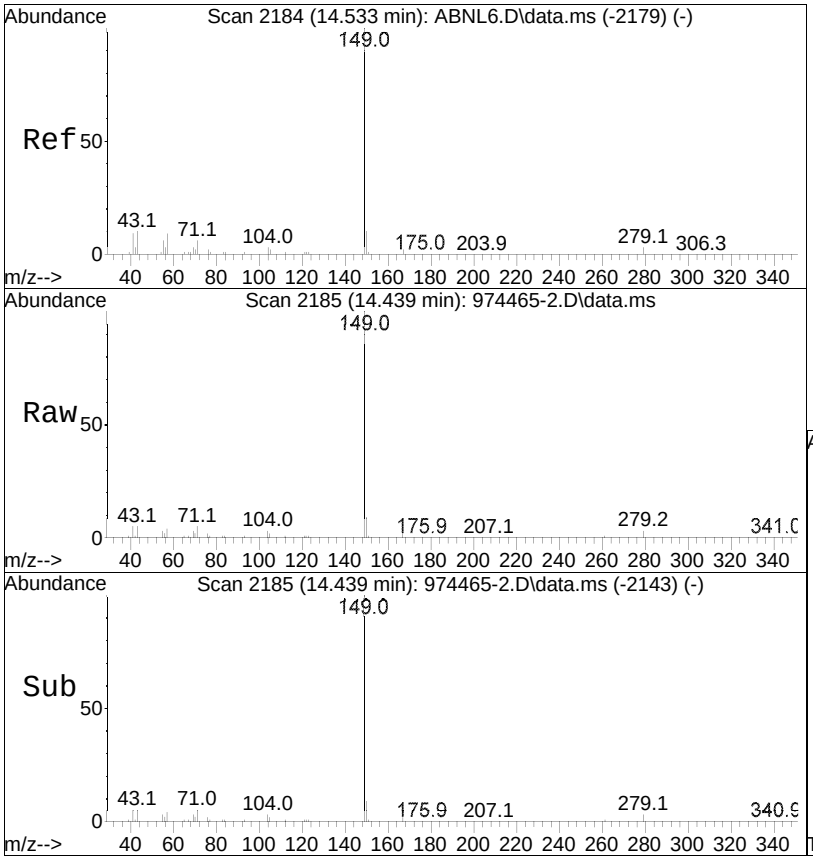



#107
Chrysene
Concen: 1.56 ug/ml
RT: 13.639 min Scan# 2049
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:228 Resp: 94874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 29.3 | 24.0 | 36.0 |
| 229 | 18.6 | 15.8 | 23.8 |

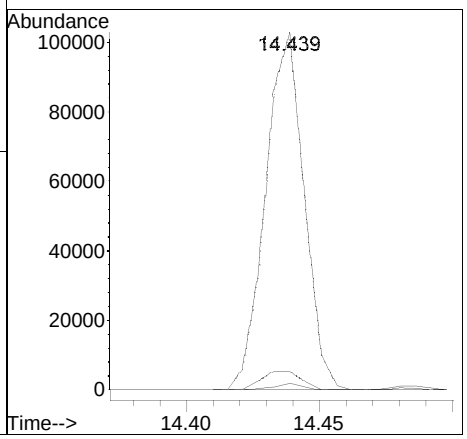


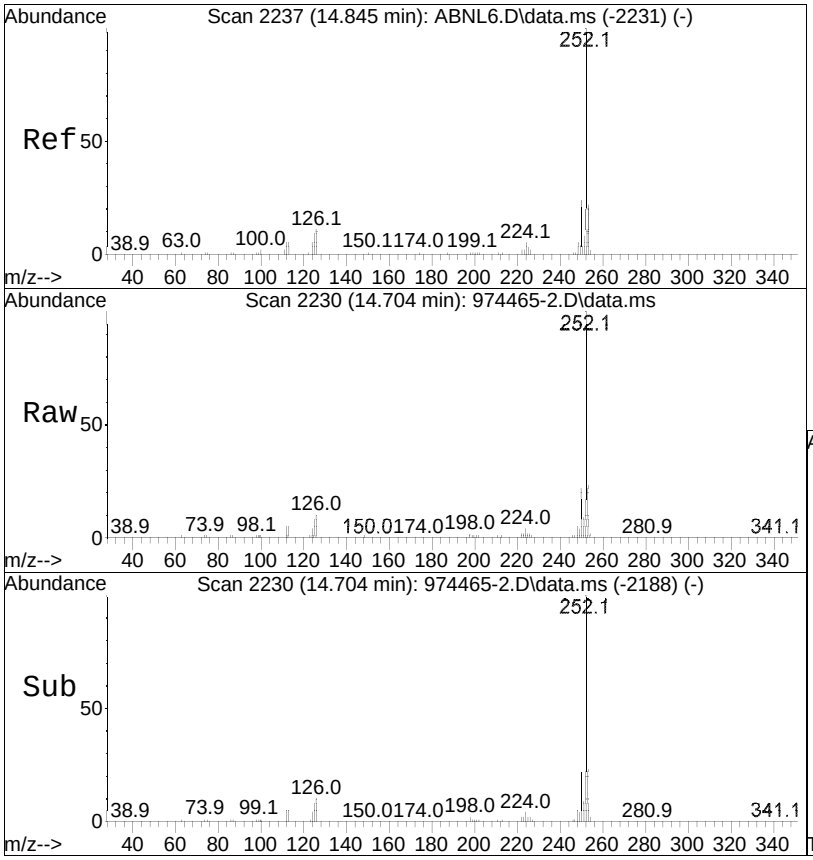



#109
Di-n-octylphthalate
Concen: 1.78 ug/ml
RT: 14.439 min Scan# 2185
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:149 Resp: 102670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 5.6 | 18.8 | 28.2# |
| 167 | 1.5 | 1.3 | 1.9 |

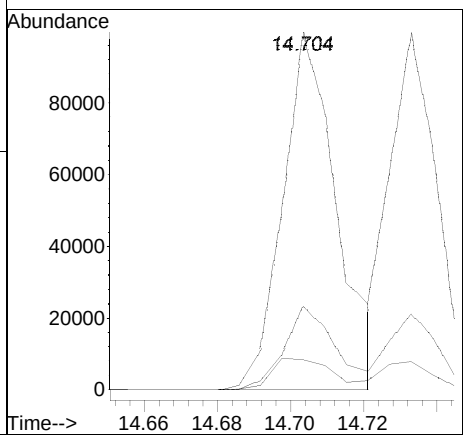





#110
Benzo(b)fluoranthene
Concen: 1.69 ug/ml
RT: 14.704 min Scan# 2230
Delta R.T. -0.000 min
Lab File: 974465-2.D
Acq: 21 Sep 2024 11:56 am

Tgt Ion:252 Resp: 102936

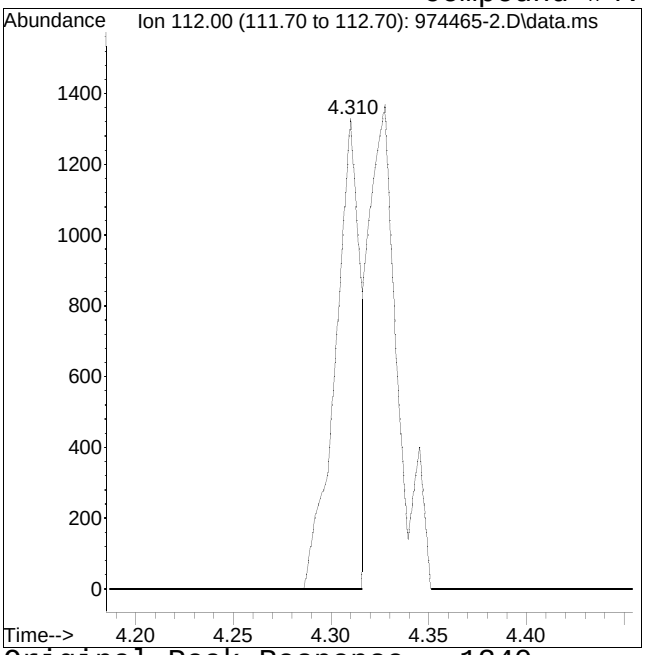
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 125 | 9.5 | 13.3 | 19.9# |
| 253 | 22.5 | 17.1 | 25.7 |

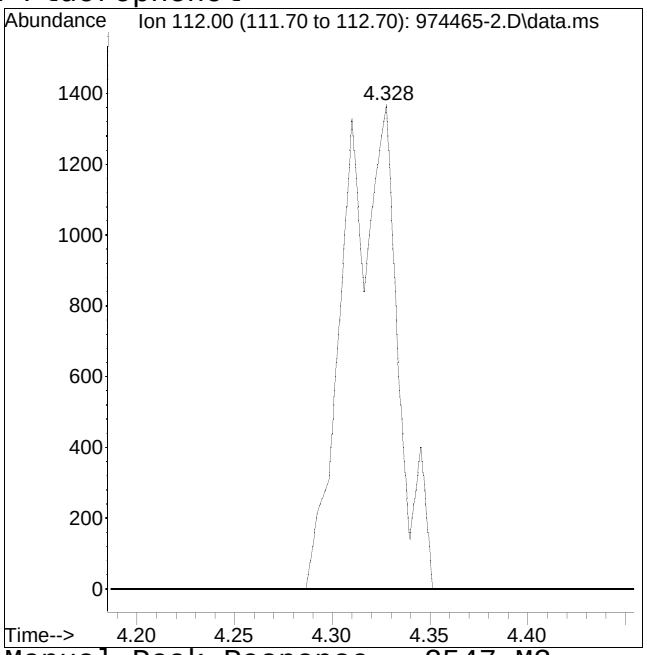


# Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : 974465-2.D Operator : SV106:als
Date Inj'd : 9/21/2024 11:56 am Instrument : SV 106
Sample : WG1974465-2,32,,gmr,sc(ok) Quant Date : 9/21/2024 12:16 pm

## Compound #4: 2-Fluorophenol



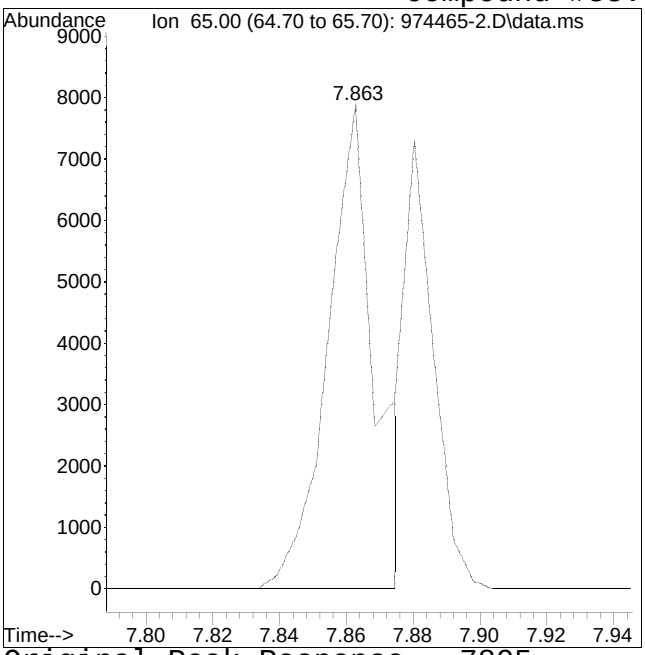

Original Peak Response = 1240 Manual Peak Response = 2547 M3

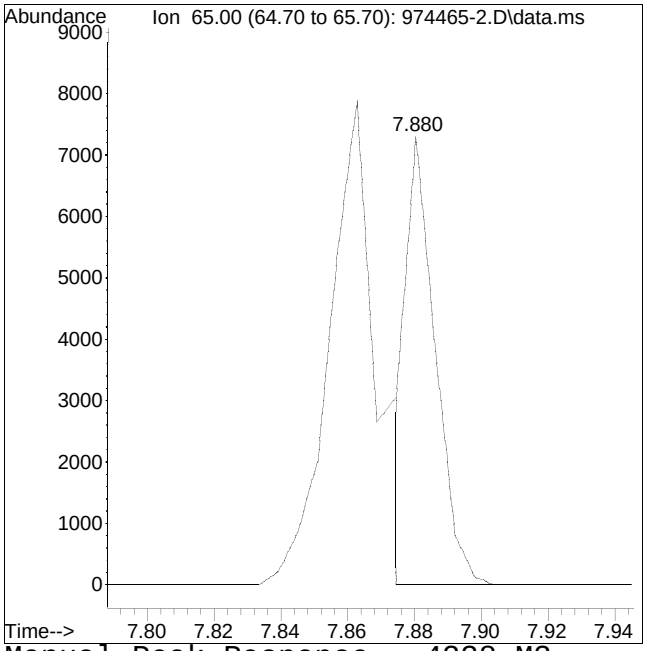
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : 974465-2.D Operator : SV106:als
Date Inj'd : 9/21/2024 11:56 am Instrument : SV 106
Sample : WG1974465-2,32,,gmr,sc(ok) Quant Date : 9/21/2024 12:16 pm

Compound #38: 4-Chloroaniline



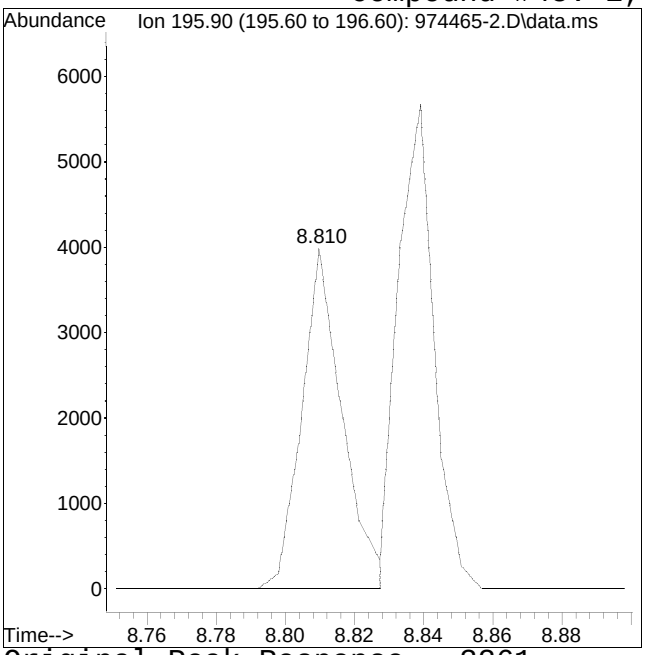

Original Peak Response = 7805 Manual Peak Response = 4238 M3

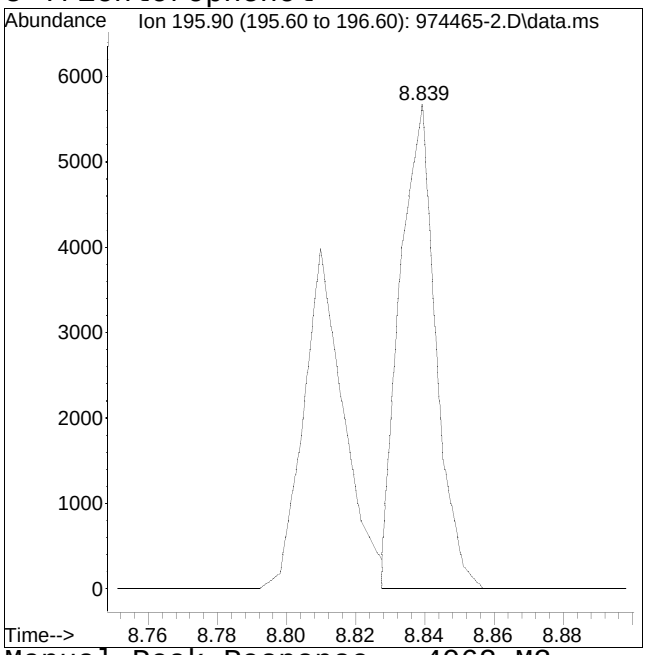
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\240921RVT\ QMethod : FS240624SV106.m
Data File : 974465-2.D Operator : SV106:als
Date Inj'd : 9/21/2024 11:56 am Instrument : SV 106
Sample : WG1974465-2,32,,gmr,sc(ok) Quant Date : 9/21/2024 12:16 pm

Compound #45: 2,4,5-Trichlorophenol




Original Peak Response = 3261 Manual Peak Response = 4062 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-3.D
Acq On : 21 Sep 2024 12:20 pm
Operator : SV106:als
Sample : WG1974465-3,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 12:38:45 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.339 | 152 | 28186 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 84.54% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.339 | 152 | 28186 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 88.95% | | | | |
| 32) IS3_1,4-Dichlorobenzen... | 6.339 | 152 | 28186 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 28138 | | | Recovery = 100.17% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 104192 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 92.41% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 104192 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 98.37% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 72455 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 91.37% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 72455 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 98.78% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 72455 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 111.88% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 151260 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 90.73% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 151260 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 106.52% | | | | |
| 104) IS1_Chrysene-d12 | 13.609 | 240 | 167140 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 92.41% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 173872 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 97.14% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 9874 | 1.212 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 60.60% | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 9336 | 0.837 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 41.85% | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8359 | 0.733 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 73.30% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 19730 | 0.737 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 73.70% | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 7754 | 1.717 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 85.85% | | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-3.D
Acq On : 21 Sep 2024 12:20 pm
Operator : SV106:als
Sample : WG1974465-3,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 12:38:45 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 96) 4-Terphenyl-d14 | 12.568 | 244 | 33994 | 0.836 | ug/ml | 0.00 |

Spiked Amount 1.000 Range 30 - 130 Recovery = 83.60%

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 6) 2-Chlorophenol | 6.063 | 128 | 16177 | 1.783 | ug/ml | 88 |
| 8) Phenol | 5.975 | 94 | 11980 | 1.036 | ug/ml# | 90 |
| 14) Bis(2-chloroisopropyl)... | 6.733 | 45 | 8939 | 0.586 | ug/ml# | 1 |
| 15) 2-Methylphenol | 6.722 | 108 | 14689 | 1.763 | ug/ml | 98 |
| 17) n-Nitrosodi-n-propylamine | 6.875 | 70 | 13687 | 1.838 | ug/ml# | 89 |
| 18) 3-Methylphenol/4-Methy... | 6.910 | 108 | 15829 | 1.756 | ug/ml | 99 |
| 20) Nitrobenzene | 7.022 | 77 | 19749 | 1.706 | ug/ml# | 91 |
| 21) Isophorone | 7.304 | 82 | 35206 | 1.810 | ug/ml# | 93 |
| 22) 2-Nitrophenol | 7.380 | 139 | 8750 | 1.795 | ug/ml# | 86 |
| 23) 2,4-Dimethylphenol | 7.486 | 107 | 15064 | 1.643 | ug/ml | 95 |
| 24) Bis(2-chloroethoxy)met... | 7.586 | 93 | 22214 | 1.773 | ug/ml# | 96 |
| 25) 2,4-Dichlorophenol | 7.645 | 162 | 16617 | 1.913 | ug/ml | 96 |
| 28) Benzaldehyde | 5.751 | 105 | 13315 | 1.591 | ug/ml | 94 |
| 29) Acetophenone | 6.845 | 105 | 26573 | 1.747 | ug/ml# | 74 |
| 38) 4-Chloroaniline | 7.880 | 65 | 4729 | 1.074 | ug/ml | 93 |
| 40) p-Chloro-m-cresol | 8.410 | 107 | 17872 | 2.002 | ug/ml | 92 |
| 43) Hexachlorocyclopentadiene | 8.686 | 237 | 12132 | 1.387 | ug/ml | 94 |
| 44) 2,4,6-Trichlorophenol | 8.810 | 196 | 14797 | 1.890 | ug/ml | 93 |
| 45) 2,4,5-Trichlorophenol | 8.839 | 196 | 16799 | 2.004 | ug/ml | 97 |
| 48) 2-Nitroaniline | 9.110 | 138 | 12352 | 1.937 | ug/ml# | 85 |
| 51) Dimethyl phthalate | 9.322 | 163 | 48657 | 1.889 | ug/ml# | 97 |
| 53) 2,6-Dinitrotoluene | 9.363 | 165 | 10987 | 1.981 | ug/ml# | 83 |
| 60) Caprolactam | 8.192 | 55 | 1919 | 0.351 | ug/ml# | 1 |
| 61) 1,2,4,5-Tetrachloroben... | 8.686 | 216 | 21894 | 1.532 | ug/ml# | 95 |
| 62) Biphenyl | 8.992 | 154 | 44995 | 1.593 | ug/ml | 98 |
| 64) 3-Nitroaniline | 9.516 | 138 | 9808 | 1.695 | ug/ml | 83 |
| 66) 2,4-Dinitrophenol | 9.616 | 184 | 6545 | 1.694 | ug/ml | 90 |
| 67) Dibenzofuran | 9.739 | 168 | 56348 | 1.607 | ug/ml | 95 |
| 68) 2,4-Dinitrotoluene | 9.751 | 165 | 15179 | 1.765 | ug/ml | 98 |
| 69) 4-Nitrophenol | 9.698 | 65 | 5824 | 0.994 | ug/ml# | 77 |
| 72) Diethyl phthalate | 10.021 | 149 | 51735 | 1.867 | ug/ml | 100 |
| 74) 4-Chlorophenyl phenyl ... | 10.104 | 204 | 25945 | 1.787 | ug/ml# | 86 |
| 75) 4-Nitroaniline | 10.104 | 138 | 11215 | 1.862 | ug/ml# | 68 |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-3.D
Acq On : 21 Sep 2024 12:20 pm
Operator : SV106:als
Sample : WG1974465-3,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 12:38:45 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 76) | 4,6-Dinitro-o-cresol | 10.139 | 198 | 10162 | 2.108 | ug/ml# | 56 |
| 77) | NDPA/DPA | 10.216 | 169 | 39000 | 1.705 | ug/ml | 96 |
| 80) | 4-Bromophenyl phenyl e... | 10.574 | 248 | 17337 | 1.914 | ug/ml# | 83 |
| 87) | Atrazine | 10.763 | 200 | 14819 | 1.608 | ug/ml | 99 |
| 91) | Carbazole | 11.221 | 167 | 68072 | 1.769 | ug/ml | 98 |
| 92) | Di-n-butylphthalate | 11.627 | 149 | 89892 | 1.989 | ug/ml | 99 |
| 97) | Butyl benzyl phthalate | 13.104 | 149 | 41337 | 1.987 | ug/ml | 93 |
| 106) | 3,3'-Dichlorobenzidine | 13.609 | 252 | 33675 | 1.648 | ug/ml# | 93 |
| 108) | Bis(2-ethylhexyl)phtha... | 13.751 | 149 | 64279 | 1.883 | ug/ml# | 91 |
| 109) | Di-n-octylphthalate | 14.439 | 149 | 107802 | 1.908 | ug/ml# | 66 |

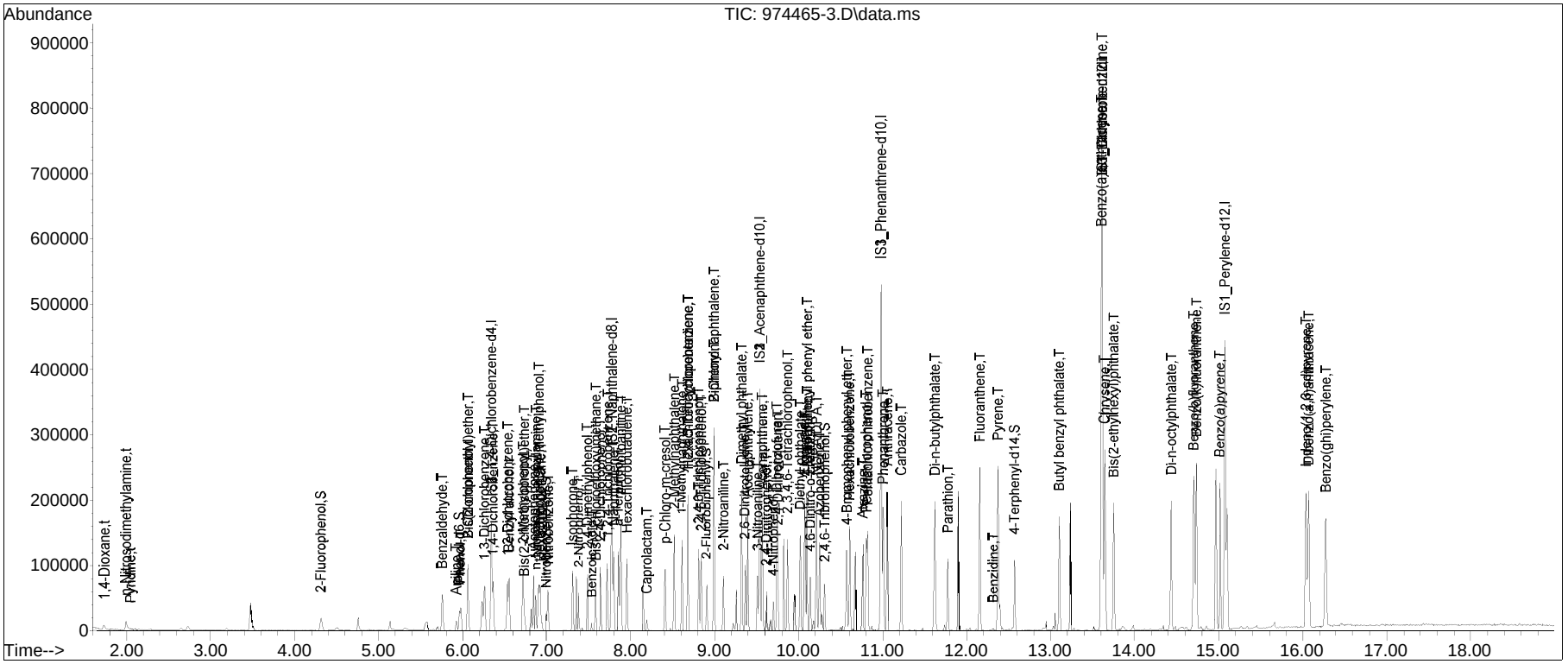
(#) = qualifier out of range (m) = manual integration (+) = signals summed

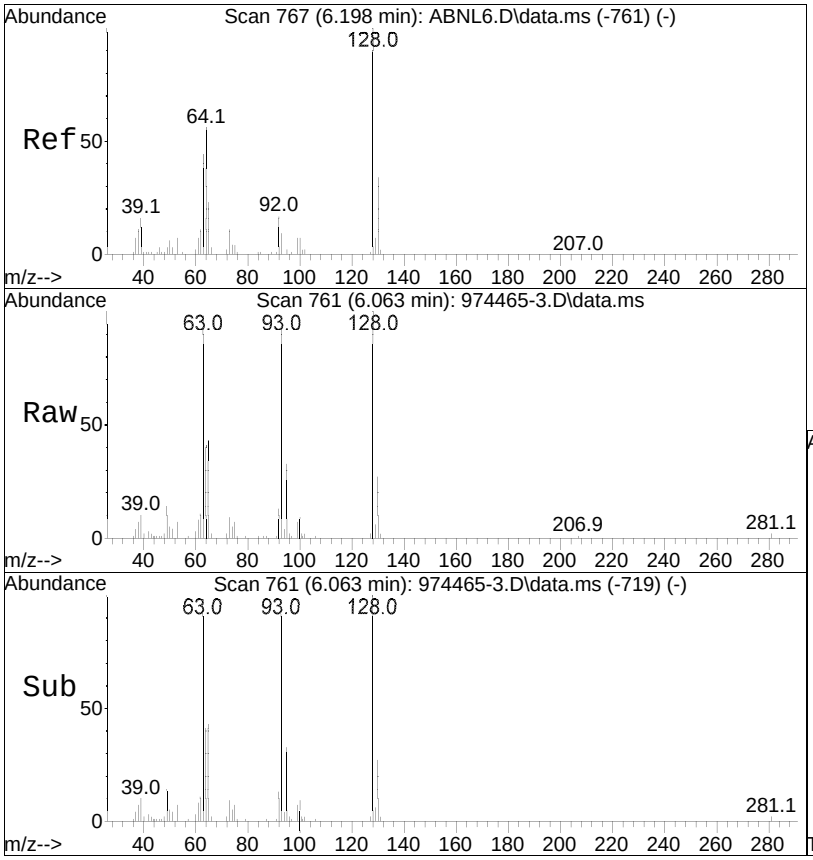
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-3.D
Acq On : 21 Sep 2024 12:20 pm
Operator : SV106:als
Sample : WG1974465-3,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 12:38:45 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MARVT\AP90921.D•

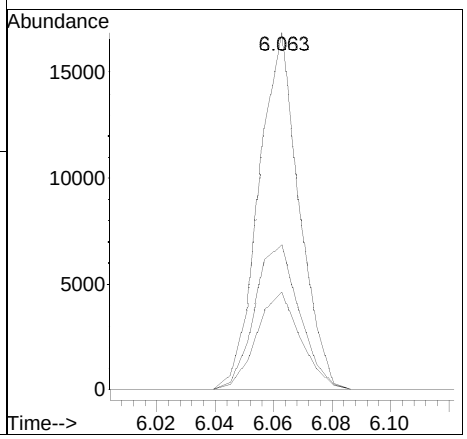


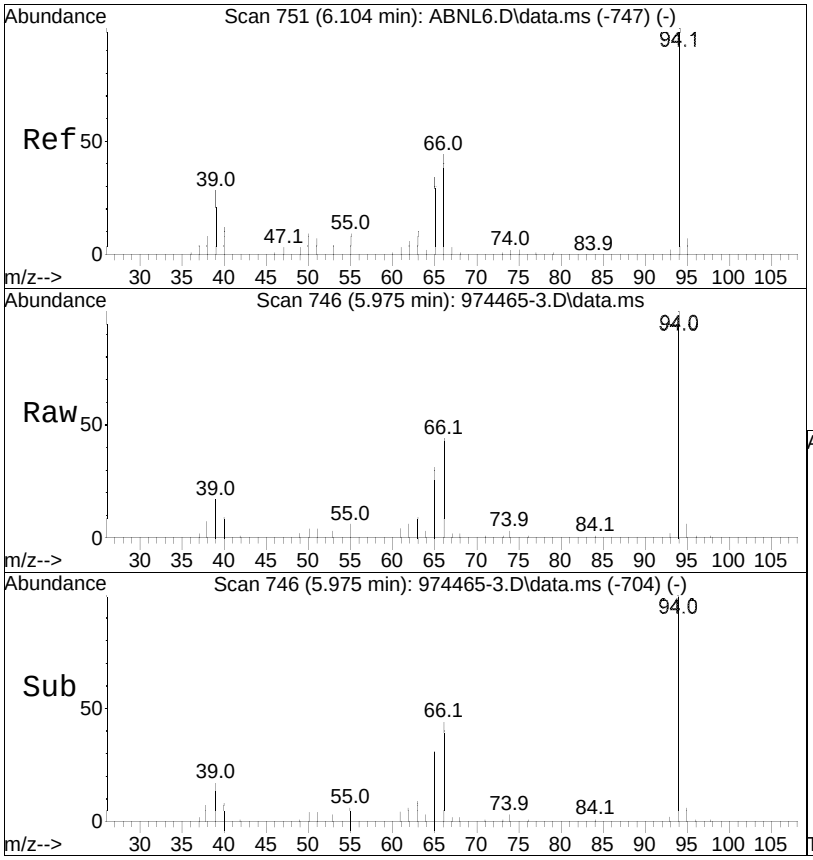



#6
2-Chlorophenol
Concen: 1.78 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:128 Resp: 16177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 64 | 45.2 | 45.1 | 67.7 |
| 130 | 29.9 | 26.2 | 39.4 |

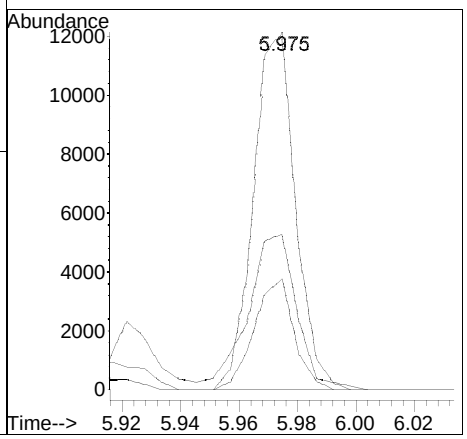


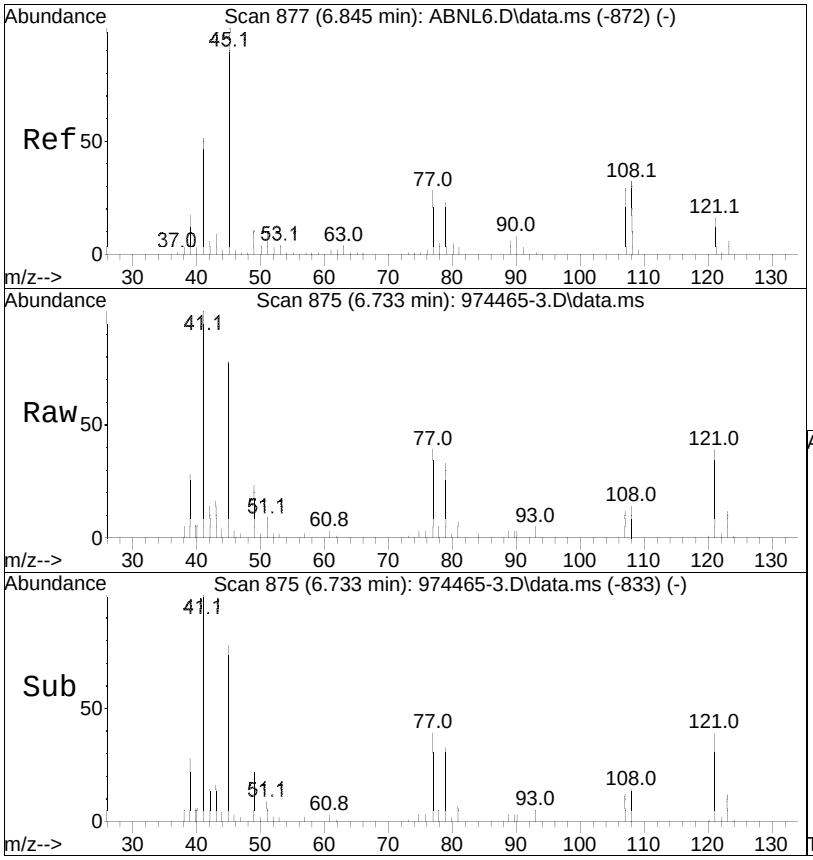



#8
Phenol
Concen: 1.04 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 94 Resp: 11980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 29.7 | 26.0 | 39.0 |
| 66 | 51.0 | 33.8 | 50.8# |

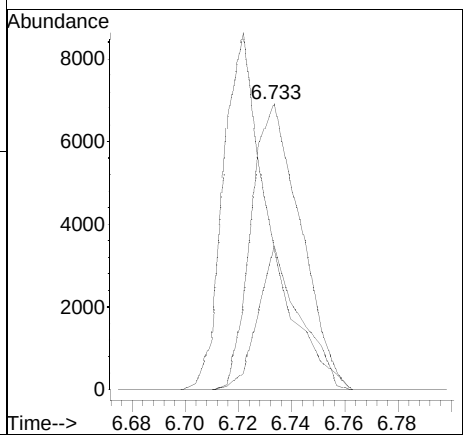


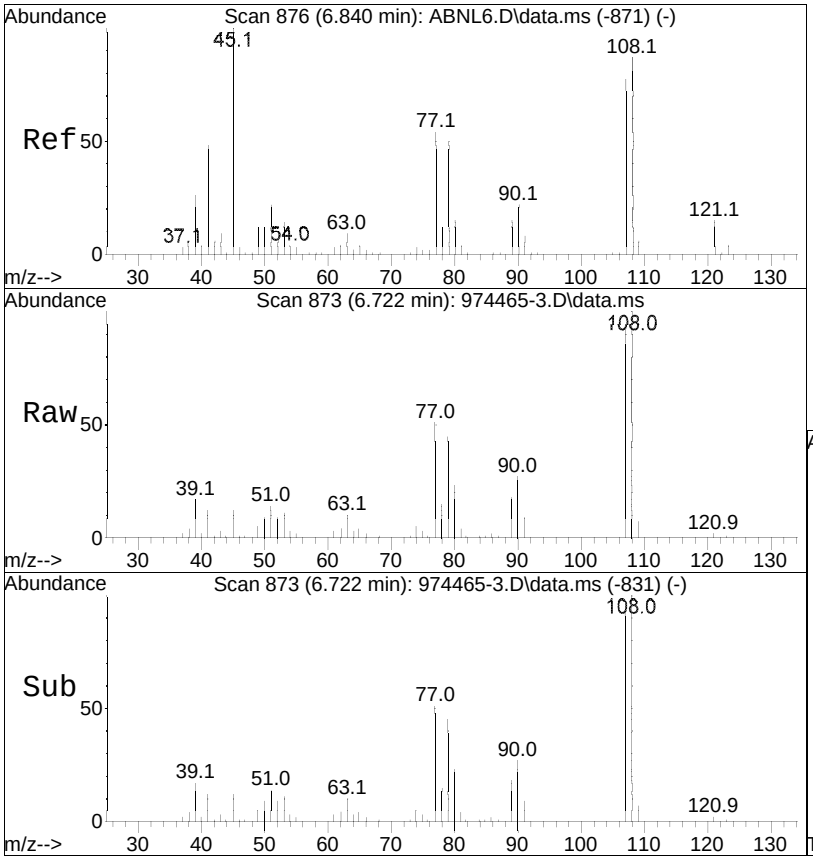



#14
Bis(2-chloroisopropyl)ether
Concen: 0.59 ug/ml
RT: 6.733 min Scan# 875
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 45 Resp: 8939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 121 | 42.4 | 9.8 | 14.6# |
| 77 | 116.5 | 6.1 | 9.1# |

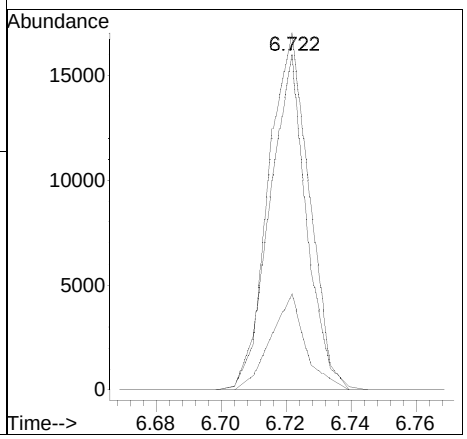


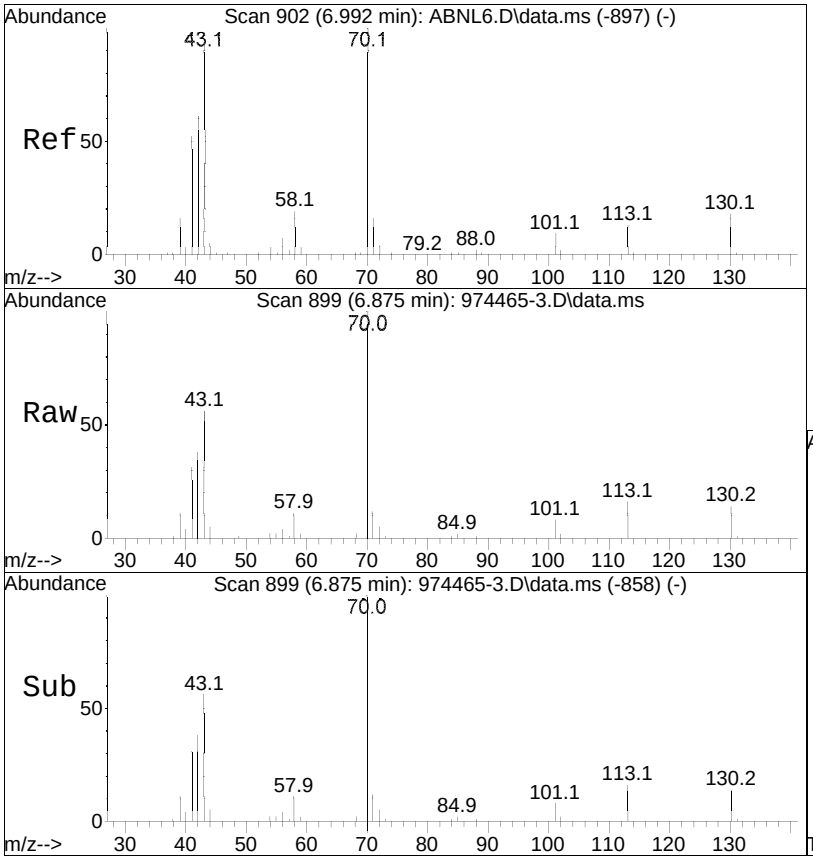



#15
2-Methylphenol
Concen: 1.76 ug/ml
RT: 6.722 min Scan# 873
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:108 Resp: 14689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 85.8 | 70.7 | 106.1 |
| 90 | 23.1 | 18.7 | 28.1 |

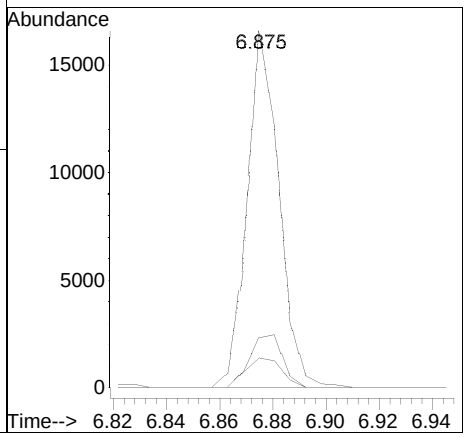


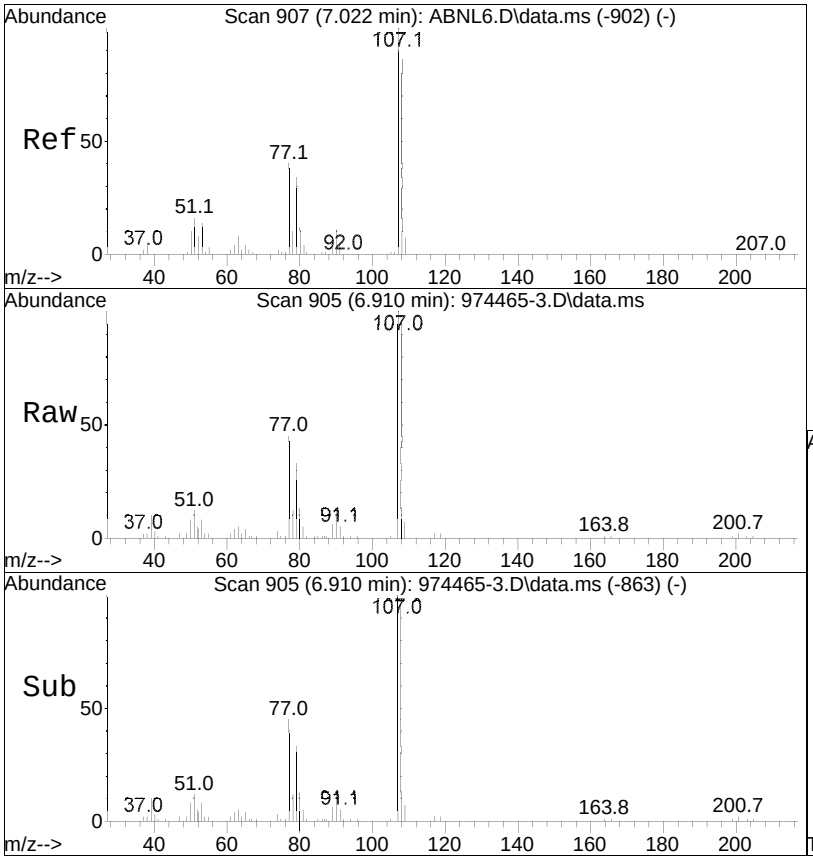



#17
n-Nitrosodi-n-propylamine
Concen: 1.84 ug/ml
RT: 6.875 min Scan# 899
Delta R.T. -0.006 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 70 Resp: 13687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 15.5 | 18.2 | 27.4# |
| 101 | 9.5 | 7.8 | 11.8 |

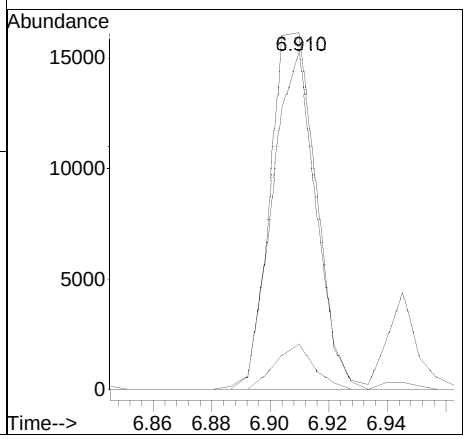


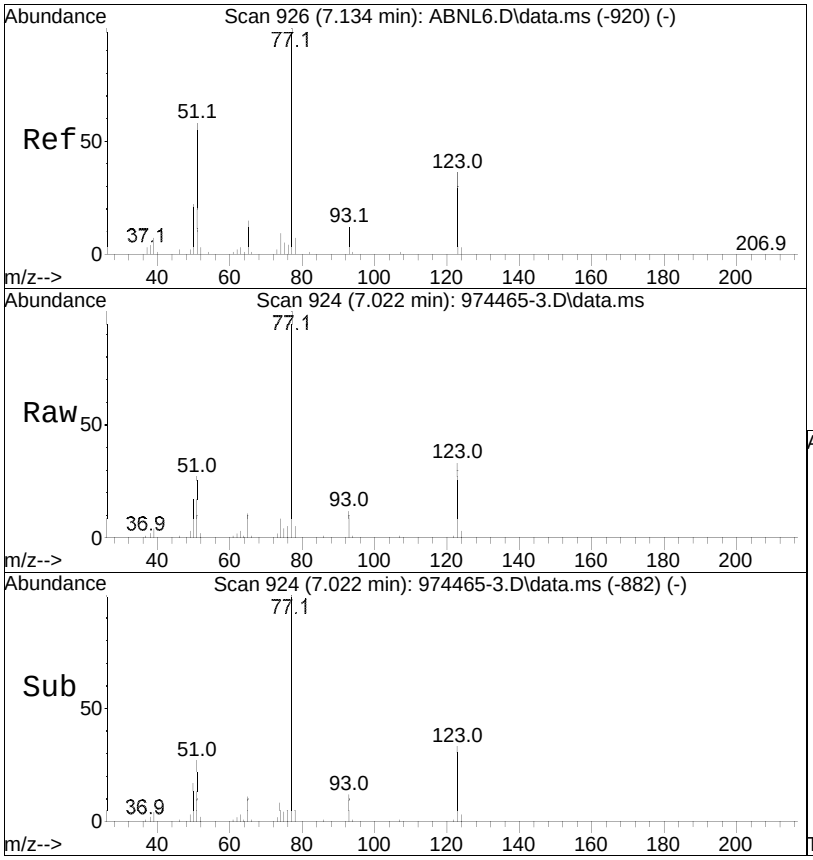



#18
3-Methylphenol/4-Methylphenol
Concen: 1.76 ug/ml
RT: 6.910 min Scan# 905
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:108 Resp: 15829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 111.7 | 88.6 | 132.8 |
| 90 | 12.2 | 8.8 | 13.2 |

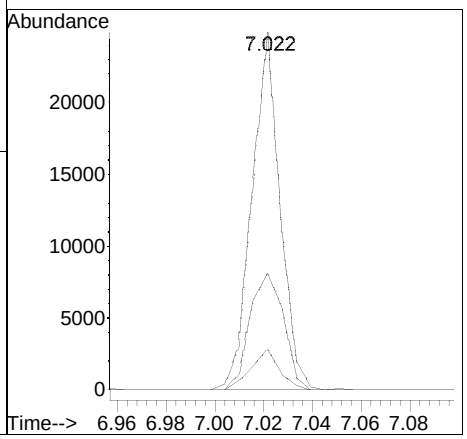


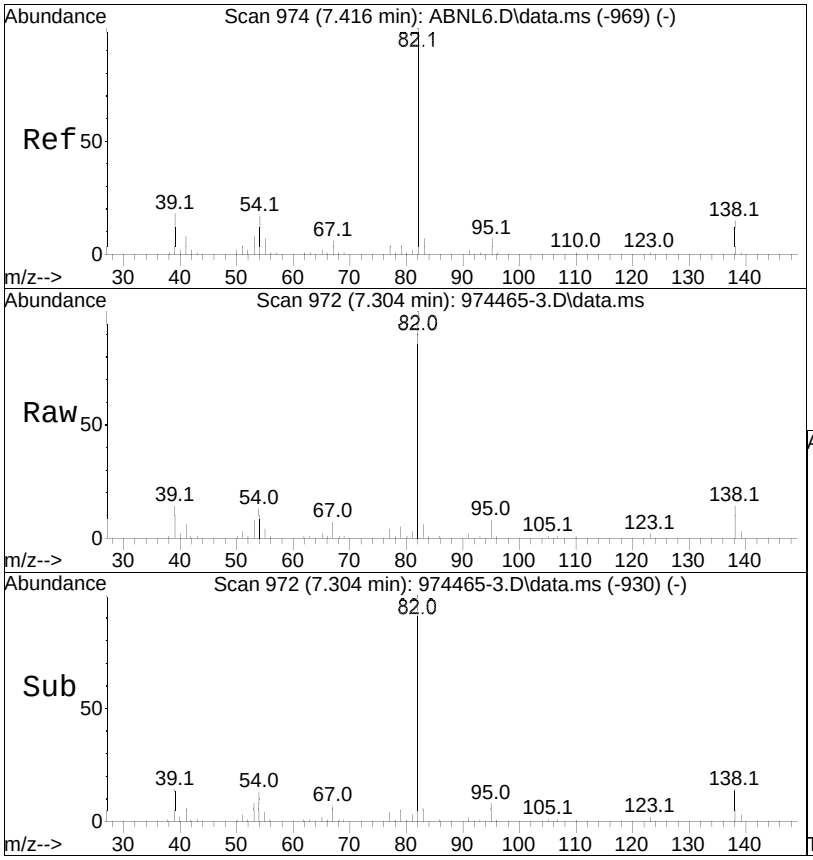



#20
Nitrobenzene
Concen: 1.71 ug/ml
RT: 7.022 min Scan# 924
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 77 Resp: 19749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 39.1 | 36.3 | 54.5 |
| 65 | 11.6 | 11.6 | 17.4# |

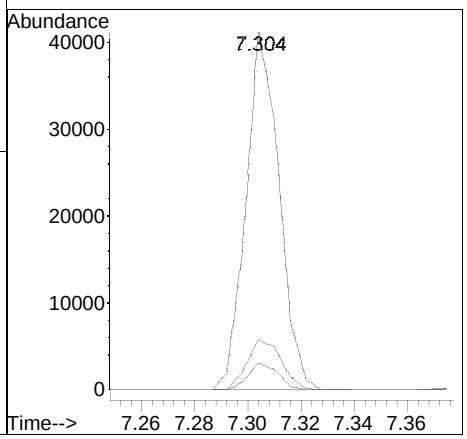


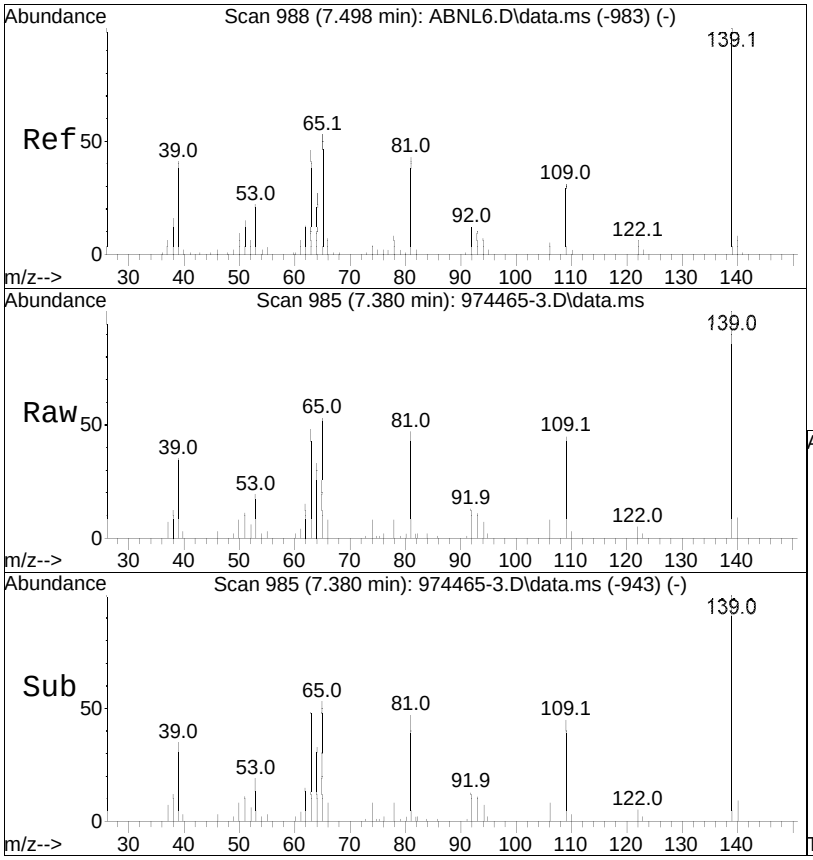



#21
Isophorone
Concen: 1.81 ug/ml
RT: 7.304 min Scan# 972
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 82 Resp: 35206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 14.6 | 14.7 | 22.1# |
| 95 | 6.9 | 5.2 | 7.8 |

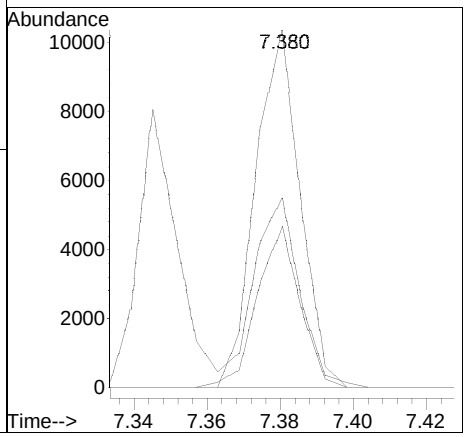


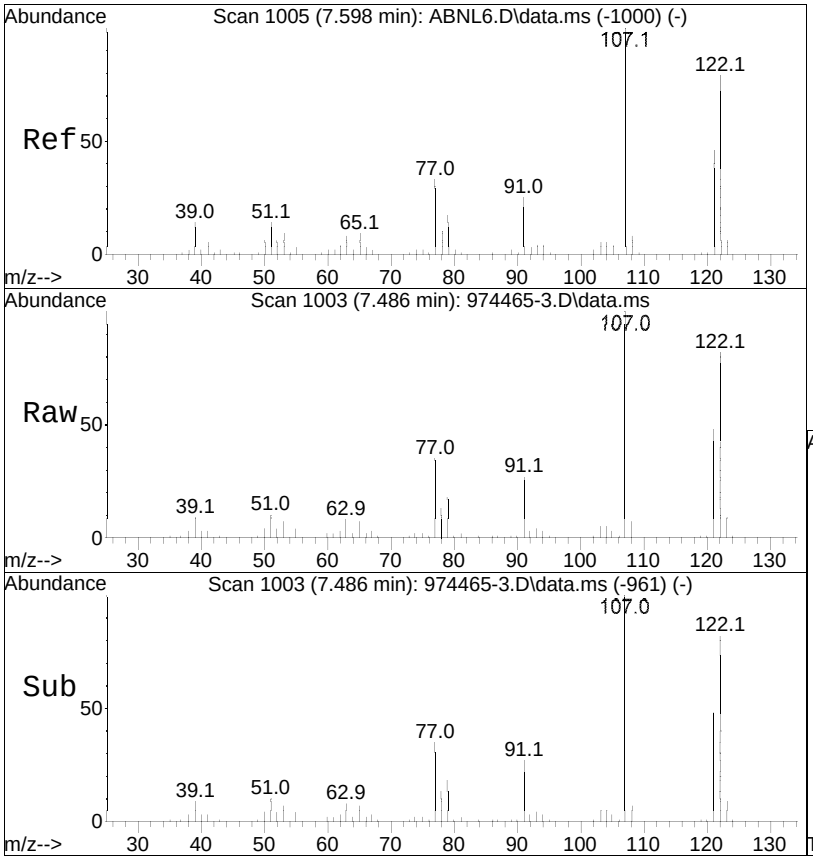



#22
2-Nitrophenol
Concen: 1.80 ug/ml
RT: 7.380 min Scan# 985
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:139 Resp: 8750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 43.1 | 19.4 | 29.0# |
| 65 | 54.5 | 46.1 | 69.1 |

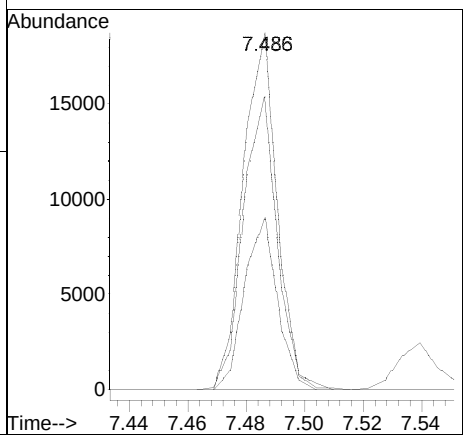


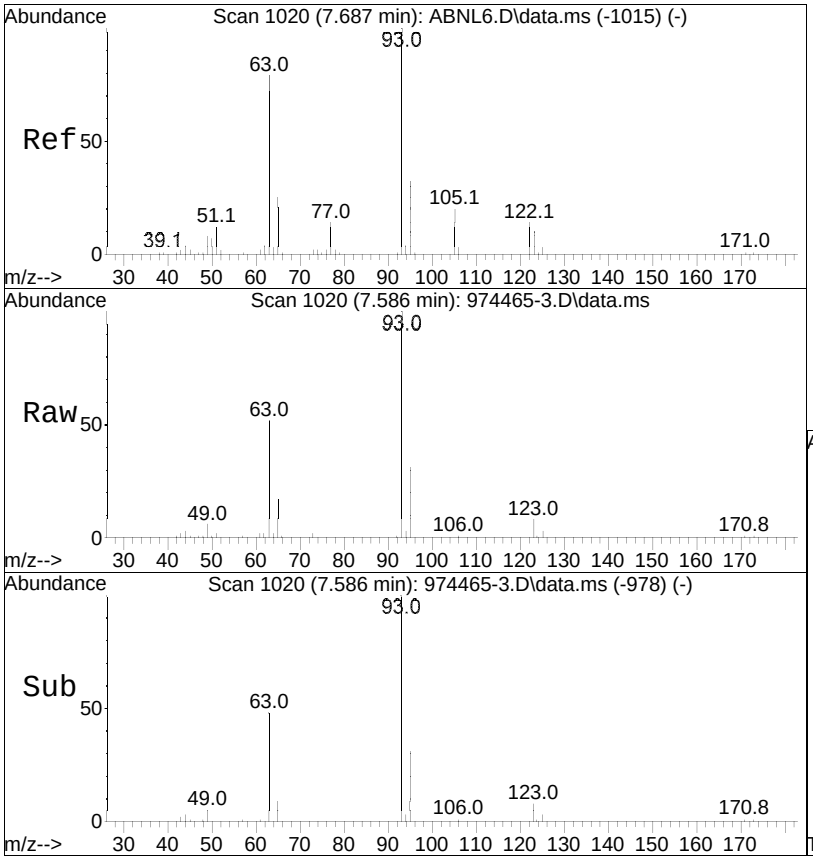



#23
2,4-Dimethylphenol
Concen: 1.64 ug/ml
RT: 7.486 min Scan# 1003
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:107 Resp: 15064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 47.0 | 40.0 | 60.0 |
| 122 | 82.4 | 70.2 | 105.4 |

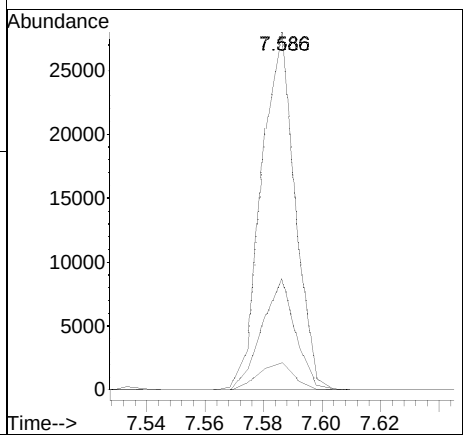


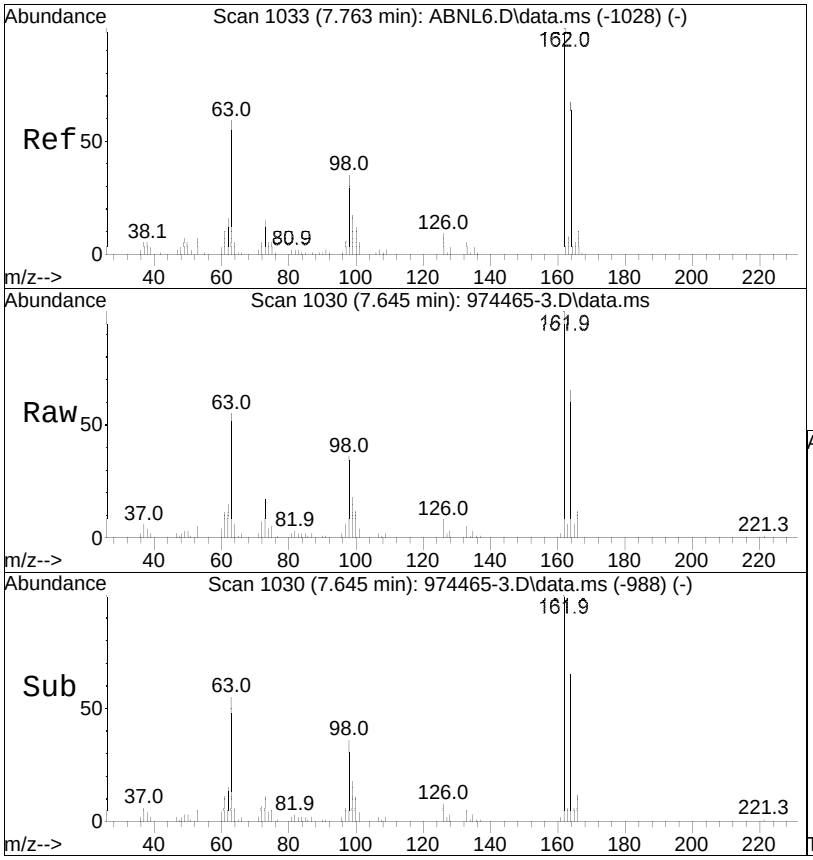



#24
Bis(2-chloroethoxy)methane
Concen: 1.77 ug/ml
RT: 7.586 min Scan# 1020
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 93 Resp: 22214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 31.4 | 25.8 | 38.8 |
| 123 | 8.2 | 10.1 | 15.1# |

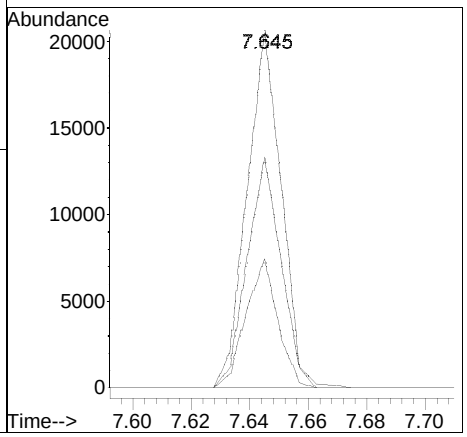


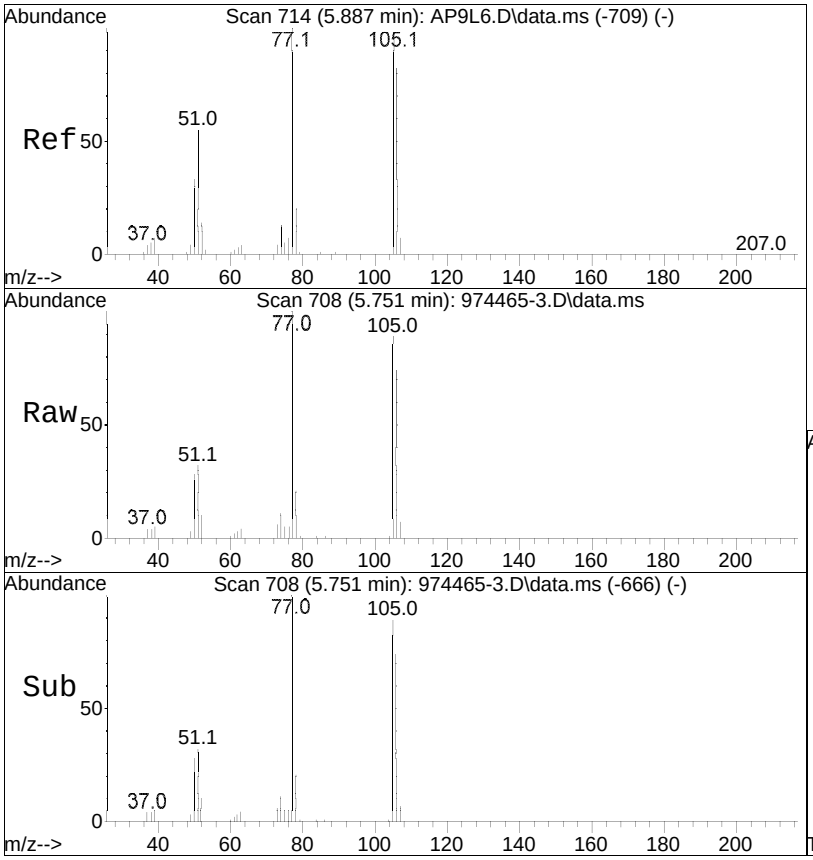



#25
2,4-Dichlorophenol
Concen: 1.91 ug/ml
RT: 7.645 min Scan# 1030
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:162 Resp: 16617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 63.9 | 51.0 | 76.4 |
| 98 | 34.0 | 32.2 | 48.2 |

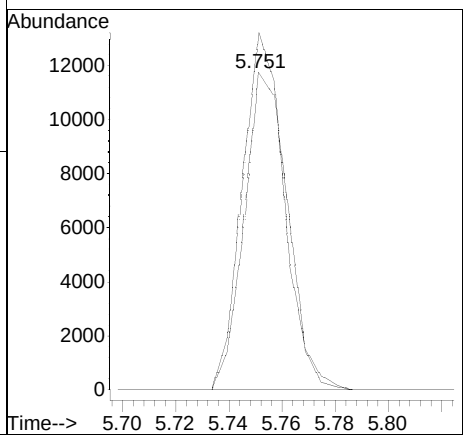


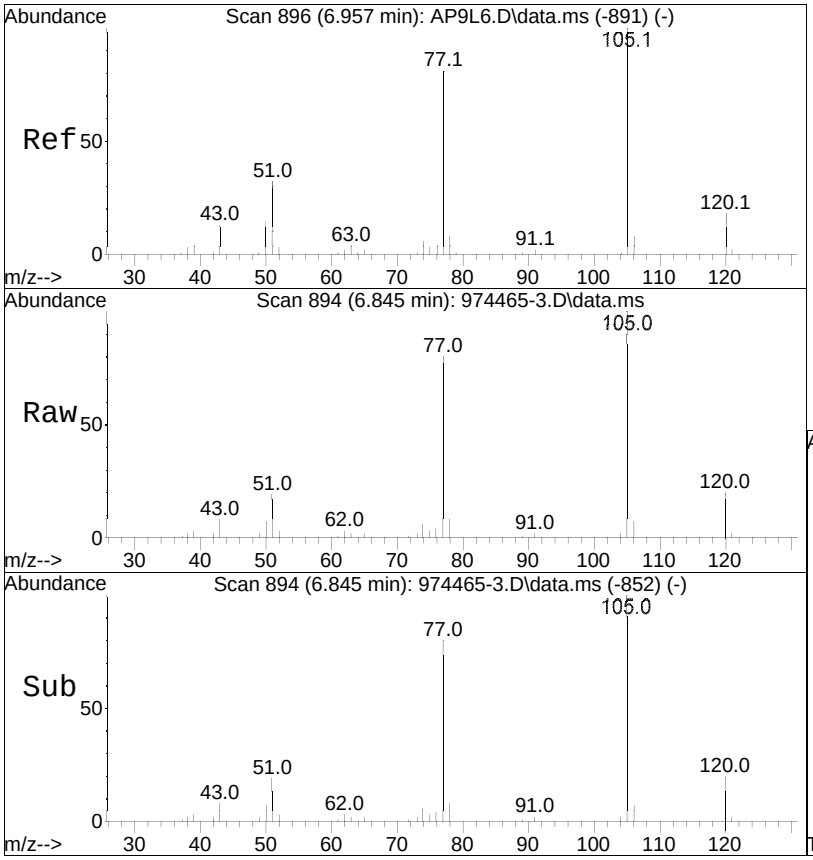



#28
Benzaldehyde
Concen: 1.59 ug/ml
RT: 5.751 min Scan# 708
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:105 Resp: 13315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 77 | 109.0 | 82.2 | 123.4 |

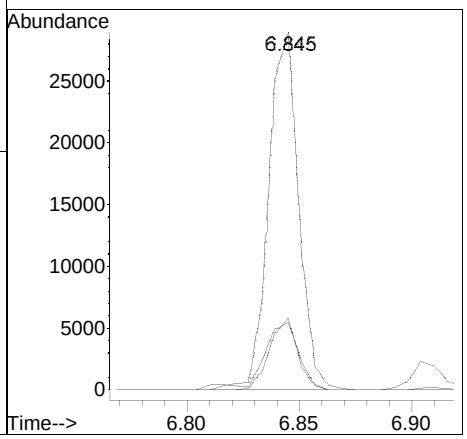


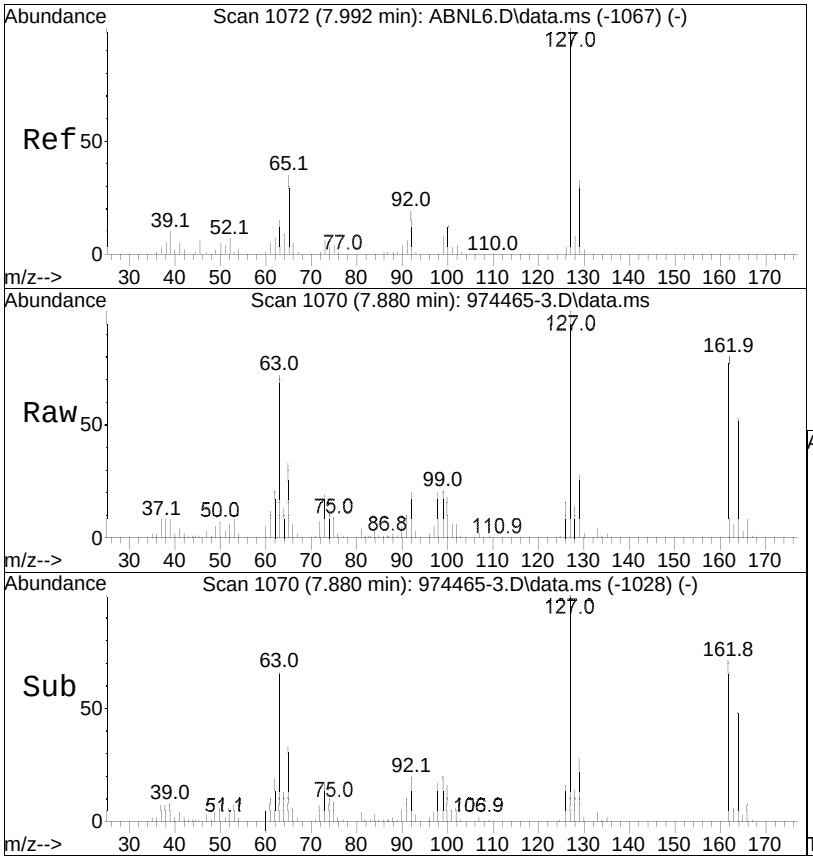



#29
Acetophenone
Concen: 1.75 ug/ml
RT: 6.845 min Scan# 894
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:105 Resp: 26573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 18.8 | 20.5 | 30.7# |
| 51 | 22.2 | 34.9 | 52.3# |

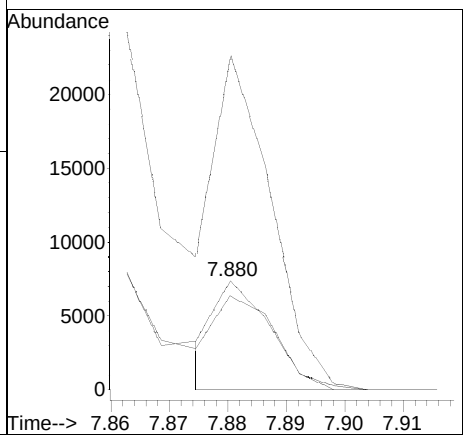


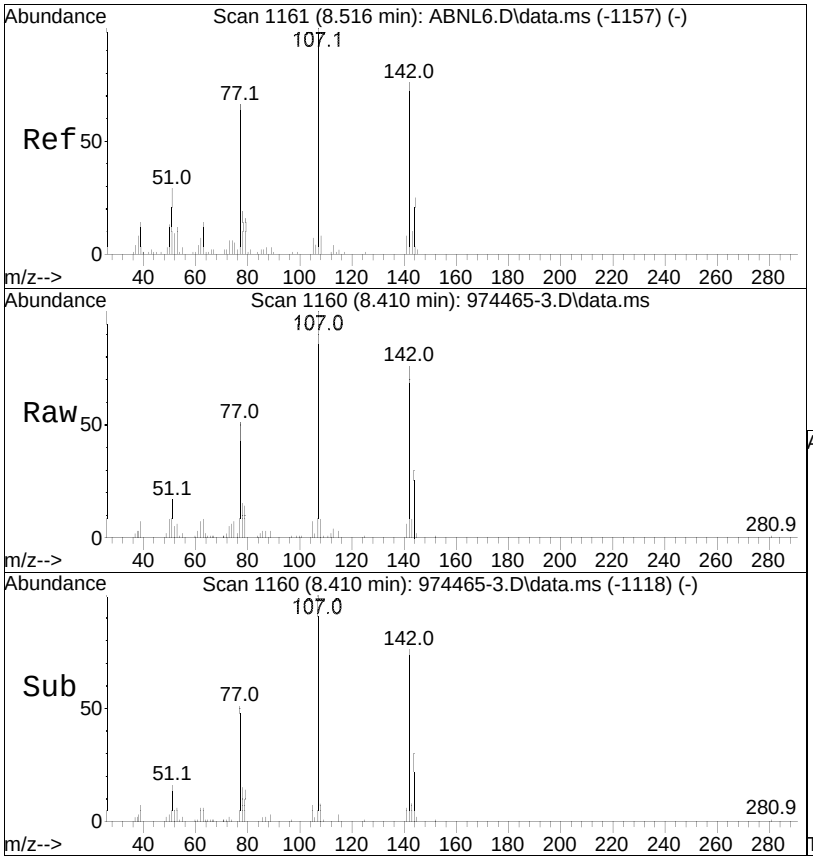



#38
4-Chloroaniline
Concen: 1.07 ug/ml
RT: 7.880 min Scan# 1070
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 65 Resp: 4729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 313.6 | 237.6 | 356.4 |
| 129 | 96.2 | 76.3 | 114.5 |

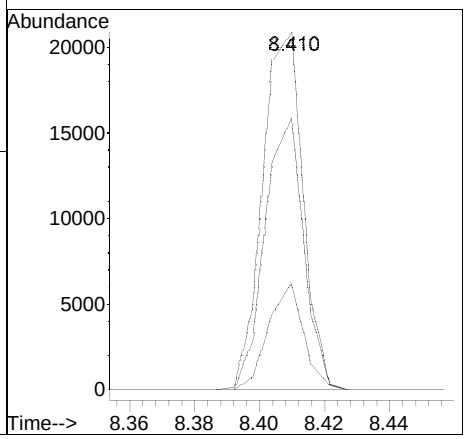


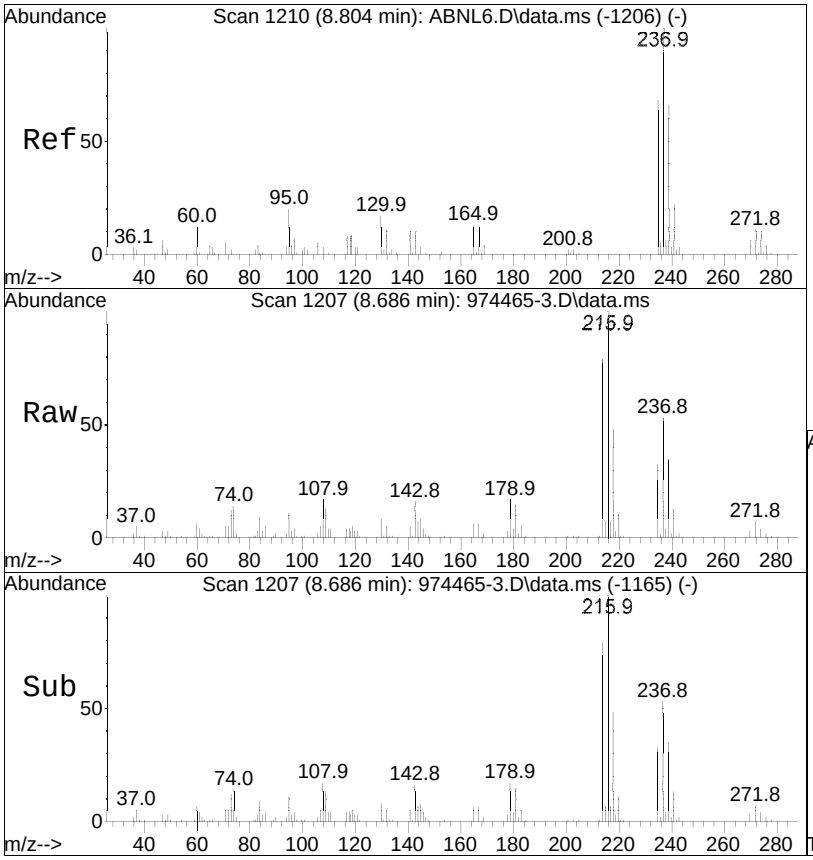



#40
p-Chloro-m-cresol
Concen: 2.00 ug/ml
RT: 8.410 min Scan# 1160
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:107 Resp: 17872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 144 | 26.1 | 20.9 | 31.3 |
| 142 | 72.8 | 66.1 | 99.1 |

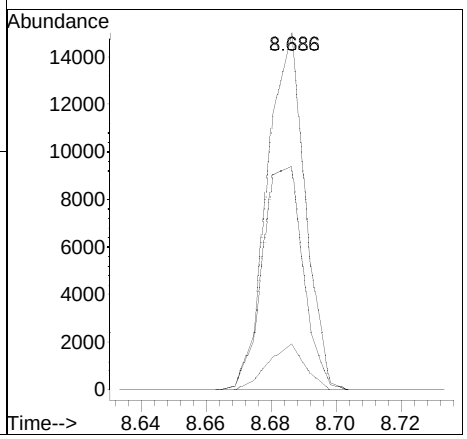


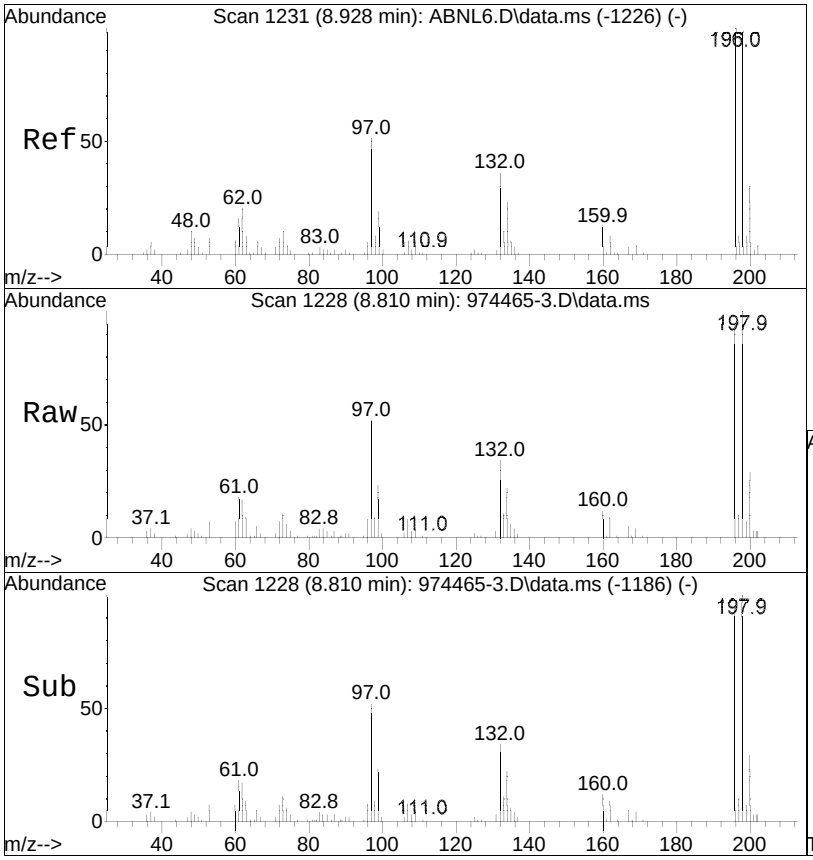



#43
Hexachlorocyclopentadiene
Concen: 1.39 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:237 Resp: 12132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 235 | 67.5 | 49.7 | 74.5 |
| 272 | 12.7 | 9.8 | 14.6 |

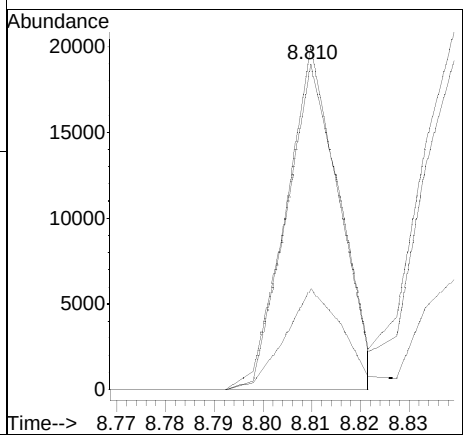


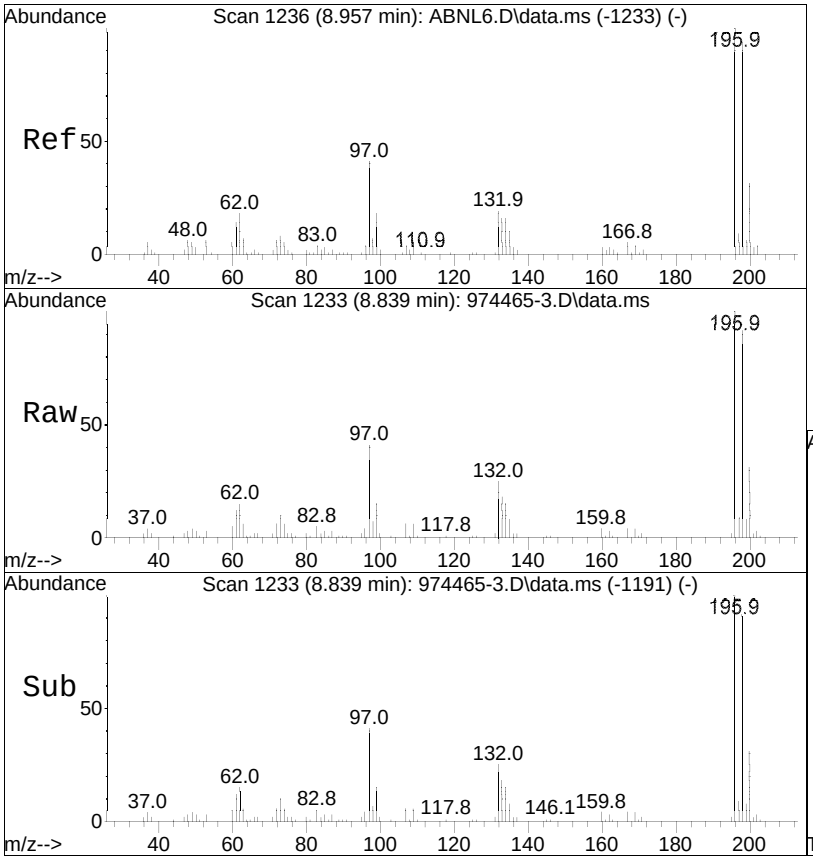



#44
2,4,6-Trichlorophenol
Concen: 1.89 ug/ml
RT: 8.810 min Scan# 1228
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:196 Resp: 14797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 103.0 | 77.5 | 116.3 |
| 200 | 34.5 | 23.8 | 35.6 |

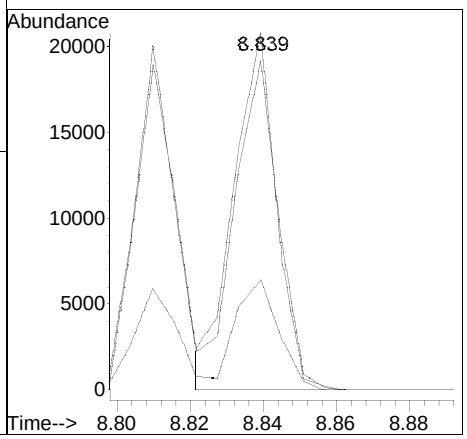


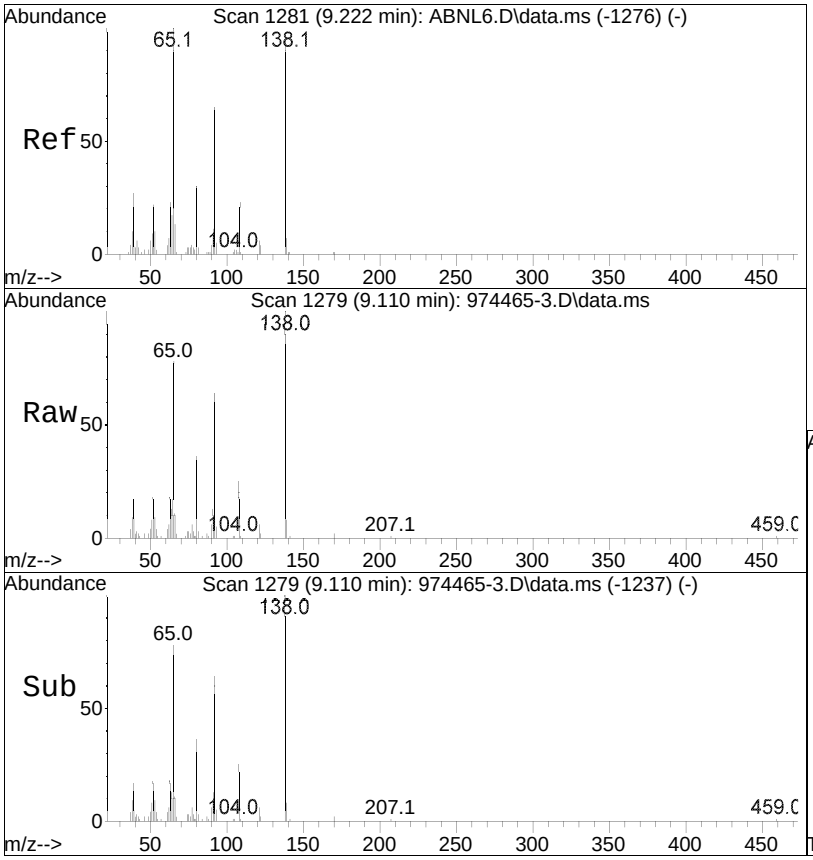



#45
2,4,5-Trichlorophenol
Concen: 2.00 ug/ml
RT: 8.839 min Scan# 1233
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:196 Resp: 16799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 30.8 | 25.4 | 38.0 |
| 198 | 94.0 | 78.0 | 117.0 |

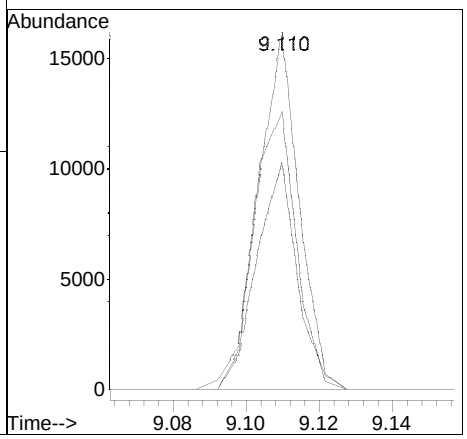


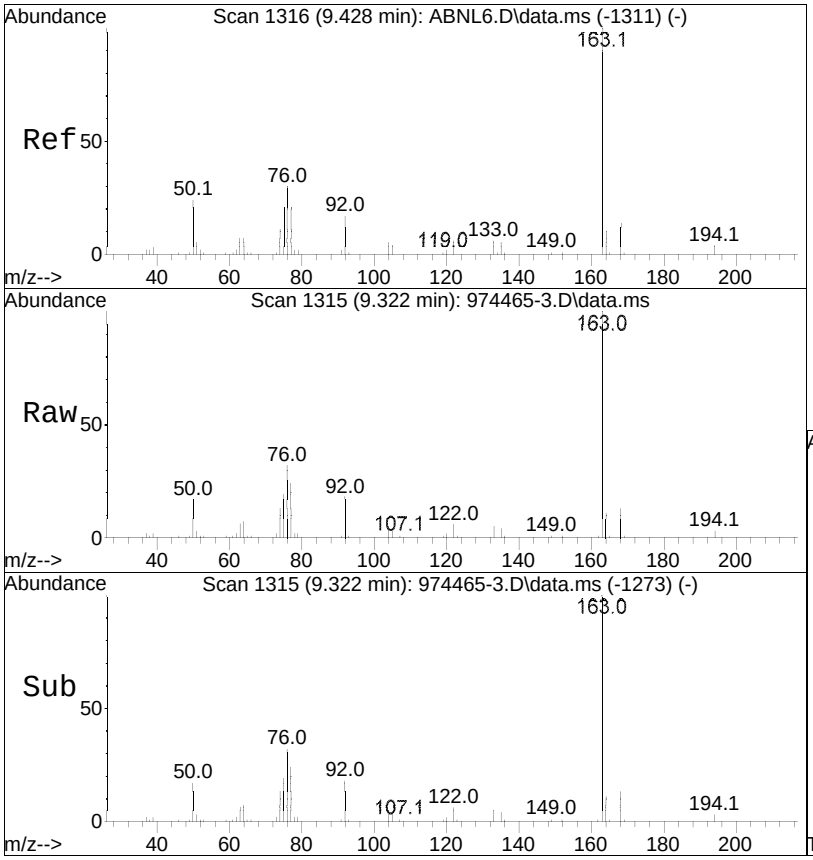



#48
2-Nitroaniline
Concen: 1.94 ug/ml
RT: 9.110 min Scan# 1279
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:138 Resp: 12352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 64.2 | 53.5 | 80.3 |
| 65 | 84.1 | 86.3 | 129.5# |

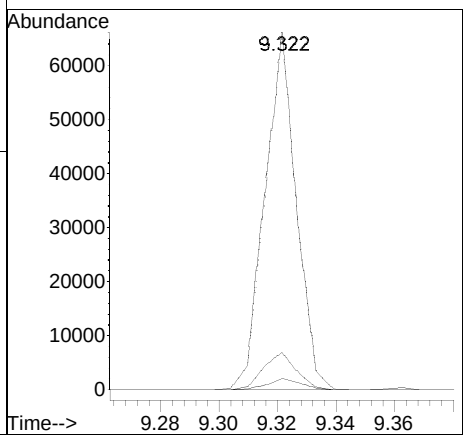


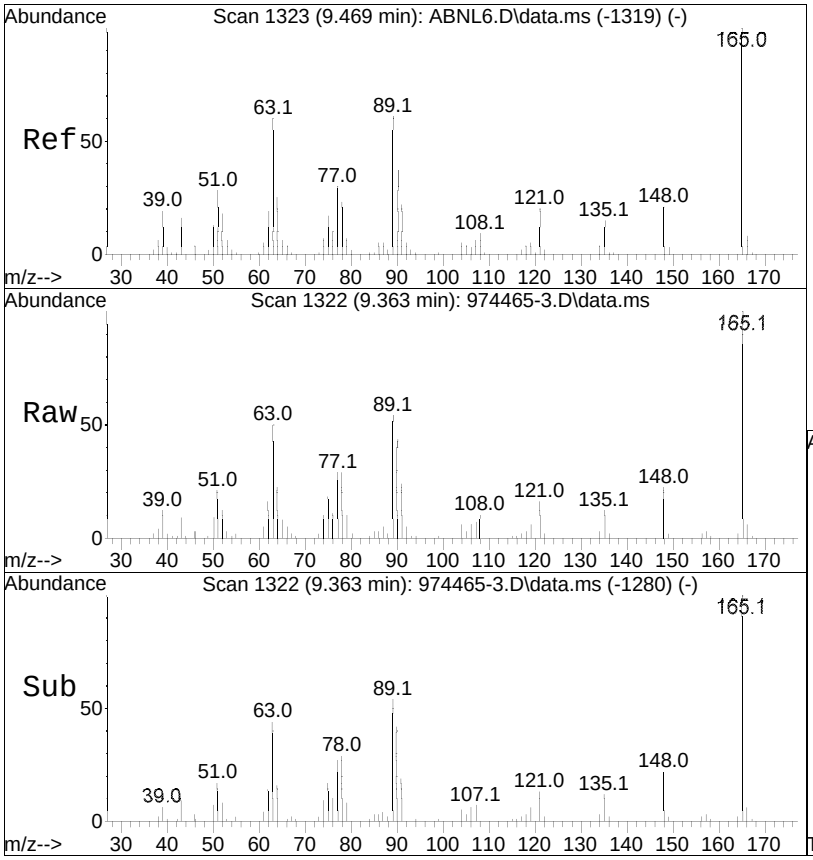



#51
Dimethyl phthalate
Concen: 1.89 ug/ml
RT: 9.322 min Scan# 1315
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:163 Resp: 48657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.4 | 3.5 | 5.3# |
| 164 | 11.1 | 7.9 | 11.9 |

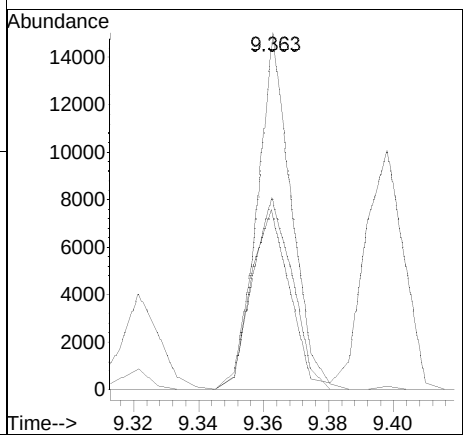


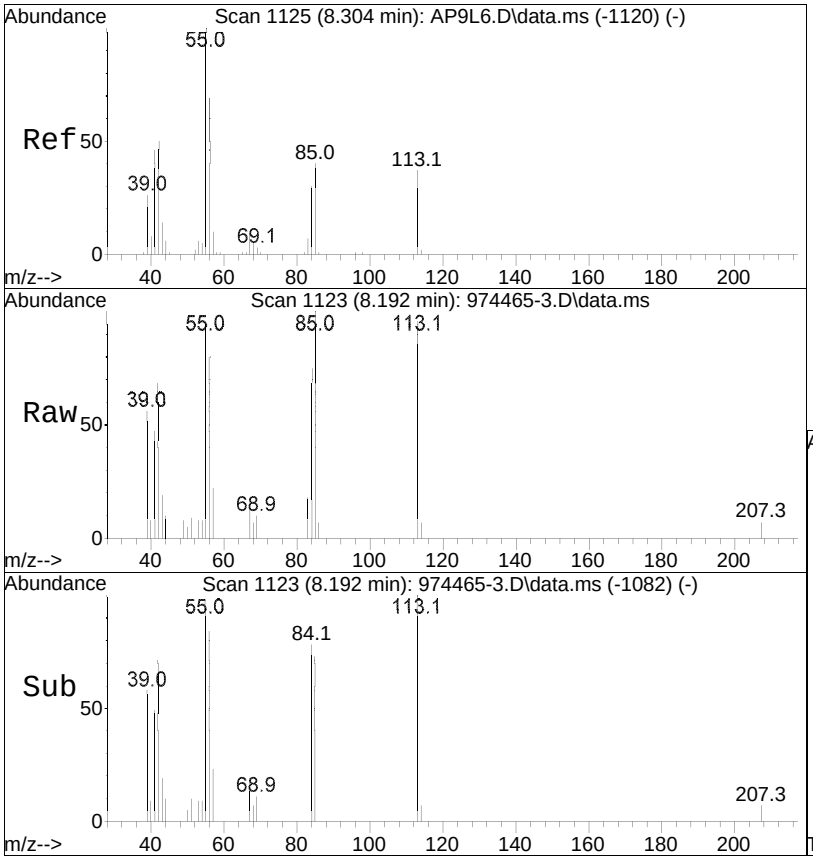



#53
2,6-Dinitrotoluene
Concen: 1.98 ug/ml
RT: 9.363 min Scan# 1322
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:165 Resp: 10987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 62.3 | 54.2 | 81.2 |
| 63 | 57.3 | 64.2 | 96.2# |

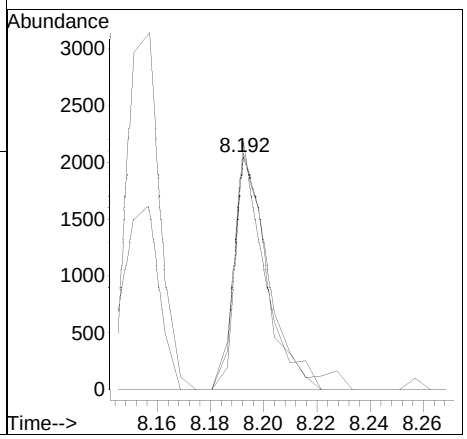


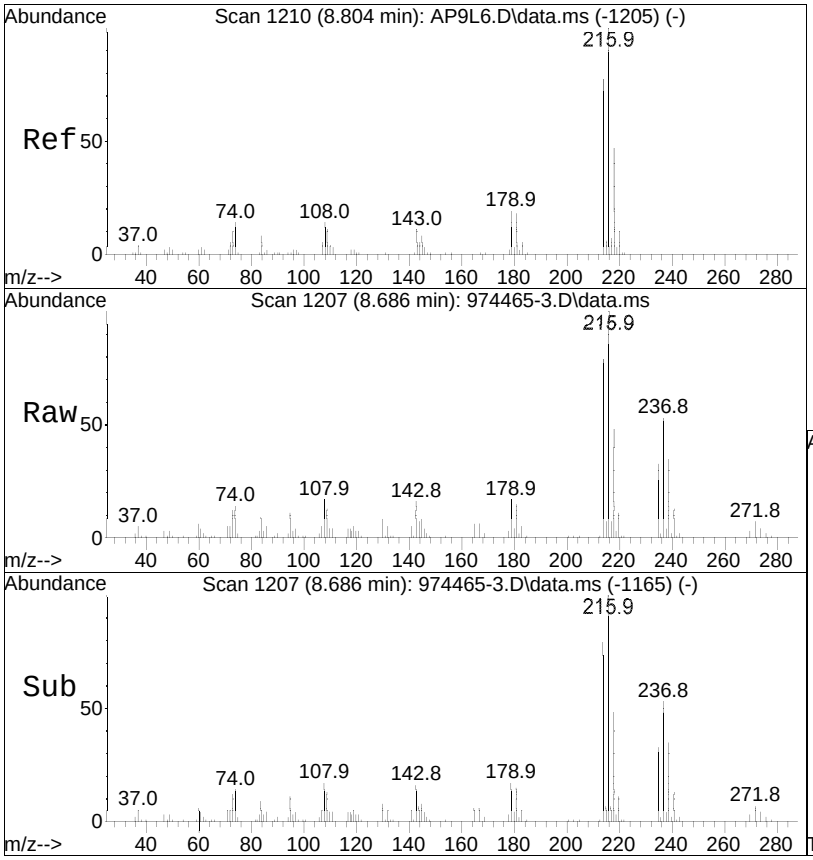



#60
Caprolactam
Concen: 0.35 ug/ml
RT: 8.192 min Scan# 1123
Delta R.T. -0.006 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 55 Resp: 1919

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 85 | 90.2 | 19.8 | 29.6# |
| 113 | 87.6 | 29.6 | 44.4# |

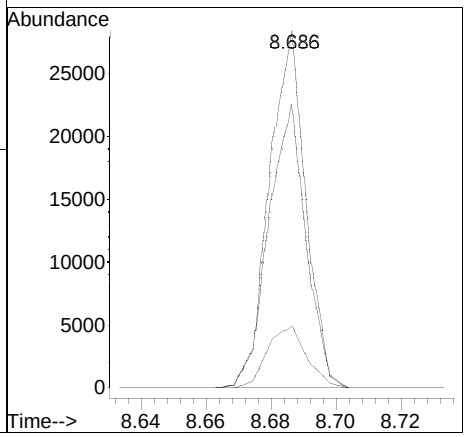


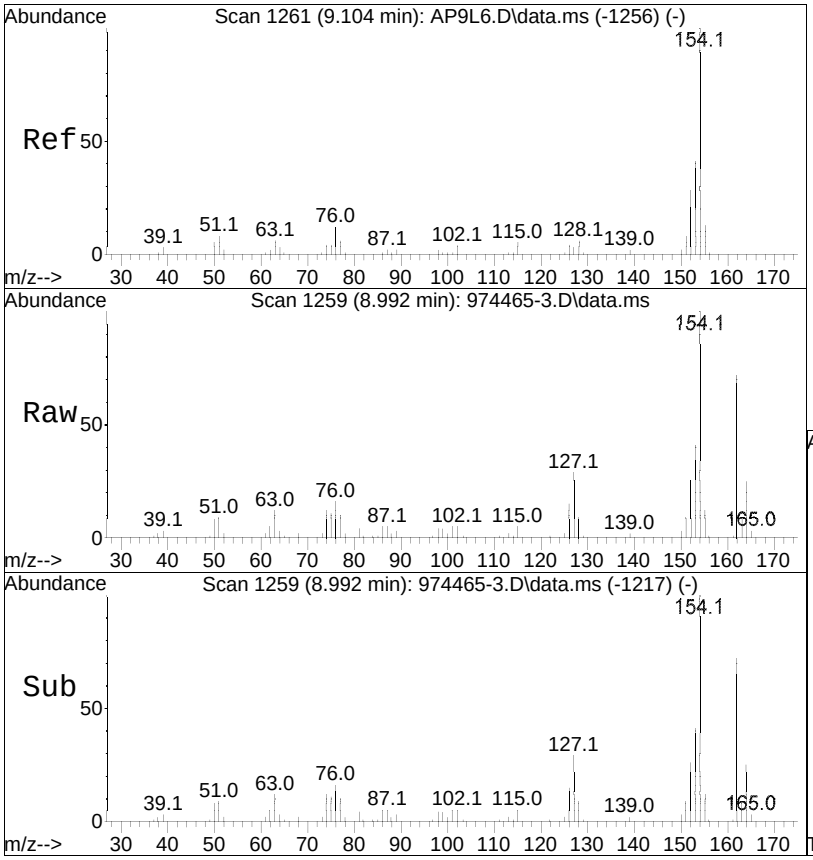



#61
1,2,4,5-Tetrachlorobenzene
Concen: 1.53 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:216 Resp: 21894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 82.3 | 63.7 | 95.5 |
| 179 | 18.9 | 19.0 | 28.6# |

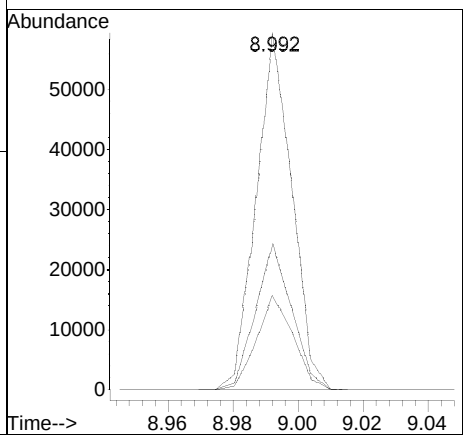


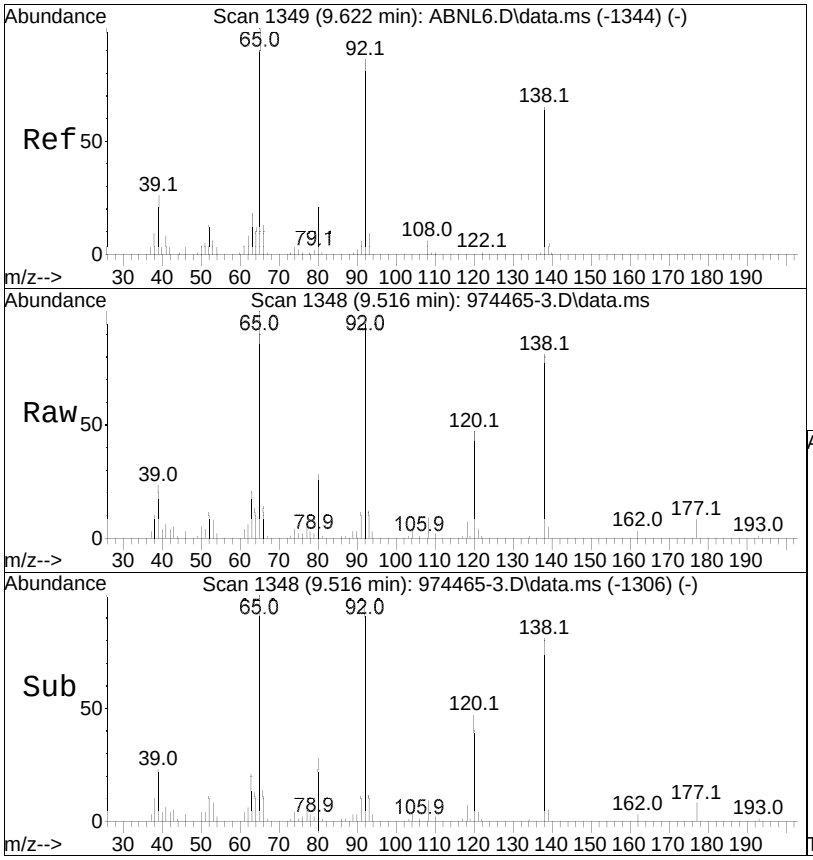



#62
Biphenyl
Concen: 1.59 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:154 Resp: 44995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 41.8 | 32.3 | 48.5 |
| 152 | 27.4 | 22.5 | 33.7 |

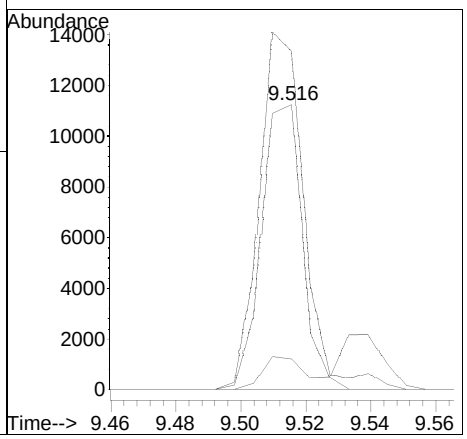


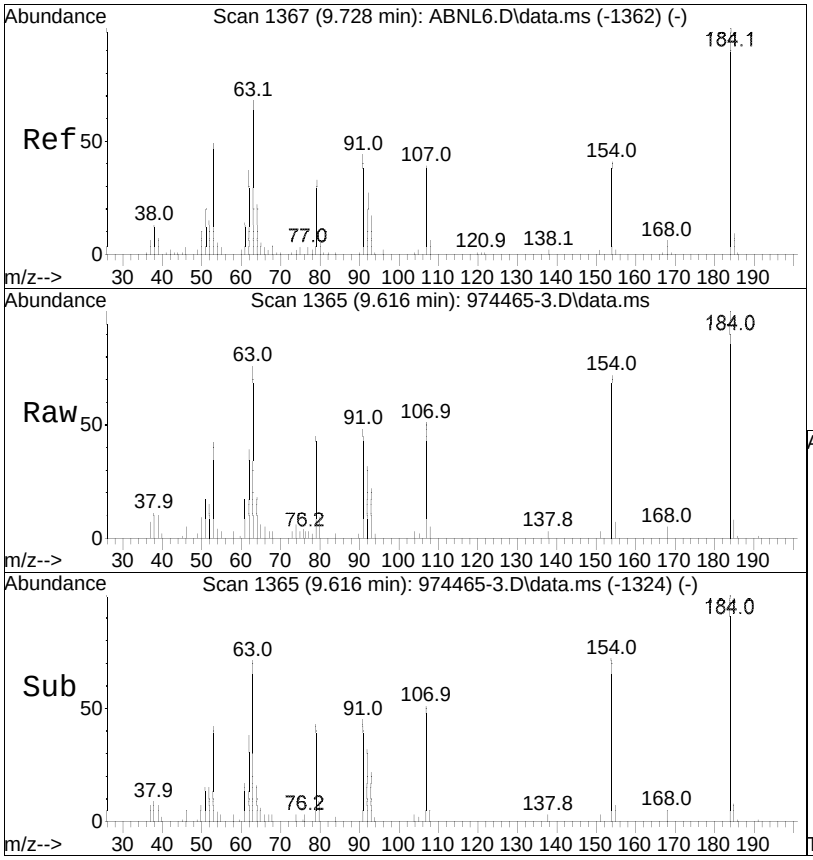



#64
3-Nitroaniline
Concen: 1.70 ug/ml
RT: 9.516 min Scan# 1348
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:138 Resp: 9808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 137.1 | 93.4 | 140.2 |
| 108 | 11.4 | 9.5 | 14.3 |

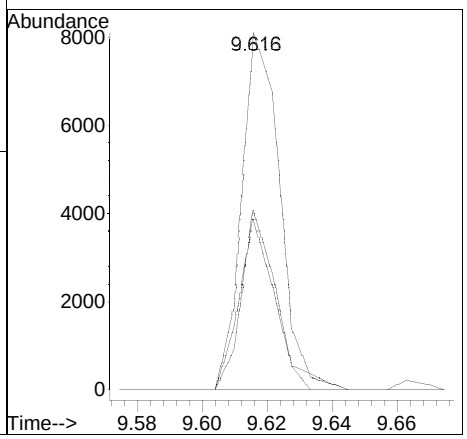


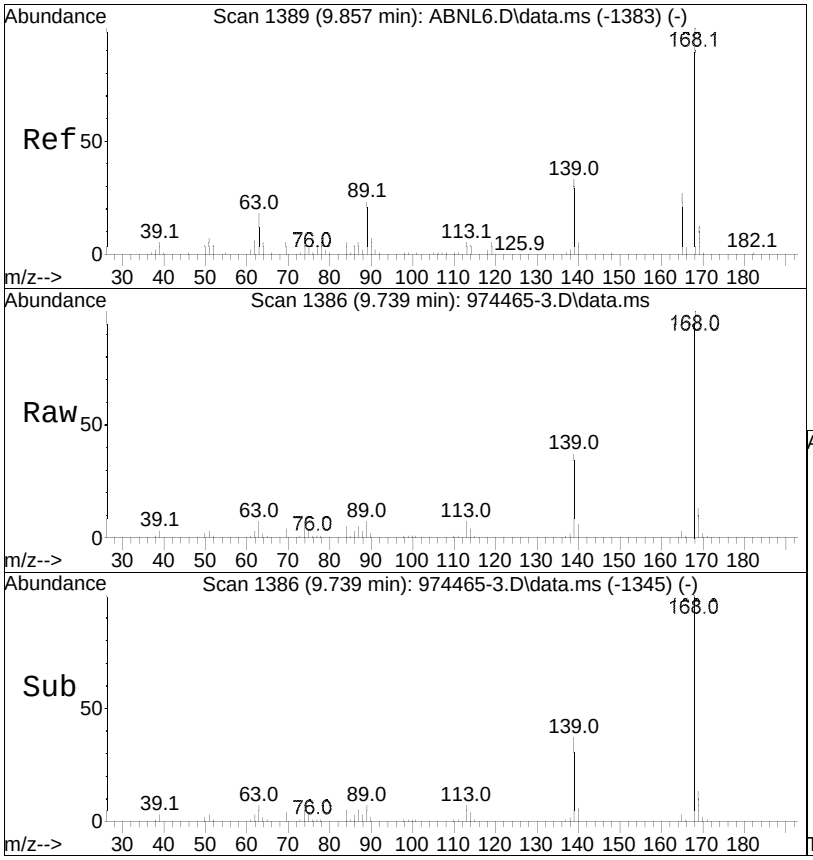



#66
2,4-Dinitrophenol
Concen: 1.69 ug/ml
RT: 9.616 min Scan# 1365
Delta R.T. -0.006 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:184 Resp: 6545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 107 | 44.2 | 37.7 | 56.5 |
| 91 | 46.9 | 46.3 | 69.5 |

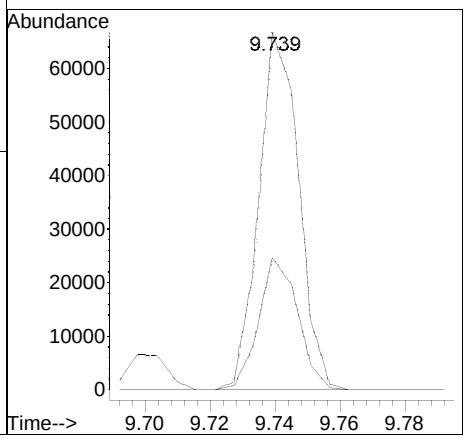


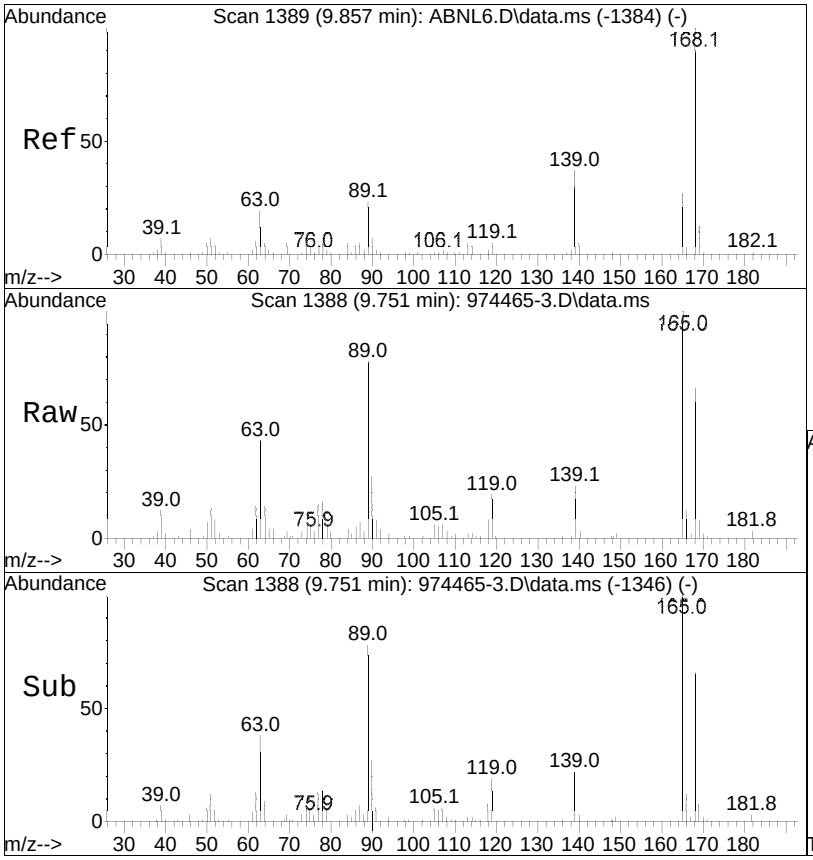



#67
Dibenzofuran
Concen: 1.61 ug/ml
RT: 9.739 min Scan# 1386
Delta R.T. -0.006 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:168 Resp: 56348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 36.4 | 31.4 | 47.2 |

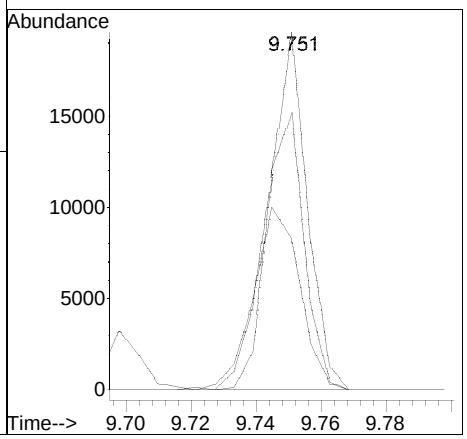


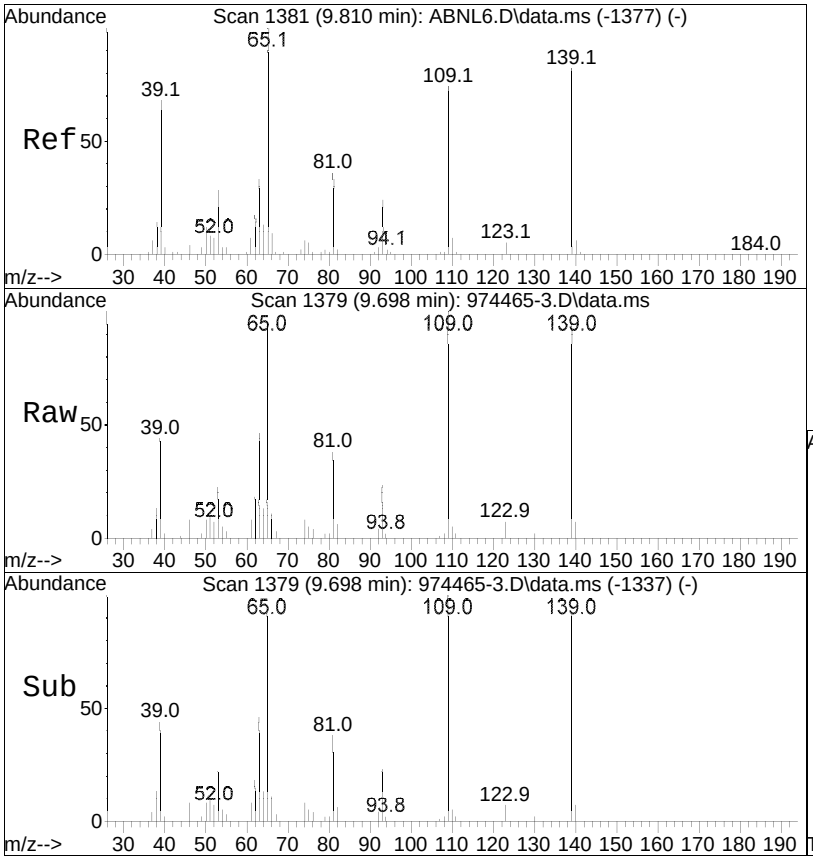



#68
2,4-Dinitrotoluene
Concen: 1.76 ug/ml
RT: 9.751 min Scan# 1388
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:165 Resp: 15179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 88.2 | 72.0 | 108.0 |
| 63 | 64.6 | 52.7 | 79.1 |

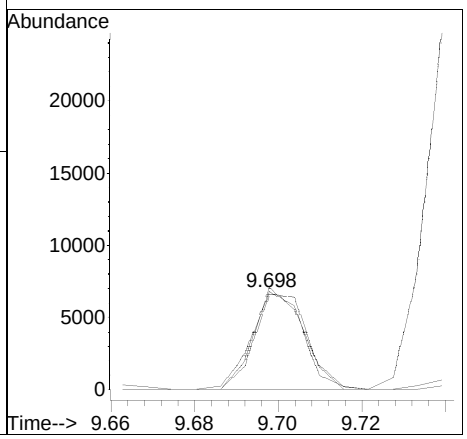


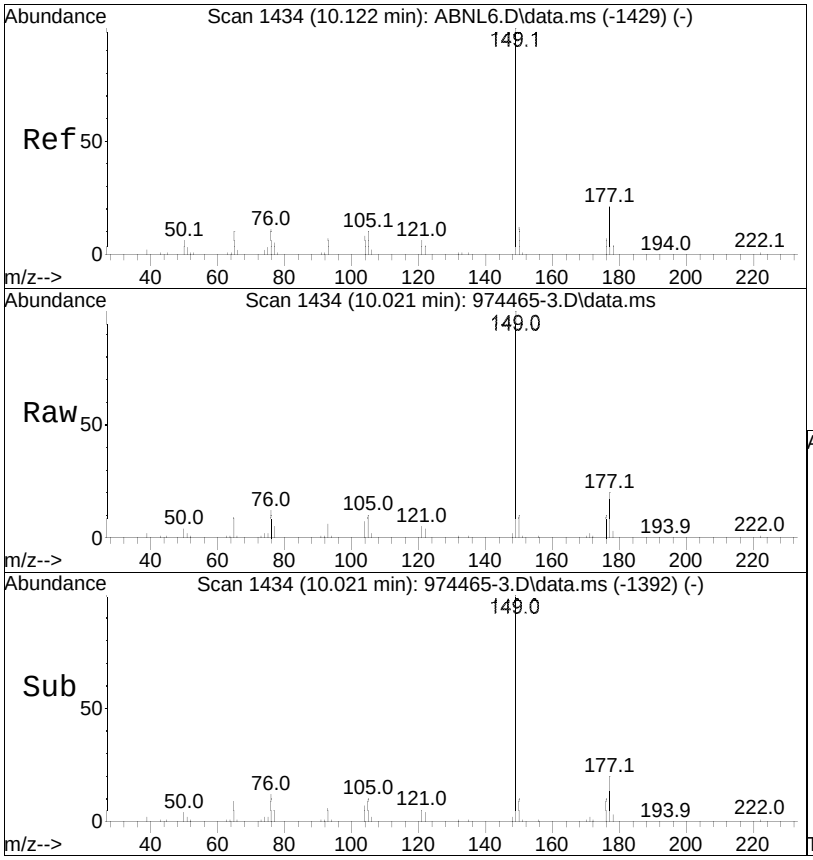



#69
4-Nitrophenol
Concen: 0.99 ug/ml
RT: 9.698 min Scan# 1379
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion: 65 Resp: 5824

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 100.1 | 47.4 | 71.2# |
| 139 | 98.6 | 76.6 | 115.0 |

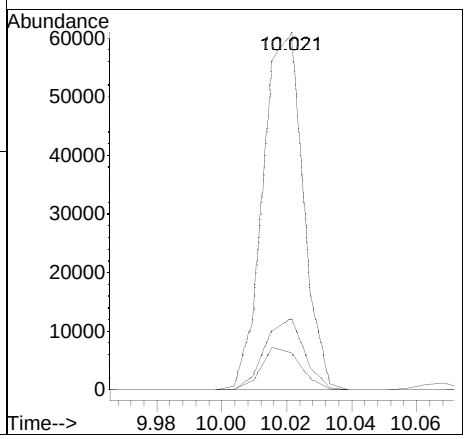


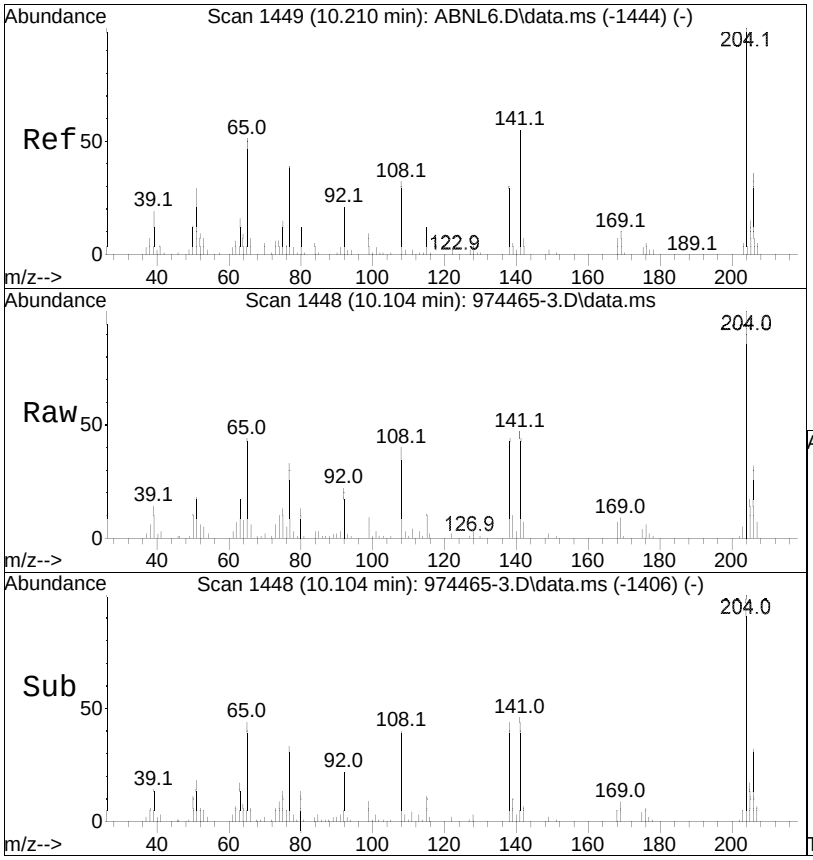



#72
Diethyl phthalate
Concen: 1.87 ug/ml
RT: 10.021 min Scan# 1434
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:149 Resp: 51735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 19.8 | 16.1 | 24.1 |
| 150 | 11.7 | 9.4 | 14.2 |

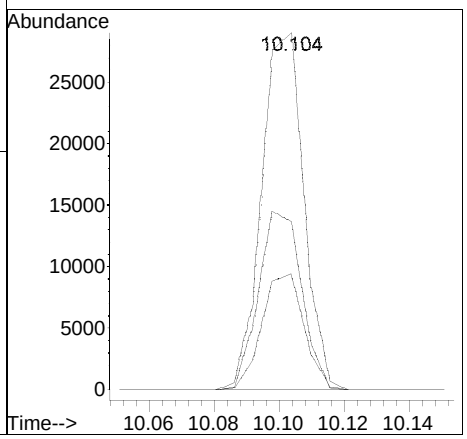


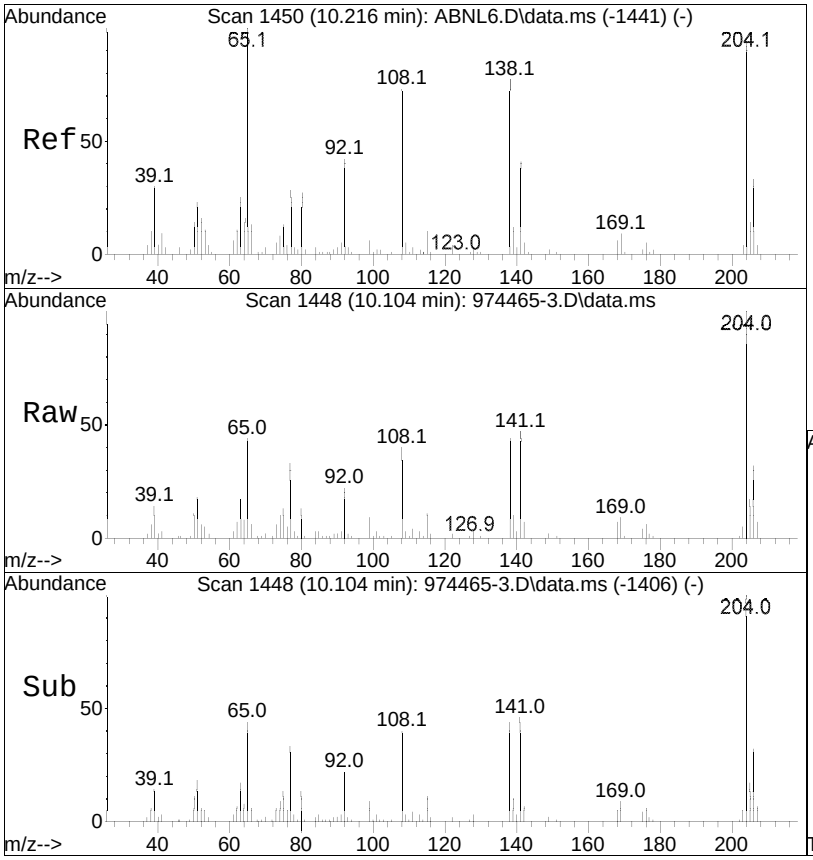



#74
4-Chlorophenyl phenyl ether
Concen: 1.79 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:204 Resp: 25945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 204 | 100 | | |
| 206 | 32.7 | 25.8 | 38.6 |
| 141 | 51.0 | 53.6 | 80.4# |

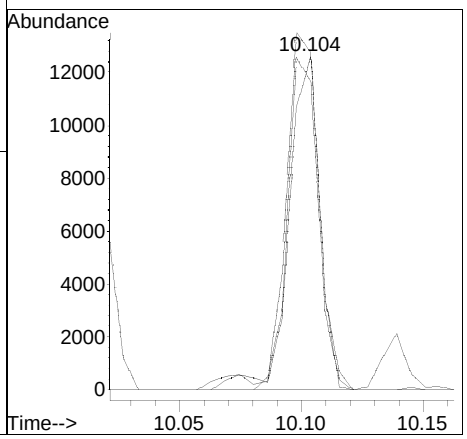


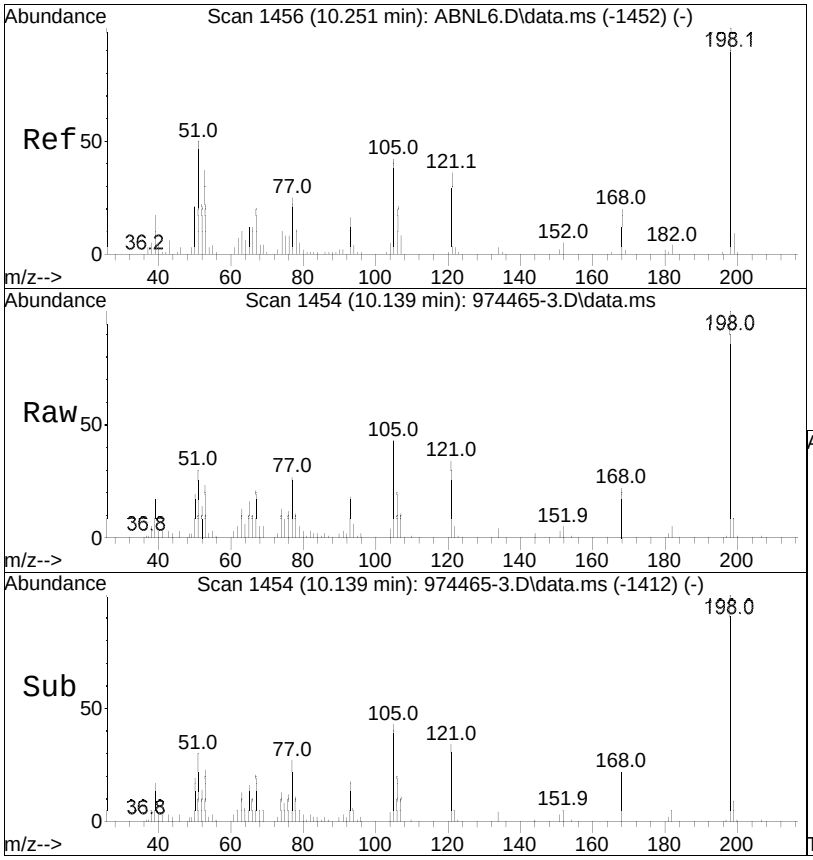



#75
4-Nitroaniline
Concen: 1.86 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:138 Resp: 11215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 97.3 | 52.1 | 78.1# |
| 65 | 109.0 | 115.0 | 172.6# |

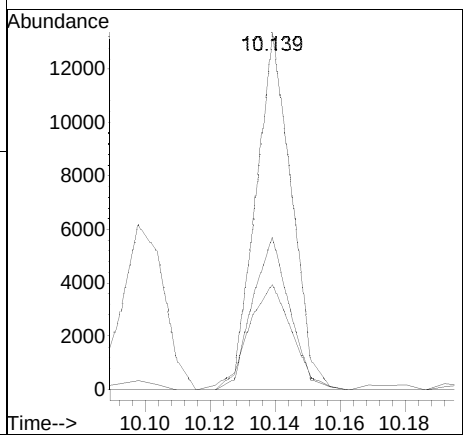


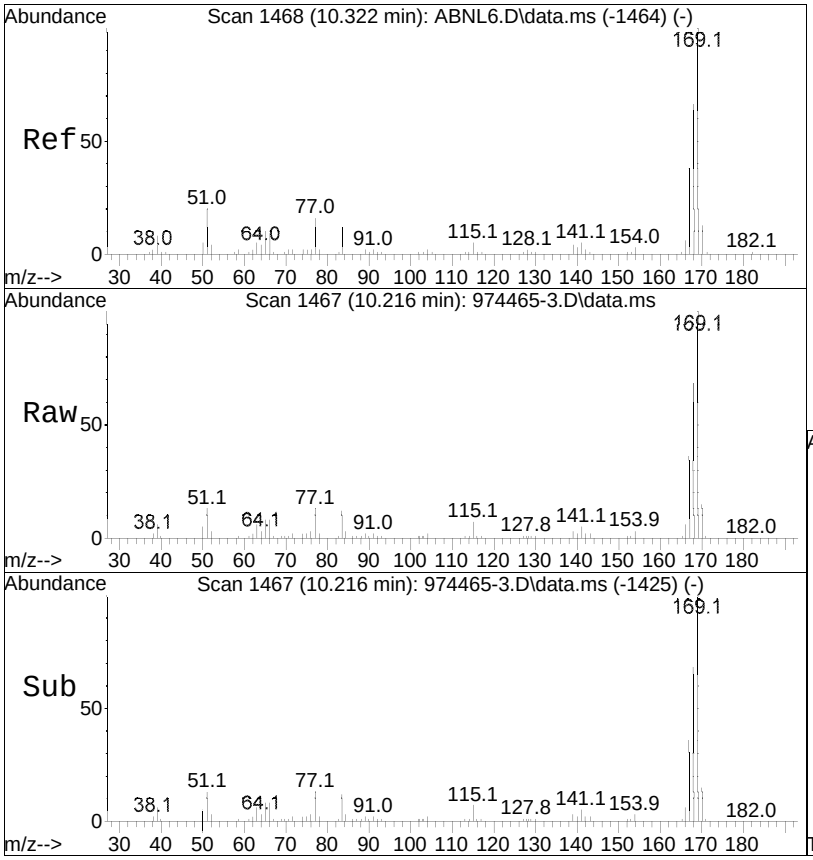



#76
4,6-Dinitro-o-cresol
Concen: 2.11 ug/ml
RT: 10.139 min Scan# 1454
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:198 Resp: 10162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 36.0 | 76.0 | 114.0# |
| 105 | 44.4 | 45.6 | 68.4# |

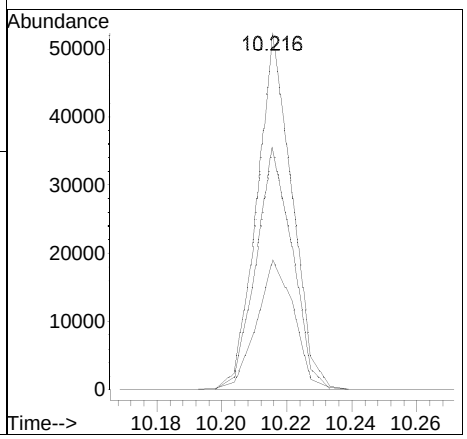


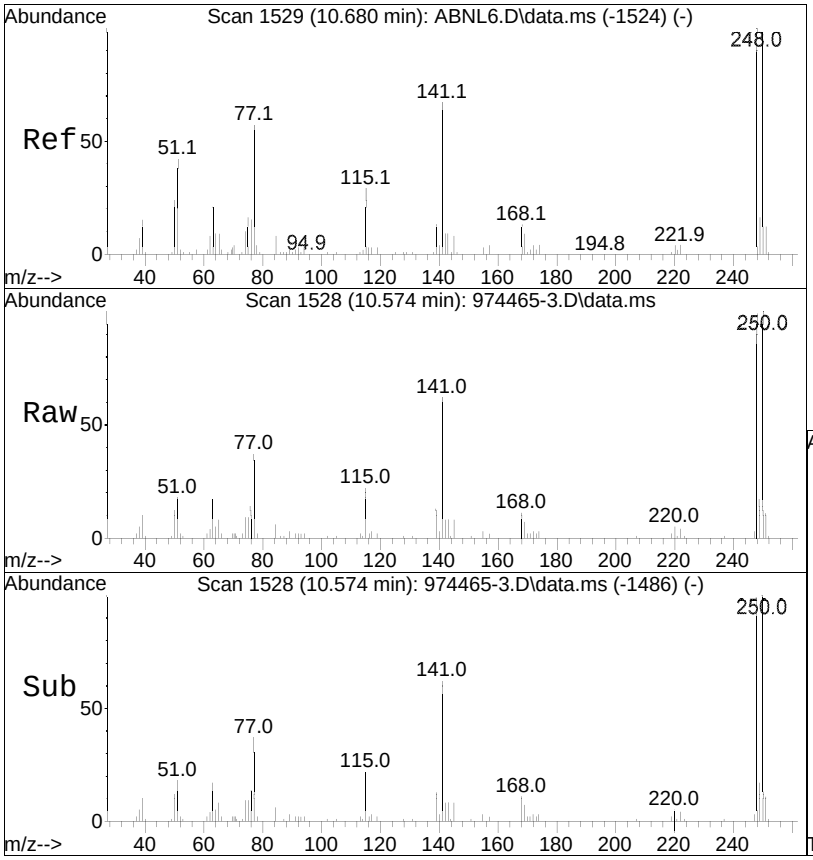



#77
NDPA/DPA
Concen: 1.71 ug/ml
RT: 10.216 min Scan# 1467
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:169 Resp: 39000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 70.4 | 54.0 | 81.0 |
| 167 | 38.8 | 28.6 | 42.8 |

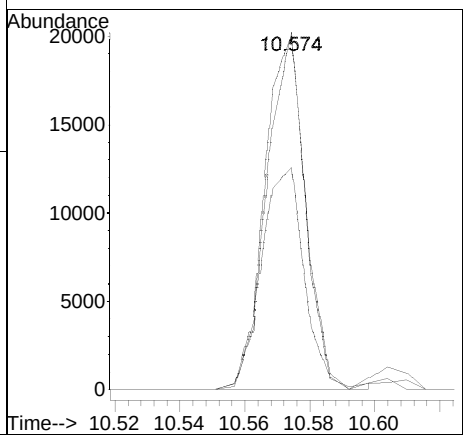


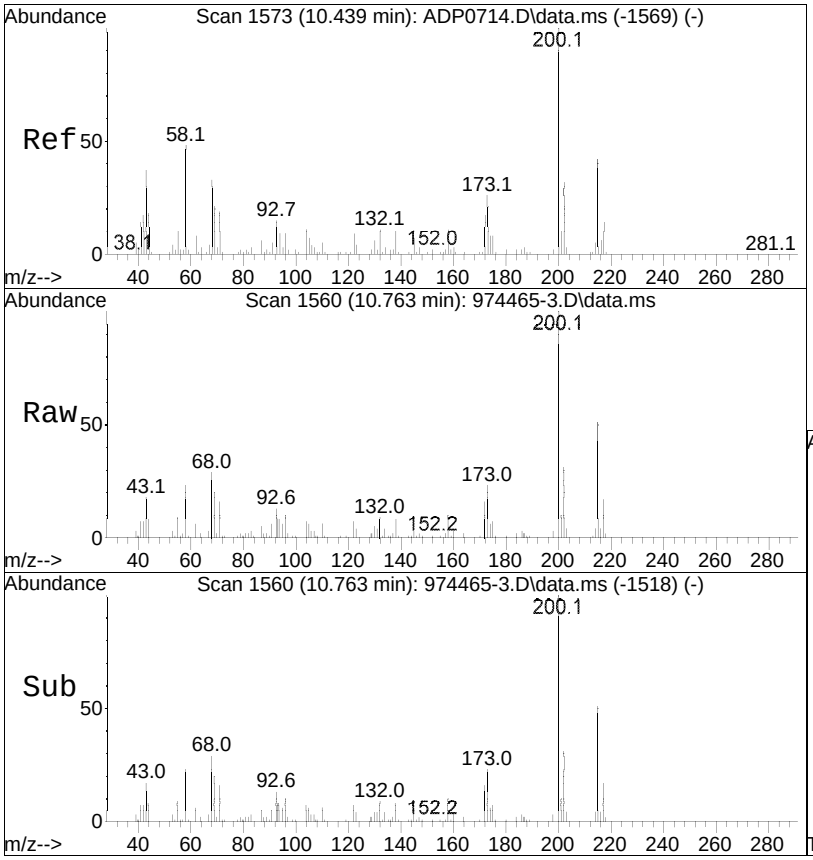



#80
4-Bromophenyl phenyl ether
Concen: 1.91 ug/ml
RT: 10.574 min Scan# 1528
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:248 Resp: 17337

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 141 | 66.0 | 76.6 | 114.8# |
| 250 | 93.9 | 77.3 | 115.9 |

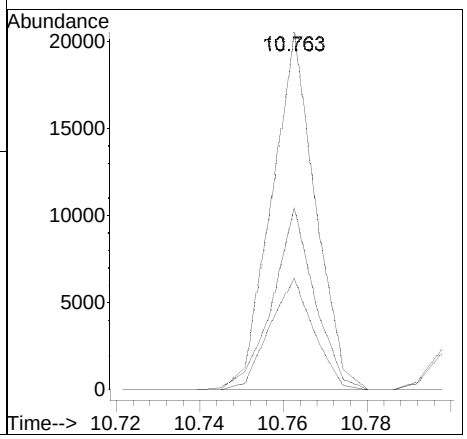


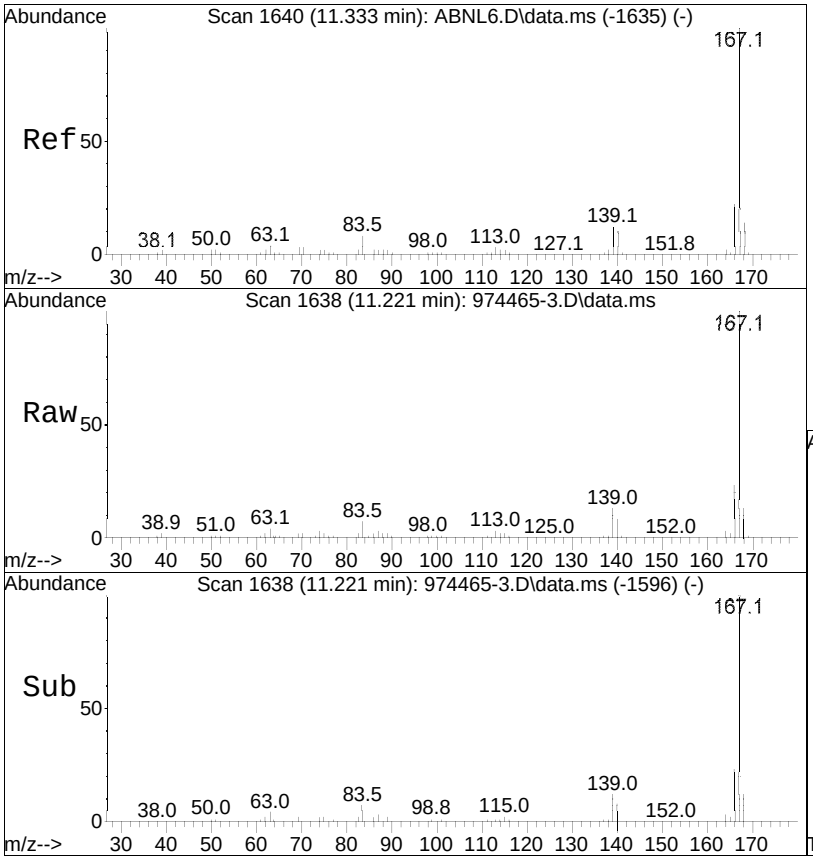



#87
Atrazine
Concen: 1.61 ug/ml
RT: 10.763 min Scan# 1560
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:200 Resp: 14819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 202 | 31.7 | 25.8 | 38.6 |
| 215 | 49.4 | 40.2 | 60.4 |

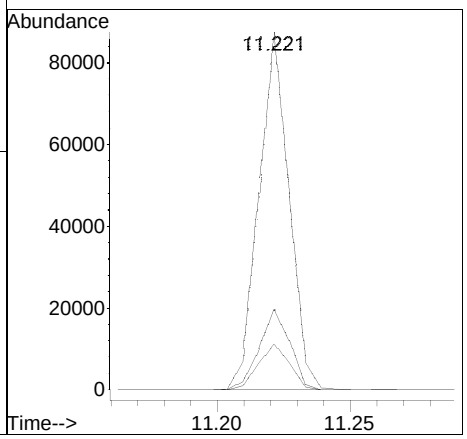


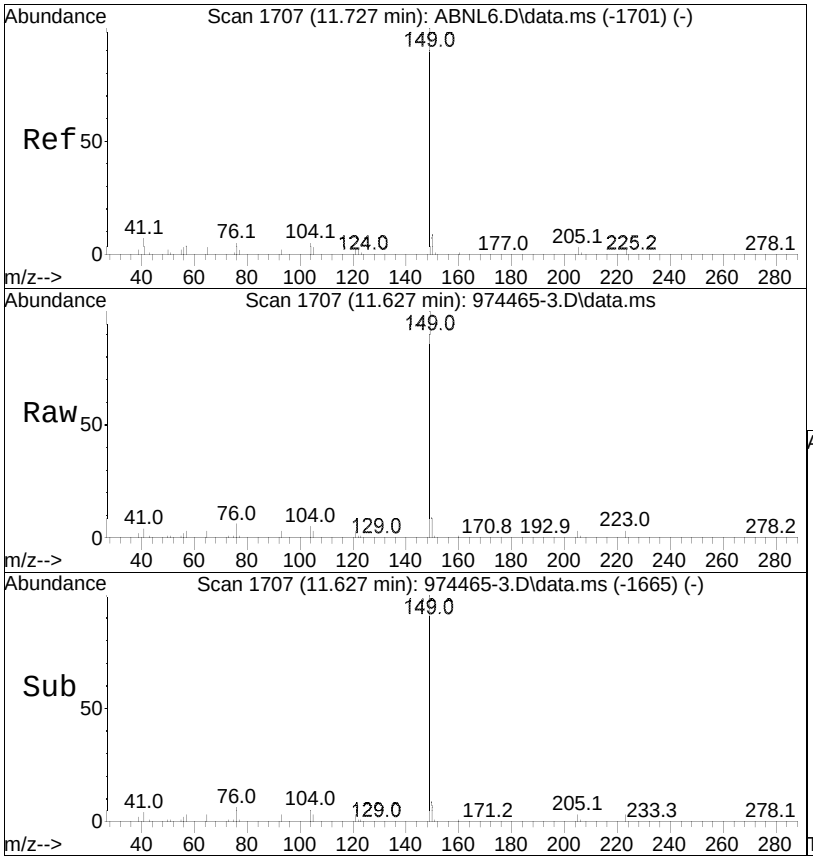



#91
Carbazole
Concen: 1.77 ug/ml
RT: 11.221 min Scan# 1638
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:167 Resp: 68072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 168 | 13.3 | 10.6 | 15.8 |
| 166 | 23.0 | 17.4 | 26.0 |

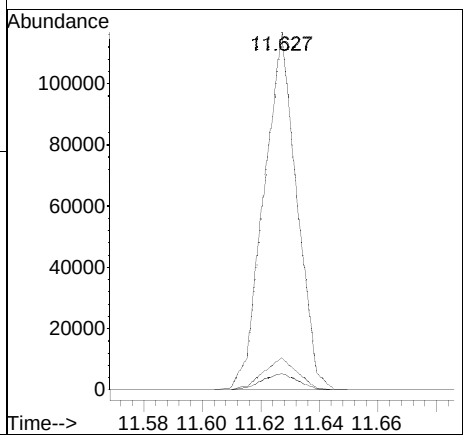


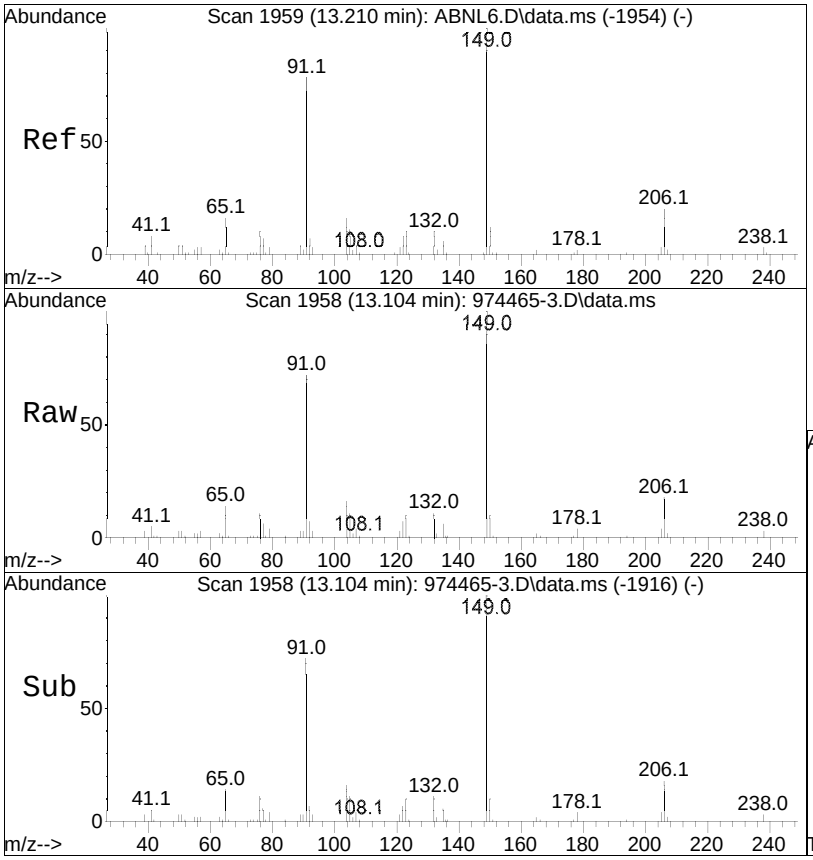



#92
Di-n-butylphthalate
Concen: 1.99 ug/ml
RT: 11.627 min Scan# 1707
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:149 Resp: 89892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.3 | 7.0 | 10.6 |
| 104 | 5.0 | 4.5 | 6.7 |

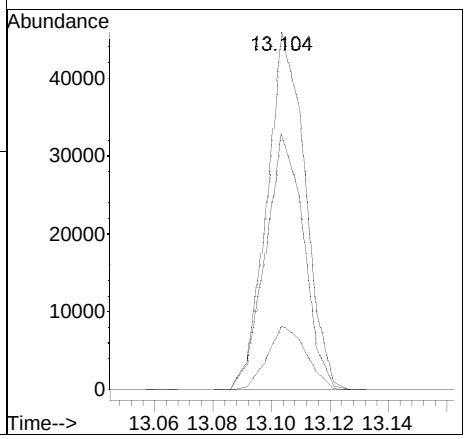


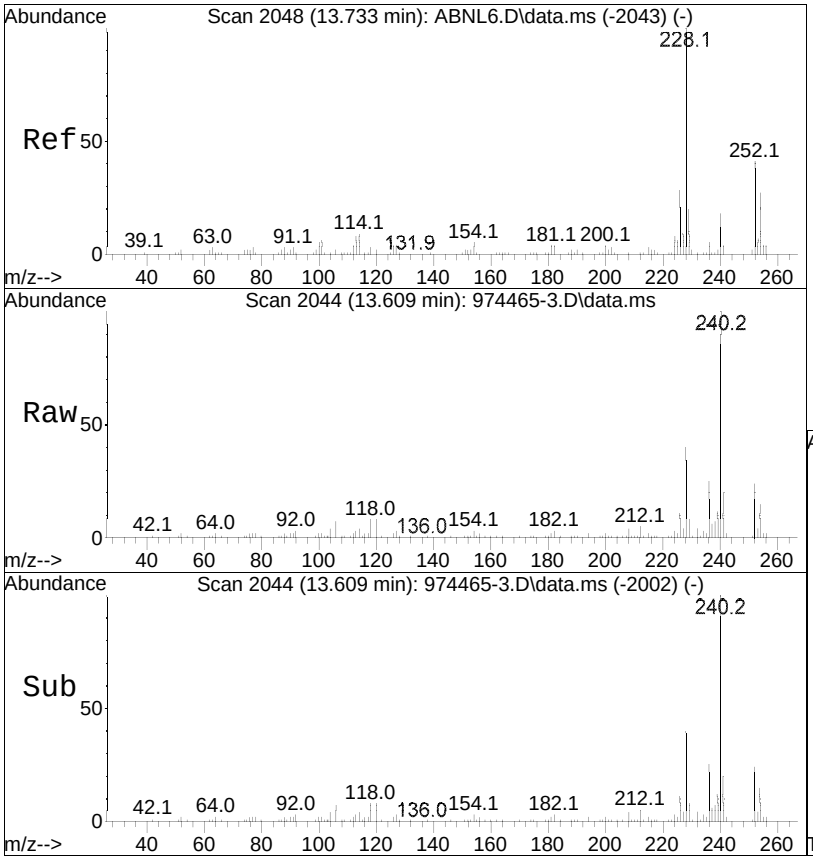



#97
Butyl benzyl phthalate
Concen: 1.99 ug/ml
RT: 13.104 min Scan# 1958
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:149 Resp: 41337

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 71.8 | 63.3 | 94.9 |
| 206 | 18.2 | 13.9 | 20.9 |

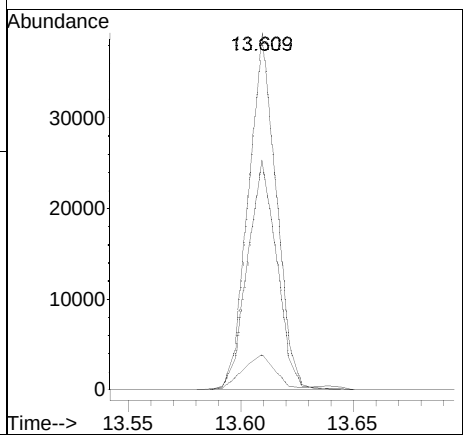


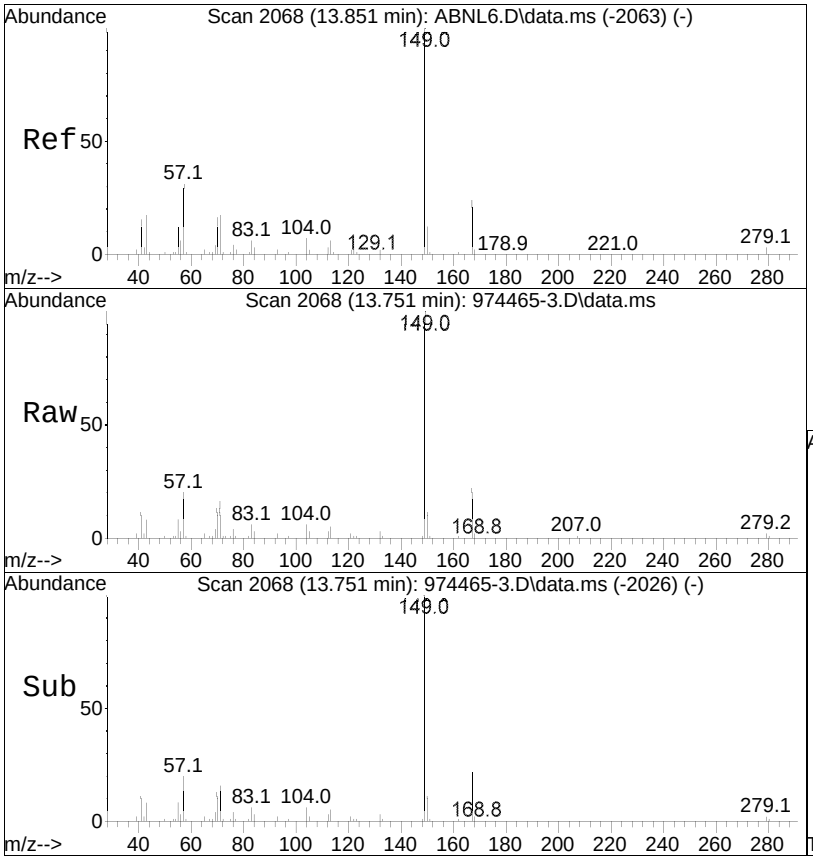



#106
3,3'-Dichlorobenzidine
Concen: 1.65 ug/ml
RT: 13.609 min Scan# 2044
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:252 Resp: 33675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 11.7 | 14.5 | 21.7# |
| 254 | 67.5 | 51.2 | 76.8 |

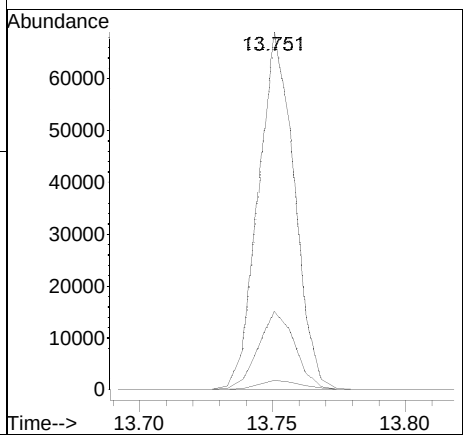


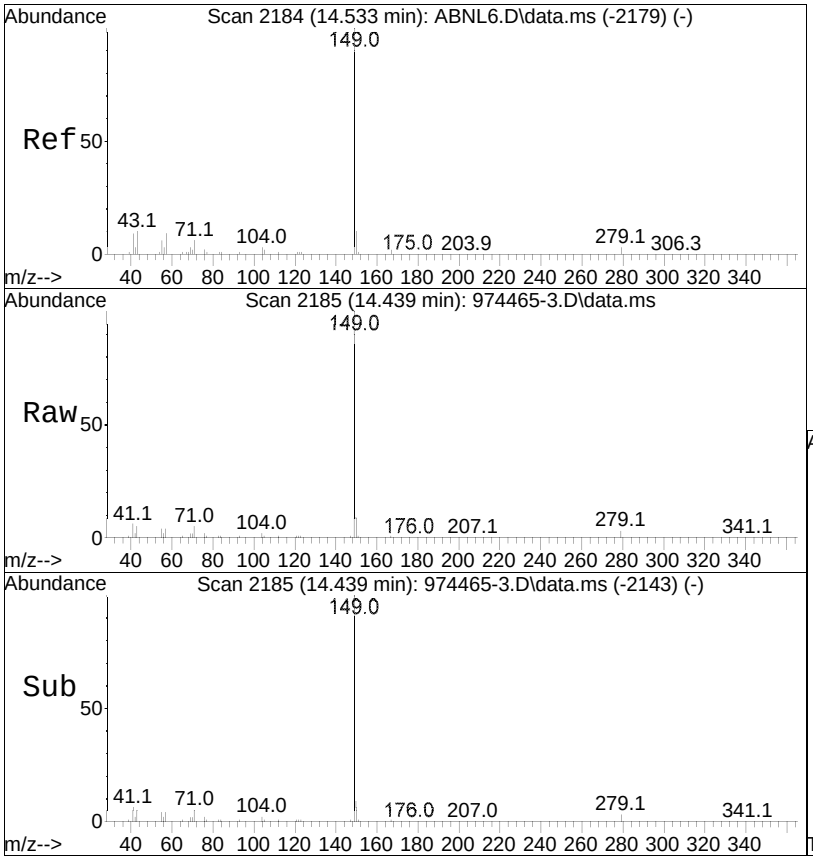



#108
Bis(2-ethylhexyl)phthalate
Concen: 1.88 ug/ml
RT: 13.751 min Scan# 2068
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:149 Resp: 64279

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 22.4 | 22.1 | 33.1 |
| 279 | 2.7 | 3.0 | 4.4# |

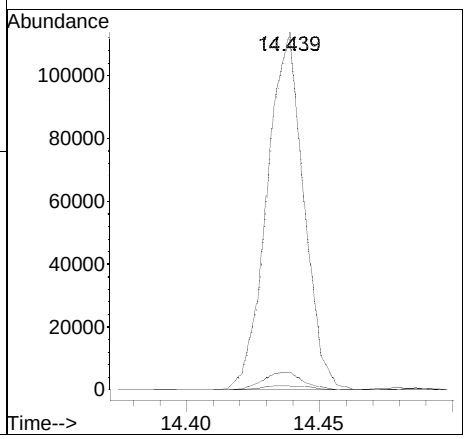





#109
Di-n-octylphthalate
Concen: 1.91 ug/ml
RT: 14.439 min Scan# 2185
Delta R.T. -0.000 min
Lab File: 974465-3.D
Acq: 21 Sep 2024 12:20 pm

Tgt Ion:149 Resp: 107802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 5.6 | 18.8 | 28.2# |
| 167 | 1.5 | 1.3 | 1.9 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 974465-3.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 12:20 pm | Instrument | : SV 106 |
| Sample | : WG1974465-3,32,,gmr | Quant Date | : 9/21/2024 12:39 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-4.D
Acq On : 21 Sep 2024 3:53 pm
Operator : SV106:als
Sample : WG1974465-4,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 16:11:43 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.340 | 152 | 28164 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 84.47% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.340 | 152 | 28164 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 88.88% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 96752 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 85.81% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 96752 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 91.35% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 71614 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 90.31% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 71614 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 97.63% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 71614 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 110.58% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 147478 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 88.46% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 147478 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 103.86% | | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 164358 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 90.87% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 165516 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 92.48% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 10246 | 1.259 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 62.95% | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 9215 | 0.827 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 41.35% | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 9724 | 0.853 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 85.30% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 20101 | 0.809 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 80.90% | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 7616 | 1.706 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 85.30% | | | | |
| 96) 4-Terphenyl-d14 | 12.569 | 244 | 34180 | 0.862 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 86.20% | | | | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-4.D
Acq On : 21 Sep 2024 3:53 pm
Operator : SV106:als
Sample : WG1974465-4,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 16:11:43 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 6.063 | 128 | 15265 | 1.683 | ug/ml | 91 |
| 8) Phenol | 5.975 | 94 | 13200 | 1.142 | ug/ml | 97 |
| 14) Bis(2-chloroisopropyl)... | 6.734 | 45 | 9560 | 0.627 | ug/ml# | 1 |
| 15) 2-Methylphenol | 6.722 | 108 | 14553 | 1.748 | ug/ml | 98 |
| 17) n-Nitrosodi-n-propylamine | 6.875 | 70 | 13522 | 1.817 | ug/ml# | 91 |
| 18) 3-Methylphenol/4-Methy... | 6.910 | 108 | 15219 | 1.690 | ug/ml | 99 |
| 20) Nitrobenzene | 7.022 | 77 | 20759 | 1.794 | ug/ml | 94 |
| 21) Isophorone | 7.304 | 82 | 36985 | 1.903 | ug/ml | 94 |
| 22) 2-Nitrophenol | 7.381 | 139 | 9365 | 1.923 | ug/ml# | 86 |
| 23) 2,4-Dimethylphenol | 7.487 | 107 | 16249 | 1.773 | ug/ml | 92 |
| 24) Bis(2-chloroethoxy)met... | 7.587 | 93 | 21964 | 1.755 | ug/ml# | 96 |
| 25) 2,4-Dichlorophenol | 7.645 | 162 | 17010 | 1.959 | ug/ml | 96 |
| 28) Benzaldehyde | 5.751 | 105 | 14245 | 1.704 | ug/ml | 94 |
| 29) Acetophenone | 6.845 | 105 | 25585 | 1.684 | ug/ml# | 75 |
| 38) 4-Chloroaniline | 7.881 | 65 | 4802 | 1.174 | ug/ml | 95 |
| 40) p-Chloro-m-cresol | 8.410 | 107 | 17819 | 2.150 | ug/ml | 96 |
| 43) Hexachlorocyclopentadiene | 8.687 | 237 | 13423 | 1.653 | ug/ml# | 97 |
| 44) 2,4,6-Trichlorophenol | 8.810 | 196 | 15981 | 2.198 | ug/ml | 92 |
| 45) 2,4,5-Trichlorophenol | 8.839 | 196 | 16779 | 2.155 | ug/ml | 96 |
| 48) 2-Nitroaniline | 9.110 | 138 | 13269 | 2.241 | ug/ml | 88 |
| 51) Dimethyl phthalate | 9.322 | 163 | 50649 | 2.117 | ug/ml# | 98 |
| 53) 2,6-Dinitrotoluene | 9.363 | 165 | 11628 | 2.258 | ug/ml# | 86 |
| 60) Caprolactam | 8.192 | 55 | 2177 | 0.429 | ug/ml# | 21 |
| 61) 1,2,4,5-Tetrachloroben... | 8.687 | 216 | 22506 | 1.696 | ug/ml | 97 |
| 62) Biphenyl | 8.992 | 154 | 45973 | 1.753 | ug/ml | 99 |
| 64) 3-Nitroaniline | 9.516 | 138 | 10499 | 1.836 | ug/ml# | 87 |
| 66) 2,4-Dinitrophenol | 9.616 | 184 | 6986 | 1.830 | ug/ml# | 89 |
| 67) Dibenzofuran | 9.739 | 168 | 57581 | 1.661 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.751 | 165 | 15066 | 1.772 | ug/ml | 94 |
| 69) 4-Nitrophenol | 9.698 | 65 | 6778 | 1.171 | ug/ml# | 77 |
| 72) Diethyl phthalate | 10.022 | 149 | 53129 | 1.940 | ug/ml | 97 |
| 74) 4-Chlorophenyl phenyl ... | 10.104 | 204 | 26308 | 1.834 | ug/ml# | 87 |
| 75) 4-Nitroaniline | 10.104 | 138 | 12199 | 2.049 | ug/ml# | 71 |
| 76) 4,6-Dinitro-o-cresol | 10.139 | 198 | 11096 | 2.329 | ug/ml# | 50 |
| 77) NDPA/DPA | 10.216 | 169 | 42386 | 1.875 | ug/ml | 98 |
| 80) 4-Bromophenyl phenyl e... | 10.575 | 248 | 16729 | 1.869 | ug/ml# | 81 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-4.D
Acq On : 21 Sep 2024 3:53 pm
Operator : SV106:als
Sample : WG1974465-4,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 16:11:43 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 87) Atrazine | 10.763 | 200 | 15887 | 1.744 | ug/ml | 92 |
| 91) Carbazole | 11.222 | 167 | 72230 | 1.925 | ug/ml | 100 |
| 92) Di-n-butylphthalate | 11.628 | 149 | 93691 | 2.126 | ug/ml | 99 |
| 97) Butyl benzyl phthalate | 13.104 | 149 | 42739 | 2.107 | ug/ml | 93 |
| 106) 3,3'-Dichlorobenzidine | 13.610 | 252 | 32649 | 1.625 | ug/ml# | 92 |
| 108) Bis(2-ethylhexyl)phtha... | 13.751 | 149 | 64775 | 1.929 | ug/ml# | 92 |
| 109) Di-n-octylphthalate | 14.439 | 149 | 108155 | 1.946 | ug/ml# | 66 |

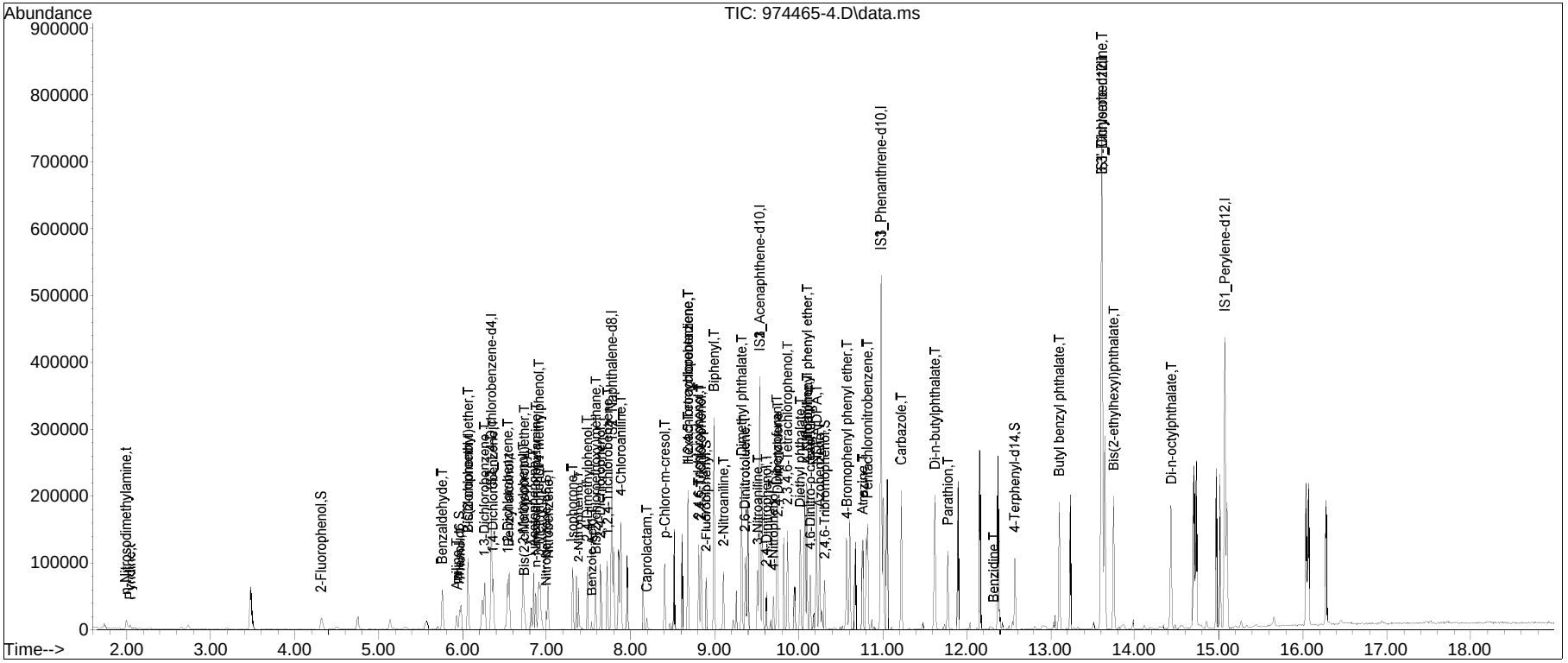
(#) = qualifier out of range (m) = manual integration (+) = signals summed

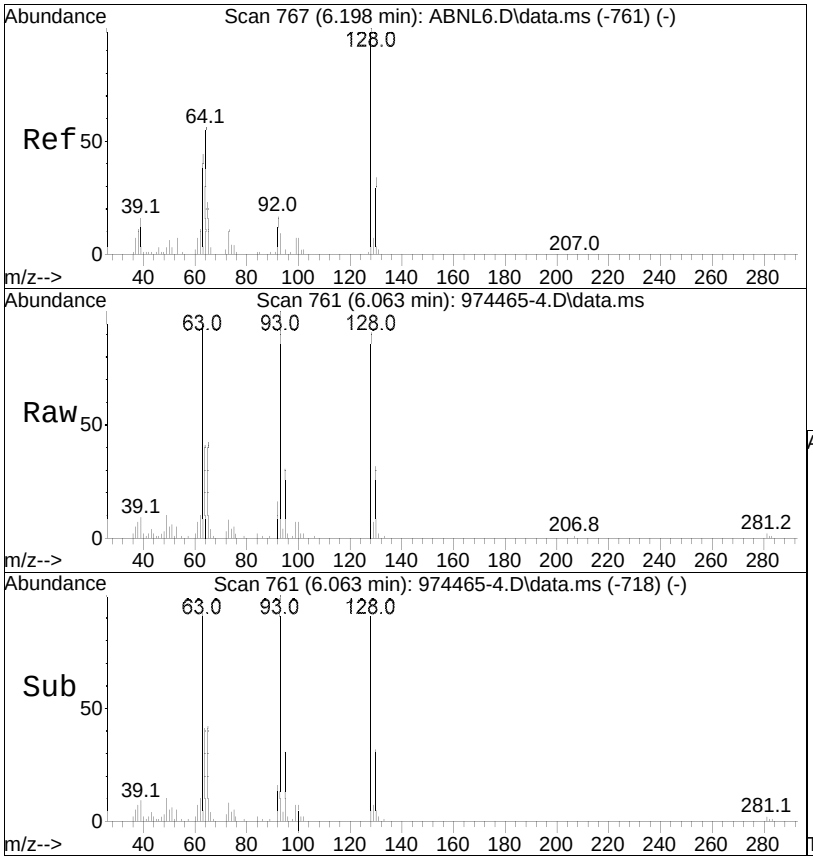
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-4.D
Acq On : 21 Sep 2024 3:53 pm
Operator : SV106:als
Sample : WG1974465-4,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 16:11:43 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•

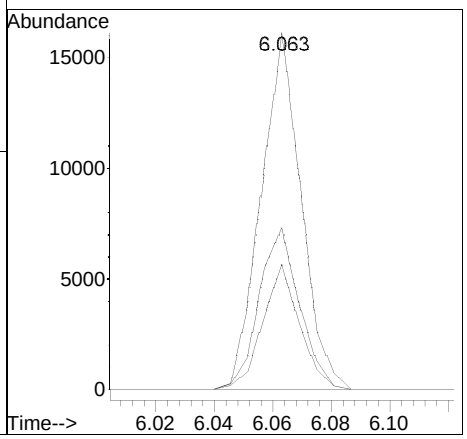


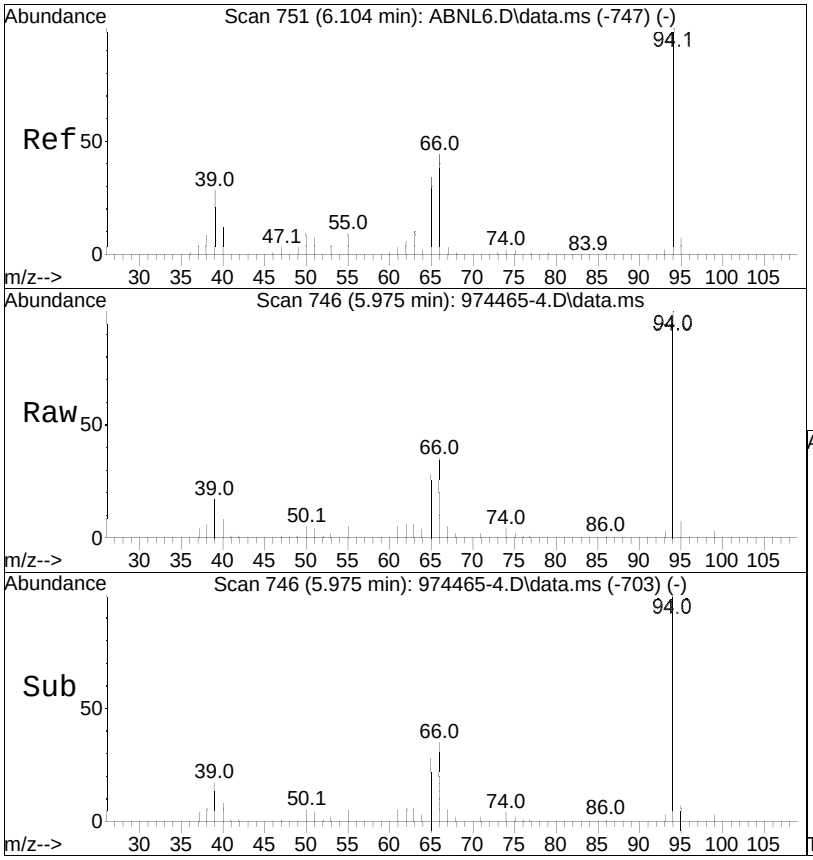



#6
2-Chlorophenol
Concen: 1.68 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:128 Resp: 15265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 64 | 45.8 | 45.1 | 67.7 |
| 130 | 32.5 | 26.2 | 39.4 |

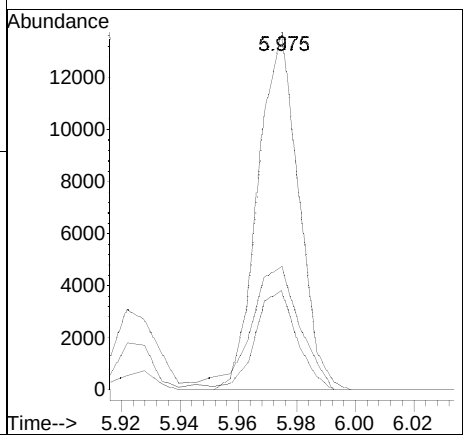


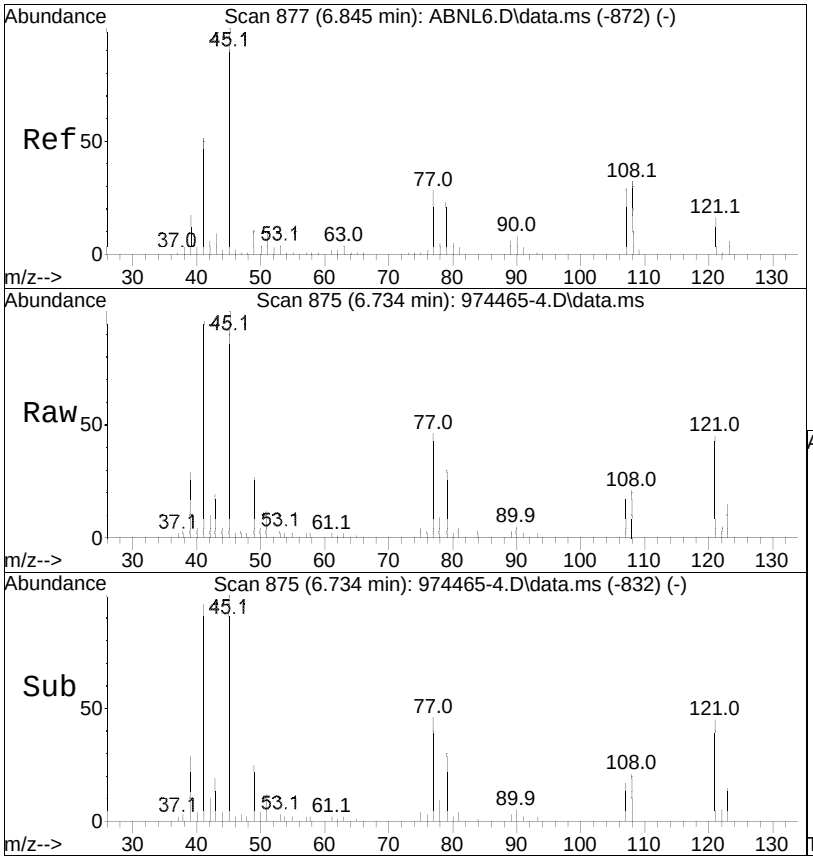



#8
Phenol
Concen: 1.14 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 94 Resp: 13200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 28.6 | 26.0 | 39.0 |
| 66 | 41.8 | 33.8 | 50.8 |

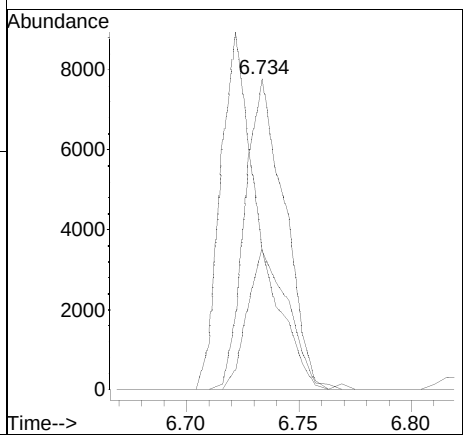


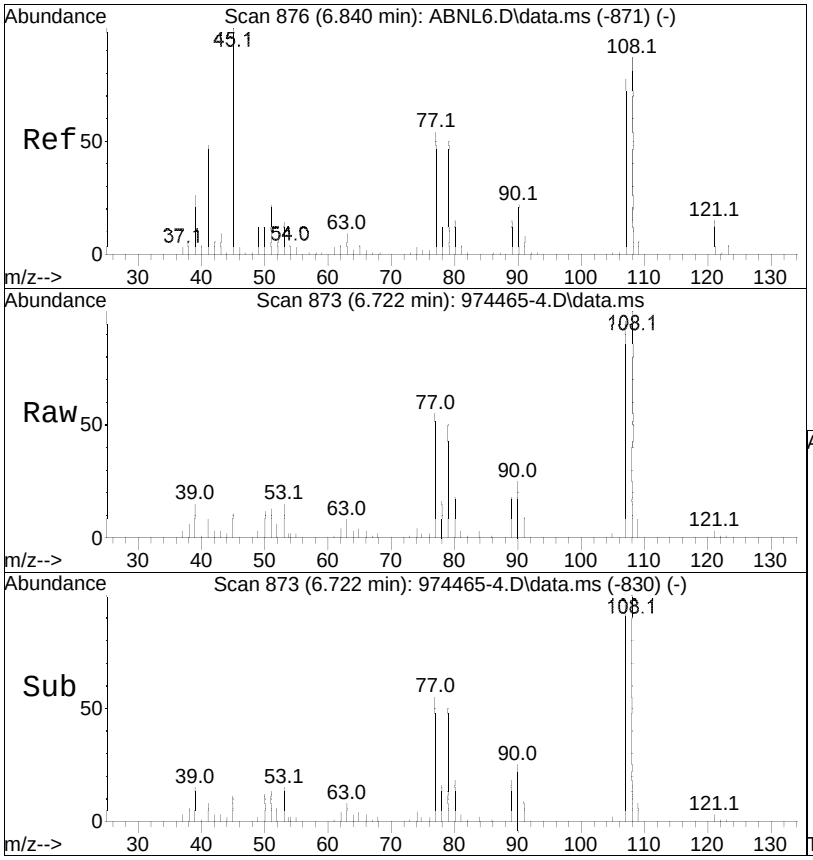



#14
Bis(2-chloroisopropyl)ether
Concen: 0.63 ug/ml
RT: 6.734 min Scan# 875
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 45 Resp: 9560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 121 | 45.8 | 9.8 | 14.6# |
| 77 | 112.0 | 6.1 | 9.1# |

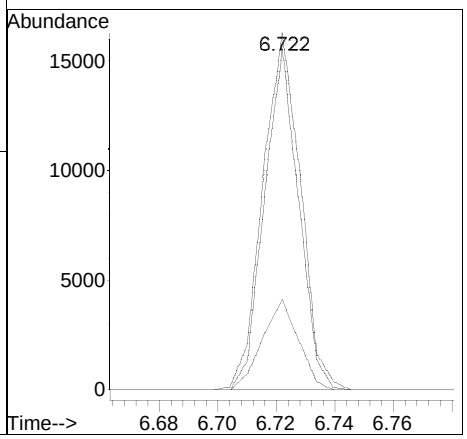


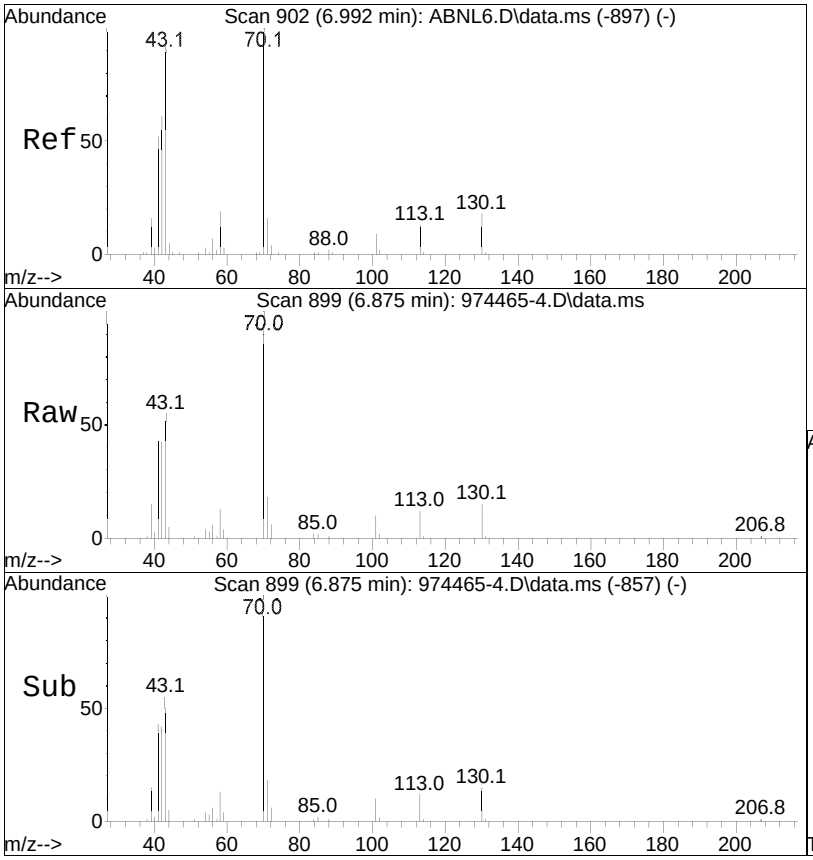



#15
2-Methylphenol
Concen: 1.75 ug/ml
RT: 6.722 min Scan# 873
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:108 Resp: 14553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 86.7 | 70.7 | 106.1 |
| 90 | 24.3 | 18.7 | 28.1 |

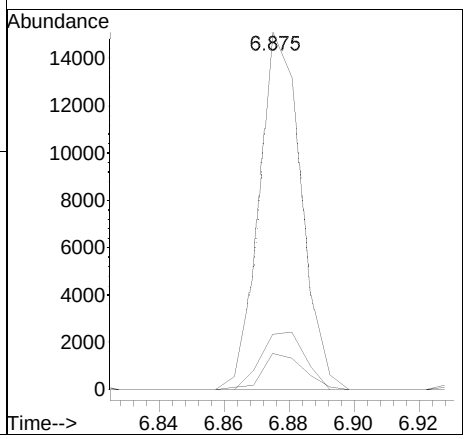


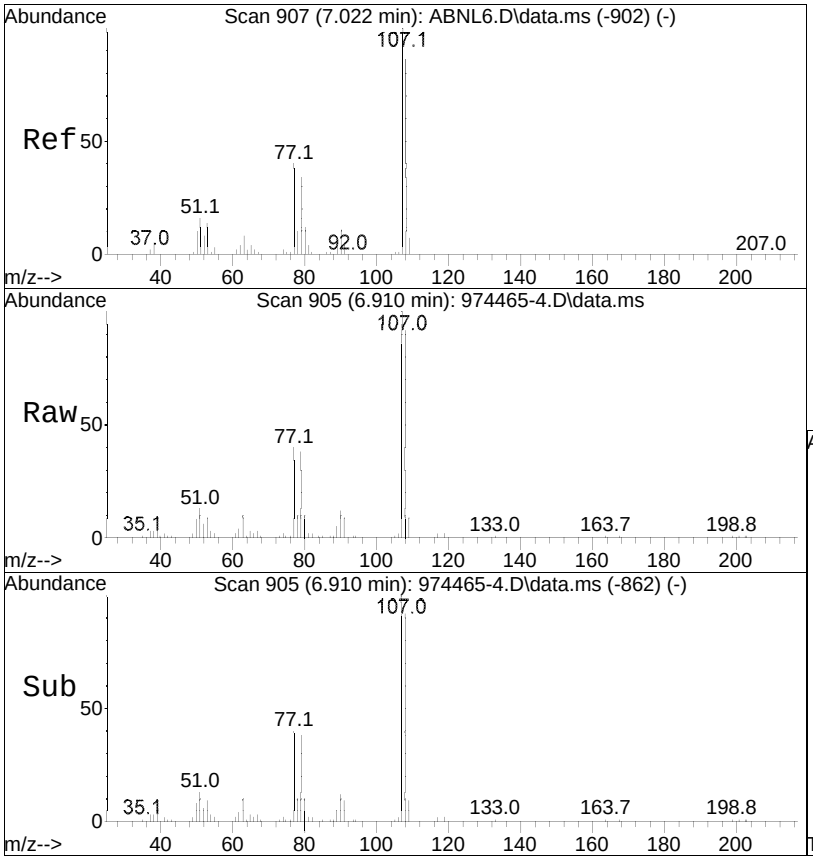



#17
n-Nitrosodi-n-propylamine
Concen: 1.82 ug/ml
RT: 6.875 min Scan# 899
Delta R.T. -0.006 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 70 Resp: 13522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 17.0 | 18.2 | 27.4# |
| 101 | 10.0 | 7.8 | 11.8 |

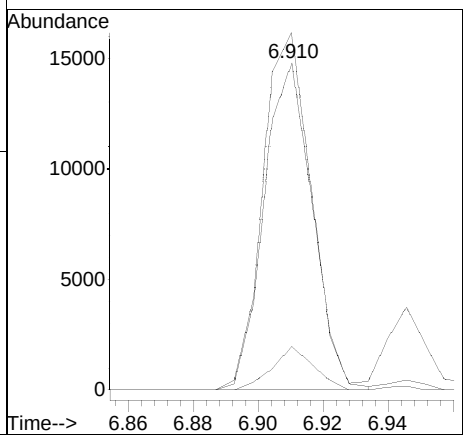


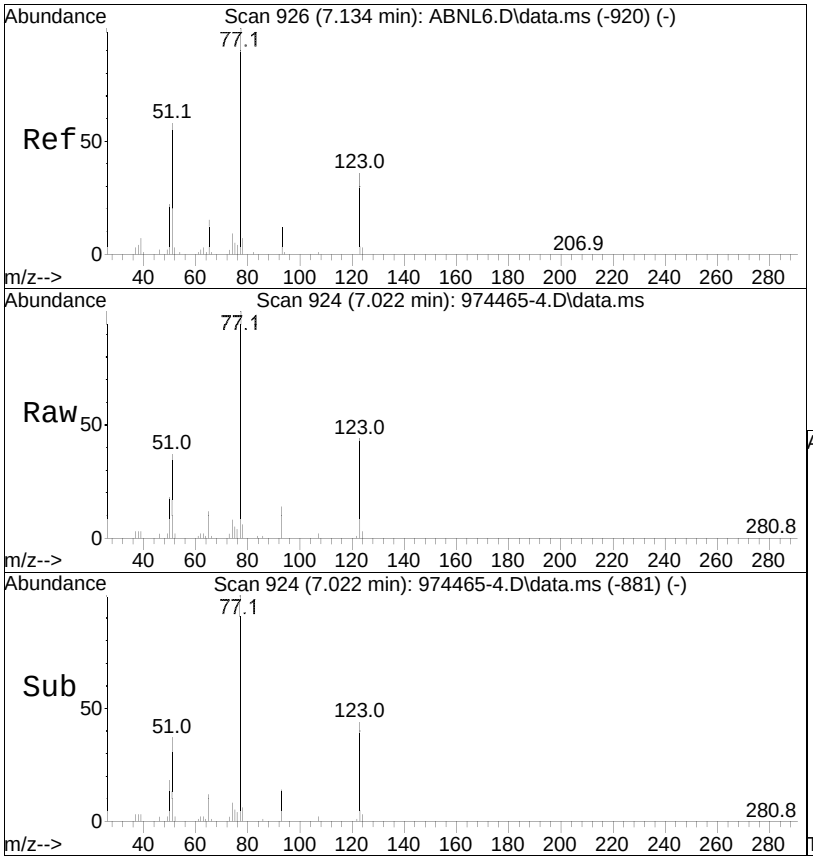



#18
3-Methylphenol/4-Methylphenol
Concen: 1.69 ug/ml
RT: 6.910 min Scan# 905
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:108 Resp: 15219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 109.4 | 88.6 | 132.8 |
| 90 | 11.4 | 8.8 | 13.2 |

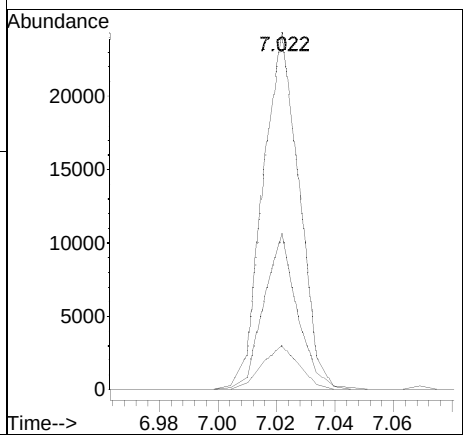


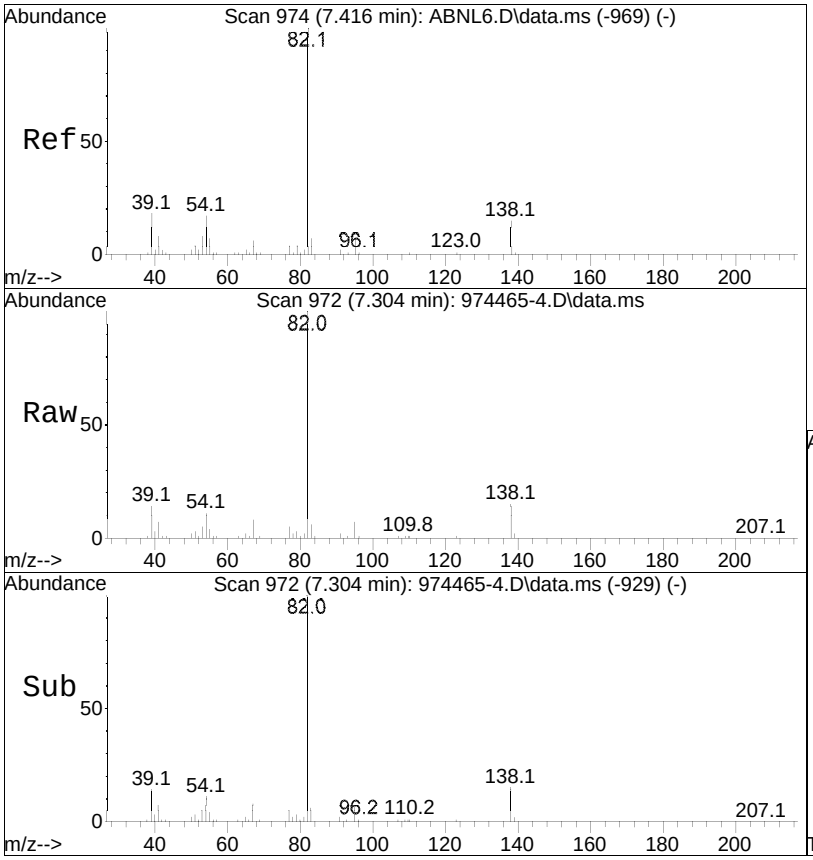



#20
Nitrobenzene
Concen: 1.79 ug/ml
RT: 7.022 min Scan# 924
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 77 Resp: 20759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 40.8 | 36.3 | 54.5 |
| 65 | 12.6 | 11.6 | 17.4 |

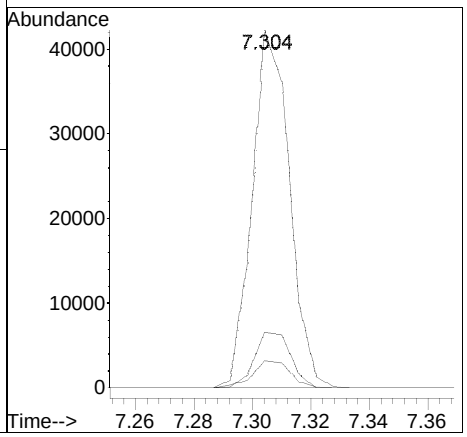


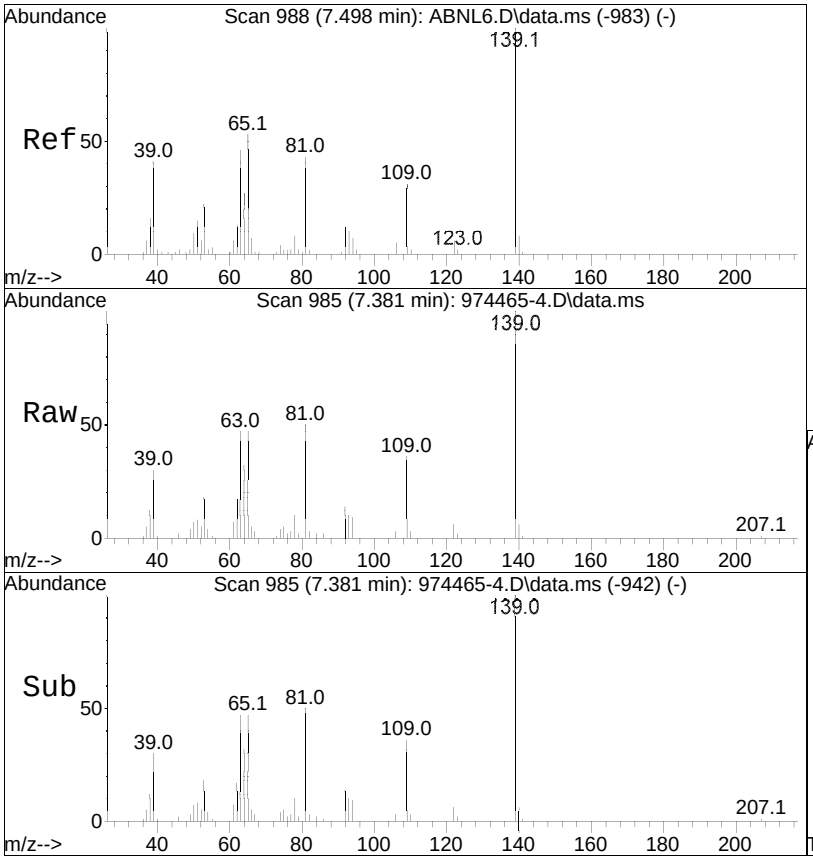



#21
Isophorone
Concen: 1.90 ug/ml
RT: 7.304 min Scan# 972
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 82 Resp: 36985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 15.2 | 14.7 | 22.1 |
| 95 | 7.7 | 5.2 | 7.8 |

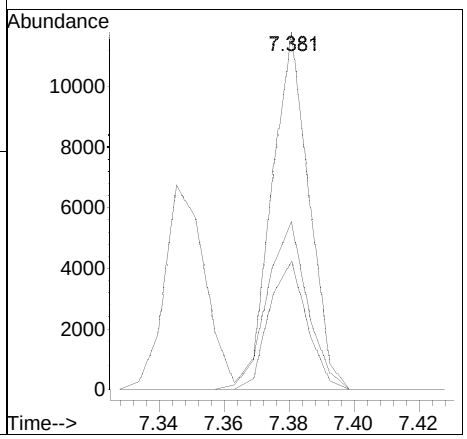


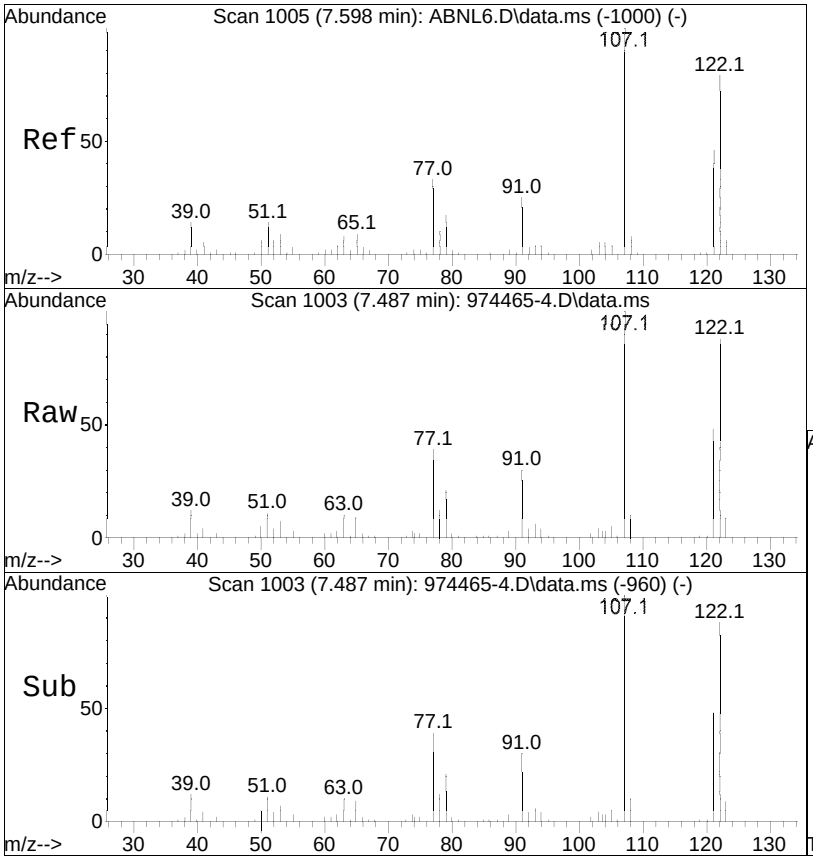



#22
2-Nitrophenol
Concen: 1.92 ug/ml
RT: 7.381 min Scan# 985
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:139 Resp: 9365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 36.7 | 19.4 | 29.0# |
| 65 | 50.6 | 46.1 | 69.1 |

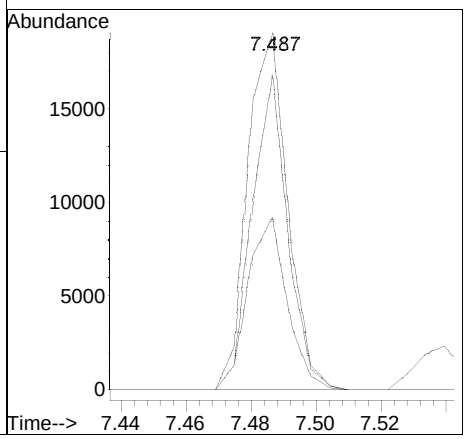


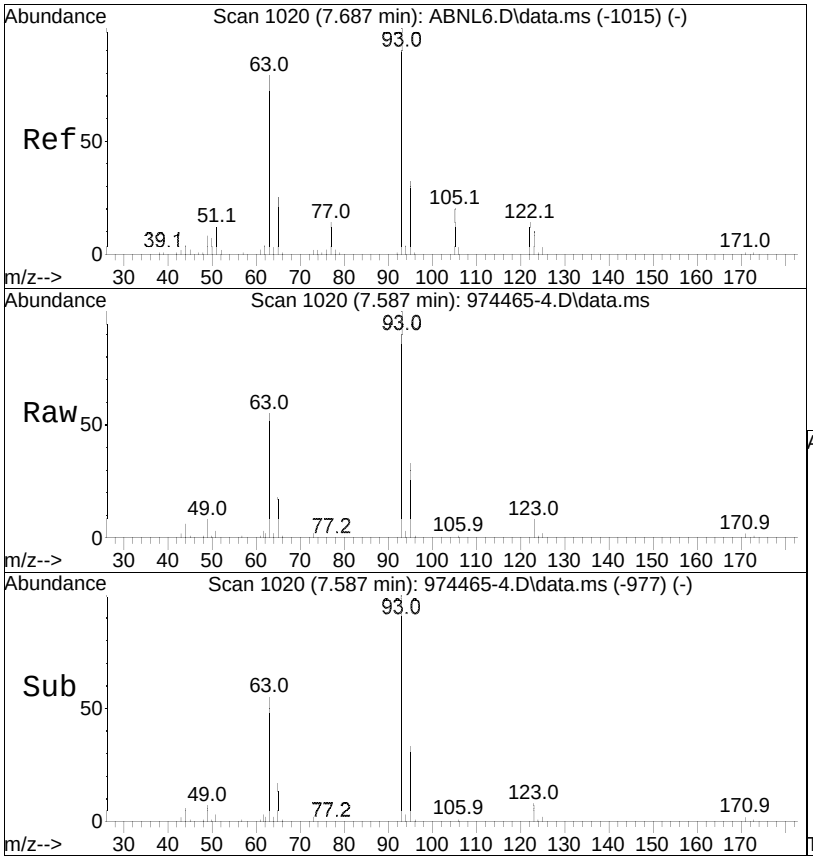



#23
2,4-Dimethylphenol
Concen: 1.77 ug/ml
RT: 7.487 min Scan# 1003
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:107 Resp: 16249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 47.6 | 40.0 | 60.0 |
| 122 | 78.4 | 70.2 | 105.4 |

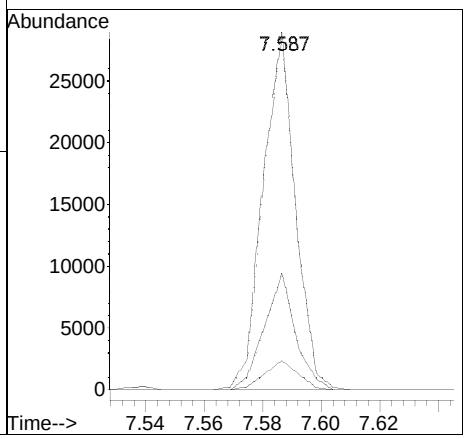


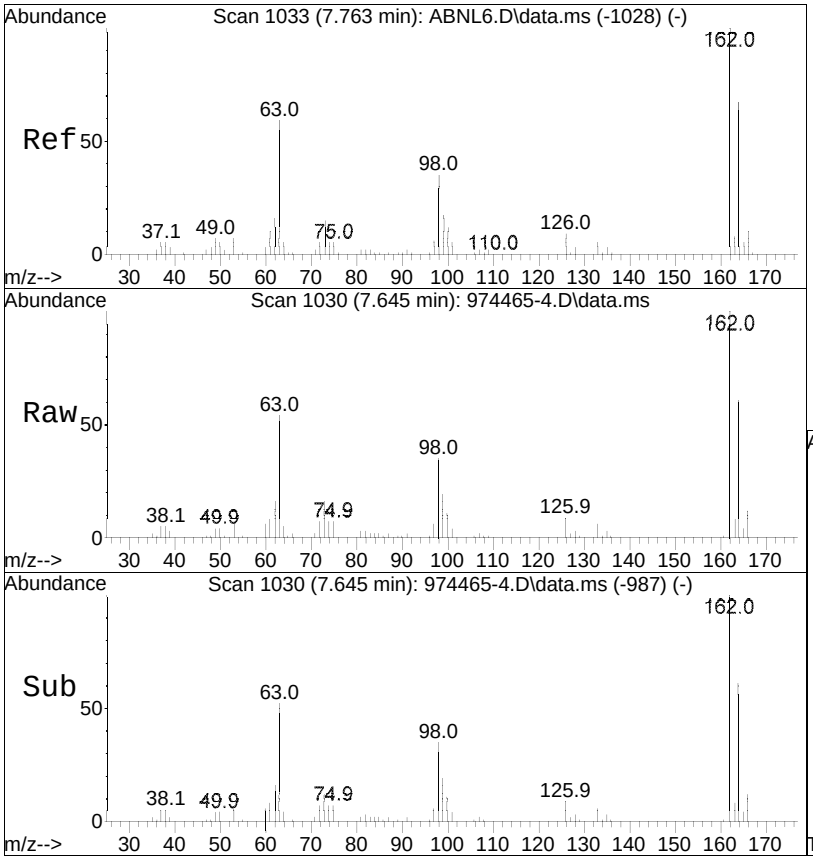



#24
Bis(2-chloroethoxy)methane
Concen: 1.75 ug/ml
RT: 7.587 min Scan# 1020
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 93 Resp: 21964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 31.7 | 25.8 | 38.8 |
| 123 | 8.7 | 10.1 | 15.1# |

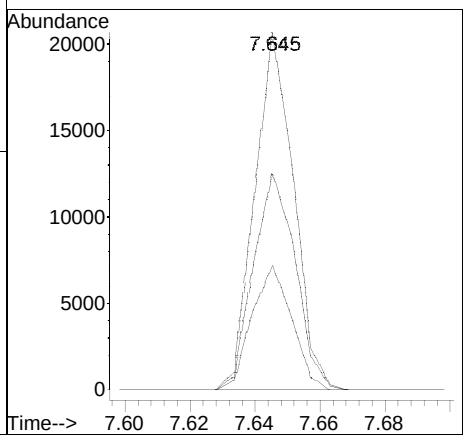


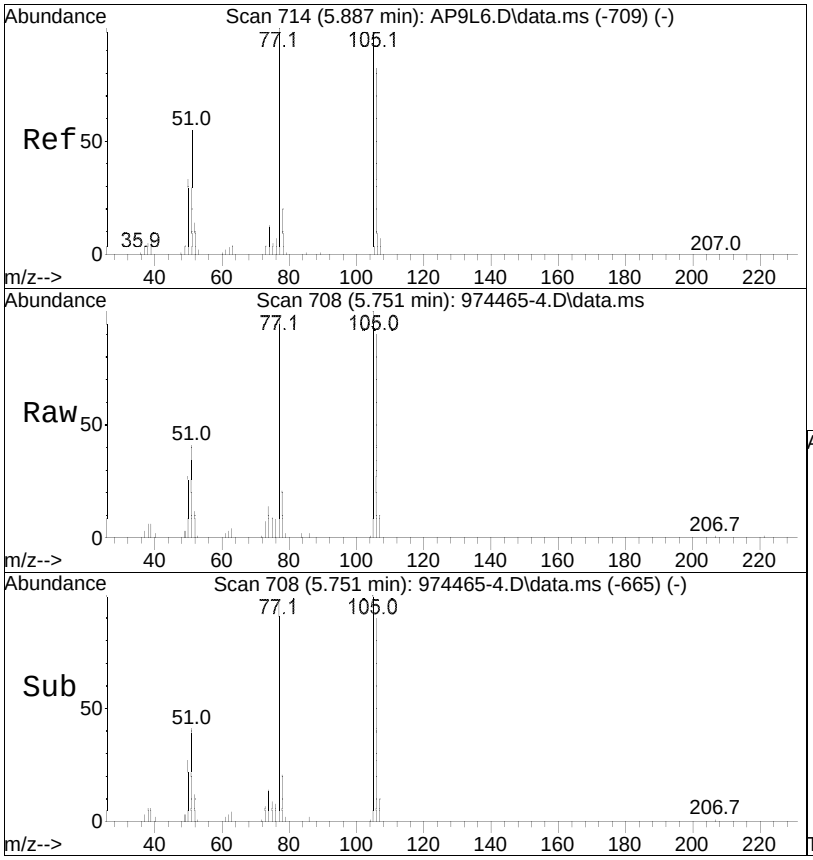



#25
2,4-Dichlorophenol
Concen: 1.96 ug/ml
RT: 7.645 min Scan# 1030
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:162 Resp: 17010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 65.3 | 51.0 | 76.4 |
| 98 | 35.8 | 32.2 | 48.2 |

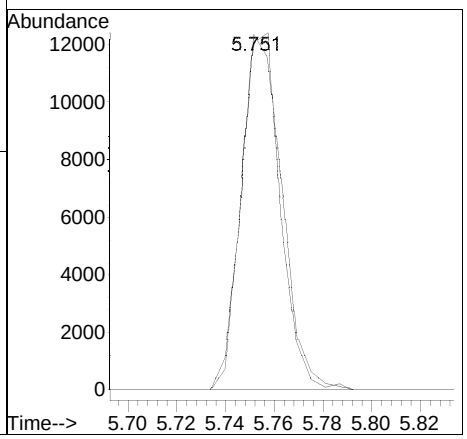


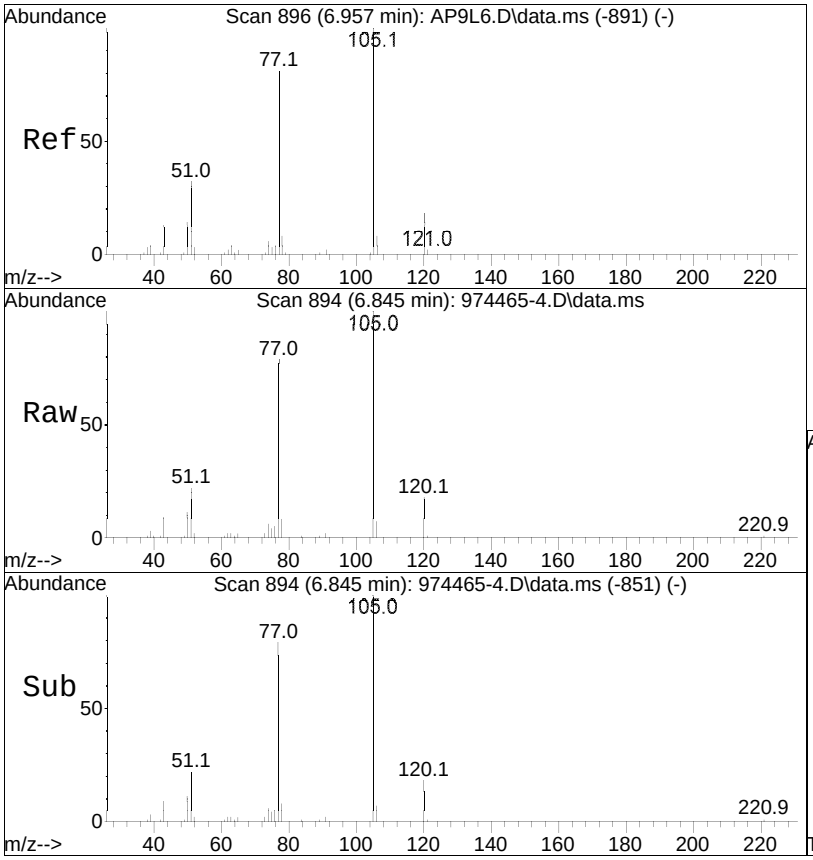



#28
Benzaldehyde
Concen: 1.70 ug/ml
RT: 5.751 min Scan# 708
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:105 Resp: 14245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 77 | 97.1 | 82.2 | 123.4 |

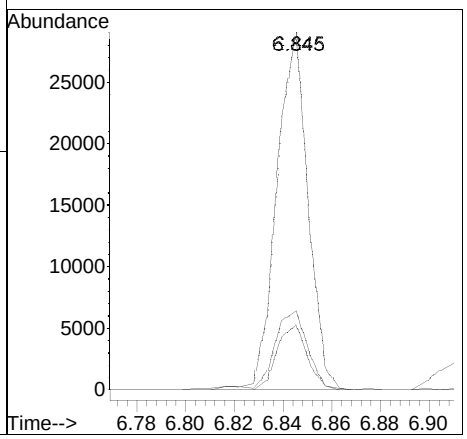


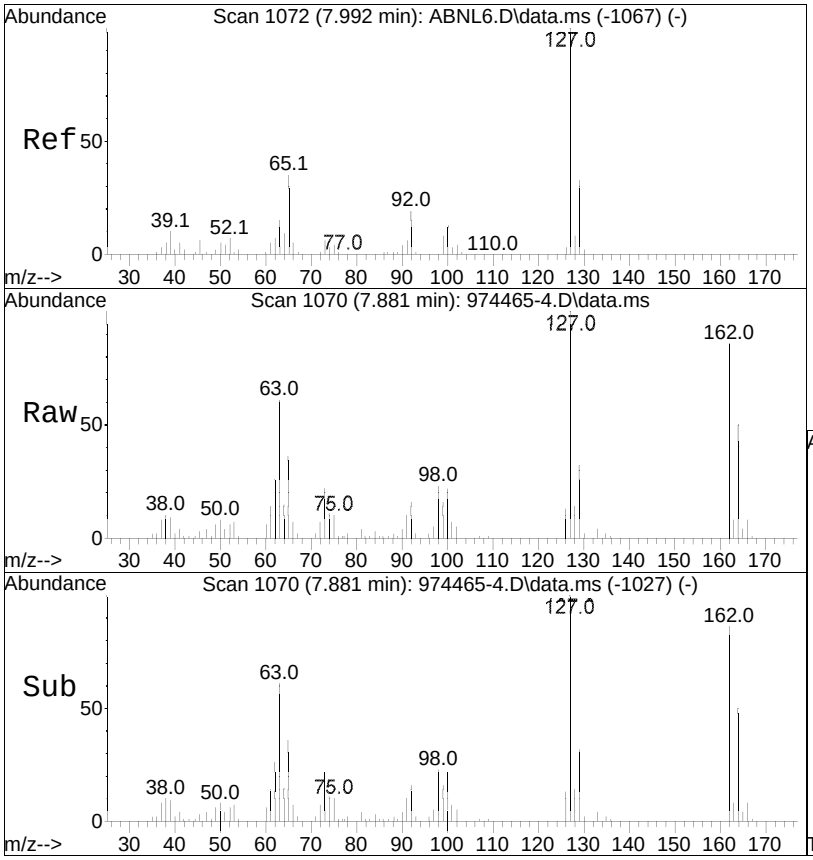



#29
Acetophenone
Concen: 1.68 ug/ml
RT: 6.845 min Scan# 894
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:105 Resp: 25585

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 17.6 | 20.5 | 30.7# |
| 51 | 24.3 | 34.9 | 52.3# |

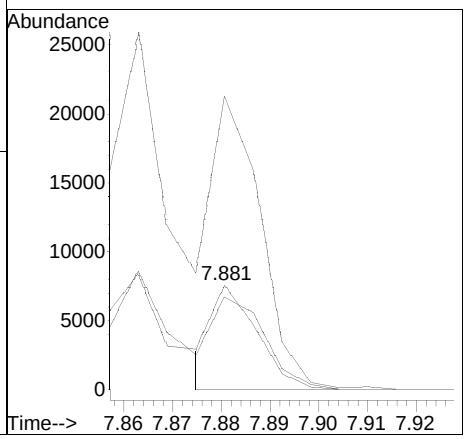


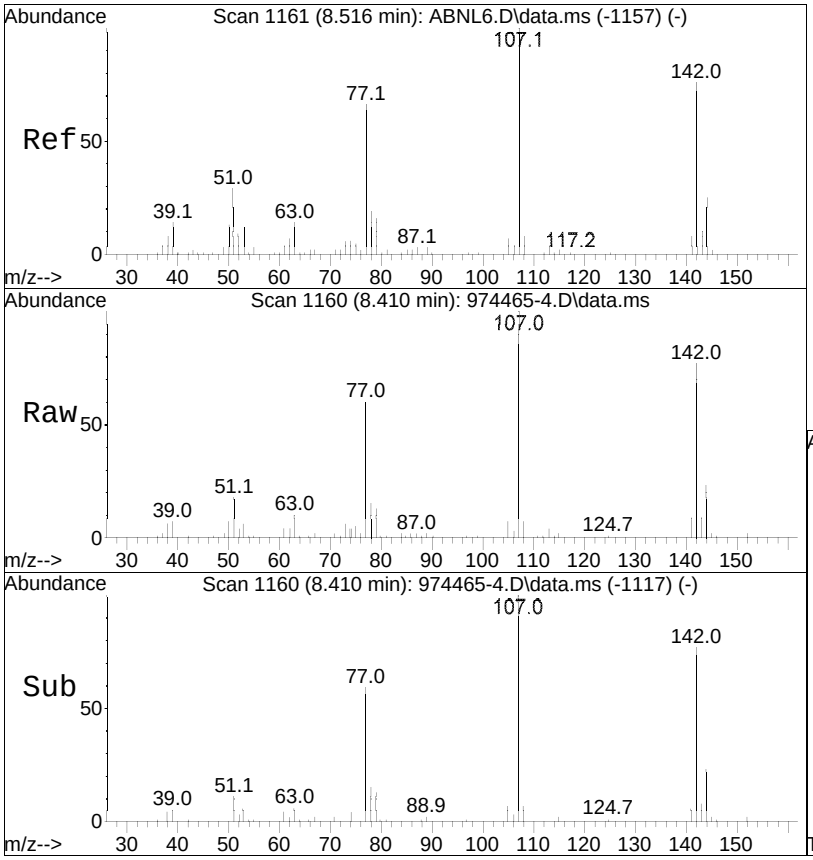



#38
4-Chloroaniline
Concen: 1.17 ug/ml
RT: 7.881 min Scan# 1070
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 65 Resp: 4802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 304.8 | 237.6 | 356.4 |
| 129 | 103.9 | 76.3 | 114.5 |

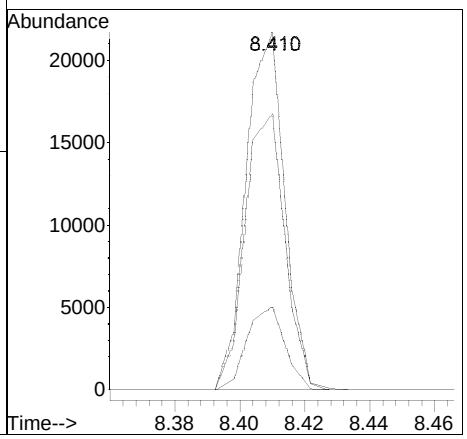


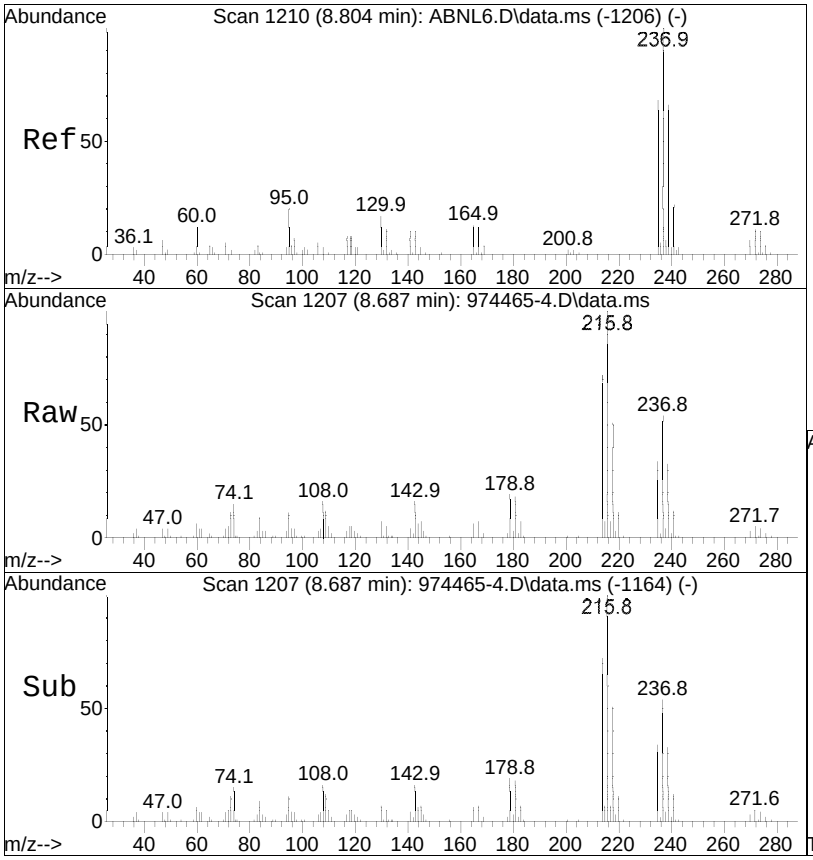



#40
p-Chloro-m-cresol
Concen: 2.15 ug/ml
RT: 8.410 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:107 Resp: 17819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 144 | 22.9 | 20.9 | 31.3 |
| 142 | 79.5 | 66.1 | 99.1 |

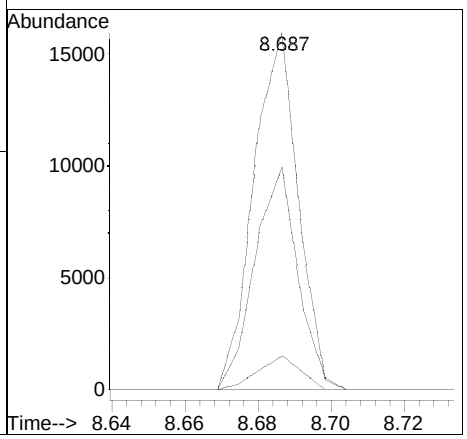


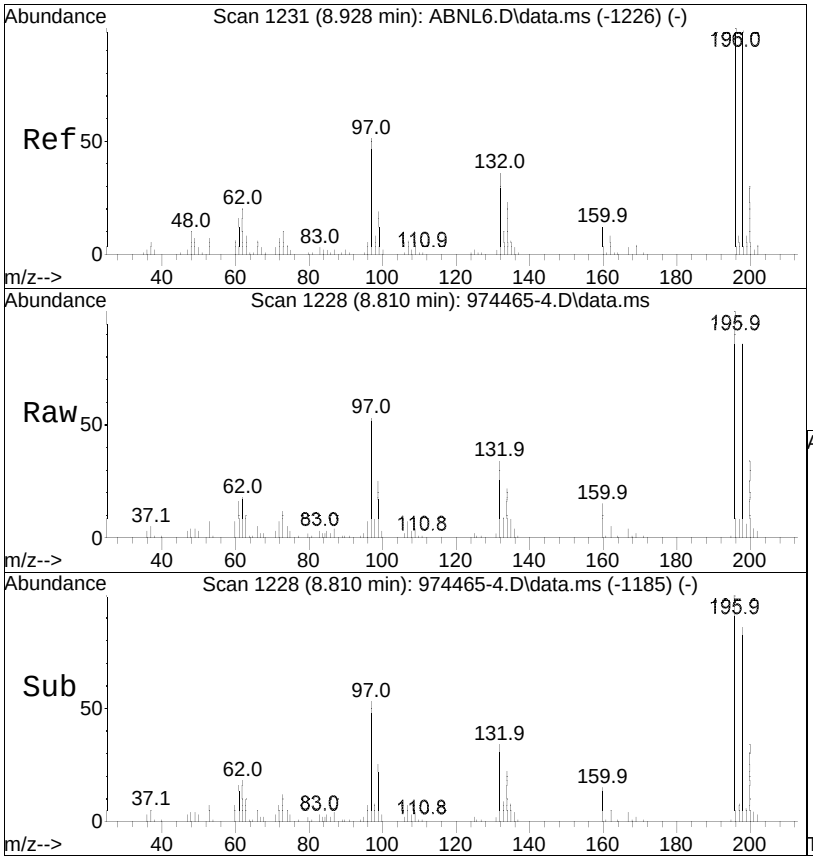



#43
Hexachlorocyclopentadiene
Concen: 1.65 ug/ml
RT: 8.687 min Scan# 1207
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:237 Resp: 13423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 235 | 60.8 | 49.7 | 74.5 |
| 272 | 9.1 | 9.8 | 14.6# |

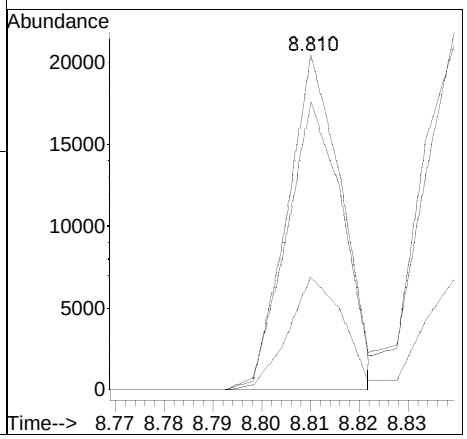


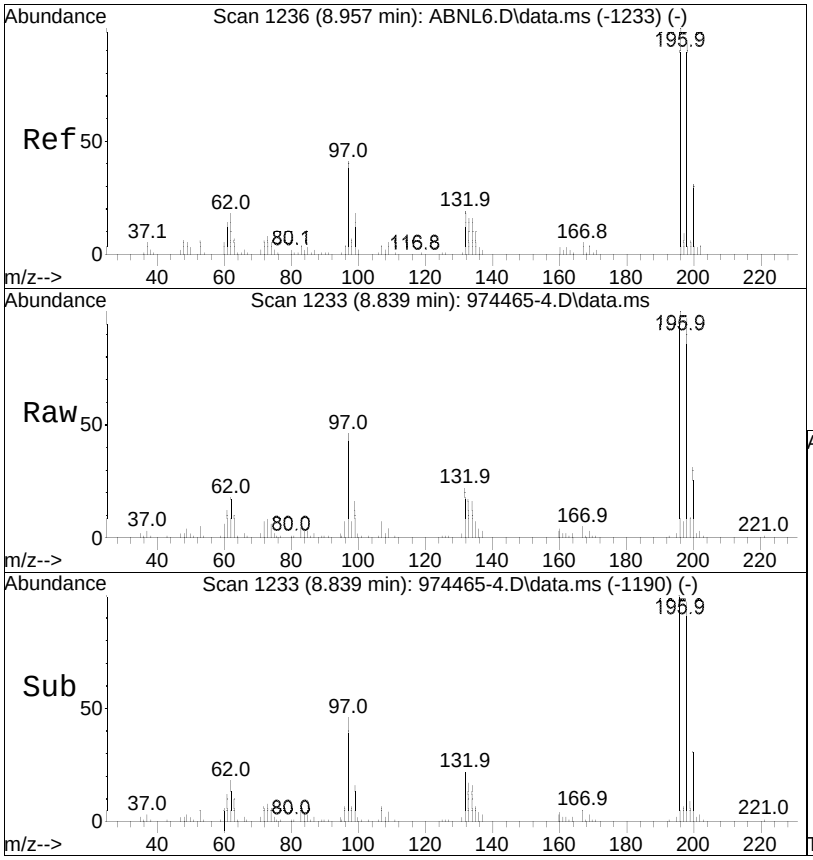



#44
2,4,6-Trichlorophenol
Concen: 2.20 ug/ml
RT: 8.810 min Scan# 1228
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:196 Resp: 15981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 89.6 | 77.5 | 116.3 |
| 200 | 35.2 | 23.8 | 35.6 |

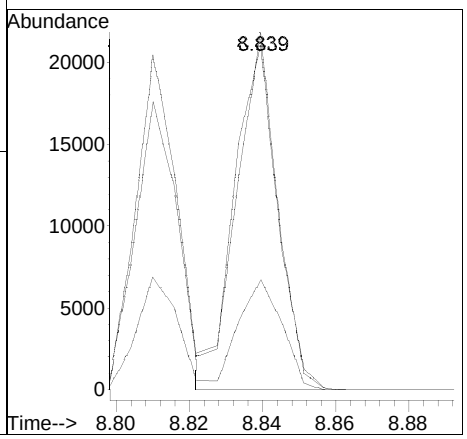


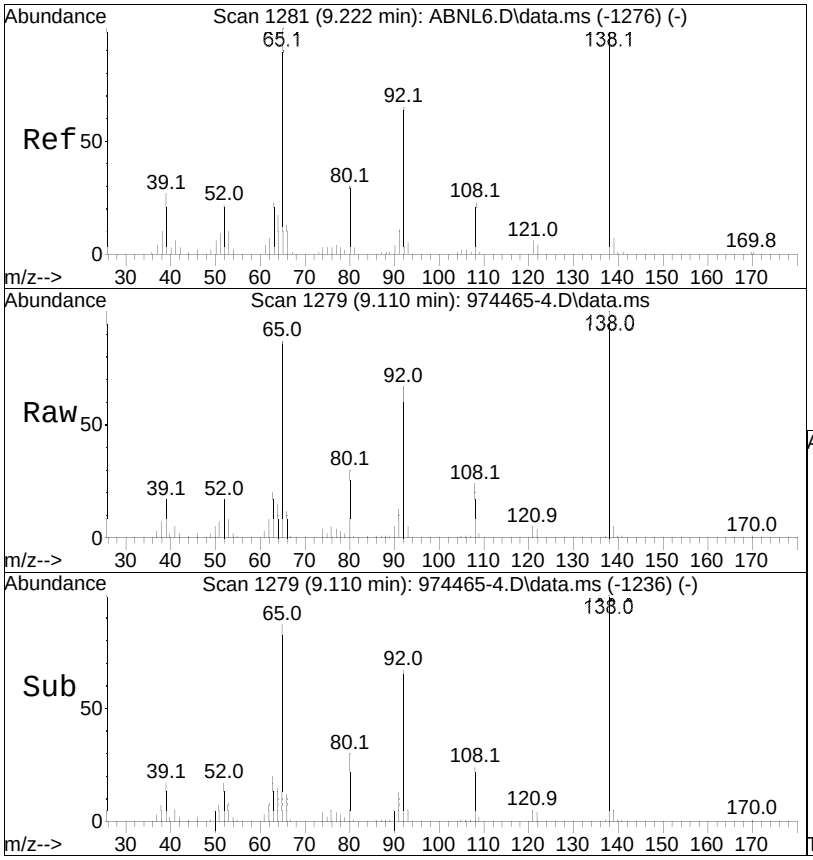



#45
2,4,5-Trichlorophenol
Concen: 2.16 ug/ml
RT: 8.839 min Scan# 1233
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:196 Resp: 16779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 32.6 | 25.4 | 38.0 |
| 198 | 102.2 | 78.0 | 117.0 |

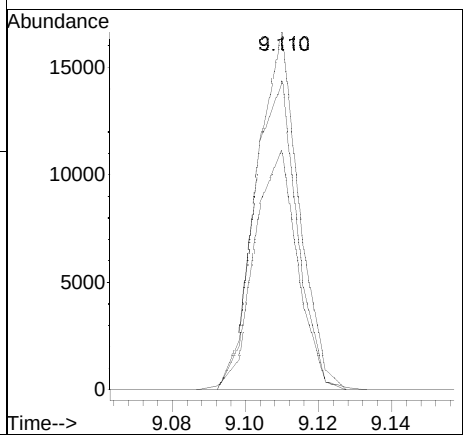


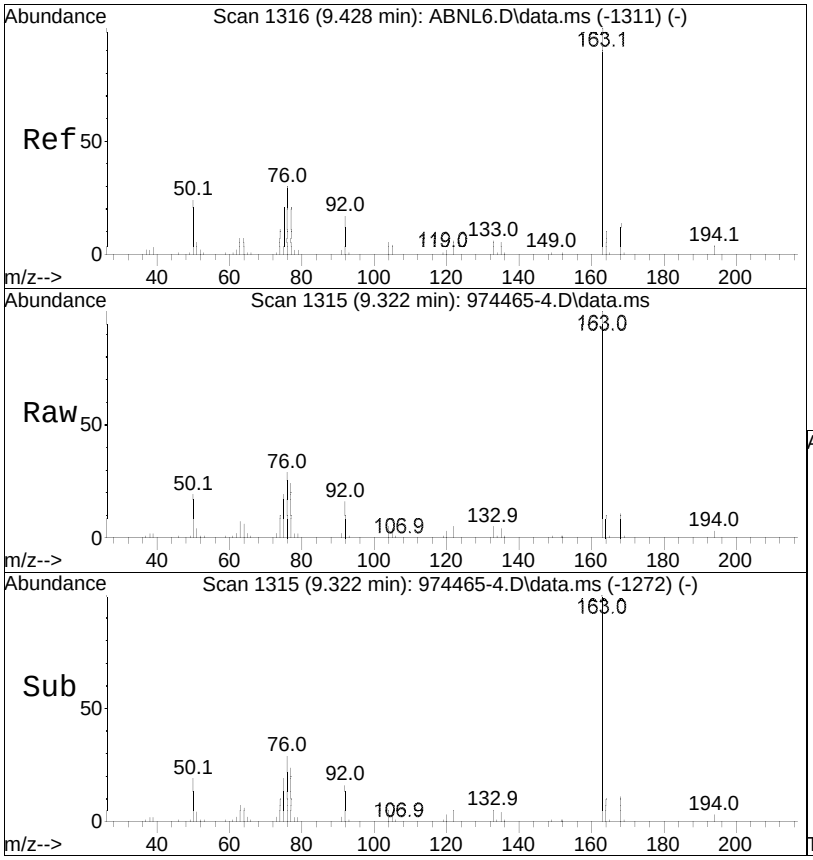



#48
2-Nitroaniline
Concen: 2.24 ug/ml
RT: 9.110 min Scan# 1279
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:138 Resp: 13269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 68.7 | 53.5 | 80.3 |
| 65 | 88.7 | 86.3 | 129.5 |

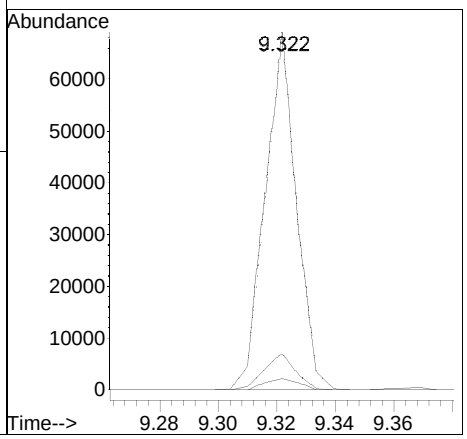


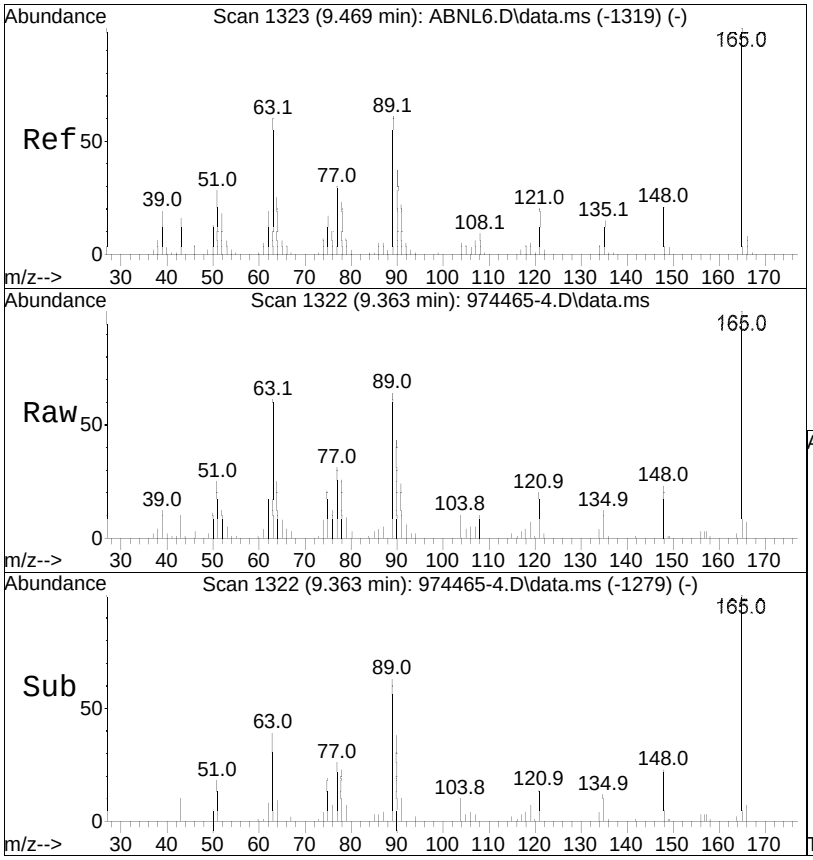



#51
Dimethyl phthalate
Concen: 2.12 ug/ml
RT: 9.322 min Scan# 1315
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:163 Resp: 50649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.4 | 3.5 | 5.3# |
| 164 | 10.3 | 7.9 | 11.9 |

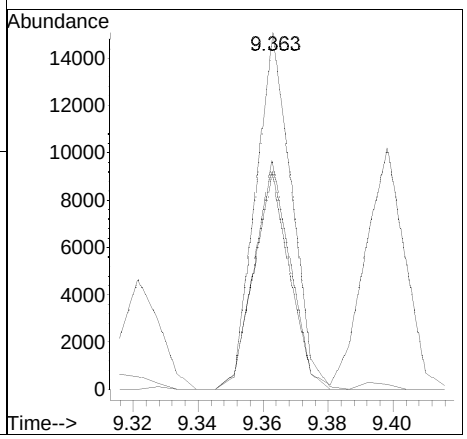


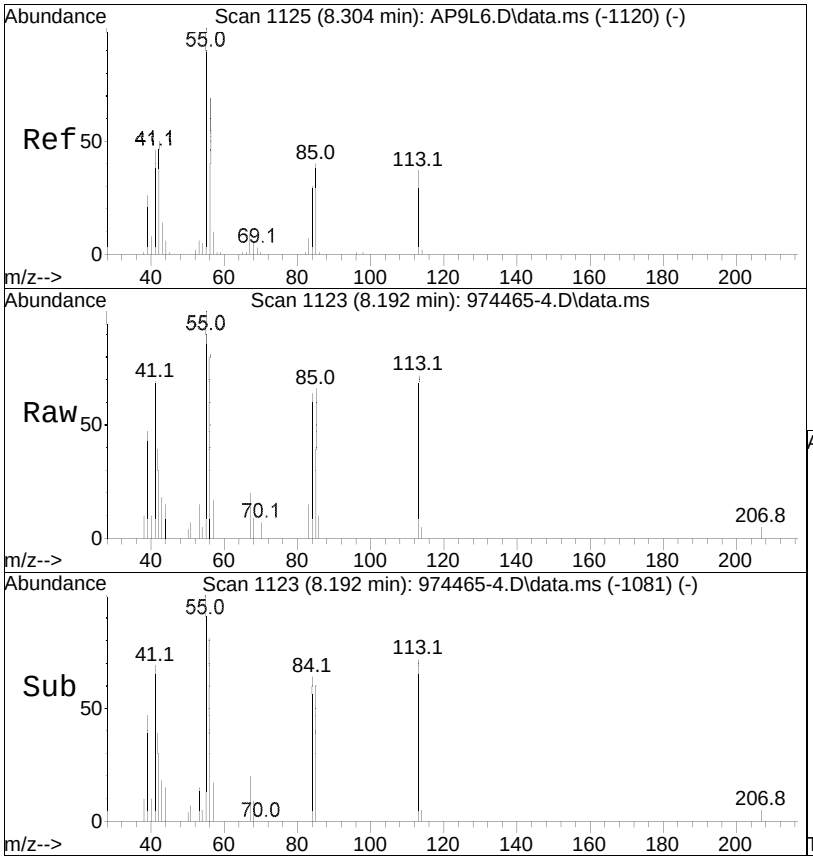



#53
2,6-Dinitrotoluene
Concen: 2.26 ug/ml
RT: 9.363 min Scan# 1322
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:165 Resp: 11628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 63.9 | 54.2 | 81.2 |
| 63 | 61.0 | 64.2 | 96.2# |

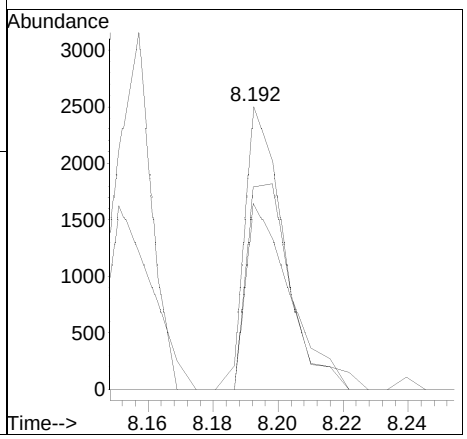


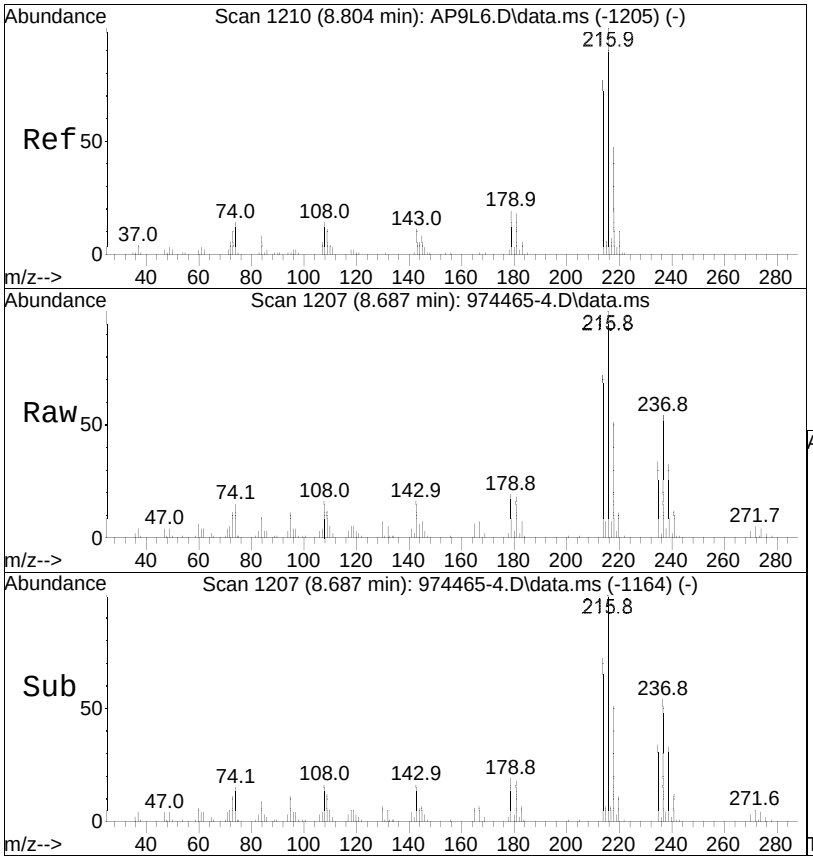



#60
Caprolactam
Concen: 0.43 ug/ml
RT: 8.192 min Scan# 1123
Delta R.T. -0.006 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 55 Resp: 2177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 85 | 68.0 | 19.8 | 29.6# |
| 113 | 80.9 | 29.6 | 44.4# |

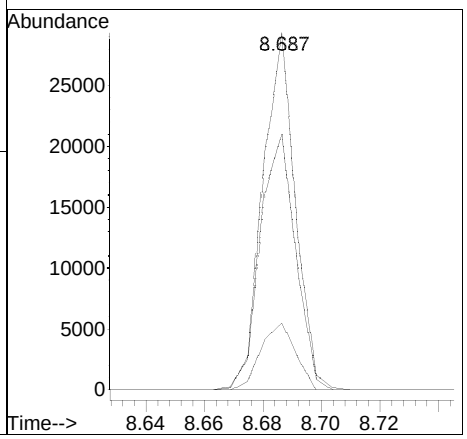


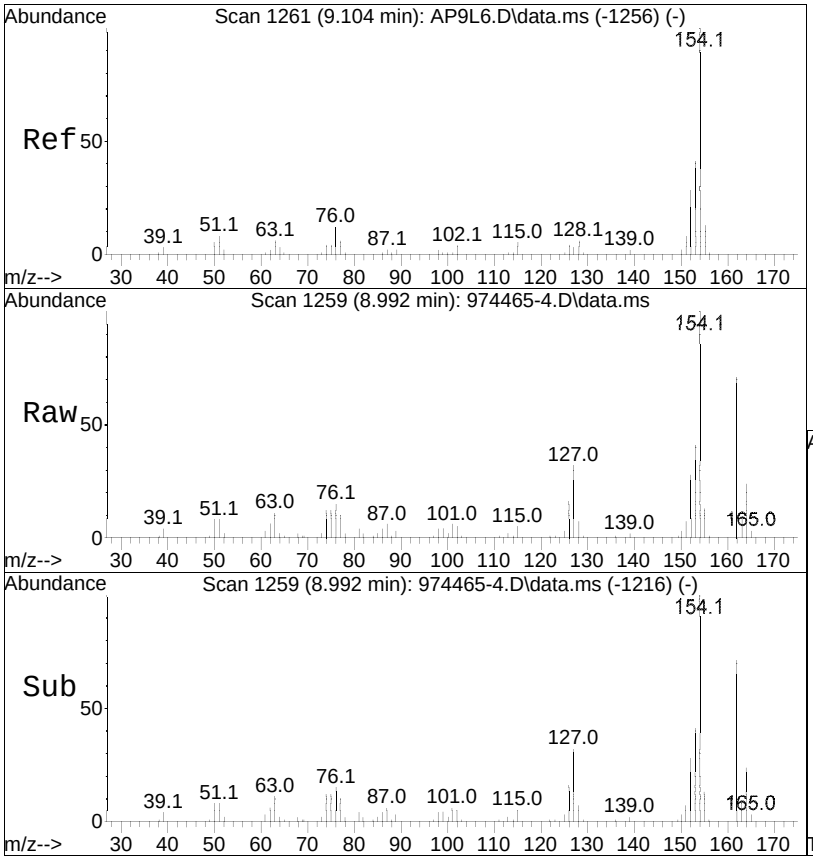



#61
1,2,4,5-Tetrachlorobenzene
Concen: 1.70 ug/ml
RT: 8.687 min Scan# 1207
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:216 Resp: 22506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 77.9 | 63.7 | 95.5 |
| 179 | 20.0 | 19.0 | 28.6 |

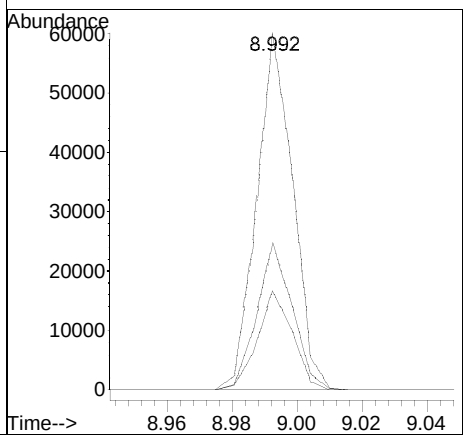


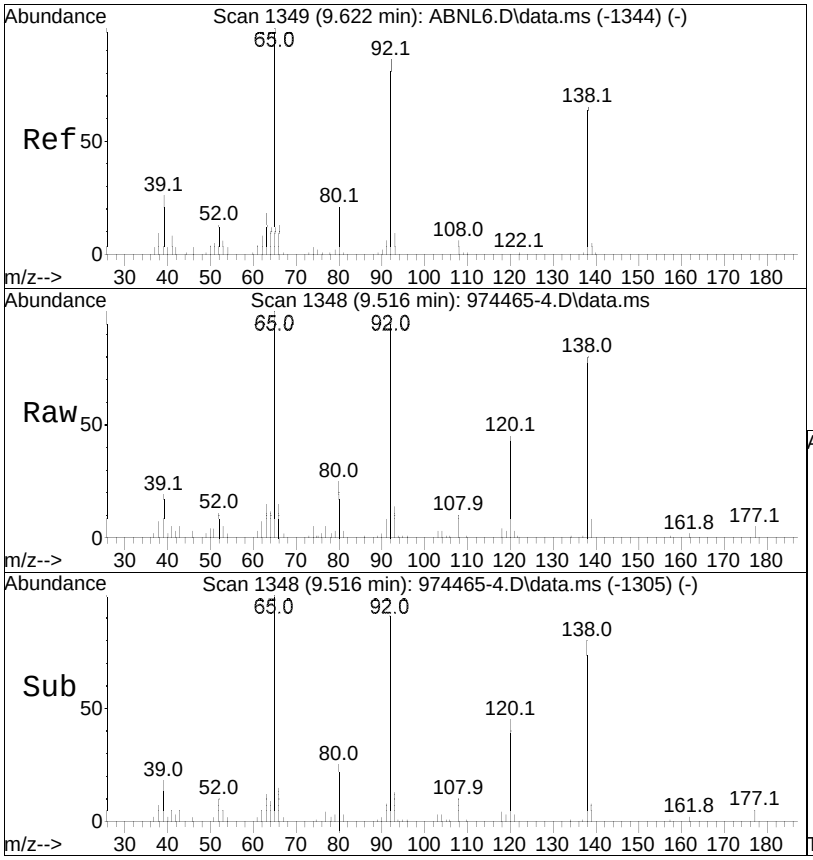



#62
Biphenyl
Concen: 1.75 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:154 Resp: 45973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 40.7 | 32.3 | 48.5 |
| 152 | 27.1 | 22.5 | 33.7 |

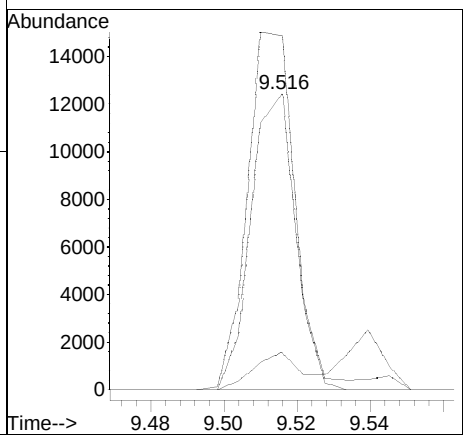


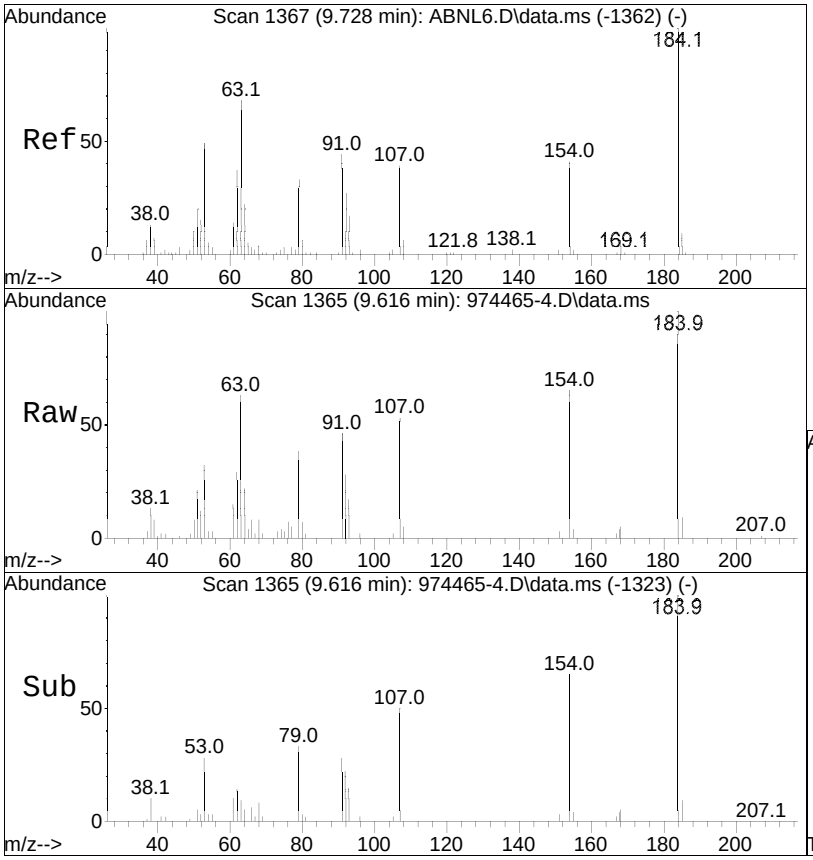



#64
3-Nitroaniline
Concen: 1.84 ug/ml
RT: 9.516 min Scan# 1348
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:138 Resp: 10499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 132.0 | 93.4 | 140.2 |
| 108 | 14.6 | 9.5 | 14.3# |

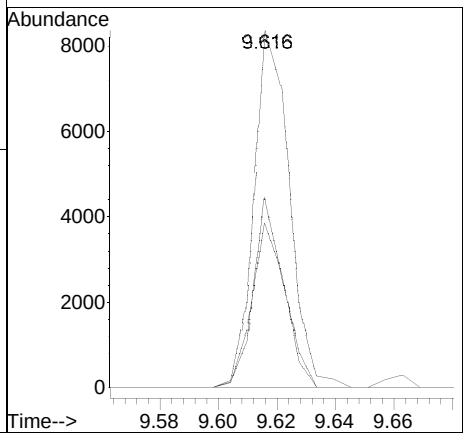


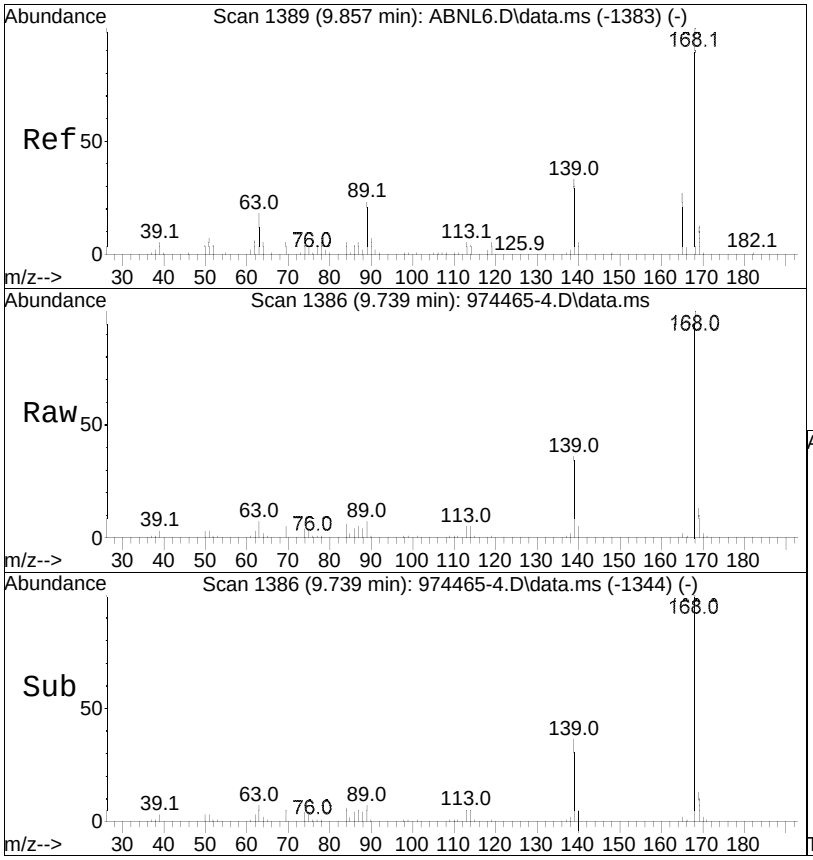



#66
2,4-Dinitrophenol
Concen: 1.83 ug/ml
RT: 9.616 min Scan# 1365
Delta R.T. -0.006 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:184 Resp: 6986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 107 | 46.1 | 37.7 | 56.5 |
| 91 | 43.5 | 46.3 | 69.5# |

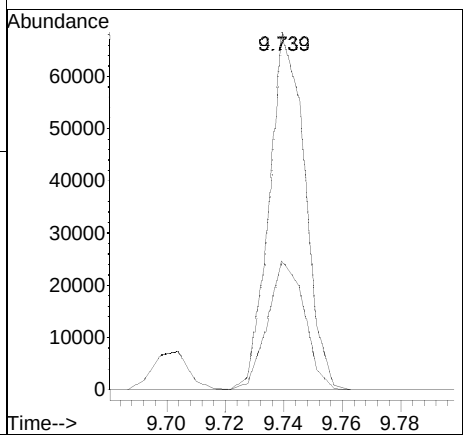


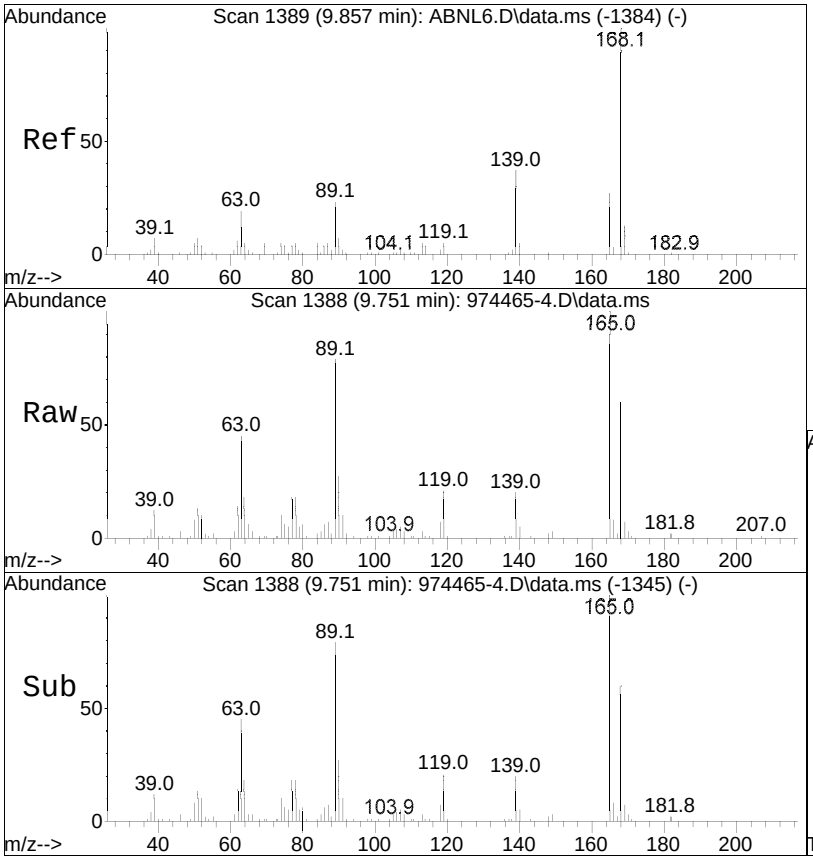



#67
Dibenzofuran
Concen: 1.66 ug/ml
RT: 9.739 min Scan# 1386
Delta R.T. -0.006 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:168 Resp: 57581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 37.3 | 31.4 | 47.2 |

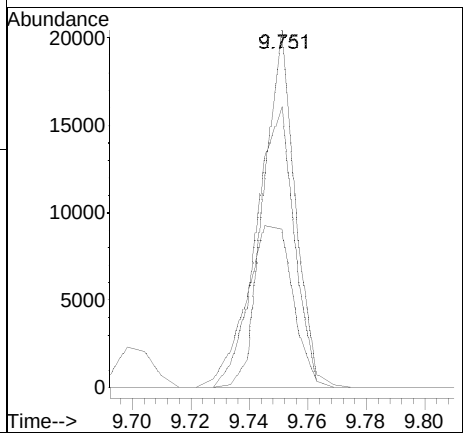


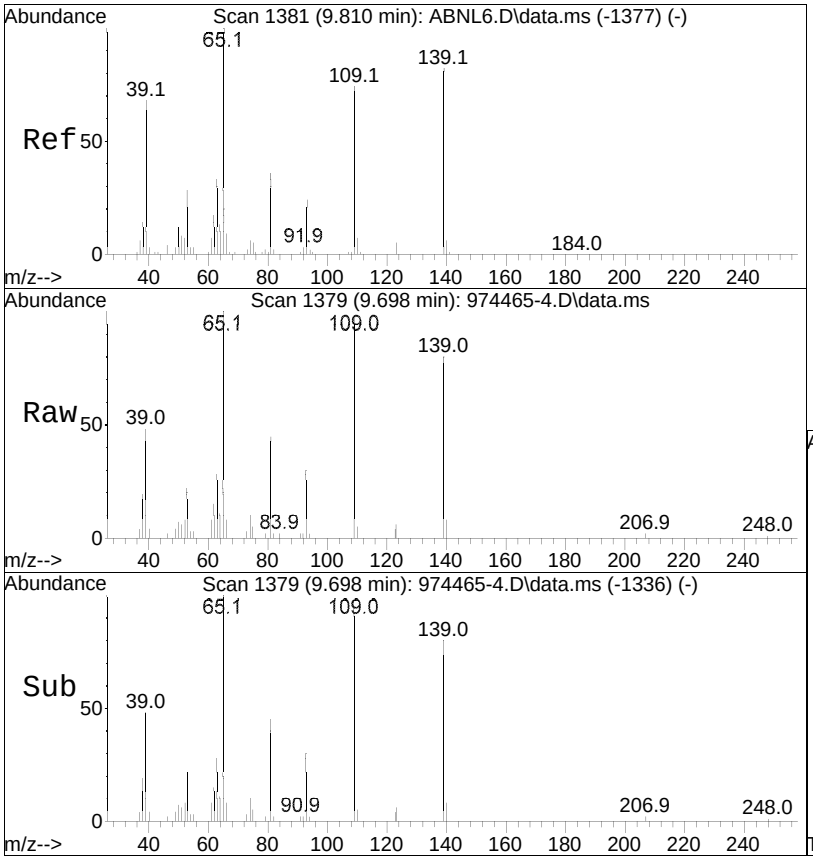



#68
2,4-Dinitrotoluene
Concen: 1.77 ug/ml
RT: 9.751 min Scan# 1388
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:165 Resp: 15066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 96.6 | 72.0 | 108.0 |
| 63 | 69.0 | 52.7 | 79.1 |

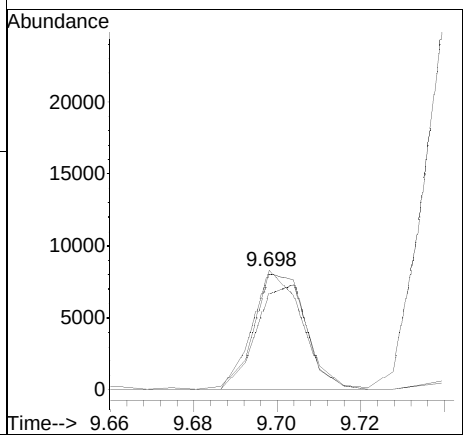


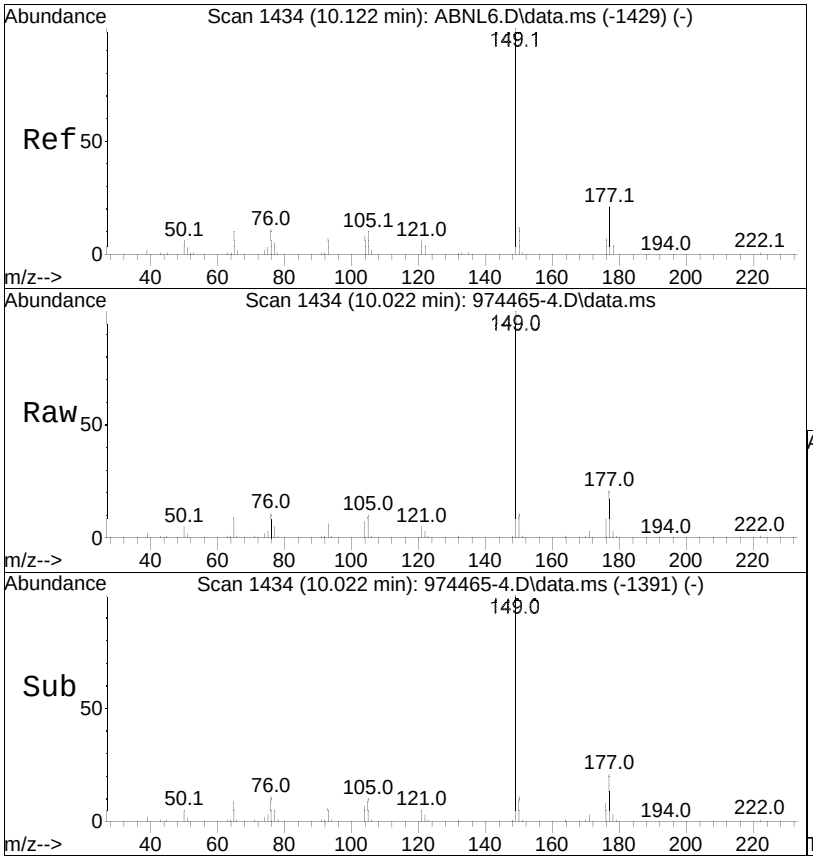



#69
4-Nitrophenol
Concen: 1.17 ug/ml
RT: 9.698 min Scan# 1379
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion: 65 Resp: 6778

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 101.4 | 47.4 | 71.2# |
| 139 | 93.1 | 76.6 | 115.0 |

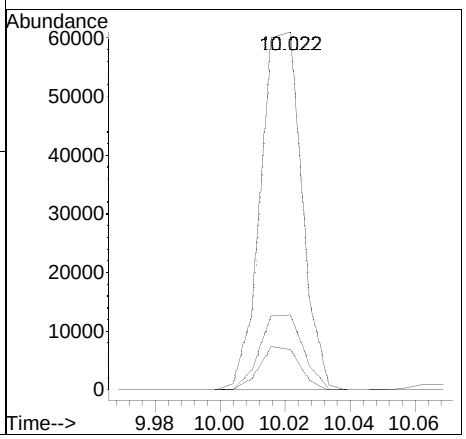


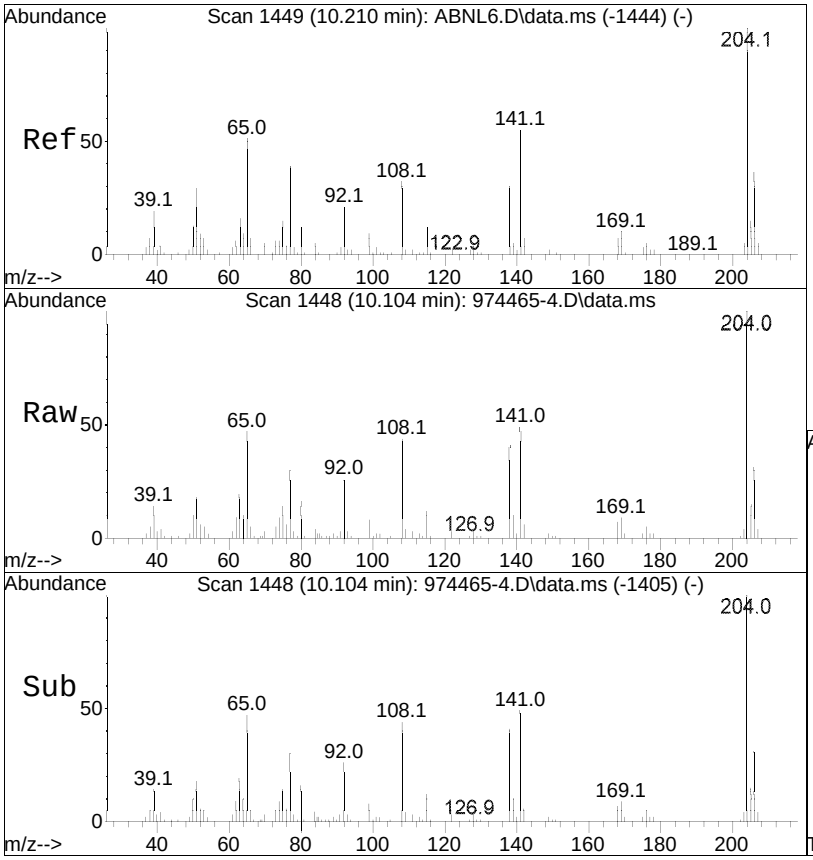



#72
Diethyl phthalate
Concen: 1.94 ug/ml
RT: 10.022 min Scan# 1434
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:149 Resp: 53129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 22.1 | 16.1 | 24.1 |
| 150 | 11.9 | 9.4 | 14.2 |

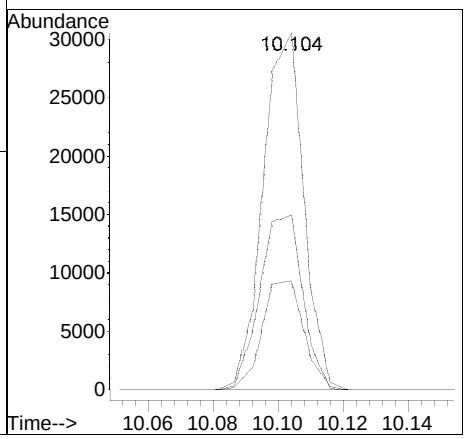


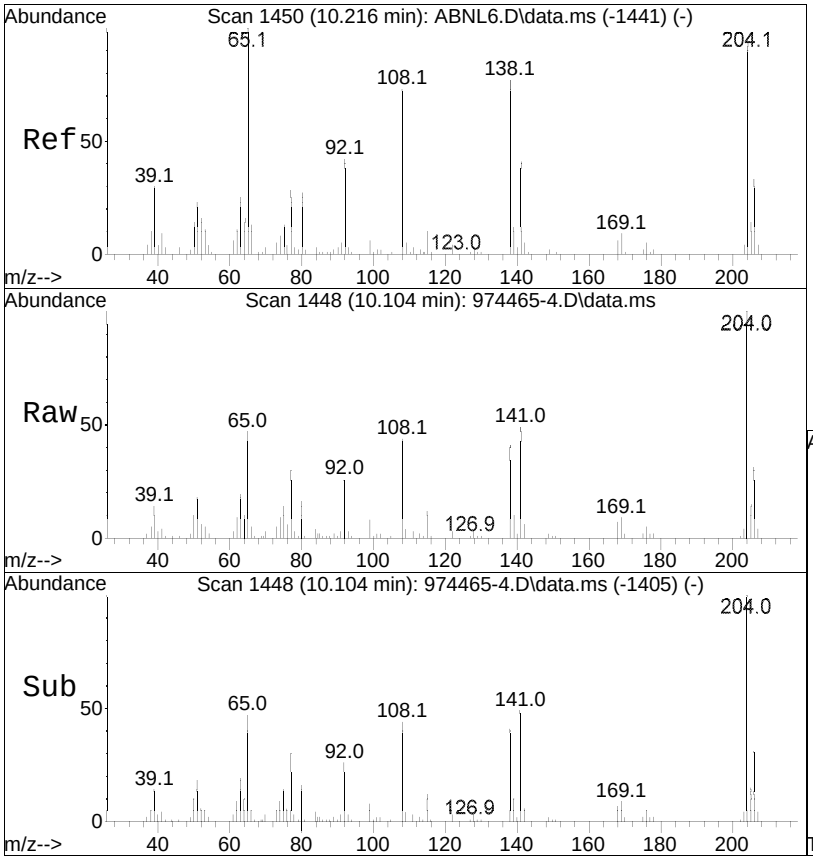



#74
4-Chlorophenyl phenyl ether
Concen: 1.83 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:204 Resp: 26308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 204 | 100 | | |
| 206 | 31.8 | 25.8 | 38.6 |
| 141 | 52.0 | 53.6 | 80.4# |

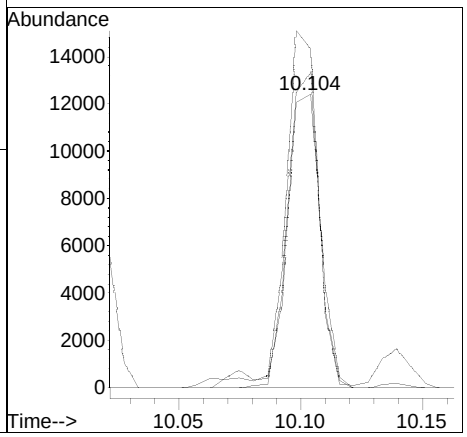


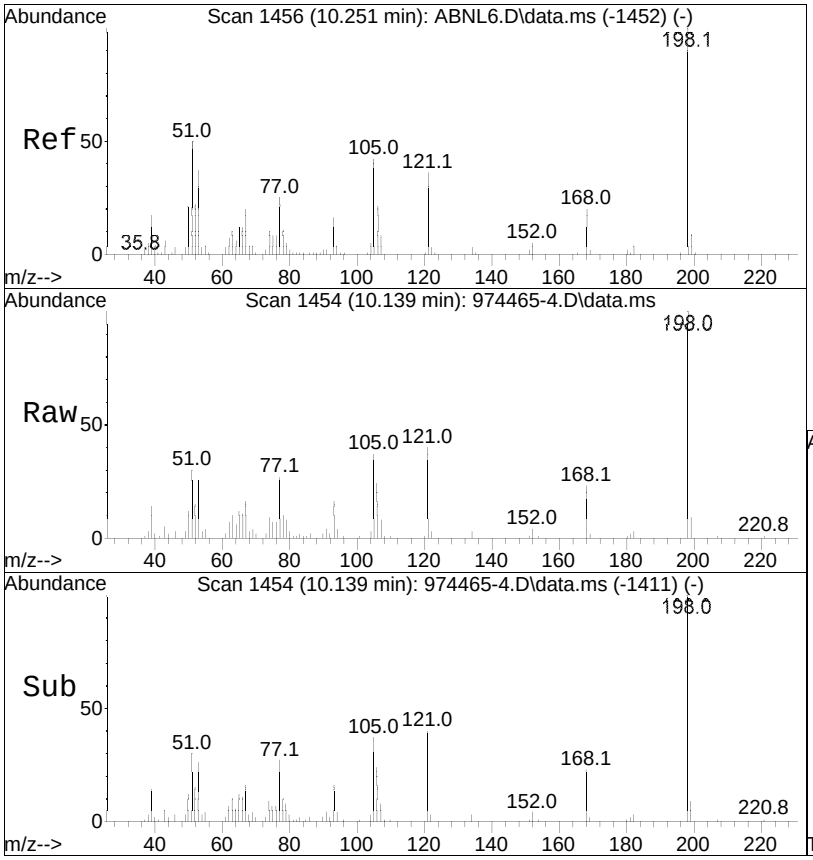



#75
4-Nitroaniline
Concen: 2.05 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:138 Resp: 12199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 97.7 | 52.1 | 78.1# |
| 65 | 115.5 | 115.0 | 172.6 |

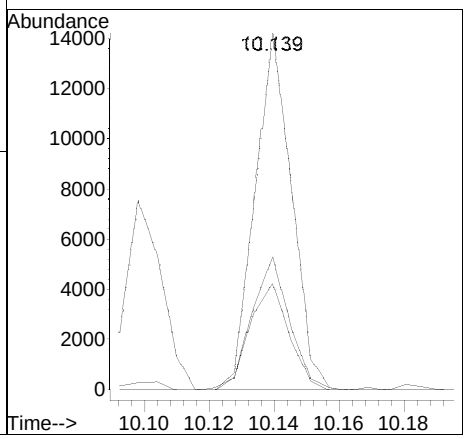


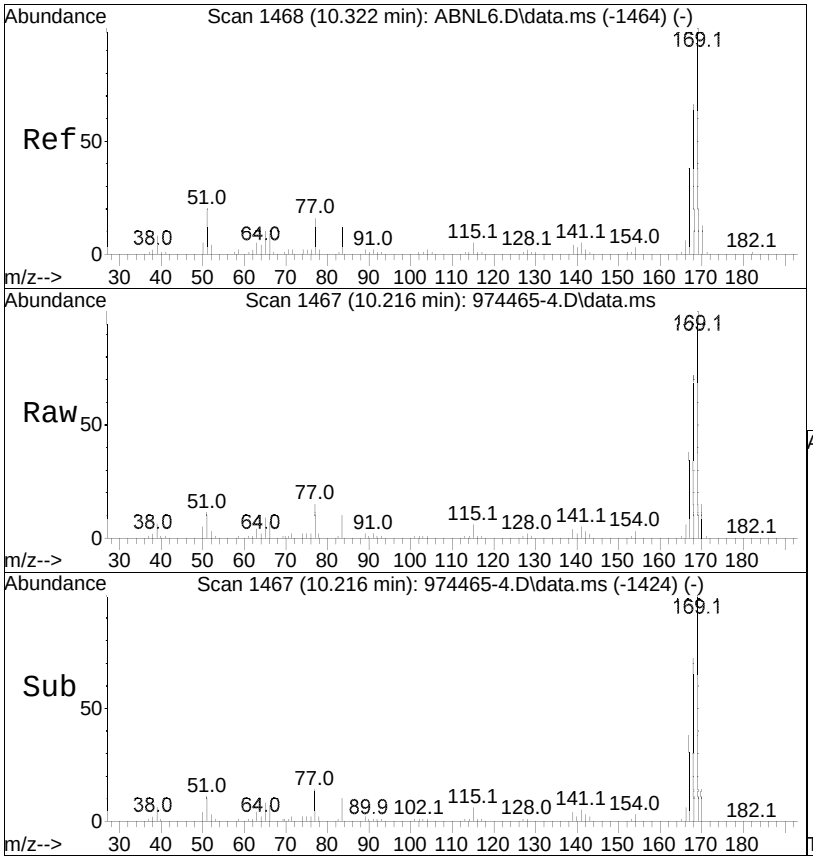



#76
4,6-Dinitro-o-cresol
Concen: 2.33 ug/ml
RT: 10.139 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:198 Resp: 11096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 32.3 | 76.0 | 114.0# |
| 105 | 38.3 | 45.6 | 68.4# |

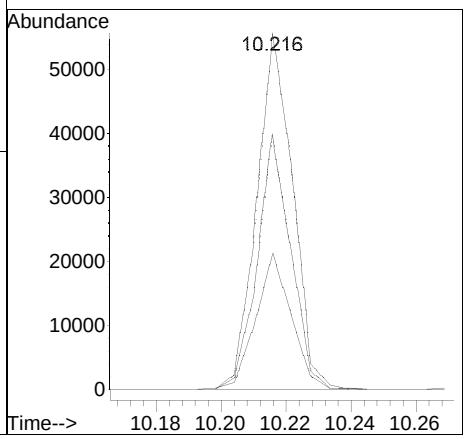


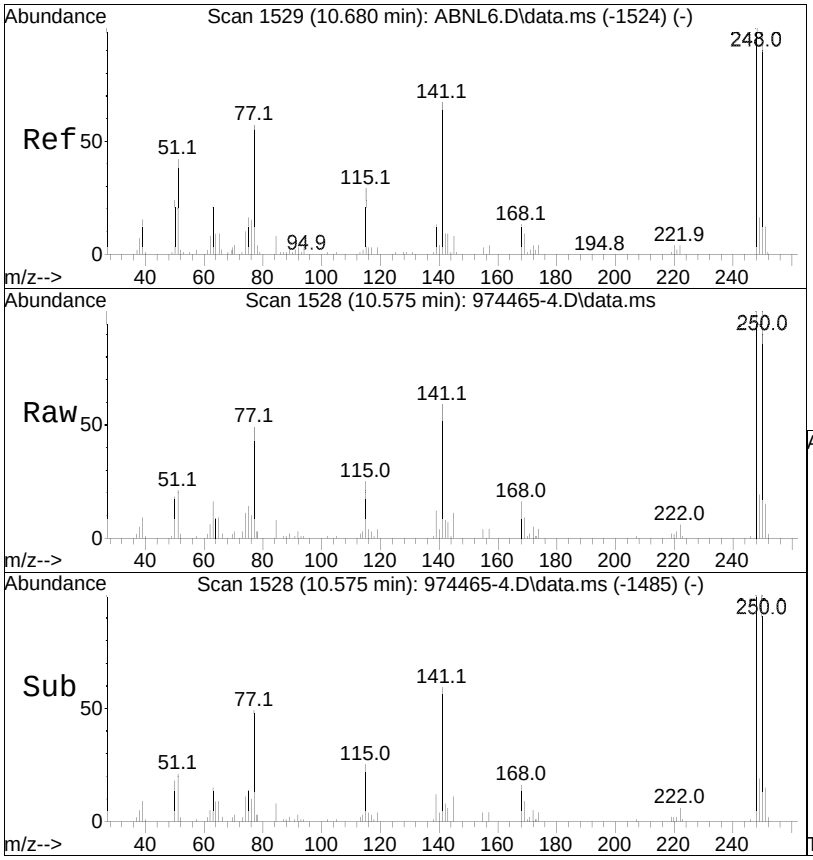



#77
NDPA/DPA
Concen: 1.88 ug/ml
RT: 10.216 min Scan# 1467
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:169 Resp: 42386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 67.0 | 54.0 | 81.0 |
| 167 | 38.2 | 28.6 | 42.8 |

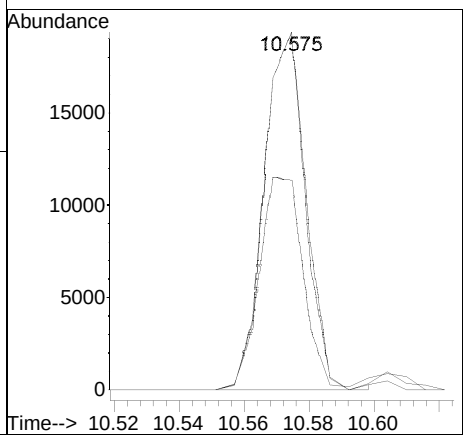


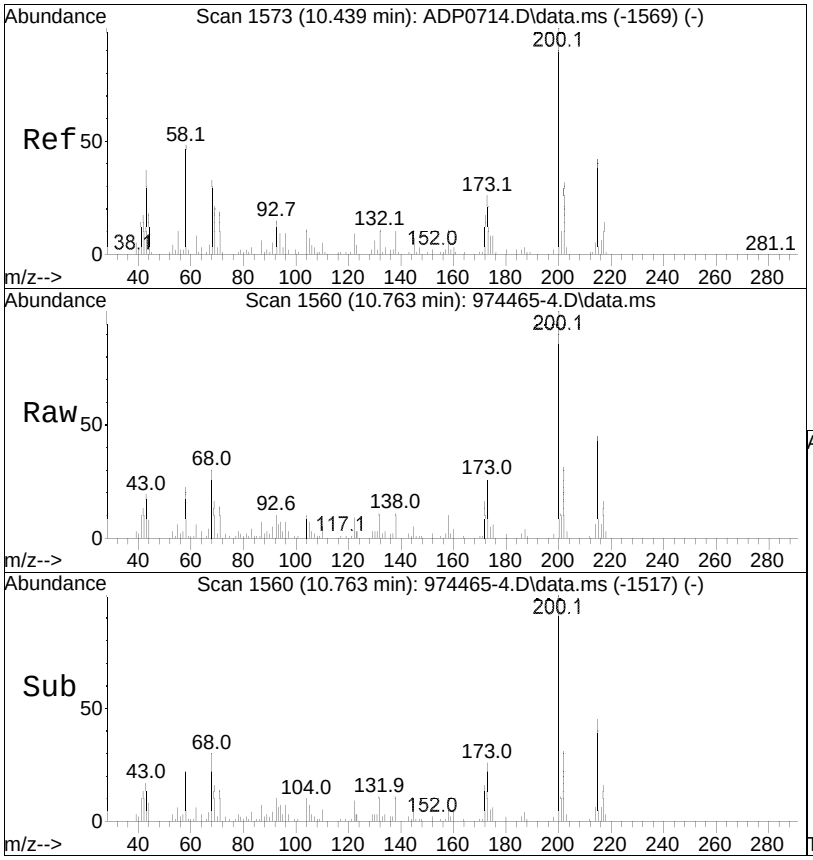



#80
4-Bromophenyl phenyl ether
Concen: 1.87 ug/ml
RT: 10.575 min Scan# 1528
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:248 Resp: 16729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 141 | 64.2 | 76.6 | 114.8# |
| 250 | 102.5 | 77.3 | 115.9 |

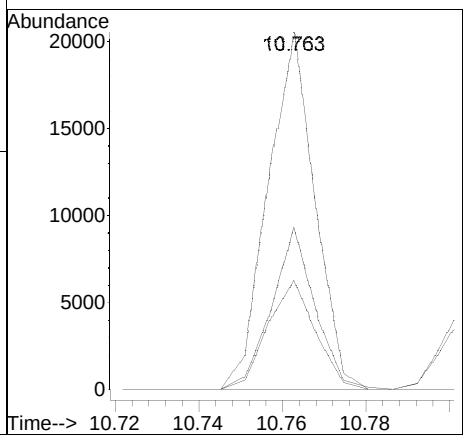


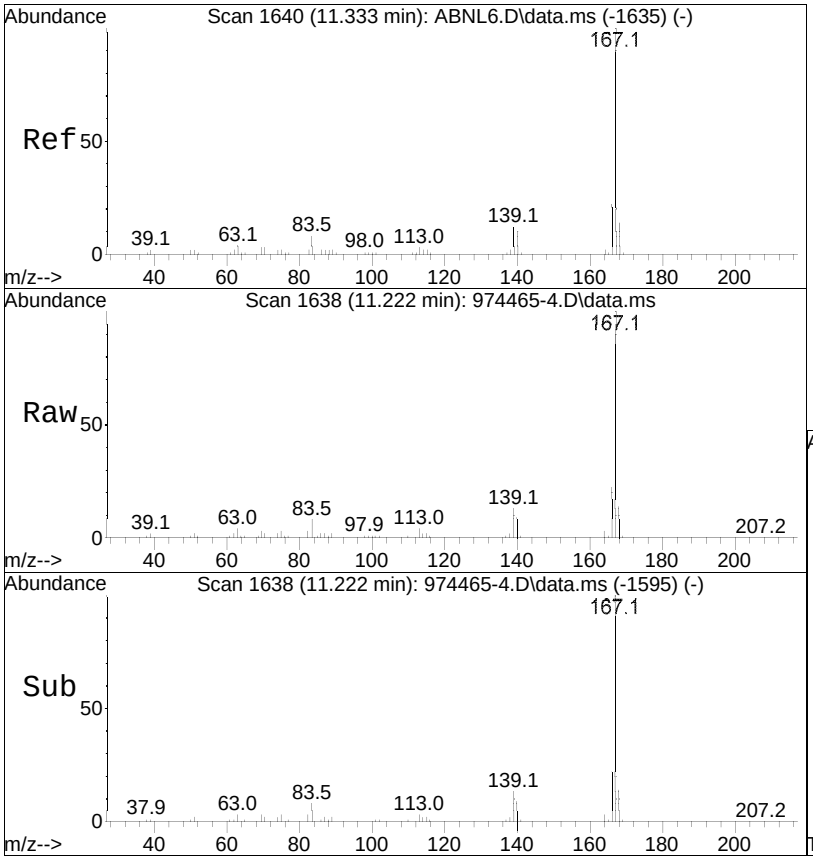



#87
Atrazine
Concen: 1.74 ug/ml
RT: 10.763 min Scan# 1560
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:200 Resp: 15887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 202 | 31.2 | 25.8 | 38.6 |
| 215 | 42.1 | 40.2 | 60.4 |

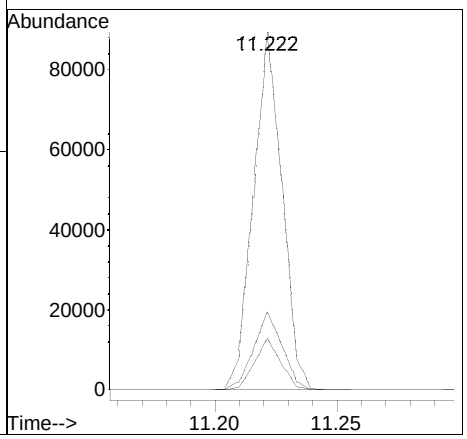


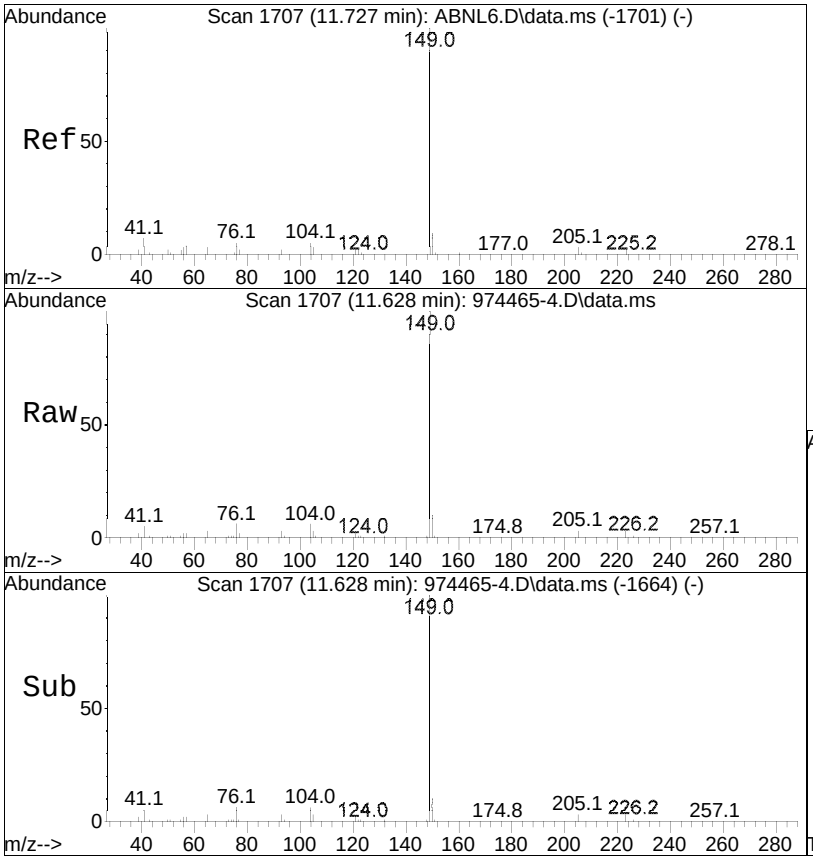



#91
Carbazole
Concen: 1.93 ug/ml
RT: 11.222 min Scan# 1638
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:167 Resp: 72230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 168 | 13.2 | 10.6 | 15.8 |
| 166 | 21.9 | 17.4 | 26.0 |

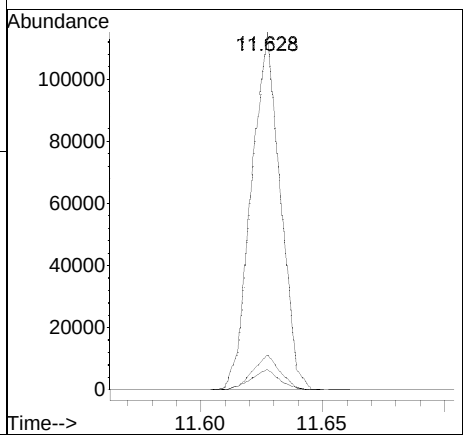


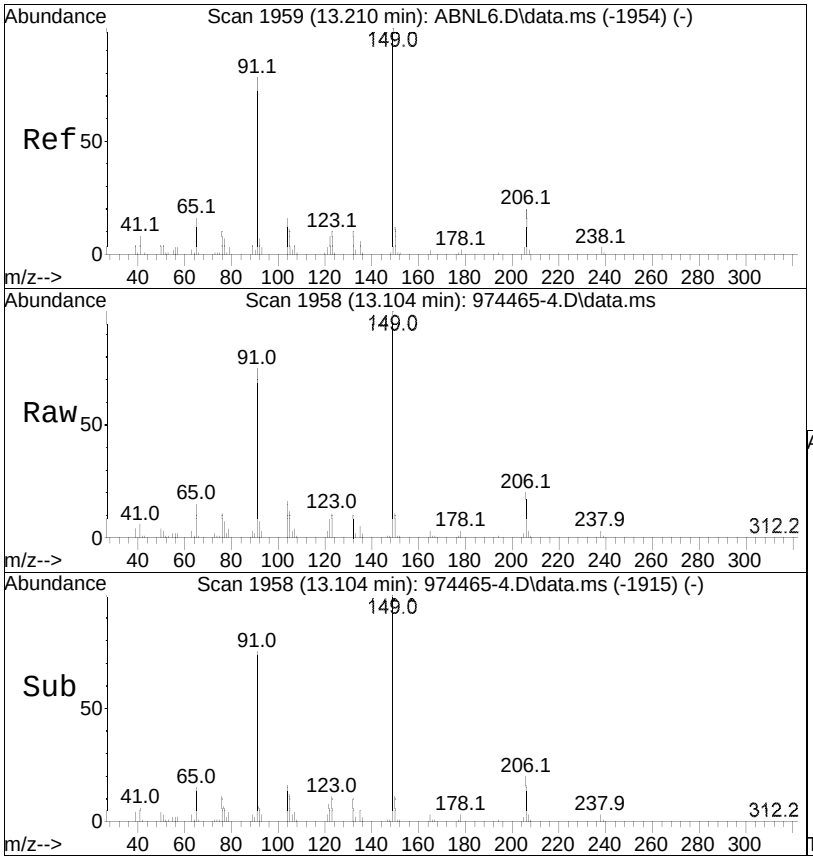



#92
Di-n-butylphthalate
Concen: 2.13 ug/ml
RT: 11.628 min Scan# 1707
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:149 Resp: 93691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 9.4 | 7.0 | 10.6 |
| 104 | 5.8 | 4.5 | 6.7 |

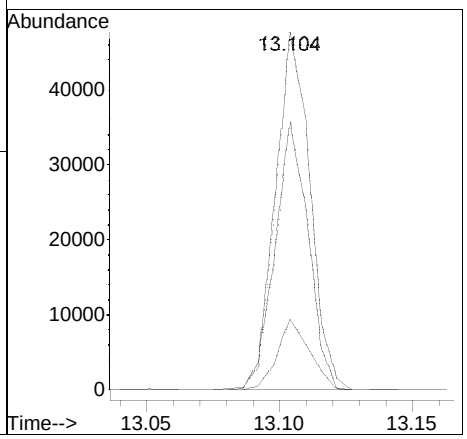


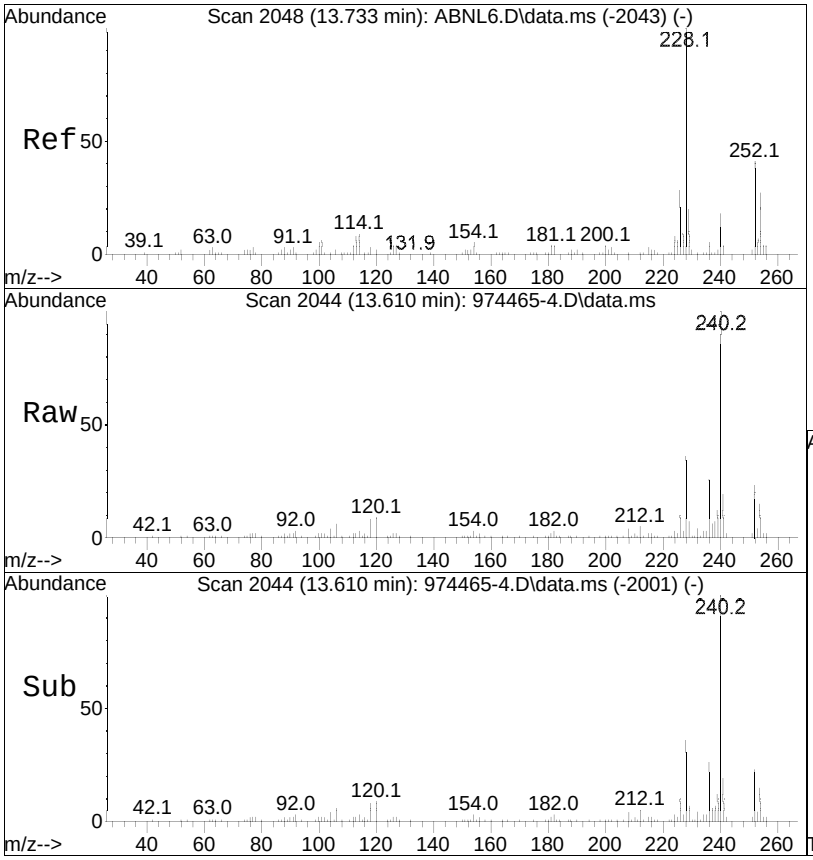



#97
Butyl benzyl phthalate
Concen: 2.11 ug/ml
RT: 13.104 min Scan# 1958
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:149 Resp: 42739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 72.1 | 63.3 | 94.9 |
| 206 | 18.6 | 13.9 | 20.9 |

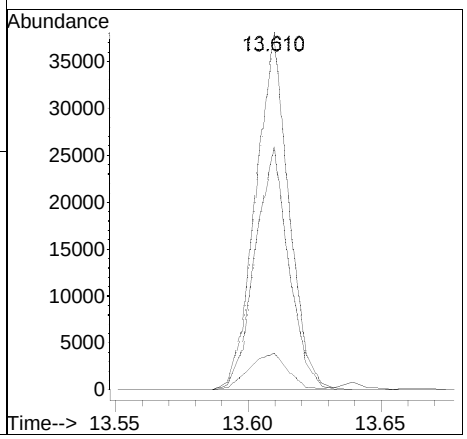


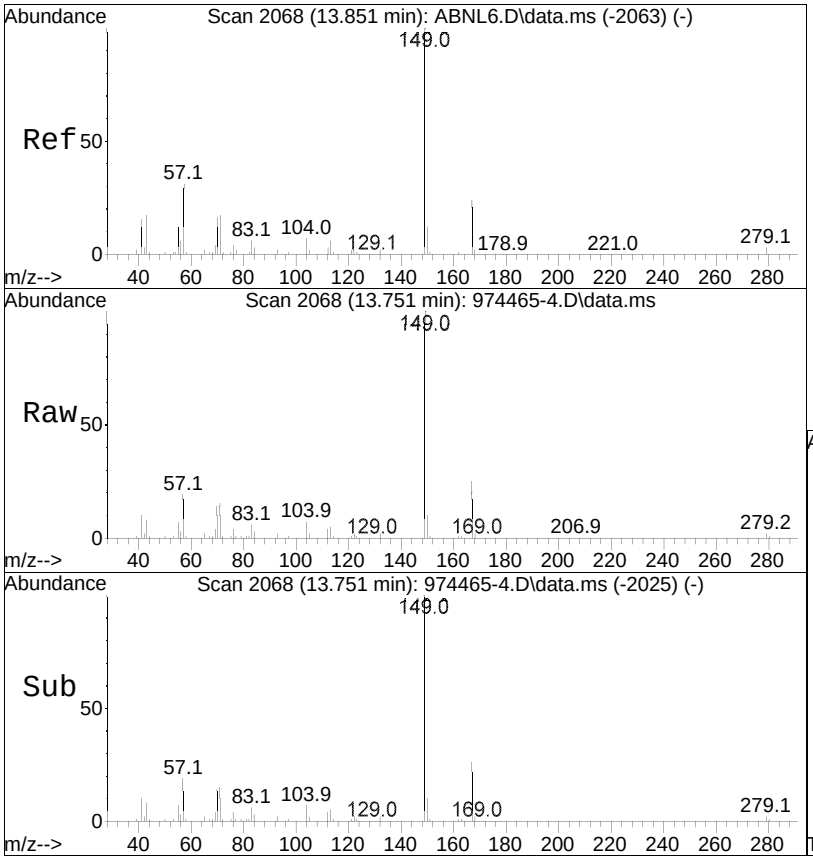



#106
3,3'-Dichlorobenzidine
Concen: 1.62 ug/ml
RT: 13.610 min Scan# 2044
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:252 Resp: 32649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 12.3 | 14.5 | 21.7# |
| 254 | 69.2 | 51.2 | 76.8 |

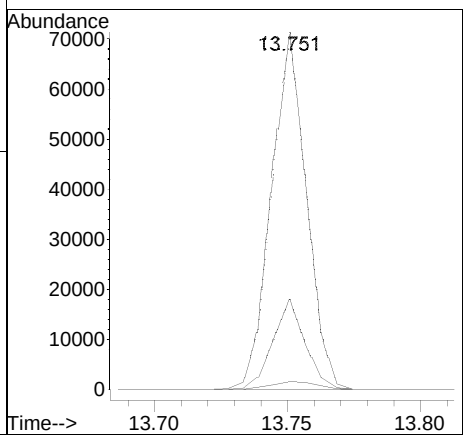


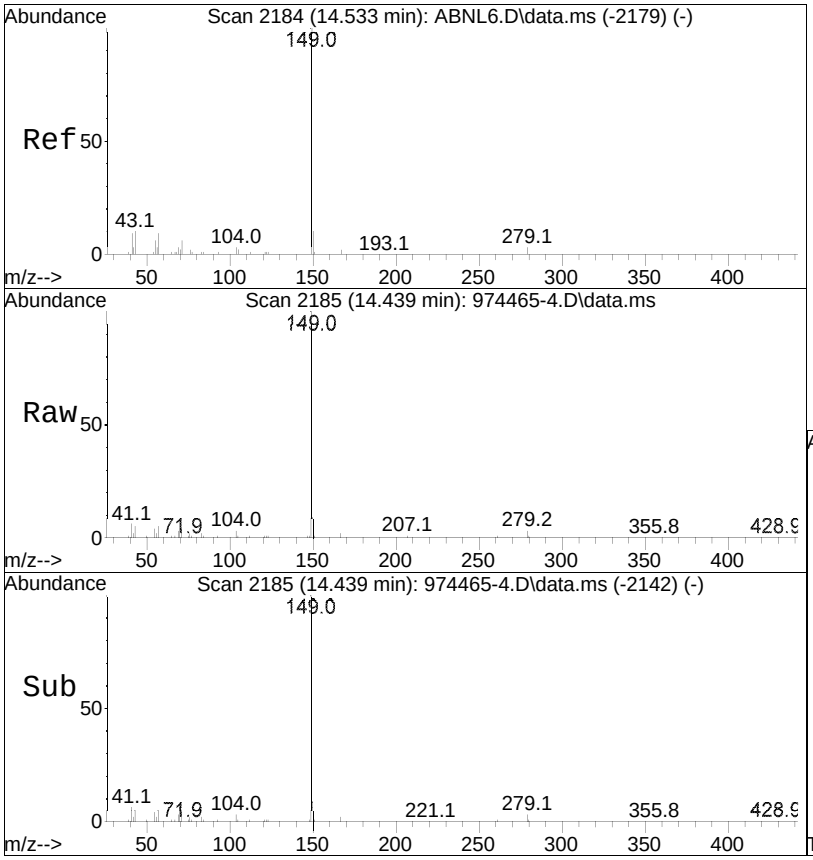



#108
Bis(2-ethylhexyl)phthalate
Concen: 1.93 ug/ml
RT: 13.751 min Scan# 2068
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:149 Resp: 64775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.3 | 22.1 | 33.1 |
| 279 | 2.7 | 3.0 | 4.4# |

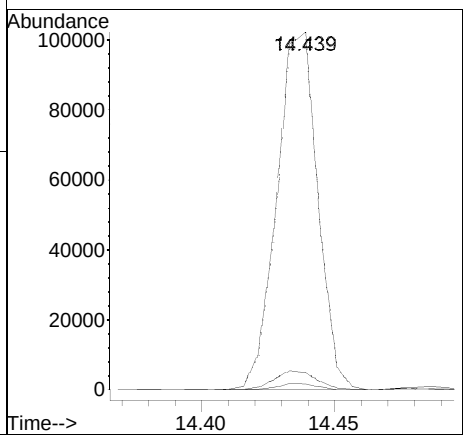





#109
Di-n-octylphthalate
Concen: 1.95 ug/ml
RT: 14.439 min Scan# 2185
Delta R.T. 0.000 min
Lab File: 974465-4.D
Acq: 21 Sep 2024 3:53 pm

Tgt Ion:149 Resp: 108155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 5.7 | 18.8 | 28.2# |
| 167 | 1.6 | 1.3 | 1.9 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 974465-4.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 3:53 pm | Instrument | : SV 106 |
| Sample | : WG1974465-4,32,,gmr | Quant Date | : 9/21/2024 4:12 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-5.D
Acq On : 21 Sep 2024 4:17 pm
Operator : SV106:als
Sample : WG1974465-5,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 16:35:27 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) IS1_1,4-Dichlorobenzen... | 6.340 | 152 | 29513 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 33341 | | | Recovery = 88.52% | | | | |
| 27) IS2_1,4-Dichlorobenzen... | 6.340 | 152 | 29513 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 31689 | | | Recovery = 93.13% | | | | |
| 35) IS1_Naphthalene-d8 | 7.775 | 136 | 102633 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 112751 | | | Recovery = 91.03% | | | | |
| 55) IS2_Naphthalene-d8 | 7.775 | 136 | 102633 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 3 = 105914 | | | Recovery = 96.90% | | | | |
| 63) IS1_Acenaphthene-d10 | 9.539 | 164 | 72627 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 79296 | | | Recovery = 91.59% | | | | |
| 83) IS2_Acenaphthene-d10 | 9.539 | 164 | 72627 | 4.000 | ug/ml | | 0.00 |
| Standard Area 3 = 73353 | | | Recovery = 99.01% | | | | |
| 86) IS3_Acenaphthene-d10 | 9.539 | 164 | 72627 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 64764 | | | Recovery = 112.14% | | | | |
| 88) IS1_Phenanthrene-d10 | 10.980 | 188 | 148693 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 166718 | | | Recovery = 89.19% | | | | |
| 100) IS3_Phenanthrene-d10 | 10.980 | 188 | 148693 | 4.000 | ug/ml | | 0.00 |
| Standard Area 2 = 141997 | | | Recovery = 104.72% | | | | |
| 104) IS1_Chrysene-d12 | 13.610 | 240 | 165085 | 4.000 | ug/ml | # | 0.00 |
| Standard Area 1 = 180876 | | | Recovery = 91.27% | | | | |
| 113) IS1_Perylene-d12 | 15.074 | 264 | 170654 | 4.000 | ug/ml | | 0.00 |
| Standard Area 1 = 178984 | | | Recovery = 95.35% | | | | |
| System Monitoring Compounds | | | | | | | |
| 4) 2-Fluorophenol | 4.316 | 112 | 8065 | 0.945 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 47.25% | | | | |
| 7) Phenol-d6 | 5.957 | 99 | 8663 | 0.742 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 37.10% | | | | |
| 19) Nitrobenzene-d5 | 6.998 | 82 | 8724 | 0.730 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 73.00% | | | | |
| 46) 2-Fluorobiphenyl | 8.904 | 172 | 18730 | 0.711 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 71.10% | | | | |
| 79) 2,4,6-Tribromophenol | 10.310 | 330 | 7046 | 1.557 | ug/ml | | 0.00 |
| Spiked Amount 2.000 | Range 15 - 110 | | Recovery = 77.85% | | | | |
| 96) 4-Terphenyl-d14 | 12.574 | 244 | 30361 | 0.759 | ug/ml | | 0.00 |
| Spiked Amount 1.000 | Range 30 - 130 | | Recovery = 75.90% | | | | |

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-5.D
Acq On : 21 Sep 2024 4:17 pm
Operator : SV106:als
Sample : WG1974465-5,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 16:35:27 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | Qvalue |
| 6) 2-Chlorophenol | 6.063 | 128 | 13765 | 1.449 | ug/ml | 92 |
| 8) Phenol | 5.975 | 94 | 12900 | 1.065 | ug/ml | 93 |
| 14) Bis(2-chloroisopropyl)... | 6.734 | 45 | 8754 | 0.548 | ug/ml# | 1 |
| 15) 2-Methylphenol | 6.722 | 108 | 13868 | 1.589 | ug/ml | 99 |
| 17) n-Nitrosodi-n-propylamine | 6.881 | 70 | 13073 | 1.676 | ug/ml# | 91 |
| 18) 3-Methylphenol/4-Methy... | 6.910 | 108 | 13544 | 1.435 | ug/ml# | 99 |
| 20) Nitrobenzene | 7.022 | 77 | 18983 | 1.566 | ug/ml# | 92 |
| 21) Isophorone | 7.304 | 82 | 32938 | 1.617 | ug/ml# | 93 |
| 22) 2-Nitrophenol | 7.381 | 139 | 8150 | 1.597 | ug/ml# | 90 |
| 23) 2,4-Dimethylphenol | 7.486 | 107 | 13722 | 1.429 | ug/ml | 94 |
| 24) Bis(2-chloroethoxy)met... | 7.586 | 93 | 19120 | 1.458 | ug/ml# | 95 |
| 25) 2,4-Dichlorophenol | 7.645 | 162 | 14972 | 1.646 | ug/ml | 95 |
| 28) Benzaldehyde | 5.751 | 105 | 12993 | 1.483 | ug/ml | 100 |
| 29) Acetophenone | 6.845 | 105 | 24101 | 1.513 | ug/ml# | 73 |
| 38) 4-Chloroaniline | 7.881 | 65 | 4748 | 1.095 | ug/ml | 96 |
| 40) p-Chloro-m-cresol | 8.410 | 107 | 14809 | 1.684 | ug/ml | 98 |
| 43) Hexachlorocyclopentadiene | 8.686 | 237 | 12170 | 1.413 | ug/ml | 96 |
| 44) 2,4,6-Trichlorophenol | 8.810 | 196 | 14378 | 1.864 | ug/ml | 98 |
| 45) 2,4,5-Trichlorophenol | 8.839 | 196 | 14833 | 1.796 | ug/ml | 93 |
| 48) 2-Nitroaniline | 9.110 | 138 | 11440 | 1.821 | ug/ml | 88 |
| 51) Dimethyl phthalate | 9.322 | 163 | 44714 | 1.762 | ug/ml# | 98 |
| 53) 2,6-Dinitrotoluene | 9.363 | 165 | 9497 | 1.738 | ug/ml | 87 |
| 60) Caprolactam | 8.192 | 55 | 1993 | 0.370 | ug/ml# | 20 |
| 61) 1,2,4,5-Tetrachloroben... | 8.686 | 216 | 20349 | 1.446 | ug/ml# | 97 |
| 62) Biphenyl | 8.992 | 154 | 41633 | 1.497 | ug/ml | 99 |
| 64) 3-Nitroaniline | 9.516 | 138 | 9635 | 1.662 | ug/ml | 95 |
| 66) 2,4-Dinitrophenol | 9.616 | 184 | 5968 | 1.541 | ug/ml# | 87 |
| 67) Dibenzofuran | 9.739 | 168 | 52279 | 1.487 | ug/ml | 97 |
| 68) 2,4-Dinitrotoluene | 9.751 | 165 | 14477 | 1.679 | ug/ml | 97 |
| 69) 4-Nitrophenol | 9.698 | 65 | 5721 | 0.974 | ug/ml# | 77 |
| 72) Diethyl phthalate | 10.022 | 149 | 45696 | 1.645 | ug/ml | 97 |
| 74) 4-Chlorophenyl phenyl ... | 10.104 | 204 | 23120 | 1.589 | ug/ml# | 84 |
| 75) 4-Nitroaniline | 10.104 | 138 | 10112 | 1.675 | ug/ml# | 75 |
| 76) 4,6-Dinitro-o-cresol | 10.139 | 198 | 9214 | 1.907 | ug/ml# | 54 |
| 77) NDPA/DPA | 10.216 | 169 | 37258 | 1.625 | ug/ml | 98 |
| 80) 4-Bromophenyl phenyl e... | 10.575 | 248 | 15401 | 1.696 | ug/ml# | 81 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-5.D
Acq On : 21 Sep 2024 4:17 pm
Operator : SV106:als
Sample : WG1974465-5,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 16:35:27 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\240921RVT\ABN0921.D
: 2 - I:\8270\SV106\240921RVT\ADP0921.D
: 3 - I:\8270\SV106\240921RVT\AP90921.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 87) Atrazine | 10.763 | 200 | 13504 | 1.462 | ug/ml | 95 |
| 91) Carbazole | 11.222 | 167 | 63301 | 1.673 | ug/ml | 98 |
| 92) Di-n-butylphthalate | 11.627 | 149 | 84687 | 1.906 | ug/ml | 99 |
| 97) Butyl benzyl phthalate | 13.104 | 149 | 37354 | 1.827 | ug/ml | 93 |
| 106) 3,3'-Dichlorobenzidine | 13.610 | 252 | 31161 | 1.544 | ug/ml# | 96 |
| 108) Bis(2-ethylhexyl)phtha... | 13.751 | 149 | 58152 | 1.724 | ug/ml# | 92 |
| 109) Di-n-octylphthalate | 14.439 | 149 | 101546 | 1.819 | ug/ml# | 67 |

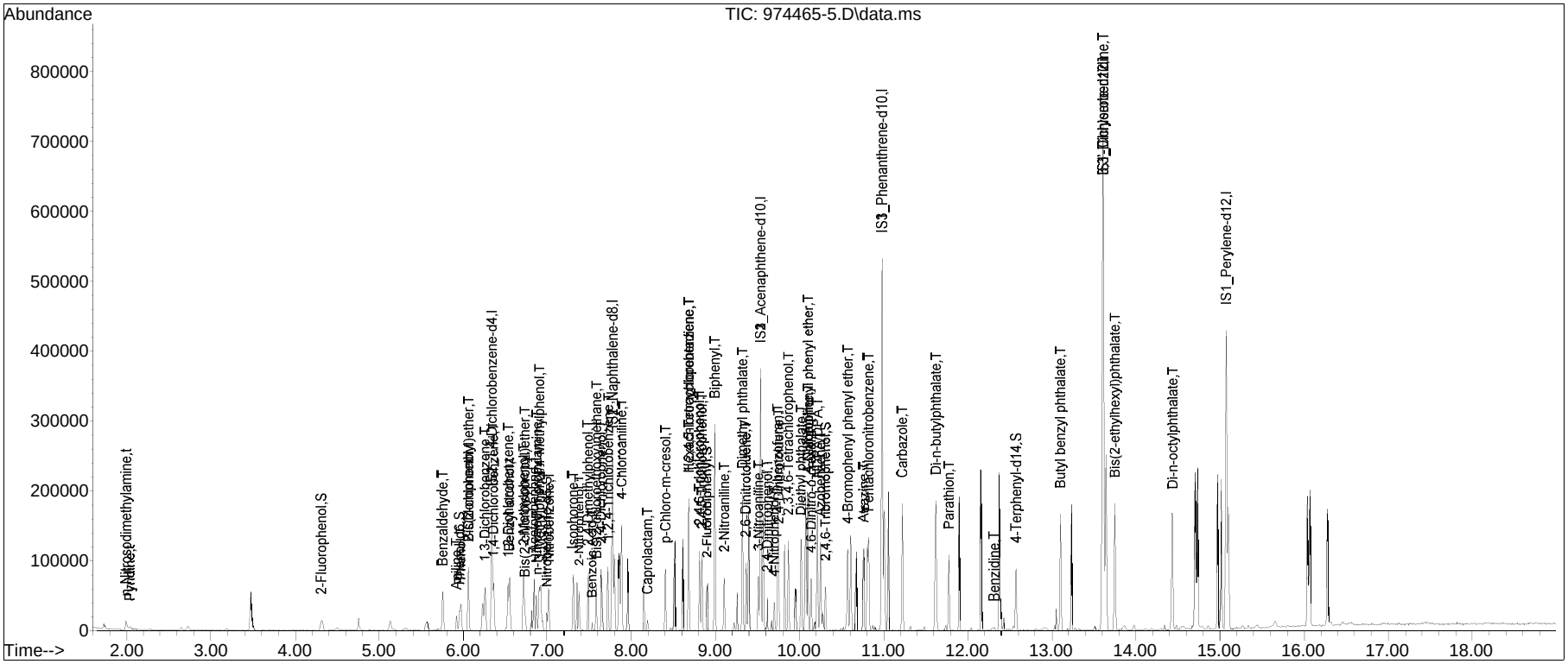
(#) = qualifier out of range (m) = manual integration (+) = signals summed

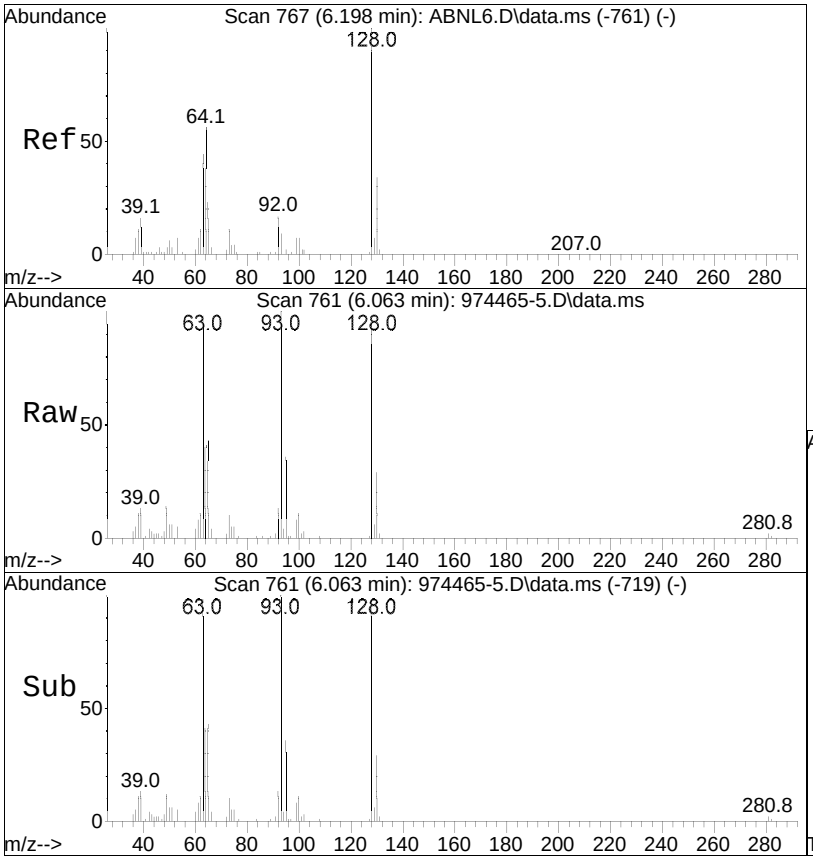
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\240921RVT\
Data File : 974465-5.D
Acq On : 21 Sep 2024 4:17 pm
Operator : SV106:als
Sample : WG1974465-5,32,,gmr
Misc : WG1974589,WG1974465,ical21231
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 16:35:27 2024
Quant Method : I:\8270\SV106\240921RVT\FS240624SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 11:24:40 2024
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90921.D•

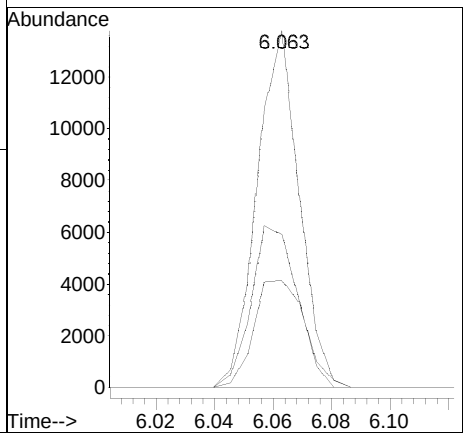


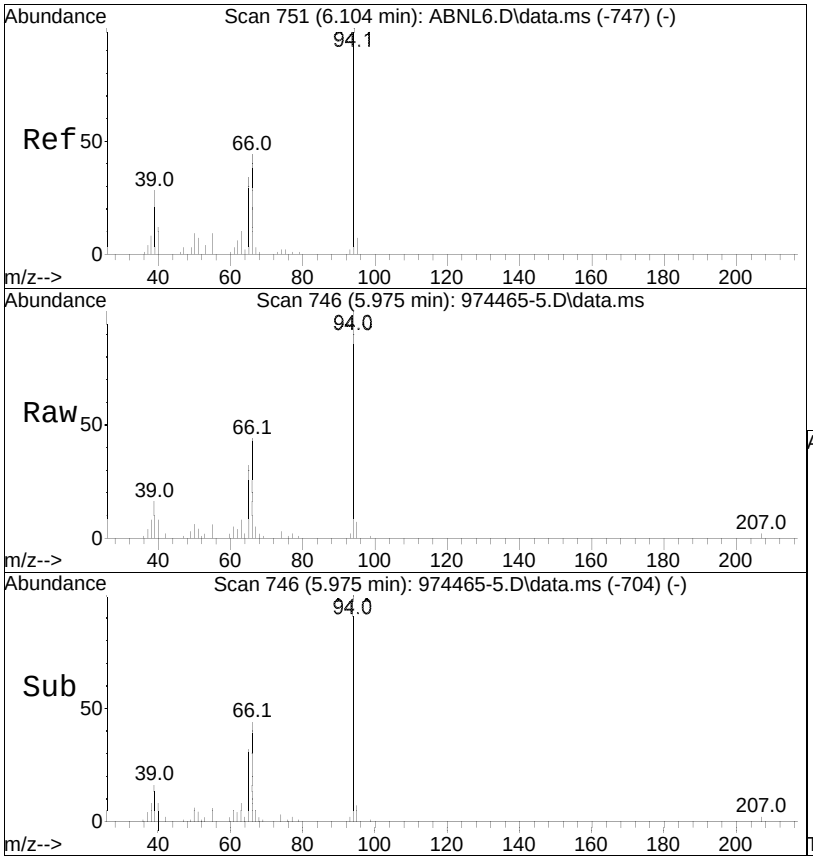



#6
2-Chlorophenol
Concen: 1.45 ug/ml
RT: 6.063 min Scan# 761
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:128 Resp: 13765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 64 | 49.6 | 45.1 | 67.7 |
| 130 | 36.7 | 26.2 | 39.4 |

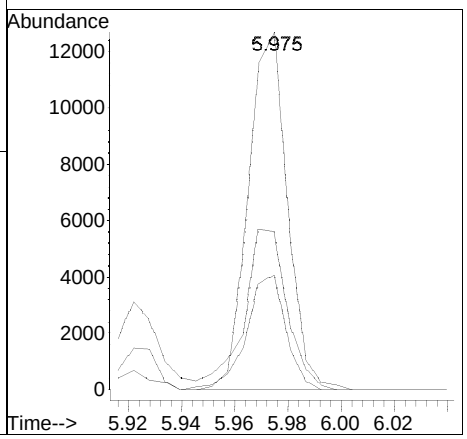


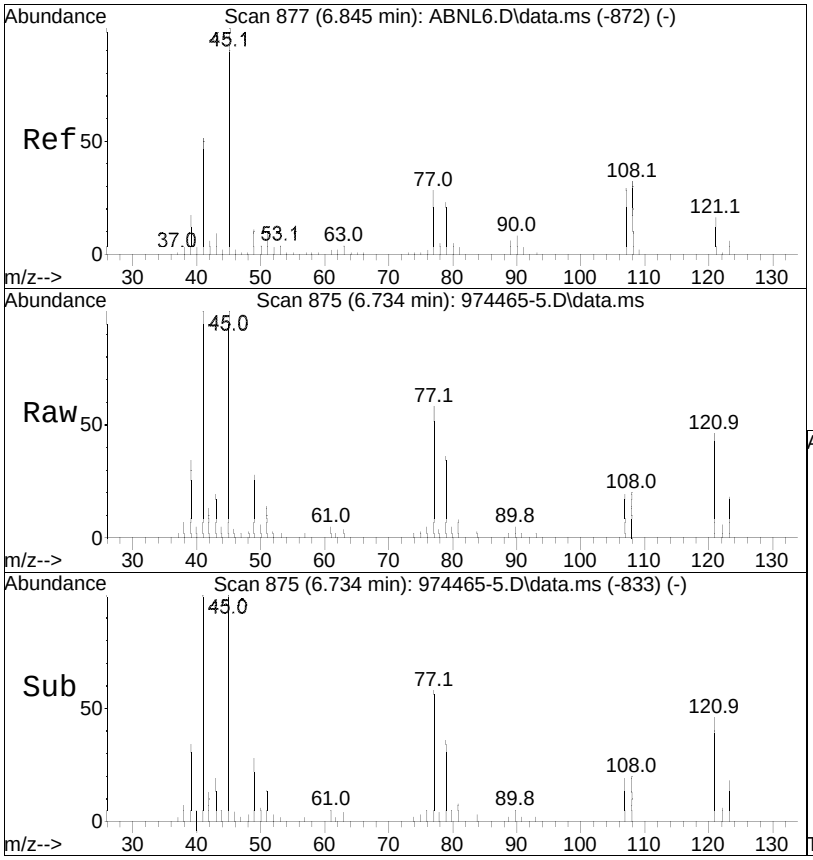



#8
Phenol
Concen: 1.06 ug/ml
RT: 5.975 min Scan# 746
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 94 Resp: 12900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 65 | 32.8 | 26.0 | 39.0 |
| 66 | 49.5 | 33.8 | 50.8 |

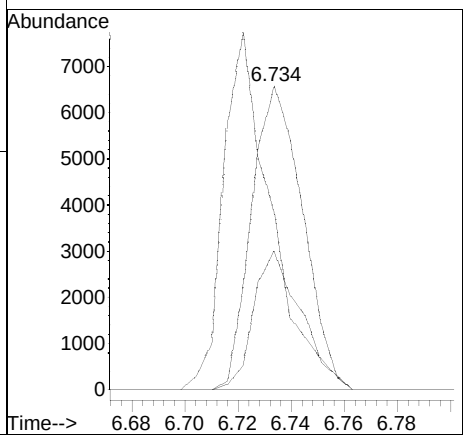


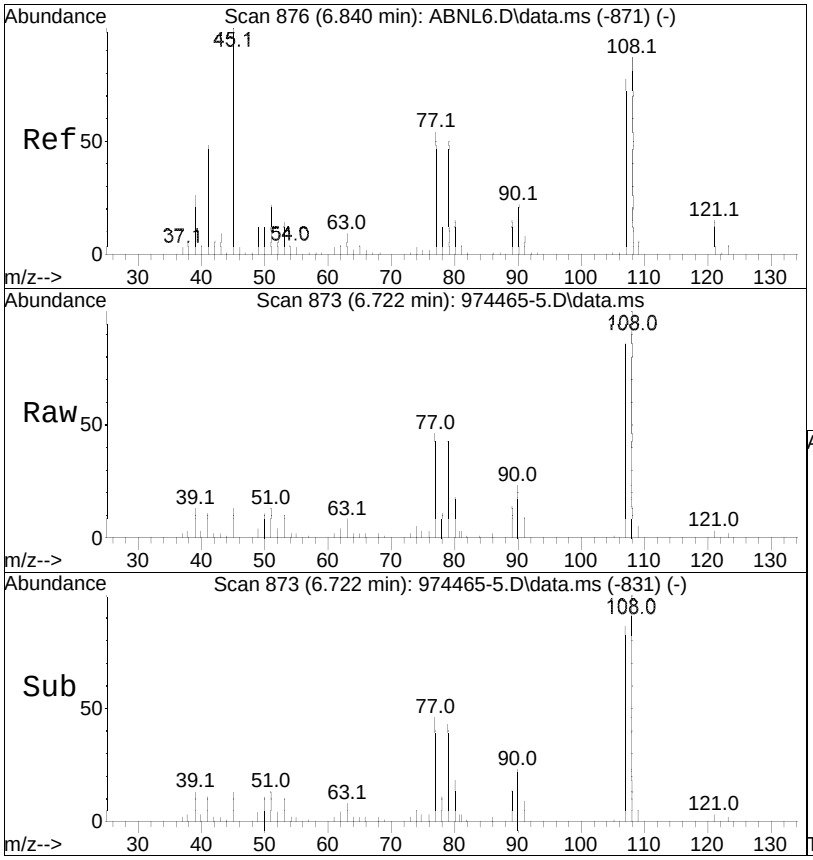



#14
Bis(2-chloroisopropyl)ether
Concen: 0.55 ug/ml
RT: 6.734 min Scan# 875
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 45 Resp: 8754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 121 | 42.5 | 9.8 | 14.6# |
| 77 | 109.9 | 6.1 | 9.1# |

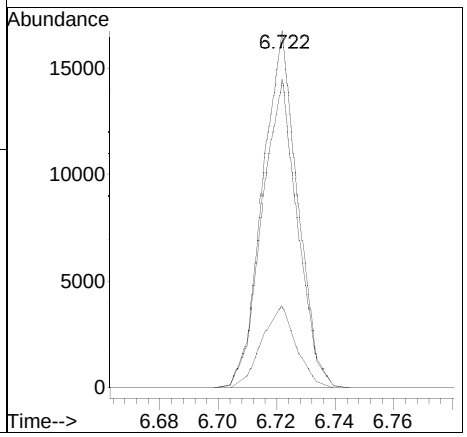


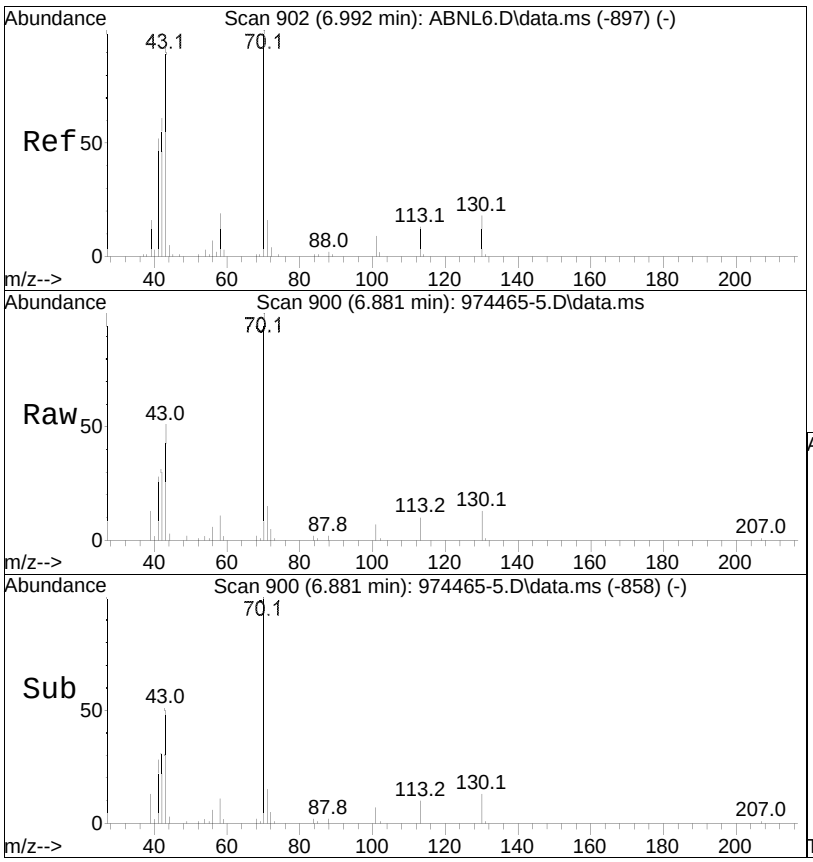



#15
2-Methylphenol
Concen: 1.59 ug/ml
RT: 6.722 min Scan# 873
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:108 Resp: 13868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 87.8 | 70.7 | 106.1 |
| 90 | 22.6 | 18.7 | 28.1 |

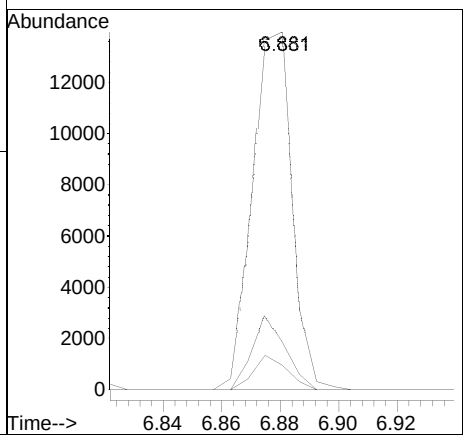


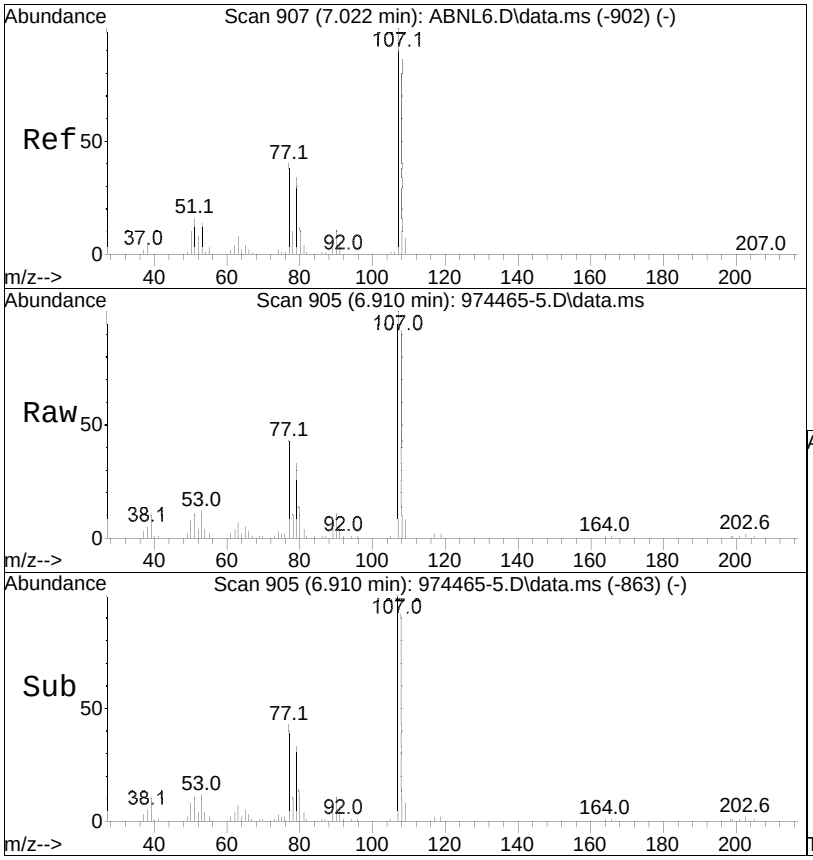



#17
n-Nitrosodi-n-propylamine
Concen: 1.68 ug/ml
RT: 6.881 min Scan# 900
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 70 Resp: 13073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 17.4 | 18.2 | 27.4# |
| 101 | 8.1 | 7.8 | 11.8 |

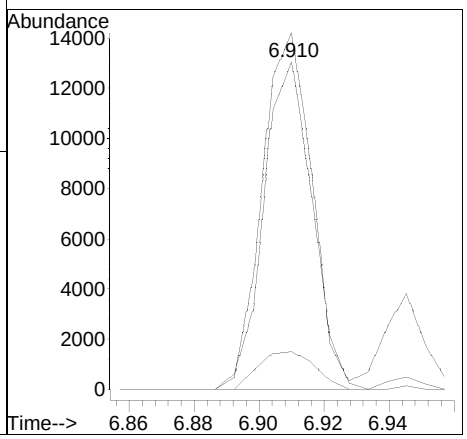


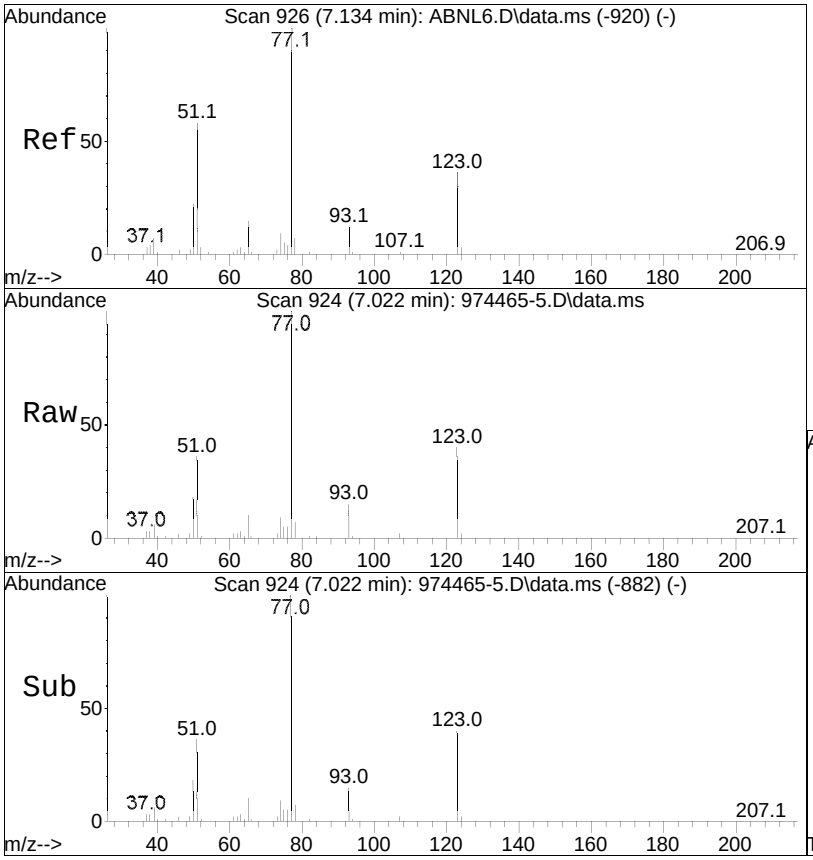



#18
3-Methylphenol/4-Methylphenol
Concen: 1.44 ug/ml
RT: 6.910 min Scan# 905
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:108 Resp: 13544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 108 | 100 | | |
| 107 | 111.6 | 88.6 | 132.8 |
| 90 | 13.6 | 8.8 | 13.2# |

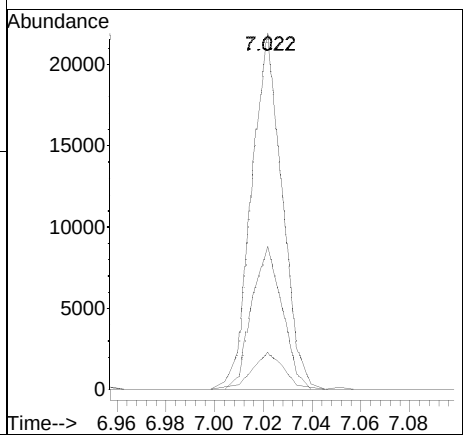


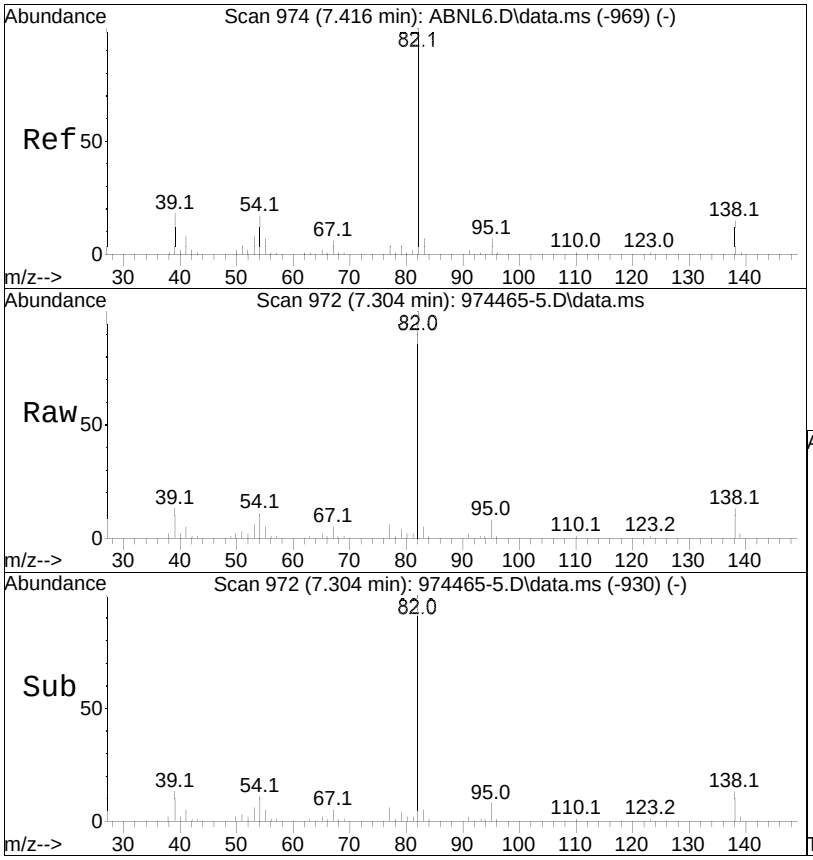



#20
Nitrobenzene
Concen: 1.57 ug/ml
RT: 7.022 min Scan# 924
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 77 Resp: 18983

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 123 | 40.2 | 36.3 | 54.5 |
| 65 | 11.0 | 11.6 | 17.4# |

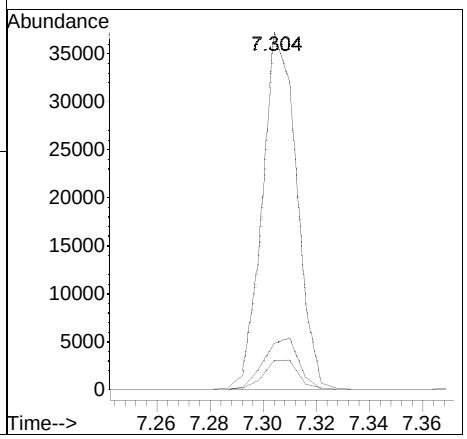


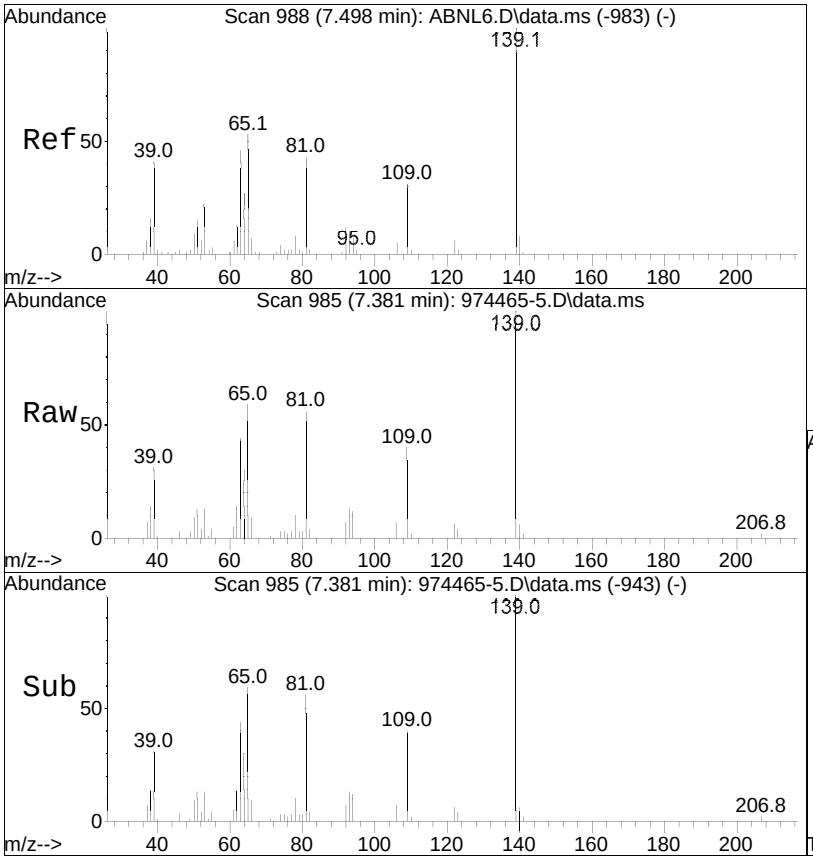



#21
Isophorone
Concen: 1.62 ug/ml
RT: 7.304 min Scan# 972
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 82 Resp: 32938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 82 | 100 | | |
| 138 | 14.8 | 14.7 | 22.1 |
| 95 | 8.4 | 5.2 | 7.8# |

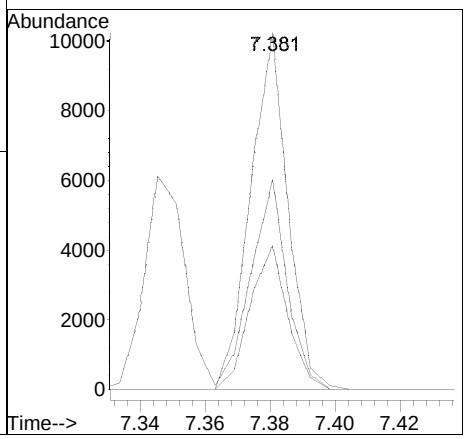


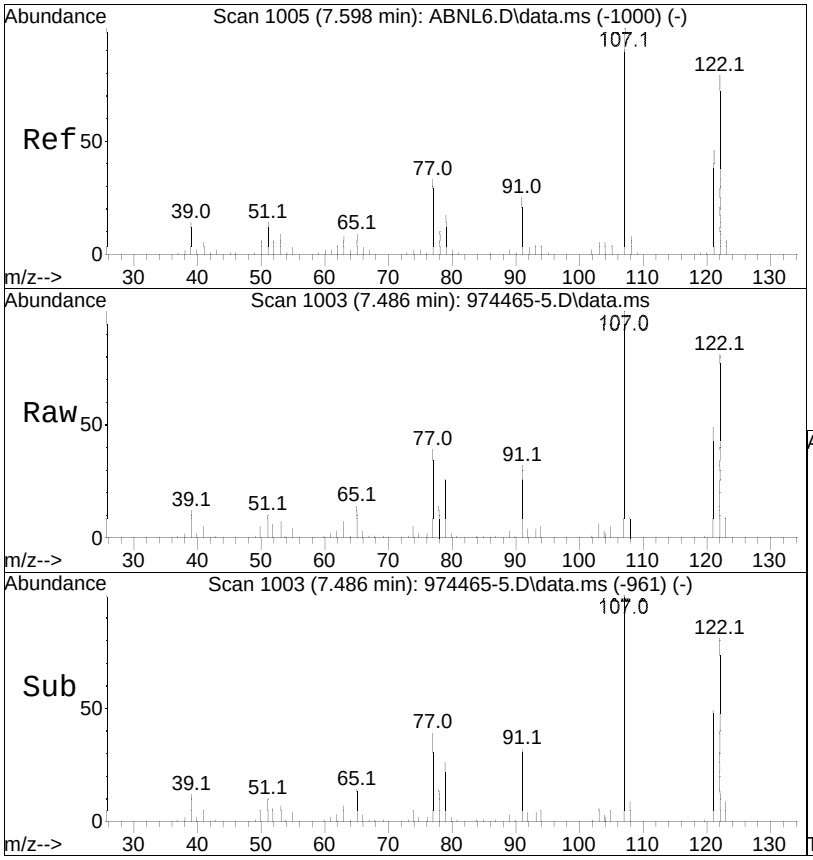



#22
2-Nitrophenol
Concen: 1.60 ug/ml
RT: 7.381 min Scan# 985
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:139 Resp: 8150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 139 | 100 | | |
| 109 | 40.8 | 19.4 | 29.0# |
| 65 | 57.5 | 46.1 | 69.1 |

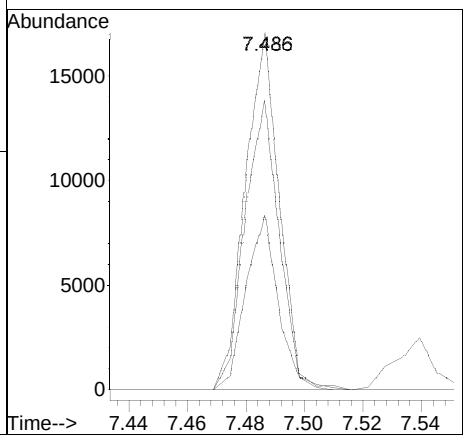


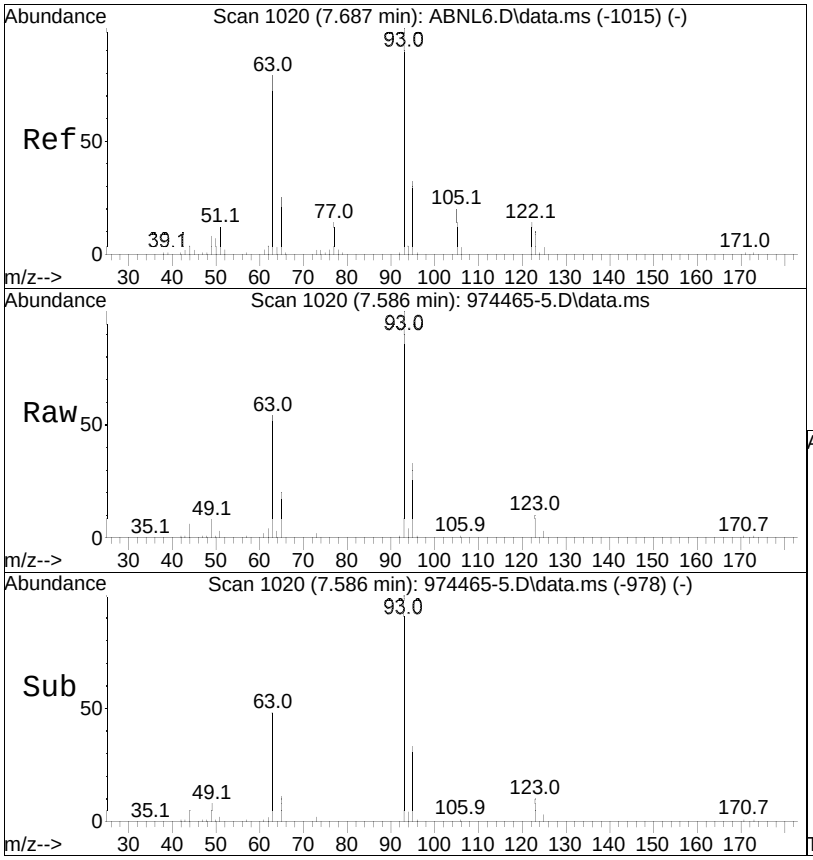



#23
2,4-Dimethylphenol
Concen: 1.43 ug/ml
RT: 7.486 min Scan# 1003
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:107 Resp: 13722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 121 | 46.4 | 40.0 | 60.0 |
| 122 | 81.7 | 70.2 | 105.4 |

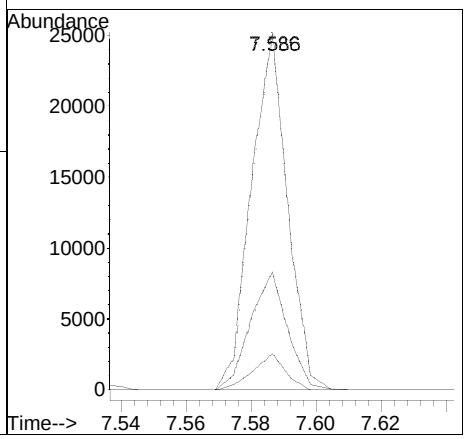


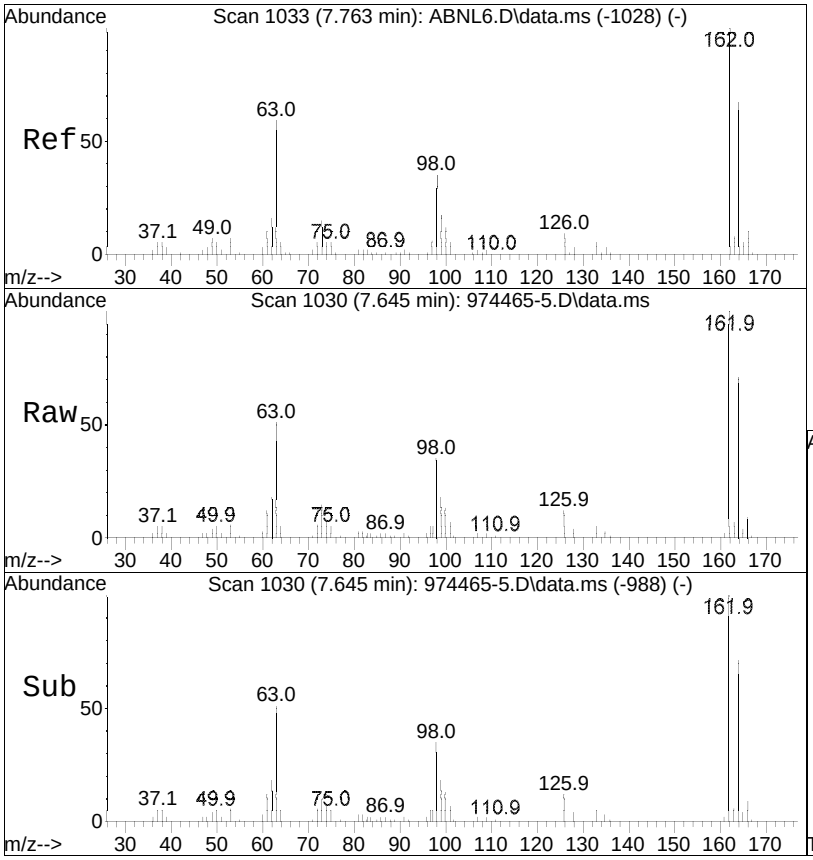



#24
Bis(2-chloroethoxy)methane
Concen: 1.46 ug/ml
RT: 7.586 min Scan# 1020
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 93 Resp: 19120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 34.1 | 25.8 | 38.8 |
| 123 | 9.3 | 10.1 | 15.1# |

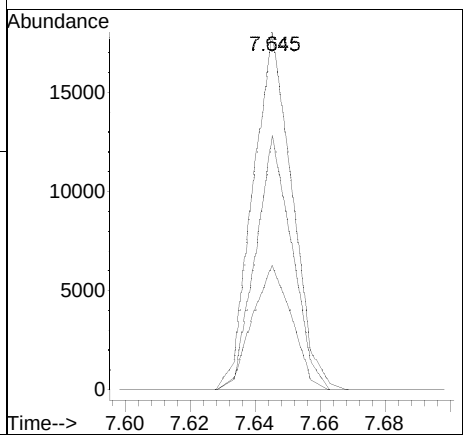


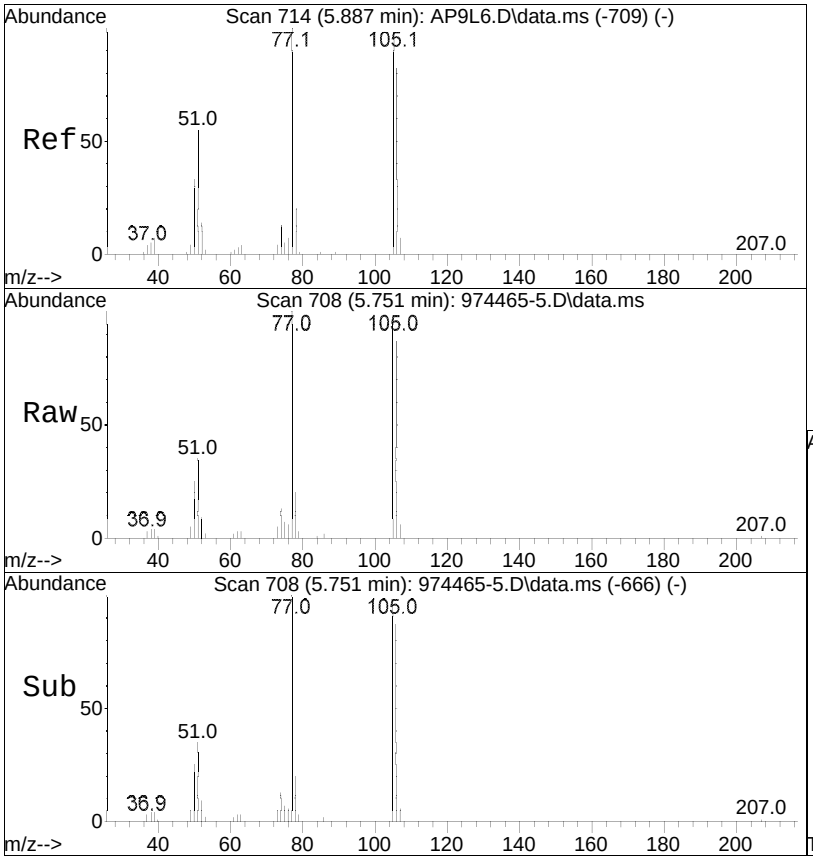



#25
2,4-Dichlorophenol
Concen: 1.65 ug/ml
RT: 7.645 min Scan# 1030
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:162 Resp: 14972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 164 | 66.1 | 51.0 | 76.4 |
| 98 | 35.0 | 32.2 | 48.2 |

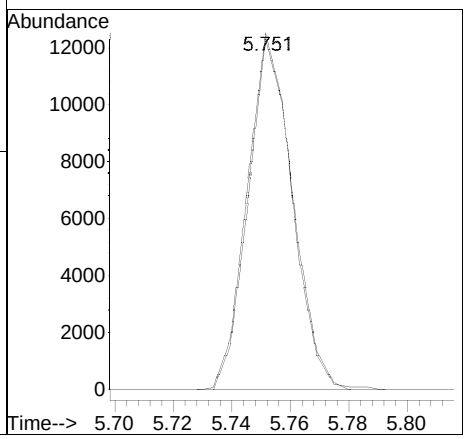


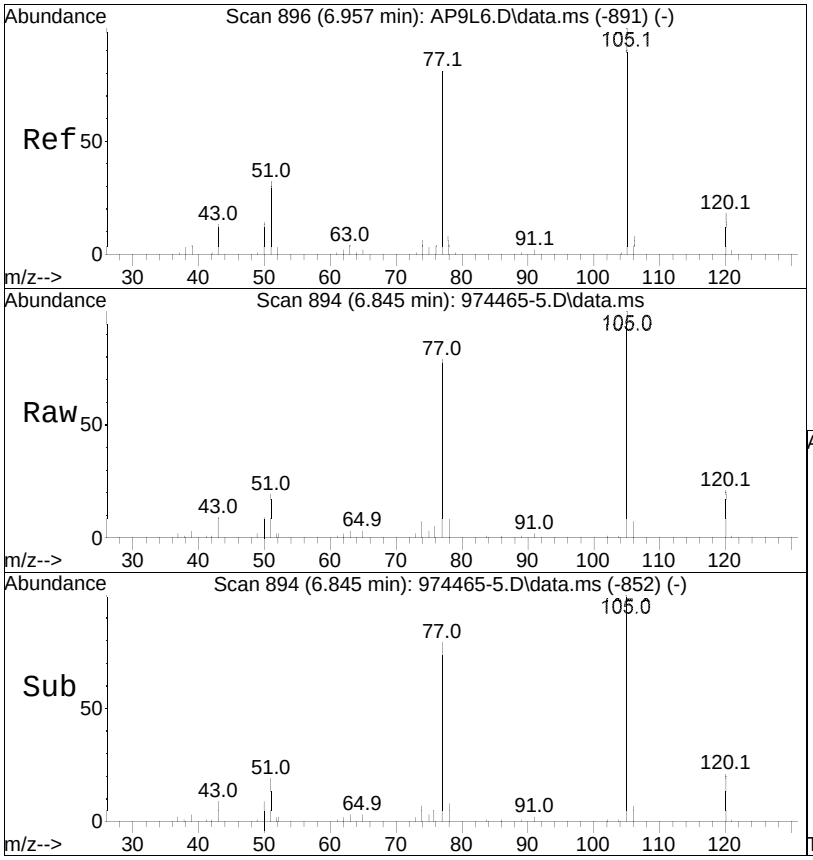



#28
Benzaldehyde
Concen: 1.48 ug/ml
RT: 5.751 min Scan# 708
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:105 Resp: 12993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 77 | 102.4 | 82.2 | 123.4 |

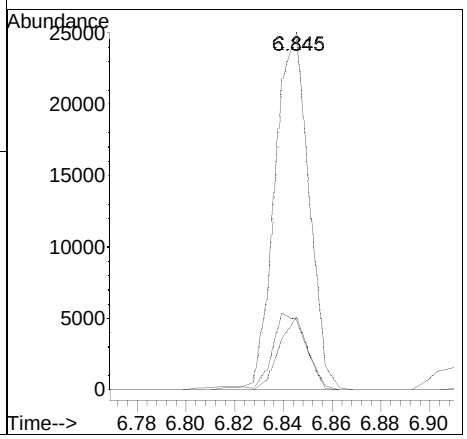


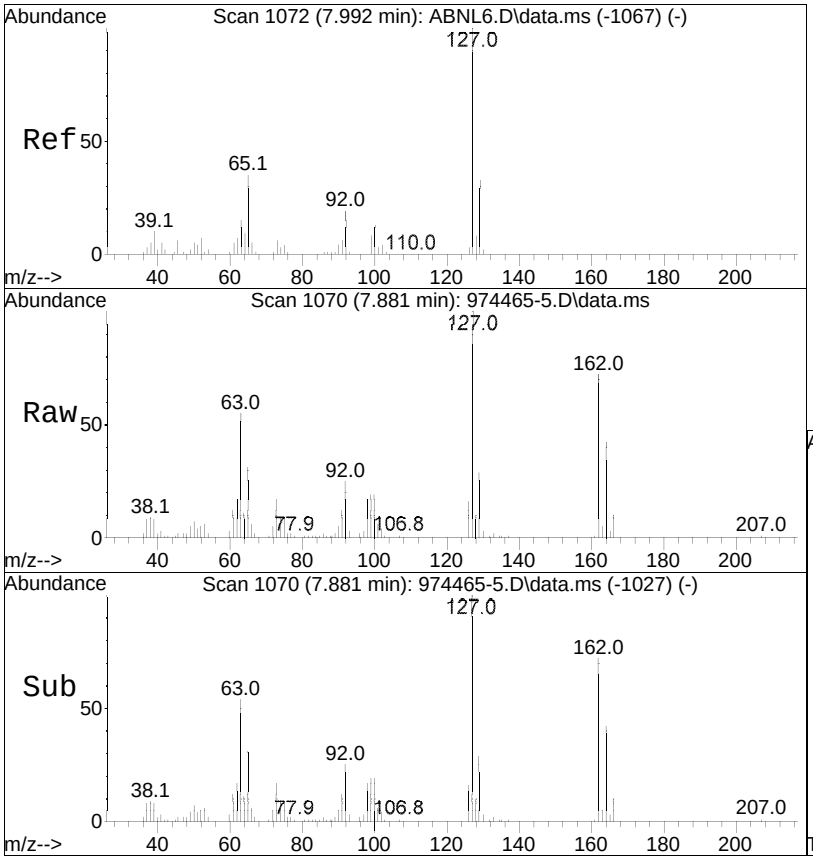



#29
Acetophenone
Concen: 1.51 ug/ml
RT: 6.845 min Scan# 894
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:105 Resp: 24101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 17.5 | 20.5 | 30.7# |
| 51 | 21.9 | 34.9 | 52.3# |

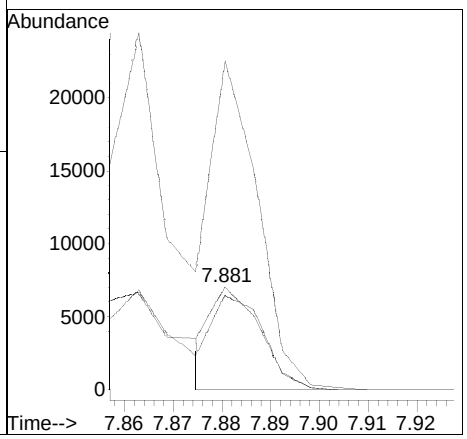


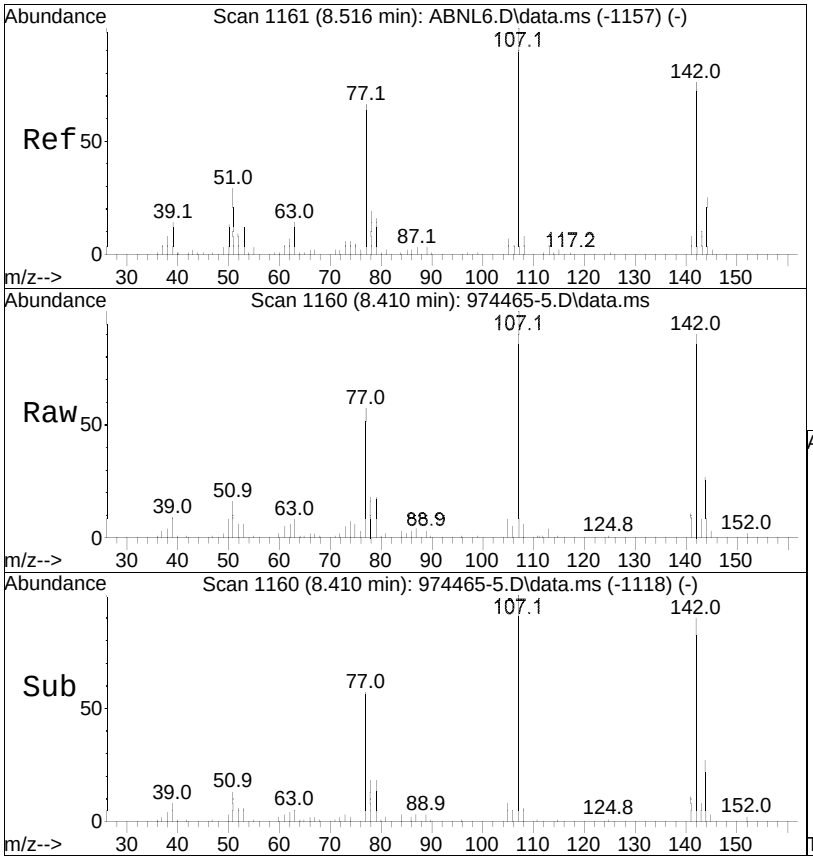



#38
4-Chloroaniline
Concen: 1.09 ug/ml
RT: 7.881 min Scan# 1070
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 65 Resp: 4748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 127 | 304.6 | 237.6 | 356.4 |
| 129 | 98.1 | 76.3 | 114.5 |

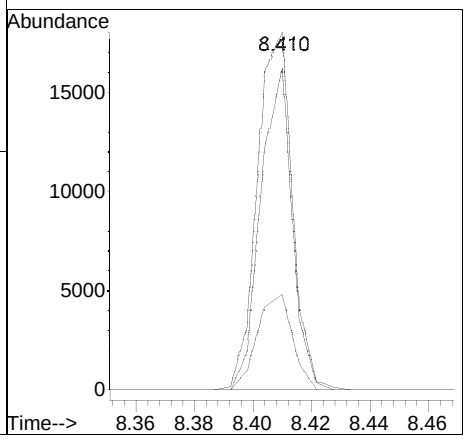


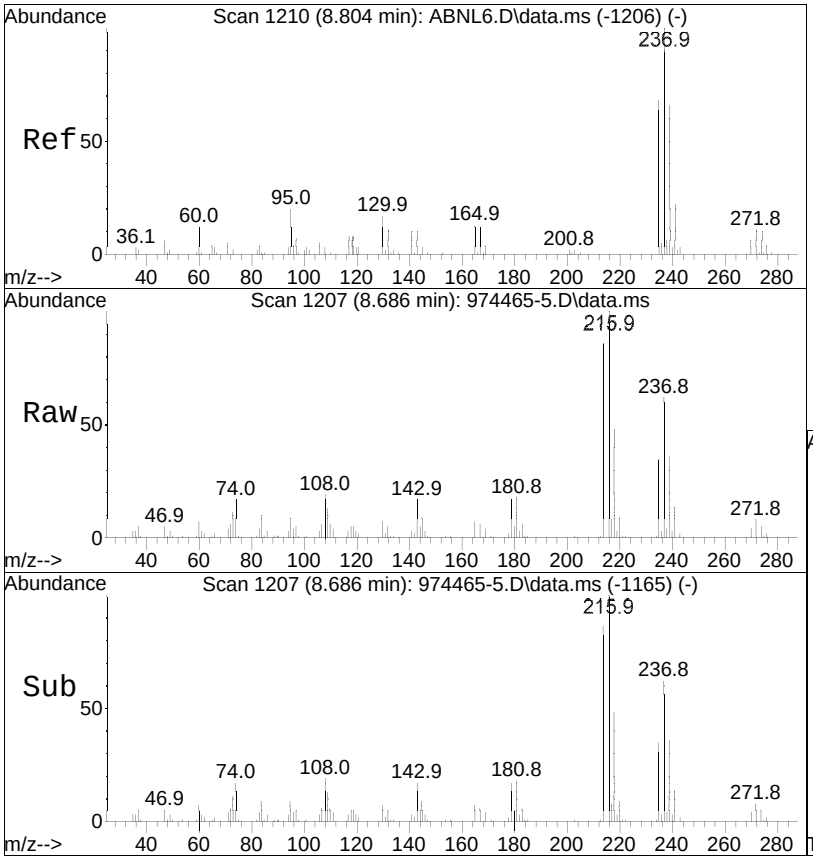



#40
p-Chloro-m-cresol
Concen: 1.68 ug/ml
RT: 8.410 min Scan# 1160
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:107 Resp: 14809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 144 | 27.0 | 20.9 | 31.3 |
| 142 | 81.1 | 66.1 | 99.1 |

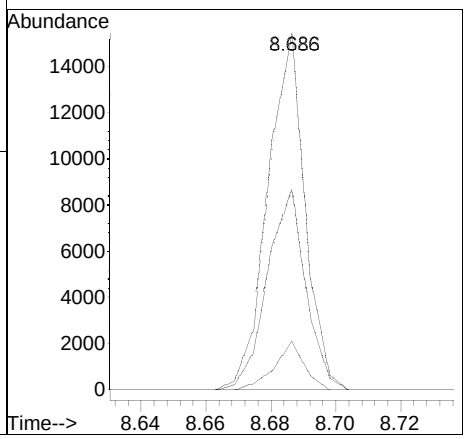


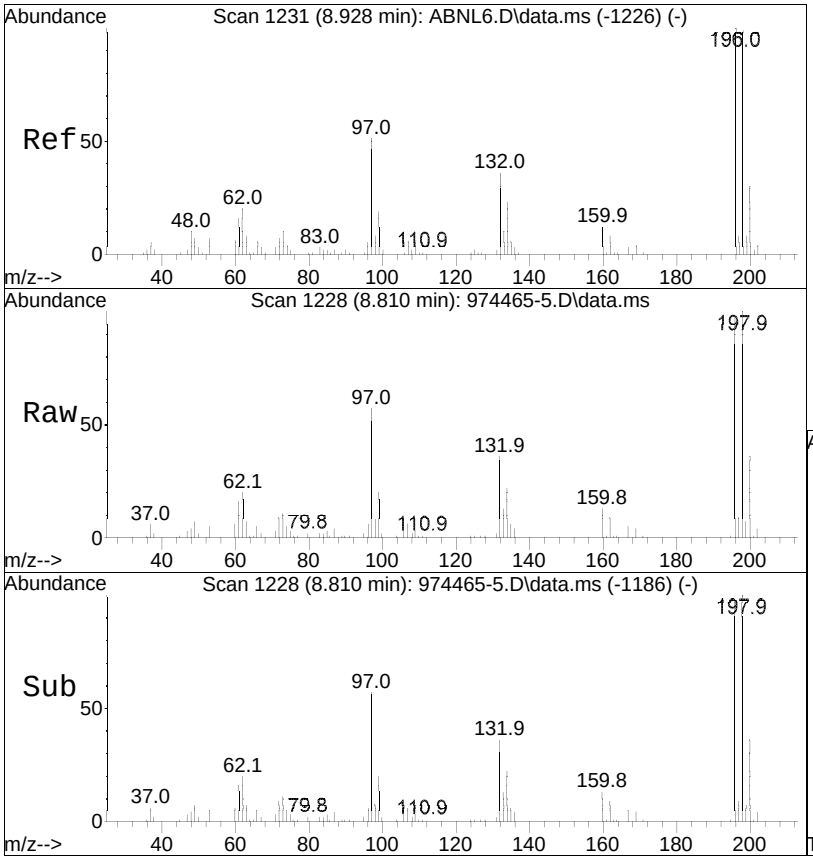



#43
Hexachlorocyclopentadiene
Concen: 1.41 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:237 Resp: 12170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 237 | 100 | | |
| 235 | 58.5 | 49.7 | 74.5 |
| 272 | 11.1 | 9.8 | 14.6 |

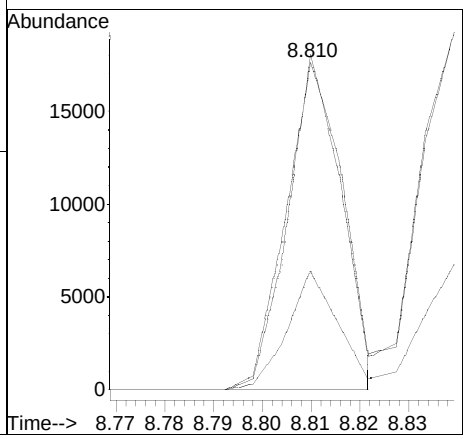


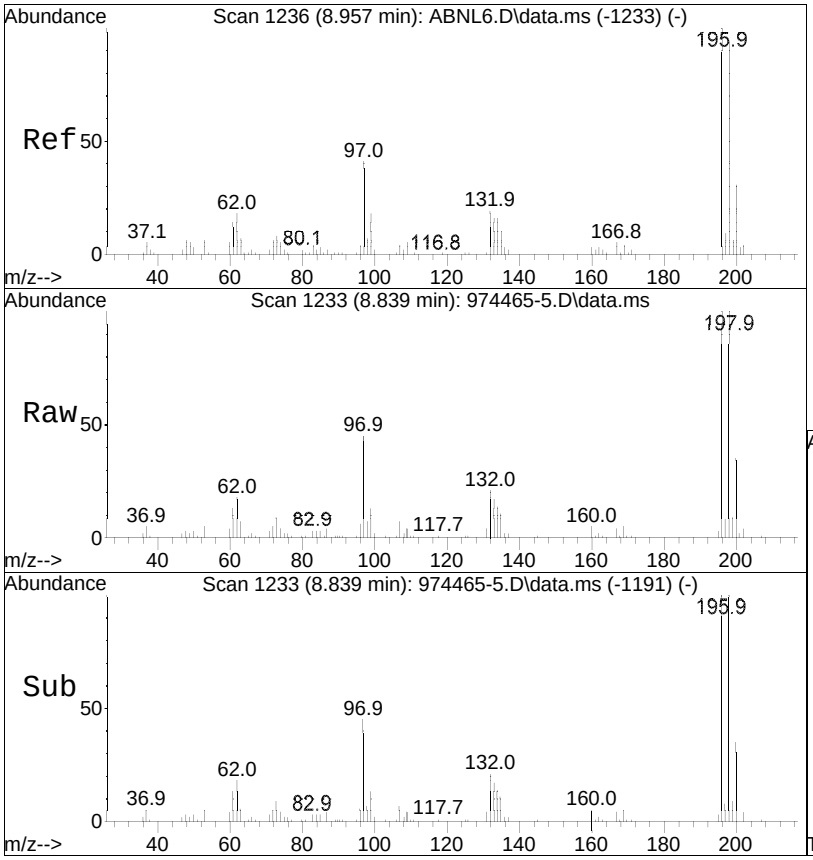



#44
2,4,6-Trichlorophenol
Concen: 1.86 ug/ml
RT: 8.810 min Scan# 1228
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:196 Resp: 14378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 198 | 95.3 | 77.5 | 116.3 |
| 200 | 32.6 | 23.8 | 35.6 |

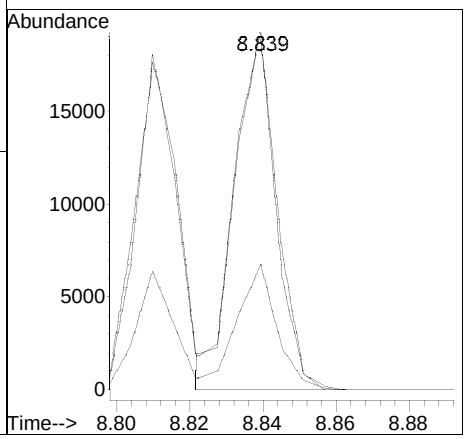


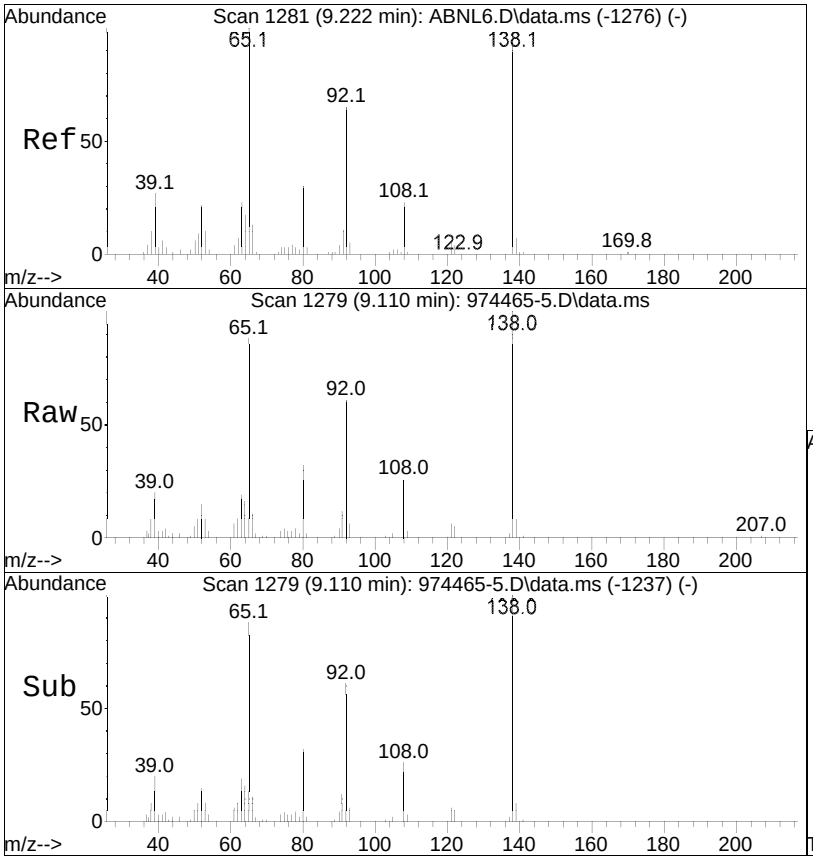



#45
2,4,5-Trichlorophenol
Concen: 1.80 ug/ml
RT: 8.839 min Scan# 1233
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:196 Resp: 14833

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 196 | 100 | | |
| 200 | 34.8 | 25.4 | 38.0 |
| 198 | 104.2 | 78.0 | 117.0 |

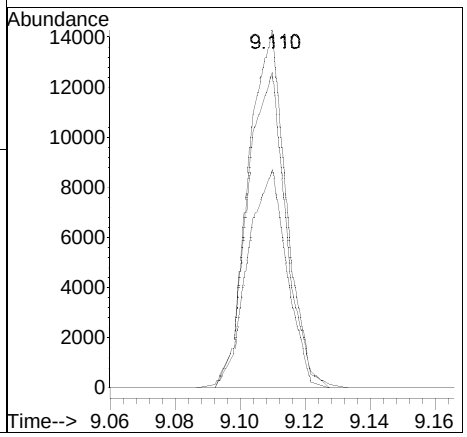


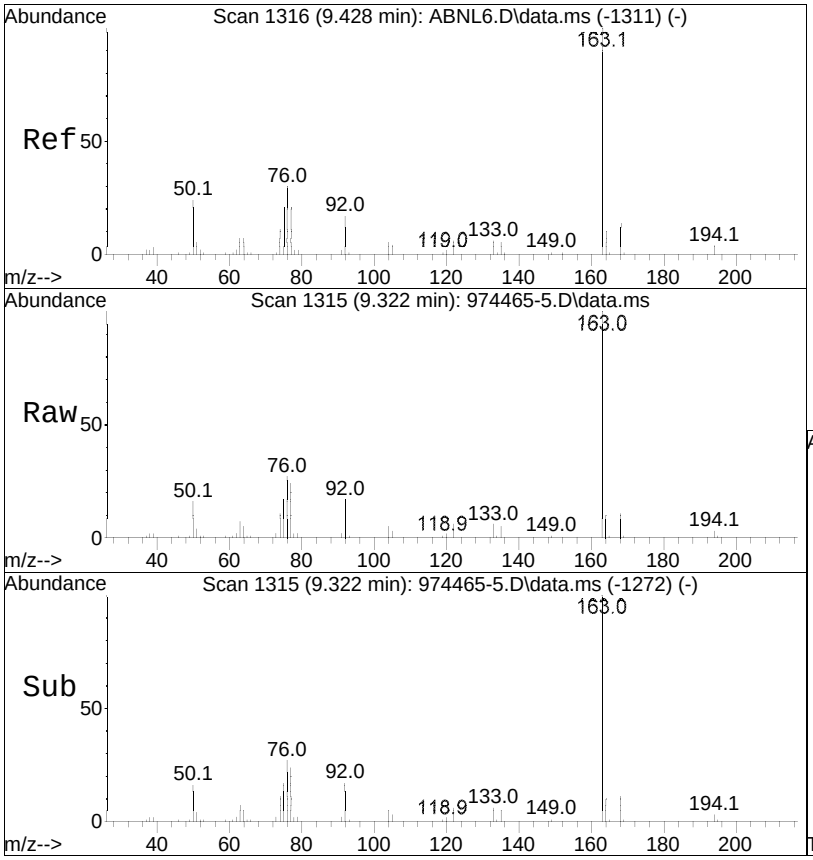



#48
2-Nitroaniline
Concen: 1.82 ug/ml
RT: 9.110 min Scan# 1279
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:138 Resp: 11440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 63.1 | 53.5 | 80.3 |
| 65 | 90.1 | 86.3 | 129.5 |

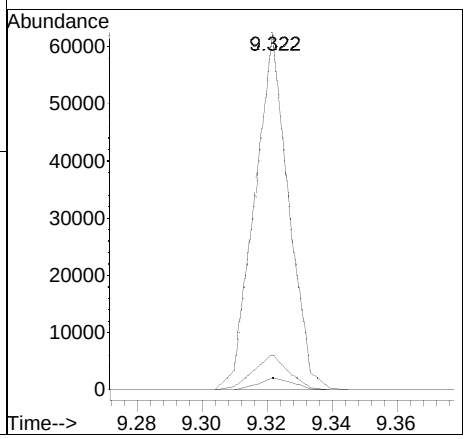


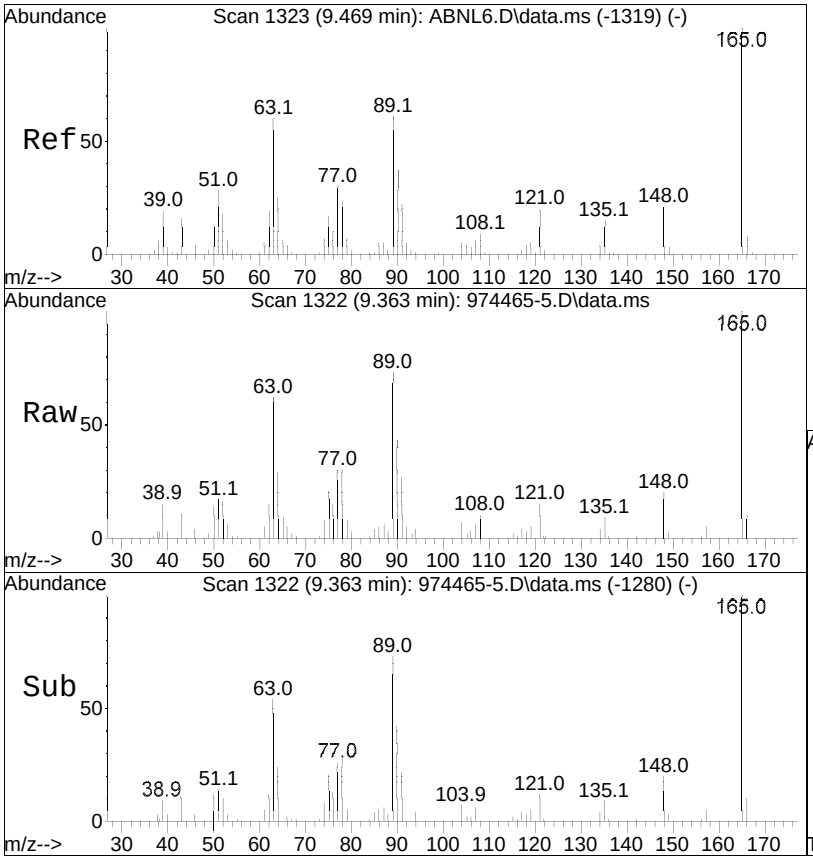



#51
Dimethyl phthalate
Concen: 1.76 ug/ml
RT: 9.322 min Scan# 1315
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:163 Resp: 44714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 163 | 100 | | |
| 194 | 3.4 | 3.5 | 5.3# |
| 164 | 10.4 | 7.9 | 11.9 |

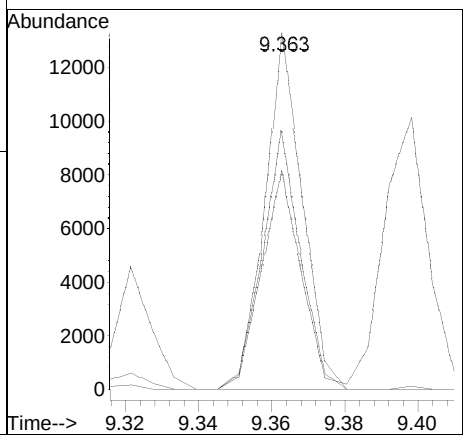


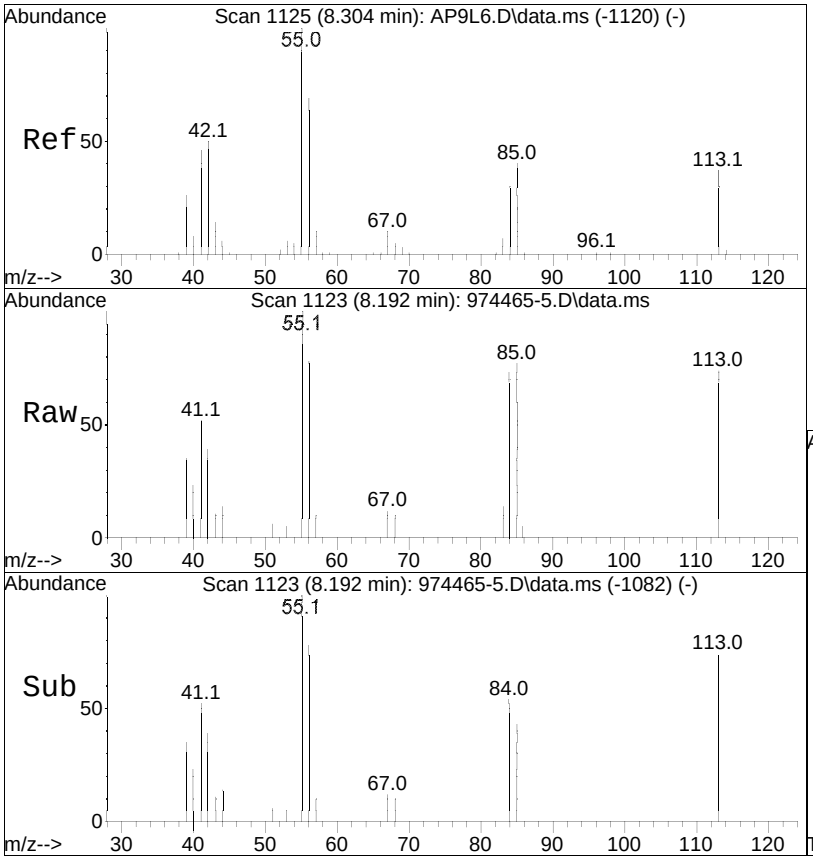



#53
2,6-Dinitrotoluene
Concen: 1.74 ug/ml
RT: 9.363 min Scan# 1322
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:165 Resp: 9497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 73.5 | 54.2 | 81.2 |
| 63 | 64.9 | 64.2 | 96.2 |

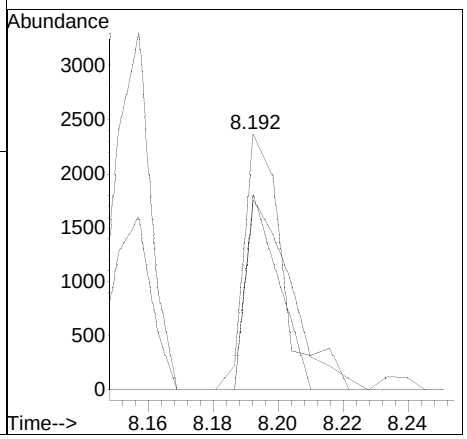


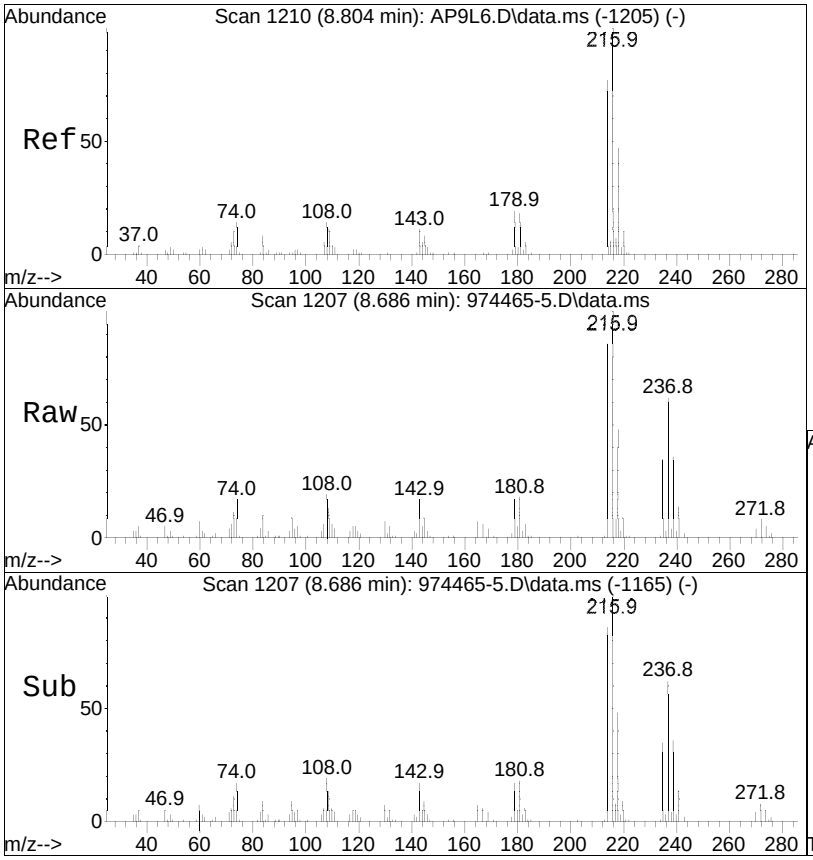



#60
Caprolactam
Concen: 0.37 ug/ml
RT: 8.192 min Scan# 1123
Delta R.T. -0.006 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 55 Resp: 1993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 85 | 64.3 | 19.8 | 29.6# |
| 113 | 84.9 | 29.6 | 44.4# |

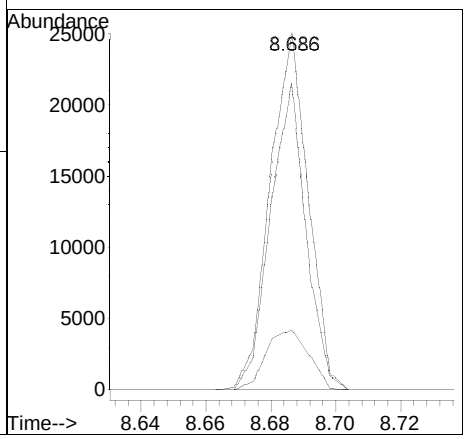


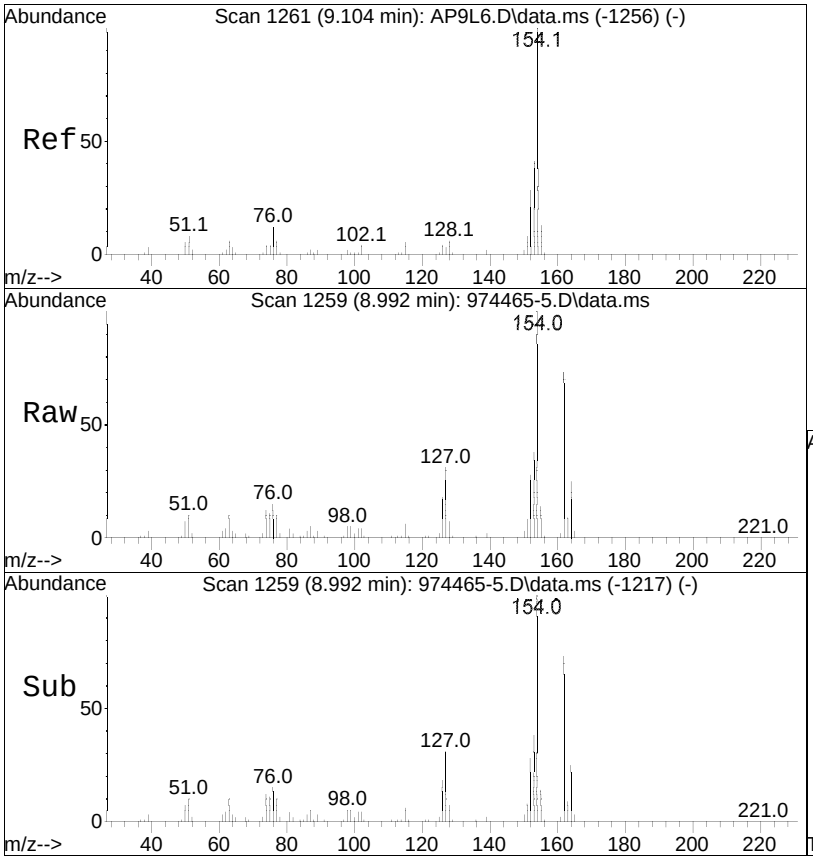



#61
1,2,4,5-Tetrachlorobenzene
Concen: 1.45 ug/ml
RT: 8.686 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:216 Resp: 20349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 216 | 100 | | |
| 214 | 80.1 | 63.7 | 95.5 |
| 179 | 18.9 | 19.0 | 28.6# |

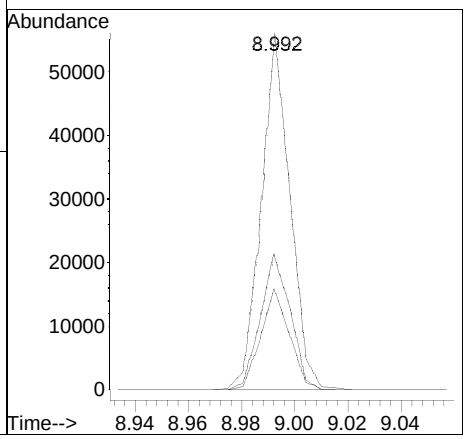


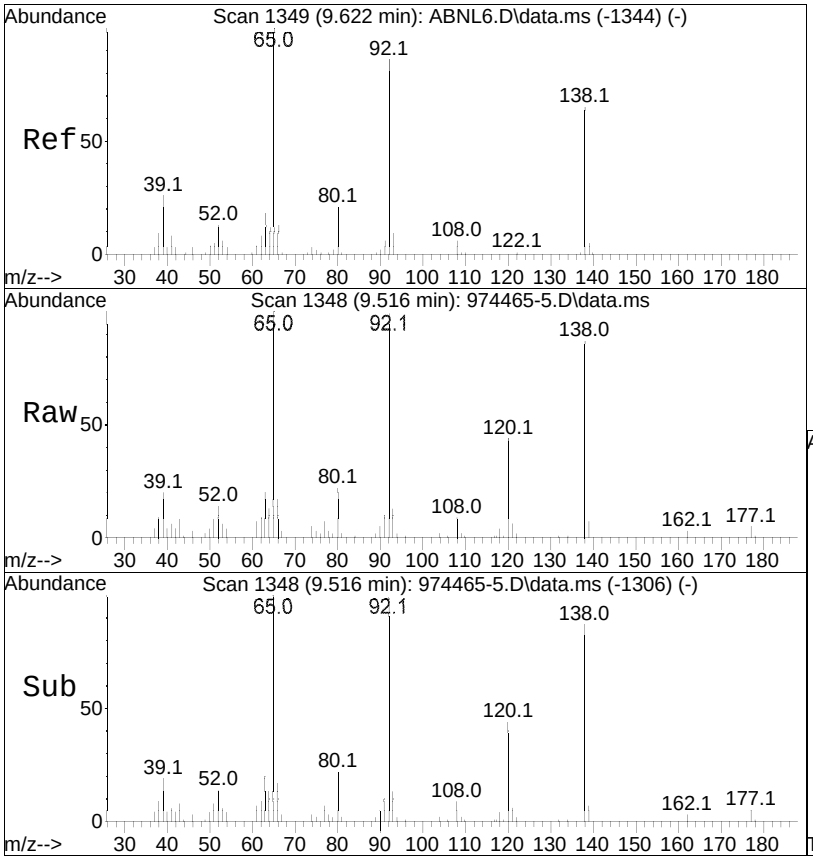



#62
Biphenyl
Concen: 1.50 ug/ml
RT: 8.992 min Scan# 1259
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:154 Resp: 41633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 154 | 100 | | |
| 153 | 39.7 | 32.3 | 48.5 |
| 152 | 28.5 | 22.5 | 33.7 |

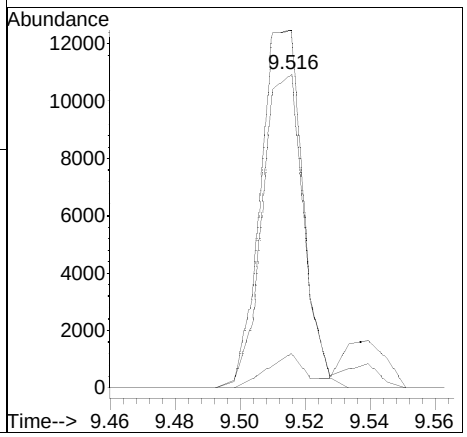


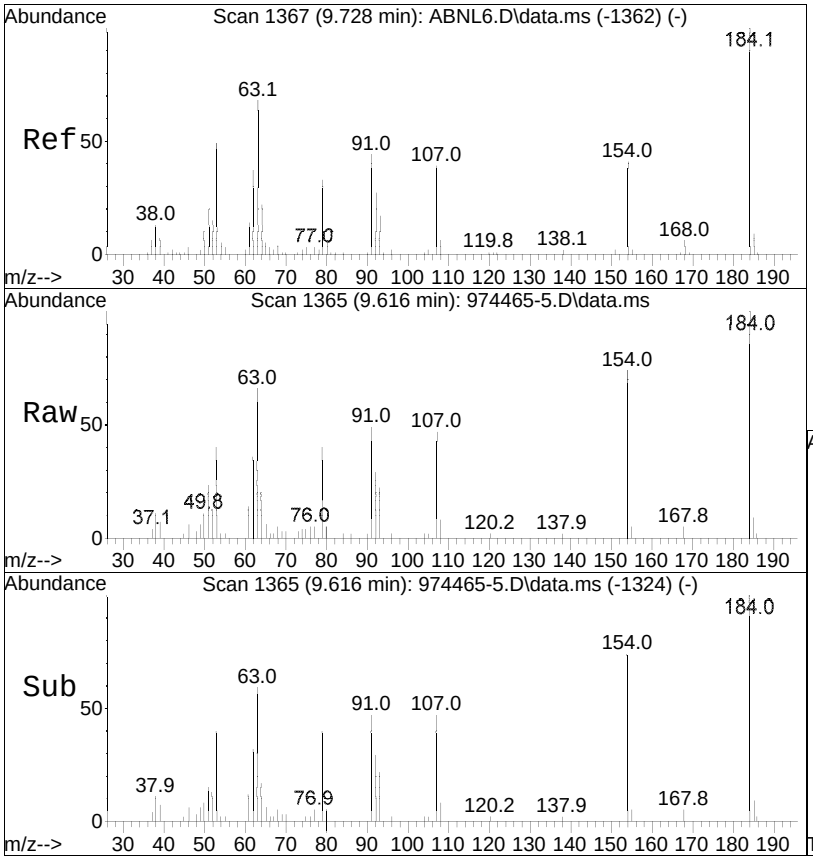



#64
3-Nitroaniline
Concen: 1.66 ug/ml
RT: 9.516 min Scan# 1348
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:138 Resp: 9635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 92 | 122.5 | 93.4 | 140.2 |
| 108 | 9.7 | 9.5 | 14.3 |

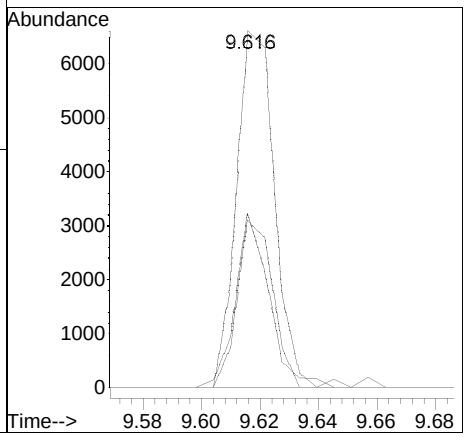


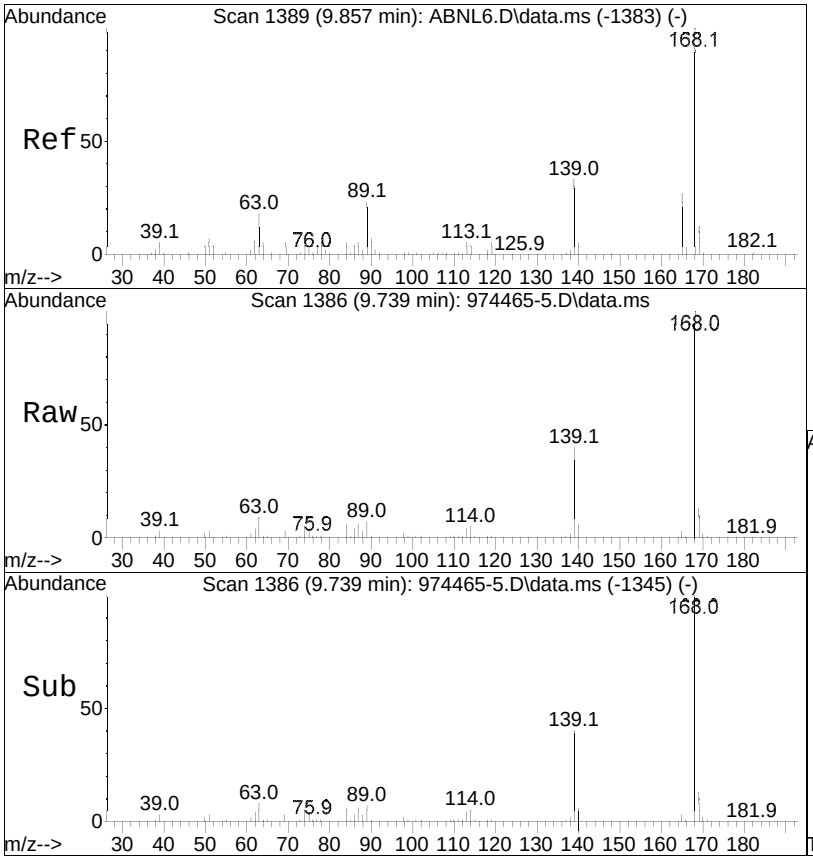



#66
2,4-Dinitrophenol
Concen: 1.54 ug/ml
RT: 9.616 min Scan# 1365
Delta R.T. -0.006 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:184 Resp: 5968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 184 | 100 | | |
| 107 | 43.6 | 37.7 | 56.5 |
| 91 | 43.1 | 46.3 | 69.5# |

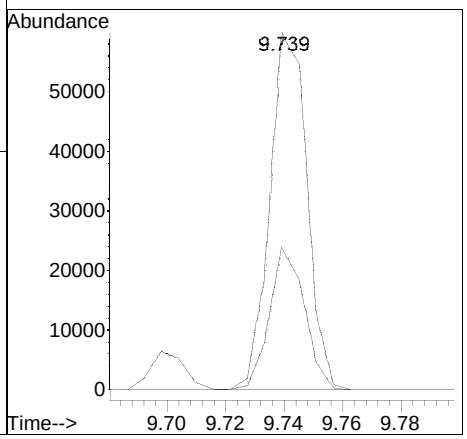


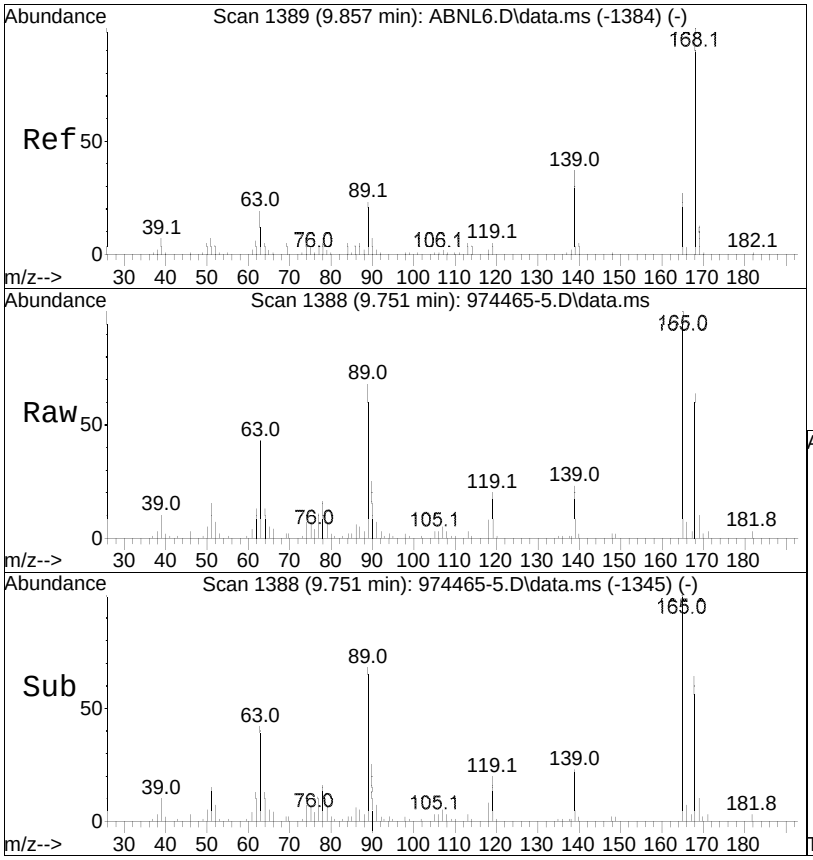



#67
Dibenzofuran
Concen: 1.49 ug/ml
RT: 9.739 min Scan# 1386
Delta R.T. -0.006 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:168 Resp: 52279

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 139 | 37.7 | 31.4 | 47.2 |

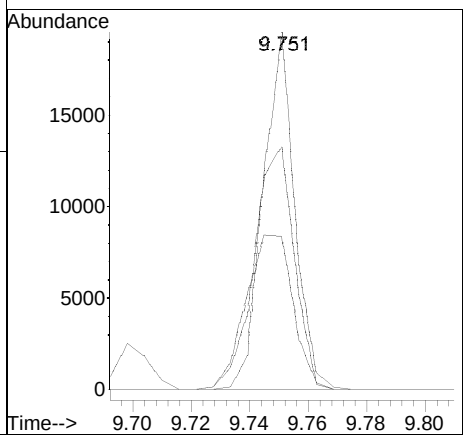


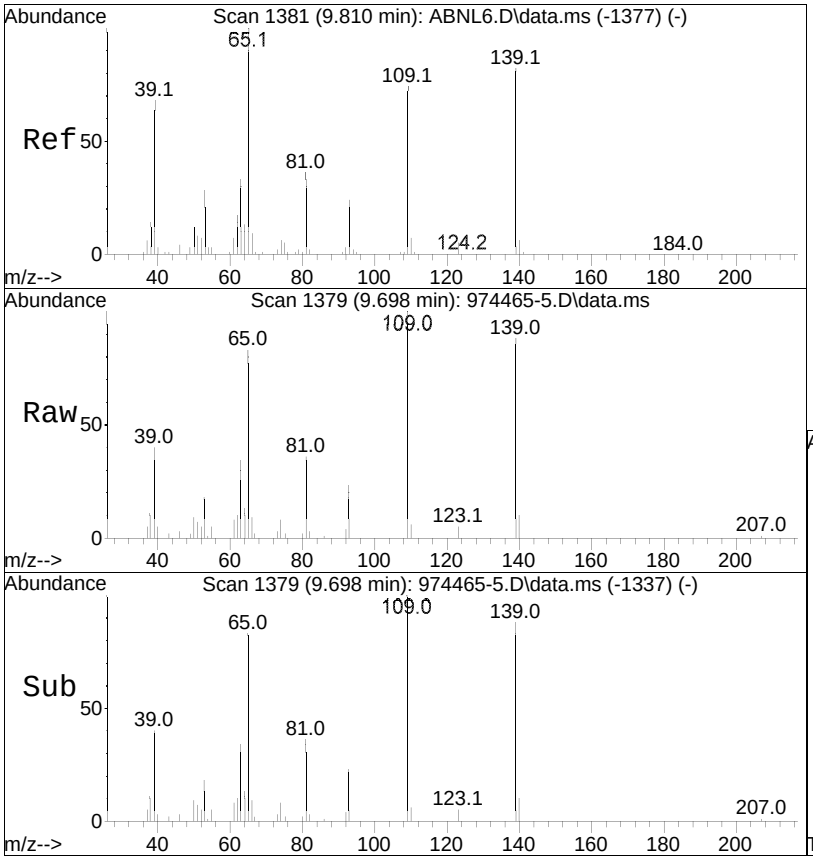



#68
2,4-Dinitrotoluene
Concen: 1.68 ug/ml
RT: 9.751 min Scan# 1388
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:165 Resp: 14477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 86.7 | 72.0 | 108.0 |
| 63 | 64.9 | 52.7 | 79.1 |

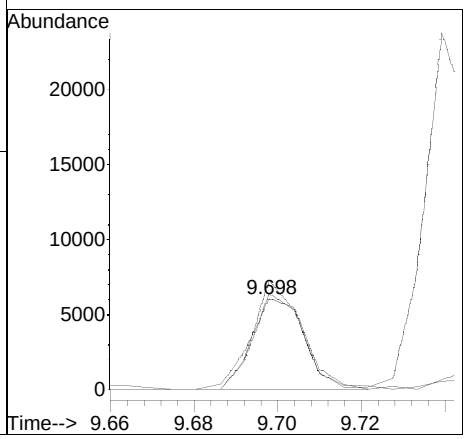


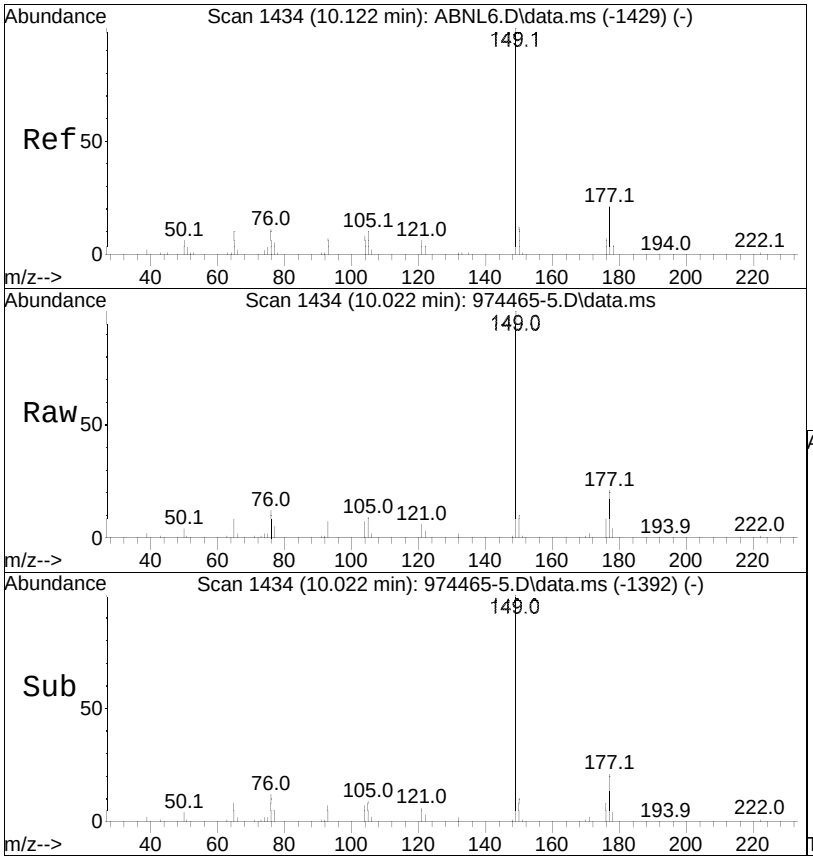



#69
4-Nitrophenol
Concen: 0.97 ug/ml
RT: 9.698 min Scan# 1379
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion: 65 Resp: 5721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 109 | 100.1 | 47.4 | 71.2# |
| 139 | 92.4 | 76.6 | 115.0 |

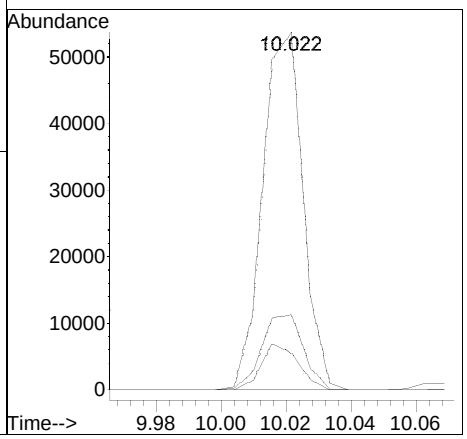


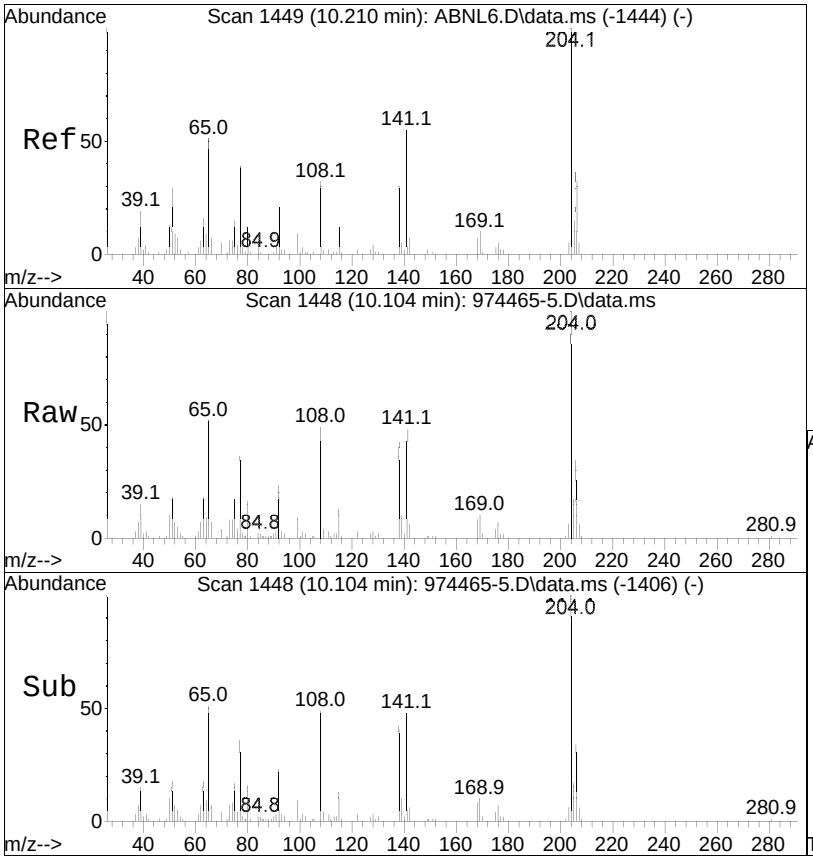



#72
Diethyl phthalate
Concen: 1.65 ug/ml
RT: 10.022 min Scan# 1434
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:149 Resp: 45696

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 177 | 22.0 | 16.1 | 24.1 |
| 150 | 11.9 | 9.4 | 14.2 |

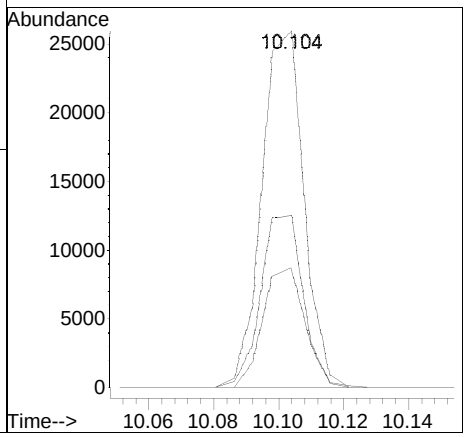


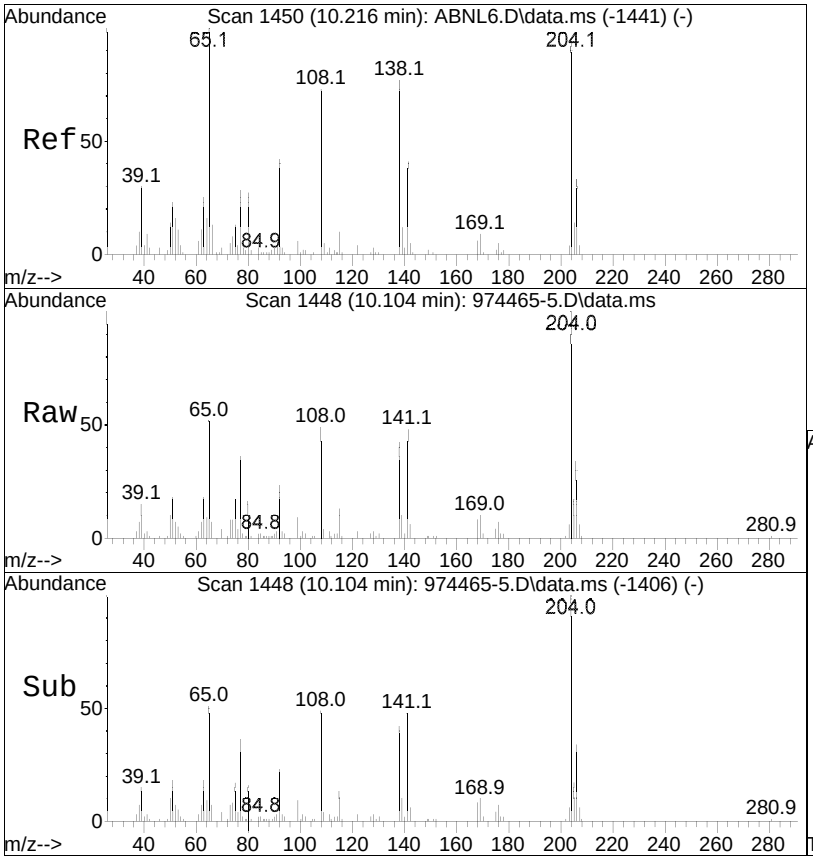



#74
4-Chlorophenyl phenyl ether
Concen: 1.59 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:204 Resp: 23120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 204 | 100 | | |
| 206 | 33.9 | 25.8 | 38.6 |
| 141 | 49.2 | 53.6 | 80.4# |

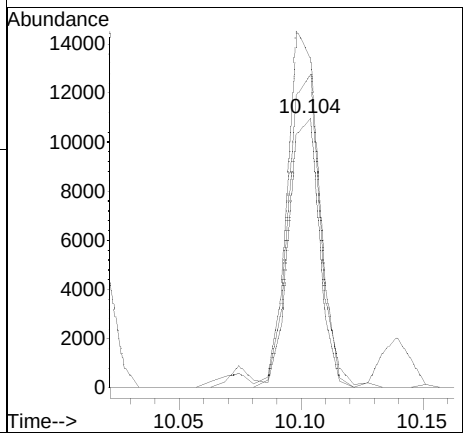


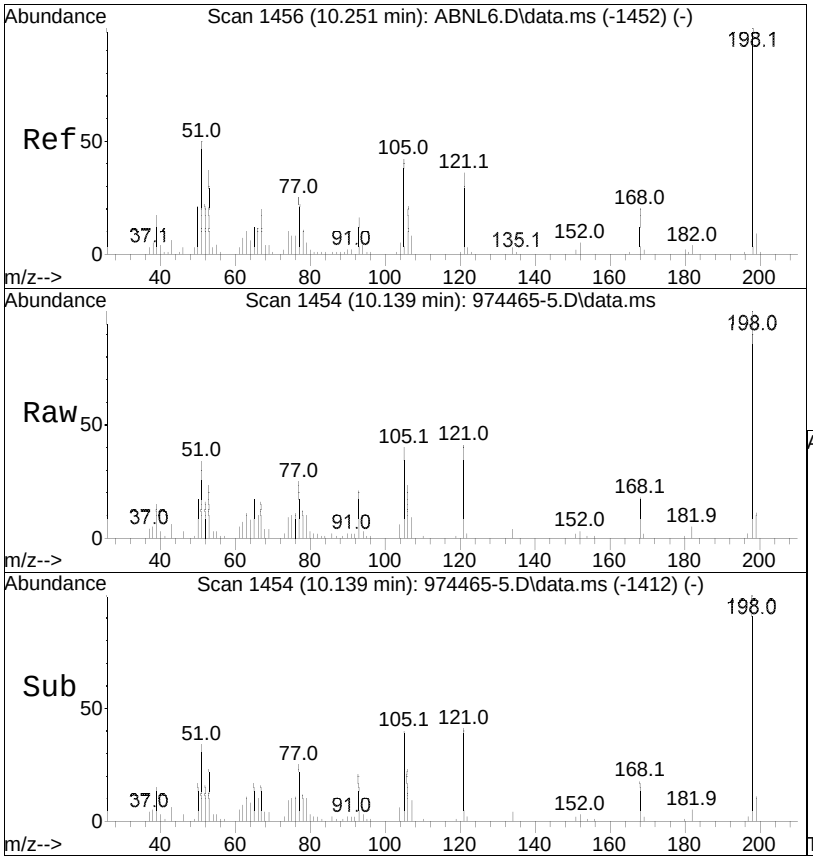



#75
4-Nitroaniline
Concen: 1.67 ug/ml
RT: 10.104 min Scan# 1448
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:138 Resp: 10112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 138 | 100 | | |
| 108 | 115.1 | 52.1 | 78.1# |
| 65 | 133.7 | 115.0 | 172.6 |

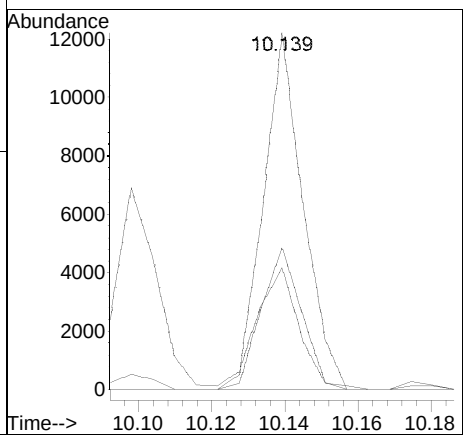


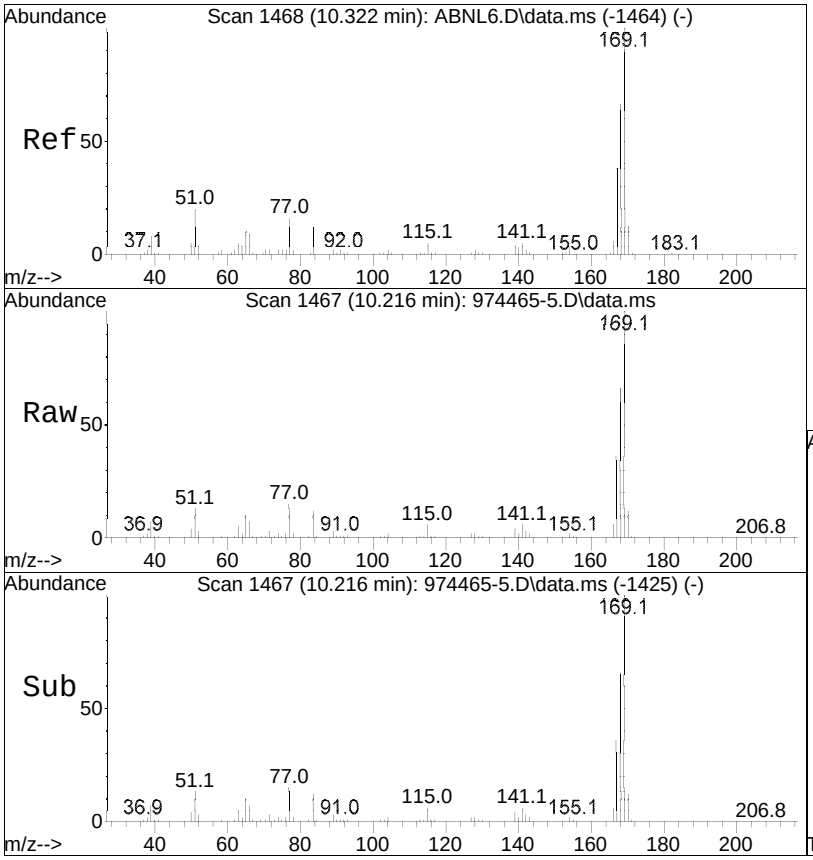



#76
4,6-Dinitro-o-cresol
Concen: 1.91 ug/ml
RT: 10.139 min Scan# 1454
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:198 Resp: 9214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 51 | 36.7 | 76.0 | 114.0# |
| 105 | 40.0 | 45.6 | 68.4# |

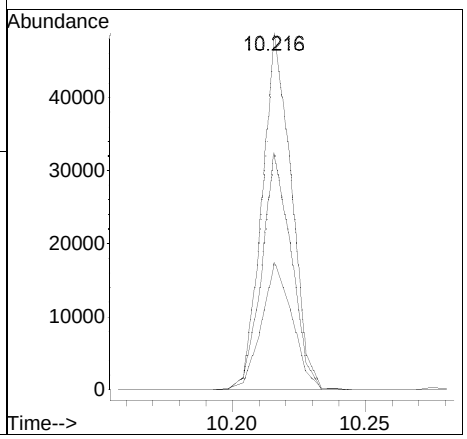


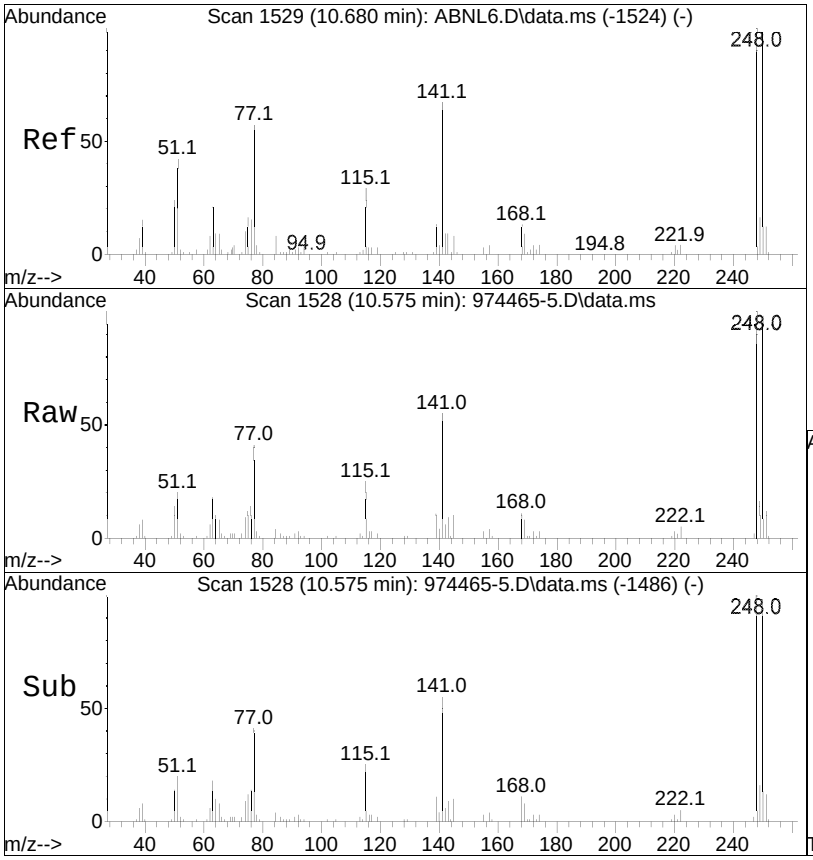



#77
NDPA/DPA
Concen: 1.63 ug/ml
RT: 10.216 min Scan# 1467
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:169 Resp: 37258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 169 | 100 | | |
| 168 | 67.0 | 54.0 | 81.0 |
| 167 | 37.8 | 28.6 | 42.8 |

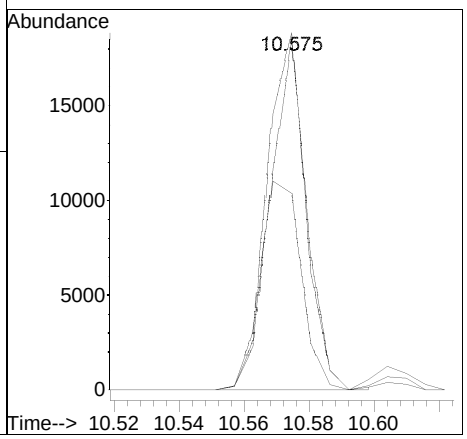


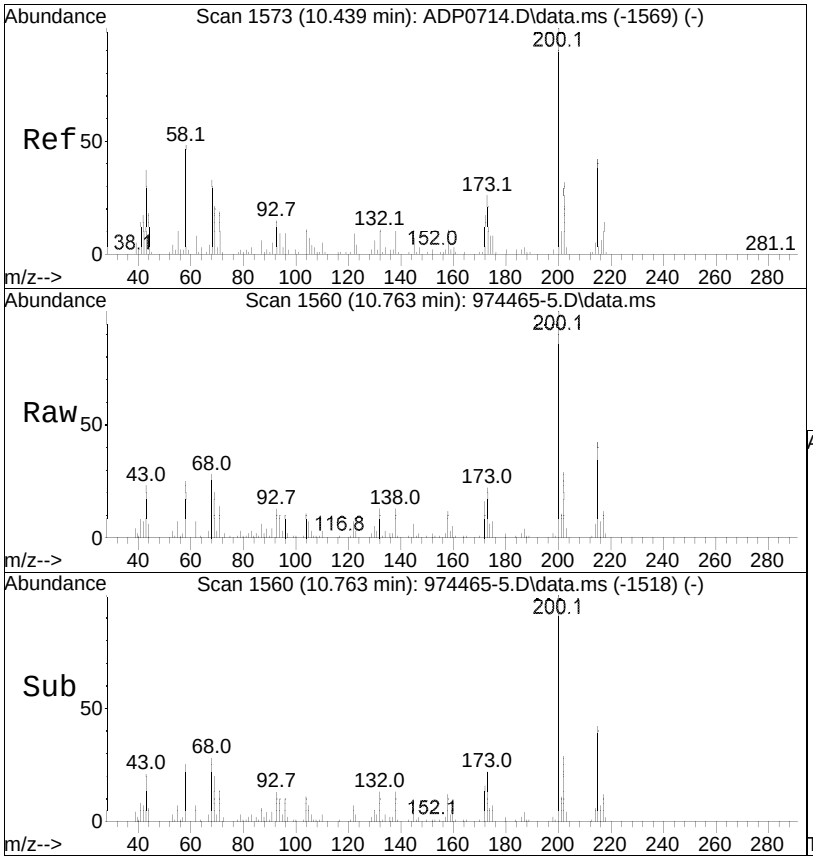



#80
4-Bromophenyl phenyl ether
Concen: 1.70 ug/ml
RT: 10.575 min Scan# 1528
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:248 Resp: 15401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 248 | 100 | | |
| 141 | 62.7 | 76.6 | 114.8# |
| 250 | 92.5 | 77.3 | 115.9 |

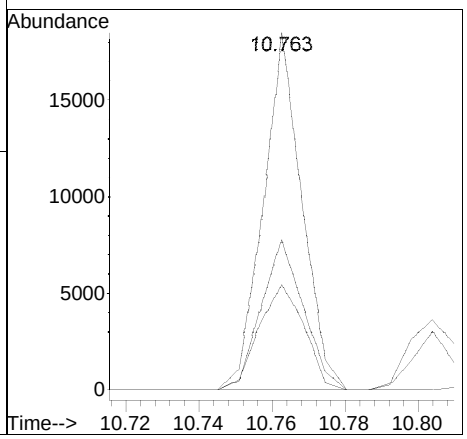


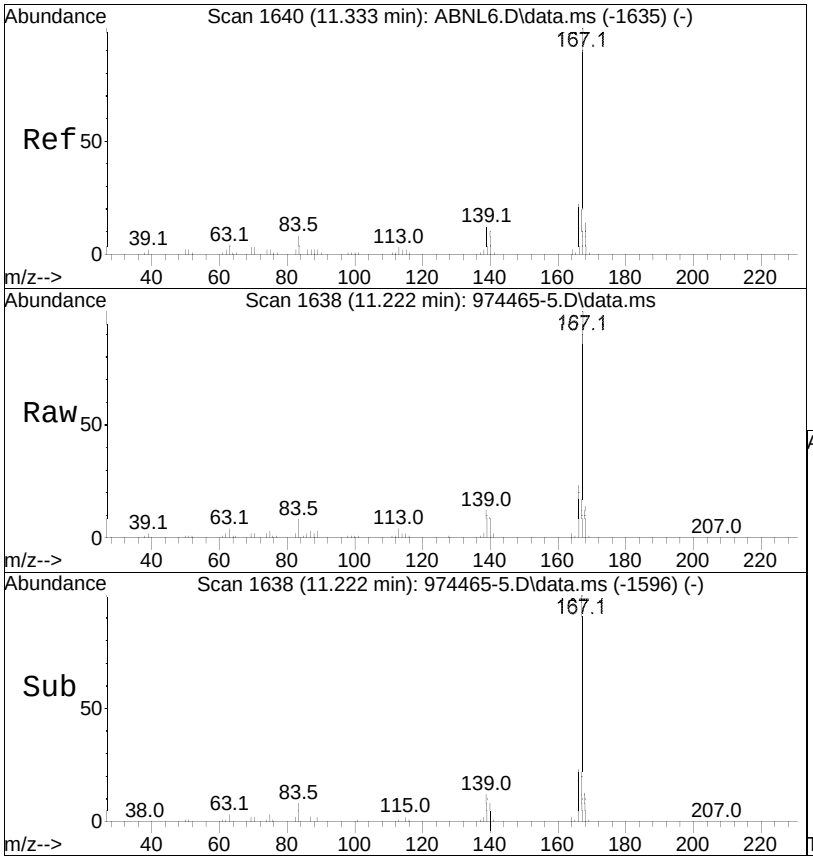



#87
Atrazine
Concen: 1.46 ug/ml
RT: 10.763 min Scan# 1560
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:200 Resp: 13504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 200 | 100 | | |
| 202 | 34.6 | 25.8 | 38.6 |
| 215 | 46.0 | 40.2 | 60.4 |

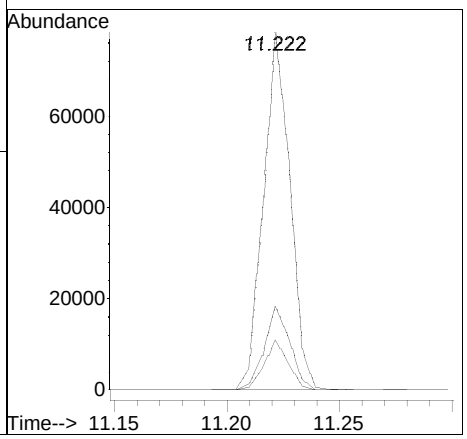


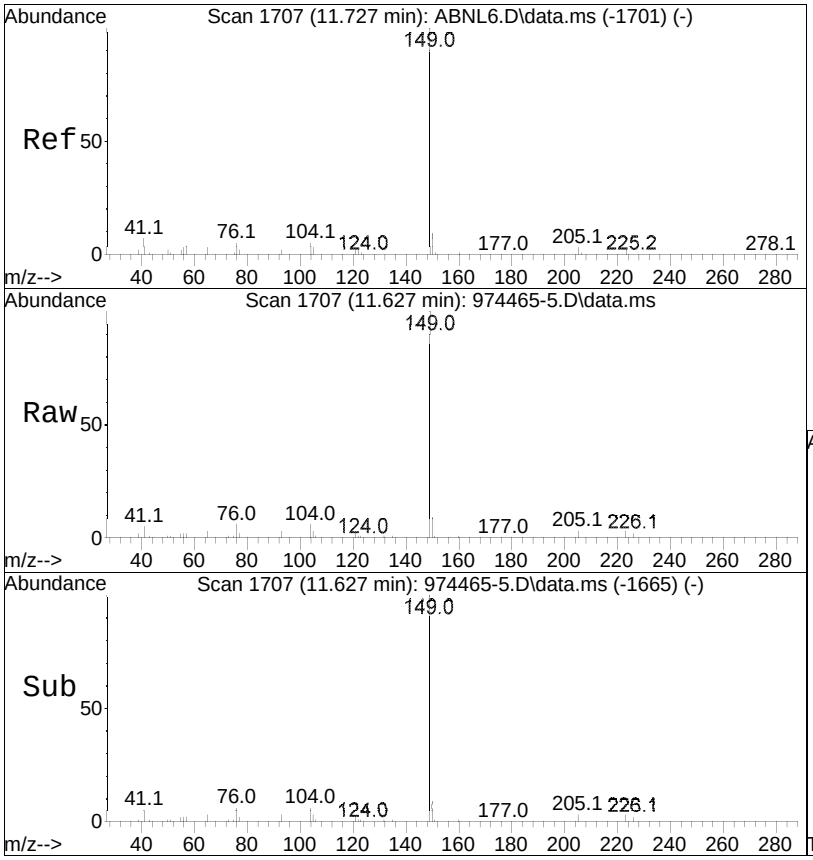



#91
Carbazole
Concen: 1.67 ug/ml
RT: 11.222 min Scan# 1638
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:167 Resp: 63301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 167 | 100 | | |
| 168 | 12.7 | 10.6 | 15.8 |
| 166 | 22.7 | 17.4 | 26.0 |

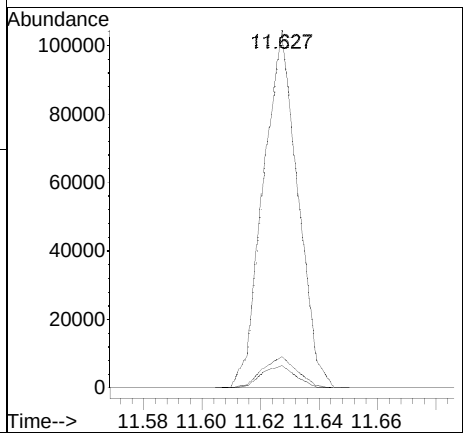


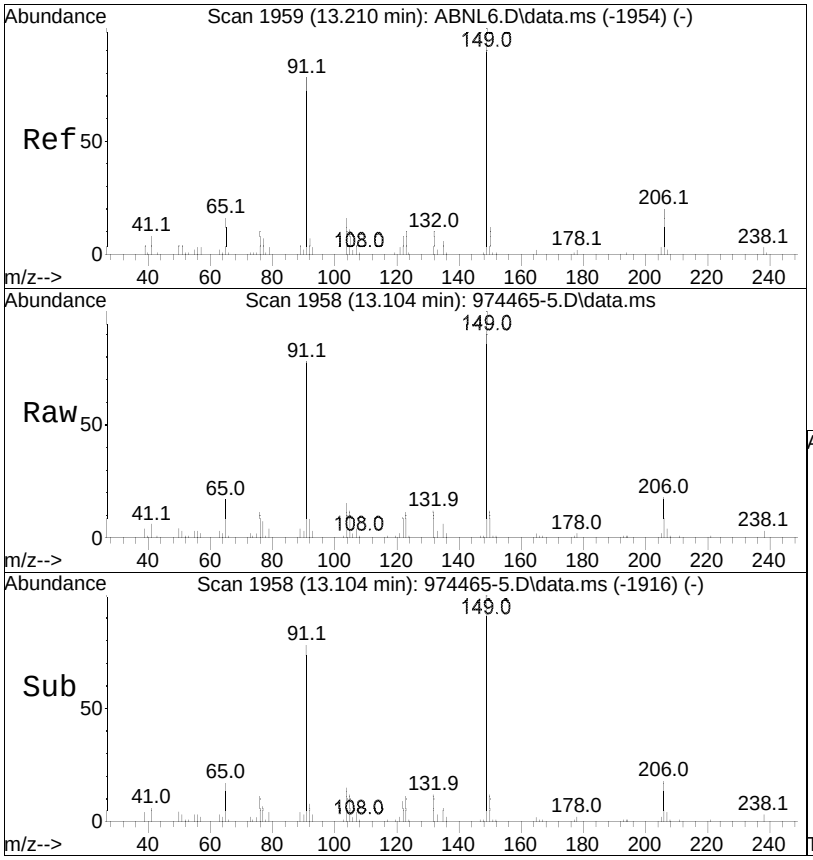



#92
Di-n-butylphthalate
Concen: 1.91 ug/ml
RT: 11.627 min Scan# 1707
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:149 Resp: 84687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 150 | 8.9 | 7.0 | 10.6 |
| 104 | 6.3 | 4.5 | 6.7 |

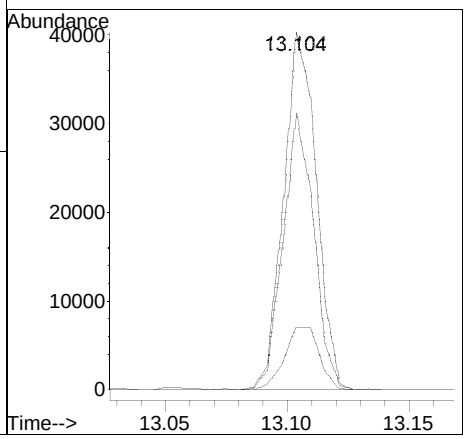


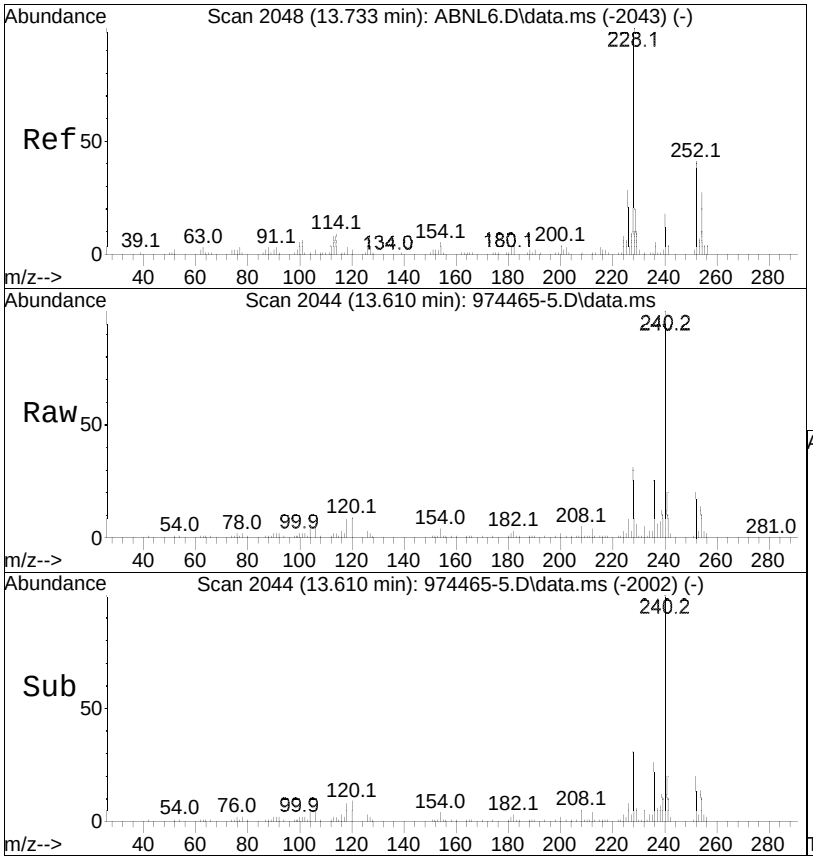



#97
Butyl benzyl phthalate
Concen: 1.83 ug/ml
RT: 13.104 min Scan# 1958
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:149 Resp: 37354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 91 | 72.5 | 63.3 | 94.9 |
| 206 | 18.9 | 13.9 | 20.9 |

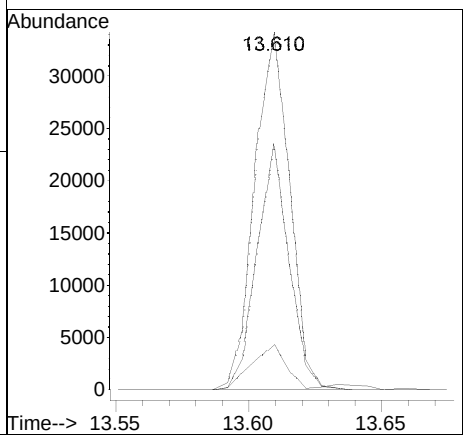


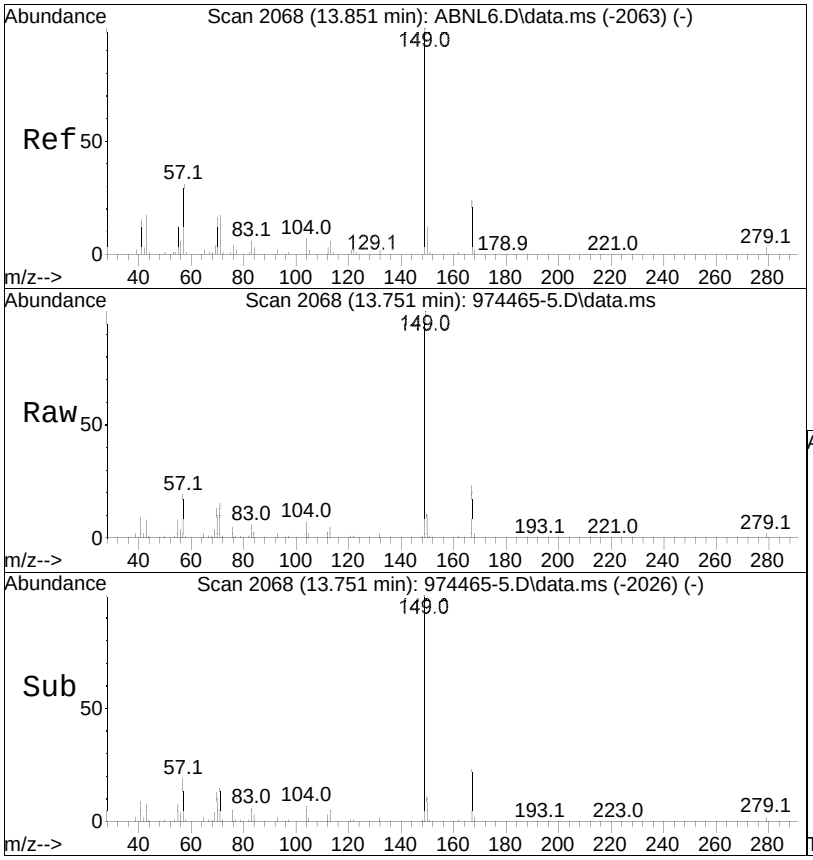



#106
3,3'-Dichlorobenzidine
Concen: 1.54 ug/ml
RT: 13.610 min Scan# 2044
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:252 Resp: 31161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 13.0 | 14.5 | 21.7# |
| 254 | 62.9 | 51.2 | 76.8 |

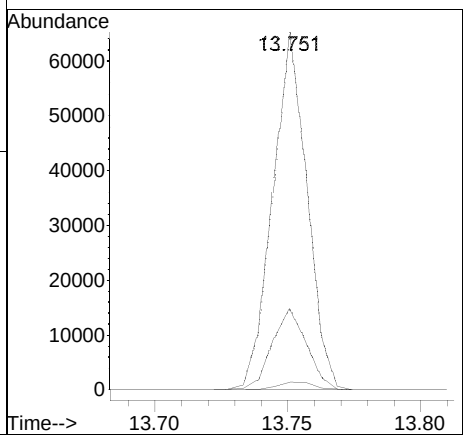


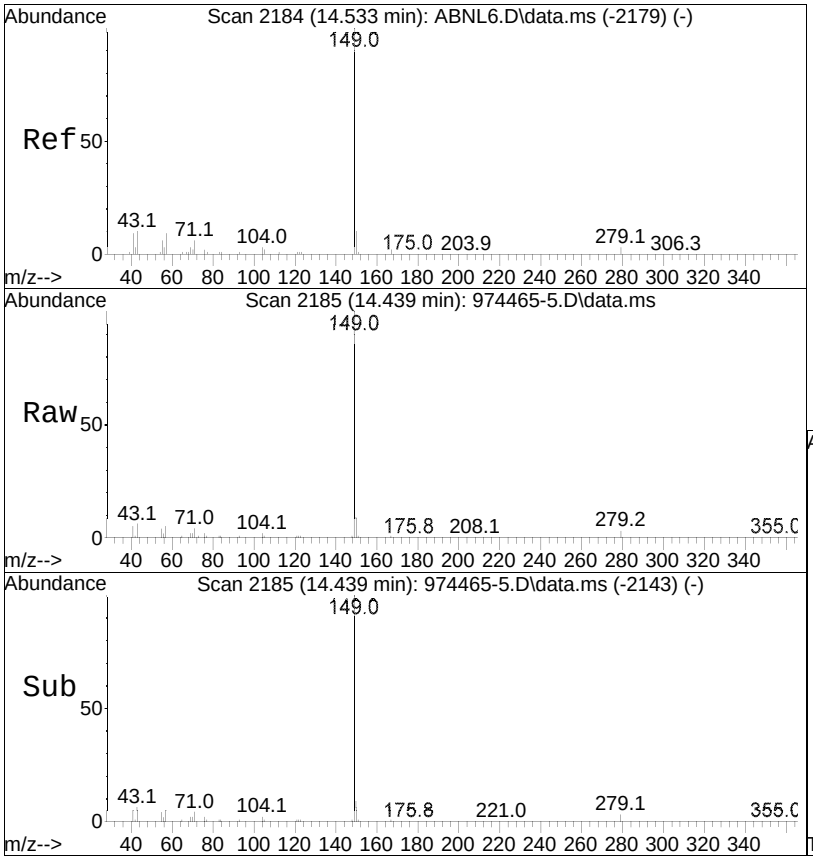



#108
Bis(2-ethylhexyl)phthalate
Concen: 1.72 ug/ml
RT: 13.751 min Scan# 2068
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:149 Resp: 58152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.1 | 22.1 | 33.1 |
| 279 | 2.5 | 3.0 | 4.4# |

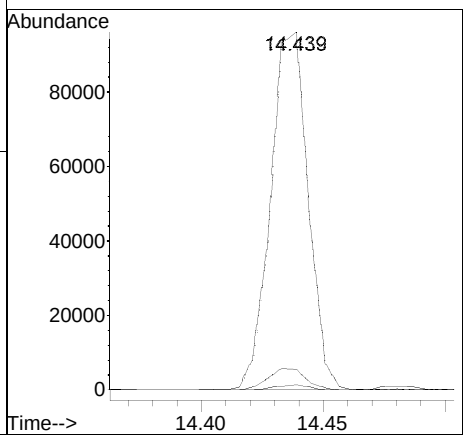





#109
Di-n-octylphthalate
Concen: 1.82 ug/ml
RT: 14.439 min Scan# 2185
Delta R.T. -0.000 min
Lab File: 974465-5.D
Acq: 21 Sep 2024 4:17 pm

Tgt Ion:149 Resp: 101546

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 43 | 6.1 | 18.8 | 28.2# |
| 167 | 1.3 | 1.3 | 1.9# |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270\SV106\240921RVT\ | QMethod | : FS240624SV106.m |
| Data File | : 974465-5.D | Operator | : SV106:als |
| Date Inj'd | : 9/21/2024 4:17 pm | Instrument | : SV 106 |
| Sample | : WG1974465-5,32,,gmr | Quant Date | : 9/21/2024 4:36 pm |

There are no manual integrations or false positives in this file.

# Calculation of Semi Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * 1000 * (1/Vo) * Vf

Where:
DF = Dilution Factor
Vo = Volume of Sample (mL)
Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: Amt * DF * 1000 * (1/Wt) * Vf * (100/TS)
Where:
DF = Dilution Factor
Wt = Weight of Sample (g)
Vf = Extraction Lab Final Volume (mL)
TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 23 2024, 02:14 pm

Work Group: WG1974465  for Department: 2 Organic Preparation

Created: 20-SEP-24  Due:  Operator: DAE

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 | MW-1SR | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-02 | MW-1DR2 | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-03 | MW-11S | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-04 | MW-11D | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-05 | DUP_091624 | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453125-07 | B1-GW | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-08 | B2-GW | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-09 | B5-GW | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-10 | B6-GW | C | NYTCL-8270-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453695-01 | 2024 0918 MW-3 | C | NYTCL-8270-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| L2453695-02 | 2024 0918 MW-2 | C | NYTCL-8270-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| L2453695-03 | 2024 0918 MW-1 | C | NYTCL-8270-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| WG1974465-1 | Laboratory Method Bl | S | NYTCL-8270-RVT | WATER | DONE | U | | | | |
| WG1974465-2 | Laboratory Control S | S | NYTCL-8270-RVT | WATER | DONE | U | | | | |
| WG1974465-3 | LCS Duplicate | S | NYTCL-8270-RVT | WATER | DONE | U | | | | |
| WG1974465-4 | Matrix Spike | S | NYTCL-8270-RVT | WATER | DONE | U | | | | |
| WG1974465-5 | Matrix Spike Duplica | S | NYTCL-8270-RVT | WATER | DONE | U | | | | |

Comments:

WG1974465-3  WG1974465-2
WG1974465-4  L2453053-01
WG1974465-5  L2453053-01

Analysis log File

Total Files Reported in Log : 33
Log Generated From Directory: I:\8270\SV106\240624RVTical\

| No. | DATA FILE | INJ METH | SAMPLE NAME | MISC | DATE INJ'D |
|---|---|---|---|---|---|
| 1 | Tune1.D | ABNRVT.M | Tune1 Lot# 10853 | WG1939040 | 6/24/2024 4:32 pm |
| 2 | ABNL9.D | ABNRVT.M | IL2,32,,ABNL50 Lot# 107 | WG1939040 | 6/24/2024 4:56 pm |
| 3 | ABNL8.D | ABNRVT.M | IL3,32,,ABNL25 Lot# 107 | WG1939040 | 6/24/2024 5:20 pm |
| 4 | ABNL7.D | ABNRVT.M | IL4,32,,ABNL10 Lot# 107 | WG1939040 | 6/24/2024 5:43 pm |
| 5 | ABNL6.D | ABNRVT.M | IL5,32,,ABNL5 Lot# 1078 | WG1939040 | 6/24/2024 6:07 pm |
| 6 | ABNL5.D | ABNRVT.M | IL6,32,,ABNL2.5 Lot# 10 | WG1939040 | 6/24/2024 6:31 pm |
| 7 | ABNL4.D | ABNRVT.M | IL7,32,,ABNL1 Lot# 1078 | WG1939040 | 6/24/2024 6:54 pm |
| 8 | ABNL3.D | ABNRVT.M | IL8,32,,ABNL0.5 Lot# 10 | WG1939040 | 6/24/2024 7:18 pm |
| 9 | ABNL2.D | ABNRVT.M | IL9,32,,ABNL0.2 Lot# 10 | WG1939040 | 6/24/2024 7:42 pm |
| 10 | ABNL1.D | ABNRVT.M | IL10,32,,ABNL0.1 Lot# 1 | WG1939040,, | 6/24/2024 8:05 pm |
| 11 | AP9L9.D | ABNRVT.M | IL2,32,,AP9L50 Lot# 107 | WG1939040 | 6/24/2024 8:29 pm |
| 12 | AP9L8.D | ABNRVT.M | IL3,32,,AP9L25 Lot# 107 | WG1939040 | 6/24/2024 8:53 pm |
| 13 | AP9L7.D | ABNRVT.M | IL4,32,,AP9L10 Lot# 107 | WG1939040 | 6/24/2024 9:16 pm |
| 14 | AP9L6.D | ABNRVT.M | IL5,32,,AP9L5 Lot# 1079 | WG1939040 | 6/24/2024 9:40 pm |
| 15 | AP9L5.D | ABNRVT.M | IL6,32,,AP9L2.5 Lot# 10 | WG1939040 | 6/24/2024 10:04 pm |
| 16 | AP9L4.D | ABNRVT.M | IL7,32,,AP9L1 Lot# 1079 | WG1939040 | 6/24/2024 10:28 pm |
| 17 | AP9L3.D | ABNRVT.M | IL8,32,,AP9L0.5 Lot# 10 | WG1939040 | 6/24/2024 10:52 pm |
| 18 | AP9L2.D | ABNRVT.M | IL9,32,,AP9L0.2 Lot# 10 | WG1939040 | 6/24/2024 11:15 pm |
| 19 | AP9L1.D | ABNRVT.M | IL10,32,,AP9L0.1 Lot# 1 | WG1939040 | 6/24/2024 11:39 pm |
| 20 | ABNICV.D | ABNRVT.M | CQICV1,32,,ABNICV Lot# | WG1939040,,ical | 6/25/2024 12:03 am |
| 21 | AP9ICV.D | ABNRVT.M | CQICV2,32,,AP9ICV Lot# | WG1939040 | 6/25/2024 12:27 am |
| 22 | Tune2.D | ABNRVT.M | Tune2 Lot# 10853 | WG1939040 | 6/25/2024 12:51 am |
| 23 | ADPL9.D | ABNRVT.M | IL2,32,,ADPL50 Lot# 107 | WG1939040 | 6/25/2024 1:14 am |
| 24 | ADPL8.D | ABNRVT.M | IL3,32,,ADPL25 Lot# 107 | WG1939040 | 6/25/2024 1:38 am |
| 25 | ADPL7.D | ABNRVT.M | IL4,32,,ADPL10 Lot# 107 | WG1939040 | 6/25/2024 2:02 am |
| 26 | ADPL6.D | ABNRVT.M | IL5,32,,ADPL5 Lot# 1079 | WG1939040 | 6/25/2024 2:26 am |
| 27 | ADPL5.D | ABNRVT.M | IL6,32,,ADPL2.5 Lot# 10 | WG1939040 | 6/25/2024 2:49 am |
| 28 | ADPL4.D | ABNRVT.M | IL7,32,,ADPL1 Lot# 1080 | WG1939040 | 6/25/2024 3:13 am |
| 29 | ADPL3.D | ABNRVT.M | IL8,32,,ADPL0.5 Lot# 10 | WG1939040 | 6/25/2024 3:37 am |
| 30 | ADPL2.D | ABNRVT.M | IL9,32,,ADPL0.2 Lot# 10 | WG1939040 | 6/25/2024 4:01 am |
| 31 | ADPL1.D | ABNRVT.M | IL10,32,,ADPL0.1 Lot# 1 | WG1939040 | 6/25/2024 4:24 am |
| 32 | ADPICV.D | ABNRVT.M | CQICV3,32,,ADPICV Lot# | WG1939040 | 6/25/2024 4:48 am |
| 33 | Blank1.D | ABNRVT.M | LVI Instrument Blank | wg,,ical | 6/25/2024 5:12 am |

Printed: 06/25/24 Page: 1

 SeqLog 1.0 - (c) 2009 Abacus Database Applications

Dep.: GCMS
Inst: SV106
Date: **09/21/24**
Run:

Method
GC: ABNRVT

Seq: **WG1974589**

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 141 | DEG0921 | wg-1,32,,Degdftpp Lot # 11002 | | | | als 9/23 |
| 142 | ABN0921 | wg-3,32,,ABN 10908 gmr0914A | **Passes Full List** | | | als 9/23 |
| 143 | AP90921 | wg-4,32,,AP9 10909 gmr0914A | | | | als 9/23 |
| 144 | ADP0921 | wg-5,32,,ADP 10751 gmr0914A | | | | als 9/23 |
| 1 | 974465-1 | WG1974465-1,32,,gmr | | | | als 9/23 |
| 2 | 974465-2 | WG1974465-2,32,,gmr | | | | als 9/23 |
| 3 | 974465-3 | WG1974465-3,32,,gmr | | | | als 9/23 |
| 4 | 974463-1 | WG1974463-1,32,,gmr | | | | als 9/23 |
| 5 | 974463-2 | WG1974463-2,32,,gmr | | | | als 9/23 |
| 6 | 974463-3 | WG1974463-3,32,,gmr | | | | als 9/23 |
| 7 | 53695-01 | L2453695-01,32,,R3C,gmr | | | | als 9/23 |
| 8 | 53695-02 | L2453695-02,32,,R3C,gmr | | | | als 9/23 |
| 9 | 53695-03 | L2453695-03,32,,R3C,gmr | | | | als 9/23 |
| 10 | 53694-01 | L2453694-01,32,,R1C,gmr | | | | als 9/23 |
| 11 | 53053-01 | L2453053-01,32,,gmr | | | | als 9/23 |
| 12 | 974465-4 | WG1974465-4,32,,gmr | | | | als 9/23 |
| 13 | 974465-5 | WG1974465-5,32,,gmr | | | | als 9/23 |
| 14 | 53053-02 | L2453053-02,32,,gmr | | | | als 9/23 |
| 15 | 53053-03 | L2453053-03,32,,gmr | | | | als 9/23 |
| 16 | 53053-04 | L2453053-04,32,,gmr | | | | als 9/23 |
| 17 | 53053-05 | L2453053-05,32,,gmr | | | | als 9/23 |
| 18 | 53051-01 | L2453051-01,32,,gmr | | | | als 9/23 |
| 19 | 53051-02 | L2453051-02,32,,gmr | | | | als 9/23 |
| 20 | 53989-09 | L2453989-09,32,,R1C,gmr | | | | als 9/23 |
| 21 | 974463-4 | WG1974463-4,32,,gmr | | | | als 9/23 |
| 22 | 974463-5 | WG1974463-5,32,,gmr | | | | als 9/23 |
| 23 | 53108-05 | L2453108-05,32,,gmr | | | gmr | als 9/23 |
| | | | | | **sv-cmm** | |

# ORGANIC ELN REPORT

**Workgroup: WG1974465**

**Prep Method:** EPA 3510C
**Solvent Type:** DCM **Lot #:** EJ049
**Surrogate Type:** ABN **Lot #:** 11001as,03/11/2025,
**Spike Type:** ABN **Lot #:** 10737ad,10/31/2024,10949af,0
**Spike Verify by:** DAE/DLP
**Lims Spikelot:** 8270-RVT

**Additional Reagents/Stds**

| | |
|---|---|
| H2SO4 | A091124 |
| Na2SO4 | 241169 |
| NaOH | 10NNaOH082824 |

**Conc.Method:** Buchi
**Solvent Type:** DCM
**Lot #:** EJ049

**Additional Reagents/Stds**

***Cleanup 1***

**Cleanup Method 1:**
**Cleanup Method 2:**
**Solvent Type:** **Lot #:**

**Additional Reagents/Stds**

| Sample/ Type | Extraction: Extract Date | Analyst | Sample Vol ml | Ph | Surr Amt ml | Spike Amt ml | Concentration: Conc Date | Analyst | Final Vol ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-02 SAMP | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-03 SAMP | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-04 SAMP | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-05 SAMP | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453125-07 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| L2453125-08 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |



Reported: 23-SEP-24 02:14 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974465**

| Sample/ Type | Extraction | | | | | | Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Extract Date | Analyst | Sample Vol **ml** | Ph | Surr Amt **ml** | Spike Amt **ml** | Conc Date | Analyst | Final Vol **ml** | Conc Unit |
| L2453125-09 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| L2453125-10 WATER | 09/21/24 11:30 | Dayle Parsons | 70 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| | **lim vol due to sediment** | | | | | | | | | |
| L2453695-01 WATER | 09/21/24 00:12 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453695-02 WATER | 09/21/24 00:12 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453695-03 WATER | 09/21/24 00:12 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 06:40 | Shaylee Amidon | 1 | K |
| WG1974465-1 BLANK | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| | **Sharing Qc's with WG1974466** | | | | | | | | | |
| WG1974465-2 LCS | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974465-3 LCSD | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974465-4 MS | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974465-5 MSD | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |



Reported: 23-SEP-24 02:14 PM

# Semivolatiles Data
# by Method 8270D-SIM

# Semivolatiles QC Summary

# Surrogate Recovery Summary
# Form 2
# Semivolatiles

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Water**

| CLIENT ID (LAB SAMPLE NO.) | S1 (2FP) | S2 (PHL) | S3 (NBZ) | S4 (FBP) | S5 (TBP) | S6 (TPH) | TOT OUT |
|---|---|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 21 | 22 | 123* | 87 | 40 | 99 | 1 |
| MW-1DR2 (L2453053-02) | 54 | 39 | 113 | 75 | 71 | 85 | 0 |
| MW-11S (L2453053-03) | 37 | 33 | 125* | 85 | 45 | 98 | 1 |
| MW-11D (L2453053-04) | 58 | 40 | 121* | 83 | 68 | 94 | 1 |
| DUP_091624 (L2453053-05) | 13* | 17 | 96 | 67 | 14 | 76 | 1 |
| WG1974466-1BLANK | 38 | 27 | 59 | 74 | 79 | 73 | 0 |
| WG1974466-2LCS | 13* | 17 | 61 | 76 | 31 | 80 | 1 |
| WG1974466-3LCSD | 51 | 40 | 69 | 84 | 105 | 86 | 0 |
| MW-1SRMS | 63 | 46 | 131* | 89 | 129* | 103 | 2 |
| MW-1SRMSD | 60 | 45 | 129* | 84 | 123* | 97 | 2 |

**QC LIMITS**

(21-120) 2FP = 2-FLUOROPHENOL
(10-120) PHL = PHENOL-D6
(23-120) NBZ = NITROBENZENE-D5
(15-120) FBP = 2-FLUOROBIPHENYL
(10-120) TBP = 2,4,6-TRIBROMOPHENOL
(41-149) TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

# Laboratory Control Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974466-2 **Analysis Date** : 09/21/24 17:54 | **File ID** | : 974466-2 |
| **LCSD Sample ID** | : WG1974466-3 **Analysis Date** : 09/21/24 18:11 | **File ID** | : 974466-3 |

| | Laboratory Control Sample | | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Acenaphthene | 20 | 16 | 83 | | 20 | 19 | 94 | 12 | 40-140 | 40 |
| 2-Chloronaphthalene | 20 | 15 | 76 | | 20 | 18 | 88 | 15 | 40-140 | 40 |
| Fluoranthene | 20 | 17 | 83 | | 20 | 18 | 92 | 10 | 40-140 | 40 |
| Hexachlorobutadiene | 20 | 13 | 67 | | 20 | 16 | 80 | 18 | 40-140 | 40 |
| Naphthalene | 20 | 14 | 72 | | 20 | 17 | 84 | 15 | 40-140 | 40 |
| Benzo(a)anthracene | 20 | 18 | 88 | | 20 | 19 | 96 | 9 | 40-140 | 40 |
| Benzo(a)pyrene | 20 | 16 | 81 | | 20 | 17 | 87 | 7 | 40-140 | 40 |
| Benzo(b)fluoranthene | 20 | 16 | 79 | | 20 | 17 | 87 | 10 | 40-140 | 40 |
| Benzo(k)fluoranthene | 20 | 16 | 80 | | 20 | 17 | 84 | 5 | 40-140 | 40 |
| Chrysene | 20 | 17 | 84 | | 20 | 18 | 92 | 9 | 40-140 | 40 |
| Acenaphthylene | 20 | 15 | 75 | | 20 | 17 | 86 | 14 | 40-140 | 40 |
| Anthracene | 20 | 18 | 90 | | 20 | 20 | 99 | 10 | 40-140 | 40 |
| Benzo(ghi)perylene | 20 | 17 | 84 | | 20 | 18 | 90 | 7 | 40-140 | 40 |
| Fluorene | 20 | 16 | 81 | | 20 | 18 | 90 | 11 | 40-140 | 40 |
| Phenanthrene | 20 | 17 | 87 | | 20 | 20 | 98 | 12 | 40-140 | 40 |
| Dibenzo(a,h)anthracene | 20 | 18 | 90 | | 20 | 19 | 96 | 6 | 40-140 | 40 |
| Indeno(1,2,3-cd)pyrene | 20 | 19 | 93 | | 20 | 19 | 97 | 4 | 40-140 | 40 |
| Pyrene | 20 | 17 | 83 | | 20 | 18 | 91 | 9 | 40-140 | 40 |
| 2-Methylnaphthalene | 20 | 15 | 73 | | 20 | 17 | 84 | 14 | 40-140 | 40 |
| Pentachlorophenol | 20 | 5.3 | 27 | Q | 20 | 24 | 122 | 128 Q | 40-140 | 40 |
| Hexachlorobenzene | 20 | 20 | 98 | | 20 | 22 | 109 | 11 | 40-140 | 40 |
| Hexachloroethane | 20 | 12 | 58 | | 20 | 14 | 68 | 16 | 40-140 | 40 |
| Bis(2-chloroethyl)ether | 20 | 13 | 67 | | 20 | 15 | 76 | 13 | 40-140 | 40 |

# Matrix Spike Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 16:29 |
| **Matrix Spike** | : WG1974466-4 | **MS Analysis Date** | : 09/21/24 16:45 |
| **Matrix Spike Dup** | : WG1974466-5 | **MSD Analysis Date** | : 09/21/24 17:01 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Acenaphthene | ND | 20 | 21 | 110 | 20 | 19 | 95 | 10 | 40-140 | 40 |
| 2-Chloronaphthalene | ND | 20 | 19 | 95 | 20 | 18 | 90 | 5 | 40-140 | 40 |
| Fluoranthene | 0.04J | 20 | 24 | 120 | 20 | 22 | 110 | 9 | 40-140 | 40 |
| Hexachlorobutadiene | ND | 20 | 16 | 80 | 20 | 15 | 75 | 6 | 40-140 | 40 |
| Naphthalene | 0.04JB | 20 | 17 | 85 | 20 | 16 | 80 | 6 | 40-140 | 40 |
| Benzo(a)anthracene | ND | 20 | 24 | 120 | 20 | 22 | 110 | 9 | 40-140 | 40 |
| Benzo(a)pyrene | ND | 20 | 28 | 140 | 20 | 26 | 130 | 7 | 40-140 | 40 |
| Benzo(b)fluoranthene | ND | 20 | 28 | 140 | 20 | 26 | 130 | 7 | 40-140 | 40 |
| Benzo(k)fluoranthene | ND | 20 | 27 | 140 | 20 | 25 | 130 | 8 | 40-140 | 40 |
| Chrysene | ND | 20 | 24 | 120 | 20 | 22 | 110 | 9 | 40-140 | 40 |
| Acenaphthylene | ND | 20 | 21 | 110 | 20 | 20 | 100 | 5 | 40-140 | 40 |
| Anthracene | 0.05J | 20 | 22 | 110 | 20 | 21 | 110 | 5 | 40-140 | 40 |
| Benzo(ghi)perylene | ND | 20 | 26 | 130 | 20 | 24 | 120 | 8 | 40-140 | 40 |
| Fluorene | 0.04J | 20 | 22 | 110 | 20 | 20 | 100 | 10 | 40-140 | 40 |
| Phenanthrene | 0.06J | 20 | 22 | 110 | 20 | 20 | 100 | 10 | 40-140 | 40 |
| Dibenzo(a,h)anthracene | ND | 20 | 23 | 120 | 20 | 22 | 110 | 4 | 40-140 | 40 |
| Indeno(1,2,3-cd)pyrene | ND | 20 | 28 | 140 | 20 | 27 | 140 | 4 | 40-140 | 40 |
| Pyrene | ND | 20 | 23 | 120 | 20 | 22 | 110 | 4 | 40-140 | 40 |
| 2-Methylnaphthalene | ND | 20 | 19 | 95 | 20 | 18 | 90 | 5 | 40-140 | 40 |
| Pentachlorophenol | 0.22J | 20 | 28 | 140 | 20 | 27 | 140 | 4 | 40-140 | 40 |
| Hexachlorobenzene | 0.05J | 20 | 22 | 110 | 20 | 21 | 110 | 5 | 40-140 | 40 |
| Hexachloroethane | ND | 20 | 17 | 85 | 20 | 16 | 80 | 6 | 40-140 | 40 |

# Matrix Spike Sample Summary
# Form 3
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 16:29 |
| **Matrix Spike** | : WG1974466-4 | **MS Analysis Date** | : 09/21/24 16:45 |
| **Matrix Spike Dup** | : WG1974466-5 | **MSD Analysis Date** | : 09/21/24 17:01 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (ug/l)** | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | **Spike Added (ug/l)** | **Spike Conc. (ug/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| Bis(2-chloroethyl)ether | ND | 20 | 19 | 95 | 20 | 18 | 90 | 5 | 40-140 | 40 |

# Method Blank Summary
# Form 4
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974466-1 | **Lab File ID** | : 74466-1 |
| **Instrument ID** | : SV119 | **Extraction Date** | : 09/20/24 |
| **Matrix** | : WATER | **Analysis Date** | : 09/21/24 19:00 |
| **Level** | : LOW | | |

| Client Sample No. | Lab Sample ID | Analysis Date |
|---|---|---|
| MW-1SR | L2453053-01 | 09/21/24 16:29 |
| MW-1SRMS | WG1974466-4 | 09/21/24 16:45 |
| MW-1SRMSD | WG1974466-5 | 09/21/24 17:01 |
| WG1974466-2LCS | WG1974466-2 | 09/21/24 17:54 |
| WG1974466-3LCSD | WG1974466-3 | 09/21/24 18:11 |
| MW-1DR2 | L2453053-02 | 09/21/24 18:38 |
| MW-11S | L2453053-03 | 09/21/24 18:55 |
| MW-11D | L2453053-04 | 09/21/24 19:11 |
| DUP_091624 | L2453053-05 | 09/21/24 19:27 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV119 | **Analysis Date** | : 06/21/24 14:09 |
| **Tune Standard** | : R1846022-1 | **Tune File ID** | : TUNE_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 46.7 |
| 68 | Less than 2.0% of mass 69 | 0.6 (1.4 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.3 (.6 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 55.3 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.8 |
| 275 | 10.0 - 60.0% of Base Peak | 26.8 |
| 365 | Greater than 1.0% of mass 198 | 3.2 |
| 441 | Present, but less than 24% of mass 442 | 17.5 |
| 442 | Base Peak, or >50% of mass 198 | 77.1 |
| 443 | 15.0 - 24.0% of mass 442 | 14.5 (18.9)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| L10 | R1846022-3 | L10 | 06/21/24 14:50 |
| L9 | R1846022-11 | L9 | 06/21/24 15:06 |
| L8 | R1846022-10 | L8 | 06/21/24 15:23 |
| L7 | R1846022-9 | L7 | 06/21/24 15:39 |
| L6 | R1846022-8 | L6 | 06/21/24 15:55 |
| L5 | R1846022-7 | L5 | 06/21/24 16:12 |
| L4 | R1846022-6 | L4 | 06/21/24 16:28 |
| L3 | R1846022-5 | L3 | 06/21/24 16:44 |
| L2 | R1846022-4 | L2 | 06/21/24 17:01 |
| L1 | R1846022-2 | L1 | 06/21/24 17:17 |
| ICV Quant Report | R1846022-12 | ICV | 06/21/24 17:33 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV119 | **Analysis Date** | : 09/21/24 14:24 |
| **Tune Standard** | : WG1974651-1 | **Tune File ID** | : deg0921a_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 50.6 |
| 68 | Less than 2.0% of mass 69 | 0.6 (1.4 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.2 (.4 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 54.5 |
| 197 | Less than 2.0% of mass 198 | 0.4 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.5 |
| 275 | 10.0 - 60.0% of Base Peak | 27 |
| 365 | Greater than 1.0% of mass 198 | 3.3 |
| 441 | Present, but less than 24% of mass 442 | 19.3 |
| 442 | Base Peak, or >50% of mass 198 | 99.6 |
| 443 | 15.0 - 24.0% of mass 442 | 19.2 (19.3)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| WG1974651-4TFACTOR-B | WG1974651-4 | DEG0921A | 09/21/24 14:24 |
| WG1974651-5TFACTOR-P | WG1974651-5 | DEG0921A | 09/21/24 14:24 |
| WG1974651-3CCAL | WG1974651-3 | CCV0921 | 09/21/24 14:42 |
| WG1974466-2LCS | WG1974466-2 | 974466-2 | 09/21/24 17:54 |
| WG1974466-3LCSD | WG1974466-3 | 974466-3 | 09/21/24 18:11 |
| WG1974466-1BLANK | WG1974466-1 | 74466-1 | 09/21/24 19:00 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV125 | **Analysis Date** | : 09/17/24 18:19 |
| **Tune Standard** | : R1877935-12 | **Tune File ID** | : Tunea_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 57.2 |
| 68 | Less than 2.0% of mass 69 | 0.8 (1.8 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.3 (.6 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 52.3 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 6.4 |
| 275 | 10.0 - 60.0% of Base Peak | 25.7 |
| 365 | Greater than 1.0% of mass 198 | 3 |
| 441 | Present, but less than 24% of mass 442 | 17.6 |
| 442 | Base Peak, or >50% of mass 198 | 89.4 |
| 443 | 15.0 - 24.0% of mass 442 | 17 (19.1)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| IL10 | R1877935-2 | IL10 | 09/17/24 18:45 |
| IL9 | R1877935-10 | IL9 | 09/17/24 19:01 |
| IL8 | R1877935-9 | IL8 | 09/17/24 19:17 |
| IL7 | R1877935-8 | IL7 | 09/17/24 19:33 |
| IL6 | R1877935-7 | IL6 | 09/17/24 19:49 |
| IL5 | R1877935-6 | IL5 | 09/17/24 20:05 |
| IL4 | R1877935-5 | IL4 | 09/17/24 20:21 |
| IL3 | R1877935-4 | IL3 | 09/17/24 20:37 |
| IL2 | R1877935-3 | IL2 | 09/17/24 20:53 |
| IL1 | R1877935-1 | IL1 | 09/17/24 21:09 |
| ICV Quant Report | R1877935-11 | ICV | 09/17/24 21:25 |

# Instrument Performance Check (Tune) Summary
# Form 5
# Semivolatiles
# Decafluorotriphenylphosphine (DFTPP)

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV125 | **Analysis Date** | : 09/21/24 13:18 |
| **Tune Standard** | : WG1974631-1 | **Tune File ID** | : deg0921_tune |

| m/e | Ion Abundance Criteria | %Relative Abundance |
|---|---|---|
| 51 | 10.0 - 80.0% of Base Peak | 50.2 |
| 68 | Less than 2.0% of mass 69 | 0.5 (1.3 )1 |
| 69 | | 100 |
| 70 | Less than 2.0% of mass 69 | 0.2 (.5 )1 |
| 127 | 10.0 - 80.0% of Base Peak | 50.4 |
| 197 | Less than 2.0% of mass 198 | 0 |
| 198 | Base Peak, or >50% of mass 442 | 100 |
| 199 | 5.0 - 9.0% of mass 198 | 7 |
| 275 | 10.0 - 60.0% of Base Peak | 26 |
| 365 | Greater than 1.0% of mass 198 | 3 |
| 441 | Present, but less than 24% of mass 442 | 18.2 |
| 442 | Base Peak, or >50% of mass 198 | 96.7 |
| 443 | 15.0 - 24.0% of mass 442 | 19.7 (20.4)2 |

1-Value is % of mass 69 2-Value is % of mass 442

**This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Client Sample ID | Lab Sample ID | File ID | Analysis Date/Time |
|---|---|---|---|
| WG1974631-4TFACTOR-B | WG1974631-4 | DEG0921 | 09/21/24 13:18 |
| WG1974631-5TFACTOR-P | WG1974631-5 | DEG0921 | 09/21/24 13:18 |
| WG1974631-3CCAL | WG1974631-3 | CCV0921 | 09/21/24 13:37 |
| MW-1SR | L2453053-01 | 53053-01 | 09/21/24 16:29 |
| WG1974466-4MS | WG1974466-4 | 974466-4 | 09/21/24 16:45 |
| WG1974466-5MSD | WG1974466-5 | 974466-5 | 09/21/24 17:01 |
| MW-1DR2 | L2453053-02 | 53053-02 | 09/21/24 18:38 |
| MW-11S | L2453053-03 | 53053-03 | 09/21/24 18:55 |
| MW-11D | L2453053-04 | 53053-04 | 09/21/24 19:11 |
| DUP_091624 | L2453053-05 | 53053-05 | 09/21/24 19:27 |

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV125 | **Analysis Date** | : 09/21/24 13:37:00 |
| **Sample No** | : WG1974631-3 | **Lab File ID** | : CCV0921 |

| | 1,4-Dichlorobenzene-d4 | | Naphthalene-d8 | | Acenaphthene-d10 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974631-3 | 446131 | 2.24 | 1575323 | 2.91 | 1015344 | 3.89 |
| Upper Limit | 892262 | 2.74 | 3150646 | 3.41 | 2030688 | 4.39 |
| Lower Limit | 223066 | 1.74 | 787662 | 2.41 | 507672 | 3.39 |
| Sample ID | | | | | | |
| MW-1SR | 380231 | 2.24 | 1322085 | 2.91 | 806100 | 3.88 |
| MW-1SR MS | 389367 | 2.24 | 1438241 | 2.90 | 873356 | 3.89 |
| MW-1SR MSD | 400353 | 2.24 | 1478619 | 2.91 | 898754 | 3.89 |
| MW-1DR2 | 379831 | 2.24 | 1324779 | 2.91 | 814984 | 3.89 |
| MW-11S | 371058 | 2.24 | 1291741 | 2.91 | 792555 | 3.89 |
| MW-11D | 364228 | 2.24 | 1261856 | 2.91 | 778405 | 3.89 |
| DUP_091624 | 368618 | 2.24 | 1283910 | 2.91 | 783474 | 3.89 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV125 | **Analysis Date** | : 09/21/24 13:37:00 |
| **Sample No** | : WG1974631-3 | **Lab File ID** | : CCV0921 |

| | Phenanthrene-d10 | | Chrysene-d12 | | Perylene-d12 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974631-3 | 2145597 | 4.73 | 2338315 | 6.28 | 2818319 | 7.48 |
| Upper Limit | 4291194 | 5.23 | 4676630 | 6.78 | 5636638 | 7.98 |
| Lower Limit | 1072799 | 4.23 | 1169158 | 5.78 | 1409160 | 6.98 |
| Sample ID | | | | | | |
| MW-1SR | 1729217 | 4.73 | 1844386 | 6.26 | 2003654 | 7.46 |
| MW-1SR MS | 1849911 | 4.73 | 1889459 | 6.27 | 2111271 | 7.46 |
| MW-1SR MSD | 1893295 | 4.73 | 1944304 | 6.27 | 2159957 | 7.47 |
| MW-1DR2 | 1739791 | 4.73 | 1884107 | 6.26 | 2109673 | 7.46 |
| MW-11S | 1694404 | 4.73 | 1825703 | 6.26 | 2036970 | 7.46 |
| MW-11D | 1685764 | 4.73 | 1832150 | 6.27 | 2048426 | 7.46 |
| DUP_091624 | 1674672 | 4.72 | 1806226 | 6.27 | 2021147 | 7.47 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV119 | **Analysis Date** | : 09/21/24 14:42:00 |
| **Sample No** | : WG1974651-3 | **Lab File ID** | : CCV0921 |

| | 1,4-Dichlorobenzene-d4 | | Naphthalene-d8 | | Acenaphthene-d10 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974651-3 | 178527 | 2.22 | 703917 | 2.88 | 468873 | 3.84 |
| Upper Limit | 357054 | 2.72 | 1407834 | 3.38 | 937746 | 4.34 |
| Lower Limit | 89264 | 1.72 | 351959 | 2.38 | 234437 | 3.34 |
| Sample ID | | | | | | |
| WG1974466-2 LCS | 216692 | 2.23 | 798543 | 2.88 | 480732 | 3.85 |
| WG1974466-3 LCSD | 217531 | 2.23 | 798086 | 2.88 | 485242 | 3.85 |
| WG1974466-1 BLANK | 213233 | 2.23 | 779703 | 2.88 | 491564 | 3.84 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

# Internal Standard Area and RT Summary
# Form 8a
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : SV119 | **Analysis Date** | : 09/21/24 14:42:00 |
| **Sample No** | : WG1974651-3 | **Lab File ID** | : CCV0921 |

| | Phenanthrene-d10 | | Chrysene-d12 | | Perylene-d12 | |
|---|---|---|---|---|---|---|
| | Area | RT | Area | RT | Area | RT |
| WG1974651-3 | 1018896 | 4.67 | 1106666 | 6.27 | 1122604 | 7.46 |
| Upper Limit | 2037792 | 5.17 | 2213332 | 6.77 | 2245208 | 7.96 |
| Lower Limit | 509448 | 4.17 | 553333 | 5.77 | 561302 | 6.96 |
| Sample ID | | | | | | |
| WG1974466-2 LCS | 1035494 | 4.68 | 1101790 | 6.25 | 1158738 | 7.44 |
| WG1974466-3 LCSD | 1031210 | 4.68 | 1085506 | 6.25 | 1138655 | 7.44 |
| WG1974466-1 BLANK | 1069097 | 4.68 | 1266589 | 6.25 | 1217077 | 7.44 |

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14021-1
**Page:** 1

## EPA 8270E Low Level PAH (WATER)

**Holding Time:** 7 days
**Container/Sample Preservation:** 2 - Amber 1000ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 83-32-9 | 0.1 | 0.035 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| 2-Chloronaphthalene | 91-58-7 | 0.2 | 0.035 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Fluoranthene | 206-44-0 | 0.1 | 0.038 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Hexachlorobutadiene | 87-68-3 | 0.5 | 0.036 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Naphthalene | 91-20-3 | 0.1 | 0.043 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Benzo(a)anthracene | 56-55-3 | 0.1 | 0.018 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Benzo(a)pyrene | 50-32-8 | 0.1 | 0.039 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Benzo(b)fluoranthene | 205-99-2 | 0.1 | 0.016 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Benzo(k)fluoranthene | 207-08-9 | 0.1 | 0.042 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Chrysene | 218-01-9 | 0.1 | 0.038 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Acenaphthylene | 208-96-8 | 0.1 | 0.035 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Anthracene | 120-12-7 | 0.1 | 0.035 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Benzo(ghi)perylene | 191-24-2 | 0.1 | 0.042 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Fluorene | 86-73-7 | 0.1 | 0.037 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Phenanthrene | 85-01-8 | 0.1 | 0.015 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Dibenzo(a,h)anthracene | 53-70-3 | 0.1 | 0.039 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 0.1 | 0.04 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Pyrene | 129-00-0 | 0.1 | 0.04 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| 1-Methylnaphthalene | 90-12-0 | 0.1 | 0.041 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| 2-Methylnaphthalene | 91-57-6 | 0.1 | 0.045 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Pentachlorophenol | 87-86-5 | 0.8 | 0.22 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Hexachlorobenzene | 118-74-1 | 0.8 | 0.032 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| Hexachloroethane | 67-72-1 | 0.8 | 0.03 | ug/l | 40-140 | 40 | 40-140 | 40 | 40 | | | |
| *2-Fluorophenol* | *367-12-4* | | | | | | | | | *21-120* | | |
| *Phenol-d6* | *13127-88-3* | | | | | | | | | *10-120* | | |
| *Nitrobenzene-d5* | *4165-60-0* | | | | | | | | | *23-120* | | |
| *2-Fluorobiphenyl* | *321-60-8* | | | | | | | | | *15-120* | | |
| *2,4,6-Tribromophenol* | *118-79-6* | | | | | | | | | *10-120* | | |
| *4-Terphenyl-d14* | *1718-51-0* | | | | | | | | | *41-149* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14022-1
**Page:** 1

## EPA 8270E Low Level PAH (SOIL)

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 83-32-9 | 6.68 | 1.4028 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 2-Chloronaphthalene | 91-58-7 | 6.68 | 0.8684 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Fluoranthene | 206-44-0 | 6.68 | 0.4676 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Hexachlorobutadiene | 87-68-3 | 6.68 | 0.9352 | ug/kg | 34-107 | 50 | 40-140 | 50 | 50 | | | |
| Naphthalene | 91-20-3 | 6.68 | 1.2024 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(a)anthracene | 56-55-3 | 6.68 | 0.6346 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(a)pyrene | 50-32-8 | 6.68 | 0.8016 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(b)fluoranthene | 205-99-2 | 6.68 | 0.6346 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(k)fluoranthene | 207-08-9 | 6.68 | 0.6012 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Chrysene | 218-01-9 | 6.68 | 0.501 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Acenaphthylene | 208-96-8 | 6.68 | 0.835 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Anthracene | 120-12-7 | 6.68 | 0.5344 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Benzo(ghi)perylene | 191-24-2 | 6.68 | 0.5678 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Fluorene | 86-73-7 | 6.68 | 0.8016 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Phenanthrene | 85-01-8 | 6.68 | 0.5678 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Dibenzo(a,h)anthracene | 53-70-3 | 6.68 | 0.668 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 6.68 | 0.8016 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Pyrene | 129-00-0 | 6.68 | 0.4676 | ug/kg | 35-142 | 50 | 35-142 | 50 | 50 | | | |
| 1-Methylnaphthalene | 90-12-0 | 6.68 | 1.0354 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| 2-Methylnaphthalene | 91-57-6 | 6.68 | 1.9038 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Pentachlorophenol | 87-86-5 | 26.72 | 2.9392 | ug/kg | 17-109 | 50 | 17-109 | 50 | 50 | | | |
| Hexachlorobenzene | 118-74-1 | 6.68 | 0.7014 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Hexachloroethane | 67-72-1 | 6.68 | 1.2358 | ug/kg | 29-106 | 50 | 40-140 | 50 | 50 | | | |
| *2-Fluorophenol* | *367-12-4* | | | | | | | | | *25-120* | | |
| *Phenol-d6* | *13127-88-3* | | | | | | | | | *10-120* | | |
| *Nitrobenzene-d5* | *4165-60-0* | | | | | | | | | *23-120* | | |
| *2-Fluorobiphenyl* | *321-60-8* | | | | | | | | | *30-120* | | |
| *2,4,6-Tribromophenol* | *118-79-6* | | | | | | | | | *10-136* | | |
| *4-Terphenyl-d14* | *1718-51-0* | | | | | | | | | *18-120* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Semivolatile Sample Data

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 16:29 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-01 | **Analyst** | : RP |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 0.20 | 0.02 | U |
| 206-44-0 | Fluoranthene | 0.04 | 0.10 | 0.03 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | 0.04 | 0.10 | 0.02 | JB |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | 0.05 | 0.10 | 0.02 | J |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | 0.04 | 0.10 | 0.03 | J |
| 85-01-8 | Phenanthrene | 0.06 | 0.10 | 0.04 | J |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.02 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.02 | U |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | ND | 0.10 | 0.03 | U |
| 87-86-5 | Pentachlorophenol | 0.22 | 0.80 | 0.06 | J |
| 118-74-1 | Hexachlorobenzene | 0.05 | 0.80 | 0.01 | J |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 16:29 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-01 | **Analyst** | : RP |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 18:38 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-02 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 0.20 | 0.02 | U |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.03 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | ND | 0.10 | 0.02 | U |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | ND | 0.10 | 0.02 | U |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | ND | 0.10 | 0.03 | U |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.04 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 0.03 | 0.10 | 0.02 | J |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 0.02 | 0.10 | 0.02 | J |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | ND | 0.10 | 0.03 | U |
| 87-86-5 | Pentachlorophenol | ND | 0.80 | 0.06 | U |
| 118-74-1 | Hexachlorobenzene | ND | 0.80 | 0.01 | U |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 18:38 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-02 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 18:55 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-03 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 0.20 | 0.02 | U |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.03 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | 0.03 | 0.10 | 0.02 | JB |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | ND | 0.10 | 0.02 | U |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | 0.03 | 0.10 | 0.03 | J |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.04 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.02 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.02 | U |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | ND | 0.10 | 0.03 | U |
| 87-86-5 | Pentachlorophenol | ND | 0.80 | 0.06 | U |
| 118-74-1 | Hexachlorobenzene | 0.02 | 0.80 | 0.01 | J |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 18:55 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-03 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 19:11 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-04 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 0.20 | 0.02 | U |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.03 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | 0.04 | 0.10 | 0.02 | JB |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | ND | 0.10 | 0.02 | U |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | ND | 0.10 | 0.03 | U |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.04 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.02 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.02 | U |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | ND | 0.10 | 0.03 | U |
| 87-86-5 | Pentachlorophenol | ND | 0.80 | 0.06 | U |
| 118-74-1 | Hexachlorobenzene | ND | 0.80 | 0.01 | U |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 19:11 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-04 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 19:27 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-05 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 0.20 | 0.02 | U |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.03 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | 0.04 | 0.10 | 0.02 | JB |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | ND | 0.10 | 0.02 | U |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | ND | 0.10 | 0.03 | U |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.04 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.02 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.02 | U |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | ND | 0.10 | 0.03 | U |
| 87-86-5 | Pentachlorophenol | ND | 0.80 | 0.06 | U |
| 118-74-1 | Hexachlorobenzene | ND | 0.80 | 0.01 | U |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 19:27 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 53053-05 | **Analyst** | : DV |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV125 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974466-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974466-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 19:00 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 74466-1 | **Analyst** | : RP |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV119 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.02 | U |
| 91-58-7 | 2-Chloronaphthalene | 0.04 | 0.20 | 0.02 | J |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.03 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.50 | 0.02 | U |
| 91-20-3 | Naphthalene | 0.10 | 0.10 | 0.02 | |
| 56-55-3 | Benzo(a)anthracene | ND | 0.10 | 0.03 | U |
| 50-32-8 | Benzo(a)pyrene | ND | 0.10 | 0.02 | U |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.03 | U |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.03 | U |
| 218-01-9 | Chrysene | ND | 0.10 | 0.03 | U |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.02 | U |
| 120-12-7 | Anthracene | 0.04 | 0.10 | 0.02 | J |
| 191-24-2 | Benzo(ghi)perylene | ND | 0.10 | 0.02 | U |
| 86-73-7 | Fluorene | 0.04 | 0.10 | 0.03 | J |
| 85-01-8 | Phenanthrene | 0.05 | 0.10 | 0.04 | J |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.02 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.02 | U |
| 129-00-0 | Pyrene | ND | 0.10 | 0.04 | U |
| 91-57-6 | 2-Methylnaphthalene | 0.06 | 0.10 | 0.03 | J |
| 87-86-5 | Pentachlorophenol | ND | 0.80 | 0.06 | U |
| 118-74-1 | Hexachlorobenzene | 0.06 | 0.80 | 0.01 | J |
| 67-72-1 | Hexachloroethane | ND | 0.80 | 0.02 | U |

# Results Summary
# Form 1
# Semivolatile Organics by GC/MS-SIM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974466-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974466-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 19:00 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8270E-SIM | **Dilution Factor** | : 1 |
| **Lab File ID** | : 74466-1 | **Analyst** | : RP |
| **Sample Amount** | : 100 ml | **Instrument ID** | : SV119 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : RXI-5SilM |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 111-44-4 | Bis(2-chloroethyl)ether | ND | 0.10 | 0.05 | U |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 04:29 pm
Operator : SV125:rp
Sample : L2453053-01,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 21 17:23:41 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.241 | 152 | 380231 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 85.23% | | | |
| 8) Naphthalene-d8 | 2.905 | 136 | 1322085 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 83.92% | | | |
| 17) Acenaphthene-d10 | 3.883 | 164 | 806100 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 79.39% | | | |
| 22) Phenanthrene-d10 | 4.725 | 188 | 1729217 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 80.59% | | | |
| 31) Chrysene-d12 | 6.264 | 240 | 1844386 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 78.88% | | | |
| 36) Perylene-d12 | 7.460 | 264 | 2003654 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 71.09% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.653 | 112 | 38492 | 411.394 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 20.57% | | | |
| 3) Phenol-d6 | 2.050 | 99 | 51737 | 448.371 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 22.42% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 72913 | 1228.582 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 122.86% | | | |
| 13) 2-Fluorobiphenyl | 3.505 | 172 | 243691 | 869.876 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 86.99% | | | |
| 21) 2,4,6-Tribromophenol | 4.328 | 330 | 28342 | 809.806 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 40.49% | | | |
| 30) 4-Terphenyl-d14 | 5.634 | 244 | 346874 | 987.101 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 98.71% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 2.915 | 128 | 1262 | 3.584 | ng/ml# | 72 |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 0.000 | | 0 | N.D. | d | |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 0.000 | | 0 | N.D. | d | |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 4.191 | 166 | 1012 | 3.755 | ng/ml | 97 |
| 24) Hexachlorobenzene | 4.511 | 284 | 601 | 5.431 | ng/ml | 99 |

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 04:29 pm
Operator : SV125:rp
Sample : L2453053-01,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 21 17:23:41 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 4.620 | 266 | 572M6 | 22.564 | ng/ml | |
| 26) Phenanthrene | 4.738 | 178 | 2752M6 | 6.169 | ng/ml | |
| 27) Anthracene | 4.764 | 178 | 1975 | 4.462 | ng/ml | 98 |
| 28) Fluoranthene | 5.415 | 202 | 2173 | 4.294 | ng/ml | 96 |
| 29) Pyrene | 5.543 | 202 | 1981 | 3.711 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 38) Benzo[k]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 39) Benzo[a]pyrene | 0.000 | | 0 | N.D. | d | |
| 40) Indeno[1,2,3-cd]pyrene | 0.000 | | 0 | N.D. | d | |
| 41) Dibenzo[a,h]anthracene | 0.000 | | 0 | N.D. | d | |
| 42) Benzo[g,h,i]perylene | 0.000 | | 0 | N.D. | d | |

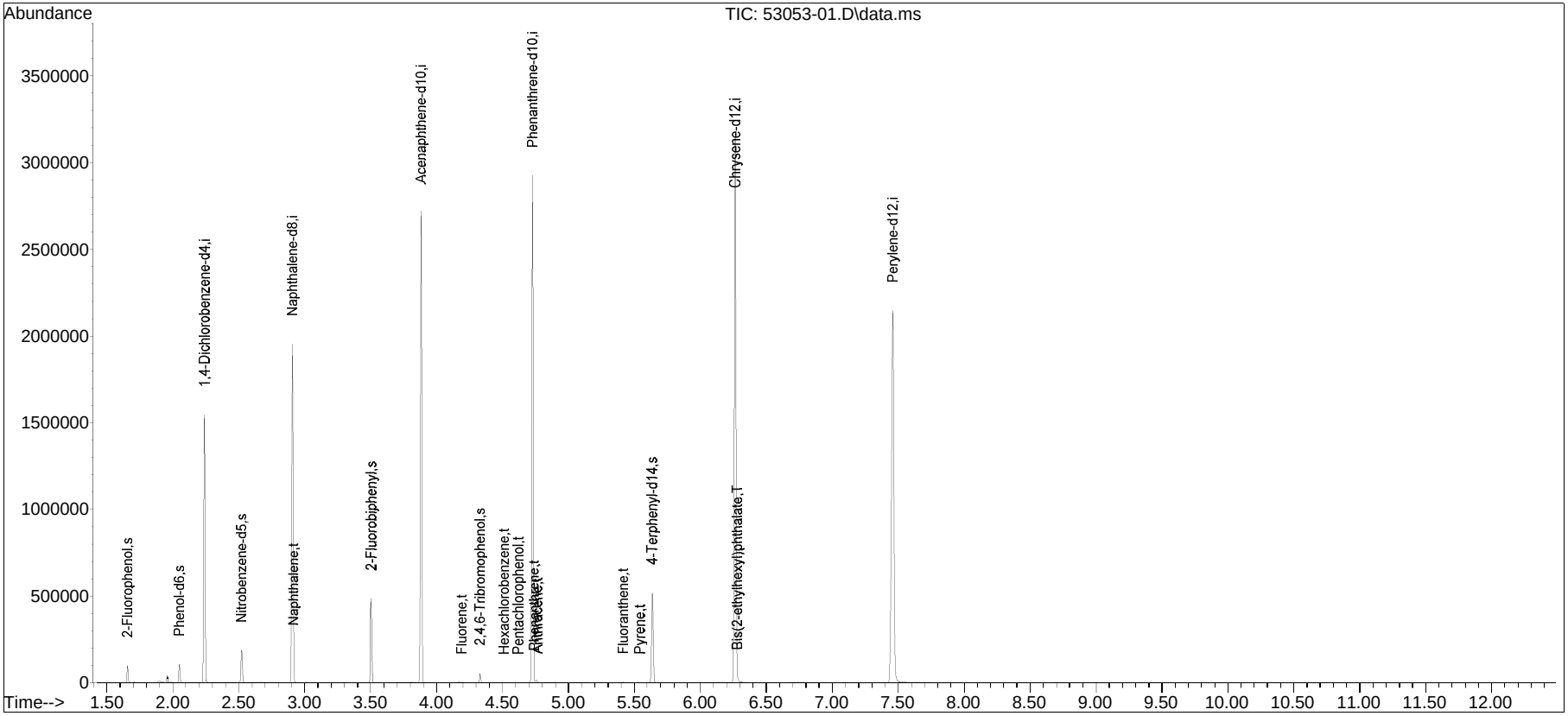
(#) = qualifier out of range (m) = manual integration (+) = signals summed

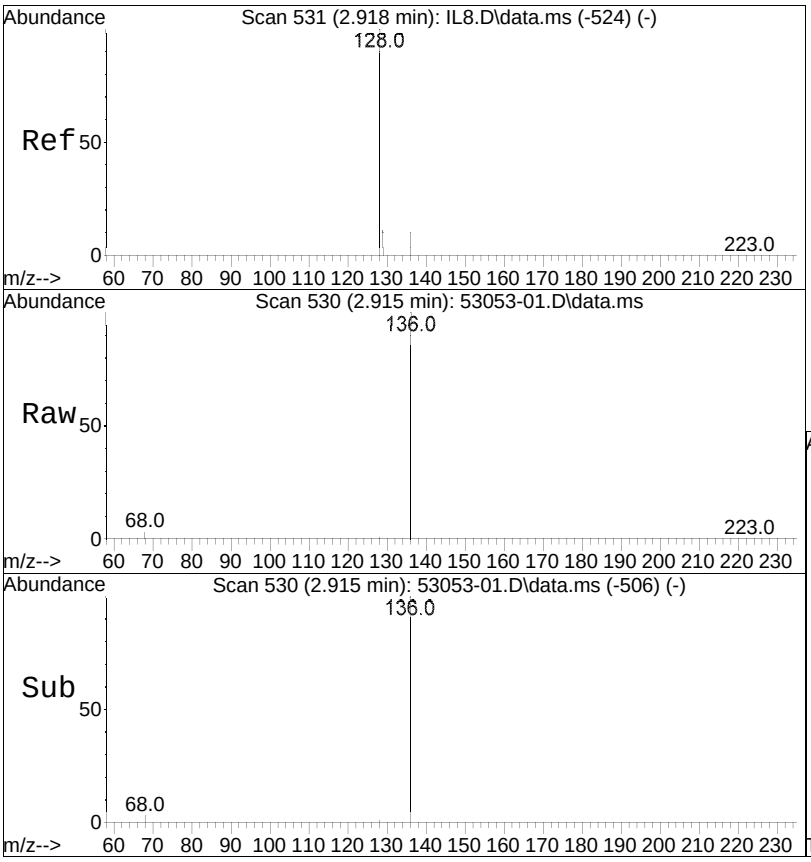
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-01.D
Acq On : 21 Sep 2024 04:29 pm
Operator : SV125:rp
Sample : L2453053-01,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 21 17:23:41 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

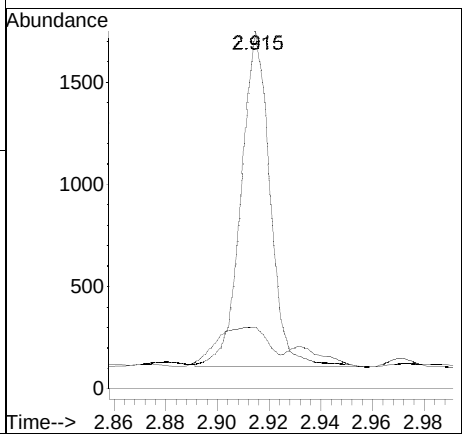


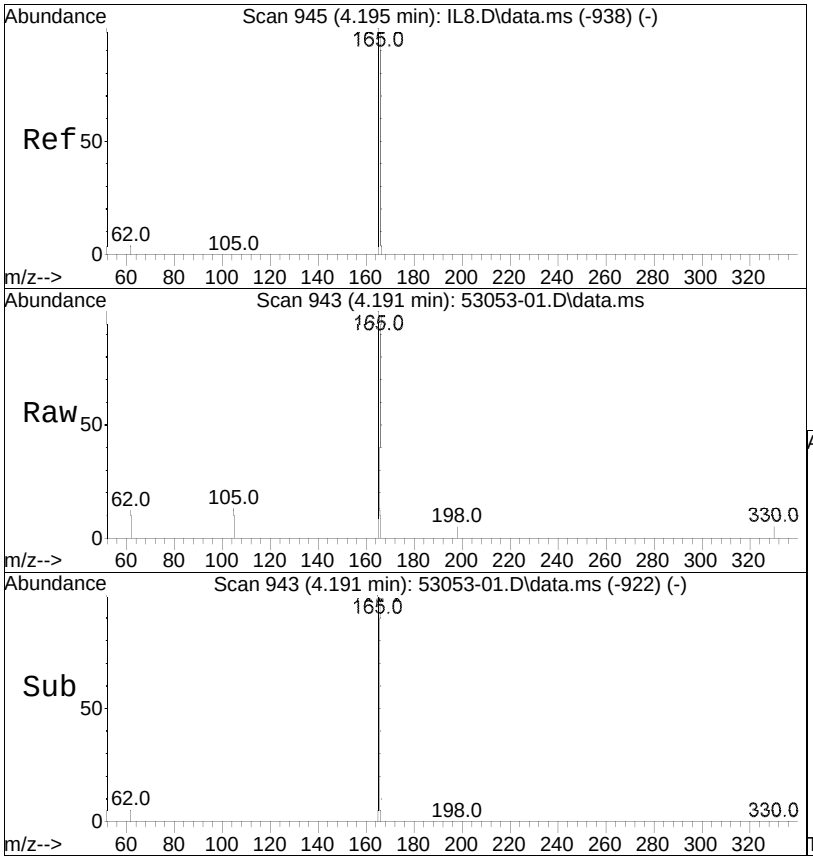



#9
Naphthalene
Concen: 3.58 ng/ml
RT: 2.915 min Scan# 530
Delta R.T. 0.000 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:128 Resp: 1262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 21.7 | 8.8 | 13.2# |
| 127 | 0.0 | 0.0 | 0.0 |

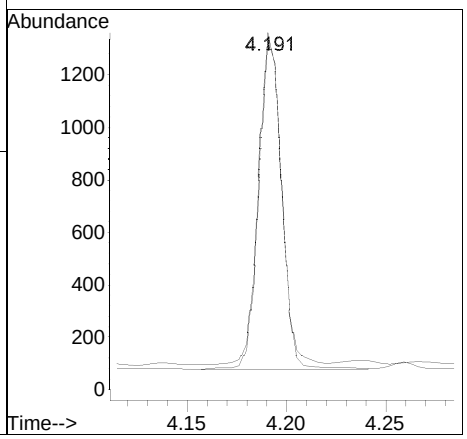


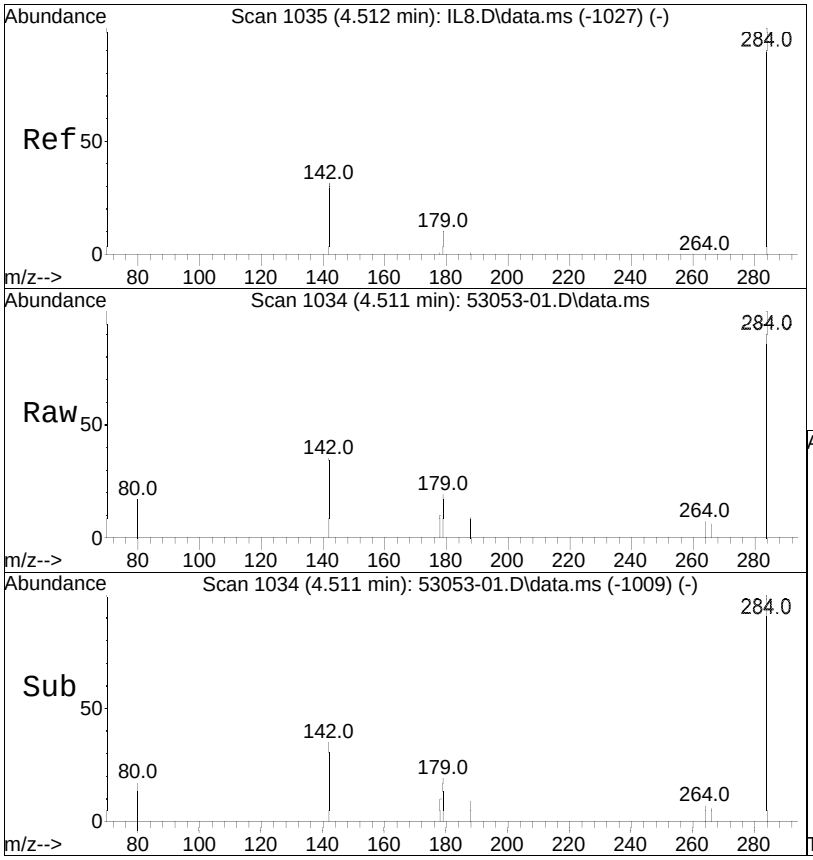



#20
Fluorene
Concen: 3.76 ng/ml
RT: 4.191 min Scan# 943
Delta R.T. -0.006 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:166 Resp: 1012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.6 | 82.0 | 123.0 |

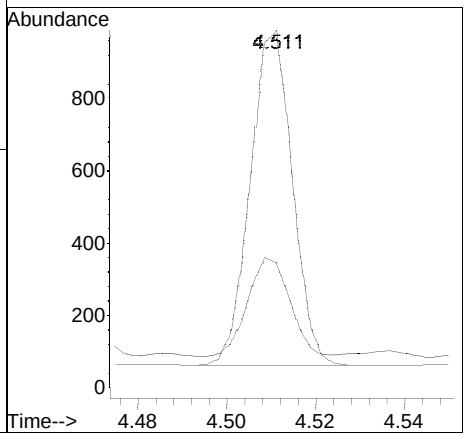


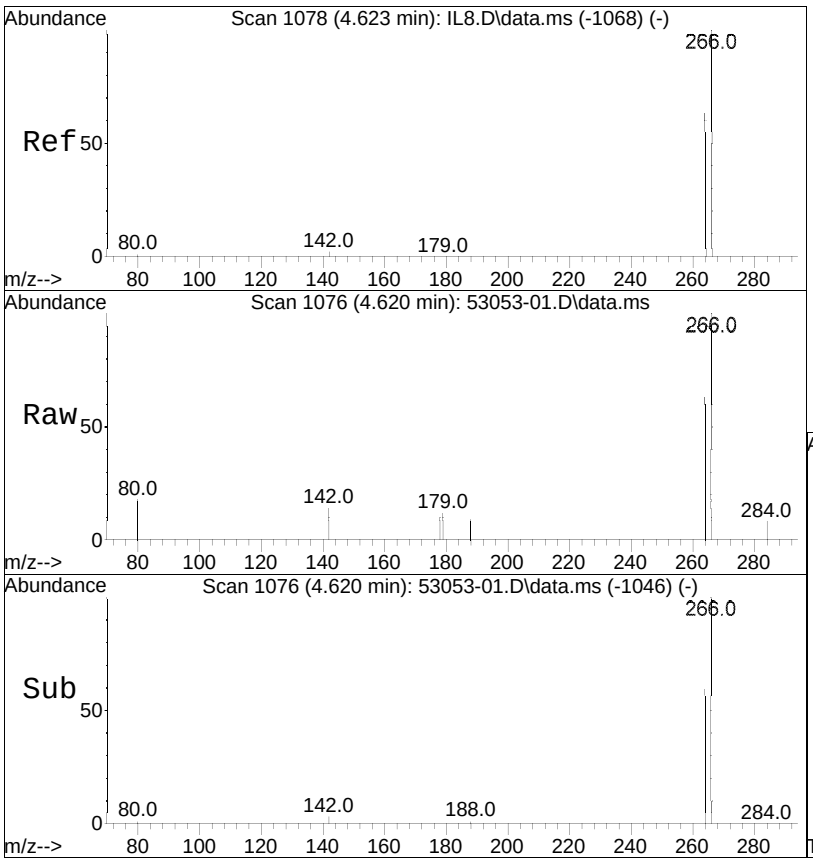



#24
Hexachlorobenzene
Concen: 5.43 ng/ml
RT: 4.511 min Scan# 1034
Delta R.T. -0.001 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:284 Resp: 601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 30.0 | 24.4 | 36.6 |

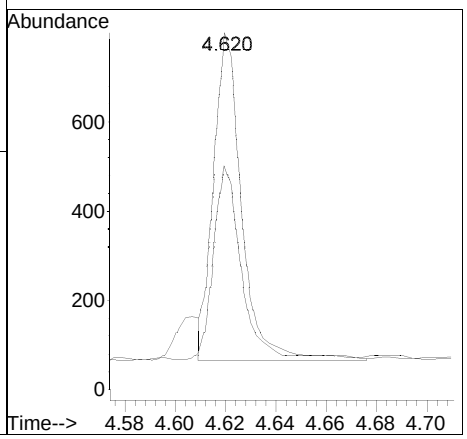


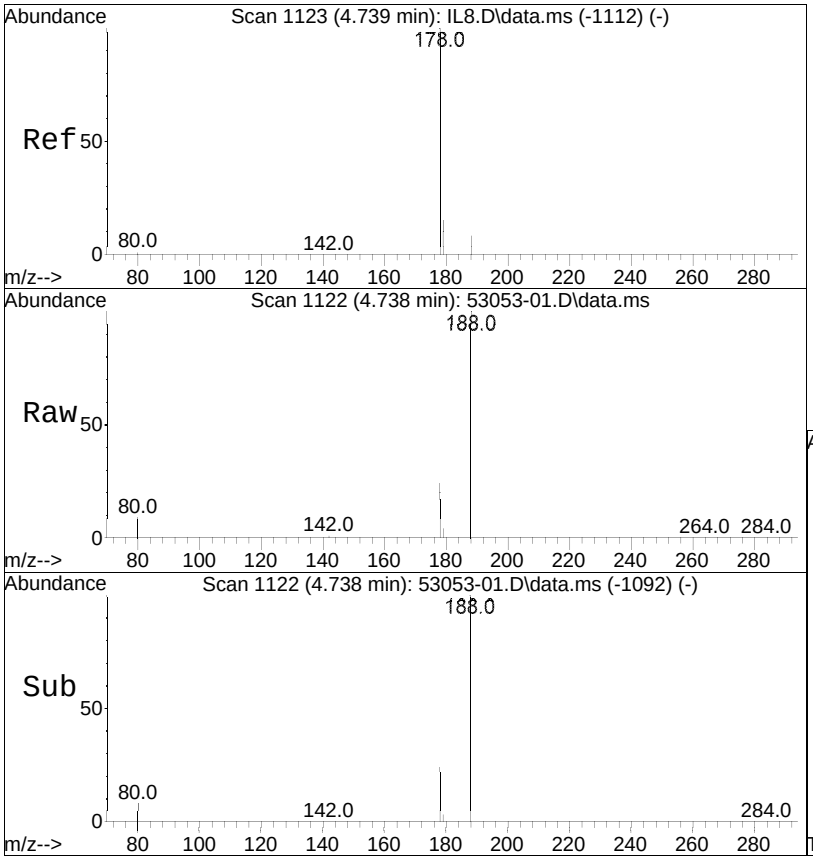



#25
Pentachlorophenol
Concen: 22.56 ng/ml M6
RT: 4.620 min Scan# 1076
Delta R.T. -0.003 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:266 Resp: 572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 57.0 | 50.4 | 75.6 |

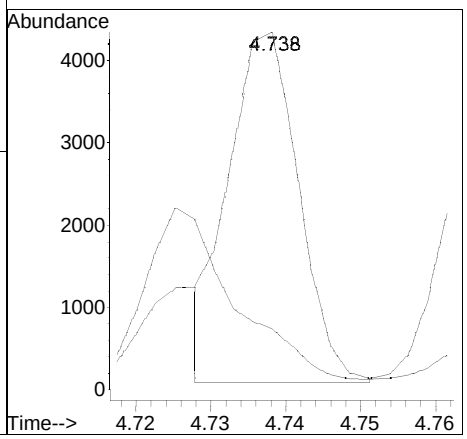


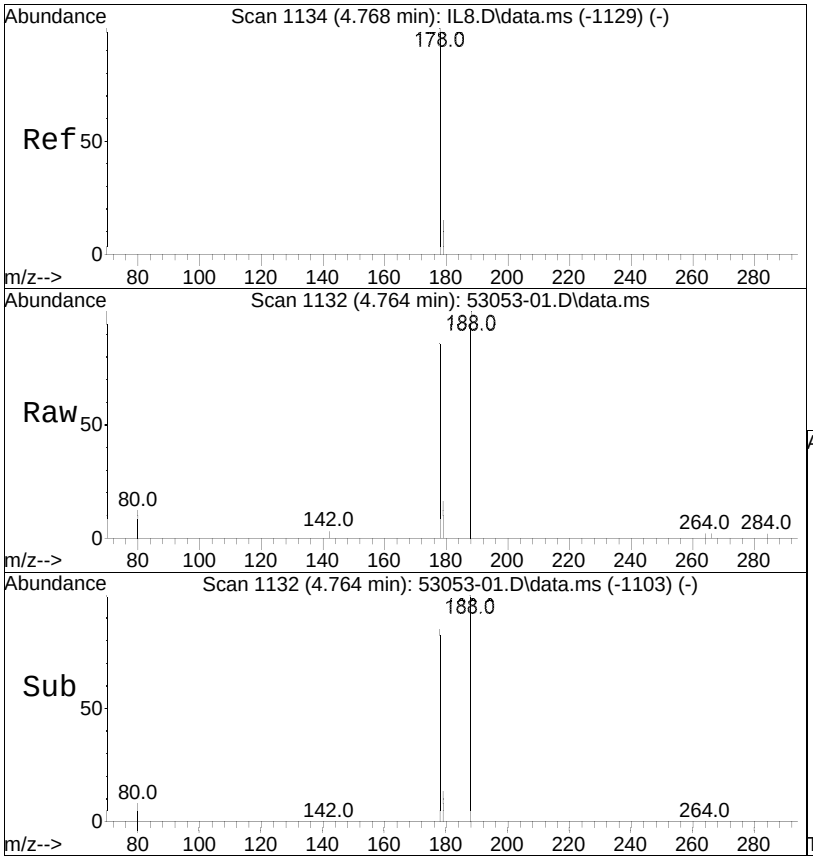



#26
Phenanthrene
Concen: 6.17 ng/ml M6
RT: 4.738 min Scan# 1122
Delta R.T. -0.003 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:178 Resp: 2752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 13.8 | 12.6 | 18.8 |

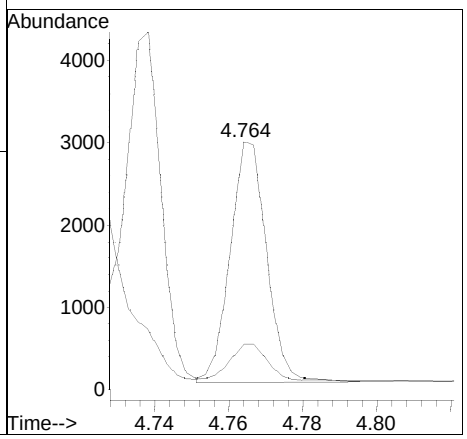


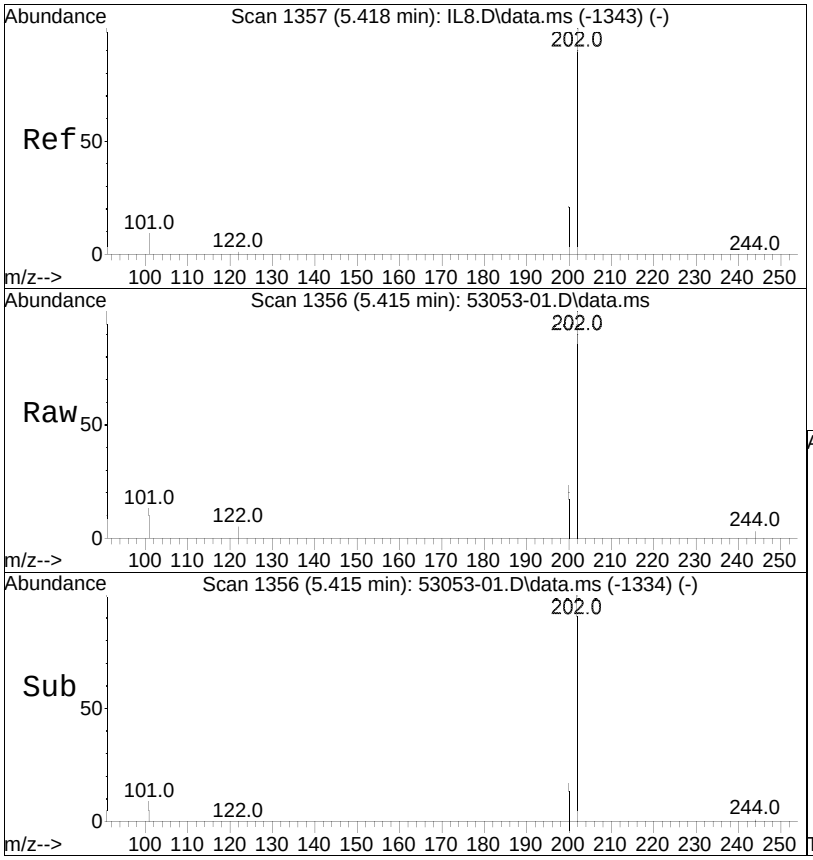



#27
Anthracene
Concen: 4.46 ng/ml
RT: 4.764 min Scan# 1132
Delta R.T. -0.006 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:178 Resp: 1975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.2 | 12.3 | 18.5 |

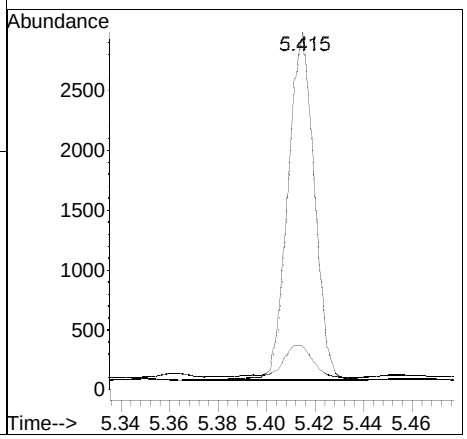


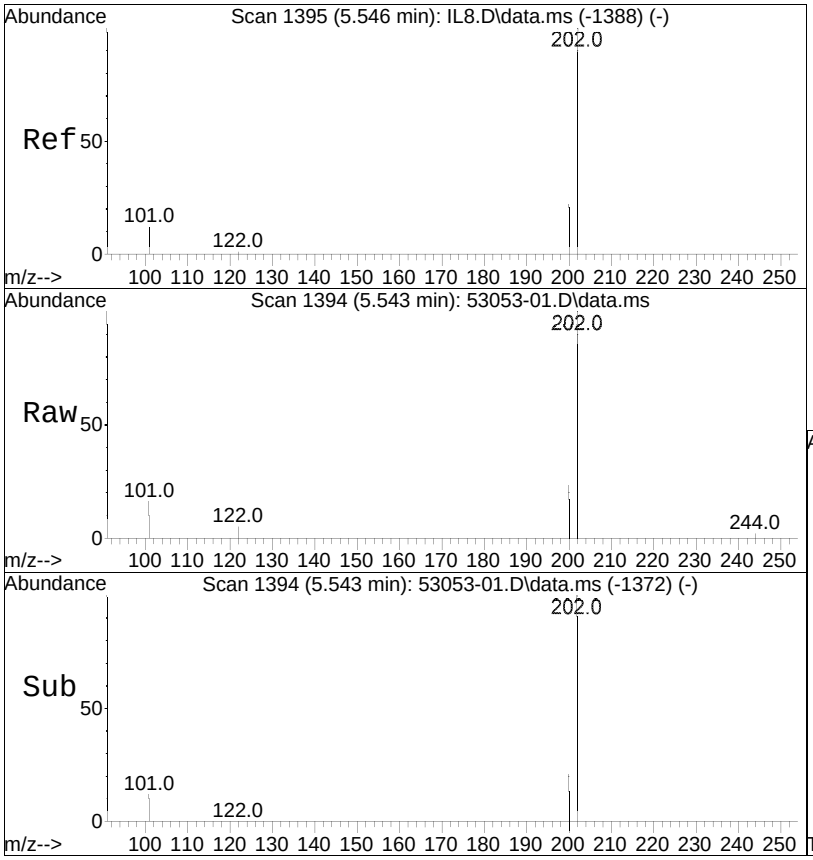



#28
Fluoranthene
Concen: 4.29 ng/ml
RT: 5.415 min Scan# 1356
Delta R.T. -0.006 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:202 Resp: 2173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.9 | 7.6 | 11.4 |

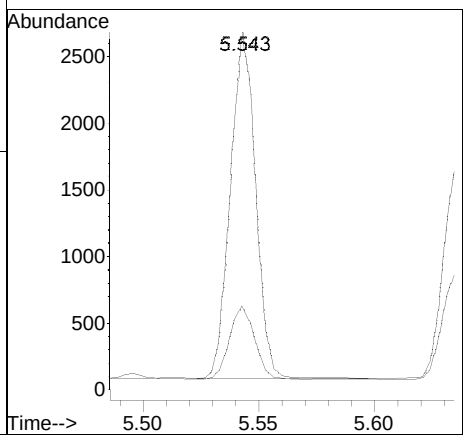





#29
Pyrene
Concen: 3.71 ng/ml
RT: 5.543 min Scan# 1394
Delta R.T. -0.006 min
Lab File: 53053-01.D
Acq: 21 Sep 2024 04:29 pm

Tgt Ion:202 Resp: 1981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.4 | 17.2 | 25.8 |

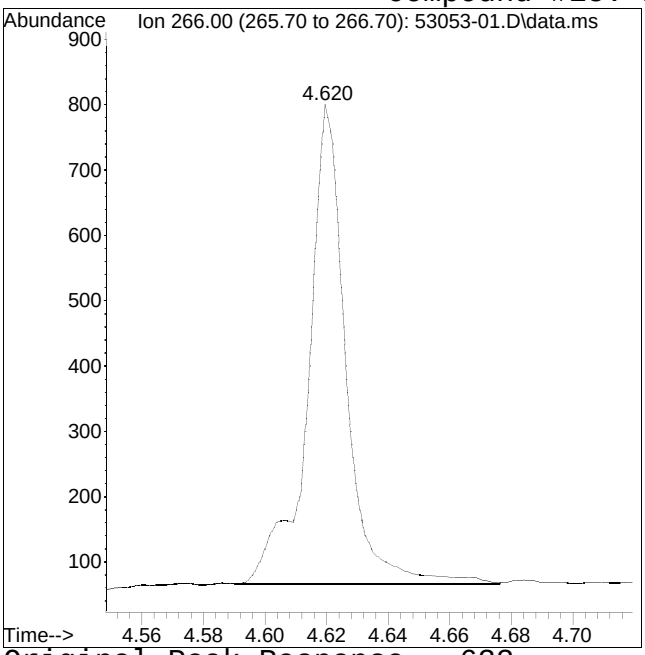


# Manual Integration Report

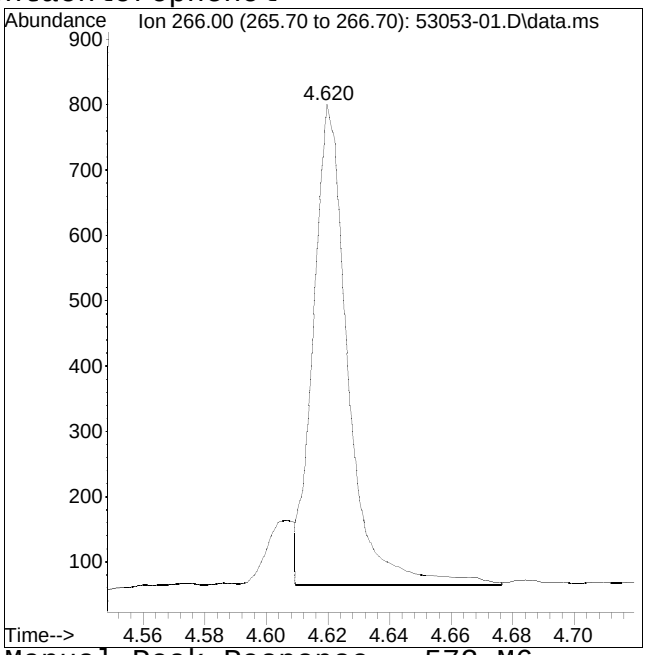
Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : 53053-01.D
Date Inj'd : 9/21/2024 4:29 pm
Sample : L2453053-01,32,,rp

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:rp
Instrument : SV125
Quant Date : 9/21/2024 4:44 pm

## Compound #25: Pentachlorophenol




Original Peak Response = 633



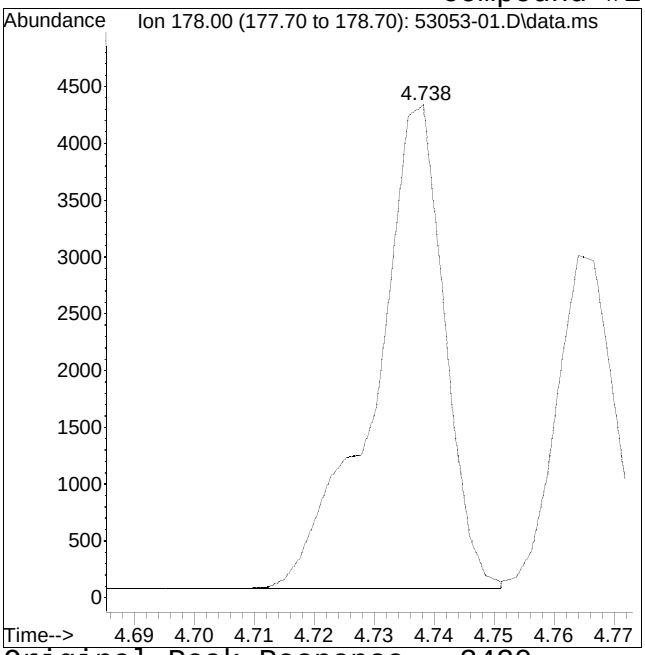

Manual Peak Response = 572 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

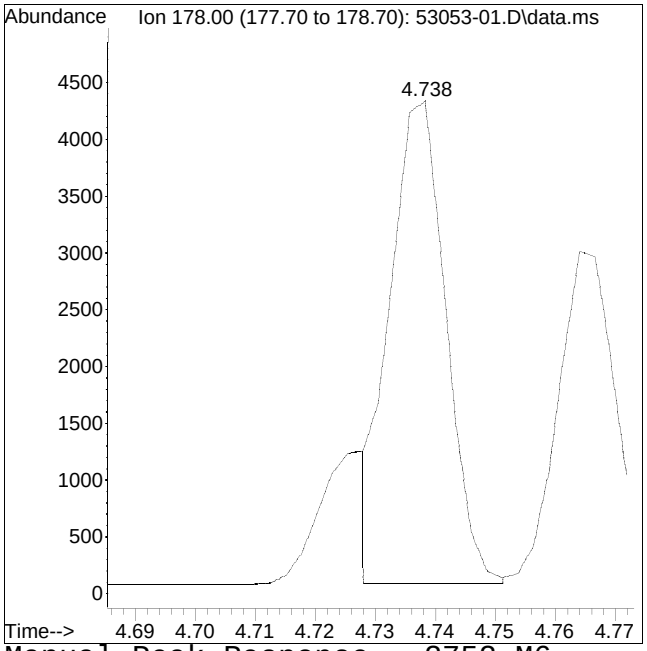
Manual Integration Report

Data Path : I:\8270SIM\SV125\240921RVTQMethod : SIM-RVT_240917n_sv125.M
Data File : 53053-01.D Operator : SV125:rp
Date Inj'd : 9/21/2024 4:29 pm Instrument : SV125
Sample : L2453053-01,32,,rp Quant Date : 9/21/2024 4:44 pm

Compound #26: Phenanthrene




Original Peak Response = 3420




Manual Peak Response = 2752 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 06:38 pm
Operator : SV125:dv
Sample : L2453053-02,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 11:23:48 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 379831 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 85.14% | | | |
| 8) Naphthalene-d8 | 2.905 | 136 | 1324779 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 84.10% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 814984 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 80.27% | | | |
| 22) Phenanthrene-d10 | 4.726 | 188 | 1739791 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 81.09% | | | |
| 31) Chrysene-d12 | 6.264 | 240 | 1884107 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 80.58% | | | |
| 36) Perylene-d12 | 7.462 | 264 | 2109673 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 74.86% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.654 | 112 | 101107 | 1081.749 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 54.09% | | | |
| 3) Phenol-d6 | 2.053 | 99 | 89620 | 777.496 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 38.87% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 67135 | 1132.414 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 113.24% | | | |
| 13) 2-Fluorobiphenyl | 3.505 | 172 | 210296 | 749.143 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 74.91% | | | |
| 21) 2,4,6-Tribromophenol | 4.330 | 330 | 50435 | 1425.353 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 71.27% | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 299040 | 845.807 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 84.58% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 0.000 | | 0 | N.D. | d | |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 0.000 | | 0 | N.D. | d | |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 3.805 | 152 | 551 | 1.585 | ng/ml# | 1 |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 0.000 | | 0 | N.D. | d | |
| 24) Hexachlorobenzene | 0.000 | | 0 | N.D. | d | |

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 06:38 pm
Operator : SV125:dv
Sample : L2453053-02,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 11:23:48 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | | |
| 26) Phenanthrene | 4.737 | 178 | 1322M6 | 2.946 | ng/ml | |
| 27) Anthracene | 4.765 | 178 | 908M1 | 2.039 | ng/ml | |
| 28) Fluoranthene | 5.414 | 202 | 1333 | 2.618 | ng/ml | 97 |
| 29) Pyrene | 5.542 | 202 | 1307 | 2.433 | ng/ml | 96 |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. d | | |
| 34) Chrysene | 0.000 | | 0 | N.D. d | | |
| 37) Benzo[b]fluoranthene | 7.088 | 252 | 1156 | 2.342 | ng/ml | 97 |
| 38) Benzo[k]fluoranthene | 7.110 | 252 | 960 | 1.985 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.396 | 252 | 900 | 2.095 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 8.664 | 276 | 986 | 2.186 | ng/ml# | 92 |
| 41) Dibenzo[a,h]anthracene | 8.701 | 278 | 891 | 2.663 | ng/ml | 99 |
| 42) Benzo[g,h,i]perylene | 9.003 | 276 | 969 | 2.074 | ng/ml | 97 |

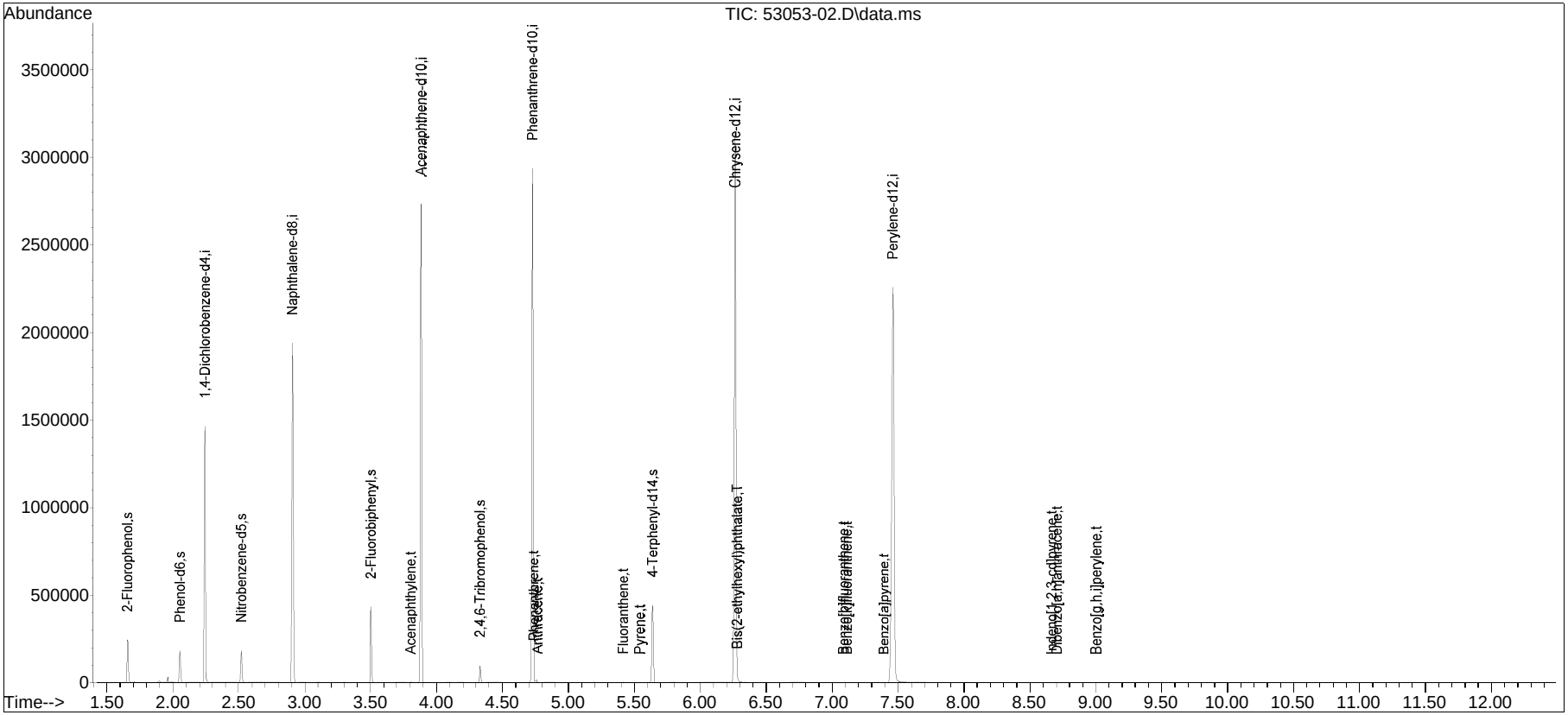
(#) = qualifier out of range (m) = manual integration (+) = signals summed

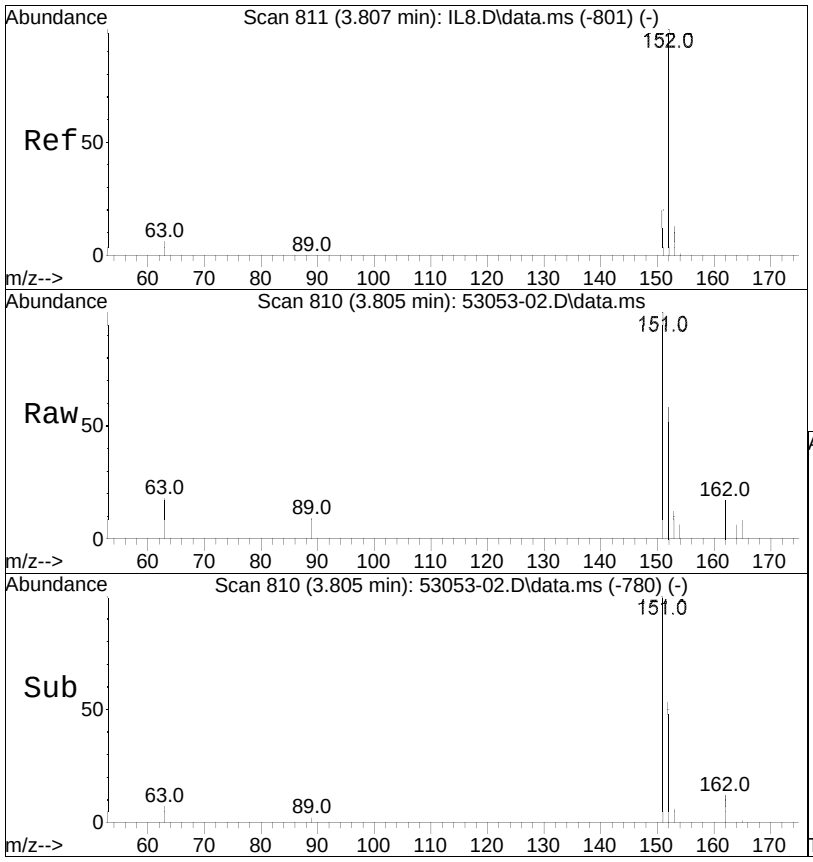
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-02.D
Acq On : 21 Sep 2024 06:38 pm
Operator : SV125:dv
Sample : L2453053-02,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 11:23:48 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

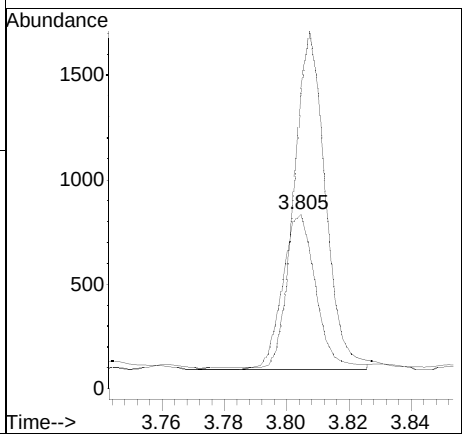


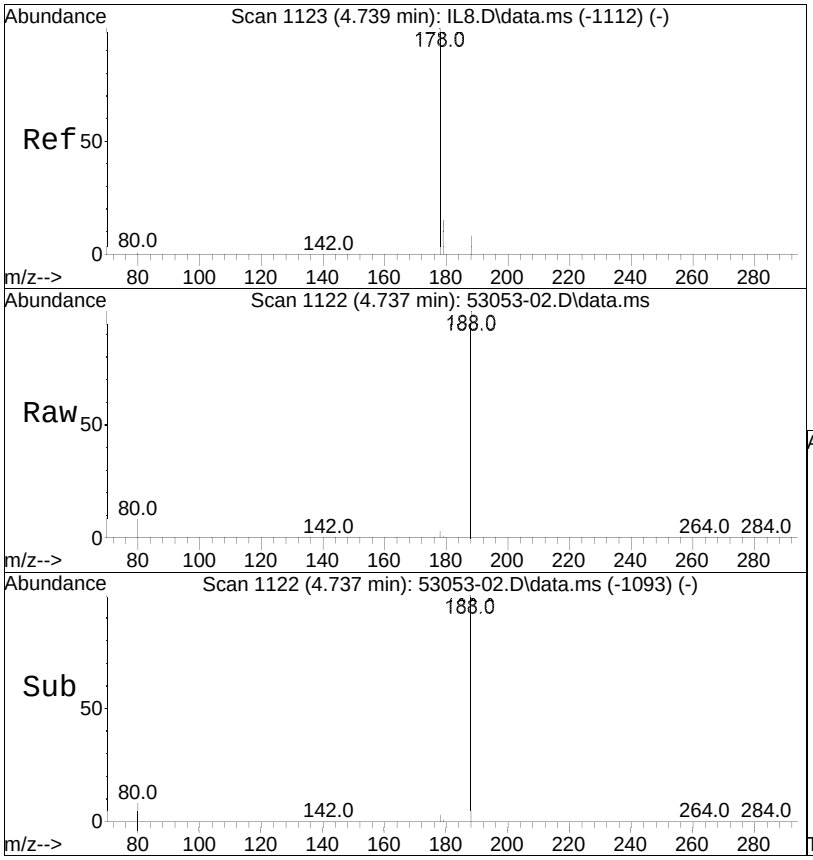



#16
Acenaphthylene
Concen: 1.59 ng/ml
RT: 3.805 min Scan# 810
Delta R.T. 0.000 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:152 Resp: 551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 205.8 | 16.2 | 24.4# |

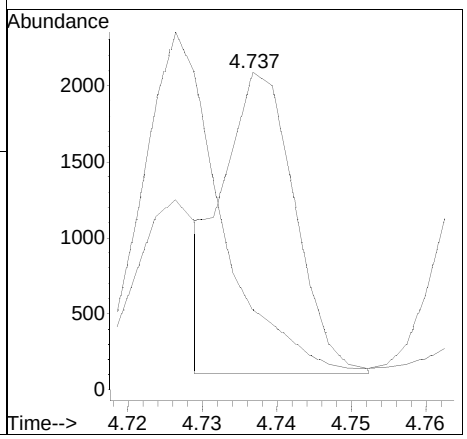


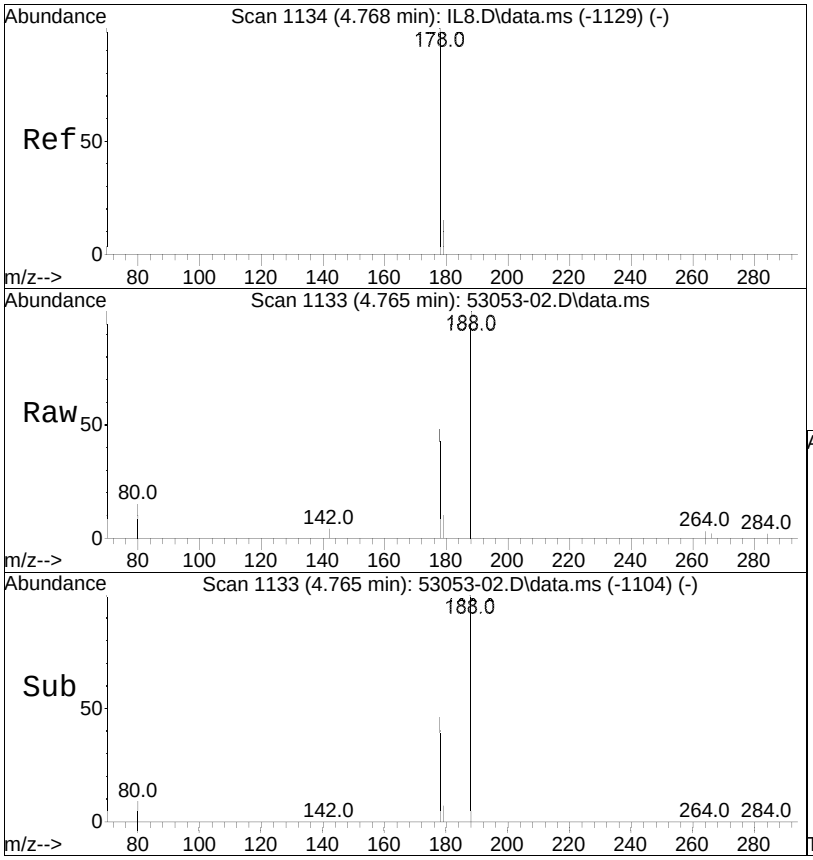



#26
Phenanthrene
Concen: 2.95 ng/ml M6
RT: 4.737 min Scan# 1122
Delta R.T. -0.005 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:178 Resp: 1322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 9.7 | 12.6 | 18.8# |

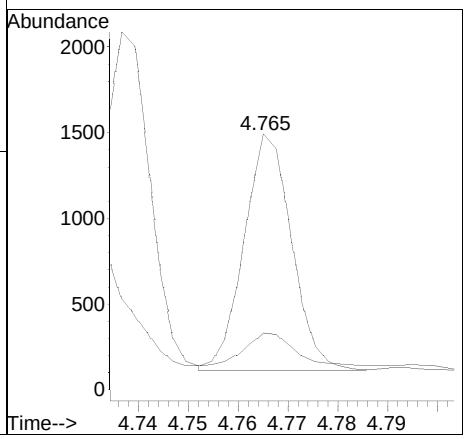


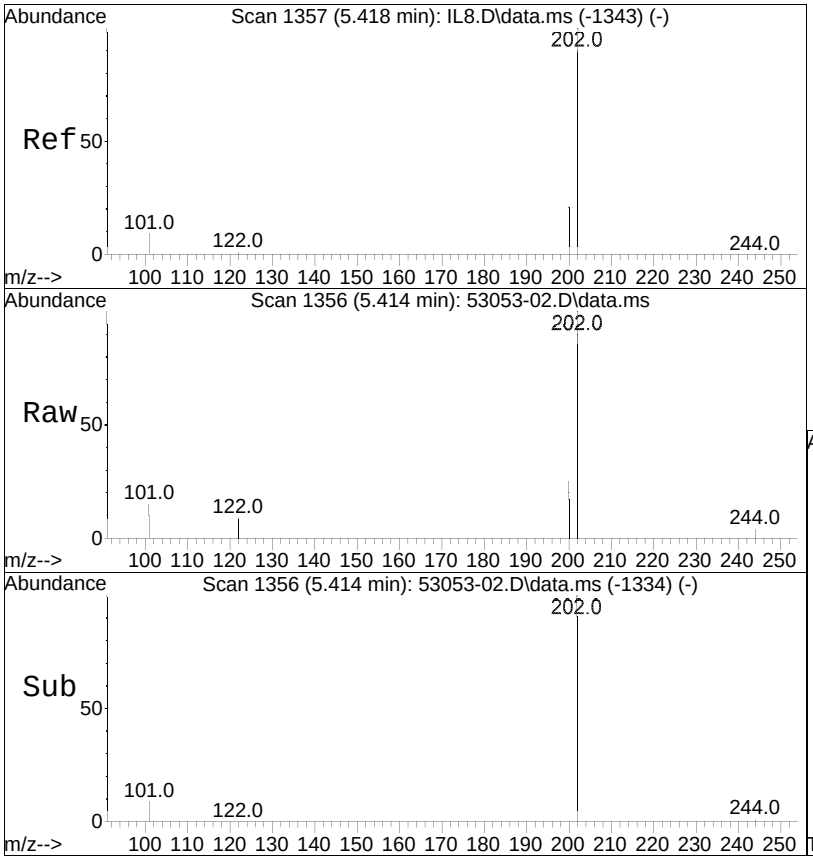



#27
Anthracene
Concen: 2.04 ng/ml M1
RT: 4.765 min Scan# 1133
Delta R.T. -0.005 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:178 Resp: 908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.3 | 12.3 | 18.5 |

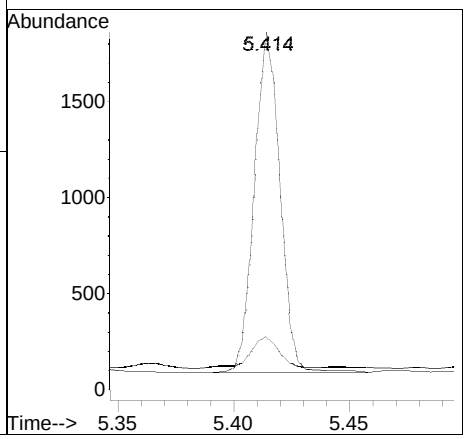


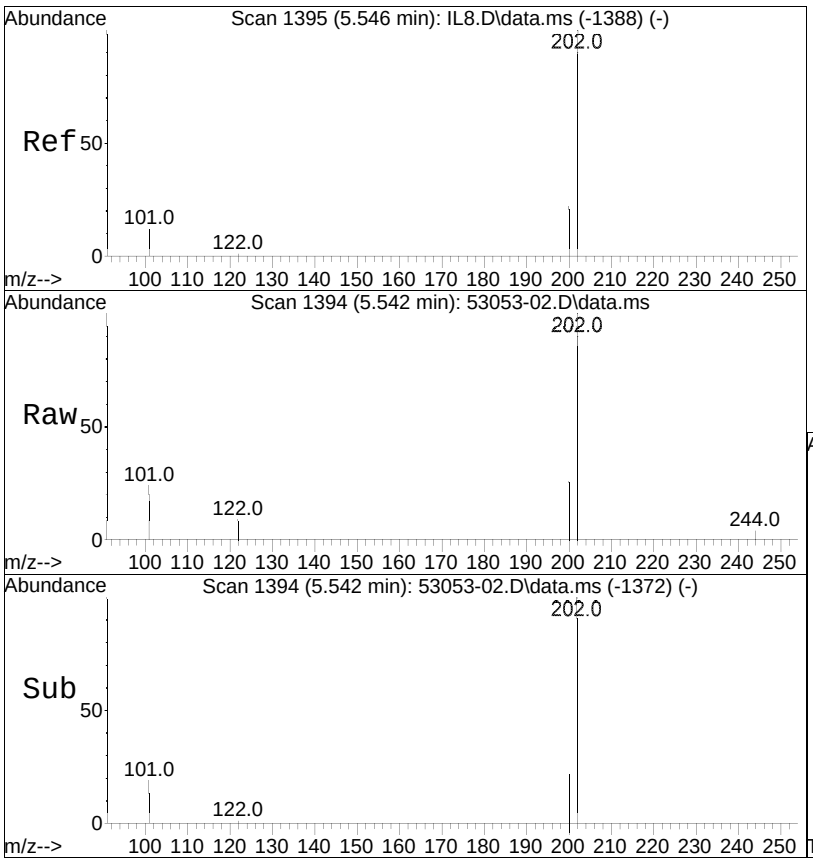



#28
Fluoranthene
Concen: 2.62 ng/ml
RT: 5.414 min Scan# 1356
Delta R.T. -0.007 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:202 Resp: 1333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.4 | 7.6 | 11.4 |

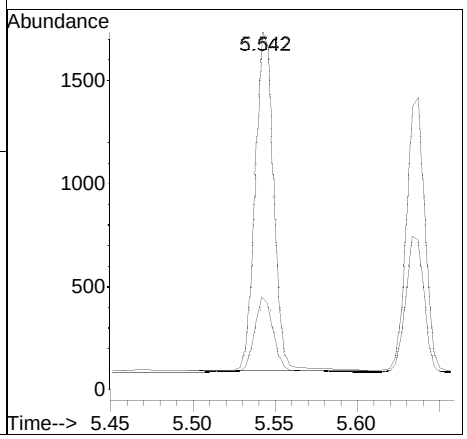


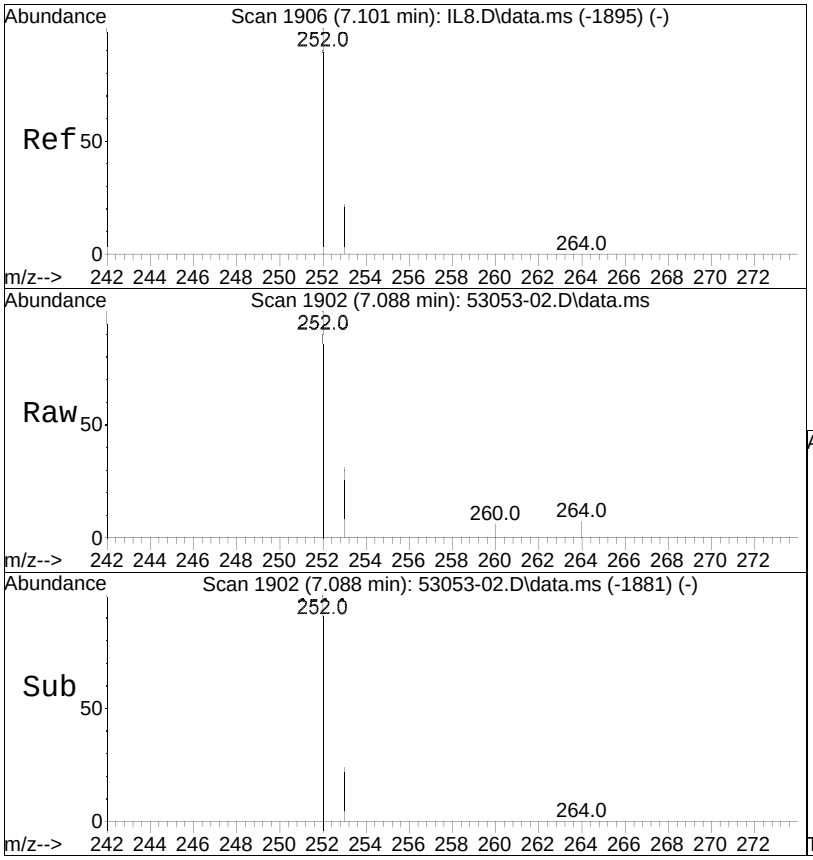



#29
Pyrene
Concen: 2.43 ng/ml
RT: 5.542 min Scan# 1394
Delta R.T. -0.007 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:202 Resp: 1307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 23.3 | 17.2 | 25.8 |

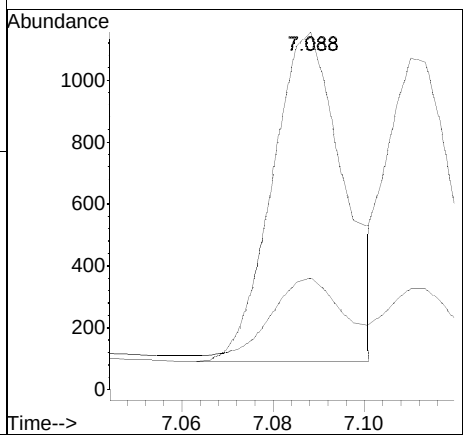


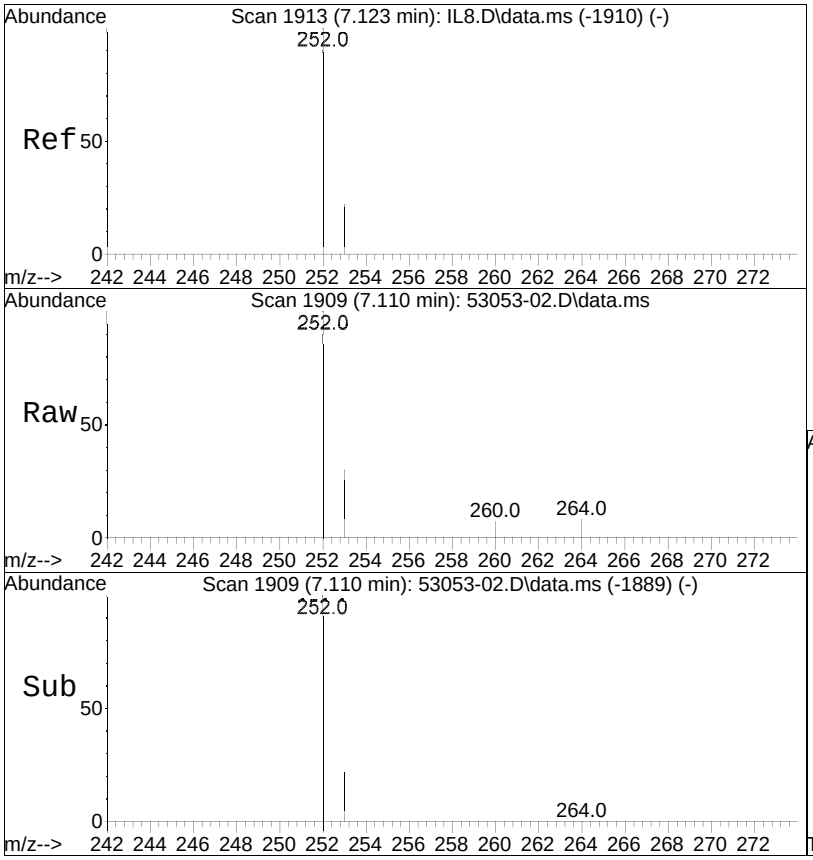



#37
Benzo[b]fluoranthene
Concen: 2.34 ng/ml
RT: 7.088 min Scan# 1902
Delta R.T. -0.015 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:252 Resp: 1156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.2 | 17.4 | 26.0 |

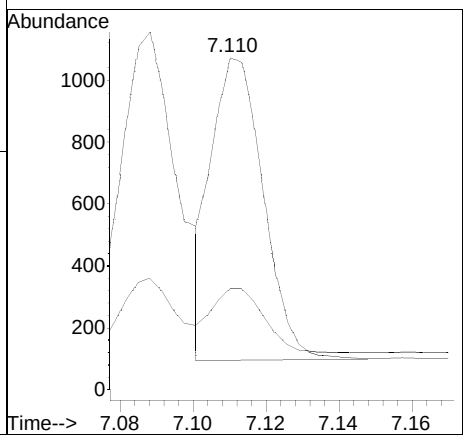


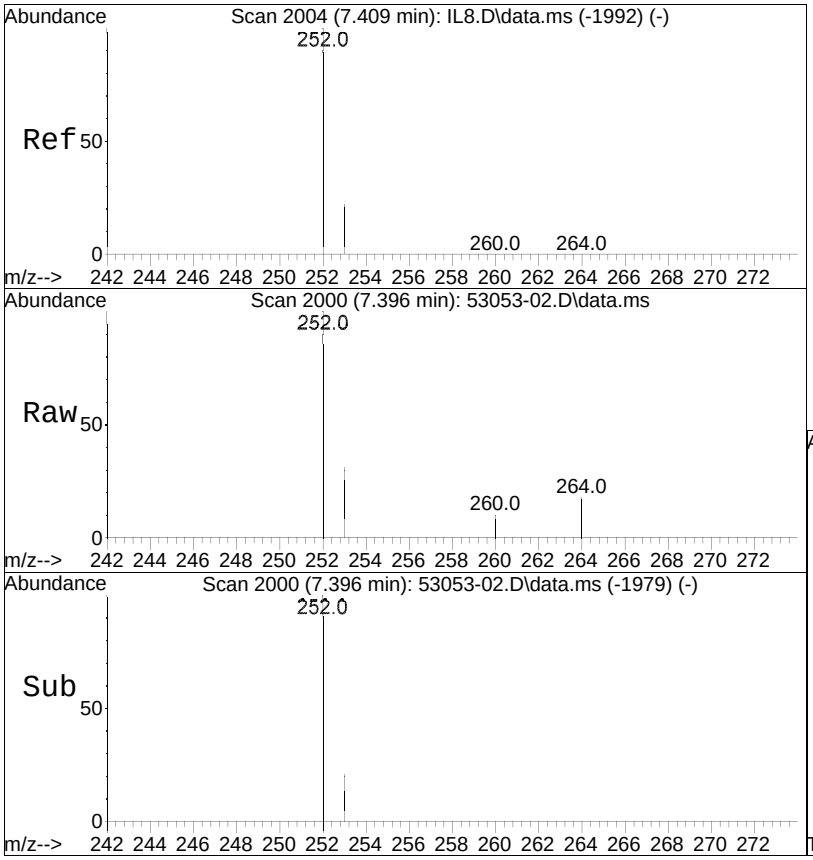



#38
Benzo[k]fluoranthene
Concen: 1.98 ng/ml
RT: 7.110 min Scan# 1909
Delta R.T. -0.018 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:252 Resp: 960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.4 | 17.5 | 26.3 |

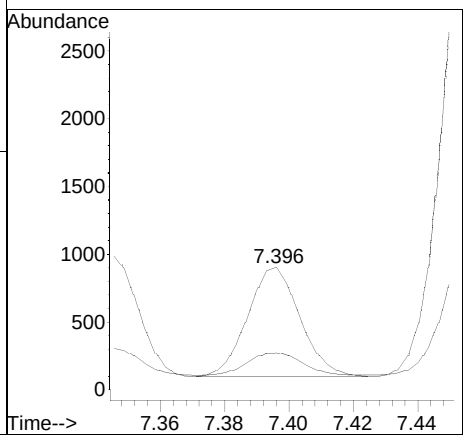


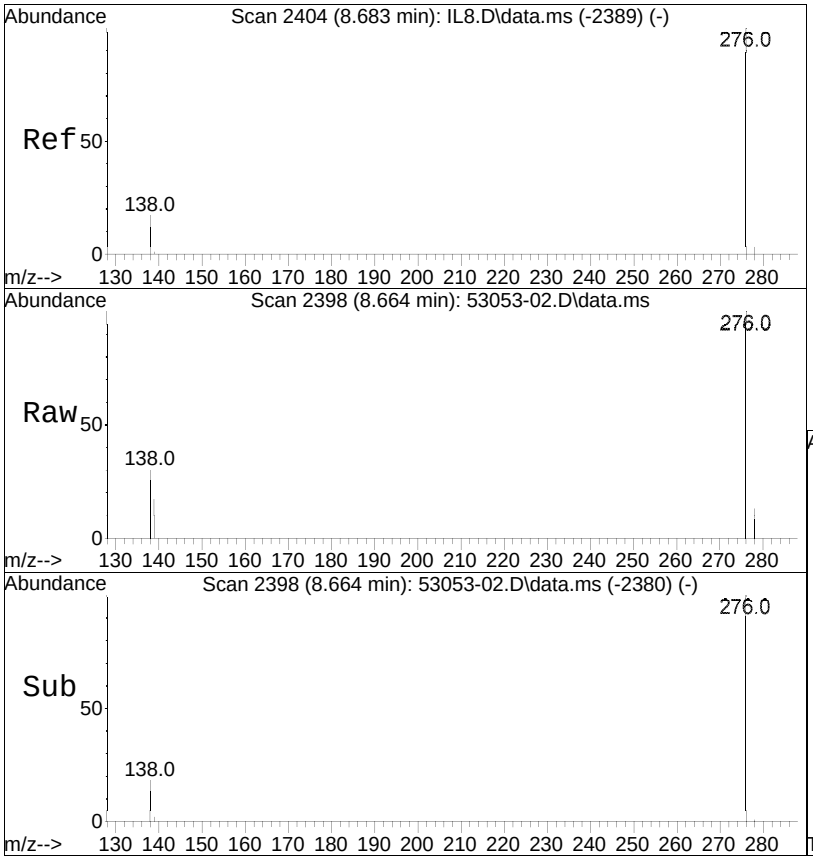



#39
Benzo[a]pyrene
Concen: 2.10 ng/ml
RT: 7.396 min Scan# 2000
Delta R.T. -0.015 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:252 Resp: 900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.1 | 17.4 | 26.0 |

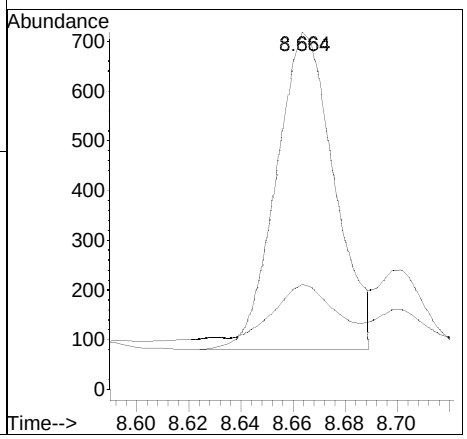


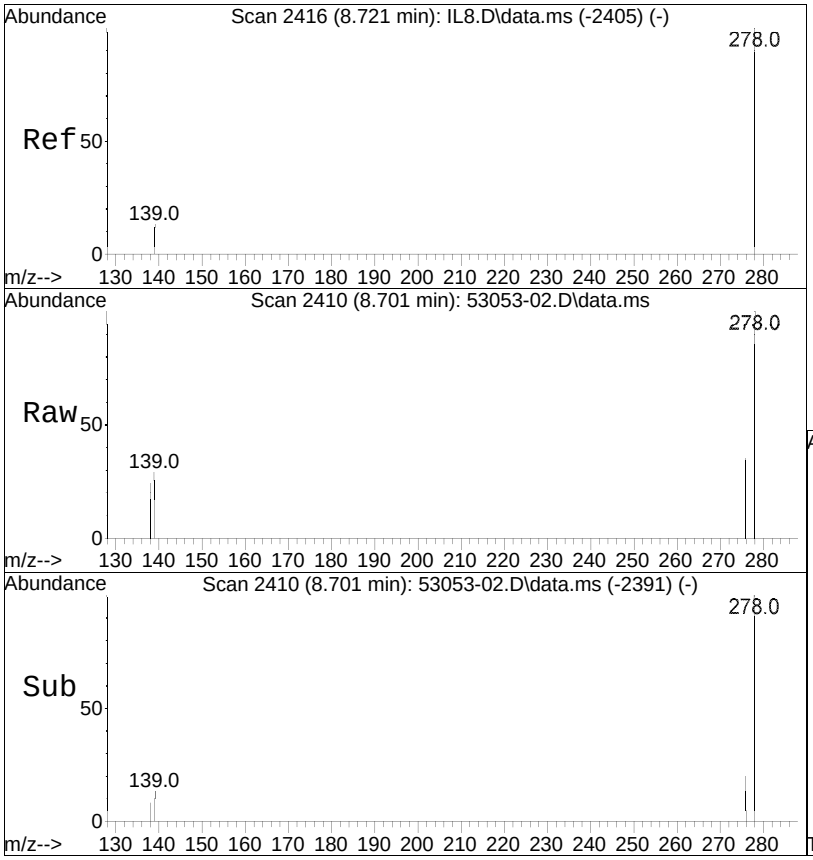



#40
Indeno[1,2,3-cd]pyrene
Concen: 2.19 ng/ml
RT: 8.664 min Scan# 2398
Delta R.T. -0.024 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:276 Resp: 986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 20.0 | 13.1 | 19.7# |

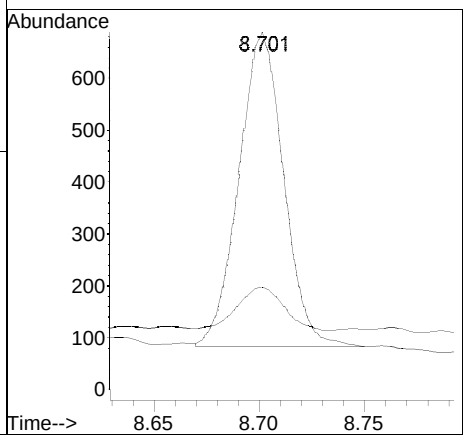


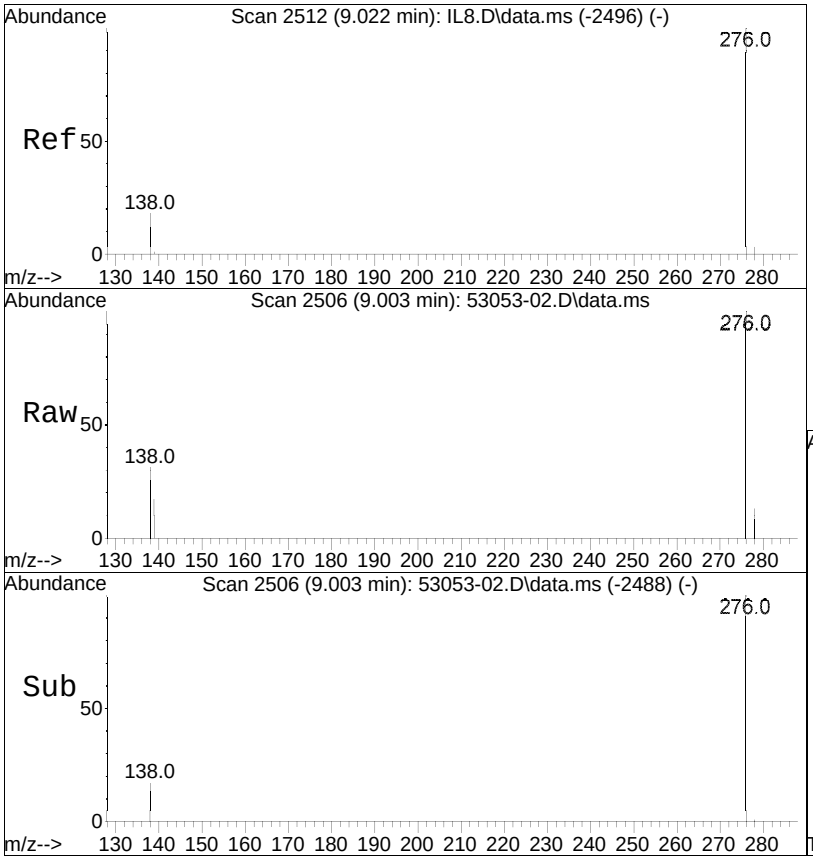



#41
Dibenzo[a,h]anthracene
Concen: 2.66 ng/ml
RT: 8.701 min Scan# 2410
Delta R.T. -0.021 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:278 Resp: 891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 14.5 | 12.0 | 18.0 |

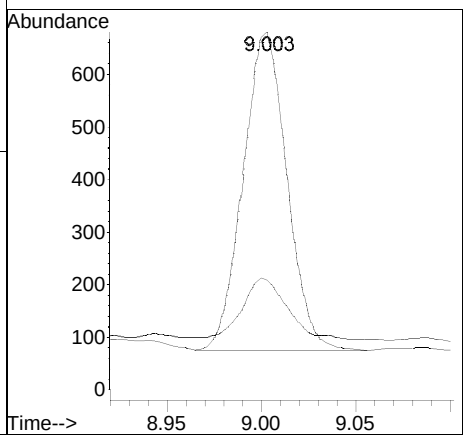





#42
Benzo[g,h,i]perylene
Concen: 2.07 ng/ml
RT: 9.003 min Scan# 2506
Delta R.T. -0.024 min
Lab File: 53053-02.D
Acq: 21 Sep 2024 06:38 pm

Tgt Ion:276 Resp: 969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 19.6 | 14.7 | 22.1 |

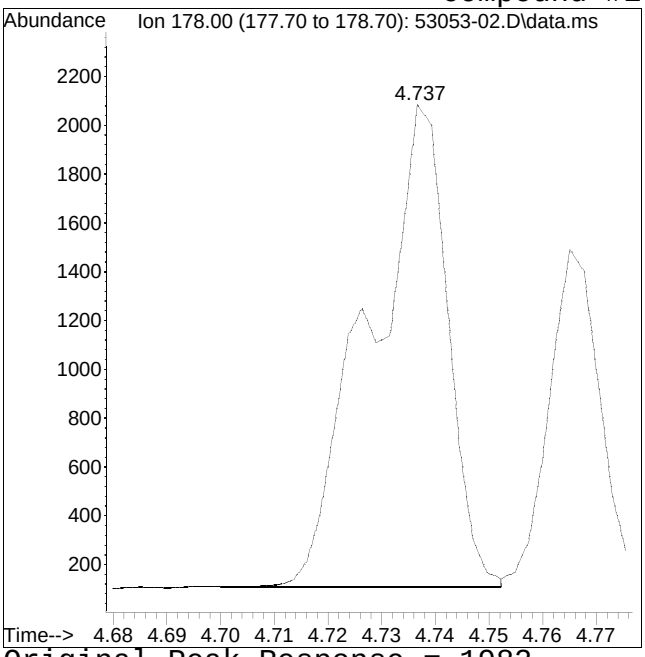


# Manual Integration Report

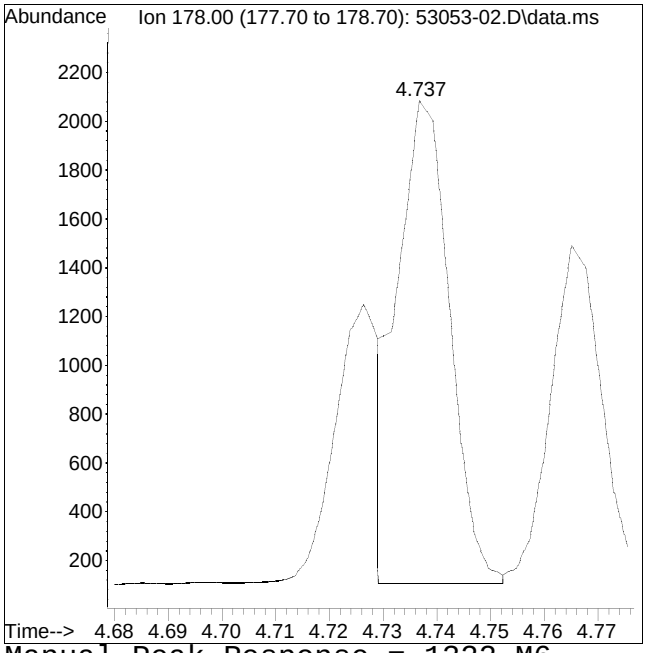
Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : 53053-02.D
Date Inj'd : 9/21/2024 6:38 pm
Sample : L2453053-02,32,,rp

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/21/2024 6:53 pm

## Compound #26: Phenanthrene




Original Peak Response = 1982



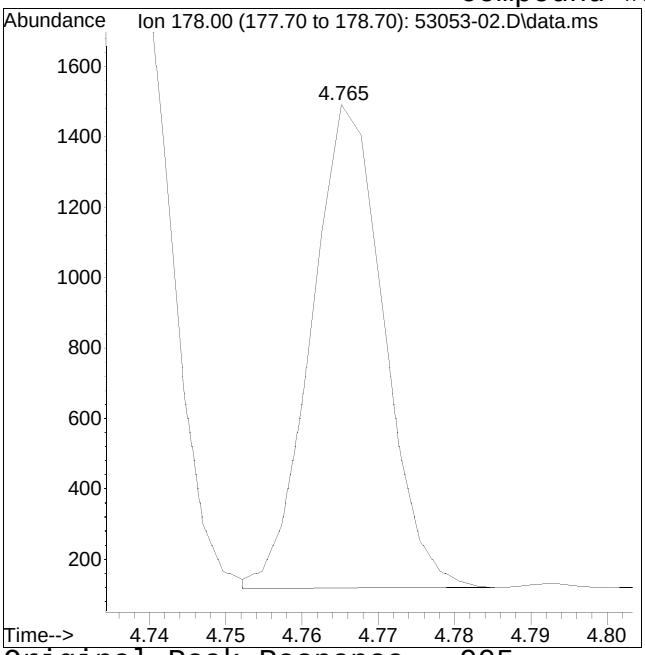

Manual Peak Response = 1322 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

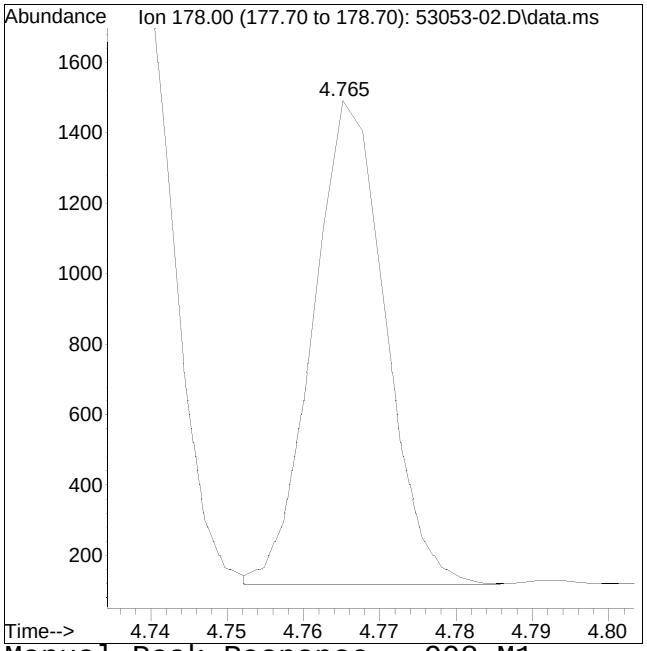
Manual Integration Report

Data Path : I:\8270SIM\SV125\240921RVTQMethod : SIM-RVT_240917n_sv125.M
Data File : 53053-02.D Operator : SV125:dv
Date Inj'd : 9/21/2024 6:38 pm Instrument : SV125
Sample : L2453053-02,32,,rp Quant Date : 9/21/2024 6:53 pm

Compound #27: Anthracene




Original Peak Response = 905




Manual Peak Response = 908 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 06:55 pm
Operator : SV125:dv
Sample : L2453053-03,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 23 12:42:15 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 371058 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 83.17% | | | |
| 8) Naphthalene-d8 | 2.905 | 136 | 1291741 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 82.00% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 792555 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 78.06% | | | |
| 22) Phenanthrene-d10 | 4.727 | 188 | 1694404 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 78.97% | | | |
| 31) Chrysene-d12 | 6.264 | 240 | 1825703 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 78.08% | | | |
| 36) Perylene-d12 | 7.463 | 264 | 2036970 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 72.28% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.656 | 112 | 67503 | 739.293 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 36.96% | | | |
| 3) Phenol-d6 | 2.053 | 99 | 75256 | 668.317 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 33.42% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 72343 | 1249.112 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 124.91% | | | |
| 13) 2-Fluorobiphenyl | 3.504 | 172 | 231498 | 845.764 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 84.58% | | | |
| 21) 2,4,6-Tribromophenol | 4.330 | 330 | 30882 | 897.461 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 44.87% | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 336099 | 976.089 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 97.61% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 2.918 | 128 | 1136 | 3.302 | ng/ml# | 71 |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 0.000 | | 0 | N.D. | d | |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 0.000 | | 0 | N.D. | d | |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 4.189 | 166 | 838 | 3.163 | ng/ml# | 60 |
| 24) Hexachlorobenzene | 4.510 | 284 | 245M4 | 2.260 | ng/ml | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 06:55 pm
Operator : SV125:dv
Sample : L2453053-03,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 23 12:42:15 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 0.000 | | 0 | N.D. | d | |
| 27) Anthracene | 0.000 | | 0 | N.D. | d | |
| 28) Fluoranthene | 0.000 | | 0 | N.D. | d | |
| 29) Pyrene | 0.000 | | 0 | N.D. | d | |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 38) Benzo[k]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 39) Benzo[a]pyrene | 0.000 | | 0 | N.D. | d | |
| 40) Indeno[1,2,3-cd]pyrene | 0.000 | | 0 | N.D. | d | |
| 41) Dibenzo[a,h]anthracene | 0.000 | | 0 | N.D. | d | |
| 42) Benzo[g,h,i]perylene | 0.000 | | 0 | N.D. | d | |

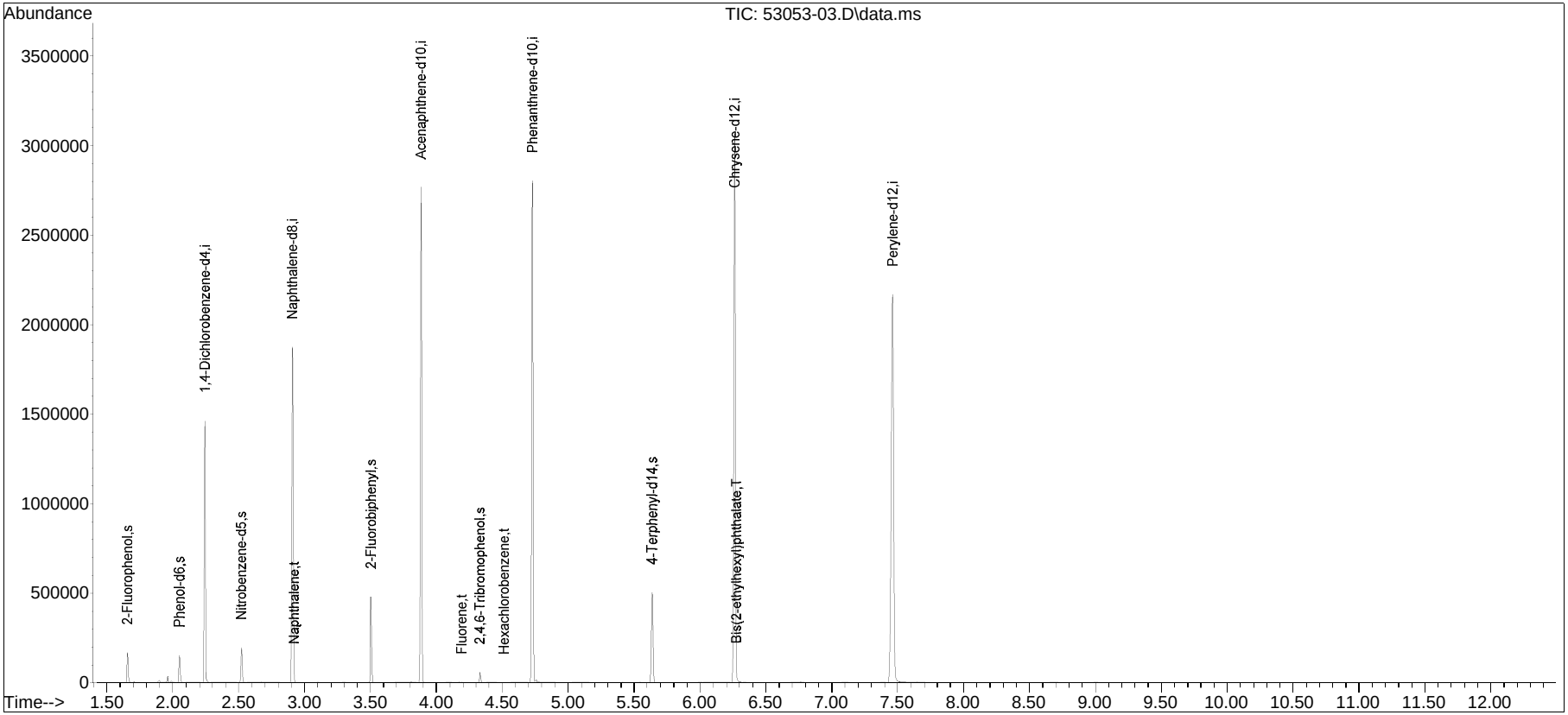
(#) = qualifier out of range (m) = manual integration (+) = signals summed

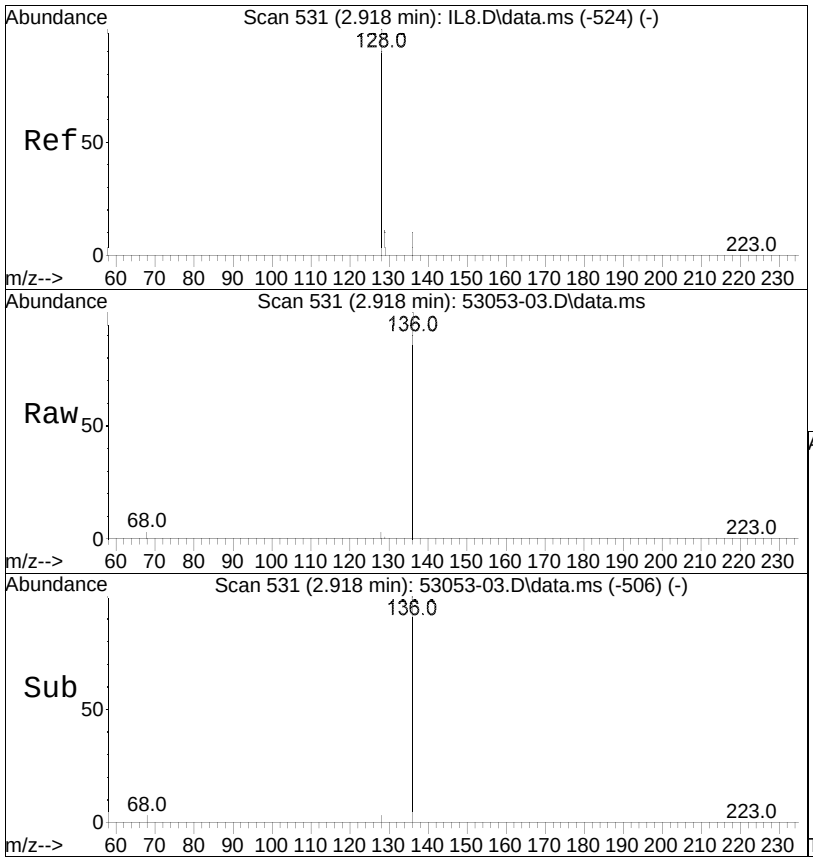
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-03.D
Acq On : 21 Sep 2024 06:55 pm
Operator : SV125:dv
Sample : L2453053-03,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 23 12:42:15 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

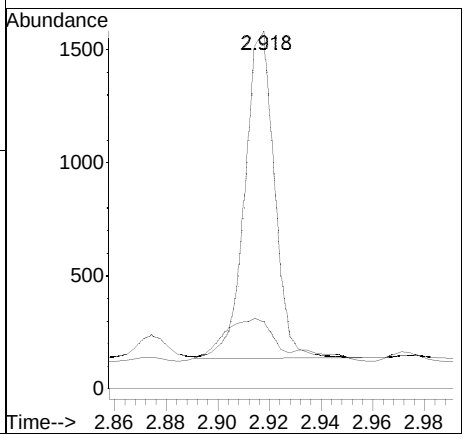


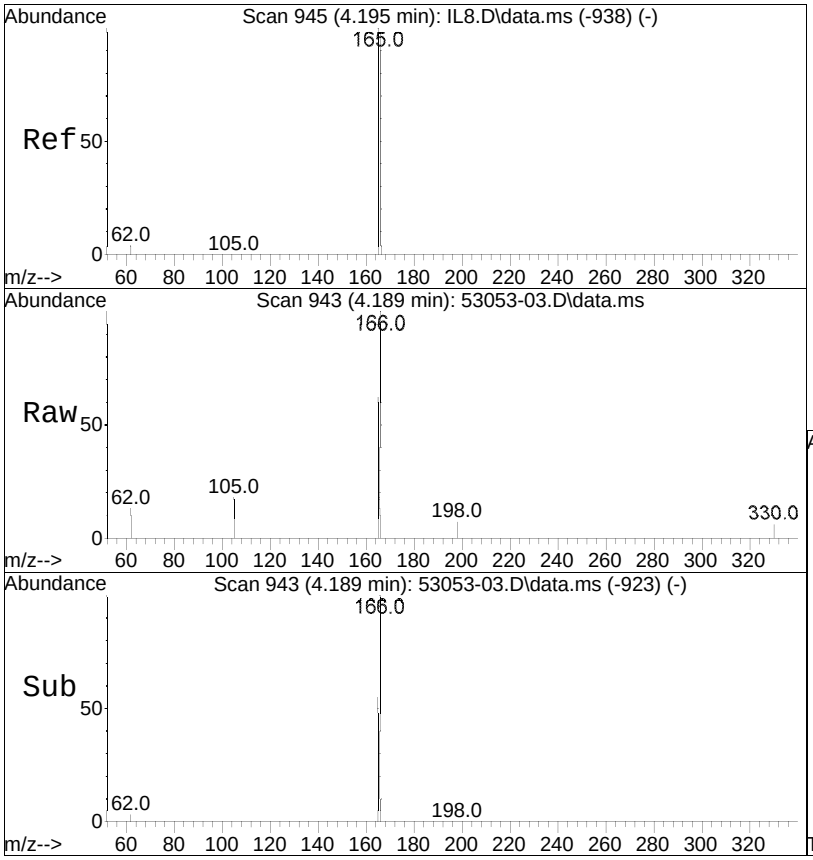



#9
Naphthalene
Concen: 3.30 ng/ml
RT: 2.918 min Scan# 531
Delta R.T. 0.003 min
Lab File: 53053-03.D
Acq: 21 Sep 2024 06:55 pm

Tgt Ion:128 Resp: 1136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 21.9 | 8.8 | 13.2# |
| 127 | 0.0 | 0.0 | 0.0 |

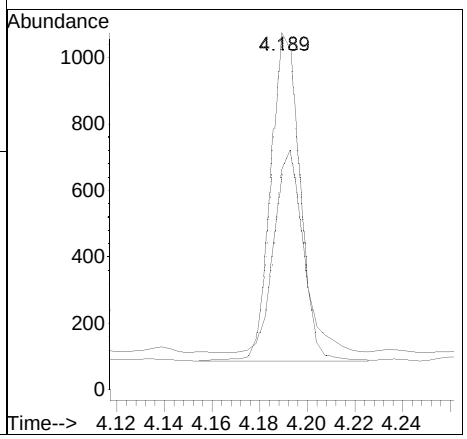


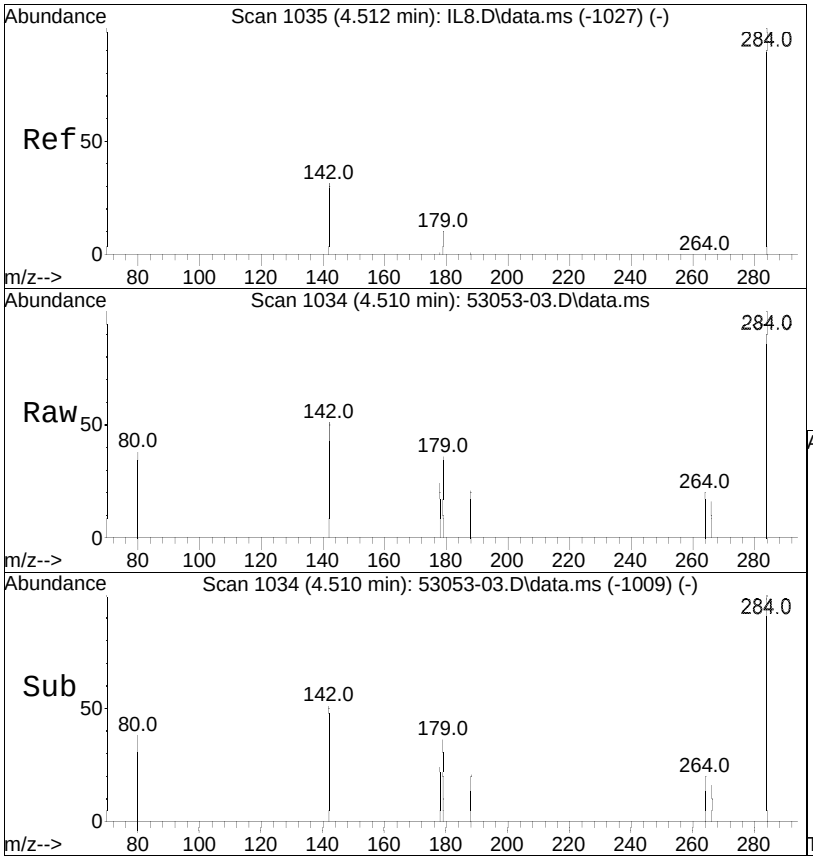



#20
Fluorene
Concen: 3.16 ng/ml
RT: 4.189 min Scan# 943
Delta R.T. -0.007 min
Lab File: 53053-03.D
Acq: 21 Sep 2024 06:55 pm

Tgt Ion:166 Resp: 838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 62.2 | 82.0 | 123.0# |

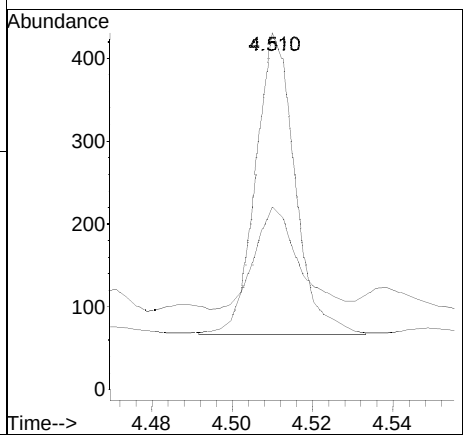





#24
Hexachlorobenzene
Concen: 2.26 ng/ml M4
RT: 4.510 min Scan# 1034
Delta R.T. -0.002 min
Lab File: 53053-03.D
Acq: 21 Sep 2024 06:55 pm

Tgt Ion:284 Resp: 245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 39.2 | 24.4 | 36.6# |

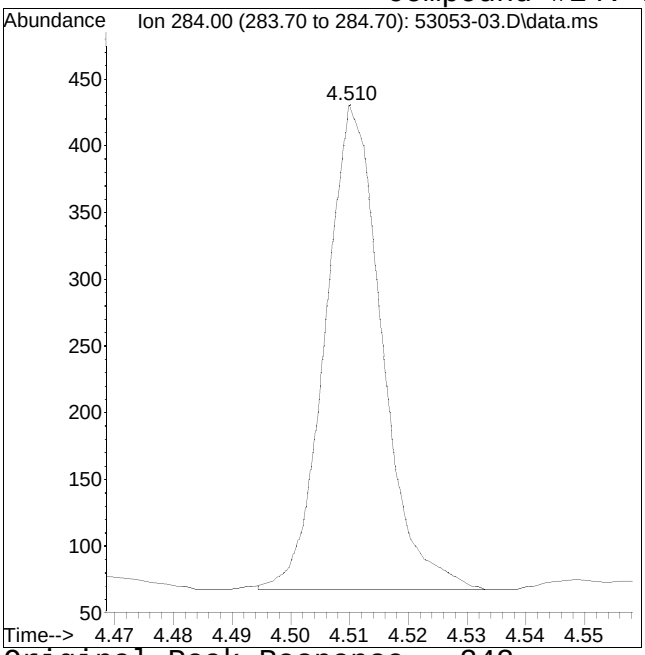


# Manual Integration Report

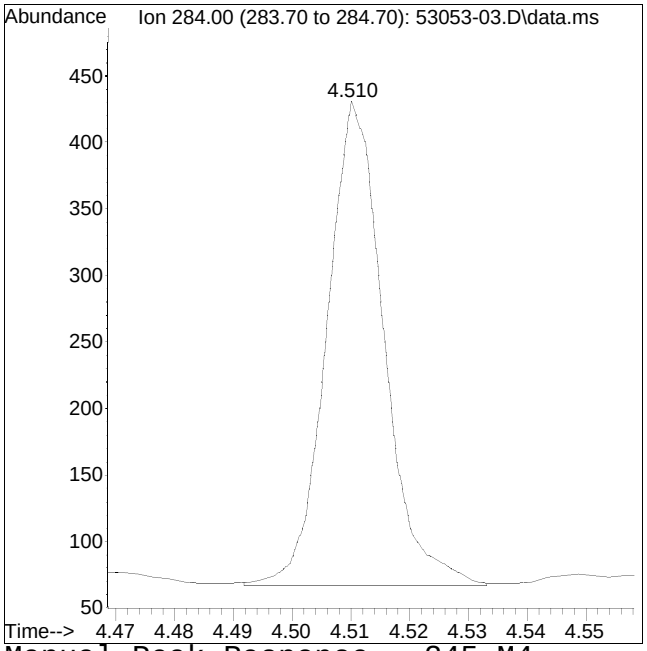
Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : 53053-03.D
Date Inj'd : 9/21/2024 6:55 pm
Sample : L2453053-03,32,,rp

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/21/2024 7:09 pm

## Compound #24: Hexachlorobenzene




Original Peak Response = 242




Manual Peak Response = 245 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 07:11 pm
Operator : SV125:dv
Sample : L2453053-04,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 23 11:30:14 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 364228 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 81.64% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1261856 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 80.10% | | | |
| 17) Acenaphthene-d10 | 3.885 | 164 | 778405 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 76.66% | | | |
| 22) Phenanthrene-d10 | 4.727 | 188 | 1685764 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 78.57% | | | |
| 31) Chrysene-d12 | 6.266 | 240 | 1832150 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 78.35% | | | |
| 36) Perylene-d12 | 7.462 | 264 | 2048426 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 72.68% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.653 | 112 | 104449 | 1165.377 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 58.27% | | | |
| 3) Phenol-d6 | 2.053 | 99 | 89351 | 808.369 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 40.42% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 68851 | 1211.110 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 121.11% | | | |
| 13) 2-Fluorobiphenyl | 3.504 | 172 | 222962 | 833.870 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 83.39% | | | |
| 21) 2,4,6-Tribromophenol | 4.330 | 330 | 45739 | 1353.382 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 67.67% | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 321841 | 939.472 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 93.95% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 2.918 | 128 | 1260 | 3.749 | ng/ml# | 77 |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 0.000 | | 0 | N.D. | d | |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 0.000 | | 0 | N.D. | d | |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 0.000 | | 0 | N.D. | d | |
| 24) Hexachlorobenzene | 0.000 | | 0 | N.D. | d | |

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 07:11 pm
Operator : SV125:dv
Sample : L2453053-04,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 23 11:30:14 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 0.000 | | 0 | N.D. | d | |
| 27) Anthracene | 0.000 | | 0 | N.D. | d | |
| 28) Fluoranthene | 0.000 | | 0 | N.D. | d | |
| 29) Pyrene | 0.000 | | 0 | N.D. | d | |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 38) Benzo[k]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 39) Benzo[a]pyrene | 0.000 | | 0 | N.D. | d | |
| 40) Indeno[1,2,3-cd]pyrene | 0.000 | | 0 | N.D. | d | |
| 41) Dibenzo[a,h]anthracene | 0.000 | | 0 | N.D. | d | |
| 42) Benzo[g,h,i]perylene | 0.000 | | 0 | N.D. | d | |

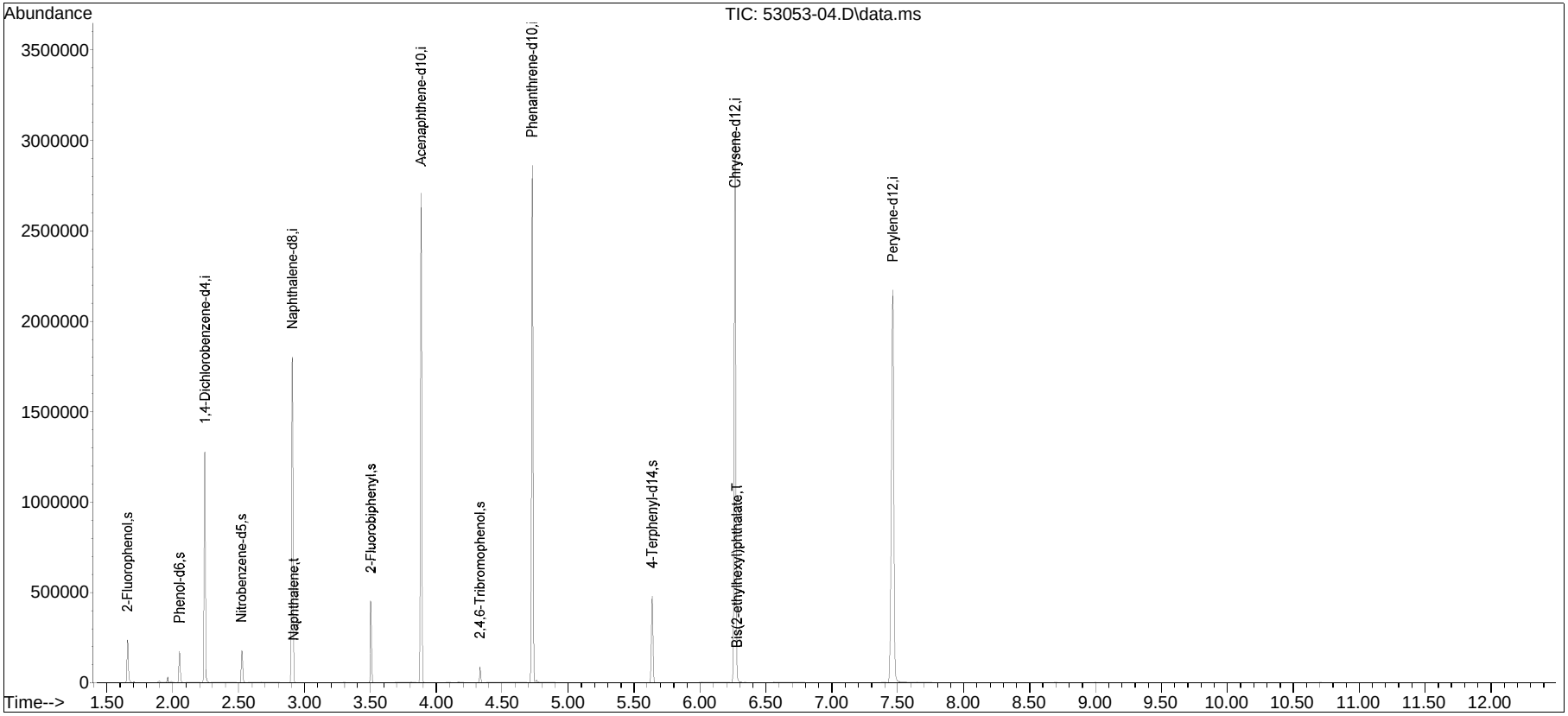
(#) = qualifier out of range (m) = manual integration (+) = signals summed

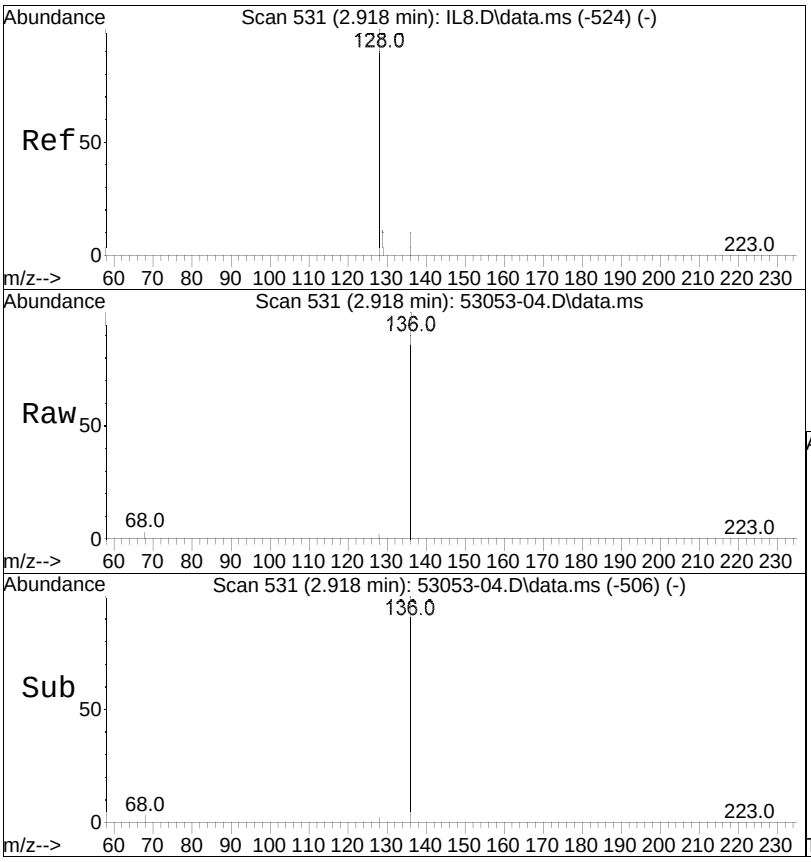
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-04.D
Acq On : 21 Sep 2024 07:11 pm
Operator : SV125:dv
Sample : L2453053-04,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 23 11:30:14 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

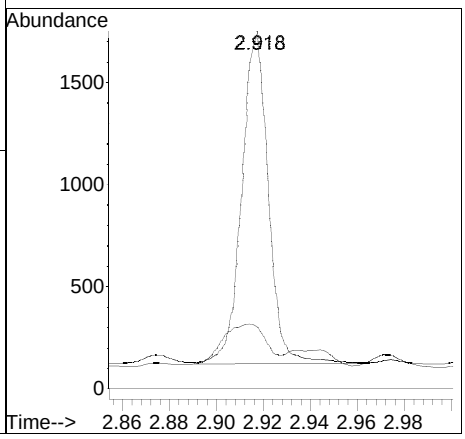





#9
Naphthalene
Concen: 3.75 ng/ml
RT: 2.918 min Scan# 531
Delta R.T. 0.003 min
Lab File: 53053-04.D
Acq: 21 Sep 2024 07:11 pm

Tgt Ion:128 Resp: 1260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 19.8 | 8.8 | 13.2# |
| 127 | 0.0 | 0.0 | 0.0 |



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\8270SIM\SV125\240921RVTQ | Method | : SIM-RVT_240917n_sv125.M |
| Data File | : 53053-04.D | Operator | : SV125:dv |
| Date Inj'd | : 9/21/2024 7:11 pm | Instrument | : SV125 |
| Sample | : L2453053-04,32,,rp | Quant Date | : 9/21/2024 7:25 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 07:27 pm
Operator : SV125:dv
Sample : L2453053-05,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 23 11:31:06 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 368618 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 82.63% | | | |
| 8) Naphthalene-d8 | 2.905 | 136 | 1283910 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 81.50% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 783474 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 77.16% | | | |
| 22) Phenanthrene-d10 | 4.724 | 188 | 1674672 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 78.05% | | | |
| 31) Chrysene-d12 | 6.265 | 240 | 1806226 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 77.24% | | | |
| 36) Perylene-d12 | 7.465 | 264 | 2021147 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 71.71% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.654 | 112 | 24424 | 269.262 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 13.46%# | | | |
| 3) Phenol-d6 | 2.053 | 99 | 37976 | 339.481 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 16.97% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 55337 | 961.802 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 96.18% | | | |
| 13) 2-Fluorobiphenyl | 3.505 | 172 | 183299 | 673.756 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 67.38% | | | |
| 21) 2,4,6-Tribromophenol | 4.330 | 330 | 9801 | 288.128 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 14.41%# | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 257956 | 757.975 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 75.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 2.915 | 128 | 1340M6 | 3.919 | ng/ml | |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 0.000 | | 0 | N.D. | d | |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 0.000 | | 0 | N.D. | d | |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 0.000 | | 0 | N.D. | d | |
| 24) Hexachlorobenzene | 0.000 | | 0 | N.D. | d | |

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 07:27 pm
Operator : SV125:dv
Sample : L2453053-05,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 23 11:31:06 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | | |
| 26) Phenanthrene | 0.000 | | 0 | N.D. | d | |
| 27) Anthracene | 0.000 | | 0 | N.D. | d | |
| 28) Fluoranthene | 0.000 | | 0 | N.D. | d | |
| 29) Pyrene | 0.000 | | 0 | N.D. | d | |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 38) Benzo[k]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 39) Benzo[a]pyrene | 0.000 | | 0 | N.D. | d | |
| 40) Indeno[1,2,3-cd]pyrene | 0.000 | | 0 | N.D. | d | |
| 41) Dibenzo[a,h]anthracene | 0.000 | | 0 | N.D. | d | |
| 42) Benzo[g,h,i]perylene | 0.000 | | 0 | N.D. | d | |

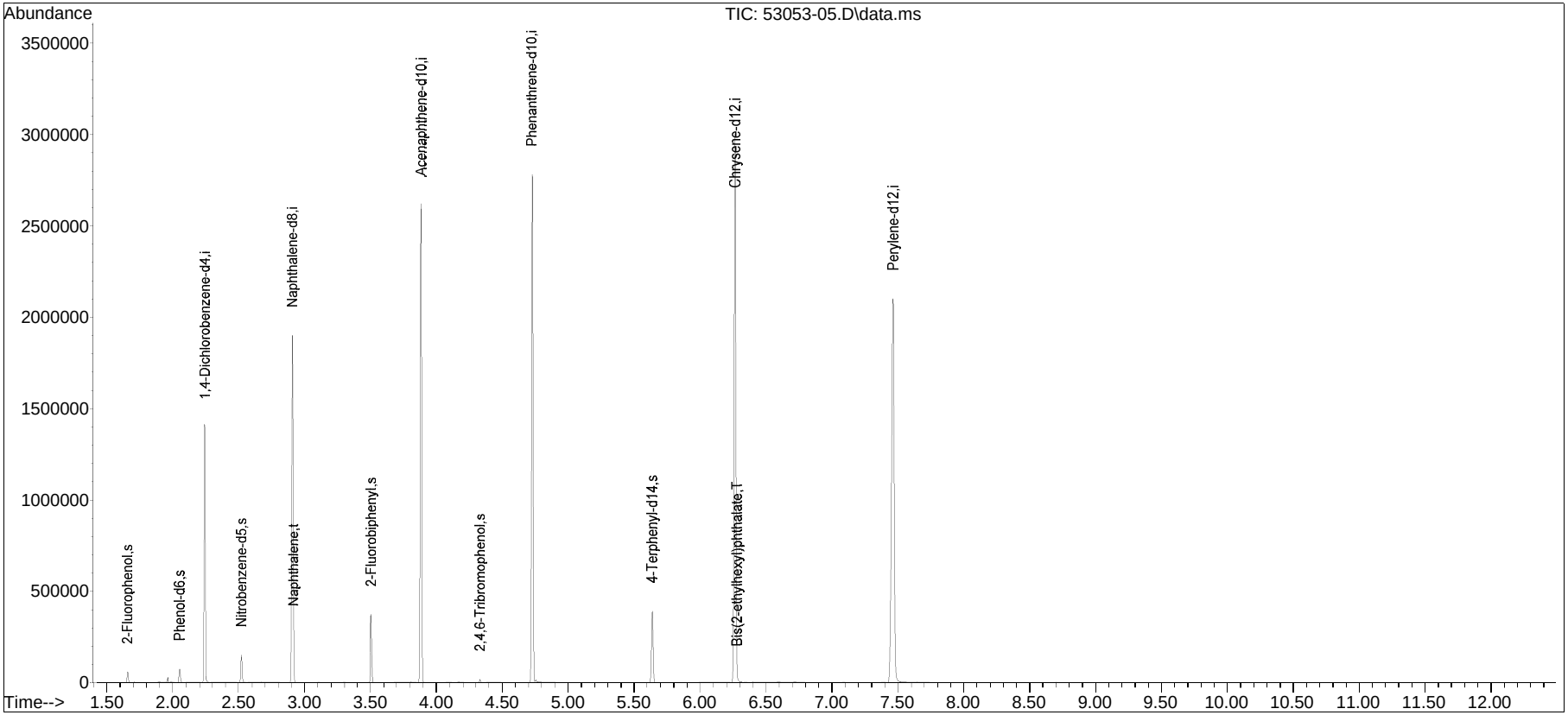
(#) = qualifier out of range (m) = manual integration (+) = signals summed

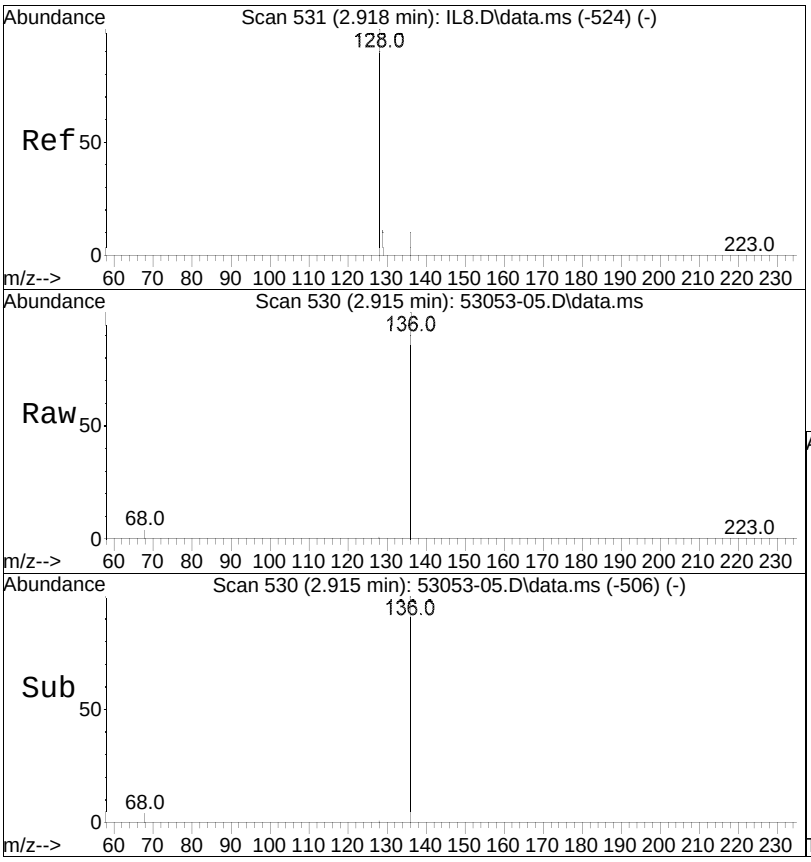
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 53053-05.D
Acq On : 21 Sep 2024 07:27 pm
Operator : SV125:dv
Sample : L2453053-05,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 23 11:31:06 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

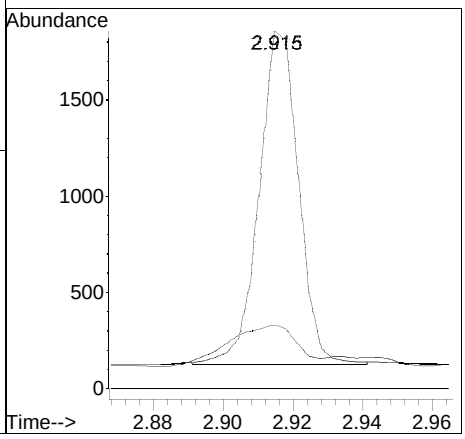





#9
Naphthalene
Concen: 3.92 ng/ml M6
RT: 2.915 min Scan# 530
Delta R.T. 0.000 min
Lab File: 53053-05.D
Acq: 21 Sep 2024 07:27 pm

Tgt Ion:128 Resp: 1340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 22.0 | 8.8 | 13.2# |
| 127 | 0.0 | 0.0 | 0.0 |

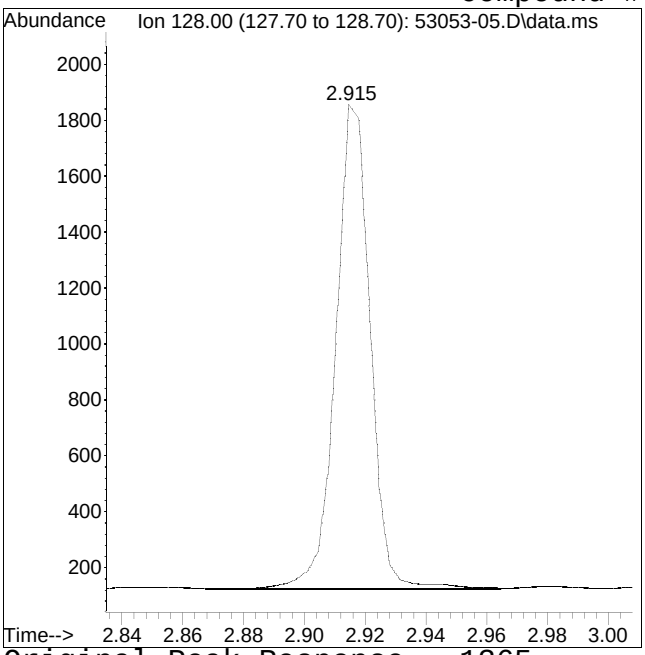


# Manual Integration Report

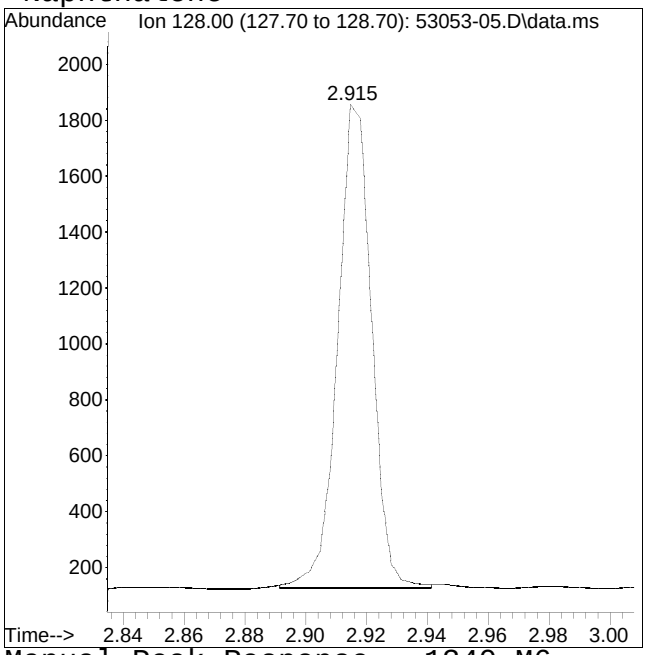
Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : 53053-05.D
Date Inj'd : 9/21/2024 7:27 pm
Sample : L2453053-05,32,,rp

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/21/2024 7:41 pm

## Compound #9: Naphthalene




Original Peak Response = 1365




Manual Peak Response = 1340 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Semivolatiles Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV119** | **Ical Ref** | **: ICAL21236** |
| **Calibration dates** | **: 06/21/24 14:50 06/21/24 17:17** | | |

Calibration Files
L1 =L1.D L2 =L2.D L3 =L3.D L4 =L4.D L5 =L5.D L6 =L6.D L7 =L7.D L8 =L8.D L9 =L9.D
L10 =L10.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1,4-Dichlorobenzene-d4 | ISTD | | | | | | | | | | | |
| 2) | s | 2-Fluorophenol | 1.499 | 1.440 | 1.417 | 1.513 | 1.488 | 1.487 | 1.409 | 1.284 | 1.164 | 1.411 | | 8.23 |
| 3) | s | Phenol-d6 | 1.805 | 1.715 | 1.711 | 1.852 | 1.844 | 1.895 | 1.850 | 1.746 | 1.599 | 1.780 | | 5.29 |
| 4) | T | bis(2-Chloroethyl)ether | 1.538 | 1.382 | 1.469 | 1.494 | 1.536 | 1.496 | 1.423 | 1.319 | 1.210 | 1.430 | | 7.67 |
| 5) | T | n-Nitrosodi-n-propylamine | 1.104 | 1.054 | 1.014 | 1.042 | 1.052 | 1.153 | 1.155 | 1.161 | 1.060 | 1.088 | | 5.15 |
| 6) | t | Hexachloroethane | 0.789 | 0.699 | 0.682 | 0.667 | 0.665 | 0.668 | 0.646 | 0.604 | 0.553 | 0.664 | | 9.73 |
| 7) | s | Nitrobenzene-d5 | 1.726 | 1.409 | 1.445 | 1.599 | 1.619 | 1.677 | 1.630 | 1.542 | 1.403 | 1.561 | | 7.58 |
| 8) | i | Naphthalene-d8 | ISTD | | | | | | | | | | | |
| 9) | t | Naphthalene | 1.150 | 1.261 | 1.157 | 1.120 | 1.128 | 1.109 | 1.109 | 1.084 | 1.006 | 0.917 | 1.104 | 8.29 |
| 10) | t | Hexachlorobutadiene | 0.293 | 0.265 | 0.250 | 0.264 | 0.255 | 0.250 | 0.239 | 0.218 | 0.198 | 0.248 | | 11.13 |
| 11) | t | 2-Methylnaphthalene | 0.784 | 0.827 | 0.829 | 0.853 | 0.903 | 0.905 | 0.892 | 0.847 | 0.776 | 0.683 | 0.830 | 8.24 |
| 12) | t | 1-Methylnaphthalene | 0.852 | 0.881 | 0.857 | 0.822 | 0.838 | 0.844 | 0.815 | 0.773 | 0.711 | 0.630 | 0.802 | 9.67 |
| 13) | s | 2-Fluorobiphenyl | 1.142 | 1.059 | 1.142 | 1.147 | 1.151 | 1.061 | 0.980 | 0.870 | 0.755 | 1.034 | | 13.63 |
| 14) | t | 2-Chloronaphthalene | 0.945 | 0.925 | 0.926 | 0.969 | 0.949 | 0.918 | 0.880 | 0.815 | 0.721 | 0.894 | | 8.84 |
| 15) | t | 2,6-Dinitrotoluene | | | | | 0.228 | 0.238 | 0.260 | 0.258 | 0.247 | 0.214 | 0.241 | 7.37 |
| 16) | t | Acenaphthylene | 1.511 | 1.519 | 1.431 | 1.482 | 1.513 | 1.484 | 1.478 | 1.415 | 1.311 | 1.141 | 1.429 | 8.32 |
| 17) | i | Acenaphthene-d10 | ISTD | | | | | | | | | | | |
| 18) | t | Acenaphthene | 1.624 | 1.531 | 1.354 | 1.345 | 1.412 | 1.407 | 1.429 | 1.389 | 1.290 | 1.181 | 1.396 | 8.73 |
| 19) | t | 2,4-Dinitrotoluene | | | | | 0.468 | 0.515 | 0.600 | 0.596 | 0.545 | 0.486 | 0.535 | 10.35 |
| 20) | t | Fluorene | 2.024 | 2.081 | 1.887 | 1.844 | 1.914 | 1.911 | 1.898 | 1.803 | 1.618 | 1.423 | 1.840 | 10.44 |
| 21) | s | 2,4,6-Tribromophenol | 0.280 | 0.250 | 0.256 | 0.280 | 0.284 | 0.315 | 0.309 | 0.287 | 0.254 | 0.279 | | 8.25 |
| 22) | i | Phenanthrene-d10 | ISTD | | | | | | | | | | | |
| 23) | T | 4,6-Dinitro-o-cresol | | | | | 0.096 | 0.107 | 0.157 | 0.163 | 0.168 | 0.160 | *Q | 0.9994 |
| 24) | t | Hexachlorobenzene | 0.325 | 0.283 | 0.293 | 0.299 | 0.290 | 0.281 | 0.261 | 0.232 | 0.207 | 0.275 | | 13.07 |
| 25) | t | Pentachlorophenol | | 0.104 | 0.091 | 0.104 | 0.117 | 0.169 | 0.178 | 0.183 | | | *Q | 0.9975 |
| 26) | t | Phenanthrene | 1.429 | 1.353 | 1.140 | 1.122 | 1.156 | 1.163 | 1.160 | 1.120 | 1.037 | 0.949 | 1.163 | 11.91 |
| 27) | t | Anthracene | 1.386 | 1.332 | 1.163 | 1.148 | 1.209 | 1.223 | 1.254 | 1.206 | 1.098 | 0.996 | 1.201 | 9.26 |
| 28) | t | Fluoranthene | 2.024 | 1.664 | 1.691 | 1.738 | 1.716 | 1.610 | 1.495 | 1.280 | 1.154 | 1.597 | | 16.22 |
| 29) | t | Pyrene | 2.103 | 1.785 | 1.749 | 1.824 | 1.772 | 1.637 | 1.528 | 1.298 | 1.195 | 1.655 | | 16.87 |
| 30) | s | 4-Terphenyl-d14 | | 1.312 | 1.248 | 1.271 | 1.235 | 1.110 | 1.026 | 0.852 | 0.791 | 1.106 | | 17.97 |
| 31) | i | Chrysene-d12 | ISTD | | | | | | | | | | | |
| 32) | t | Benzo[a]anthracene | 7.571 | 3.798 | 2.602 | 1.853 | 1.665 | 1.630 | 1.616 | 1.504 | 1.473 | | *L | 0.9990 |
| 33) | t | 3,3'-Dichlorobenzene | | | | | 0.567 | 0.588 | 0.657 | 0.660 | 0.614 | 0.579 | 0.611 | 6.57 |
| 34) | t | Chrysene | 1.711 | 1.595 | 1.403 | 1.409 | 1.460 | 1.464 | 1.512 | 1.516 | 1.433 | 1.384 | 1.489 | 6.76 |
| 35) | T | bis(2-Ethylhexyl)phthalate | | | | | 0.830 | 0.858 | 1.029 | 1.097 | 1.115 | 1.082 | *L | 0.9996 |
| 36) | i | Perylene-d12 | ISTD | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV119** | **Ical Ref** | **: ICAL21236** |
| **Calibration dates** | **: 06/21/24 14:50 06/21/24 17:17** | | |

Calibration Files
L1 =L1.D L2 =L2.D L3 =L3.D L4 =L4.D L5 =L5.D L6 =L6.D L7 =L7.D L8 =L8.D L9 =L9.D
L10 =L10.D

| | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) t | Benzo[b]fluoranthene | 1.975 | 1.900 | 1.600 | 1.691 | 1.716 | 1.761 | 1.653 | 1.617 | 1.405 | 1.248 | 1.657 | 12.90 |
| 38) t | Benzo[k]fluoranthene | | | 1.744 | 1.675 | 1.775 | 1.675 | 1.559 | 1.403 | 1.269 | 1.144 | 1.531 | 15.26 |
| 39) t | Benzo[a]pyrene | 1.765 | 1.646 | 1.432 | 1.422 | 1.491 | 1.502 | 1.494 | 1.441 | 1.291 | 1.190 | 1.467 | 11.01 |
| 40) t | Indeno[1,2,3-cd]pyrene | 1.835 | 1.611 | 1.346 | 1.389 | 1.476 | 1.489 | 1.478 | 1.483 | 1.373 | 1.352 | 1.483 | 9.98 |
| 41) t | Dibenzo[a,h]anthracene | 1.555 | 1.453 | 1.258 | 1.272 | 1.378 | 1.353 | 1.305 | 1.289 | 1.196 | 1.155 | 1.321 | 8.99 |
| 42) t | Benzo[g,h,i]perylene | 1.810 | 1.648 | 1.414 | 1.376 | 1.486 | 1.459 | 1.431 | 1.397 | 1.302 | 1.267 | 1.459 | 11.08 |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV125** | **Ical Ref** | **: ICAL21503** |
| **Calibration dates** | **: 09/17/24 18:45 09/17/24 21:09** | | |

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1,4-Dichlorobenzene-d4 | ISTD | | | | | | | | | | | |
| 2) | s | 2-Fluorophenol | 0.971 | 1.076 | 1.003 | 0.976 | 0.958 | 1.008 | 0.994 | 0.957 | 0.967 | 0.934 | 0.984 | 3.99 |
| 3) | s | Phenol-d6 | 1.486 | 1.276 | 1.119 | 1.153 | 1.166 | 1.204 | 1.208 | 1.167 | 1.194 | 1.166 | 1.214 | 8.61 |
| 4) | T | bis(2-Chloroethyl)ether | | 1.231 | 1.079 | 1.071 | 1.059 | 1.122 | 1.074 | 1.036 | 1.033 | 1.002 | 1.079 | 6.16 |
| 5) | T | n-Nitrosodi-n-propylamine | | | 0.783 | 0.730 | 0.690 | 0.718 | 0.742 | 0.722 | 0.757 | 0.747 | 0.736 | 3.82 |
| 6) | t | Hexachloroethane | | | 0.471 | 0.447 | 0.430 | 0.441 | 0.439 | 0.421 | 0.429 | 0.414 | 0.437 | 4.06 |
| 7) | s | Nitrobenzene-d5 | | 0.575 | 0.577 | 0.602 | 0.586 | 0.628 | 0.666 | 0.656 | 0.695 | 0.632 | 0.624 | 6.80 |
| 8) | i | Naphthalene-d8 | ISTD | | | | | | | | | | | |
| 9) | t | Naphthalene | 1.355 | 1.209 | 1.078 | 1.069 | 1.017 | 1.046 | 1.011 | 0.979 | 0.969 | 0.920 | 1.065 | 12.06 |
| 10) | t | Hexachlorobutadiene | | 0.238 | 0.222 | 0.223 | 0.214 | 0.221 | 0.212 | 0.206 | 0.205 | 0.195 | 0.215 | 5.78 |
| 11) | t | 2-Methylnaphthalene | 0.718 | 0.708 | 0.691 | 0.682 | 0.669 | 0.693 | 0.687 | 0.662 | 0.669 | 0.643 | 0.682 | 3.27 |
| 12) | t | 1-Methylnaphthalene | 0.658 | 0.667 | 0.633 | 0.632 | 0.624 | 0.647 | 0.639 | 0.617 | 0.618 | 0.595 | 0.633 | 3.33 |
| 13) | s | 2-Fluorobiphenyl | 0.874 | 0.908 | 0.858 | 0.853 | 0.848 | 0.876 | 0.858 | 0.814 | 0.811 | 0.778 | 0.848 | 4.44 |
| 14) | t | 2-Chloronaphthalene | | 0.761 | 0.709 | 0.729 | 0.712 | 0.742 | 0.731 | 0.706 | 0.718 | 0.696 | 0.723 | 2.79 |
| 15) | t | 2,6-Dinitrotoluene | | | | | 0.053 | 0.057 | 0.072 | 0.080 | 0.104 | 0.107 | *Q | 0.9964 |
| 16) | t | Acenaphthylene | 1.098 | 1.071 | 1.004 | 1.012 | 0.998 | 1.042 | 1.081 | 1.053 | 1.078 | 1.057 | 1.049 | 3.32 |
| 17) | i | Acenaphthene-d10 | ISTD | | | | | | | | | | | |
| 18) | t | Acenaphthene | 1.257 | 1.314 | 1.244 | 1.250 | 1.211 | 1.256 | 1.208 | 1.169 | 1.168 | 1.120 | 1.220 | 4.60 |
| 19) | t | 2,4-Dinitrotoluene | | | | | 0.098 | 0.109 | 0.141 | 0.162 | 0.208 | 0.213 | *Q | 0.9964 |
| 20) | t | Fluorene | 1.432 | 1.440 | 1.311 | 1.293 | 1.284 | 1.357 | 1.363 | 1.310 | 1.316 | 1.267 | 1.337 | 4.47 |
| 21) | s | 2,4,6-Tribromophenol | | 0.181 | 0.165 | 0.140 | 0.147 | 0.161 | 0.181 | 0.184 | 0.202 | 0.201 | 0.174 | 12.57 |
| 22) | i | Phenanthrene-d10 | ISTD | | | | | | | | | | | |
| 23) | T | 4,6-Dinitro-o-cresol | | | | | 0.020 | 0.023 | 0.030 | 0.033 | 0.040 | 0.041 | *Q | 0.9975 |
| 24) | t | Hexachlorobenzene | | 0.307 | 0.255 | 0.257 | 0.249 | 0.264 | 0.256 | 0.242 | 0.243 | 0.230 | 0.256 | 8.40 |
| 25) | t | Pentachlorophenol | | | | 0.059 | 0.071 | 0.056 | 0.076 | 0.090 | 0.112 | 0.114 | *Q | 0.9957 |
| 26) | t | Phenanthrene | 0.973 | 1.099 | 1.118 | 1.039 | 1.071 | 1.085 | 1.045 | 0.988 | 0.985 | 0.915 | 1.032 | 6.27 |
| 27) | t | Anthracene | 1.105 | 1.143 | 0.995 | 0.988 | 0.986 | 1.038 | 1.038 | 1.000 | 1.007 | 0.938 | 1.024 | 5.92 |
| 28) | t | Fluoranthene | 1.264 | 1.214 | 1.137 | 1.114 | 1.109 | 1.178 | 1.216 | 1.173 | 1.184 | 1.115 | 1.170 | 4.42 |
| 29) | t | Pyrene | 1.341 | 1.275 | 1.181 | 1.159 | 1.158 | 1.242 | 1.299 | 1.257 | 1.253 | 1.184 | 1.235 | 5.06 |
| 30) | s | 4-Terphenyl-d14 | 0.919 | 0.824 | 0.766 | 0.765 | 0.778 | 0.817 | 0.844 | 0.816 | 0.818 | 0.780 | 0.813 | 5.67 |
| 31) | i | Chrysene-d12 | ISTD | | | | | | | | | | | |
| 32) | t | Benzo[a]anthracene | 1.298 | 0.729 | 0.349 | 0.226 | 0.137 | 0.125 | 0.125 | 0.121 | 0.122 | 0.115 | *L | 0.9992 |
| 33) | t | 3,3'-Dichlorobenzene | | | | | 0.274 | 0.318 | 0.393 | 0.414 | 0.462 | 0.462 | *L | 0.9983 |
| 34) | t | Chrysene | 1.125 | 0.955 | 1.113 | 1.204 | 1.165 | 1.234 | 1.215 | 1.144 | 1.152 | 1.086 | 1.139 | 7.01 |
| 35) | T | bis(2-Ethylhexyl)phthalate | | | | | 0.202 | 0.223 | 0.325 | 0.358 | 0.476 | 0.475 | *Q | 0.9952 |
| 36) | i | Perylene-d12 | ISTD | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Semivolatiles

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: SV125** | **Ical Ref** | **: ICAL21503** |
| **Calibration dates** | **: 09/17/24 18:45 09/17/24 21:09** | | |

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

| | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) t | Benzo[b]fluoranthene | 0.880 | 0.893 | 0.869 | 0.819 | 0.828 | 0.920 | 1.039 | 1.063 | 1.043 | 1.007 | 0.936 | 9.97 |
| 38) t | Benzo[k]fluoranthene | 0.780 | 0.776 | 0.790 | 0.821 | 0.865 | 0.958 | 1.100 | 1.000 | 1.092 | 0.989 | 0.917 | 13.84 |
| 39) t | Benzo[a]pyrene | 0.698 | 0.706 | 0.693 | 0.696 | 0.727 | 0.815 | 0.946 | 0.928 | 0.983 | 0.952 | 0.814 | 15.29 |
| 40) t | Indeno[1,2,3-cd]pyrene | 0.720 | 0.729 | 0.711 | 0.710 | 0.725 | 0.836 | 0.957 | 0.989 | 1.068 | 1.107 | 0.855 | 18.71 |
| 41) t | Dibenzo[a,h]anthracene | 0.611 | 0.627 | 0.633 | 0.644 | 0.709 | 0.835 | 0.956 | 0.928 | 1.004 | | *Q | 0.9992 |
| 42) t | Benzo[g,h,i]perylene | 0.787 | 0.770 | 0.749 | 0.756 | 0.792 | 0.900 | 0.989 | 0.985 | 1.045 | 1.084 | 0.886 | 14.71 |

# Response Factor Report SV119

Method Path : I:\8270SIM\sv119\240621RVTical\
Method File : SIM-RVT_240621_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Jun 26 12:41:11 2024
Response Via : Initial Calibration

Calibration Files
L1 =L1.D L2 =L2.D L3 =L3.D L4 =L4.D L5 =L5.D L6 =L6.D L7 =L7.D L8 =L8.D L9 =L9.D
L10 =L10.D

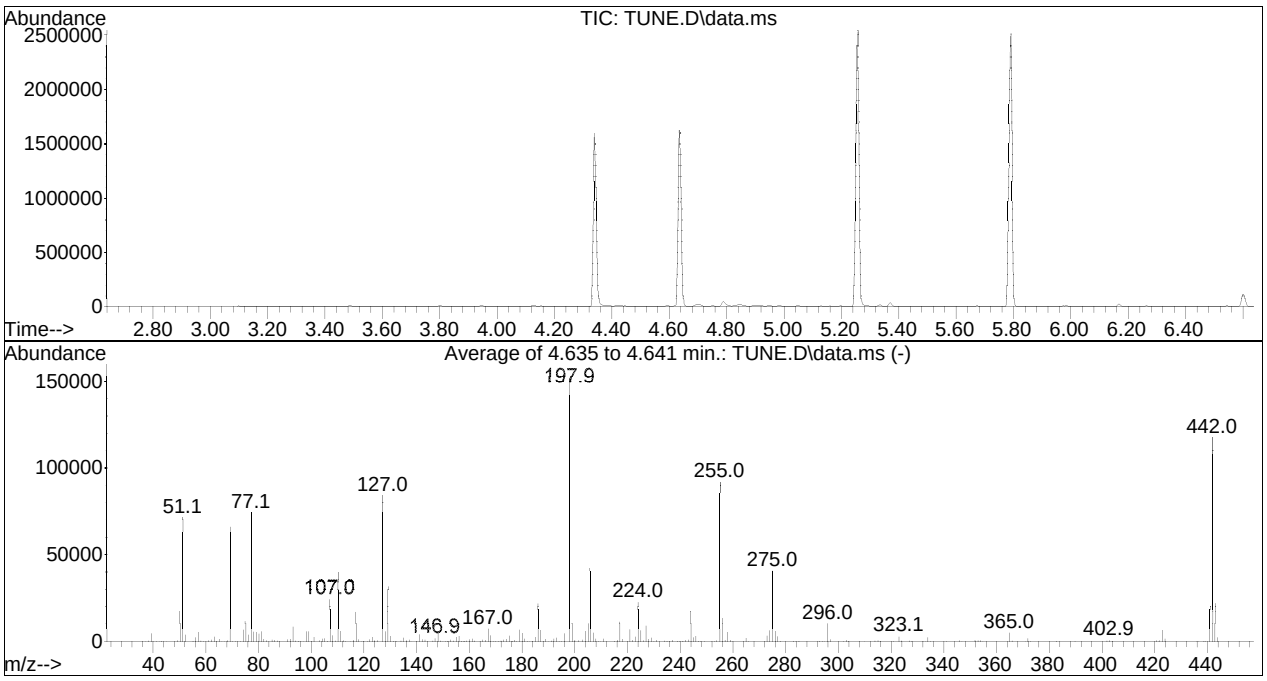
| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1,4-Dichlorobenzene-d4 | ISTD | | | | | | | | | | | |
| 2) | s | 2-Fluorophenol | 1.499 | 1.440 | 1.417 | 1.513 | 1.488 | 1.487 | 1.409 | 1.284 | 1.164 | 1.411 | | 8.23 |
| 3) | s | Phenol-d6 | 1.805 | 1.715 | 1.711 | 1.852 | 1.844 | 1.895 | 1.850 | 1.746 | 1.599 | 1.780 | | 5.29 |
| 4) | T | bis(2-Chloroethyl)ether | 1.538 | 1.382 | 1.469 | 1.494 | 1.536 | 1.496 | 1.423 | 1.319 | 1.210 | 1.430 | | 7.67 |
| 5) | T | n-Nitrosodi-n-propylamine | 1.104 | 1.054 | 1.014 | 1.042 | 1.052 | 1.153 | 1.155 | 1.161 | 1.060 | 1.088 | | 5.15 |
| 6) | t | Hexachloroethane | 0.789 | 0.699 | 0.682 | 0.667 | 0.665 | 0.668 | 0.646 | 0.604 | 0.553 | 0.664 | | 9.73 |
| 7) | s | Nitrobenzene-d5 | 1.726 | 1.409 | 1.445 | 1.599 | 1.619 | 1.677 | 1.630 | 1.542 | 1.403 | 1.561 | | 7.58 |
| 8) | i | Naphthalene-d8 | ISTD | | | | | | | | | | | |
| 9) | t | Naphthalene | 1.150 | 1.261 | 1.157 | 1.120 | 1.128 | 1.109 | 1.109 | 1.084 | 1.006 | 0.917 | 1.104 | 8.29 |
| 10) | t | Hexachlorobutadiene | 0.293 | 0.265 | 0.250 | 0.264 | 0.255 | 0.250 | 0.239 | 0.218 | 0.198 | 0.248 | | 11.13 |
| 11) | t | 2-Methylnaphthalene | 0.784 | 0.827 | 0.829 | 0.853 | 0.903 | 0.905 | 0.892 | 0.847 | 0.776 | 0.683 | 0.830 | 8.24 |
| 12) | t | 1-Methylnaphthalene | 0.852 | 0.881 | 0.857 | 0.822 | 0.838 | 0.844 | 0.815 | 0.773 | 0.711 | 0.630 | 0.802 | 9.67 |
| 13) | s | 2-Fluorobiphenyl | 1.142 | 1.059 | 1.142 | 1.147 | 1.151 | 1.061 | 0.980 | 0.870 | 0.755 | 1.034 | | 13.63 |
| 14) | t | 2-Chloronaphthalene | 0.945 | 0.925 | 0.926 | 0.969 | 0.949 | 0.918 | 0.880 | 0.815 | 0.721 | 0.894 | | 8.84 |
| 15) | t | 2,6-Dinitrotoluene | 0.228 | 0.238 | 0.260 | 0.258 | 0.247 | 0.214 | 0.241 | | | | | 7.37 |
| 16) | t | Acenaphthylene | 1.511 | 1.519 | 1.431 | 1.482 | 1.513 | 1.484 | 1.478 | 1.415 | 1.311 | 1.141 | 1.429 | 8.32 |
| 17) | i | Acenaphthene-d10 | ISTD | | | | | | | | | | | |
| 18) | t | Acenaphthene | 1.624 | 1.531 | 1.354 | 1.345 | 1.412 | 1.407 | 1.429 | 1.389 | 1.290 | 1.181 | 1.396 | 8.73 |
| 19) | t | 2,4-Dinitrotoluene | 0.468 | 0.515 | 0.600 | 0.596 | 0.545 | 0.486 | 0.535 | | | | | 10.35 |
| 20) | t | Fluorene | 2.024 | 2.081 | 1.887 | 1.844 | 1.914 | 1.911 | 1.898 | 1.803 | 1.618 | 1.423 | 1.840 | 10.44 |
| 21) | s | 2,4,6-Tribromophenol | 0.280 | 0.250 | 0.256 | 0.280 | 0.284 | 0.315 | 0.309 | 0.287 | 0.254 | 0.279 | | 8.25 |
| 22) | i | Phenanthrene-d10 | ISTD | | | | | | | | | | | |
| 23) | T | 4,6-Dinitro-o-cresol | 0.096 | 0.107 | 0.157 | 0.163 | 0.168 | 0.160 | | | | | *Q | 0.9994 |
| 24) | t | Hexachlorobenzene | 0.325 | 0.283 | 0.293 | 0.299 | 0.290 | 0.281 | 0.261 | 0.232 | 0.207 | 0.275 | | 13.07 |
| 25) | t | Pentachlorophenol | 0.104 | 0.091 | 0.104 | 0.117 | 0.169 | 0.178 | 0.183 | | | | *Q | 0.9975 |
| 26) | t | Phenanthrene | 1.429 | 1.353 | 1.140 | 1.122 | 1.156 | 1.163 | 1.160 | 1.120 | 1.037 | 0.949 | 1.163 | 11.91 |
| 27) | t | Anthracene | 1.386 | 1.332 | 1.163 | 1.148 | 1.209 | 1.223 | 1.254 | 1.206 | 1.098 | 0.996 | 1.201 | 9.26 |
| 28) | t | Fluoranthene | 2.024 | 1.664 | 1.691 | 1.738 | 1.716 | 1.610 | 1.495 | 1.280 | 1.154 | 1.597 | | 16.22 |
| 29) | t | Pyrene | 2.103 | 1.785 | 1.749 | 1.824 | 1.772 | 1.637 | 1.528 | 1.298 | 1.195 | 1.655 | | 16.87 |
| 30) | s | 4-Terphenyl-d14 | 1.312 | 1.248 | 1.271 | 1.235 | 1.110 | 1.026 | 0.852 | 0.791 | 1.106 | | | 17.97 |
| 31) | i | Chrysene-d12 | ISTD | | | | | | | | | | | |
| 32) | t | Benzo[a]anthracene | 7.571 | 3.798 | 2.602 | 1.853 | 1.665 | 1.630 | 1.616 | 1.504 | 1.473 | | *L | 0.9990 |
| 33) | t | 3,3'-Dichlorob... | 0.567 | 0.588 | 0.657 | 0.660 | 0.614 | 0.579 | 0.611 | | | | | 6.57 |
| 34) | t | Chrysene | 1.711 | 1.595 | 1.403 | 1.409 | 1.460 | 1.464 | 1.512 | 1.516 | 1.433 | 1.384 | 1.489 | 6.76 |
| 35) | T | bis(2-Ethylhexyl)phthalate | 0.830 | 0.858 | 1.029 | 1.097 | 1.115 | 1.082 | | | | | *L | 0.9996 |
| 36) | i | Perylene-d12 | ISTD | | | | | | | | | | | |
| 37) | t | Benzo[b]fluora... | 1.975 | 1.900 | 1.600 | 1.691 | 1.716 | 1.761 | 1.653 | 1.617 | 1.405 | 1.248 | 1.657 | 12.90 |
| 38) | t | Benzo[k]fluora... | 1.744 | 1.675 | 1.775 | 1.675 | 1.559 | 1.403 | 1.269 | 1.144 | 1.531 | | | 15.26 |
| 39) | t | Benzo[a]pyrene | 1.765 | 1.646 | 1.432 | 1.422 | 1.491 | 1.502 | 1.494 | 1.441 | 1.291 | 1.190 | 1.467 | 11.01 |
| 40) | t | Indeno[1,2,3-c... | 1.835 | 1.611 | 1.346 | 1.389 | 1.476 | 1.489 | 1.478 | 1.483 | 1.373 | 1.352 | 1.483 | 9.98 |
| 41) | t | Dibenzo[a,h]anthracene | 1.555 | 1.453 | 1.258 | 1.272 | 1.378 | 1.353 | 1.305 | 1.289 | 1.196 | 1.155 | 1.321 | 8.99 |
| 42) | t | Benzo[g,h,i]pe... | 1.810 | 1.648 | 1.414 | 1.376 | 1.486 | 1.459 | 1.431 | 1.397 | 1.302 | 1.267 | 1.459 | 11.08 |

(#) = Out of Range

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : TUNE.D
Acq On : 21 Jun 2024 02:09 pm
Operator : sv119:dv
Sample : TUNE
Misc : WG1939716,,ical
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Jun 26 12:41:11 2024



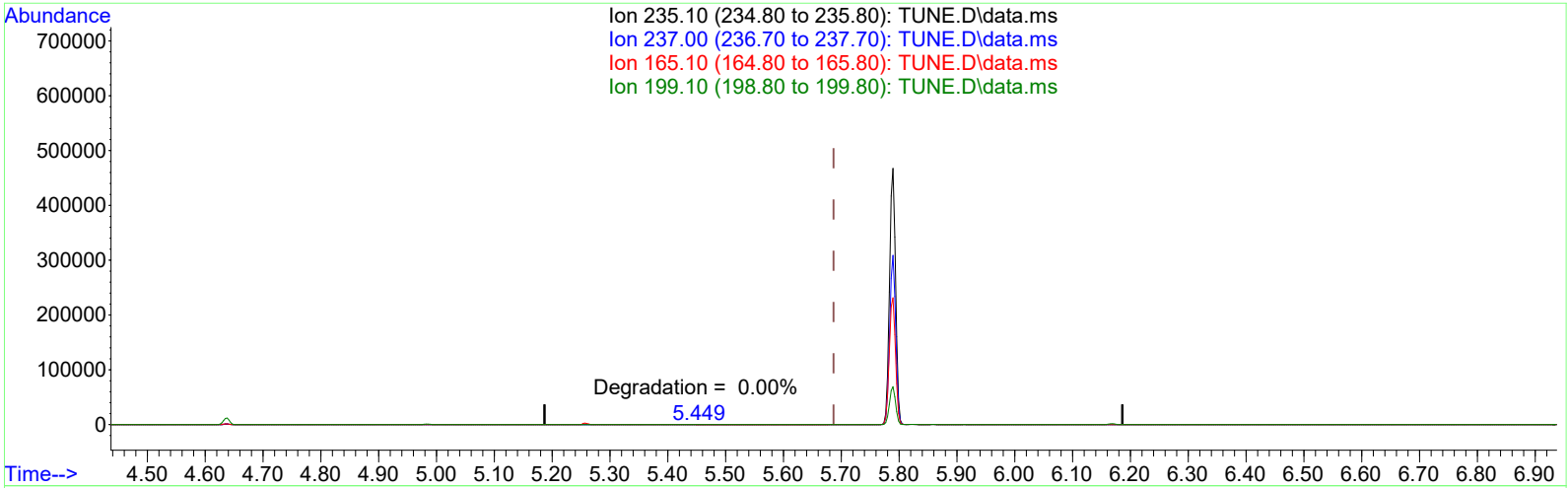

Spectrum Information: Average of 4.635 to 4.641 min.

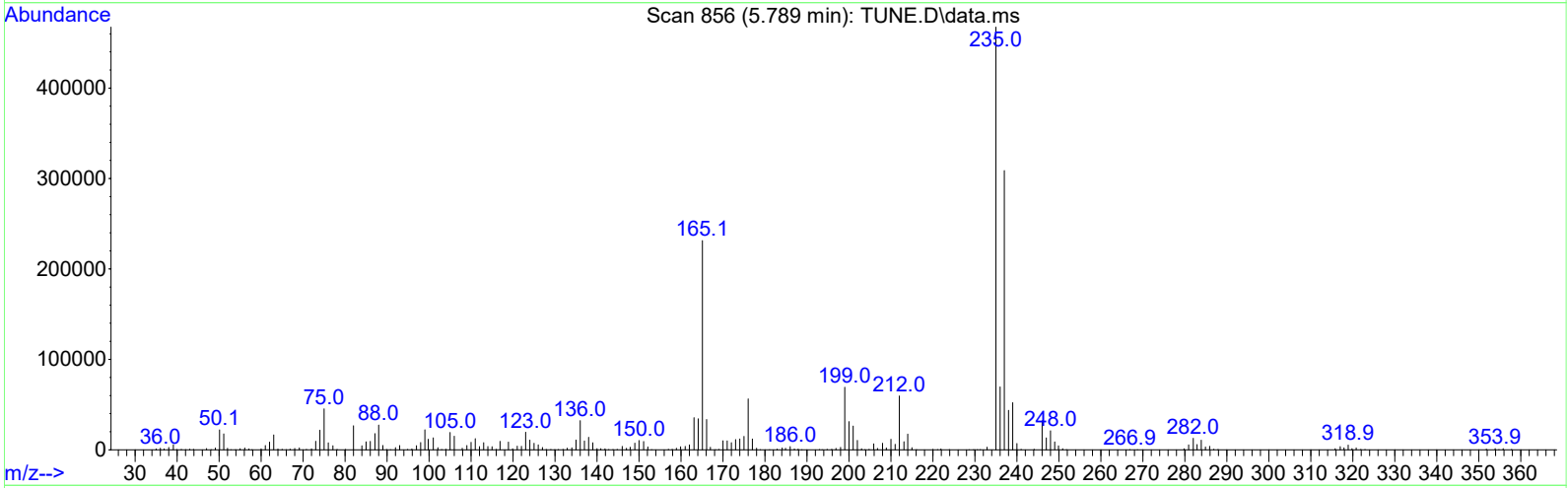
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 46.7 | 71109 | PASS |
| 68 | 69 | 0.00 | 2 | 1.4 | 926 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 65816 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 425 | PASS |
| 127 | 198 | 10 | 80 | 55.3 | 84061 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 152117 | PASS |
| 199 | 198 | 5 | 9 | 6.8 | 10353 | PASS |
| 275 | 198 | 10 | 60 | 26.8 | 40739 | PASS |
| 365 | 198 | 1 | 100 | 3.2 | 4906 | PASS |
| 441 | 442 | 0.01 | 24 | 17.5 | 20573 | PASS |
| 442 | 198 | 50 | 100 | 77.1 | 117261 | PASS |
| 443 | 442 | 15 | 24 | 18.9 | 22125 | PASS |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : TUNE.D
Acq On : 21 Jun 2024 02:09 pm
Operator : sv119:dv
Sample : TUNE
Misc : WG1939716,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jun 21 14:45:51 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 07 09:31:44 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools™ [TUNE]

(6) ddt (T)

5.789min (+ 0.102) 56.01

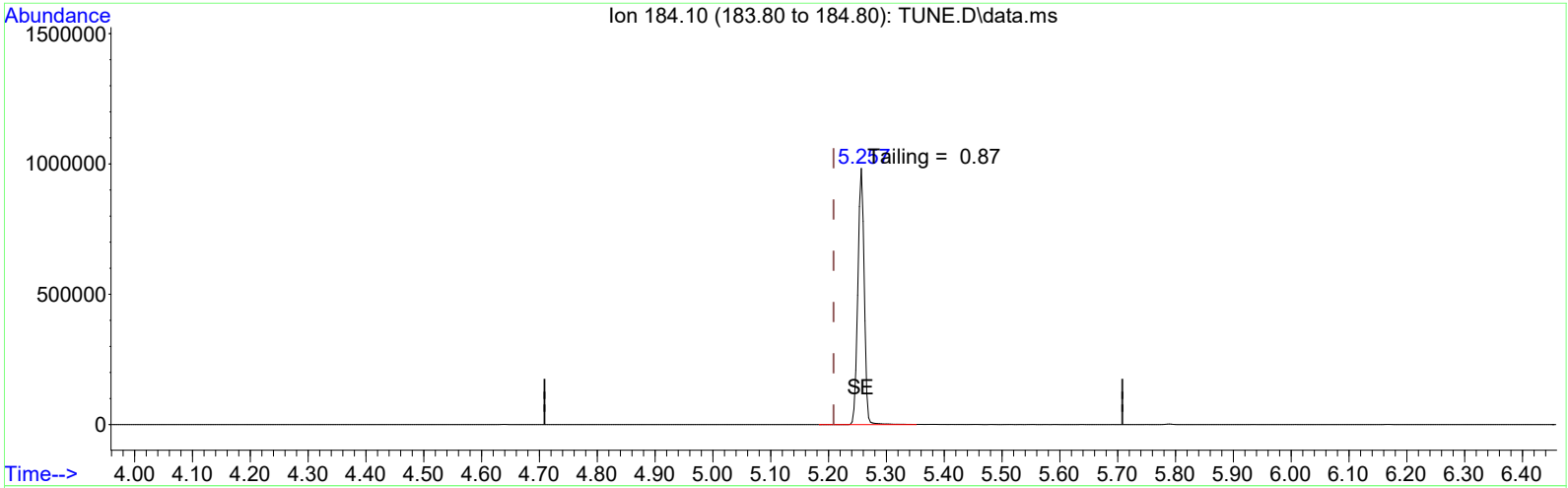
response 341393

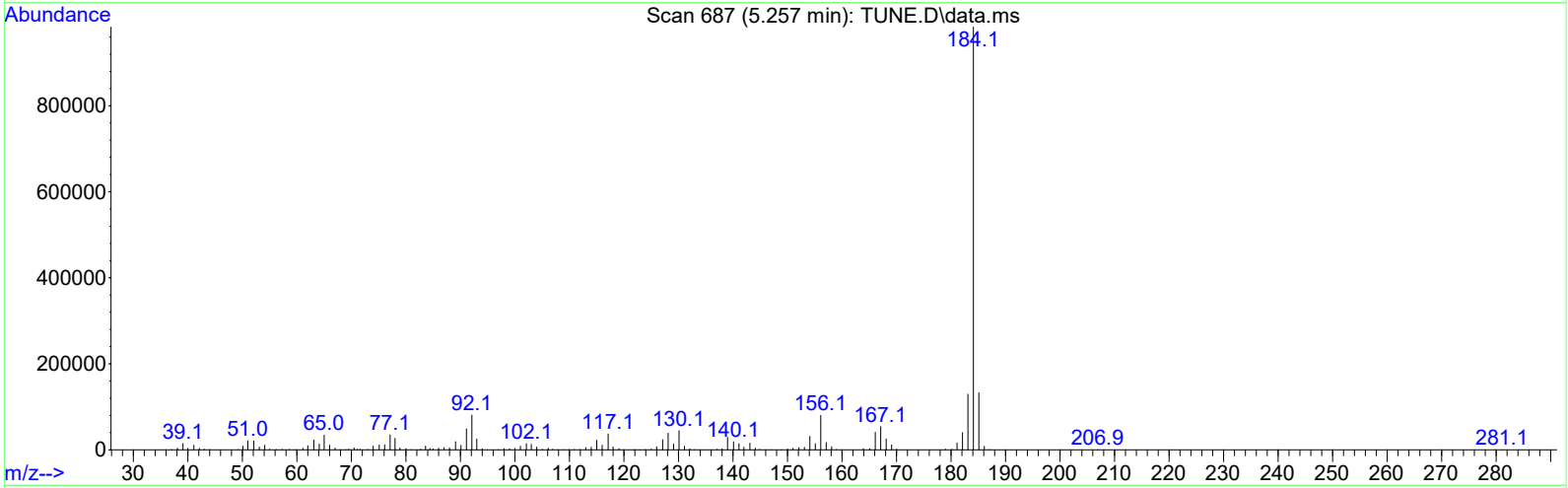
| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 65.60 | 65.73 |
| 165.10 | 53.30 | 50.75 |
| 199.10 | 17.10 | 14.98 |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : TUNE.D
Acq On : 21 Jun 2024 02:09 pm
Operator : sv119:dv
Sample : TUNE
Misc : WG1939716,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jun 21 14:45:51 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 07 09:31:44 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools™ [TUNE]

(3) benzidine (T)

5.257min (+ 0.048) 74.21

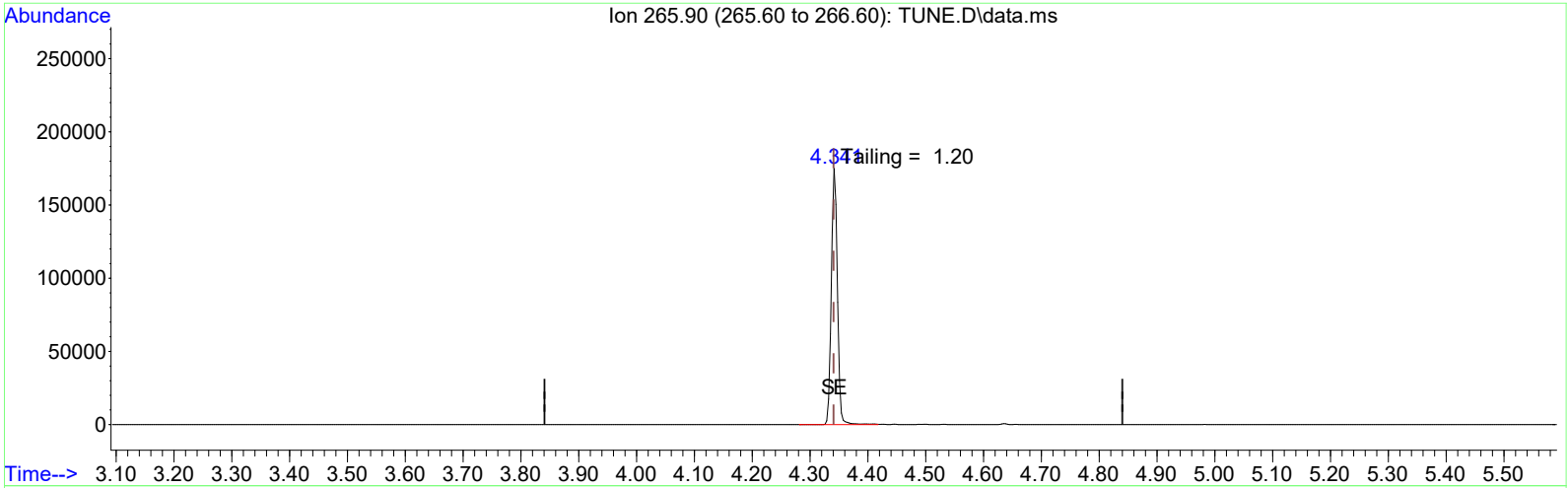
response 755442

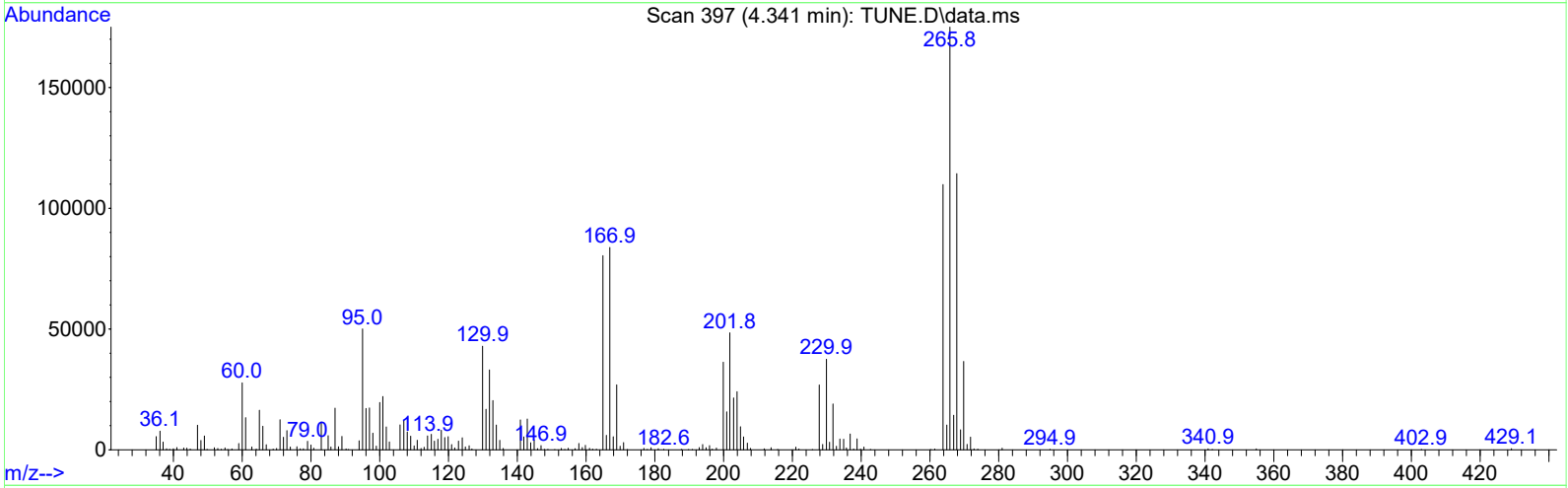
| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : TUNE.D
Acq On : 21 Jun 2024 02:09 pm
Operator : sv119:dv
Sample : TUNE
Misc : WG1939716,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jun 21 14:45:51 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 07 09:31:44 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools™ [TUNE]

(1) pentachlorophenol (T)

4.341min (+ 0.000) 60.65

response 127382

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L10.D
Acq On : 21 Jun 2024 02:50 pm
Operator : sv119:dv
Sample : IL10,32,, #10462 5000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 12:37:42 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:52 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.882 | 152 | 182102 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 186265 | | | Recovery = 97.77% | | | |
| 8) Naphthalene-d8 | 2.533 | 136 | 694866 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 691724 | | | Recovery = 100.45% | | | |
| 17) Acenaphthene-d10 | 3.498 | 164 | 422066 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 424015 | | | Recovery = 99.54% | | | |
| 22) Phenanthrene-d10 | 4.324 | 188 | 983453 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 95.70% | | | |
| 31) Chrysene-d12 | 5.941 | 240 | 892849M6 | 4000.000 | ng/ml | 0.10 |
| Standard Area 1 = 965951 | | | Recovery = 92.43% | | | |
| 36) Perylene-d12 | 6.919 | 264 | 1084648M2 | 4000.000 | ng/ml | 0.14 |
| Standard Area 1 = 979854 | | | Recovery = 110.69% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.313 | 112 | 264903 | 4123.822 | ng/ml | -0.03 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 206.19%# | | | |
| 3) Phenol-d6 | 1.713 | 99 | 364059 | 4493.489 | ng/ml | -0.02 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 224.67%# | | | |
| 7) Nitrobenzene-d5 | 2.161 | 82 | 319320 | 4493.176 | ng/ml | -0.02 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 449.32%# | | | |
| 13) 2-Fluorobiphenyl | 3.131 | 172 | 655438 | 3648.606 | ng/ml | -0.01 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 364.86%# | | | |
| 21) 2,4,6-Tribromophenol | 3.938 | 330 | 134058 | 4549.052 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 227.45%# | | | |
| 30) 4-Terphenyl-d14 | 5.279 | 244 | 972551 | 3577.262 | ng/ml | 0.04 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 178.86%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.758 | 93 | 275370 | 4230.502 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.088 | 70 | 241235 | 4834.229 | ng/ml | 99 |
| 6) Hexachloroethane | 2.129 | 117 | 125966 | 4169.320 | ng/ml | 100 |
| 9) Naphthalene | 2.544 | 128 | 796569 | 4139.539 | ng/ml | 99 |
| 10) Hexachlorobutadiene | 2.618 | 225 | 171911 | 3992.228 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.921 | 142 | 593407 | 4115.899 | ng/ml | 98 |
| 12) 1-Methylnaphthalene | 2.975 | 142 | 546976 | 3924.914 | ng/ml | 98 |
| 14) 2-Chloronaphthalene | 3.189 | 162 | 626560 | 4033.688 | ng/ml | 99 |
| 15) 2,6-Dinitrotoluene | 3.396 | 165 | 185920M4 | 4444.978 | ng/ml | |
| 16) Acenaphthylene | 3.417 | 152 | 991190 | 3994.067 | ng/ml | 100 |
| 18) Acenaphthene | 3.515 | 153 | 623165 | 4229.846 | ng/ml | 98 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L10.D
Acq On : 21 Jun 2024 02:50 pm
Operator : sv119:dv
Sample : IL10,32,, #10462 5000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 12:37:42 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:52 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.621 | 165 | 256294 | 4542.669 | ng/ml | 98 |
| 20) Fluorene | 3.803 | 166 | 750934 | 3867.188 | ng/ml | 96 |
| 23) 4,6-Dinitro-o-cresol | 3.850 | 198 | 196403 | 4975.528 | ng/ml | 98 |
| 24) Hexachlorobenzene | 4.116 | 284 | 254877 | 3774.456 | ng/ml | 98 |
| 25) Pentachlorophenol | 4.229 | 266 | 212303 | 4334.686 | ng/ml | 100 |
| 26) Phenanthrene | 4.339 | 178 | 1166478 | 4079.939 | ng/ml | 99 |
| 27) Anthracene | 4.367 | 178 | 1224962 | 4146.825 | ng/ml | 98 |
| 28) Fluoranthene | 5.032 | 202 | 1418253M3 | 3612.649 | ng/ml | |
| 29) Pyrene | 5.167 | 202 | 1469416 | 3612.041 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 5.932 | 228 | 1644077M3 | 4897.958 | ng/ml | |
| 33) 3,3'-Dichlorobenzene | 5.934 | 252 | 645828M4 | 4735.874 | ng/ml | |
| 34) Chrysene | 5.959 | 228 | 1544132M3 | 4646.782 | ng/ml | |
| 35) Bis(2-ethylhexyl)phtha... | 5.997 | 149 | 1207751M6 | 4951.264 | ng/ml | |
| 37) Benzo[b]fluoranthene | 6.636 | 252 | 1692321M3 | 3767.103 | ng/ml | |
| 38) Benzo[k]fluoranthene | 6.657 | 252 | 1550840M4 | 3736.742 | ng/ml | |
| 39) Benzo[a]pyrene | 6.871 | 252 | 1613200M2 | 4054.525 | ng/ml | |
| 40) Indeno[1,2,3-cd]pyrene | 7.865 | 276 | 1833451M2 | 4558.453 | ng/ml | |
| 41) Dibenzo[a,h]anthracene | 7.899 | 278 | 1566122M6 | 4371.174 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 8.141 | 276 | 1717170M2 | 4340.469 | ng/ml | |

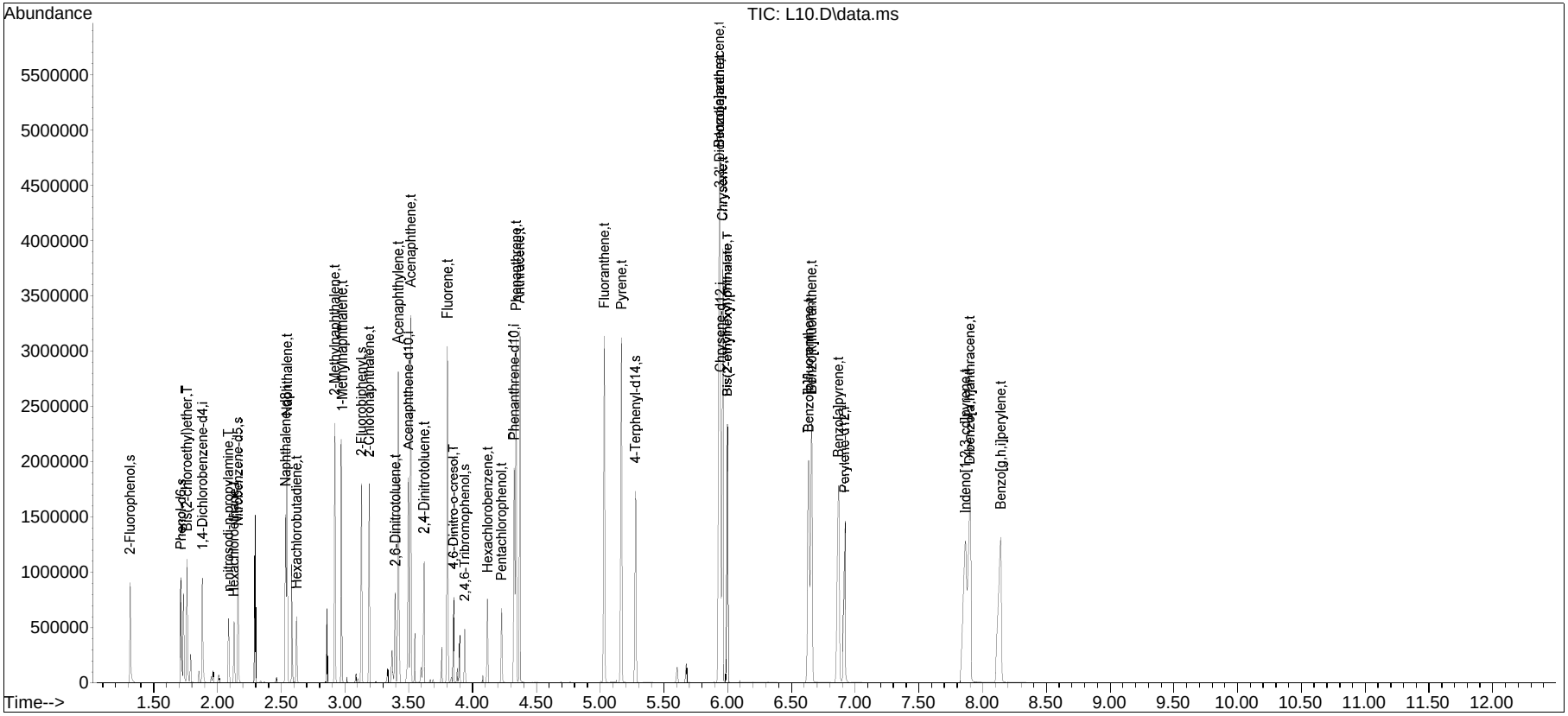
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L10.D
Acq On : 21 Jun 2024 02:50 pm
Operator : sv119:dv
Sample : IL10,32,, #10462 5000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 12:37:42 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:52 2024
Response via : Initial Calibration

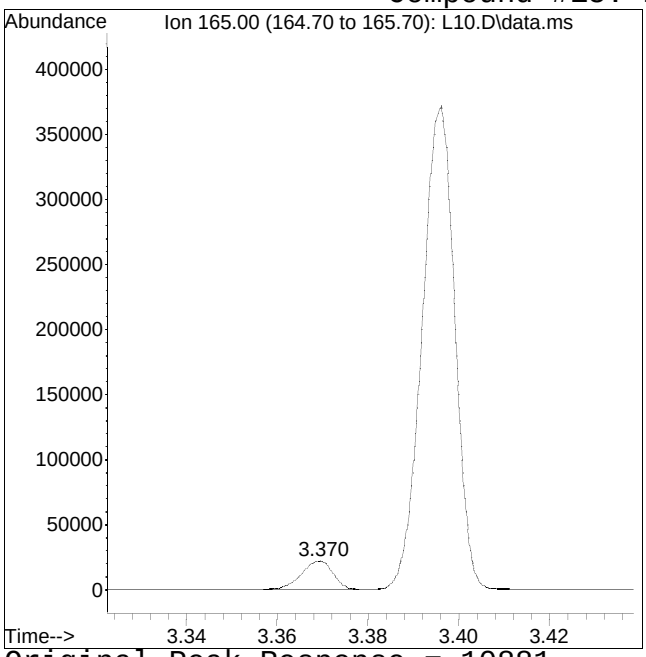
Sub List : Default - All compounds listedical\L8.D•



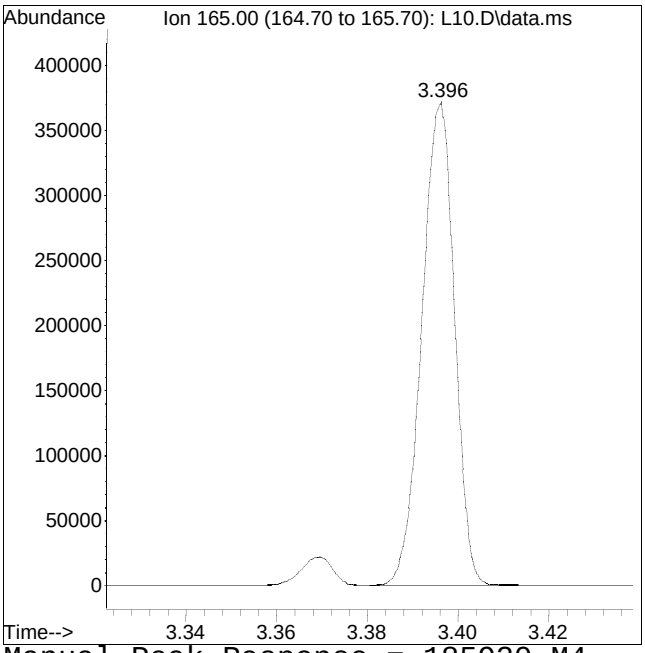
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L10.D
Date Inj'd : 6/21/2024 2:50 pm
Sample : IL10,32,, #10462 5000 ng/m
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

## Compound #15: 2,6-Dinitrotoluene




Original Peak Response = 10881



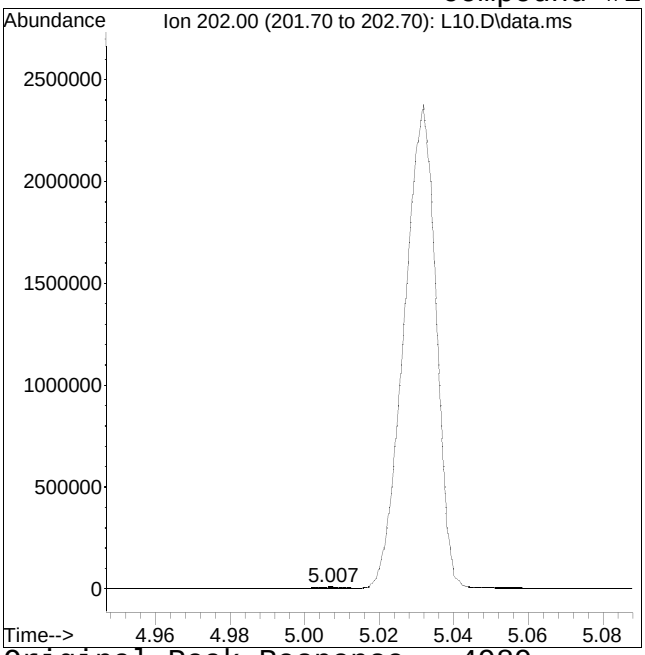

Manual Peak Response = 185920 M4

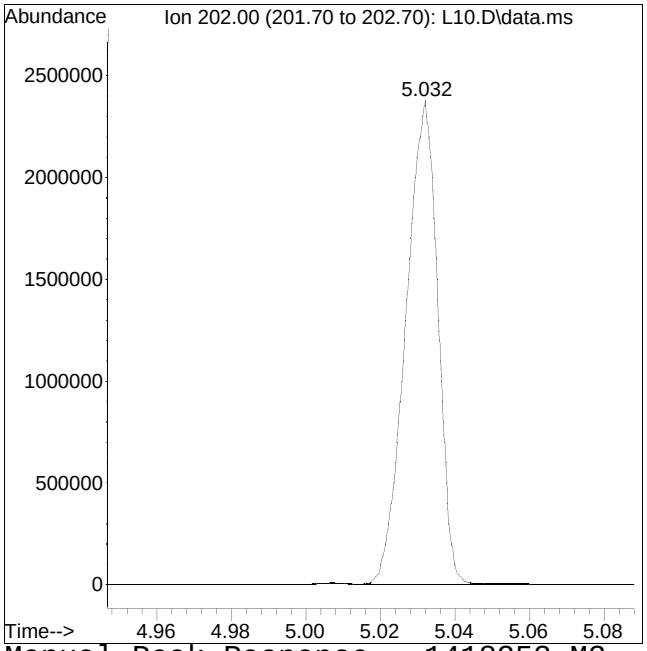
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L10.D
Date Inj'd : 6/21/2024 2:50 pm
Sample : IL10,32,, #10462 5000 ng/m
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

Compound #28: Fluoranthene



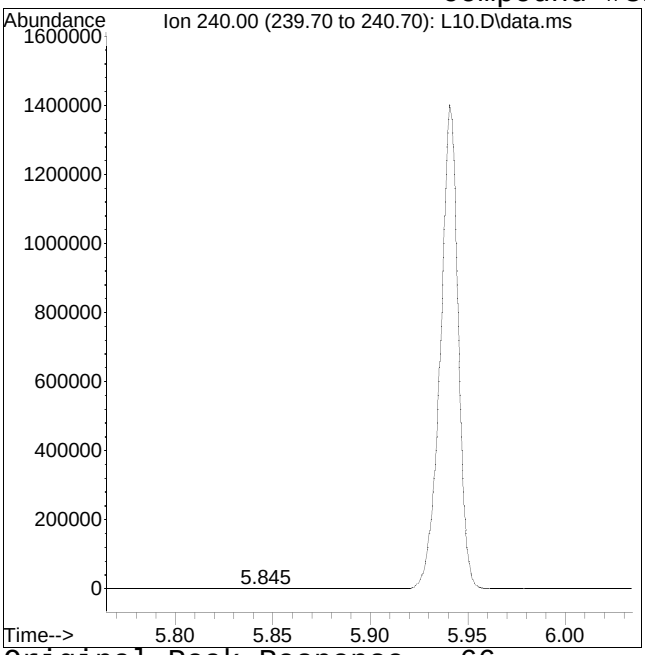




Original Peak Response = 4989 Manual Peak Response = 1418253 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

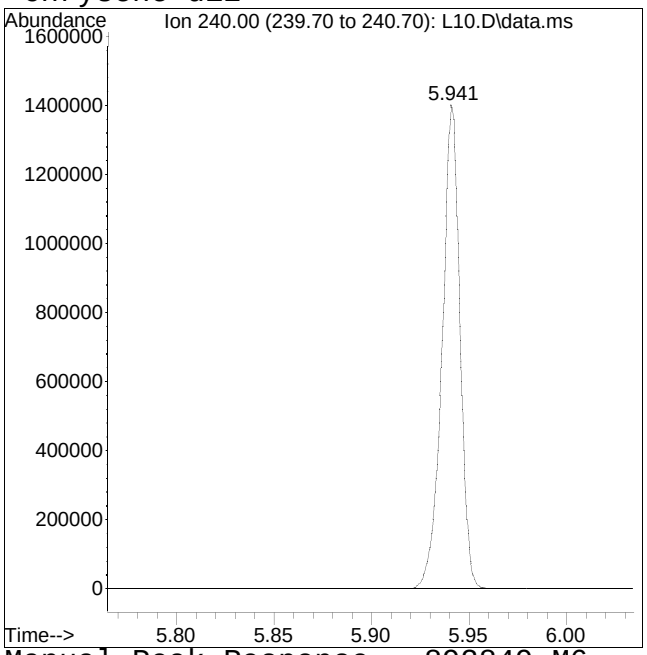
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #31: Chrysene-d12




Original Peak Response = 66



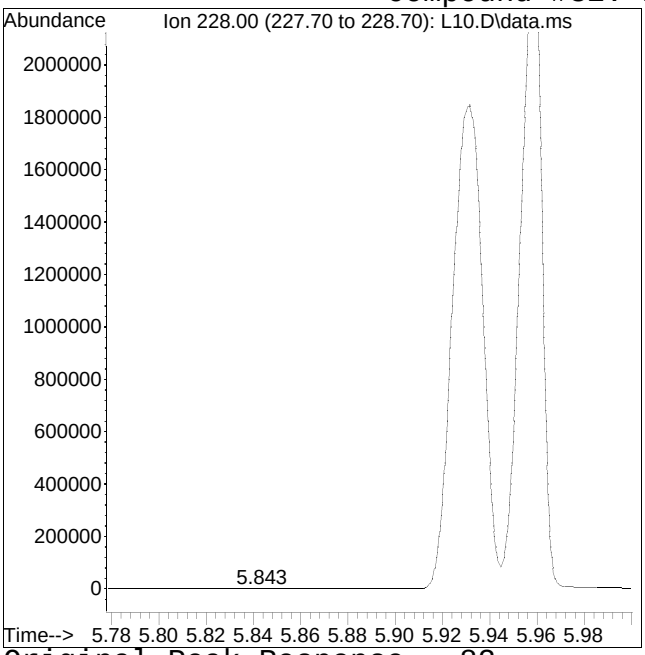

Manual Peak Response = 892849 M6

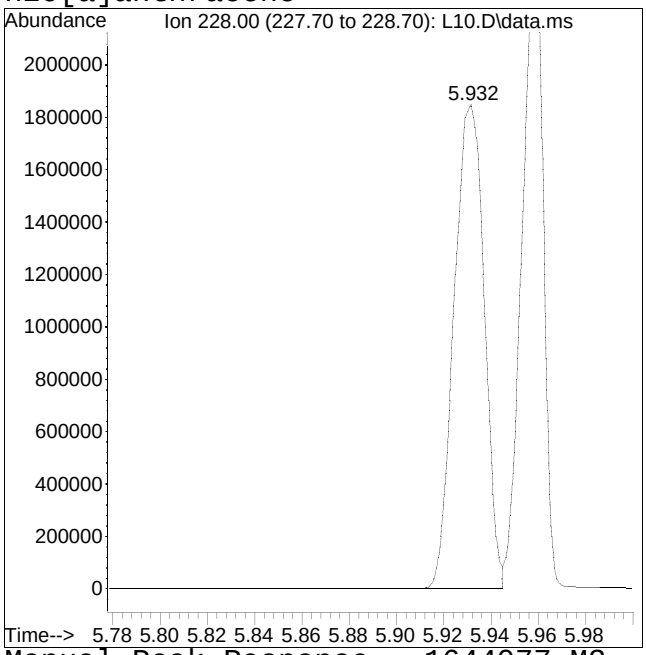
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L10.D
Date Inj'd : 6/21/2024 2:50 pm
Sample : IL10,32,, #10462 5000 ng/m
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

## Compound #32: Benzo[a]anthracene



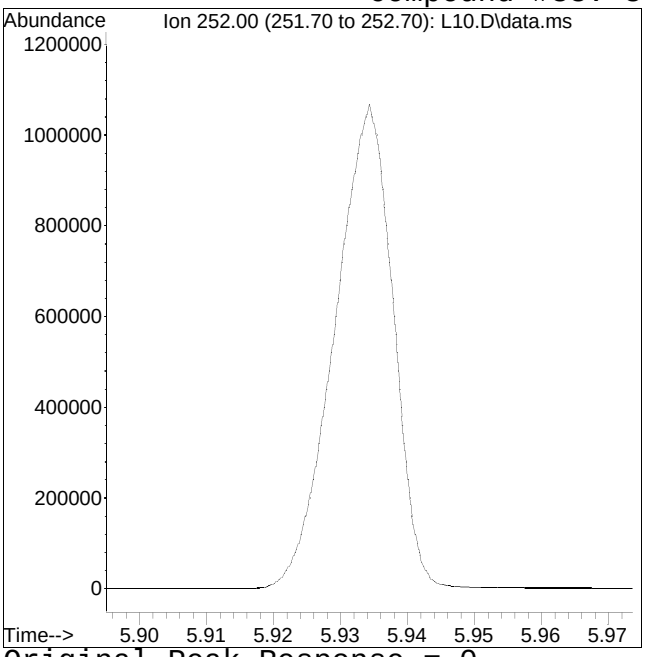

Original Peak Response = 82 Manual Peak Response = 1644077 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

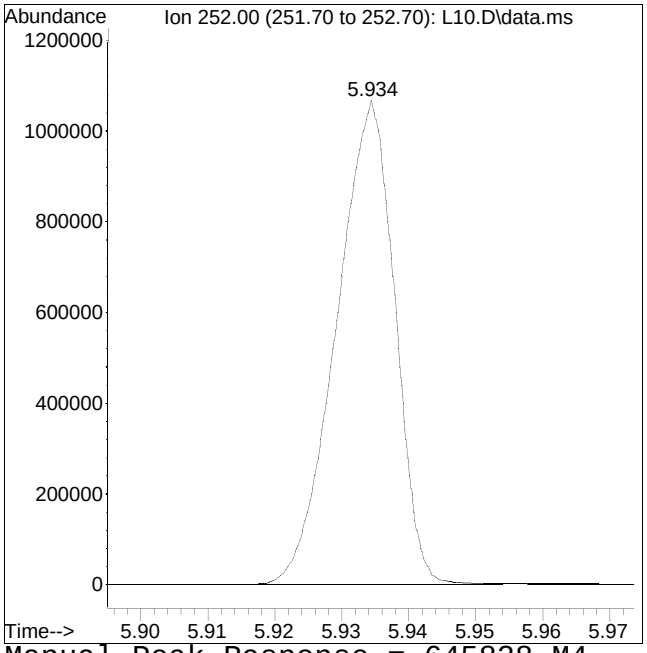
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L10.D
Date Inj'd : 6/21/2024 2:50 pm
Sample : IL10,32,, #10462 5000 ng/m
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

## Compound #33: 3,3'-Dichlorobenzene




Original Peak Response = 0



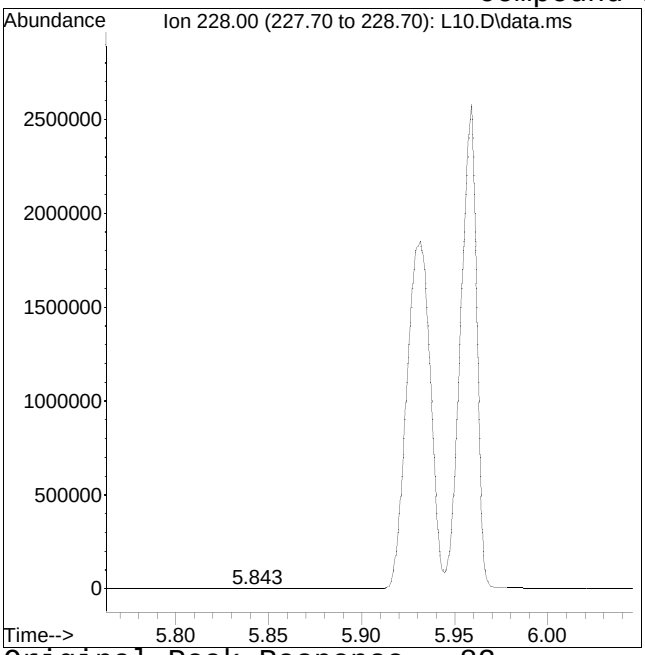

Manual Peak Response = 645828 M4

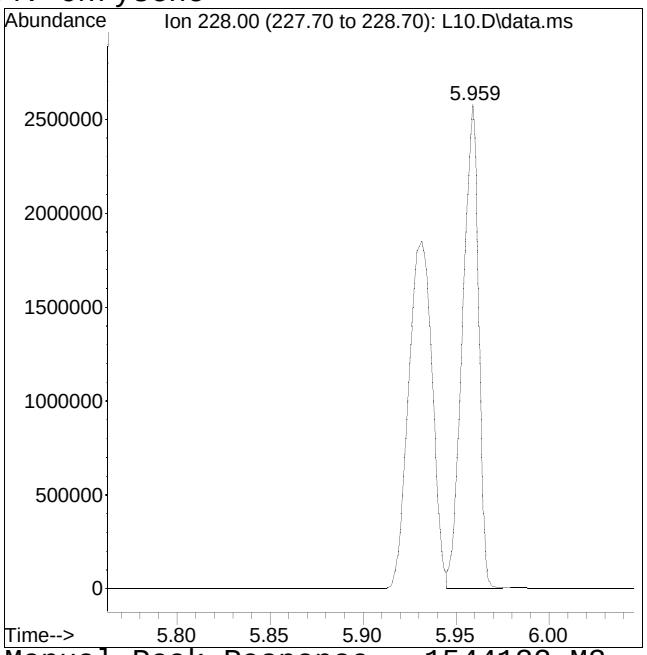
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #34: Chrysene



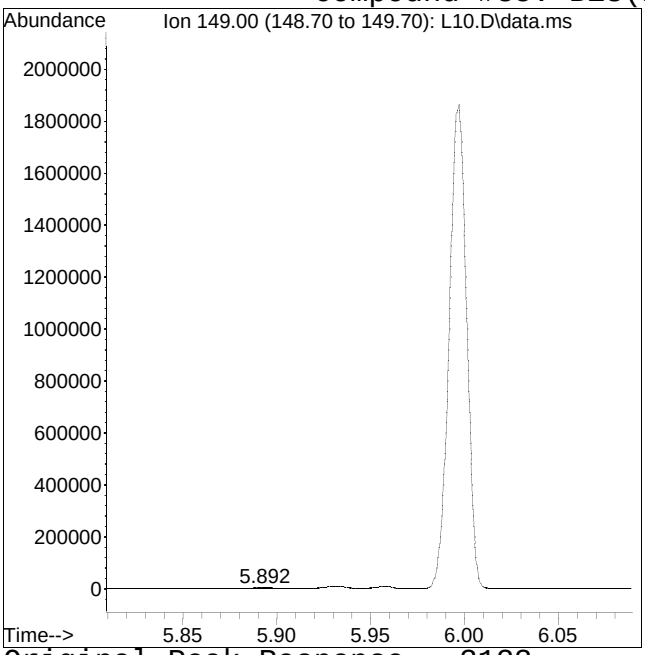




Original Peak Response = 82 Manual Peak Response = 1544132 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

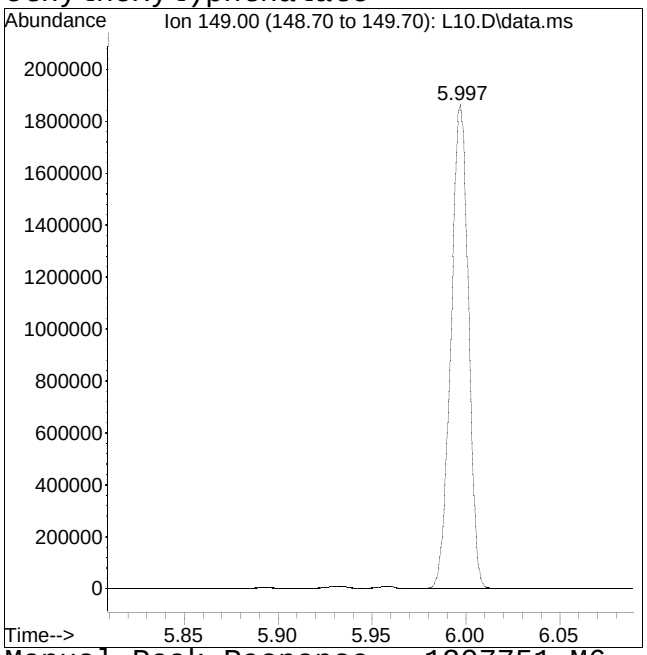
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L10.D
Date Inj'd : 6/21/2024 2:50 pm
Sample : IL10,32,, #10462 5000 ng/m
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

## Compound #35: Bis(2-ethylhexyl)phthalate




Original Peak Response = 3123



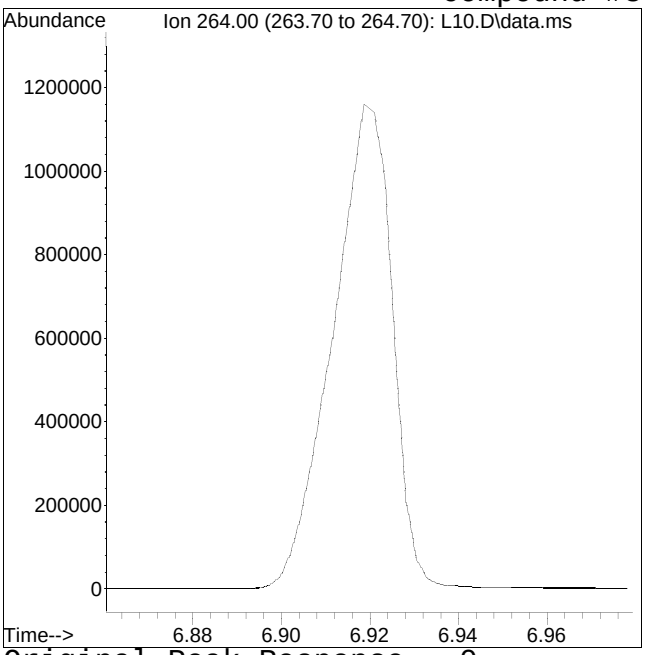

Manual Peak Response = 1207751 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

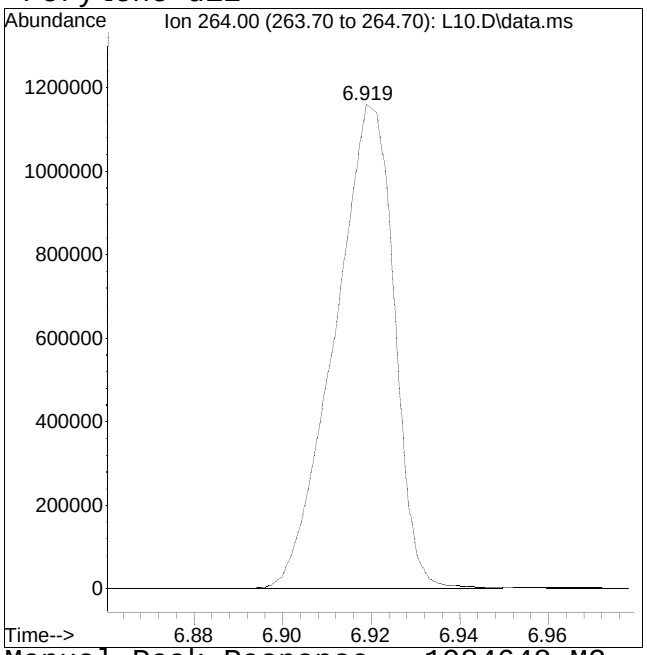
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #36: Perylene-d12




Original Peak Response = 0



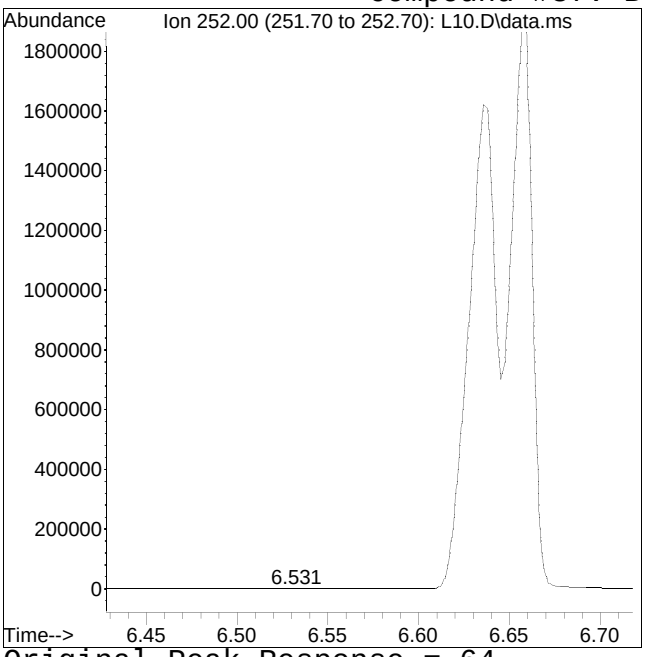

Manual Peak Response = 1084648 M2

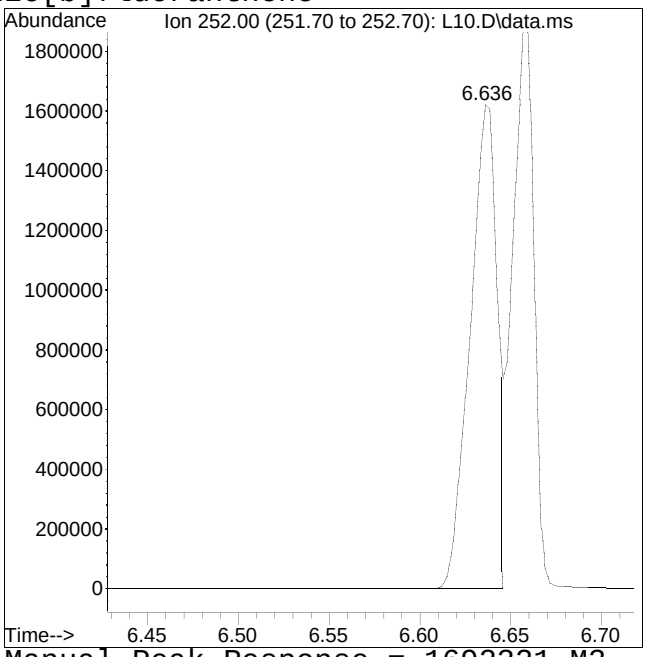
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #37: Benzo[b]fluoranthene



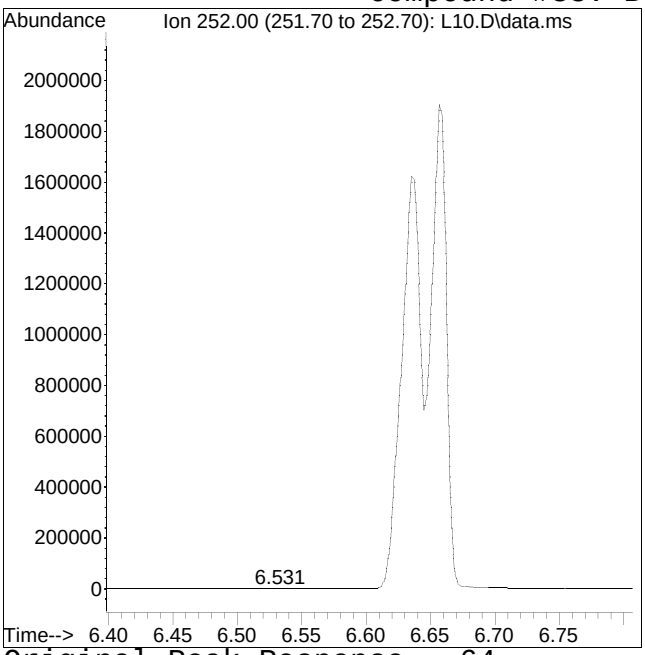




Original Peak Response = 64 Manual Peak Response = 1692321 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

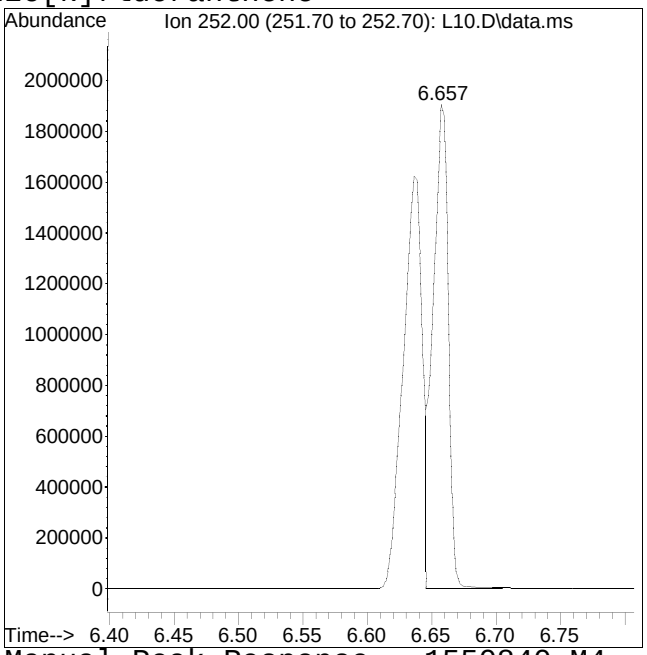
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #38: Benzo[k]fluoranthene




Original Peak Response = 64



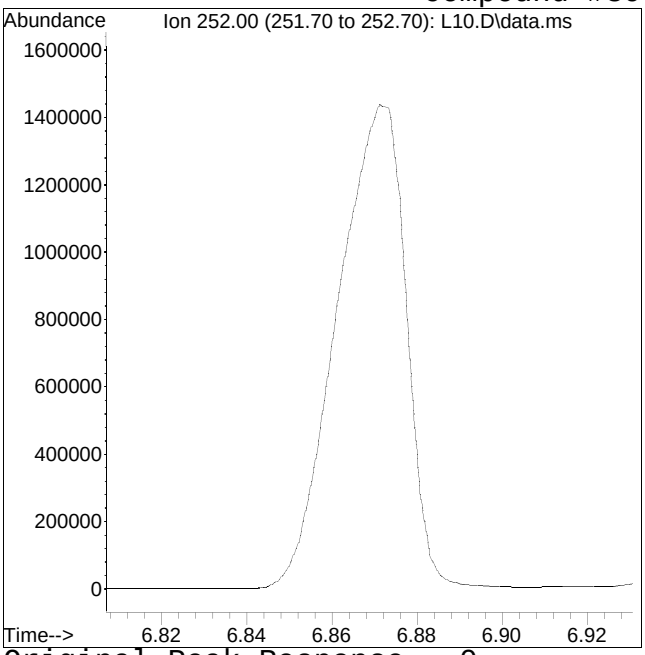

Manual Peak Response = 1550840 M4

M4 = Poor automated baseline construction.

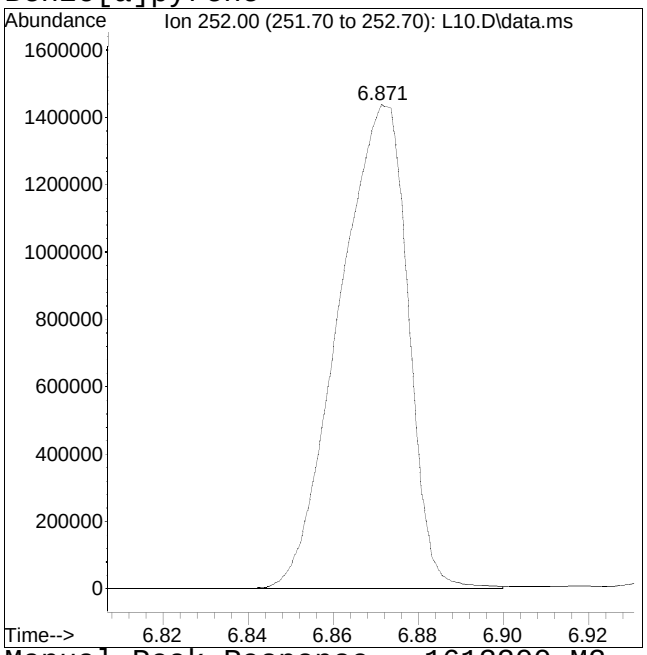
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #39: Benzo[a]pyrene




Original Peak Response = 0



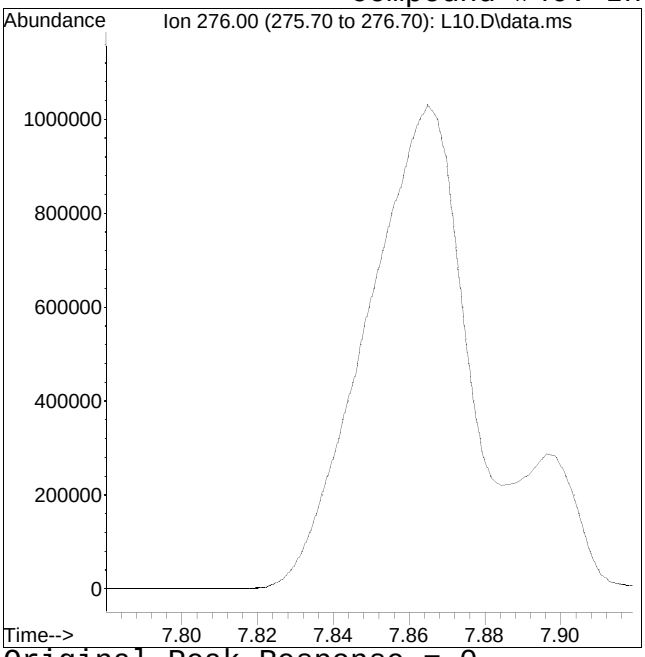

Manual Peak Response = 1613200 M2

M2 = Peak not found by automatic integration algorithm.

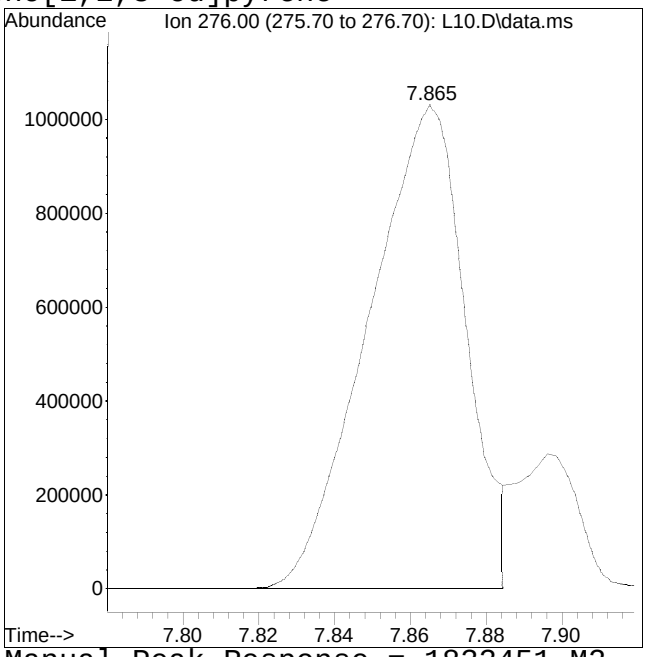
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #40: Indeno[1,2,3-cd]pyrene




Original Peak Response = 0



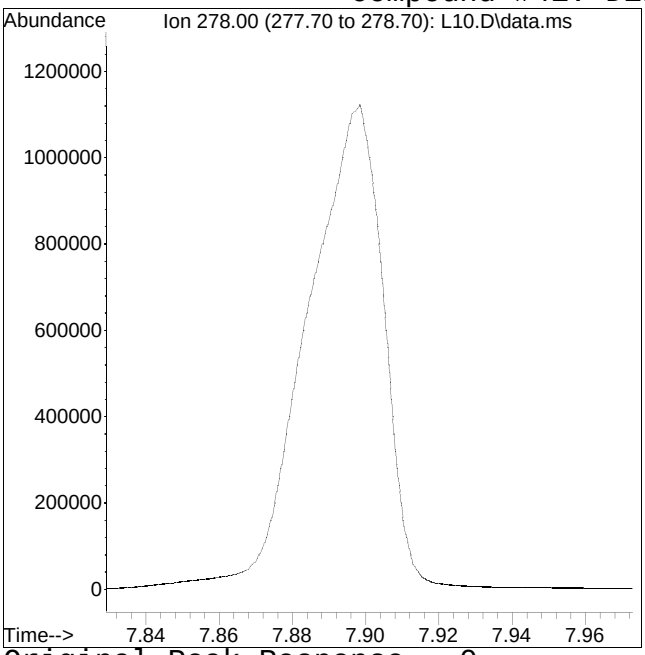

Manual Peak Response = 1833451 M2

M2 = Peak not found by automatic integration algorithm.

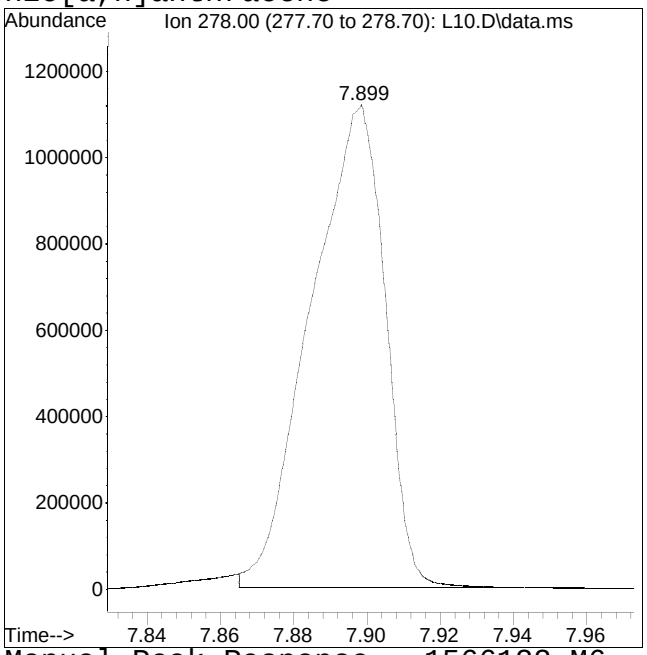
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 0



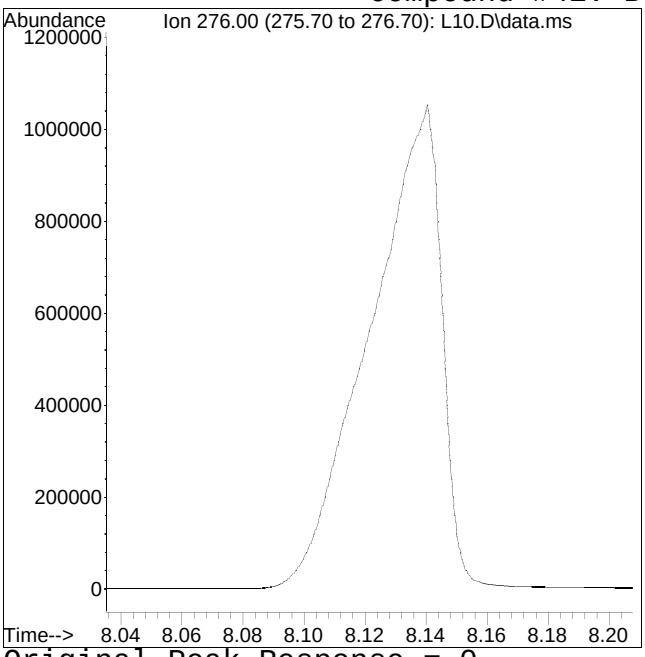

Manual Peak Response = 1566122 M6

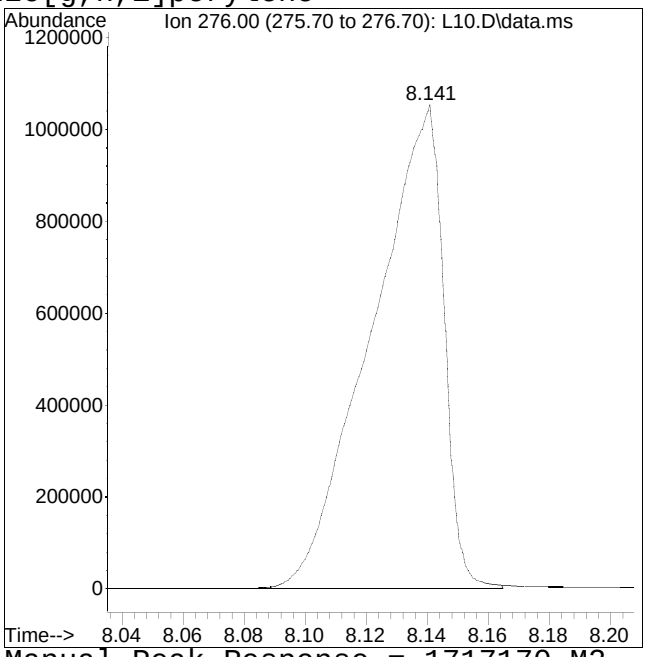
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L10.D Operator : sv119:dv
Date Inj'd : 6/21/2024 2:50 pm Instrument : SV119
Sample : IL10,32,, #10462 5000 ng/mQuant Date : 6/26/2024 12:34 pm

Compound #42: Benzo[g,h,i]perylene




Original Peak Response = 0 Manual Peak Response = 1717170 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L9.D
Acq On : 21 Jun 2024 03:06 pm
Operator : sv119:dv
Sample : IL9,32,, #10755 2500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 26 12:34:53 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.899 | 152 | 189146 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 101.55% | | | |
| 8) Naphthalene-d8 | 2.546 | 136 | 722855 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 104.50% | | | |
| 17) Acenaphthene-d10 | 3.506 | 164 | 456454 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 107.65% | | | |
| 22) Phenanthrene-d10 | 4.330 | 188 | 1086397 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 105.72% | | | |
| 31) Chrysene-d12 | 5.856 | 240 | 939463 | 4000.000 | ng/ml | 0.01 |
| Standard Area 1 = 965951 | | | Recovery = 97.26% | | | |
| 36) Perylene-d12 | 6.800 | 264 | 986561 | 4000.000 | ng/ml | 0.02 |
| Standard Area 1 = 979854 | | | Recovery = 100.68% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.333 | 112 | 151735 | 2274.136 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 113.71%# | | | |
| 3) Phenol-d6 | 1.731 | 99 | 206390 | 2452.551 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 122.63%# | | | |
| 7) Nitrobenzene-d5 | 2.175 | 82 | 182270 | 2469.221 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 246.92%# | | | |
| 13) 2-Fluorobiphenyl | 3.140 | 172 | 393094 | 2103.496 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 210.35%# | | | |
| 21) 2,4,6-Tribromophenol | 3.946 | 330 | 81809 | 2566.922 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 128.35%# | | | |
| 30) 4-Terphenyl-d14 | 5.240 | 244 | 578682 | 1926.830 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 96.34% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.777 | 93 | 155970 | 2306.927 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.105 | 70 | 137292 | 2648.803 | ng/ml | 100 |
| 6) Hexachloroethane | 2.146 | 117 | 71406 | 2275.433 | ng/ml | 100 |
| 9) Naphthalene | 2.557 | 128 | 454475 | 2270.327 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.632 | 225 | 98409 | 2196.830 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.933 | 142 | 350789 | 2338.880 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 2.985 | 142 | 321099 | 2214.883 | ng/ml | 99 |
| 14) 2-Chloronaphthalene | 3.198 | 162 | 368102 | 2278.021 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.402 | 165 | 111600 | 2564.824 | ng/ml | 99 |
| 16) Acenaphthylene | 3.425 | 152 | 592198 | 2293.904 | ng/ml | 100 |
| 18) Acenaphthene | 3.523 | 153 | 367895 | 2309.025 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L9.D
Acq On : 21 Jun 2024 03:06 pm
Operator : sv119:dv
Sample : IL9,32,, #10755 2500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 26 12:34:53 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:44 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.626 | 165 | 155366 | 2546.314 | ng/ml | 99 |
| 20) Fluorene | 3.809 | 166 | 461558 | 2197.876 | ng/ml | 98 |
| 23) 4,6-Dinitro-o-cresol | 3.853 | 198 | 113818 | 2552.849 | ng/ml | 98 |
| 24) Hexachlorobenzene | 4.121 | 284 | 157766 | 2114.960 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.235 | 266 | 124179 | 2486.234 | ng/ml | 99 |
| 26) Phenanthrene | 4.343 | 178 | 703865 | 2228.597 | ng/ml | 99 |
| 27) Anthracene | 4.370 | 178 | 745371 | 2284.182 | ng/ml | 99 |
| 28) Fluoranthene | 5.009 | 202 | 869238 | 2004.360 | ng/ml | 99 |
| 29) Pyrene | 5.134 | 202 | 881286 | 1961.055 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 5.845 | 228 | 883116 | 2496.432 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 5.844 | 252 | 360790 | 2514.410 | ng/ml | 99 |
| 34) Chrysene | 5.870 | 228 | 841688 | 2407.228 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.900 | 149 | 654479 | 2556.429 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.515 | 252 | 866471 | 2120.526 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 6.534 | 252 | 782677 | 2073.355 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 6.750 | 252 | 795930 | 2199.336 | ng/ml | 98 |
| 40) Indeno[1,2,3-cd]pyrene | 7.746 | 276 | 846780 | 2314.641 | ng/ml | 98 |
| 41) Dibenzo[a,h]anthracene | 7.777 | 278 | 737232M6 | 2262.255 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 8.014 | 276 | 802567 | 2230.332 | ng/ml | 100 |

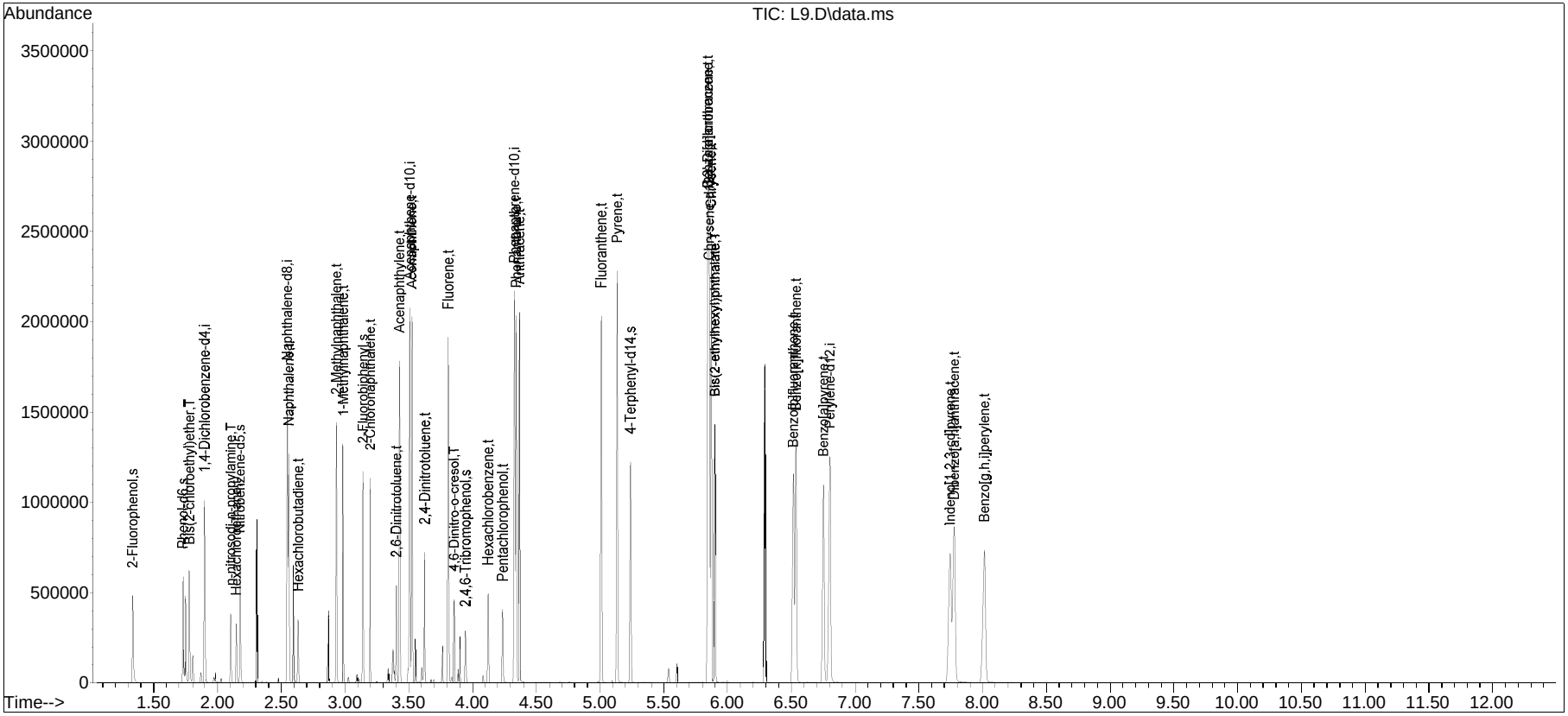
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L9.D
Acq On : 21 Jun 2024 03:06 pm
Operator : sv119:dv
Sample : IL9,32,, #10755 2500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 26 12:34:53 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:44 2024
Response via : Initial Calibration

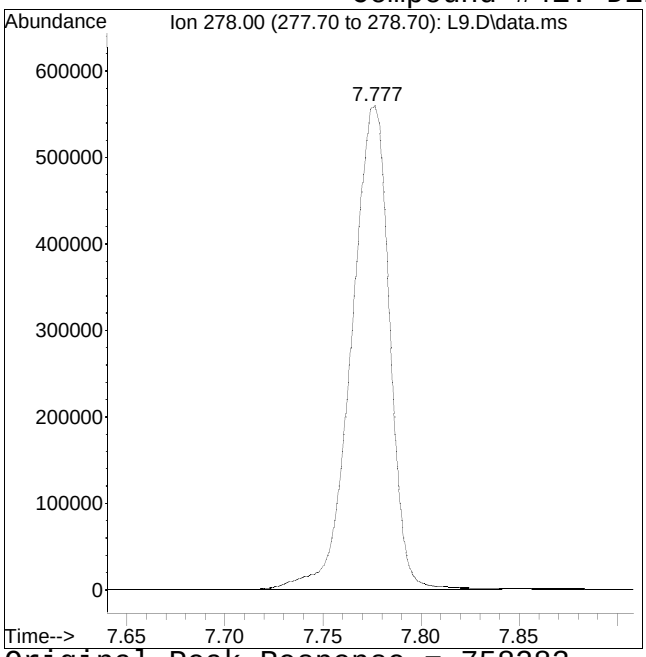
Sub List : Default - All compounds listedical\L8.D•



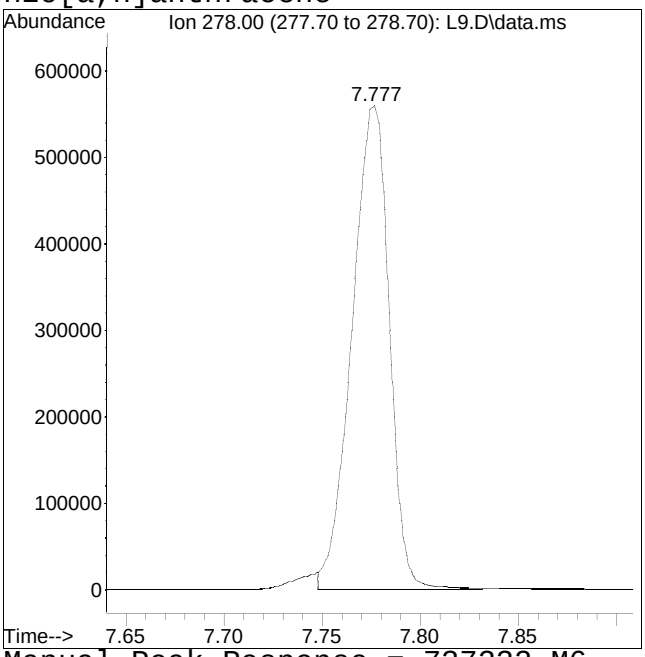
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L9.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:06 pm Instrument : SV119
Sample : IL9,32,, #10755 2500 ng/mlQuant Date : 6/26/2024 12:35 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 758283




Manual Peak Response = 737232 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L8.D
Acq On : 21 Jun 2024 03:23 pm
Operator : sv119:dv
Sample : IL8,32,, #10463 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 26 12:34:46 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:37 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.904 | 152 | 186265 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 100.00% | | | |
| 8) Naphthalene-d8 | 2.549 | 136 | 691724 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 100.00% | | | |
| 17) Acenaphthene-d10 | 3.509 | 164 | 424015 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 100.00% | | | |
| 22) Phenanthrene-d10 | 4.331 | 188 | 1027588 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 100.00% | | | |
| 31) Chrysene-d12 | 5.841 | 240 | 965951 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 100.00% | | | |
| 36) Perylene-d12 | 6.781 | 264 | 979854 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 979854 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.339 | 112 | 65627M2 | 998.801 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 49.94% | | | |
| 3) Phenol-d6 | 1.736 | 99 | 86170 | 1039.804 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 51.99% | | | |
| 7) Nitrobenzene-d5 | 2.181 | 82 | 75891M3 | 1044.001 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 104.40% | | | |
| 13) 2-Fluorobiphenyl | 3.143 | 172 | 169529M3 | 947.998 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 94.80% | | | |
| 21) 2,4,6-Tribromophenol | 3.947 | 330 | 32775 | 1107.057 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 55.35% | | | |
| 30) 4-Terphenyl-d14 | 5.235 | 244 | 263650 | 928.113 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 46.41% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.782 | 93 | 66261 | 995.215 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.108 | 70 | 53783 | 1053.696 | ng/ml | 100 |
| 6) Hexachloroethane | 2.152 | 117 | 30066 | 972.906 | ng/ml | 100 |
| 9) Naphthalene | 2.560 | 128 | 187504 | 978.830 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.637 | 225 | 41300 | 963.452 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.936 | 142 | 146502M3 | 1020.760 | ng/ml | |
| 12) 1-Methylnaphthalene | 2.988 | 142 | 133700M3 | 963.744 | ng/ml | |
| 14) 2-Chloronaphthalene | 3.200 | 162 | 152169M3 | 984.088 | ng/ml | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L8.D
Acq On : 21 Jun 2024 03:23 pm
Operator : sv119:dv
Sample : IL8,32,, #10463 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 26 12:34:46 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:37 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 15) 2,6-Dinitrotoluene | 3.403 | 165 | 44628M4 | 1071.813 | ng/ml | |
| 16) Acenaphthylene | 3.426 | 152 | 244662M3 | 990.360 | ng/ml | |
| 18) Acenaphthene | 3.526 | 153 | 147231 | 994.764 | ng/ml | 100 |
| 19) 2,4-Dinitrotoluene | 3.627 | 165 | 63132M3 | 1113.836 | ng/ml | |
| 20) Fluorene | 3.812 | 166 | 191121M3 | 979.718 | ng/ml | |
| 23) 4,6-Dinitro-o-cresol | 3.854 | 198 | 41899 | 991.493 | ng/ml | 100 |
| 24) Hexachlorobenzene | 4.122 | 284 | 67031 | 950.023 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.235 | 266 | 45740 | 1037.550 | ng/ml | 100 |
| 26) Phenanthrene | 4.343 | 178 | 287629 | 962.818 | ng/ml | 100 |
| 27) Anthracene | 4.370 | 178 | 309847 | 1003.864 | ng/ml | 100 |
| 28) Fluoranthene | 5.005 | 202 | 383985M6 | 936.097 | ng/ml | |
| 29) Pyrene | 5.132 | 202 | 392628 | 923.685 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 5.833 | 228 | 390189 | 1068.137 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 5.831 | 252 | 159447 | 1080.743 | ng/ml | 100 |
| 34) Chrysene | 5.856 | 228 | 366215 | 1018.654 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.887 | 149 | 264818M3 | 1014.123 | ng/ml | |
| 37) Benzo[b]fluoranthene | 6.493 | 252 | 396025 | 975.831 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 6.512 | 252 | 343688M3 | 916.680 | ng/ml | |
| 39) Benzo[a]pyrene | 6.729 | 252 | 352937 | 981.921 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 7.721 | 276 | 363376M2 | 1000.073 | ng/ml | |
| 41) Dibenzo[a,h]anthracene | 7.750 | 278 | 315703M6 | 975.391 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.990 | 276 | 342280M2 | 957.706 | ng/ml | |

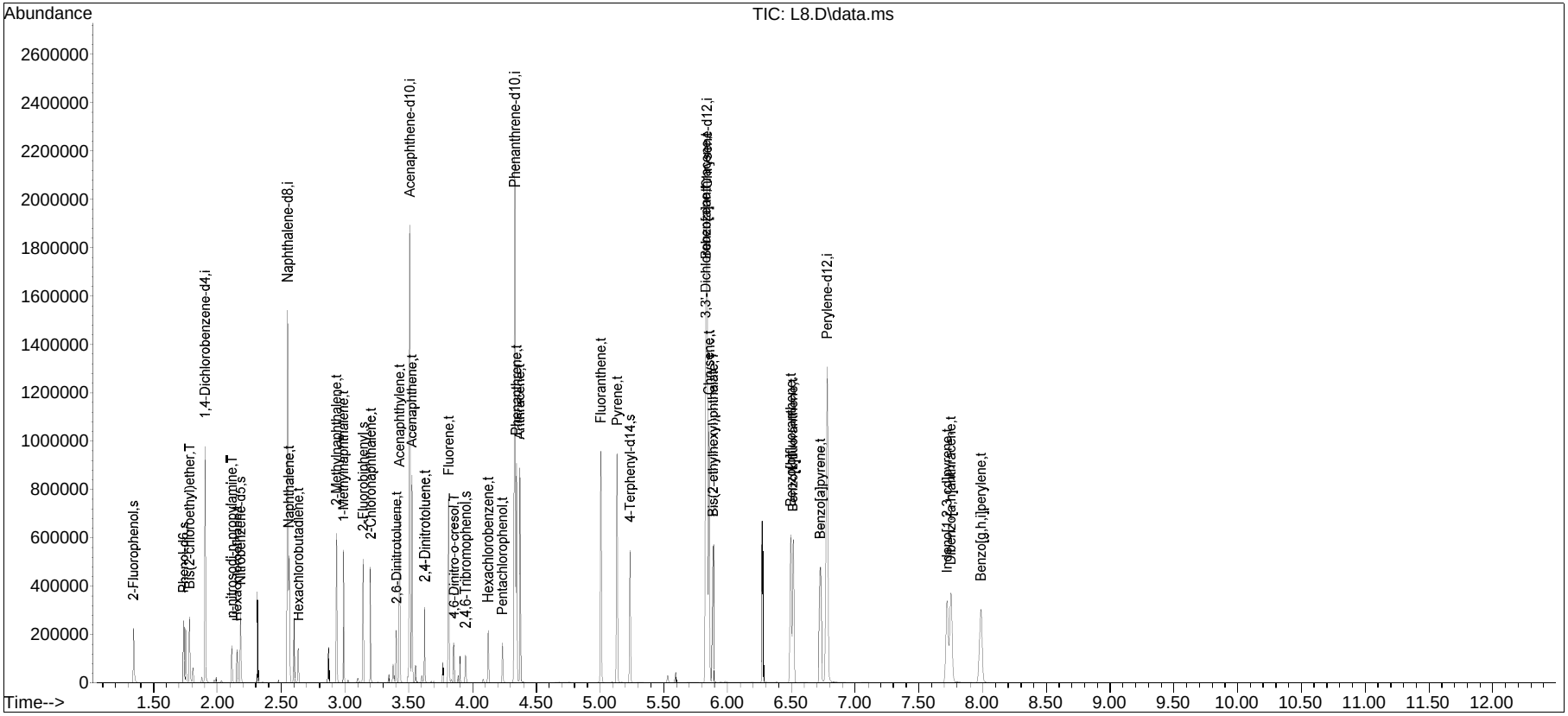
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L8.D
Acq On : 21 Jun 2024 03:23 pm
Operator : sv119:dv
Sample : IL8,32,, #10463 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 26 12:34:46 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:37 2024
Response via : Initial Calibration

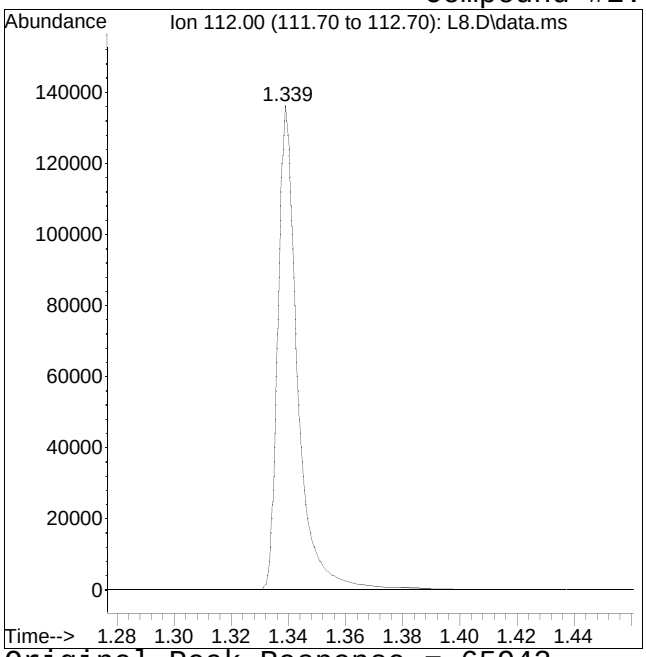
Sub List : Default - All compounds listedical\L8.D•



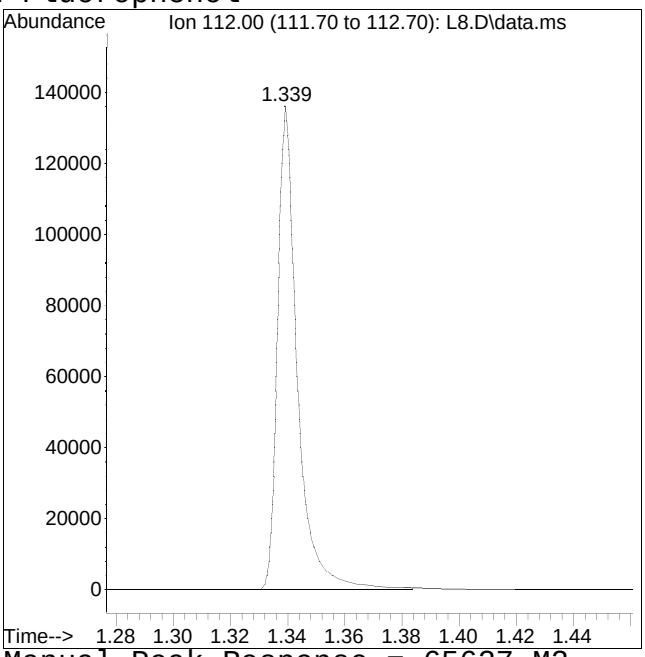
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

## Compound #2: 2-Fluorophenol




Original Peak Response = 65942



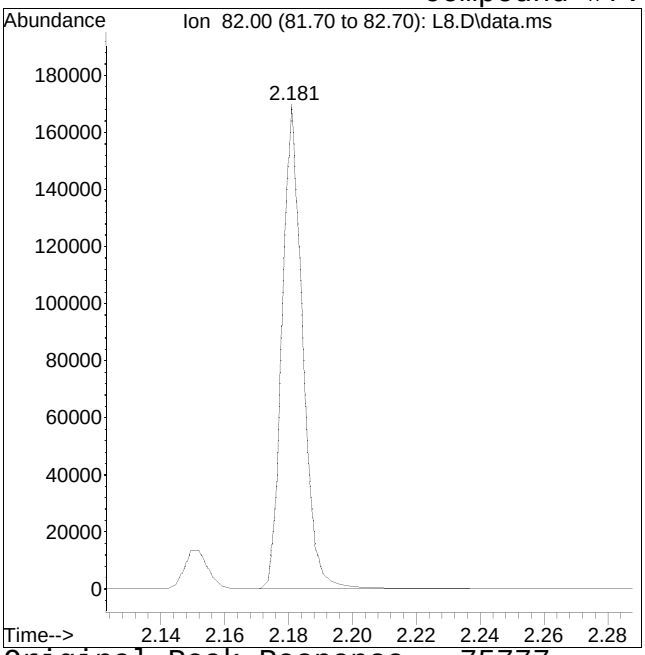

Manual Peak Response = 65627 M2

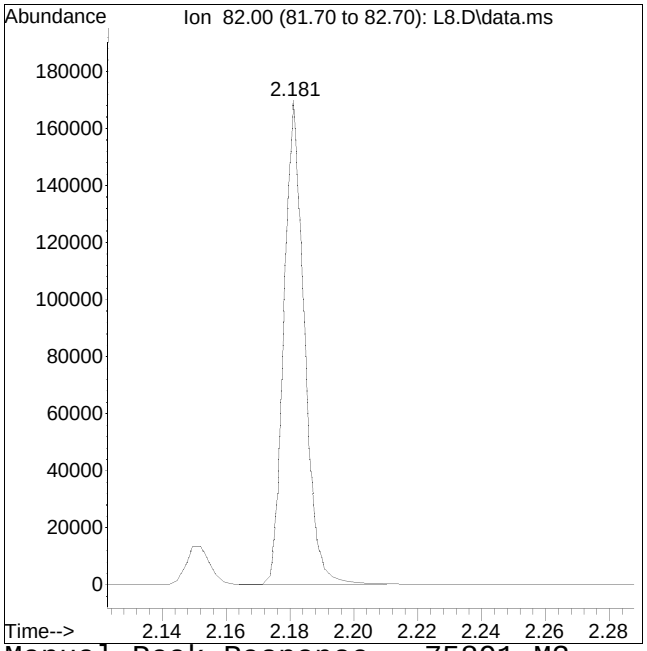
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #7: Nitrobenzene-d5



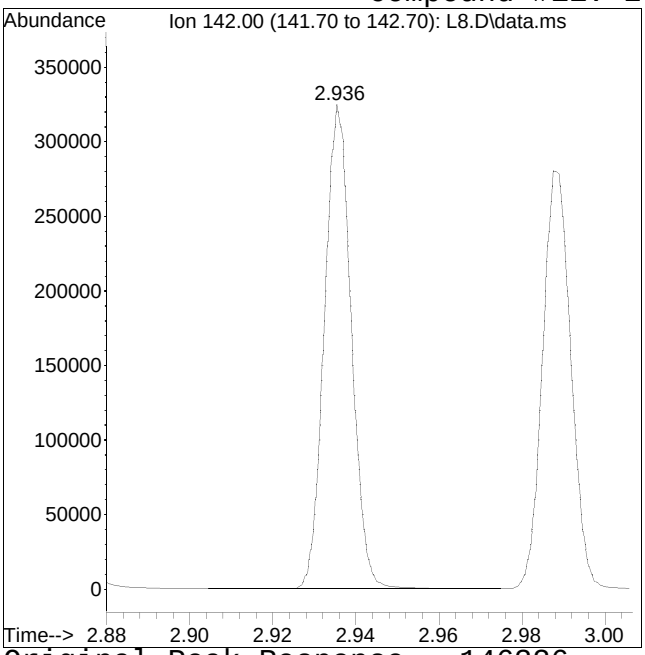

Original Peak Response = 75777 Manual Peak Response = 75891 M3

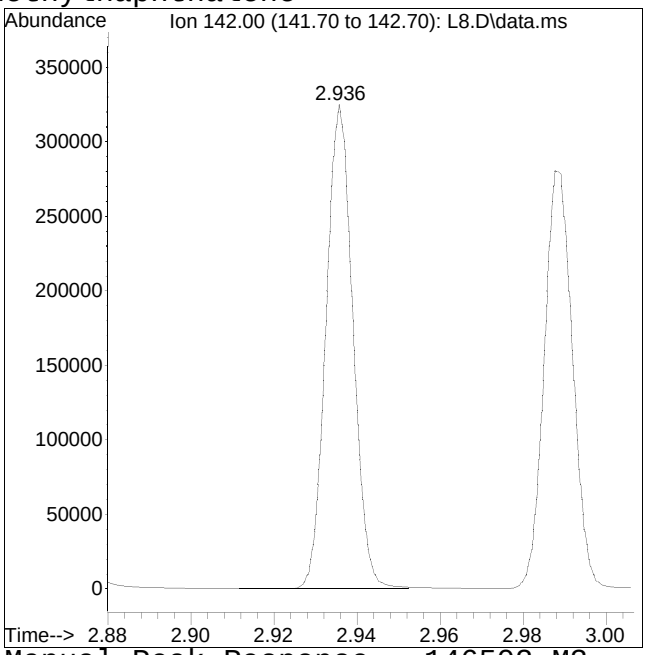
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #11: 2-Methylnaphthalene



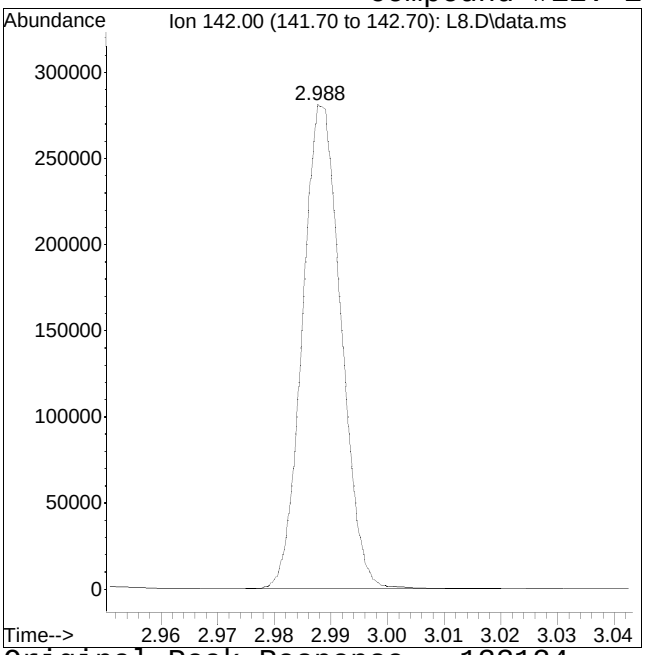

Original Peak Response = 146326 Manual Peak Response = 146502 M3

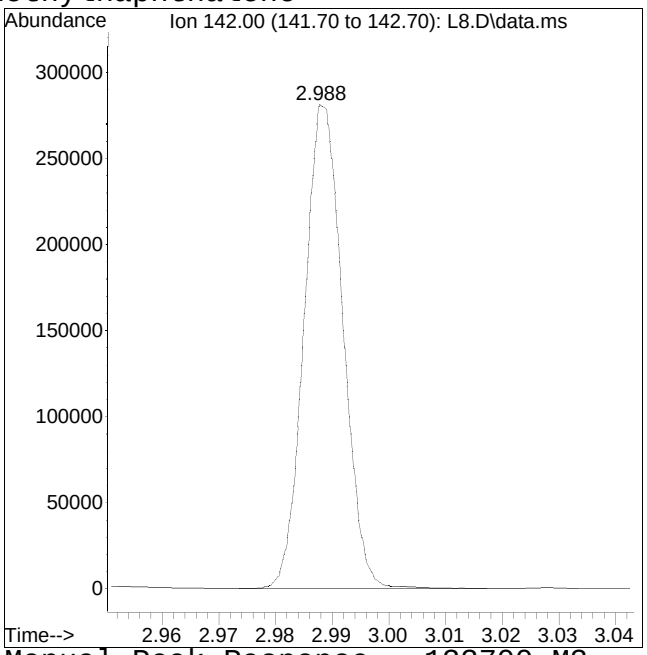
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #12: 1-Methylnaphthalene



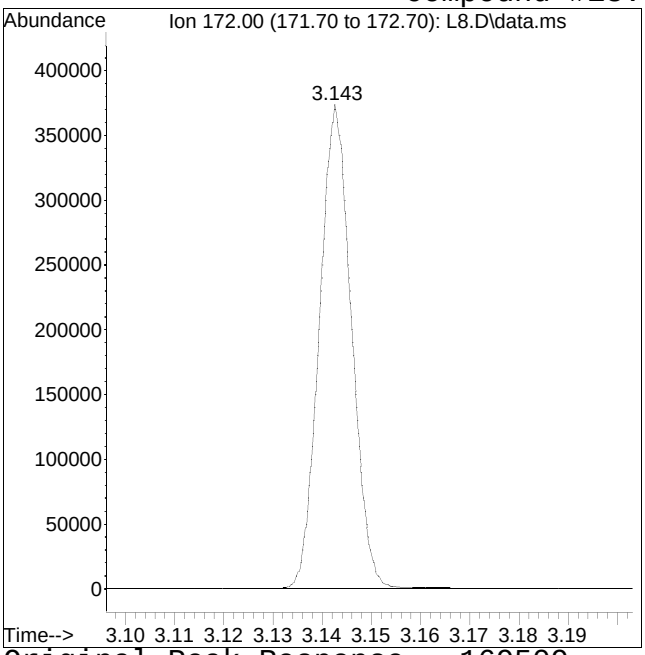

Original Peak Response = 133124 Manual Peak Response = 133700 M3

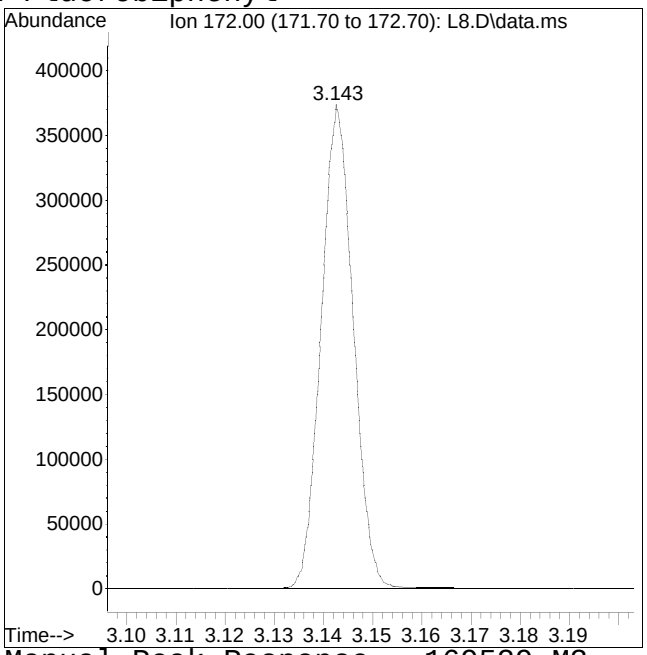
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #13: 2-Fluorobiphenyl



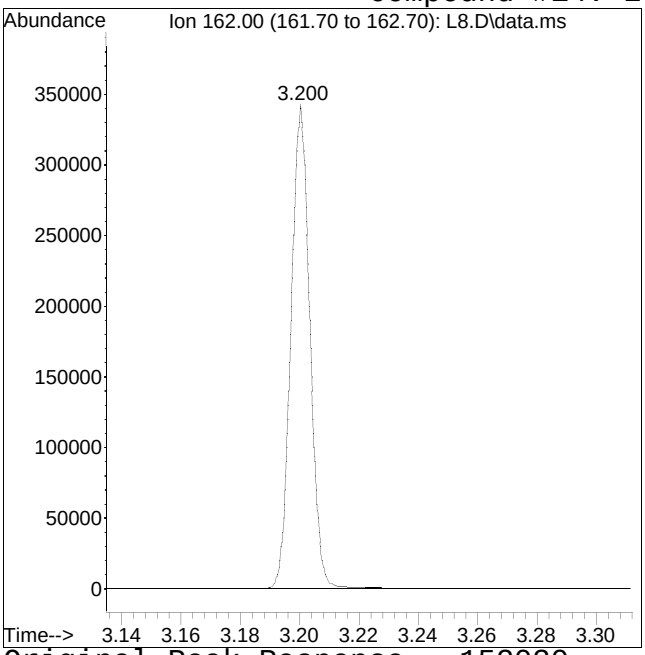

Original Peak Response = 169509 Manual Peak Response = 169529 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

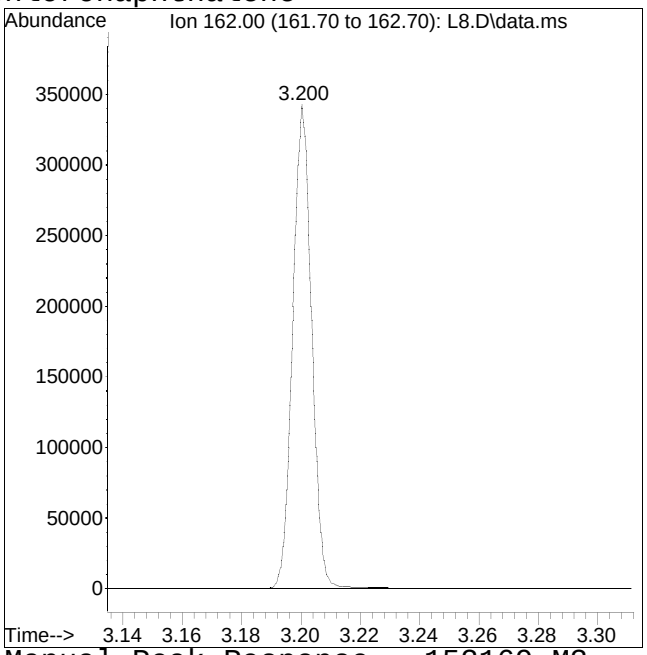
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #14: 2-Chloronaphthalene




Original Peak Response = 152030



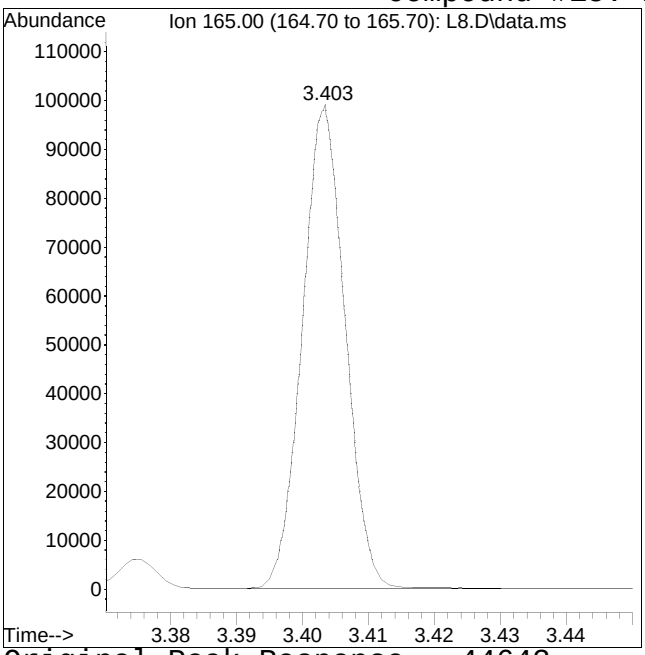

Manual Peak Response = 152169 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

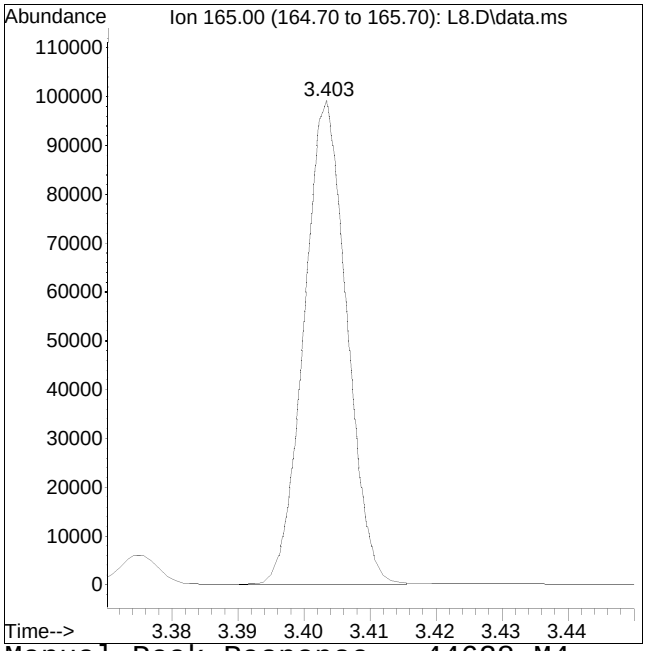
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #15: 2,6-Dinitrotoluene




Original Peak Response = 44643



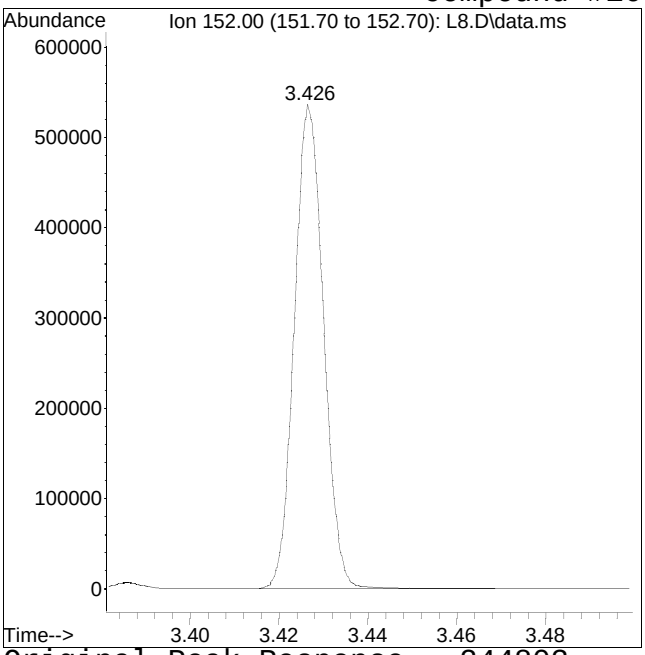

Manual Peak Response = 44628 M4

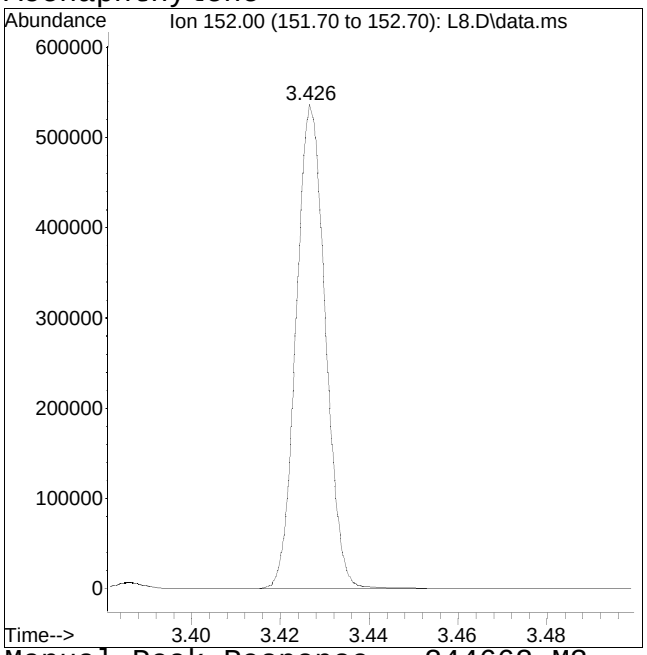
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #16: Acenaphthylene



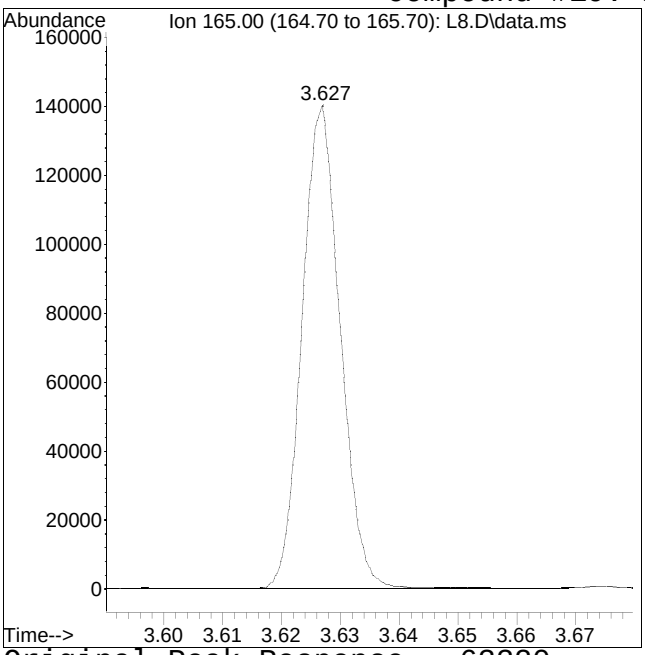

Original Peak Response = 244803 Manual Peak Response = 244662 M3

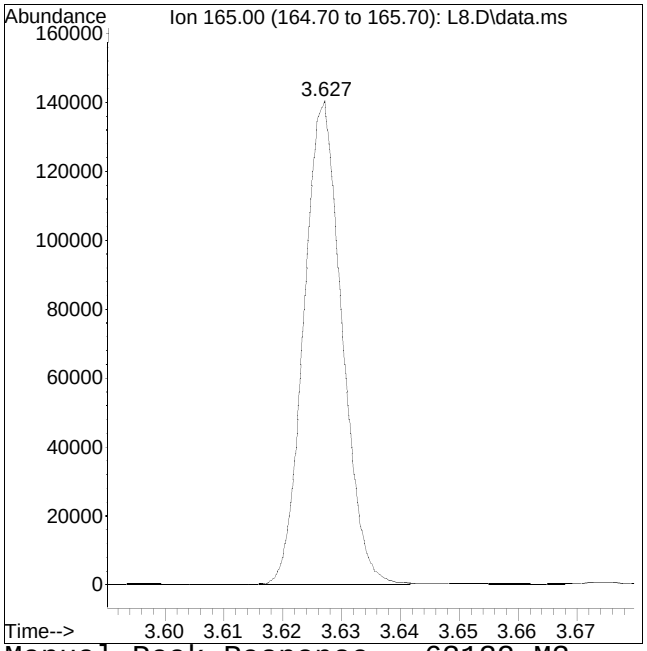
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #19: 2,4-Dinitrotoluene



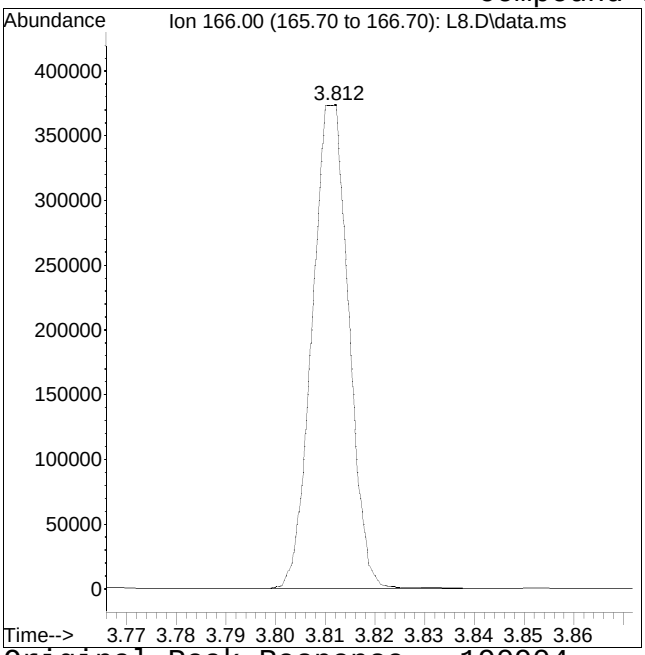




Original Peak Response = 63320 Manual Peak Response = 63132 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

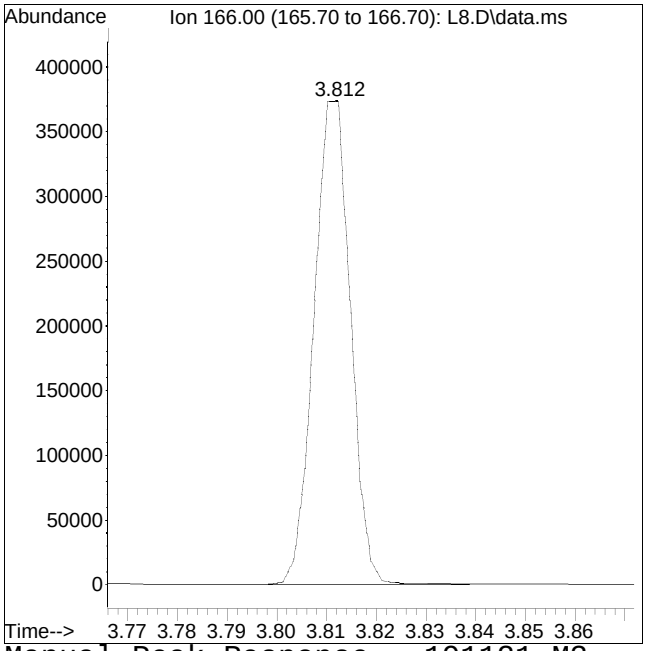
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #20: Fluorene




Original Peak Response = 190904



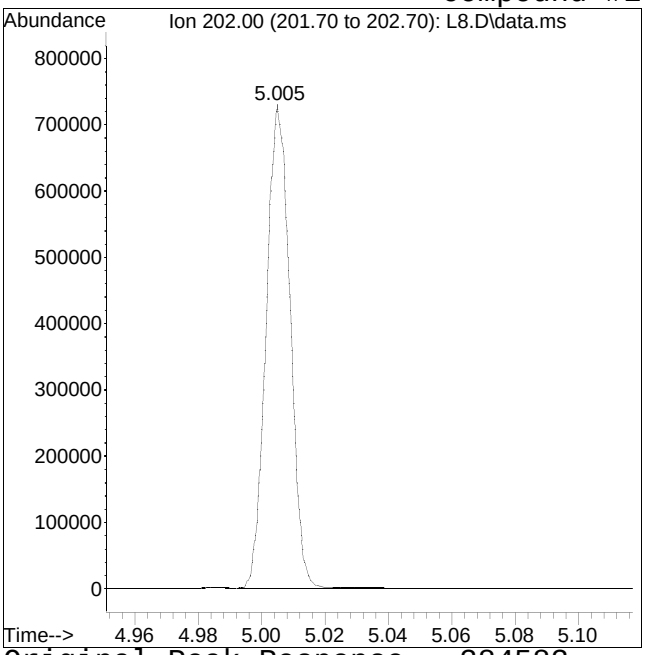

Manual Peak Response = 191121 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

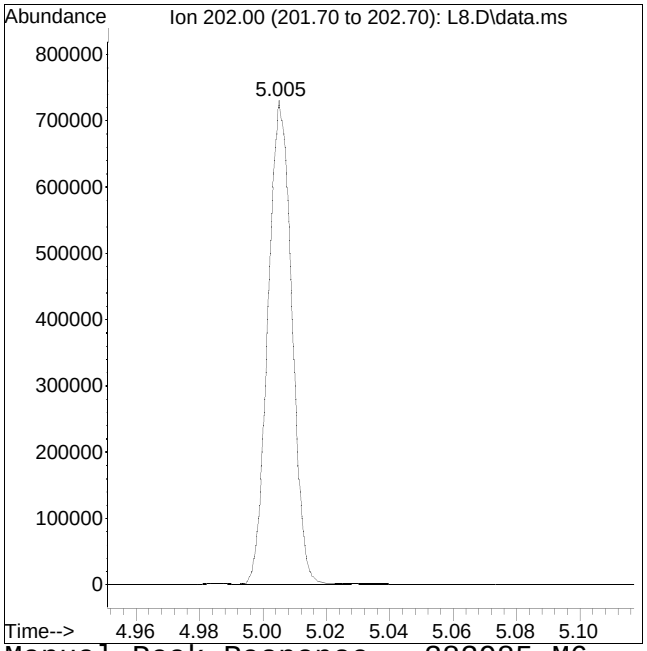
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #28: Fluoranthene




Original Peak Response = 384583



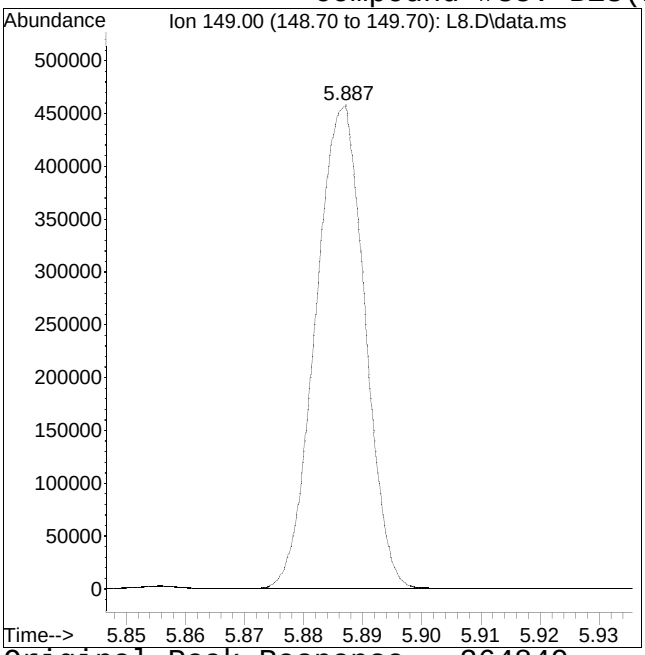

Manual Peak Response = 383985 M6

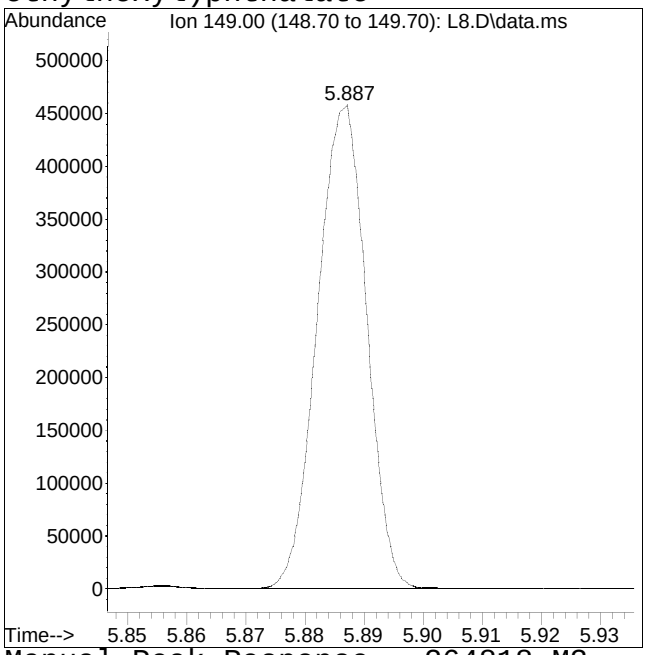
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #35: Bis(2-ethylhexyl)phthalate



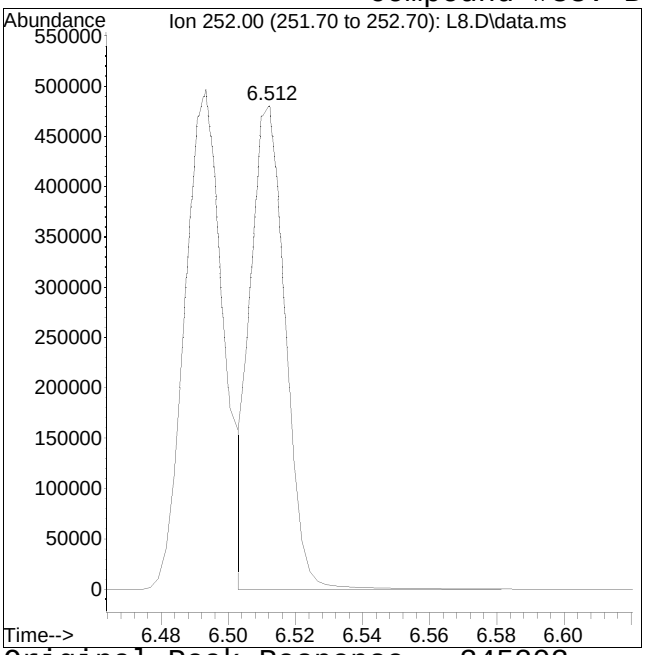

Original Peak Response = 264849 Manual Peak Response = 264818 M3

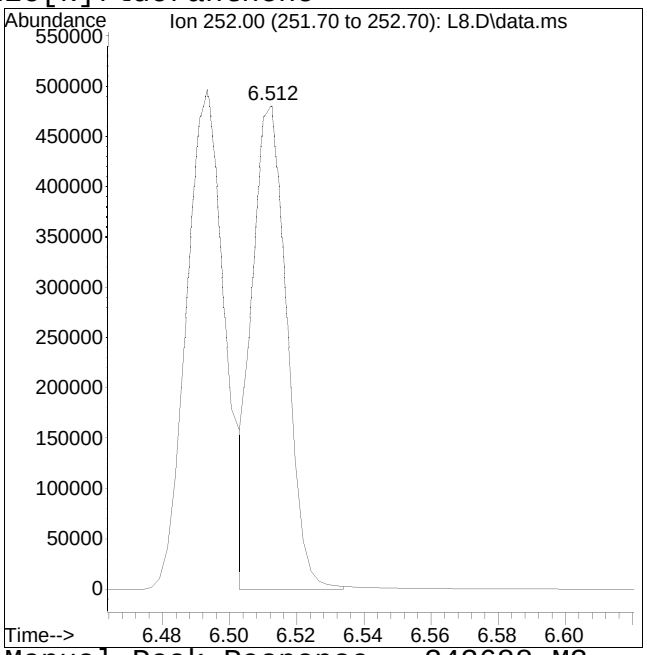
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L8.D
Date Inj'd : 6/21/2024 3:23 pm
Sample : IL8,32,, #10463 1000 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #38: Benzo[k]fluoranthene



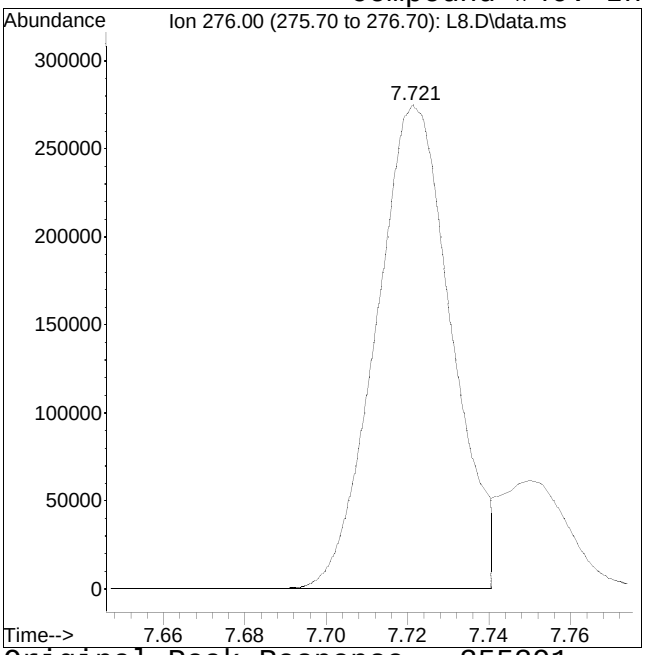

Original Peak Response = 345203 Manual Peak Response = 343688 M3

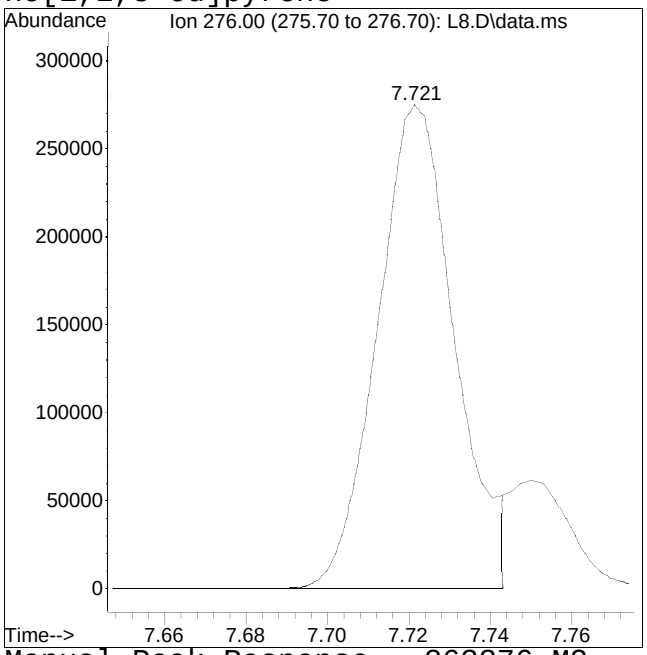
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #40: Indeno[1,2,3-cd]pyrene



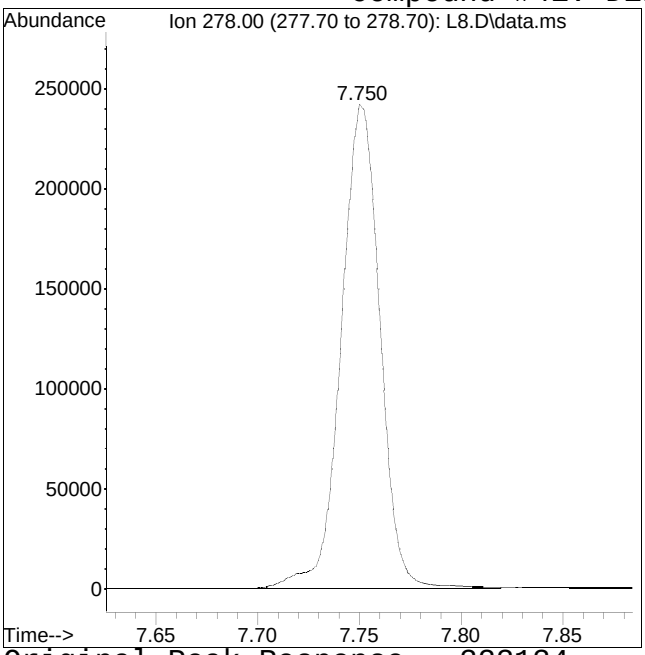




Original Peak Response = 355391 Manual Peak Response = 363376 M2
M2 = Peak not found by automatic integration algorithm.

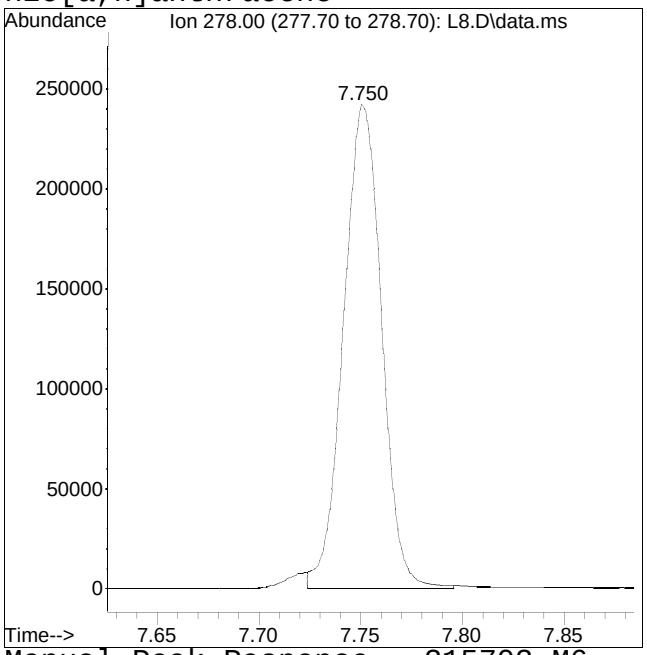
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 323134



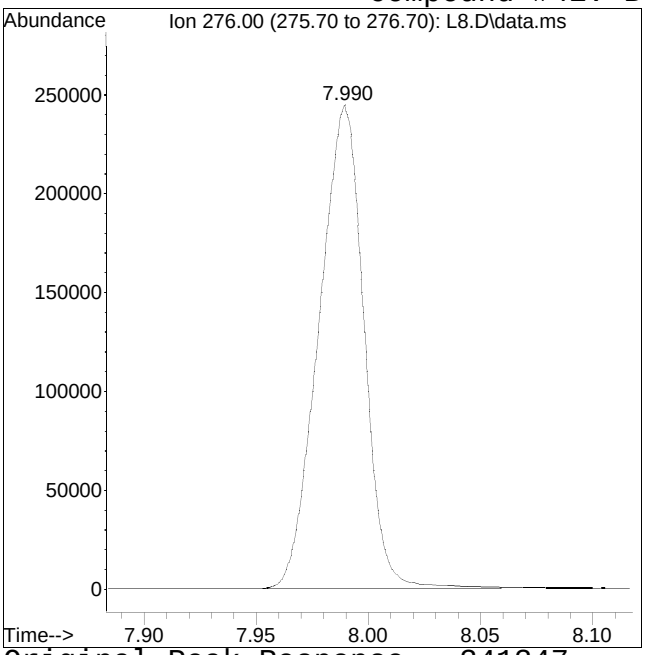

Manual Peak Response = 315703 M6

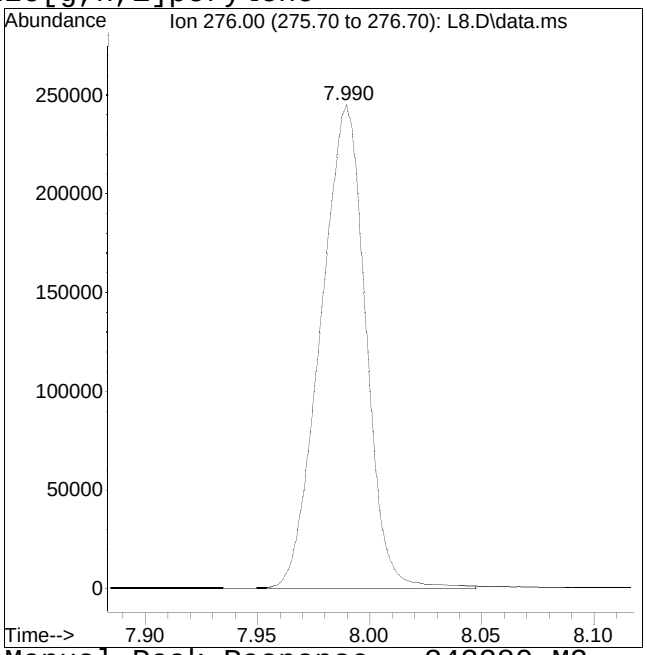
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L8.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:23 pm Instrument : SV119
Sample : IL8,32,, #10463 1000 ng/mlQuant Date : 6/26/2024 12:35 pm

Compound #42: Benzo[g,h,i]perylene




Original Peak Response = 341347 Manual Peak Response = 342280 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L7.D
Acq On : 21 Jun 2024 03:39 pm
Operator : sv119:dv
Sample : IL7,32,, #10756 500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 26 12:34:40 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:32 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.909 | 152 | 204302 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery | = 109.68% | | |
| 8) Naphthalene-d8 | 2.553 | 136 | 751559 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery | = 108.65% | | |
| 17) Acenaphthene-d10 | 3.511 | 164 | 459733 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery | = 108.42% | | |
| 22) Phenanthrene-d10 | 4.334 | 188 | 1096647 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery | = 106.72% | | |
| 31) Chrysene-d12 | 5.841 | 240 | 1070301 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery | = 110.80% | | |
| 36) Perylene-d12 | 6.781 | 264 | 1043335 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 979854 | | | Recovery | = 106.48% | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.345 | 112 | 37971 | 526.875 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 26.34% | | |
| 3) Phenol-d6 | 1.740 | 99 | 48385 | 532.310 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 26.62% | | |
| 7) Nitrobenzene-d5 | 2.185 | 82 | 42833 | 537.215 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 53.72% | | |
| 13) 2-Fluorobiphenyl | 3.147 | 172 | 99652 | 512.884 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 51.29% | | |
| 21) 2,4,6-Tribromophenol | 3.949 | 330 | 18075 | 563.094 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 28.15% | | |
| 30) 4-Terphenyl-d14 | 5.237 | 244 | 152207 | 502.065 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery | = 25.10%# | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.786 | 93 | 38197 | 523.054 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.114 | 70 | 29440 | 525.856 | ng/ml | 100 |
| 6) Hexachloroethane | 2.156 | 117 | 17049 | 502.983 | ng/ml | 99 |
| 9) Naphthalene | 2.564 | 128 | 104222 | 500.756 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.640 | 225 | 23451 | 503.513 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.940 | 142 | 83802 | 537.408 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 2.992 | 142 | 76547 | 507.841 | ng/ml | 99 |
| 14) 2-Chloronaphthalene | 3.203 | 162 | 86207 | 513.121 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.406 | 165 | 24385 | 539.019 | ng/ml | 99 |
| 16) Acenaphthylene | 3.430 | 152 | 138843 | 517.274 | ng/ml | 100 |
| 18) Acenaphthene | 3.528 | 153 | 82124 | 511.760 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L7.D
Acq On : 21 Jun 2024 03:39 pm
Operator : sv119:dv
Sample : IL7,32,, #10756 500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 26 12:34:40 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:32 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.629 | 165 | 34468 | 560.872 | ng/ml | 99 |
| 20) Fluorene | 3.814 | 166 | 109062 | 515.634 | ng/ml | 99 |
| 23) 4,6-Dinitro-o-cresol | 3.854 | 198 | 21548 | 487.512 | ng/ml | 99 |
| 24) Hexachlorobenzene | 4.125 | 284 | 38574 | 512.277 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.237 | 266 | 23228 | 508.657 | ng/ml | 99 |
| 26) Phenanthrene | 4.345 | 178 | 158957 | 498.590 | ng/ml | 100 |
| 27) Anthracene | 4.373 | 178 | 171955 | 522.029 | ng/ml | 100 |
| 28) Fluoranthene | 5.009 | 202 | 220686 | 504.120 | ng/ml | 100 |
| 29) Pyrene | 5.134 | 202 | 224446 | 494.774 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 5.833 | 228 | 218035 | 534.660 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 5.831 | 252 | 87919 | 537.821 | ng/ml | 99 |
| 34) Chrysene | 5.854 | 228 | 202249 | 507.722 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.884 | 149 | 137675 | 482.910 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.491 | 252 | 215596 | 498.919 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 6.510 | 252 | 203294 | 509.232 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 6.726 | 252 | 194869 | 509.166 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.719 | 276 | 192780 | 498.282 | ng/ml | 99 |
| 41) Dibenzo[a,h]anthracene | 7.750 | 278 | 170184M6 | 493.806 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.982 | 276 | 186688 | 490.574 | ng/ml | 100 |

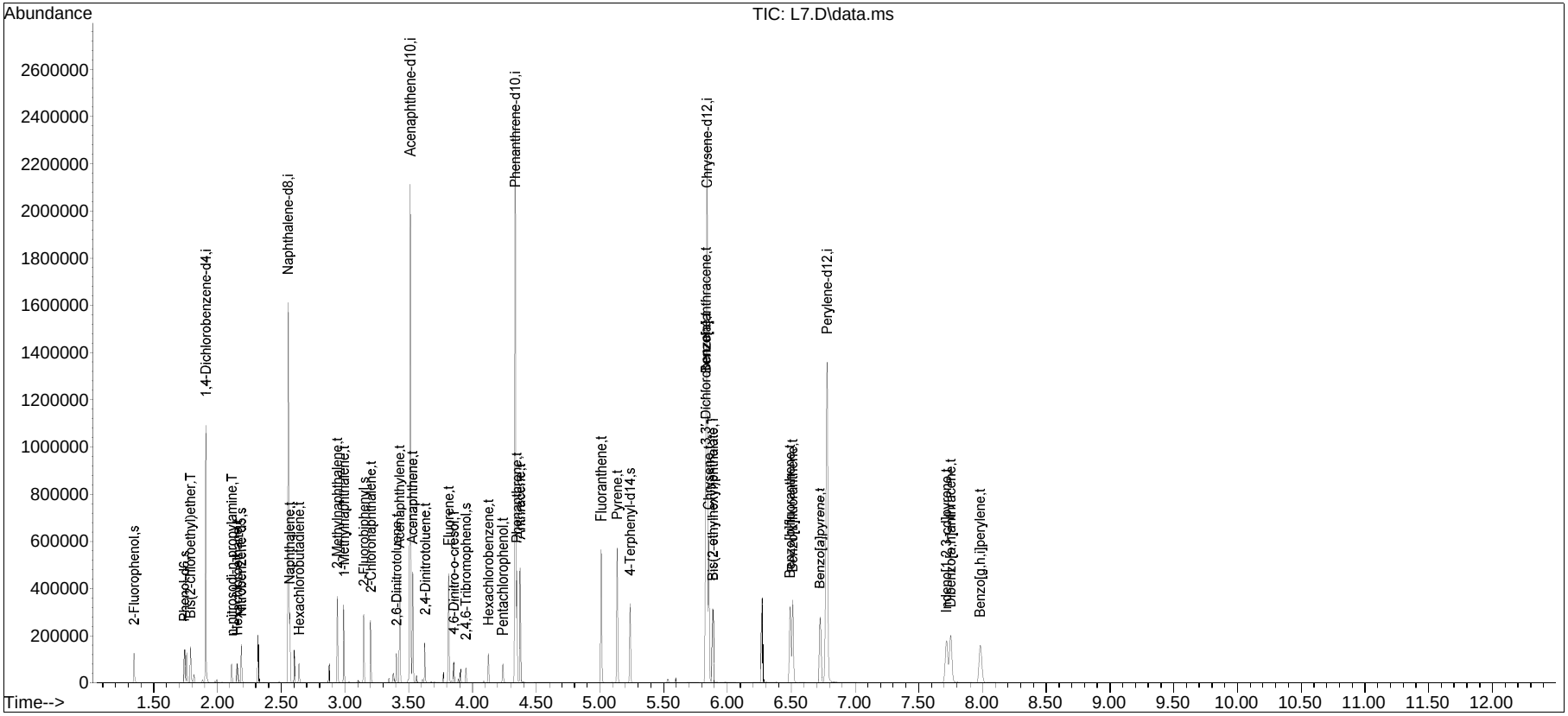
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L7.D
Acq On : 21 Jun 2024 03:39 pm
Operator : sv119:dv
Sample : IL7,32,, #10756 500 ng/ml
Misc : WG1939716,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 26 12:34:40 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:32 2024
Response via : Initial Calibration

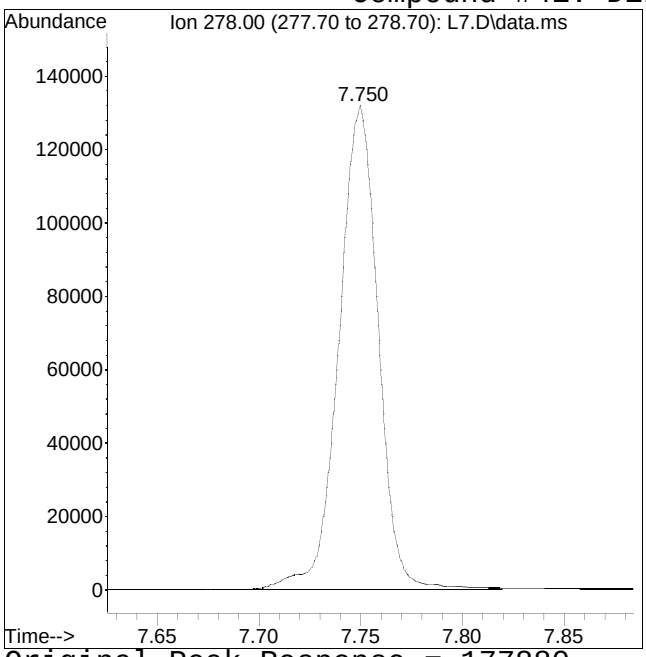
Sub List : Default - All compounds listedical\L8.D•



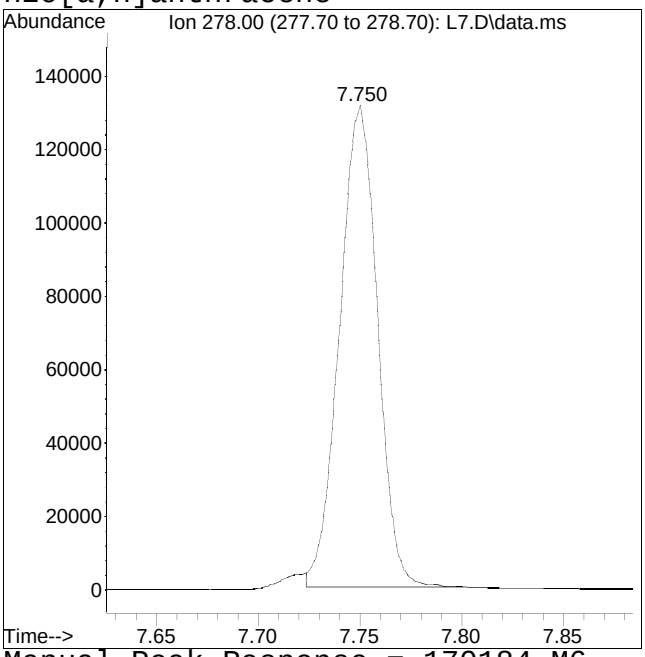
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L7.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:39 pm Instrument : SV119
Sample : IL7,32,, #10756 500 ng/ml Quant Date : 6/26/2024 12:35 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 177880




Manual Peak Response = 170184 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L6.D
Acq On : 21 Jun 2024 03:55 pm
Operator : sv119:dv
Sample : IL6,32,, #10465 100 ng/ml
Misc : WG1939716,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 26 12:34:34 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:26 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.910 | 152 | 209209 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 112.32% | | | |
| 8) Naphthalene-d8 | 2.556 | 136 | 740351 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 107.03% | | | |
| 17) Acenaphthene-d10 | 3.512 | 164 | 452145 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 106.63% | | | |
| 22) Phenanthrene-d10 | 4.334 | 188 | 1079747 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 105.08% | | | |
| 31) Chrysene-d12 | 5.839 | 240 | 1140426 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 118.06% | | | |
| 36) Perylene-d12 | 6.774 | 264 | 1053034 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 979854 | | | Recovery = 107.47% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.347 | 112 | 7780 | 105.421 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 5.27%# | | | |
| 3) Phenol-d6 | 1.743 | 99 | 9644 | 103.610 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 5.18%# | | | |
| 7) Nitrobenzene-d5 | 2.188 | 82 | 8470 | 103.740 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 10.37%# | | | |
| 13) 2-Fluorobiphenyl | 3.148 | 172 | 21295 | 111.259 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 11.13%# | | | |
| 21) 2,4,6-Tribromophenol | 3.949 | 330 | 3205 | 101.522 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 5.08%# | | | |
| 30) 4-Terphenyl-d14 | 5.237 | 244 | 33328 | 111.655 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 5.58%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.791 | 93 | 8036 | 107.461 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.118 | 70 | 5504 | 96.006 | ng/ml | 99 |
| 6) Hexachloroethane | 2.159 | 117 | 3479 | 100.231 | ng/ml | 100 |
| 9) Naphthalene | 2.567 | 128 | 20534 | 100.153 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.641 | 225 | 4717 | 102.811 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.941 | 142 | 16747 | 109.022 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 2.993 | 142 | 15622 | 105.211 | ng/ml | 98 |
| 14) 2-Chloronaphthalene | 3.204 | 162 | 17557 | 106.085 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.407 | 165 | 4401 | 98.755 | ng/ml | 98 |
| 16) Acenaphthylene | 3.431 | 152 | 27470 | 103.892 | ng/ml | 100 |
| 18) Acenaphthene | 3.529 | 153 | 15901 | 100.751 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L6.D
Acq On : 21 Jun 2024 03:55 pm
Operator : sv119:dv
Sample : IL6,32,, #10465 100 ng/ml
Misc : WG1939716,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 26 12:34:34 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:26 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.631 | 165 | 5817 | 96.244 | ng/ml | 95 |
| 20) Fluorene | 3.814 | 166 | 21606 | 103.865 | ng/ml | 98 |
| 23) 4,6-Dinitro-o-cresol | 3.856 | 198 | 2885 | 86.397 | ng/ml | 96 |
| 24) Hexachlorobenzene | 4.126 | 284 | 7838 | 105.721 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.240 | 266 | 3148 | 75.168 | ng/ml | 99 |
| 26) Phenanthrene | 4.345 | 178 | 31388 | 99.994 | ng/ml | 98 |
| 27) Anthracene | 4.373 | 178 | 33024 | 101.825 | ng/ml | 100 |
| 28) Fluoranthene | 5.009 | 202 | 46312 | 107.448 | ng/ml | 100 |
| 29) Pyrene | 5.134 | 202 | 47836 | 107.101 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 5.831 | 228 | 47460 | 102.777 | ng/ml | 98 |
| 33) 3,3'-Dichlorobenzene | 5.828 | 252 | 16757 | 96.203 | ng/ml | 99 |
| 34) Chrysene | 5.852 | 228 | 41746 | 98.354 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.883 | 149 | 24460 | 91.642 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.486 | 252 | 46371 | 106.321 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 6.505 | 252 | 44088 | 109.419 | ng/ml | 97 |
| 39) Benzo[a]pyrene | 6.721 | 252 | 39529 | 102.333 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.712 | 276 | 39190 | 100.362 | ng/ml | 99 |
| 41) Dibenzo[a,h]anthracene | 7.743 | 278 | 35608M6 | 102.369 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.980 | 276 | 38404 | 99.988 | ng/ml | 99 |

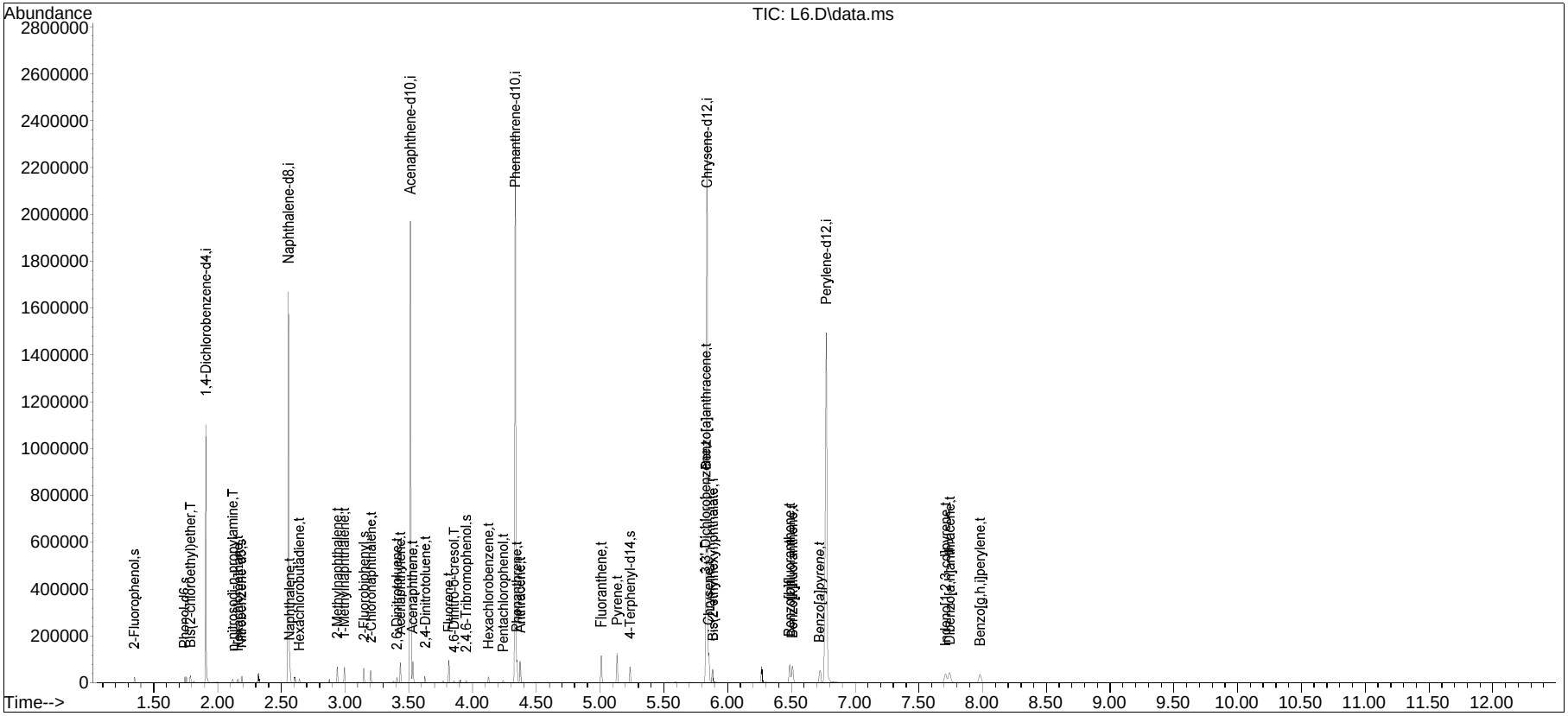
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L6.D
Acq On : 21 Jun 2024 03:55 pm
Operator : sv119:dv
Sample : IL6,32,, #10465 100 ng/ml
Misc : WG1939716,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 26 12:34:34 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:26 2024
Response via : Initial Calibration

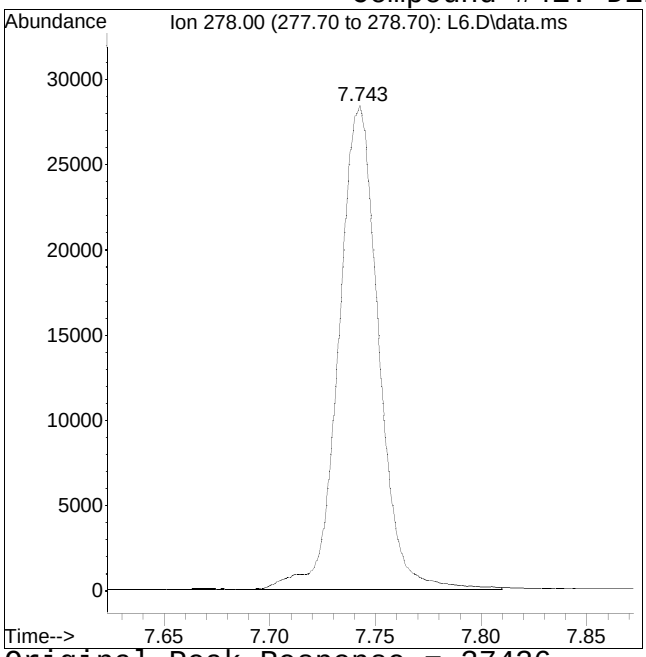
Sub List : Default - All compounds listedical\L8.D•



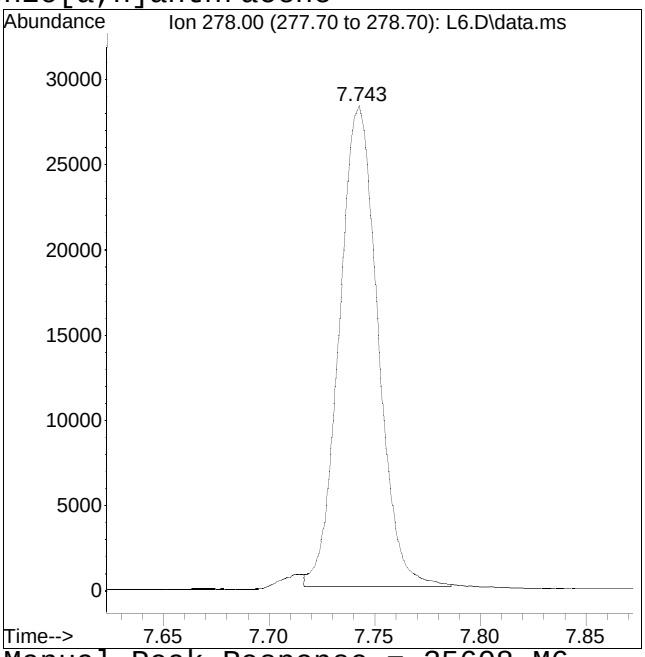
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L6.D Operator : sv119:dv
Date Inj'd : 6/21/2024 3:55 pm Instrument : SV119
Sample : IL6,32,, #10465 100 ng/ml Quant Date : 6/26/2024 12:35 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 37436




Manual Peak Response = 35608 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L5.D
Acq On : 21 Jun 2024 04:12 pm
Operator : sv119:dv
Sample : IL5,32,, #10757 40 ng/ml
Misc : WG1939716,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 26 12:34:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:19 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.911 | 152 | 200302 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 107.54% | | | |
| 8) Naphthalene-d8 | 2.555 | 136 | 701205 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 101.37% | | | |
| 17) Acenaphthene-d10 | 3.512 | 164 | 427946 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 100.93% | | | |
| 22) Phenanthrene-d10 | 4.333 | 188 | 1016976 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 98.97% | | | |
| 31) Chrysene-d12 | 5.836 | 240 | 1071660 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 110.94% | | | |
| 36) Perylene-d12 | 6.774 | 264 | 989408 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 979854 | | | Recovery = 100.98% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.349 | 112 | 3030 | 42.883 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 2.14%# | | | |
| 3) Phenol-d6 | 1.744 | 99 | 3710 | 41.631 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 2.08%# | | | |
| 7) Nitrobenzene-d5 | 2.190 | 82 | 3202 | 40.962 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 4.10%# | | | |
| 13) 2-Fluorobiphenyl | 3.148 | 172 | 8046 | 44.385 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 4.44%# | | | |
| 21) 2,4,6-Tribromophenol | 3.949 | 330 | 1198 | 40.094 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 2.00%# | | | |
| 30) 4-Terphenyl-d14 | 5.235 | 244 | 12929 | 45.988 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 2.30%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.792 | 93 | 2992M4 | 41.789 | ng/ml | |
| 5) n-nitrosodi-n-propylamine | 2.117 | 70 | 2088 | 38.041 | ng/ml | 98 |
| 6) Hexachloroethane | 2.158 | 117 | 1336 | 40.202 | ng/ml | 100 |
| 9) Naphthalene | 2.566 | 128 | 7912 | 40.745 | ng/ml | 99 |
| 10) Hexachlorobutadiene | 2.640 | 225 | 1848 | 42.527 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.941 | 142 | 6330 | 43.508 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 2.995 | 142 | 5879M6 | 41.804 | ng/ml | |
| 14) 2-Chloronaphthalene | 3.206 | 162 | 6793 | 43.337 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.407 | 165 | 1600 | 37.907 | ng/ml | 96 |
| 16) Acenaphthylene | 3.431 | 152 | 10607 | 42.355 | ng/ml | 99 |
| 18) Acenaphthene | 3.529 | 153 | 6043 | 40.454 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L5.D
Acq On : 21 Jun 2024 04:12 pm
Operator : sv119:dv
Sample : IL5,32,, #10757 40 ng/ml
Misc : WG1939716,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 26 12:34:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:19 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.633 | 165 | 2002 | 34.997 | ng/ml | 89 |
| 20) Fluorene | 3.814 | 166 | 8190 | 41.598 | ng/ml | 97 |
| 23) 4,6-Dinitro-o-cresol | 3.858 | 198 | 976 | 46.132 | ng/ml | 96 |
| 24) Hexachlorobenzene | 4.126 | 284 | 3043 | 43.578 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.240 | 266 | 1059 | 29.625 | ng/ml | 98 |
| 26) Phenanthrene | 4.345 | 178 | 11761M6 | 39.780 | ng/ml | |
| 27) Anthracene | 4.375 | 178 | 12291 | 40.237 | ng/ml | 100 |
| 28) Fluoranthene | 5.009 | 202 | 17675 | 43.539 | ng/ml | 99 |
| 29) Pyrene | 5.132 | 202 | 18547 | 44.088 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 5.828 | 228 | 19860 | 41.274 | ng/ml | 95 |
| 33) 3,3'-Dichlorobenzene | 5.827 | 252 | 6080 | 37.146 | ng/ml# | 83 |
| 34) Chrysene | 5.849 | 228 | 15648 | 39.233 | ng/ml | 98 |
| 35) Bis(2-ethylhexyl)phtha... | 5.879 | 149 | 8891 | 43.633 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.484 | 252 | 16977 | 41.428 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 6.503 | 252 | 17564 | 46.394 | ng/ml | 95 |
| 39) Benzo[a]pyrene | 6.719 | 252 | 14757 | 40.660 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.712 | 276 | 14606 | 39.810 | ng/ml | 98 |
| 41) Dibenzo[a,h]anthracene | 7.740 | 278 | 13633M6 | 41.714 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.978 | 276 | 14701 | 40.736 | ng/ml | 99 |

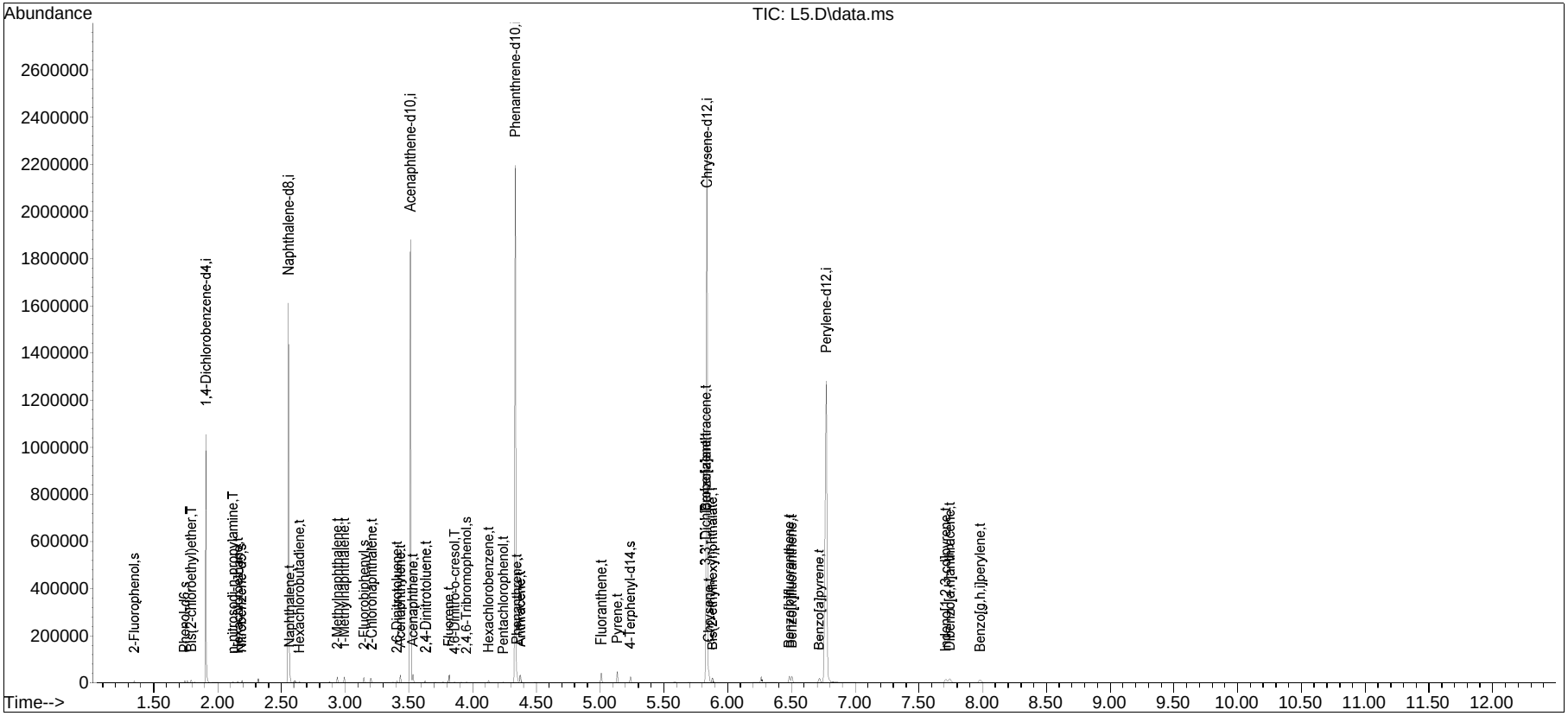
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L5.D
Acq On : 21 Jun 2024 04:12 pm
Operator : sv119:dv
Sample : IL5,32,, #10757 40 ng/ml
Misc : WG1939716,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 26 12:34:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:19 2024
Response via : Initial Calibration

Sub List : Default - All compounds listedical\L8.D•

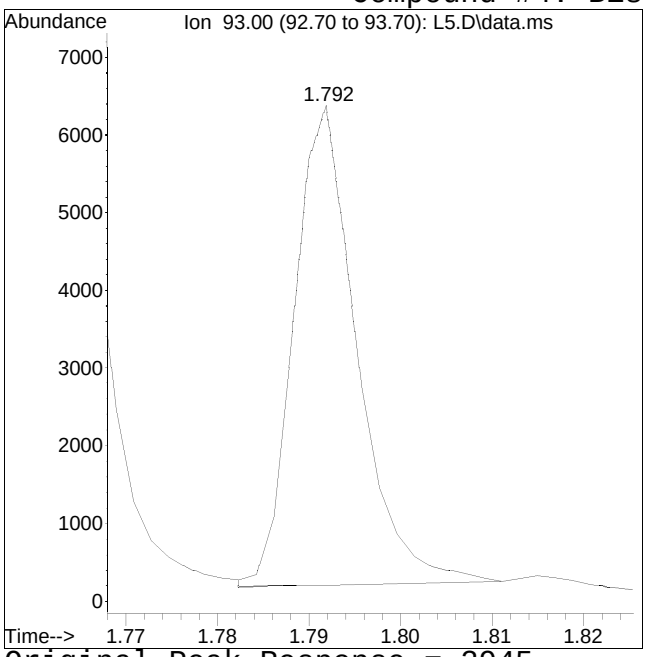


# Manual Integration Report

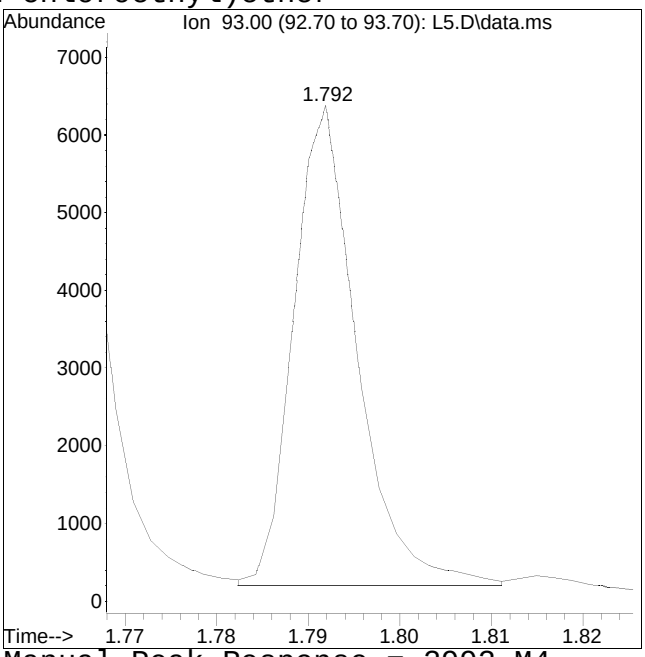
Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L5.D
Date Inj'd : 6/21/2024 4:12 pm
Sample : IL5,32,, #10757 40 ng/ml

Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #4: Bis(2-chloroethyl)ether




Original Peak Response = 2945



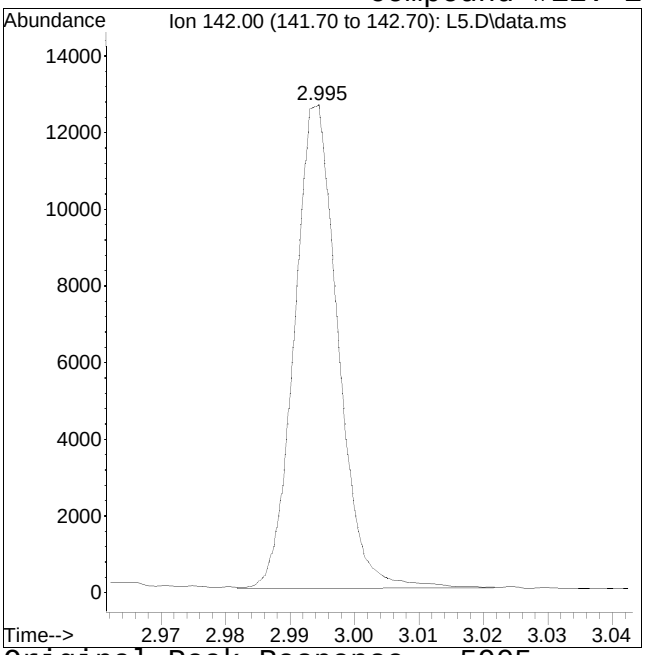

Manual Peak Response = 2992 M4

M4 = Poor automated baseline construction.

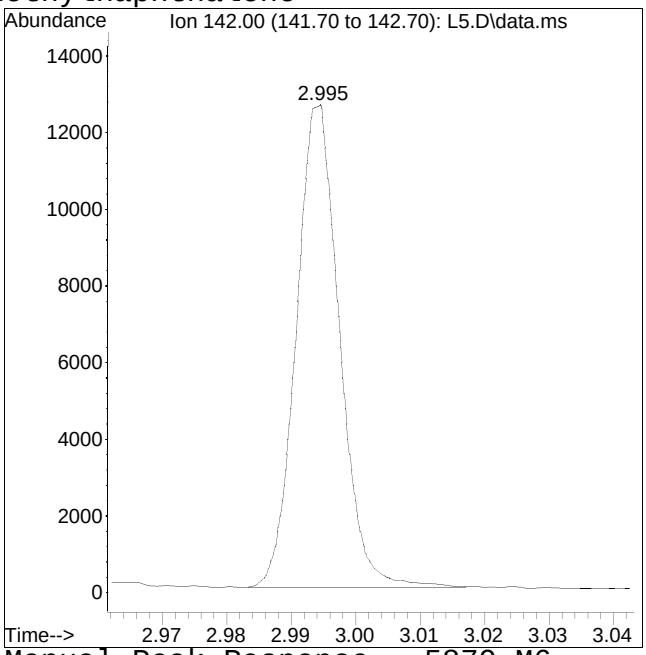
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L5.D
Date Inj'd : 6/21/2024 4:12 pm
Sample : IL5,32,, #10757 40 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #12: 1-Methylnaphthalene




Original Peak Response = 5905



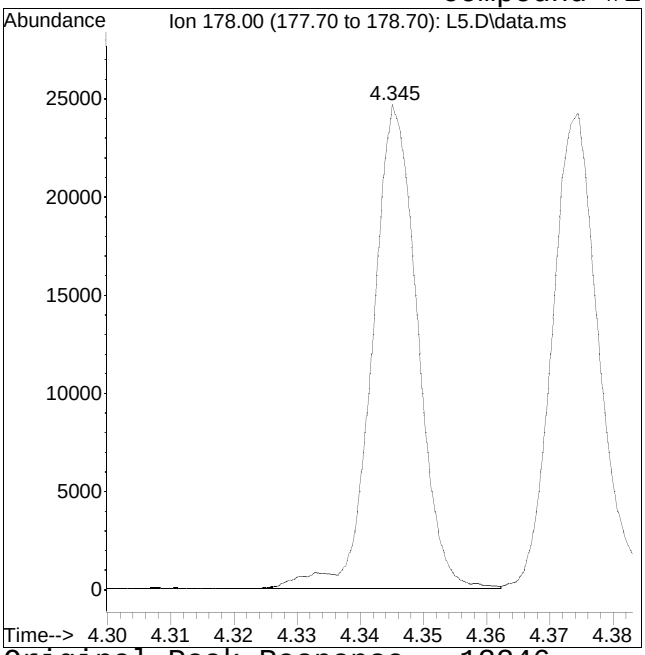

Manual Peak Response = 5879 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

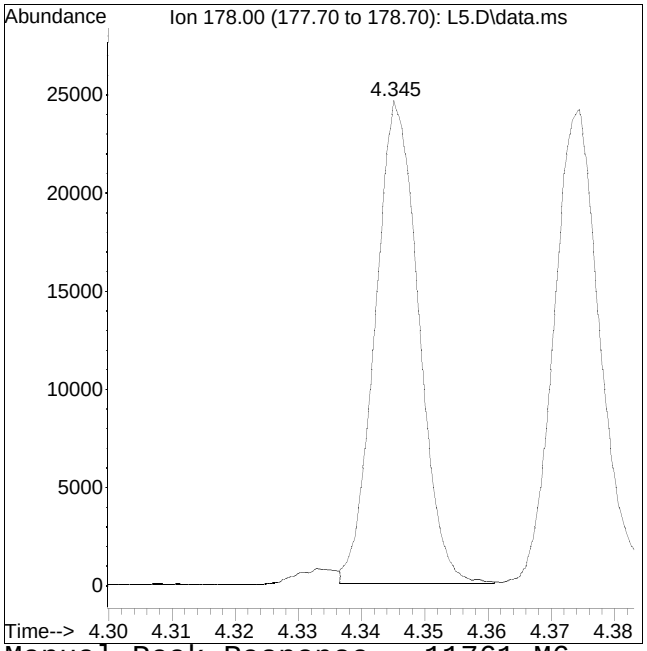
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L5.D Operator : sv119:dv
Date Inj'd : 6/21/2024 4:12 pm Instrument : SV119
Sample : IL5,32,, #10757 40 ng/ml Quant Date : 6/26/2024 12:35 pm

Compound #26: Phenanthrene




Original Peak Response = 12246



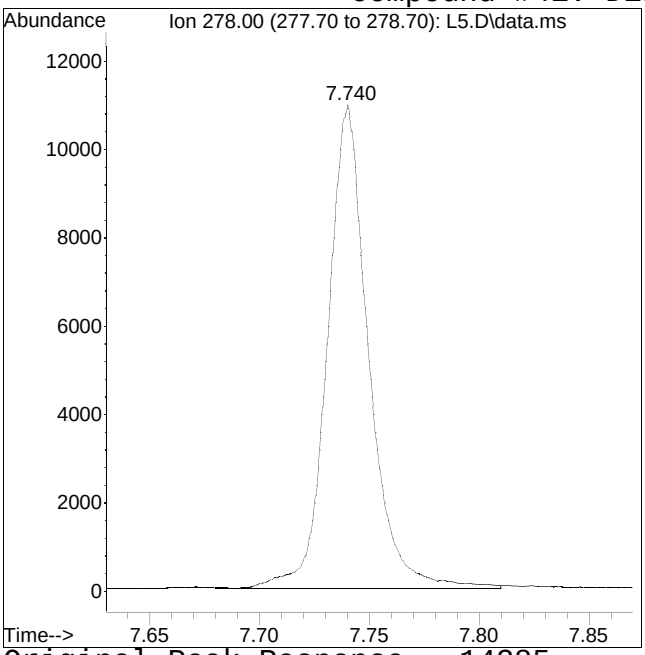

Manual Peak Response = 11761 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

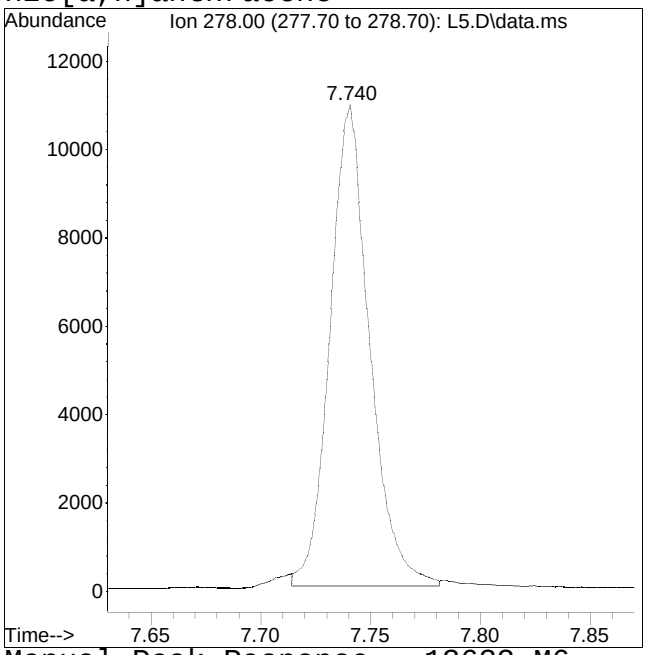
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L5.D Operator : sv119:dv
Date Inj'd : 6/21/2024 4:12 pm Instrument : SV119
Sample : IL5,32,, #10757 40 ng/ml Quant Date : 6/26/2024 12:35 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 14285




Manual Peak Response = 13633 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L4.D
Acq On : 21 Jun 2024 04:28 pm
Operator : sv119:dv
Sample : IL4,32,, #10468 10 ng/ml
Misc : WG1939716,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 26 12:34:22 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:14 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.913 | 152 | 213427 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 114.58% | | | |
| 8) Naphthalene-d8 | 2.557 | 136 | 742567 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 107.35% | | | |
| 17) Acenaphthene-d10 | 3.512 | 164 | 453515 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 106.96% | | | |
| 22) Phenanthrene-d10 | 4.334 | 188 | 1070494 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 104.18% | | | |
| 31) Chrysene-d12 | 5.835 | 240 | 1128280 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 116.81% | | | |
| 36) Perylene-d12 | 6.769 | 264 | 1013190 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 979854 | | | Recovery = 103.40% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.352 | 112 | 756 | 10.042 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.50%# | | | |
| 3) Phenol-d6 | 1.748 | 99 | 913 | 9.615 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.48%# | | | |
| 7) Nitrobenzene-d5 | 2.192 | 82 | 771 | 9.257 | ng/ml | 0.01 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.93%# | | | |
| 13) 2-Fluorobiphenyl | 3.150 | 172 | 2120 | 11.043 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 1.10%# | | | |
| 21) 2,4,6-Tribromophenol | 3.951 | 330 | 290 | 9.158 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.46%# | | | |
| 30) 4-Terphenyl-d14 | 5.235 | 244 | 3341 | 11.290 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 0.56%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.794 | 93 | 784M6 | 10.277 | ng/ml | |
| 5) n-nitrosodi-n-propylamine | 2.122 | 70 | 541 | 9.250 | ng/ml | 97 |
| 6) Hexachloroethane | 2.161 | 117 | 364 | 10.280 | ng/ml | 93 |
| 9) Naphthalene | 2.568 | 128 | 2080 | 10.115 | ng/ml# | 95 |
| 10) Hexachlorobutadiene | 2.643 | 225 | 465 | 10.105 | ng/ml | 96 |
| 11) 2-Methylnaphthalene | 2.944 | 142 | 1584 | 10.281 | ng/ml | 95 |
| 12) 1-Methylnaphthalene | 2.995 | 142 | 1526 | 10.247 | ng/ml | 99 |
| 14) 2-Chloronaphthalene | 3.207 | 162 | 1719 | 10.356 | ng/ml | 97 |
| 15) 2,6-Dinitrotoluene | 3.408 | 165 | 446 | 9.978 | ng/ml | 98 |
| 16) Acenaphthylene | 3.431 | 152 | 2751 | 10.373 | ng/ml | 99 |
| 18) Acenaphthene | 3.529 | 153 | 1525 | 9.633 | ng/ml | 98 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L4.D
Acq On : 21 Jun 2024 04:28 pm
Operator : sv119:dv
Sample : IL4,32,, #10468 10 ng/ml
Misc : WG1939716,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 26 12:34:22 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:14 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.636 | 165 | 489 | 8.066 | ng/ml# | 80 |
| 20) Fluorene | 3.817 | 166 | 2091 | 10.022 | ng/ml | 95 |
| 23) 4,6-Dinitro-o-cresol | 3.863 | 198 | 160 | 27.090 | ng/ml | 95 |
| 24) Hexachlorobenzene | 4.127 | 284 | 784 | 10.666 | ng/ml | 98 |
| 25) Pentachlorophenol | 4.242 | 266 | 244 | 9.794 | ng/ml | 94 |
| 26) Phenanthrene | 4.346 | 178 | 3004 | 9.653 | ng/ml | 100 |
| 27) Anthracene | 4.376 | 178 | 3071 | 9.551 | ng/ml | 99 |
| 28) Fluoranthene | 5.009 | 202 | 4526 | 10.591 | ng/ml | 99 |
| 29) Pyrene | 5.134 | 202 | 4681 | 10.571 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 5.828 | 228 | 7340 | 9.231 | ng/ml# | 86 |
| 33) 3,3'-Dichlorobenzene | 5.823 | 252 | 1462 | 8.484 | ng/ml# | 23 |
| 34) Chrysene | 5.848 | 228 | 3974 | 9.464 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.878 | 149 | 2249 | 20.623 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.481 | 252 | 4284 | 10.209 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 6.500 | 252 | 4243 | 10.945 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 6.717 | 252 | 3601 | 9.689 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.707 | 276 | 3518 | 9.364 | ng/ml | 98 |
| 41) Dibenzo[a,h]anthracene | 7.738 | 278 | 3222M6 | 9.627 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.973 | 276 | 3485 | 9.430 | ng/ml | 99 |

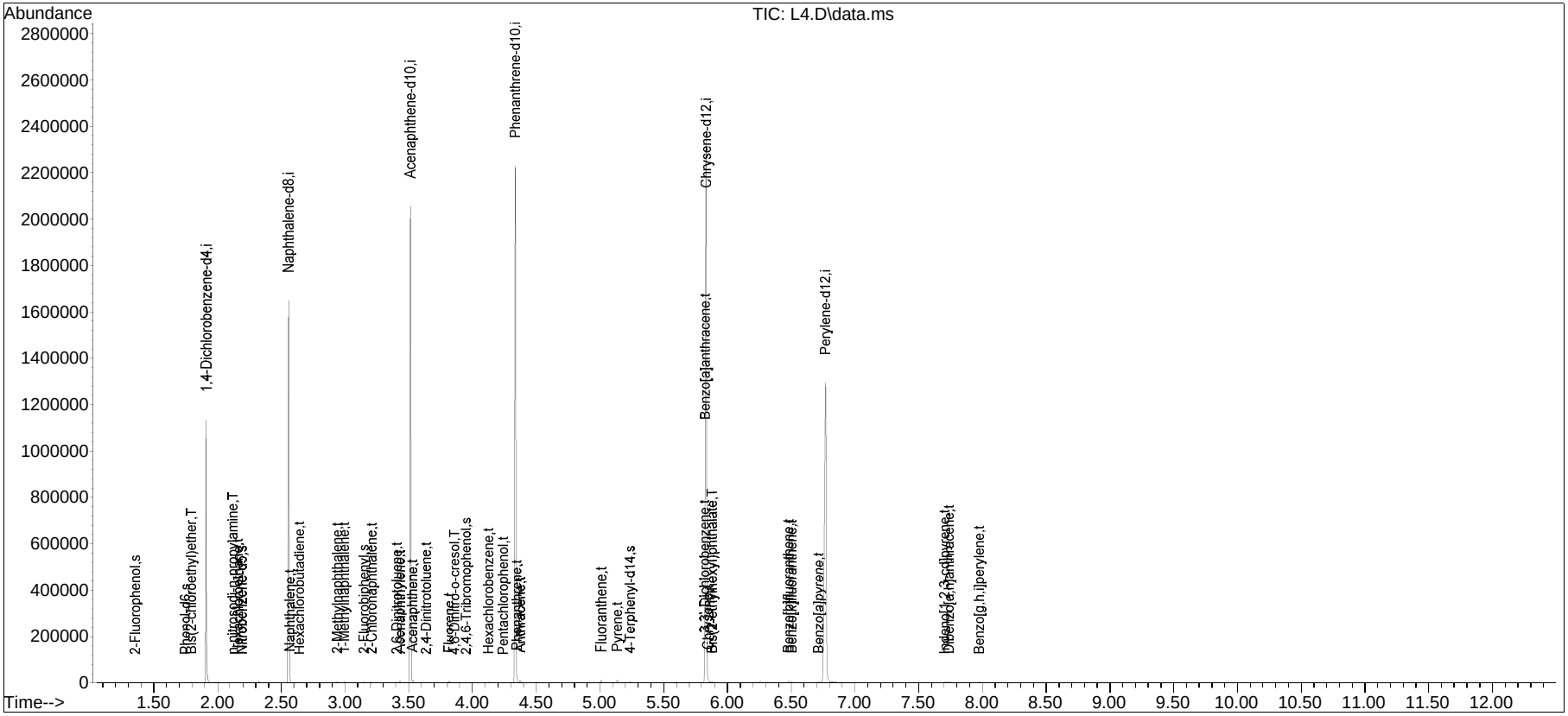
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L4.D
Acq On : 21 Jun 2024 04:28 pm
Operator : sv119:dv
Sample : IL4,32,, #10468 10 ng/ml
Misc : WG1939716,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 26 12:34:22 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:14 2024
Response via : Initial Calibration

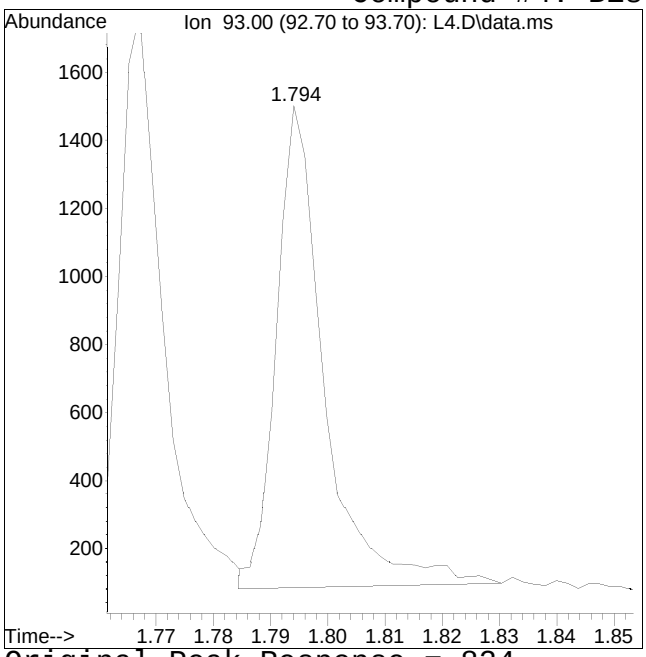
Sub List : Default - All compounds listedical\L8.D•



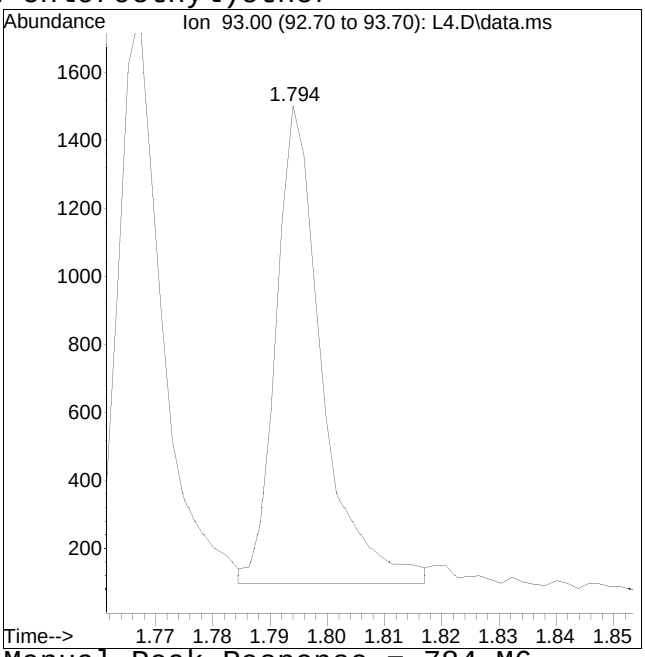
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L4.D
Date Inj'd : 6/21/2024 4:28 pm
Sample : IL4,32,, #10468 10 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #4: Bis(2-chloroethyl)ether




Original Peak Response = 824



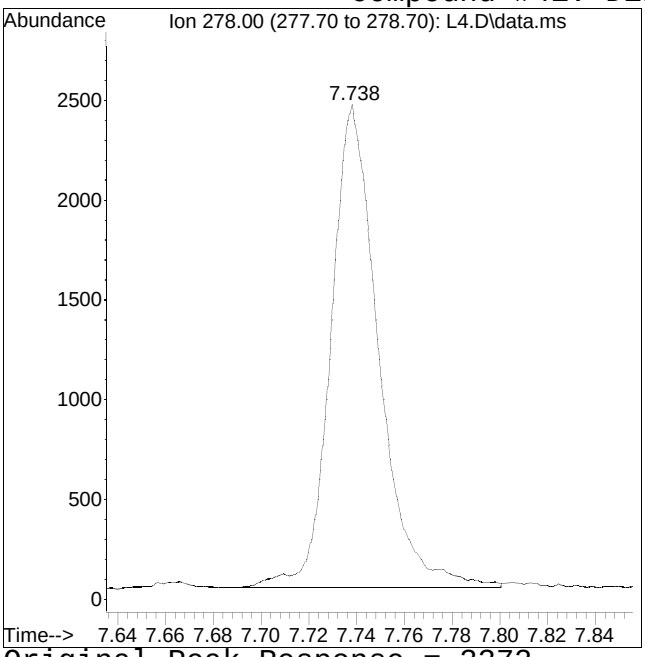

Manual Peak Response = 784 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

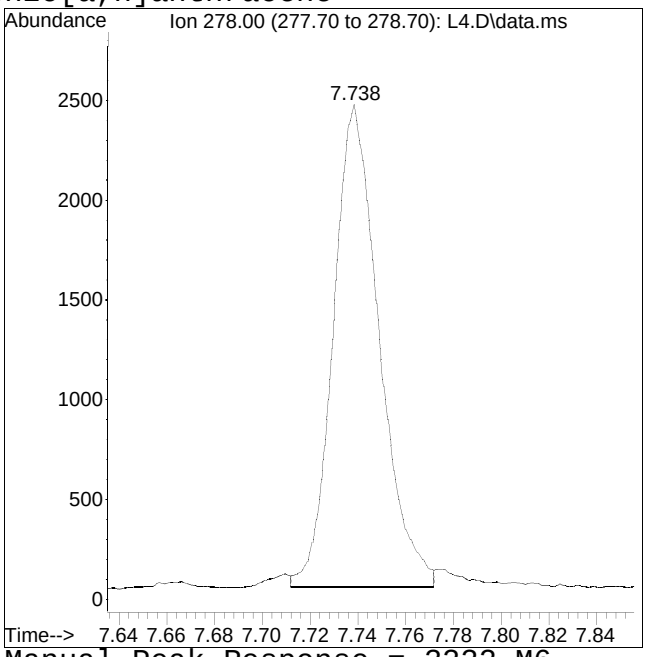
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L4.D Operator : sv119:dv
Date Inj'd : 6/21/2024 4:28 pm Instrument : SV119
Sample : IL4,32,, #10468 10 ng/ml Quant Date : 6/26/2024 12:35 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 3372




Manual Peak Response = 3222 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L3.D
Acq On : 21 Jun 2024 04:44 pm
Operator : sv119:dv
Sample : IL3,32,, #10469 5 ng/ml
Misc : WG1939716,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 26 12:39:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:07 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.913 | 152 | 209500 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery = 112.47% | | |
| 8) Naphthalene-d8 | 2.557 | 136 | 729885 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 105.52% | | |
| 17) Acenaphthene-d10 | 3.513 | 164 | 447694 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 105.58% | | |
| 22) Phenanthrene-d10 | 4.335 | 188 | 1050136 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 102.19% | | |
| 31) Chrysene-d12 | 5.835 | 240 | 1112822 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 115.20% | | |
| 36) Perylene-d12 | 6.769 | 264 | 994319 | 4000.000 ng/ml | -0.01 |
| Standard Area 1 = 979854 | | | Recovery = 101.48% | | |
| System Monitoring Compounds | | | | | |
| 2) 2-Fluorophenol | 1.352 | 112 | 377 | 5.101 ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.26%# | | |
| 3) Phenol-d6 | 1.748 | 99 | 449 | 4.817 ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.24%# | | |
| 7) Nitrobenzene-d5 | 2.194 | 82 | 369 | 4.513 ng/ml | 0.01 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.45%# | | |
| 13) 2-Fluorobiphenyl | 3.151 | 172 | 966 | 5.119 ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.51%# | | |
| 21) 2,4,6-Tribromophenol | 3.954 | 330 | 140 | 4.479 ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.22%# | | |
| 30) 4-Terphenyl-d14 | 5.238 | 244 | 1722 | 5.932 ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 0.30%# | | |
| Target Compounds | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.796 | 93 | 362M6 | 4.834 ng/ml | |
| 5) n-nitrosodi-n-propylamine | 2.124 | 70 | 276 | 4.808 ng/ml | 97 |
| 6) Hexachloroethane | 2.160 | 117 | 183 | 5.265 ng/ml | 91 |
| 9) Naphthalene | 2.568 | 128 | 1056 | 5.224 ng/ml# | 90 |
| 10) Hexachlorobutadiene | 2.642 | 225 | 242 | 5.350 ng/ml | 95 |
| 11) 2-Methylnaphthalene | 2.944 | 142 | 756 | 4.992 ng/ml | 96 |
| 12) 1-Methylnaphthalene | 2.997 | 142 | 782 | 5.342 ng/ml | 95 |
| 14) 2-Chloronaphthalene | 3.209 | 162 | 844 | 5.173 ng/ml | 98 |
| 15) 2,6-Dinitrotoluene | 3.410 | 165 | 195 | 4.438 ng/ml# | 82 |
| 16) Acenaphthylene | 3.434 | 152 | 1306 | 5.010 ng/ml | 99 |
| 18) Acenaphthene | 3.530 | 153 | 758 | 4.851 ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L3.D
Acq On : 21 Jun 2024 04:44 pm
Operator : sv119:dv
Sample : IL3,32,, #10469 5 ng/ml
Misc : WG1939716,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 26 12:39:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:07 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.638 | 165 | 224 | 3.743 | ng/ml | 91 |
| 20) Fluorene | 3.817 | 166 | 1056 | 5.127 | ng/ml | 98 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | d | |
| 24) Hexachlorobenzene | 4.129 | 284 | 371 | 5.145 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.242 | 266 | 136 | 7.392 | ng/ml# | 74 |
| 26) Phenanthrene | 4.348 | 178 | 1497M6 | 4.904 | ng/ml | |
| 27) Anthracene | 4.376 | 178 | 1527 | 4.841 | ng/ml | 97 |
| 28) Fluoranthene | 5.011 | 202 | 2184 | 5.210 | ng/ml | 100 |
| 29) Pyrene | 5.136 | 202 | 2343 | 5.394 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 5.832 | 228 | 5283 | 4.547 | ng/ml# | 78 |
| 33) 3,3'-Dichlorobenzene | 5.827 | 252 | 688 | 4.048 | ng/ml# | 1 |
| 34) Chrysene | 5.848 | 228 | 1952M1 | 4.713 | ng/ml | |
| 35) Bis(2-ethylhexyl)phtha... | 5.878 | 149 | 1208 | 17.310 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 6.481 | 252 | 1989 | 4.830 | ng/ml | 97 |
| 38) Benzo[k]fluoranthene | 6.501 | 252 | 2168M4 | 5.698 | ng/ml | |
| 39) Benzo[a]pyrene | 6.717 | 252 | 1780 | 4.880 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.709 | 276 | 1673 | 4.537 | ng/ml | 95 |
| 41) Dibenzo[a,h]anthracene | 7.741 | 278 | 1564M6 | 4.762 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.975 | 276 | 1758 | 4.847 | ng/ml | 100 |

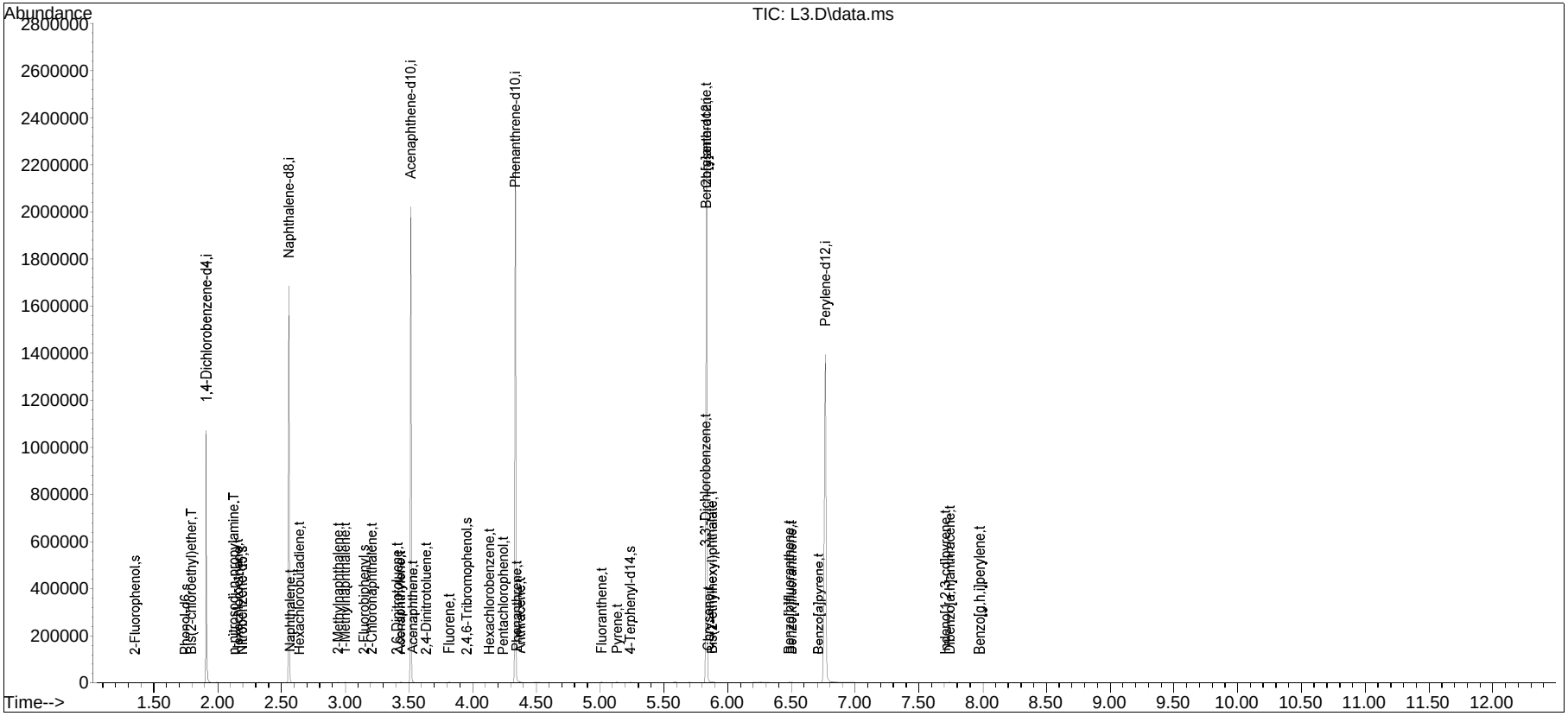
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L3.D
Acq On : 21 Jun 2024 04:44 pm
Operator : sv119:dv
Sample : IL3,32,, #10469 5 ng/ml
Misc : WG1939716,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 26 12:39:28 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:35:07 2024
Response via : Initial Calibration

Sub List : Default - All compounds listedical\L8.D•

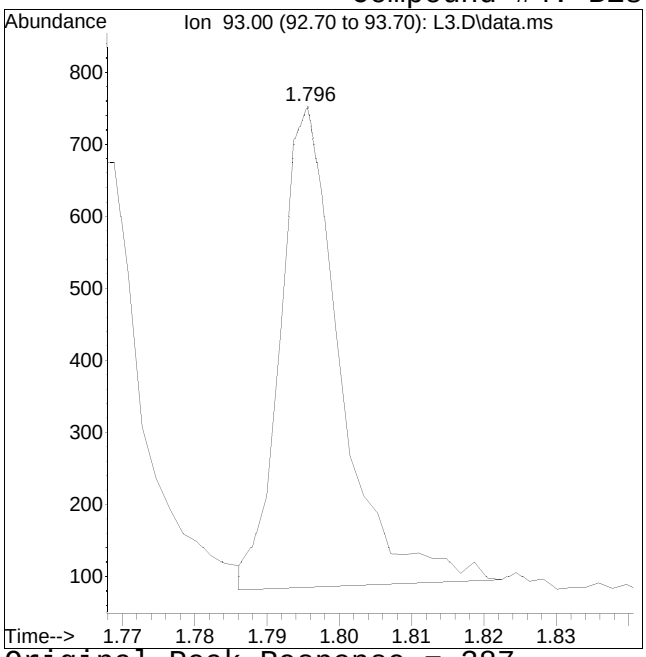


# Manual Integration Report

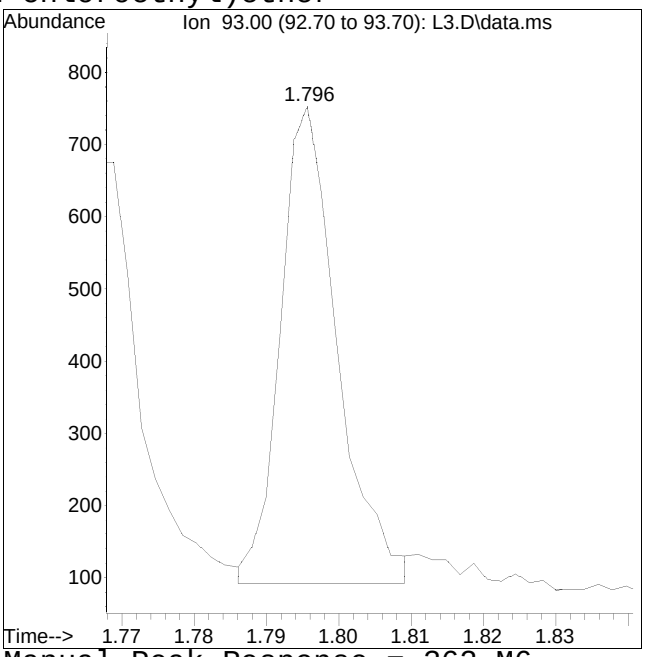
Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L3.D
Date Inj'd : 6/21/2024 4:44 pm
Sample : IL3,32,, #10469 5 ng/ml

Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #4: Bis(2-chloroethyl)ether




Original Peak Response = 387



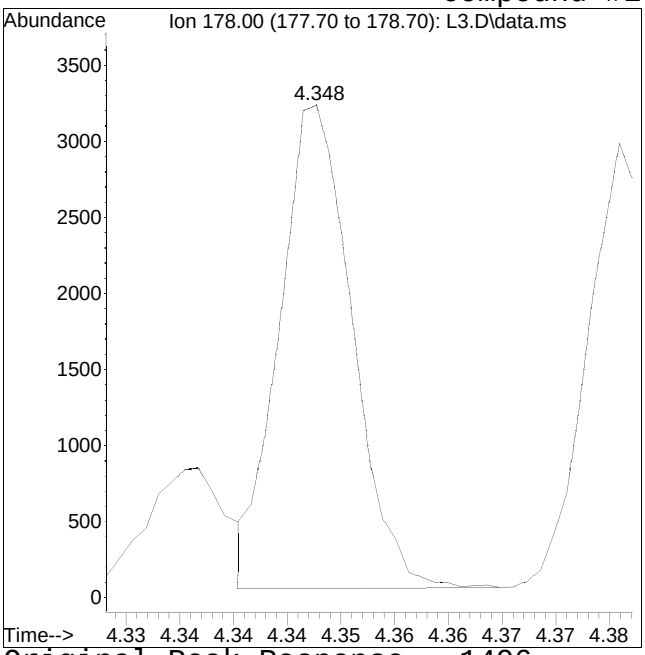

Manual Peak Response = 362 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

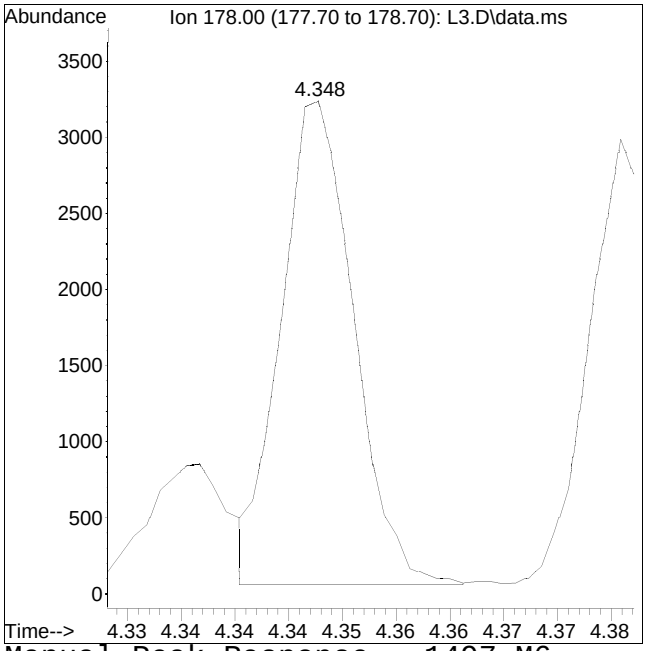
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L3.D
Date Inj'd : 6/21/2024 4:44 pm
Sample : IL3,32,, #10469 5 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

Compound #26: Phenanthrene




Original Peak Response = 1496



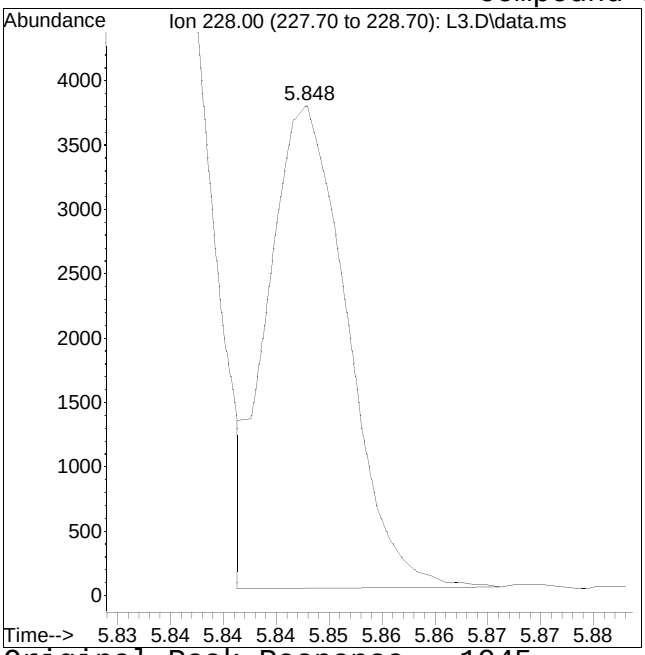

Manual Peak Response = 1497 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

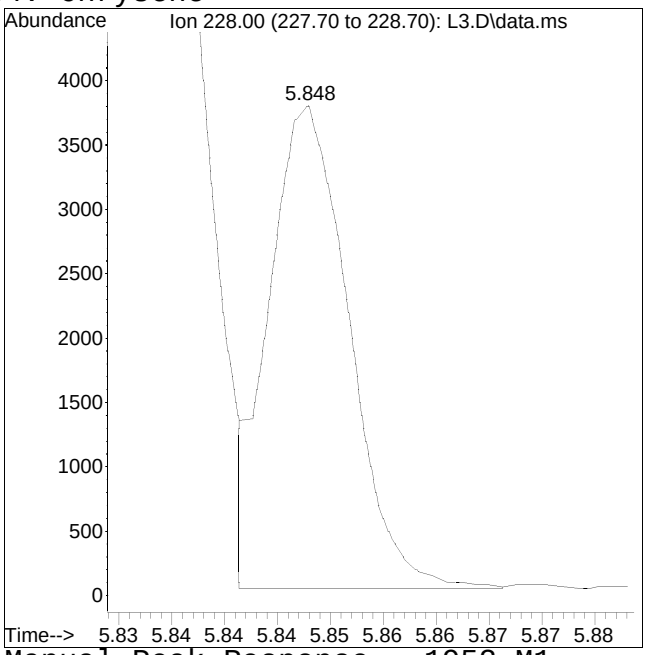
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L3.D
Date Inj'd : 6/21/2024 4:44 pm
Sample : IL3,32,, #10469 5 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #34: Chrysene




Original Peak Response = 1945




Manual Peak Response = 1952 M1

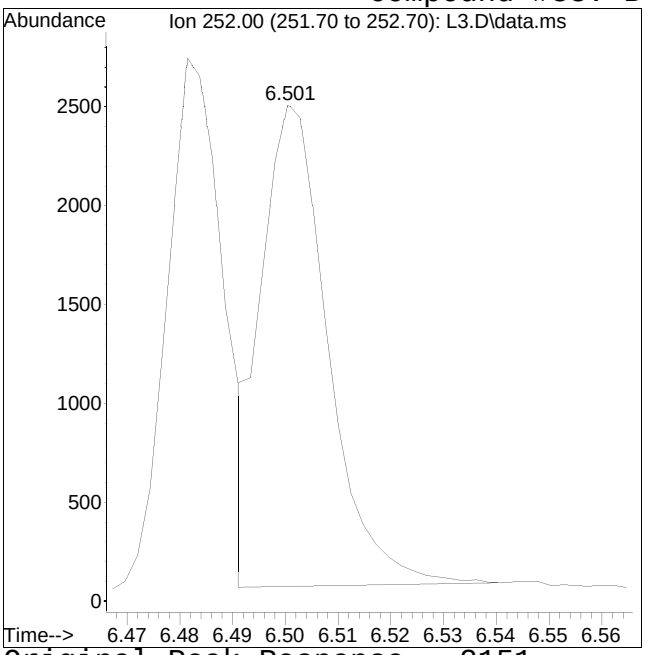
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration Report

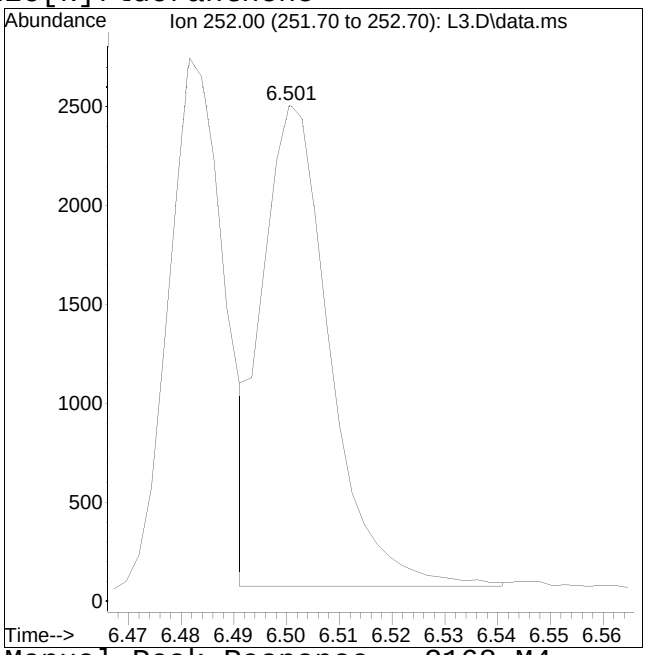
Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L3.D
Date Inj'd : 6/21/2024 4:44 pm
Sample : IL3,32,, #10469 5 ng/ml

Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:35 pm

## Compound #38: Benzo[k]fluoranthene




Original Peak Response = 2151



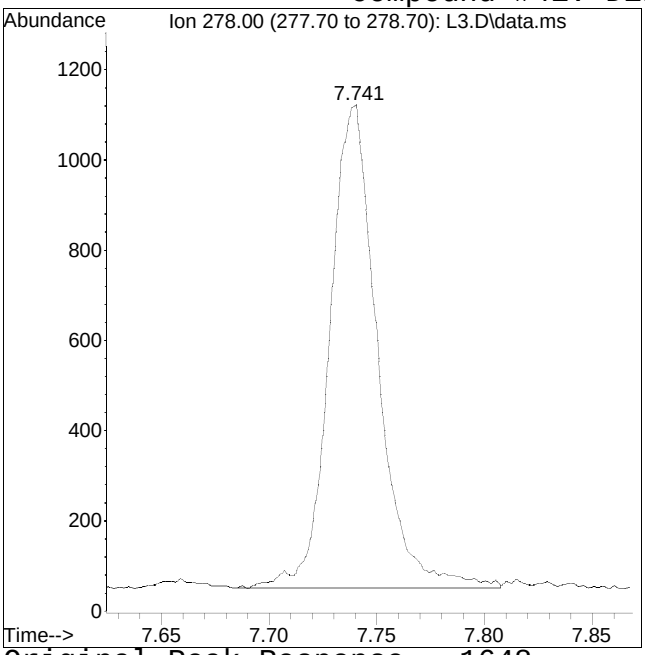

Manual Peak Response = 2168 M4

M4 = Poor automated baseline construction.

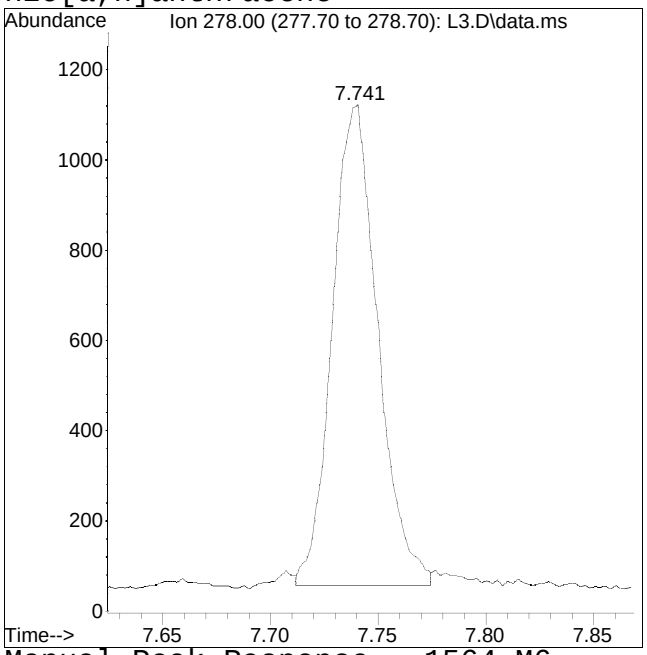
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L3.D Operator : sv119:dv
Date Inj'd : 6/21/2024 4:44 pm Instrument : SV119
Sample : IL3,32,, #10469 5 ng/ml Quant Date : 6/26/2024 12:35 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 1648




Manual Peak Response = 1564 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L2.D
Acq On : 21 Jun 2024 05:01 pm
Operator : sv119:dv
Sample : IL2,32,, #10758 2 ng/ml
Misc : WG1939716,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 18:50:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:12 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.915 | 152 | 202808 | 4000.000 | ng/ml | 0.01 |
| Standard Area 1 = 186265 | | | Recovery = 108.88% | | | |
| 8) Naphthalene-d8 | 2.557 | 136 | 710799 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 102.76% | | | |
| 17) Acenaphthene-d10 | 3.513 | 164 | 436373 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 102.91% | | | |
| 22) Phenanthrene-d10 | 4.334 | 188 | 1034805 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 100.70% | | | |
| 31) Chrysene-d12 | 5.835 | 240 | 1089887 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 112.83% | | | |
| 36) Perylene-d12 | 6.769 | 264 | 975901 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 979854 | | | Recovery = 99.60% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.353 | 112 | 152 | 2.125 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.11%# | | | |
| 3) Phenol-d6 | 1.750 | 99 | 183 | 2.028 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.10%# | | | |
| 7) Nitrobenzene-d5 | 2.195 | 82 | 175 | 2.211 | ng/ml | 0.01 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.22%# | | | |
| 13) 2-Fluorobiphenyl | 3.151 | 172 | 406 | 2.209 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.22%# | | | |
| 21) 2,4,6-Tribromophenol | 3.953 | 330 | 61M1 | 2.002 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.10%# | | | |
| 30) 4-Terphenyl-d14 | 5.237 | 244 | 776 | 2.713 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 0.14%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.796 | 93 | 156M4 | 2.152 | ng/ml | |
| 5) n-nitrosodi-n-propylamine | 2.124 | 70 | 112M6 | 2.029 | ng/ml | |
| 6) Hexachloroethane | 2.161 | 117 | 80 | 2.378 | ng/ml | 94 |
| 9) Naphthalene | 2.568 | 128 | 448 | 2.283 | ng/ml | 98 |
| 10) Hexachlorobutadiene | 2.642 | 225 | 104 | 2.361 | ng/ml | 89 |
| 11) 2-Methylnaphthalene | 2.944 | 142 | 294 | 1.993 | ng/ml | 98 |
| 12) 1-Methylnaphthalene | 2.998 | 142 | 313 | 2.196 | ng/ml | 96 |
| 14) 2-Chloronaphthalene | 3.209 | 162 | 336 | 2.115 | ng/ml | 99 |
| 15) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. d | | |
| 16) Acenaphthylene | 3.434 | 152 | 540 | 2.127 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L2.D
Acq On : 21 Jun 2024 05:01 pm
Operator : sv119:dv
Sample : IL2,32,, #10758 2 ng/ml
Misc : WG1939716,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 18:50:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:12 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 18) Acenaphthene | 3.530 | 153 | 334 | 2.193 | ng/ml | 93 |
| 19) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 3.819 | 166 | 454 | 2.261 | ng/ml | 92 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 24) Hexachlorobenzene | 4.127 | 284 | 168 | 2.364 | ng/ml | 99 |
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 4.346 | 178 | 700 | 2.327 | ng/ml | 99 |
| 27) Anthracene | 4.376 | 178 | 689 | 2.217 | ng/ml | 100 |
| 28) Fluoranthene | 5.011 | 202 | 1047 | 2.535 | ng/ml | 99 |
| 29) Pyrene | 5.134 | 202 | 1088 | 2.542 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 5.833 | 228 | 4126 | 1.985 | ng/ml# | 74 |
| 33) 3,3'-Dichlorobenzene | 5.826 | 252 | 303 | 1.820 | ng/ml# | 1 |
| 34) Chrysene | 5.847 | 228 | 869 | 2.142 | ng/ml | 97 |
| 35) Bis(2-ethylhexyl)phtha... | 5.877 | 149 | 585 | 15.306 | ng/ml | 97 |
| 37) Benzo[b]fluoranthene | 6.481 | 252 | 927 | 2.293 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 6.500 | 252 | 984M6 | 2.635 | ng/ml | |
| 39) Benzo[a]pyrene | 6.717 | 252 | 803 | 2.243 | ng/ml | 98 |
| 40) Indeno[1,2,3-cd]pyrene | 7.709 | 276 | 786 | 2.172 | ng/ml# | 83 |
| 41) Dibenzo[a,h]anthracene | 7.738 | 278 | 709 | 2.199 | ng/ml | 100 |
| 42) Benzo[g,h,i]perylene | 7.975 | 276 | 804 | 2.259 | ng/ml | 99 |

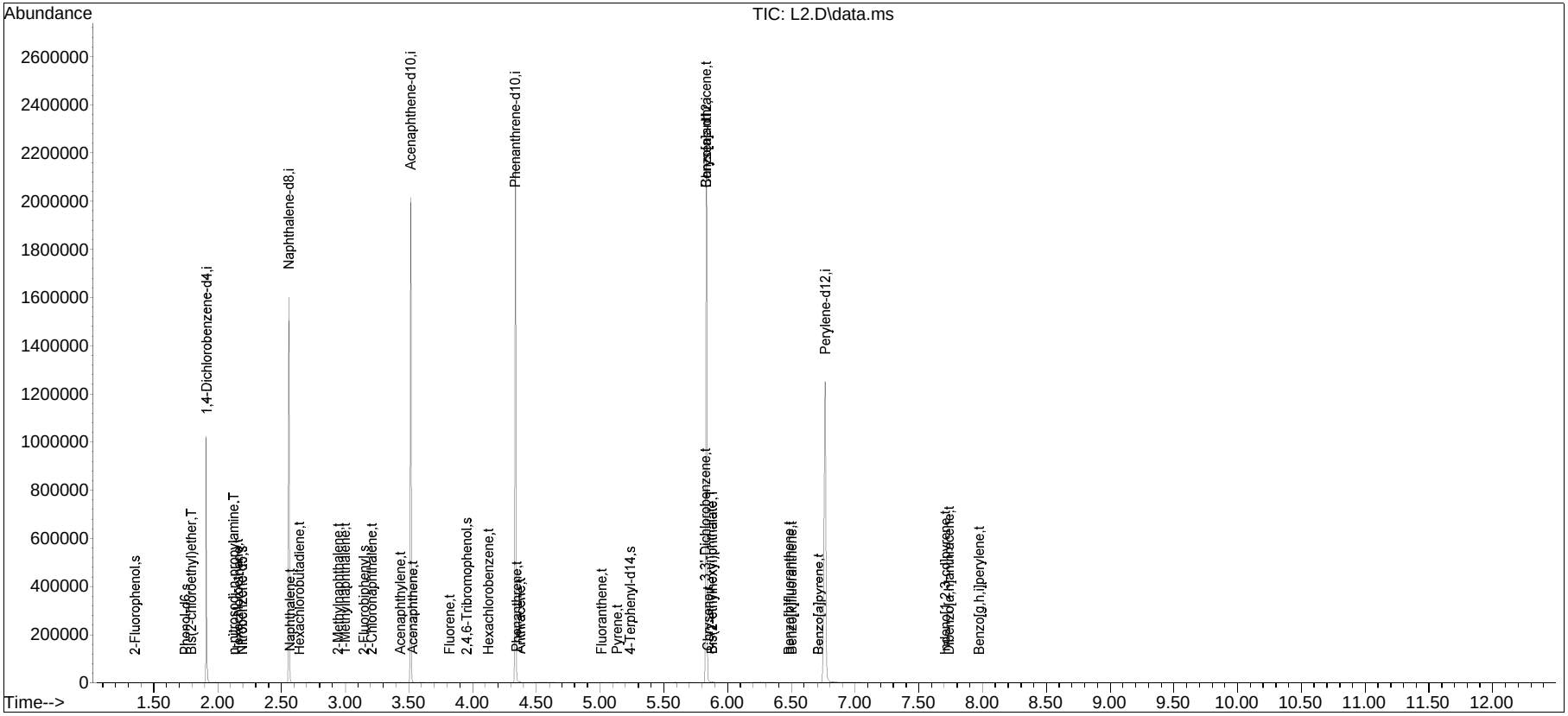
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L2.D
Acq On : 21 Jun 2024 05:01 pm
Operator : sv119:dv
Sample : IL2,32,, #10758 2 ng/ml
Misc : WG1939716,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 18:50:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:12 2024
Response via : Initial Calibration

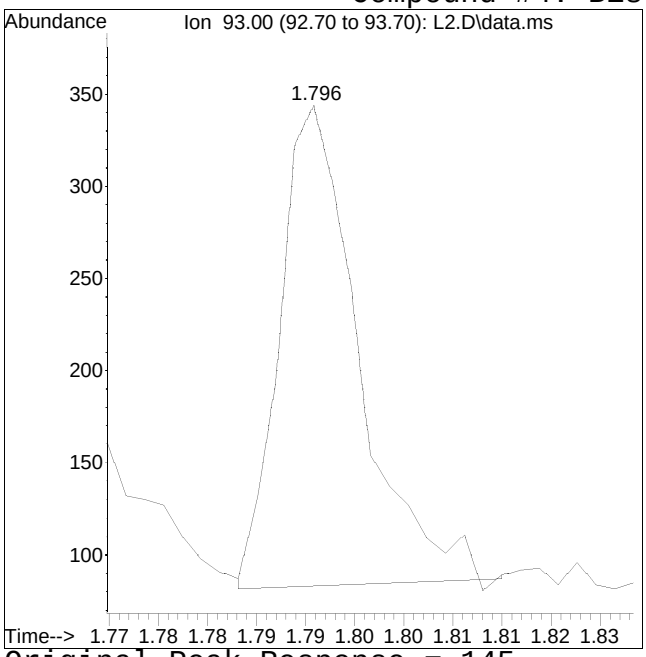
Sub List : Default - All compounds listedical\L8.D•



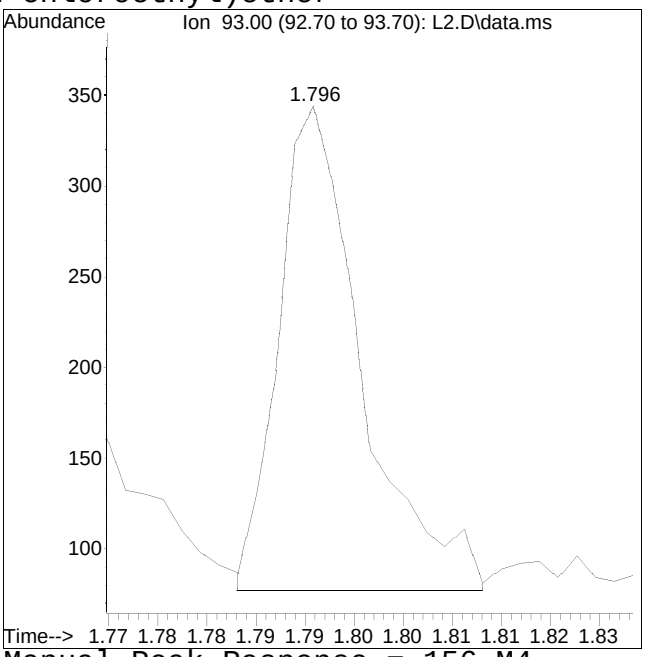
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L2.D
Date Inj'd : 6/21/2024 5:01 pm
Sample : IL2,32,, #10758 2 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 7/17/2024 6:52 pm

## Compound #4: Bis(2-chloroethyl)ether




Original Peak Response = 145



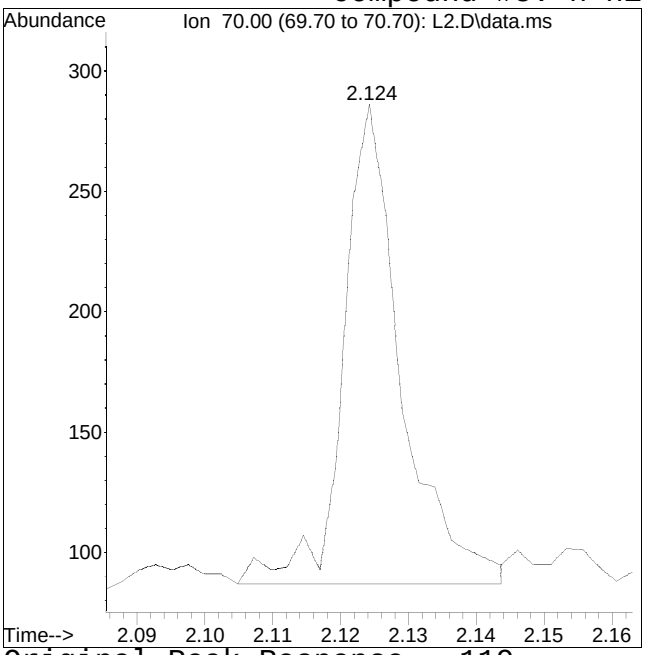

Manual Peak Response = 156 M4

M4 = Poor automated baseline construction.

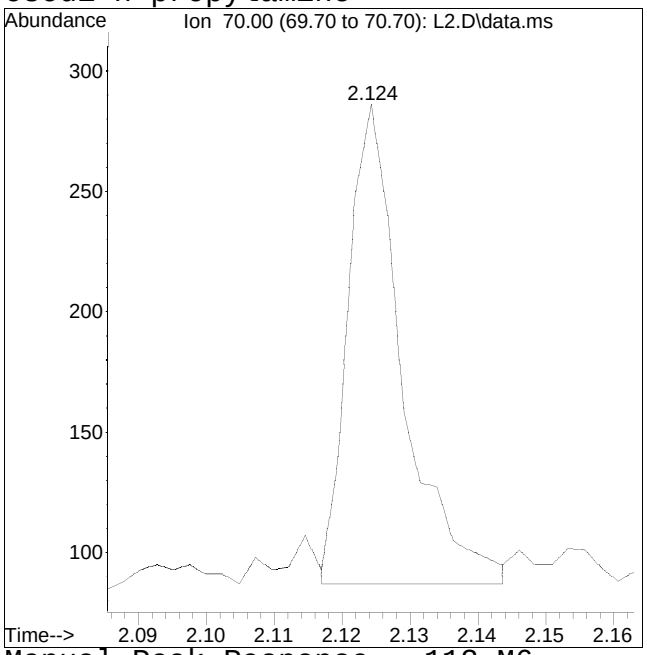
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L2.D
Date Inj'd : 6/21/2024 5:01 pm
Sample : IL2,32,, #10758 2 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 7/17/2024 6:52 pm

Compound #5: n-nitrosodi-n-propylamine




Original Peak Response = 119



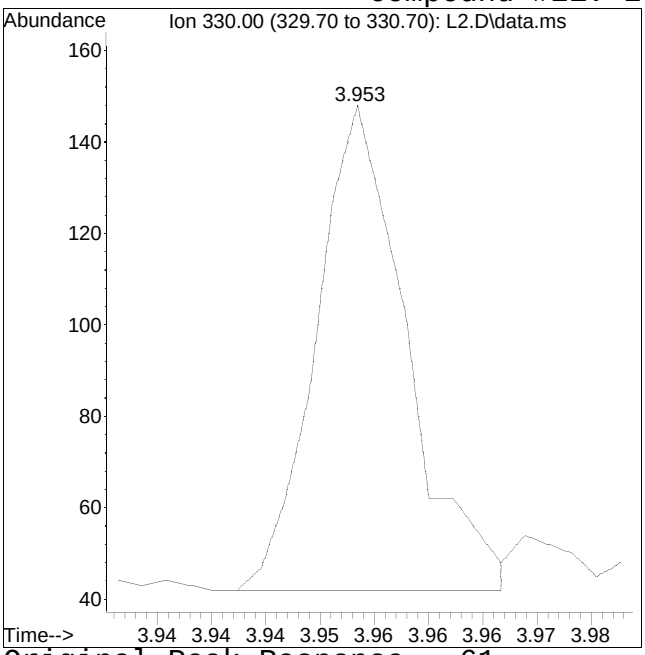

Manual Peak Response = 112 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

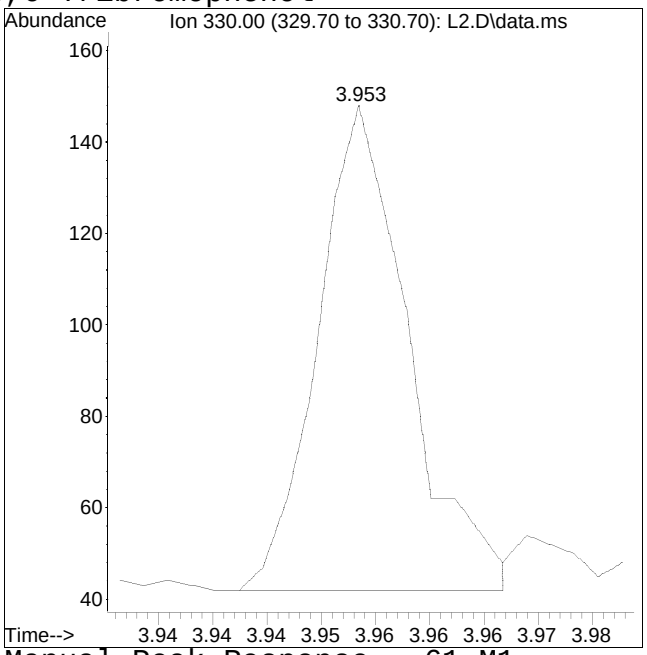
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L2.D
Date Inj'd : 6/21/2024 5:01 pm
Sample : IL2,32,, #10758 2 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 7/17/2024 6:52 pm

## Compound #21: 2,4,6-Tribromophenol




Original Peak Response = 61



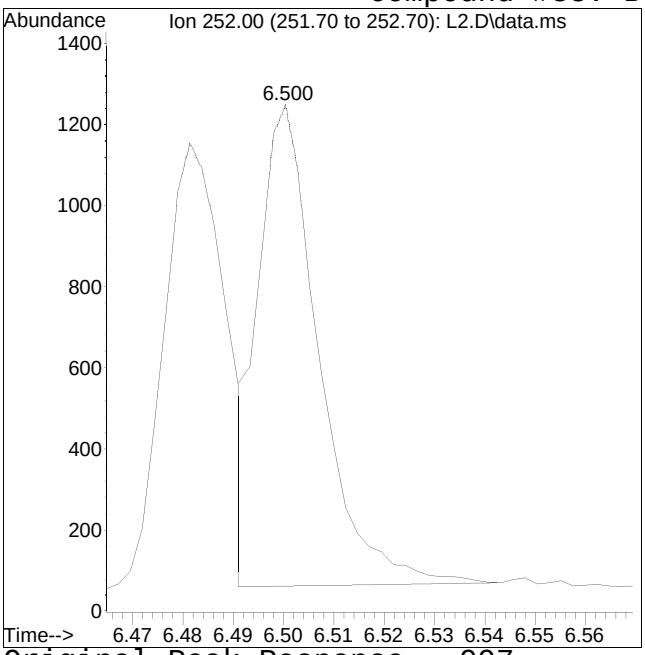

Manual Peak Response = 61 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

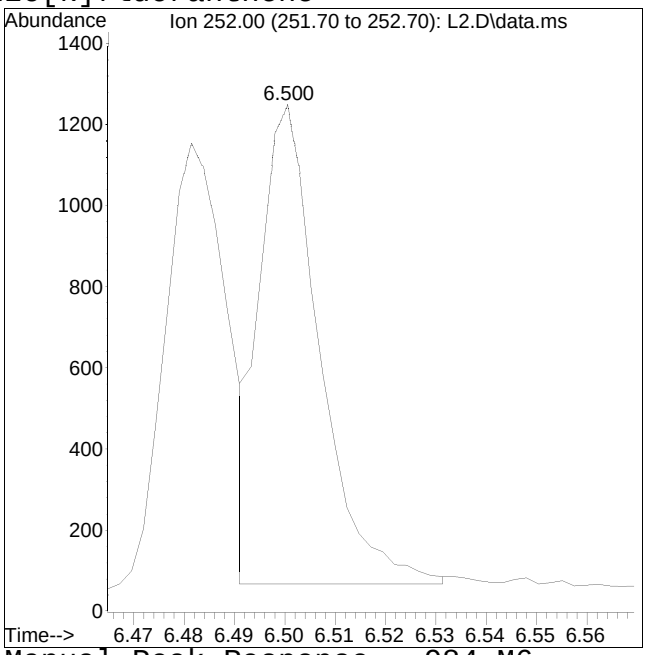
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L2.D Operator : sv119:dv
Date Inj'd : 6/21/2024 5:01 pm Instrument : SV119
Sample : IL2,32,, #10758 2 ng/ml Quant Date : 7/17/2024 6:52 pm

Compound #38: Benzo[k]fluoranthene




Original Peak Response = 997




Manual Peak Response = 984 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L1.D
Acq On : 21 Jun 2024 05:17 pm
Operator : sv119:dv
Sample : IL1,32,, #10759 1 ng/ml
Misc : WG1939716,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 26 12:35:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:45 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.914 | 152 | 203550 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 186265 | | | Recovery | = 109.28% | |
| 8) Naphthalene-d8 | 2.558 | 136 | 709280 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery | = 102.54% | |
| 17) Acenaphthene-d10 | 3.513 | 164 | 430918 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery | = 101.63% | |
| 22) Phenanthrene-d10 | 4.335 | 188 | 1016193 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery | = 98.89% | |
| 31) Chrysene-d12 | 5.832 | 240 | 1075525 | 4000.000 ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery | = 111.34% | |
| 36) Perylene-d12 | 6.764 | 264 | 970030 | 4000.000 ng/ml | -0.02 |
| Standard Area 1 = 979854 | | | Recovery | = 99.00% | |
| System Monitoring Compounds | | | | | |
| 2) 2-Fluorophenol | 0.000 | 112 | 0d | 0.000 ng/ml | |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 0.00%# | |
| 3) Phenol-d6 | 0.000 | 99 | 0d | 0.000 ng/ml | |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 0.00%# | |
| 7) Nitrobenzene-d5 | 0.000 | 82 | 0d | 0.000 ng/ml | |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 0.00%# | |
| 13) 2-Fluorobiphenyl | 0.000 | 172 | 0d | 0.000 ng/ml | |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 0.00%# | |
| 21) 2,4,6-Tribromophenol | 0.000 | 330 | 0 | 0.000 ng/ml | |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 0.00%# | |
| 30) 4-Terphenyl-d14 | 5.238 | 244 | 413 | 1.470 ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery | = 0.07%# | |
| Target Compounds | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. d | |
| 5) n-nitrosodi-n-propylamine | 0.000 | | 0 | N.D. d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. d | |
| 9) Naphthalene | 2.569 | 128 | 204M6 | 1.039 ng/ml | |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. d | |
| 11) 2-Methylnaphthalene | 2.944 | 142 | 139 | 0.945 ng/ml | 86 |
| 12) 1-Methylnaphthalene | 2.998 | 142 | 151 | 1.062 ng/ml | 99 |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. d | |
| 15) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. d | |
| 16) Acenaphthylene | 3.434 | 152 | 268 | 1.058 ng/ml | 94 |
| 18) Acenaphthene | 3.530 | 153 | 175 | 1.163 ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L1.D
Acq On : 21 Jun 2024 05:17 pm
Operator : sv119:dv
Sample : IL1,32,, #10759 1 ng/ml
Misc : WG1939716,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 26 12:35:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:45 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | | |
| 20) Fluorene | 3.817 | 166 | 218 | 1.100 | ng/ml | 89 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 24) Hexachlorobenzene | 0.000 | | 0 | N.D. | d | |
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 4.348 | 178 | 363 | 1.229 | ng/ml | 93 |
| 27) Anthracene | 4.376 | 178 | 352 | 1.153 | ng/ml# | 89 |
| 28) Fluoranthene | 5.011 | 202 | 544 | 1.341 | ng/ml | 97 |
| 29) Pyrene | 5.134 | 202 | 575 | 1.368 | ng/ml | 98 |
| 32) Benzo[a]anthracene | 5.831 | 228 | 3582 | 0.772 | ng/ml# | 70 |
| 33) 3,3'-Dichlorobenzene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 5.844 | 228 | 460 | 1.149 | ng/ml | 98 |
| 35) Bis(2-ethylhexyl)phtha... | 5.875 | 149 | 341 | 14.504 | ng/ml# | 90 |
| 37) Benzo[b]fluoranthene | 6.479 | 252 | 479 | 1.192 | ng/ml | 93 |
| 38) Benzo[k]fluoranthene | 6.496 | 252 | 547M6 | 1.474 | ng/ml | |
| 39) Benzo[a]pyrene | 6.712 | 252 | 428 | 1.203 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 7.707 | 276 | 445 | 1.237 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 7.733 | 278 | 377 | 1.177 | ng/ml | 93 |
| 42) Benzo[g,h,i]perylene | 7.973 | 276 | 439 | 1.241 | ng/ml | 94 |

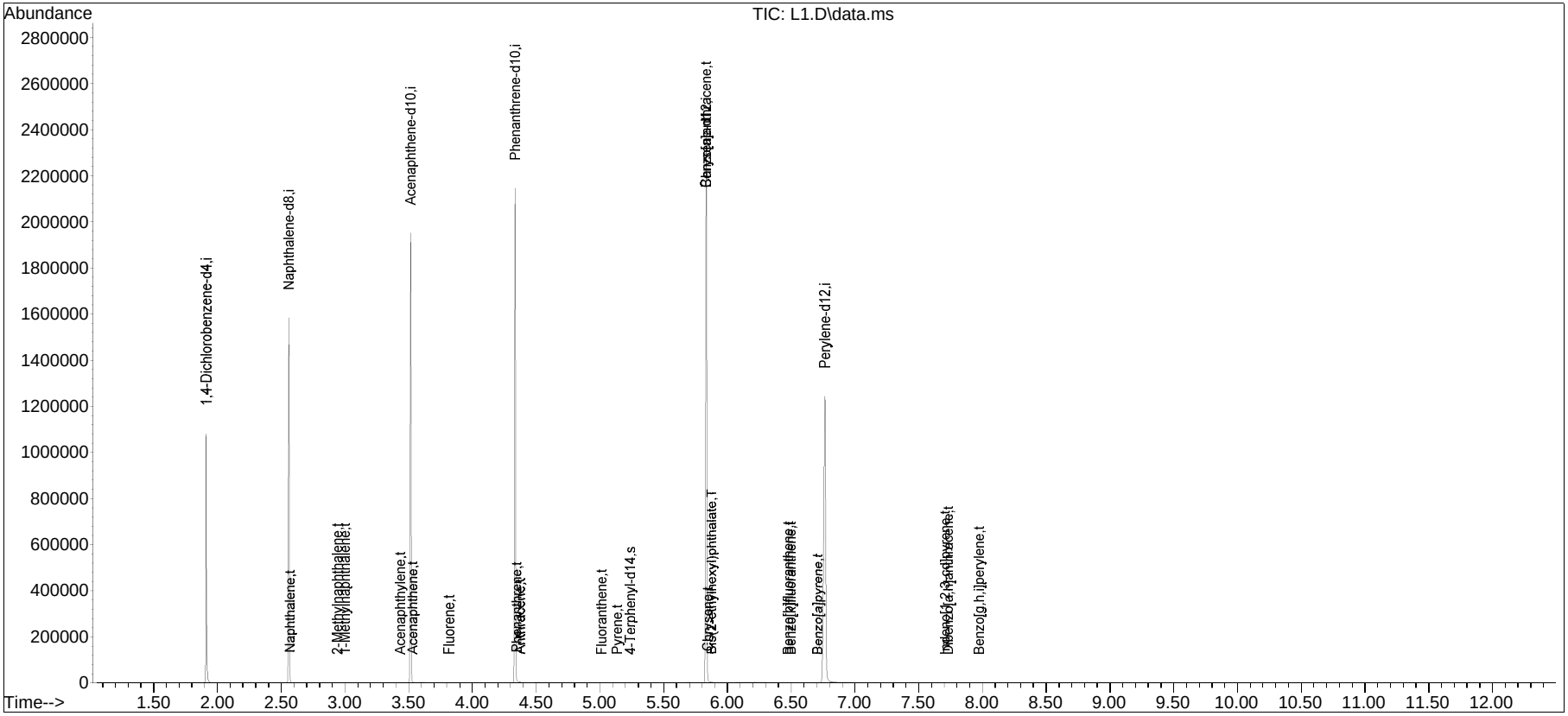
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : L1.D
Acq On : 21 Jun 2024 05:17 pm
Operator : sv119:dv
Sample : IL1,32,, #10759 1 ng/ml
Misc : WG1939716,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 26 12:35:54 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:34:45 2024
Response via : Initial Calibration

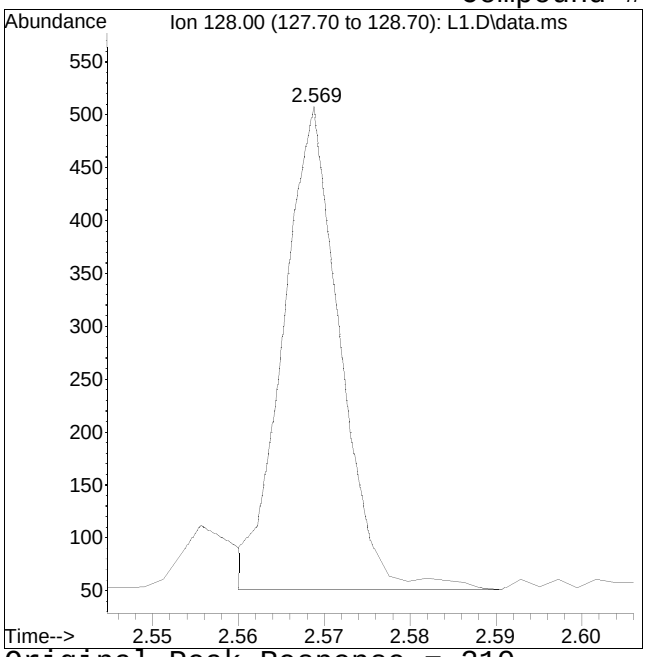
Sub List : Default - All compounds listedical\L8.D•



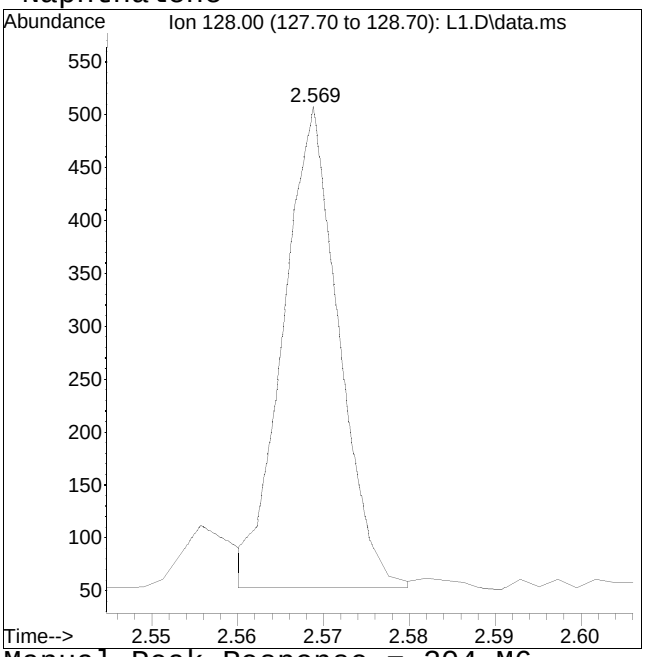
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : L1.D
Date Inj'd : 6/21/2024 5:17 pm
Sample : IL1,32,, #10759 1 ng/ml
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:34 pm

## Compound #9: Naphthalene




Original Peak Response = 210



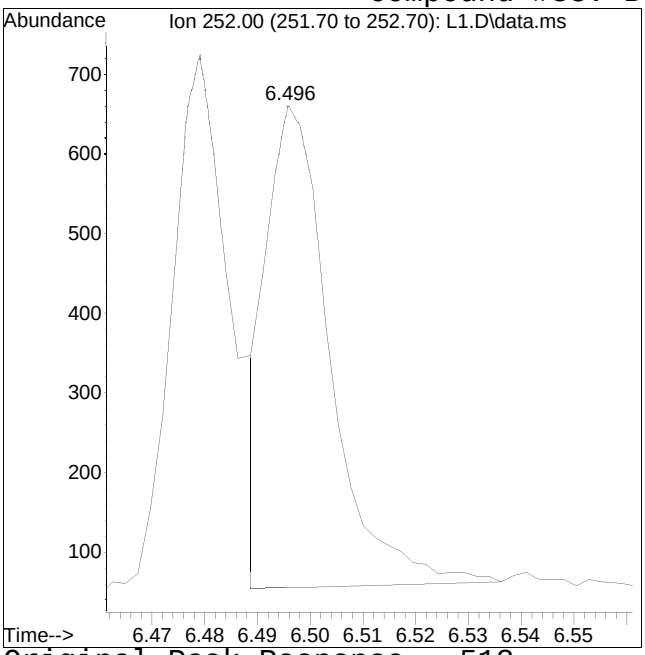

Manual Peak Response = 204 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

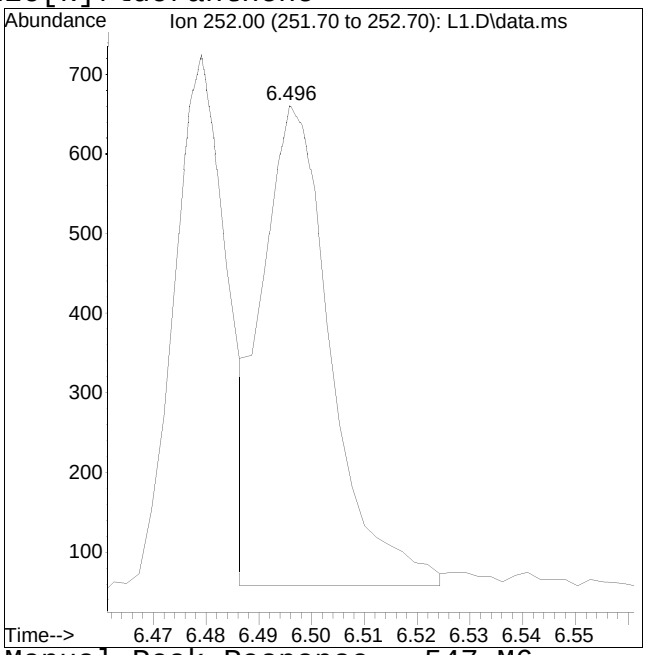
Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQMethod : SIM-RVT_240621_sv119.M
Data File : L1.D Operator : sv119:dv
Date Inj'd : 6/21/2024 5:17 pm Instrument : SV119
Sample : IL1,32,, #10759 1 ng/ml Quant Date : 6/26/2024 12:34 pm

Compound #38: Benzo[k]fluoranthene




Original Peak Response = 513




Manual Peak Response = 547 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : ICV.D
Acq On : 21 Jun 2024 05:33 pm
Operator : sv119:dv
Sample : CQICV,32,, #10475 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 26 12:47:43 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:11 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | i | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 108 | 0.01 |
| 2 | s | 2-Fluorophenol | 1.411 | 1.274 | 9.7 | 98 | 0.01 |
| 3 | s | Phenol-d6 | 1.780 | 1.667 | 6.3 | 98 | 0.01 |
| 4 | T | Bis(2-chloroethyl)ether | 1.430 | 1.327 | 7.2 | 101 | 0.01 |
| 5 | T | n-nitrosodi-n-propylamine | 1.088 | 1.062 | 2.4 | 100 | 0.00 |
| 6 | t | Hexachloroethane | 0.664 | 0.603 | 9.2 | 101 | 0.00 |
| 7 | s | Nitrobenzene-d5 | 1.561 | 1.498 | 4.0 | 100 | 0.00 |
| 8 | i | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 9 | t | Naphthalene | 1.104 | 1.006 | 8.9 | 100 | 0.00 |
| 10 | t | Hexachlorobutadiene | 0.248 | 0.232 | 6.5 | 105 | 0.00 |
| 11 | t | 2-Methylnaphthalene | 0.830 | 0.811 | 2.3 | 103 | 0.00 |
| 12 | t | 1-Methylnaphthalene | 0.802 | 0.725 | 9.6 | 101 | 0.00 |
| 13 | s | 2-Fluorobiphenyl | 1.034 | 0.925 | 10.5 | 102 | 0.00 |
| 14 | t | 2-Chloronaphthalene | 0.894 | 0.822 | 8.1 | 101 | 0.00 |
| 15 | t | 2,6-Dinitrotoluene | 0.241 | 0.237 | 1.7 | 99 | 0.00 |
| 16 | t | Acenaphthylene | 1.429 | 1.296 | 9.3 | 99 | 0.00 |
| 17 | i | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 18 | t | Acenaphthene | 1.396 | 1.315 | 5.8 | 103 | 0.00 |
| 19 | t | 2,4-Dinitrotoluene | 0.535 | 0.535 | 0.0 | 98 | 0.00 |
| 20 | t | Fluorene | 1.840 | 1.661 | 9.7 | 101 | 0.00 |
| 21 | s | 2,4,6-Tribromophenol | 0.279 | 0.279 | 0.0 | 98 | 0.00 |
| 22 | i | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 107 | 0.00 |
| 23 | T | 4,6-Dinitro-o-cresol | *1000.000 | 880.620 | 11.9 | 95 | 0.00 |
| 24 | t | Hexachlorobenzene | 0.275 | 0.245 | 10.9 | 101 | 0.00 |
| 25 | t | Pentachlorophenol | *1000.000 | 953.975 | 4.6 | 98 | 0.00 |
| 26 | t | Phenanthrene | 1.163 | 1.032 | 11.3 | 99 | 0.00 |
| 27 | t | Anthracene | 1.201 | 1.124 | 6.4 | 100 | 0.00 |
| 28 | t | Fluoranthene | 1.597 | 1.383 | 13.4 | 99 | 0.00 |
| 29 | t | Pyrene | 1.655 | 1.405 | 15.1 | 99 | 0.00 |
| 30 | s | 4-Terphenyl-d14 | 1.106 | 0.952 | 13.9 | 100 | 0.00 |
| 31 | i | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 32 | t | Benzo[a]anthracene | *1000.000 | 951.603 | 4.8 | 96 | 0.00 |
| 33 | t | 3,3'-Dichlorobenzene | 0.611 | 0.580 | 5.1 | 95 | 0.00 |
| 34 | t | Chrysene | 1.489 | 1.363 | 8.5 | 97 | 0.00 |
| 35 | T | Bis(2-ethylhexyl)phthalate | *1000.000 | 913.160 | 8.7 | 97 | -0.01 |

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : ICV.D
Acq On : 21 Jun 2024 05:33 pm
Operator : sv119:dv
Sample : CQICV,32,, #10475 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 26 12:47:43 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:11 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 36 | i | Perylene-d12 | 1.000 | 1.000 | 0.0 | 106 | -0.02 |
| 37 | t | Benzo[b]fluoranthene | 1.657 | 1.506 | 9.1 | 99 | -0.01 |
| 38 | t | Benzo[k]fluoranthene | 1.531 | 1.293 | 15.5 | 98 | -0.02 |
| 39 | t | Benzo[a]pyrene | 1.467 | 1.323 | 9.8 | 97 | -0.02 |
| 40 | t | Indeno[1,2,3-cd]pyrene | 1.483 | 1.316 | 11.3 | 94 | -0.02 |
| 41 | t | Dibenzo[a,h]anthracene | 1.321 | 1.137 | 13.9 | 93 | -0.02 |
| 42 | t | Benzo[g,h,i]perylene | 1.459 | 1.242 | 14.9 | 94 | -0.02 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : ICV.D
Acq On : 21 Jun 2024 05:33 pm
Operator : sv119:dv
Sample : CQICV,32,, #10475 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 26 12:47:43 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:11 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 1.915 | 152 | 202001 | 4000.000 | ng/ml | 0.01 |
| Standard Area 1 = 186265 | | | Recovery = 108.45% | | | |
| 8) Naphthalene-d8 | 2.557 | 136 | 747112 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 691724 | | | Recovery = 108.01% | | | |
| 17) Acenaphthene-d10 | 3.515 | 164 | 463193 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 424015 | | | Recovery = 109.24% | | | |
| 22) Phenanthrene-d10 | 4.337 | 188 | 1102241 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1027588 | | | Recovery = 107.26% | | | |
| 31) Chrysene-d12 | 5.835 | 240 | 1041875 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 965951 | | | Recovery = 107.86% | | | |
| 36) Perylene-d12 | 6.764 | 264 | 1037753 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 979854 | | | Recovery = 105.91% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.349 | 112 | 64359 | 903.199 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 45.16% | | | |
| 3) Phenol-d6 | 1.746 | 99 | 84165 | 936.493 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 46.82% | | | |
| 7) Nitrobenzene-d5 | 2.190 | 82 | 75641 | 959.502 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 95.95% | | | |
| 13) 2-Fluorobiphenyl | 3.150 | 172 | 172844 | 894.880 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 89.49% | | | |
| 21) 2,4,6-Tribromophenol | 3.951 | 330 | 32251 | 997.217 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 49.86% | | | |
| 30) 4-Terphenyl-d14 | 5.238 | 244 | 262424 | 861.230 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 43.06% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 1.792 | 93 | 66997 | 927.880 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.117 | 70 | 53622 | 975.530 | ng/ml | 100 |
| 6) Hexachloroethane | 2.161 | 117 | 30445 | 908.425 | ng/ml | 99 |
| 9) Naphthalene | 2.568 | 128 | 187929 | 911.101 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.643 | 225 | 43320 | 935.654 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 2.944 | 142 | 151466 | 977.108 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 2.996 | 142 | 135334 | 903.201 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.207 | 162 | 153464 | 918.886 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.410 | 165 | 44232 | 983.548 | ng/ml | 100 |
| 16) Acenaphthylene | 3.434 | 152 | 241981 | 906.891 | ng/ml | 100 |
| 18) Acenaphthene | 3.532 | 153 | 152236 | 941.580 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : ICV.D
Acq On : 21 Jun 2024 05:33 pm
Operator : sv119:dv
Sample : CQICV,32,, #10475 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 26 12:47:43 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:11 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\240621RVTical\L8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.633 | 165 | 61973 | 1000.907 | ng/ml | 99 |
| 20) Fluorene | 3.817 | 166 | 192295 | 902.360 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 3.859 | 198 | 39842 | 880.620 | ng/ml | 99 |
| 24) Hexachlorobenzene | 4.129 | 284 | 67436 | 891.030 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.241 | 266 | 44915 | 953.975 | ng/ml | 99 |
| 26) Phenanthrene | 4.349 | 178 | 284491 | 887.815 | ng/ml | 100 |
| 27) Anthracene | 4.376 | 178 | 309800 | 935.732 | ng/ml | 100 |
| 28) Fluoranthene | 5.009 | 202 | 381208 | 866.385 | ng/ml | 100 |
| 29) Pyrene | 5.134 | 202 | 387138 | 849.084 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 5.826 | 228 | 375288 | 951.603 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 5.822 | 252 | 151190 | 950.099 | ng/ml | 100 |
| 34) Chrysene | 5.848 | 228 | 354927 | 915.312 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 5.875 | 149 | 256817 | 913.160 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 6.479 | 252 | 390762 | 909.142 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 6.496 | 252 | 335346 | 844.528 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 6.710 | 252 | 343357 | 901.971 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 7.702 | 276 | 341330 | 886.987 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 7.731 | 278 | 295075M6 | 860.795 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 7.971 | 276 | 322203 | 851.232 | ng/ml | 99 |

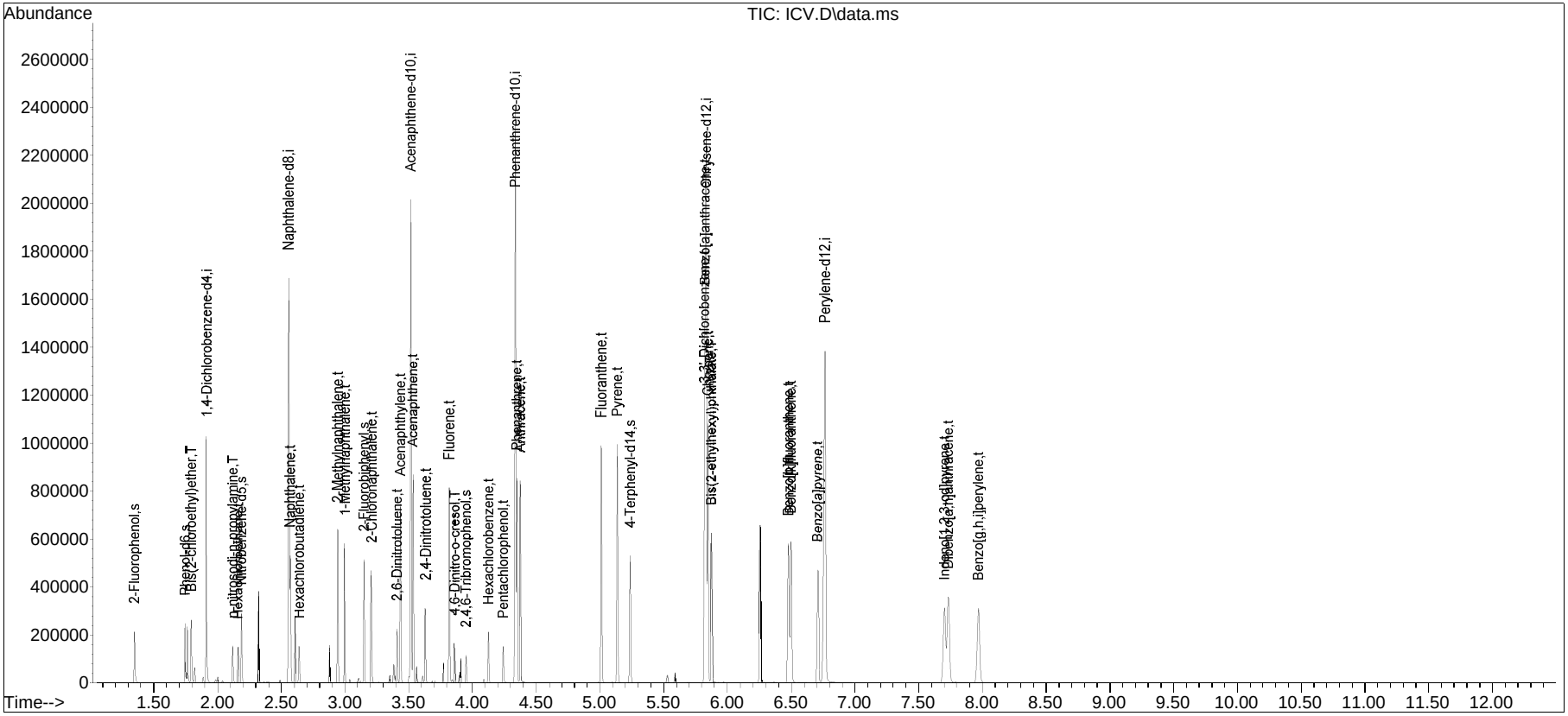
(#) = qualifier out of range (m) = manual integration (+) = signals summed

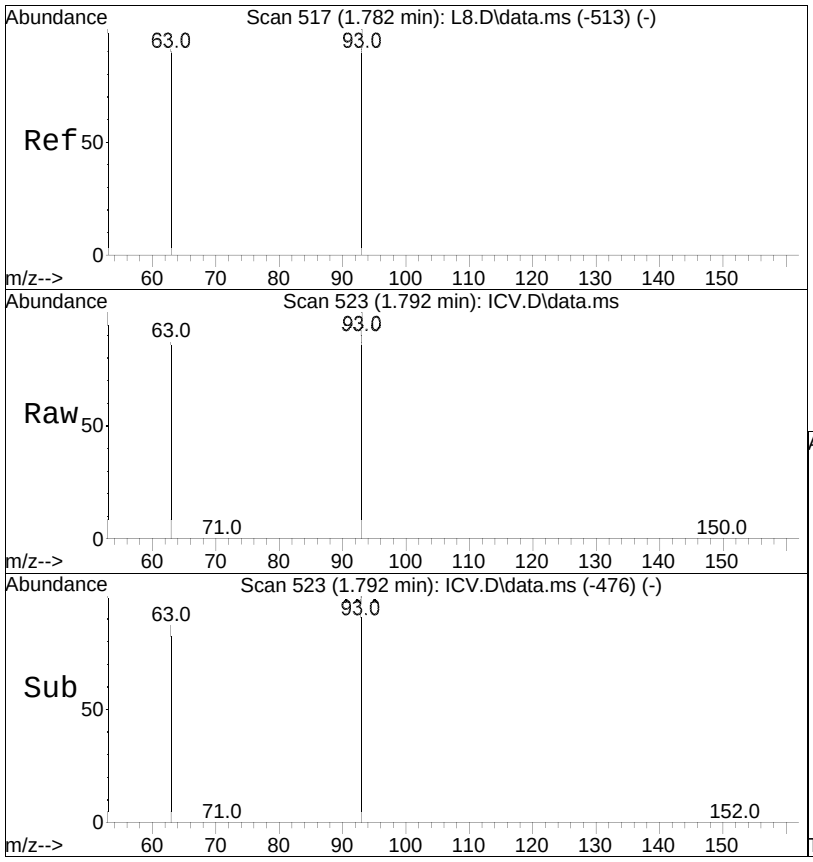
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240621RVTical\
Data File : ICV.D
Acq On : 21 Jun 2024 05:33 pm
Operator : sv119:dv
Sample : CQICV,32,, #10475 1000 ng/ml
Misc : WG1939716,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 26 12:47:43 2024
Quant Method : I:\8270SIM\sv119\240621RVTical\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Jun 26 12:41:11 2024
Response via : Initial Calibration

Sub List : Default - All compounds listedical\L8.D•

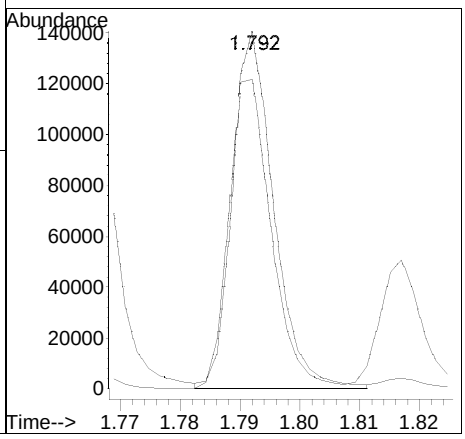


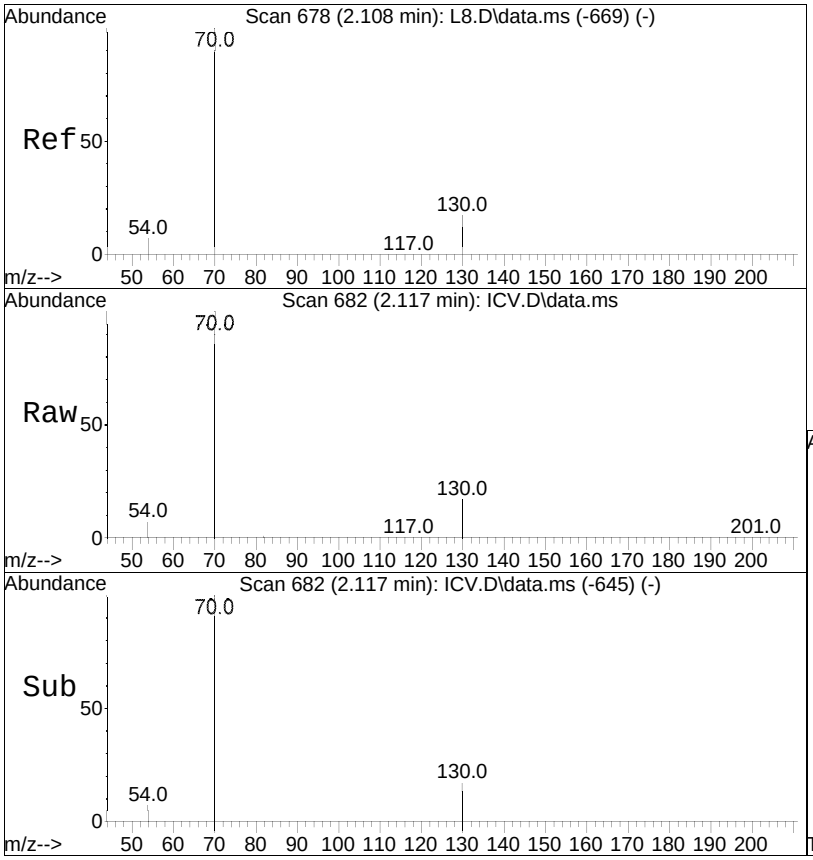



#4
Bis(2-chloroethyl)ether
Concen: 927.88 ng/ml
RT: 1.792 min Scan# 523
Delta R.T. 0.010 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion: 93 Resp: 66997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 88.9 | 71.7 | 107.5 |

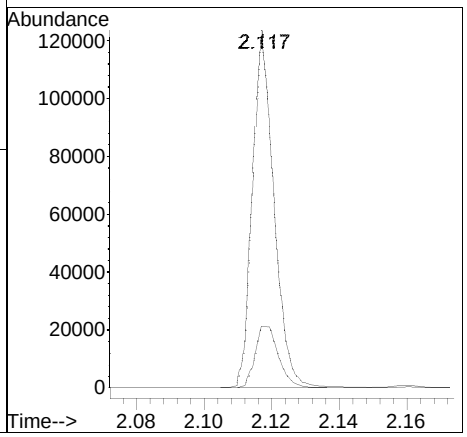


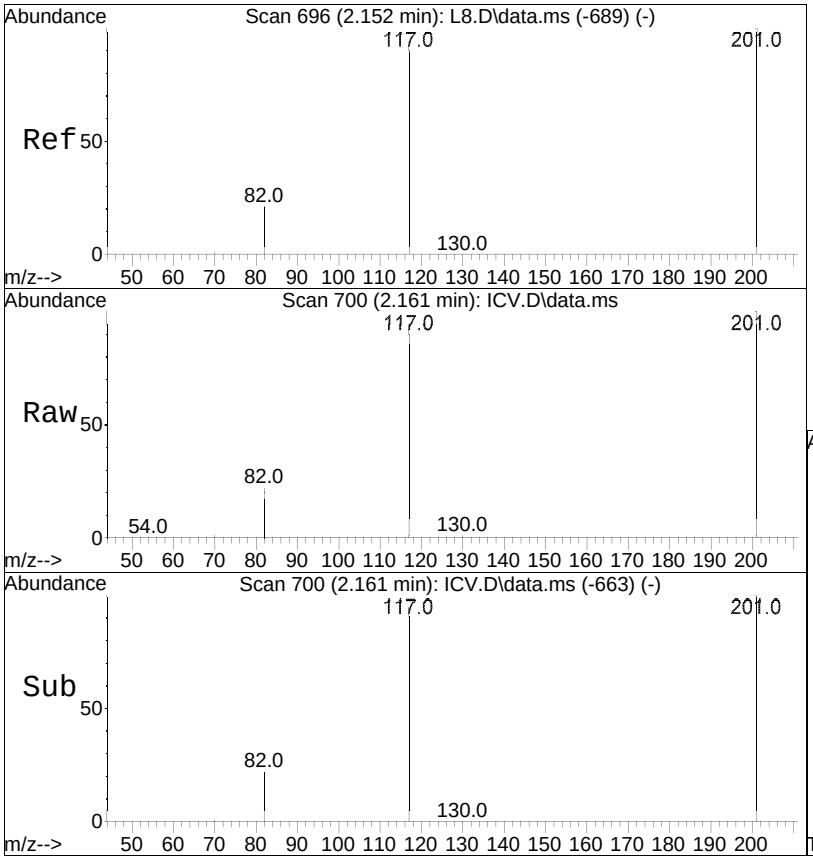



#5
n-nitrosodi-n-propylamine
Concen: 975.53 ng/ml
RT: 2.117 min Scan# 682
Delta R.T. 0.009 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion: 70 Resp: 53622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 18.9 | 15.1 | 22.7 |

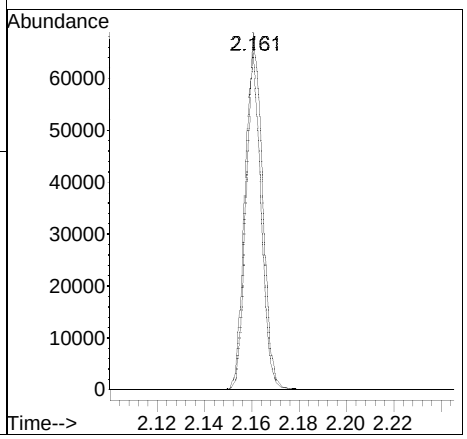


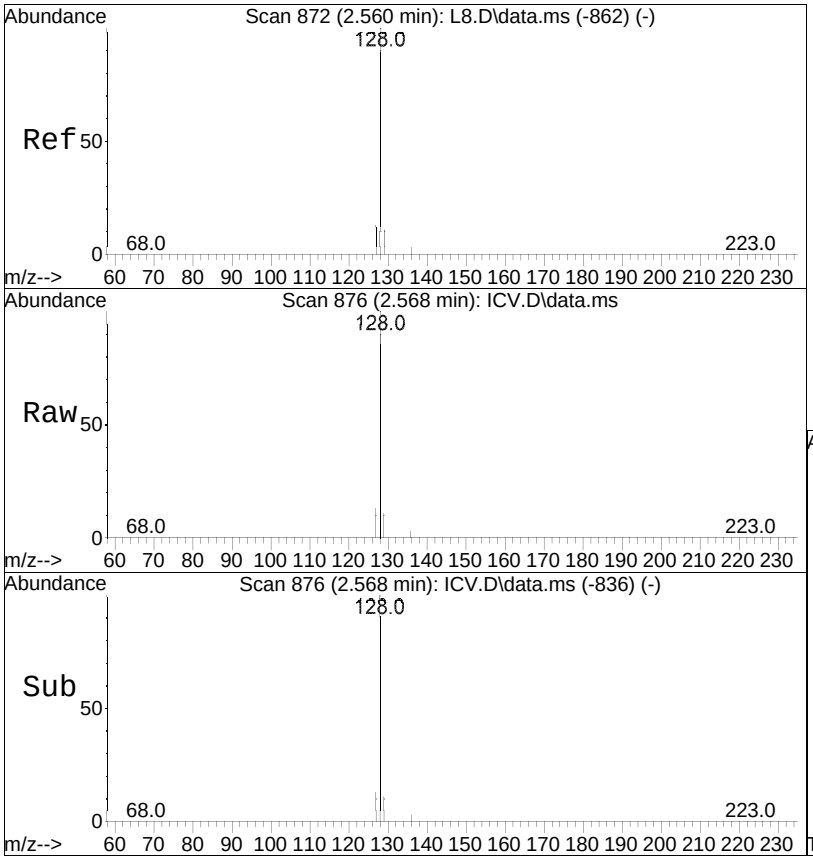



#6
Hexachloroethane
Concen: 908.42 ng/ml
RT: 2.161 min Scan# 700
Delta R.T. 0.009 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:117 Resp: 30445

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 105.1 | 83.0 | 124.6 |

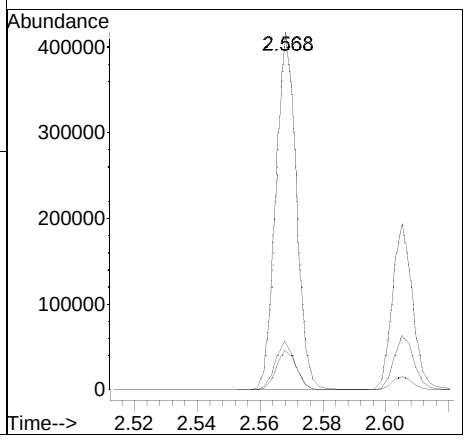


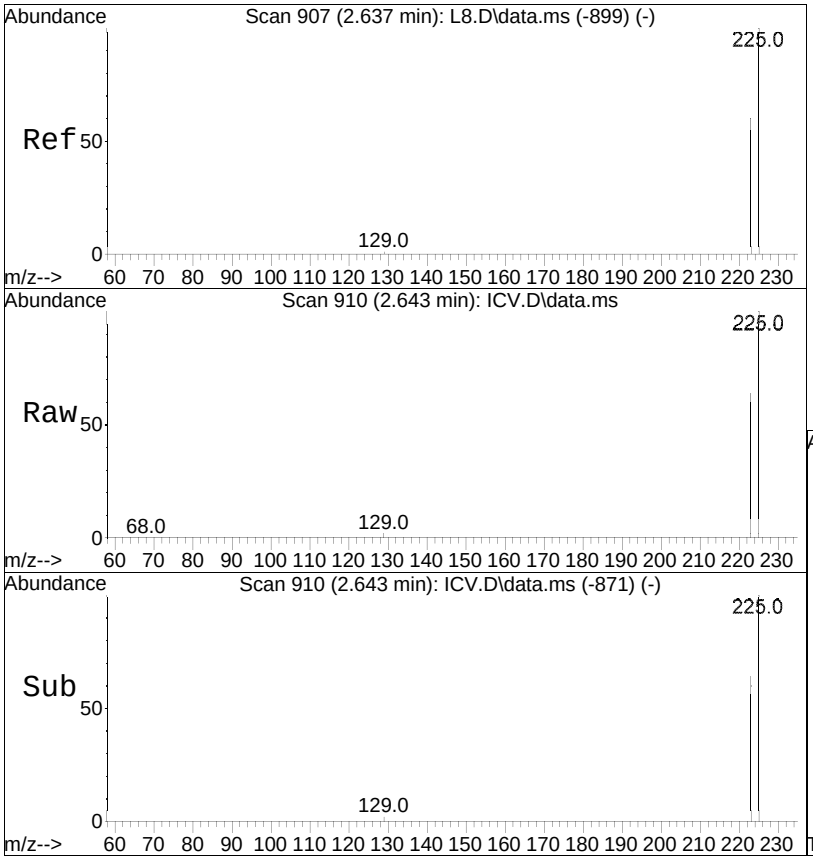



#9
Naphthalene
Concen: 911.10 ng/ml
RT: 2.568 min Scan# 876
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:128 Resp: 187929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.2 | 9.0 | 13.4 |
| 127 | 13.3 | 10.6 | 15.8 |

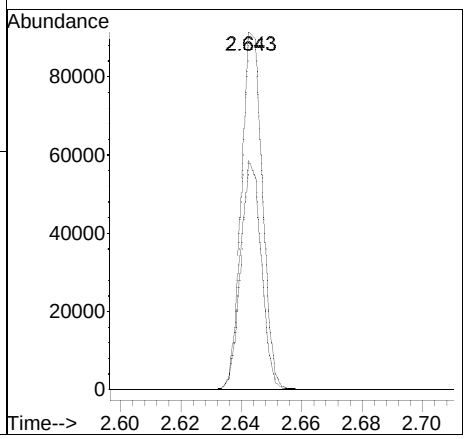


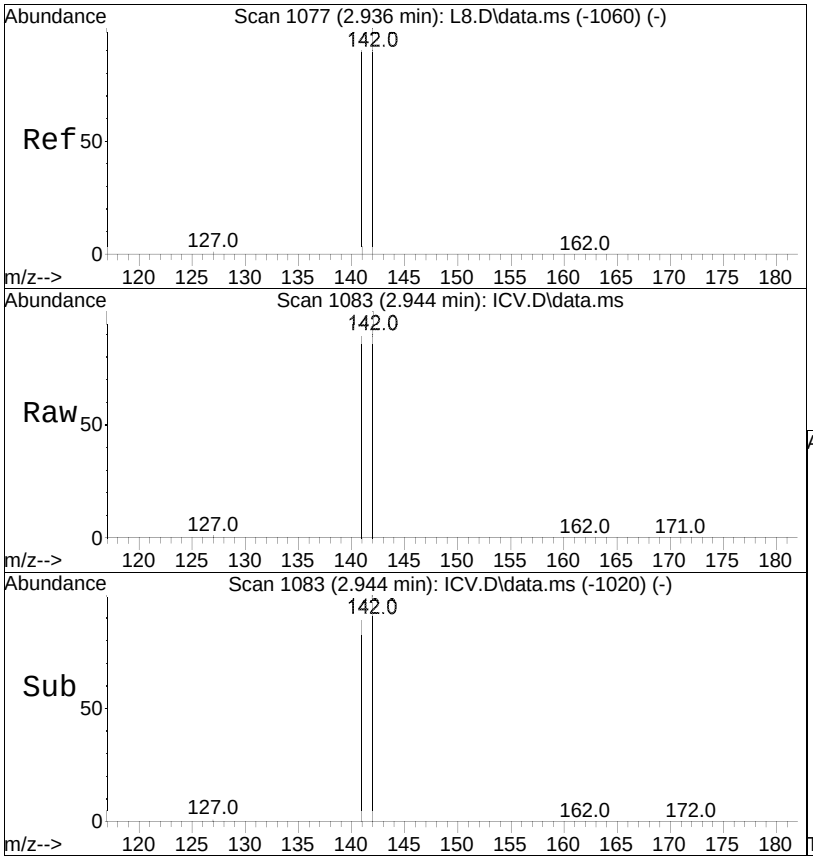



#10
Hexachlorobutadiene
Concen: 935.65 ng/ml
RT: 2.643 min Scan# 910
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:225 Resp: 43320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.8 | 50.2 | 75.2 |

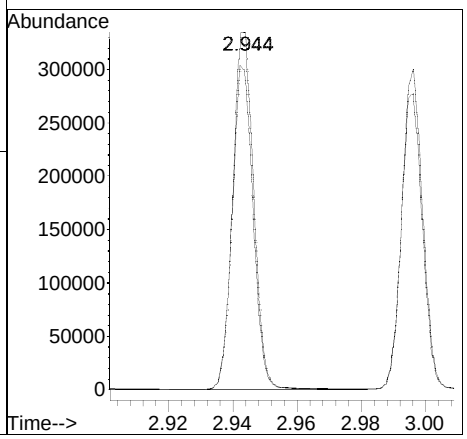


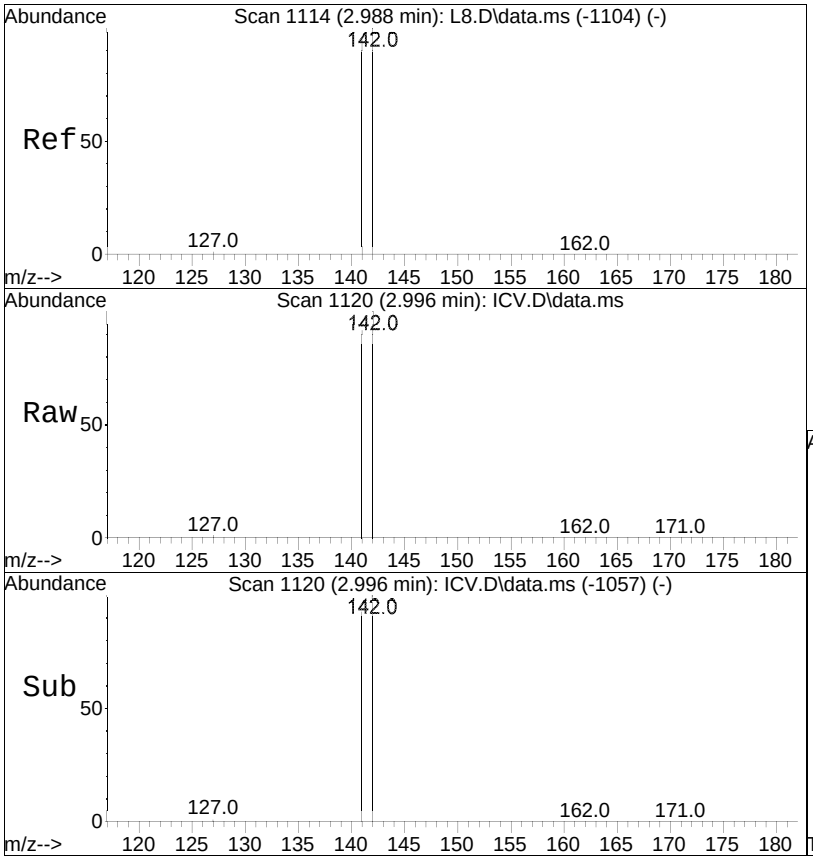



#11
2-Methylnaphthalene
Concen: 977.11 ng/ml
RT: 2.944 min Scan# 1083
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:142 Resp: 151466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 90.6 | 72.3 | 108.5 |

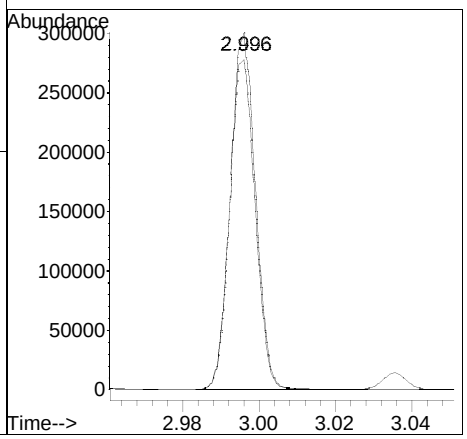


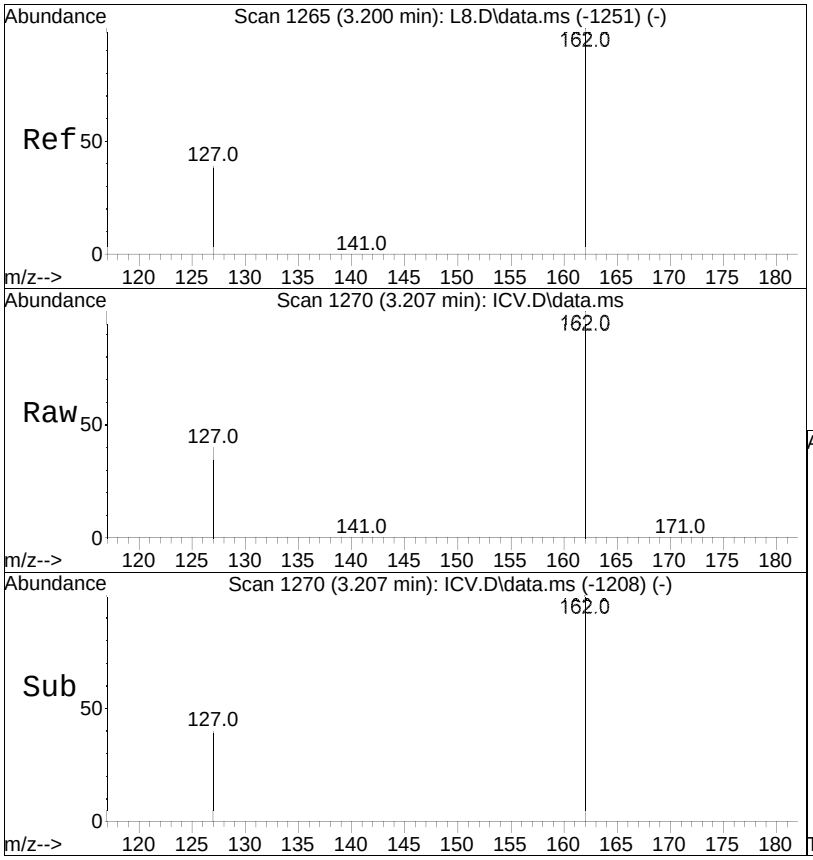



#12
1-Methylnaphthalene
Concen: 903.20 ng/ml
RT: 2.996 min Scan# 1120
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:142 Resp: 135334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 93.9 | 74.9 | 112.3 |

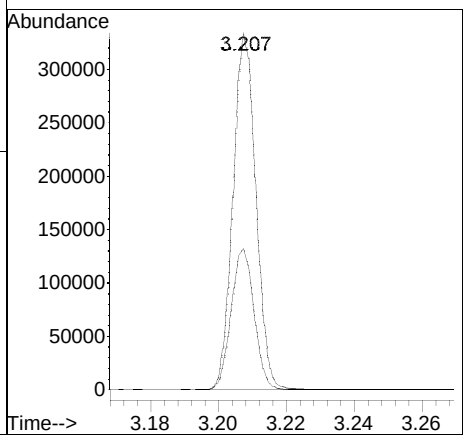


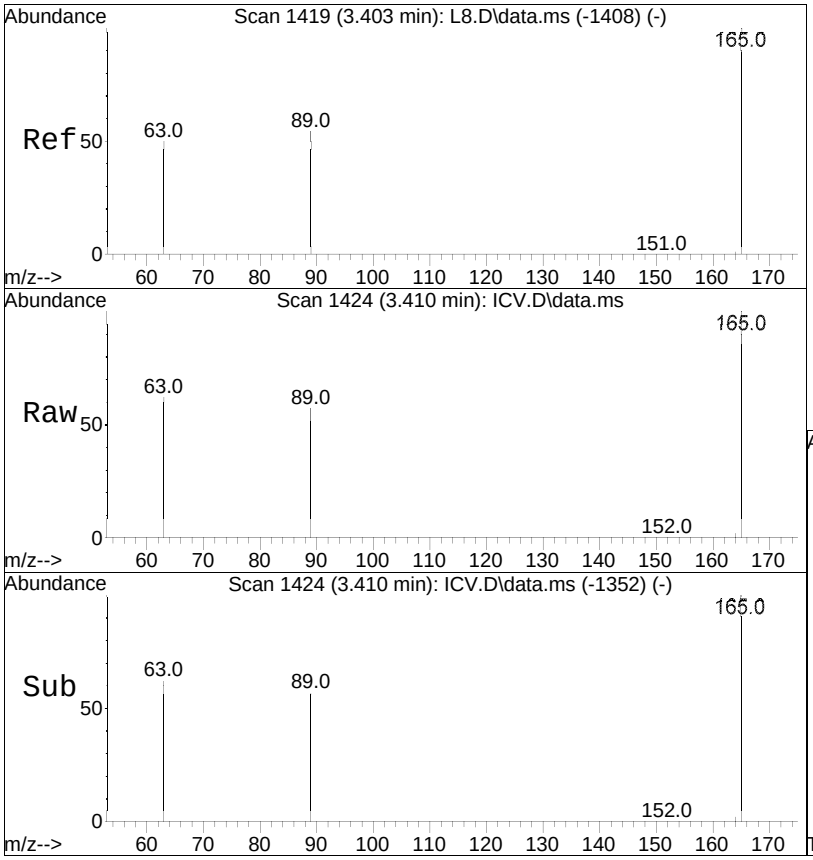



#14
2-Chloronaphthalene
Concen:  918.89 ng/ml
RT:  3.207 min  Scan# 1270
Delta R.T.  0.007 min
Lab File:  ICV.D
Acq: 21 Jun 2024  05:33 pm

Tgt Ion:162 Resp:  153464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 40.0 | 32.0 | 48.0 |

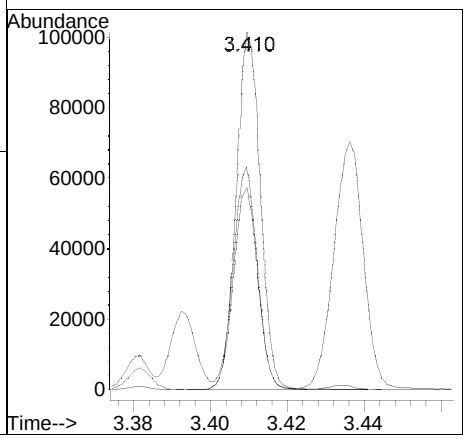


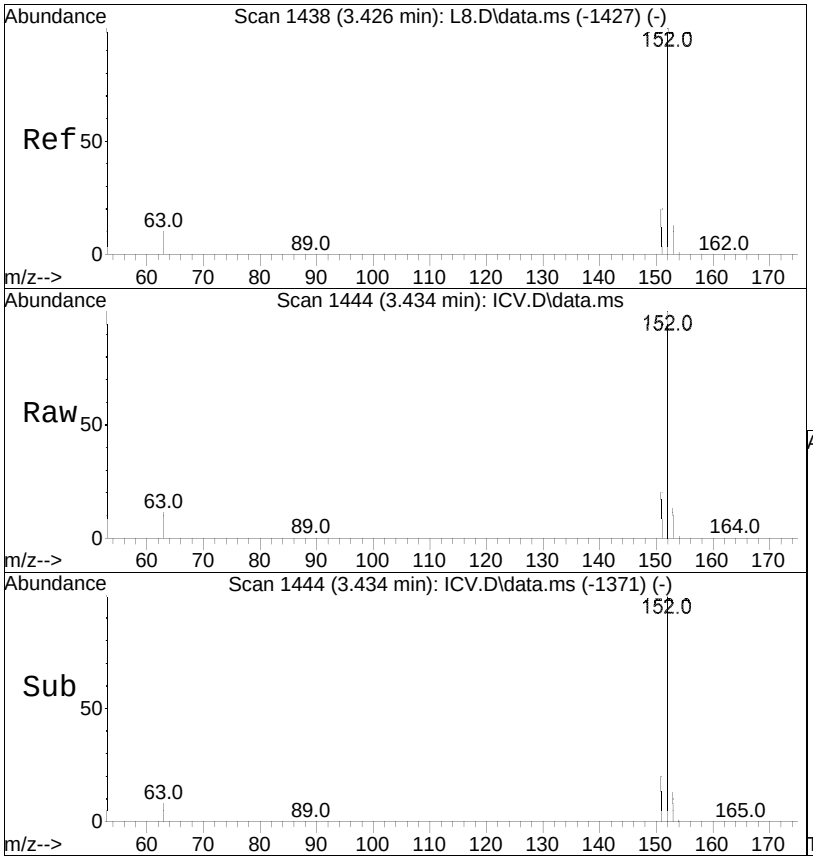



#15
2,6-Dinitrotoluene
Concen: 983.55 ng/ml
RT: 3.410 min Scan# 1424
Delta R.T. 0.007 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:165 Resp: 44232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 57.0 | 45.7 | 68.5 |
| 63 | 61.6 | 49.8 | 74.6 |

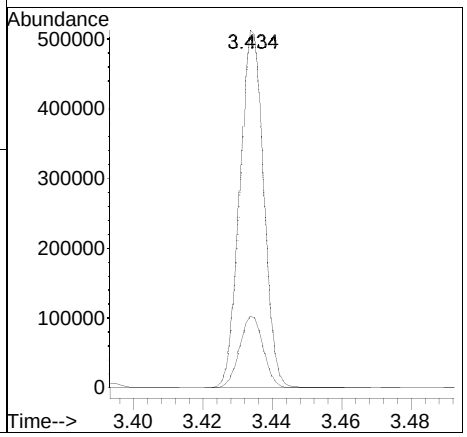


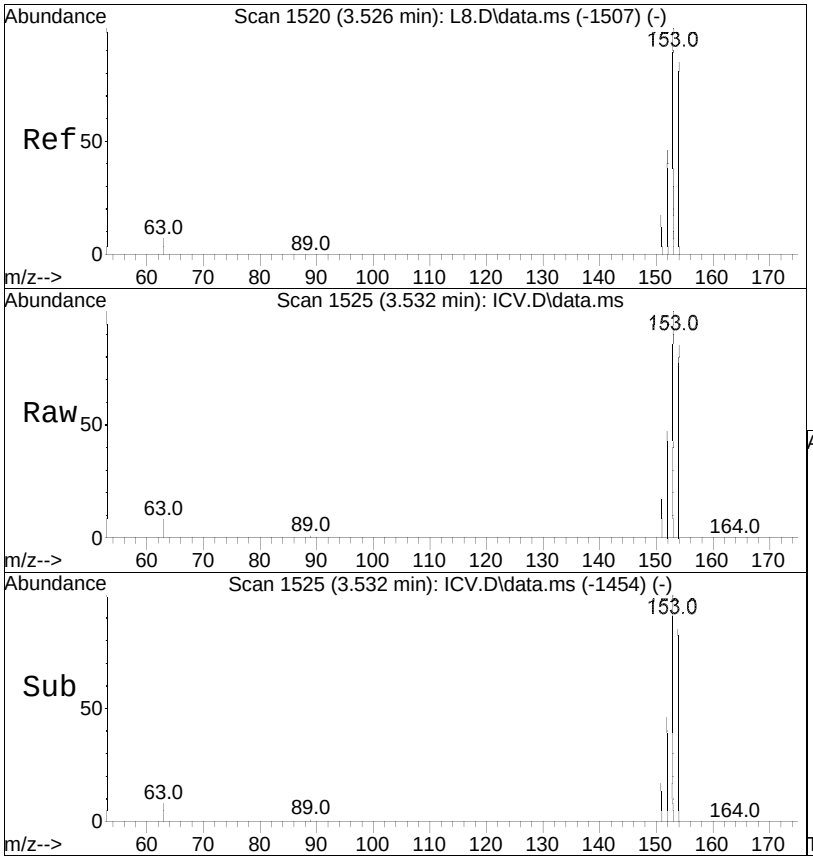



#16
Acenaphthylene
Concen: 906.89 ng/ml
RT: 3.434 min Scan# 1444
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:152 Resp: 241981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.1 | 16.0 | 24.0 |

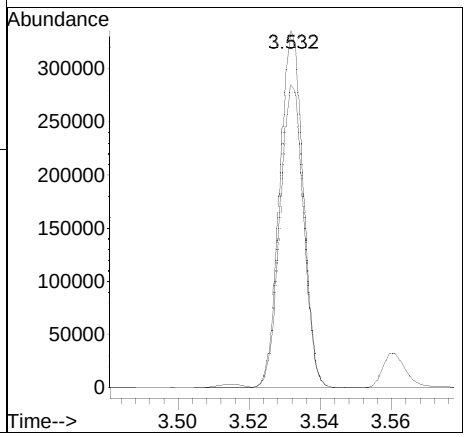


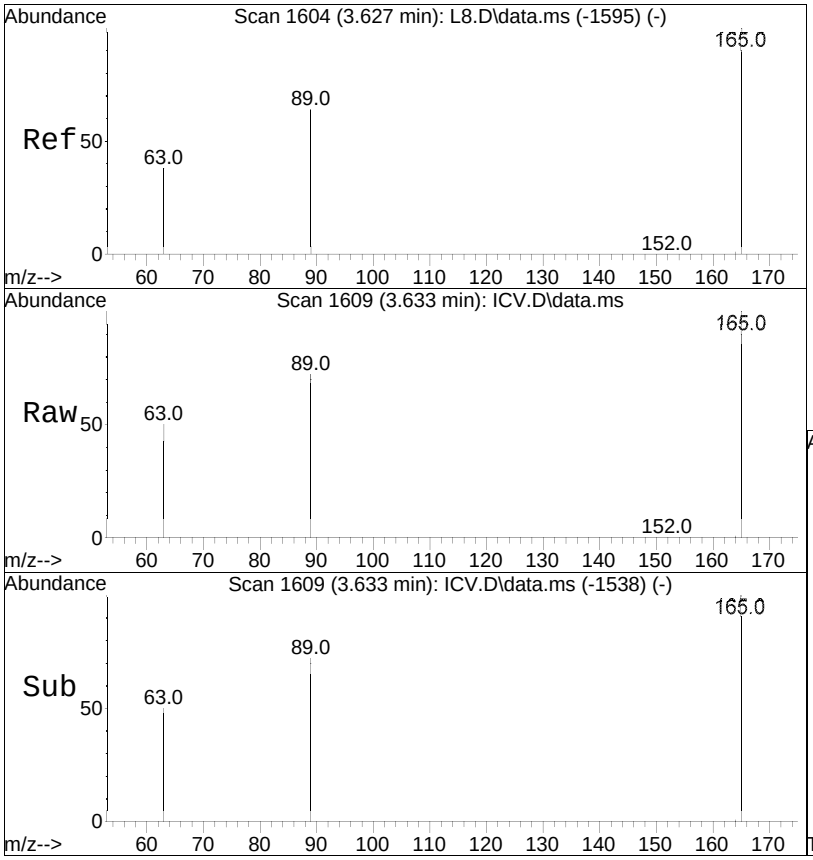



#18
Acenaphthene
Concen: 941.58 ng/ml
RT: 3.532 min Scan# 1525
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:153 Resp: 152236

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 85.1 | 68.1 | 102.1 |

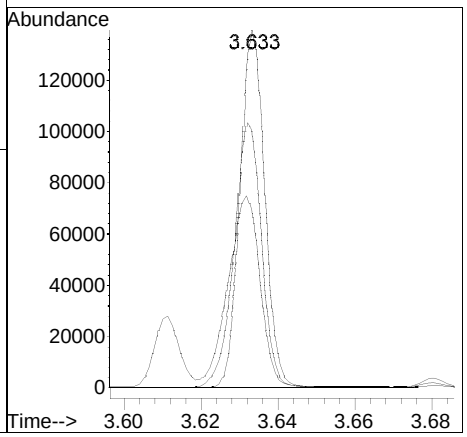


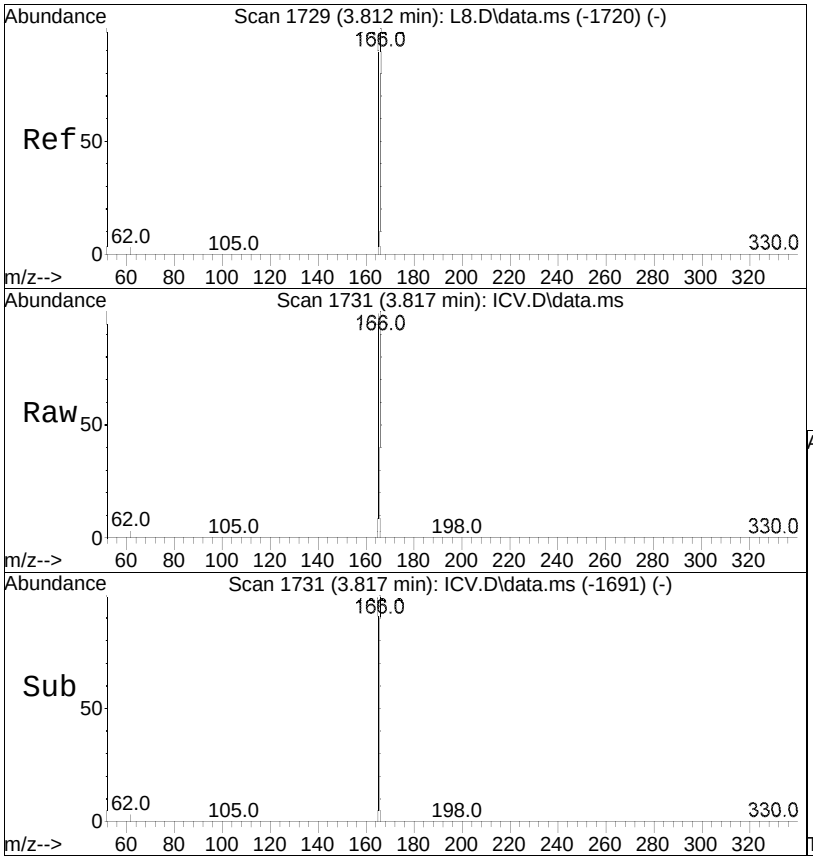



#19
2,4-Dinitrotoluene
Concen: 1000.91 ng/ml
RT: 3.633 min Scan# 1609
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:165 Resp: 61973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 82.6 | 65.8 | 98.6 |
| 63 | 69.3 | 55.0 | 82.4 |

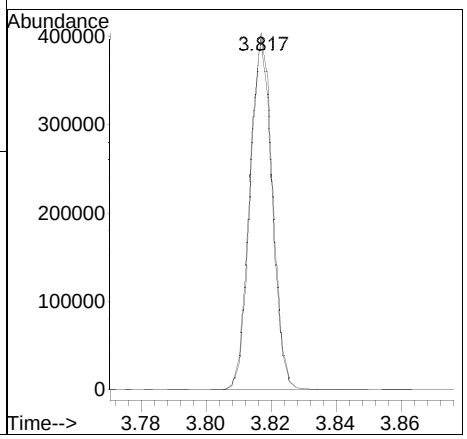


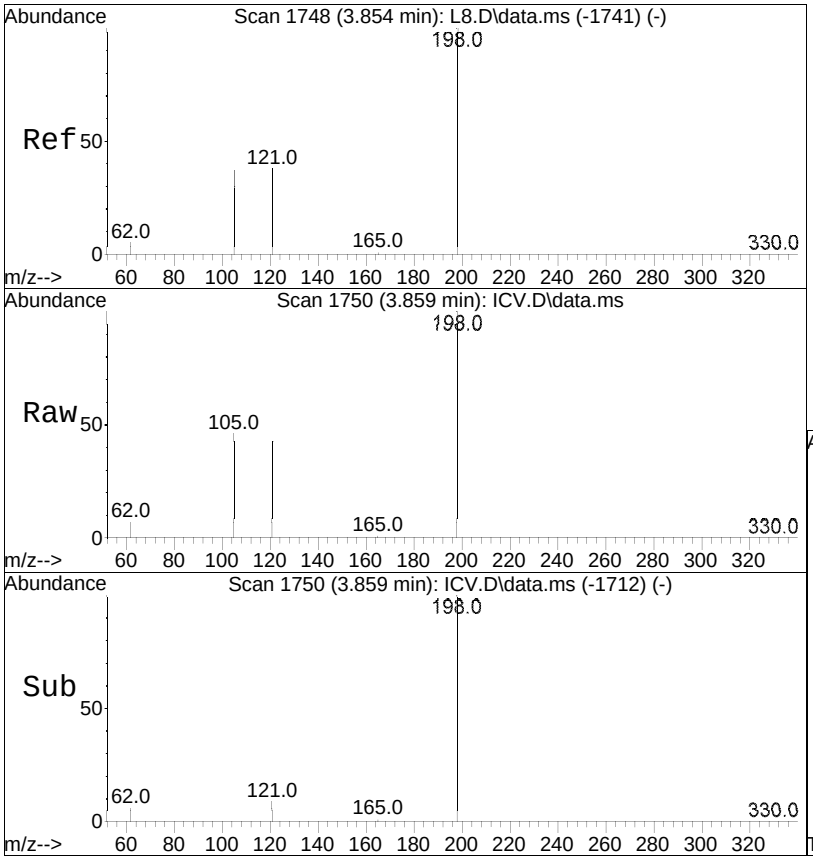



#20
Fluorene
Concen: 902.36 ng/ml
RT: 3.817 min Scan# 1731
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:166 Resp: 192295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.1 | 79.3 | 118.9 |

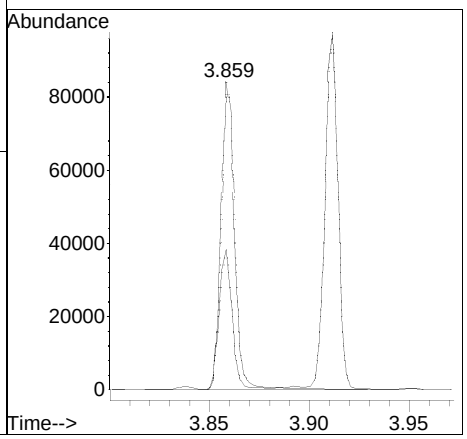


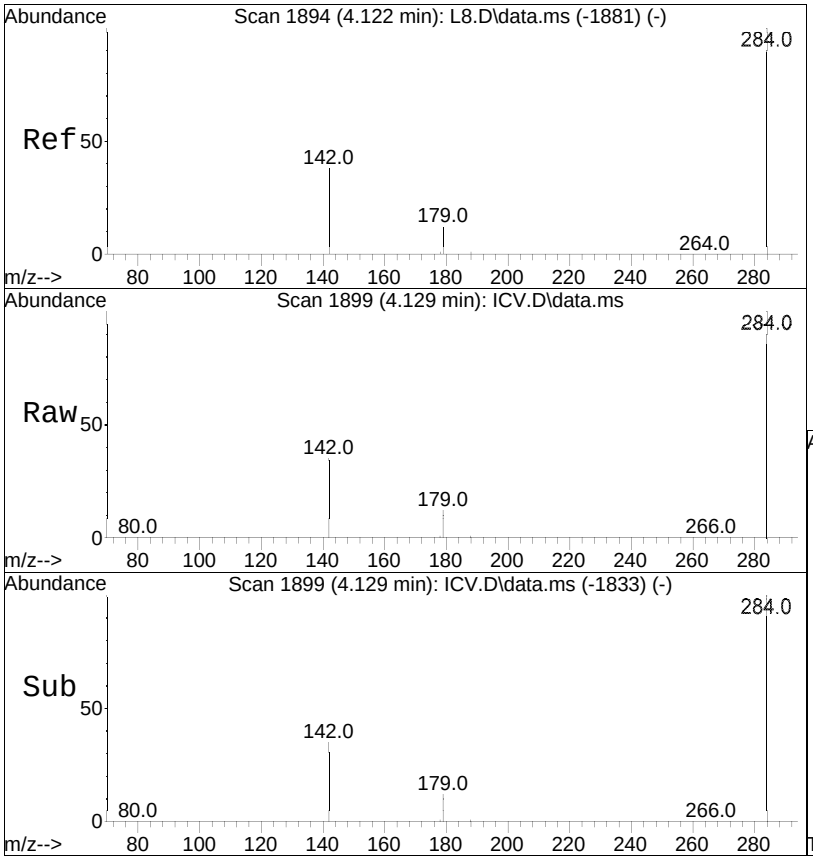



#23
4,6-Dinitro-o-cresol
Concen: 880.62 ng/ml
RT: 3.859 min Scan# 1750
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:198 Resp: 39842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 105 | 43.8 | 35.6 | 53.4 |

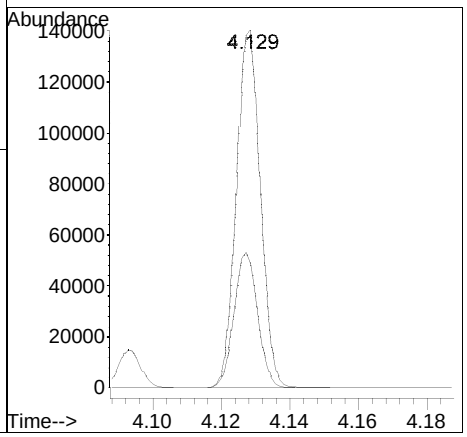


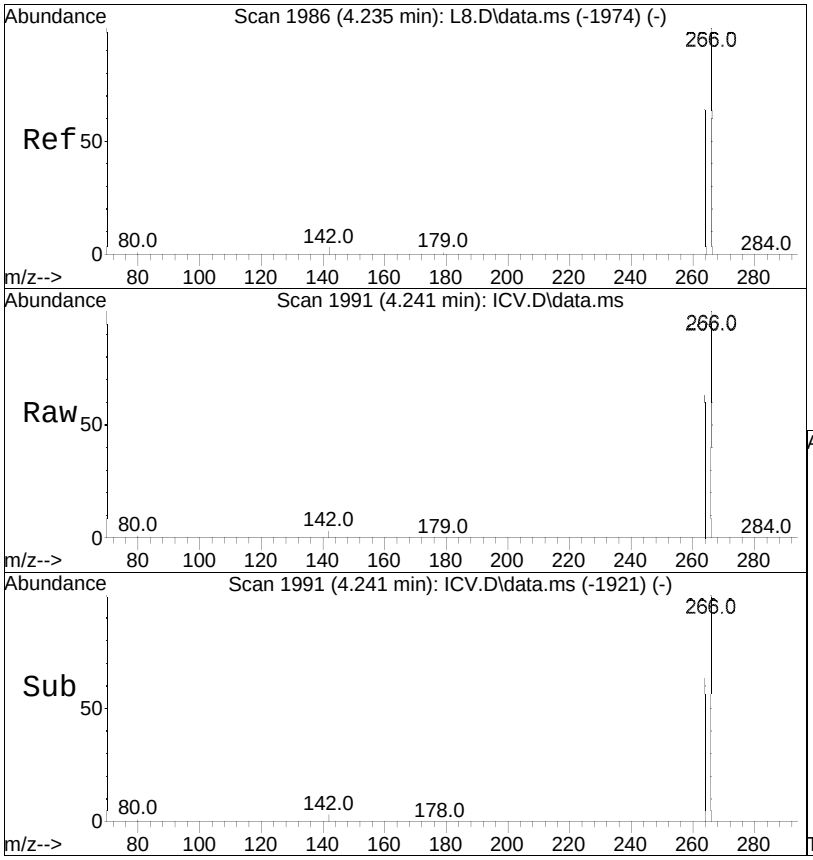



#24
Hexachlorobenzene
Concen: 891.03 ng/ml
RT: 4.129 min Scan# 1899
Delta R.T. 0.007 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:284 Resp: 67436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 37.4 | 30.0 | 45.0 |

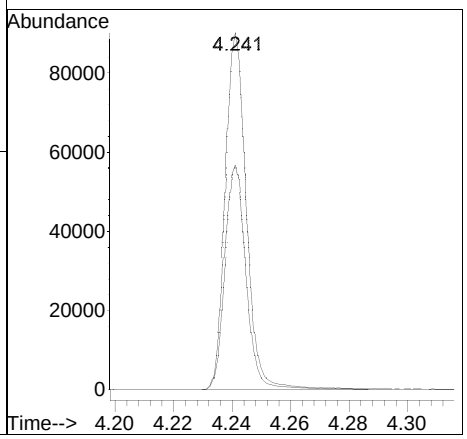


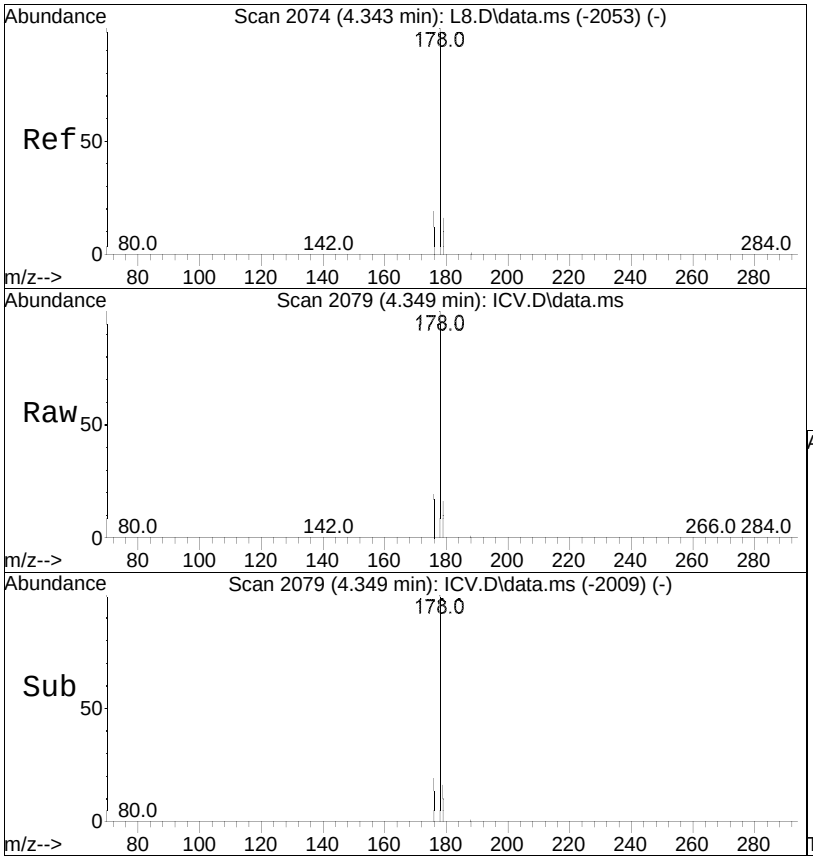



#25
Pentachlorophenol
Concen: 953.98 ng/ml
RT: 4.241 min Scan# 1991
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:266 Resp: 44915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.0 | 49.9 | 74.9 |

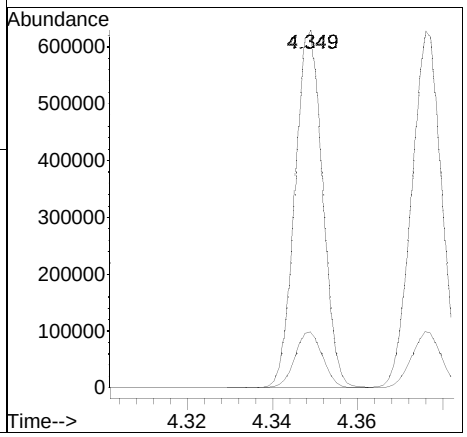


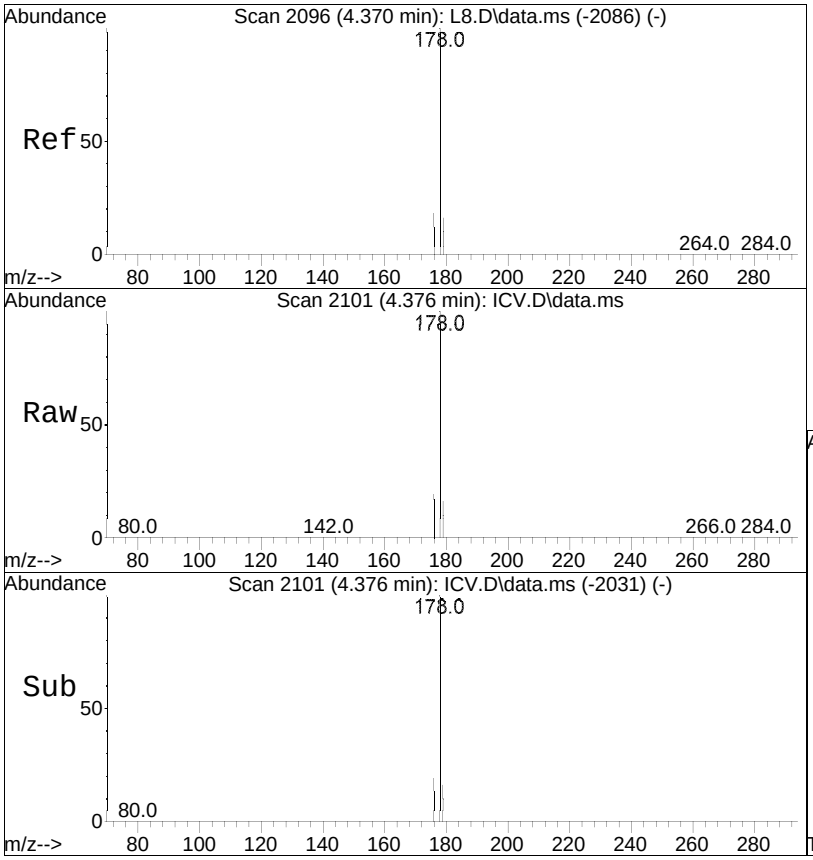



#26
Phenanthrene
Concen: 887.82 ng/ml
RT: 4.349 min Scan# 2079
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:178 Resp: 284491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.7 | 12.6 | 18.8 |

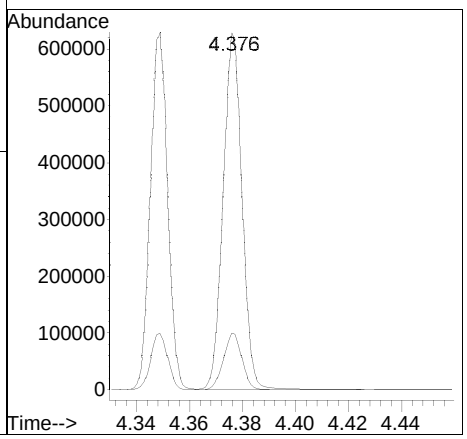


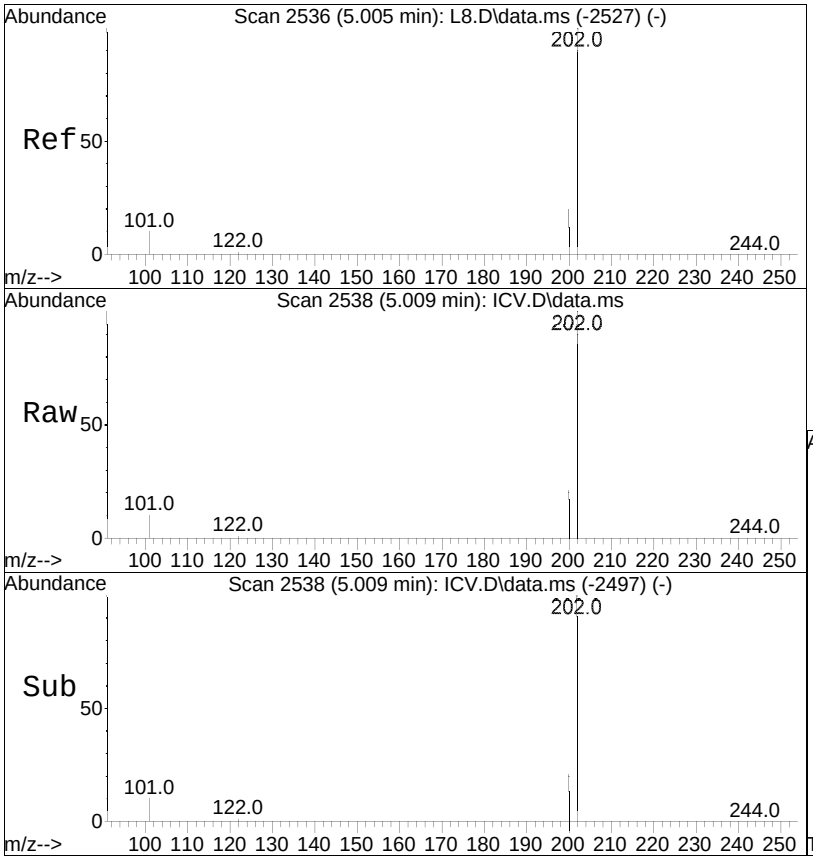



#27
Anthracene
Concen:  935.73 ng/ml
RT:   4.376 min  Scan# 2101
Delta R.T.  0.006 min
Lab File:   ICV.D
Acq: 21 Jun 2024  05:33 pm

Tgt Ion:178 Resp:  309800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.5 | 12.4 | 18.6 |

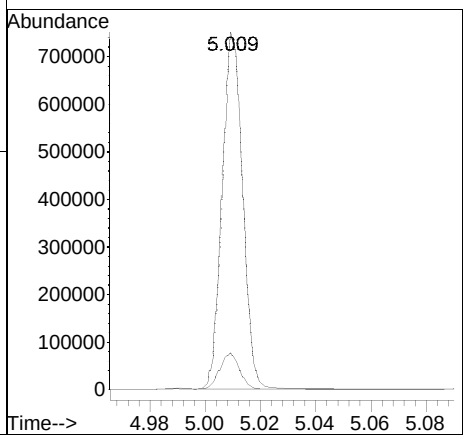


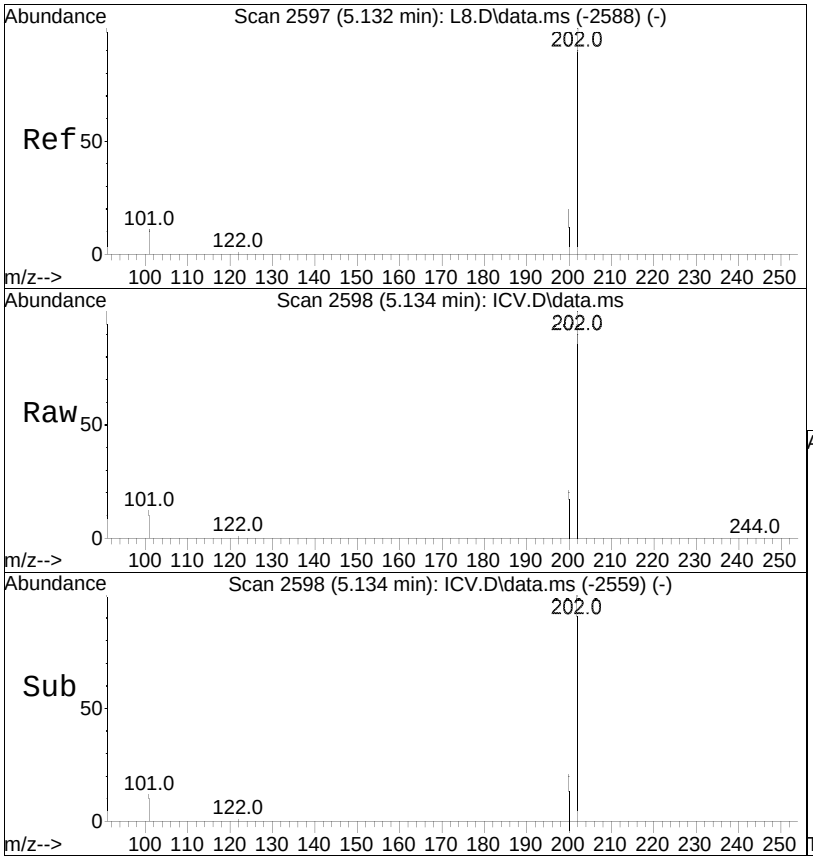



#28
Fluoranthene
Concen: 866.39 ng/ml
RT: 5.009 min Scan# 2538
Delta R.T. 0.004 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:202 Resp: 381208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 10.0 | 8.1 | 12.1 |

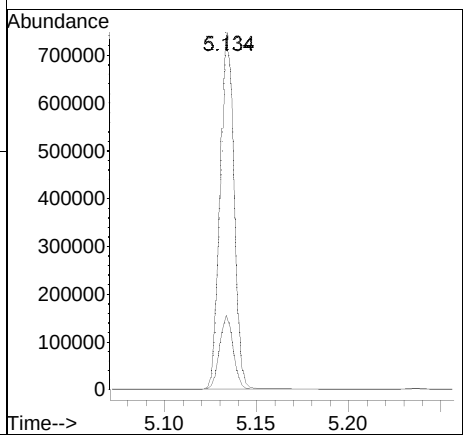


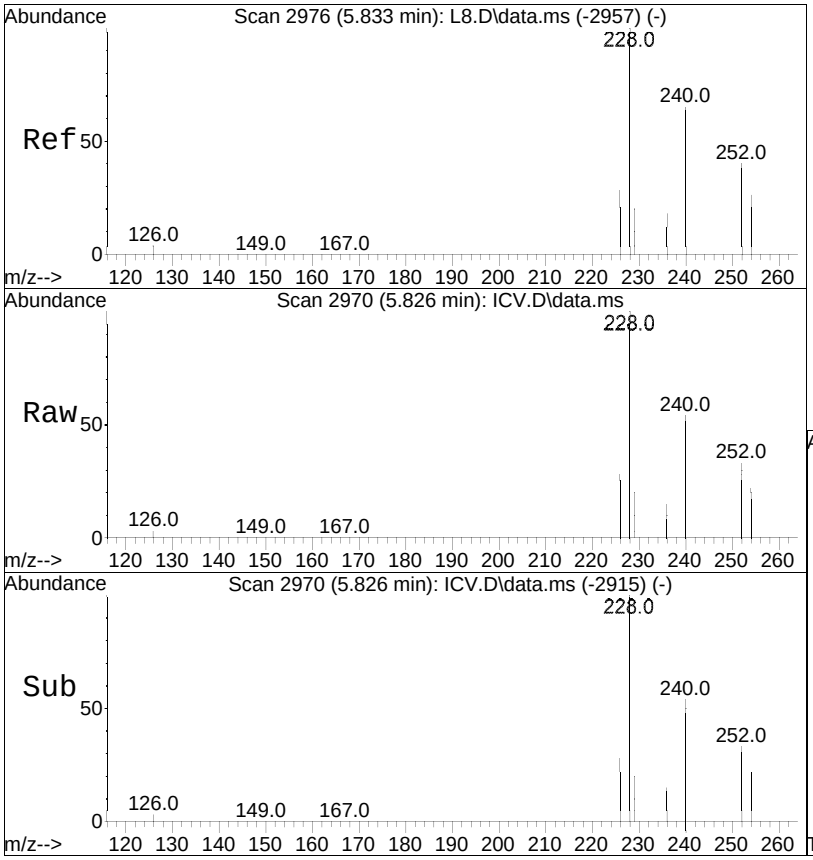



#29
Pyrene
Concen: 849.08 ng/ml
RT: 5.134 min Scan# 2598
Delta R.T. 0.002 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:202 Resp: 387138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 20.6 | 16.5 | 24.7 |

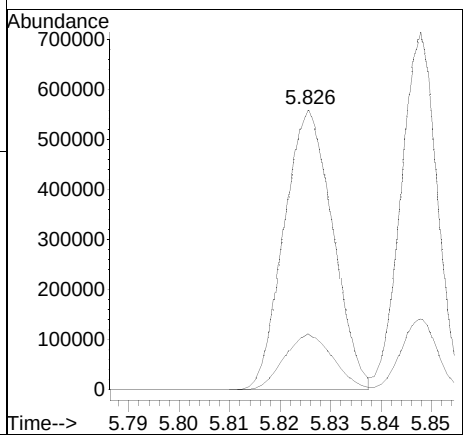


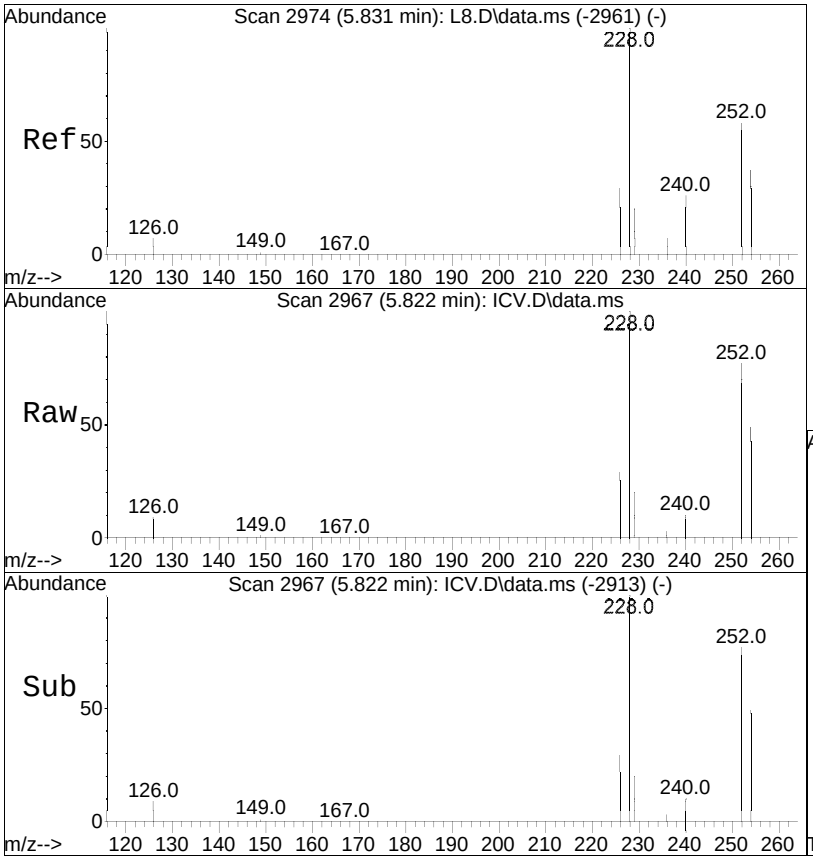



#32
Benzo[a]anthracene
Concen: 951.60 ng/ml
RT: 5.826 min Scan# 2970
Delta R.T. -0.007 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:228 Resp: 375288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.8 | 15.8 | 23.8 |

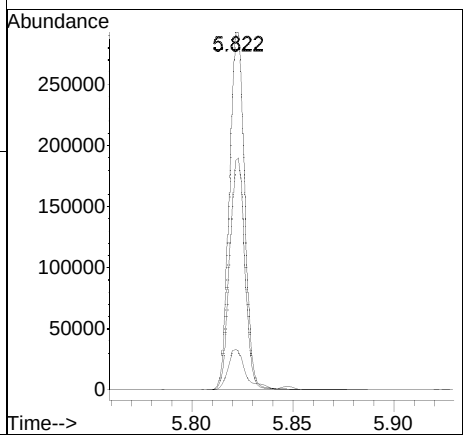


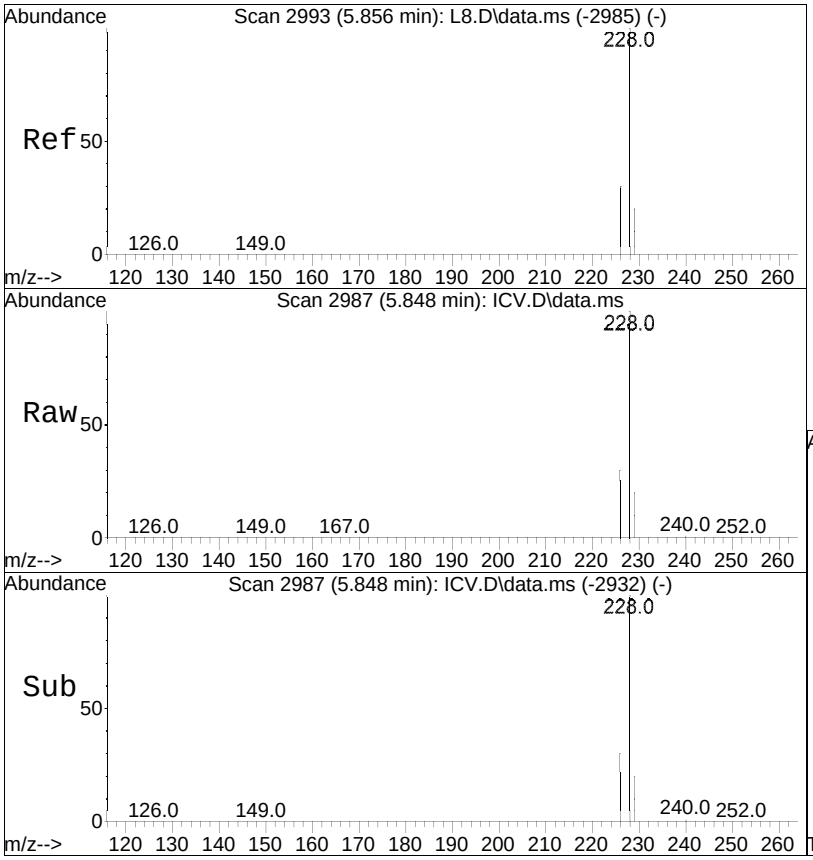



#33
3,3'-Dichlorobenzene
Concen: 950.10 ng/ml
RT: 5.822 min Scan# 2967
Delta R.T. -0.009 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:252 Resp: 151190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 13.3 | 10.5 | 15.7 |
| 254 | 64.2 | 51.4 | 77.0 |

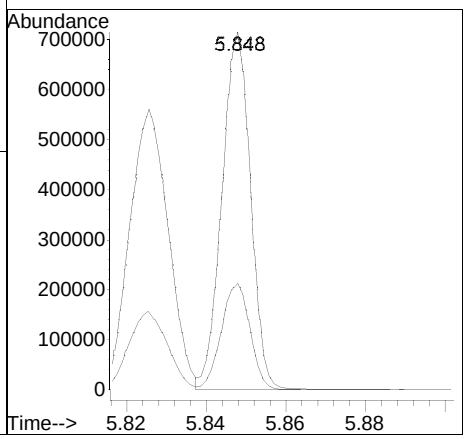


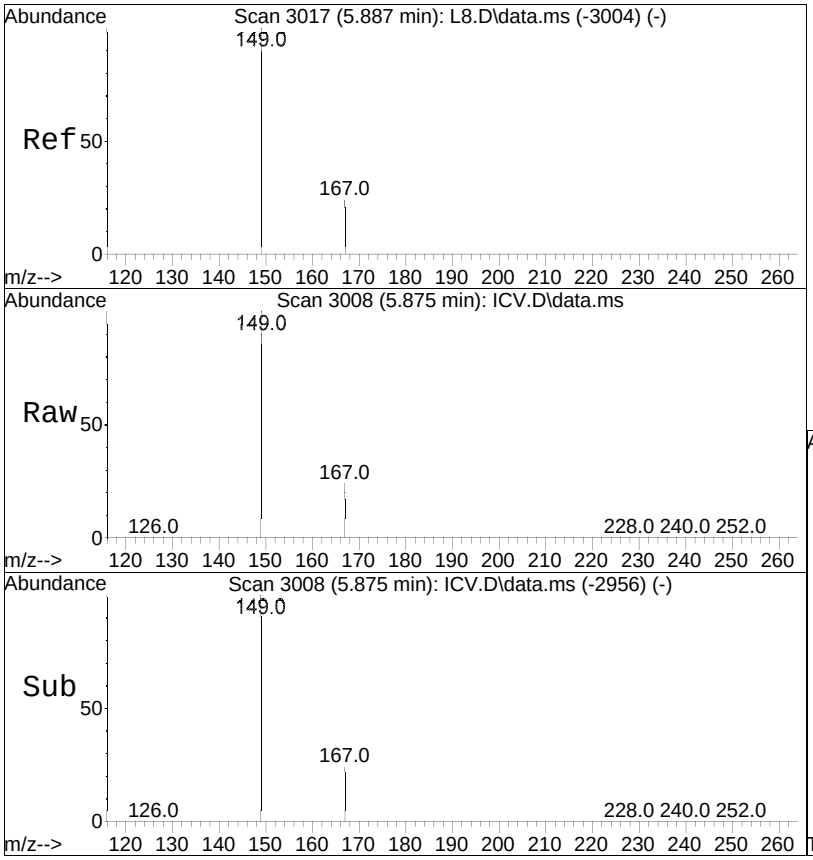



#34
Chrysene
Concen:  915.31 ng/ml
RT:   5.848 min  Scan# 2987
Delta R.T.  -0.008 min
Lab File:   ICV.D
Acq: 21 Jun 2024  05:33 pm

Tgt Ion:228 Resp:  354927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.1 | 23.9 | 35.9 |

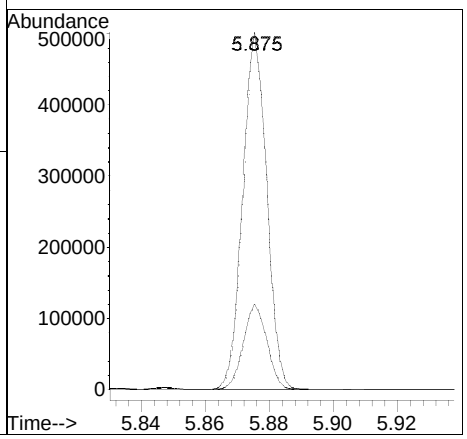


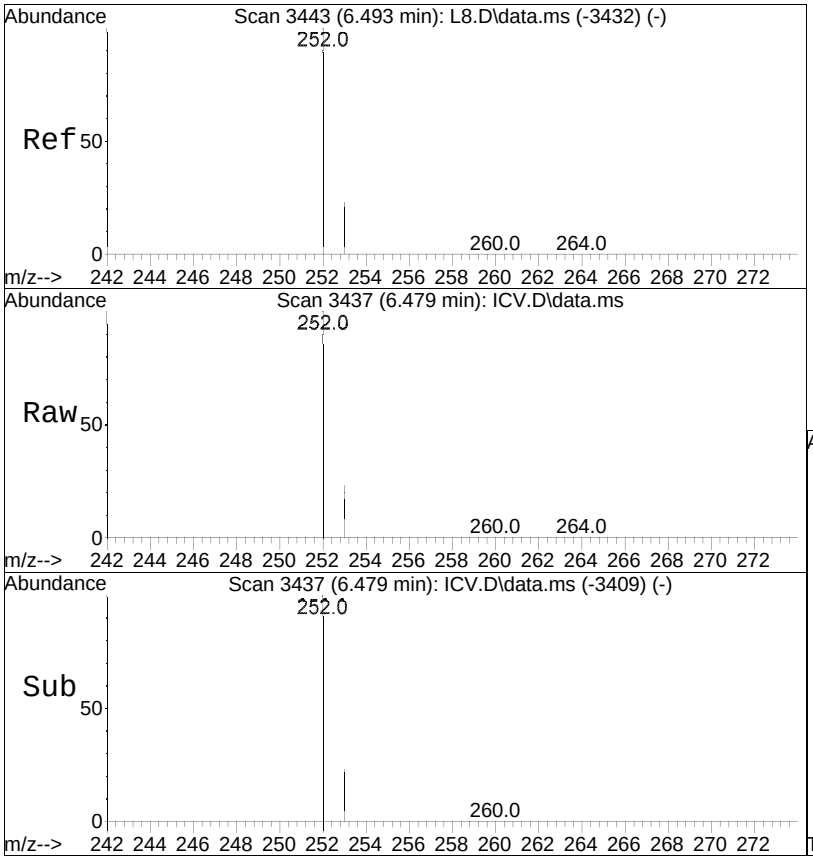



#35
Bis(2-ethylhexyl)phthalate
Concen: 913.16 ng/ml
RT: 5.875 min Scan# 3008
Delta R.T. -0.012 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:149 Resp: 256817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 23.7 | 19.0 | 28.4 |

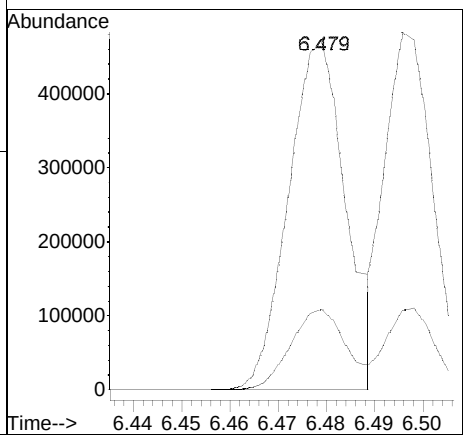


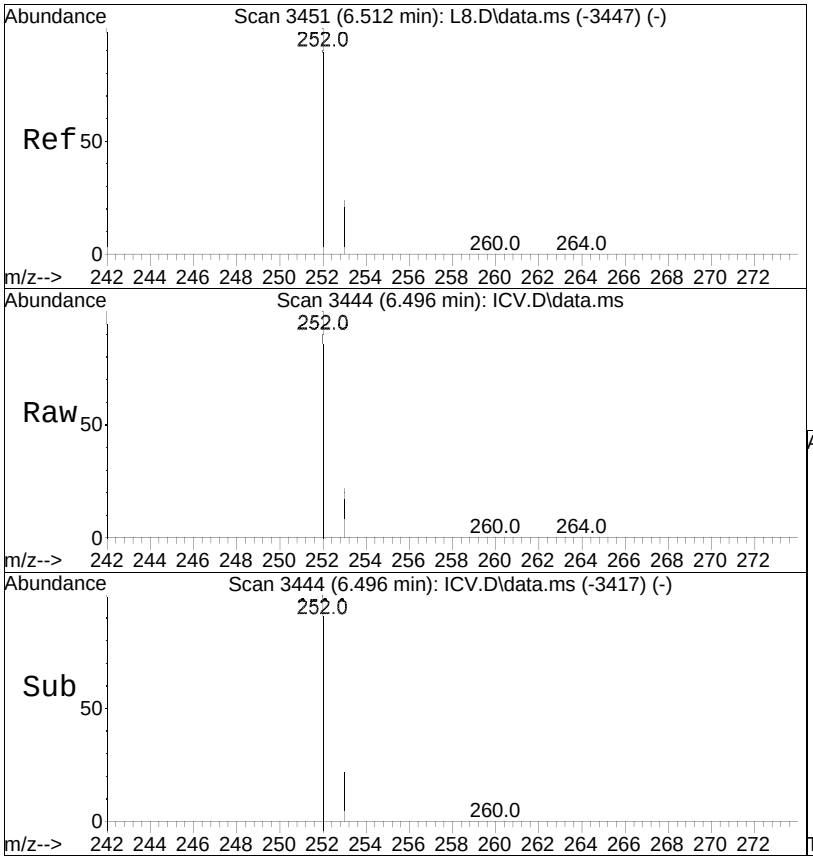



#37
Benzo[b]fluoranthene
Concen: 909.14 ng/ml
RT: 6.479 min Scan# 3437
Delta R.T. -0.014 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:252 Resp: 390762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.4 | 18.0 | 27.0 |

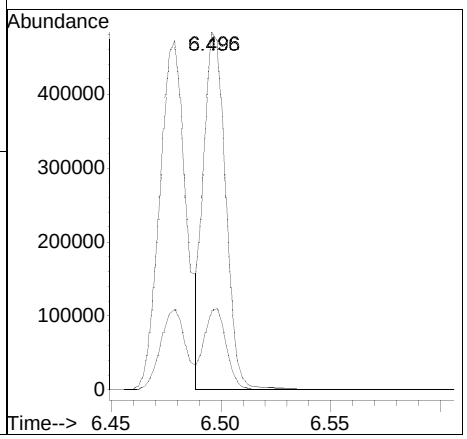


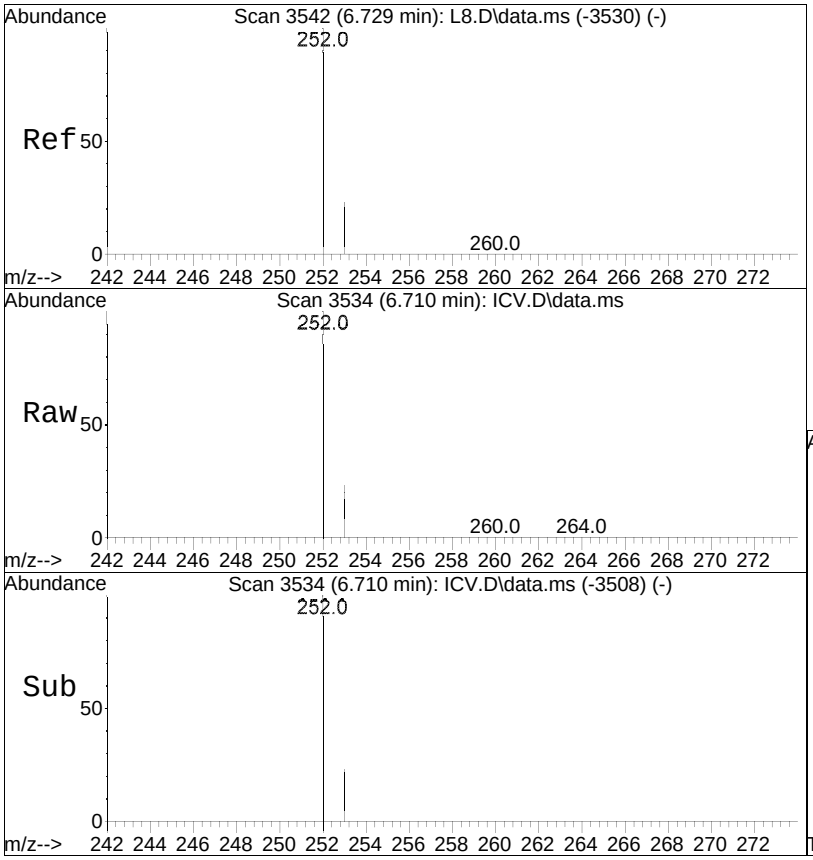



#38
Benzo[k]fluoranthene
Concen: 844.53 ng/ml
RT: 6.496 min Scan# 3444
Delta R.T. -0.016 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:252 Resp: 335346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.8 | 18.3 | 27.5 |

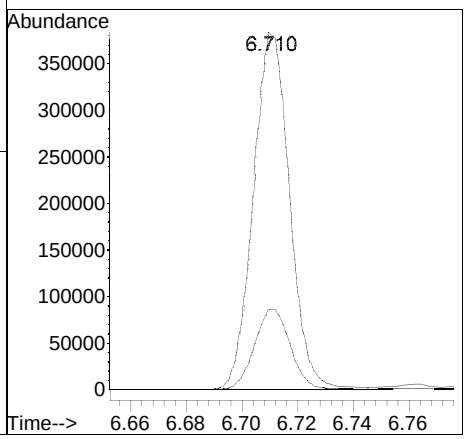


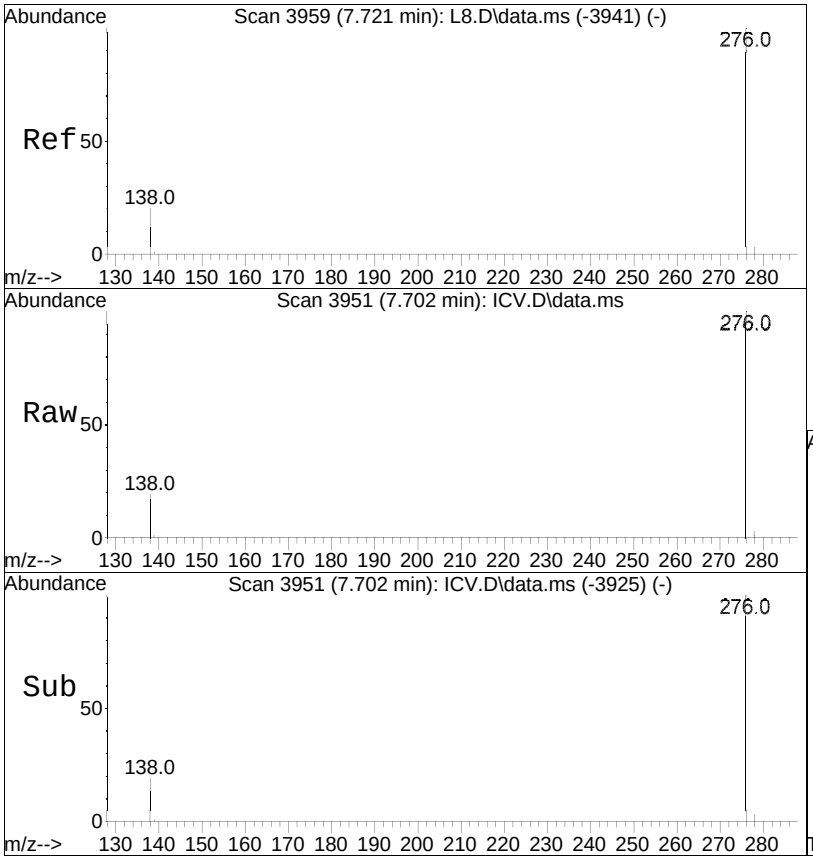



#39
Benzo[a]pyrene
Concen: 901.97 ng/ml
RT: 6.710 min Scan# 3534
Delta R.T. -0.019 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:252 Resp: 343357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.4 | 17.9 | 26.9 |

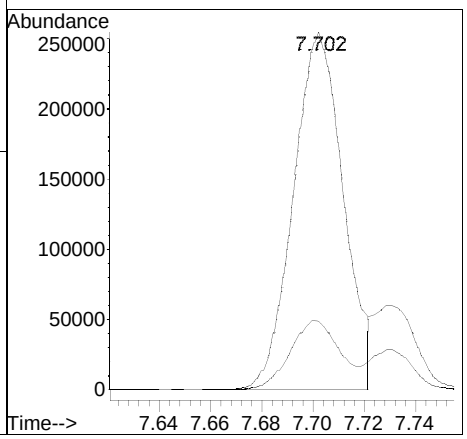


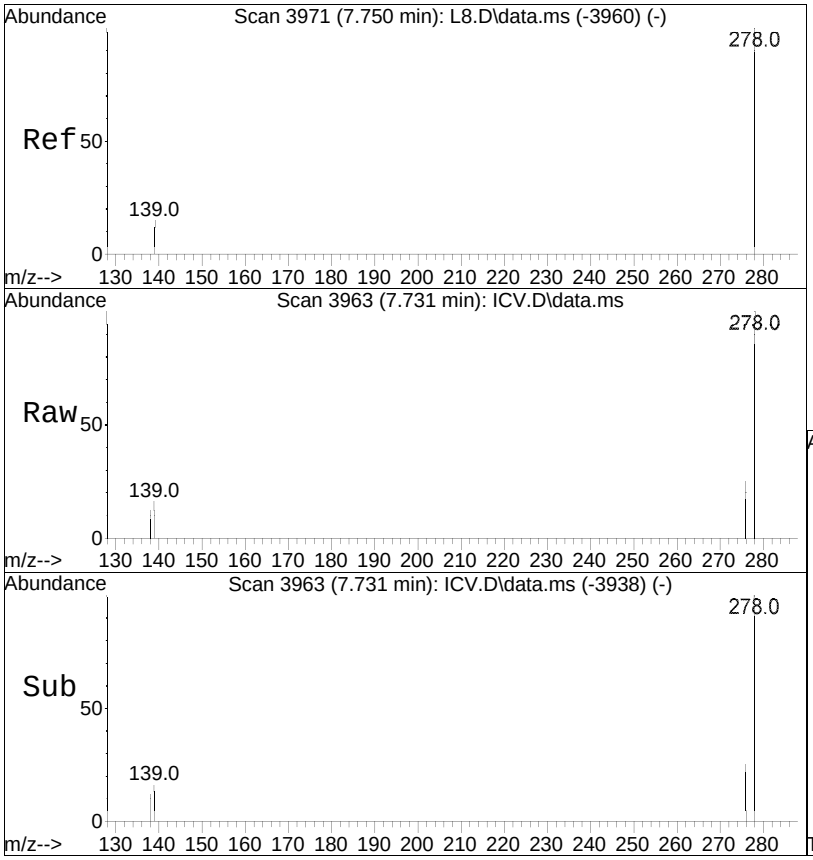



#40
Indeno[1,2,3-cd]pyrene
Concen: 886.99 ng/ml
RT: 7.702 min Scan# 3951
Delta R.T. -0.019 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:276 Resp: 341330

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 19.1 | 15.1 | 22.7 |

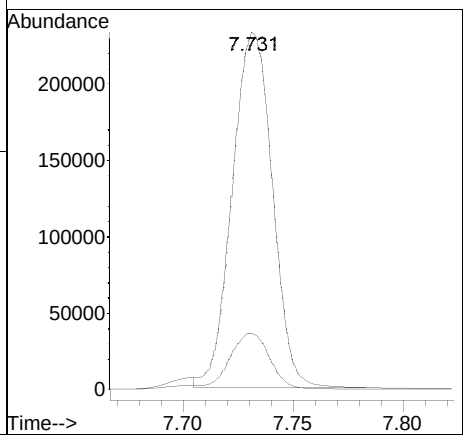


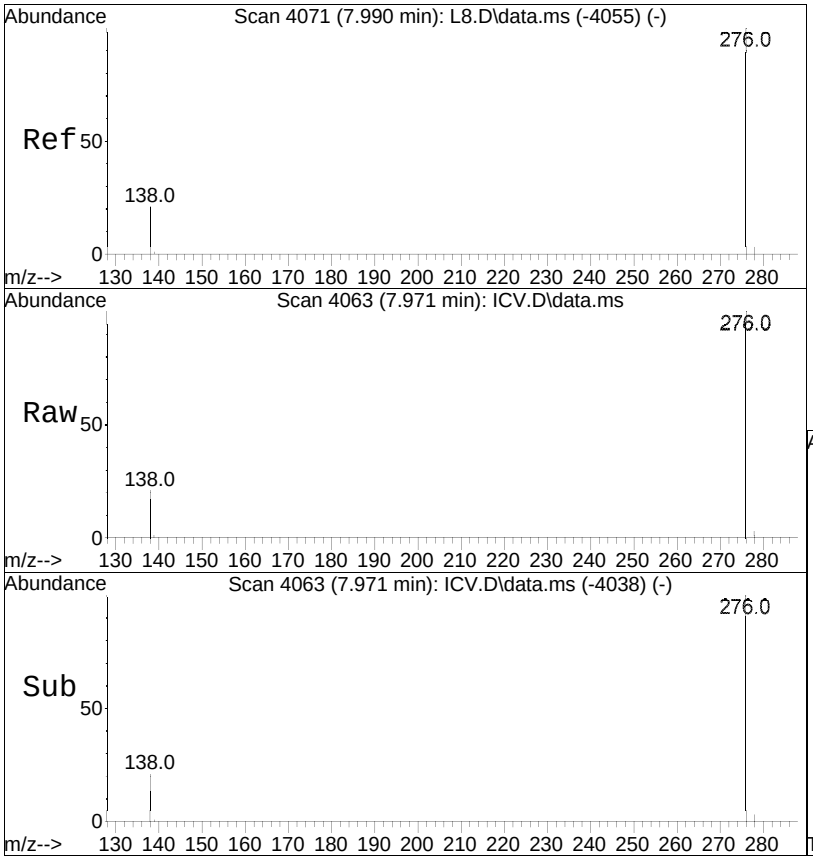



#41
Dibenzo[a,h]anthracene
Concen: 860.79 ng/ml M6
RT: 7.731 min Scan# 3963
Delta R.T. -0.019 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:278 Resp: 295075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 15.6 | 13.3 | 19.9 |

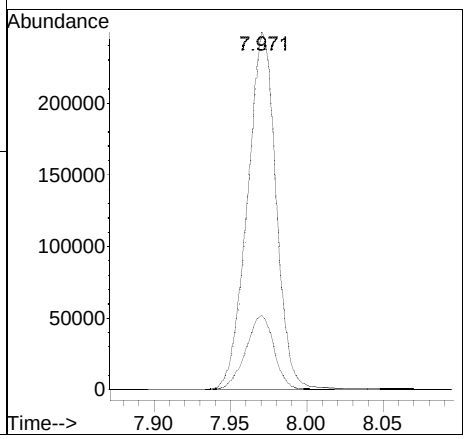





#42
Benzo[g,h,i]perylene
Concen: 851.23 ng/ml
RT: 7.971 min Scan# 4063
Delta R.T. -0.019 min
Lab File: ICV.D
Acq: 21 Jun 2024 05:33 pm

Tgt Ion:276 Resp: 322203

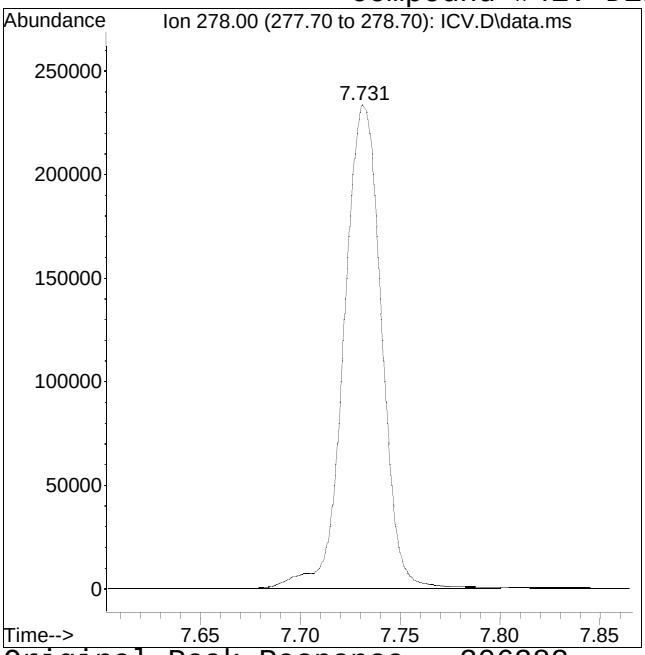
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 20.8 | 16.9 | 25.3 |



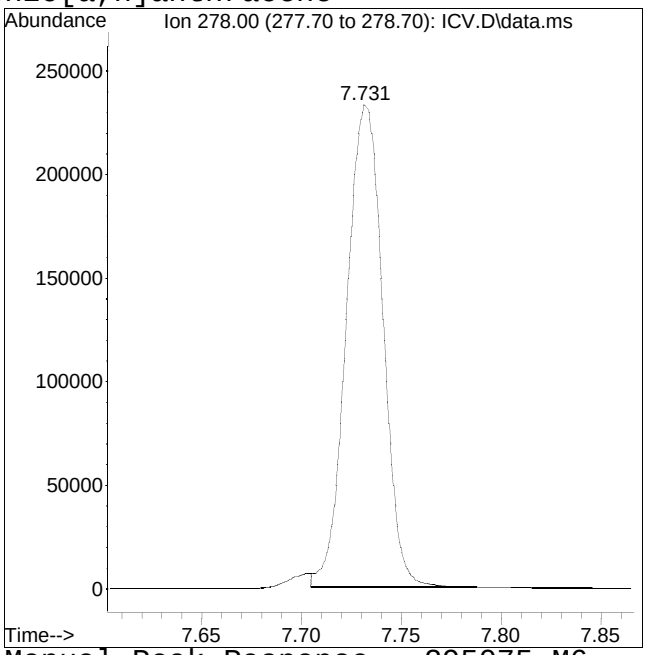
# Manual Integration Report

Data Path : I:\8270SIM\sv119\240621RVTQ
Data File : ICV.D
Date Inj'd : 6/21/2024 5:33 pm
Sample : CQICV,32,, #10475 1000 ng/
Method : SIM-RVT_240621_sv119.M
Operator : sv119:dv
Instrument : SV119
Quant Date : 6/26/2024 12:48 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 306382




Manual Peak Response = 295075 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

## Evaluate Relative Error Report SV119

Method Path : I:\8270SIM\sv119\240621RVTical\
Method File : SIM-RVT_240621_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Jun 26 12:41:11 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 23 T | 4,6-Dinitro-o-cresol | Q | ng/ml | 1000.0 | 991.493 | -0.9 | 40.00 | 46.132 | 15.3 |
| 25 T | Pentachlorophenol | Q | ng/ml | 1000.0 | 1037.550 | 3.8 | 5.00 | 7.392 | 47.8 |
| 32 T | Benzo[a]anthracene | L | ng/ml | 1000.0 | 1068.137 | 6.8 | 2.00 | 1.985 | -0.7 |
| 35 T | Bis(2-ethylhexyl)phthalate | L | ng/ml | 1000.0 | 1014.123 | 1.4 | 40.00 | 43.633 | 9.1 |

## Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 23 T | 4,6-Dinitro-o-cresol | Quadratic | 0.999438 | -0.007216 | 0.170334 | -0.00100381 |
| 25 T | Pentachlorophenol | Quadratic | 0.997478 | 0.032871 | 0.163746 | -0.000173207 |
| 32 T | Benzo[a]anthracene | Linear | 0.998969 | 0.000000 | 1.50131 | 0.00304083 |
| 35 T | Bis(2-ethylhexyl)phthalate | Linear | 0.999566 | 0.000000 | 1.09576 | -0.00365625 |

Response Factor Report SV125

Method Path : I:\8270SIM\SV125\240917nRVTical\
Method File : SIM-RVT_240917n_sv125.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 19 13:55:09 2024
Response Via : Initial Calibration

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

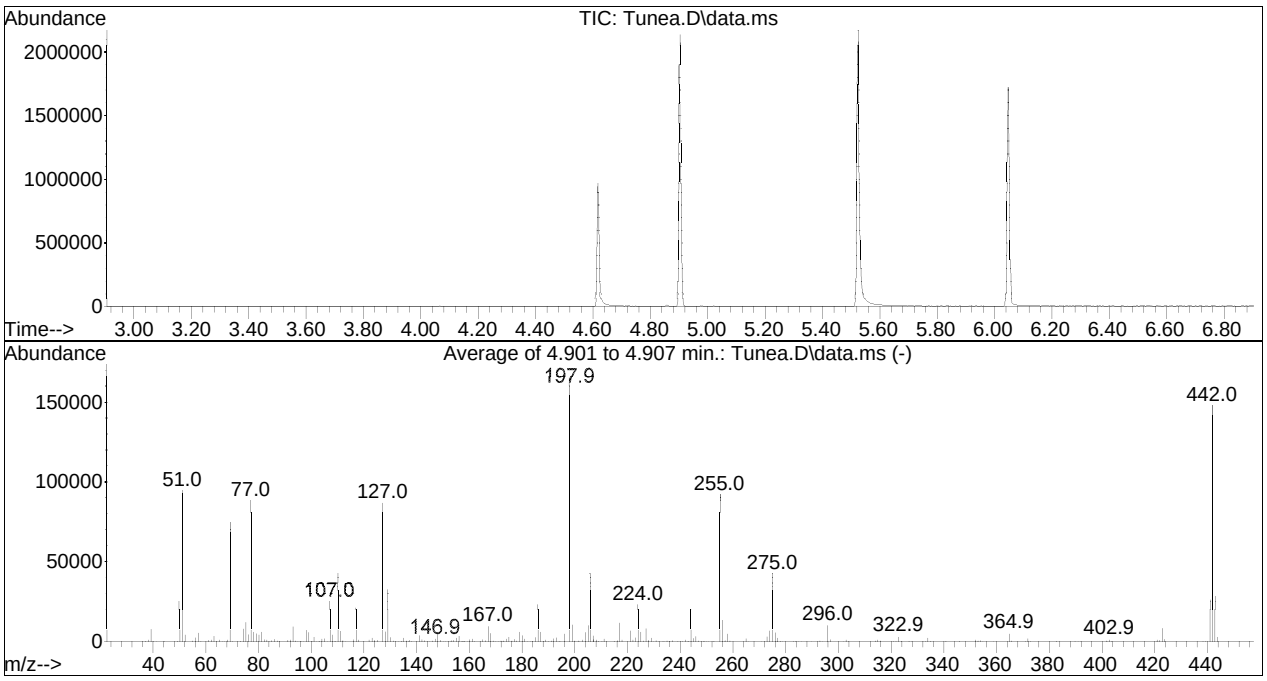
| | | Compound | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1,4-Dichlorobenzene-d4 | ISTD | | | | | | | | | | | |
| 2) | s | 2-Fluorophenol | 0.971 | 1.076 | 1.003 | 0.976 | 0.958 | 1.008 | 0.994 | 0.957 | 0.967 | 0.934 | 0.984 | 3.99 |
| 3) | s | Phenol-d6 | 1.486 | 1.276 | 1.119 | 1.153 | 1.166 | 1.204 | 1.208 | 1.167 | 1.194 | 1.166 | 1.214 | 8.61 |
| 4) | T | bis(2-Chloroethyl)ether | | 1.231 | 1.079 | 1.071 | 1.059 | 1.122 | 1.074 | 1.036 | 1.033 | 1.002 | 1.079 | 6.16 |
| 5) | T | n-Nitrosodi-n-propylamine | | | 0.783 | 0.730 | 0.690 | 0.718 | 0.742 | 0.722 | 0.757 | 0.747 | 0.736 | 3.82 |
| 6) | t | Hexachloroethane | | | 0.471 | 0.447 | 0.430 | 0.441 | 0.439 | 0.421 | 0.429 | 0.414 | 0.437 | 4.06 |
| 7) | s | Nitrobenzene-d5 | | 0.575 | 0.577 | 0.602 | 0.586 | 0.628 | 0.666 | 0.656 | 0.695 | 0.632 | 0.624 | 6.80 |
| 8) | i | Naphthalene-d8 | ISTD | | | | | | | | | | | |
| 9) | t | Naphthalene | 1.355 | 1.209 | 1.078 | 1.069 | 1.017 | 1.046 | 1.011 | 0.979 | 0.969 | 0.920 | 1.065 | 12.06 |
| 10) | t | Hexachlorobutadiene | | 0.238 | 0.222 | 0.223 | 0.214 | 0.221 | 0.212 | 0.206 | 0.205 | 0.195 | 0.215 | 5.78 |
| 11) | t | 2-Methylnaphthalene | 0.718 | 0.708 | 0.691 | 0.682 | 0.669 | 0.693 | 0.687 | 0.662 | 0.669 | 0.643 | 0.682 | 3.27 |
| 12) | t | 1-Methylnaphthalene | 0.658 | 0.667 | 0.633 | 0.632 | 0.624 | 0.647 | 0.639 | 0.617 | 0.618 | 0.595 | 0.633 | 3.33 |
| 13) | s | 2-Fluorobiphenyl | 0.874 | 0.908 | 0.858 | 0.853 | 0.848 | 0.876 | 0.858 | 0.814 | 0.811 | 0.778 | 0.848 | 4.44 |
| 14) | t | 2-Chloronaphthalene | | 0.761 | 0.709 | 0.729 | 0.712 | 0.742 | 0.731 | 0.706 | 0.718 | 0.696 | 0.723 | 2.79 |
| 15) | t | 2,6-Dinitrotoluene | | | | | 0.053 | 0.057 | 0.072 | 0.080 | 0.104 | 0.107 | *Q | 0.9964 |
| 16) | t | Acenaphthylene | 1.098 | 1.071 | 1.004 | 1.012 | 0.998 | 1.042 | 1.081 | 1.053 | 1.078 | 1.057 | 1.049 | 3.32 |
| 17) | i | Acenaphthene-d10 | ISTD | | | | | | | | | | | |
| 18) | t | Acenaphthene | 1.257 | 1.314 | 1.244 | 1.250 | 1.211 | 1.256 | 1.208 | 1.169 | 1.168 | 1.120 | 1.220 | 4.60 |
| 19) | t | 2,4-Dinitrotoluene | | | | | 0.098 | 0.109 | 0.141 | 0.162 | 0.208 | 0.213 | *Q | 0.9964 |
| 20) | t | Fluorene | 1.432 | 1.440 | 1.311 | 1.293 | 1.284 | 1.357 | 1.363 | 1.310 | 1.316 | 1.267 | 1.337 | 4.47 |
| 21) | s | 2,4,6-Tribromophenol | | 0.181 | 0.165 | 0.140 | 0.147 | 0.161 | 0.181 | 0.184 | 0.202 | 0.201 | 0.174 | 12.57 |
| 22) | i | Phenanthrene-d10 | ISTD | | | | | | | | | | | |
| 23) | T | 4,6-Dinitro-o-cresol | | | | | 0.020 | 0.023 | 0.030 | 0.033 | 0.040 | 0.041 | *Q | 0.9975 |
| 24) | t | Hexachlorobenzene | | 0.307 | 0.255 | 0.257 | 0.249 | 0.264 | 0.256 | 0.242 | 0.243 | 0.230 | 0.256 | 8.40 |
| 25) | t | Pentachlorophenol | | | | 0.059 | 0.071 | 0.056 | 0.076 | 0.090 | 0.112 | 0.114 | *Q | 0.9957 |
| 26) | t | Phenanthrene | 0.973 | 1.099 | 1.118 | 1.039 | 1.071 | 1.085 | 1.045 | 0.988 | 0.985 | 0.915 | 1.032 | 6.27 |
| 27) | t | Anthracene | 1.105 | 1.143 | 0.995 | 0.988 | 0.986 | 1.038 | 1.038 | 1.000 | 1.007 | 0.938 | 1.024 | 5.92 |
| 28) | t | Fluoranthene | 1.264 | 1.214 | 1.137 | 1.114 | 1.109 | 1.178 | 1.216 | 1.173 | 1.184 | 1.115 | 1.170 | 4.42 |
| 29) | t | Pyrene | 1.341 | 1.275 | 1.181 | 1.159 | 1.158 | 1.242 | 1.299 | 1.257 | 1.253 | 1.184 | 1.235 | 5.06 |
| 30) | s | 4-Terphenyl-d14 | 0.919 | 0.824 | 0.766 | 0.765 | 0.778 | 0.817 | 0.844 | 0.816 | 0.818 | 0.780 | 0.813 | 5.67 |
| 31) | i | Chrysene-d12 | ISTD | | | | | | | | | | | |
| 32) | t | Benzo[a]anthracene | 1.298 | 0.729 | 0.349 | 0.226 | 0.137 | 0.125 | 0.125 | 0.121 | 0.122 | 0.115 | *L | 0.9992 |
| 33) | t | 3,3'-Dichlorob... | | | | | 0.274 | 0.318 | 0.393 | 0.414 | 0.462 | 0.462 | *L | 0.9983 |
| 34) | t | Chrysene | 1.125 | 0.955 | 1.113 | 1.204 | 1.165 | 1.234 | 1.215 | 1.144 | 1.152 | 1.086 | 1.139 | 7.01 |
| 35) | T | bis(2-Ethylhexyl)phthalate | | | | | 0.202 | 0.223 | 0.325 | 0.358 | 0.476 | 0.475 | *Q | 0.9952 |
| 36) | i | Perylene-d12 | ISTD | | | | | | | | | | | |
| 37) | t | Benzo[b]fluora... | 0.880 | 0.893 | 0.869 | 0.819 | 0.828 | 0.920 | 1.039 | 1.063 | 1.043 | 1.007 | 0.936 | 9.97 |
| 38) | t | Benzo[k]fluora... | 0.780 | 0.776 | 0.790 | 0.821 | 0.865 | 0.958 | 1.100 | 1.000 | 1.092 | 0.989 | 0.917 | 13.84 |
| 39) | t | Benzo[a]pyrene | 0.698 | 0.706 | 0.693 | 0.696 | 0.727 | 0.815 | 0.946 | 0.928 | 0.983 | 0.952 | 0.814 | 15.29 |
| 40) | t | Indeno[1,2,3-c... | 0.720 | 0.729 | 0.711 | 0.710 | 0.725 | 0.836 | 0.957 | 0.989 | 1.068 | 1.107 | 0.855 | 18.71 |
| 41) | t | Dibenzo[a,h]anthracene | 0.611 | 0.627 | 0.633 | 0.644 | 0.709 | 0.835 | 0.956 | 0.928 | 1.004 | | *Q | 0.9992 |
| 42) | t | Benzo[g,h,i]pe... | 0.787 | 0.770 | 0.749 | 0.756 | 0.792 | 0.900 | 0.989 | 0.985 | 1.045 | 1.084 | 0.886 | 14.71 |

(#) = Out of Range

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : Tunea.D
Acq On : 17 Sep 2024 06:19 pm
Operator : SV125:dv
Sample : TUNE #11000
Misc : WG1973864,,ical
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 19 13:55:09 2024



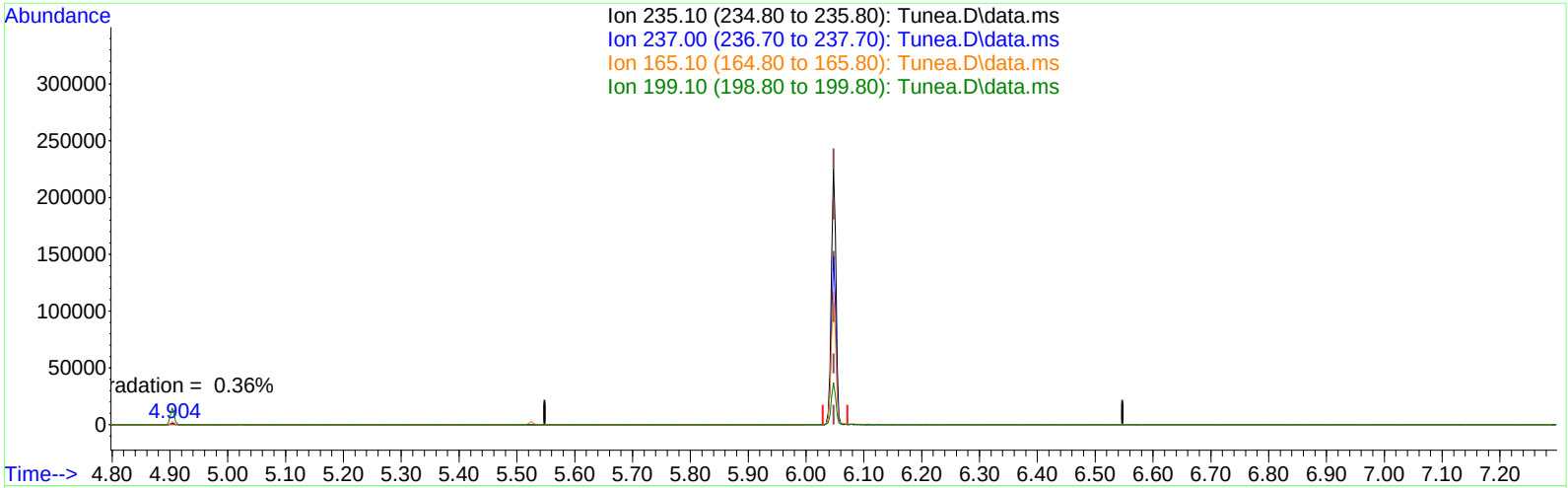

Spectrum Information: Average of 4.901 to 4.907 min.

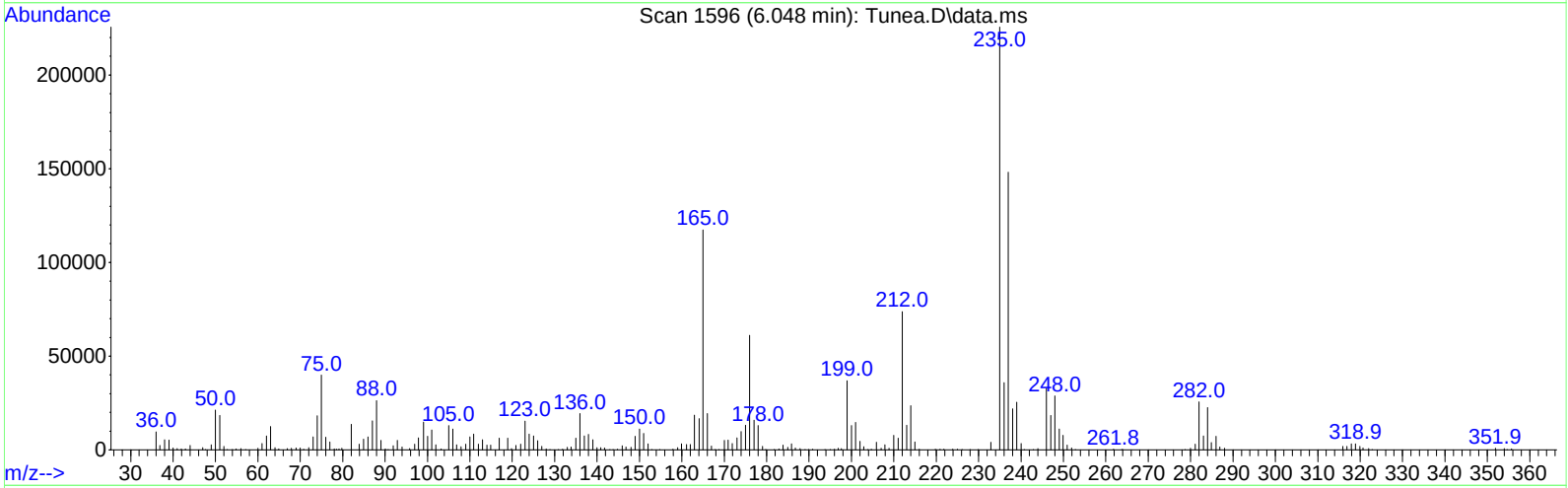
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 57.2 | 94562 | PASS |
| 68 | 69 | 0.00 | 2 | 1.8 | 1338 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 74589 | PASS |
| 70 | 69 | 0.00 | 2 | 0.6 | 435 | PASS |
| 127 | 198 | 10 | 80 | 52.3 | 86517 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 165307 | PASS |
| 199 | 198 | 5 | 9 | 6.4 | 10578 | PASS |
| 275 | 198 | 10 | 60 | 25.7 | 42528 | PASS |
| 365 | 198 | 1 | 100 | 3.0 | 5025 | PASS |
| 441 | 442 | 0.01 | 24 | 17.6 | 25968 | PASS |
| 442 | 198 | 50 | 100 | 89.4 | 147853 | PASS |
| 443 | 442 | 15 | 24 | 19.1 | 28172 | PASS |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : Tunea.D
Acq On : 17 Sep 2024 06:19 pm
Operator : SV125:dv
Sample : TUNE #11000
Misc : WG1973864,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 18 10:29:37 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools™ [TUNE #11000]

(6) ddt (T)

6.048min (-0.000) 20.11

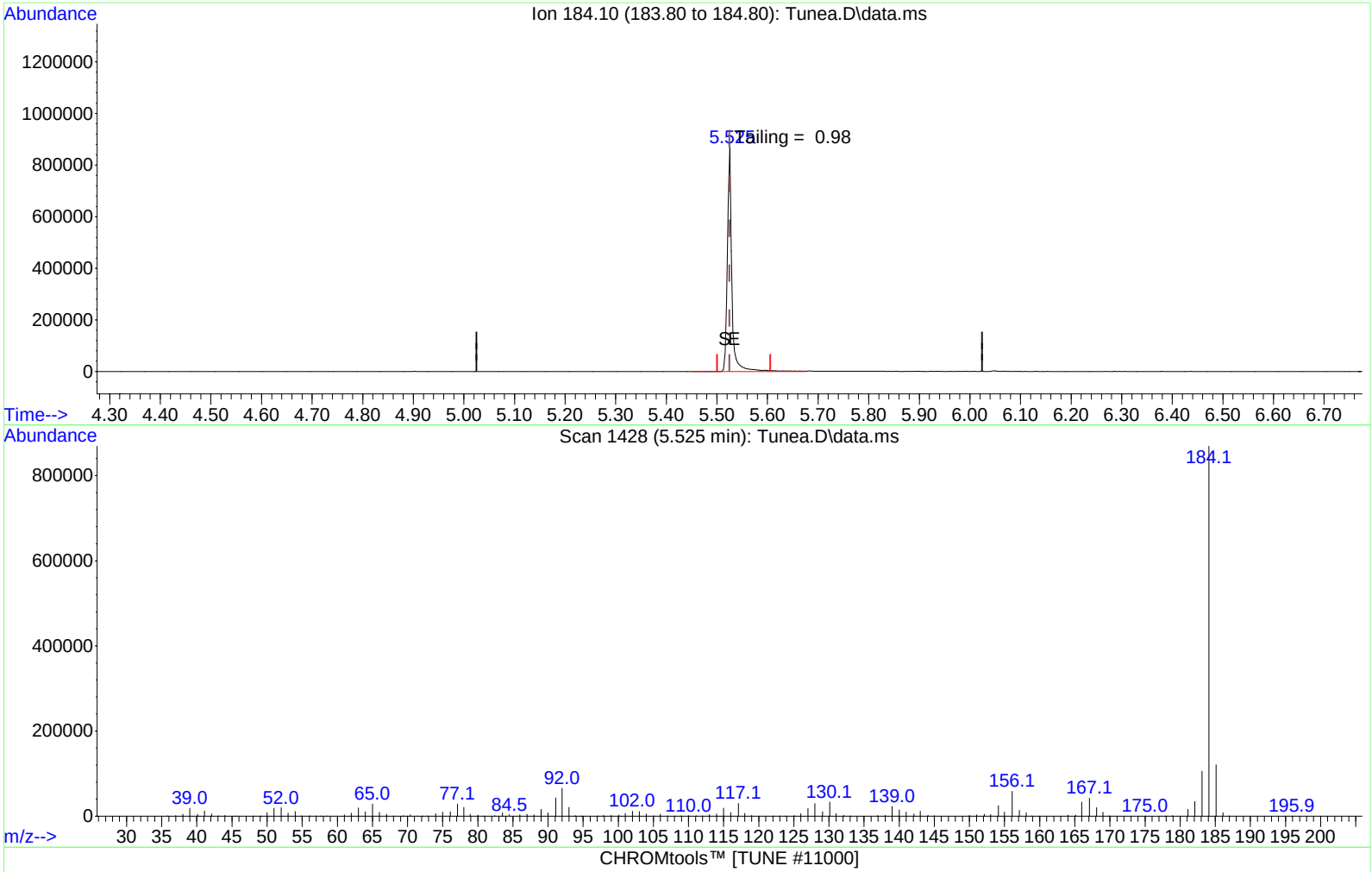
response 122607

| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 65.60 | 64.60 |
| 165.10 | 53.30 | 52.03 |
| 199.10 | 17.10 | 16.60 |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : Tunea.D
Acq On : 17 Sep 2024 06:19 pm
Operator : SV125:dv
Sample : TUNE #11000
Misc : WG1973864,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 18 10:29:37 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools™ [TUNE #11000]

(3) benzidine (T)

5.525min (+ 0.000) 51.95

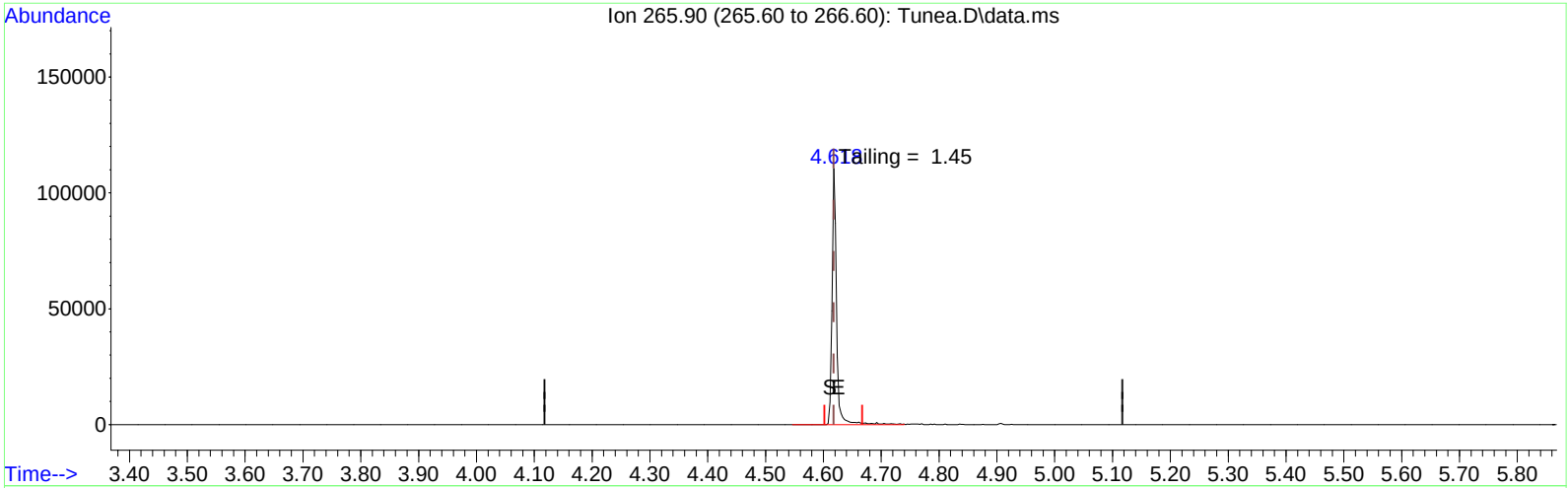
response 528864

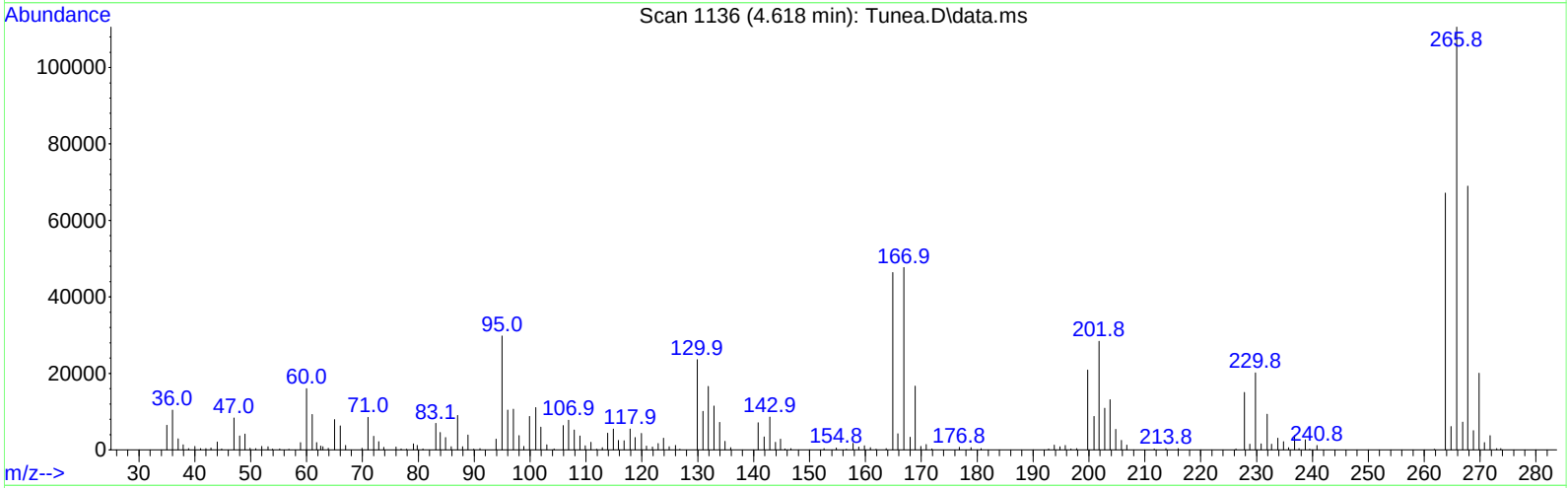
| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : Tunea.D
Acq On : 17 Sep 2024 06:19 pm
Operator : SV125:dv
Sample : TUNE #11000
Misc : WG1973864,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 18 10:29:37 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools™ [TUNE #11000]

(1) pentachlorophenol (T)

4.618min (-0.000) 27.91

response 58613

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL10.D
Acq On : 17 Sep 2024 06:45 pm
Operator : SV125:dv
Sample : IL10,32,,5000.0 ng/ml #10885
Misc : WG1973864,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 19 13:55:05 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:11 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.224 | 152 | 334754 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 394276 | | | Recovery = 84.90% | | | |
| 8) Naphthalene-d8 | 2.898 | 136 | 1210244 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 87.80% | | | |
| 17) Acenaphthene-d10 | 3.883 | 164 | 795797 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 91.83% | | | |
| 22) Phenanthrene-d10 | 4.729 | 188 | 1739300 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 94.42% | | | |
| 31) Chrysene-d12 | 6.325 | 240 | 1992034M4 | 4000.000 | ng/ml | 0.05 |
| Standard Area 1 = 1977784 | | | Recovery = 100.72% | | | |
| 36) Perylene-d12 | 7.534 | 264 | 2538106 | 4000.000 | ng/ml | 0.06 |
| Standard Area 1 = 2341485 | | | Recovery = 108.40% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.624 | 112 | 390725 | 4743.304 | ng/ml | -0.02 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 237.17%# | | | |
| 3) Phenol-d6 | 2.033 | 99 | 487883 | 4802.565 | ng/ml | -0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 240.13%# | | | |
| 7) Nitrobenzene-d5 | 2.510 | 82 | 264396 | 5060.294 | ng/ml | -0.01 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 506.03%# | | | |
| 13) 2-Fluorobiphenyl | 3.502 | 172 | 1176363 | 4587.179 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 458.72%# | | | |
| 21) 2,4,6-Tribromophenol | 4.329 | 330 | 199662 | 5778.732 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 288.94%# | | | |
| 30) 4-Terphenyl-d14 | 5.667 | 244 | 1696589 | 4800.001 | ng/ml | 0.03 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 480.00%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.089 | 93 | 419112 | 4642.929 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.433 | 70 | 312746 | 5076.885 | ng/ml | 99 |
| 6) Hexachloroethane | 2.490 | 117 | 173146 | 4738.835 | ng/ml | 98 |
| 9) Naphthalene | 2.908 | 128 | 1391421 | 4316.599 | ng/ml# | 99 |
| 10) Hexachlorobutadiene | 2.985 | 225 | 295444 | 4536.681 | ng/ml | 99 |
| 11) 2-Methylnaphthalene | 3.294 | 142 | 972506 | 4710.573 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.349 | 142 | 900446 | 4701.978 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.566 | 162 | 1052670 | 4815.357 | ng/ml | 99 |
| 15) 2,6-Dinitrotoluene | 3.762 | 165 | 161202 | 4936.453 | ng/ml | 97 |
| 16) Acenaphthylene | 3.802 | 152 | 1598614 | 5035.193 | ng/ml | 98 |
| 18) Acenaphthene | 3.902 | 153 | 1114435 | 4592.257 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL10.D
Acq On : 17 Sep 2024 06:45 pm
Operator : SV125:dv
Sample : IL10,32,,5000.0 ng/ml #10885
Misc : WG1973864,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 19 13:55:05 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:11 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.991 | 165 | 211934 | 4936.369 | ng/ml# | 75 |
| 20) Fluorene | 4.192 | 166 | 1259880 | 4735.814 | ng/ml | 99 |
| 23) 4,6-Dinitro-o-cresol | 4.225 | 198 | 89736 | 4944.920 | ng/ml | 95 |
| 24) Hexachlorobenzene | 4.512 | 284 | 500231 | 4494.288 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.623 | 266 | 247465 | 4927.317 | ng/ml | 100 |
| 26) Phenanthrene | 4.742 | 178 | 1989833 | 4434.754 | ng/ml | 99 |
| 27) Anthracene | 4.770 | 178 | 2038630 | 4579.437 | ng/ml | 98 |
| 28) Fluoranthene | 5.434 | 202 | 2424685 | 4764.039 | ng/ml | 98 |
| 29) Pyrene | 5.569 | 202 | 2574078 | 4793.739 | ng/ml | 98 |
| 32) Benzo[a]anthracene | 6.317 | 228 | 2861281 | 4882.545 | ng/ml | 98 |
| 33) 3,3'-Dichlorobenzene | 6.303 | 252 | 1151468 | 5073.886 | ng/ml | 99 |
| 34) Chrysene | 6.342 | 228 | 2704609 | 4766.370 | ng/ml | 97 |
| 35) Bis(2-ethylhexyl)phtha... | 6.347 | 149 | 1182017 | 4924.948 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 7.163 | 252 | 3194155 | 5378.251 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 7.191 | 252 | 3138702 | 5393.717 | ng/ml | 98 |
| 39) Benzo[a]pyrene | 7.474 | 252 | 3021584 | 5847.396 | ng/ml | 98 |
| 40) Indeno[1,2,3-cd]pyrene | 8.754 | 276 | 3512337 | 6471.845 | ng/ml | 97 |
| 41) Dibenzo[a,h]anthracene | 8.788 | 278 | 3295830M6 | 4699.481 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.099 | 276 | 3439988 | 6120.819 | ng/ml | 99 |

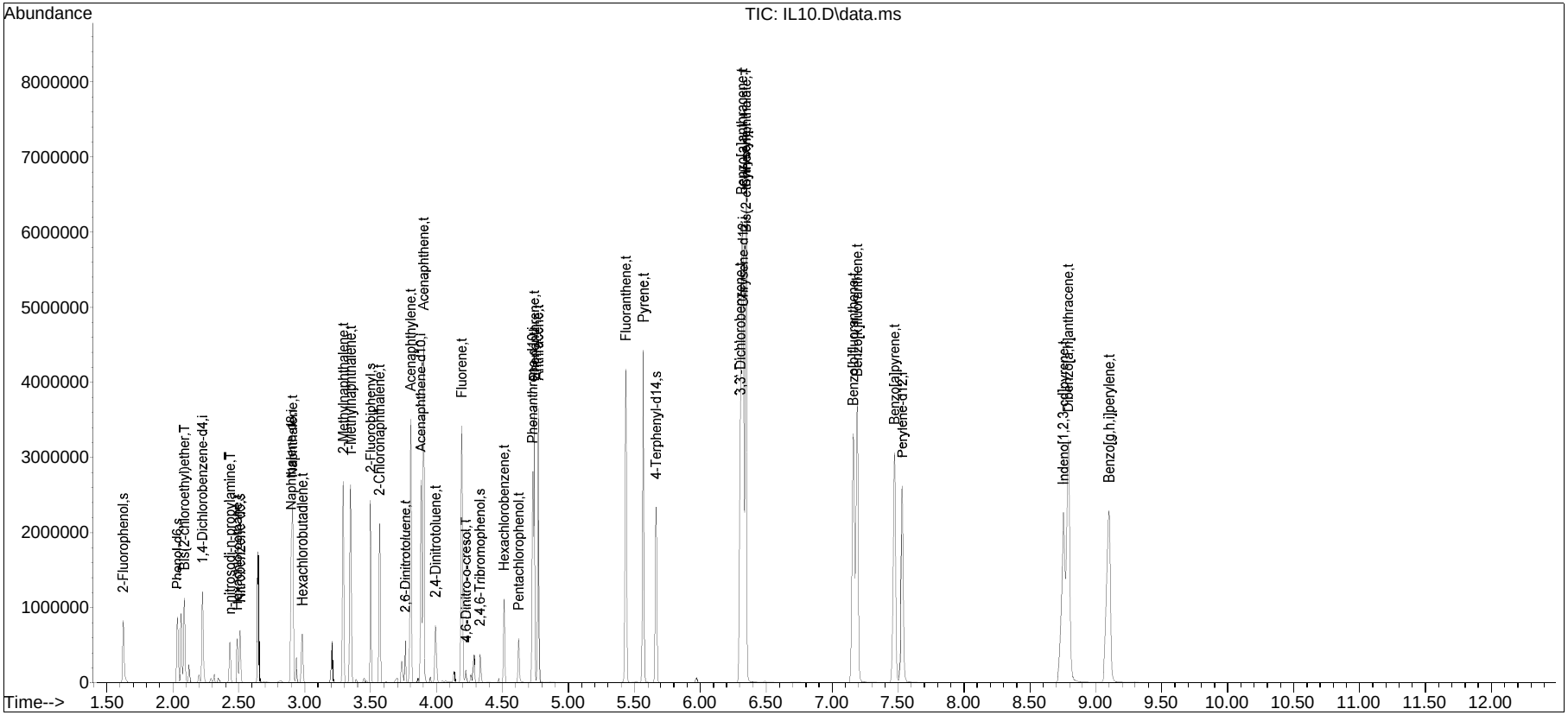
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL10.D
Acq On : 17 Sep 2024 06:45 pm
Operator : SV125:dv
Sample : IL10,32,,5000.0 ng/ml #10885
Misc : WG1973864,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 19 13:55:05 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:11 2024
Response via : Initial Calibration

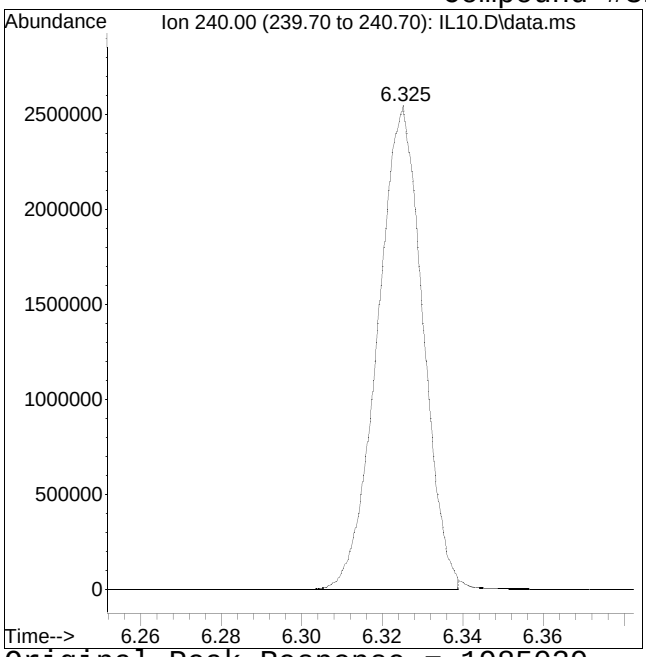
Sub List : Default - All compounds listedTical\IL8.D•

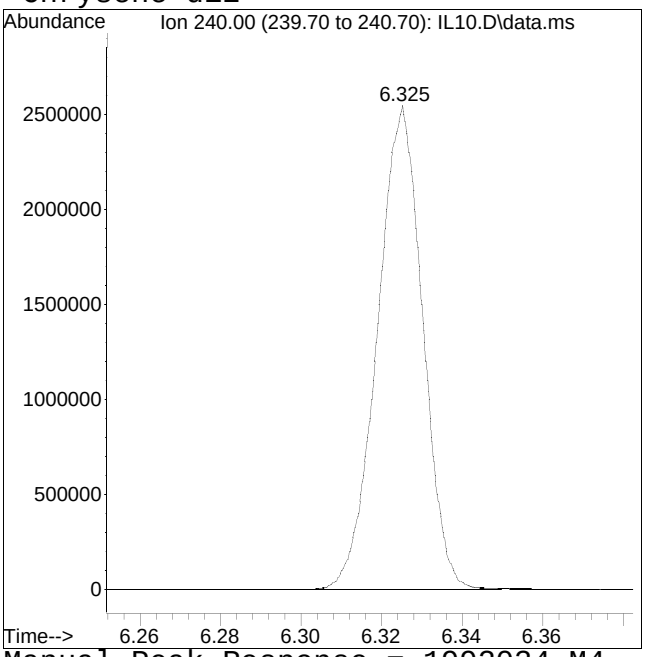


# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL10.D Operator : SV125:dv
Date Inj'd : 9/17/2024 6:45 pm Instrument : SV125
Sample : IL10,32,,5000.0 ng/ml #108Quant Date : 9/19/2024 1:56 pm

## Compound #31: Chrysene-d12



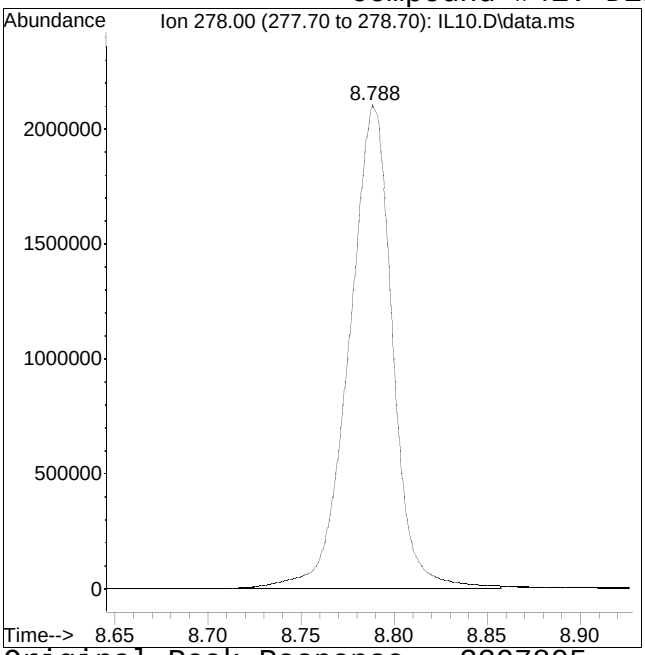




Original Peak Response = 1985039 Manual Peak Response = 1992034 M4
M4 = Poor automated baseline construction.

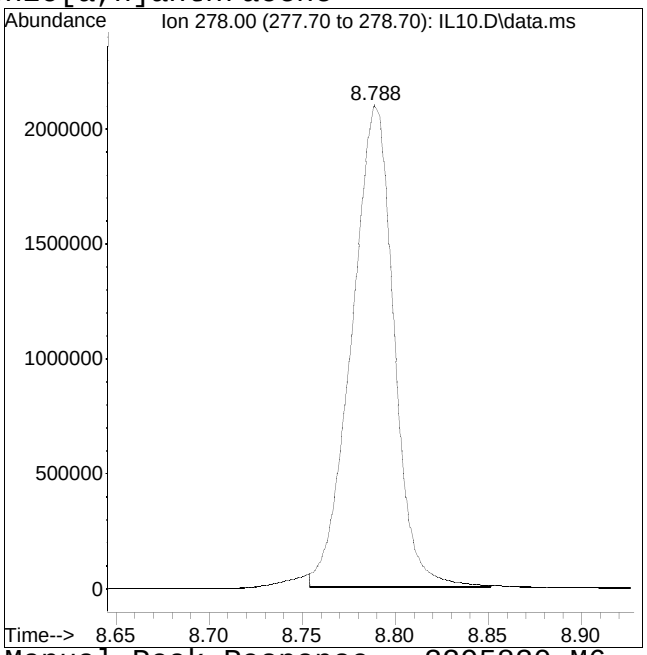
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL10.D
Date Inj'd : 9/17/2024 6:45 pm
Sample : IL10,32,,5000.0 ng/ml #108
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 3397805




Manual Peak Response = 3295830 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL9.D
Acq On : 17 Sep 2024 07:01 pm
Operator : SV125:dv
Sample : IL9,32,,2500.0 ng/ml #10901
Misc : WG1973864,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 19 13:57:33 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:30 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.238 | 152 | 392749 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 99.61% | | | |
| 8) Naphthalene-d8 | 2.905 | 136 | 1387895 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 100.69% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 890362 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 102.75% | | | |
| 22) Phenanthrene-d10 | 4.727 | 188 | 1883763 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 102.26% | | | |
| 31) Chrysene-d12 | 6.282 | 240 | 2016341 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 101.95% | | | |
| 36) Perylene-d12 | 7.483 | 264 | 2403653 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 102.66% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.640 | 112 | 237363 | 2456.029 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 122.80%# | | | |
| 3) Phenol-d6 | 2.044 | 99 | 293066 | 2458.860 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 122.94%# | | | |
| 7) Nitrobenzene-d5 | 2.518 | 82 | 170682 | 2784.321 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 278.43%# | | | |
| 13) 2-Fluorobiphenyl | 3.504 | 172 | 703239 | 2391.242 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 239.12%# | | | |
| 21) 2,4,6-Tribromophenol | 4.330 | 330 | 112415 | 2908.018 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 145.40%# | | | |
| 30) 4-Terphenyl-d14 | 5.643 | 244 | 963377 | 2516.571 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 251.66%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.100 | 93 | 253682 | 2395.313 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.438 | 70 | 185933 | 2572.603 | ng/ml | 99 |
| 6) Hexachloroethane | 2.498 | 117 | 105393 | 2458.565 | ng/ml | 99 |
| 9) Naphthalene | 2.915 | 128 | 840356 | 2273.331 | ng/ml# | 100 |
| 10) Hexachlorobutadiene | 2.991 | 225 | 177928 | 2382.450 | ng/ml | 99 |
| 11) 2-Methylnaphthalene | 3.297 | 142 | 580259 | 2450.867 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.352 | 142 | 535907 | 2440.218 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.571 | 162 | 622494 | 2483.063 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.765 | 165 | 90008 | 2689.731 | ng/ml | 97 |
| 16) Acenaphthylene | 3.804 | 152 | 935026 | 2568.103 | ng/ml | 99 |
| 18) Acenaphthene | 3.904 | 153 | 649964 | 2393.847 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL9.D
Acq On : 17 Sep 2024 07:01 pm
Operator : SV125:dv
Sample : IL9,32,,2500.0 ng/ml #10901
Misc : WG1973864,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 19 13:57:33 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:30 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.991 | 165 | 115564M4 | 2687.411 | ng/ml | |
| 20) Fluorene | 4.193 | 166 | 732339 | 2460.443 | ng/ml | 99 |
| 23) 4,6-Dinitro-o-cresol | 4.222 | 198 | 47581 | 2659.272 | ng/ml | 96 |
| 24) Hexachlorobenzene | 4.513 | 284 | 285812 | 2370.931 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.624 | 266 | 131783 | 2702.585 | ng/ml | 100 |
| 26) Phenanthrene | 4.740 | 178 | 1159468 | 2385.942 | ng/ml | 100 |
| 27) Anthracene | 4.768 | 178 | 1185396 | 2458.586 | ng/ml | 99 |
| 28) Fluoranthene | 5.420 | 202 | 1394325 | 2529.486 | ng/ml | 99 |
| 29) Pyrene | 5.549 | 202 | 1474755 | 2535.834 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.271 | 228 | 1535594 | 2584.054 | ng/ml | 99 |
| 33) 3,3'-Dichlorobenzene | 6.257 | 252 | 581650 | 2544.172 | ng/ml | 99 |
| 34) Chrysene | 6.298 | 228 | 1451791 | 2527.668 | ng/ml | 99 |
| 35) Bis(2-ethylhexyl)phtha... | 6.298 | 149 | 599245 | 2719.754 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 7.109 | 252 | 1566682 | 2785.505 | ng/ml | 96 |
| 38) Benzo[k]fluoranthene | 7.138 | 252 | 1640597 | 2976.994 | ng/ml | 98 |
| 39) Benzo[a]pyrene | 7.420 | 252 | 1476972 | 3018.131 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 8.697 | 276 | 1604906 | 3122.623 | ng/ml | 99 |
| 41) Dibenzo[a,h]anthracene | 8.735 | 278 | 1508459M6 | 2498.903 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.037 | 276 | 1569855 | 2949.512 | ng/ml | 99 |

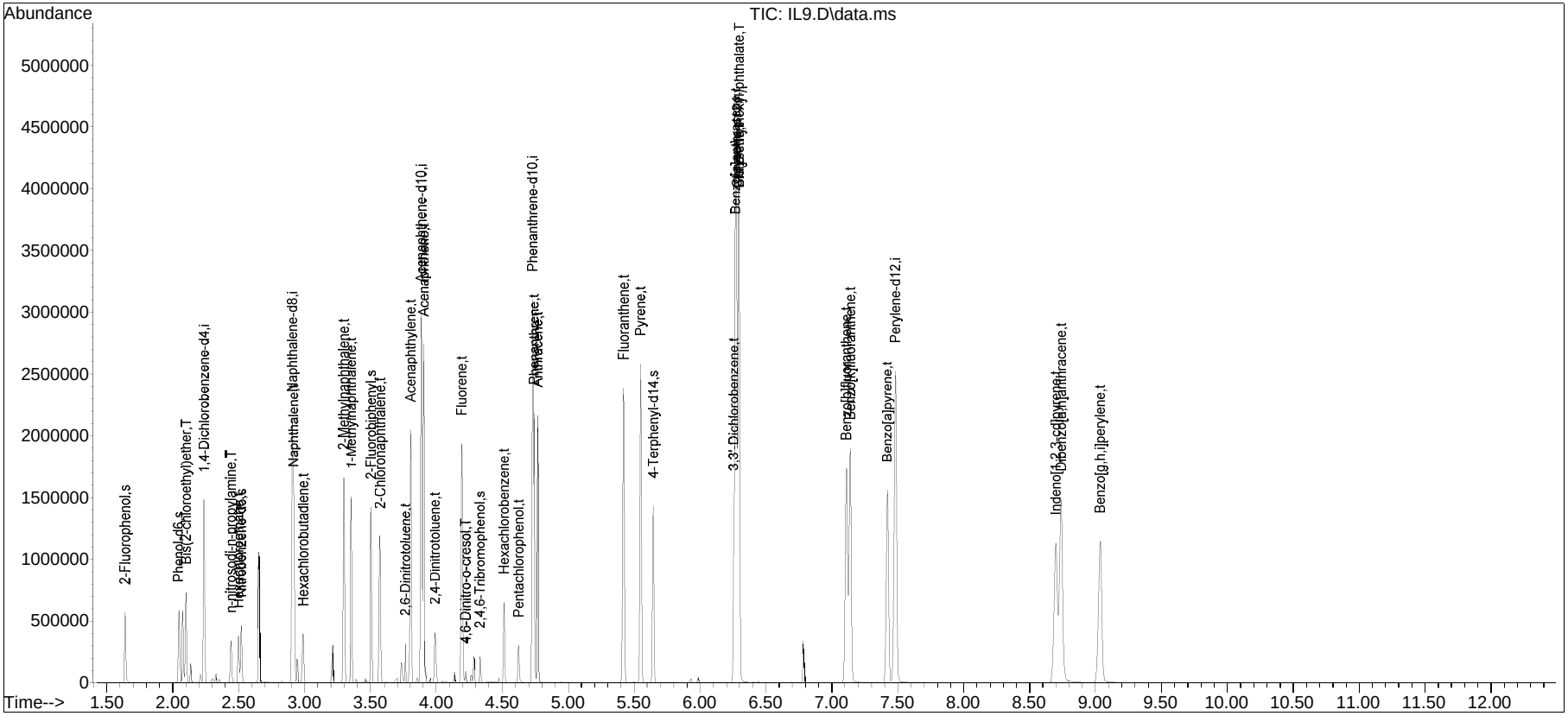
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL9.D
Acq On : 17 Sep 2024 07:01 pm
Operator : SV125:dv
Sample : IL9,32,,2500.0 ng/ml #10901
Misc : WG1973864,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 19 13:57:33 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:30 2024
Response via : Initial Calibration

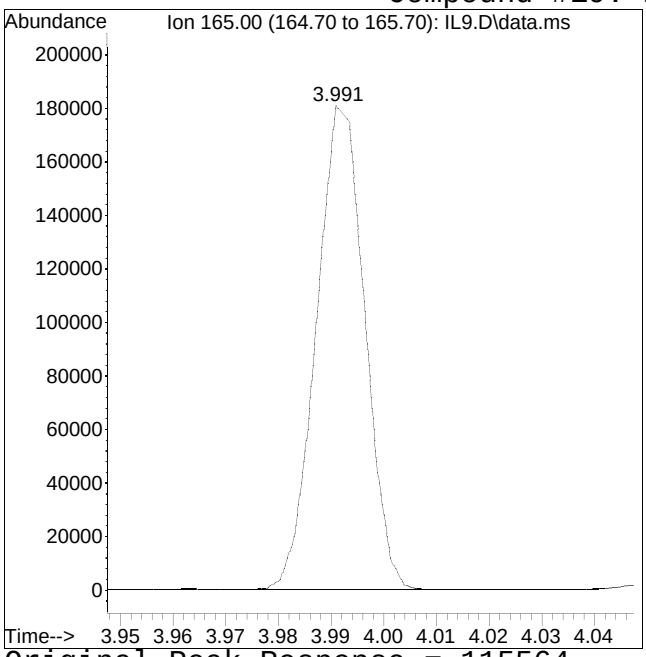
Sub List : Default - All compounds listedTical\IL8.D•



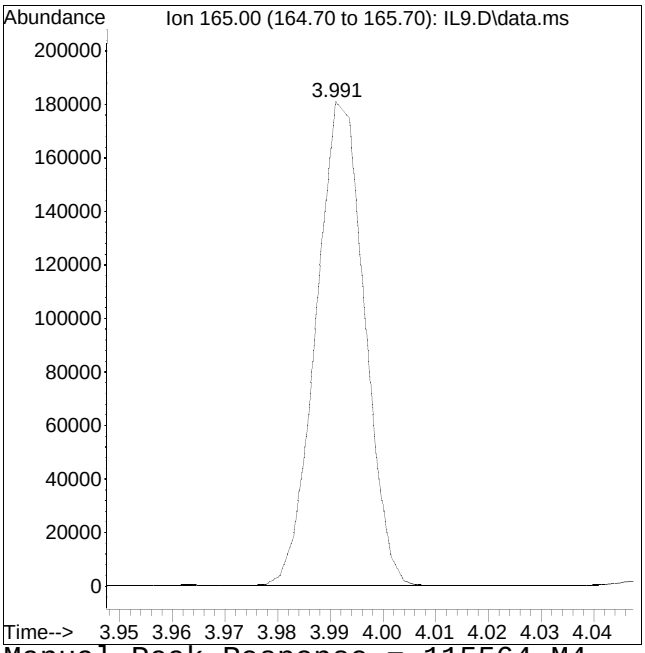
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL9.D Operator : SV125:dv
Date Inj'd : 9/17/2024 7:01 pm Instrument : SV125
Sample : IL9,32,,2500.0 ng/ml #1090Quant Date : 9/19/2024 1:56 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 115564



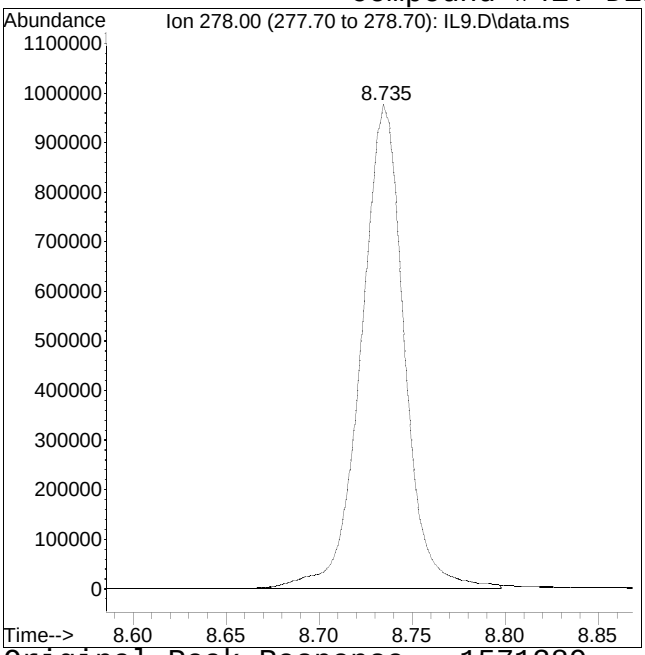

Manual Peak Response = 115564 M4

M4 = Poor automated baseline construction.

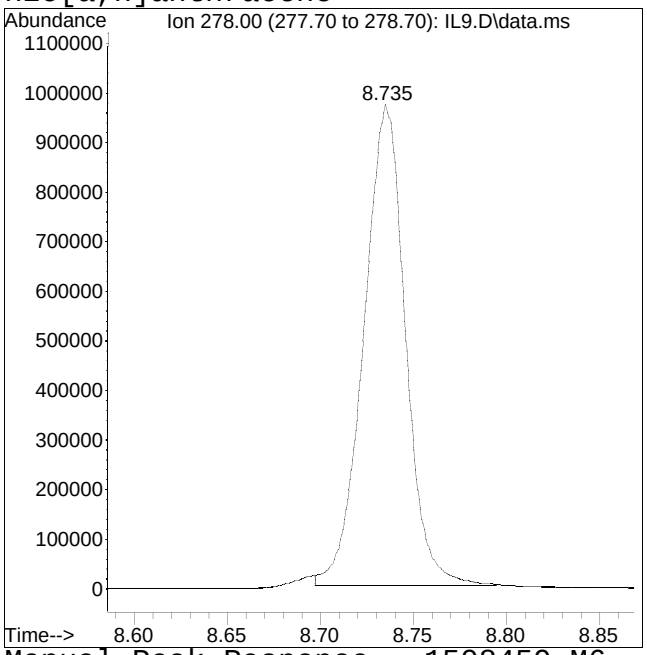
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL9.D
Date Inj'd : 9/17/2024 7:01 pm
Sample : IL9,32,,2500.0 ng/ml #1090
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 1571389




Manual Peak Response = 1508459 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL8.D
Acq On : 17 Sep 2024 07:17 pm
Operator : SV125:dv
Sample : IL8,32,,1000.0 ng/ml #10888
Misc : WG1973864,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:59:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:26 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.238 | 152 | 394276 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 100.00% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1378401 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 100.00% | | | |
| 17) Acenaphthene-d10 | 3.888 | 164 | 866554 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 100.00% | | | |
| 22) Phenanthrene-d10 | 4.729 | 188 | 1842065 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 100.00% | | | |
| 31) Chrysene-d12 | 6.272 | 240 | 1977784 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 100.00% | | | |
| 36) Perylene-d12 | 7.475 | 264 | 2341485 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 100.00% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.645 | 112 | 94345 | 972.420 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 48.62% | | | |
| 3) Phenol-d6 | 2.047 | 99 | 115048 | 961.528 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 48.08% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 64693 | 1051.244 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 105.12% | | | |
| 13) 2-Fluorobiphenyl | 3.507 | 172 | 280355 | 959.865 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 95.99% | | | |
| 21) 2,4,6-Tribromophenol | 4.333 | 330 | 39937 | 1061.498 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 53.07% | | | |
| 30) 4-Terphenyl-d14 | 5.640 | 244 | 375720 | 1003.688 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 100.37% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.103 | 93 | 102166 | 960.934 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.441 | 70 | 71201 | 981.334 | ng/ml | 100 |
| 6) Hexachloroethane | 2.501 | 117 | 41487 | 964.044 | ng/ml | 100 |
| 9) Naphthalene | 2.918 | 128 | 337347 | 918.877 | ng/ml# | 100 |
| 10) Hexachlorobutadiene | 2.991 | 225 | 71129 | 958.975 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.300 | 142 | 228281 | 970.842 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.355 | 142 | 212723 | 975.292 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.571 | 162 | 243331 | 977.307 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.764 | 165 | 27520 | 925.660 | ng/ml | 100 |
| 16) Acenaphthylene | 3.807 | 152 | 362824 | 1003.381 | ng/ml | 100 |
| 18) Acenaphthene | 3.904 | 153 | 253297 | 958.535 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL8.D
Acq On : 17 Sep 2024 07:17 pm
Operator : SV125:dv
Sample : IL8,32,,1000.0 ng/ml #10888
Misc : WG1973864,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:59:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:26 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.993 | 165 | 35048M4 | 934.785 | ng/ml | |
| 20) Fluorene | 4.195 | 166 | 283889 | 979.988 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.221 | 198 | 15031 | 939.941 | ng/ml | 100 |
| 24) Hexachlorobenzene | 4.512 | 284 | 111664 | 947.268 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.623 | 266 | 41614 | 963.208 | ng/ml | 100 |
| 26) Phenanthrene | 4.739 | 178 | 455141 | 957.786 | ng/ml | 100 |
| 27) Anthracene | 4.768 | 178 | 460662 | 977.070 | ng/ml | 100 |
| 28) Fluoranthene | 5.418 | 202 | 540307 | 1002.375 | ng/ml | 100 |
| 29) Pyrene | 5.546 | 202 | 578716 | 1017.625 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.264 | 228 | 597203 | 1018.478 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 6.250 | 252 | 204577 | 927.716 | ng/ml | 100 |
| 34) Chrysene | 6.288 | 228 | 565845 | 1004.381 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 6.291 | 149 | 177074 | 910.465 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 7.101 | 252 | 622091 | 1135.422 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.123 | 252 | 585428 | 1090.511 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.409 | 252 | 543223 | 1139.526 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.683 | 276 | 578966 | 1156.387 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.721 | 278 | 543468M6 | 992.650 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.022 | 276 | 576221 | 1111.374 | ng/ml | 100 |

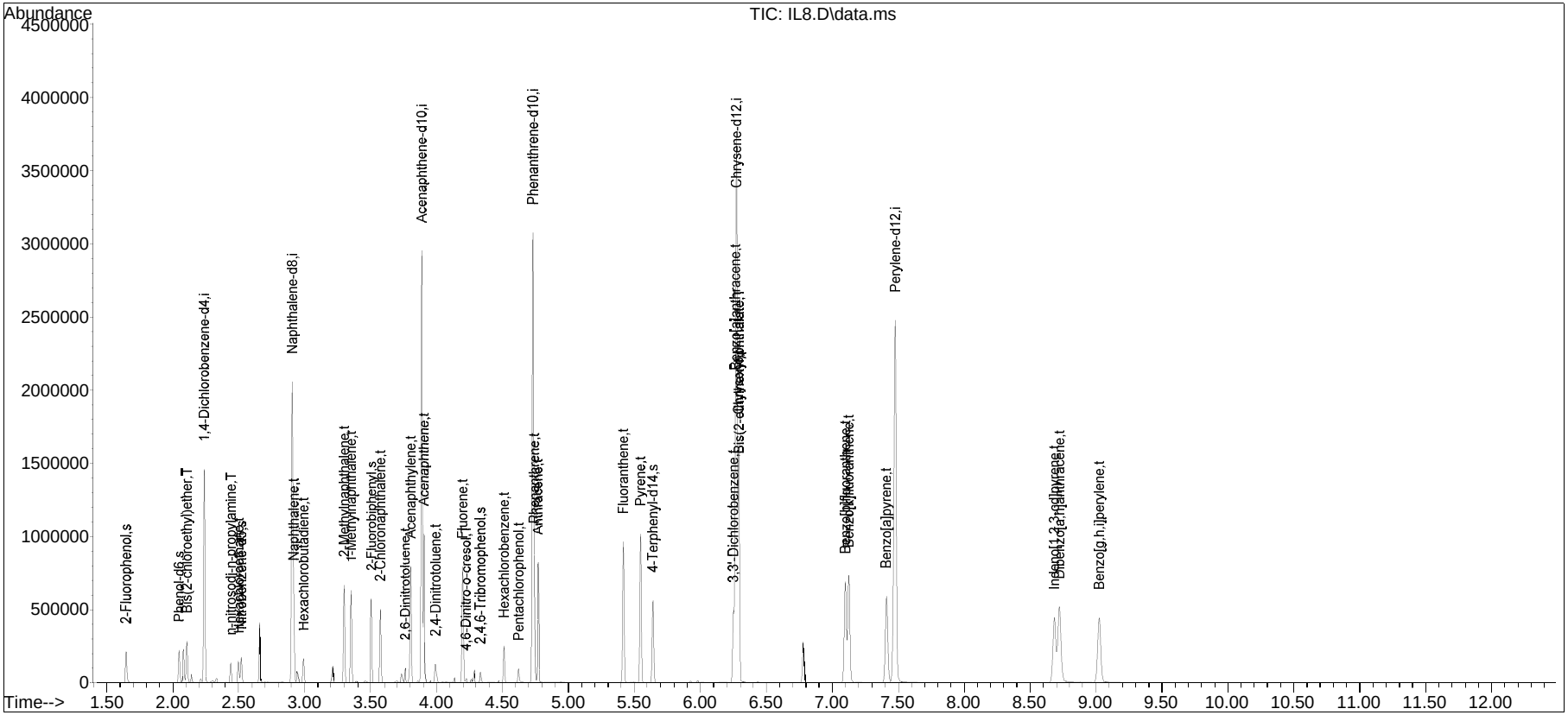
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL8.D
Acq On : 17 Sep 2024 07:17 pm
Operator : SV125:dv
Sample : IL8,32,,1000.0 ng/ml #10888
Misc : WG1973864,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:59:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:26 2024
Response via : Initial Calibration

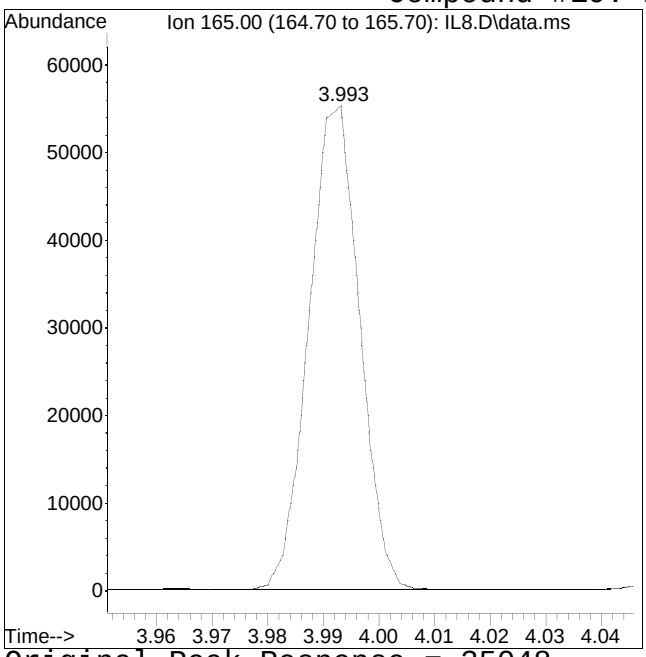
Sub List : Default - All compounds listedTical\IL8.D•



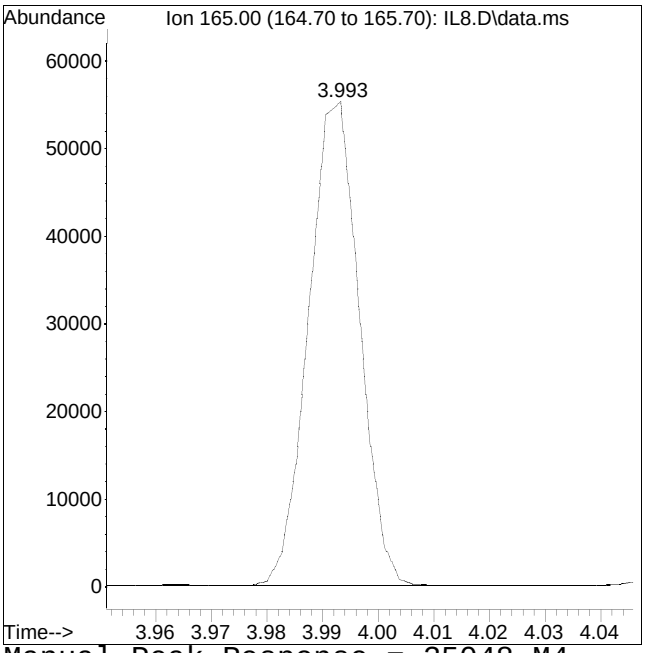
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL8.D Operator : SV125:dv
Date Inj'd : 9/17/2024 7:17 pm Instrument : SV125
Sample : IL8,32,,1000.0 ng/ml #1088Quant Date : 9/19/2024 1:56 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 35048



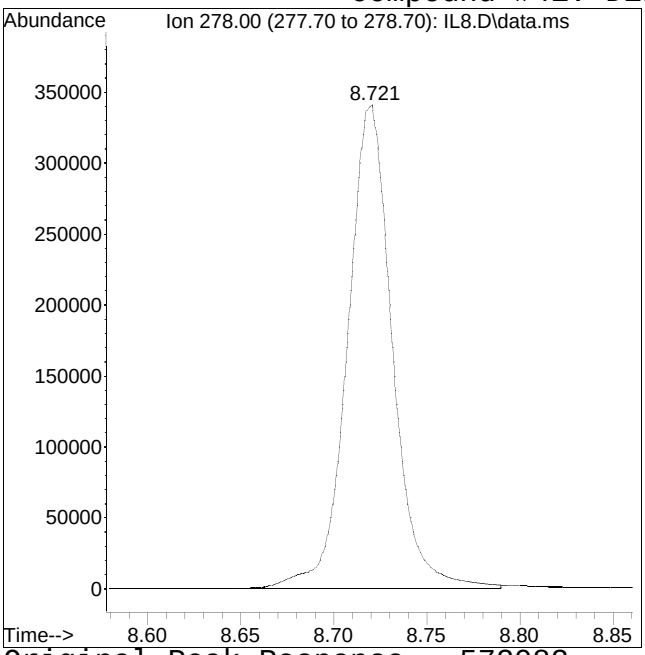

Manual Peak Response = 35048 M4

M4 = Poor automated baseline construction.

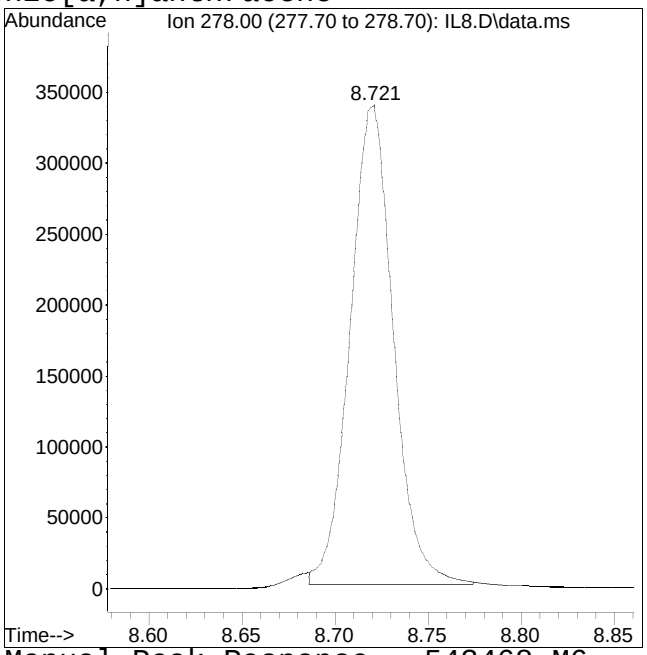
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL8.D
Date Inj'd : 9/17/2024 7:17 pm
Sample : IL8,32,,1000.0 ng/ml #1088
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 572082




Manual Peak Response = 543468 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL7.D
Acq On : 17 Sep 2024 07:33 pm
Operator : SV125:dv
Sample : IL7,32,,500.0 ng/ml #10889
Misc : WG1973864,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 19 13:59:01 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:20 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.241 | 152 | 409032 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 103.74% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1437308 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 104.27% | | | |
| 17) Acenaphthene-d10 | 3.889 | 164 | 909423 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 104.95% | | | |
| 22) Phenanthrene-d10 | 4.728 | 188 | 1937370 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 105.17% | | | |
| 31) Chrysene-d12 | 6.269 | 240 | 2017816 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 102.02% | | | |
| 36) Perylene-d12 | 7.472 | 264 | 2297096 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 98.10% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.648 | 112 | 50836 | 505.068 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 25.25% | | | |
| 3) Phenol-d6 | 2.047 | 99 | 61771 | 497.635 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 24.88% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 34058 | 533.468 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 53.35% | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 154107 | 505.999 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 50.60% | | | |
| 21) 2,4,6-Tribromophenol | 4.332 | 330 | 20602 | 521.775 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 26.09% | | | |
| 30) 4-Terphenyl-d14 | 5.638 | 244 | 204272 | 518.842 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 51.88% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 54920 | 497.922 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.441 | 70 | 37913 | 503.689 | ng/ml | 100 |
| 6) Hexachloroethane | 2.501 | 117 | 22469 | 503.282 | ng/ml | 98 |
| 9) Naphthalene | 2.918 | 128 | 181689 | 474.608 | ng/ml# | 100 |
| 10) Hexachlorobutadiene | 2.991 | 225 | 38144 | 493.188 | ng/ml | 99 |
| 11) 2-Methylnaphthalene | 3.300 | 142 | 123496 | 503.683 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.355 | 142 | 114732 | 504.464 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 131286 | 505.682 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.765 | 165 | 12858 | 439.234 | ng/ml | 98 |
| 16) Acenaphthylene | 3.807 | 152 | 194291 | 515.286 | ng/ml | 100 |
| 18) Acenaphthene | 3.905 | 153 | 137357 | 495.289 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL7.D
Acq On : 17 Sep 2024 07:33 pm
Operator : SV125:dv
Sample : IL7,32,,500.0 ng/ml #10889
Misc : WG1973864,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 19 13:59:01 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:20 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.991 | 165 | 16029M4 | 433.276 | ng/ml | |
| 20) Fluorene | 4.194 | 166 | 154935 | 509.626 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.223 | 198 | 7225 | 451.765 | ng/ml# | 83 |
| 24) Hexachlorobenzene | 4.514 | 284 | 62027 | 500.303 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.622 | 266 | 18407 | 422.230 | ng/ml | 100 |
| 26) Phenanthrene | 4.741 | 178 | 253139 | 506.493 | ng/ml | 100 |
| 27) Anthracene | 4.769 | 178 | 251289 | 506.768 | ng/ml | 100 |
| 28) Fluoranthene | 5.418 | 202 | 294496 | 519.471 | ng/ml | 100 |
| 29) Pyrene | 5.547 | 202 | 314661 | 526.087 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.264 | 228 | 315525 | 522.576 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 6.248 | 252 | 99013 | 452.747 | ng/ml | 100 |
| 34) Chrysene | 6.286 | 228 | 306428 | 533.122 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 6.288 | 149 | 81916 | 438.463 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 7.098 | 252 | 298393 | 555.142 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.120 | 252 | 315945 | 599.902 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.406 | 252 | 271606 | 580.761 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.680 | 276 | 274836 | 559.546 | ng/ml | 99 |
| 41) Dibenzo[a,h]anthracene | 8.715 | 278 | 274643M6 | 523.679 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.016 | 276 | 283894 | 558.135 | ng/ml | 100 |

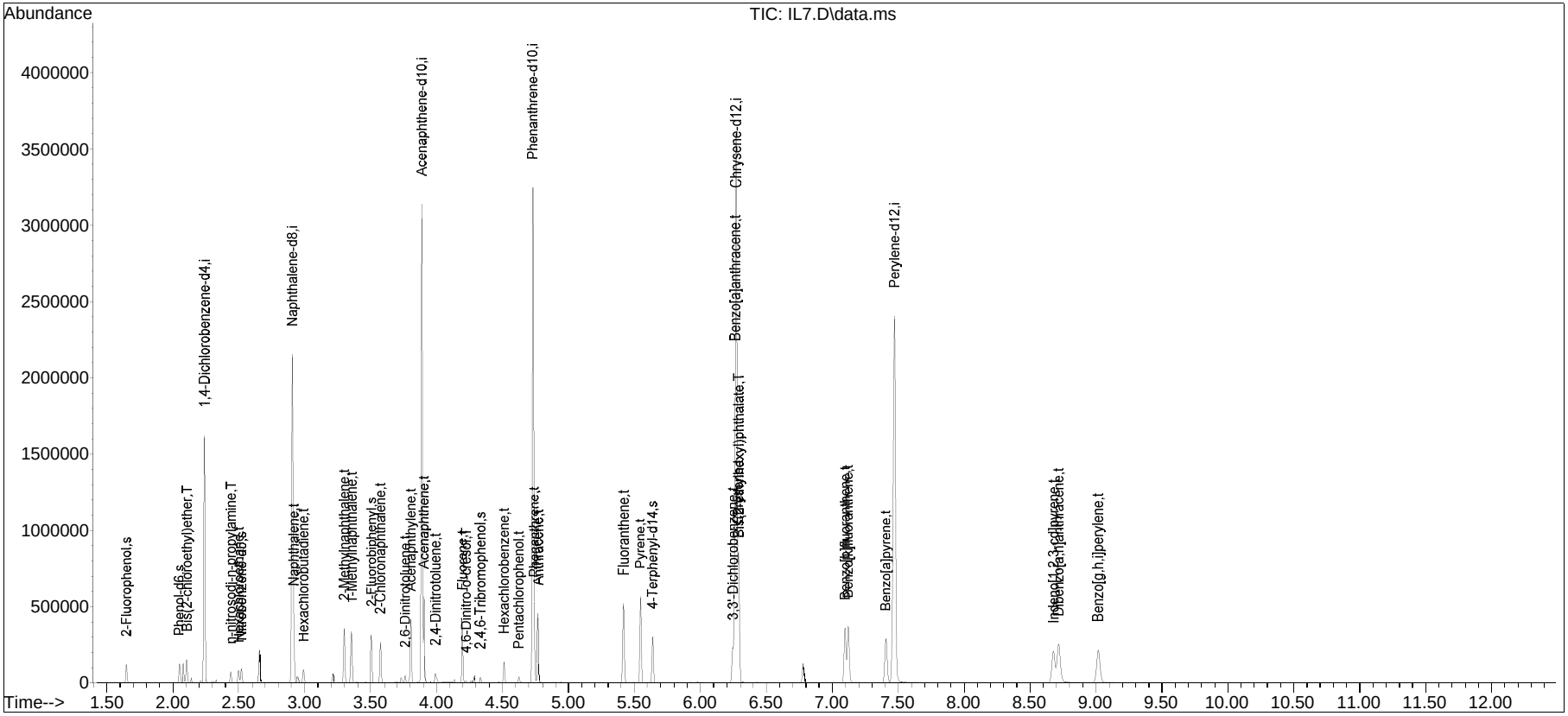
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL7.D
Acq On : 17 Sep 2024 07:33 pm
Operator : SV125:dv
Sample : IL7,32,,500.0 ng/ml #10889
Misc : WG1973864,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 19 13:59:01 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:20 2024
Response via : Initial Calibration

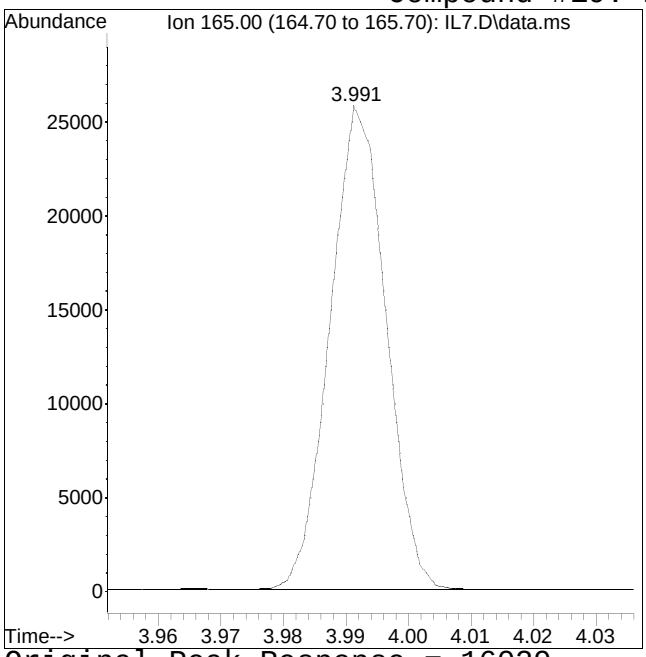
Sub List : Default - All compounds listedTical\IL8.D•



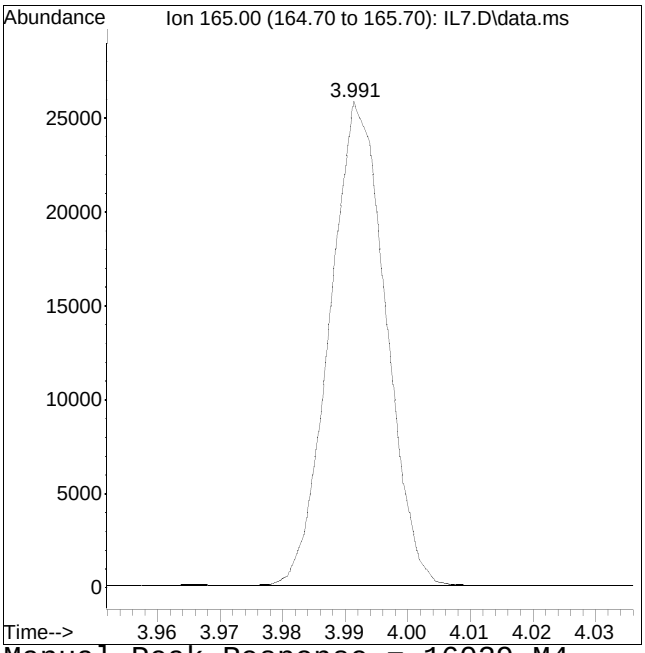
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL7.D Operator : SV125:dv
Date Inj'd : 9/17/2024 7:33 pm Instrument : SV125
Sample : IL7,32,,500.0 ng/ml #10889Quant Date : 9/19/2024 1:56 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 16029



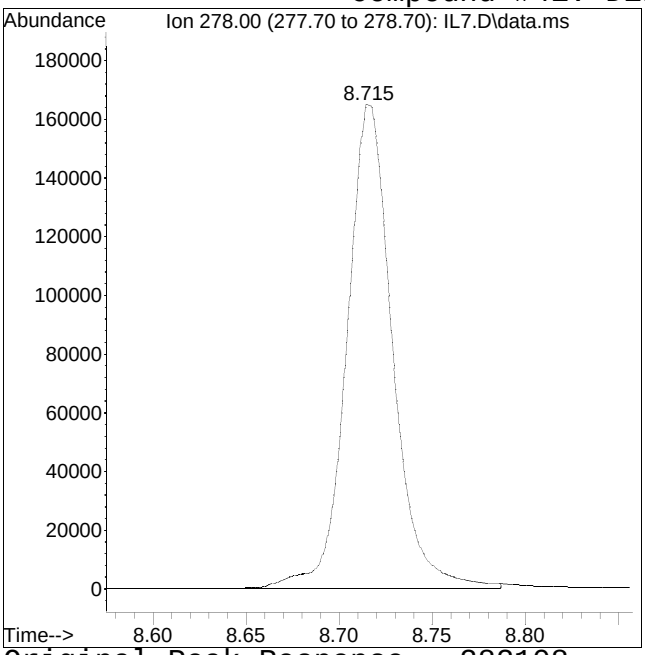

Manual Peak Response = 16029 M4

M4 = Poor automated baseline construction.

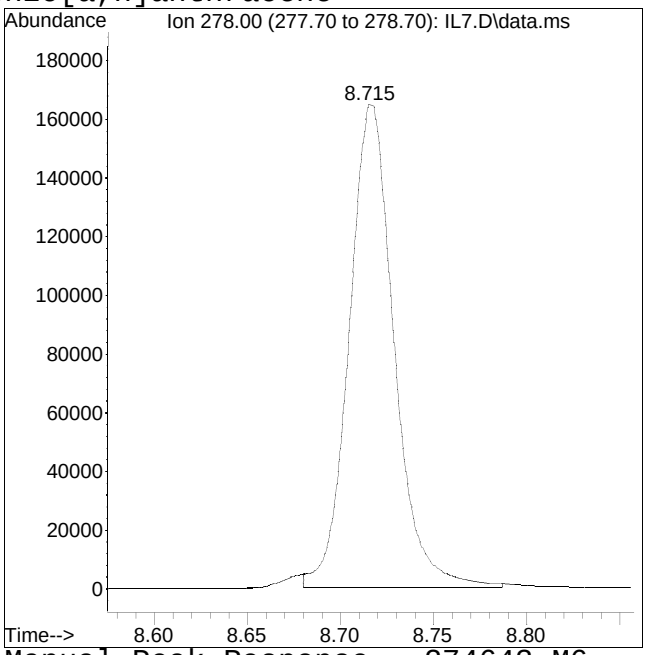
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL7.D
Date Inj'd : 9/17/2024 7:33 pm
Sample : IL7,32,,500.0 ng/ml #10889
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 282108




Manual Peak Response = 274643 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL6.D
Acq On : 17 Sep 2024 07:49 pm
Operator : SV125:dv
Sample : IL6,32,,100.0 ng/ml #10899
Misc : WG1973864,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:58:36 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:15 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.241 | 152 | 407561 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 103.37% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1389381 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 100.80% | | | |
| 17) Acenaphthene-d10 | 3.889 | 164 | 854117 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 98.56% | | | |
| 22) Phenanthrene-d10 | 4.730 | 188 | 1800028 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 97.72% | | | |
| 31) Chrysene-d12 | 6.270 | 240 | 1911355 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 96.64% | | | |
| 36) Perylene-d12 | 7.473 | 264 | 2231155 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 95.29% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.648 | 112 | 10266 | 102.363 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 5.12%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 12269 | 99.197 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 4.96%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 6396 | 100.545 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 10.05%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 30425 | 103.344 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 10.33%# | | | |
| 21) 2,4,6-Tribromophenol | 4.334 | 330 | 3435 | 92.629 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 4.63%# | | | |
| 30) 4-Terphenyl-d14 | 5.639 | 244 | 36784 | 100.559 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 10.06%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 11435 | 104.047 | ng/ml | 97 |
| 5) n-nitrosodi-n-propylamine | 2.444 | 70 | 7313 | 97.507 | ng/ml | 99 |
| 6) Hexachloroethane | 2.504 | 117 | 4489 | 100.912 | ng/ml | 99 |
| 9) Naphthalene | 2.918 | 128 | 36342 | 98.207 | ng/ml# | 99 |
| 10) Hexachlorobutadiene | 2.995 | 225 | 7667 | 102.551 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.300 | 142 | 24082 | 101.607 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.355 | 142 | 22465 | 102.184 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 25777 | 102.712 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.765 | 165 | 1972 | 91.077 | ng/ml | 97 |
| 16) Acenaphthylene | 3.807 | 152 | 36205 | 99.333 | ng/ml | 100 |
| 18) Acenaphthene | 3.905 | 153 | 26829 | 103.006 | ng/ml | 96 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL6.D
Acq On : 17 Sep 2024 07:49 pm
Operator : SV125:dv
Sample : IL6,32,,100.0 ng/ml #10899
Misc : WG1973864,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:58:36 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:15 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.994 | 165 | 2319M4 | 90.110 | ng/ml | |
| 20) Fluorene | 4.197 | 166 | 28973 | 101.471 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.222 | 198 | 1043 | 91.441 | ng/ml# | 69 |
| 24) Hexachlorobenzene | 4.513 | 284 | 11880 | 103.134 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.624 | 266 | 2517 | 70.061 | ng/ml | 100 |
| 26) Phenanthrene | 4.740 | 178 | 48841 | 105.180 | ng/ml | 95 |
| 27) Anthracene | 4.769 | 178 | 46731 | 101.432 | ng/ml | 100 |
| 28) Fluoranthene | 5.420 | 202 | 53018 | 100.656 | ng/ml | 100 |
| 29) Pyrene | 5.548 | 202 | 55887 | 100.568 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.262 | 228 | 59727 | 96.383 | ng/ml | 98 |
| 33) 3,3'-Dichlorobenzene | 6.248 | 252 | 15190 | 93.498 | ng/ml | 99 |
| 34) Chrysene | 6.286 | 228 | 58964 | 108.299 | ng/ml | 99 |
| 35) Bis(2-ethylhexyl)phtha... | 6.289 | 149 | 10642M6 | 87.014 | ng/ml | |
| 37) Benzo[b]fluoranthene | 7.096 | 252 | 51332 | 98.323 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.121 | 252 | 53445 | 104.478 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.407 | 252 | 45443 | 100.040 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.678 | 276 | 46609 | 97.697 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.715 | 278 | 46602M6 | 94.122 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.017 | 276 | 50214 | 101.638 | ng/ml | 99 |

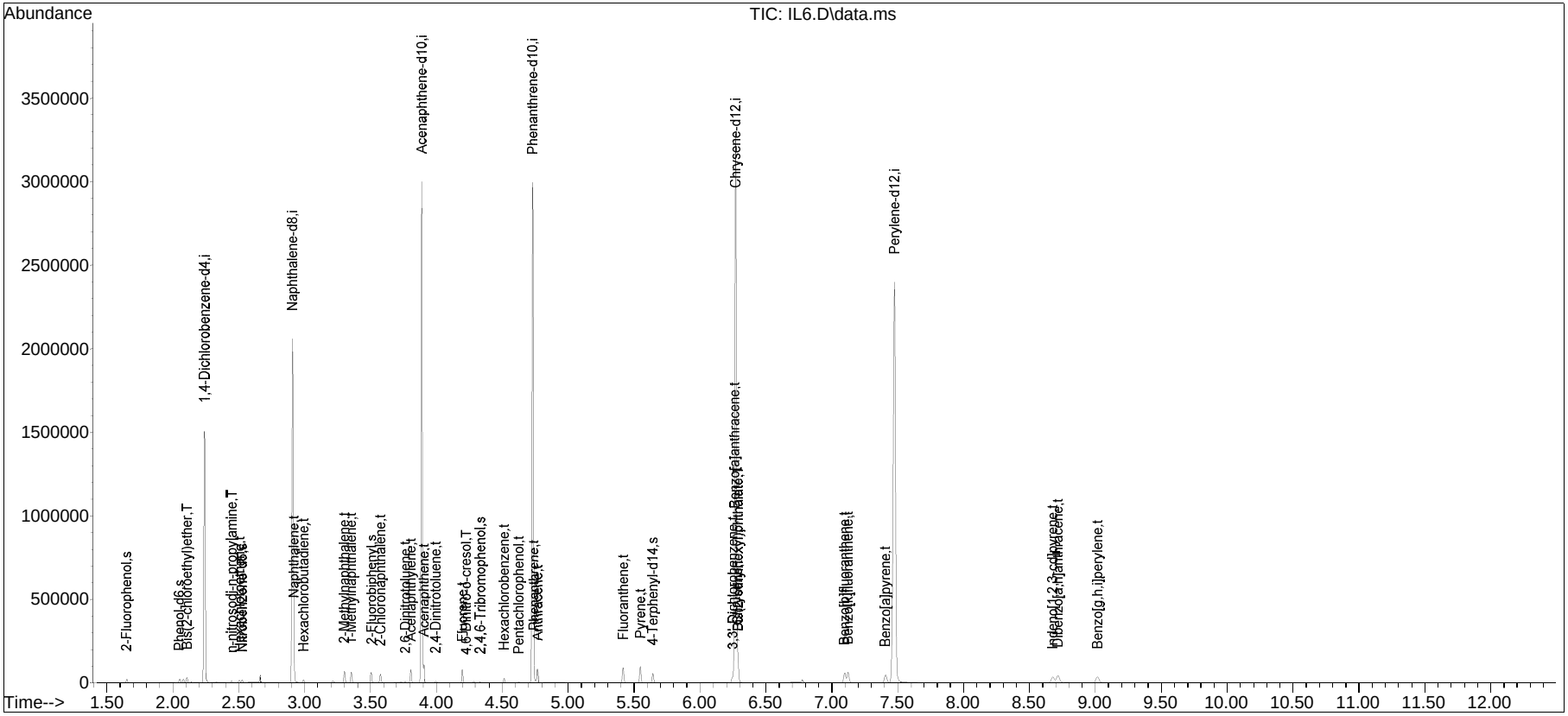
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL6.D
Acq On : 17 Sep 2024 07:49 pm
Operator : SV125:dv
Sample : IL6,32,,100.0 ng/ml #10899
Misc : WG1973864,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:58:36 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:56:15 2024
Response via : Initial Calibration

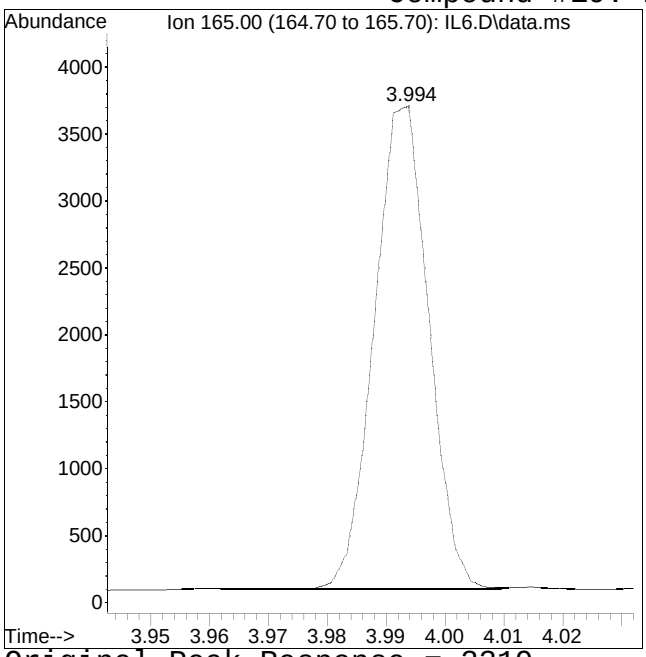
Sub List : Default - All compounds listedTical\IL8.D•



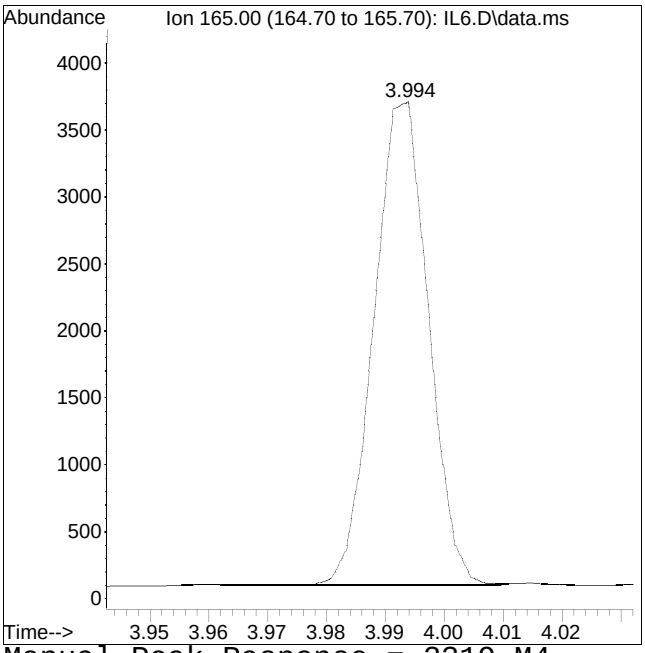
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL6.D
Date Inj'd : 9/17/2024 7:49 pm
Sample : IL6,32,,100.0 ng/ml #10899
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 2319



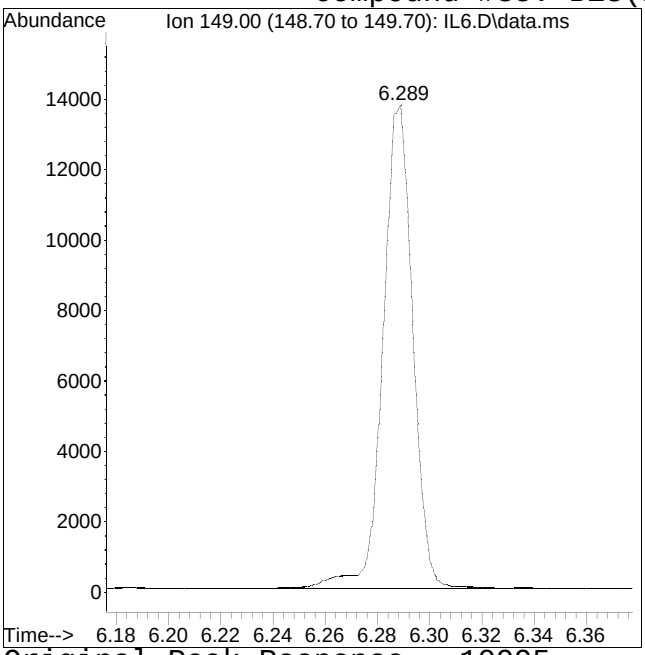

Manual Peak Response = 2319 M4

M4 = Poor automated baseline construction.

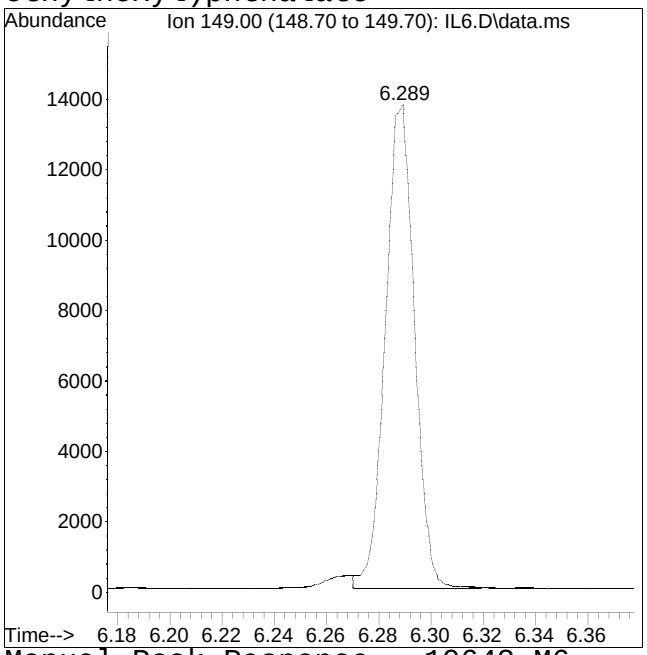
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL6.D
Date Inj'd : 9/17/2024 7:49 pm
Sample : IL6,32,,100.0 ng/ml #10899
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #35: Bis(2-ethylhexyl)phthalate




Original Peak Response = 10995



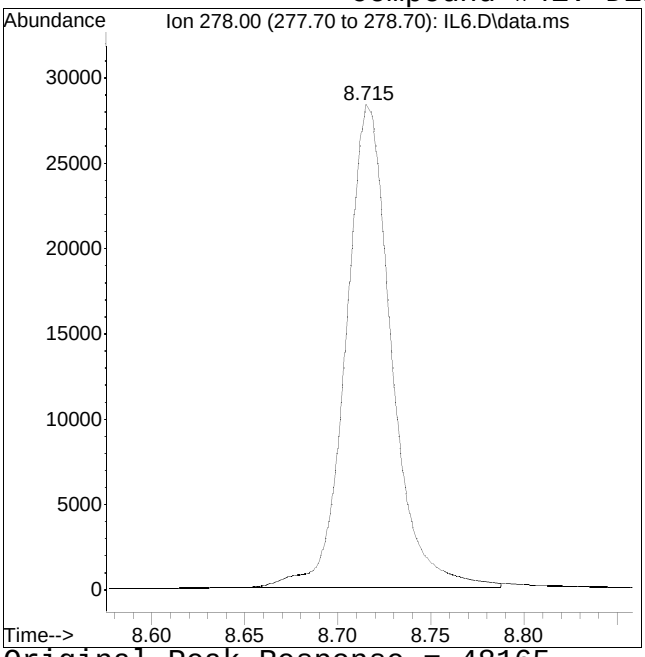

Manual Peak Response = 10642 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

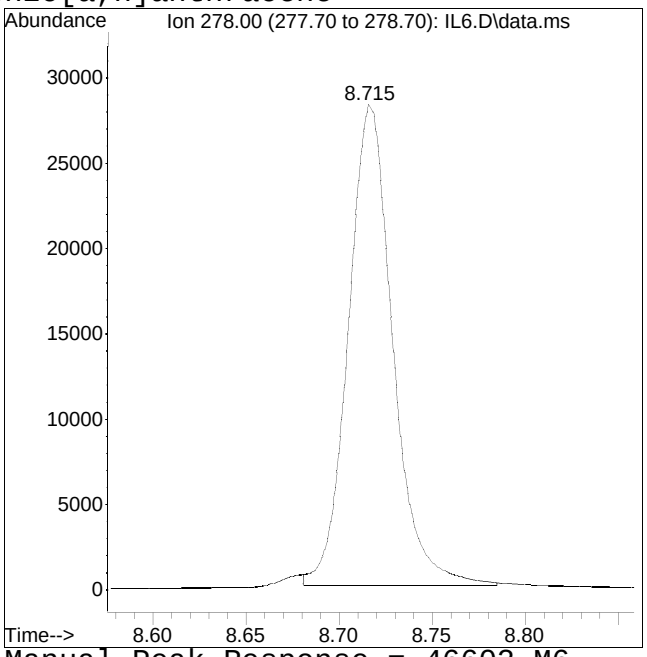
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL6.D
Date Inj'd : 9/17/2024 7:49 pm
Sample : IL6,32,,100.0 ng/ml #10899
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 1:56 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 48165




Manual Peak Response = 46602 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL5.D
Acq On : 17 Sep 2024 08:05 pm
Operator : SV125:dv
Sample : IL5,32,,40.0 ng/ml #10891
Misc : WG1973864,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:58:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:55:39 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 409922 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 103.97% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1414147 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 102.59% | | | |
| 17) Acenaphthene-d10 | 3.889 | 164 | 870430 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 100.45% | | | |
| 22) Phenanthrene-d10 | 4.728 | 188 | 1829454 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 99.32% | | | |
| 31) Chrysene-d12 | 6.271 | 240 | 1931812 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 97.68% | | | |
| 36) Perylene-d12 | 7.474 | 264 | 2201815 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 94.03% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.648 | 112 | 3927 | 38.931 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 1.95%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 4778 | 38.409 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 1.92%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 2404 | 37.573 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 3.76%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 11995 | 40.030 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 4.00%# | | | |
| 21) 2,4,6-Tribromophenol | 4.331 | 330 | 1283 | 33.949 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 1.70%# | | | |
| 30) 4-Terphenyl-d14 | 5.639 | 244 | 14239 | 38.300 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 3.83%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 4342 | 39.280 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.444 | 70 | 2827 | 37.476 | ng/ml | 99 |
| 6) Hexachloroethane | 2.504 | 117 | 1764 | 39.426 | ng/ml | 98 |
| 9) Naphthalene | 2.921 | 128 | 14381 | 38.181 | ng/ml# | 98 |
| 10) Hexachlorobutadiene | 2.994 | 225 | 3032 | 39.845 | ng/ml | 98 |
| 11) 2-Methylnaphthalene | 3.300 | 142 | 9460 | 39.215 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.355 | 142 | 8826 | 39.443 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 10063 | 39.395 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.765 | 165 | 745 | 48.846 | ng/ml | 97 |
| 16) Acenaphthylene | 3.807 | 152 | 14108 | 38.029 | ng/ml | 99 |
| 18) Acenaphthene | 3.907 | 153 | 10542 | 39.716 | ng/ml | 94 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL5.D
Acq On : 17 Sep 2024 08:05 pm
Operator : SV125:dv
Sample : IL5,32,,40.0 ng/ml #10891
Misc : WG1973864,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:58:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:55:39 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.994 | 165 | 856M4 | 49.381 | ng/ml | |
| 20) Fluorene | 4.198 | 166 | 11177 | 38.411 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.227 | 198 | 371 | 47.557 | ng/ml# | 65 |
| 24) Hexachlorobenzene | 4.514 | 284 | 4561 | 38.959 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.625 | 266 | 1290 | 39.250 | ng/ml | 99 |
| 26) Phenanthrene | 4.741 | 178 | 19596M4 | 41.522 | ng/ml | |
| 27) Anthracene | 4.769 | 178 | 18031 | 38.508 | ng/ml | 100 |
| 28) Fluoranthene | 5.419 | 202 | 20293 | 37.907 | ng/ml | 100 |
| 29) Pyrene | 5.547 | 202 | 21176 | 37.493 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.263 | 228 | 26497 | 36.663 | ng/ml | 96 |
| 33) 3,3'-Dichlorobenzene | 6.246 | 252 | 5286 | 47.974 | ng/ml | 98 |
| 34) Chrysene | 6.284 | 228 | 22515 | 40.915 | ng/ml | 98 |
| 35) Bis(2-ethylhexyl)phtha... | 6.287 | 149 | 3903M6 | 50.736 | ng/ml | |
| 37) Benzo[b]fluoranthene | 7.097 | 252 | 18237 | 35.397 | ng/ml | 97 |
| 38) Benzo[k]fluoranthene | 7.119 | 252 | 19048M4 | 37.733 | ng/ml | |
| 39) Benzo[a]pyrene | 7.405 | 252 | 16017 | 35.730 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.675 | 276 | 15972 | 33.925 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.716 | 278 | 15625M6 | 32.585 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.015 | 276 | 17450 | 35.791 | ng/ml | 99 |

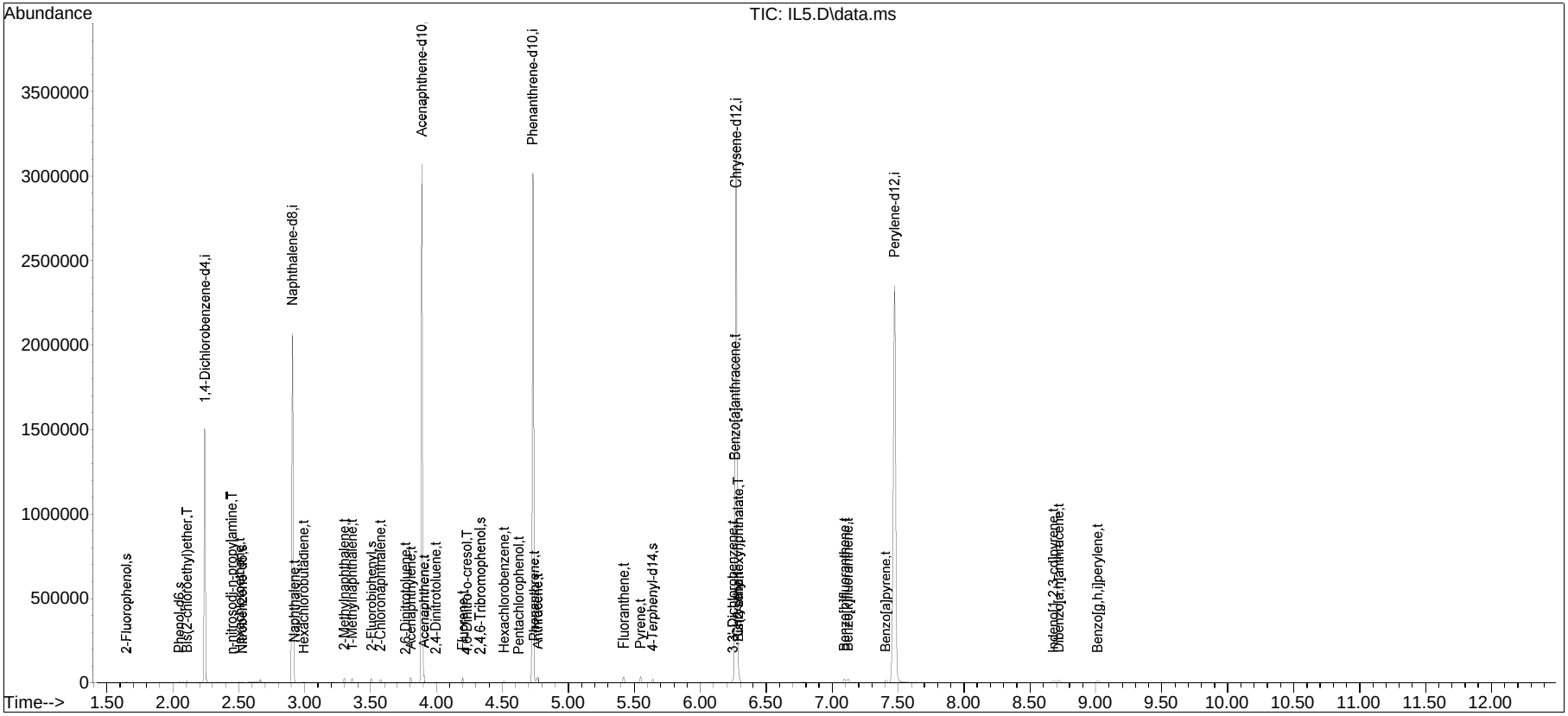
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL5.D
Acq On : 17 Sep 2024 08:05 pm
Operator : SV125:dv
Sample : IL5,32,,40.0 ng/ml #10891
Misc : WG1973864,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:58:14 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 13:55:39 2024
Response via : Initial Calibration

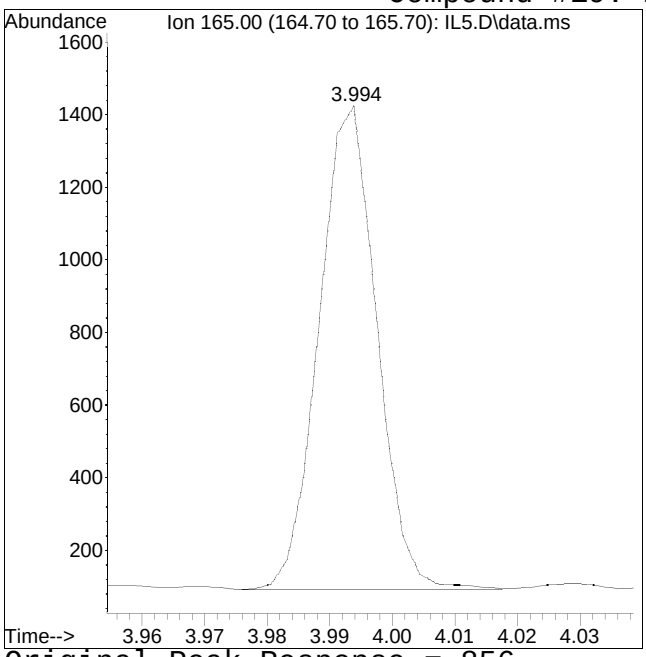
Sub List : Default - All compounds listedTical\IL8.D•



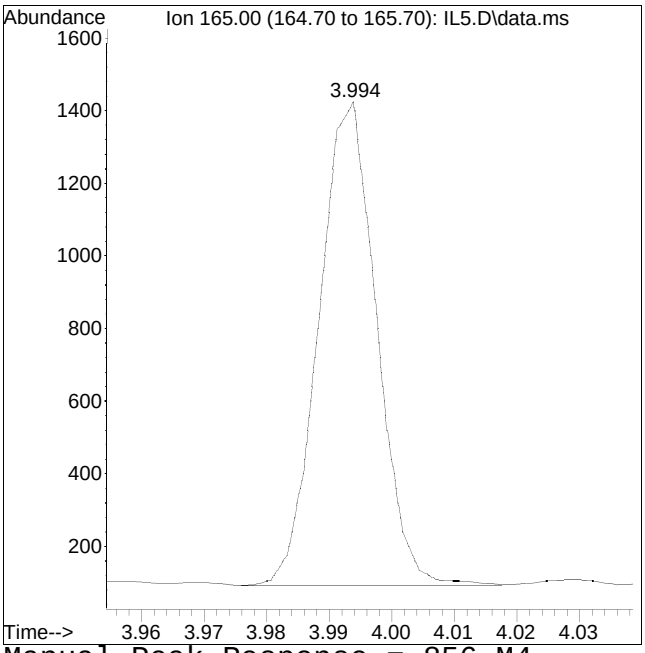
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL5.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:05 pm Instrument : SV125
Sample : IL5,32,,40.0 ng/ml #10891 Quant Date : 9/19/2024 1:55 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 856



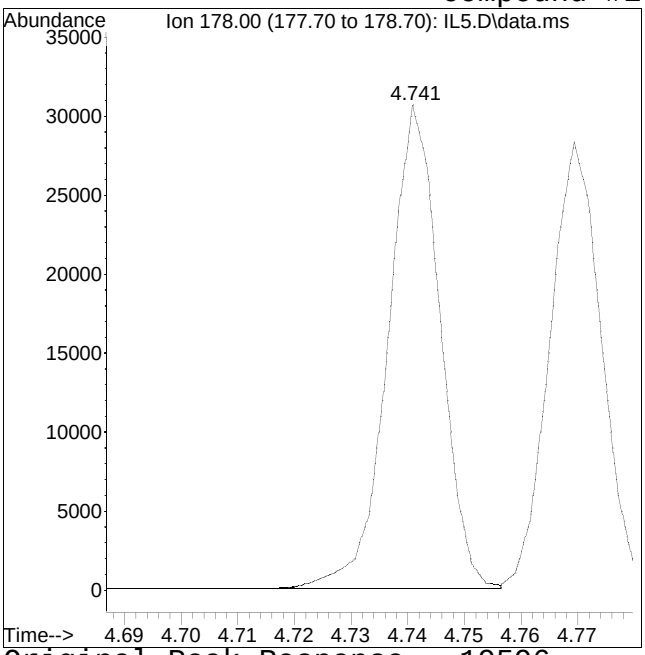

Manual Peak Response = 856 M4

M4 = Poor automated baseline construction.

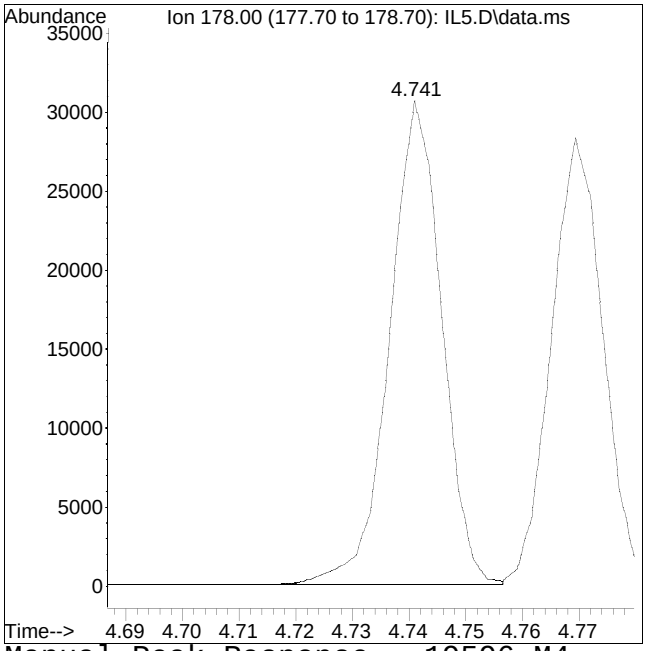
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL5.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:05 pm Instrument : SV125
Sample : IL5,32,,40.0 ng/ml #10891 Quant Date : 9/19/2024 1:55 pm

## Compound #26: Phenanthrene




Original Peak Response = 19596



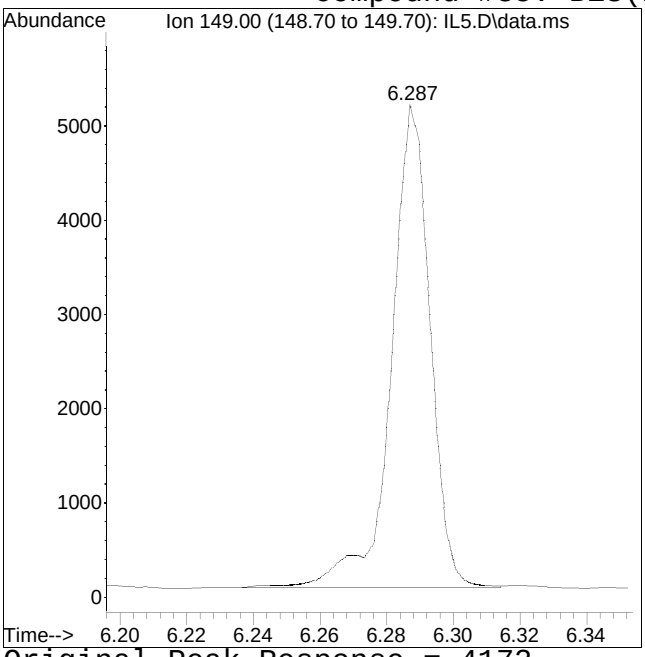

Manual Peak Response = 19596 M4

M4 = Poor automated baseline construction.

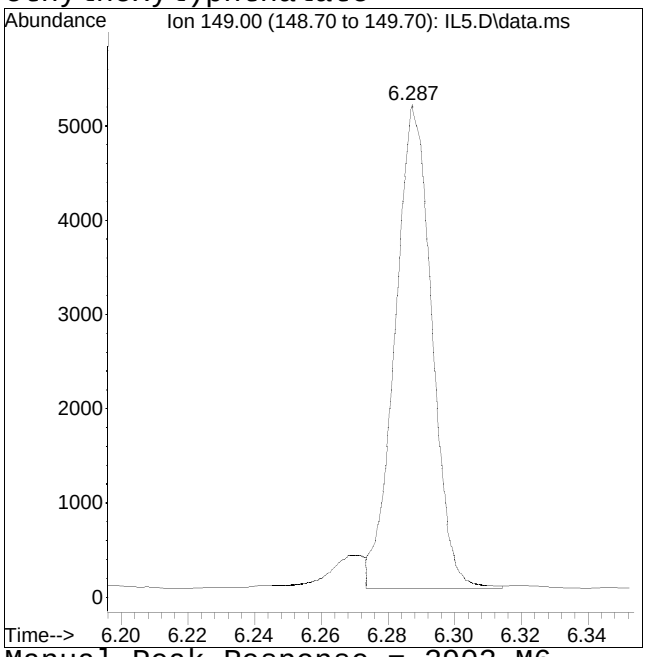
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL5.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:05 pm Instrument : SV125
Sample : IL5,32,,40.0 ng/ml #10891 Quant Date : 9/19/2024 1:55 pm

Compound #35: Bis(2-ethylhexyl)phthalate




Original Peak Response = 4172



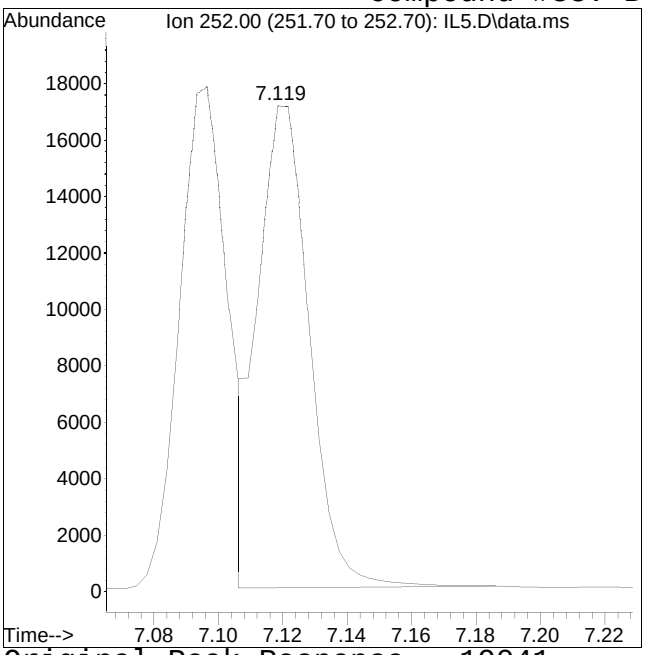

Manual Peak Response = 3903 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

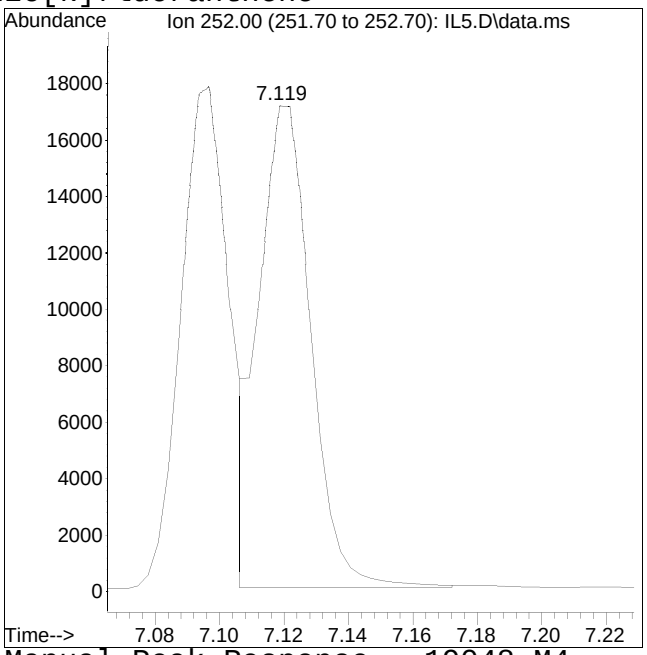
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL5.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:05 pm Instrument : SV125
Sample : IL5,32,,40.0 ng/ml #10891 Quant Date : 9/19/2024 1:55 pm

## Compound #38: Benzo[k]fluoranthene




Original Peak Response = 19041



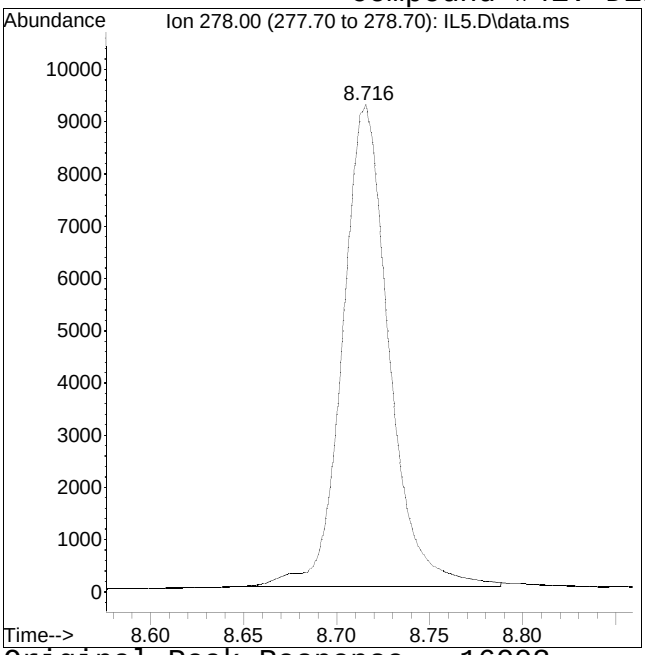

Manual Peak Response = 19048 M4

M4 = Poor automated baseline construction.

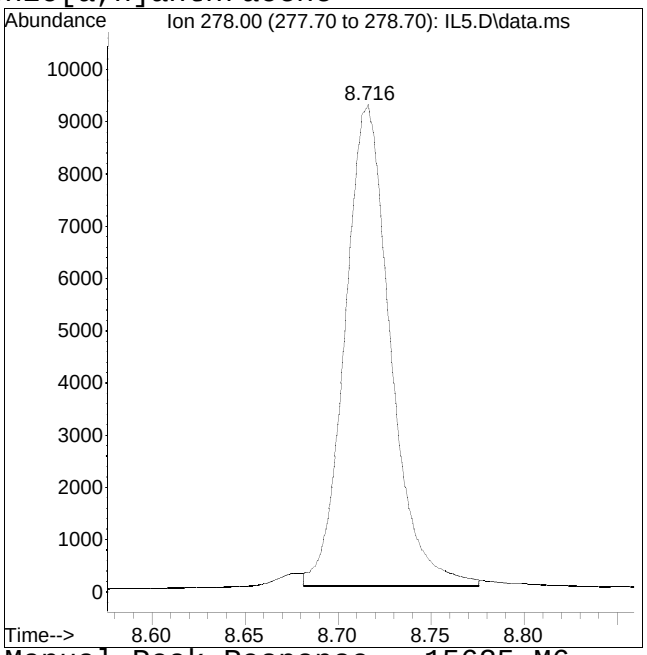
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL5.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:05 pm Instrument : SV125
Sample : IL5,32,,40.0 ng/ml #10891 Quant Date : 9/19/2024 1:55 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 16003




Manual Peak Response = 15625 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL4.D
Acq On : 17 Sep 2024 08:21 pm
Operator : SV125:dv
Sample : IL4,32,,10.0 ng/ml #10892
Misc : WG1973864,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:38:31 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 408999 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 103.73% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1402083 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 101.72% | | | |
| 17) Acenaphthene-d10 | 3.890 | 164 | 863372 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 99.63% | | | |
| 22) Phenanthrene-d10 | 4.731 | 188 | 1811338 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 98.33% | | | |
| 31) Chrysene-d12 | 6.271 | 240 | 1910494 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 96.60% | | | |
| 36) Perylene-d12 | 7.471 | 264 | 2201398 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 94.02% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.651 | 112 | 998 | 9.916 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.50%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 1179 | 9.499 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.47%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 616 | 9.650 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.97%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 2990 | 10.064 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 1.01%# | | | |
| 21) 2,4,6-Tribromophenol | 4.334 | 330 | 303 | 8.083 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.40%# | | | |
| 30) 4-Terphenyl-d14 | 5.640 | 244 | 3464 | 9.411 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.94%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.108 | 93 | 1095 | 9.928 | ng/ml | 98 |
| 5) n-nitrosodi-n-propylamine | 2.444 | 70 | 746 | 9.912 | ng/ml | 100 |
| 6) Hexachloroethane | 2.504 | 117 | 457 | 10.237 | ng/ml | 96 |
| 9) Naphthalene | 2.921 | 128 | 3748 | 10.036 | ng/ml# | 93 |
| 10) Hexachlorobutadiene | 2.994 | 225 | 780 | 10.338 | ng/ml | 99 |
| 11) 2-Methylnaphthalene | 3.301 | 142 | 2392 | 10.001 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 3.356 | 142 | 2214 | 9.979 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 2554 | 10.085 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.766 | 165 | 193 | 30.366 | ng/ml | 93 |
| 16) Acenaphthylene | 3.808 | 152 | 3547 | 9.643 | ng/ml | 99 |
| 18) Acenaphthene | 3.905 | 153 | 2697M6 | 10.244 | ng/ml | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL4.D
Acq On : 17 Sep 2024 08:21 pm
Operator : SV125:dv
Sample : IL4,32,,10.0 ng/ml #10892
Misc : WG1973864,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:38:31 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:32:01 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.995 | 165 | 199M4 | 31.612 | ng/ml | |
| 20) Fluorene | 4.197 | 166 | 2790 | 9.667 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | d | |
| 24) Hexachlorobenzene | 4.514 | 284 | 1165 | 10.051 | ng/ml | 99 |
| 25) Pentachlorophenol | 4.627 | 266 | 269M6 | 14.428 | ng/ml | |
| 26) Phenanthrene | 4.741 | 178 | 4703M6 | 10.065 | ng/ml | |
| 27) Anthracene | 4.769 | 178 | 4475 | 9.653 | ng/ml | 99 |
| 28) Fluoranthene | 5.417 | 202 | 5044 | 9.516 | ng/ml | 100 |
| 29) Pyrene | 5.546 | 202 | 5249 | 9.387 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.268 | 228 | 10775 | 9.154 | ng/ml# | 85 |
| 33) 3,3'-Dichlorobenzene | 6.247 | 252 | 1242 | 29.749 | ng/ml | 99 |
| 34) Chrysene | 6.285 | 228 | 5751 | 10.568 | ng/ml | 99 |
| 35) Bis(2-ethylhexyl)phtha... | 6.287 | 149 | 991M4 | 44.579 | ng/ml | |
| 37) Benzo[b]fluoranthene | 7.094 | 252 | 4508 | 8.751 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.119 | 252 | 4521 | 8.957 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.405 | 252 | 3831 | 8.548 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 8.676 | 276 | 3911 | 8.309 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.713 | 278 | 3548M6 | 8.002 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.015 | 276 | 4160 | 8.534 | ng/ml | 99 |

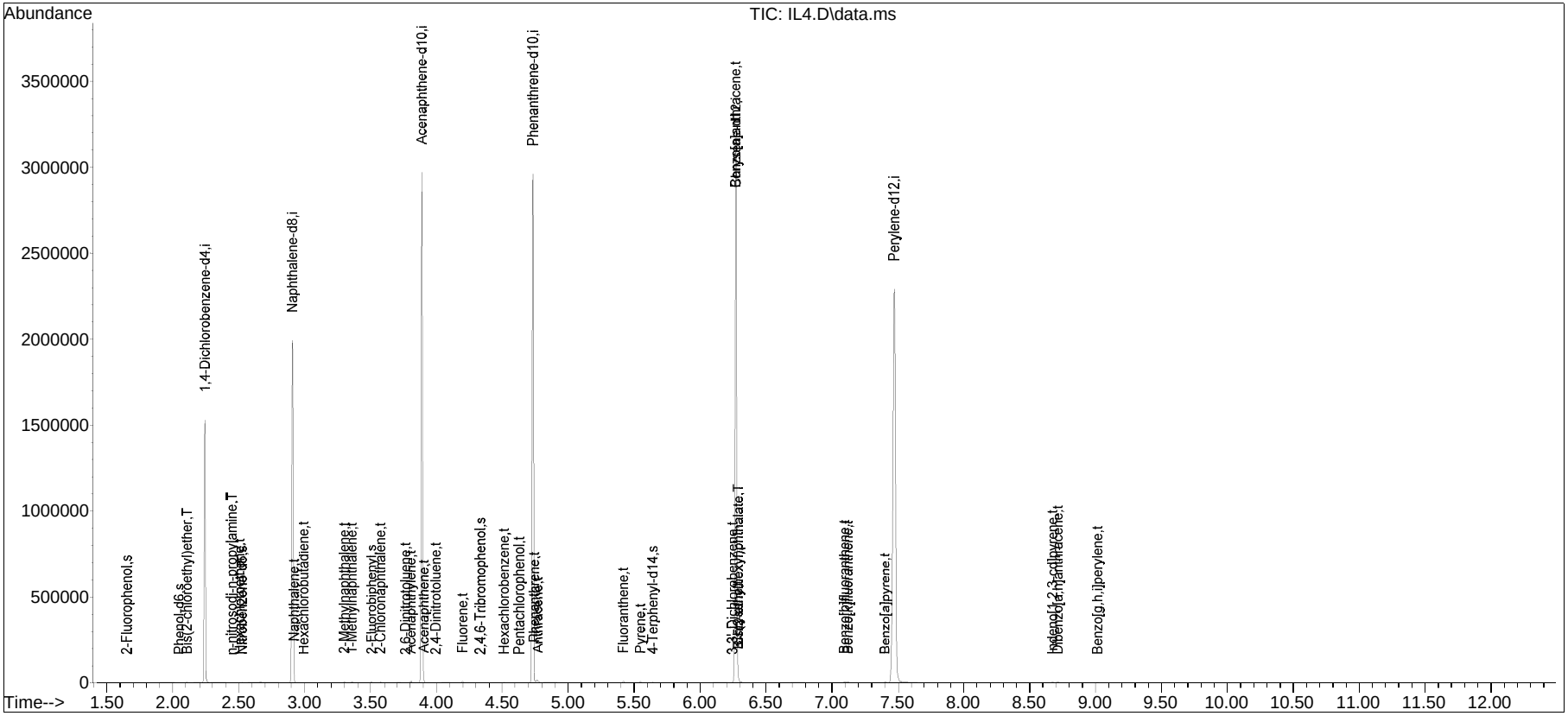
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL4.D
Acq On : 17 Sep 2024 08:21 pm
Operator : SV125:dv
Sample : IL4,32,,10.0 ng/ml #10892
Misc : WG1973864,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:38:31 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:32:01 2024
Response via : Initial Calibration

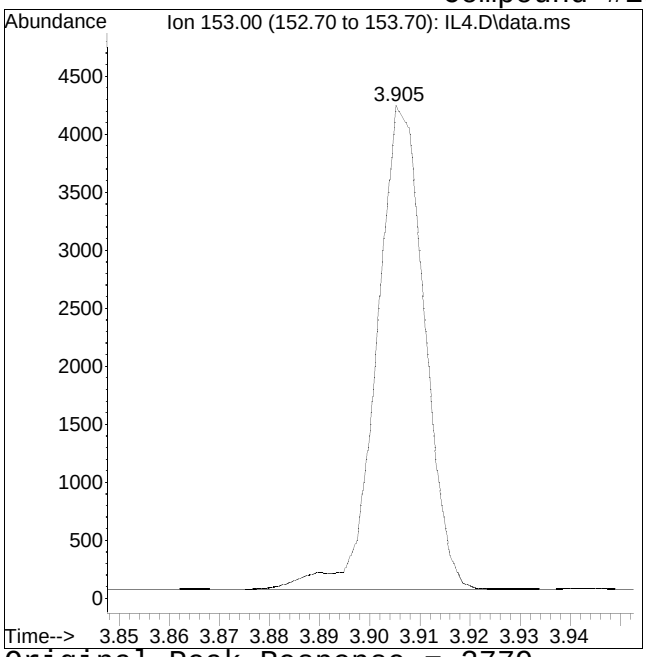
Sub List : Default - All compounds listedTical\IL8.D•



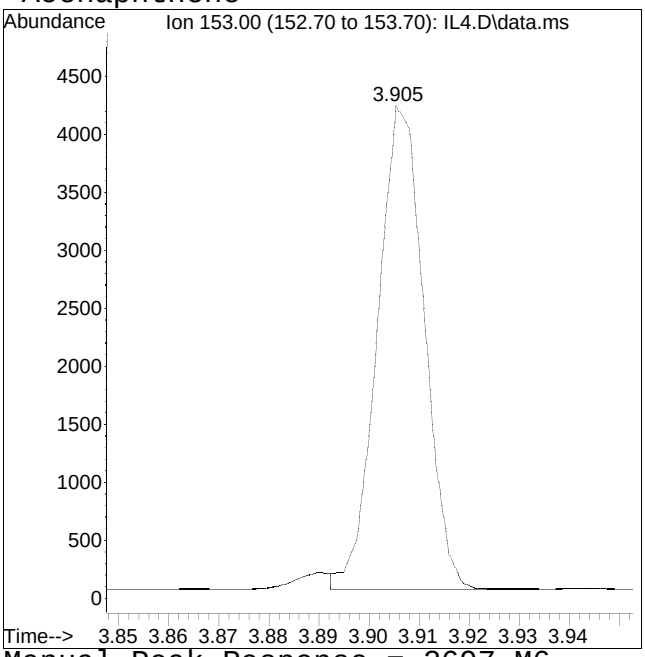
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL4.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:21 pm Instrument : SV125
Sample : IL4,32,,10.0 ng/ml #10892 Quant Date : 9/18/2024 11:32 am

## Compound #18: Acenaphthene




Original Peak Response = 2779




Manual Peak Response = 2697 M6

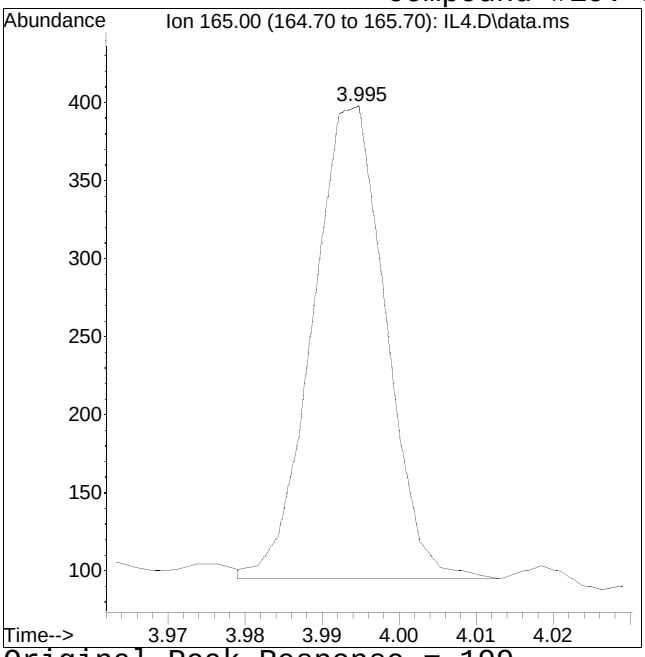
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

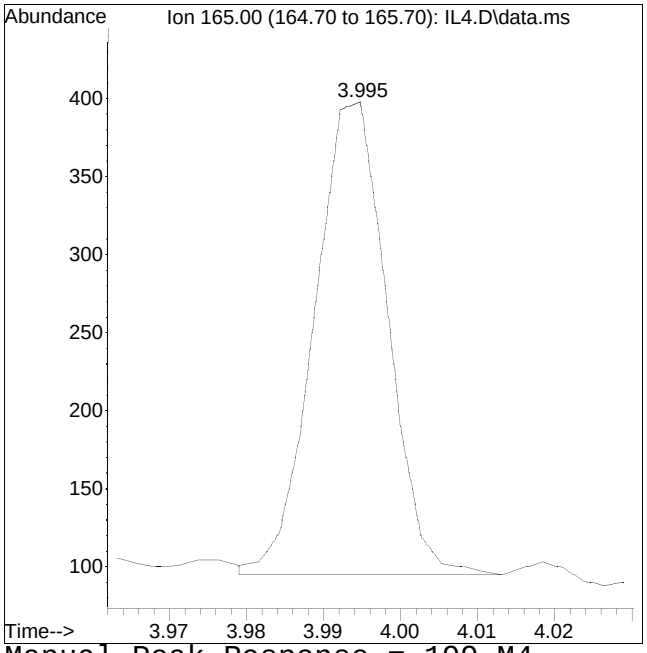
Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL4.D
Date Inj'd : 9/17/2024 8:21 pm
Sample : IL4,32,,10.0 ng/ml #10892

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/18/2024 11:32 am

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 199



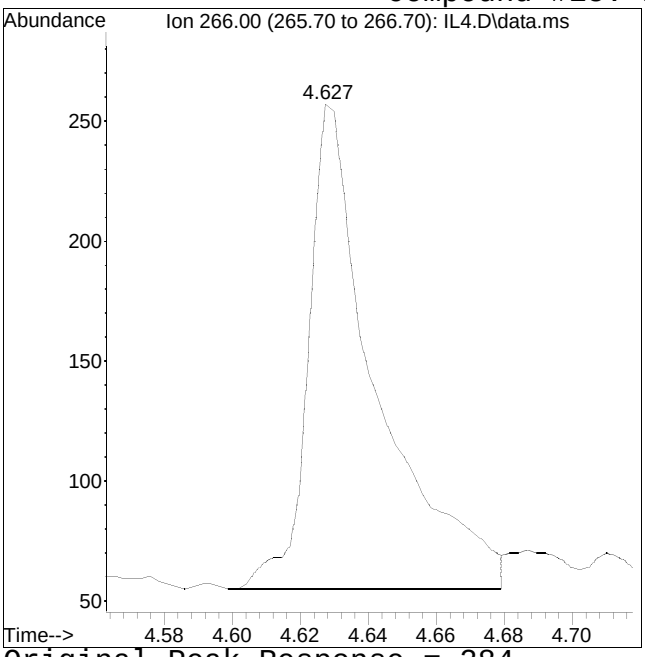

Manual Peak Response = 199 M4

M4 = Poor automated baseline construction.

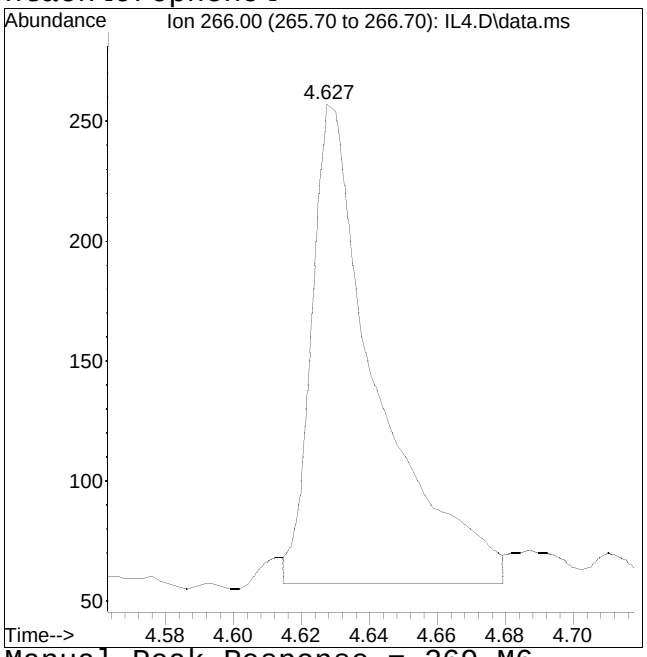
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL4.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:21 pm Instrument : SV125
Sample : IL4,32,,10.0 ng/ml #10892 Quant Date : 9/18/2024 11:32 am

## Compound #25: Pentachlorophenol




Original Peak Response = 284



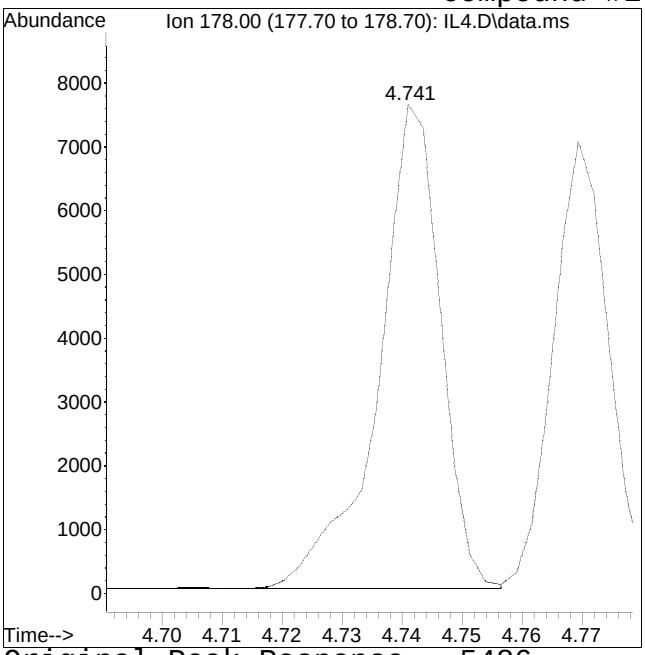

Manual Peak Response = 269 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

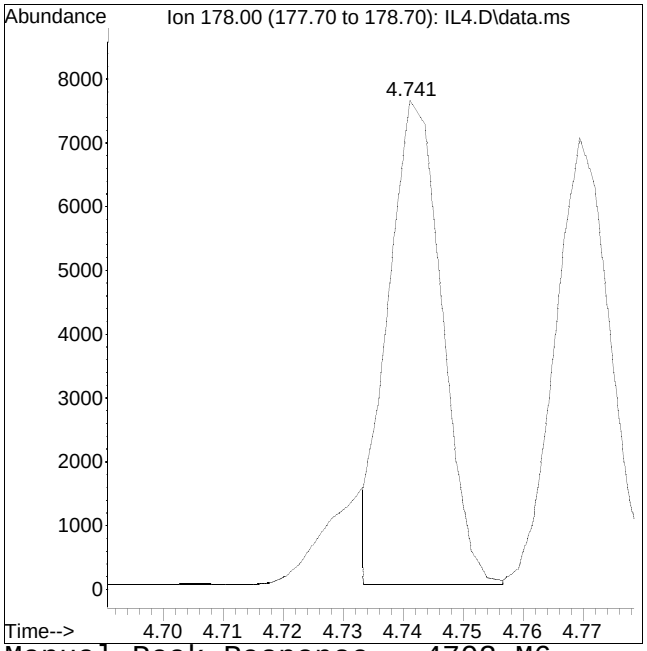
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL4.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:21 pm Instrument : SV125
Sample : IL4,32,,10.0 ng/ml #10892 Quant Date : 9/18/2024 11:32 am

## Compound #26: Phenanthrene




Original Peak Response = 5486



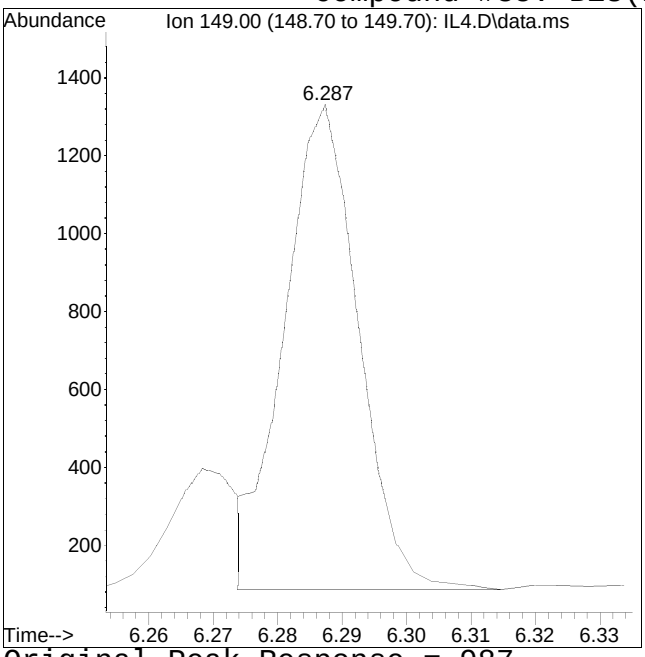

Manual Peak Response = 4703 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

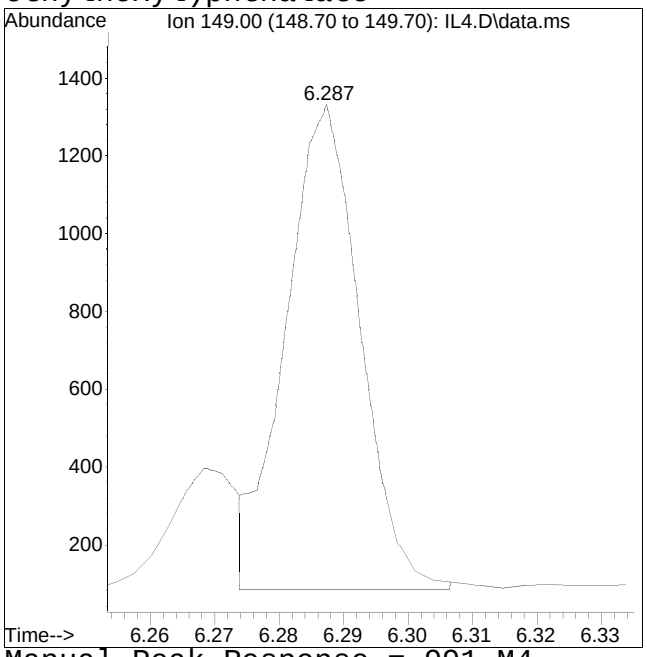
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL4.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:21 pm Instrument : SV125
Sample : IL4,32,,10.0 ng/ml #10892 Quant Date : 9/18/2024 11:32 am

## Compound #35: Bis(2-ethylhexyl)phthalate




Original Peak Response = 987



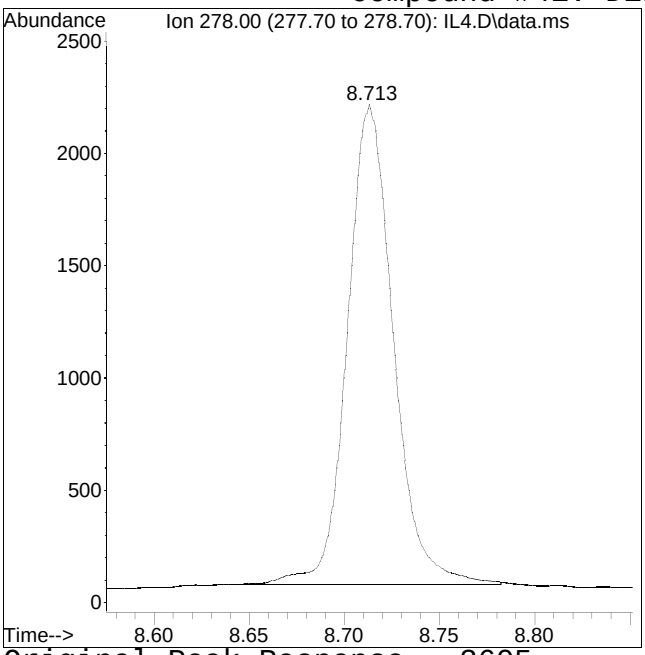

Manual Peak Response = 991 M4

M4 = Poor automated baseline construction.

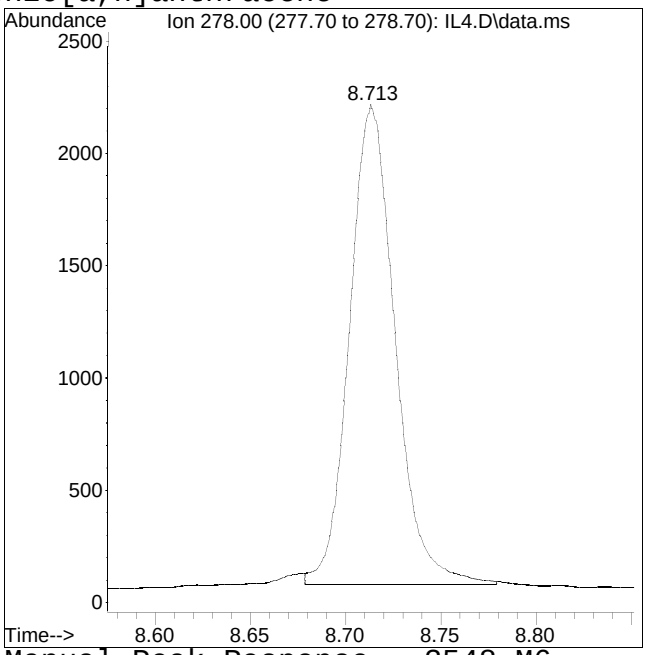
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL4.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:21 pm Instrument : SV125
Sample : IL4,32,,10.0 ng/ml #10892 Quant Date : 9/18/2024 11:32 am

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 3605




Manual Peak Response = 3548 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL3.D
Acq On : 17 Sep 2024 08:37 pm
Operator : SV125:dv
Sample : IL3,32,,5.0 ng/ml #10893
Misc : WG1973864,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:36:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:57 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 400513 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 101.58% | | | |
| 8) Naphthalene-d8 | 2.908 | 136 | 1373907 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 99.67% | | | |
| 17) Acenaphthene-d10 | 3.889 | 164 | 835994 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 96.47% | | | |
| 22) Phenanthrene-d10 | 4.729 | 188 | 1761868 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 95.65% | | | |
| 31) Chrysene-d12 | 6.271 | 240 | 1855639 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 93.82% | | | |
| 36) Perylene-d12 | 7.474 | 264 | 2119002 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 90.50% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.648 | 112 | 502 | 5.094 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.25%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 560 | 4.607 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.23%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 289 | 4.623 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.46%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 1473 | 5.060 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.51%# | | | |
| 21) 2,4,6-Tribromophenol | 4.334 | 330 | 172 | 4.739 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.24%# | | | |
| 30) 4-Terphenyl-d14 | 5.640 | 244 | 1688 | 4.715 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.47%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 540 | 5.000 | ng/ml | 100 |
| 5) n-nitrosodi-n-propylamine | 2.444 | 70 | 392 | 5.319 | ng/ml | 97 |
| 6) Hexachloroethane | 2.504 | 117 | 236 | 5.399 | ng/ml | 97 |
| 9) Naphthalene | 2.921 | 128 | 1852 | 5.061 | ng/ml# | 83 |
| 10) Hexachlorobutadiene | 2.994 | 225 | 382 | 5.167 | ng/ml | 95 |
| 11) 2-Methylnaphthalene | 3.301 | 142 | 1187 | 5.065 | ng/ml | 97 |
| 12) 1-Methylnaphthalene | 3.355 | 142 | 1087 | 5.000 | ng/ml | 99 |
| 14) 2-Chloronaphthalene | 3.575 | 162 | 1218 | 4.908 | ng/ml | 98 |
| 15) 2,6-Dinitrotoluene | 3.766 | 165 | 121 | 28.009 | ng/ml | 91 |
| 16) Acenaphthylene | 3.808 | 152 | 1724 | 4.783 | ng/ml | 100 |
| 18) Acenaphthene | 3.905 | 153 | 1300M6 | 5.099 | ng/ml | |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL3.D
Acq On : 17 Sep 2024 08:37 pm
Operator : SV125:dv
Sample : IL3,32,,5.0 ng/ml #10893
Misc : WG1973864,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:36:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:57 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.994 | 165 | 108 | 29.219 | ng/ml# | 33 |
| 20) Fluorene | 4.197 | 166 | 1370 | 4.902 | ng/ml | 99 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 24) Hexachlorobenzene | 4.515 | 284 | 562 | 4.985 | ng/ml | 94 |
| 25) Pentachlorophenol | 4.629 | 266 | 213M6 | 13.194 | ng/ml | |
| 26) Phenanthrene | 4.742 | 178 | 2462M6 | 5.417 | ng/ml | |
| 27) Anthracene | 4.771 | 178 | 2192 | 4.861 | ng/ml | 97 |
| 28) Fluoranthene | 5.420 | 202 | 2504 | 4.857 | ng/ml | 99 |
| 29) Pyrene | 5.549 | 202 | 2602 | 4.784 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.268 | 228 | 8088M4 | 4.789 | ng/ml | |
| 33) 3,3'-Dichlorobenzene | 0.000 | | 0 | N.D. d | | |
| 34) Chrysene | 6.284 | 228 | 2582M3 | 4.885 | ng/ml | |
| 35) Bis(2-ethylhexyl)phtha... | 6.287 | 149 | 495M6 | 42.399 | ng/ml | |
| 37) Benzo[b]fluoranthene | 7.097 | 252 | 2302 | 4.643 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 7.122 | 252 | 2092 | 4.306 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.405 | 252 | 1835 | 4.253 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.675 | 276 | 1884 | 4.158 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.713 | 278 | 1678M6 | 4.323 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.015 | 276 | 1984 | 4.228 | ng/ml | 100 |

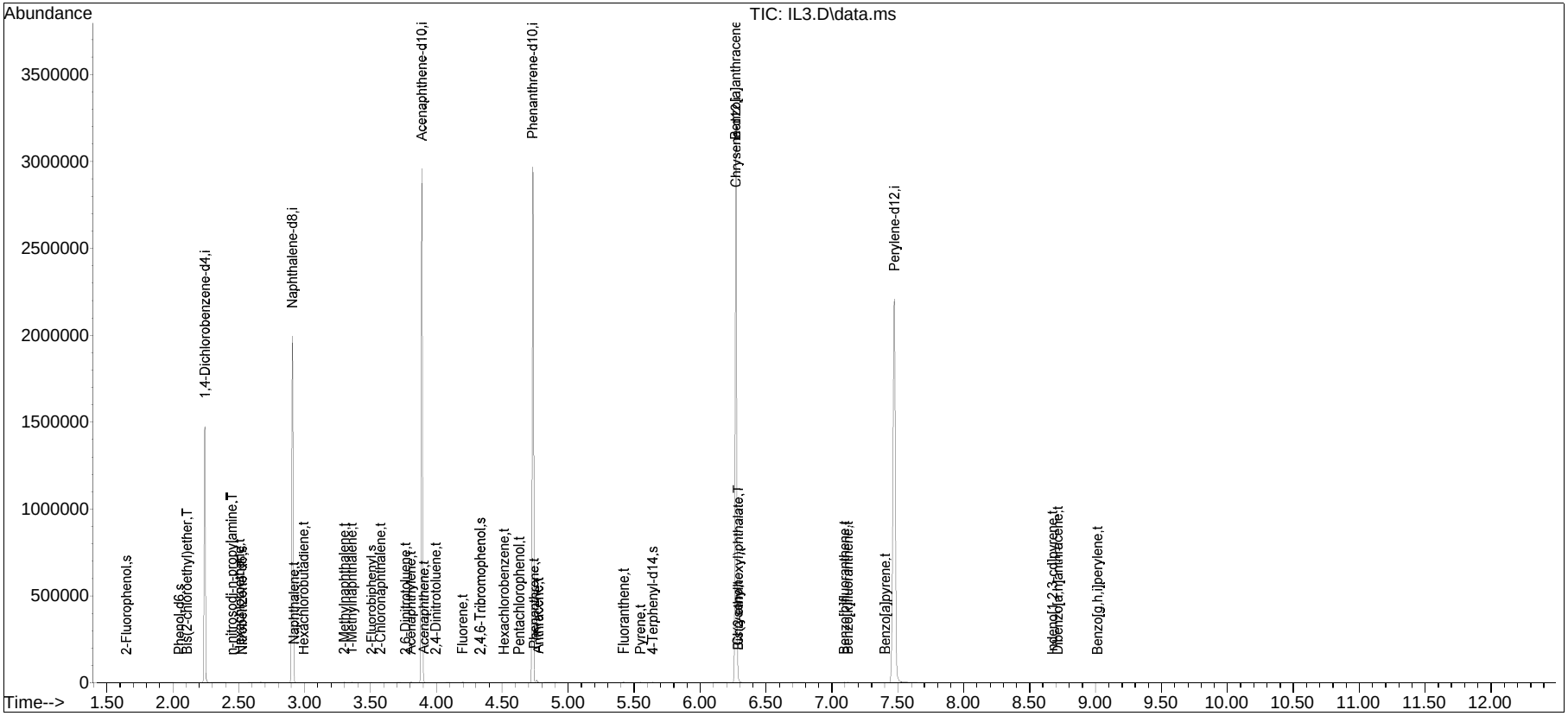
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL3.D
Acq On : 17 Sep 2024 08:37 pm
Operator : SV125:dv
Sample : IL3,32,,5.0 ng/ml #10893
Misc : WG1973864,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:36:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:57 2024
Response via : Initial Calibration

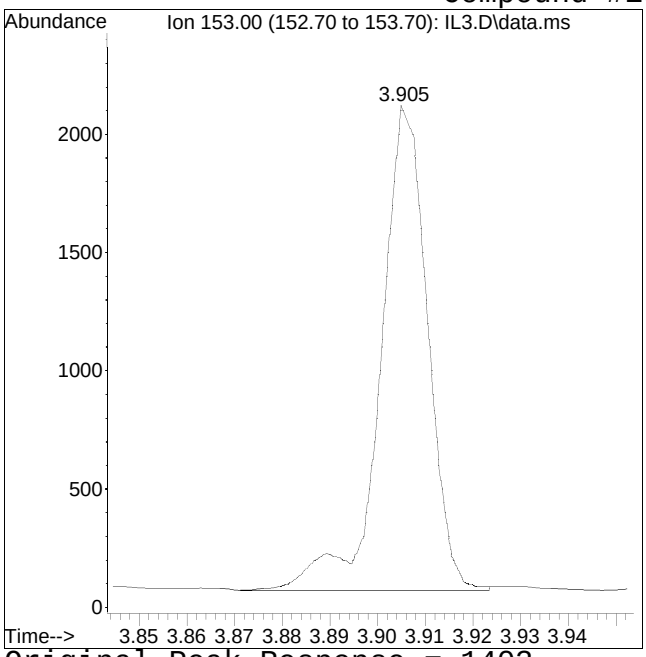
Sub List : Default - All compounds listedTical\IL8.D•



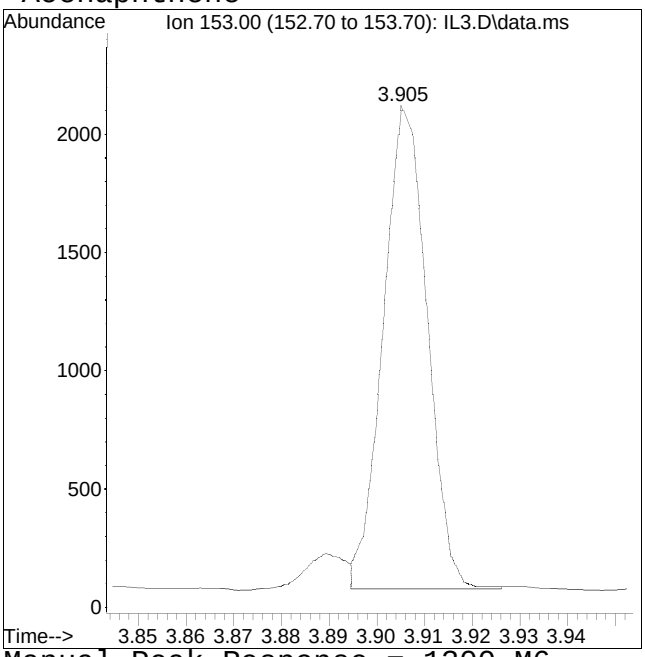
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #18: Acenaphthene




Original Peak Response = 1403



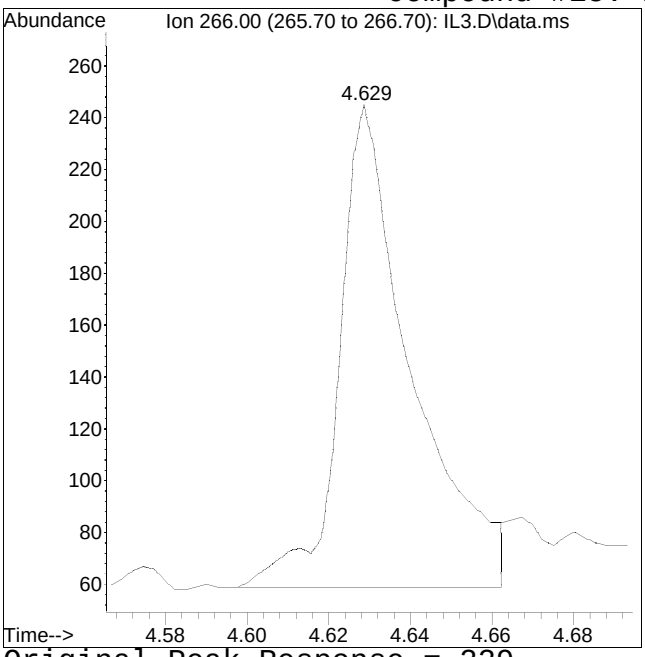

Manual Peak Response = 1300 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

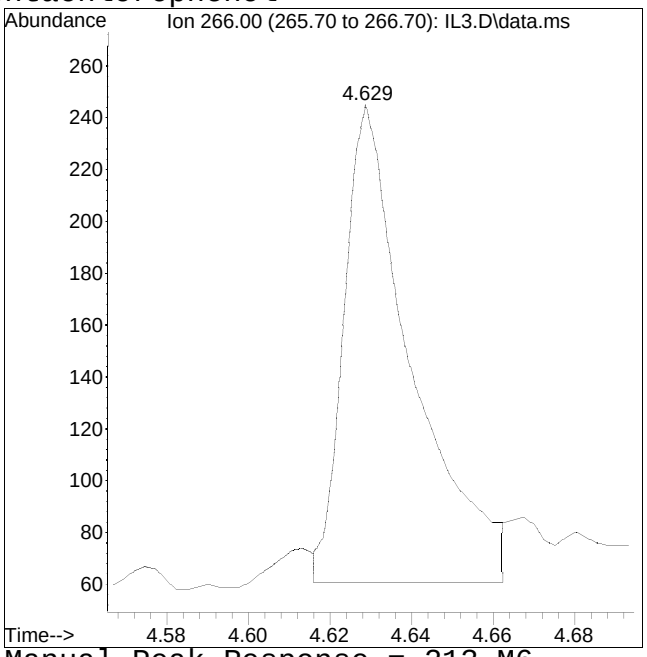
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #25: Pentachlorophenol




Original Peak Response = 229



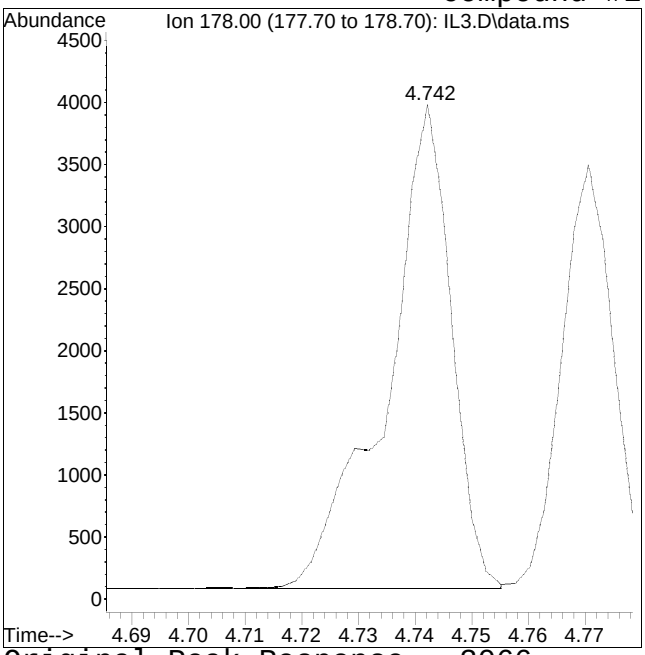

Manual Peak Response = 213 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

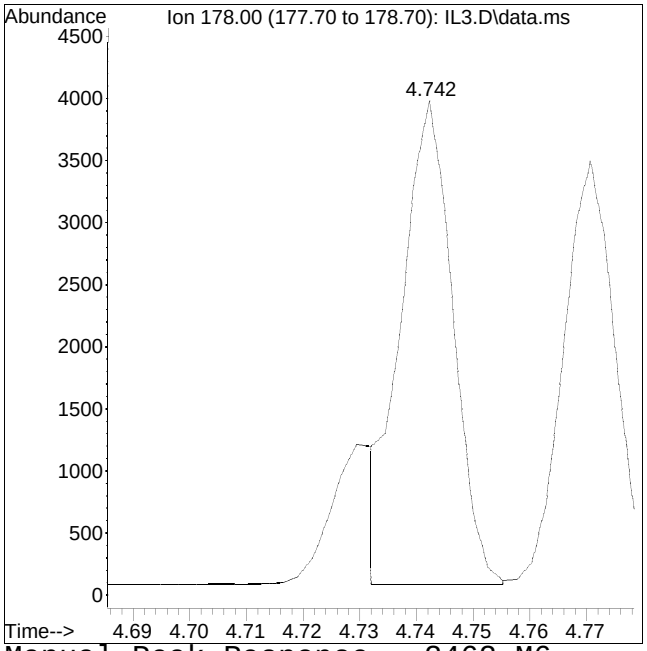
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #26: Phenanthrene




Original Peak Response = 3066



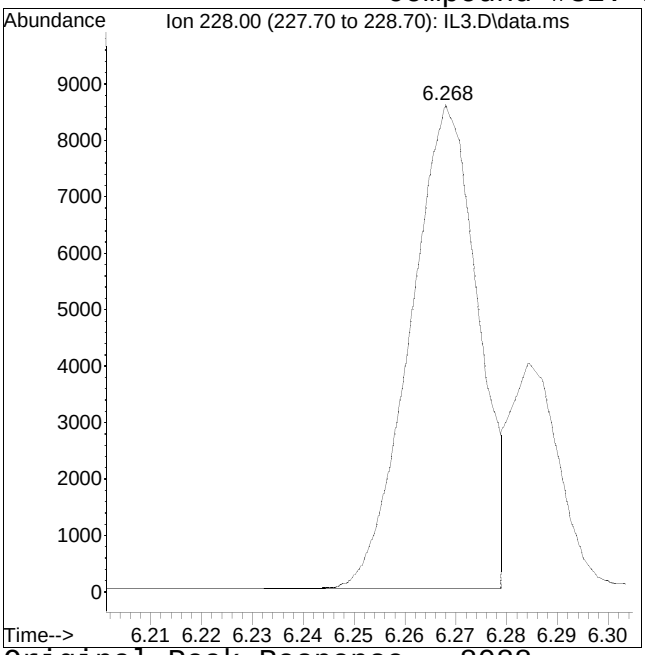

Manual Peak Response = 2462 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

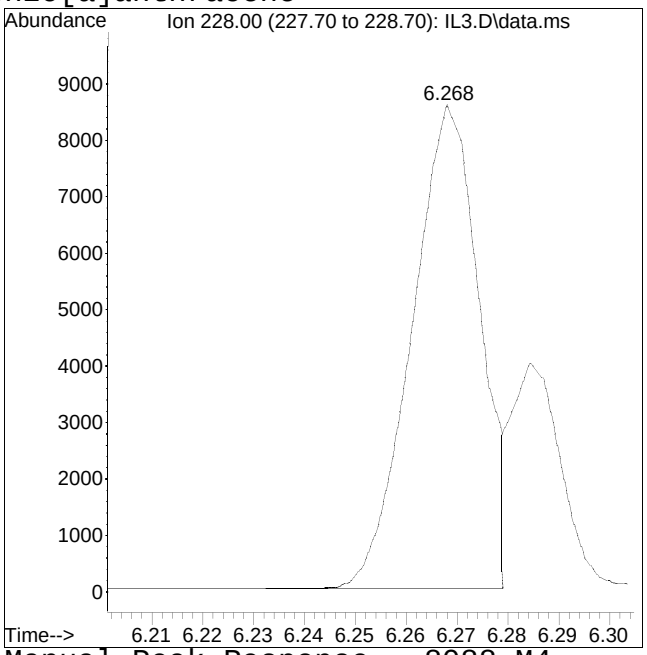
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

## Compound #32: Benzo[a]anthracene




Original Peak Response = 8088



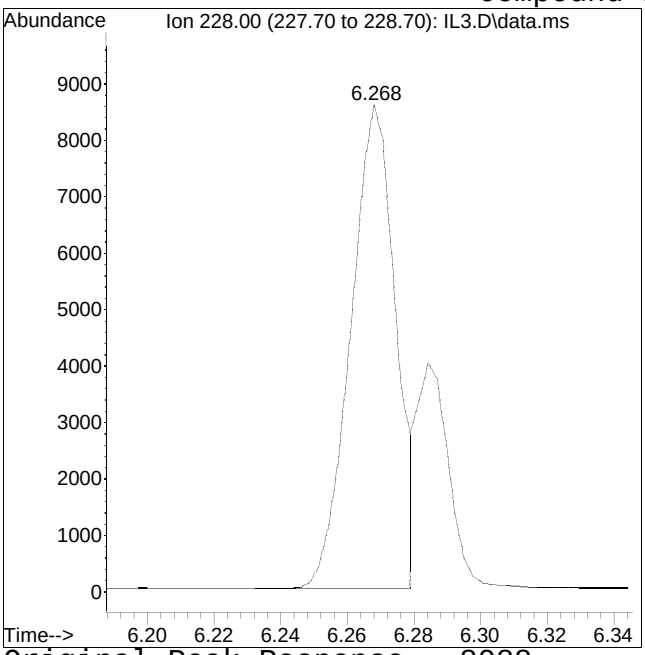

Manual Peak Response = 8088 M4

M4 = Poor automated baseline construction.

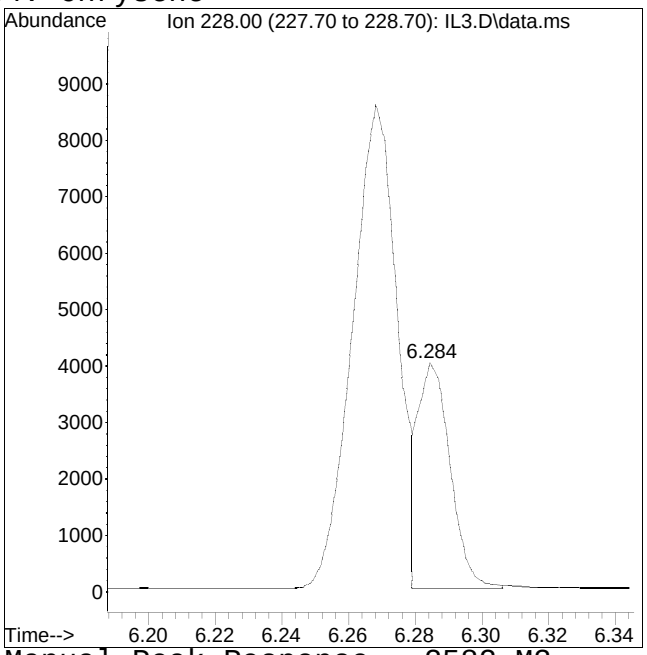
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #34: Chrysene




Original Peak Response = 8088



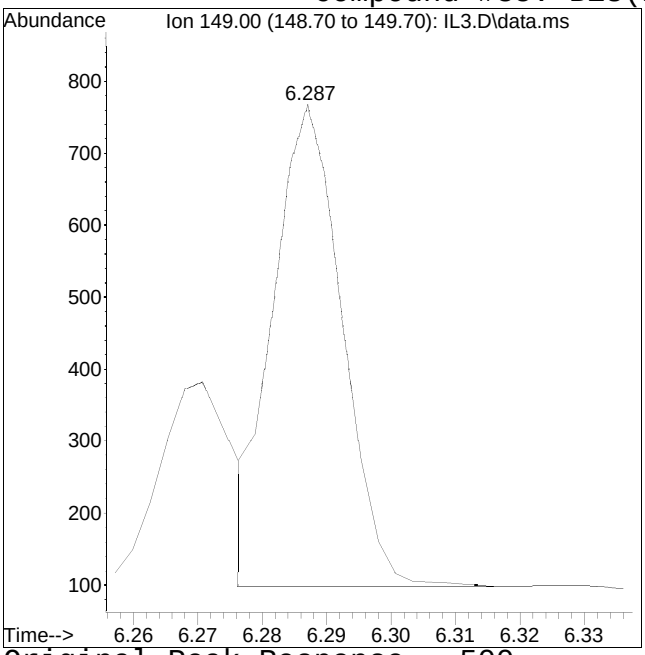

Manual Peak Response = 2582 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

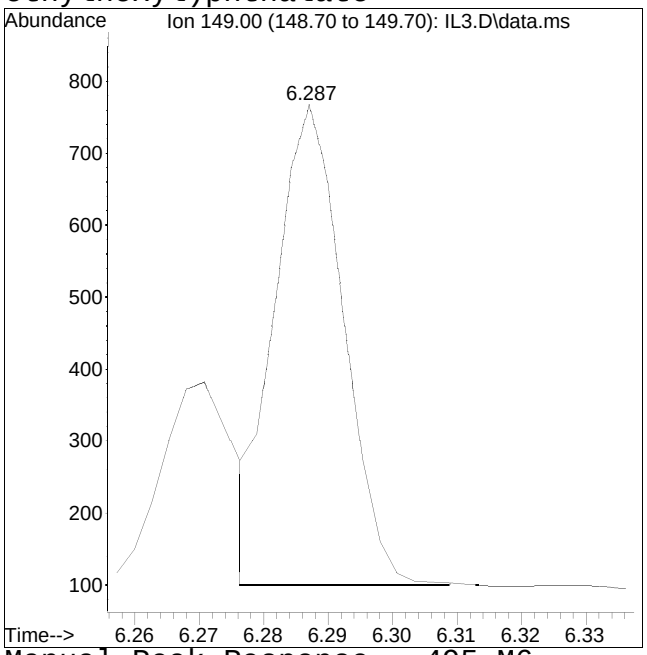
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #35: Bis(2-ethylhexyl)phthalate




Original Peak Response = 500



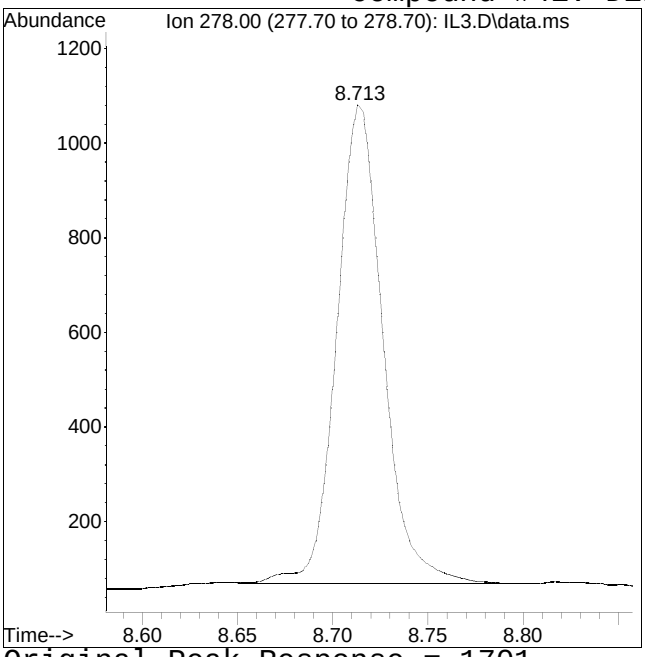

Manual Peak Response = 495 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

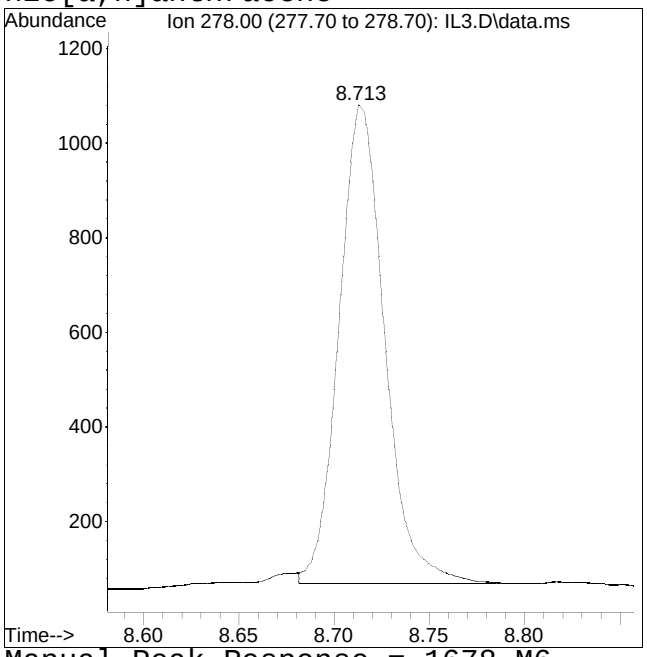
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL3.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:37 pm Instrument : SV125
Sample : IL3,32,,5.0 ng/ml #10893 Quant Date : 9/18/2024 11:31 am

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 1701




Manual Peak Response = 1678 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL2.D
Acq On : 17 Sep 2024 08:53 pm
Operator : SV125:dv
Sample : IL2,32,,2.0 ng/ml #10900
Misc : WG1973864,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:34:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 399698 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 101.38% | | | |
| 8) Naphthalene-d8 | 2.911 | 136 | 1361704 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 98.79% | | | |
| 17) Acenaphthene-d10 | 3.890 | 164 | 826693 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 95.40% | | | |
| 22) Phenanthrene-d10 | 4.730 | 188 | 1761489 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 95.63% | | | |
| 31) Chrysene-d12 | 6.270 | 240 | 1953919 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 98.79% | | | |
| 36) Perylene-d12 | 7.470 | 264 | 2258731 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 96.47% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.651 | 112 | 215 | 2.186 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.11%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 255 | 2.102 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.11%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 115 | 1.843 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.18%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 618 | 2.142 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.21%# | | | |
| 21) 2,4,6-Tribromophenol | 4.334 | 330 | 75M6 | 2.090 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.10%# | | | |
| 30) 4-Terphenyl-d14 | 5.641 | 244 | 726 | 2.028 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.20%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.108 | 93 | 246 | 2.282 | ng/ml | 96 |
| 5) n-nitrosodi-n-propylamine | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | d | |
| 9) Naphthalene | 2.921 | 128 | 823 | 2.269 | ng/ml# | 59 |
| 10) Hexachlorobutadiene | 2.995 | 225 | 162 | 2.211 | ng/ml | 96 |
| 11) 2-Methylnaphthalene | 3.301 | 142 | 482 | 2.075 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 3.356 | 142 | 454 | 2.107 | ng/ml | 97 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 518 | 2.106 | ng/ml | 99 |
| 15) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 16) Acenaphthylene | 3.808 | 152 | 729 | 2.041 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL2.D
Acq On : 17 Sep 2024 08:53 pm
Operator : SV125:dv
Sample : IL2,32,,2.0 ng/ml #10900
Misc : WG1973864,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:34:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:51 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 18) Acenaphthene | 3.906 | 153 | 543 | 2.154 | ng/ml | 88 |
| 19) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 4.197 | 166 | 595 | 2.153 | ng/ml | 99 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 24) Hexachlorobenzene | 4.513 | 284 | 270 | 2.395 | ng/ml | 93 |
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 4.743 | 178 | 968M6 | 2.130 | ng/ml | |
| 27) Anthracene | 4.771 | 178 | 1007 | 2.234 | ng/ml | 96 |
| 28) Fluoranthene | 5.418 | 202 | 1069 | 2.074 | ng/ml | 98 |
| 29) Pyrene | 5.547 | 202 | 1123 | 2.065 | ng/ml | 98 |
| 32) Benzo[a]anthracene | 6.270 | 228 | 7119M6 | 2.353 | ng/ml | |
| 33) 3,3'-Dichlorobenzene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 6.284 | 228 | 933M3 | 1.676 | ng/ml | |
| 35) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 7.096 | 252 | 1008 | 1.907 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 7.118 | 252 | 876 | 1.692 | ng/ml | 98 |
| 39) Benzo[a]pyrene | 7.404 | 252 | 797 | 1.733 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.674 | 276 | 823 | 1.704 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.712 | 278 | 708 | 2.175 | ng/ml | 100 |
| 42) Benzo[g,h,i]perylene | 9.014 | 276 | 870 | 1.739 | ng/ml | 100 |

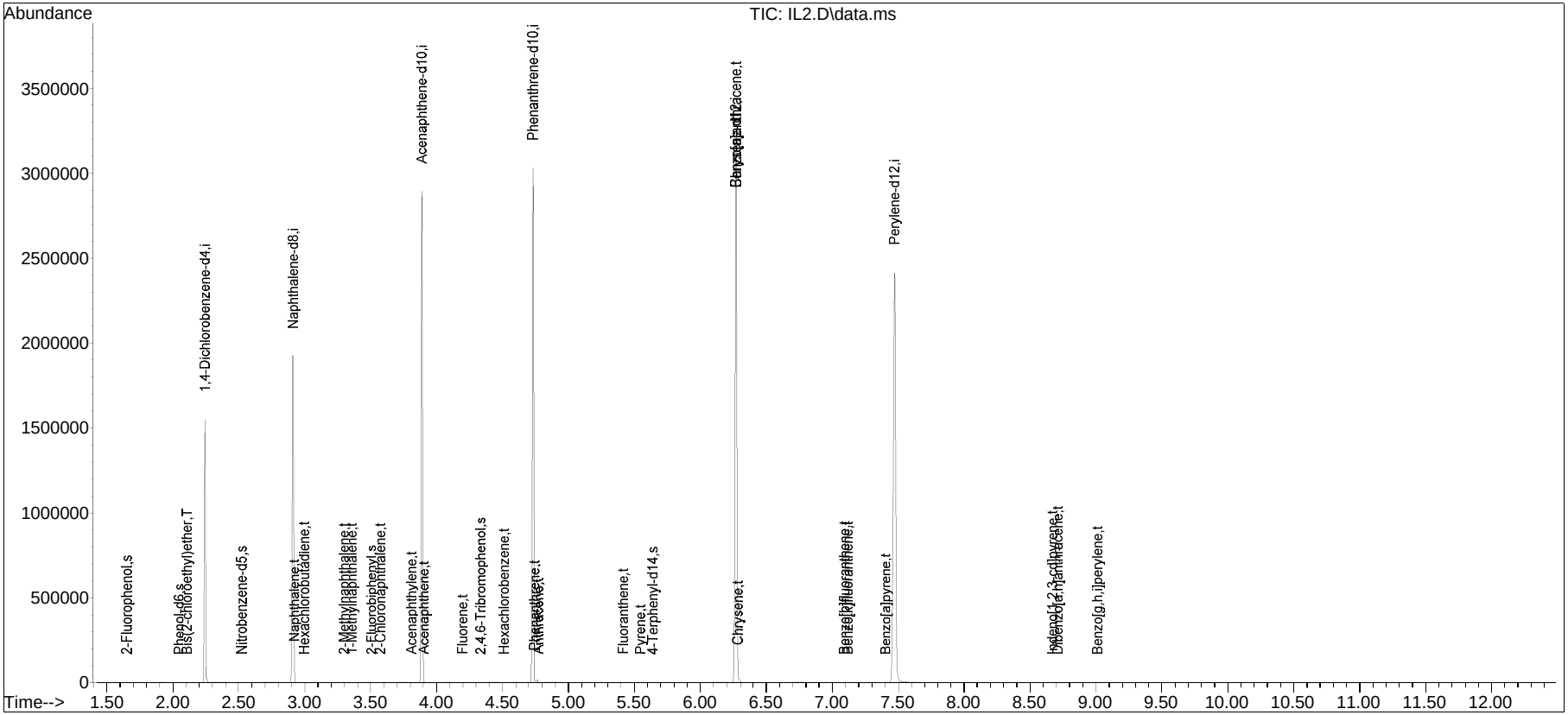
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL2.D
Acq On : 17 Sep 2024 08:53 pm
Operator : SV125:dv
Sample : IL2,32,,2.0 ng/ml #10900
Misc : WG1973864,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:34:09 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:51 2024
Response via : Initial Calibration

Sub List : Default - All compounds listedTical\IL8.D•

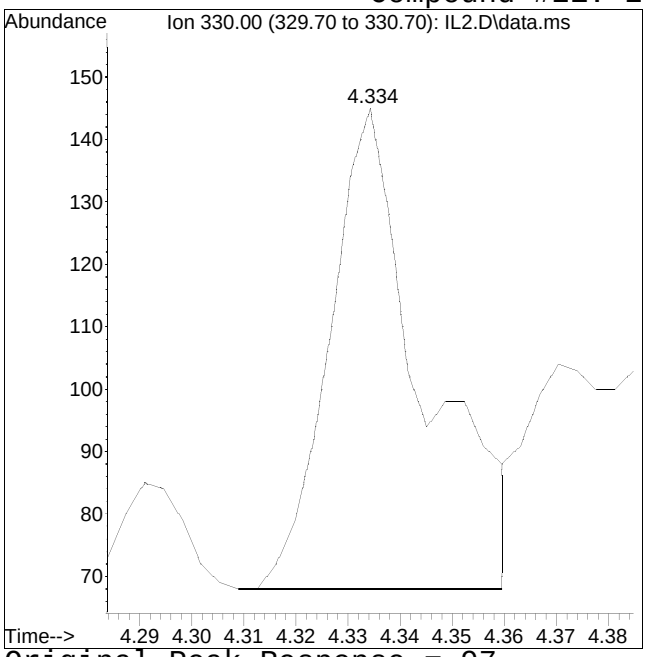


# Manual Integration Report

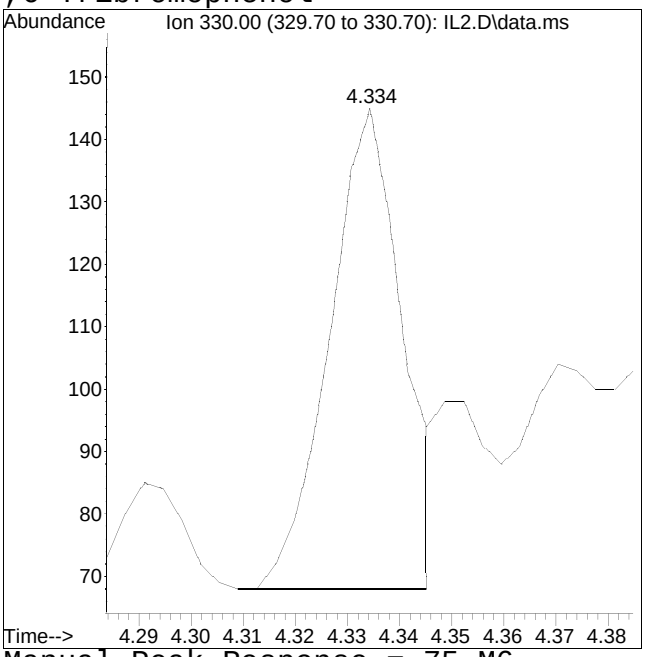
Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL2.D
Date Inj'd : 9/17/2024 8:53 pm
Sample : IL2,32,,2.0 ng/ml #10900

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/18/2024 11:31 am

## Compound #21: 2,4,6-Tribromophenol




Original Peak Response = 97



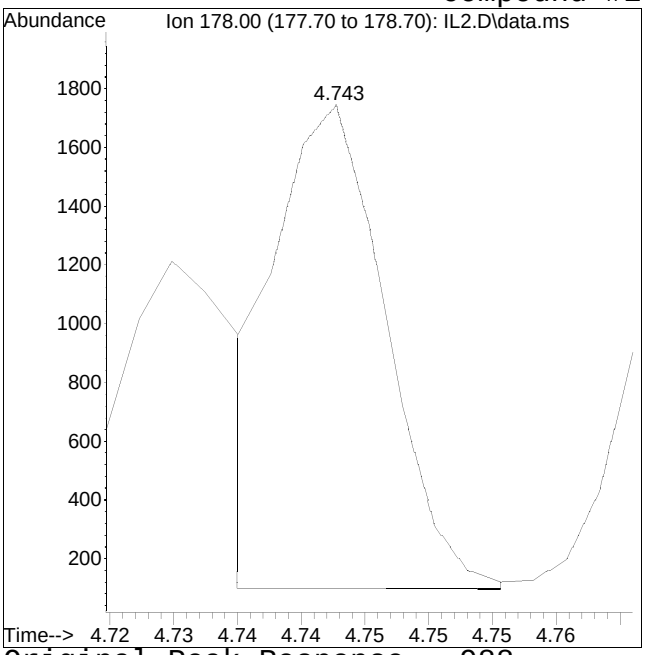

Manual Peak Response = 75 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

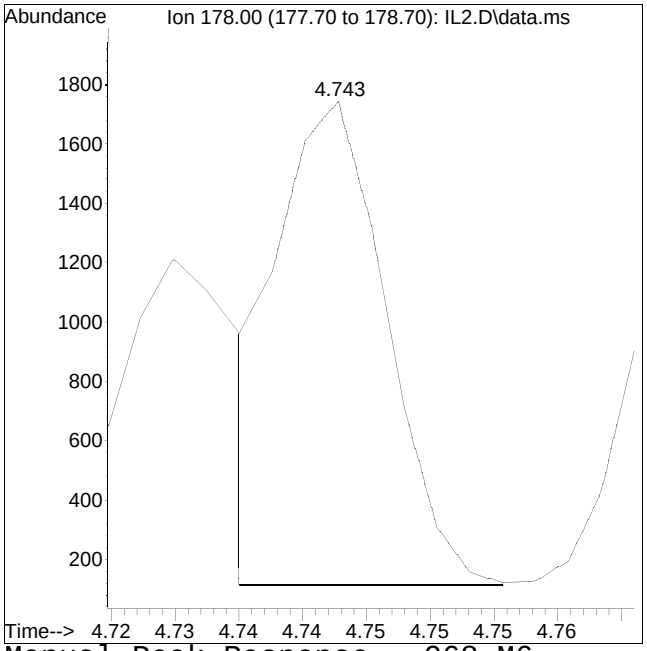
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL2.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:53 pm Instrument : SV125
Sample : IL2,32,,2.0 ng/ml #10900 Quant Date : 9/18/2024 11:31 am

Compound #26: Phenanthrene




Original Peak Response = 988



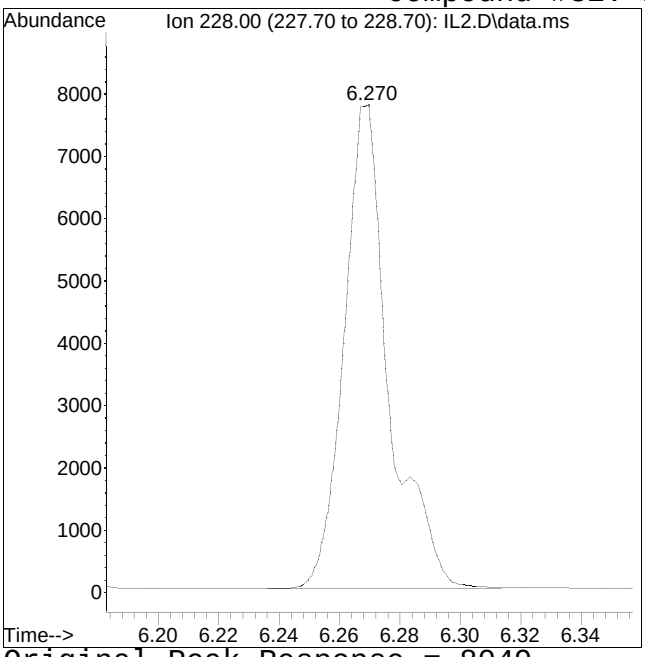

Manual Peak Response = 968 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

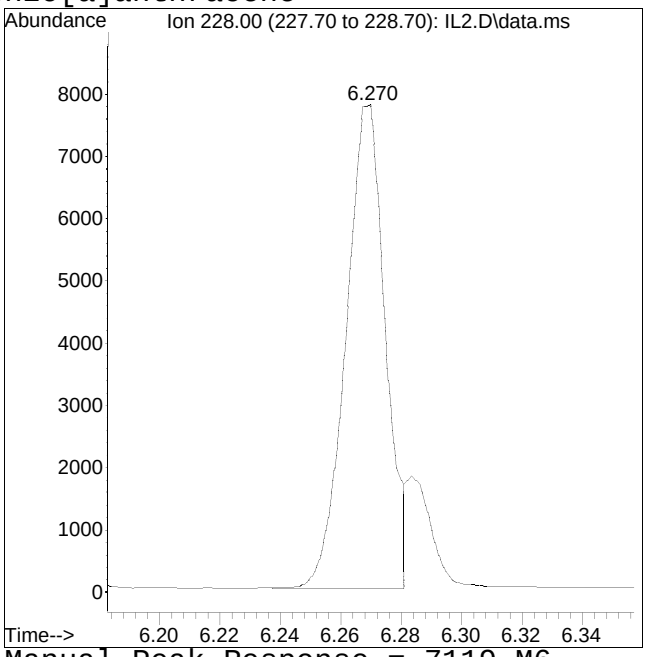
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL2.D
Date Inj'd : 9/17/2024 8:53 pm
Sample : IL2,32,,2.0 ng/ml #10900
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/18/2024 11:31 am

## Compound #32: Benzo[a]anthracene




Original Peak Response = 8049



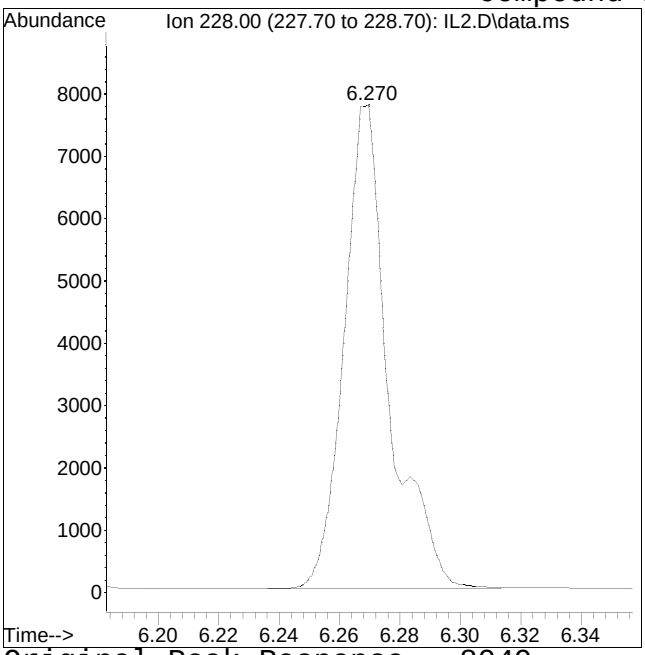

Manual Peak Response = 7119 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

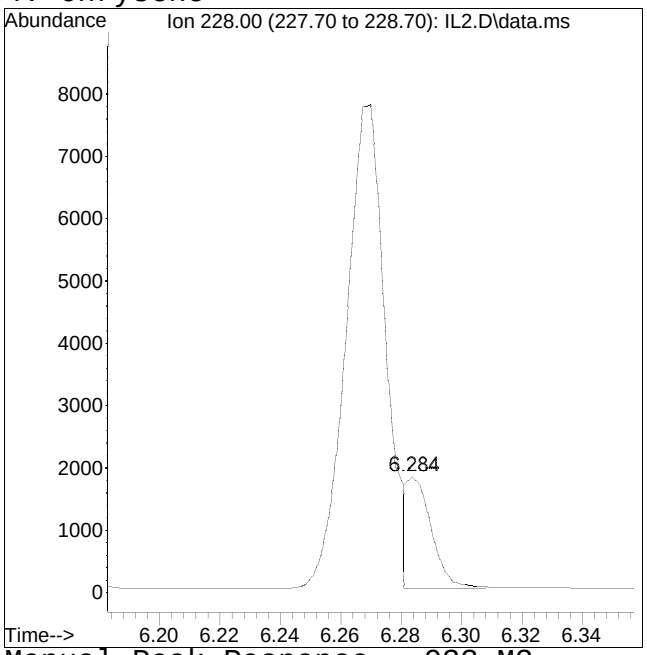
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL2.D Operator : SV125:dv
Date Inj'd : 9/17/2024 8:53 pm Instrument : SV125
Sample : IL2,32,,2.0 ng/ml #10900 Quant Date : 9/18/2024 11:31 am

Compound #34: Chrysene




Original Peak Response = 8049




Manual Peak Response = 933 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL1.D
Acq On : 17 Sep 2024 09:09 pm
Operator : SV125:dv
Sample : IL1,32,,1.0 ng/ml #10895
Misc : WG1973864,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 11:33:08 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:42 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 395605 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 100.34% | | | |
| 8) Naphthalene-d8 | 2.911 | 136 | 1336908 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 96.99% | | | |
| 17) Acenaphthene-d10 | 3.890 | 164 | 801773 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 92.52% | | | |
| 22) Phenanthrene-d10 | 4.730 | 188 | 1705715 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 92.60% | | | |
| 31) Chrysene-d12 | 6.270 | 240 | 1873984 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 94.75% | | | |
| 36) Perylene-d12 | 7.470 | 264 | 2159685 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 92.24% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.651 | 112 | 96 | 0.986 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.05%# | | | |
| 3) Phenol-d6 | 2.050 | 99 | 147 | 1.224 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.06%# | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 73 | 1.182 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.12%# | | | |
| 13) 2-Fluorobiphenyl | 3.508 | 172 | 292 | 1.031 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.10%# | | | |
| 21) 2,4,6-Tribromophenol | 0.000 | 330 | 0 | 0.000 | ng/ml | |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 0.00%# | | | |
| 30) 4-Terphenyl-d14 | 5.641 | 244 | 392M4 | 1.131 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 0.11%# | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. d | | |
| 5) n-nitrosodi-n-propylamine | 0.000 | | 0 | N.D. d | | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. d | | |
| 9) Naphthalene | 2.921 | 128 | 453 | 1.272 | ng/ml# | 30 |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. d | | |
| 11) 2-Methylnaphthalene | 3.301 | 142 | 240 | 1.052 | ng/ml | 97 |
| 12) 1-Methylnaphthalene | 3.356 | 142 | 220 | 1.040 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 0.000 | | 0 | N.D. d | | |
| 15) 2,6-Dinitrotoluene | 0.000 | | 0 | N.D. | | |
| 16) Acenaphthylene | 3.808 | 152 | 367 | 1.046 | ng/ml | 97 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL1.D
Acq On : 17 Sep 2024 09:09 pm
Operator : SV125:dv
Sample : IL1,32,,1.0 ng/ml #10895
Misc : WG1973864,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 11:33:08 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:42 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 18) Acenaphthene | 3.906 | 153 | 252 | 1.031 | ng/ml# | 74 |
| 19) 2,4-Dinitrotoluene | 0.000 | | 0 | N.D. | | |
| 20) Fluorene | 4.197 | 166 | 287 | 1.071 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 0.000 | | 0 | N.D. | | |
| 24) Hexachlorobenzene | 4.516 | 284 | 113 | 1.035 | ng/ml# | 85 |
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. d | | |
| 26) Phenanthrene | 4.743 | 178 | 415M6 | 0.943 | ng/ml | |
| 27) Anthracene | 4.771 | 178 | 471 | 1.079 | ng/ml# | 91 |
| 28) Fluoranthene | 5.418 | 202 | 539 | 1.080 | ng/ml# | 94 |
| 29) Pyrene | 5.547 | 202 | 572 | 1.086 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.270 | 228 | 6081M6 | 0.996 | ng/ml | |
| 33) 3,3'-Dichlorobenzene | 0.000 | | 0 | N.D. d | | |
| 34) Chrysene | 6.281 | 228 | 527M3 | 0.987 | ng/ml | |
| 35) Bis(2-ethylhexyl)phtha... | 0.000 | | 0 | N.D. d | | |
| 37) Benzo[b]fluoranthene | 7.096 | 252 | 475 | 0.940 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.121 | 252 | 421 | 0.850 | ng/ml | 97 |
| 39) Benzo[a]pyrene | 7.404 | 252 | 377 | 0.857 | ng/ml | 96 |
| 40) Indeno[1,2,3-cd]pyrene | 8.677 | 276 | 389 | 0.842 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.712 | 278 | 329M6 | 1.451 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.014 | 276 | 425 | 0.889 | ng/ml | 98 |

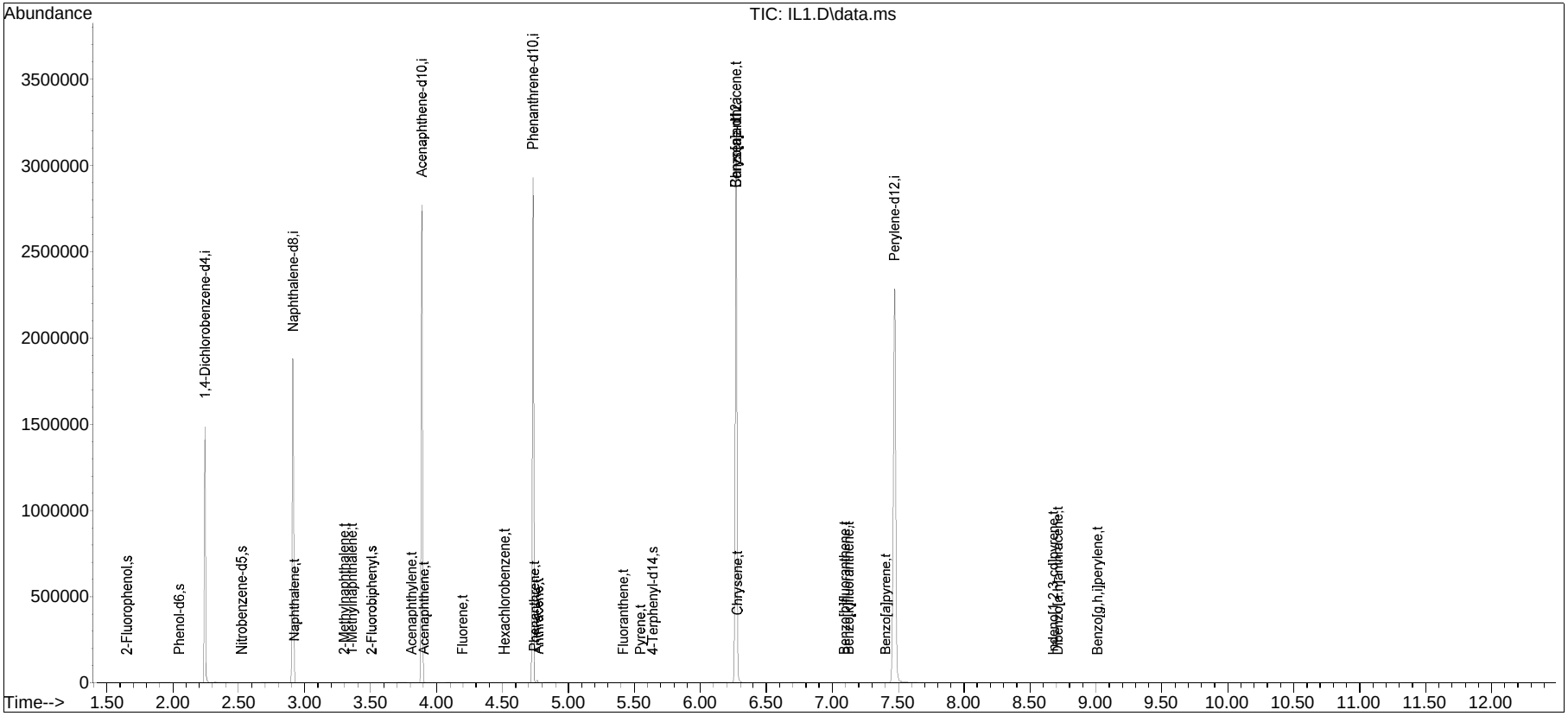
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : IL1.D
Acq On : 17 Sep 2024 09:09 pm
Operator : SV125:dv
Sample : IL1,32,,1.0 ng/ml #10895
Misc : WG1973864,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 11:33:08 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 18 11:31:42 2024
Response via : Initial Calibration

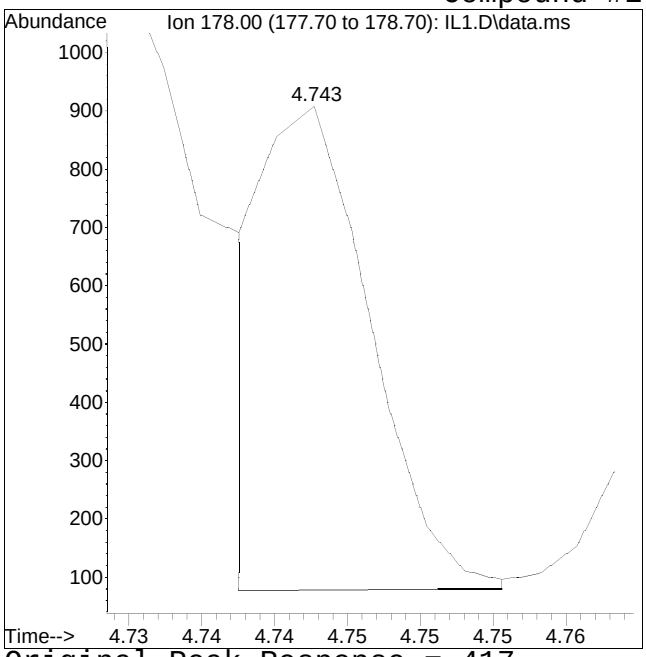
Sub List : Default - All compounds listedTical\IL8.D•



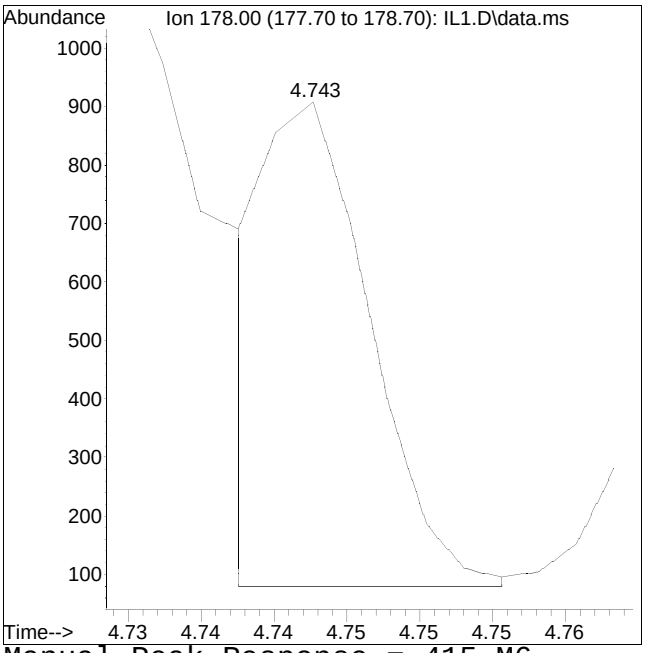
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL1.D Operator : SV125:dv
Date Inj'd : 9/17/2024 9:09 pm Instrument : SV125
Sample : IL1,32,,1.0 ng/ml #10895 Quant Date : 9/18/2024 11:31 am

## Compound #26: Phenanthrene




Original Peak Response = 417




Manual Peak Response = 415 M6

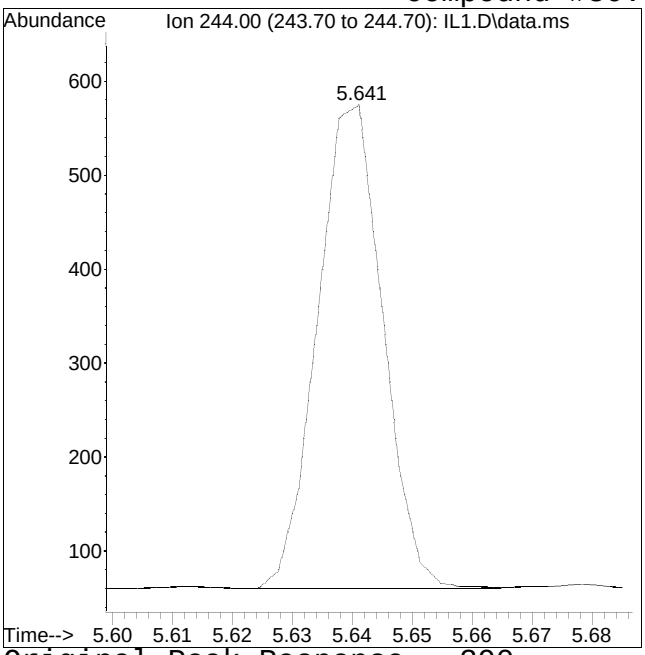
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

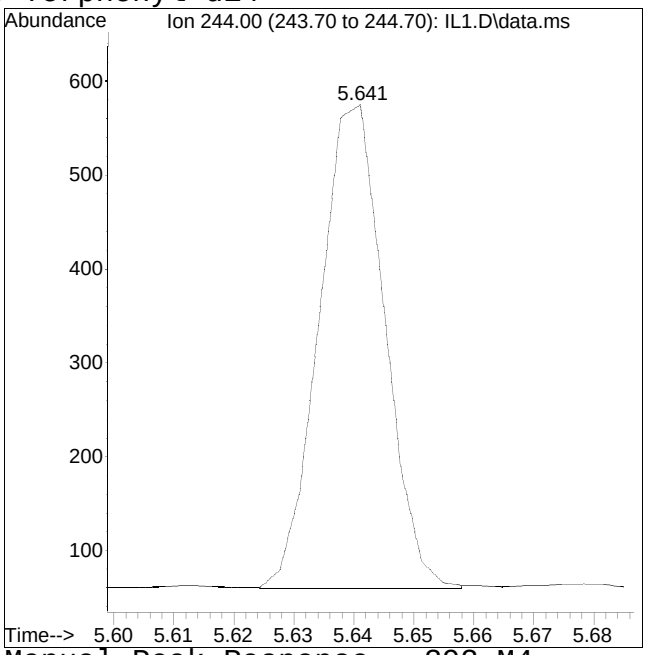
Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL1.D
Date Inj'd : 9/17/2024 9:09 pm
Sample : IL1,32,,1.0 ng/ml #10895

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/18/2024 11:31 am

## Compound #30: 4-Terphenyl-d14




Original Peak Response = 390



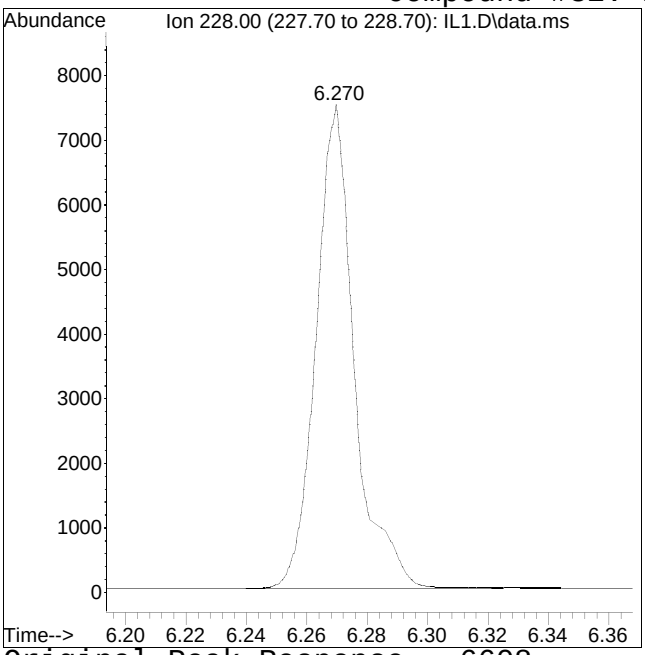

Manual Peak Response = 392 M4

M4 = Poor automated baseline construction.

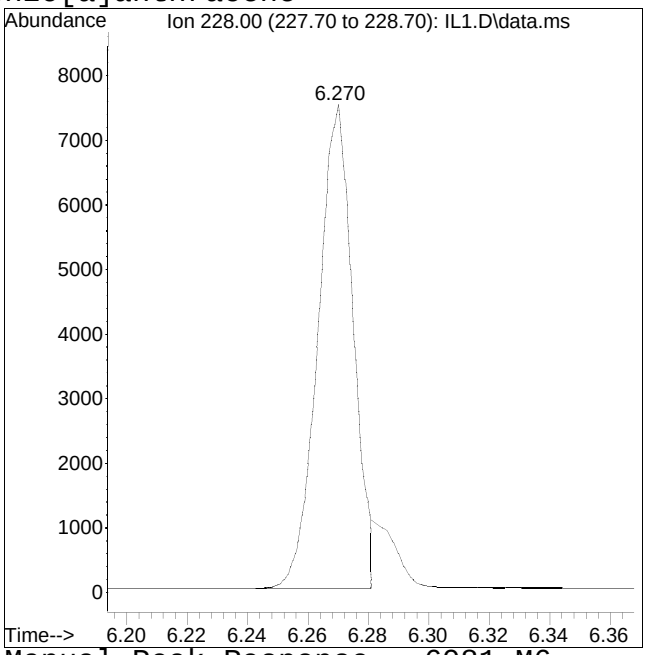
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : IL1.D
Date Inj'd : 9/17/2024 9:09 pm
Sample : IL1,32,,1.0 ng/ml #10895
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/18/2024 11:31 am

## Compound #32: Benzo[a]anthracene




Original Peak Response = 6608



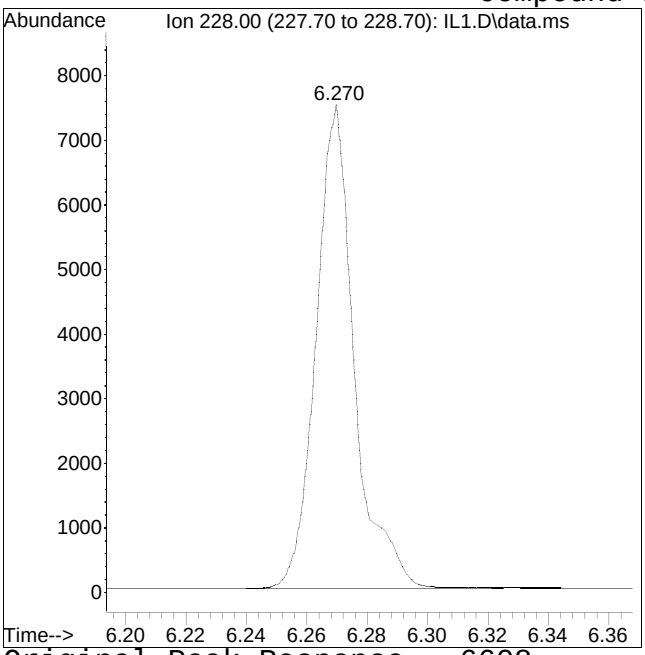

Manual Peak Response = 6081 M6

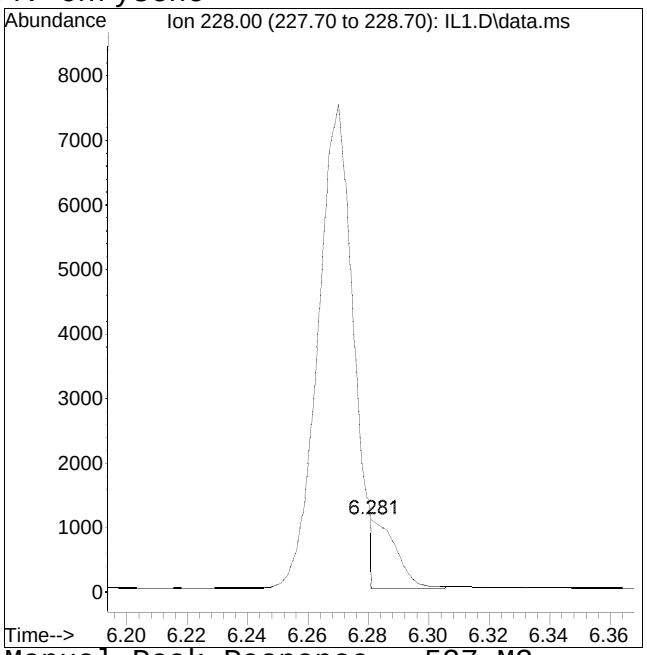
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL1.D Operator : SV125:dv
Date Inj'd : 9/17/2024 9:09 pm Instrument : SV125
Sample : IL1,32,,1.0 ng/ml #10895 Quant Date : 9/18/2024 11:31 am

Compound #34: Chrysene



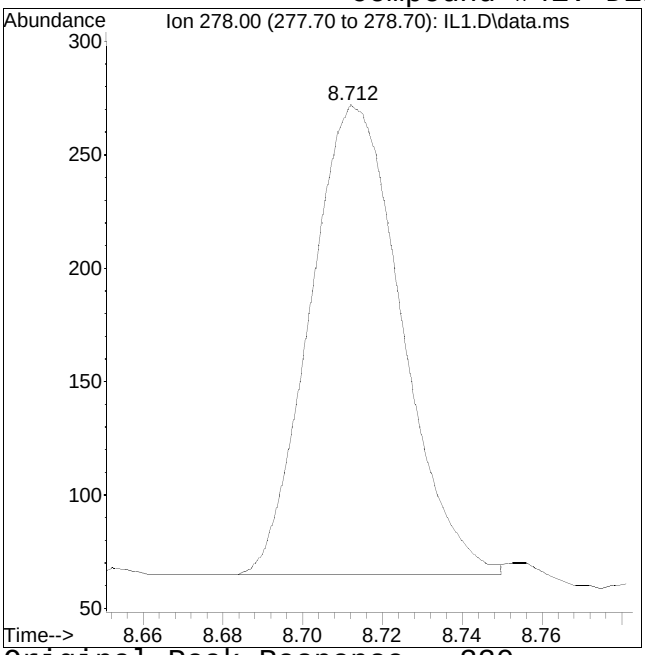

Original Peak Response = 6608 Manual Peak Response = 527 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

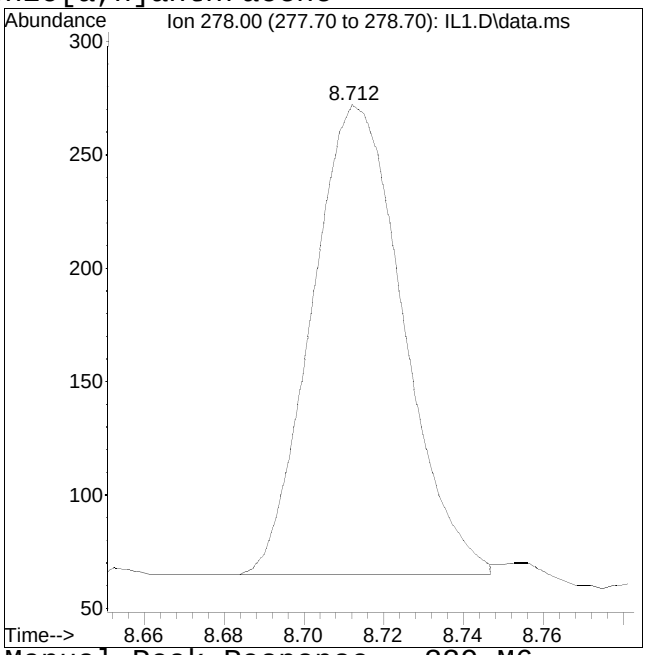
Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : IL1.D Operator : SV125:dv
Date Inj'd : 9/17/2024 9:09 pm Instrument : SV125
Sample : IL1,32,,1.0 ng/ml #10895 Quant Date : 9/18/2024 11:31 am

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 330




Manual Peak Response = 329 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : ICV.D
Acq On : 17 Sep 2024 09:25 pm
Operator : SV125:dv
Sample : CQICV,32,, 1.000 Lot#10884
Misc : WG1973864,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:00:15 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 14:00:48 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | i | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 2 | s | 2-Fluorophenol | 0.984 | 0.971 | 1.3 | 102 | 0.00 |
| 3 | s | Phenol-d6 | 1.214 | 1.165 | 4.0 | 101 | 0.00 |
| 4 | T | Bis(2-chloroethyl)ether | 1.079 | 1.003 | 7.0 | 98 | 0.00 |
| 5 | T | n-nitrosodi-n-propylamine | 0.736 | 0.674 | 8.4 | 94 | 0.00 |
| 6 | t | Hexachloroethane | 0.437 | 0.415 | 5.0 | 99 | 0.00 |
| 7 | s | Nitrobenzene-d5 | 0.624 | 0.583 | 6.6 | 90 | 0.00 |
| 8 | i | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 9 | t | Naphthalene | 1.065 | 0.956 | 10.2 | 97 | 0.00 |
| 10 | t | Hexachlorobutadiene | 0.215 | 0.206 | 4.2 | 99 | 0.00 |
| 11 | t | 2-Methylnaphthalene | 0.682 | 0.660 | 3.2 | 99 | 0.00 |
| 12 | t | 1-Methylnaphthalene | 0.633 | 0.610 | 3.6 | 98 | 0.00 |
| 13 | s | 2-Fluorobiphenyl | 0.848 | 0.803 | 5.3 | 98 | 0.00 |
| 14 | t | 2-Chloronaphthalene | 0.723 | 0.684 | 5.4 | 96 | 0.00 |
| 15 | t | 2,6-Dinitrotoluene | *1000.000 | 779.733 | 22.0 | 83 | 0.00 |
| 16 | t | Acenaphthylene | 1.049 | 1.022 | 2.6 | 96 | 0.00 |
| 17 | i | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 18 | t | Acenaphthene | 1.220 | 1.141 | 6.5 | 96 | 0.00 |
| 19 | t | 2,4-Dinitrotoluene | *1000.000 | 802.348 | 19.8 | 84 | 0.00 |
| 20 | t | Fluorene | 1.337 | 1.280 | 4.3 | 96 | 0.00 |
| 21 | s | 2,4,6-Tribromophenol | 0.174 | 0.179 | -2.9 | 96 | 0.00 |
| 22 | i | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 23 | T | 4,6-Dinitro-o-cresol | *1000.000 | 832.049 | 16.8 | 86 | 0.00 |
| 24 | t | Hexachlorobenzene | 0.256 | 0.238 | 7.0 | 97 | 0.00 |
| 25 | t | Pentachlorophenol | *1000.000 | 903.567 | 9.6 | 92 | 0.00 |
| 26 | t | Phenanthrene | 1.032 | 0.970 | 6.0 | 97 | 0.00 |
| 27 | t | Anthracene | 1.024 | 0.982 | 4.1 | 97 | 0.00 |
| 28 | t | Fluoranthene | 1.170 | 1.140 | 2.6 | 96 | 0.00 |
| 29 | t | Pyrene | 1.235 | 1.241 | -0.5 | 97 | 0.00 |
| 30 | s | 4-Terphenyl-d14 | 0.813 | 0.799 | 1.7 | 96 | 0.00 |
| 31 | i | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 32 | t | Benzo[a]anthracene | *1000.000 | 972.157 | 2.8 | 93 | 0.00 |
| 33 | t | 3,3'-Dichlorobenzene | *1000.000 | 920.476 | 8.0 | 96 | 0.00 |
| 34 | t | Chrysene | 1.139 | 1.143 | -0.4 | 97 | 0.00 |
| 35 | T | Bis(2-ethylhexyl)phthalate | *1000.000 | 823.938 | 17.6 | 87 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : ICV.D
Acq On : 17 Sep 2024 09:25 pm
Operator : SV125:dv
Sample : CQICV,32,, 1.000 Lot#10884
Misc : WG1973864,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:00:15 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 14:00:48 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 36 | i | Perylene-d12 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 37 | t | Benzo[b]fluoranthene | 0.936 | 0.982 | -4.9 | 89 | 0.00 |
| 38 | t | Benzo[k]fluoranthene | 0.917 | 1.029 | -12.2 | 100 | 0.00 |
| 39 | t | Benzo[a]pyrene | 0.814 | 0.914 | -12.3 | 95 | 0.00 |
| 40 | t | Indeno[1,2,3-cd]pyrene | 0.855 | 0.958 | -12.0 | 94 | 0.00 |
| 41 | t | Dibenzo[a,h]anthracene | *1000.000 | 1000.276 | -0.0 | 98 | 0.00 |
| 42 | t | Benzo[g,h,i]perylene | 0.886 | 0.961 | -8.5 | 94 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : ICV.D
Acq On : 17 Sep 2024 09:25 pm
Operator : SV125:dv
Sample : CQICV,32,, 1.000 Lot#10884
Misc : WG1973864,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:00:15 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 14:00:48 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.243 | 152 | 397721 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 394276 | | | Recovery = 100.87% | | | |
| 8) Naphthalene-d8 | 2.911 | 136 | 1369762 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1378401 | | | Recovery = 99.37% | | | |
| 17) Acenaphthene-d10 | 3.891 | 164 | 853637 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 866554 | | | Recovery = 98.51% | | | |
| 22) Phenanthrene-d10 | 4.730 | 188 | 1812965 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1842065 | | | Recovery = 98.42% | | | |
| 31) Chrysene-d12 | 6.271 | 240 | 1921415 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1977784 | | | Recovery = 97.15% | | | |
| 36) Perylene-d12 | 7.475 | 264 | 2266955 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2341485 | | | Recovery = 96.82% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.650 | 112 | 96550 | 986.528 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 49.33% | | | |
| 3) Phenol-d6 | 2.052 | 99 | 115883 | 960.118 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 48.01% | | | |
| 7) Nitrobenzene-d5 | 2.524 | 82 | 57987 | 934.112 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 93.41% | | | |
| 13) 2-Fluorobiphenyl | 3.510 | 172 | 274954 | 947.310 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 94.73% | | | |
| 21) 2,4,6-Tribromophenol | 4.335 | 330 | 38299 | 1033.365 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 51.67% | | | |
| 30) 4-Terphenyl-d14 | 5.641 | 244 | 362360 | 983.535 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 98.35% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.108 | 93 | 99768 | 930.252 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.443 | 70 | 67019 | 915.695 | ng/ml | 99 |
| 6) Hexachloroethane | 2.504 | 117 | 41233 | 949.842 | ng/ml | 99 |
| 9) Naphthalene | 2.921 | 128 | 327210 | 896.887 | ng/ml# | 100 |
| 10) Hexachlorobutadiene | 2.994 | 225 | 70531 | 956.910 | ng/ml | 99 |
| 11) 2-Methylnaphthalene | 3.303 | 142 | 226159 | 967.884 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.358 | 142 | 208904 | 963.823 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.574 | 162 | 234354 | 947.189 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.767 | 165 | 22735 | 779.733 | ng/ml | 99 |
| 16) Acenaphthylene | 3.809 | 152 | 349842 | 973.581 | ng/ml | 100 |
| 18) Acenaphthene | 3.907 | 153 | 243491 | 935.370 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : ICV.D
Acq On : 17 Sep 2024 09:25 pm
Operator : SV125:dv
Sample : CQICV,32,, 1.000 Lot#10884
Misc : WG1973864,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:00:15 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 14:00:48 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV125\240917nRVTical\IL8.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 19) 2,4-Dinitrotoluene | 3.993 | 165 | 29280M4 | 802.348 | ng/ml | |
| 20) Fluorene | 4.197 | 166 | 273059 | 956.866 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.223 | 198 | 12989M4 | 832.049 | ng/ml | |
| 24) Hexachlorobenzene | 4.516 | 284 | 107981 | 930.728 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.624 | 266 | 38271 | 903.567 | ng/ml | 100 |
| 26) Phenanthrene | 4.743 | 178 | 439728 | 940.204 | ng/ml | 100 |
| 27) Anthracene | 4.771 | 178 | 444982 | 958.962 | ng/ml | 100 |
| 28) Fluoranthene | 5.418 | 202 | 516847 | 974.242 | ng/ml | 100 |
| 29) Pyrene | 5.550 | 202 | 562633 | 1005.224 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.263 | 228 | 554053 | 972.157 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 6.247 | 252 | 197154 | 920.476 | ng/ml | 100 |
| 34) Chrysene | 6.285 | 228 | 548944 | 1002.967 | ng/ml | 100 |
| 35) Bis(2-ethylhexyl)phtha... | 6.288 | 149 | 154479 | 823.938 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 7.097 | 252 | 556509 | 1049.117 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.123 | 252 | 583310 | 1122.288 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.409 | 252 | 517993 | 1122.325 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.682 | 276 | 543147 | 1120.511 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.720 | 278 | 530412M6 | 1000.276 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.022 | 276 | 544533 | 1084.785 | ng/ml | 100 |

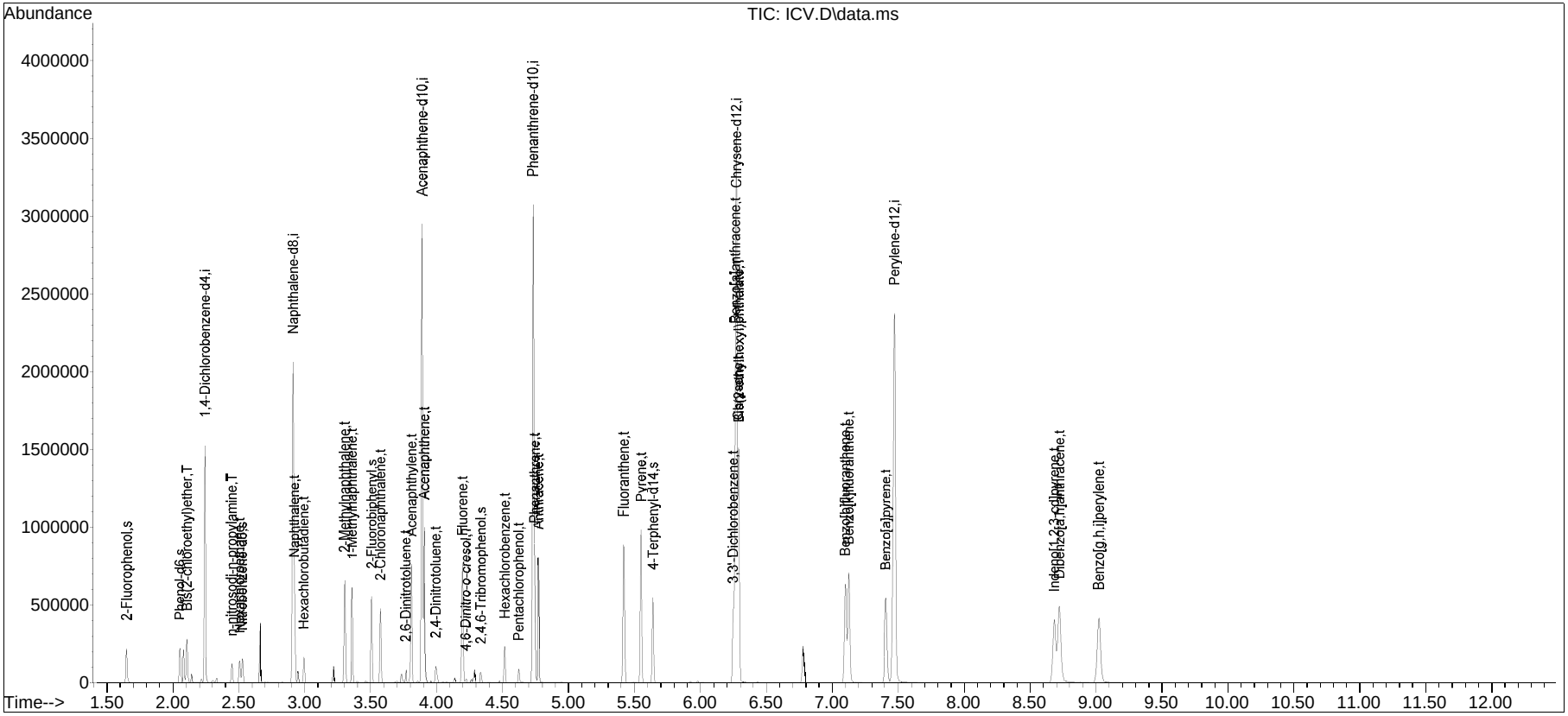
(#) = qualifier out of range (m) = manual integration (+) = signals summed

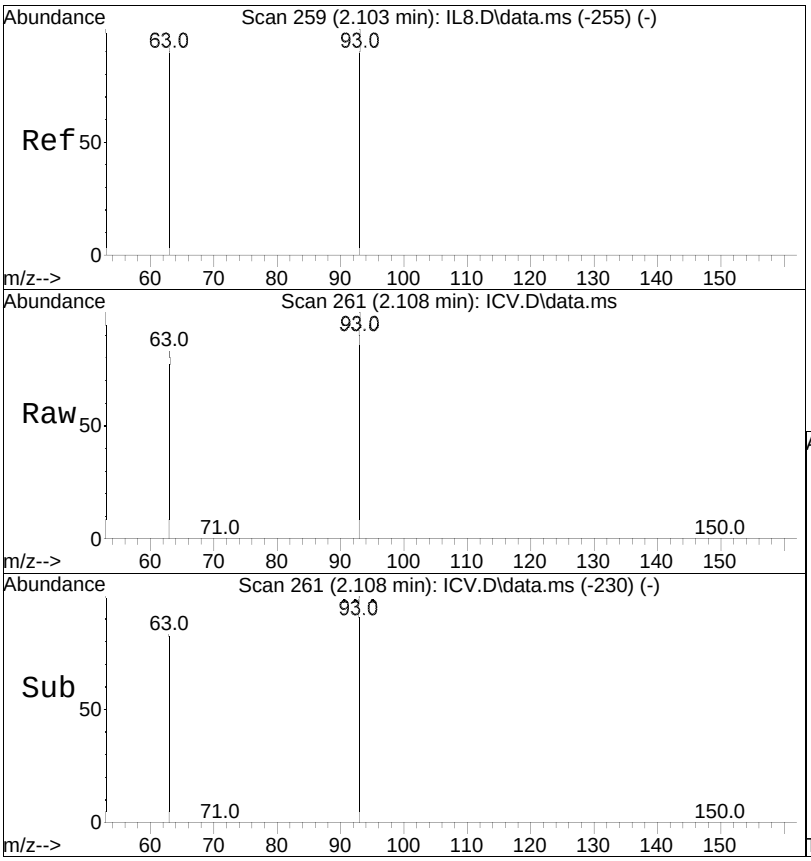
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240917nRVTical\
Data File : ICV.D
Acq On : 17 Sep 2024 09:25 pm
Operator : SV125:dv
Sample : CQICV,32,, 1.000 Lot#10884
Misc : WG1973864,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:00:15 2024
Quant Method : I:\8270SIM\SV125\240917nRVTical\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 19 14:00:48 2024
Response via : Initial Calibration

Sub List : Default - All compounds listedTical\IL8.D•

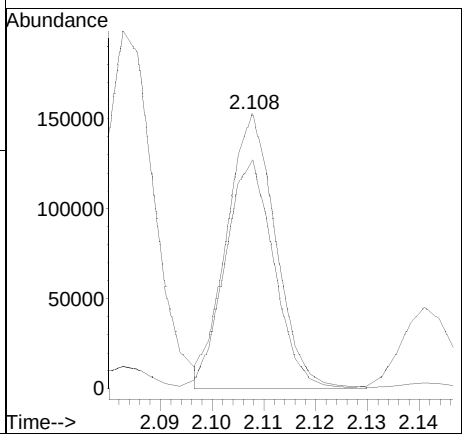


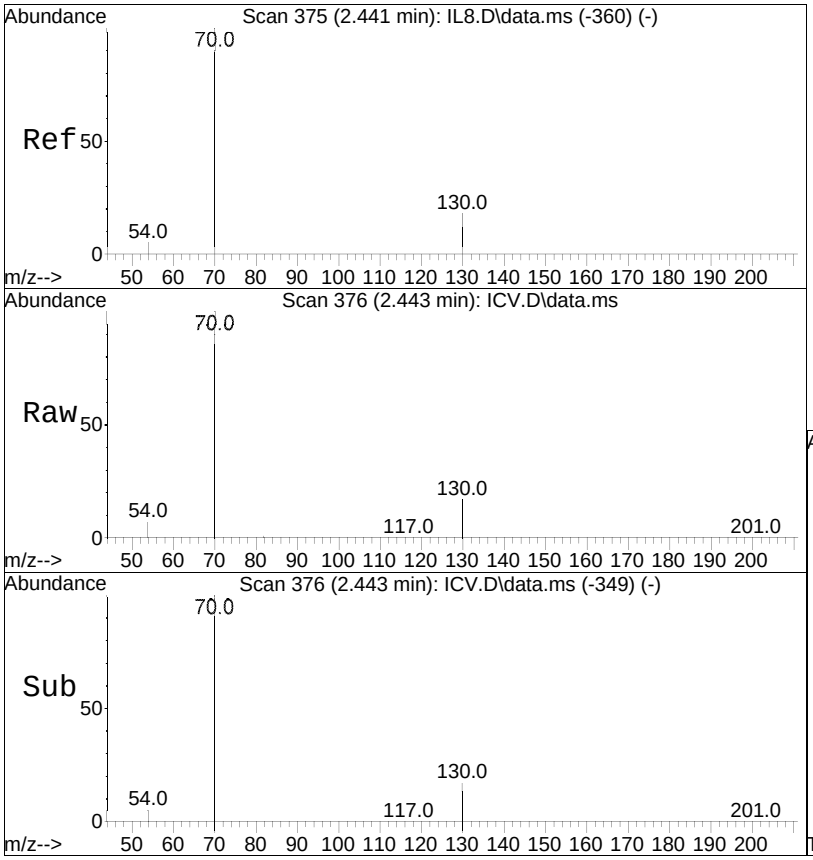



#4
Bis(2-chloroethyl)ether
Concen: 930.25 ng/ml
RT: 2.108 min Scan# 261
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion: 93 Resp: 99768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 83.1 | 66.1 | 99.1 |

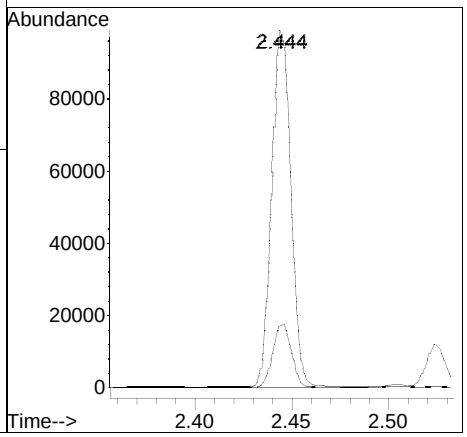


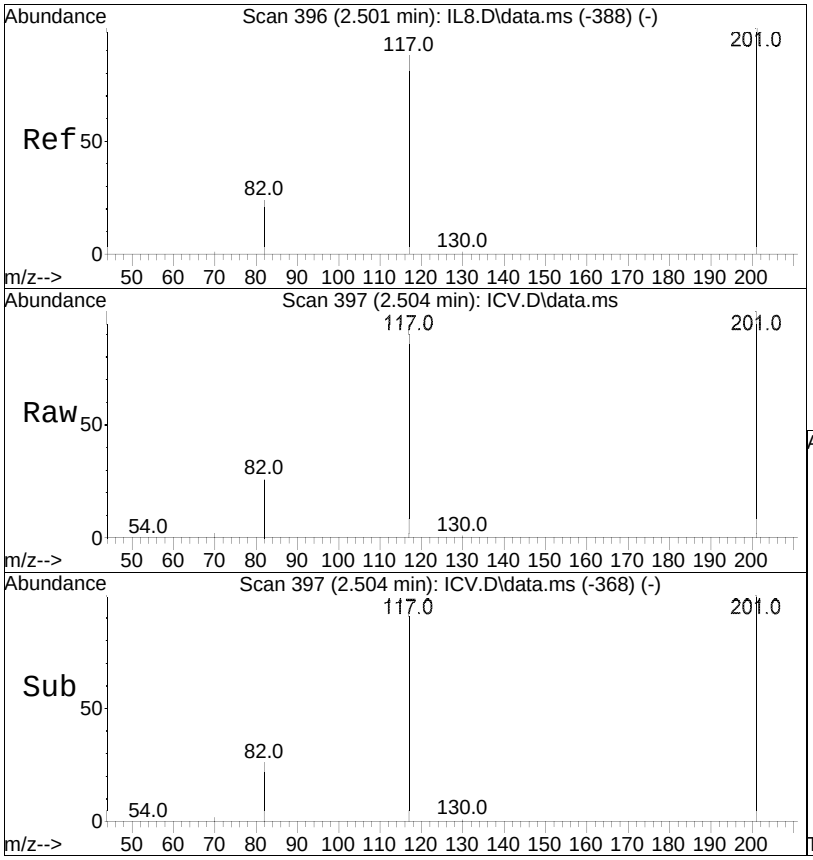



#5
n-nitrosodi-n-propylamine
Concen: 915.69 ng/ml
RT: 2.443 min Scan# 376
Delta R.T. 0.002 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion: 70 Resp: 67019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 17.7 | 14.5 | 21.7 |

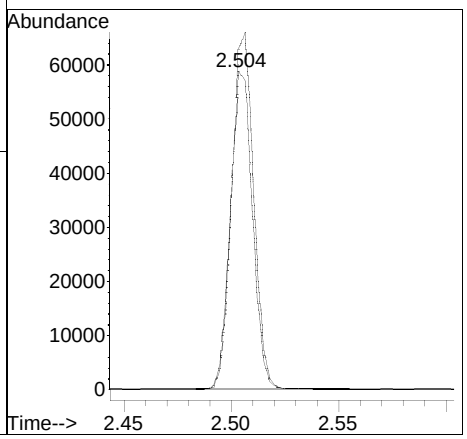


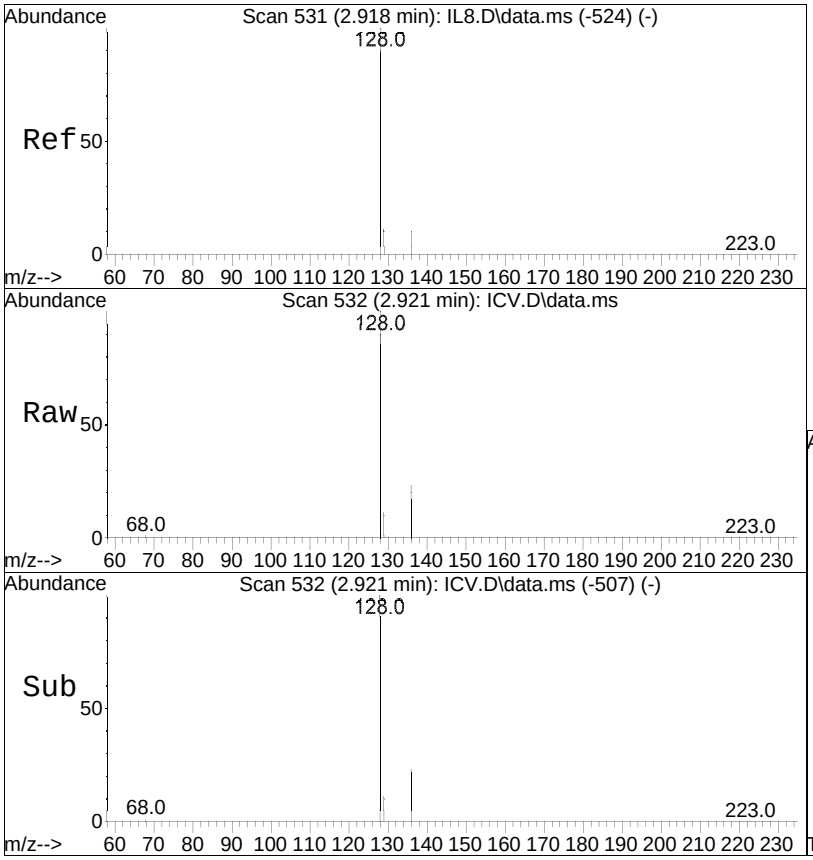



#6
Hexachloroethane
Concen: 949.84 ng/ml
RT: 2.504 min Scan# 397
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:117 Resp: 41233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 111.5 | 89.9 | 134.9 |

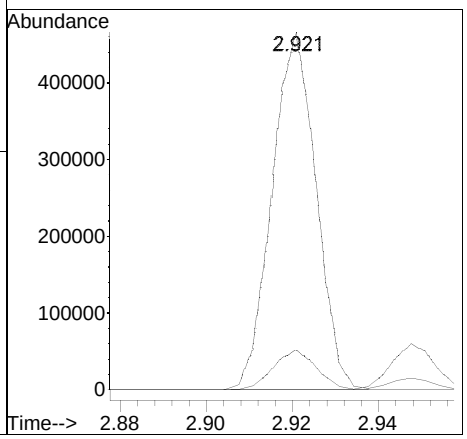


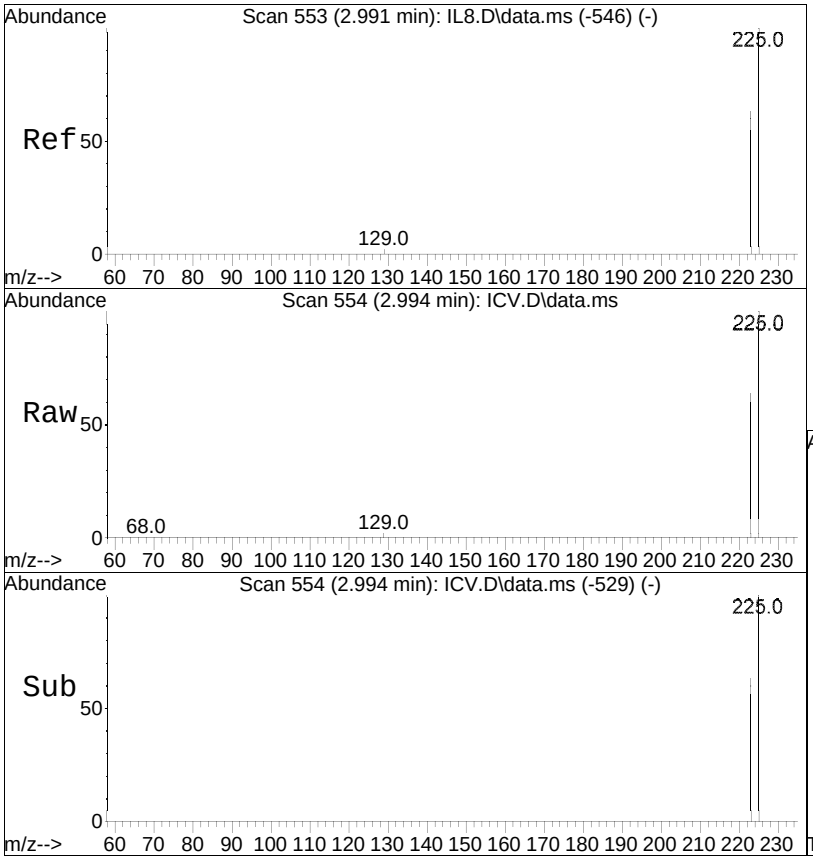



#9
Naphthalene
Concen: 896.89 ng/ml
RT: 2.921 min Scan# 532
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:128 Resp: 327210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.1 | 8.8 | 13.2 |
| 127 | 0.0 | 0.0 | 0.0 |

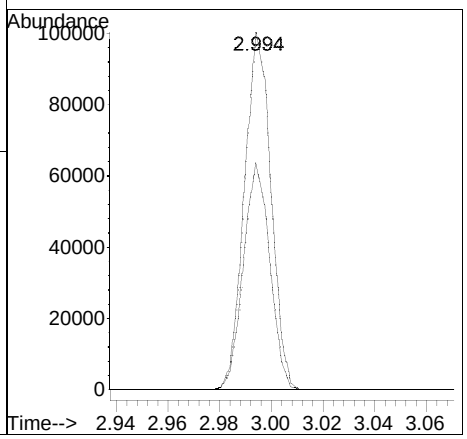


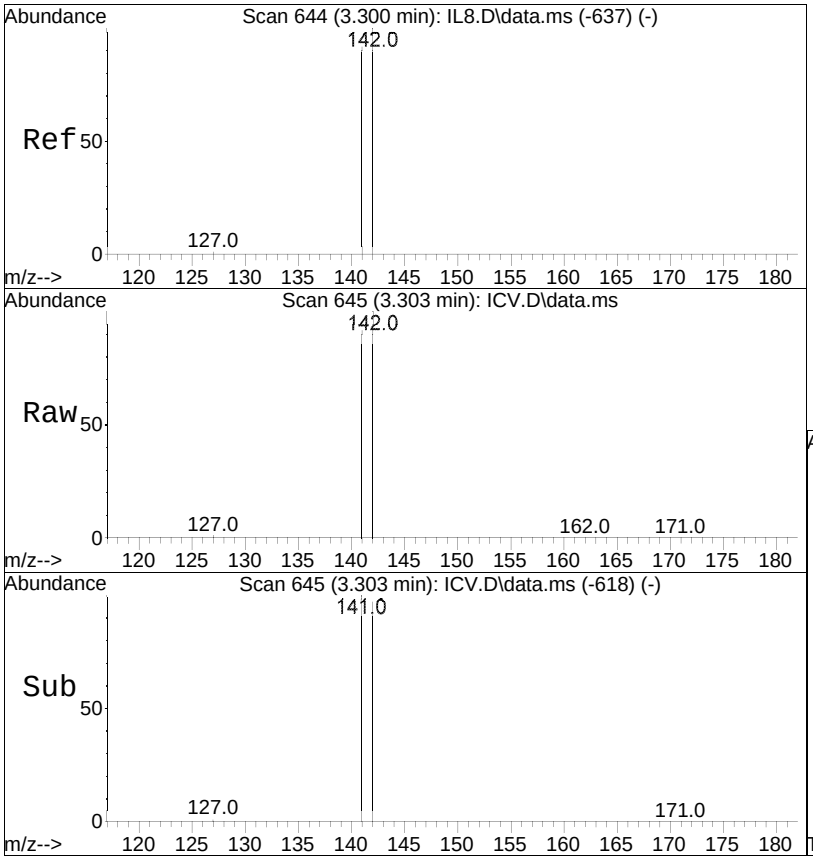



#10
Hexachlorobutadiene
Concen: 956.91 ng/ml
RT: 2.994 min Scan# 554
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:225 Resp: 70531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.9 | 49.9 | 74.9 |

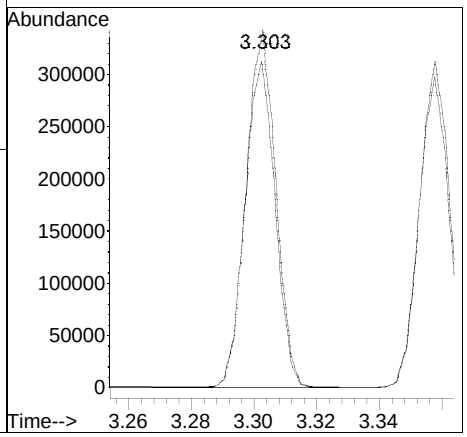


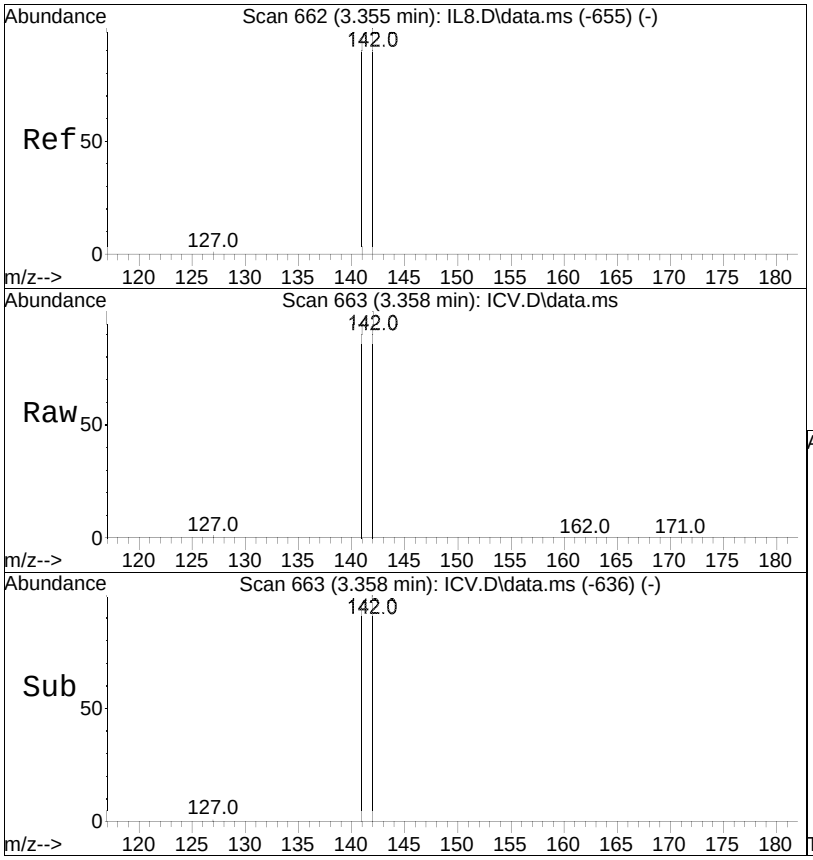



#11
2-Methylnaphthalene
Concen: 967.88 ng/ml
RT: 3.303 min Scan# 645
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:142 Resp: 226159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.0 | 73.8 | 110.6 |

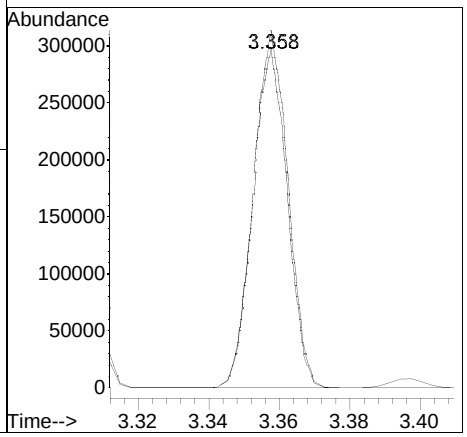


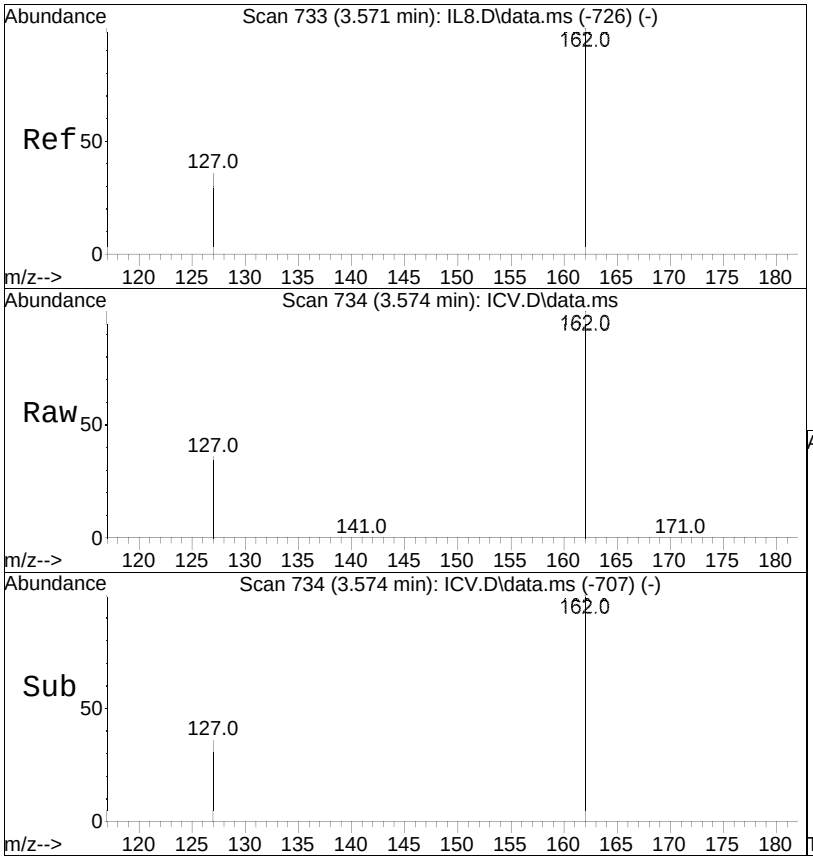



#12
1-Methylnaphthalene
Concen: 963.82 ng/ml
RT: 3.358 min Scan# 663
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:142 Resp: 208904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 95.2 | 76.1 | 114.1 |

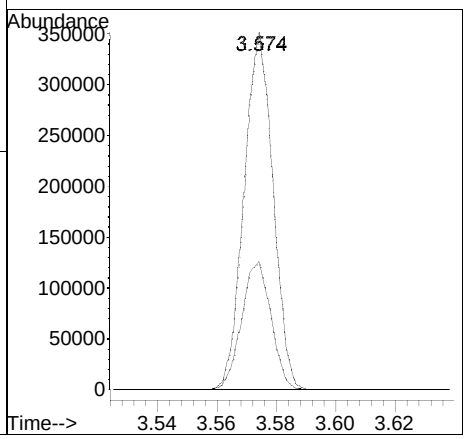


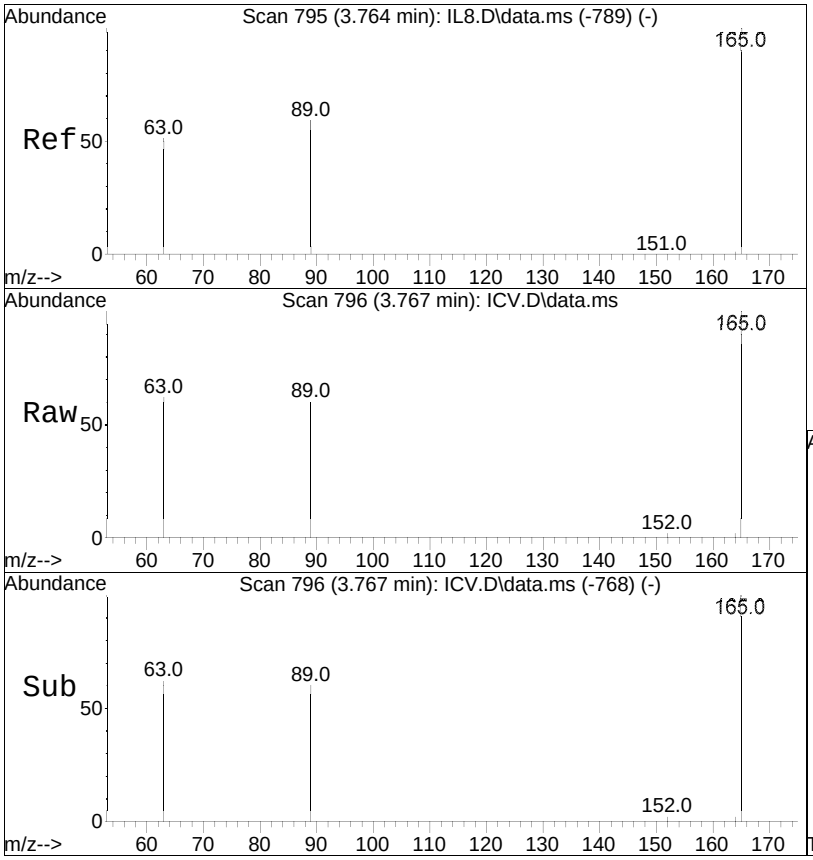



#14
2-Chloronaphthalene
Concen: 947.19 ng/ml
RT: 3.574 min Scan# 734
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:162 Resp: 234354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 36.6 | 29.4 | 44.0 |

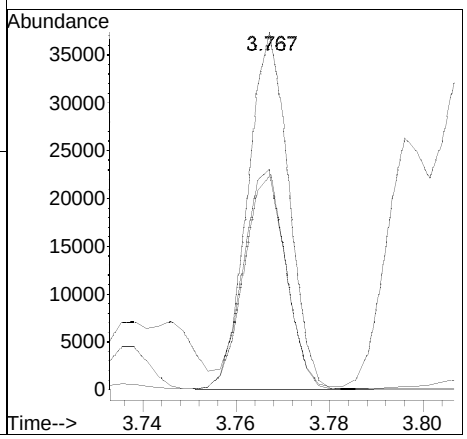


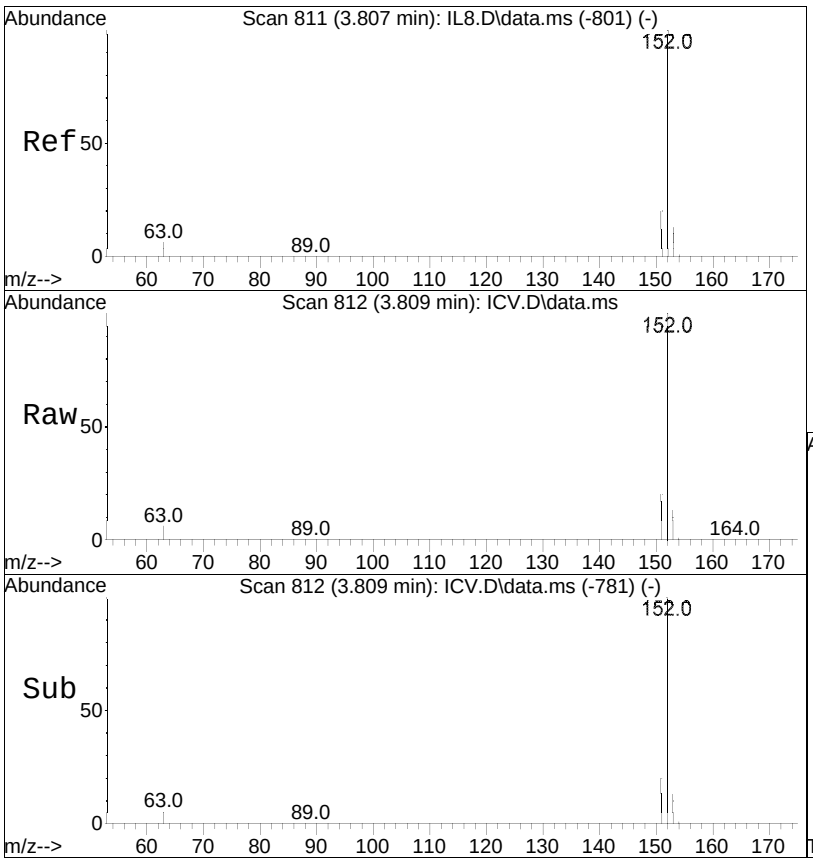



#15
2,6-Dinitrotoluene
Concen: 779.73 ng/ml
RT: 3.767 min Scan# 796
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:165 Resp: 22735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 61.2 | 48.5 | 72.7 |
| 63 | 63.0 | 49.5 | 74.3 |

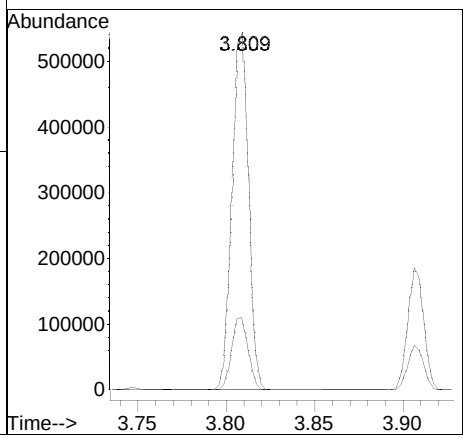


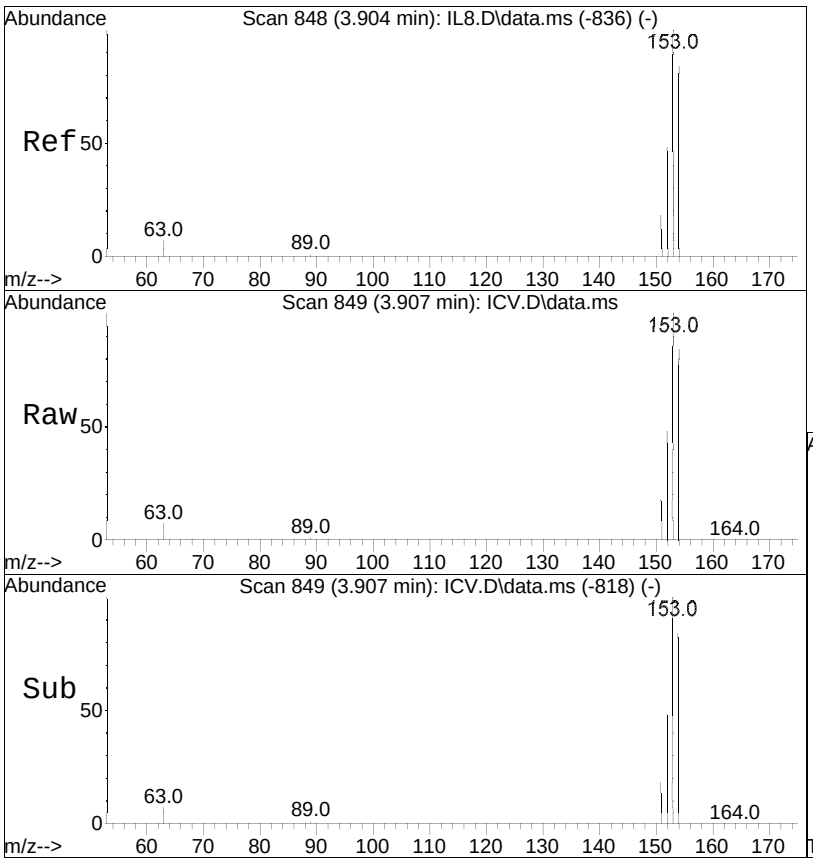



#16
Acenaphthylene
Concen: 973.58 ng/ml
RT: 3.809 min Scan# 812
Delta R.T. 0.002 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:152 Resp: 349842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.4 | 16.2 | 24.4 |

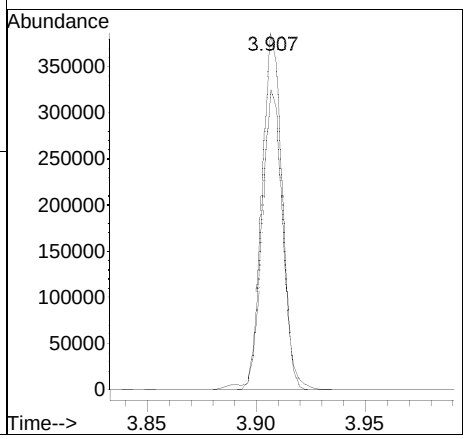


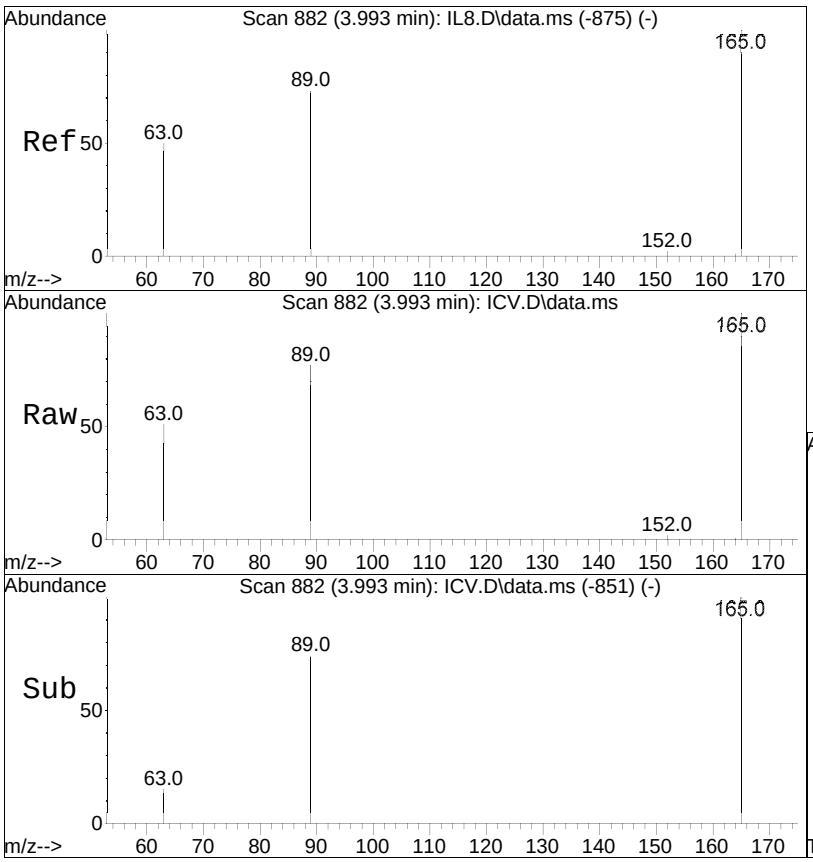



#18
Acenaphthene
Concen: 935.37 ng/ml
RT: 3.907 min Scan# 849
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:153 Resp: 243491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 87.9 | 70.3 | 105.5 |

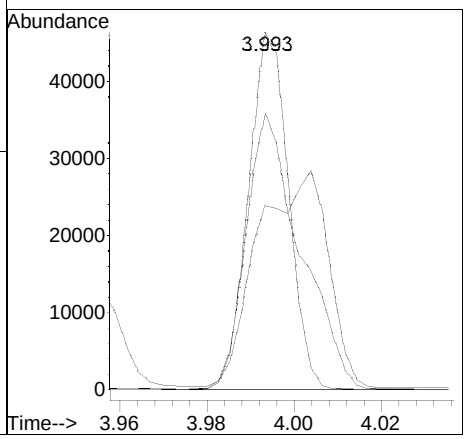


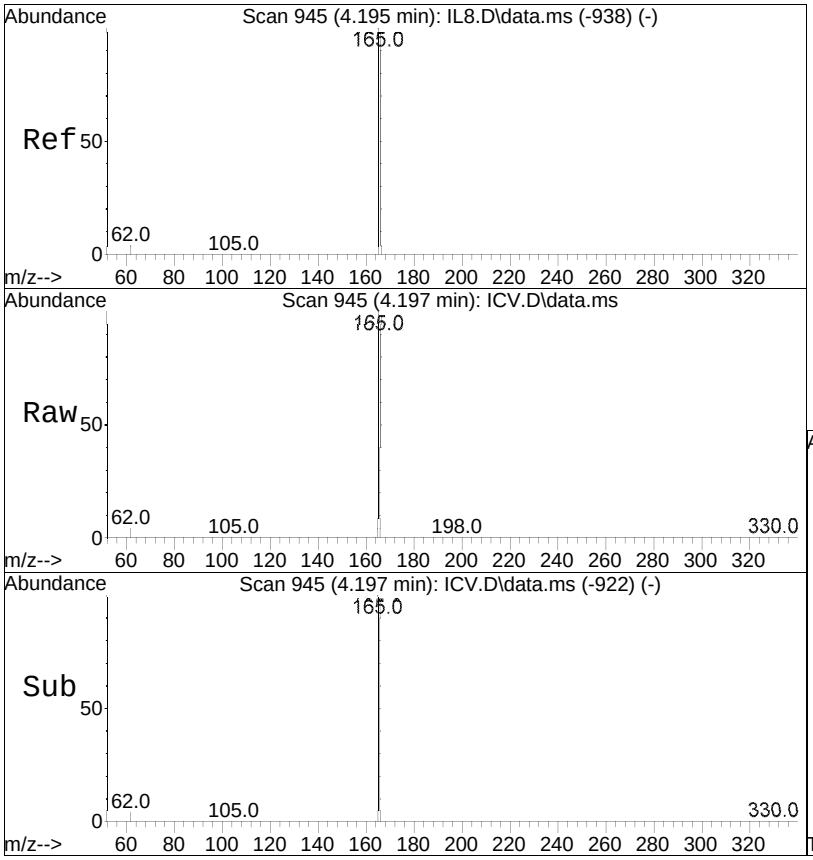



#19
2,4-Dinitrotoluene
Concen: 802.35 ng/ml M4
RT: 3.993 min Scan# 882
Delta R.T. 0.000 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:165 Resp: 29280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 84.9 | 64.2 | 96.2 |
| 63 | 55.8 | 40.1 | 60.1 |

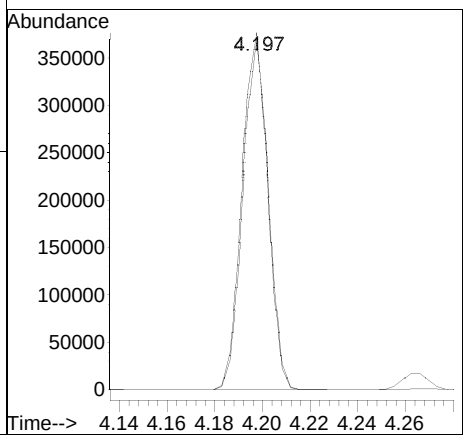


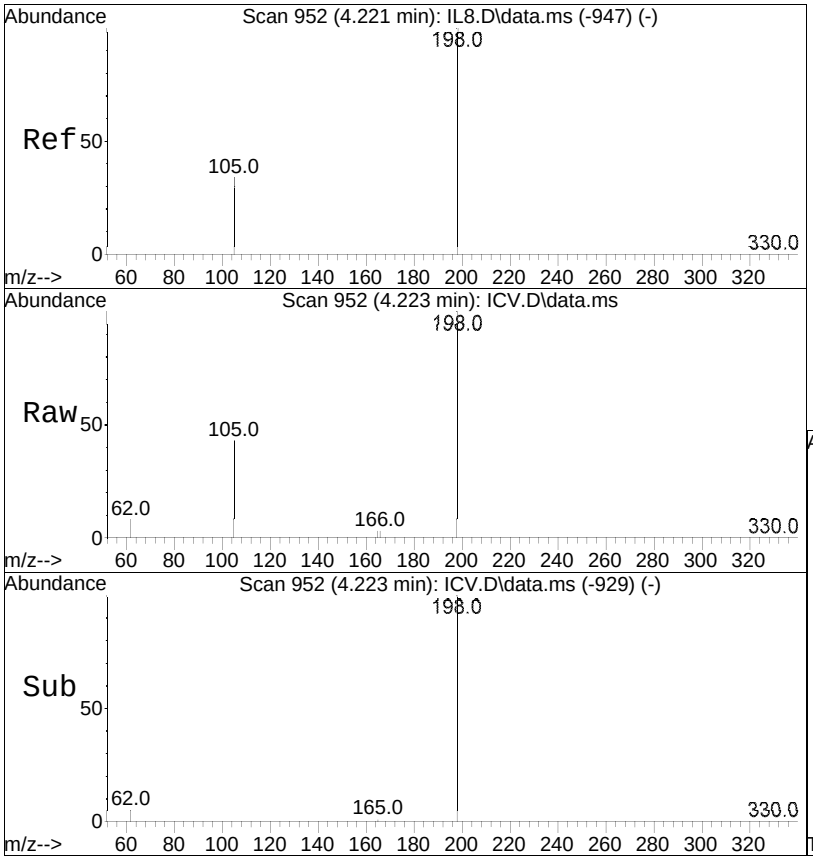



#20
Fluorene
Concen: 956.87 ng/ml
RT: 4.197 min Scan# 945
Delta R.T. 0.002 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:166 Resp: 273059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 102.7 | 82.0 | 123.0 |

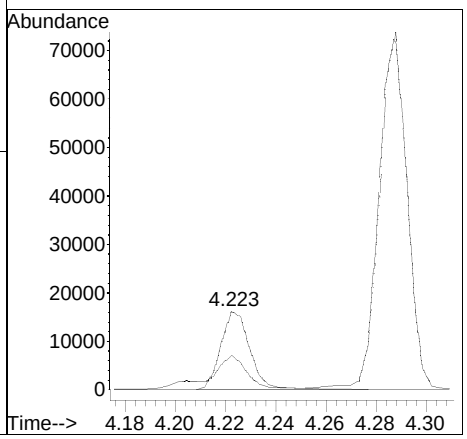


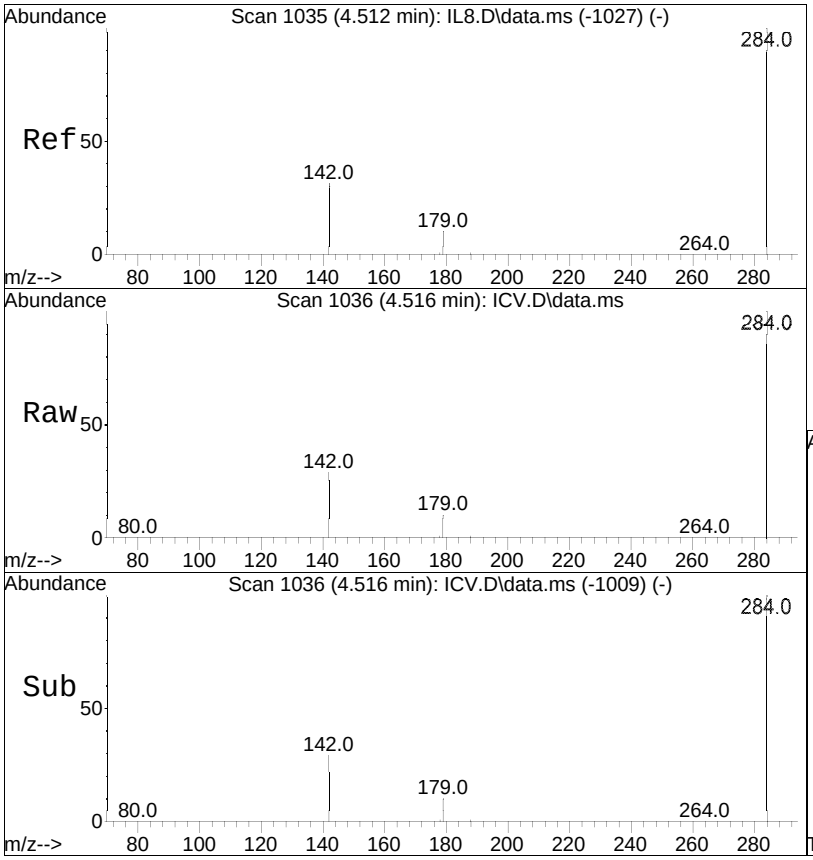



#23
4,6-Dinitro-o-cresol
Concen: 832.05 ng/ml M4
RT: 4.223 min Scan# 952
Delta R.T. 0.002 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:198 Resp: 12989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 105 | 50.3 | 39.5 | 59.3 |

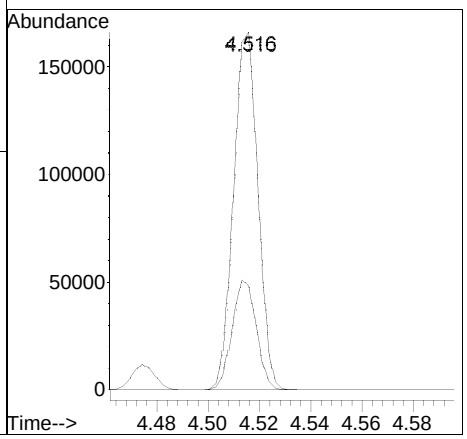


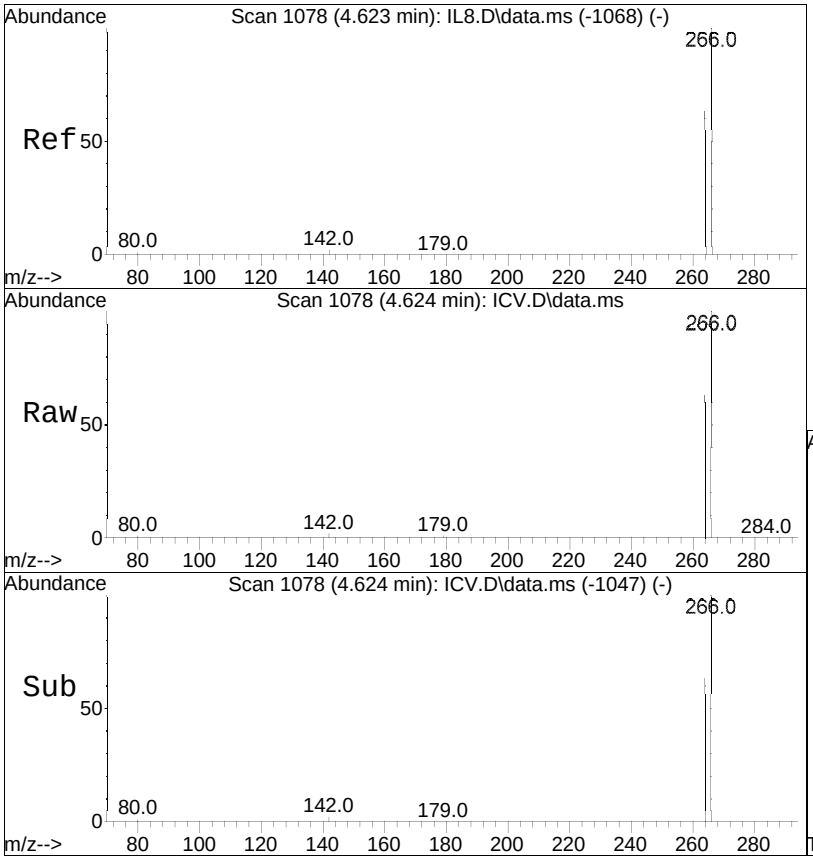



#24
Hexachlorobenzene
Concen: 930.73 ng/ml
RT: 4.516 min Scan# 1036
Delta R.T. 0.004 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:284 Resp: 107981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 30.4 | 24.4 | 36.6 |

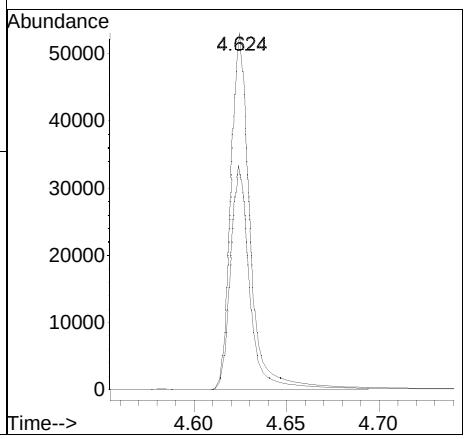


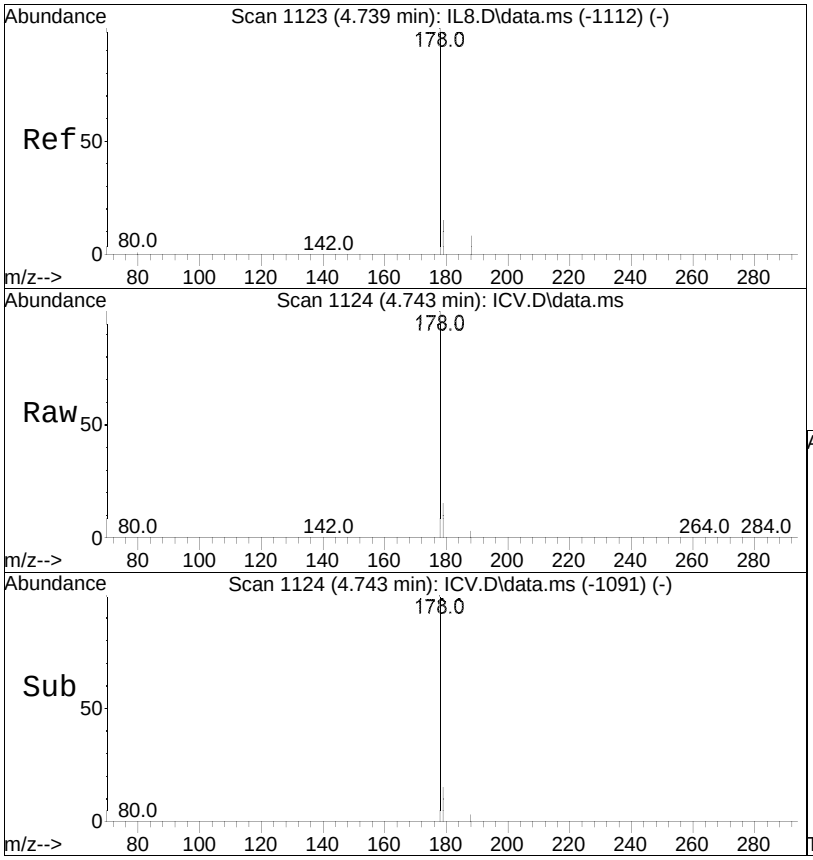



#25
Pentachlorophenol
Concen: 903.57 ng/ml
RT: 4.624 min Scan# 1078
Delta R.T. 0.001 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:266 Resp: 38271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.9 | 50.4 | 75.6 |

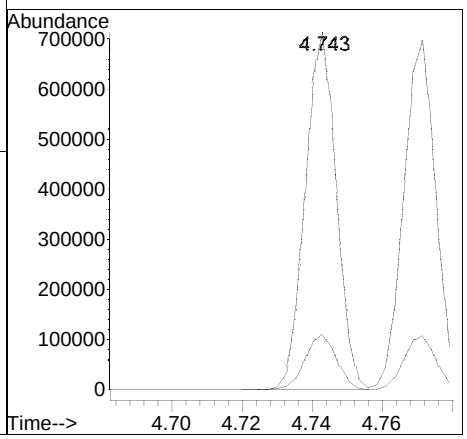


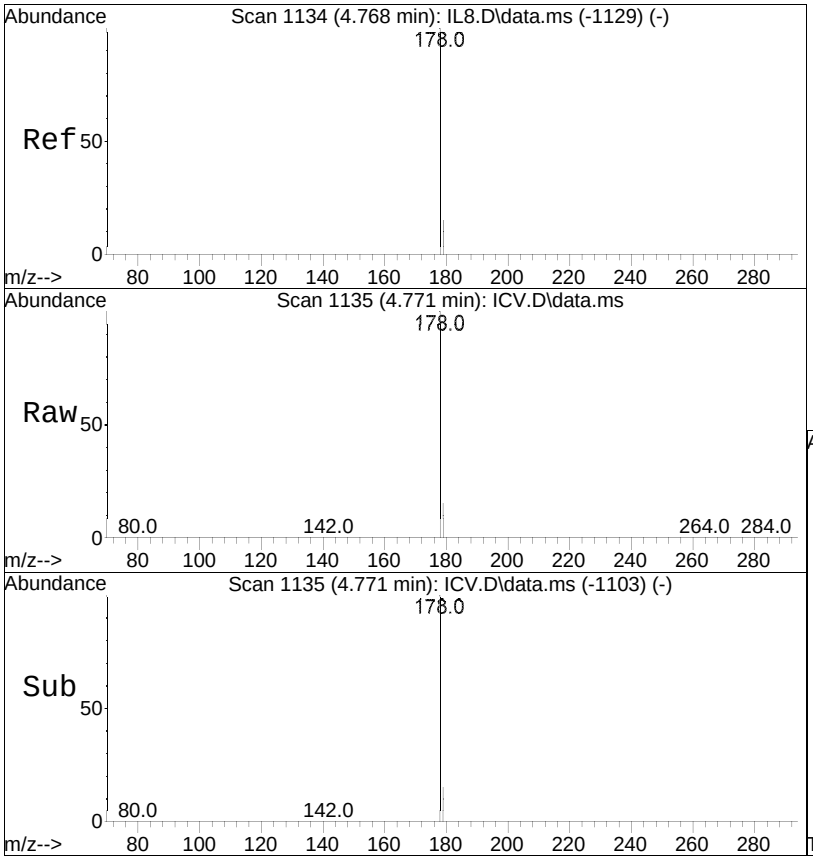



#26
Phenanthrene
Concen: 940.20 ng/ml
RT: 4.743 min Scan# 1124
Delta R.T. 0.004 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:178 Resp: 439728

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.7 | 12.6 | 18.8 |

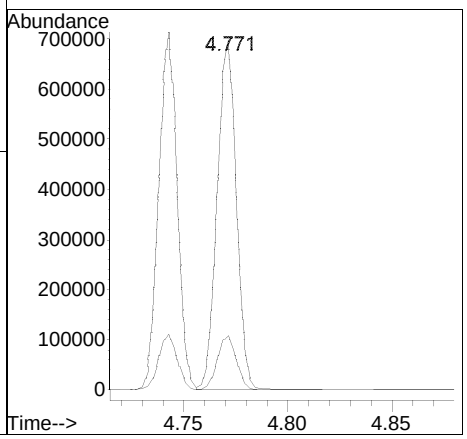


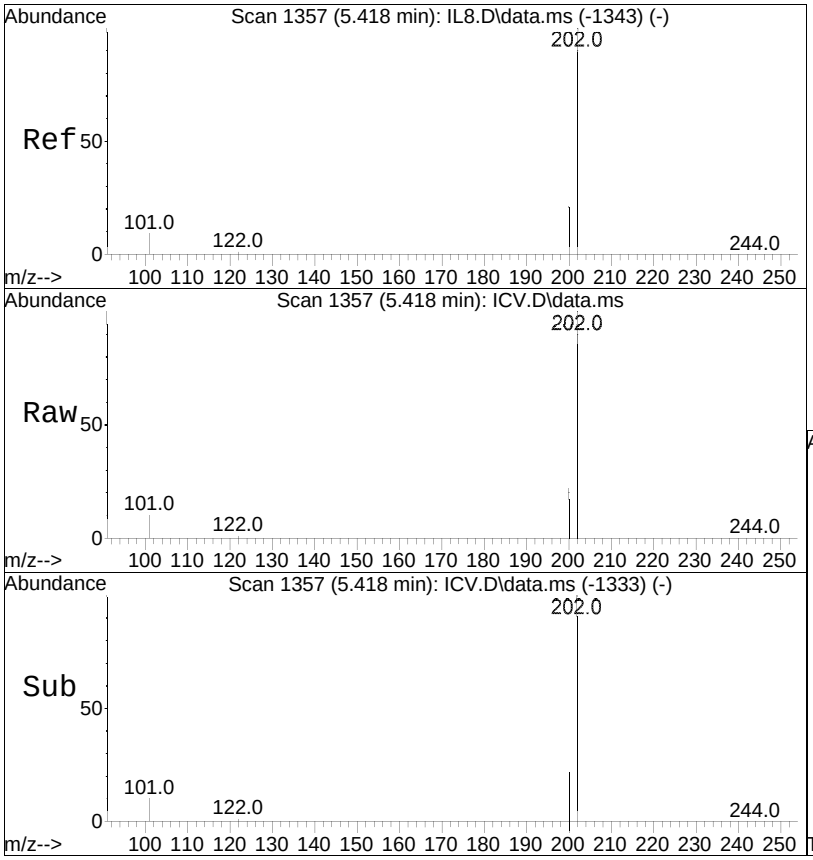



#27
Anthracene
Concen: 958.96 ng/ml
RT: 4.771 min Scan# 1135
Delta R.T. 0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:178 Resp: 444982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.4 | 12.3 | 18.5 |

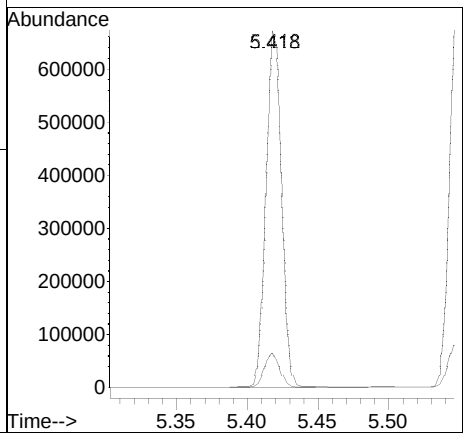


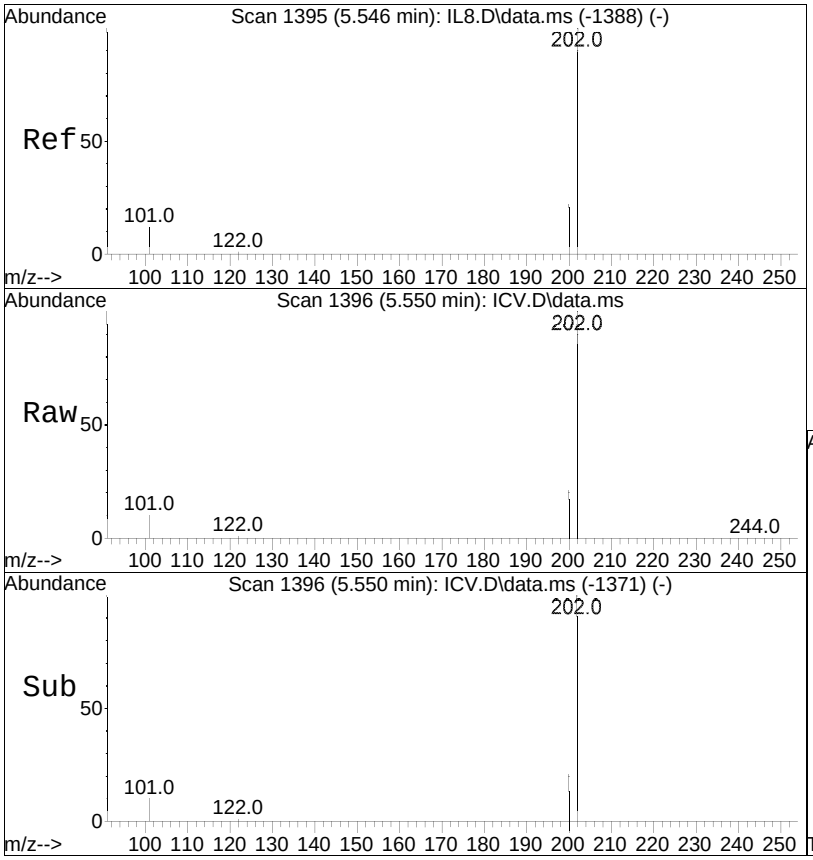



#28
Fluoranthene
Concen: 974.24 ng/ml
RT: 5.418 min Scan# 1357
Delta R.T. -0.000 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:202 Resp: 516847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.4 | 7.6 | 11.4 |

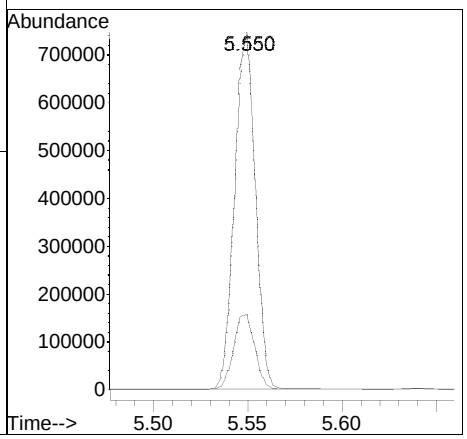


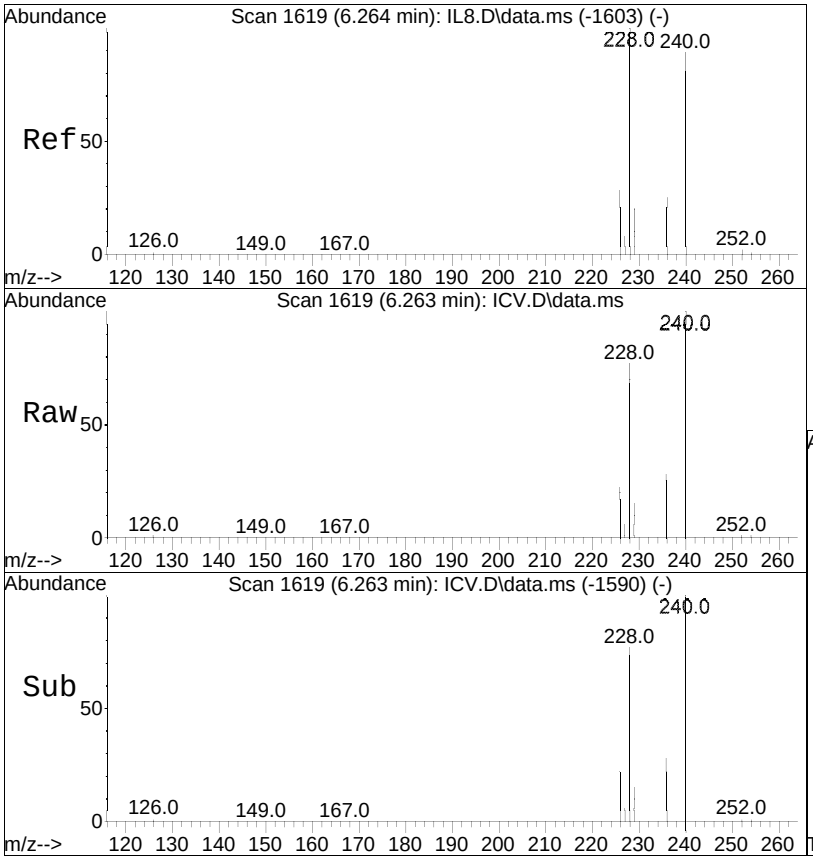



#29
Pyrene
Concen: 1005.22 ng/ml
RT:  5.550 min  Scan# 1396
Delta R.T.  0.003 min
Lab File:  ICV.D
Acq: 17 Sep 2024  09:25 pm

Tgt Ion:202 Resp:  562633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.6 | 17.2 | 25.8 |

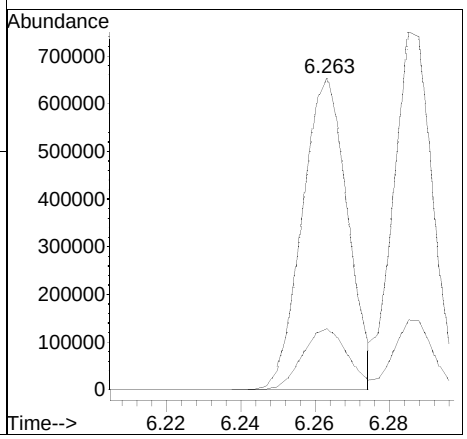


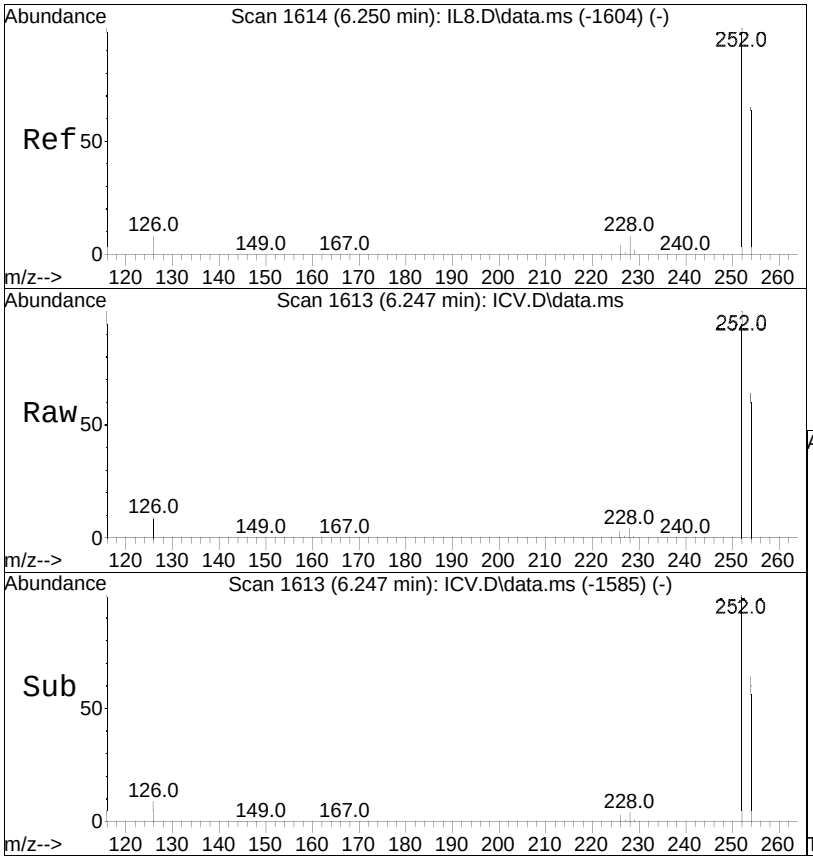



#32
Benzo[a]anthracene
Concen: 972.16 ng/ml
RT: 6.263 min Scan# 1619
Delta R.T. -0.001 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:228 Resp: 554053

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.7 | 15.8 | 23.6 |

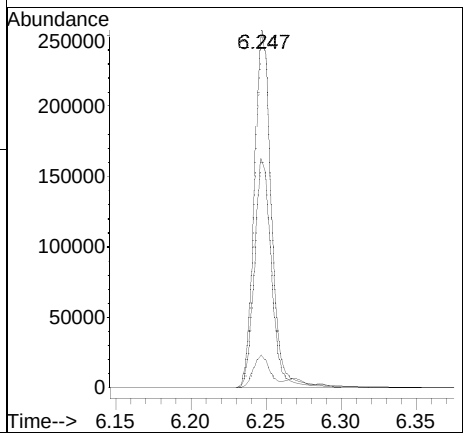


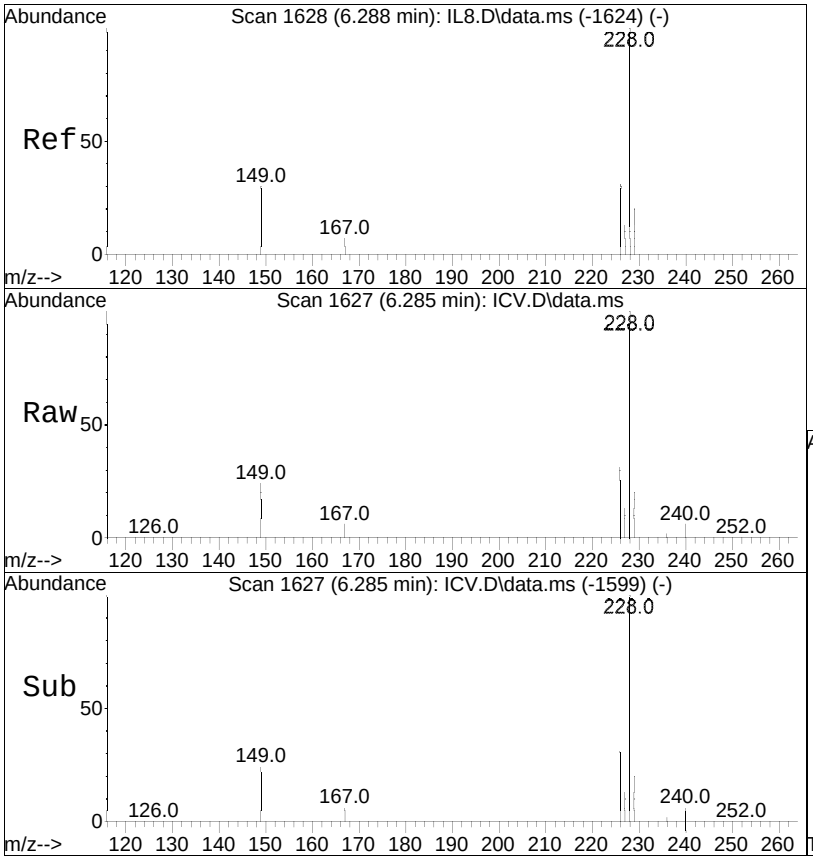



#33
3,3'-Dichlorobenzene
Concen: 920.48 ng/ml
RT: 6.247 min Scan# 1613
Delta R.T. -0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:252 Resp: 197154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 9.2 | 7.2 | 10.8 |
| 254 | 64.7 | 51.8 | 77.6 |

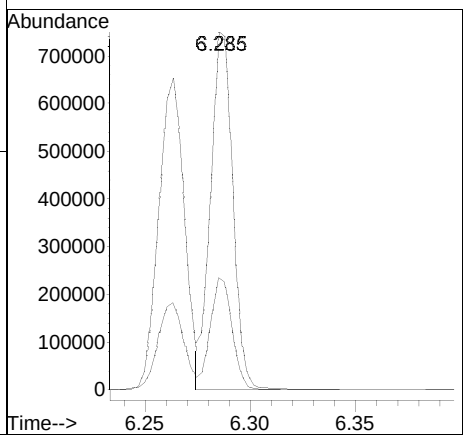


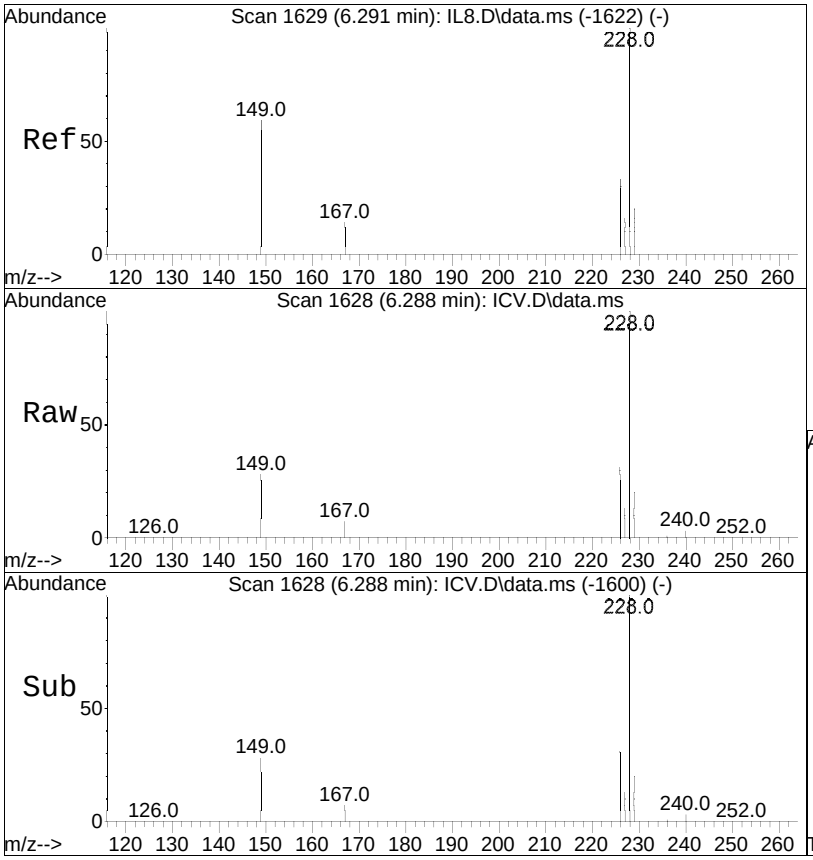



#34
Chrysene
Concen: 1002.97 ng/ml
RT:  6.285 min  Scan# 1627
Delta R.T.  -0.003 min
Lab File:  ICV.D
Acq: 17 Sep 2024  09:25 pm

Tgt Ion:228 Resp:  548944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 24.8 | 37.2 |

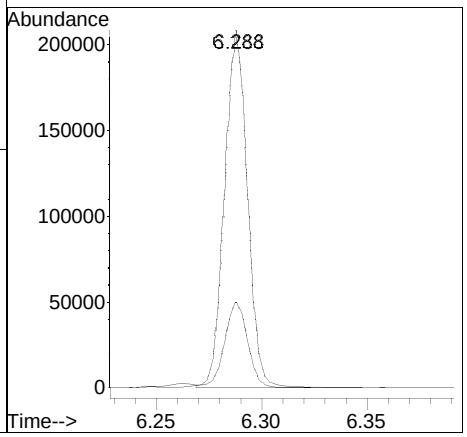


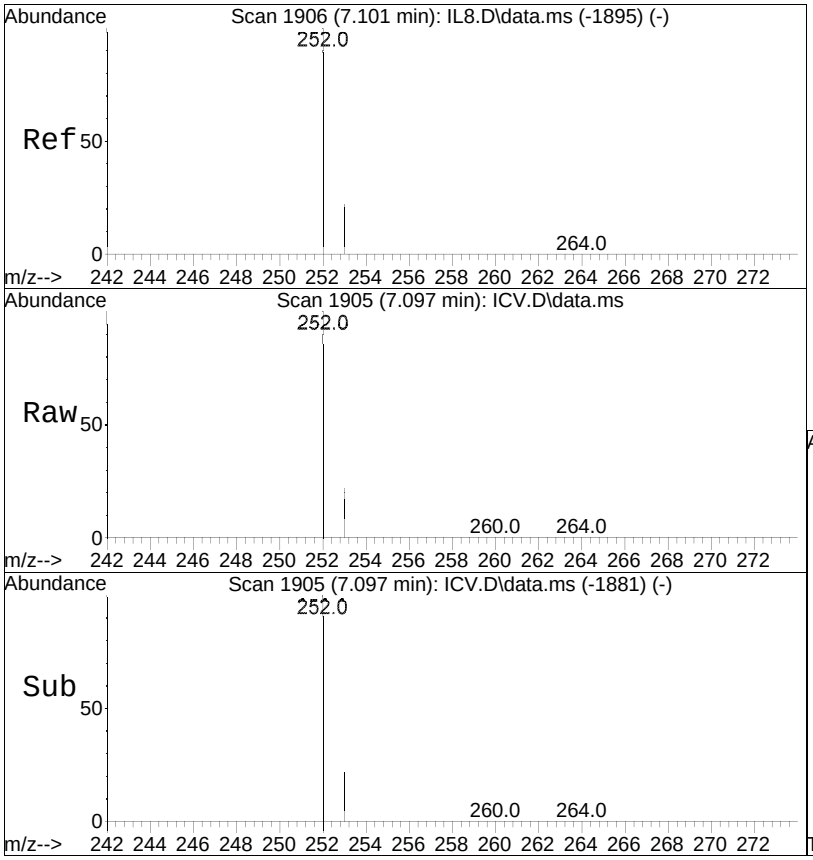



#35
Bis(2-ethylhexyl)phthalate
Concen: 823.94 ng/ml
RT: 6.288 min Scan# 1628
Delta R.T. -0.003 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:149 Resp: 154479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.8 | 19.9 | 29.9 |

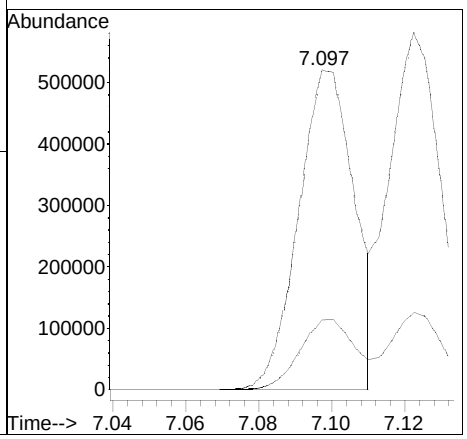


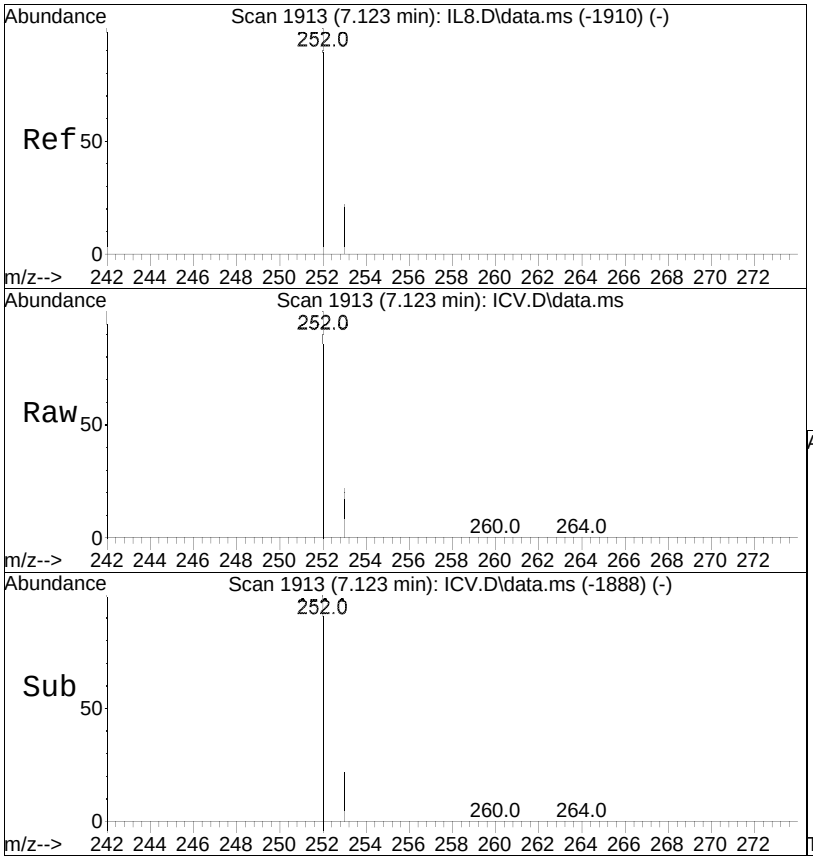



#37
Benzo[b]fluoranthene
Concen: 1049.12 ng/ml
RT: 7.097 min Scan# 1905
Delta R.T. -0.004 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:252 Resp: 556509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.7 | 17.4 | 26.0 |

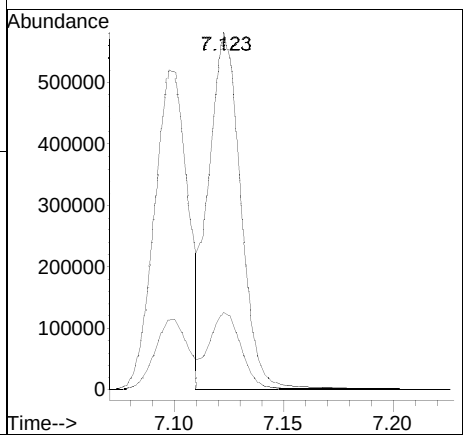


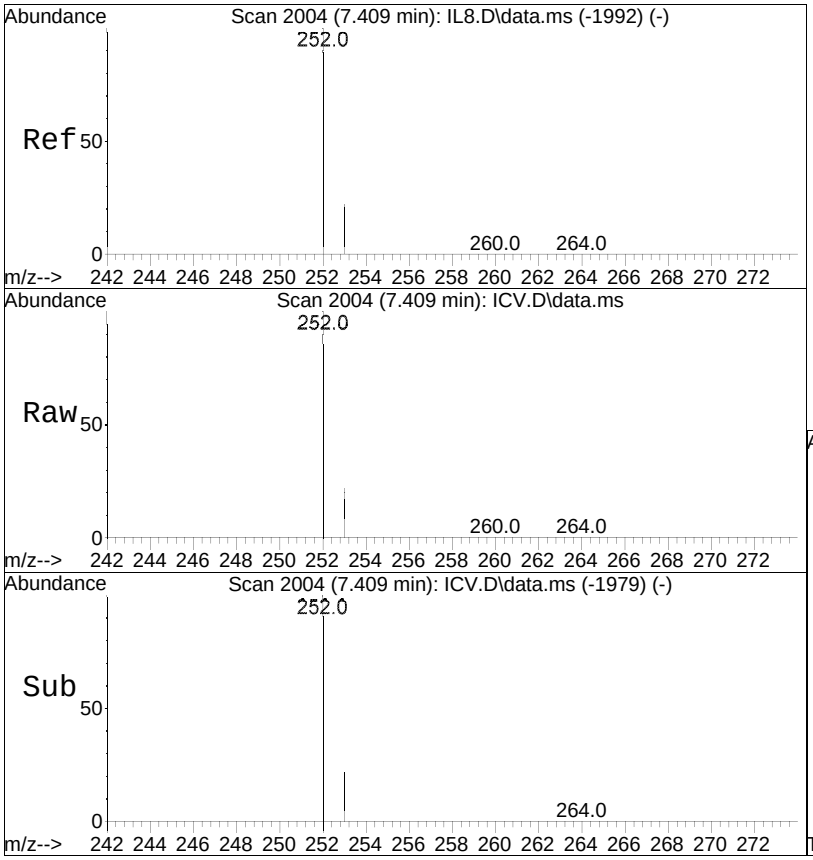



#38
Benzo[k]fluoranthene
Concen: 1122.29 ng/ml
RT: 7.123 min Scan# 1913
Delta R.T. -0.000 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:252 Resp: 583310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.5 | 26.3 |

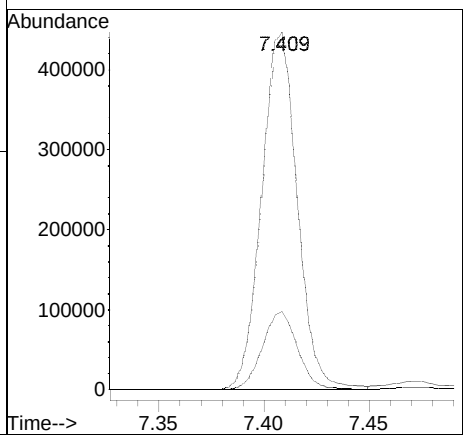


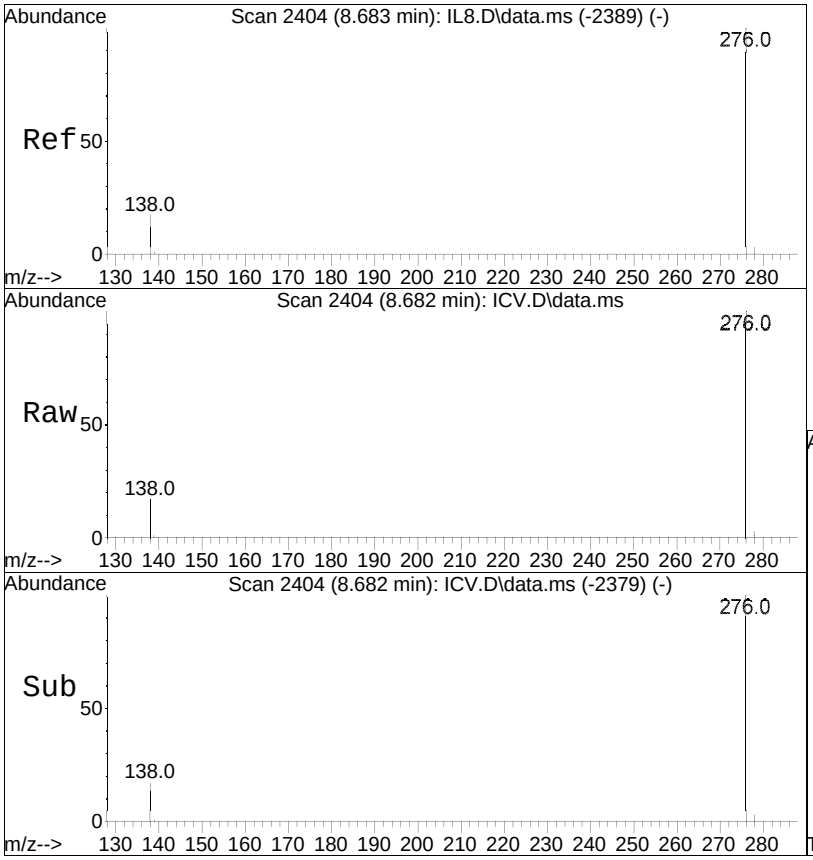



#39
Benzo[a]pyrene
Concen: 1122.32 ng/ml
RT:  7.409 min  Scan# 2004
Delta R.T.  -0.000 min
Lab File:  ICV.D
Acq: 17 Sep 2024  09:25 pm

Tgt Ion:252 Resp:  517993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.8 | 17.4 | 26.0 |

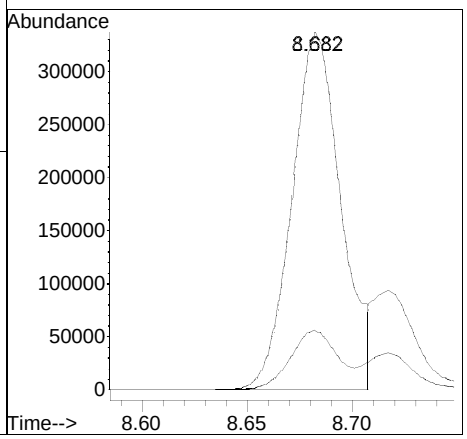


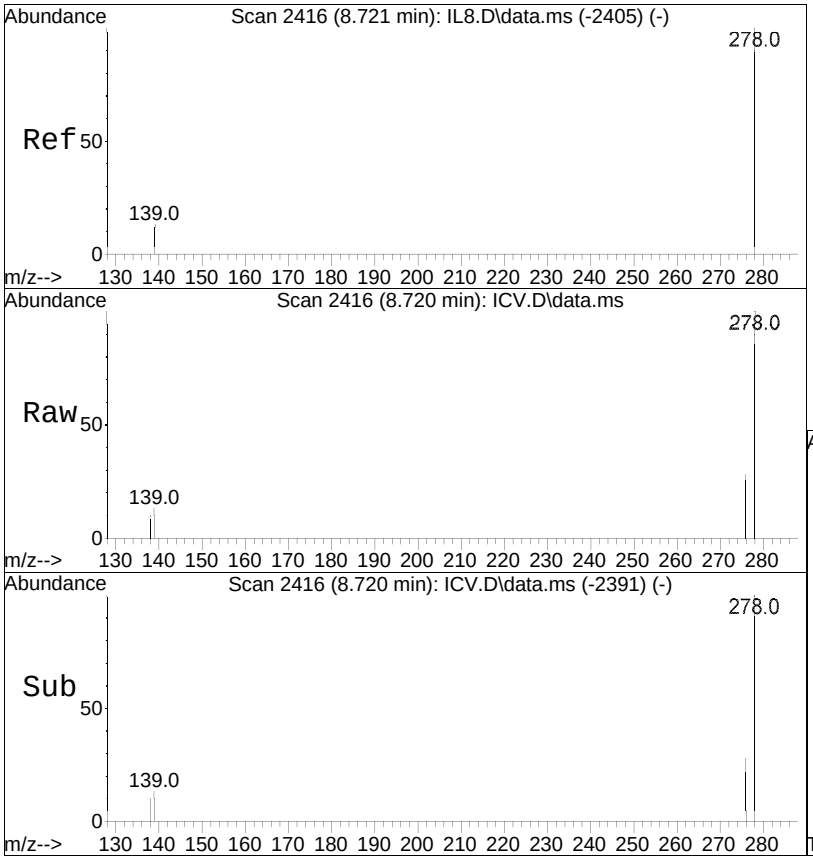



#40
Indeno[1,2,3-cd]pyrene
Concen: 1120.51 ng/ml
RT:  8.682 min  Scan# 2404
Delta R.T.  -0.001 min
Lab File:  ICV.D
Acq: 17 Sep 2024  09:25 pm

Tgt Ion:276 Resp:  543147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 16.2 | 13.1 | 19.7 |

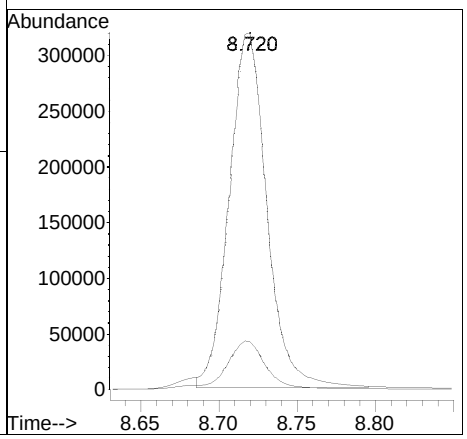


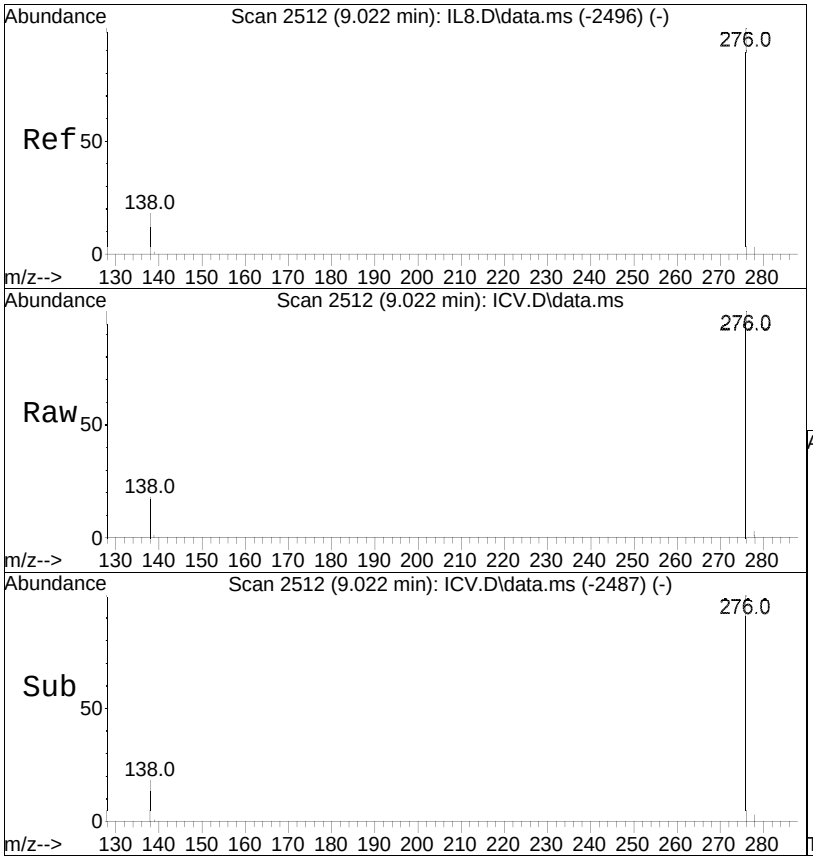



#41
Dibenzo[a,h]anthracene
Concen: 1000.28 ng/ml M6
RT: 8.720 min Scan# 2416
Delta R.T. -0.001 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:278 Resp: 530412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 14.5 | 12.0 | 18.0 |

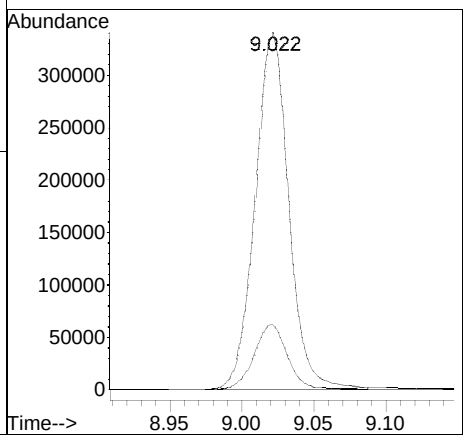





#42
Benzo[g,h,i]perylene
Concen: 1084.78 ng/ml
RT: 9.022 min Scan# 2512
Delta R.T. -0.000 min
Lab File: ICV.D
Acq: 17 Sep 2024 09:25 pm

Tgt Ion:276 Resp: 544533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.3 | 14.7 | 22.1 |

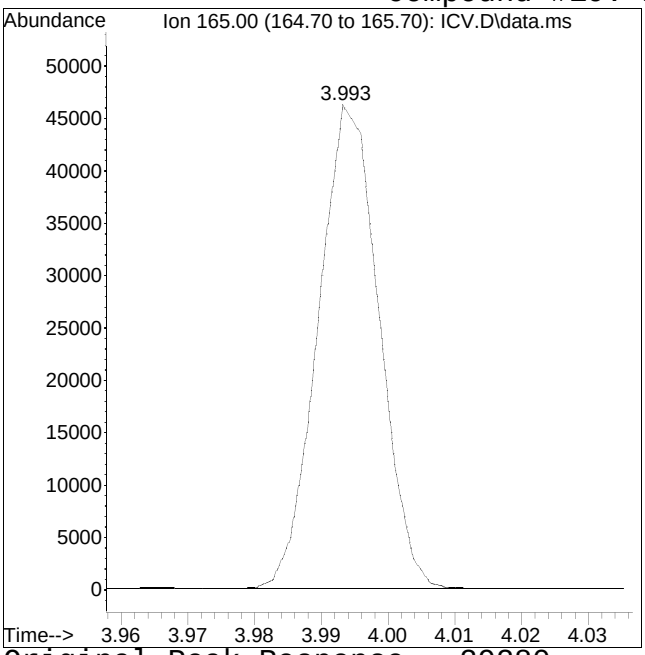


# Manual Integration Report

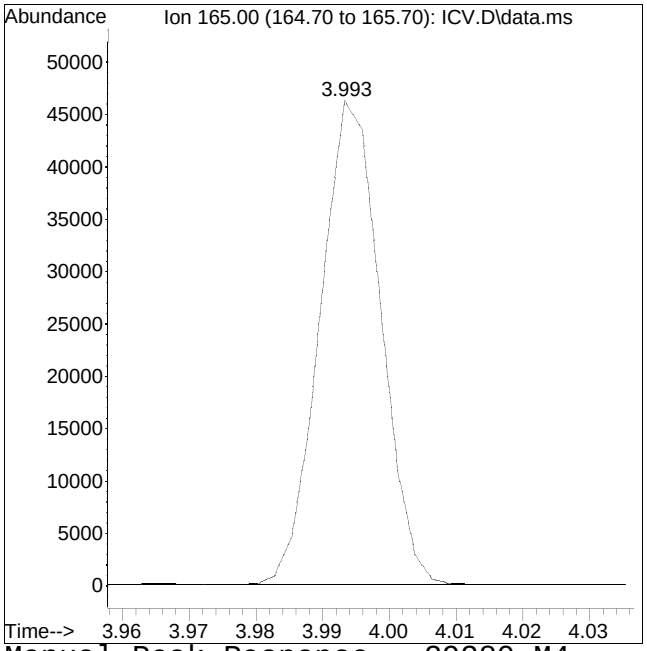
Data Path : I:\8270SIM\SV125\240917nRVQ
Data File : ICV.D
Date Inj'd : 9/17/2024 9:25 pm
Sample : CQICV,32,, 1.000 Lot#10884

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/19/2024 2:00 pm

## Compound #19: 2,4-Dinitrotoluene




Original Peak Response = 29280



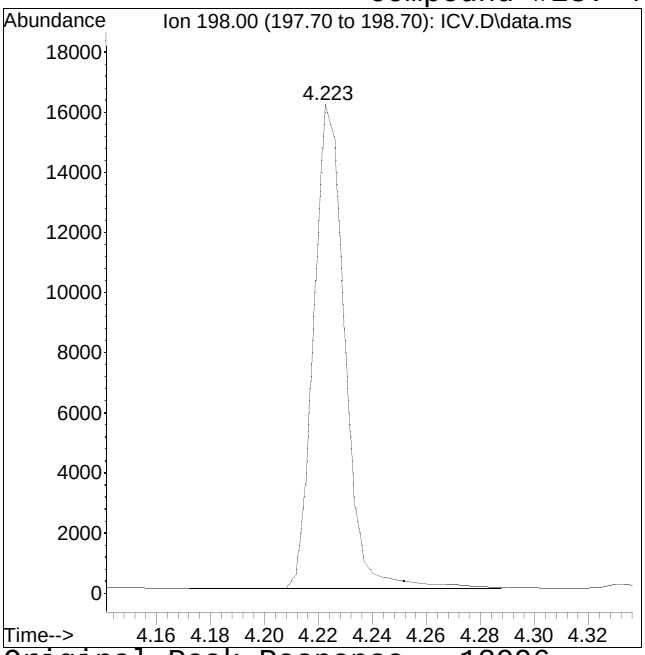

Manual Peak Response = 29280 M4

M4 = Poor automated baseline construction.

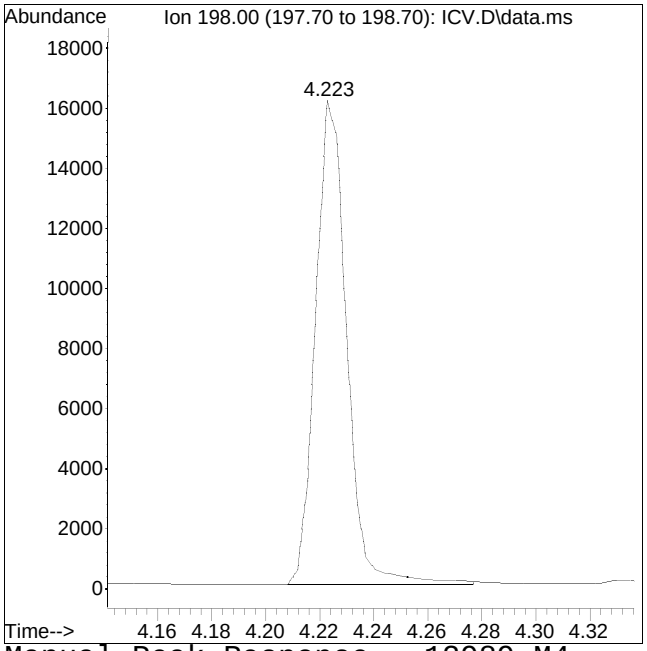
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : ICV.D Operator : SV125:dv
Date Inj'd : 9/17/2024 9:25 pm Instrument : SV125
Sample : CQICV,32,, 1.000 Lot#10884Quant Date : 9/19/2024 2:00 pm

## Compound #23: 4,6-Dinitro-o-cresol




Original Peak Response = 12996



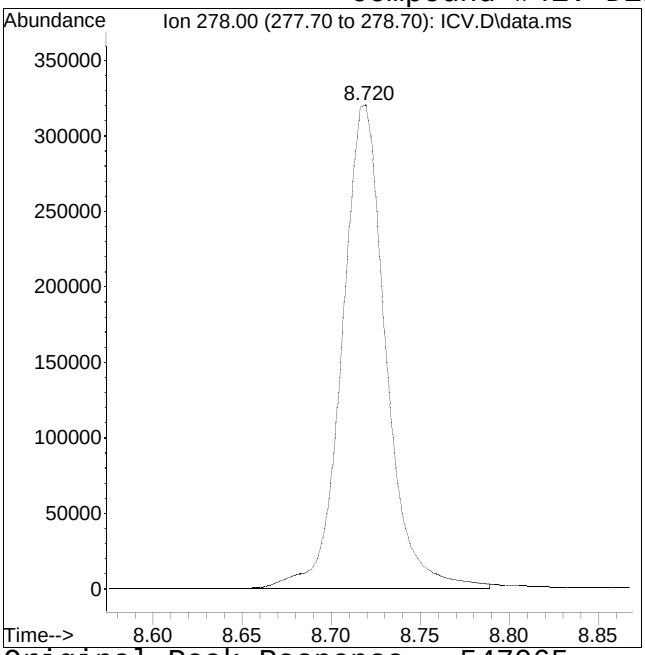

Manual Peak Response = 12989 M4

M4 = Poor automated baseline construction.

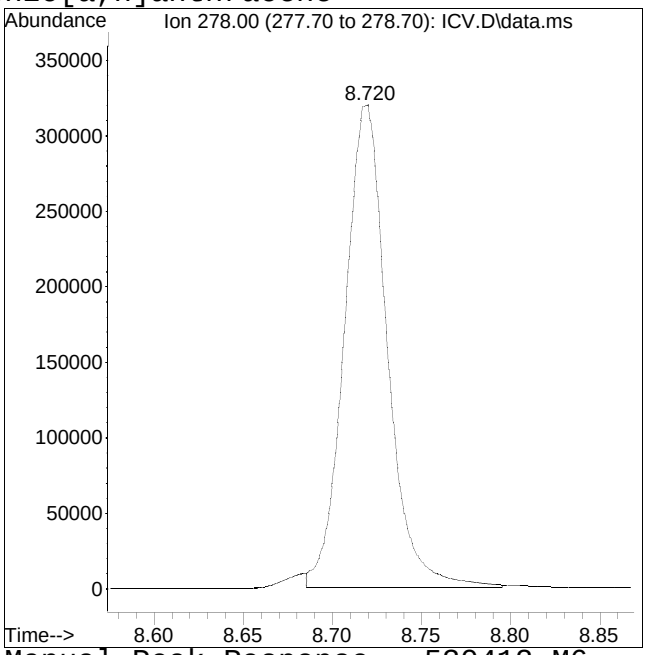
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240917nRVQMethod : SIM-RVT_240917n_sv125.M
Data File : ICV.D Operator : SV125:dv
Date Inj'd : 9/17/2024 9:25 pm Instrument : SV125
Sample : CQICV,32,, 1.000 Lot#10884Quant Date : 9/19/2024 2:00 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 547065




Manual Peak Response = 530412 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

## Evaluate Relative Error Report SV125

Method Path : I:\8270SIM\SV125\240917nRVTical\
Method File : SIM-RVT_240917n_sv125.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 19 13:55:09 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 15 T | 2,6-Dinitrotoluene | Q | ng/ml | 1000.0 | 925.660 | -7.4 | 40.00 | 48.846 | 22.1 |
| 19 T | 2,4-Dinitrotoluene | Q | ng/ml | 1000.0 | 934.785 | -6.5 | 40.00 | 49.381 | 23.5 |
| 23 T | 4,6-Dinitro-o-cresol | Q | ng/ml | 1000.0 | 939.941 | -6.0 | 40.00 | 47.557 | 18.9 |
| 25 T | Pentachlorophenol | Q | ng/ml | 1000.0 | 963.208 | -3.7 | 10.00 | 14.428 | 44.3 |
| 32 T | Benzo[a]anthracene | L | ng/ml | 1000.0 | 1018.478 | 1.8 | 1.00 | 0.996 | -0.4 |
| 33 T | 3,3'-Dichlorobenzene | L | ng/ml | 1000.0 | 927.716 | -7.2 | 40.00 | 47.974 | 19.9 |
| 35 T | Bis(2-ethylhexyl)phthalate | Q | ng/ml | 1000.0 | 910.465 | -9.0 | 40.00 | 50.736 | 26.8 |
| 41 T | Dibenzo[a,h]anthracene | Q | ng/ml | 1000.0 | 992.650 | -0.7 | 1.00 | 1.453 | 45.3 |

## Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 15 T | 2,6-Dinitrotoluene | Quadratic | 0.996416 | 0.019847 | 0.083842 | -0.000499981 |
| 19 T | 2,4-Dinitrotoluene | Quadratic | 0.996416 | 0.038883 | 0.16871 | -0.00110528 |
| 23 T | 4,6-Dinitro-o-cresol | Quadratic | 0.997511 | 0.006299 | 0.0341114 | -0.000203654 |
| 25 T | Pentachlorophenol | Quadratic | 0.995664 | 0.021295 | 0.0894112 | -0.000174271 |
| 32 T | Benzo[a]anthracene | Linear | 0.999177 | 0.000000 | 1.17431 | 0.00295257 |
| 33 T | 3,3'-Dichlorobenzene | Linear | 0.998349 | 0.000000 | 0.457867 | -0.00275515 |
| 35 T | Bis(2-ethylhexyl)phthalate | Quadratic | 0.995241 | 0.077851 | 0.388449 | -0.0029192 |
| 41 T | Dibenzo[a,h]anthracene | Quadratic | 0.999237 | 0.182829 | 0.890607 | -0.00017077 |

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV125 | **Calibration Date** | : 09/21/24 13:37 | | |
| **Lab File ID** | : CCV0921 | **Init. Calib. Date(s)** | : 09/17/24 | 09/17/24 | |
| **Sample No** | : WG1974631-3 | **Init. Calib. Times** | : 18:45 | 21:09 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene-d4 | 1 | 1 | .05 | 0 | 20 | 113 | 0 |
| 2-Fluorophenol | 0.984 | 0.941 | .05 | 4.4 | 20 | 111 | 0 |
| Phenol-d6 | 1.214 | 1.169 | .05 | 3.7 | 20 | 113 | 0 |
| Bis(2-chloroethyl)ether | 1.079 | 1.046 | .05 | 3.1 | 20 | 114 | 0 |
| n-nitrosodi-n-propylamine | 0.736 | 0.722 | .05 | 1.9 | 20 | 113 | 0 |
| Hexachloroethane | 0.437 | 0.447 | .05 | -2.3 | 20 | 120 | 0 |
| Nitrobenzene-d5 | 0.624 | 0.872 | .05 | -39.7* | 20 | 150 | 0 |
| Naphthalene-d8 | 1 | 1 | .05 | 0 | 20 | 114 | 0 |
| Naphthalene | 1.065 | 0.982 | .05 | 7.8 | 20 | 115 | 0 |
| Hexachlorobutadiene | 0.215 | 0.208 | .05 | 3.3 | 20 | 115 | 0 |
| 2-Methylnaphthalene | 0.682 | 0.674 | .05 | 1.2 | 20 | 116 | 0 |
| 1-Methylnaphthalene | 0.633 | 0.625 | .05 | 1.3 | 20 | 116 | 0 |
| 2-Fluorobiphenyl | 0.848 | 0.83 | .05 | 2.1 | 20 | 117 | 0 |
| 2-Chloronaphthalene | 0.723 | 0.723 | .05 | 0 | 20 | 117 | 0 |
| 2,6-Dinitrotoluene | 1000 | 1376.988 | .05 | -37.7* | 20 | 176 | 0 |
| Acenaphthylene | 1.049 | 1.069 | .05 | -1.9 | 20 | 116 | 0 |
| Acenaphthene-d10 | 1 | 1 | .05 | 0 | 20 | 117 | 0 |
| Acenaphthene | 1.22 | 1.175 | .05 | 3.7 | 20 | 118 | 0 |
| 2,4-Dinitrotoluene | 1000 | 1442.724 | .05 | -44.3* | 20 | 188 | 0 |
| Fluorene | 1.337 | 1.319 | .05 | 1.3 | 20 | 118 | 0 |
| 2,4,6-Tribromophenol | 0.174 | 0.214 | .05 | -23* | 20 | 136 | 0 |
| Phenanthrene-d10 | 1 | 1 | .05 | 0 | 20 | 116 | 0 |
| 4,6-Dinitro-o-cresol | 1000 | 1820.732 | .05 | -82.1* | 20 | 237 | 0 |
| Hexachlorobenzene | 0.256 | 0.25 | .05 | 2.3 | 20 | 120 | 0 |
| Pentachlorophenol | 1000 | 1146.371 | .05 | -14.6 | 20 | 140 | 0 |
| Phenanthrene | 1.032 | 1.007 | .05 | 2.4 | 20 | 119 | 0 |
| Anthracene | 1.024 | 1.006 | .05 | 1.8 | 20 | 117 | 0 |
| Fluoranthene | 1.17 | 1.188 | .05 | -1.5 | 20 | 118 | 0 |
| Pyrene | 1.235 | 1.27 | .05 | -2.8 | 20 | 118 | 0 |
| 4-Terphenyl-d14 | 0.813 | 0.832 | .05 | -2.3 | 20 | 119 | 0 |
| Chrysene-d12 | 1 | 1 | .05 | 0 | 20 | 118 | 0 |
| Benzo[a]anthracene | 1000 | 1019.735 | .05 | -2 | 20 | 118 | 0 |
| 3,3'-Dichlorobenzene | 1000 | 936.206 | .05 | 6.4 | 20 | 119 | 0 |
| Chrysene | 1.139 | 1.148 | .05 | -0.8 | 20 | 119 | 0 |
| Bis(2-ethylhexyl)phthalate | 1000 | 1252.609 | .05 | -25.3* | 20 | 167 | 0 |
| Perylene-d12 | 1 | 1 | .05 | 0 | 20 | 120 | 0 |
| Benzo[b]fluoranthene | 0.936 | 1.036 | .05 | -10.7 | 20 | 117 | 0 |
| Benzo[k]fluoranthene | 0.917 | 1.033 | .05 | -12.6 | 20 | 124 | 0 |
| Benzo[a]pyrene | 0.814 | 0.926 | .05 | -13.8 | 20 | 120 | 0 |
| Indeno[1,2,3-cd]pyrene | 0.855 | 1.025 | .05 | -19.9 | 20 | 125 | 0 |
| Dibenzo[a,h]anthracene | 1000 | 1081.305 | .05 | -8.1 | 20 | 132 | 0 |
| Benzo[g,h,i]perylene | 0.886 | 1.042 | .05 | -17.6 | 20 | 127 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV119 | **Calibration Date** | : 09/21/24 14:42 | | |
| **Lab File ID** | : CCV0921 | **Init. Calib. Date(s)** | : 06/21/24 | 06/21/24 | |
| **Sample No** | : WG1974651-3 | **Init. Calib. Times** | : 14:50 | 17:17 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene-d4 | 1 | 1 | .05 | 0 | 20 | 96 | 0 |
| 2-Fluorophenol | 1.411 | 1.446 | .05 | -2.5 | 20 | 98 | 0 |
| Phenol-d6 | 1.78 | 1.799 | .05 | -1.1 | 20 | 93 | 0 |
| Bis(2-chloroethyl)ether | 1.43 | 1.411 | .05 | 1.3 | 20 | 95 | 0 |
| n-nitrosodi-n-propylamine | 1.088 | 0.974 | .05 | 10.5 | 20 | 81 | 0 |
| Hexachloroethane | 0.664 | 0.662 | .05 | 0.3 | 20 | 98 | 0 |
| Nitrobenzene-d5 | 1.561 | 1.455 | .05 | 6.8 | 20 | 86 | 0 |
| Naphthalene-d8 | 1 | 1 | .05 | 0 | 20 | 102 | 0 |
| Naphthalene | 1.104 | 1.144 | .05 | -3.6 | 20 | 107 | 0 |
| Hexachlorobutadiene | 0.248 | 0.269 | .05 | -8.5 | 20 | 115 | 0 |
| 2-Methylnaphthalene | 0.83 | 0.891 | .05 | -7.3 | 20 | 107 | 0 |
| 1-Methylnaphthalene | 0.802 | 0.8 | .05 | 0.2 | 20 | 105 | 0 |
| 2-Fluorobiphenyl | 1.034 | 1.089 | .05 | -5.3 | 20 | 113 | 0 |
| 2-Chloronaphthalene | 0.894 | 0.94 | .05 | -5.1 | 20 | 109 | 0 |
| 2,6-Dinitrotoluene | 0.241 | 0.252 | .05 | -4.6 | 20 | 99 | 0 |
| Acenaphthylene | 1.429 | 1.394 | .05 | 2.4 | 20 | 100 | 0 |
| Acenaphthene-d10 | 1 | 1 | .05 | 0 | 20 | 111 | 0 |
| Acenaphthene | 1.396 | 1.353 | .05 | 3.1 | 20 | 108 | 0 |
| 2,4-Dinitrotoluene | 0.535 | 0.523 | .05 | 2.2 | 20 | 97 | 0 |
| Fluorene | 1.84 | 1.713 | .05 | 6.9 | 20 | 105 | 0 |
| 2,4,6-Tribromophenol | 0.279 | 0.34 | .05 | -21.9* | 20 | 121 | 0 |
| Phenanthrene-d10 | 1 | 1 | .05 | 0 | 20 | 99 | 0 |
| 4,6-Dinitro-o-cresol | 1000 | 983.946 | .05 | 1.6 | 20 | 98 | 0 |
| Hexachlorobenzene | 0.275 | 0.303 | .05 | -10.2 | 20 | 115 | 0 |
| Pentachlorophenol | 1000 | 1040.957 | .05 | -4.1 | 20 | 99 | 0 |
| Phenanthrene | 1.163 | 1.118 | .05 | 3.9 | 20 | 99 | 0 |
| Anthracene | 1.201 | 1.194 | .05 | 0.6 | 20 | 98 | 0 |
| Fluoranthene | 1.597 | 1.47 | .05 | 8 | 20 | 98 | 0 |
| Pyrene | 1.655 | 1.529 | .05 | 7.6 | 20 | 99 | 0 |
| 4-Terphenyl-d14 | 1.106 | 1.022 | .05 | 7.6 | 20 | 99 | 0 |
| Chrysene-d12 | 1 | 1 | .05 | 0 | 20 | 115 | 0 |
| Benzo[a]anthracene | 1000 | 927.947 | .05 | 7.2 | 20 | 100 | 0 |
| 3,3'-Dichlorobenzene | 0.611 | 0.672 | .05 | -10 | 20 | 117 | 0 |
| Chrysene | 1.489 | 1.307 | .05 | 12.2 | 20 | 99 | 0 |
| Bis(2-ethylhexyl)phthalate | 1000 | 782.61 | .05 | 21.7* | 20 | 88 | 0 |
| Perylene-d12 | 1 | 1 | .05 | 0 | 20 | 115 | 0 |
| Benzo[b]fluoranthene | 1.657 | 1.413 | .05 | 14.7 | 20 | 100 | 0 |
| Benzo[k]fluoranthene | 1.531 | 1.364 | .05 | 10.9 | 20 | 111 | 0 |
| Benzo[a]pyrene | 1.467 | 1.314 | .05 | 10.4 | 20 | 104 | 0 |
| Indeno[1,2,3-cd]pyrene | 1.483 | 1.468 | .05 | 1 | 20 | 113 | 0 |
| Dibenzo[a,h]anthracene | 1.321 | 1.274 | .05 | 3.6 | 20 | 113 | 0 |
| Benzo[g,h,i]perylene | 1.459 | 1.325 | .05 | 9.2 | 20 | 109 | 0 |

*** Value outside of QC limits.**

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 01:37 pm
Operator : SV125:rp
Sample : WG1974631-3,32,,CCV 10888 (0905)
Misc : WG1974631,,ical21503
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 14:09:39 2024
Quant Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:35 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | i | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 113 | 0.00 |
| 2 | s | 2-Fluorophenol | 0.984 | 0.941 | 4.4 | 111 | 0.00 |
| 3 | s | Phenol-d6 | 1.214 | 1.169 | 3.7 | 113 | 0.00 |
| 4 | T | Bis(2-chloroethyl)ether | 1.079 | 1.046 | 3.1 | 114 | 0.00 |
| 5 | T | n-nitrosodi-n-propylamine | 0.736 | 0.722 | 1.9 | 113 | 0.00 |
| 6 | t | Hexachloroethane | 0.437 | 0.447 | -2.3 | 120 | 0.00 |
| 7 | s | Nitrobenzene-d5 | 0.624 | 0.872 | -39.7# | 150 | 0.00 |
| 8 | i | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 114 | 0.00 |
| 9 | t | Naphthalene | 1.065 | 0.982 | 7.8 | 115 | 0.00 |
| 10 | t | Hexachlorobutadiene | 0.215 | 0.208 | 3.3 | 115 | 0.00 |
| 11 | t | 2-Methylnaphthalene | 0.682 | 0.674 | 1.2 | 116 | 0.00 |
| 12 | t | 1-Methylnaphthalene | 0.633 | 0.625 | 1.3 | 116 | 0.00 |
| 13 | s | 2-Fluorobiphenyl | 0.848 | 0.830 | 2.1 | 117 | 0.00 |
| 14 | t | 2-Chloronaphthalene | 0.723 | 0.723 | 0.0 | 117 | 0.00 |
| 15 | t | 2,6-Dinitrotoluene | *1000.000 | 1376.988 | -37.7# | 176 | 0.00 |
| 16 | t | Acenaphthylene | 1.049 | 1.069 | -1.9 | 116 | 0.00 |
| 17 | i | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 117 | 0.00 |
| 18 | t | Acenaphthene | 1.220 | 1.175 | 3.7 | 118 | 0.00 |
| 19 | t | 2,4-Dinitrotoluene | *1000.000 | 1442.724 | -44.3# | 188 | 0.00 |
| 20 | t | Fluorene | 1.337 | 1.319 | 1.3 | 118 | 0.00 |
| 21 | s | 2,4,6-Tribromophenol | 0.174 | 0.214 | -23.0# | 136 | 0.00 |
| 22 | i | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 116 | 0.00 |
| 23 | T | 4,6-Dinitro-o-cresol | *1000.000 | 1820.732 | -82.1# | 237 | 0.00 |
| 24 | t | Hexachlorobenzene | 0.256 | 0.250 | 2.3 | 120 | 0.00 |
| 25 | t | Pentachlorophenol | *1000.000 | 1146.371 | -14.6 | 140 | 0.00 |
| 26 | t | Phenanthrene | 1.032 | 1.007 | 2.4 | 119 | 0.00 |
| 27 | t | Anthracene | 1.024 | 1.006 | 1.8 | 117 | 0.00 |
| 28 | t | Fluoranthene | 1.170 | 1.188 | -1.5 | 118 | 0.00 |
| 29 | t | Pyrene | 1.235 | 1.270 | -2.8 | 118 | 0.00 |
| 30 | s | 4-Terphenyl-d14 | 0.813 | 0.832 | -2.3 | 119 | 0.00 |
| 31 | i | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 32 | t | Benzo[a]anthracene | *1000.000 | 1019.735 | -2.0 | 118 | 0.00 |
| 33 | t | 3,3'-Dichlorobenzene | *1000.000 | 936.206 | 6.4 | 119 | 0.00 |
| 34 | t | Chrysene | 1.139 | 1.148 | -0.8 | 119 | 0.00 |
| 35 | T | Bis(2-ethylhexyl)phthalate | *1000.000 | 1252.609 | -25.3# | 167 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 01:37 pm
Operator : SV125:rp
Sample : WG1974631-3,32,,CCV 10888 (0905)
Misc : WG1974631,,ical21503
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 14:09:39 2024
Quant Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:35 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 36 | i | Perylene-d12 | 1.000 | 1.000 | 0.0 | 120 | 0.00 |
| 37 | t | Benzo[b]fluoranthene | 0.936 | 1.036 | -10.7 | 117 | 0.00 |
| 38 | t | Benzo[k]fluoranthene | 0.917 | 1.033 | -12.6 | 124 | 0.00 |
| 39 | t | Benzo[a]pyrene | 0.814 | 0.926 | -13.8 | 120 | 0.00 |
| 40 | t | Indeno[1,2,3-cd]pyrene | 0.855 | 1.025 | -19.9 | 125 | 0.00 |
| 41 | t | Dibenzo[a,h]anthracene | *1000.000 | 1081.305 | -8.1 | 132 | 0.00 |
| 42 | t | Benzo[g,h,i]perylene | 0.886 | 1.042 | -17.6 | 127 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 01:37 pm
Operator : SV125:rp
Sample : WG1974631-3,32,,CCV 10888 (0905)
Misc : WG1974631,,ical21503
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 14:09:39 2024
Quant Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:35 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.238 | 152 | 446131 | 4000.000 | ng/ml | 0.00 |
| 8) Naphthalene-d8 | 2.905 | 136 | 1575323 | 4000.000 | ng/ml | 0.00 |
| 17) Acenaphthene-d10 | 3.886 | 164 | 1015344 | 4000.000 | ng/ml | 0.00 |
| 22) Phenanthrene-d10 | 4.729 | 188 | 2145597 | 4000.000 | ng/ml | 0.00 |
| 31) Chrysene-d12 | 6.276 | 240 | 2338315 | 4000.000 | ng/ml | 0.00 |
| 36) Perylene-d12 | 7.480 | 264 | 2818319 | 4000.000 | ng/ml | 0.00 |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.645 | 112 | 104981 | 956.277 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 47.81% | | | |
| 3) Phenol-d6 | 2.047 | 99 | 130359 | 962.857 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 48.14% | | | |
| 7) Nitrobenzene-d5 | 2.518 | 82 | 97306 | 1397.410 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 139.74%# | | | |
| 13) 2-Fluorobiphenyl | 3.505 | 172 | 327023 | 979.684 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 97.97% | | | |
| 21) 2,4,6-Tribromophenol | 4.333 | 330 | 54361 | 1233.144 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 61.66% | | | |
| 30) 4-Terphenyl-d14 | 5.640 | 244 | 446383 | 1023.761 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 102.38% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.103 | 93 | 116653 | 969.664 | ng/ml | 99 |
| 5) n-nitrosodi-n-propylamine | 2.441 | 70 | 80535 | 980.965 | ng/ml | 98 |
| 6) Hexachloroethane | 2.498 | 117 | 49836 | 1023.448 | ng/ml | 99 |
| 9) Naphthalene | 2.915 | 128 | 386920 | 922.163 | ng/ml# | 100 |
| 10) Hexachlorobutadiene | 2.991 | 225 | 81982 | 967.130 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.297 | 142 | 265478 | 987.901 | ng/ml | 100 |
| 12) 1-Methylnaphthalene | 3.352 | 142 | 246151 | 987.479 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.572 | 162 | 284758 | 1000.727 | ng/ml | 100 |
| 15) 2,6-Dinitrotoluene | 3.765 | 165 | 48385 | 1376.988 | ng/ml | 95 |
| 16) Acenaphthylene | 3.805 | 152 | 420885 | 1018.449 | ng/ml | 100 |
| 18) Acenaphthene | 3.905 | 153 | 298291 | 963.387 | ng/ml | 97 |
| 19) 2,4-Dinitrotoluene | 3.991 | 165 | 65798 | 1442.724 | ng/ml# | 81 |
| 20) Fluorene | 4.196 | 166 | 334886 | 986.624 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.221 | 198 | 35678 | 1820.732 | ng/ml | 92 |
| 24) Hexachlorobenzene | 4.512 | 284 | 134312 | 978.208 | ng/ml | 100 |
| 25) Pentachlorophenol | 4.623 | 266 | 58359 | 1146.371 | ng/ml | 100 |
| 26) Phenanthrene | 4.742 | 178 | 540170 | 975.910 | ng/ml | 100 |
| 27) Anthracene | 4.770 | 178 | 539858 | 983.059 | ng/ml | 100 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 01:37 pm
Operator : SV125:rp
Sample : WG1974631-3,32,,CCV 10888 (0905)
Misc : WG1974631,,ical21503
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 14:09:39 2024
Quant Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:35 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 28) Fluoranthene | 5.421 | 202 | 637421 | 1015.249 | ng/ml | 100 |
| 29) Pyrene | 5.549 | 202 | 681254 | 1028.462 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.268 | 228 | 706930 | 1019.735 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 6.252 | 252 | 244142 | 936.206 | ng/ml | 100 |
| 34) Chrysene | 6.293 | 228 | 670959 | 1007.333 | ng/ml | 98 |
| 35) Bis(2-ethylhexyl)phtha... | 6.293 | 149 | 295467 | 1252.609 | ng/ml | 100 |
| 37) Benzo[b]fluoranthene | 7.103 | 252 | 730255 | 1107.335 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.128 | 252 | 728101 | 1126.806 | ng/ml | 100 |
| 39) Benzo[a]pyrene | 7.411 | 252 | 652696 | 1137.518 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.688 | 276 | 722093 | 1198.242 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.723 | 278 | 715696M6 | 1081.305 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.027 | 276 | 733934 | 1176.059 | ng/ml | 99 |

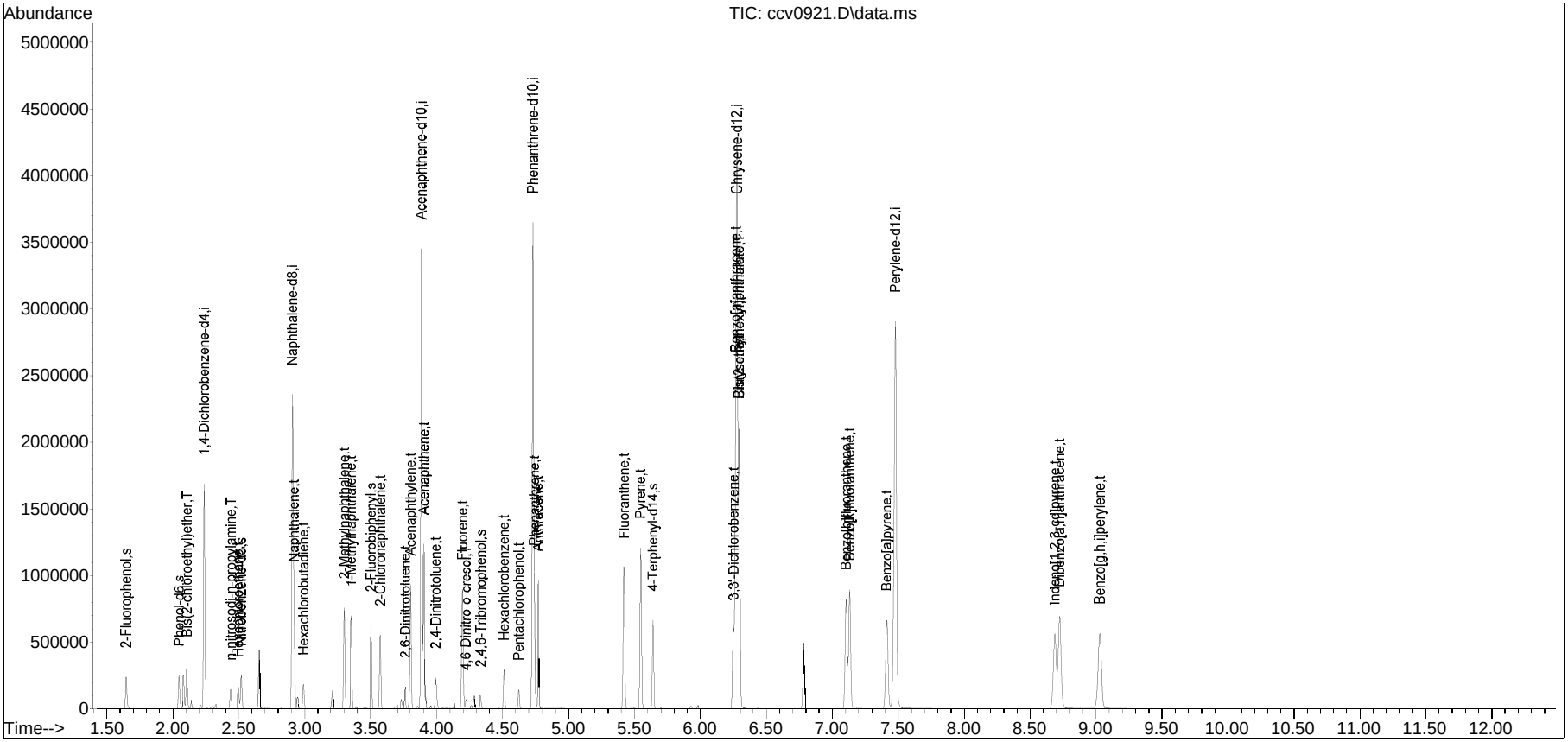
(#) = qualifier out of range (m) = manual integration (+) = signals summed

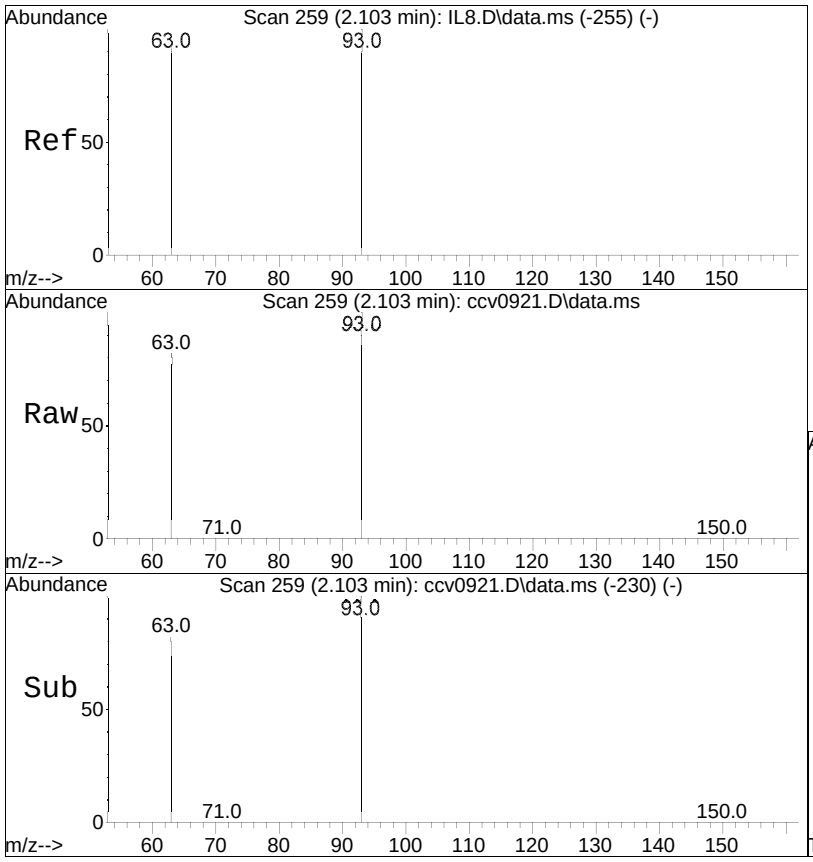
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 01:37 pm
Operator : SV125:rp
Sample : WG1974631-3,32,,CCV 10888 (0905)
Misc : WG1974631,,ical21503
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 14:09:39 2024
Quant Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:35 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

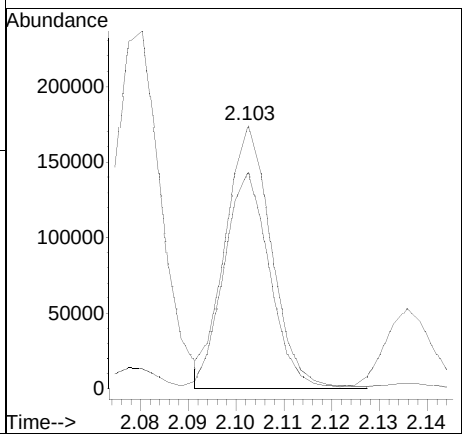


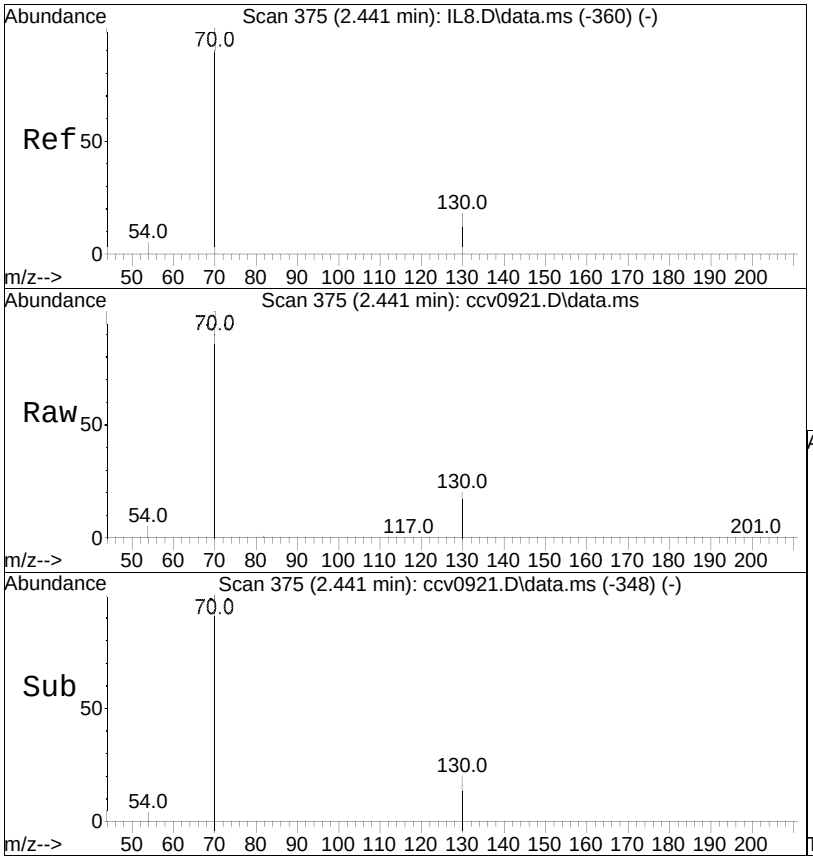



#4
Bis(2-chloroethyl)ether
Concen: 969.66 ng/ml
RT: 2.103 min Scan# 259
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion: 93 Resp: 116653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 81.4 | 66.1 | 99.1 |

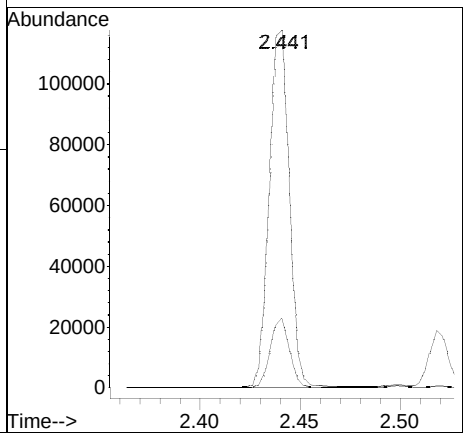


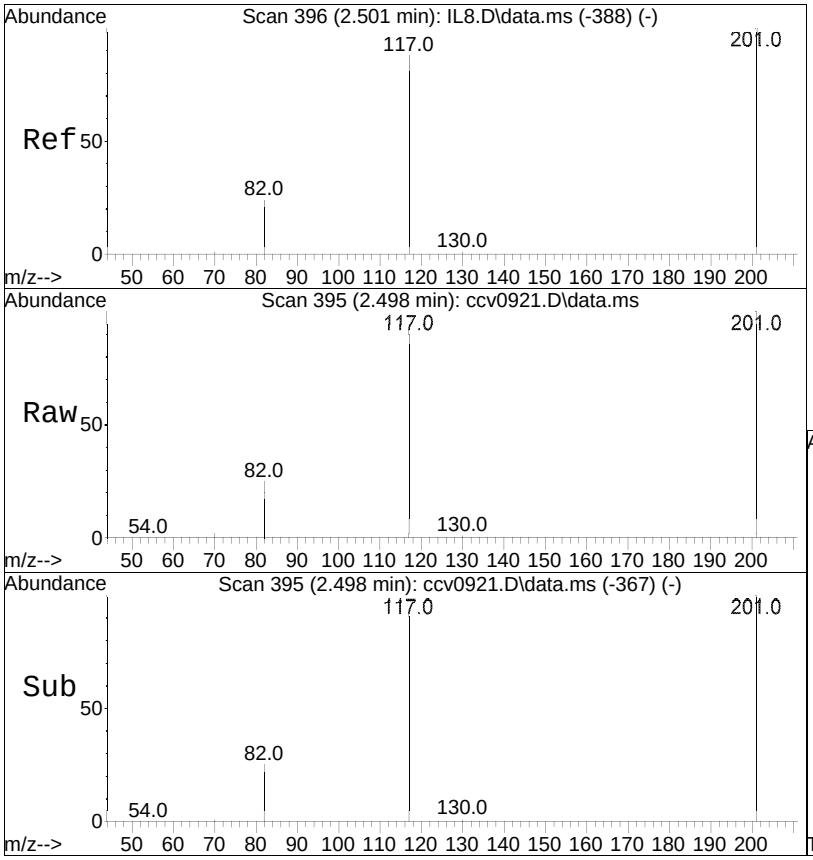



#5
n-nitrosodi-n-propylamine
Concen: 980.97 ng/ml
RT: 2.441 min Scan# 375
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion: 70 Resp: 80535

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 18.8 | 14.5 | 21.7 |

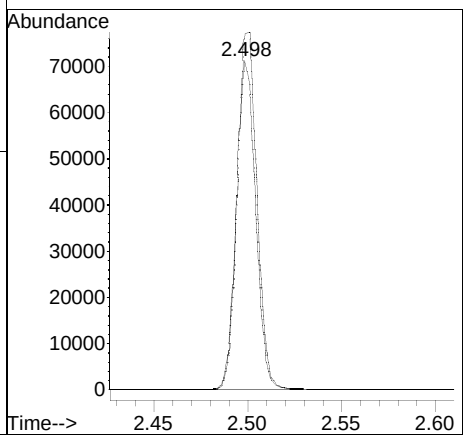


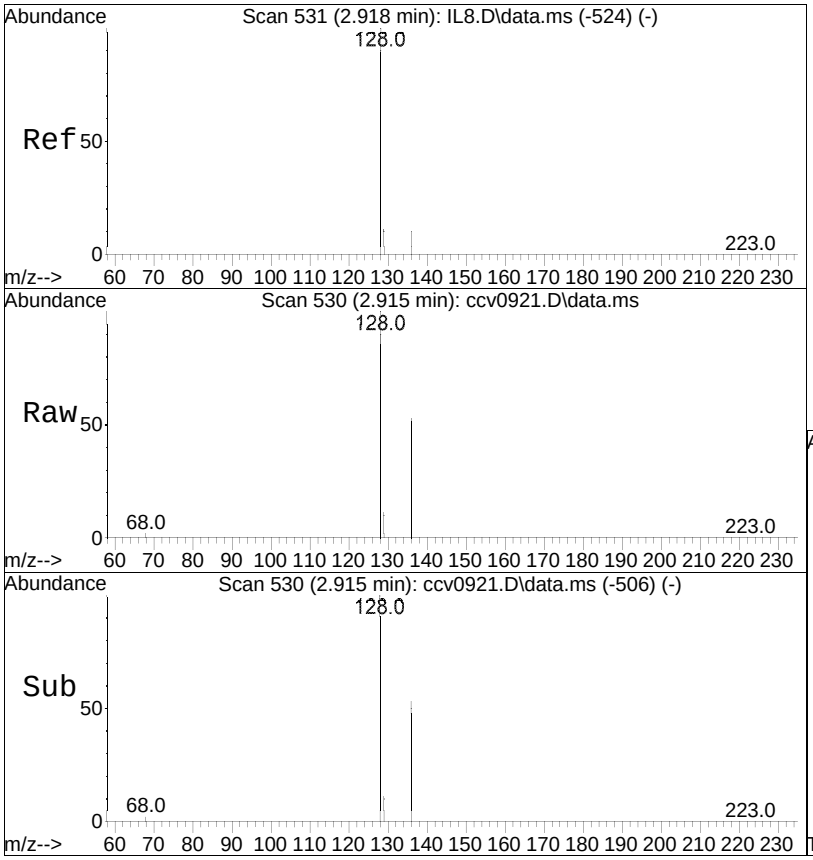



#6
Hexachloroethane
Concen: 1023.45 ng/ml
RT: 2.498 min Scan# 395
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:117 Resp: 49836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 111.5 | 89.9 | 134.9 |

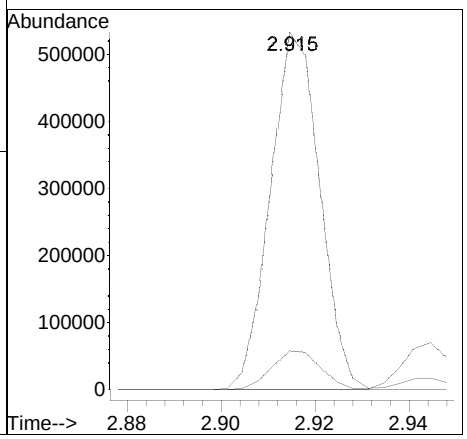


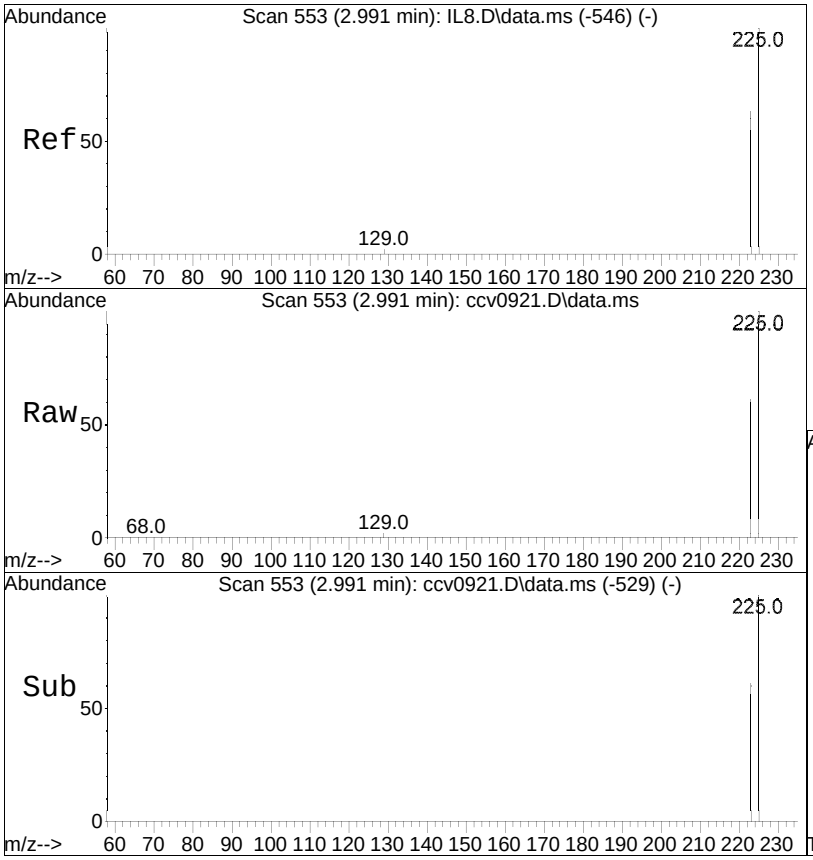



#9
Naphthalene
Concen: 922.16 ng/ml
RT: 2.915 min Scan# 530
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:128 Resp: 386920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.1 | 8.8 | 13.2 |
| 127 | 0.0 | 0.0 | 0.0 |

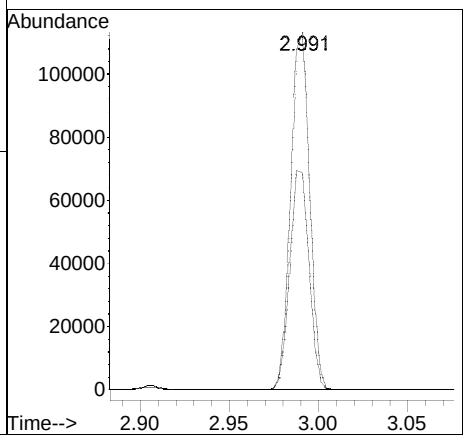


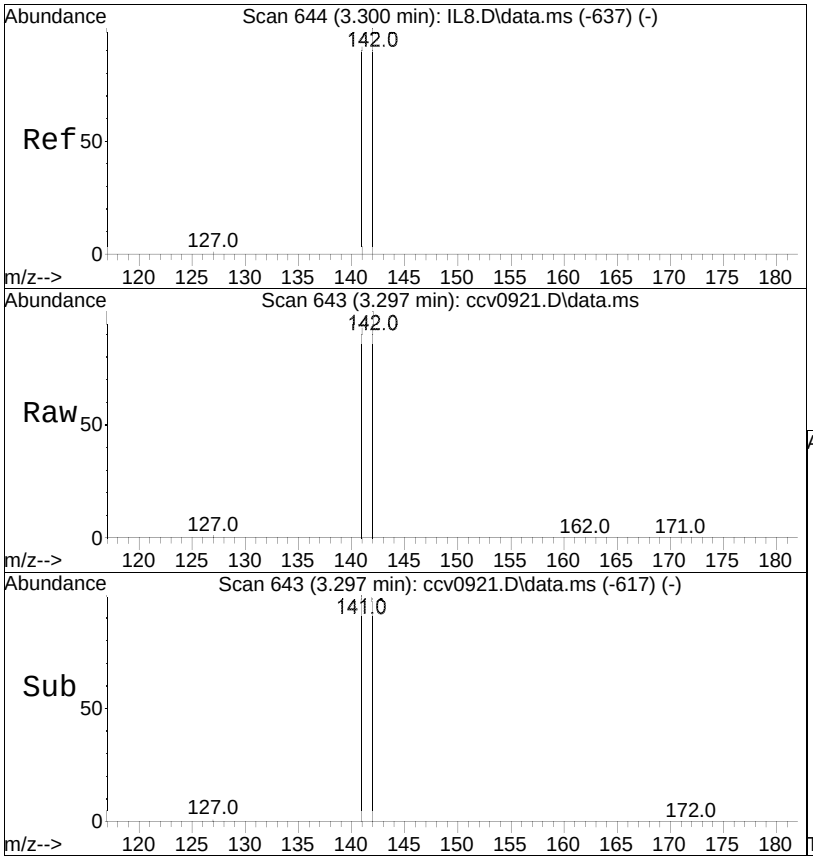



#10
Hexachlorobutadiene
Concen: 967.13 ng/ml
RT: 2.991 min Scan# 553
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:225 Resp: 81982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 49.9 | 74.9 |

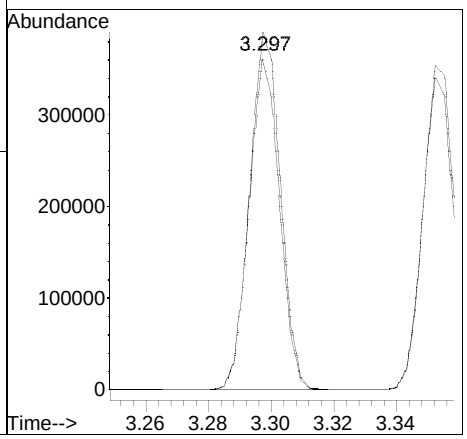


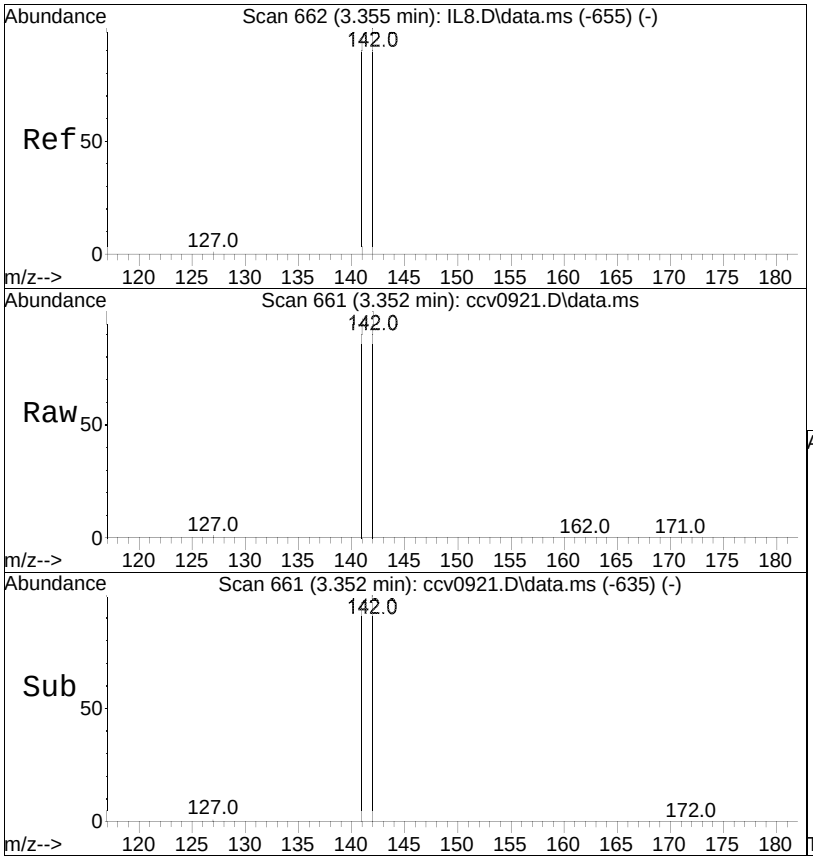



#11
2-Methylnaphthalene
Concen: 987.90 ng/ml
RT: 3.297 min Scan# 643
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:142 Resp: 265478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.8 | 73.8 | 110.6 |

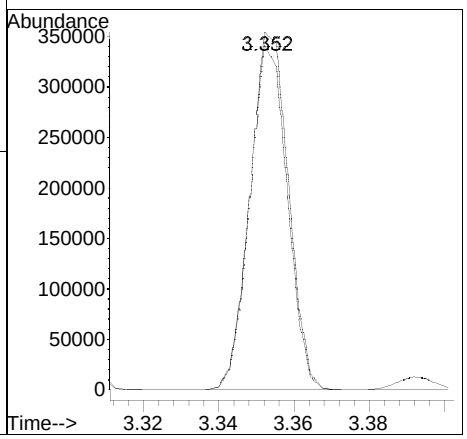


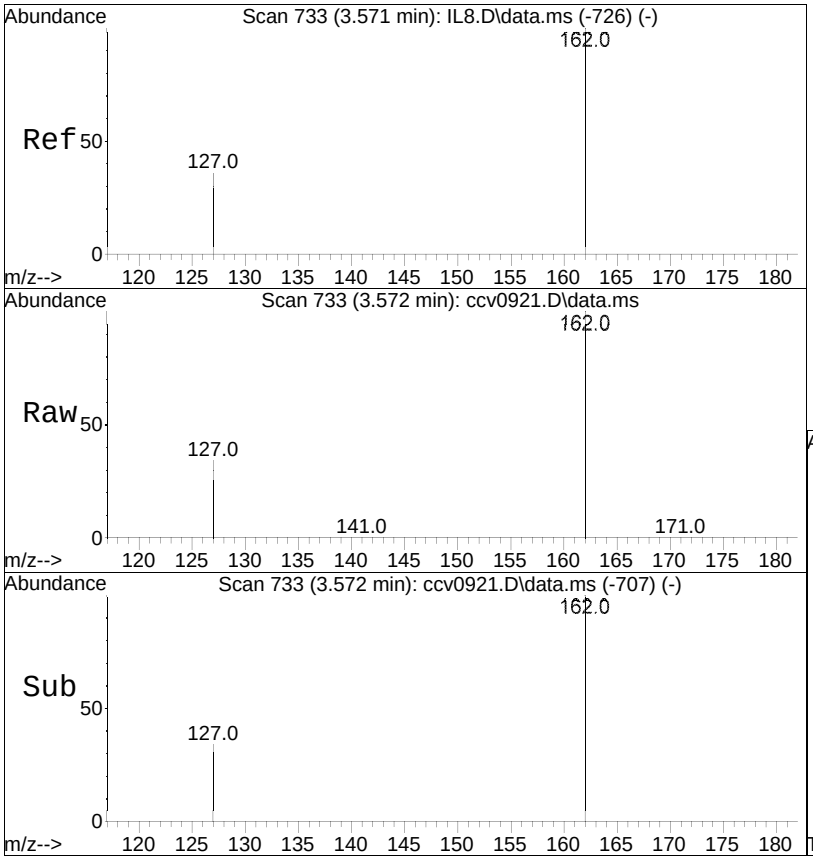



#12
1-Methylnaphthalene
Concen: 987.48 ng/ml
RT: 3.352 min Scan# 661
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:142 Resp: 246151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 95.4 | 76.1 | 114.1 |

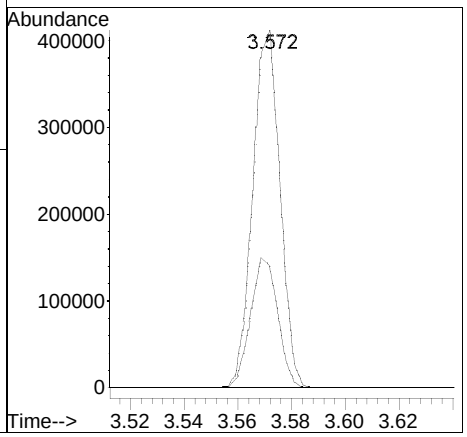


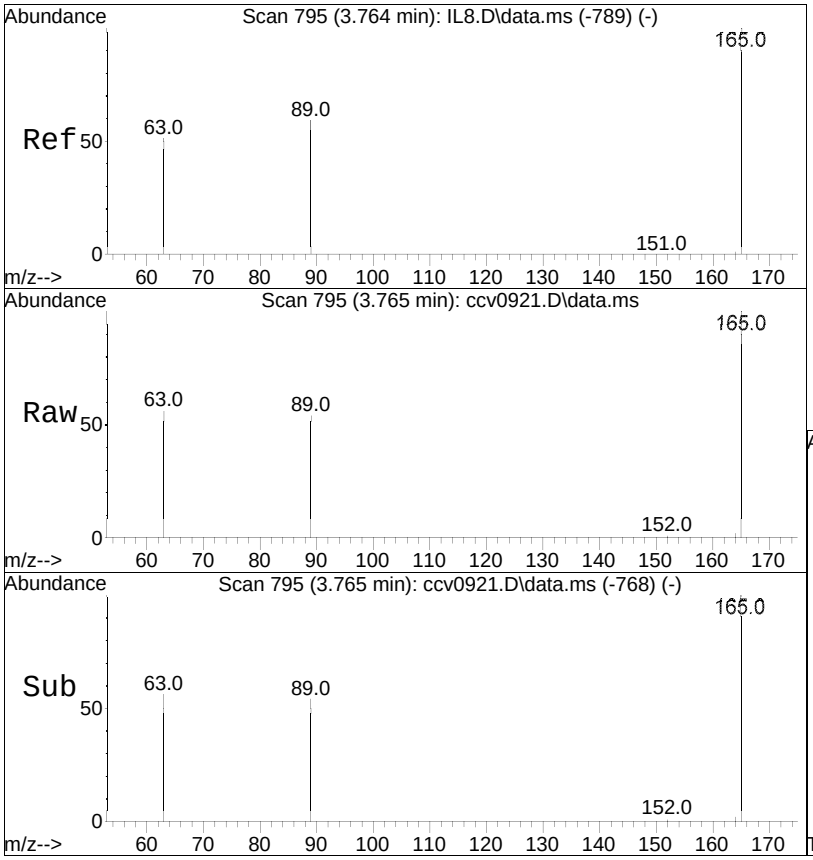



#14
2-Chloronaphthalene
Concen: 1000.73 ng/ml
RT: 3.572 min Scan# 733
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:162 Resp: 284758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 36.5 | 29.4 | 44.0 |

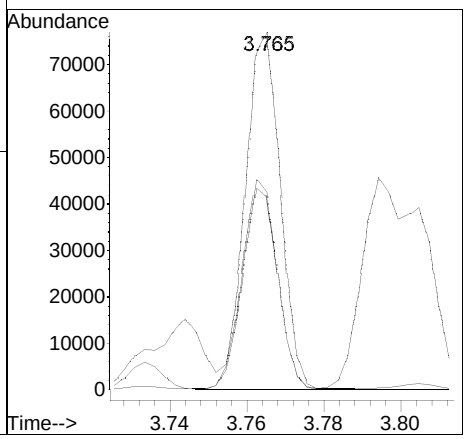


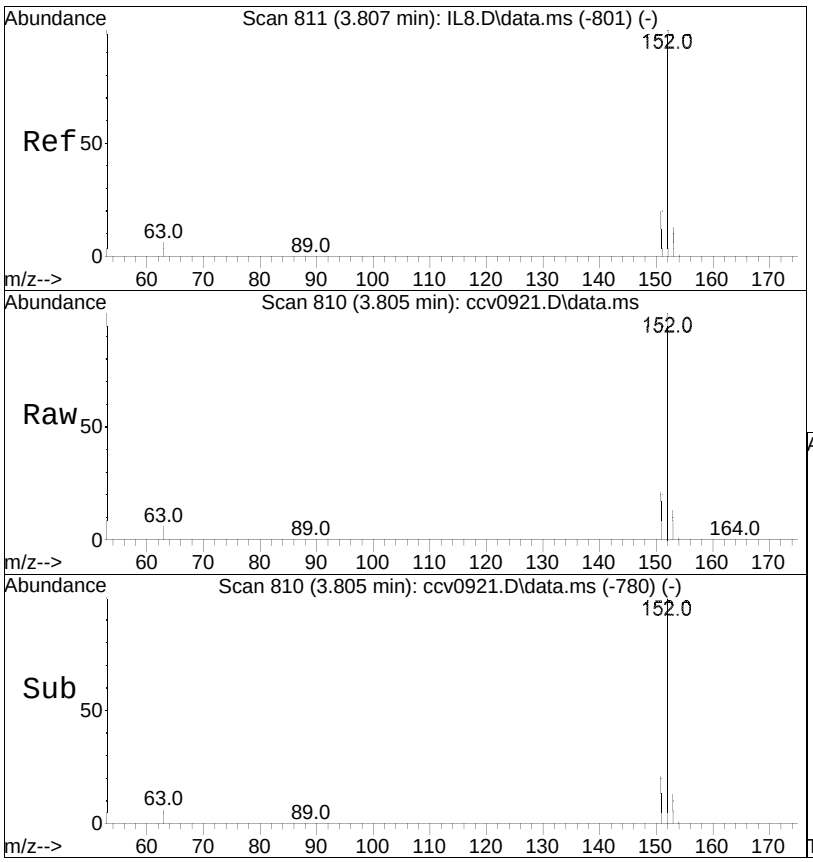



#15
2,6-Dinitrotoluene
Concen: 1376.99 ng/ml
RT:  3.765 min  Scan# 795
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:165 Resp:  48385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 56.9 | 48.5 | 72.7 |
| 63 | 58.4 | 49.5 | 74.3 |

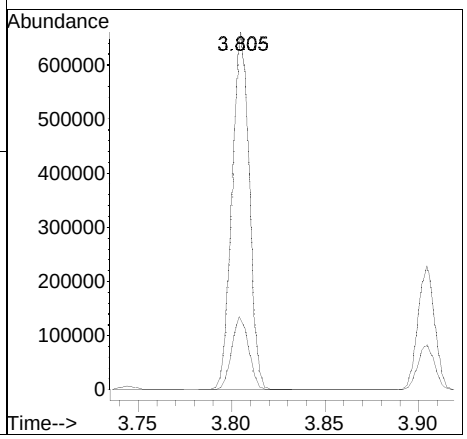


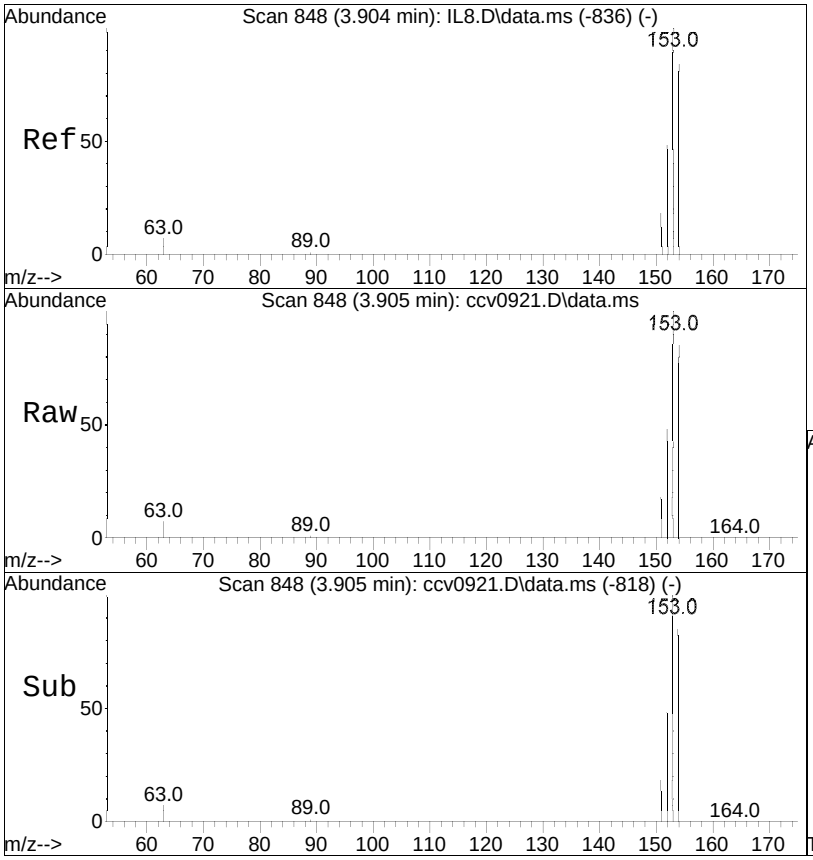



#16
Acenaphthylene
Concen: 1018.45 ng/ml
RT: 3.805 min Scan# 810
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:152 Resp: 420885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.3 | 16.2 | 24.4 |

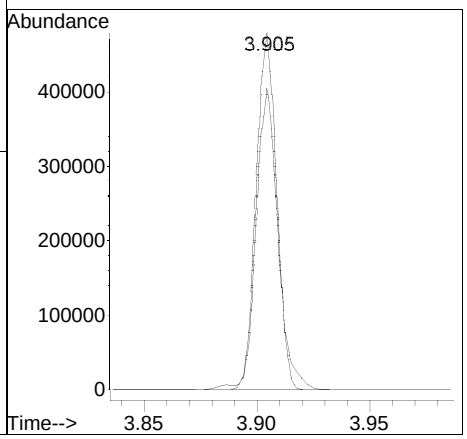


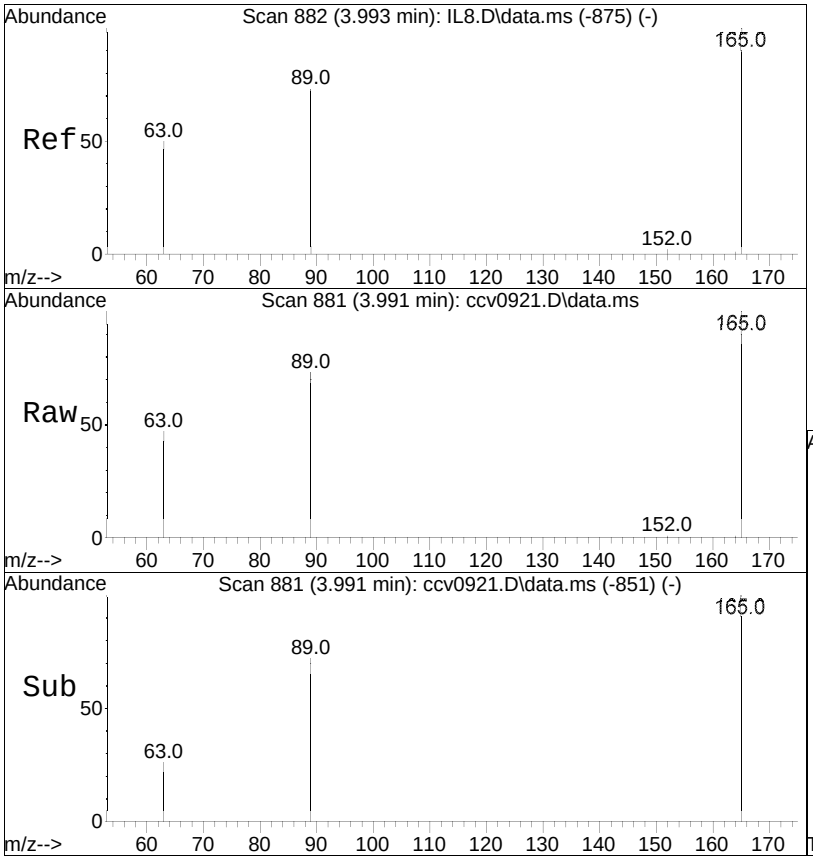



#18
Acenaphthene
Concen: 963.39 ng/ml
RT: 3.905 min Scan# 848
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:153 Resp: 298291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 90.6 | 70.3 | 105.5 |

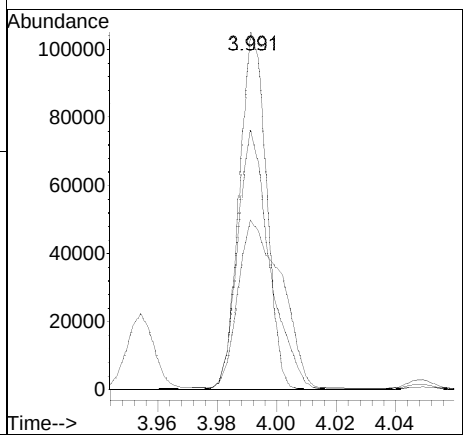


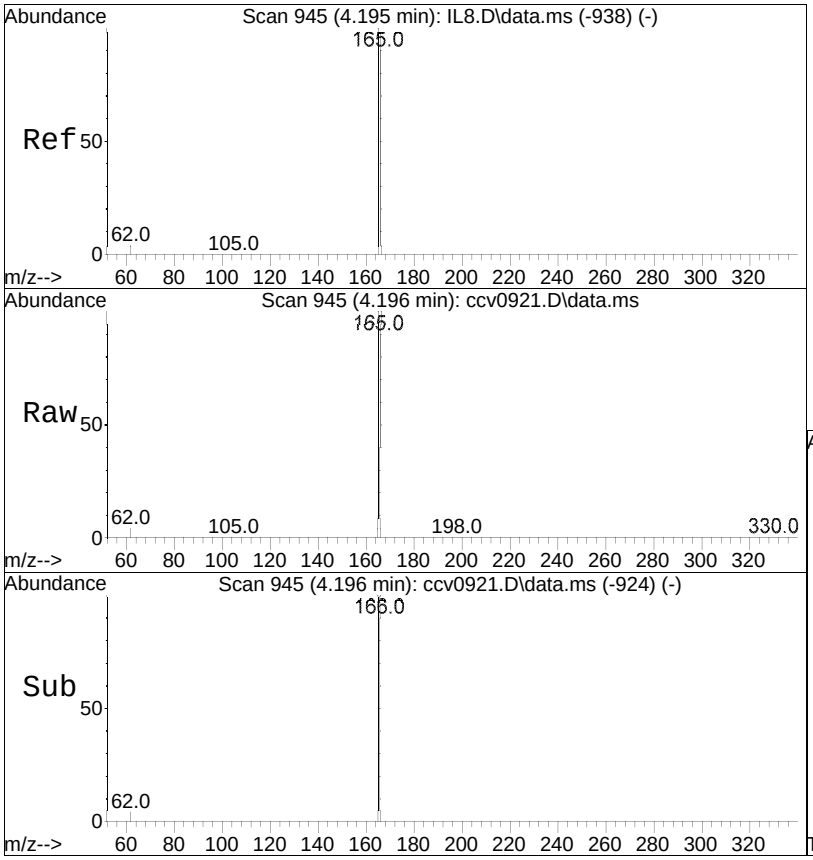



#19
2,4-Dinitrotoluene
Concen: 1442.72 ng/ml
RT:  3.991 min  Scan# 881
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:165 Resp:  65798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 86.6 | 64.2 | 96.2 |
| 63 | 75.5 | 40.1 | 60.1# |

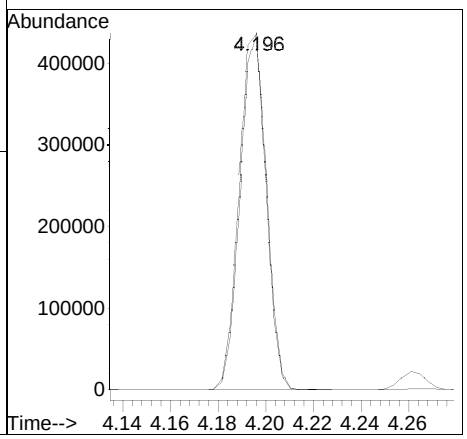


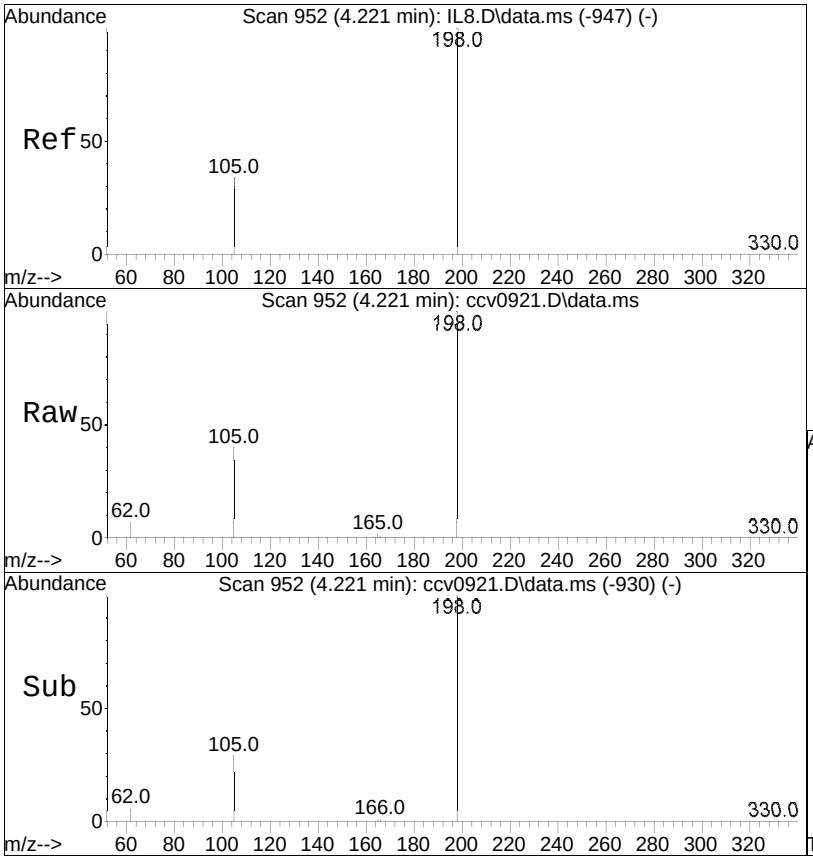



#20
Fluorene
Concen: 986.62 ng/ml
RT: 4.196 min Scan# 945
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:166 Resp: 334886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 102.2 | 82.0 | 123.0 |

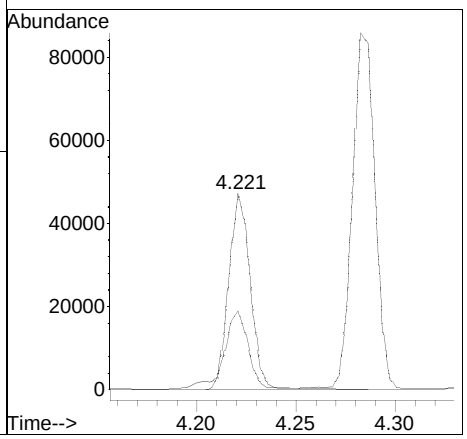


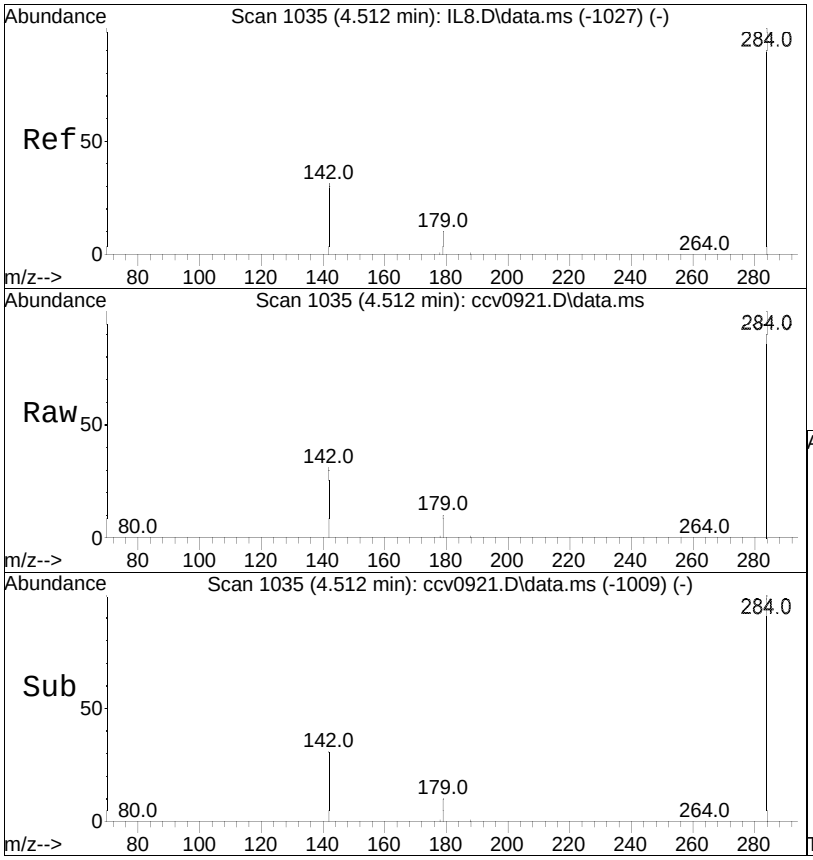



#23
4,6-Dinitro-o-cresol
Concen: 1820.73 ng/ml
RT:  4.221 min  Scan# 952
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:198 Resp:  35678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 105 | 44.0 | 39.5 | 59.3 |

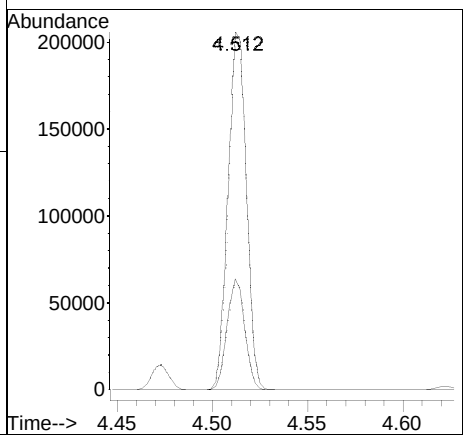


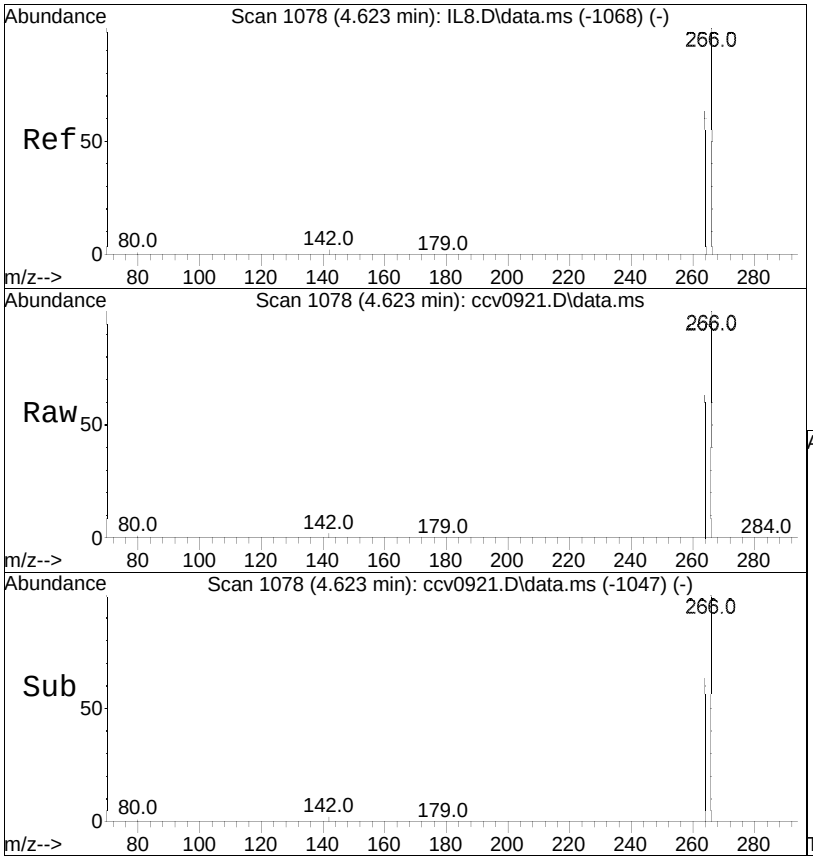



#24
Hexachlorobenzene
Concen: 978.21 ng/ml
RT: 4.512 min Scan# 1035
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:284 Resp: 134312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 30.2 | 24.4 | 36.6 |

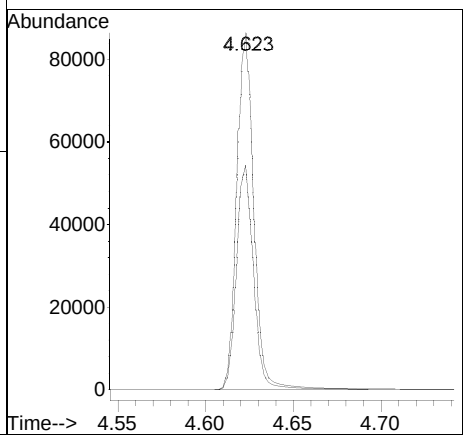


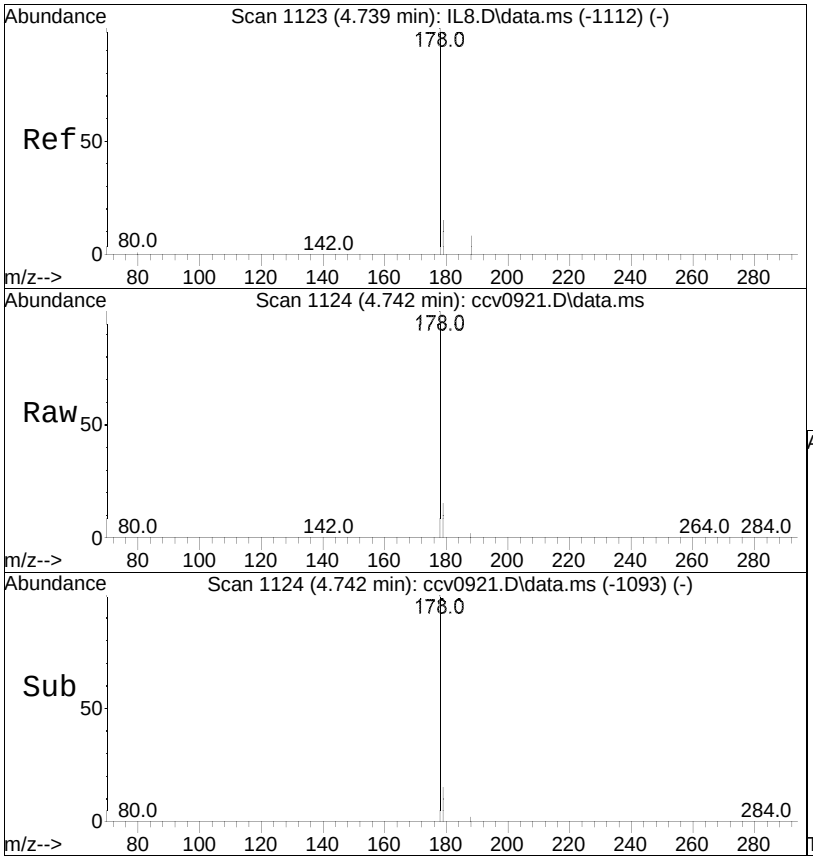



#25
Pentachlorophenol
Concen: 1146.37 ng/ml
RT: 4.623 min Scan# 1078
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:266 Resp: 58359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.0 | 50.4 | 75.6 |

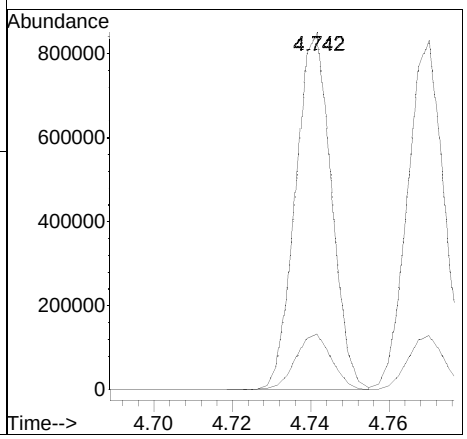


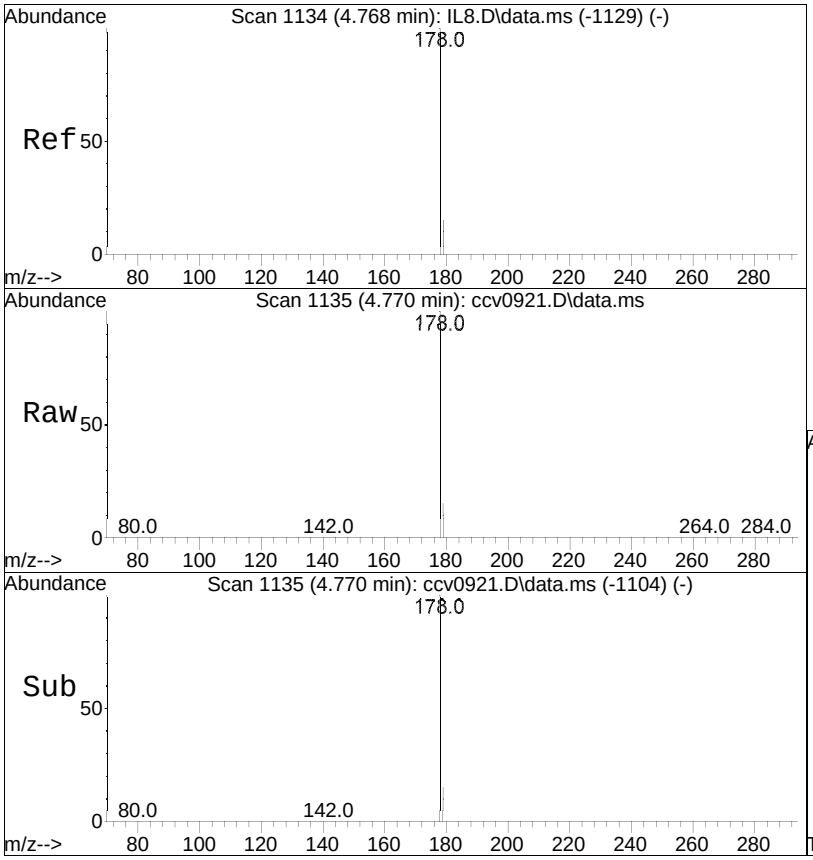



#26
Phenanthrene
Concen: 975.91 ng/ml
RT: 4.742 min Scan# 1124
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:178 Resp: 540170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.7 | 12.6 | 18.8 |

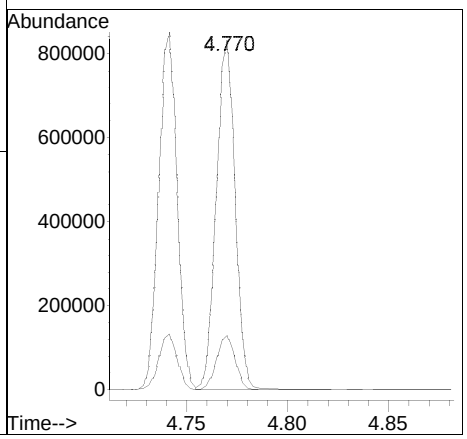


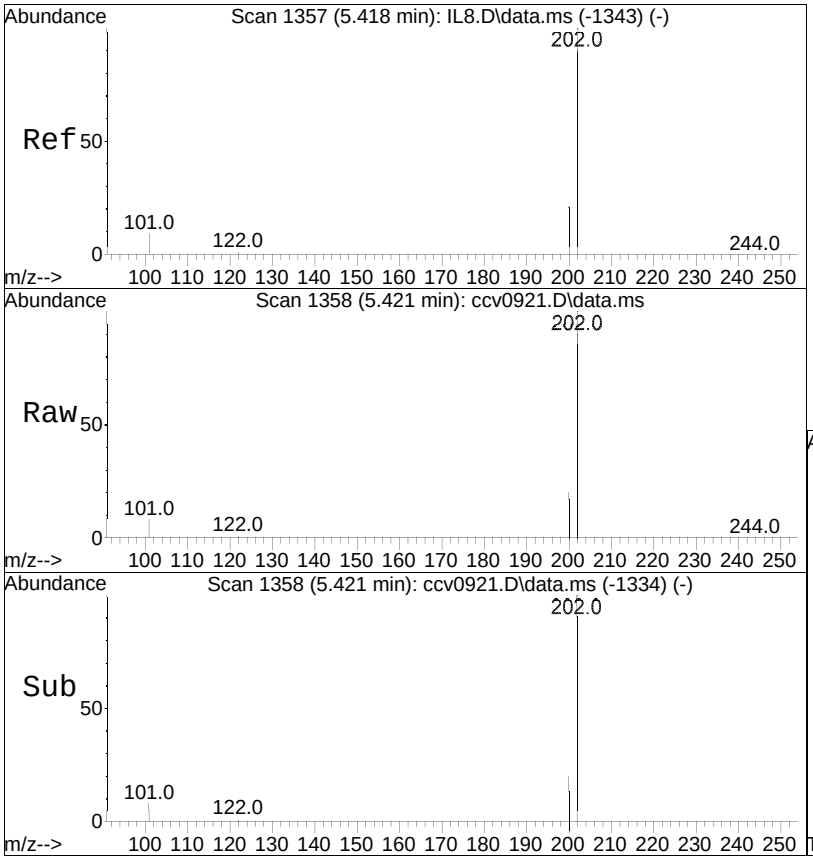



#27
Anthracene
Concen: 983.06 ng/ml
RT: 4.770 min Scan# 1135
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:178 Resp: 539858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.5 | 12.3 | 18.5 |

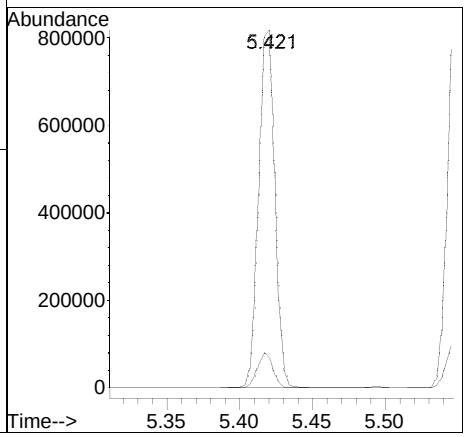


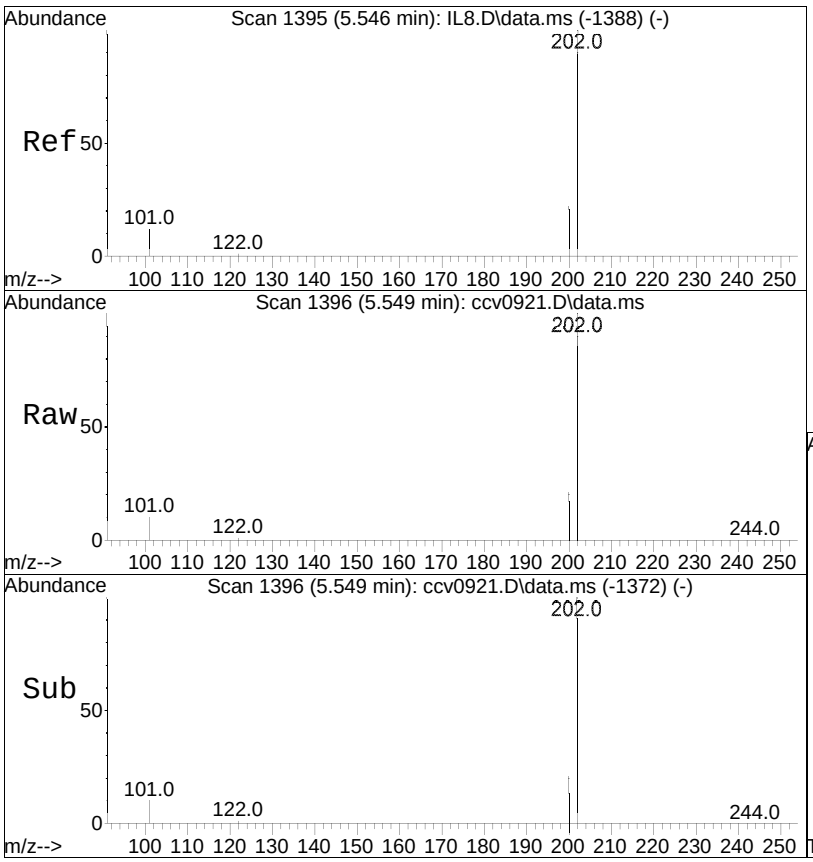



#28
Fluoranthene
Concen: 1015.25 ng/ml
RT:  5.421 min  Scan# 1358
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:202 Resp:  637421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.4 | 7.6 | 11.4 |

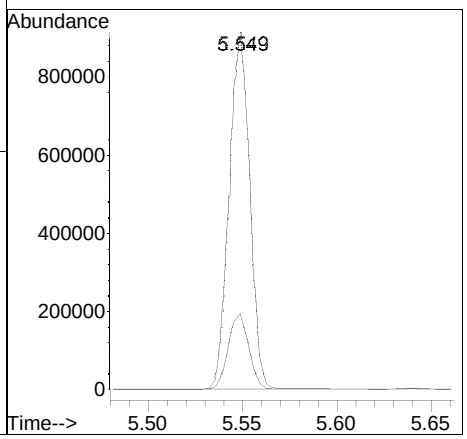


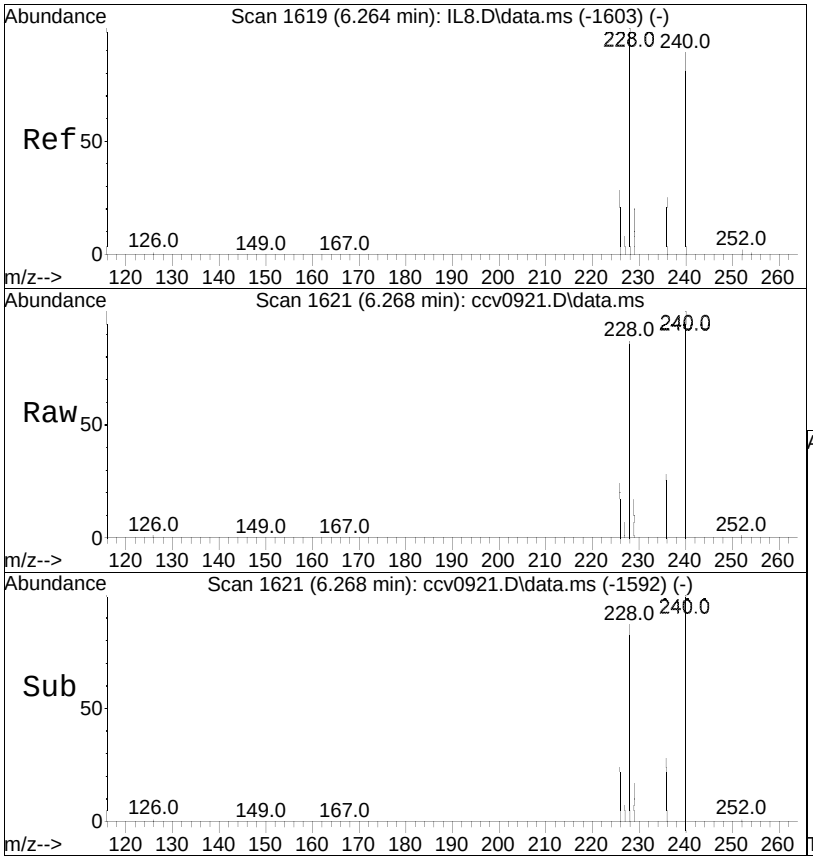



#29
Pyrene
Concen: 1028.46 ng/ml
RT:  5.549 min  Scan# 1396
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:202 Resp:  681254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.5 | 17.2 | 25.8 |

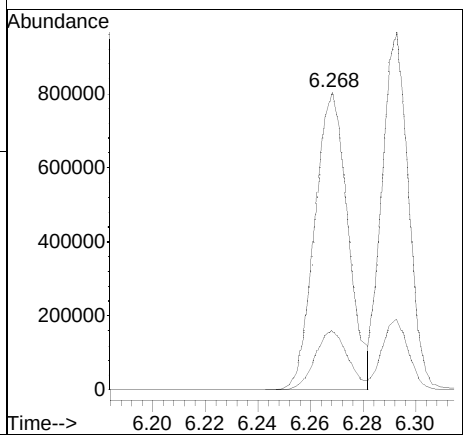


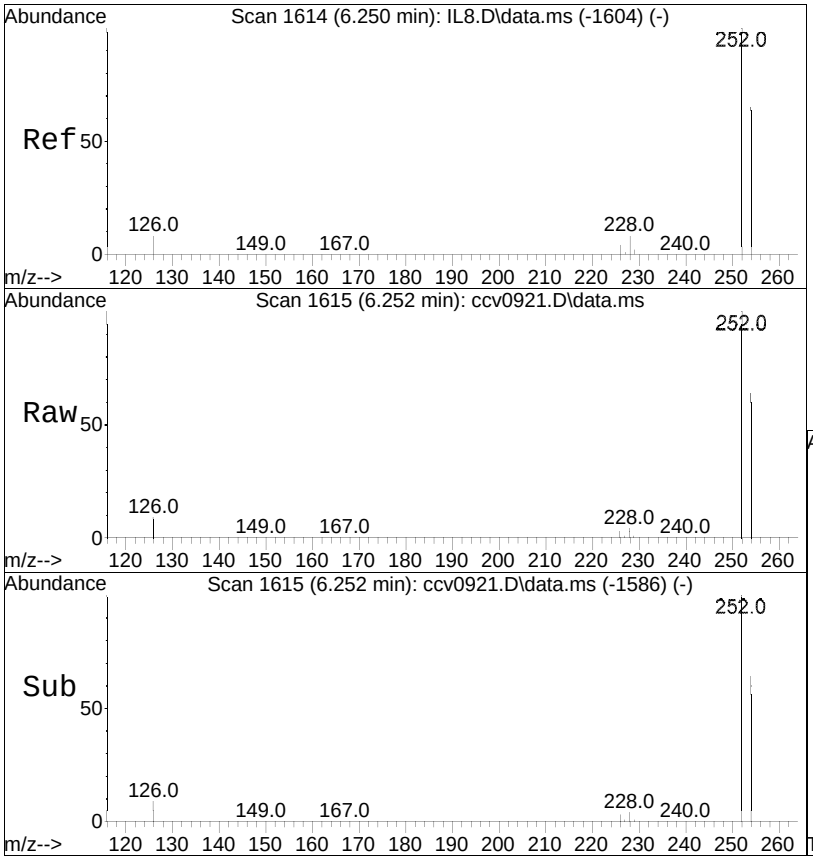



#32
Benzo[a]anthracene
Concen: 1019.73 ng/ml
RT:  6.268 min  Scan# 1621
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:228 Resp:  706930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.8 | 15.8 | 23.6 |

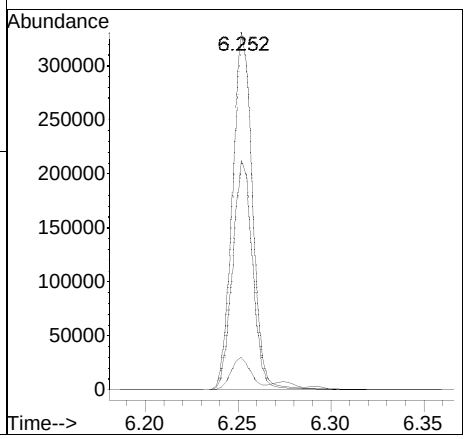


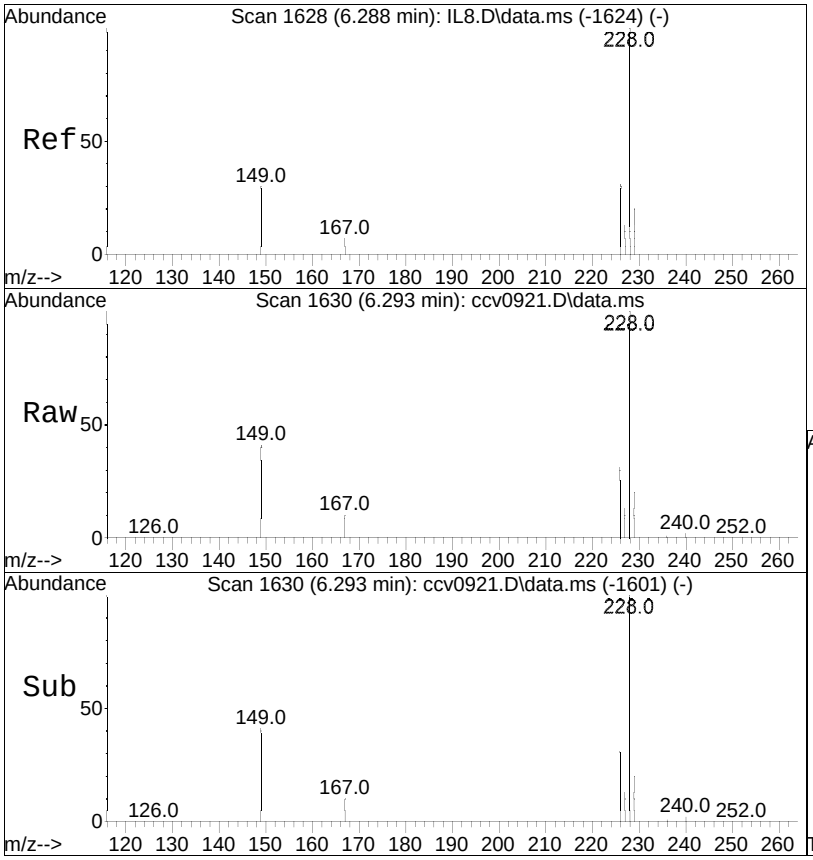



#33
3,3'-Dichlorobenzene
Concen: 936.21 ng/ml
RT: 6.252 min Scan# 1615
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:252 Resp: 244142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 9.2 | 7.2 | 10.8 |
| 254 | 64.6 | 51.8 | 77.6 |

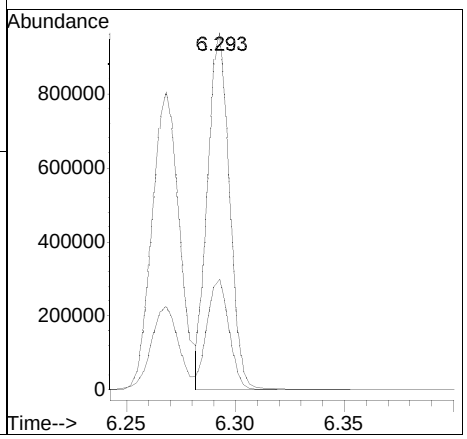


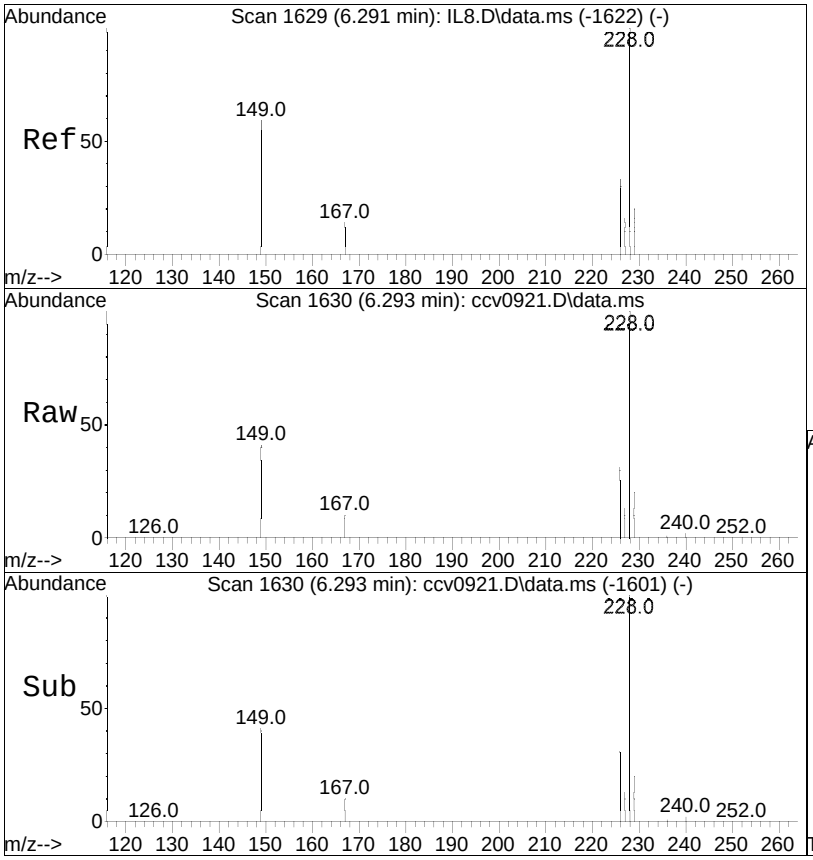



#34
Chrysene
Concen: 1007.33 ng/ml
RT:  6.293 min  Scan# 1630
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:228 Resp:  670959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.9 | 24.8 | 37.2 |

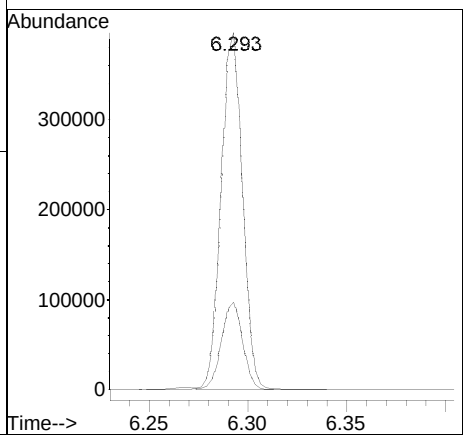


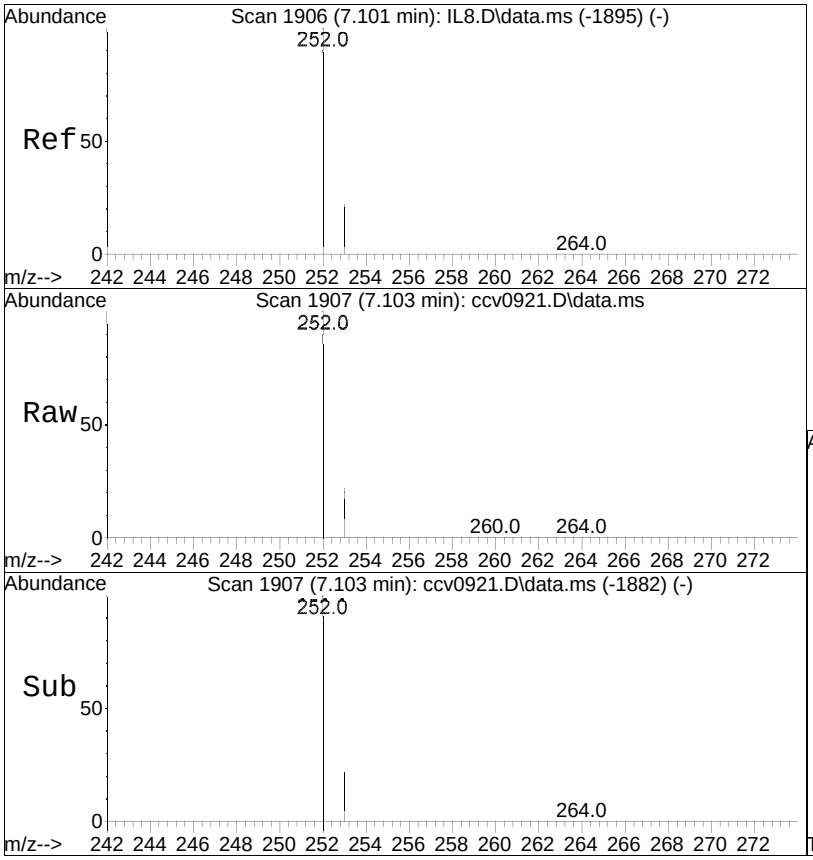



#35
Bis(2-ethylhexyl)phthalate
Concen: 1252.61 ng/ml
RT:  6.293 min  Scan# 1630
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:149 Resp:  295467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.8 | 19.9 | 29.9 |

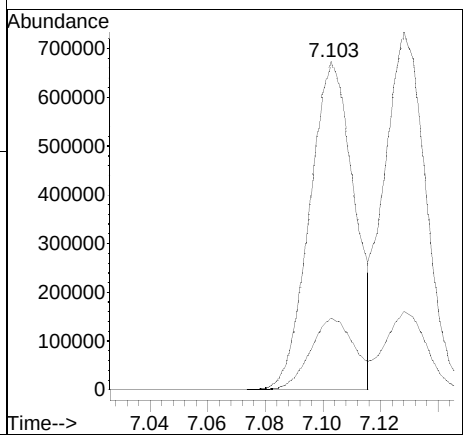


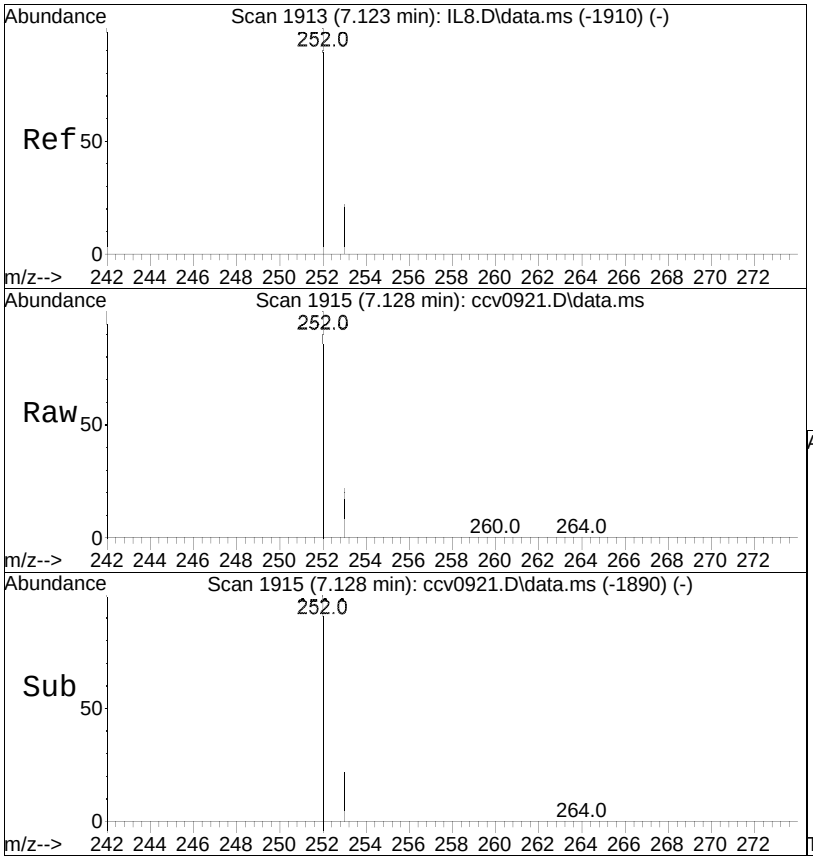



#37
Benzo[b]fluoranthene
Concen: 1107.34 ng/ml
RT: 7.103 min Scan# 1907
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:252 Resp: 730255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.7 | 17.4 | 26.0 |

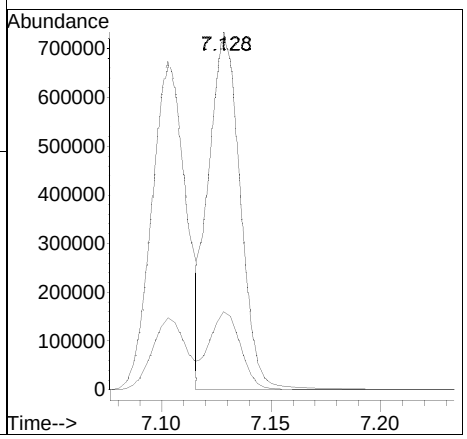


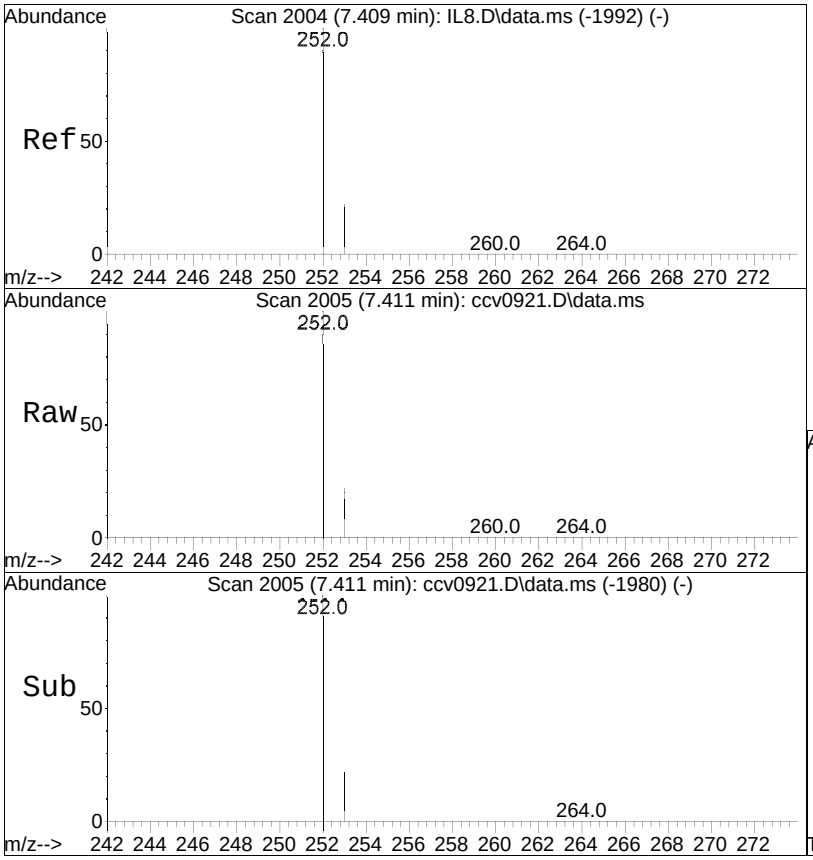



#38
Benzo[k]fluoranthene
Concen: 1126.81 ng/ml
RT:  7.128 min  Scan# 1915
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:252 Resp:  728101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.5 | 26.3 |

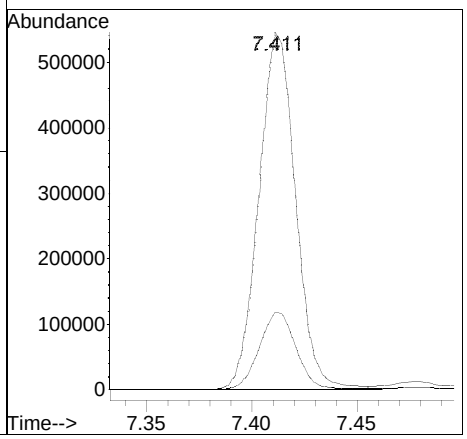


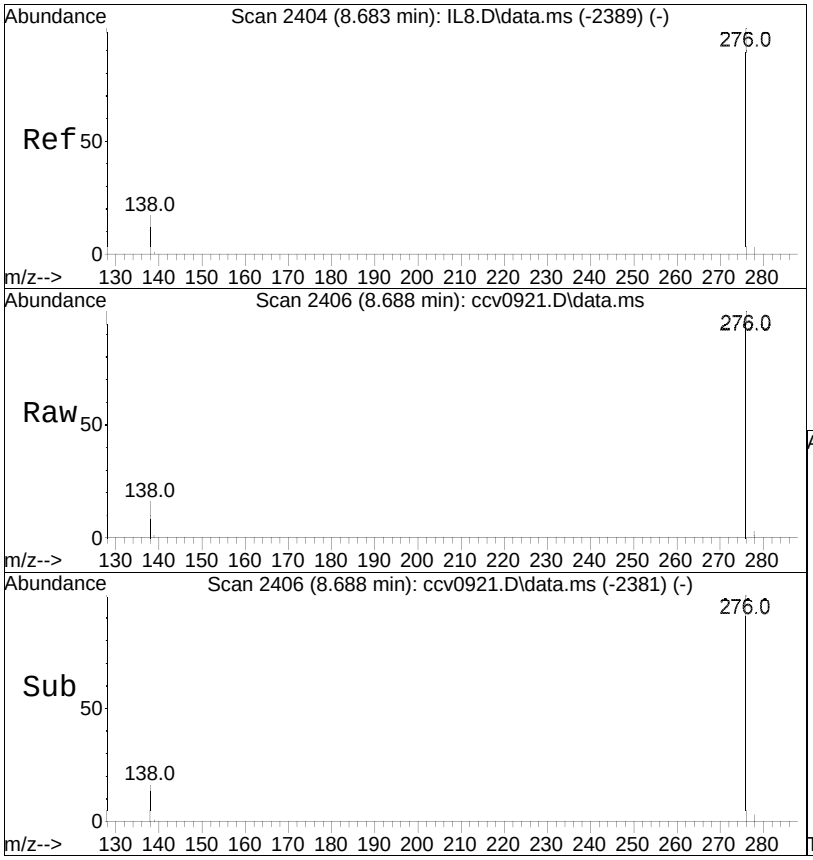



#39
Benzo[a]pyrene
Concen: 1137.52 ng/ml
RT:  7.411 min  Scan# 2005
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:252 Resp:  652696

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.8 | 17.4 | 26.0 |

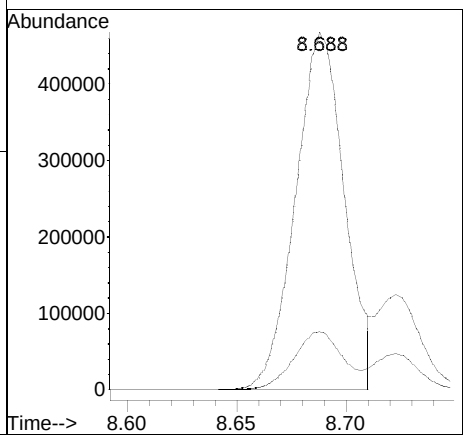


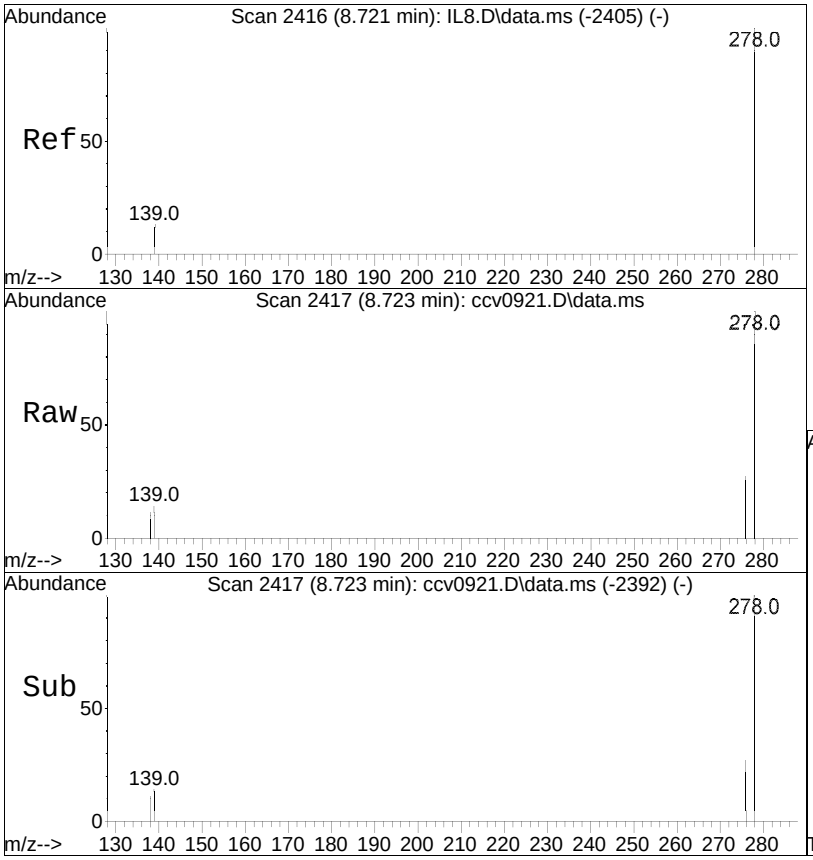



#40
Indeno[1,2,3-cd]pyrene
Concen: 1198.24 ng/ml
RT:  8.688 min  Scan# 2406
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:276 Resp:  722093

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 16.5 | 13.1 | 19.7 |

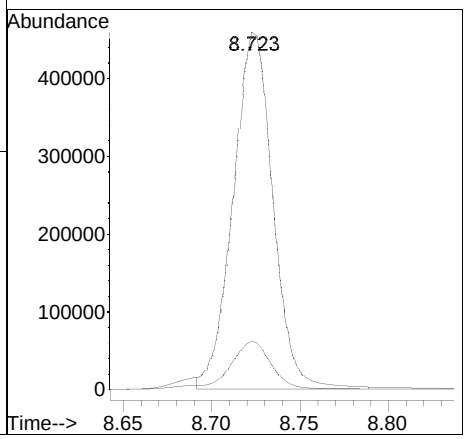


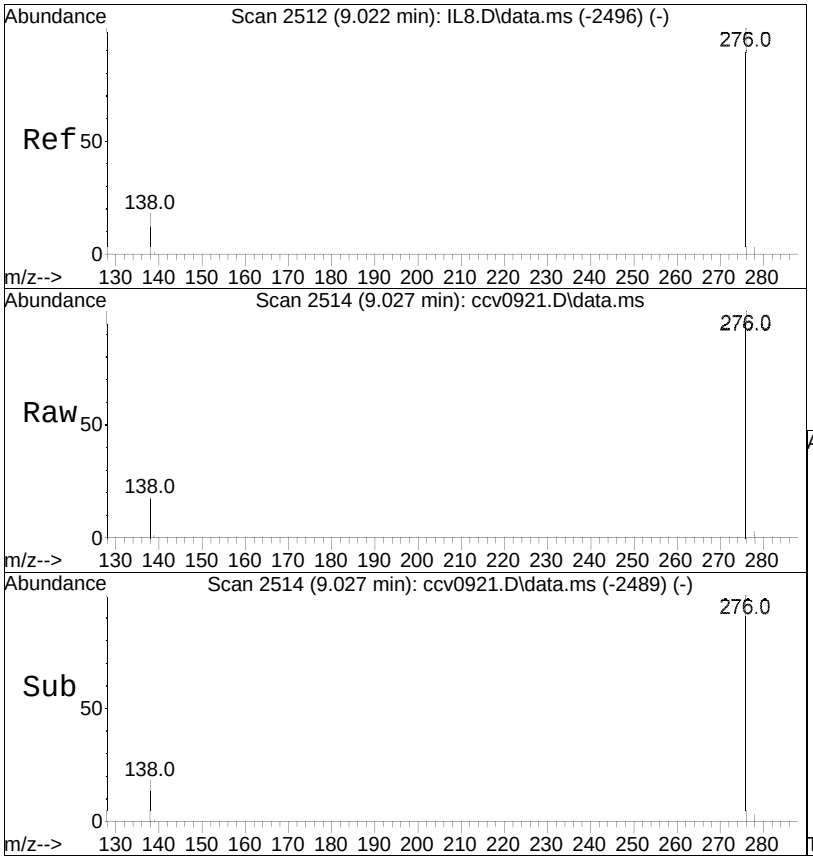



#41
Dibenzo[a,h]anthracene
Concen: 1081.31 ng/ml M6
RT: 8.723 min Scan# 2417
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 01:37 pm

Tgt Ion:278 Resp: 715696

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 14.2 | 12.0 | 18.0 |

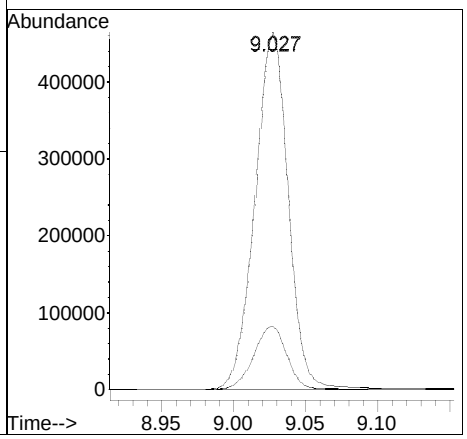





#42
Benzo[g,h,i]perylene
Concen: 1176.06 ng/ml
RT:  9.027 min  Scan# 2514
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  01:37 pm

Tgt Ion:276 Resp:  733934

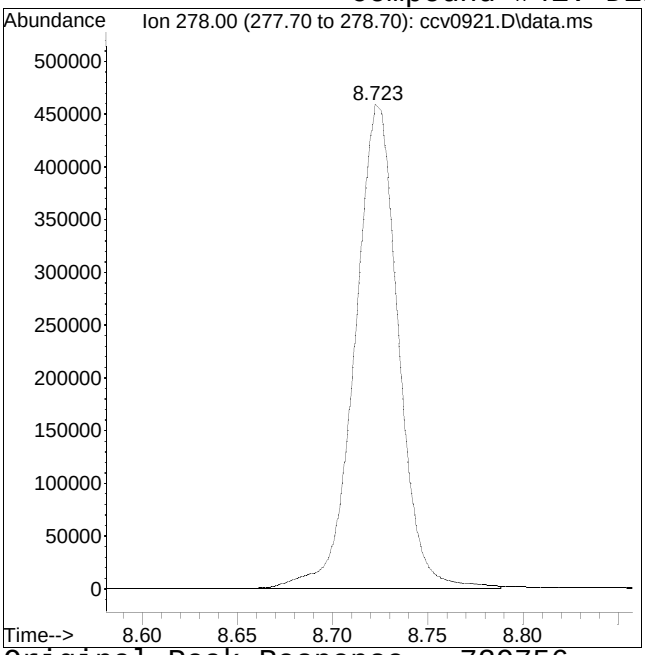
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.0 | 14.7 | 22.1 |



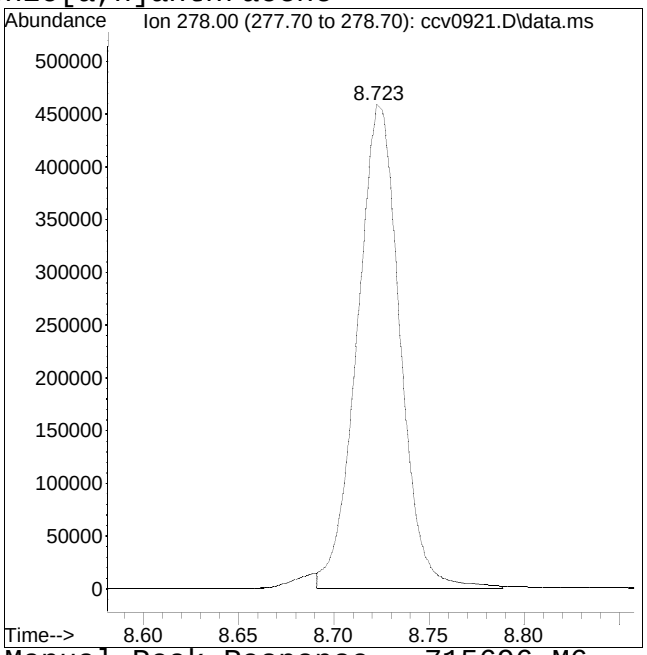
# Manual Integration Report

Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : ccv0921.D
Date Inj'd : 9/21/2024 1:37 pm
Sample : WG1974631-3,32,,CCV 10888
Method : SIM-RVT_240917n_sv125.M
Operator : SV125:rp
Instrument : SV125
Quant Date : 9/21/2024 2:10 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 729756



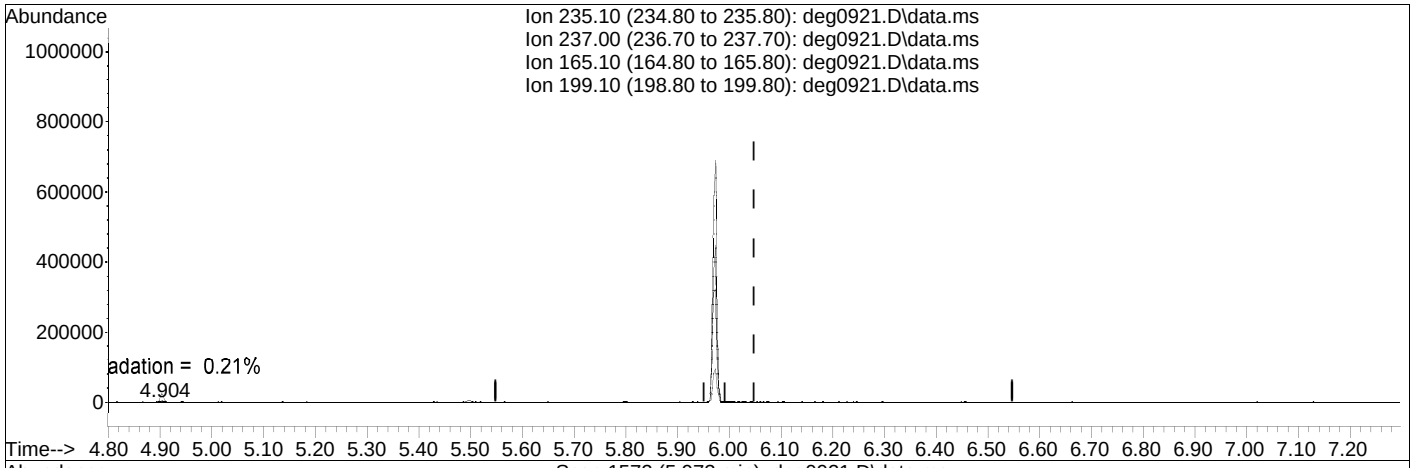

Manual Peak Response = 715696 M6

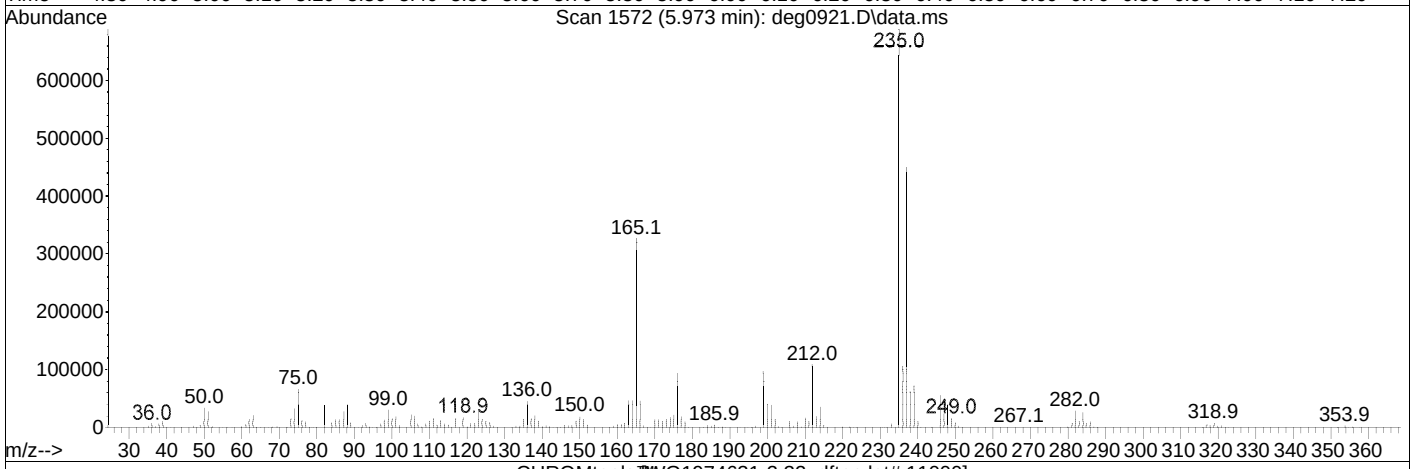
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : deg0921.D
Acq On : 21 Sep 2024 01:18 pm
Operator : SV125:rp
Sample : WG1974631-2,32,,dftpp lot# 11000
Misc : WG1974631,,ical21503
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 13:35:05 2024
Quant Method : I:\8270SIM\SV125\240921RVT\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools [WG1974631-2,32,,dftpp lot# 11000]

(6) ddt (T)

5.973min (-0.075) 57.62

response 351212

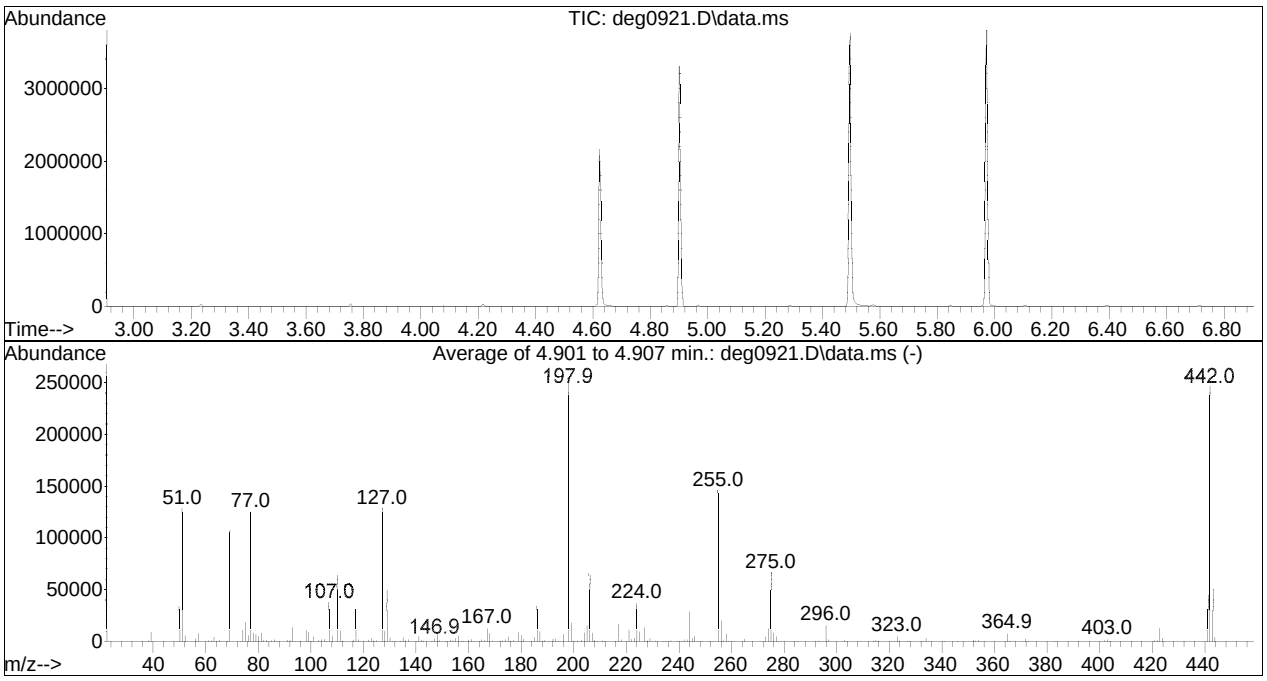
| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 65.60 | 63.60 |
| 165.10 | 53.30 | 49.72 |
| 199.10 | 17.10 | 14.86 |

# DFTPP

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : deg0921.D
Acq On : 21 Sep 2024 01:18 pm
Operator : SV125:rp
Sample : WG1974631-1,32,,dftpp lot# 11000
Misc : WG1974631,,ical21503
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Sat Sep 21 14:10:33 2024



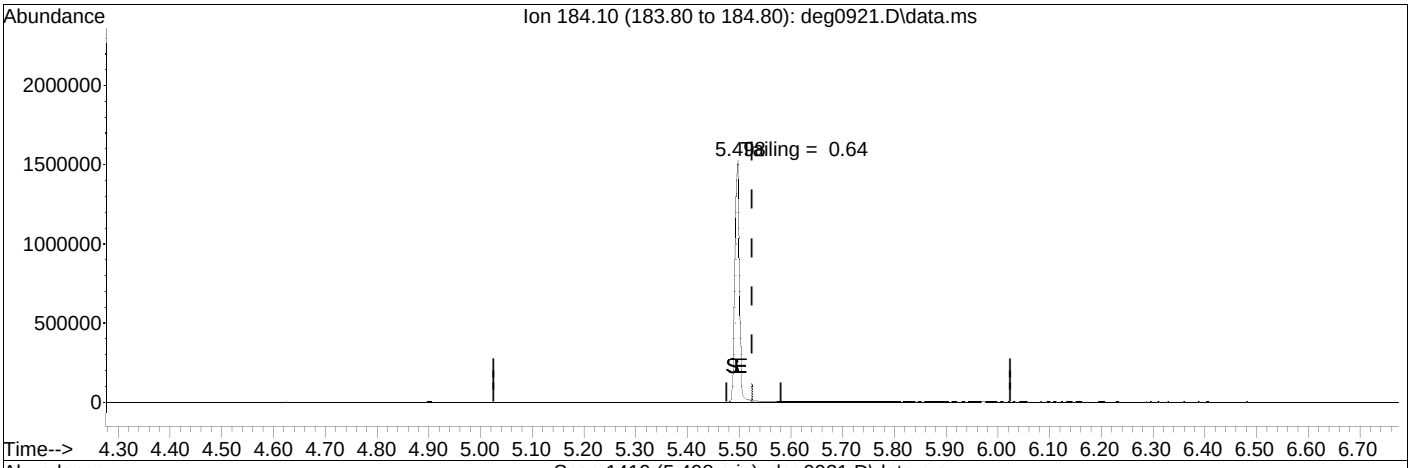

Spectrum Information: Average of 4.901 to 4.907 min.

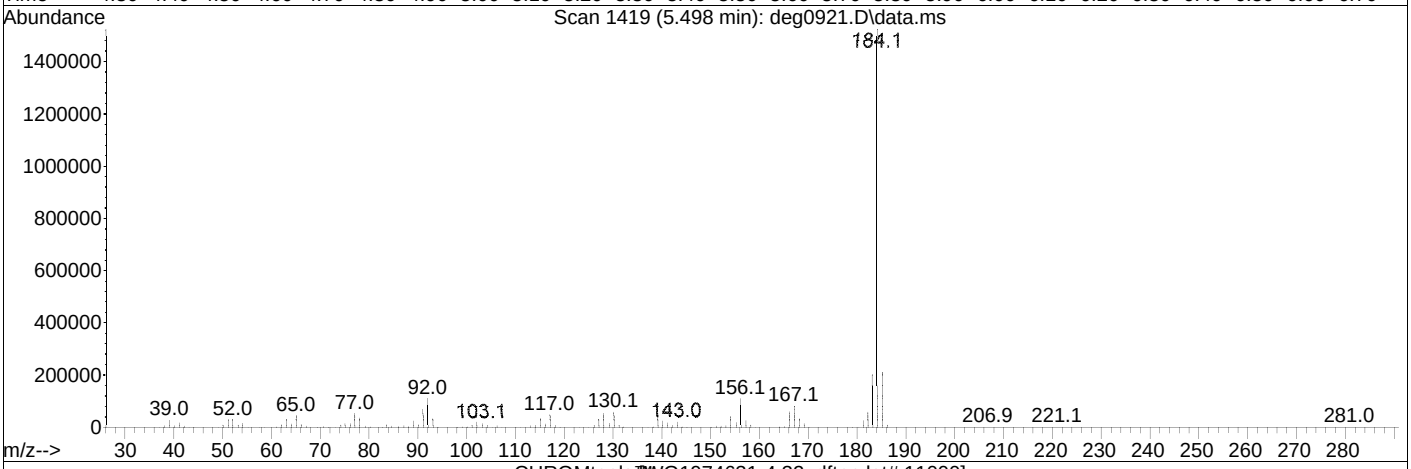
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 50.2 | 128050 | PASS |
| 68 | 69 | 0.00 | 2 | 1.3 | 1363 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 106673 | PASS |
| 70 | 69 | 0.00 | 2 | 0.5 | 509 | PASS |
| 127 | 198 | 10 | 80 | 50.4 | 128472 | PASS |
| 197 | 198 | 0.00 | 2 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 254955 | PASS |
| 199 | 198 | 5 | 9 | 7.0 | 17973 | PASS |
| 275 | 198 | 10 | 60 | 26.0 | 66381 | PASS |
| 365 | 198 | 1 | 100 | 3.0 | 7770 | PASS |
| 441 | 442 | 0.01 | 24 | 18.2 | 44829 | PASS |
| 442 | 198 | 50 | 100 | 96.7 | 246464 | PASS |
| 443 | 442 | 15 | 24 | 20.4 | 50221 | PASS |

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : deg0921.D
Acq On : 21 Sep 2024 01:18 pm
Operator : SV125:rp
Sample : WG1974631-4,32,,dftpp lot# 11000
Misc : WG1974631,,ical21503
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 13:35:05 2024
Quant Method : I:\8270SIM\SV125\240921RVT\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools [WG1974631-4,32,,dftpp lot# 11000]

(3) benzidine (T)

5.498min (-0.027) 82.18

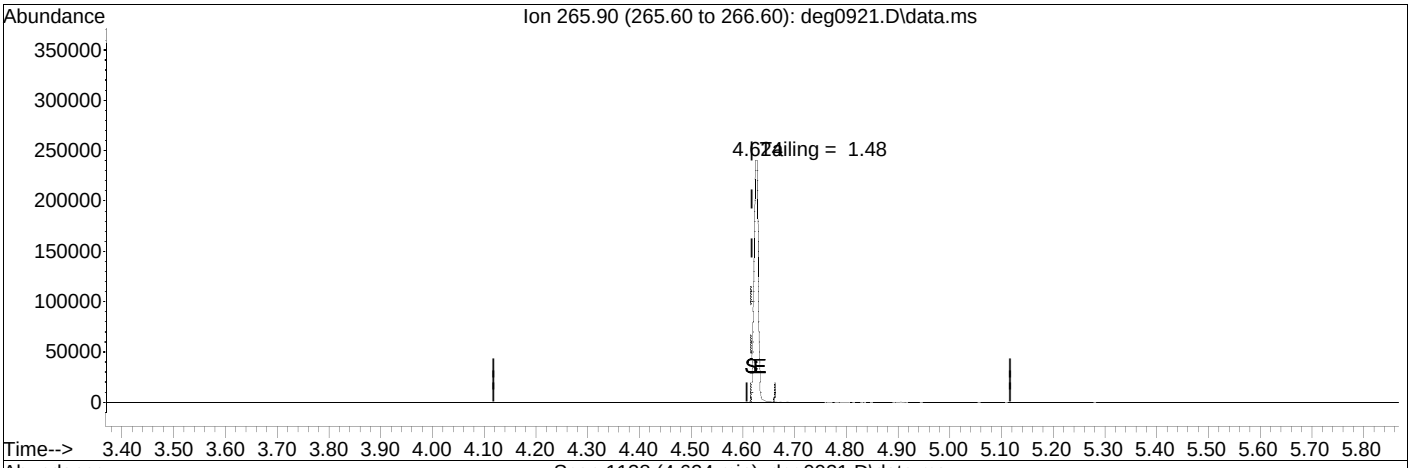
response 836597

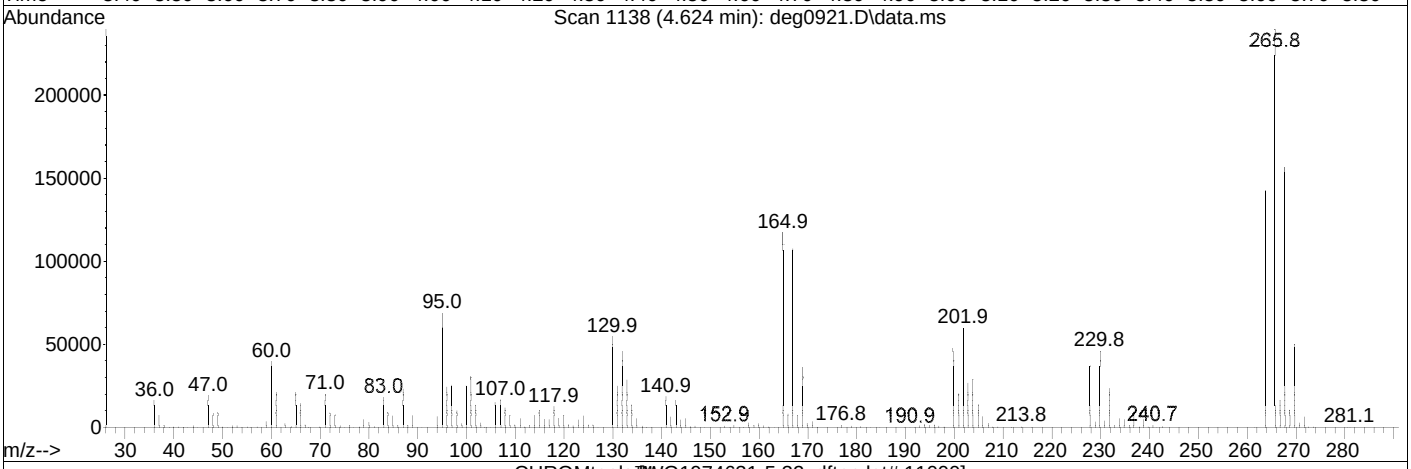
| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : deg0921.D
Acq On : 21 Sep 2024 01:18 pm
Operator : SV125:rp
Sample : WG1974631-5,32,,dftpp lot# 11000
Misc : WG1974631,,ical21503
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 13:35:05 2024
Quant Method : I:\8270SIM\SV125\240921RVT\dftppsv125.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 17 18:39:22 2024
Response via : Continuing Cal File:




CHROMtools [WG1974631-5,32,,dftpp lot# 11000]

(1) pentachlorophenol (T)

4.624min (+ 0.006) 62.59

response 131464

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV125 | **Calibration Date** | : 09/21/24 13:37 | | |
| **Lab File ID** | : CCV0921 | **Init. Calib. Date(s)** | : 09/17/24 | 09/17/24 | |
| **Sample No** | : WG1974631-3 | **Init. Calib. Times** | : 18:45 | 21:09 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene-d4 | 1 | 1 | .05 | 0 | 20 | 113 | 0 |
| 2-Fluorophenol | 0.984 | 0.941 | .05 | 4.4 | 20 | 111 | 0 |
| Phenol-d6 | 1.214 | 1.169 | .05 | 3.7 | 20 | 113 | 0 |
| Bis(2-chloroethyl)ether | 1.079 | 1.046 | .05 | 3.1 | 20 | 114 | 0 |
| n-nitrosodi-n-propylamine | 0.736 | 0.722 | .05 | 1.9 | 20 | 113 | 0 |
| Hexachloroethane | 0.437 | 0.447 | .05 | -2.3 | 20 | 120 | 0 |
| Nitrobenzene-d5 | 0.624 | 0.872 | .05 | -39.7* | 20 | 150 | 0 |
| Naphthalene-d8 | 1 | 1 | .05 | 0 | 20 | 114 | 0 |
| Naphthalene | 1.065 | 0.982 | .05 | 7.8 | 20 | 115 | 0 |
| Hexachlorobutadiene | 0.215 | 0.208 | .05 | 3.3 | 20 | 115 | 0 |
| 2-Methylnaphthalene | 0.682 | 0.674 | .05 | 1.2 | 20 | 116 | 0 |
| 1-Methylnaphthalene | 0.633 | 0.625 | .05 | 1.3 | 20 | 116 | 0 |
| 2-Fluorobiphenyl | 0.848 | 0.83 | .05 | 2.1 | 20 | 117 | 0 |
| 2-Chloronaphthalene | 0.723 | 0.723 | .05 | 0 | 20 | 117 | 0 |
| 2,6-Dinitrotoluene | 1000 | 1376.988 | .05 | -37.7* | 20 | 176 | 0 |
| Acenaphthylene | 1.049 | 1.069 | .05 | -1.9 | 20 | 116 | 0 |
| Acenaphthene-d10 | 1 | 1 | .05 | 0 | 20 | 117 | 0 |
| Acenaphthene | 1.22 | 1.175 | .05 | 3.7 | 20 | 118 | 0 |
| 2,4-Dinitrotoluene | 1000 | 1442.724 | .05 | -44.3* | 20 | 188 | 0 |
| Fluorene | 1.337 | 1.319 | .05 | 1.3 | 20 | 118 | 0 |
| 2,4,6-Tribromophenol | 0.174 | 0.214 | .05 | -23* | 20 | 136 | 0 |
| Phenanthrene-d10 | 1 | 1 | .05 | 0 | 20 | 116 | 0 |
| 4,6-Dinitro-o-cresol | 1000 | 1820.732 | .05 | -82.1* | 20 | 237 | 0 |
| Hexachlorobenzene | 0.256 | 0.25 | .05 | 2.3 | 20 | 120 | 0 |
| Pentachlorophenol | 1000 | 1146.371 | .05 | -14.6 | 20 | 140 | 0 |
| Phenanthrene | 1.032 | 1.007 | .05 | 2.4 | 20 | 119 | 0 |
| Anthracene | 1.024 | 1.006 | .05 | 1.8 | 20 | 117 | 0 |
| Fluoranthene | 1.17 | 1.188 | .05 | -1.5 | 20 | 118 | 0 |
| Pyrene | 1.235 | 1.27 | .05 | -2.8 | 20 | 118 | 0 |
| 4-Terphenyl-d14 | 0.813 | 0.832 | .05 | -2.3 | 20 | 119 | 0 |
| Chrysene-d12 | 1 | 1 | .05 | 0 | 20 | 118 | 0 |
| Benzo[a]anthracene | 1000 | 1019.735 | .05 | -2 | 20 | 118 | 0 |
| 3,3'-Dichlorobenzene | 1000 | 936.206 | .05 | 6.4 | 20 | 119 | 0 |
| Chrysene | 1.139 | 1.148 | .05 | -0.8 | 20 | 119 | 0 |
| Bis(2-ethylhexyl)phthalate | 1000 | 1252.609 | .05 | -25.3* | 20 | 167 | 0 |
| Perylene-d12 | 1 | 1 | .05 | 0 | 20 | 120 | 0 |
| Benzo[b]fluoranthene | 0.936 | 1.036 | .05 | -10.7 | 20 | 117 | 0 |
| Benzo[k]fluoranthene | 0.917 | 1.033 | .05 | -12.6 | 20 | 124 | 0 |
| Benzo[a]pyrene | 0.814 | 0.926 | .05 | -13.8 | 20 | 120 | 0 |
| Indeno[1,2,3-cd]pyrene | 0.855 | 1.025 | .05 | -19.9 | 20 | 125 | 0 |
| Dibenzo[a,h]anthracene | 1000 | 1081.305 | .05 | -8.1 | 20 | 132 | 0 |
| Benzo[g,h,i]perylene | 0.886 | 1.042 | .05 | -17.6 | 20 | 127 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : SV119 | **Calibration Date** | : 09/21/24 14:42 | | |
| **Lab File ID** | : CCV0921 | **Init. Calib. Date(s)** | : 06/21/24 | 06/21/24 | |
| **Sample No** | : WG1974651-3 | **Init. Calib. Times** | : 14:50 | 17:17 | |
| **Channel** | : | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene-d4 | 1 | 1 | .05 | 0 | 20 | 96 | 0 |
| 2-Fluorophenol | 1.411 | 1.446 | .05 | -2.5 | 20 | 98 | 0 |
| Phenol-d6 | 1.78 | 1.799 | .05 | -1.1 | 20 | 93 | 0 |
| Bis(2-chloroethyl)ether | 1.43 | 1.411 | .05 | 1.3 | 20 | 95 | 0 |
| n-nitrosodi-n-propylamine | 1.088 | 0.974 | .05 | 10.5 | 20 | 81 | 0 |
| Hexachloroethane | 0.664 | 0.662 | .05 | 0.3 | 20 | 98 | 0 |
| Nitrobenzene-d5 | 1.561 | 1.455 | .05 | 6.8 | 20 | 86 | 0 |
| Naphthalene-d8 | 1 | 1 | .05 | 0 | 20 | 102 | 0 |
| Naphthalene | 1.104 | 1.144 | .05 | -3.6 | 20 | 107 | 0 |
| Hexachlorobutadiene | 0.248 | 0.269 | .05 | -8.5 | 20 | 115 | 0 |
| 2-Methylnaphthalene | 0.83 | 0.891 | .05 | -7.3 | 20 | 107 | 0 |
| 1-Methylnaphthalene | 0.802 | 0.8 | .05 | 0.2 | 20 | 105 | 0 |
| 2-Fluorobiphenyl | 1.034 | 1.089 | .05 | -5.3 | 20 | 113 | 0 |
| 2-Chloronaphthalene | 0.894 | 0.94 | .05 | -5.1 | 20 | 109 | 0 |
| 2,6-Dinitrotoluene | 0.241 | 0.252 | .05 | -4.6 | 20 | 99 | 0 |
| Acenaphthylene | 1.429 | 1.394 | .05 | 2.4 | 20 | 100 | 0 |
| Acenaphthene-d10 | 1 | 1 | .05 | 0 | 20 | 111 | 0 |
| Acenaphthene | 1.396 | 1.353 | .05 | 3.1 | 20 | 108 | 0 |
| 2,4-Dinitrotoluene | 0.535 | 0.523 | .05 | 2.2 | 20 | 97 | 0 |
| Fluorene | 1.84 | 1.713 | .05 | 6.9 | 20 | 105 | 0 |
| 2,4,6-Tribromophenol | 0.279 | 0.34 | .05 | -21.9* | 20 | 121 | 0 |
| Phenanthrene-d10 | 1 | 1 | .05 | 0 | 20 | 99 | 0 |
| 4,6-Dinitro-o-cresol | 1000 | 983.946 | .05 | 1.6 | 20 | 98 | 0 |
| Hexachlorobenzene | 0.275 | 0.303 | .05 | -10.2 | 20 | 115 | 0 |
| Pentachlorophenol | 1000 | 1040.957 | .05 | -4.1 | 20 | 99 | 0 |
| Phenanthrene | 1.163 | 1.118 | .05 | 3.9 | 20 | 99 | 0 |
| Anthracene | 1.201 | 1.194 | .05 | 0.6 | 20 | 98 | 0 |
| Fluoranthene | 1.597 | 1.47 | .05 | 8 | 20 | 98 | 0 |
| Pyrene | 1.655 | 1.529 | .05 | 7.6 | 20 | 99 | 0 |
| 4-Terphenyl-d14 | 1.106 | 1.022 | .05 | 7.6 | 20 | 99 | 0 |
| Chrysene-d12 | 1 | 1 | .05 | 0 | 20 | 115 | 0 |
| Benzo[a]anthracene | 1000 | 927.947 | .05 | 7.2 | 20 | 100 | 0 |
| 3,3'-Dichlorobenzene | 0.611 | 0.672 | .05 | -10 | 20 | 117 | 0 |
| Chrysene | 1.489 | 1.307 | .05 | 12.2 | 20 | 99 | 0 |
| Bis(2-ethylhexyl)phthalate | 1000 | 782.61 | .05 | 21.7* | 20 | 88 | 0 |
| Perylene-d12 | 1 | 1 | .05 | 0 | 20 | 115 | 0 |
| Benzo[b]fluoranthene | 1.657 | 1.413 | .05 | 14.7 | 20 | 100 | 0 |
| Benzo[k]fluoranthene | 1.531 | 1.364 | .05 | 10.9 | 20 | 111 | 0 |
| Benzo[a]pyrene | 1.467 | 1.314 | .05 | 10.4 | 20 | 104 | 0 |
| Indeno[1,2,3-cd]pyrene | 1.483 | 1.468 | .05 | 1 | 20 | 113 | 0 |
| Dibenzo[a,h]anthracene | 1.321 | 1.274 | .05 | 3.6 | 20 | 113 | 0 |
| Benzo[g,h,i]perylene | 1.459 | 1.325 | .05 | 9.2 | 20 | 109 | 0 |

*** Value outside of QC limits.**

# Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 02:42 pm
Operator : sv119:rp
Sample : WG1974651-3,32,,ICV 10884 (0920)
Misc : WG1974651,,ical21236
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 15:01:18 2024
Quant Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:19 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | i | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 2 | s | 2-Fluorophenol | 1.411 | 1.446 | -2.5 | 98 | 0.00 |
| 3 | s | Phenol-d6 | 1.780 | 1.799 | -1.1 | 93 | 0.00 |
| 4 | T | Bis(2-chloroethyl)ether | 1.430 | 1.411 | 1.3 | 95 | 0.00 |
| 5 | T | n-nitrosodi-n-propylamine | 1.088 | 0.974 | 10.5 | 81 | 0.00 |
| 6 | t | Hexachloroethane | 0.664 | 0.662 | 0.3 | 98 | 0.00 |
| 7 | s | Nitrobenzene-d5 | 1.561 | 1.455 | 6.8 | 86 | 0.00 |
| 8 | i | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 9 | t | Naphthalene | 1.104 | 1.144 | -3.6 | 107 | 0.00 |
| 10 | t | Hexachlorobutadiene | 0.248 | 0.269 | -8.5 | 115 | 0.00 |
| 11 | t | 2-Methylnaphthalene | 0.830 | 0.891 | -7.3 | 107 | 0.00 |
| 12 | t | 1-Methylnaphthalene | 0.802 | 0.800 | 0.2 | 105 | 0.00 |
| 13 | s | 2-Fluorobiphenyl | 1.034 | 1.089 | -5.3 | 113 | 0.00 |
| 14 | t | 2-Chloronaphthalene | 0.894 | 0.940 | -5.1 | 109 | 0.00 |
| 15 | t | 2,6-Dinitrotoluene | 0.241 | 0.252 | -4.6 | 99 | 0.00 |
| 16 | t | Acenaphthylene | 1.429 | 1.394 | 2.4 | 100 | 0.00 |
| 17 | i | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 18 | t | Acenaphthene | 1.396 | 1.353 | 3.1 | 108 | 0.00 |
| 19 | t | 2,4-Dinitrotoluene | 0.535 | 0.523 | 2.2 | 97 | 0.00 |
| 20 | t | Fluorene | 1.840 | 1.713 | 6.9 | 105 | 0.00 |
| 21 | s | 2,4,6-Tribromophenol | 0.279 | 0.340 | -21.9# | 121 | 0.00 |
| 22 | i | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 23 | T | 4,6-Dinitro-o-cresol | *1000.000 | 983.946 | 1.6 | 98 | 0.00 |
| 24 | t | Hexachlorobenzene | 0.275 | 0.303 | -10.2 | 115 | 0.00 |
| 25 | t | Pentachlorophenol | *1000.000 | 1040.957 | -4.1 | 99 | 0.00 |
| 26 | t | Phenanthrene | 1.163 | 1.118 | 3.9 | 99 | 0.00 |
| 27 | t | Anthracene | 1.201 | 1.194 | 0.6 | 98 | 0.00 |
| 28 | t | Fluoranthene | 1.597 | 1.470 | 8.0 | 98 | 0.00 |
| 29 | t | Pyrene | 1.655 | 1.529 | 7.6 | 99 | 0.00 |
| 30 | s | 4-Terphenyl-d14 | 1.106 | 1.022 | 7.6 | 99 | 0.00 |
| 31 | i | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 32 | t | Benzo[a]anthracene | *1000.000 | 927.947 | 7.2 | 100 | 0.00 |
| 33 | t | 3,3'-Dichlorobenzene | 0.611 | 0.672 | -10.0 | 117 | 0.00 |
| 34 | t | Chrysene | 1.489 | 1.307 | 12.2 | 99 | 0.00 |
| 35 | T | Bis(2-ethylhexyl)phthalate | *1000.000 | 782.610 | 21.7# | 88 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 02:42 pm
Operator : sv119:rp
Sample : WG1974651-3,32,,ICV 10884 (0920)
Misc : WG1974651,,ical21236
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 15:01:18 2024
Quant Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:19 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 36 | i | Perylene-d12 | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 37 | t | Benzo[b]fluoranthene | 1.657 | 1.413 | 14.7 | 100 | 0.00 |
| 38 | t | Benzo[k]fluoranthene | 1.531 | 1.364 | 10.9 | 111 | 0.00 |
| 39 | t | Benzo[a]pyrene | 1.467 | 1.314 | 10.4 | 104 | 0.00 |
| 40 | t | Indeno[1,2,3-cd]pyrene | 1.483 | 1.468 | 1.0 | 113 | 0.00 |
| 41 | t | Dibenzo[a,h]anthracene | 1.321 | 1.274 | 3.6 | 113 | 0.00 |
| 42 | t | Benzo[g,h,i]perylene | 1.459 | 1.325 | 9.2 | 109 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 02:42 pm
Operator : sv119:rp
Sample : WG1974651-3,32,,ICV 10884 (0920)
Misc : WG1974651,,ical21236
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 15:01:18 2024
Quant Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:19 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.222 | 152 | 178527 | 4000.000 | ng/ml | 0.00 |
| 8) Naphthalene-d8 | 2.876 | 136 | 703917 | 4000.000 | ng/ml | # 0.00 |
| 17) Acenaphthene-d10 | 3.840 | 164 | 468873 | 4000.000 | ng/ml | 0.00 |
| 22) Phenanthrene-d10 | 4.674 | 188 | 1018896 | 4000.000 | ng/ml | 0.00 |
| 31) Chrysene-d12 | 6.268 | 240 | 1106666 | 4000.000 | ng/ml | 0.00 |
| 36) Perylene-d12 | 7.456 | 264 | 1122604 | 4000.000 | ng/ml | 0.00 |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.646 | 112 | 64556 | 1025.086 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 51.25% | | | |
| 3) Phenol-d6 | 2.041 | 99 | 80302 | 1010.995 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 50.55% | | | |
| 7) Nitrobenzene-d5 | 2.499 | 82 | 64938 | 932.045 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 93.20% | | | |
| 13) 2-Fluorobiphenyl | 3.464 | 172 | 191617 | 1052.953 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 105.30% | | | |
| 21) 2,4,6-Tribromophenol | 4.281 | 330 | 39797 | 1215.636 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 60.78% | | | |
| 30) 4-Terphenyl-d14 | 5.606 | 244 | 260260 | 923.995 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 46.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.090 | 93 | 62993 | 987.139 | ng/ml | 85 |
| 5) n-nitrosodi-n-propylamine | 2.420 | 70 | 43484 | 895.111 | ng/ml# | 87 |
| 6) Hexachloroethane | 2.477 | 117 | 29545 | 997.486 | ng/ml | 89 |
| 9) Naphthalene | 2.887 | 128 | 201324 | 1035.935 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.957 | 225 | 47352 | 1085.500 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.261 | 142 | 156833 | 1073.814 | ng/ml | 99 |
| 12) 1-Methylnaphthalene | 3.316 | 142 | 140835 | 997.590 | ng/ml | 99 |
| 14) 2-Chloronaphthalene | 3.530 | 162 | 165480 | 1051.634 | ng/ml | 92 |
| 15) 2,6-Dinitrotoluene | 3.722 | 165 | 44327 | 1046.144 | ng/ml# | 82 |
| 16) Acenaphthylene | 3.760 | 152 | 245306 | 975.767 | ng/ml | 99 |
| 18) Acenaphthene | 3.858 | 153 | 158606 | 969.095 | ng/ml | 100 |
| 19) 2,4-Dinitrotoluene | 3.950 | 165 | 61248 | 977.214 | ng/ml# | 81 |
| 20) Fluorene | 4.146 | 166 | 200802 | 930.865 | ng/ml | 100 |
| 23) 4,6-Dinitro-o-cresol | 4.179 | 198 | 41224 | 983.946 | ng/ml# | 83 |
| 24) Hexachlorobenzene | 4.463 | 284 | 77210 | 1103.624 | ng/ml | 89 |
| 25) Pentachlorophenol | 4.575 | 266 | 45510 | 1040.957 | ng/ml | 99 |
| 26) Phenanthrene | 4.688 | 178 | 284666 | 961.029 | ng/ml | 100 |
| 27) Anthracene | 4.715 | 178 | 304078 | 993.578 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 02:42 pm
Operator : sv119:rp
Sample : WG1974651-3,32,,ICV 10884 (0920)
Misc : WG1974651,,ical21236
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 15:01:18 2024
Quant Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:19 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 28) Fluoranthene | 5.376 | 202 | 374450 | 920.640 | ng/ml | 95 |
| 29) Pyrene | 5.510 | 202 | 389374 | 923.844 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.259 | 228 | 388800 | 927.947 | ng/ml | 100 |
| 33) 3,3'-Dichlorobenzene | 6.247 | 252 | 186049 | 1100.708 | ng/ml# | 97 |
| 34) Chrysene | 6.283 | 228 | 361735 | 878.253 | ng/ml | 98 |
| 35) Bis(2-ethylhexyl)phtha... | 6.288 | 149 | 233210 | 782.610 | ng/ml | 98 |
| 37) Benzo[b]fluoranthene | 7.088 | 252 | 396433 | 852.622 | ng/ml | 98 |
| 38) Benzo[k]fluoranthene | 7.111 | 252 | 382821 | 891.218 | ng/ml | 98 |
| 39) Benzo[a]pyrene | 7.389 | 252 | 368793 | 895.564 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.646 | 276 | 411925 | 989.529 | ng/ml | 92 |
| 41) Dibenzo[a,h]anthracene | 8.682 | 278 | 357647M6 | 964.471 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 8.981 | 276 | 371791 | 907.997 | ng/ml | 91 |

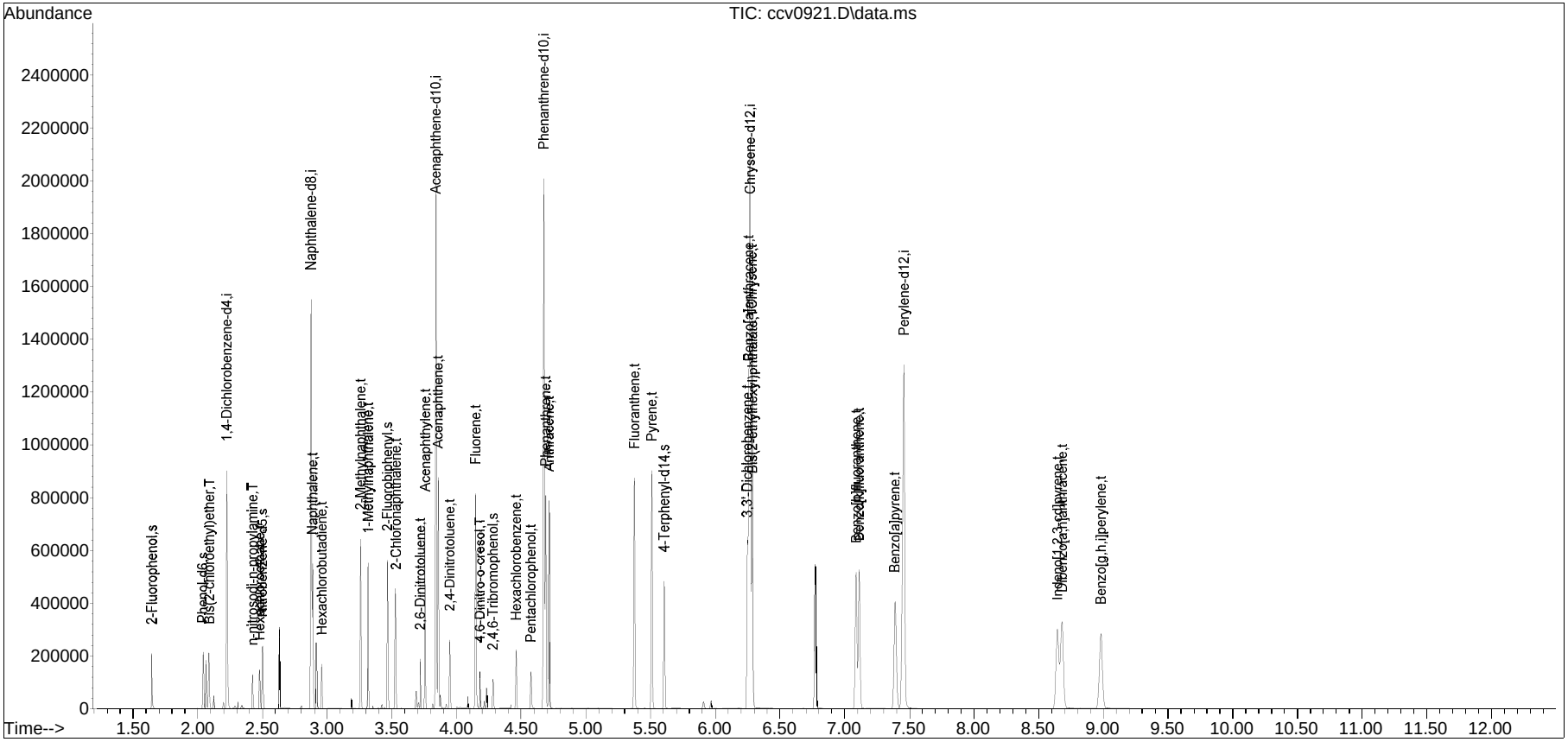
(#) = qualifier out of range (m) = manual integration (+) = signals summed

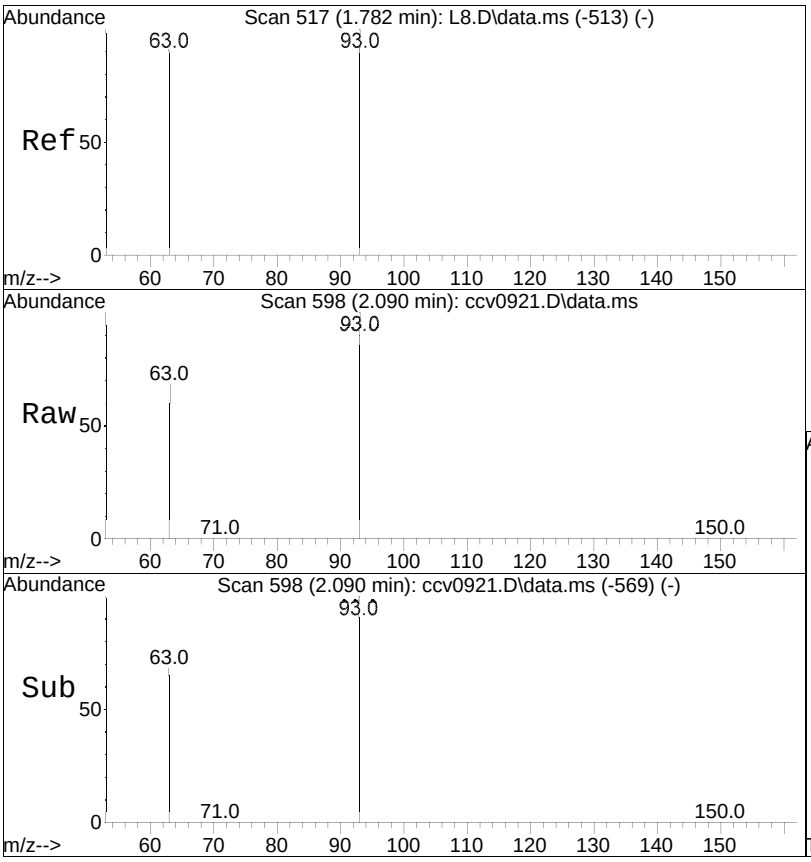
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : ccv0921.D
Acq On : 21 Sep 2024 02:42 pm
Operator : sv119:rp
Sample : WG1974651-3,32,,ICV 10884 (0920)
Misc : WG1974651,,ical21236
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 15:01:18 2024
Quant Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:19 2024
Response via : Initial Calibration

Sub List : Default - All compounds listed

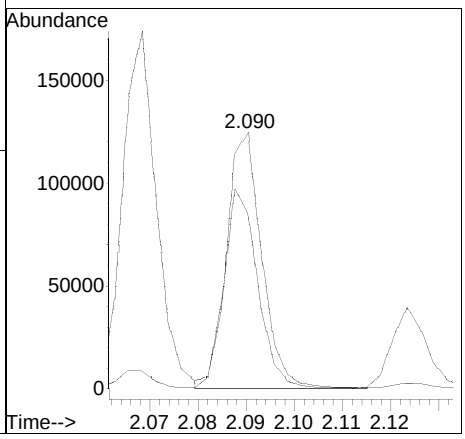


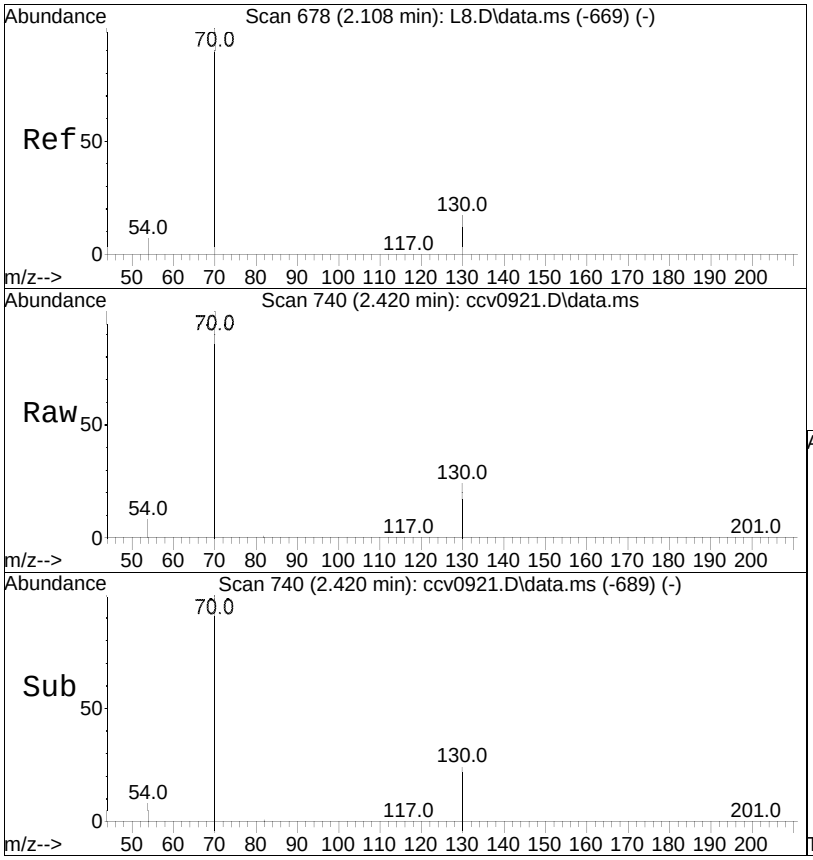



#4
Bis(2-chloroethyl)ether
Concen: 987.14 ng/ml
RT: 2.090 min Scan# 598
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion: 93 Resp: 62993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 75.4 | 71.7 | 107.5 |

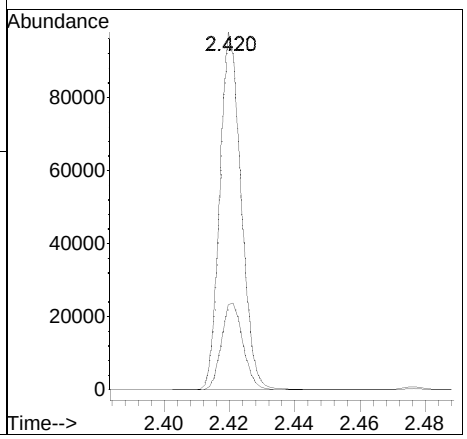


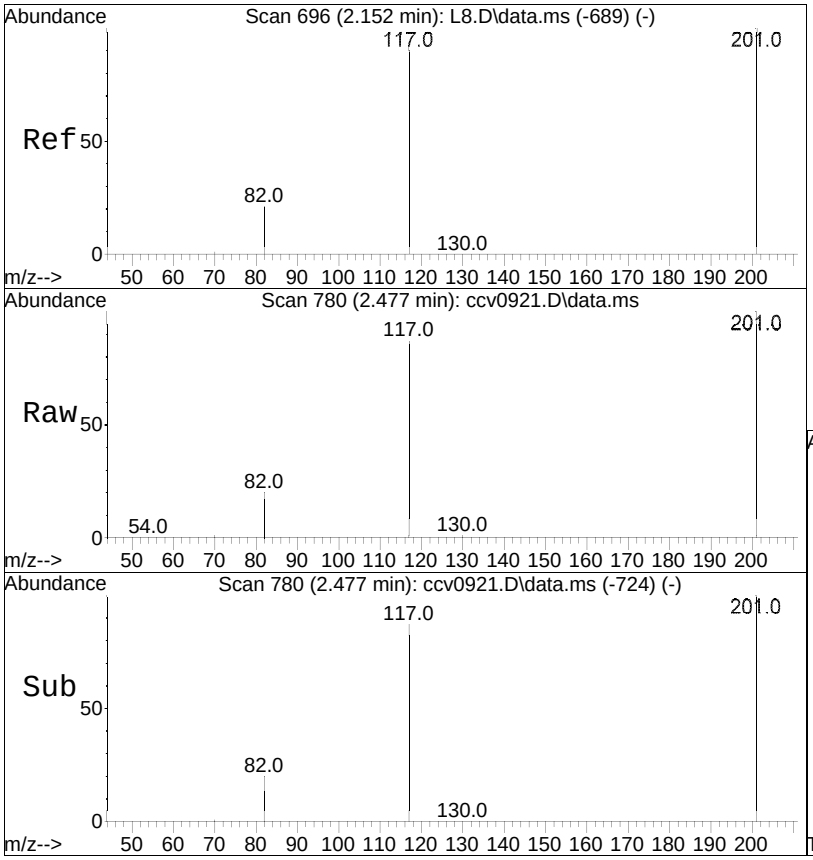



#5
n-nitrosodi-n-propylamine
Concen: 895.11 ng/ml
RT: 2.420 min Scan# 740
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion: 70 Resp: 43484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 70 | 100 | | |
| 130 | 24.6 | 15.1 | 22.7# |

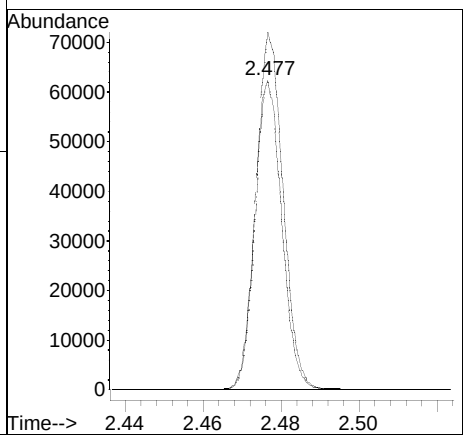


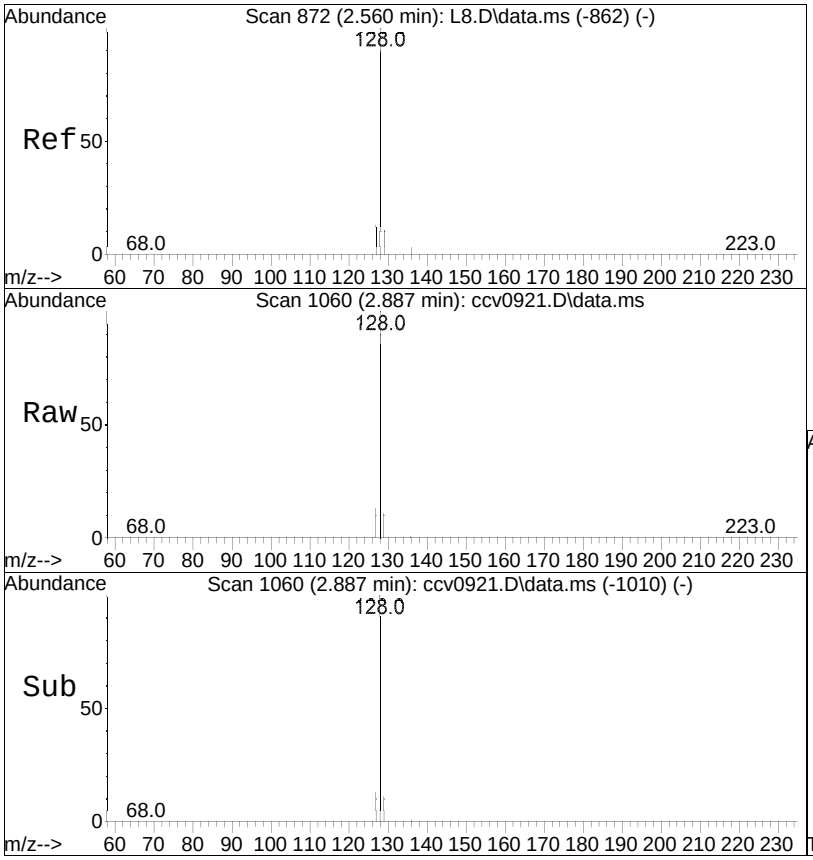



#6
Hexachloroethane
Concen: 997.49 ng/ml
RT: 2.477 min Scan# 780
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:117 Resp: 29545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 114.7 | 83.0 | 124.6 |

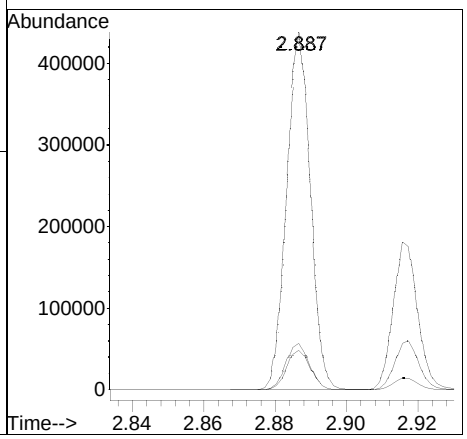


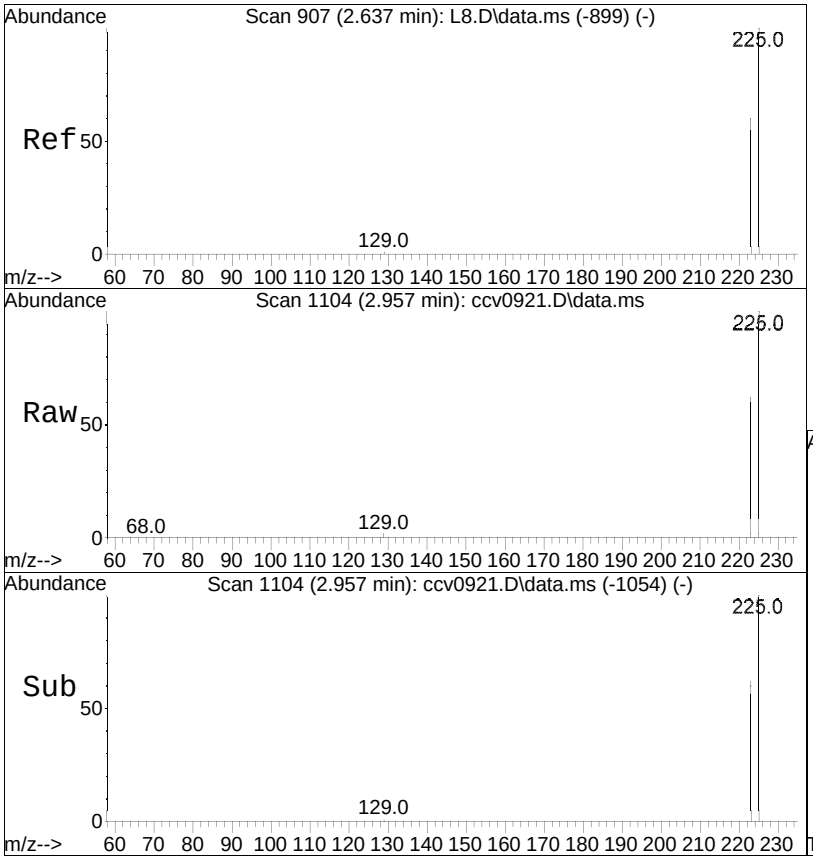



#9
Naphthalene
Concen: 1035.93 ng/ml
RT:  2.887 min  Scan# 1060
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:128 Resp:  201324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.2 | 9.0 | 13.4 |
| 127 | 13.0 | 10.6 | 15.8 |

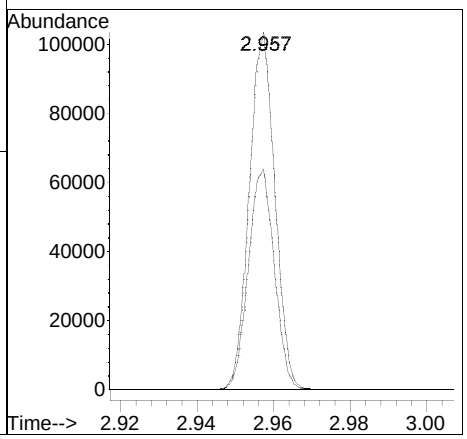


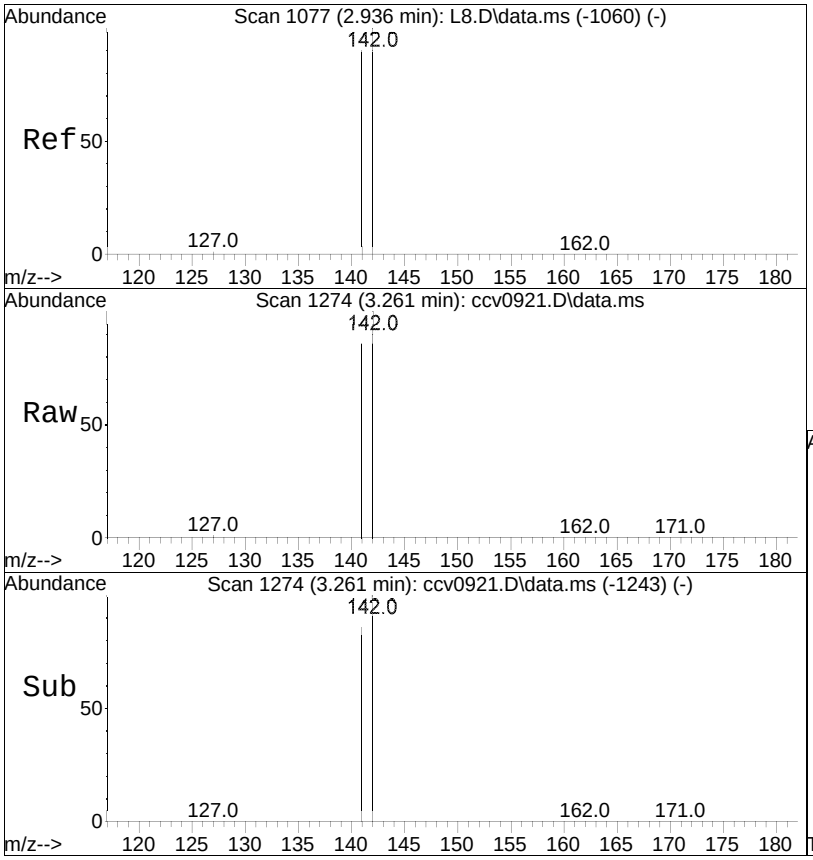



#10
Hexachlorobutadiene
Concen: 1085.50 ng/ml
RT:  2.957 min  Scan# 1104
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:225 Resp:  47352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.7 | 50.2 | 75.2 |

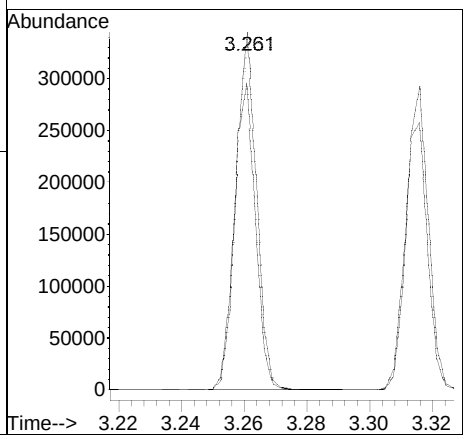


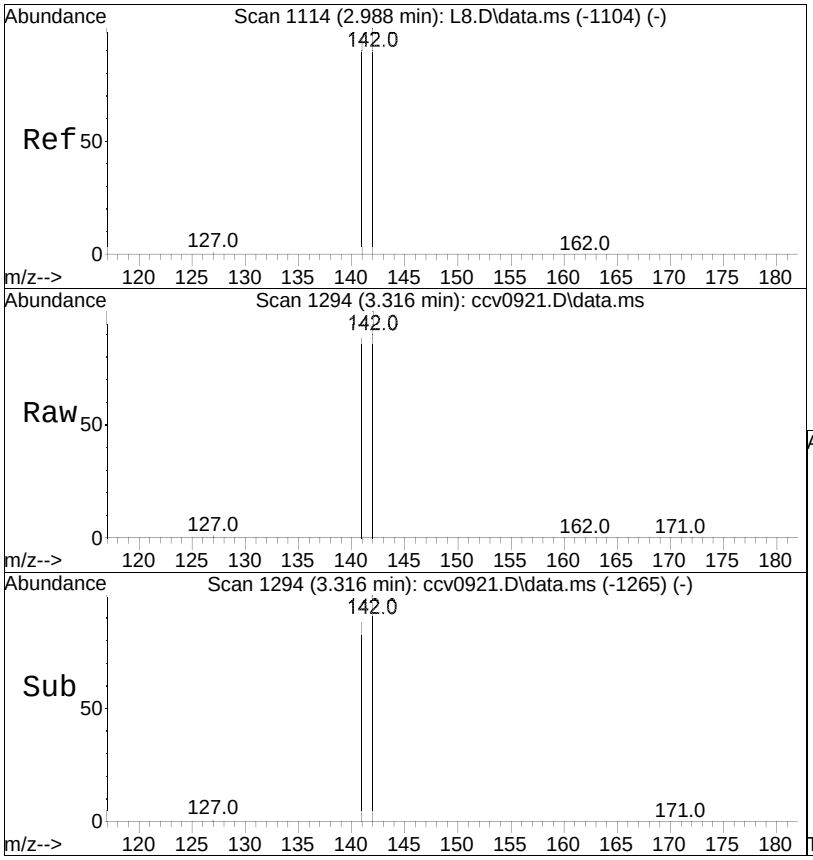



#11
2-Methylnaphthalene
Concen: 1073.81 ng/ml
RT:  3.261 min  Scan# 1274
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:142 Resp:  156833

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 89.4 | 72.3 | 108.5 |

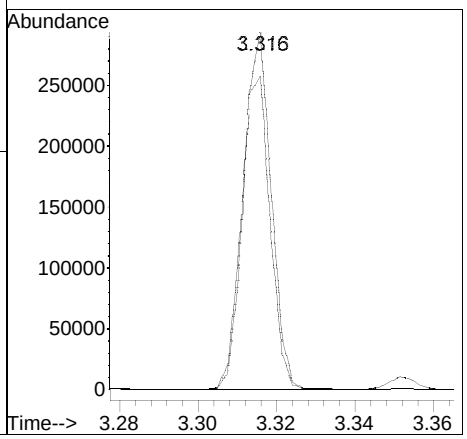


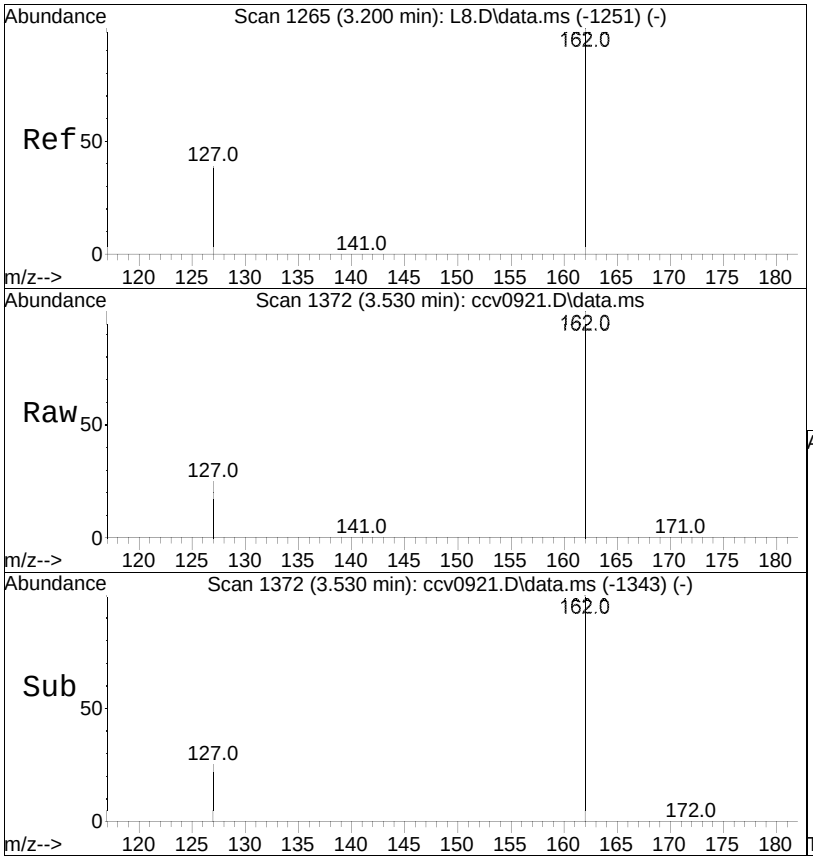



#12
1-Methylnaphthalene
Concen: 997.59 ng/ml
RT: 3.316 min Scan# 1294
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:142 Resp: 140835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.3 | 74.9 | 112.3 |

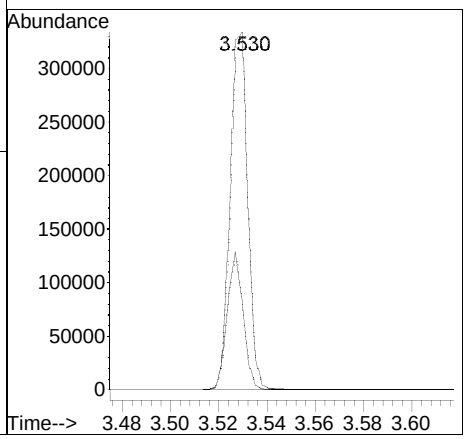


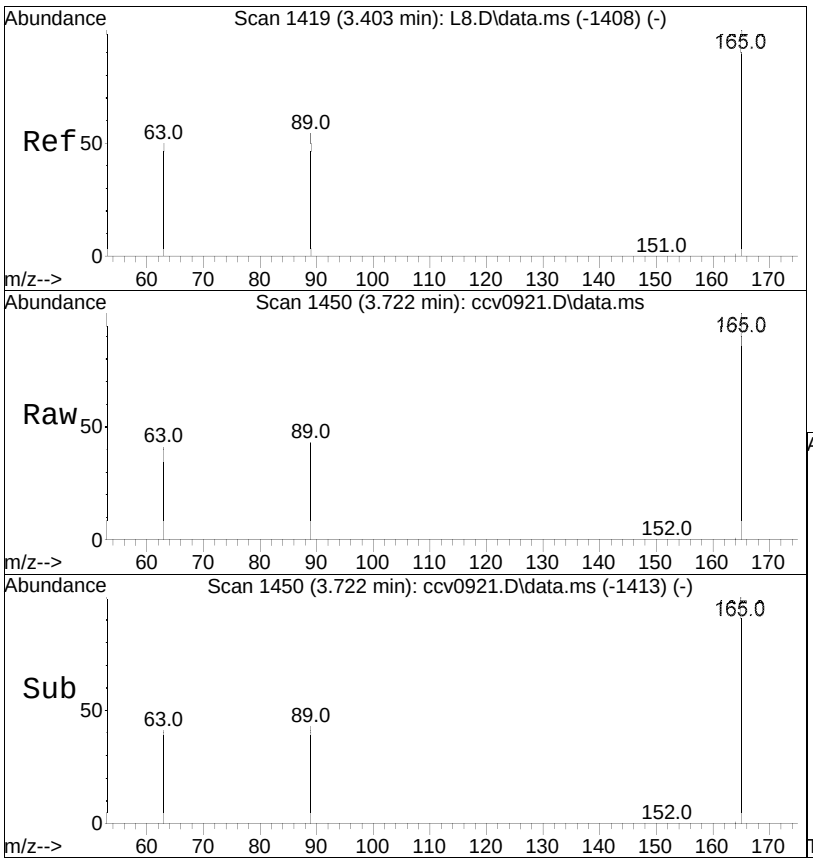



#14
2-Chloronaphthalene
Concen: 1051.63 ng/ml
RT:  3.530 min  Scan# 1372
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:162 Resp:  165480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 35.2 | 32.0 | 48.0 |

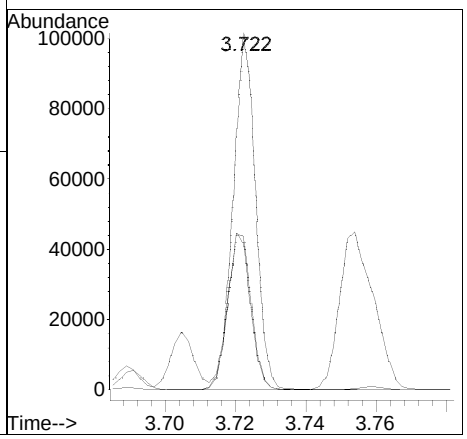


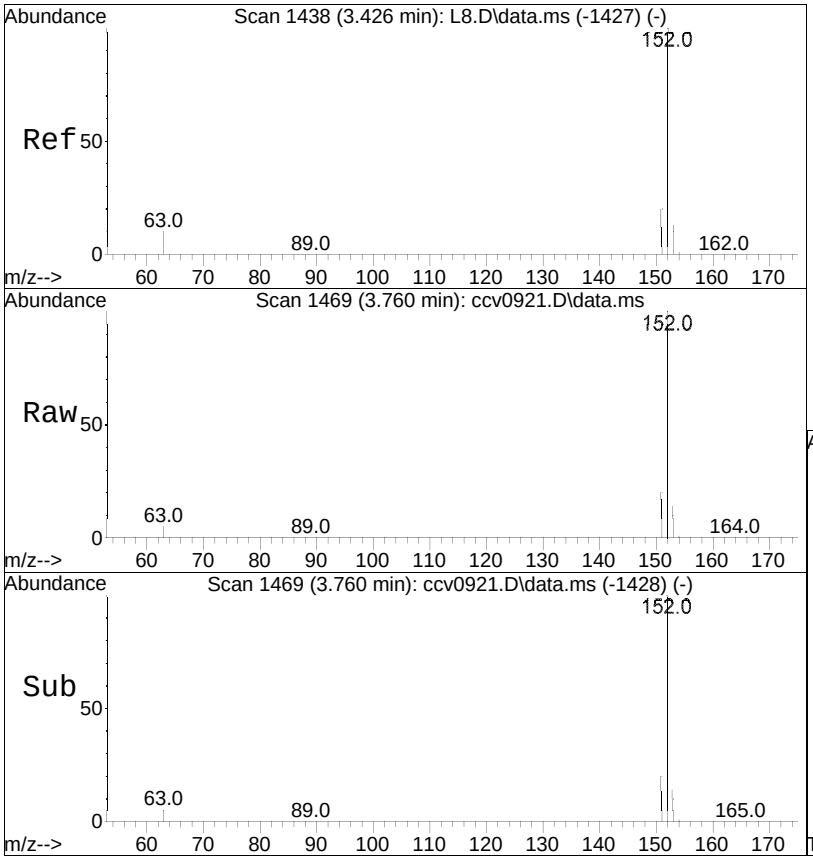



#15
2,6-Dinitrotoluene
Concen: 1046.14 ng/ml
RT:  3.722 min  Scan# 1450
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:165 Resp:  44327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 46.5 | 45.7 | 68.5 |
| 63 | 45.3 | 49.8 | 74.6# |

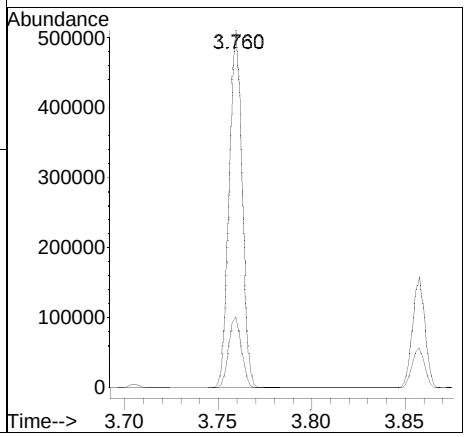


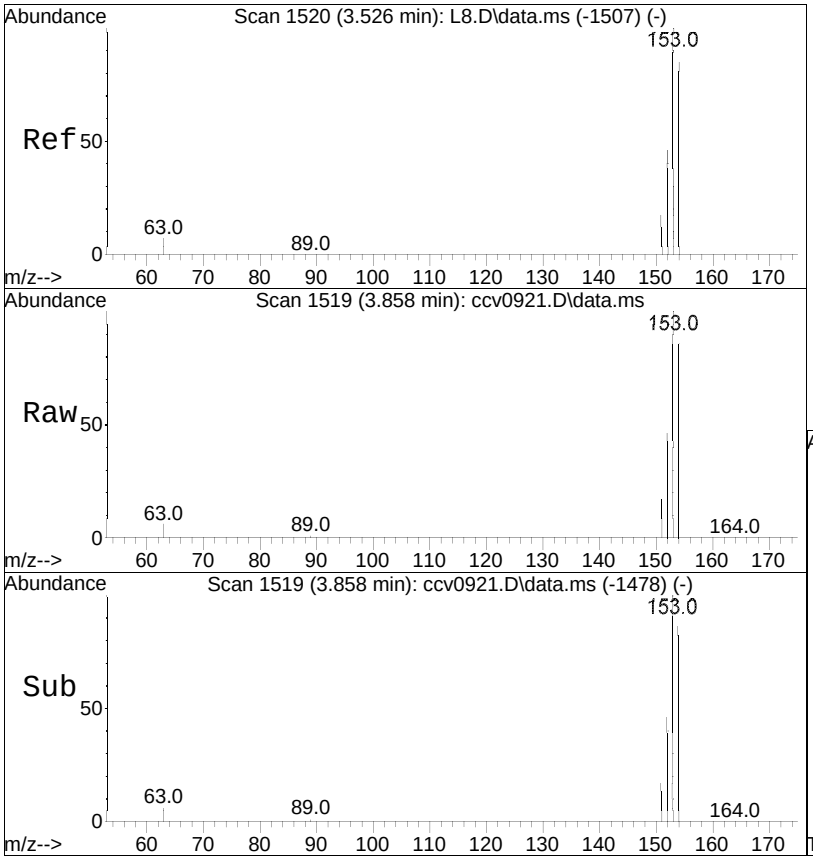



#16
Acenaphthylene
Concen: 975.77 ng/ml
RT: 3.760 min Scan# 1469
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:152 Resp: 245306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.8 | 16.0 | 24.0 |

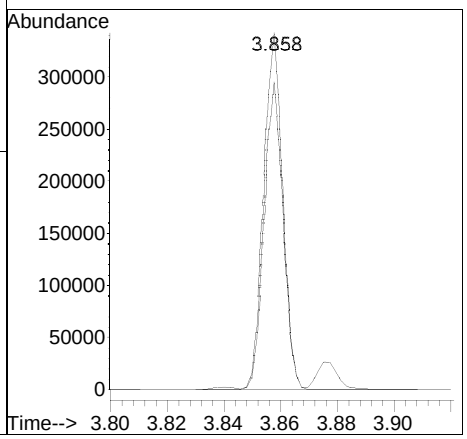


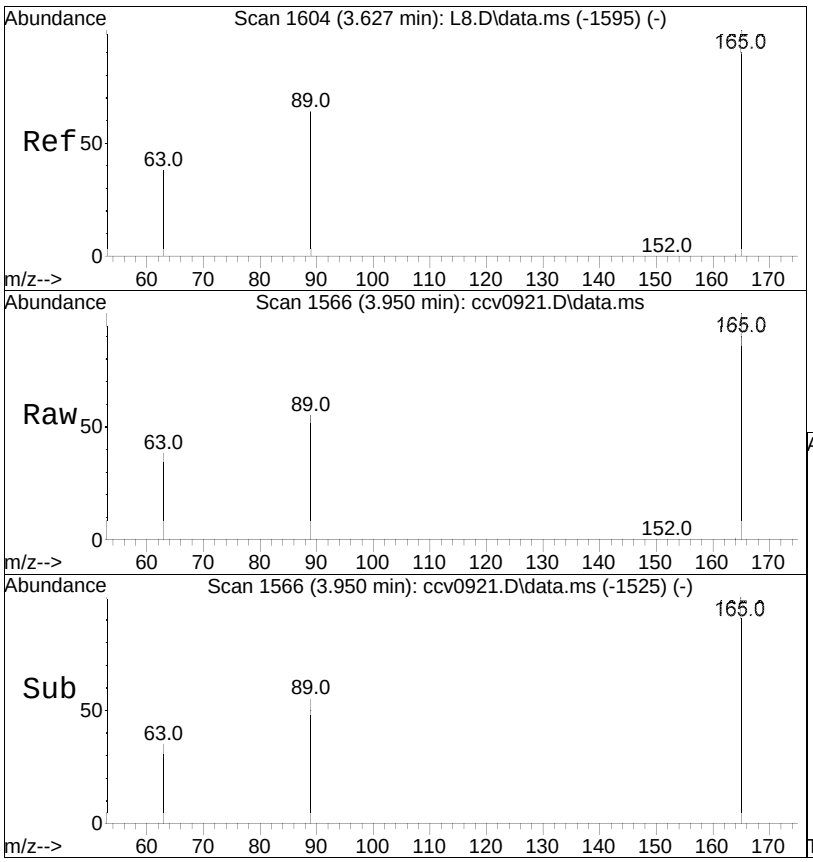



#18
Acenaphthene
Concen: 969.09 ng/ml
RT: 3.858 min Scan# 1519
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:153 Resp: 158606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 85.6 | 68.1 | 102.1 |

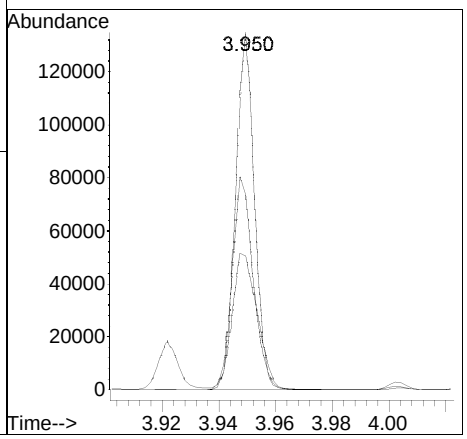


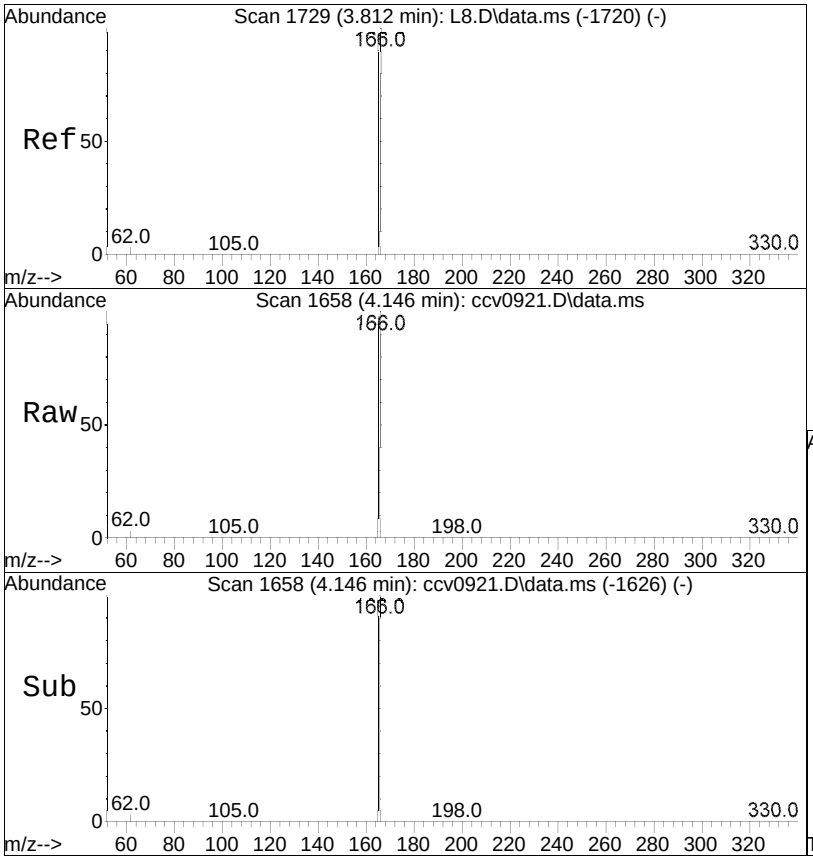



#19
2,4-Dinitrotoluene
Concen: 977.21 ng/ml
RT: 3.950 min Scan# 1566
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:165 Resp: 61248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 165 | 100 | | |
| 89 | 66.9 | 65.8 | 98.6 |
| 63 | 51.1 | 55.0 | 82.4# |

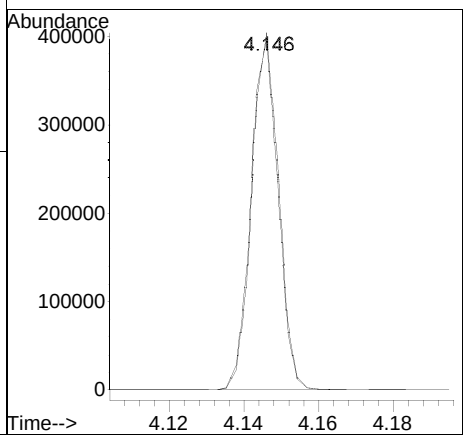


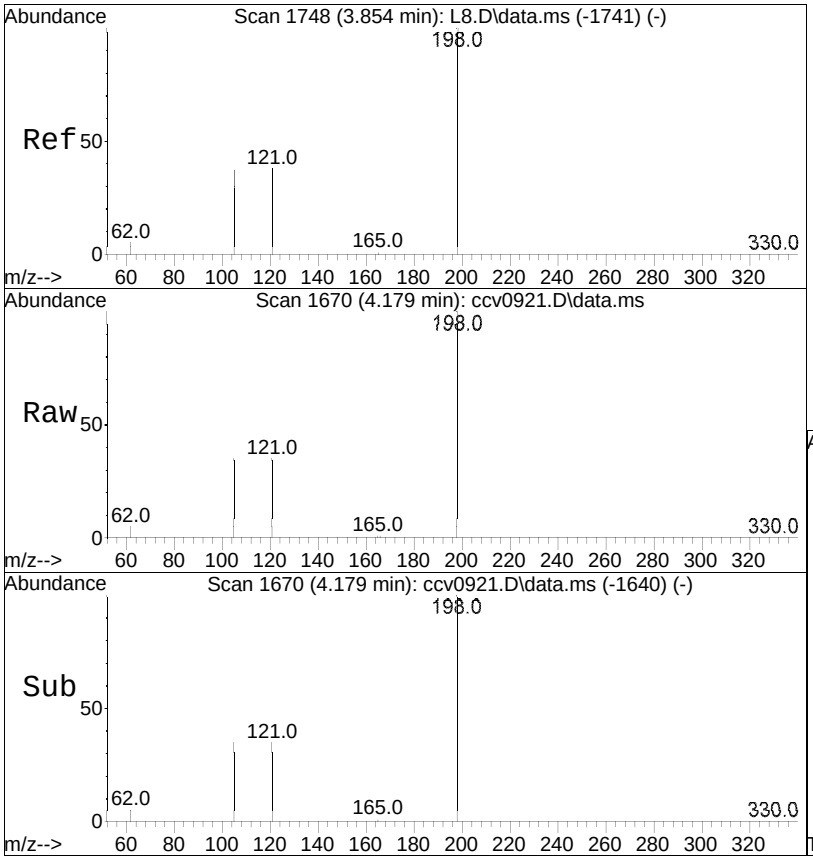



#20
Fluorene
Concen: 930.87 ng/ml
RT: 4.146 min Scan# 1658
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:166 Resp: 200802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 99.4 | 79.3 | 118.9 |

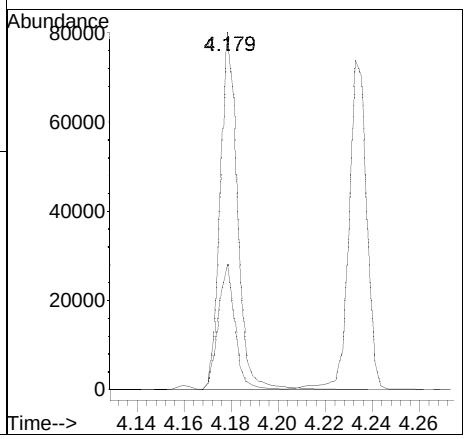


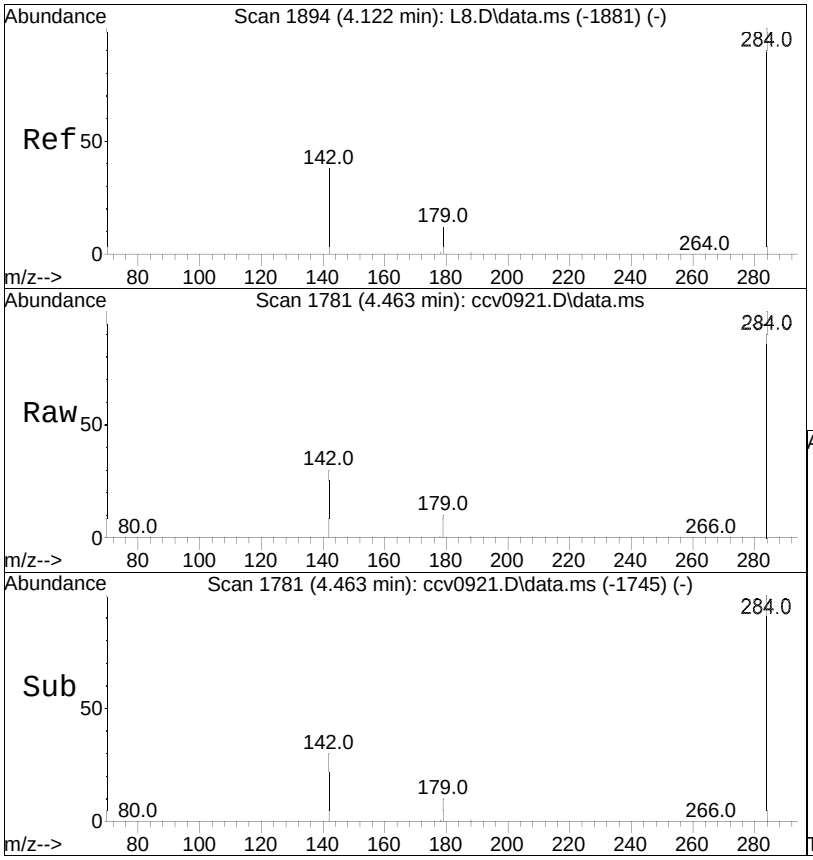



#23
4,6-Dinitro-o-cresol
Concen: 983.95 ng/ml
RT: 4.179 min Scan# 1670
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:198 Resp: 41224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 198 | 100 | | |
| 105 | 33.4 | 35.6 | 53.4# |

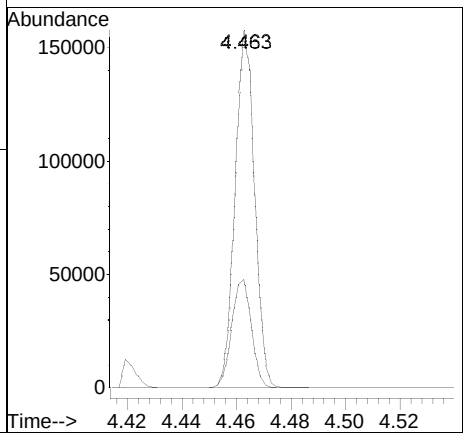


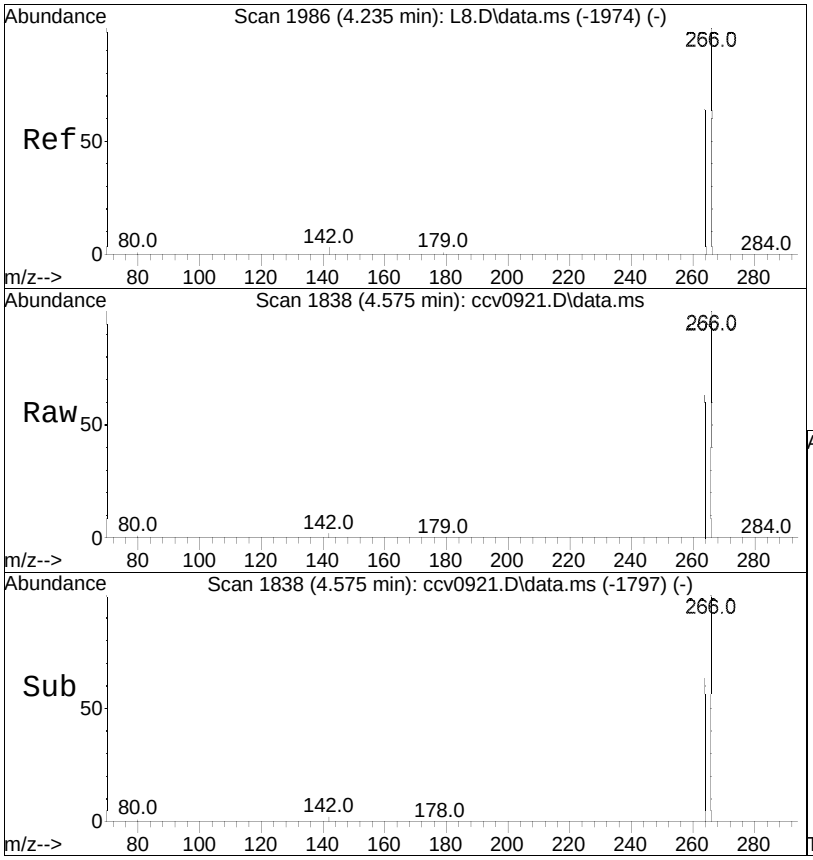



#24
Hexachlorobenzene
Concen: 1103.62 ng/ml
RT: 4.463 min Scan# 1781
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:284 Resp: 77210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 31.0 | 30.0 | 45.0 |

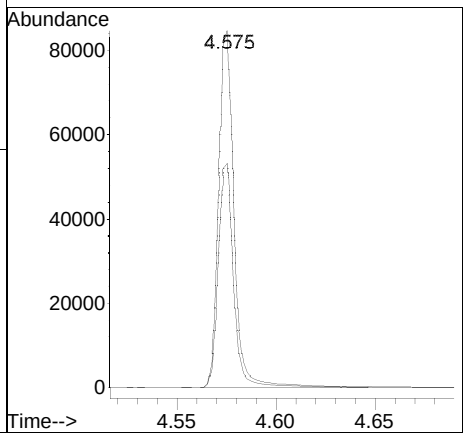


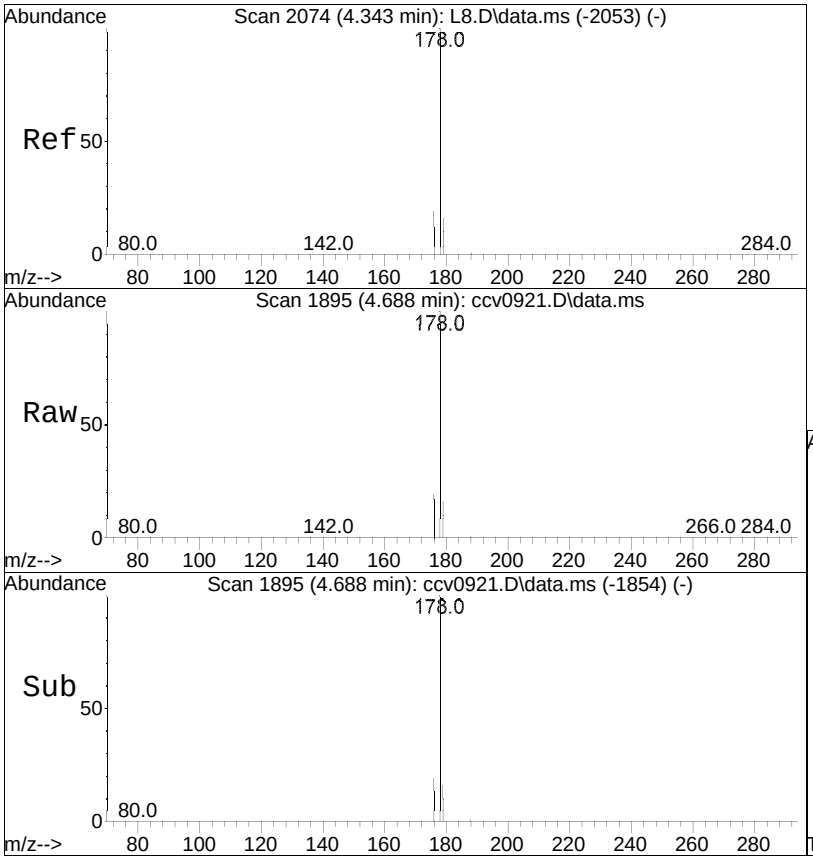



#25
Pentachlorophenol
Concen: 1040.96 ng/ml
RT: 4.575 min Scan# 1838
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:266 Resp: 45510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.3 | 49.9 | 74.9 |

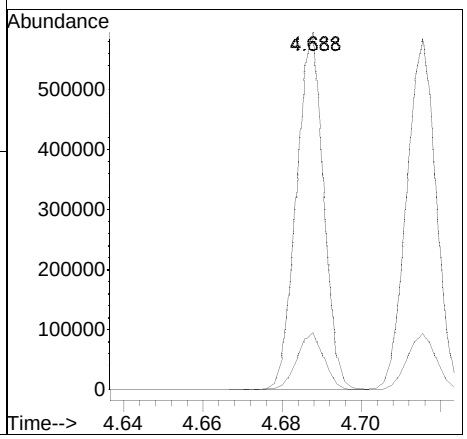


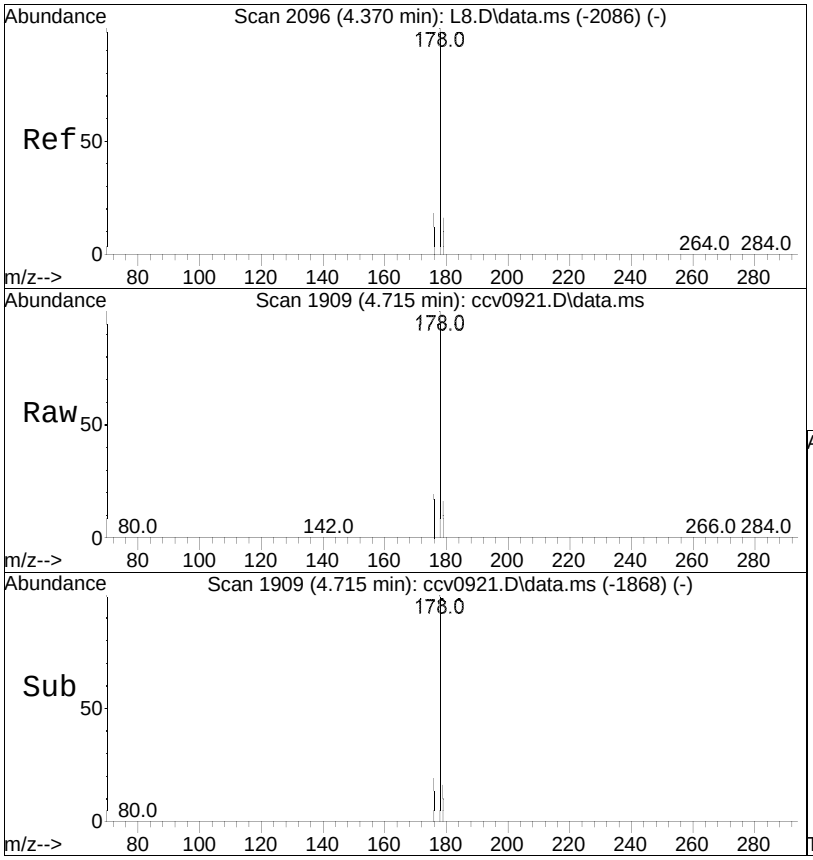



#26
Phenanthrene
Concen: 961.03 ng/ml
RT: 4.688 min Scan# 1895
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:178 Resp: 284666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.9 | 12.6 | 18.8 |

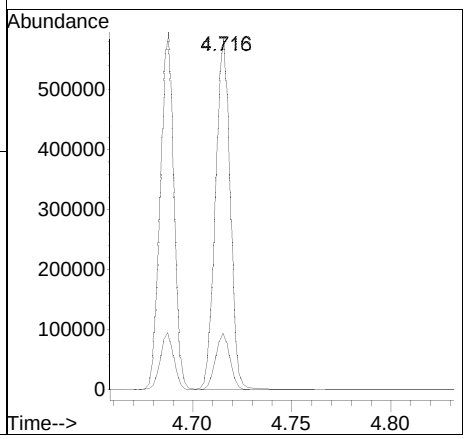


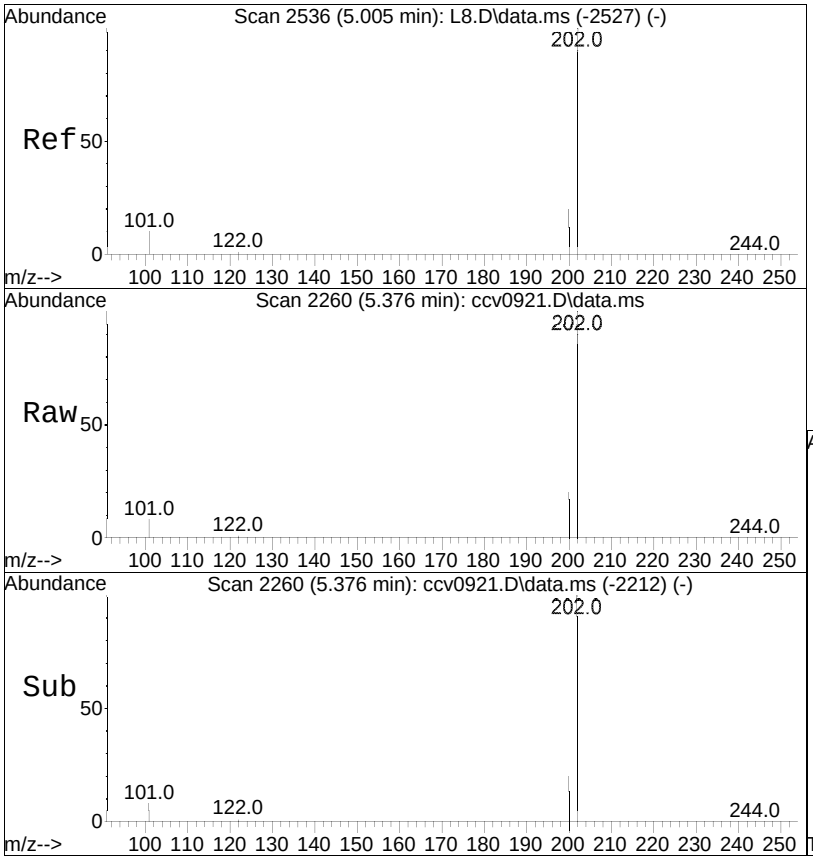



#27
Anthracene
Concen: 993.58 ng/ml
RT: 4.715 min Scan# 1909
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:178 Resp: 304078

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.7 | 12.4 | 18.6 |

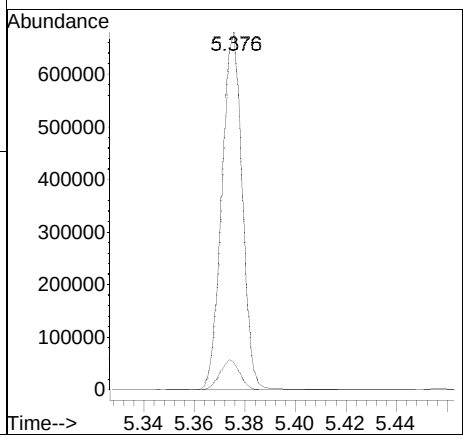


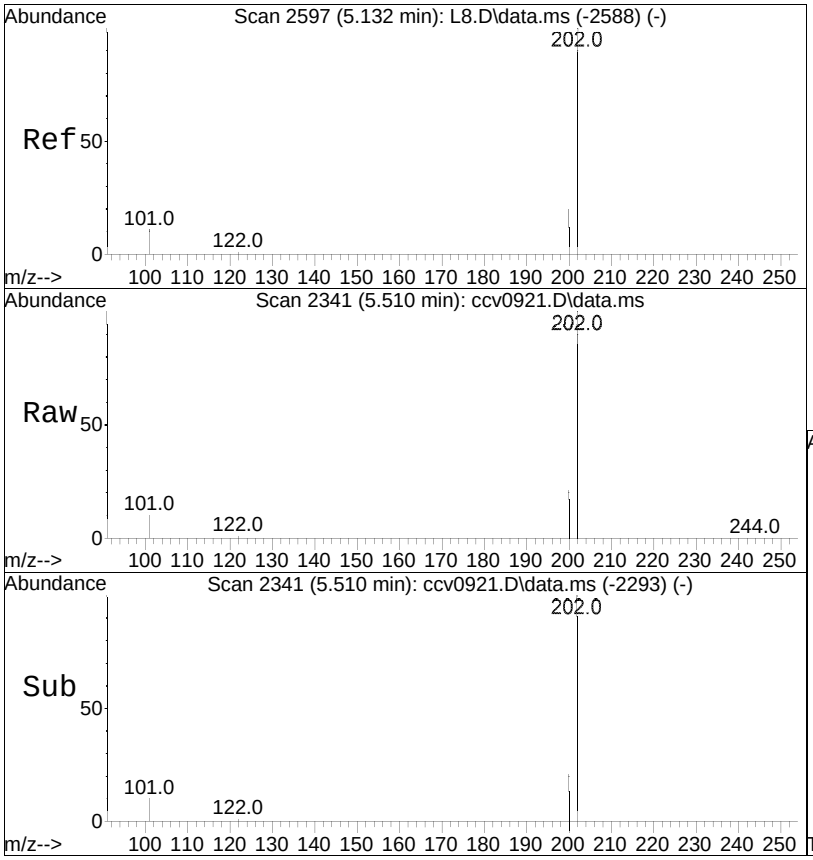



#28
Fluoranthene
Concen: 920.64 ng/ml
RT: 5.376 min Scan# 2260
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:202 Resp: 374450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 8.2 | 8.1 | 12.1 |

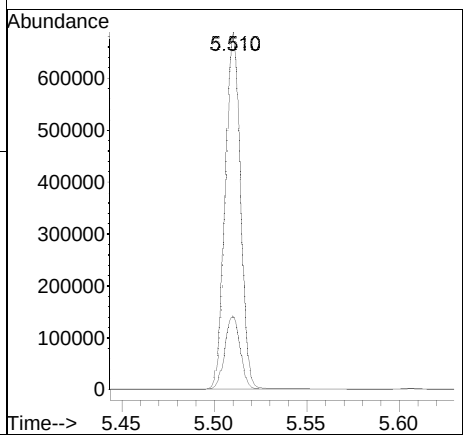


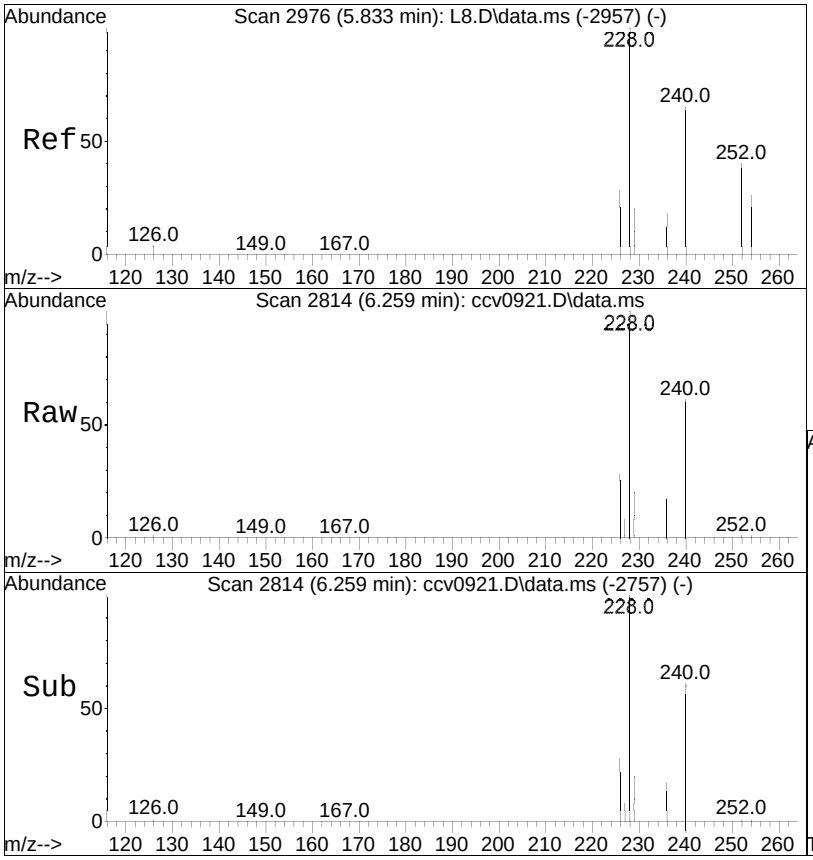



#29
Pyrene
Concen: 923.84 ng/ml
RT: 5.510 min Scan# 2341
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:202 Resp: 389374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.0 | 16.5 | 24.7 |

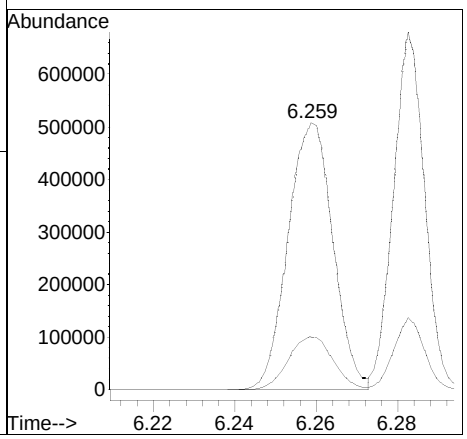


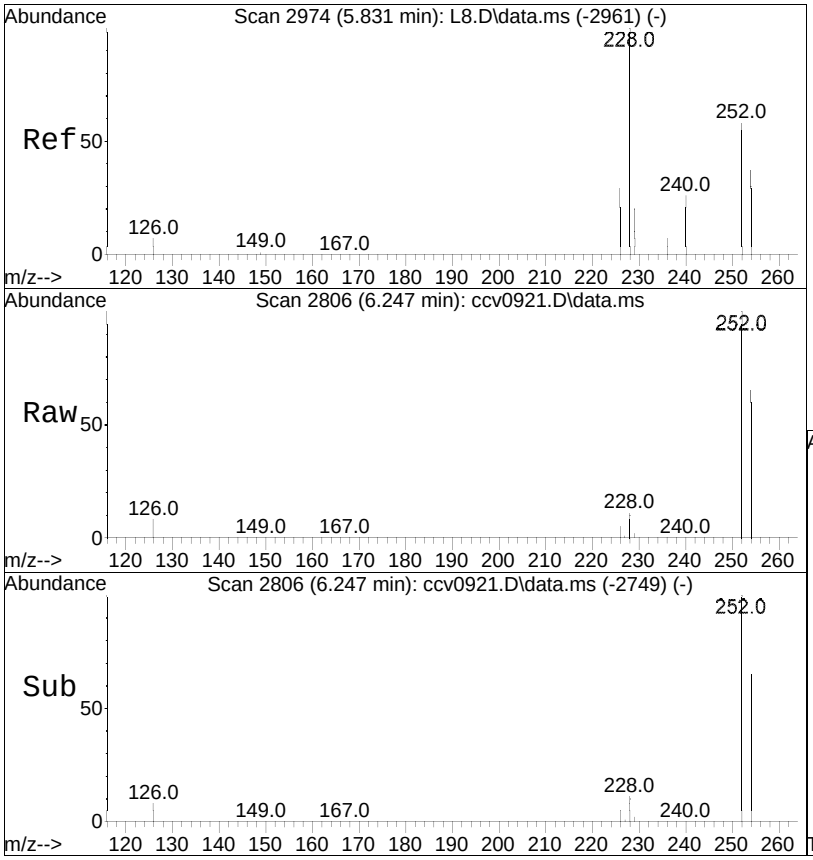



#32
Benzo[a]anthracene
Concen: 927.95 ng/ml
RT: 6.259 min Scan# 2814
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:228 Resp: 388800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.8 | 15.8 | 23.8 |

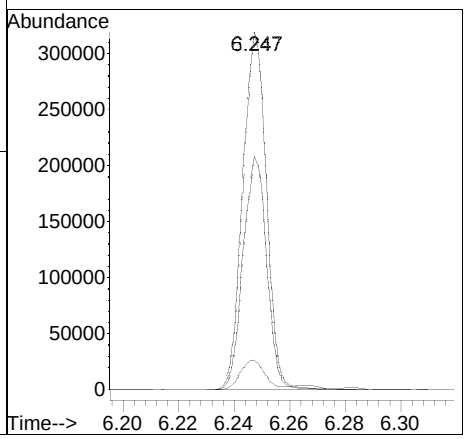


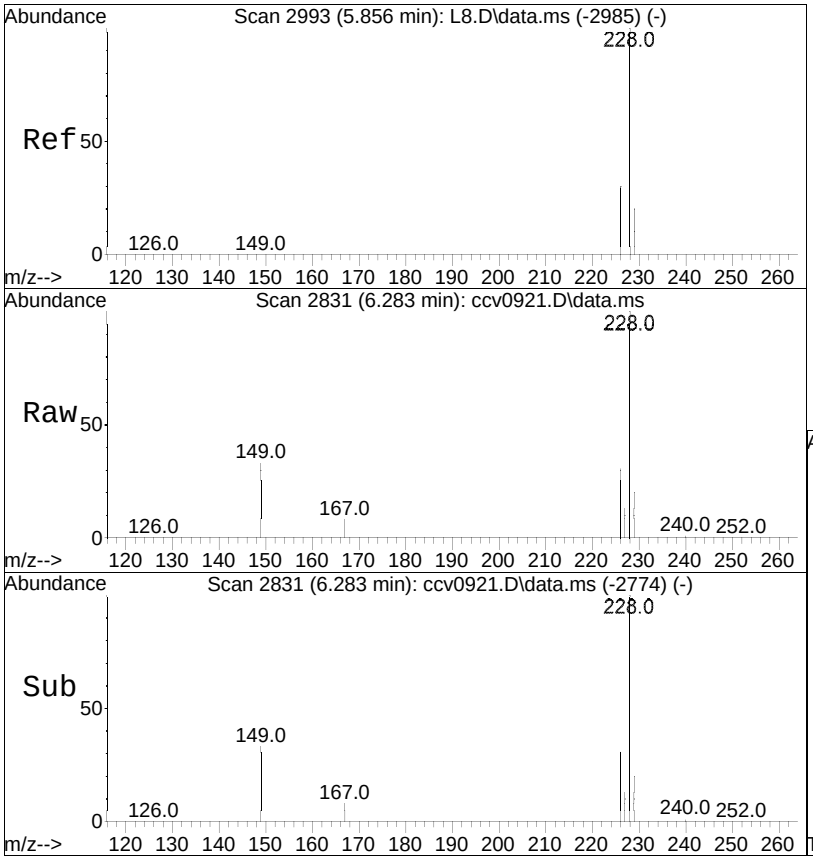



#33
3,3'-Dichlorobenzene
Concen: 1100.71 ng/ml
RT:  6.247 min  Scan# 2806
Delta R.T.  0.000 min
Lab File:  ccv0921.D
Acq: 21 Sep 2024  02:42 pm

Tgt Ion:252 Resp:  186049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 126 | 8.7 | 10.5 | 15.7# |
| 254 | 65.3 | 51.4 | 77.0 |

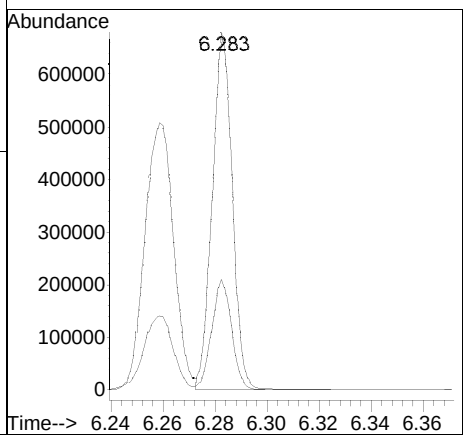


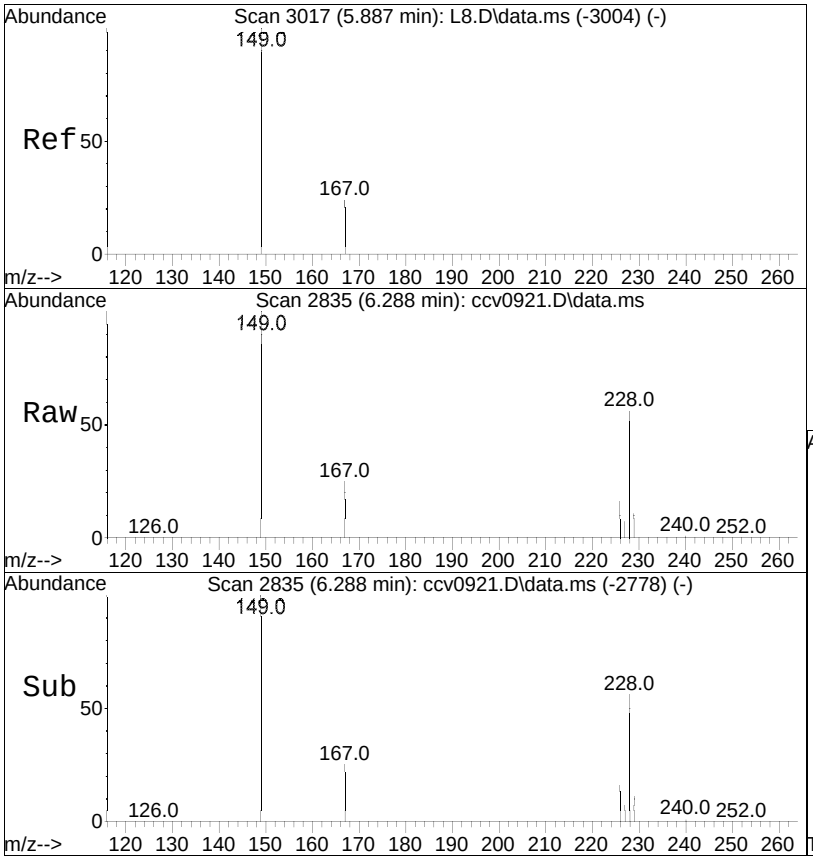



#34
Chrysene
Concen: 878.25 ng/ml
RT: 6.283 min Scan# 2831
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:228 Resp: 361735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 23.9 | 35.9 |

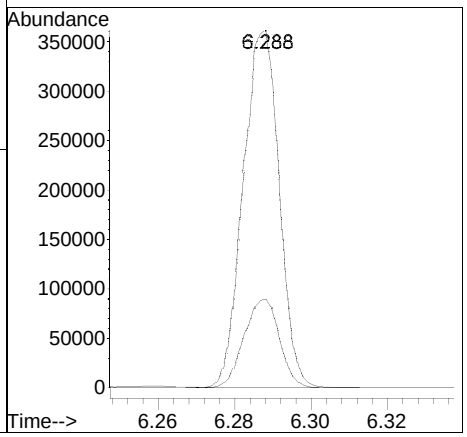


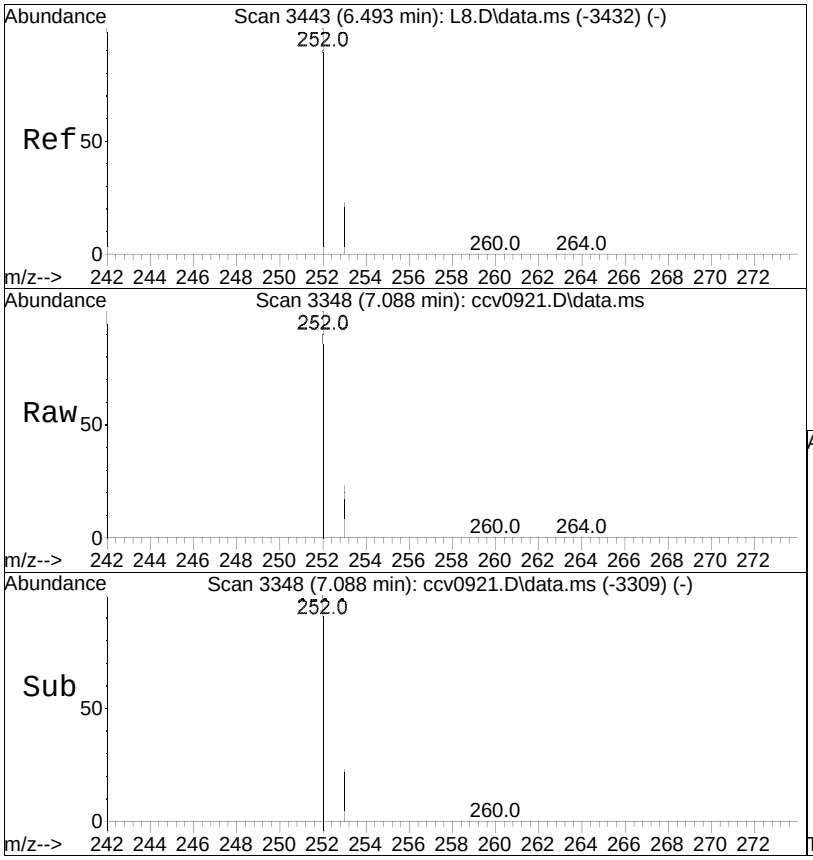



#35
Bis(2-ethylhexyl)phthalate
Concen: 782.61 ng/ml
RT: 6.288 min Scan# 2835
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:149 Resp: 233210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 149 | 100 | | |
| 167 | 24.5 | 19.0 | 28.4 |

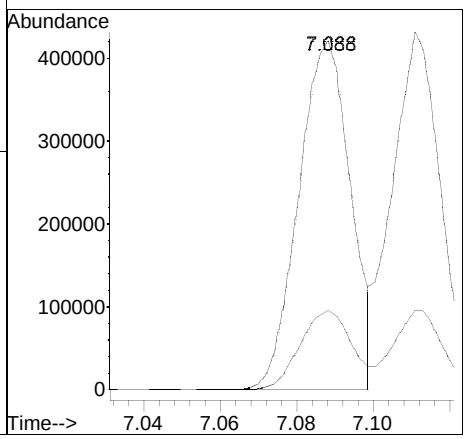


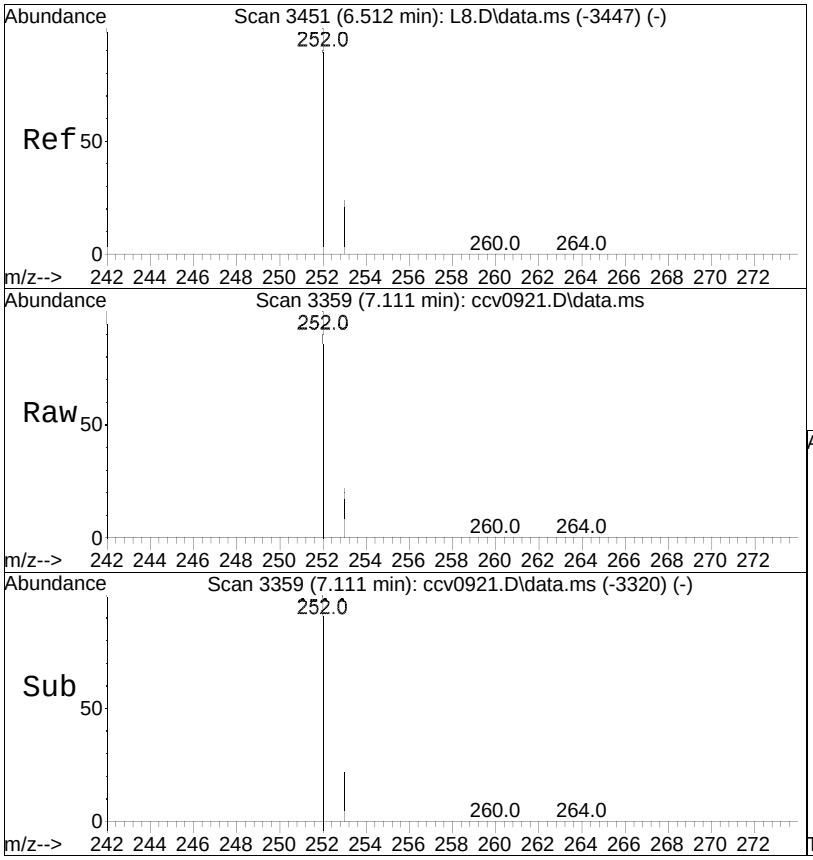



#37
Benzo[b]fluoranthene
Concen: 852.62 ng/ml
RT: 7.088 min Scan# 3348
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:252 Resp: 396433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.3 | 18.0 | 27.0 |

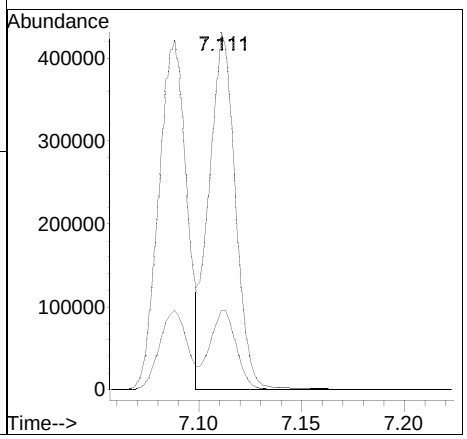


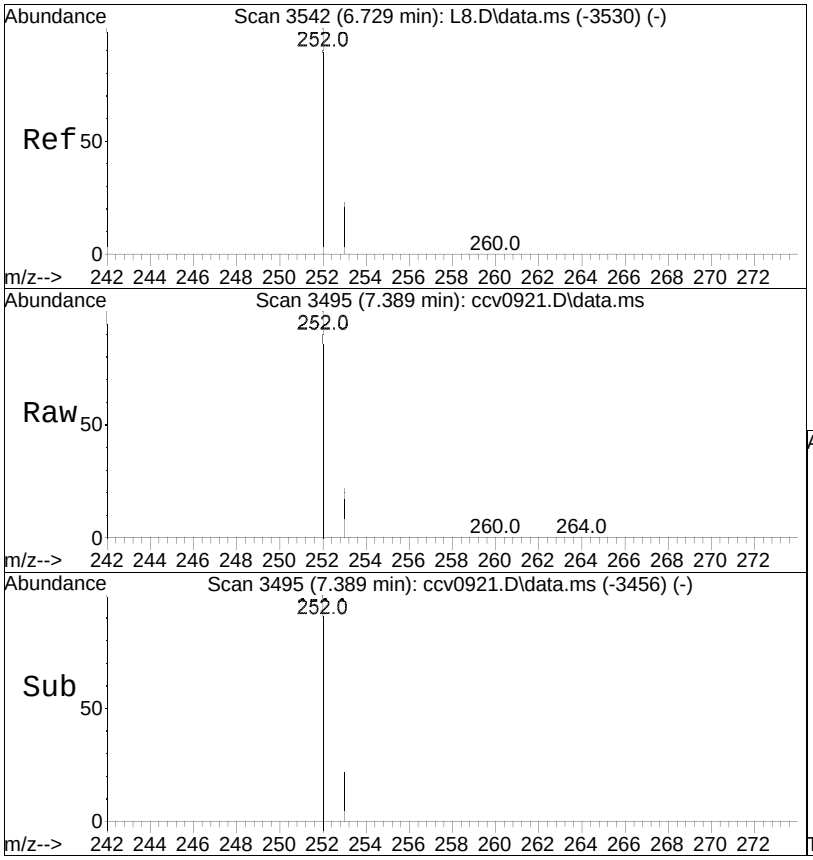



#38
Benzo[k]fluoranthene
Concen: 891.22 ng/ml
RT: 7.111 min Scan# 3359
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:252 Resp: 382821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.7 | 18.3 | 27.5 |

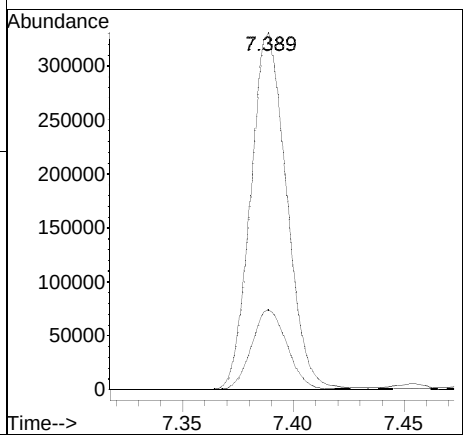


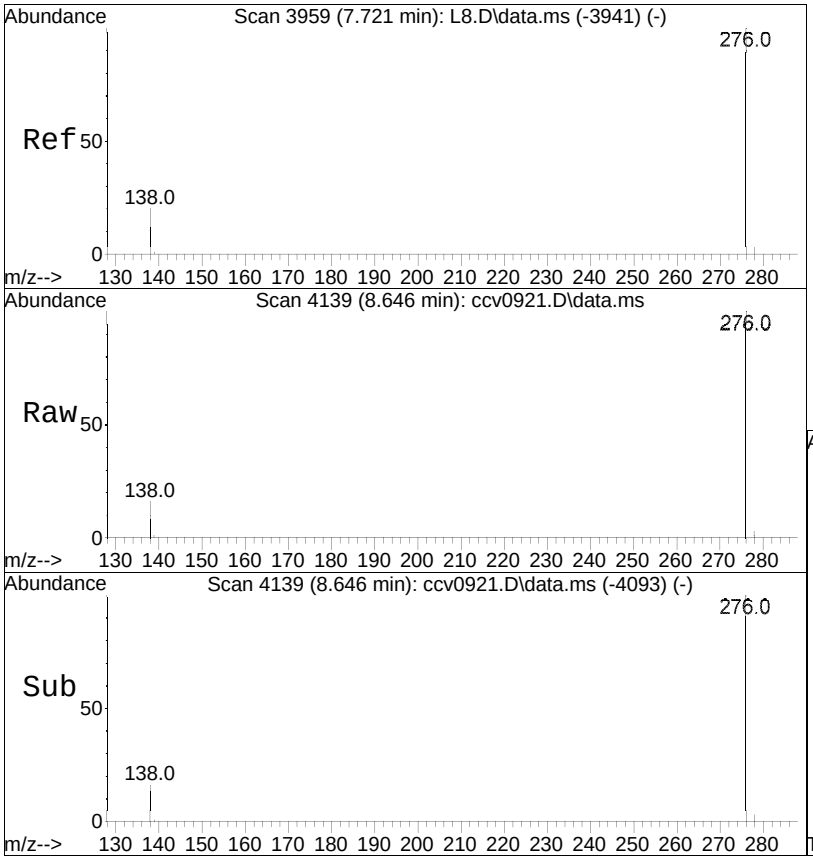



#39
Benzo[a]pyrene
Concen: 895.56 ng/ml
RT: 7.389 min Scan# 3495
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:252 Resp: 368793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.4 | 17.9 | 26.9 |

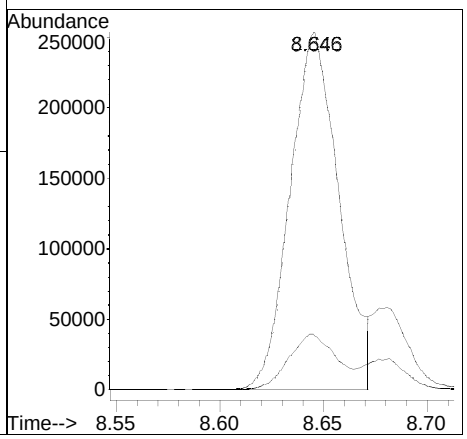


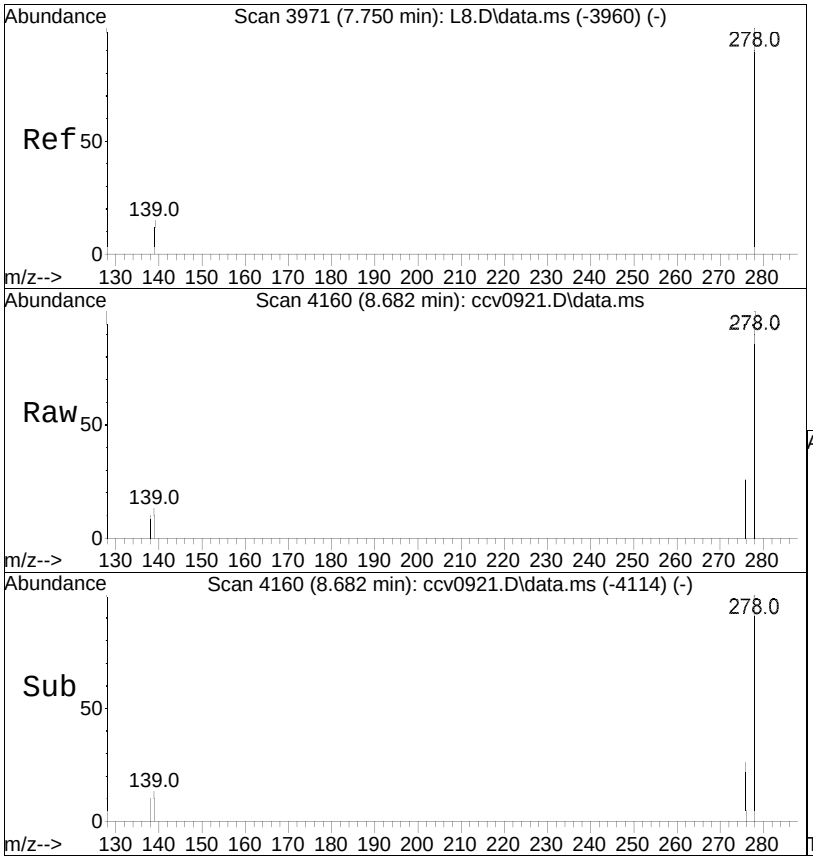



#40
Indeno[1,2,3-cd]pyrene
Concen: 989.53 ng/ml
RT: 8.646 min Scan# 4139
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:276 Resp: 411925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 15.2 | 15.1 | 22.7 |

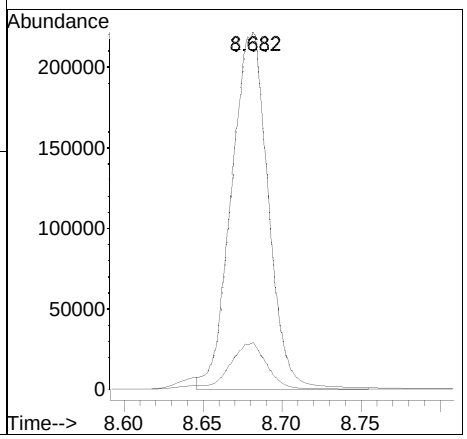


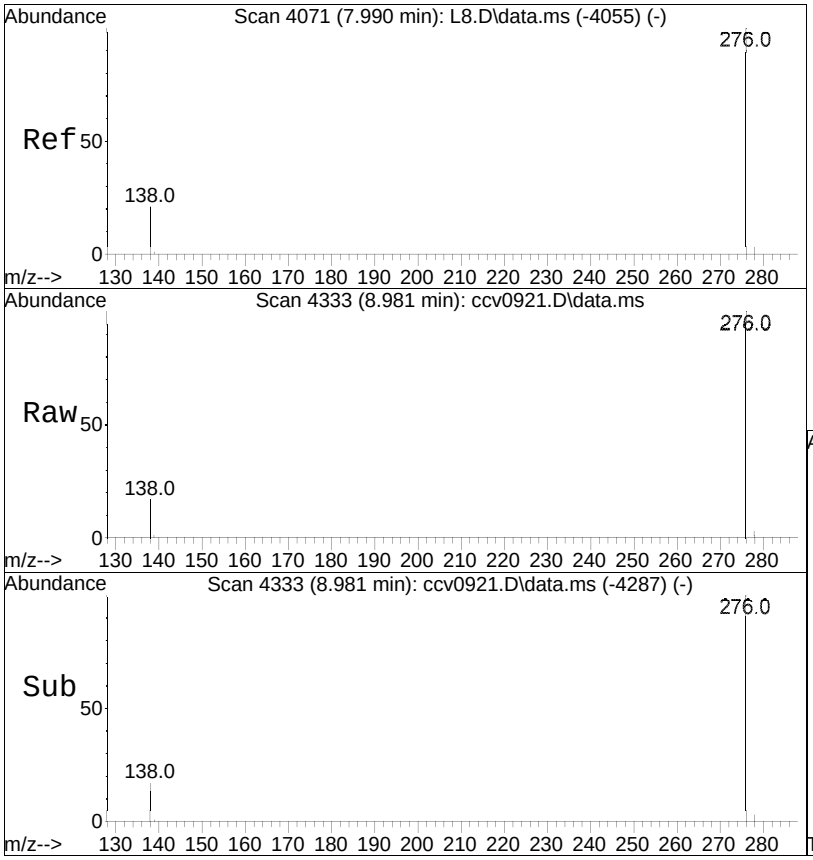



#41
Dibenzo[a,h]anthracene
Concen: 964.47 ng/ml M6
RT: 8.682 min Scan# 4160
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:278 Resp: 357647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 12.6 | 13.3 | 19.9# |

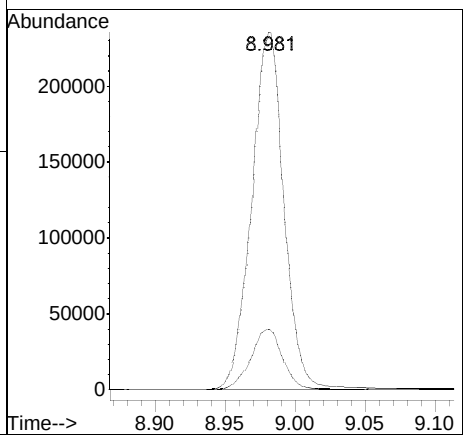





#42
Benzo[g,h,i]perylene
Concen: 908.00 ng/ml
RT: 8.981 min Scan# 4333
Delta R.T. 0.000 min
Lab File: ccv0921.D
Acq: 21 Sep 2024 02:42 pm

Tgt Ion:276 Resp: 371791

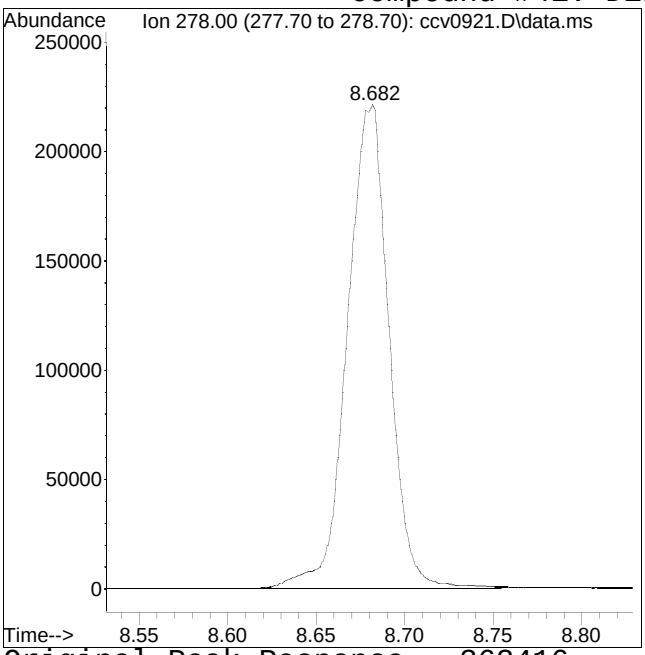
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 17.0 | 16.9 | 25.3 |



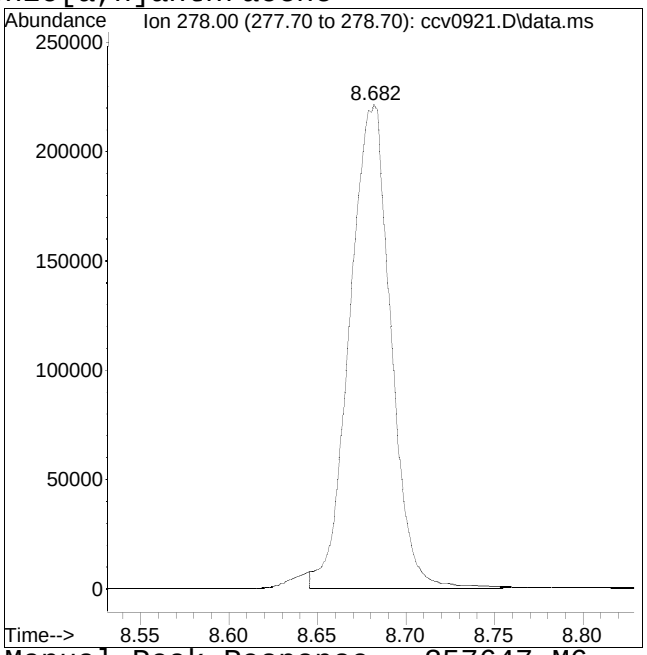
Manual Integration Report

Data Path : I:\8270SIM\sv119\240921RVTQMethod : SIM-RVT_240621_sv119.M
Data File : ccv0921.D Operator : sv119:rp
Date Inj'd : 9/21/2024 2:42 pm Instrument : SV119
Sample : WG1974651-3,32,,ICV 10884 Quant Date : 9/21/2024 3:02 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 363416



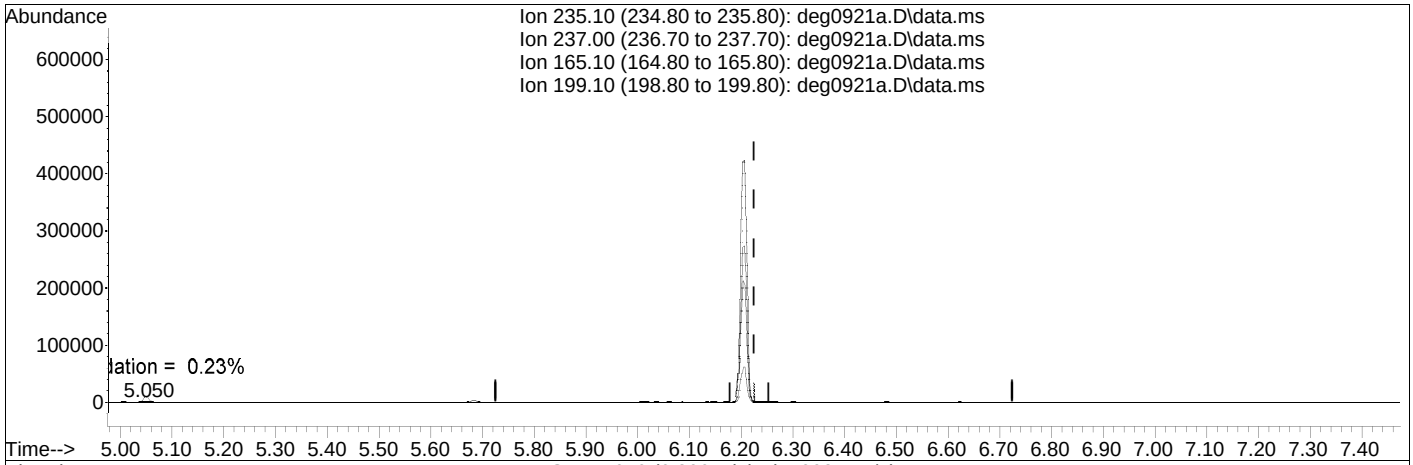

Manual Peak Response = 357647 M6

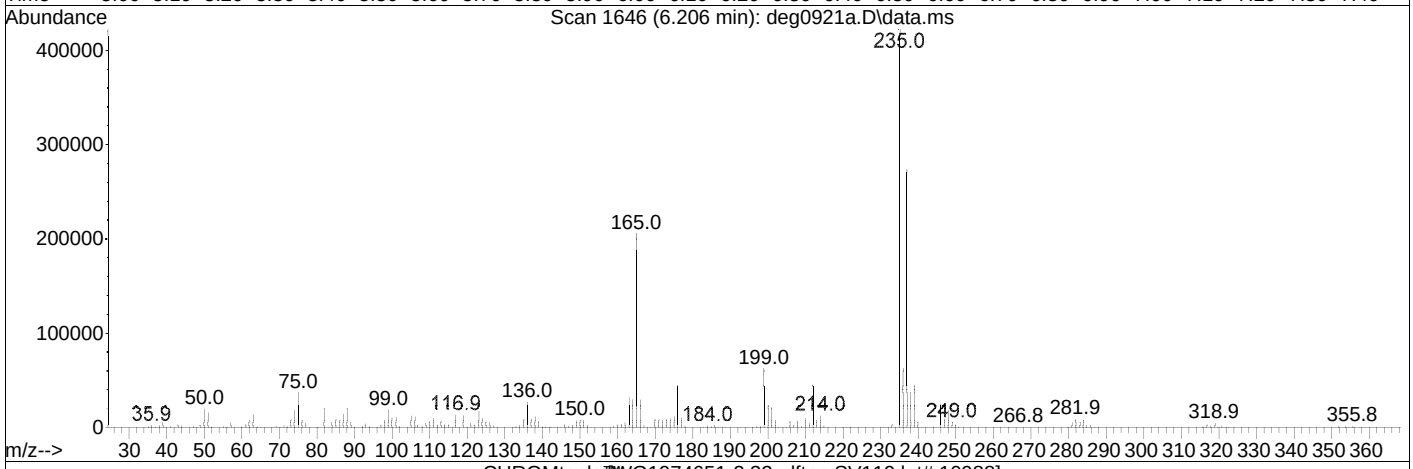
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : deg0921a.D
Acq On : 21 Sep 2024 02:24 pm
Operator : sv119:rp
Sample : WG1974651-2,32,,dftpp SV119 lot# 10988
Misc : WG1974651,,ical21236
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 14:37:24 2024
Quant Method : I:\8270SIM\sv119\240921RVT\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 14 14:45:01 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools [WG1974651-2,32,,dftpp SV119 lot# 10988]

(6) ddt (T)

6.206min (-0.019) 54.95

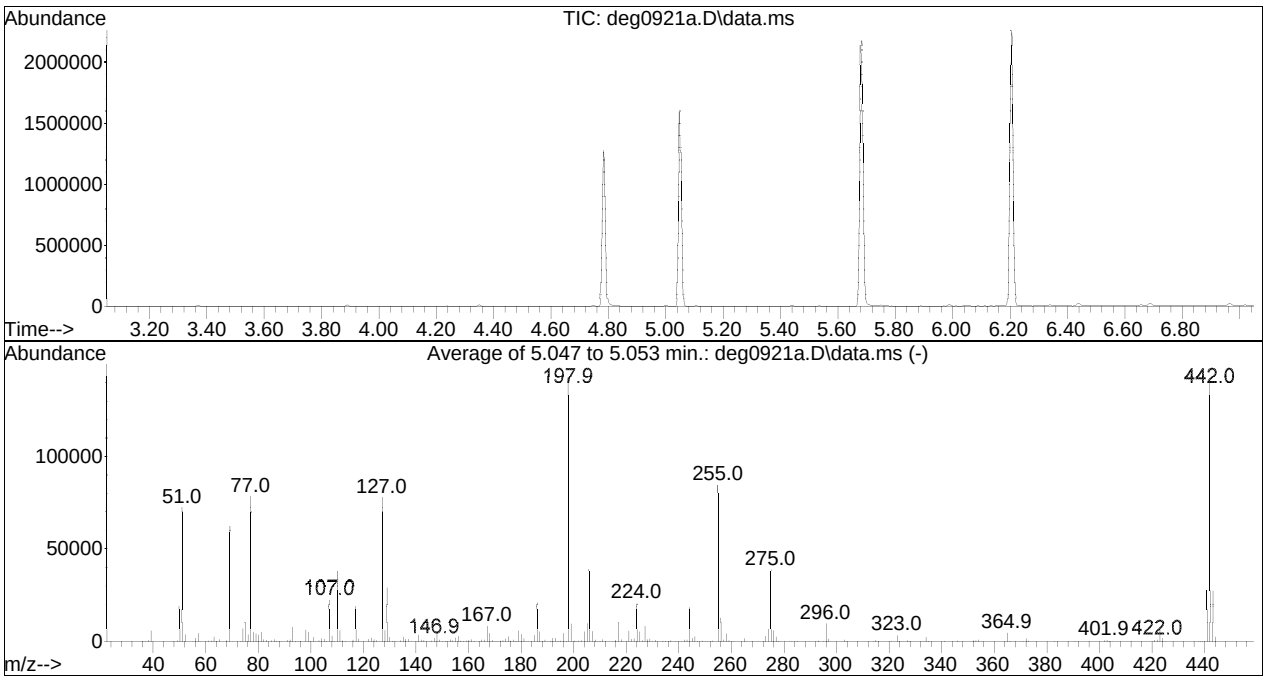
response 334945

| Ion | Exp% | Act% |
|---|---|---|
| 235.10 | 100.00 | 100.00 |
| 237.00 | 65.60 | 65.02 |
| 165.10 | 53.30 | 49.35 |
| 199.10 | 17.10 | 14.69 |

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : deg0921a.D
Acq On : 21 Sep 2024 02:24 pm
Operator : sv119:rp
Sample : WG1974651-1,32,,dftpp SV119 lot# 10988
Misc : WG1974651,,ical21236
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\240921RVT\SIM-RVT_240621_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Sat Sep 21 15:02:17 2024



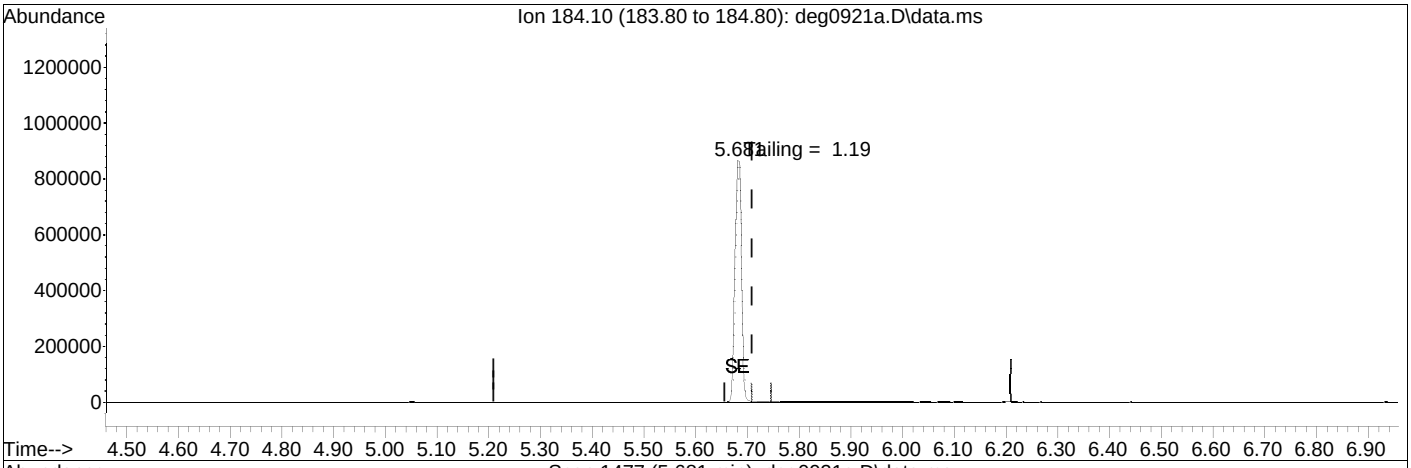

Spectrum Information: Average of 5.047 to 5.053 min.

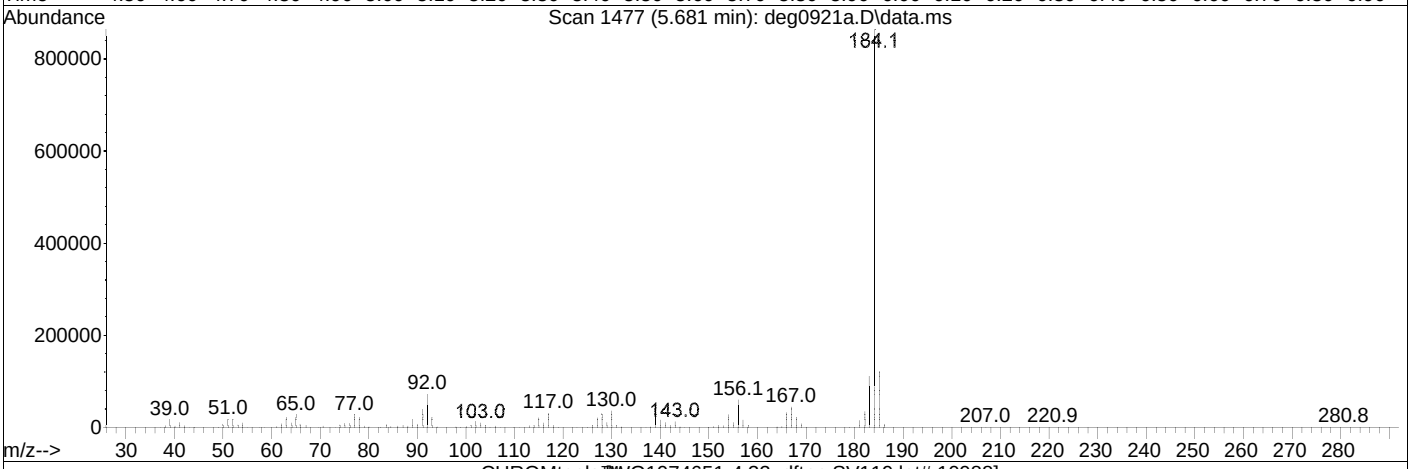
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 10 | 80 | 50.6 | 72220 | PASS |
| 68 | 69 | 0.00 | 2 | 1.4 | 881 | PASS |
| 69 | 69 | 100 | 100 | 100.0 | 62173 | PASS |
| 70 | 69 | 0.00 | 2 | 0.4 | 249 | PASS |
| 127 | 198 | 10 | 80 | 54.5 | 77800 | PASS |
| 197 | 198 | 0.00 | 2 | 0.4 | 501 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 142728 | PASS |
| 199 | 198 | 5 | 9 | 6.5 | 9240 | PASS |
| 275 | 198 | 10 | 60 | 27.0 | 38485 | PASS |
| 365 | 198 | 1 | 100 | 3.3 | 4708 | PASS |
| 441 | 442 | 0.01 | 24 | 19.3 | 27493 | PASS |
| 442 | 198 | 50 | 100 | 99.6 | 142152 | PASS |
| 443 | 442 | 15 | 24 | 19.3 | 27461 | PASS |

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : deg0921a.D
Acq On : 21 Sep 2024 02:24 pm
Operator : sv119:rp
Sample : WG1974651-4,32,,dftpp SV119 lot# 10988
Misc : WG1974651,,ical21236
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 14:37:24 2024
Quant Method : I:\8270SIM\sv119\240921RVT\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 14 14:45:01 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools [WG1974651-4,32,,dftpp SV119 lot# 10988]

(3) benzidine (T)

5.681min (-0.028) 69.67

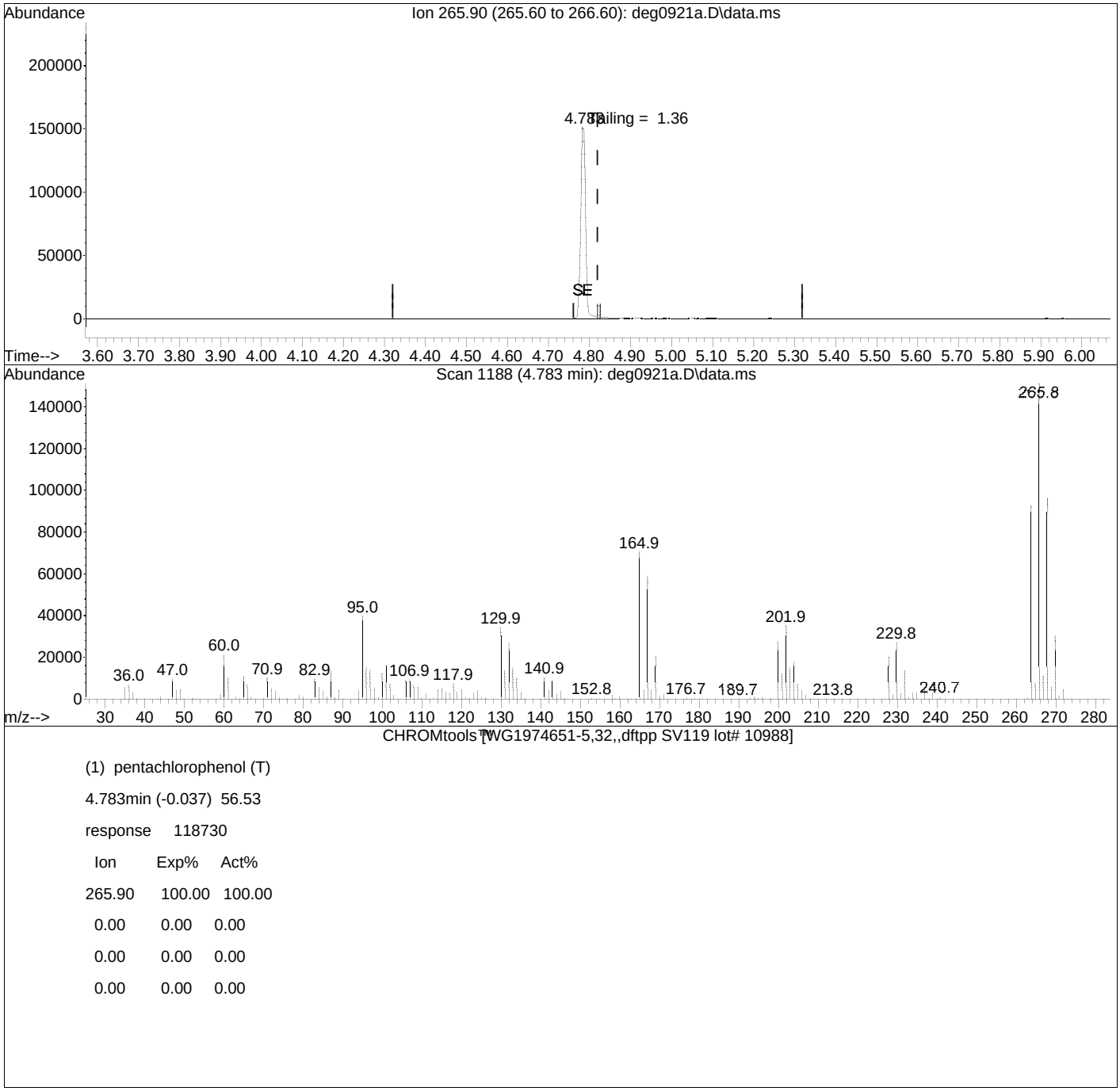
response 709201

| Ion | Exp% | Act% |
|---|---|---|
| 184.10 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : deg0921a.D
Acq On : 21 Sep 2024 02:24 pm
Operator : sv119:rp
Sample : WG1974651-5,32,,dftpp SV119 lot# 10988
Misc : WG1974651,,ical21236
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 21 14:37:24 2024
Quant Method : I:\8270SIM\sv119\240921RVT\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 14 14:45:01 2024
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D




CHROMtools [WG1974651-5,32,,dftpp SV119 lot# 10988]

(1) pentachlorophenol (T)

4.783min (-0.037) 56.53

response 118730

| Ion | Exp% | Act% |
|---|---|---|
| 265.90 | 100.00 | 100.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 74466-1.D
Acq On : 21 Sep 2024 07:00 pm
Operator : sv119:rp
Sample : WG1974466-1,32,,RV,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 19:29:37 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.230 | 152 | 213233 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 178527 | | | Recovery = 119.44% | | | |
| 8) Naphthalene-d8 | 2.883 | 136 | 779703 | 4000.000 | ng/ml | # 0.00 |
| Standard Area 1 = 703917 | | | Recovery = 110.77% | | | |
| 17) Acenaphthene-d10 | 3.844 | 164 | 491564 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 468873 | | | Recovery = 104.84% | | | |
| 22) Phenanthrene-d10 | 4.677 | 188 | 1069097 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1018896 | | | Recovery = 104.93% | | | |
| 31) Chrysene-d12 | 6.249 | 240 | 1266589 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1106666 | | | Recovery = 114.45% | | | |
| 36) Perylene-d12 | 7.436 | 264 | 1217077 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1122604 | | | Recovery = 108.42% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.664 | 112 | 57835 | 768.890 | ng/ml | 0.02 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 38.44% | | | |
| 3) Phenol-d6 | 2.052 | 99 | 51088 | 538.507 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 26.93% | | | |
| 7) Nitrobenzene-d5 | 2.508 | 82 | 49435 | 594.049 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 59.40% | | | |
| 13) 2-Fluorobiphenyl | 3.469 | 172 | 149098 | 739.672 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 73.97% | | | |
| 21) 2,4,6-Tribromophenol | 4.287 | 330 | 54566 | 1589.830 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 79.49% | | | |
| 30) 4-Terphenyl-d14 | 5.600 | 244 | 216902 | 733.903 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 36.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 0.000 | | 0 | N.D. | d | |
| 6) Hexachloroethane | 0.000 | | 0 | N.D. | | |
| 9) Naphthalene | 2.893 | 128 | 2235M6 | 10.383 | ng/ml | |
| 10) Hexachlorobutadiene | 0.000 | | 0 | N.D. | d | |
| 11) 2-Methylnaphthalene | 3.269 | 142 | 891 | 5.508 | ng/ml | 98 |
| 14) 2-Chloronaphthalene | 3.535 | 162 | 670 | 3.844 | ng/ml | 94 |
| 16) Acenaphthylene | 0.000 | | 0 | N.D. | d | |
| 18) Acenaphthene | 0.000 | | 0 | N.D. | d | |
| 20) Fluorene | 4.149 | 166 | 832 | 3.679 | ng/ml | 94 |
| 24) Hexachlorobenzene | 4.465 | 284 | 430 | 5.858 | ng/ml | 90 |

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 74466-1.D
Acq On : 21 Sep 2024 07:00 pm
Operator : sv119:rp
Sample : WG1974466-1,32,,RV,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 19:29:37 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 0.000 | | 0 | N.D. | d | |
| 26) Phenanthrene | 4.688 | 178 | 1456M1 | 4.685 | ng/ml | |
| 27) Anthracene | 4.718 | 178 | 1176 | 3.662 | ng/ml | 98 |
| 28) Fluoranthene | 0.000 | | 0 | N.D. | d | |
| 29) Pyrene | 0.000 | | 0 | N.D. | d | |
| 32) Benzo[a]anthracene | 0.000 | | 0 | N.D. | d | |
| 34) Chrysene | 0.000 | | 0 | N.D. | d | |
| 37) Benzo[b]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 38) Benzo[k]fluoranthene | 0.000 | | 0 | N.D. | d | |
| 39) Benzo[a]pyrene | 0.000 | | 0 | N.D. | d | |
| 40) Indeno[1,2,3-cd]pyrene | 0.000 | | 0 | N.D. | d | |
| 41) Dibenzo[a,h]anthracene | 0.000 | | 0 | N.D. | d | |
| 42) Benzo[g,h,i]perylene | 0.000 | | 0 | N.D. | d | |

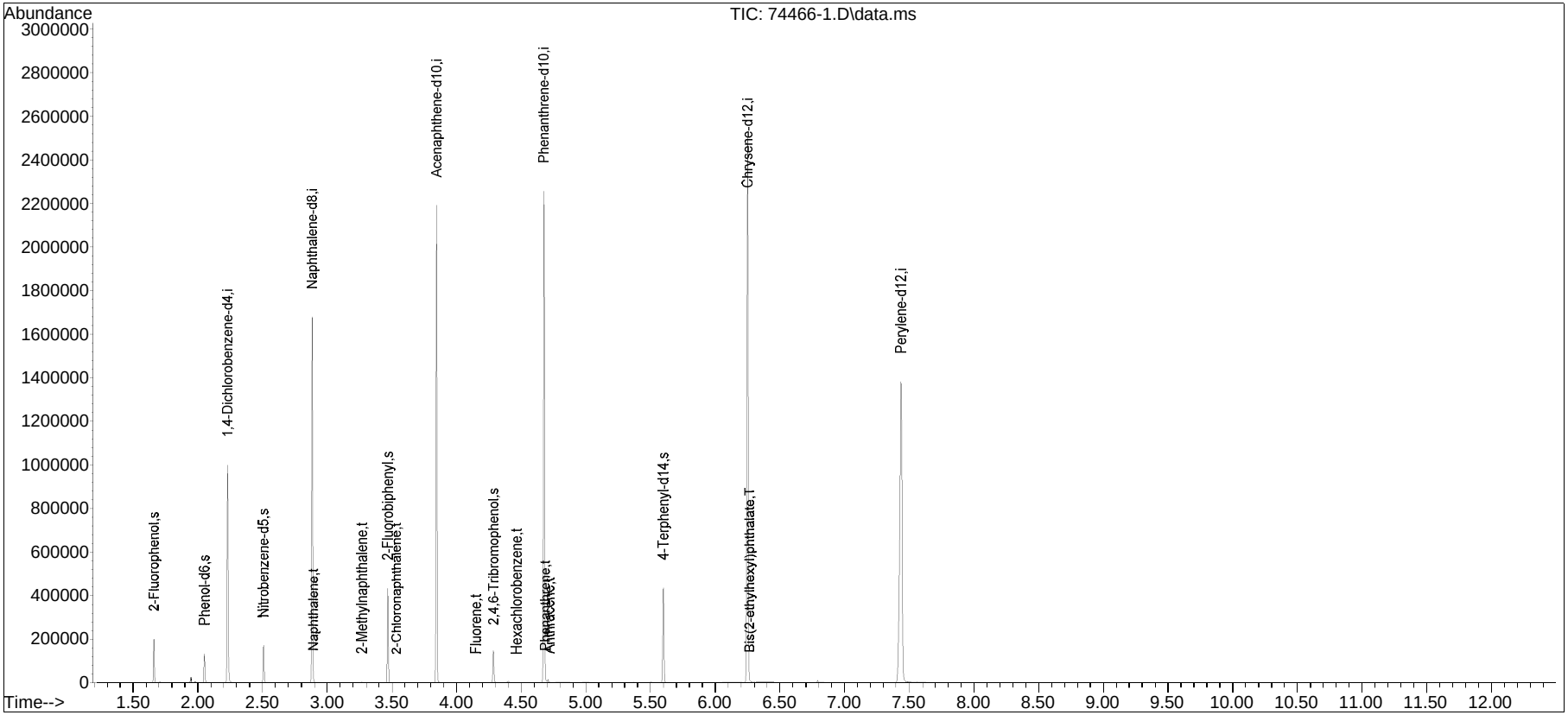
(#) = qualifier out of range (m) = manual integration (+) = signals summed

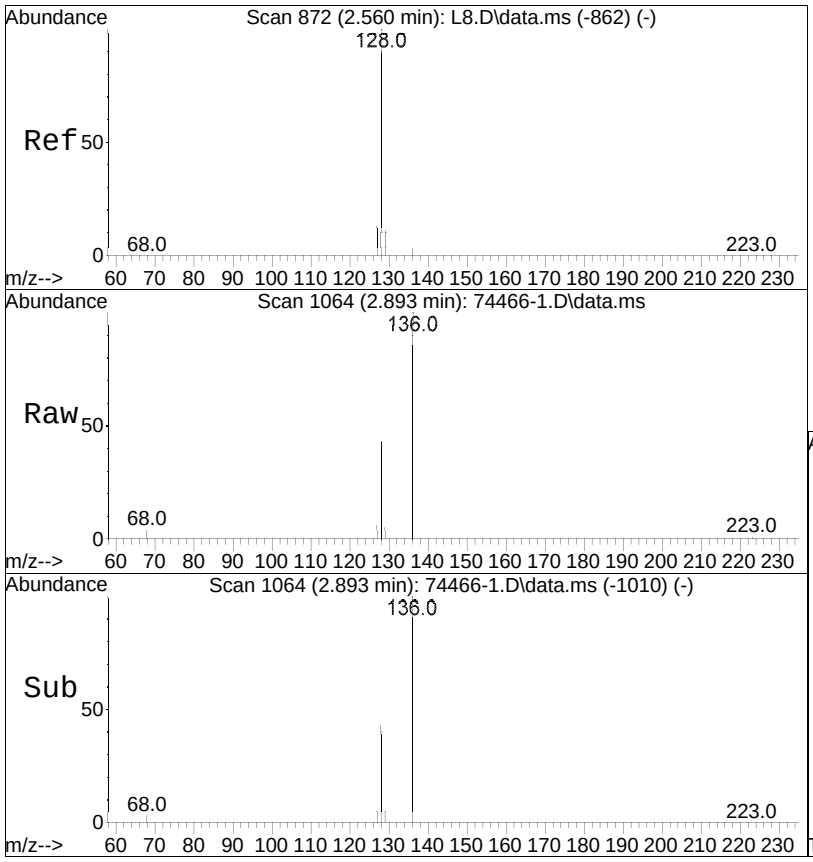
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 74466-1.D
Acq On : 21 Sep 2024 07:00 pm
Operator : sv119:rp
Sample : WG1974466-1,32,,RV,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 19:29:37 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

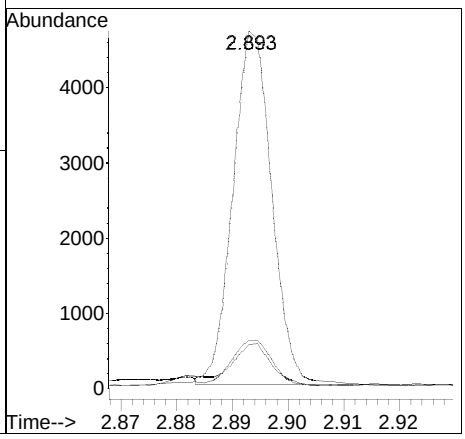


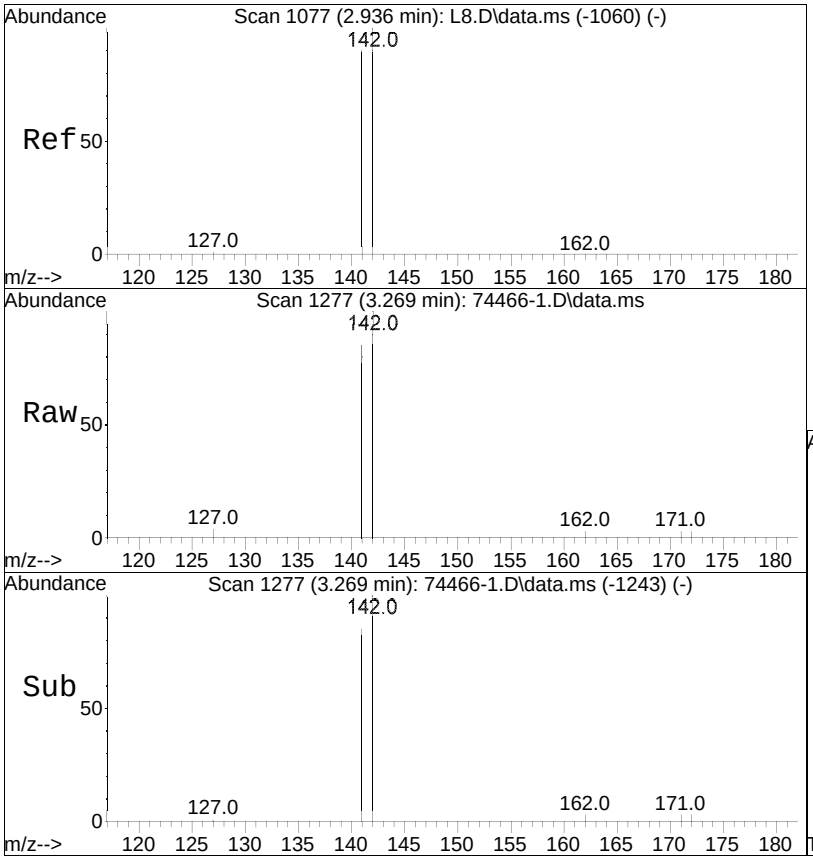



#9
Naphthalene
Concen:  10.38 ng/ml M6
RT:  2.893 min  Scan# 1064
Delta R.T.  0.006 min
Lab File:  74466-1.D
Acq: 21 Sep 2024  07:00 pm

Tgt Ion:128 Resp:  2235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.6 | 9.0 | 13.4 |
| 127 | 13.7 | 10.6 | 15.8 |

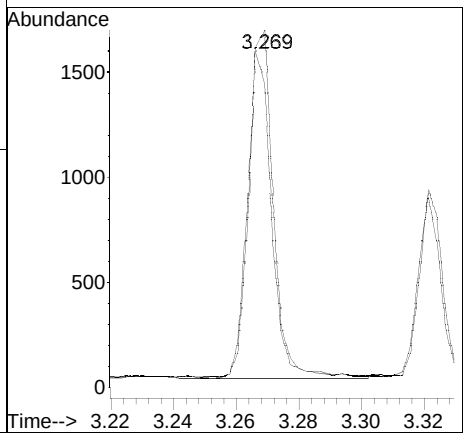


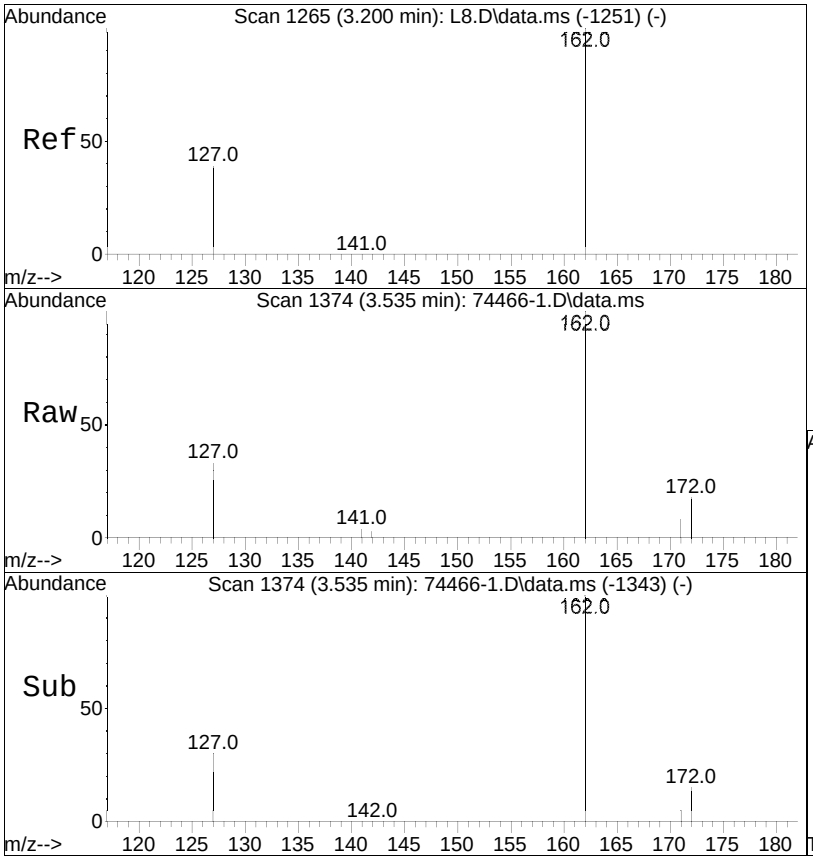



#11
2-Methylnaphthalene
Concen: 5.51 ng/ml
RT: 3.269 min Scan# 1277
Delta R.T. 0.008 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:142 Resp: 891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.3 | 72.3 | 108.5 |

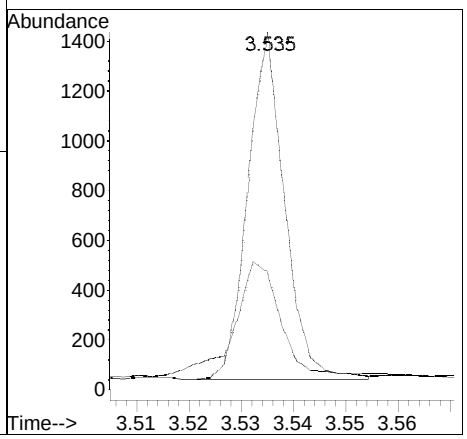


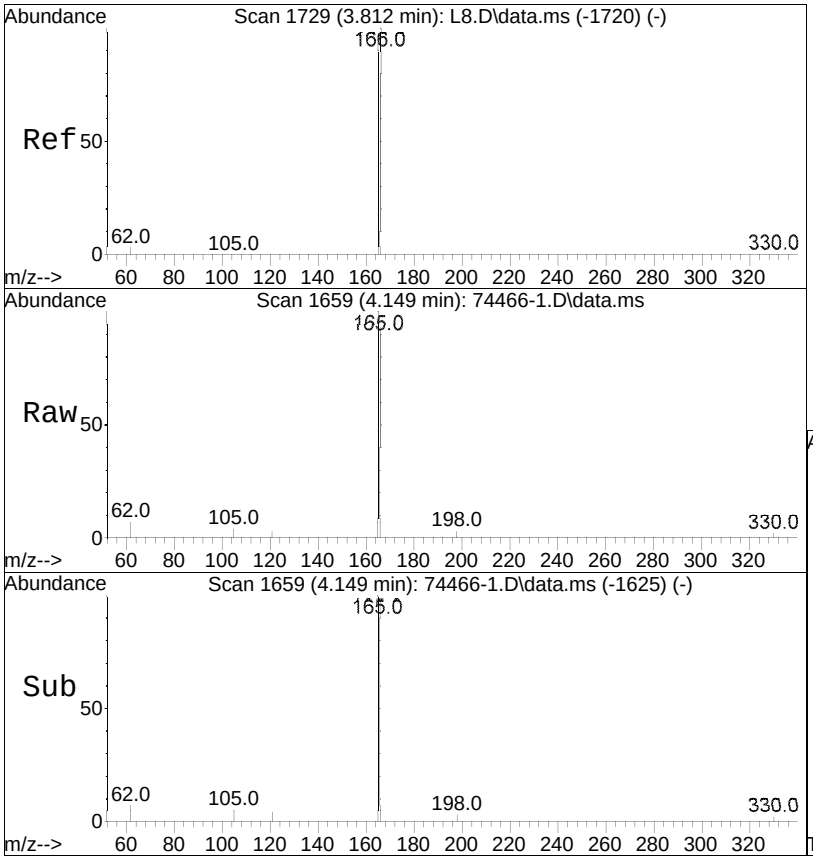



#14
2-Chloronaphthalene
Concen: 3.84 ng/ml
RT: 3.535 min Scan# 1374
Delta R.T. 0.005 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:162 Resp: 670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 43.9 | 32.0 | 48.0 |

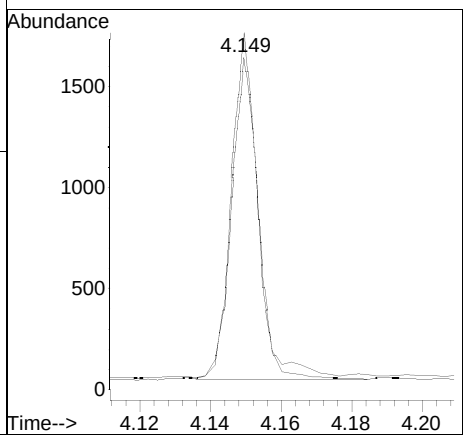


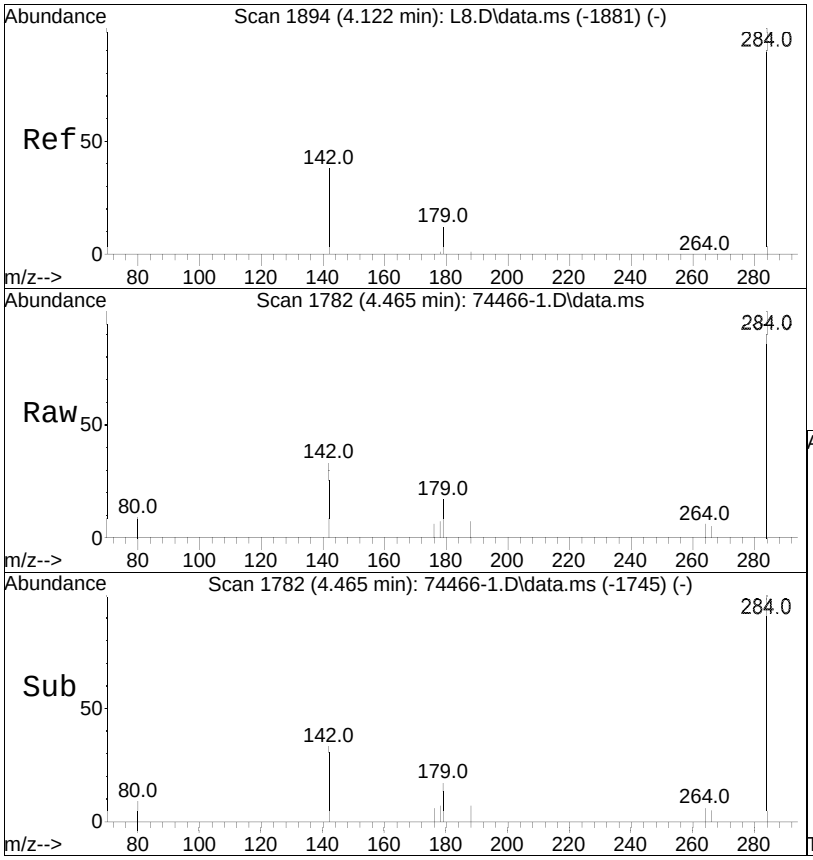



#20
Fluorene
Concen: 3.68 ng/ml
RT: 4.149 min Scan# 1659
Delta R.T. 0.003 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:166 Resp: 832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 105.4 | 79.3 | 118.9 |

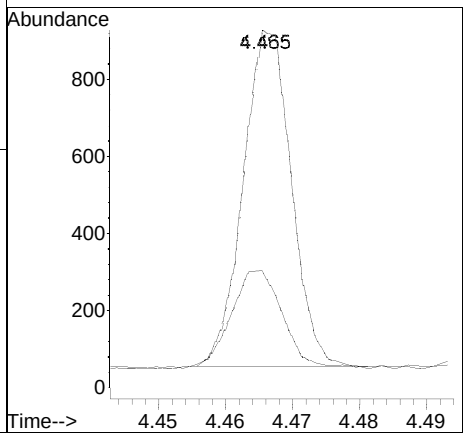


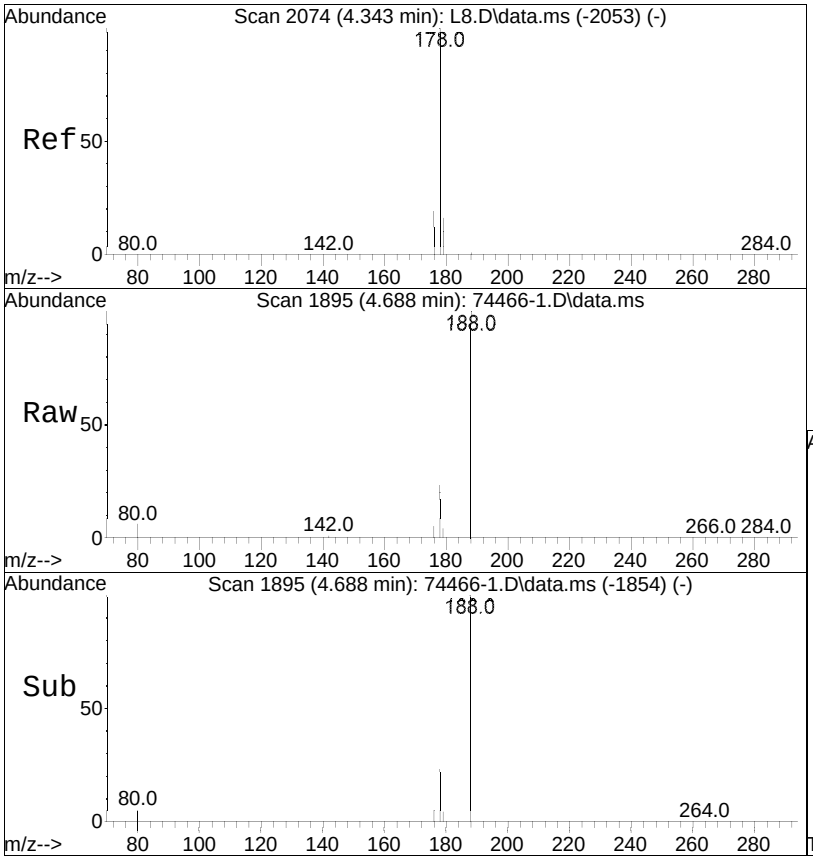



#24
Hexachlorobenzene
Concen: 5.86 ng/ml
RT: 4.465 min Scan# 1782
Delta R.T. 0.003 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:284 Resp: 430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 31.4 | 30.0 | 45.0 |

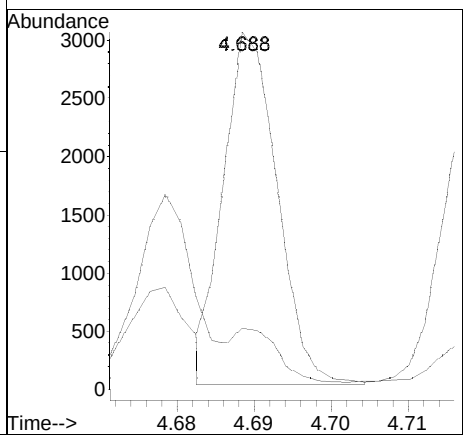


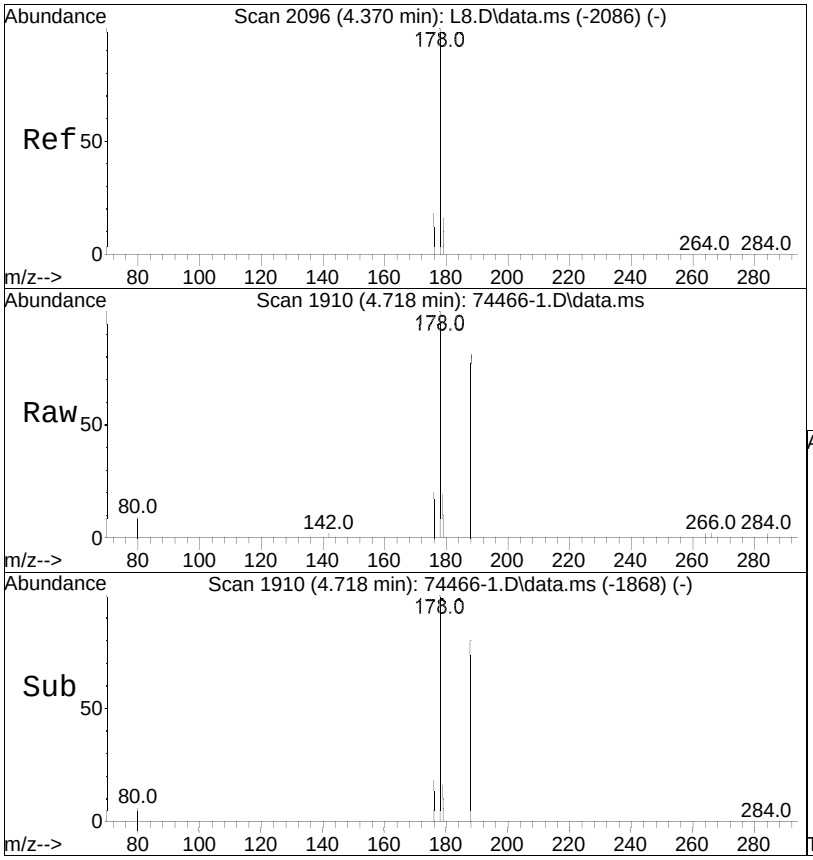



#26
Phenanthrene
Concen: 4.68 ng/ml M1
RT: 4.688 min Scan# 1895
Delta R.T. 0.001 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:178 Resp: 1456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 13.1 | 12.6 | 18.8 |

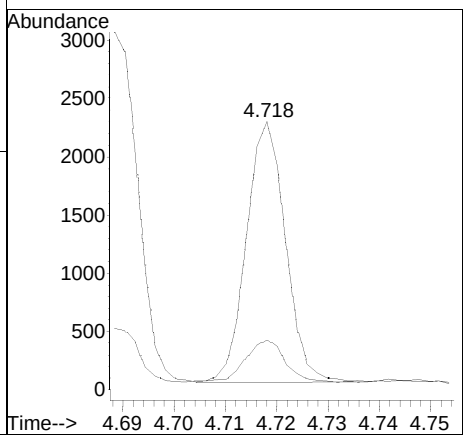





#27
Anthracene
Concen: 3.66 ng/ml
RT: 4.718 min Scan# 1910
Delta R.T. 0.003 min
Lab File: 74466-1.D
Acq: 21 Sep 2024 07:00 pm

Tgt Ion:178 Resp: 1176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.2 | 12.4 | 18.6 |

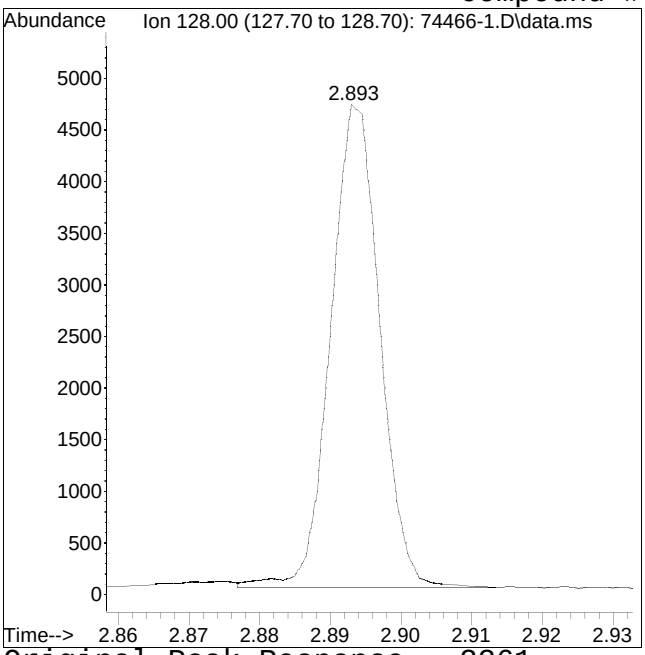


# Manual Integration Report

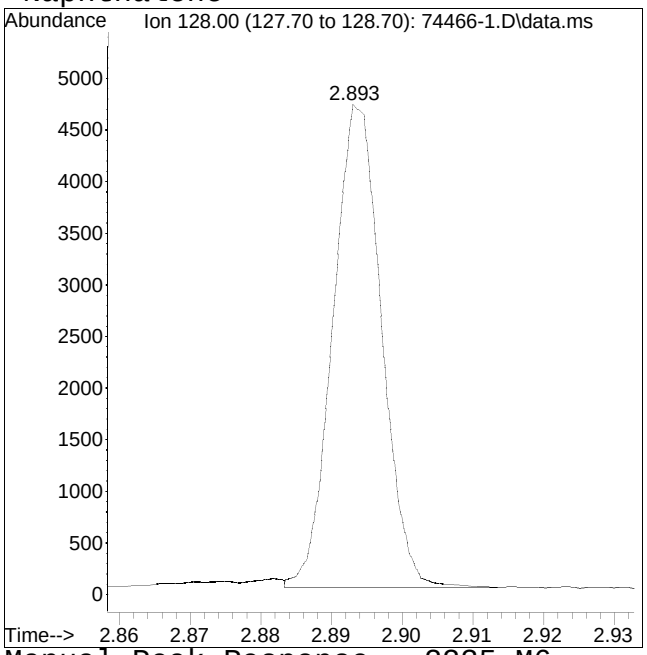
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 74466-1.D
Date Inj'd : 9/21/2024 7:00 pm
Sample : WG1974466-1,32,,RV,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 7:14 pm

## Compound #9: Naphthalene




Original Peak Response = 2261




Manual Peak Response = 2235 M6

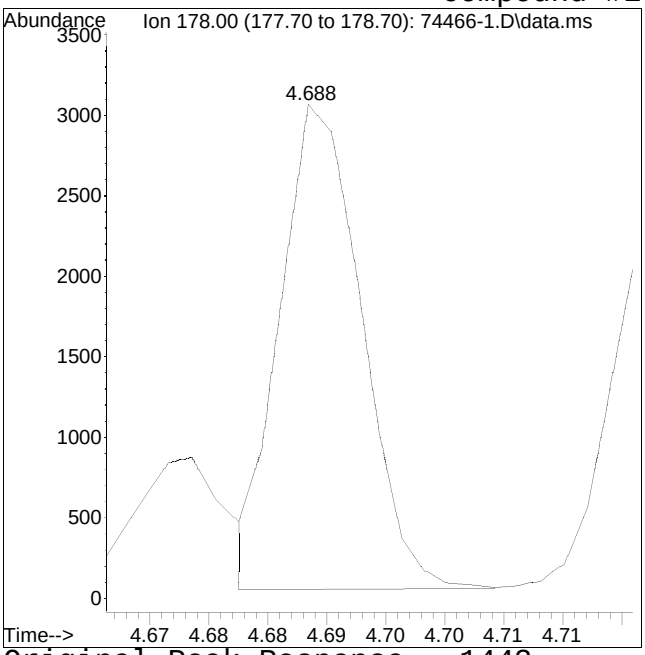
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Manual Integration Report

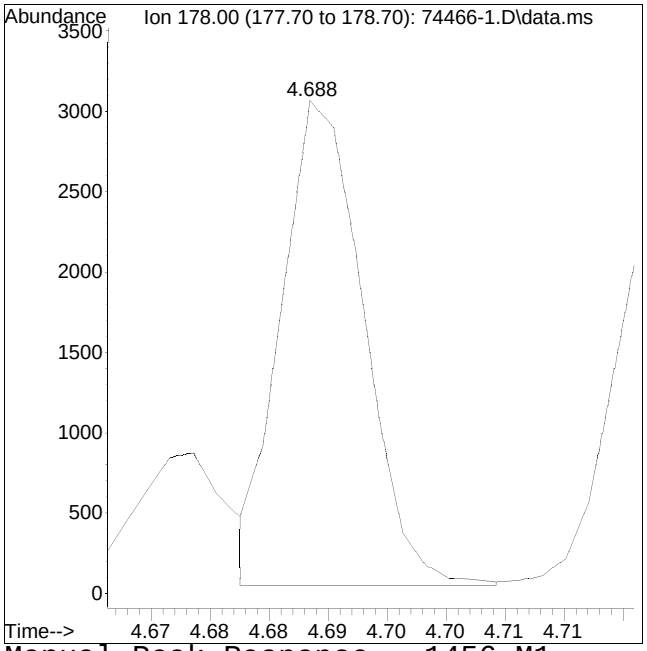
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 74466-1.D
Date Inj'd : 9/21/2024 7:00 pm
Sample : WG1974466-1,32,,RV,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 7:14 pm

## Compound #26: Phenanthrene




Original Peak Response = 1443




Manual Peak Response = 1456 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-2.D
Acq On : 21 Sep 2024 05:54 pm
Operator : sv119:rp
Sample : WG1974466-2,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 19:11:43 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.231 | 152 | 216692 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 178527 | | | Recovery | = 121.38% | | |
| 8) Naphthalene-d8 | 2.882 | 136 | 798543 | 4000.000 | ng/ml | # 0.00 |
| Standard Area 1 = 703917 | | | Recovery | = 113.44% | | |
| 17) Acenaphthene-d10 | 3.846 | 164 | 480732 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 468873 | | | Recovery | = 102.53% | | |
| 22) Phenanthrene-d10 | 4.678 | 188 | 1035494 | 4000.000 | ng/ml | # 0.00 |
| Standard Area 1 = 1018896 | | | Recovery | = 101.63% | | |
| 31) Chrysene-d12 | 6.246 | 240 | 1101790 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1106666 | | | Recovery | = 99.56% | | |
| 36) Perylene-d12 | 7.436 | 264 | 1158738 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1122604 | | | Recovery | = 103.22% | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.668 | 112 | 19551 | 255.773 | ng/ml | 0.02 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 12.79%# | | |
| 3) Phenol-d6 | 2.055 | 99 | 33186 | 344.222 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 17.21% | | |
| 7) Nitrobenzene-d5 | 2.509 | 82 | 51532 | 609.363 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 60.94% | | |
| 13) 2-Fluorobiphenyl | 3.470 | 172 | 156325 | 757.228 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery | = 75.72% | | |
| 21) 2,4,6-Tribromophenol | 4.287 | 330 | 20544 | 612.055 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery | = 30.60% | | |
| 30) 4-Terphenyl-d14 | 5.597 | 244 | 229625 | 802.165 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery | = 40.11% | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.099 | 93 | 103693 | 1338.741 | ng/ml | 86 |
| 6) Hexachloroethane | 2.486 | 117 | 41441 | 1152.694 | ng/ml | 89 |
| 9) Naphthalene | 2.894 | 128 | 319490 | 1449.163 | ng/ml | 100 |
| 10) Hexachlorobutadiene | 2.964 | 225 | 66082 | 1335.358 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.267 | 142 | 242504 | 1463.638 | ng/ml | 97 |
| 14) 2-Chloronaphthalene | 3.533 | 162 | 270617 | 1515.994 | ng/ml | 100 |
| 16) Acenaphthylene | 3.764 | 152 | 429828 | 1507.148 | ng/ml | 100 |
| 18) Acenaphthene | 3.862 | 153 | 277409 | 1653.177 | ng/ml | 99 |
| 20) Fluorene | 4.149 | 166 | 360102 | 1628.158 | ng/ml | 98 |
| 24) Hexachlorobenzene | 4.465 | 284 | 140051 | 1969.772 | ng/ml | 90 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-2.D
Acq On : 21 Sep 2024 05:54 pm
Operator : sv119:rp
Sample : WG1974466-2,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 19:11:43 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 4.580 | 266 | 22987 | 532.293 | ng/ml | 98 |
| 26) Phenanthrene | 4.690 | 178 | 525992 | 1747.279 | ng/ml | 99 |
| 27) Anthracene | 4.718 | 178 | 557073 | 1791.064 | ng/ml | 98 |
| 28) Fluoranthene | 5.371 | 202 | 687006 | 1662.029 | ng/ml | 95 |
| 29) Pyrene | 5.504 | 202 | 714581 | 1668.266 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.238 | 228 | 731577 | 1760.988 | ng/ml | 99 |
| 34) Chrysene | 6.262 | 228 | 686556 | 1674.260 | ng/ml | 98 |
| 37) Benzo[b]fluoranthene | 7.066 | 252 | 762332 | 1588.446 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 7.091 | 252 | 712823 | 1607.724 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.373 | 252 | 691330 | 1626.450 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 8.628 | 276 | 800905 | 1863.943 | ng/ml | 92 |
| 41) Dibenzo[a,h]anthracene | 8.663 | 278 | 685524M6 | 1791.013 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 8.969 | 276 | 710518 | 1681.133 | ng/ml | 91 |

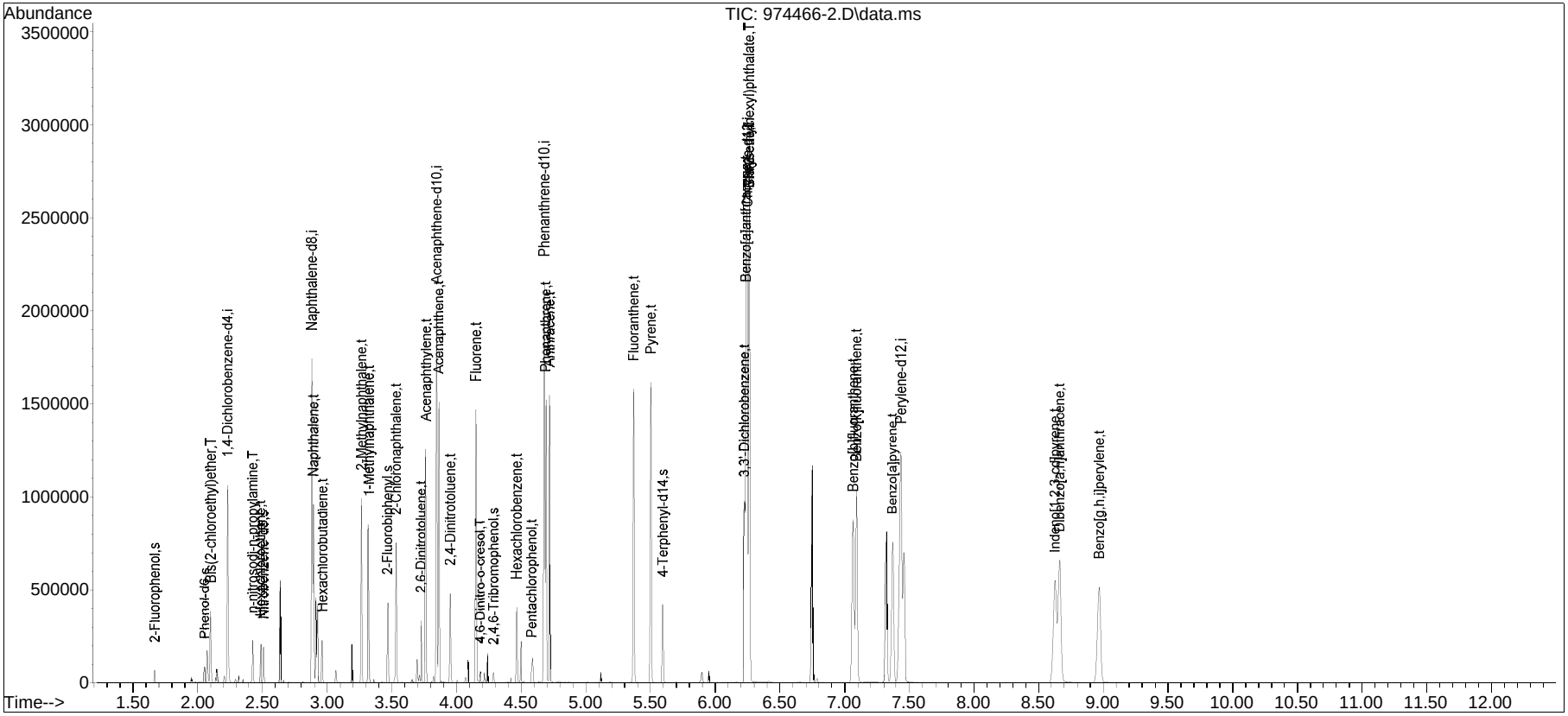
(#) = qualifier out of range (m) = manual integration (+) = signals summed

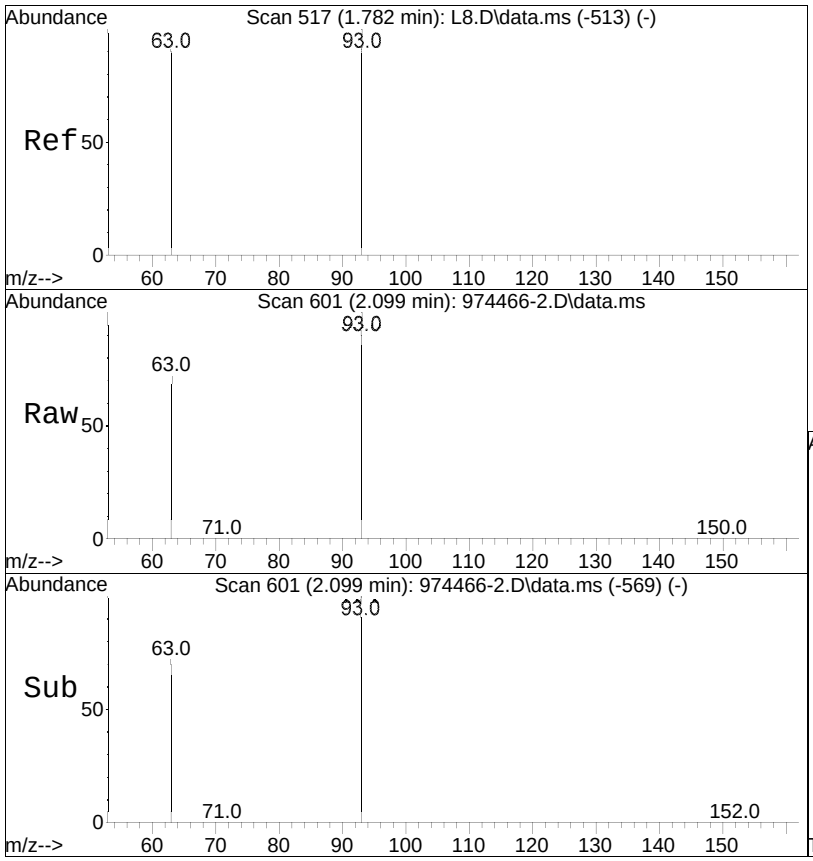
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-2.D
Acq On : 21 Sep 2024 05:54 pm
Operator : sv119:rp
Sample : WG1974466-2,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 21 19:11:43 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

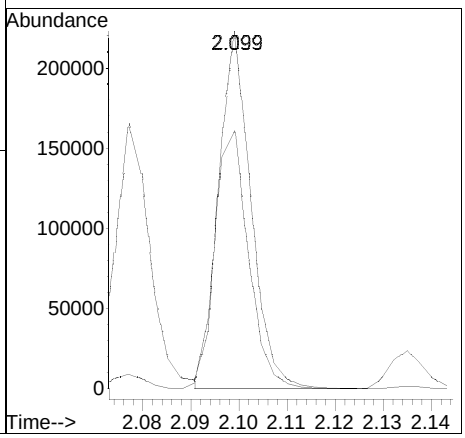


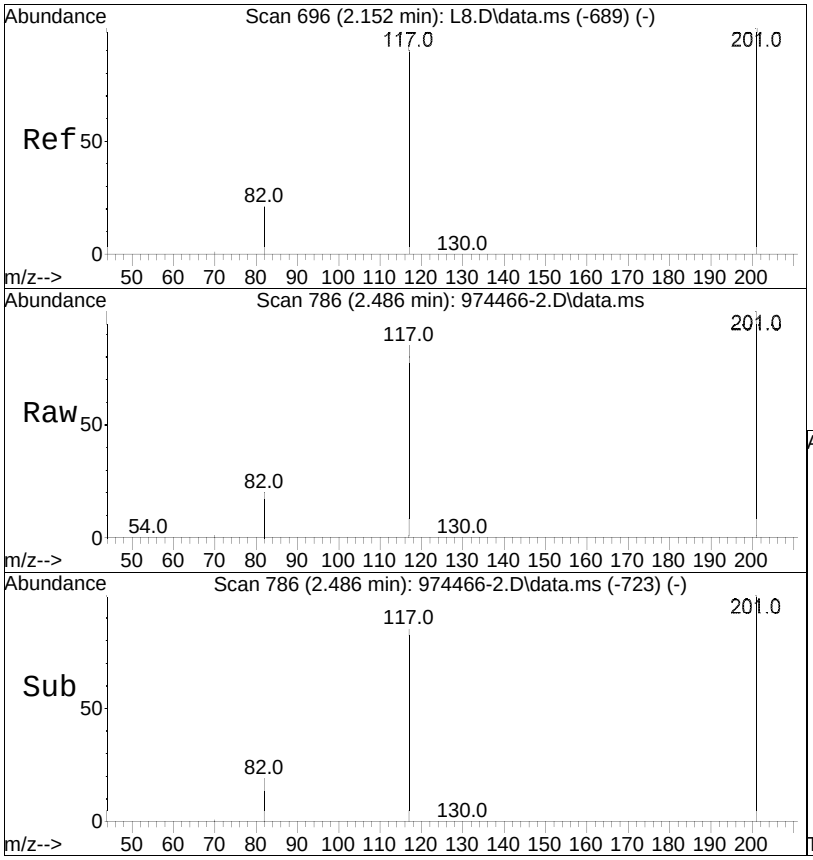



#4
Bis(2-chloroethyl)ether
Concen: 1338.74 ng/ml
RT:  2.099 min  Scan# 601
Delta R.T.  0.009 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion: 93 Resp:  103693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 76.3 | 71.7 | 107.5 |

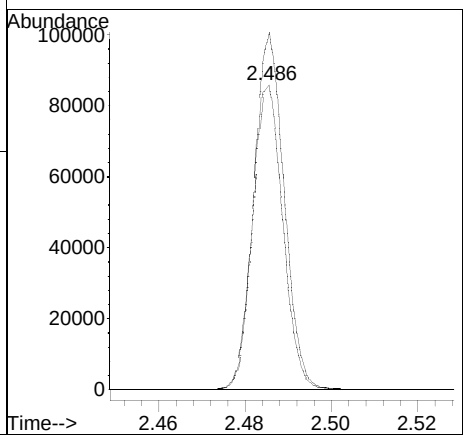


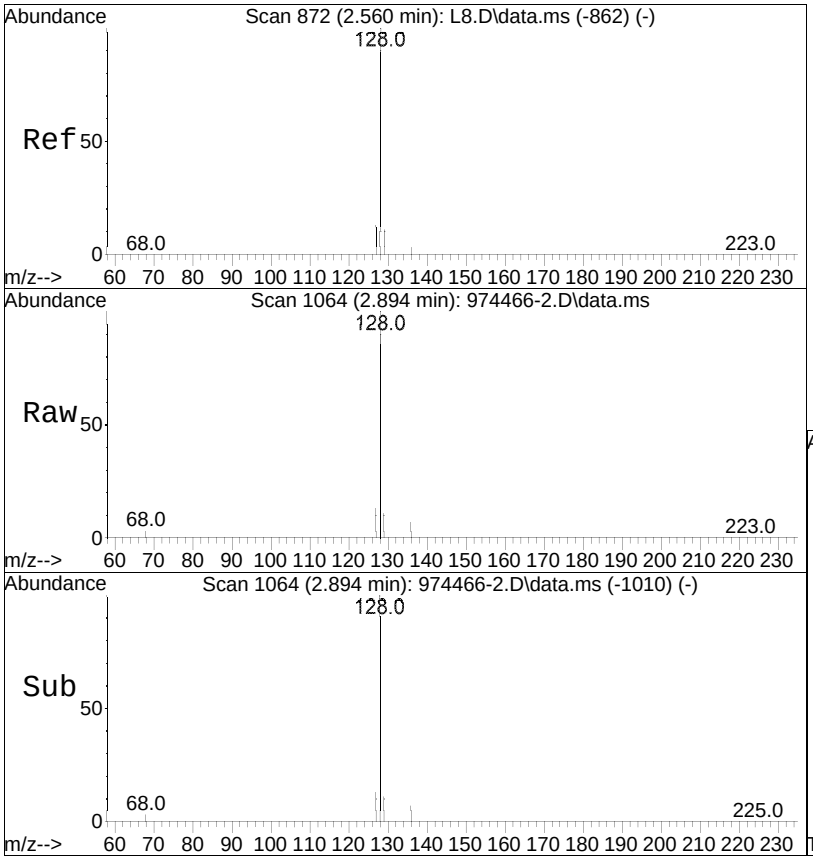



#6
Hexachloroethane
Concen: 1152.69 ng/ml
RT: 2.486 min Scan# 786
Delta R.T. 0.009 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:117 Resp: 41441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 115.5 | 83.0 | 124.6 |

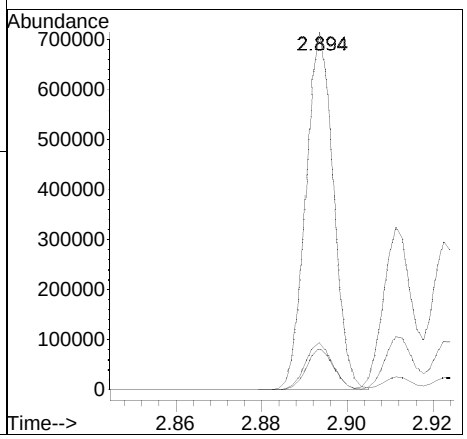


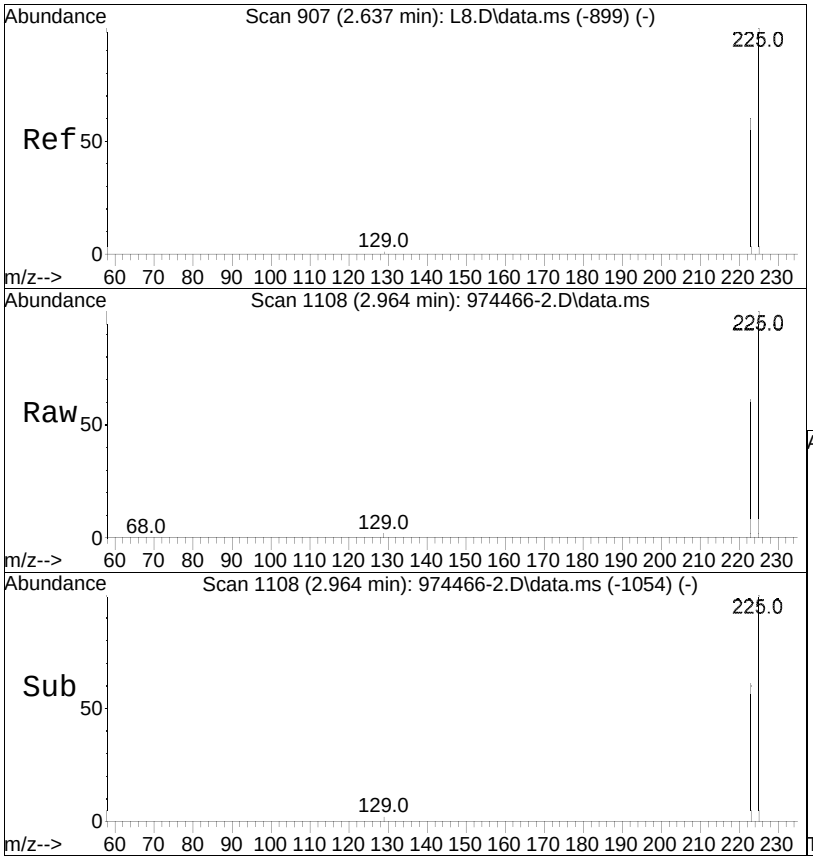



#9
Naphthalene
Concen: 1449.16 ng/ml
RT:  2.894 min  Scan# 1064
Delta R.T.  0.007 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:128 Resp:  319490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.3 | 9.0 | 13.4 |
| 127 | 13.1 | 10.6 | 15.8 |

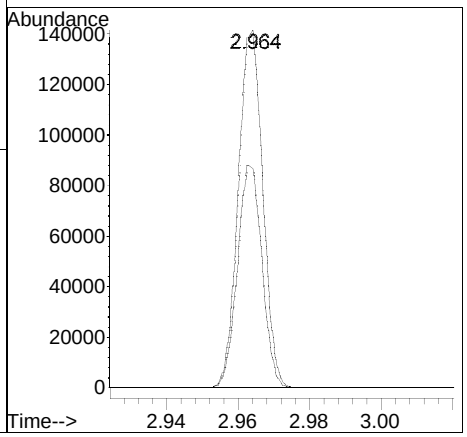


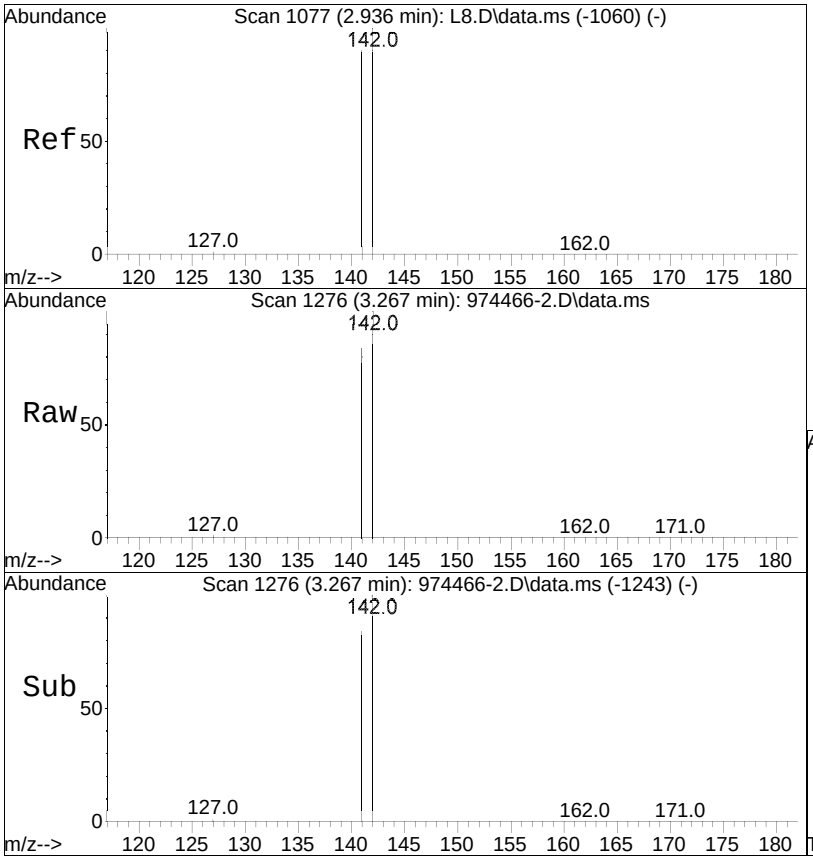



#10
Hexachlorobutadiene
Concen: 1335.36 ng/ml
RT: 2.964 min Scan# 1108
Delta R.T. 0.007 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:225 Resp: 66082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 50.2 | 75.2 |

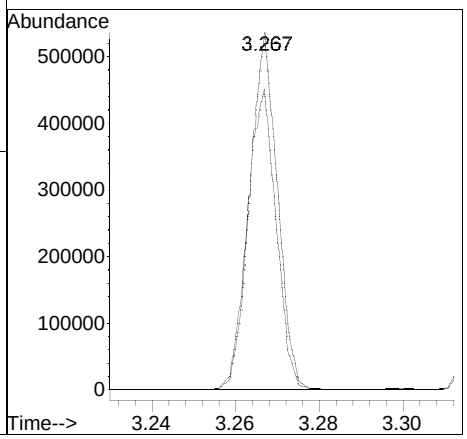


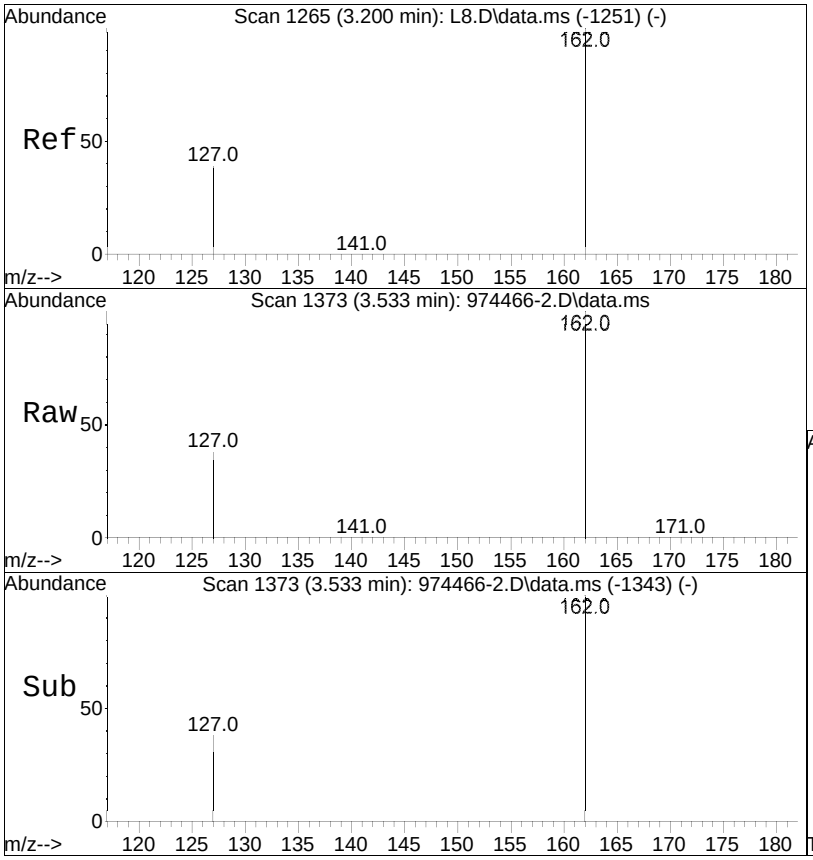



#11
2-Methylnaphthalene
Concen: 1463.64 ng/ml
RT:  3.267 min  Scan# 1276
Delta R.T.  0.006 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:142 Resp:  242504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 88.0 | 72.3 | 108.5 |

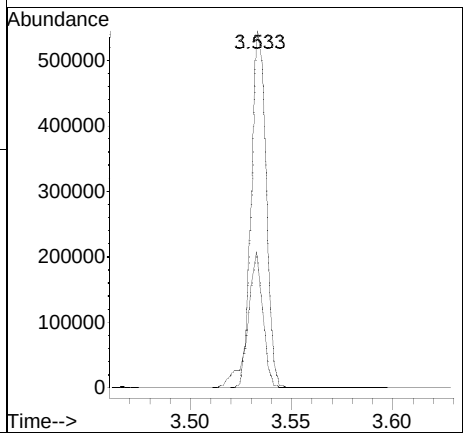


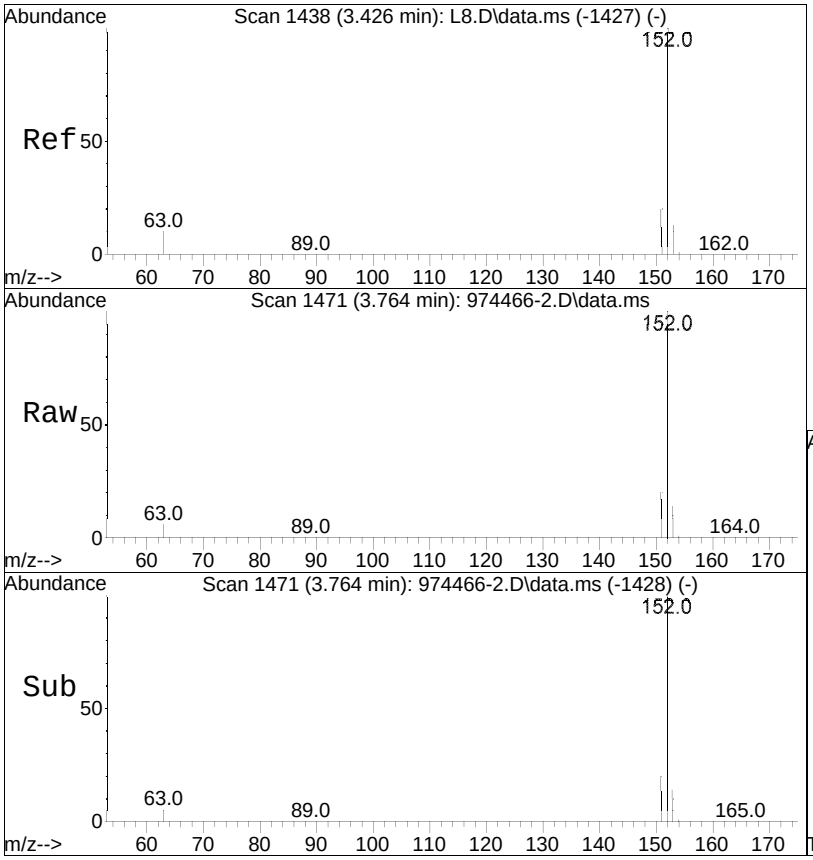



#14
2-Chloronaphthalene
Concen: 1515.99 ng/ml
RT:  3.533 min  Scan# 1373
Delta R.T.  0.003 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:162 Resp:  270617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 39.9 | 32.0 | 48.0 |

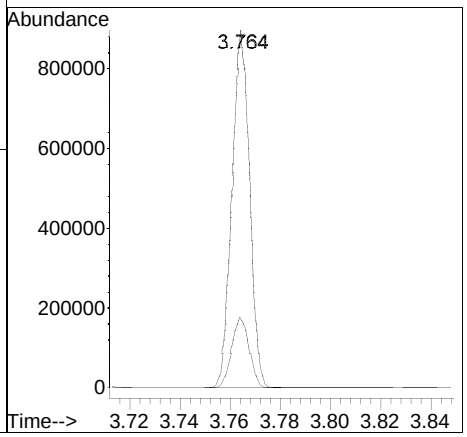


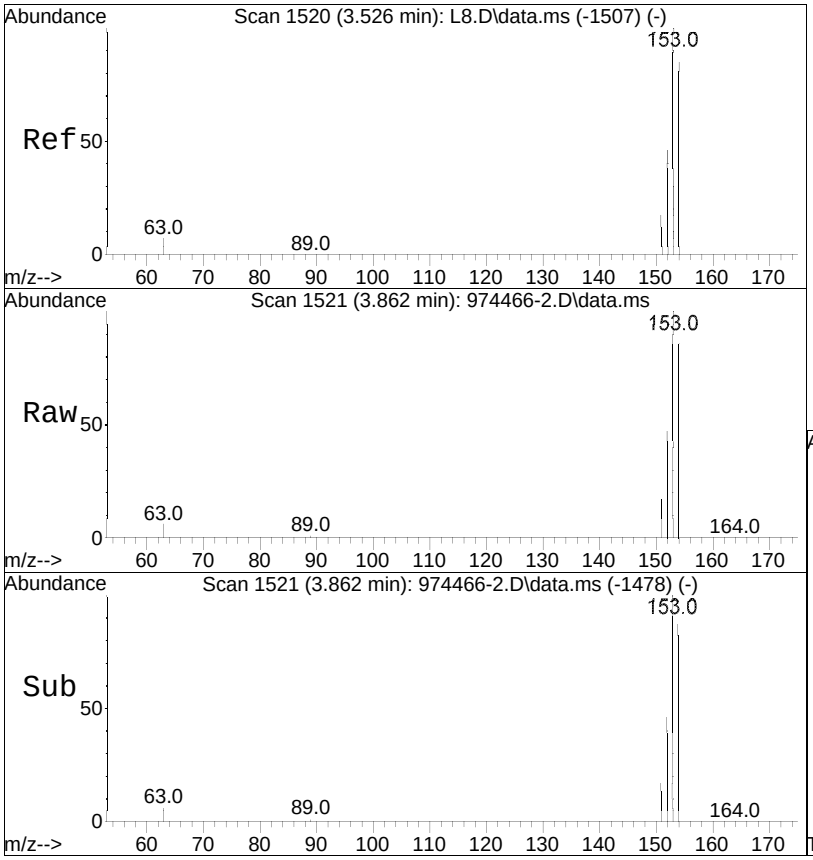



#16
Acenaphthylene
Concen: 1507.15 ng/ml
RT:  3.764 min  Scan# 1471
Delta R.T.  0.004 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:152 Resp:  429828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.8 | 16.0 | 24.0 |

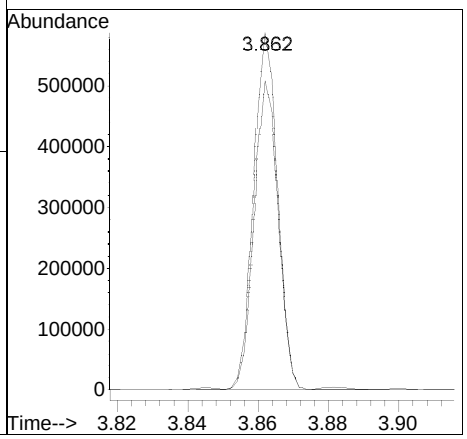


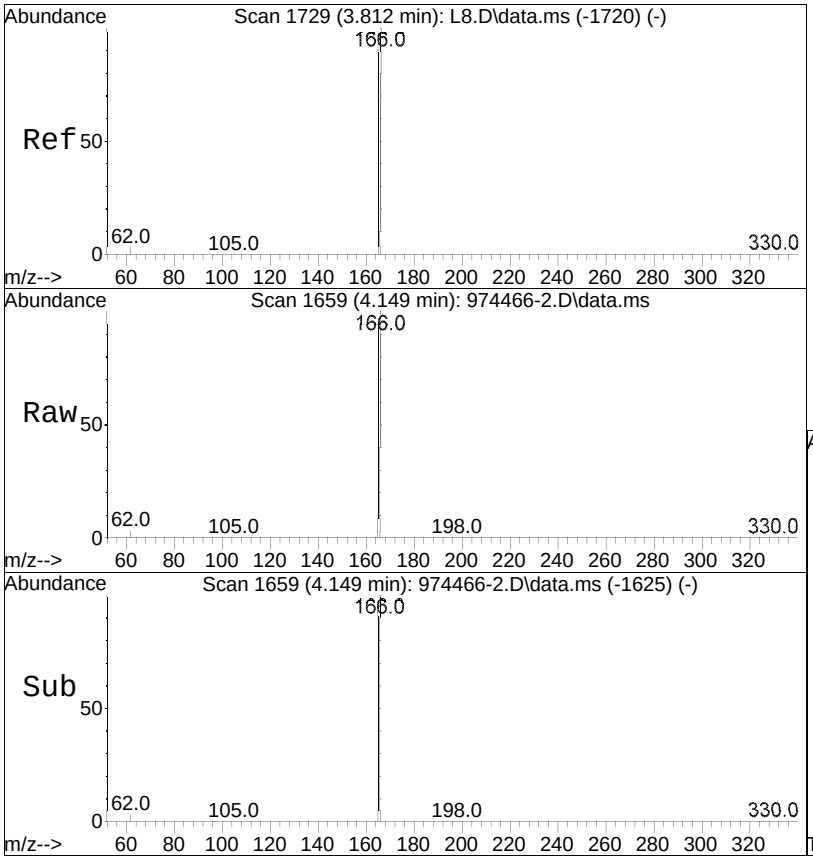



#18
Acenaphthene
Concen: 1653.18 ng/ml
RT: 3.862 min Scan# 1521
Delta R.T. 0.004 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:153 Resp: 277409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 86.4 | 68.1 | 102.1 |

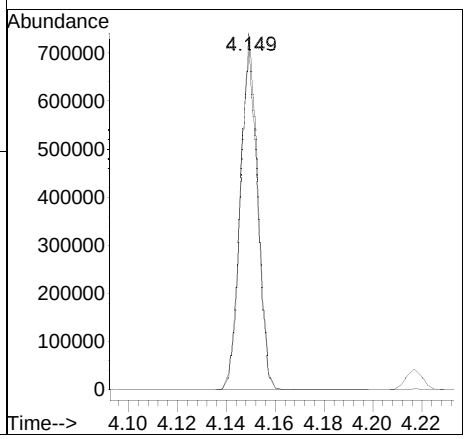


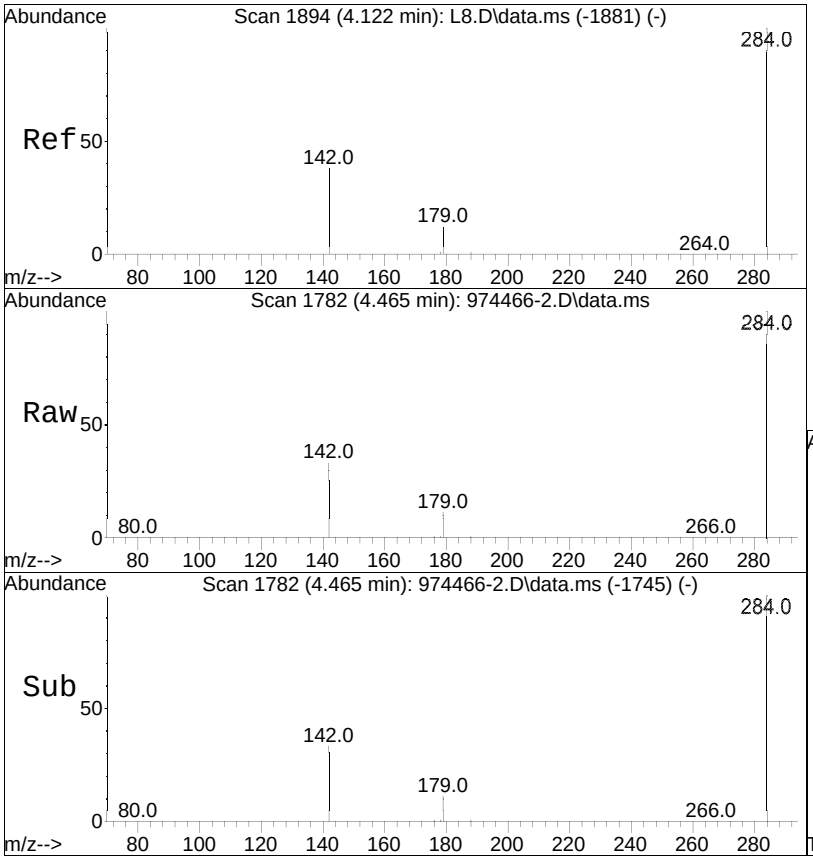



#20
Fluorene
Concen: 1628.16 ng/ml
RT:  4.149 min  Scan# 1659
Delta R.T.  0.003 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:166 Resp:  360102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 97.3 | 79.3 | 118.9 |

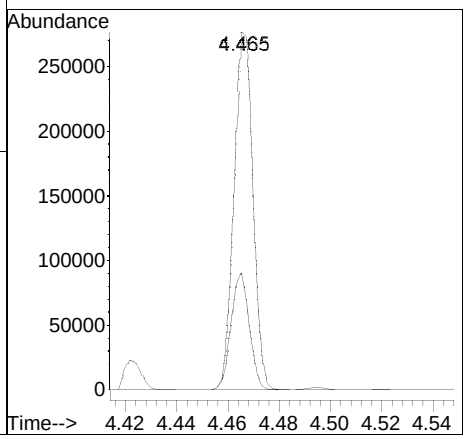


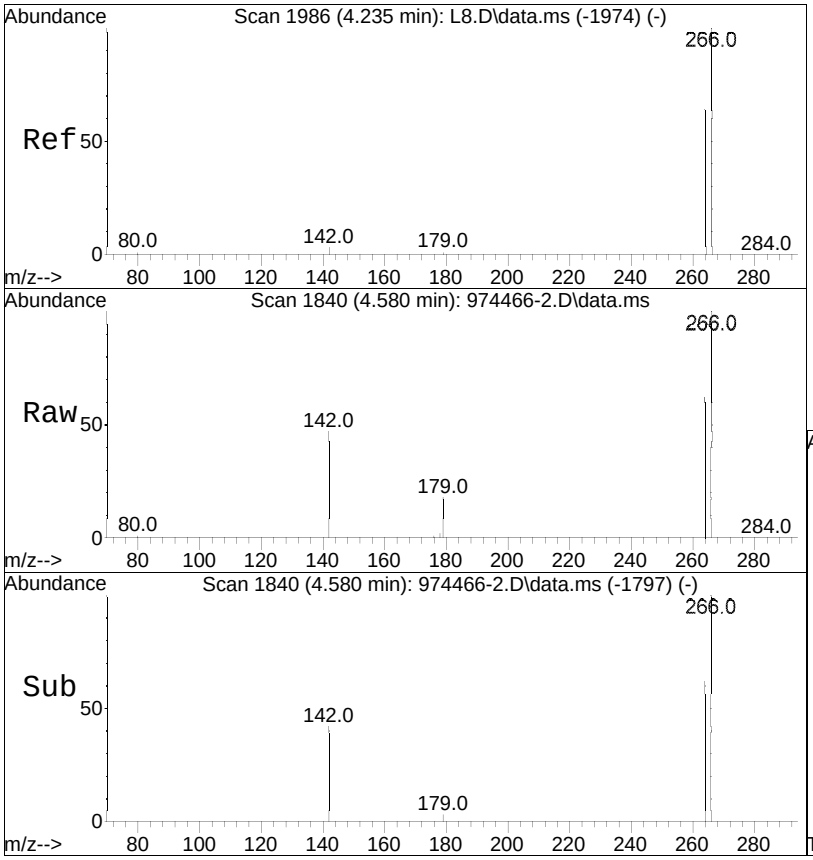



#24
Hexachlorobenzene
Concen: 1969.77 ng/ml
RT:  4.465 min  Scan# 1782
Delta R.T.  0.002 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:284 Resp:  140051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 31.4 | 30.0 | 45.0 |

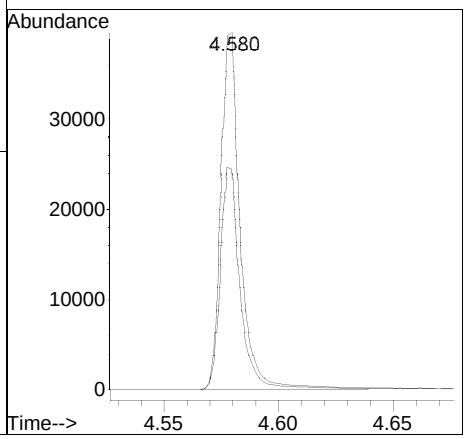


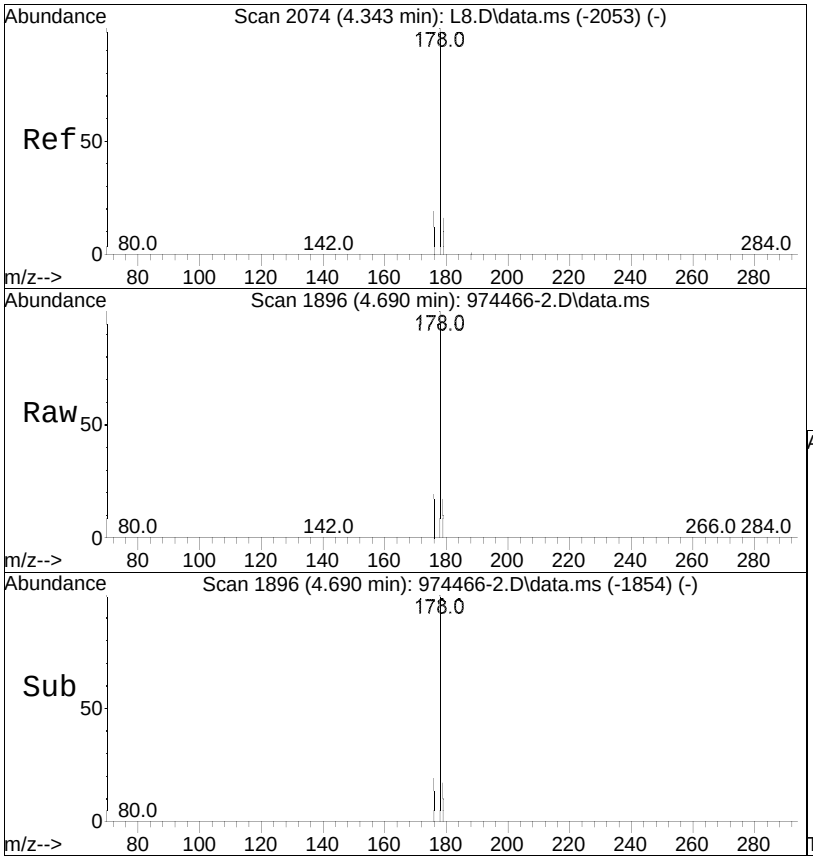



#25
Pentachlorophenol
Concen: 532.29 ng/ml
RT: 4.580 min Scan# 1840
Delta R.T. 0.004 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:266 Resp: 22987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 64.0 | 49.9 | 74.9 |

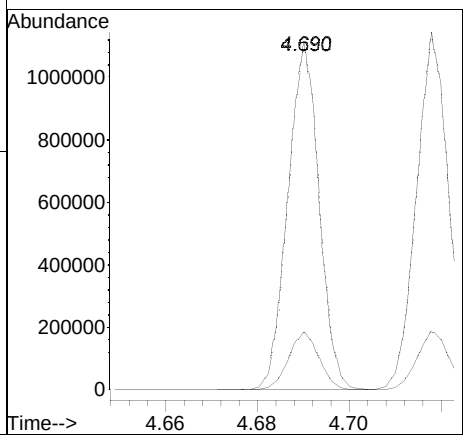


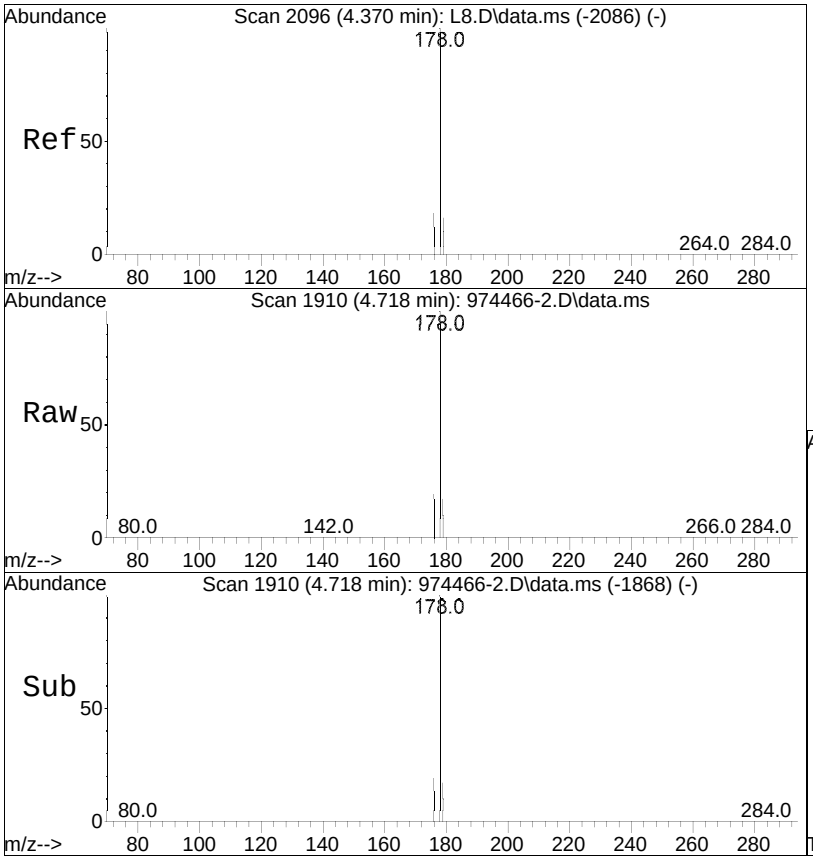



#26
Phenanthrene
Concen: 1747.28 ng/ml
RT:  4.690 min  Scan# 1896
Delta R.T.  0.002 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:178 Resp:  525992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.3 | 12.6 | 18.8 |

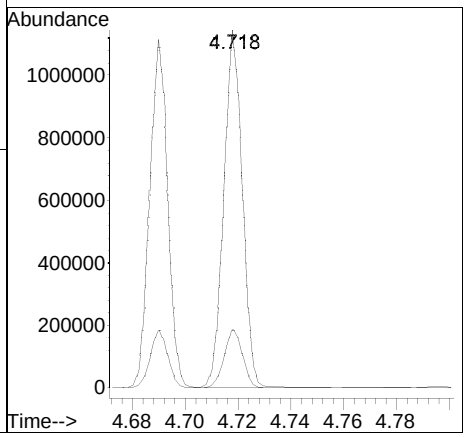


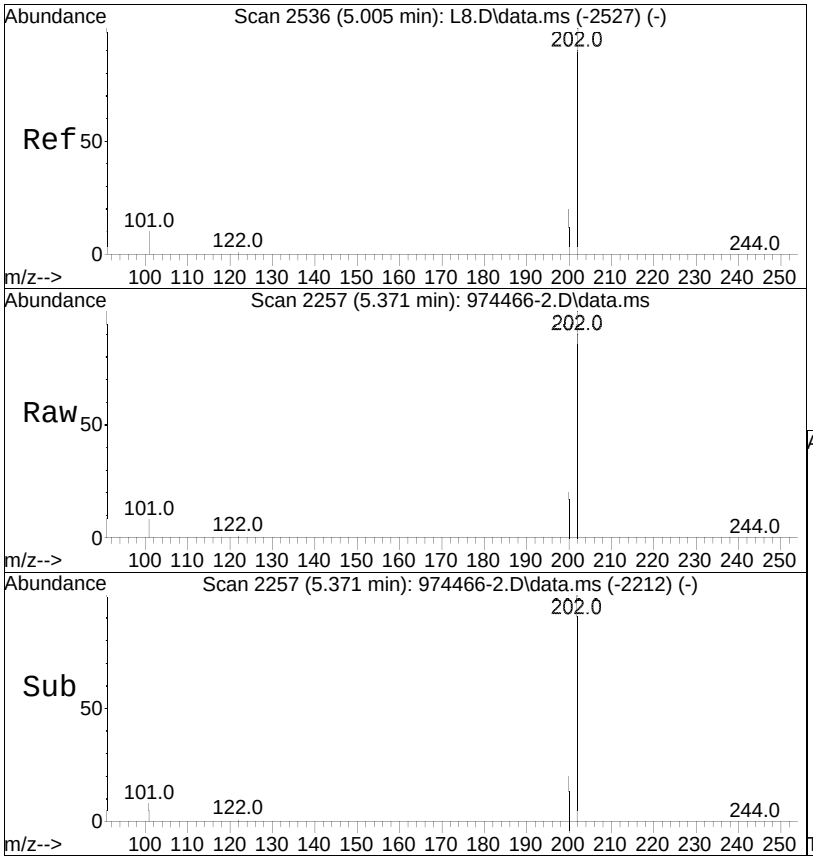



#27
Anthracene
Concen: 1791.06 ng/ml
RT:  4.718 min  Scan# 1910
Delta R.T.  0.002 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:178 Resp:  557073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.1 | 12.4 | 18.6 |

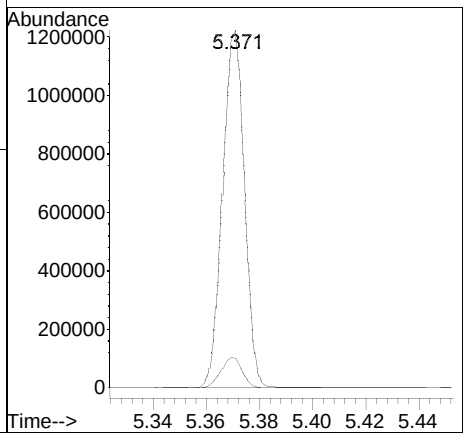


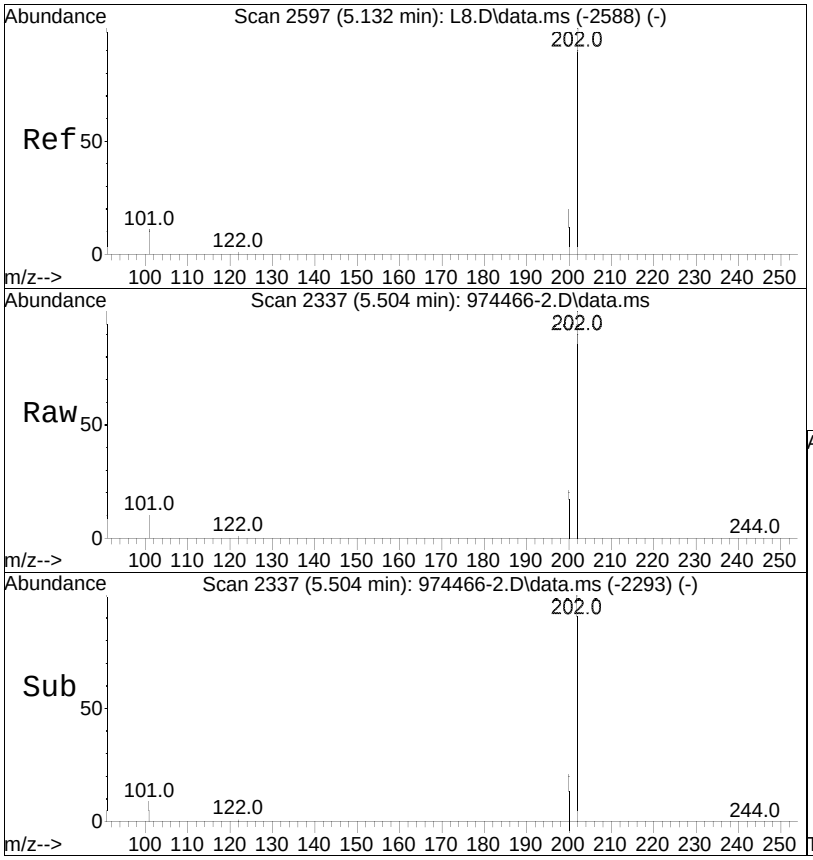



#28
Fluoranthene
Concen: 1662.03 ng/ml
RT:  5.371 min  Scan# 2257
Delta R.T.  -0.005 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:202 Resp:  687006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 8.4 | 8.1 | 12.1 |

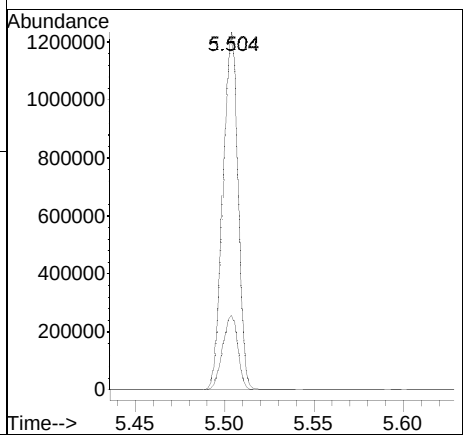


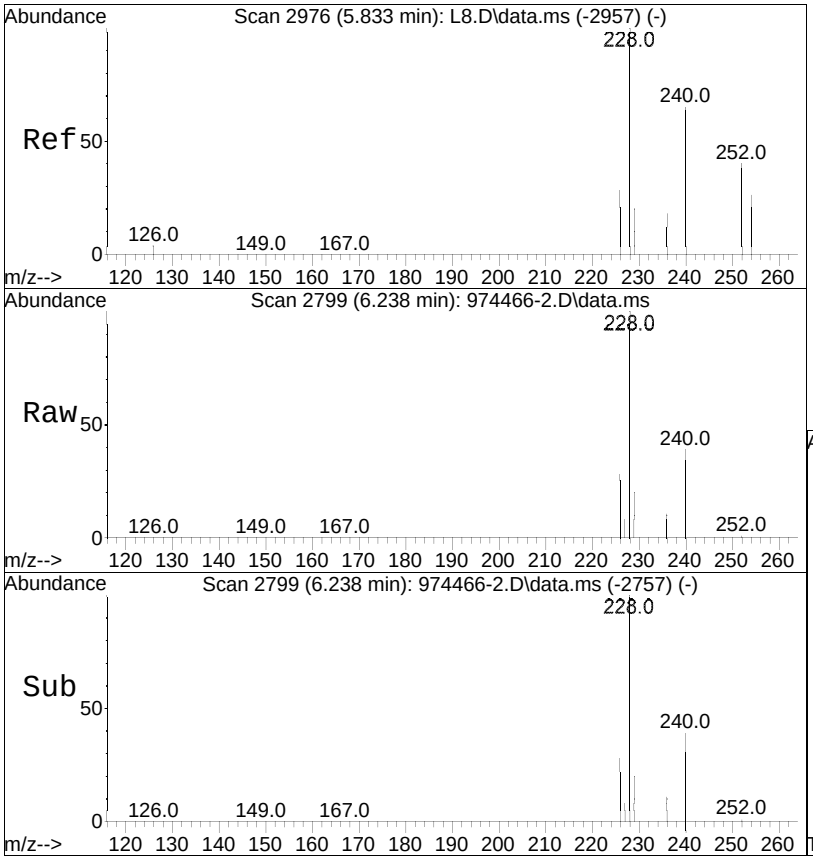



#29
Pyrene
Concen: 1668.27 ng/ml
RT:  5.504 min  Scan# 2337
Delta R.T.  -0.006 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:202 Resp:  714581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 16.5 | 24.7 |

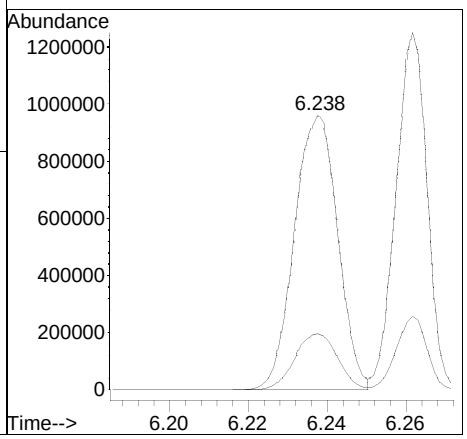


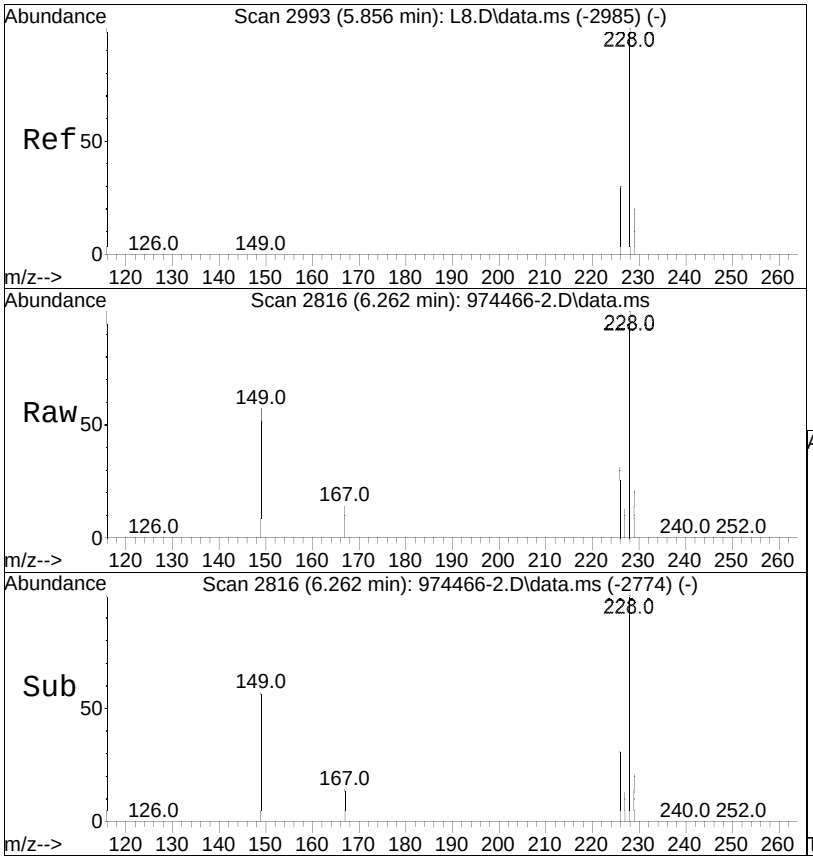



#32
Benzo[a]anthracene
Concen: 1760.99 ng/ml
RT:  6.238 min  Scan# 2799
Delta R.T.  -0.021 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:228 Resp:  731577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 20.2 | 15.8 | 23.8 |

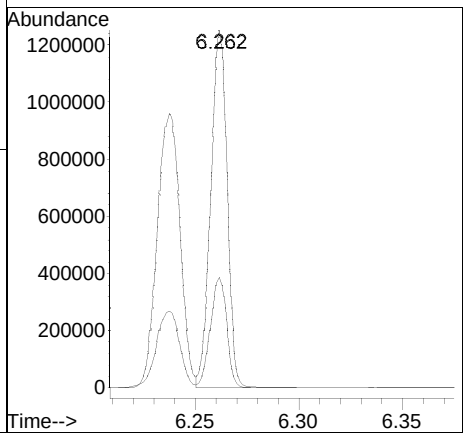


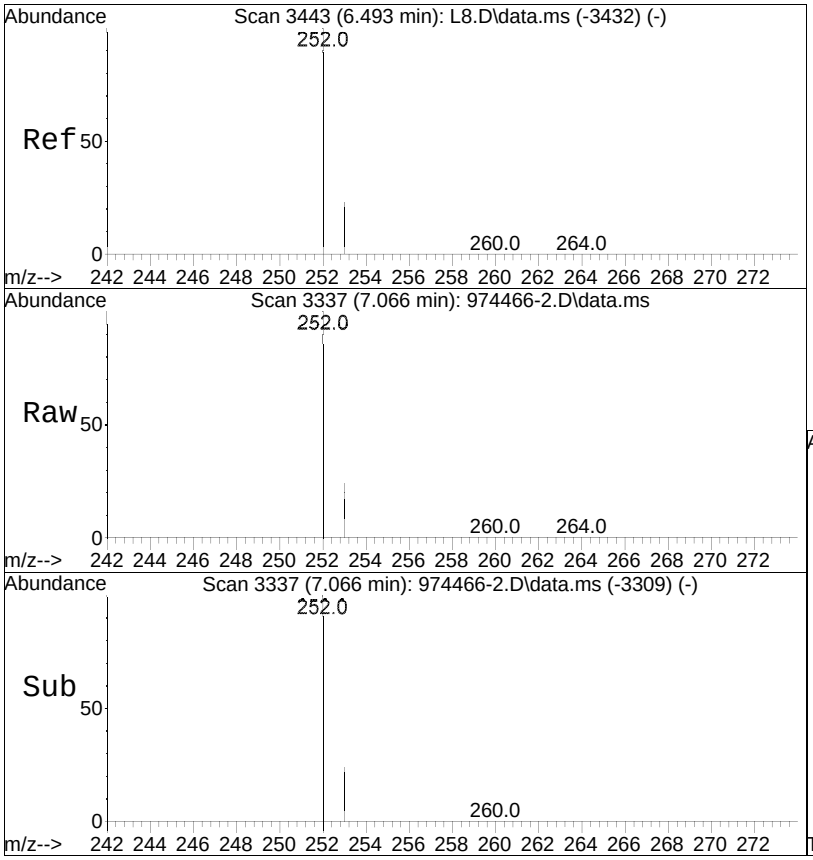



#34
Chrysene
Concen: 1674.26 ng/ml
RT:  6.262 min  Scan# 2816
Delta R.T.  -0.021 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:228 Resp:  686556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 23.9 | 35.9 |

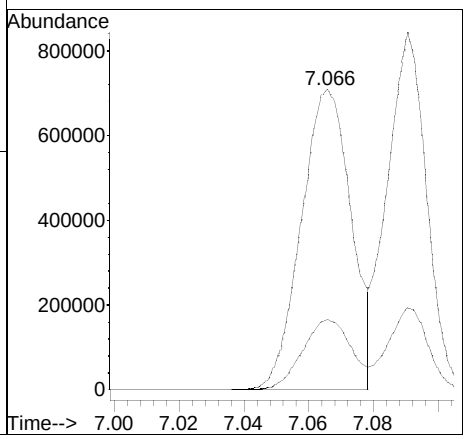


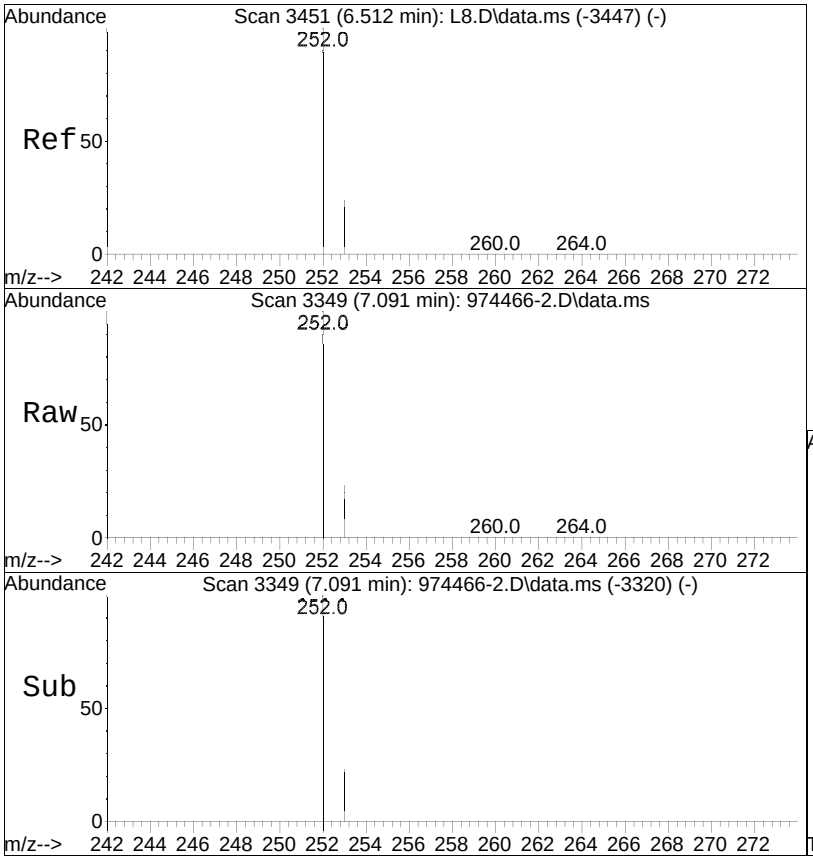



#37
Benzo[b]fluoranthene
Concen: 1588.45 ng/ml
RT: 7.066 min Scan# 3337
Delta R.T. -0.022 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:252 Resp: 762332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.9 | 18.0 | 27.0 |

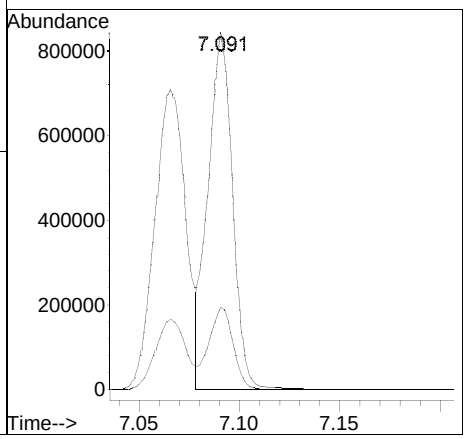


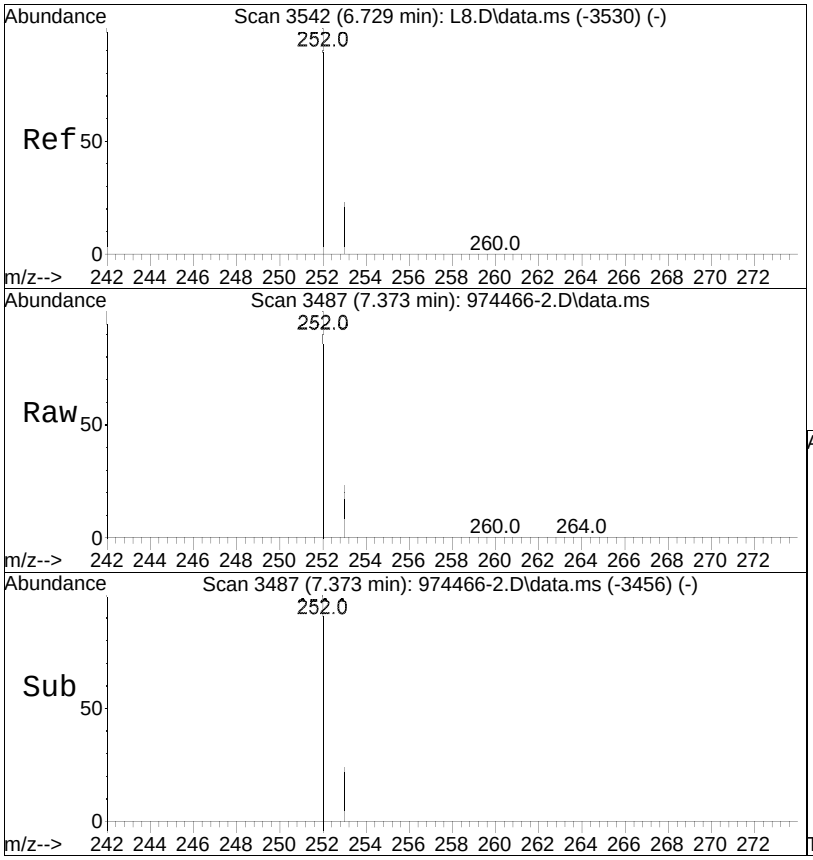



#38
Benzo[k]fluoranthene
Concen: 1607.72 ng/ml
RT:  7.091 min  Scan# 3349
Delta R.T.  -0.020 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:252 Resp:  712823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.2 | 18.3 | 27.5 |

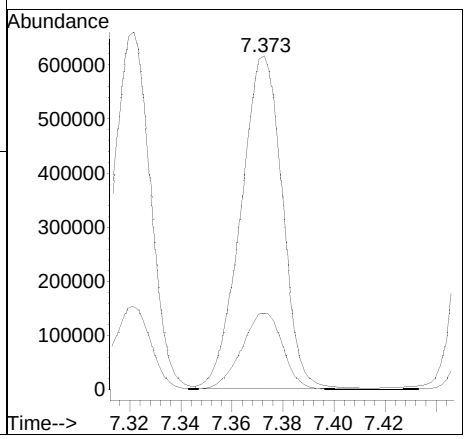


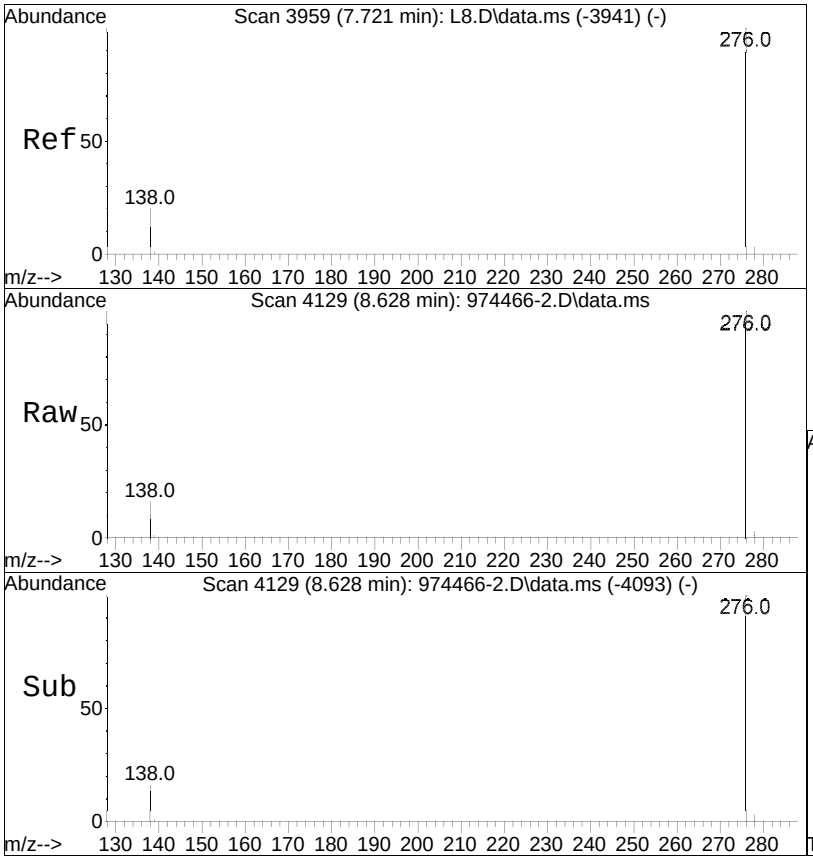



#39
Benzo[a]pyrene
Concen: 1626.45 ng/ml
RT:  7.373 min  Scan# 3487
Delta R.T.  -0.016 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:252 Resp:  691330

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.7 | 17.9 | 26.9 |

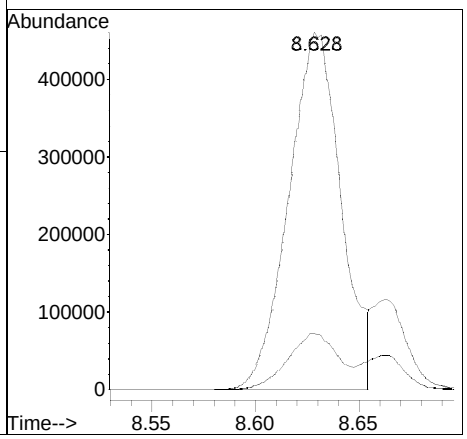


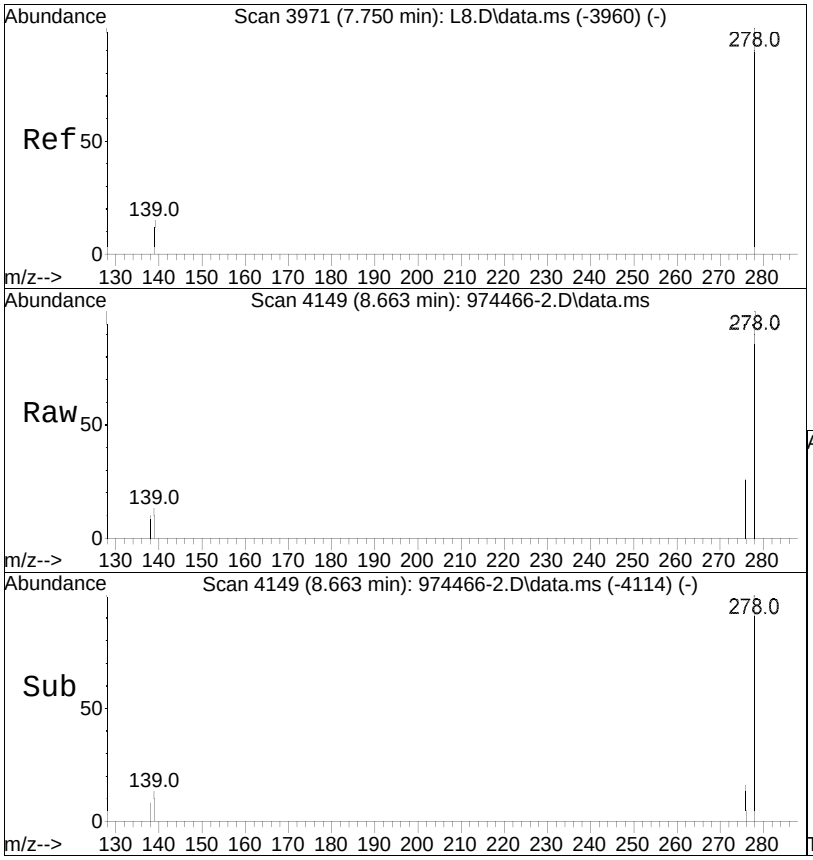



#40
Indeno[1,2,3-cd]pyrene
Concen: 1863.94 ng/ml
RT: 8.628 min Scan# 4129
Delta R.T. -0.017 min
Lab File: 974466-2.D
Acq: 21 Sep 2024 05:54 pm

Tgt Ion:276 Resp: 800905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 15.3 | 15.1 | 22.7 |

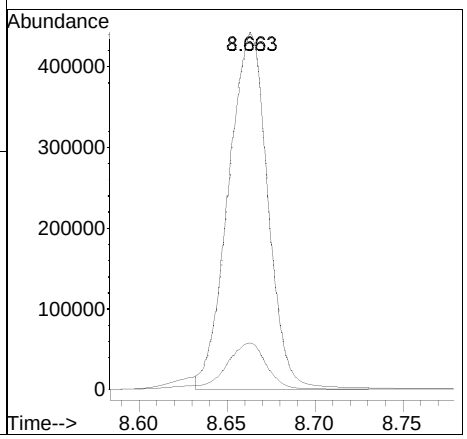


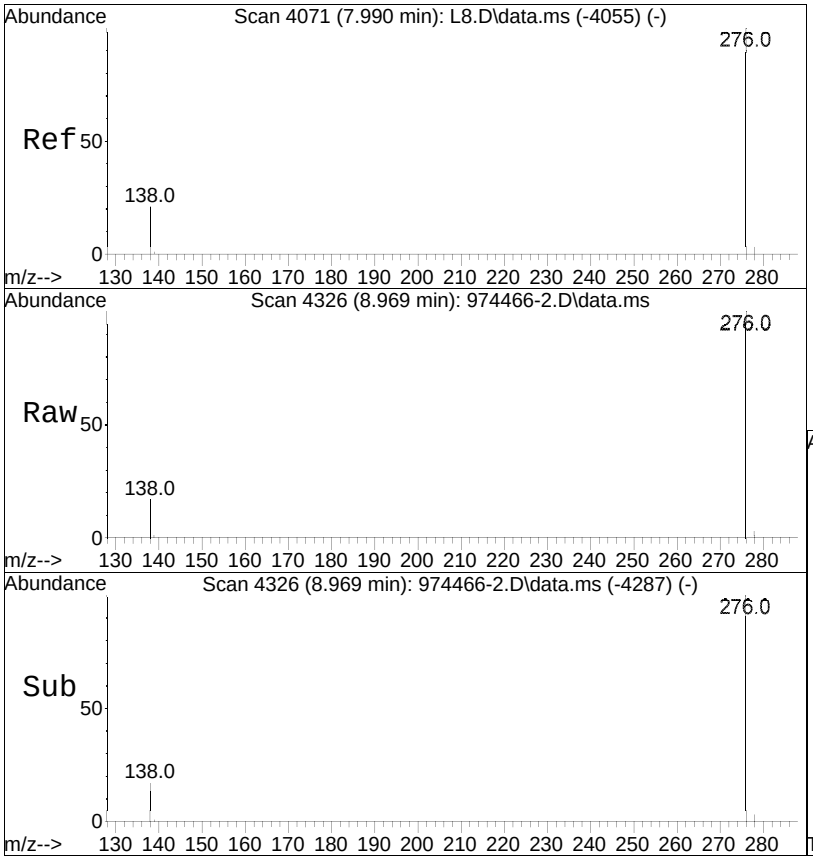



#41
Dibenzo[a,h]anthracene
Concen: 1791.01 ng/ml M6
RT:  8.663 min  Scan# 4149
Delta R.T.  -0.019 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:278 Resp:  685524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 13.7 | 13.3 | 19.9 |

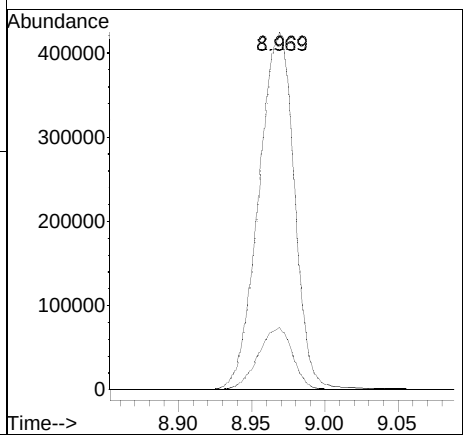





#42
Benzo[g,h,i]perylene
Concen: 1681.13 ng/ml
RT:  8.969 min  Scan# 4326
Delta R.T.  -0.012 min
Lab File:  974466-2.D
Acq: 21 Sep 2024  05:54 pm

Tgt Ion:276 Resp:  710518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 17.1 | 16.9 | 25.3 |

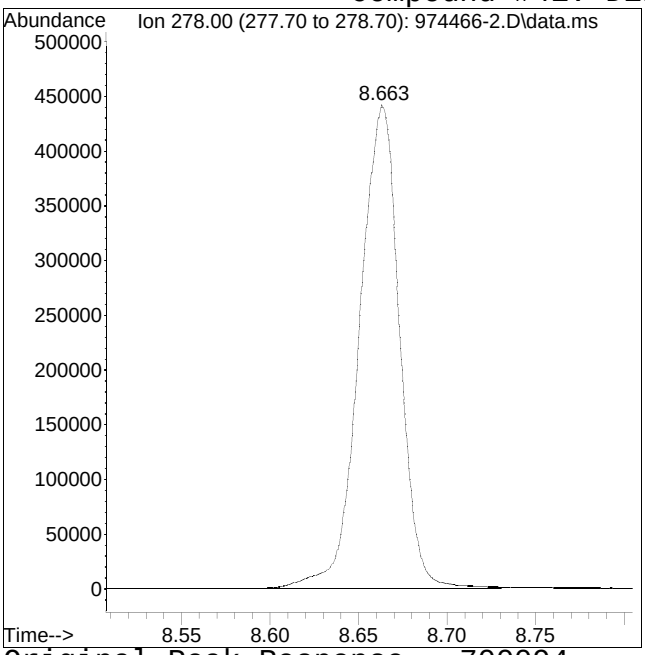


# Manual Integration Report

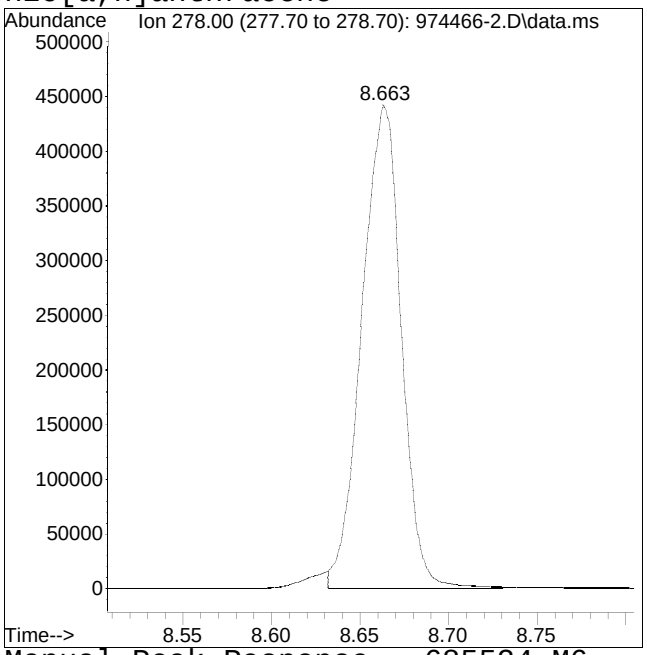
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 974466-2.D
Date Inj'd : 9/21/2024 5:54 pm
Sample : WG1974466-2,32,,RR,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 6:08 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 700094




Manual Peak Response = 685524 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-3.D
Acq On : 21 Sep 2024 06:11 pm
Operator : sv119:rp
Sample : WG1974466-3,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 21 19:13:38 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.233 | 152 | 217531 | 4000.000 | ng/ml | 0.01 |
| Standard Area 1 = 178527 | | | Recovery = 121.85% | | | |
| 8) Naphthalene-d8 | 2.883 | 136 | 798086M3 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 703917 | | | Recovery = 113.38% | | | |
| 17) Acenaphthene-d10 | 3.846 | 164 | 485242 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 468873 | | | Recovery = 103.49% | | | |
| 22) Phenanthrene-d10 | 4.679 | 188 | 1031210 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1018896 | | | Recovery = 101.21% | | | |
| 31) Chrysene-d12 | 6.249 | 240 | 1085506 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1106666 | | | Recovery = 98.09% | | | |
| 36) Perylene-d12 | 7.438 | 264 | 1138655 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 1122604 | | | Recovery = 101.43% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.668 | 112 | 79020 | 1029.778 | ng/ml | 0.02 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 51.49% | | | |
| 3) Phenol-d6 | 2.055 | 99 | 77619 | 801.998 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 40.10% | | | |
| 7) Nitrobenzene-d5 | 2.508 | 82 | 58307 | 686.818 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 68.68% | | | |
| 13) 2-Fluorobiphenyl | 3.469 | 172 | 174042M3 | 843.531 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 84.35% | | | |
| 21) 2,4,6-Tribromophenol | 4.287 | 330 | 70895 | 2092.502 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 104.63% | | | |
| 30) 4-Terphenyl-d14 | 5.599 | 244 | 243966 | 855.804 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 30 - 130 | | Recovery = 42.79% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.099 | 93 | 118393 | 1522.632 | ng/ml | 85 |
| 6) Hexachloroethane | 2.485 | 117 | 49116 | 1360.907 | ng/ml | 89 |
| 9) Naphthalene | 2.895 | 128 | 371993M4 | 1688.276 | ng/ml | |
| 10) Hexachlorobutadiene | 2.964 | 225 | 78849 | 1594.260 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.266 | 142 | 279021M3 | 1685.002 | ng/ml | |
| 14) 2-Chloronaphthalene | 3.535 | 162 | 312324 | 1750.638 | ng/ml | 100 |
| 16) Acenaphthylene | 3.765 | 152 | 489022 | 1715.687 | ng/ml | 100 |
| 18) Acenaphthene | 3.863 | 153 | 317686 | 1875.606 | ng/ml | 98 |
| 20) Fluorene | 4.151 | 166 | 402468 | 1802.797 | ng/ml | 98 |

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-3.D
Acq On : 21 Sep 2024 06:11 pm
Operator : sv119:rp
Sample : WG1974466-3,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 21 19:13:38 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 24) Hexachlorobenzene | 4.467 | 284 | 154936 | 2188.177 | ng/ml | 90 |
| 25) Pentachlorophenol | 4.578 | 266 | 115905 | 2448.908 | ng/ml | 99 |
| 26) Phenanthrene | 4.690 | 178 | 587403 | 1959.385 | ng/ml | 99 |
| 27) Anthracene | 4.720 | 178 | 616263 | 1989.600 | ng/ml | 98 |
| 28) Fluoranthene | 5.371 | 202 | 755143 | 1834.458 | ng/ml | 95 |
| 29) Pyrene | 5.504 | 202 | 774027 | 1814.557 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.241 | 228 | 787335 | 1924.383 | ng/ml | 99 |
| 34) Chrysene | 6.265 | 228 | 740355 | 1832.541 | ng/ml | 98 |
| 37) Benzo[b]fluoranthene | 7.070 | 252 | 819304 | 1737.267 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 7.095 | 252 | 733635 | 1683.848 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.373 | 252 | 728082 | 1743.126 | ng/ml | 99 |
| 40) Indeno[1,2,3-cd]pyrene | 8.632 | 276 | 821438 | 1945.448 | ng/ml | 93 |
| 41) Dibenzo[a,h]anthracene | 8.667 | 278 | 721830M6 | 1919.129 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 8.969 | 276 | 750365 | 1806.727 | ng/ml | 92 |

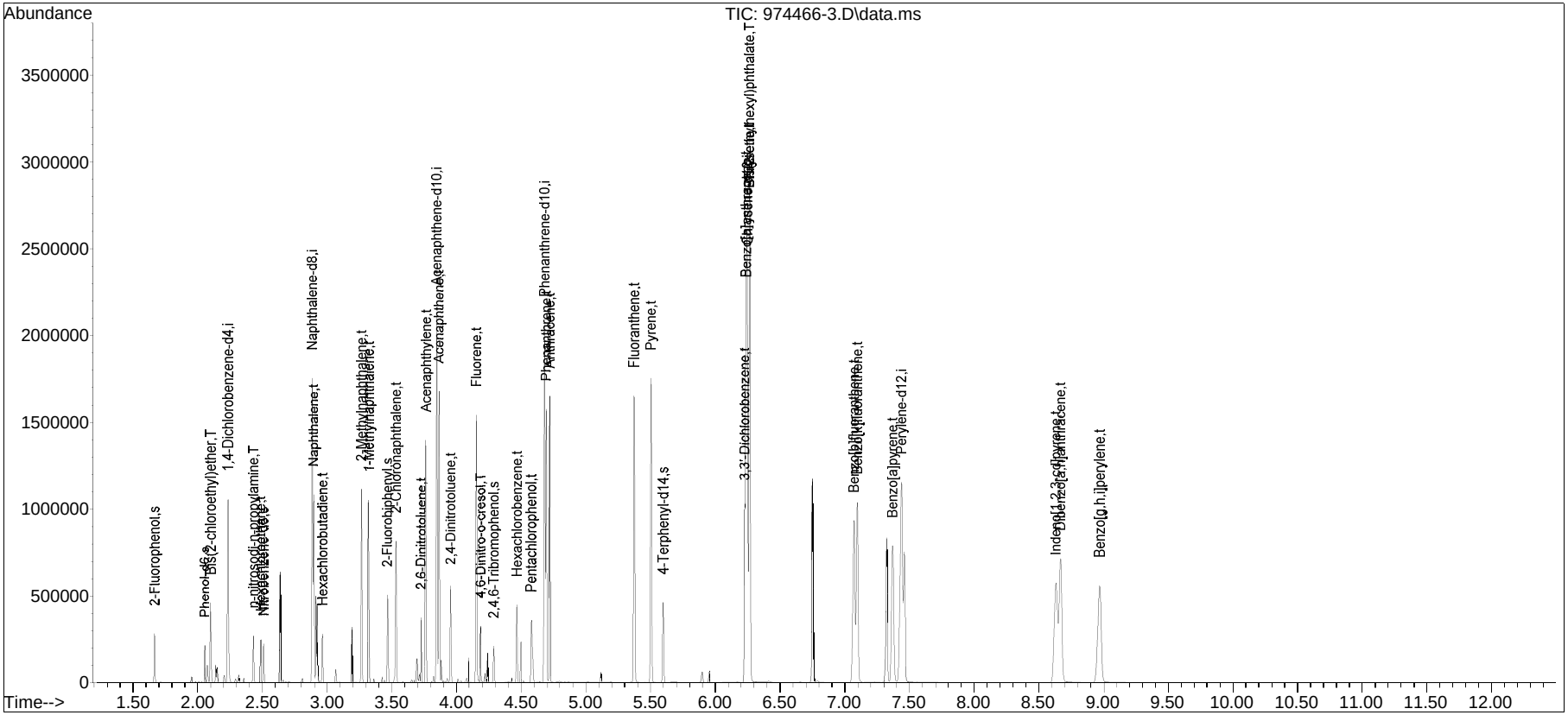
(#) = qualifier out of range (m) = manual integration (+) = signals summed

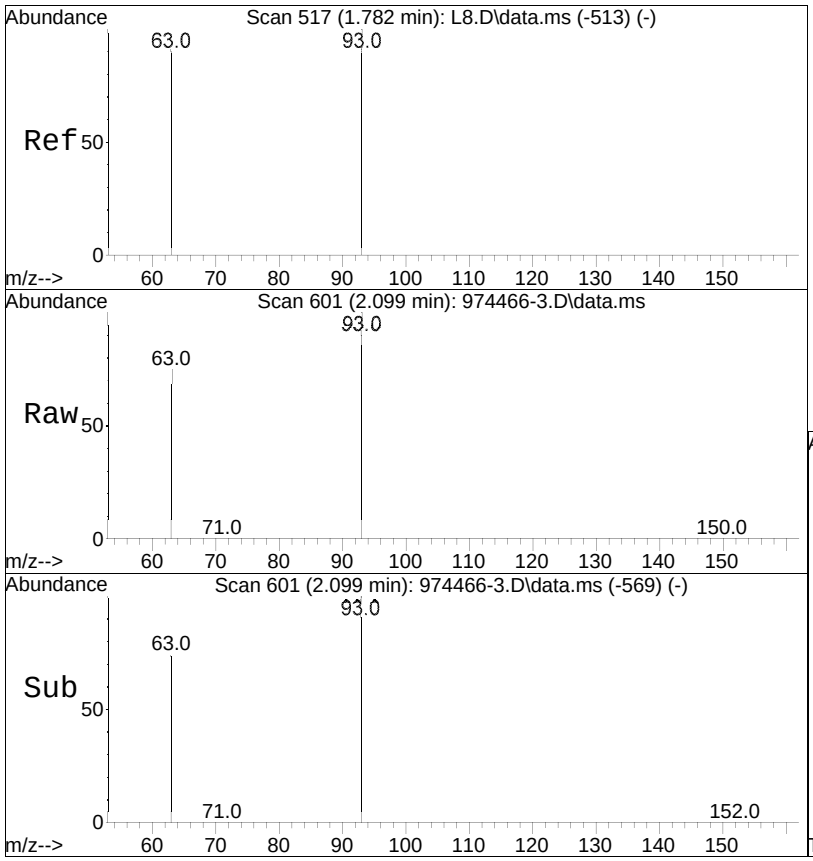
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\240921RVT\
Data File : 974466-3.D
Acq On : 21 Sep 2024 06:11 pm
Operator : sv119:rp
Sample : WG1974466-3,32,,RR,rp
Misc : WG1974651,WG1974466,ical21236
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 21 19:13:38 2024
Quant Method : I:\8270sim\sv119\240921RVT\SIM-RVT_240621_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 15:02:17 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

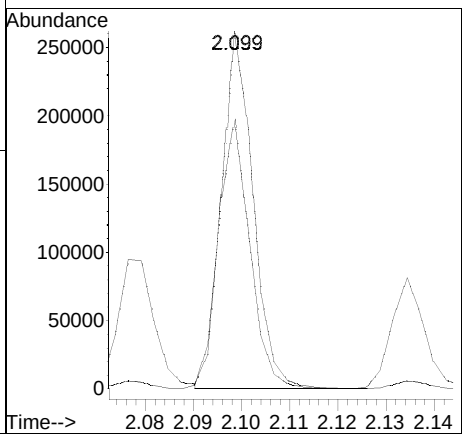


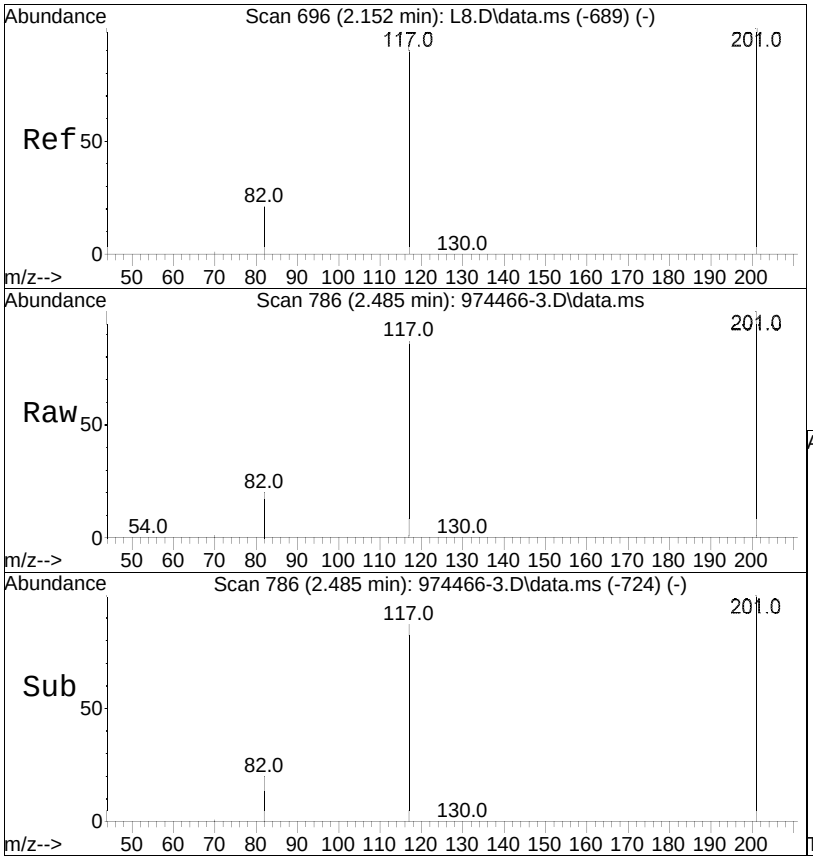



#4
Bis(2-chloroethyl)ether
Concen: 1522.63 ng/ml
RT: 2.099 min Scan# 601
Delta R.T. 0.008 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion: 93 Resp: 118393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 75.5 | 71.7 | 107.5 |

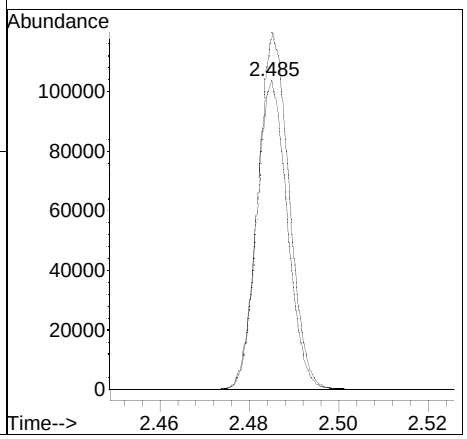


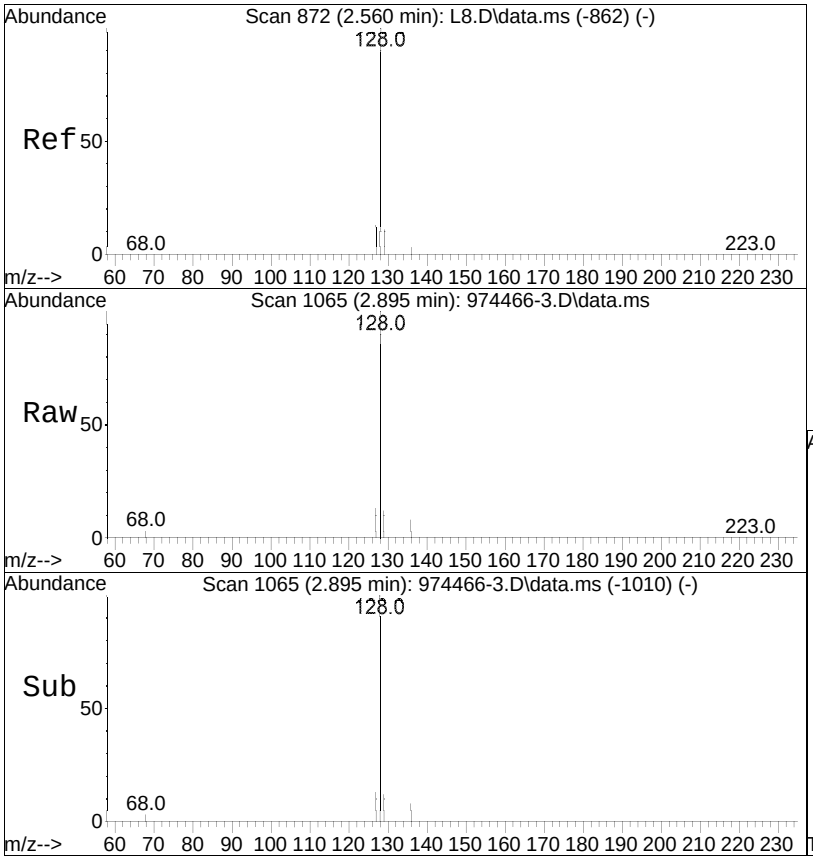



#6
Hexachloroethane
Concen: 1360.91 ng/ml
RT: 2.485 min Scan# 786
Delta R.T. 0.009 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:117 Resp: 49116

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 115.4 | 83.0 | 124.6 |

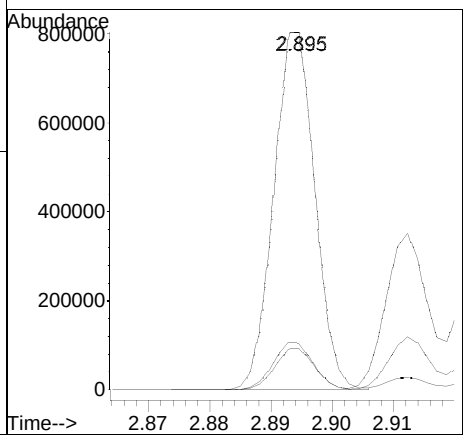


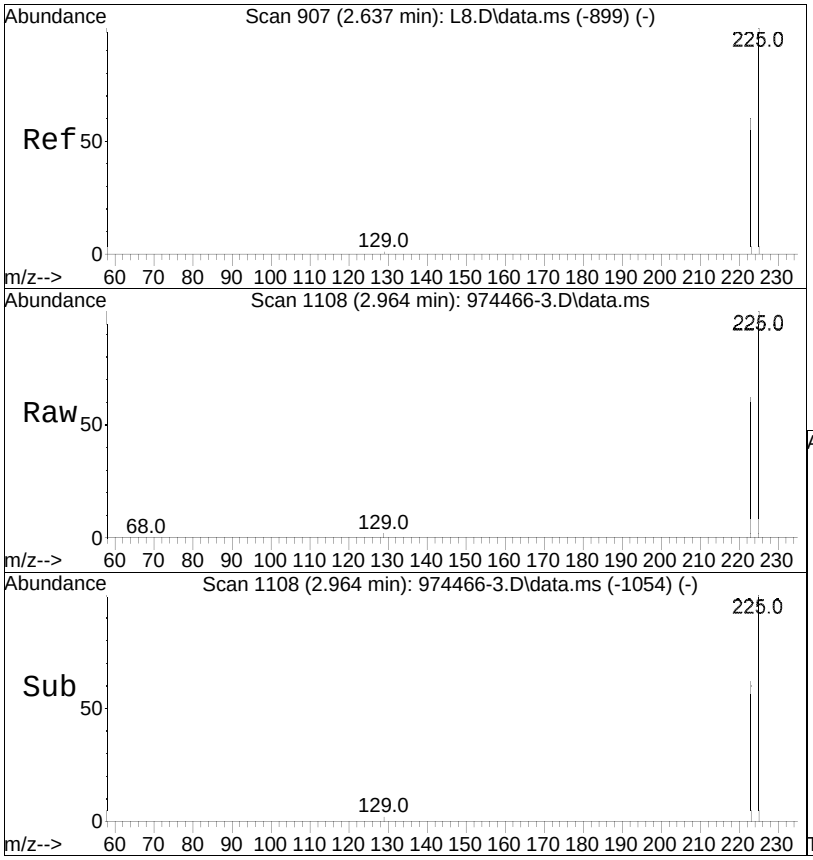



#9
Naphthalene
Concen: 1688.28 ng/ml M4
RT:  2.895 min  Scan# 1065
Delta R.T.  0.008 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:128 Resp:  371993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 10.7 | 9.0 | 13.4 |
| 127 | 11.8 | 10.6 | 15.8 |

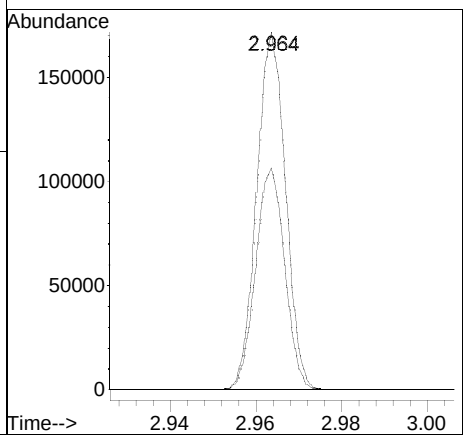


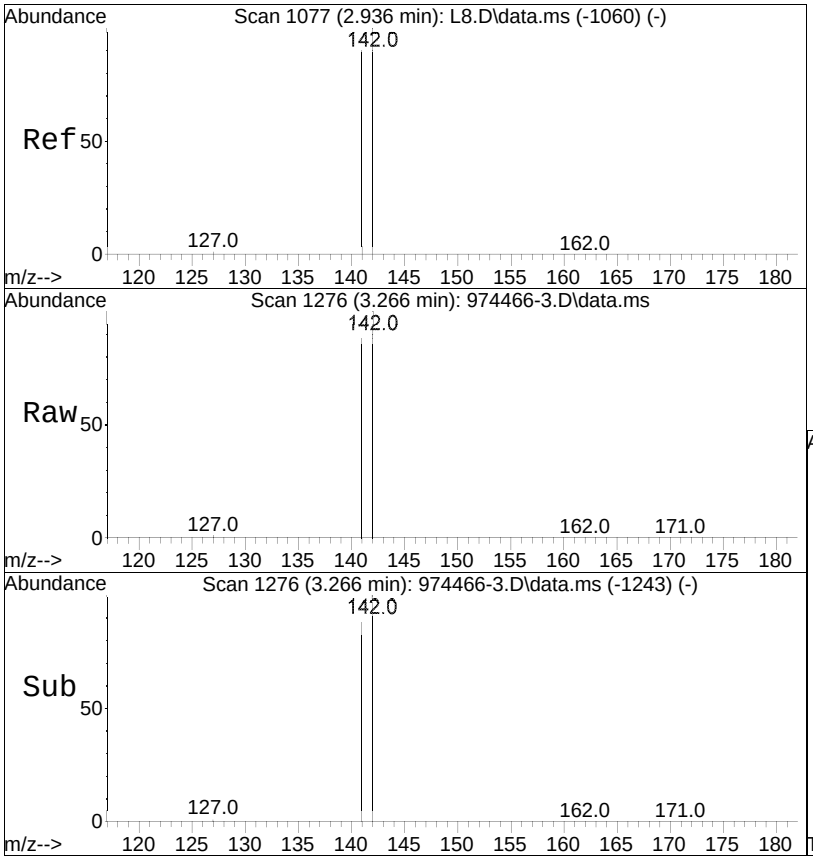



#10
Hexachlorobutadiene
Concen: 1594.26 ng/ml
RT:  2.964 min  Scan# 1108
Delta R.T.  0.006 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:225 Resp:  78849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.7 | 50.2 | 75.2 |

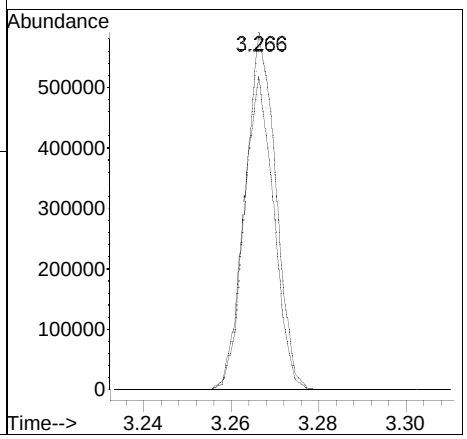


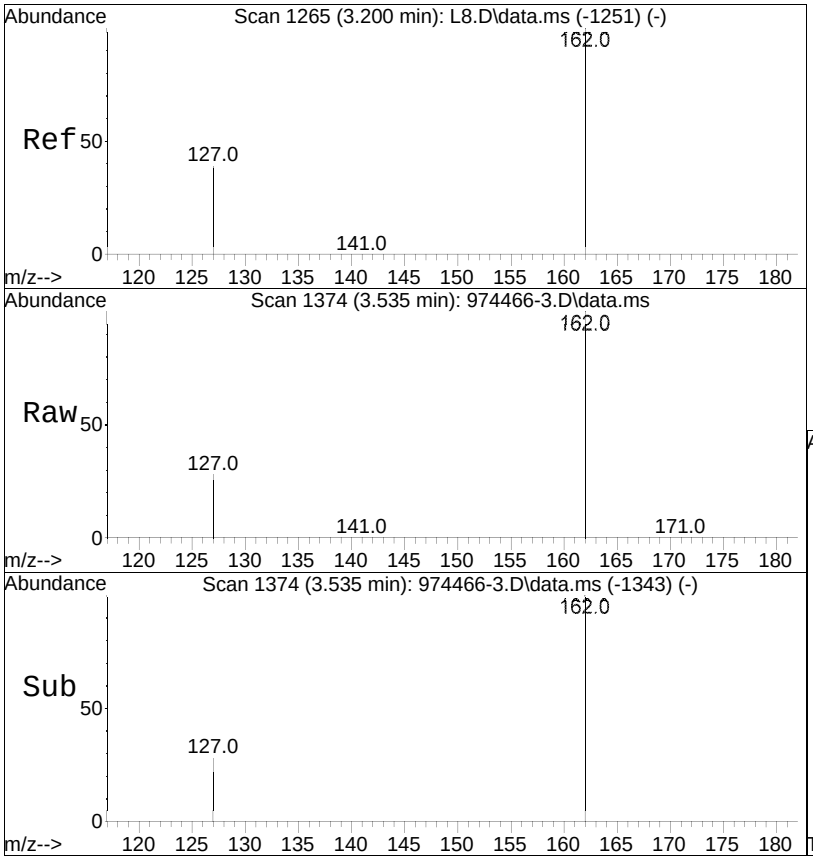



#11
2-Methylnaphthalene
Concen: 1685.00 ng/ml M3
RT:  3.266 min  Scan# 1276
Delta R.T.  0.005 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:142 Resp:  279021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 87.9 | 72.3 | 108.5 |

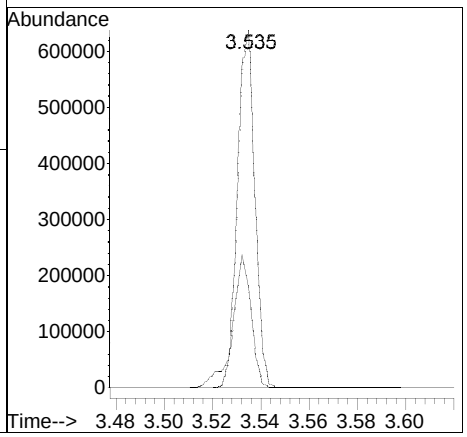


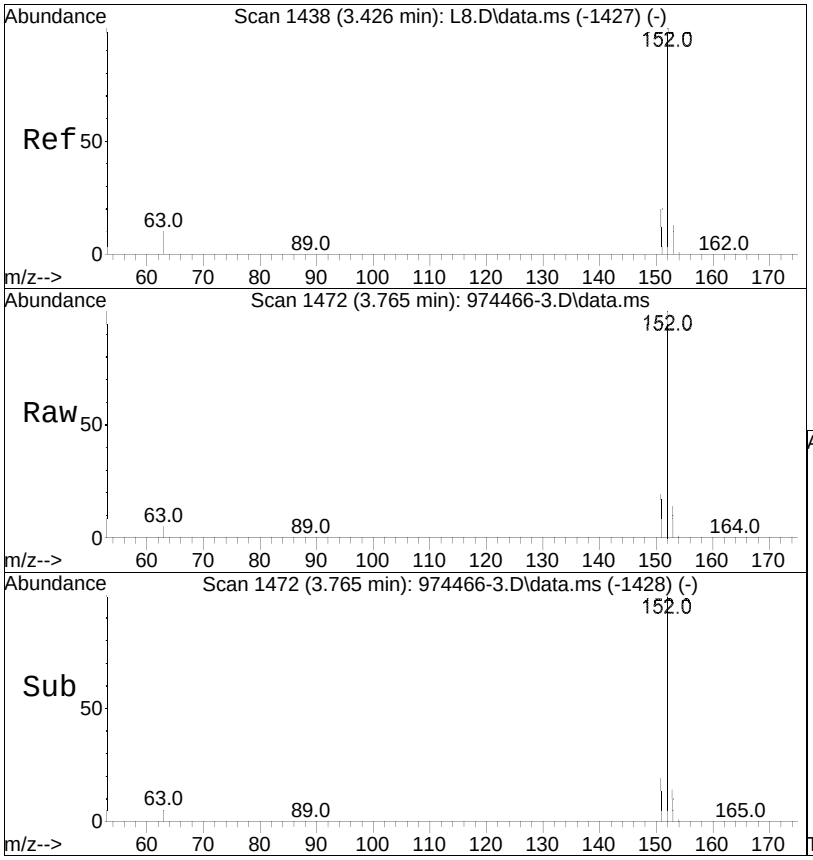



#14
2-Chloronaphthalene
Concen: 1750.64 ng/ml
RT:  3.535 min  Scan# 1374
Delta R.T.  0.005 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:162 Resp:  312324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 39.9 | 32.0 | 48.0 |

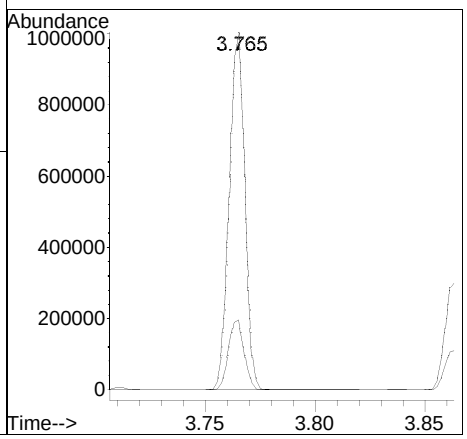


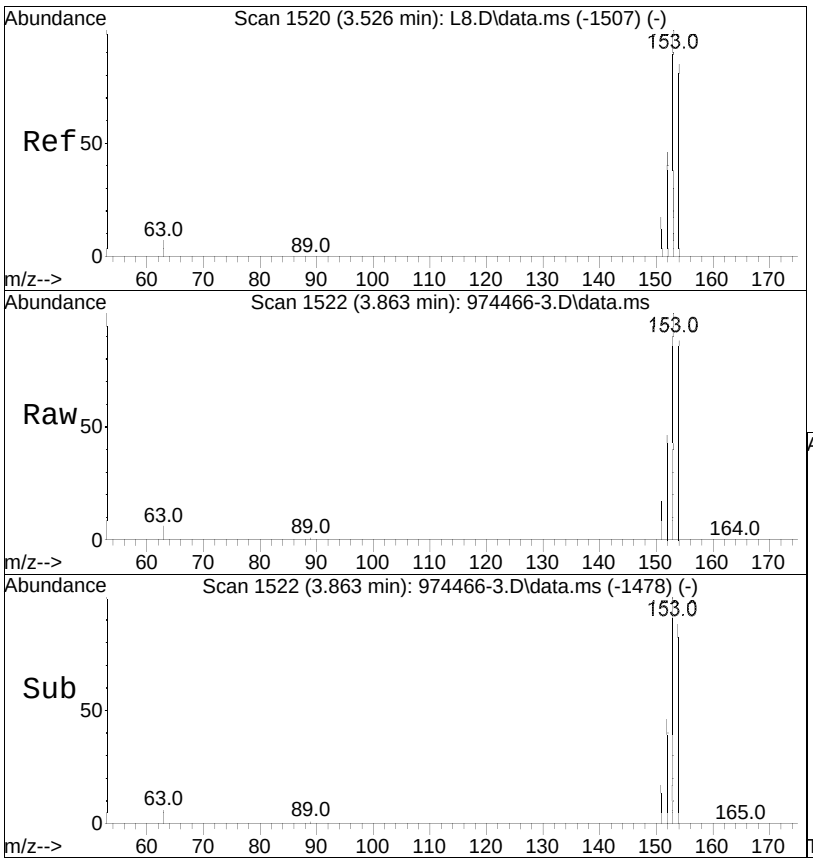



#16
Acenaphthylene
Concen: 1715.69 ng/ml
RT: 3.765 min Scan# 1472
Delta R.T. 0.006 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:152 Resp: 489022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 19.8 | 16.0 | 24.0 |

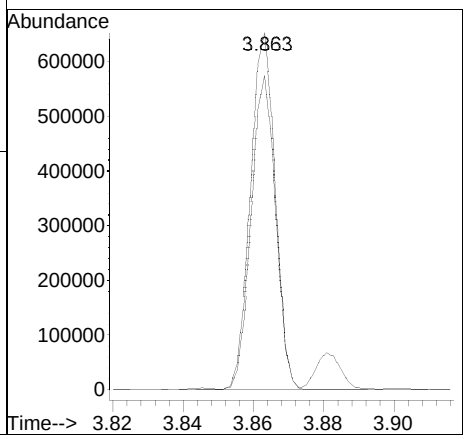


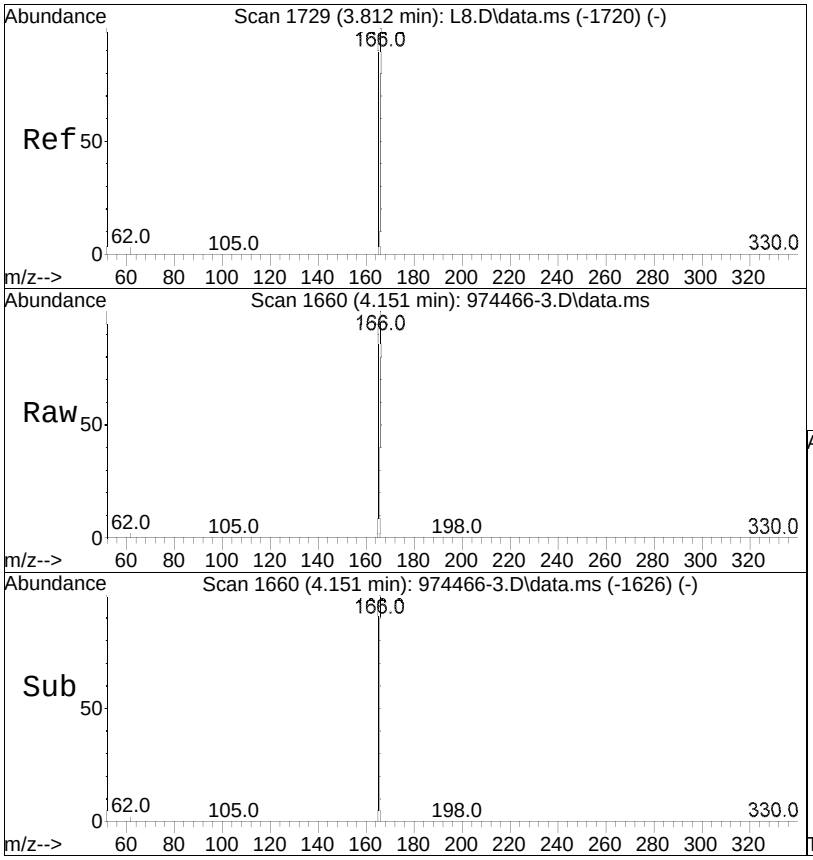



#18
Acenaphthene
Concen: 1875.61 ng/ml
RT: 3.863 min Scan# 1522
Delta R.T. 0.006 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:153 Resp: 317686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 86.6 | 68.1 | 102.1 |

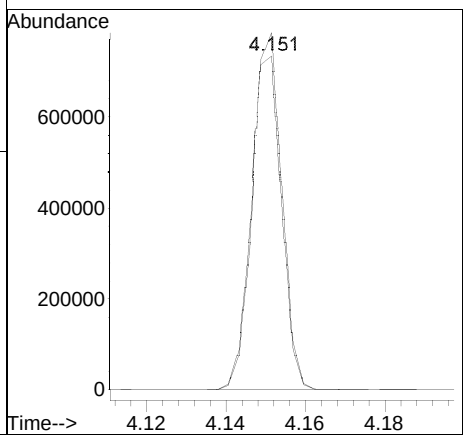


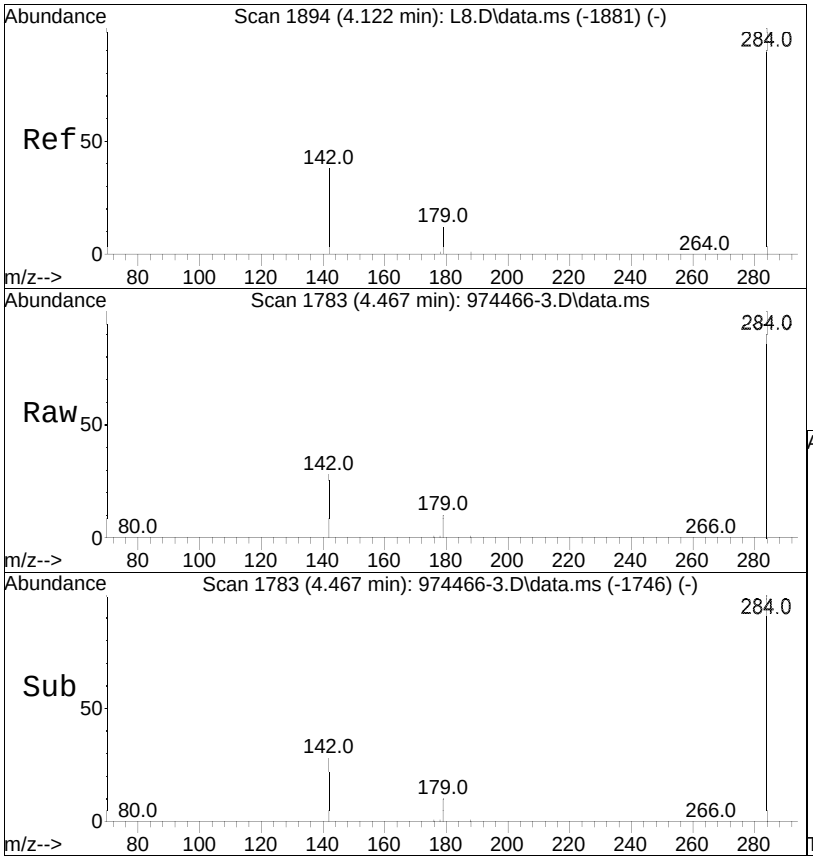



#20
Fluorene
Concen: 1802.80 ng/ml
RT:  4.151 min  Scan# 1660
Delta R.T.  0.005 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:166 Resp:  402468

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 96.9 | 79.3 | 118.9 |

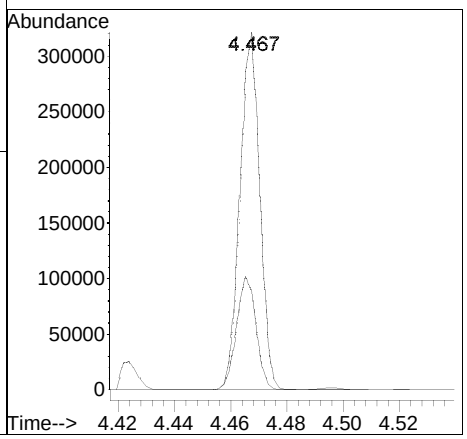


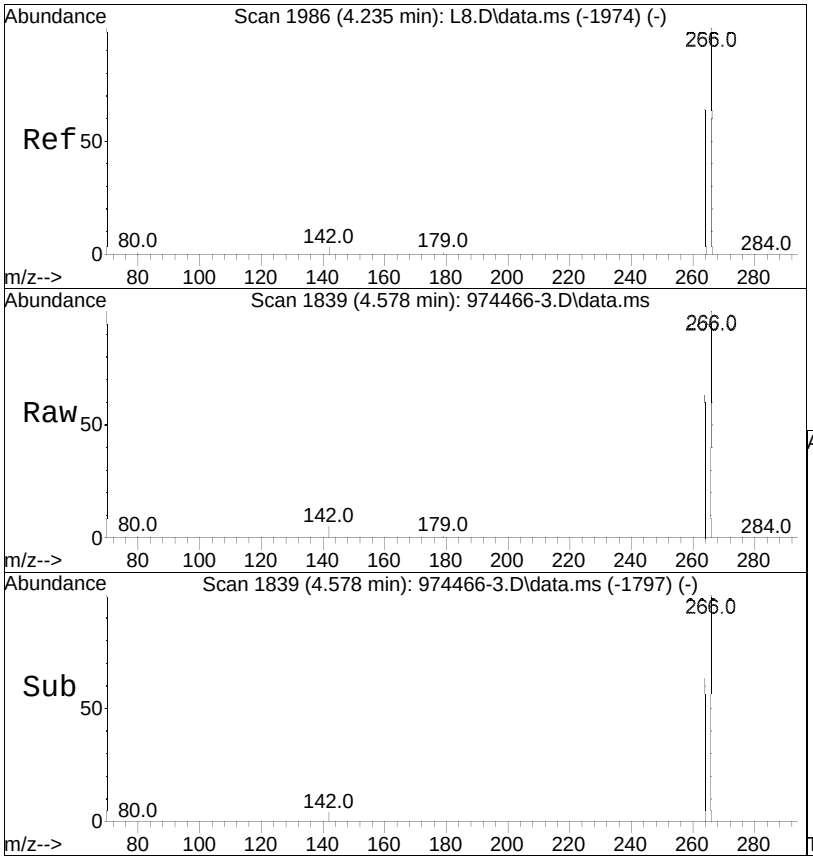



#24
Hexachlorobenzene
Concen: 2188.18 ng/ml
RT: 4.467 min Scan# 1783
Delta R.T. 0.005 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:284 Resp: 154936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 31.5 | 30.0 | 45.0 |

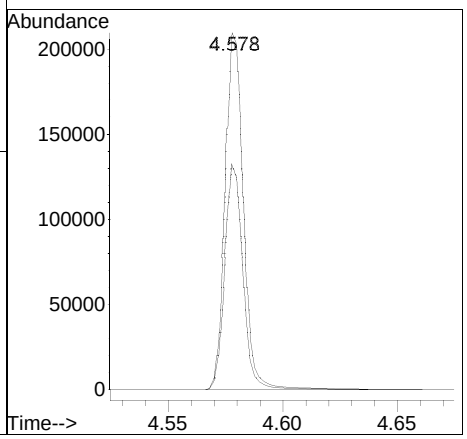


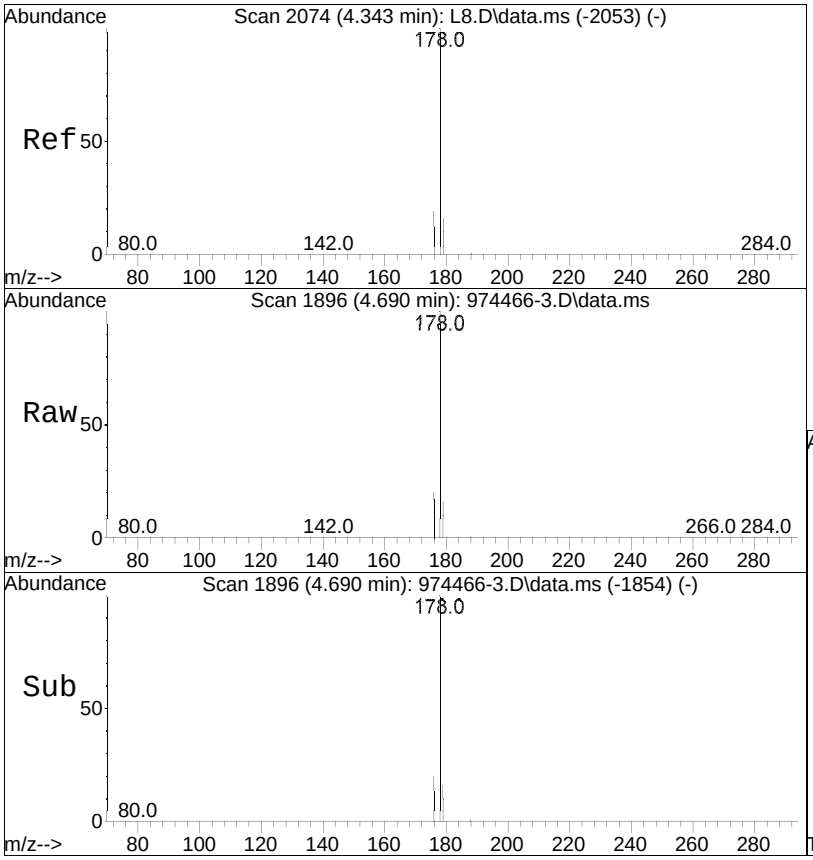



#25
Pentachlorophenol
Concen: 2448.91 ng/ml
RT:  4.578 min  Scan# 1839
Delta R.T.  0.003 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:266 Resp:  115905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 62.9 | 49.9 | 74.9 |

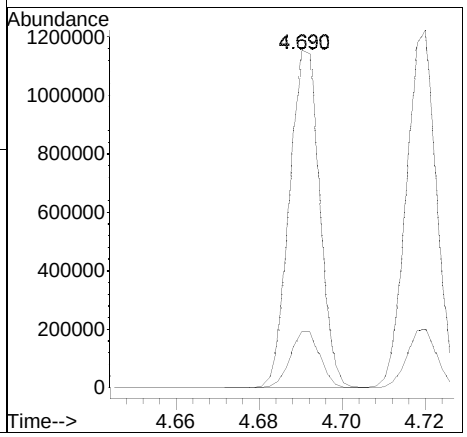


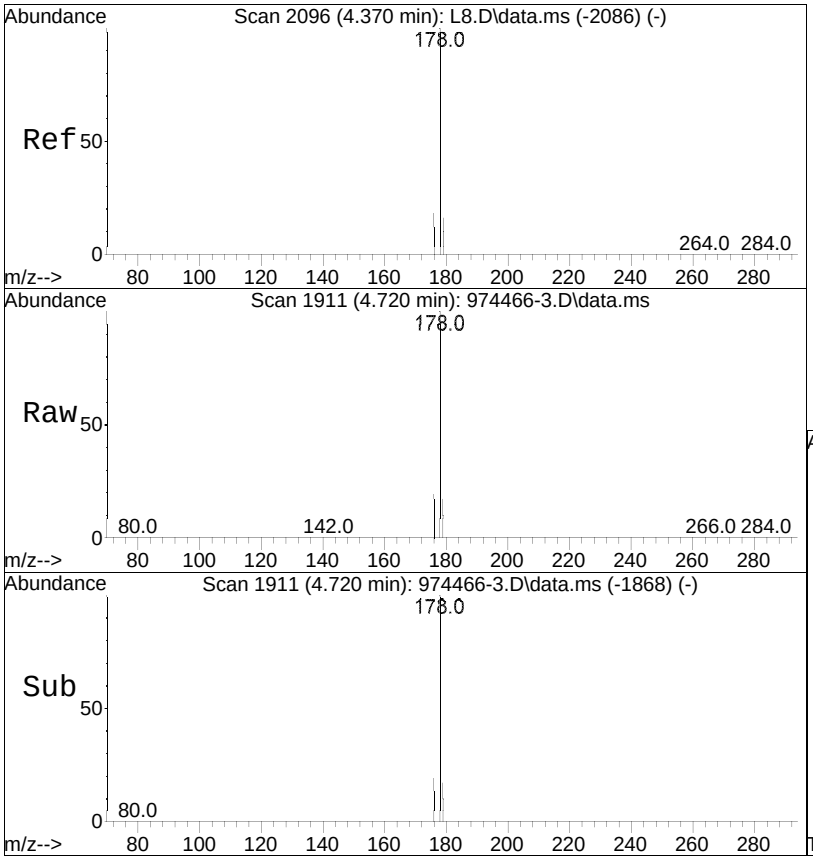



#26
Phenanthrene
Concen: 1959.38 ng/ml
RT:  4.690 min  Scan# 1896
Delta R.T.  0.003 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:178 Resp:  587403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.3 | 12.6 | 18.8 |

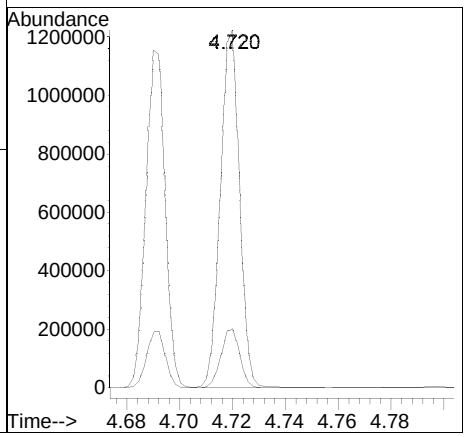


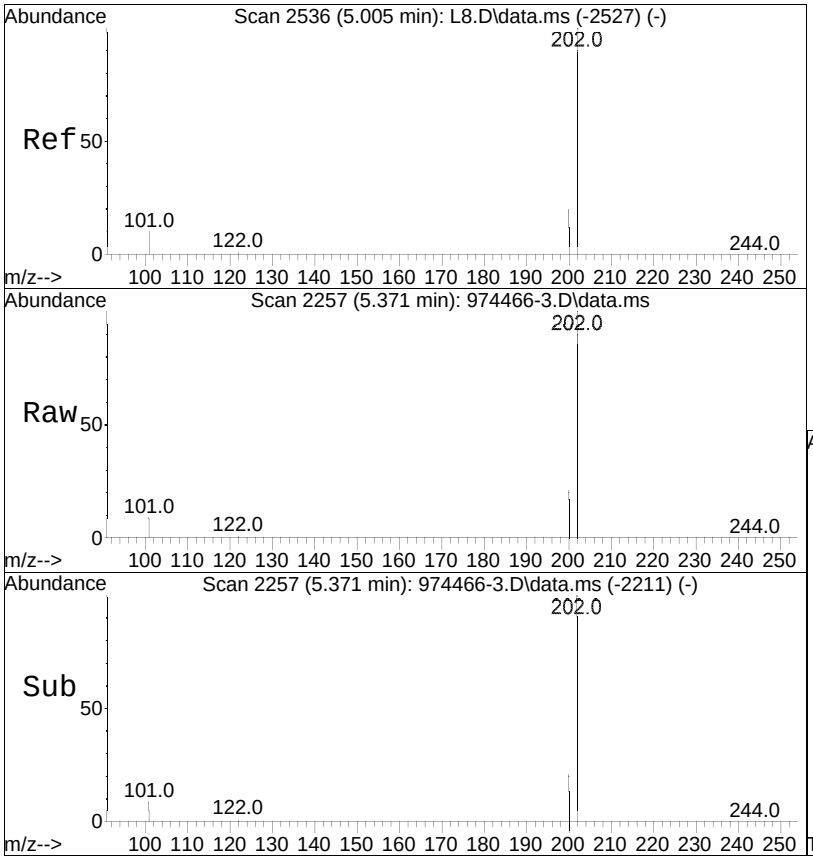



#27
Anthracene
Concen: 1989.60 ng/ml
RT:  4.720 min  Scan# 1911
Delta R.T.  0.005 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:178 Resp:  616263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 16.2 | 12.4 | 18.6 |

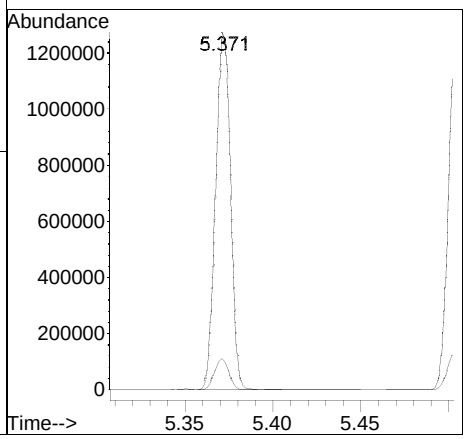


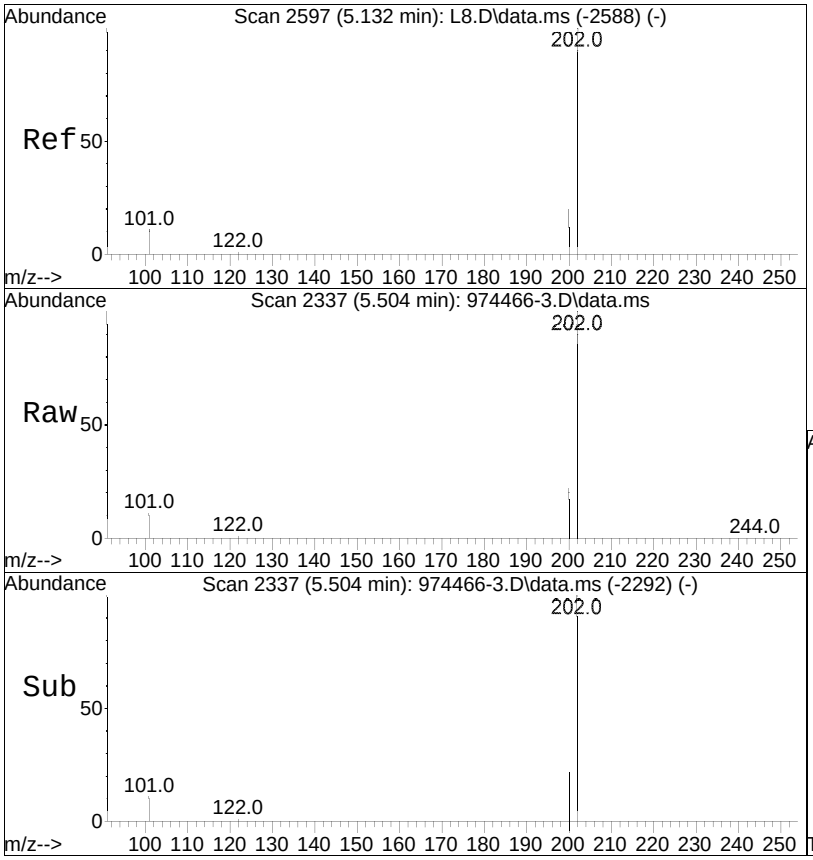



#28
Fluoranthene
Concen: 1834.46 ng/ml
RT:  5.371 min  Scan# 2257
Delta R.T.  -0.004 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:202 Resp:  755143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 8.4 | 8.1 | 12.1 |

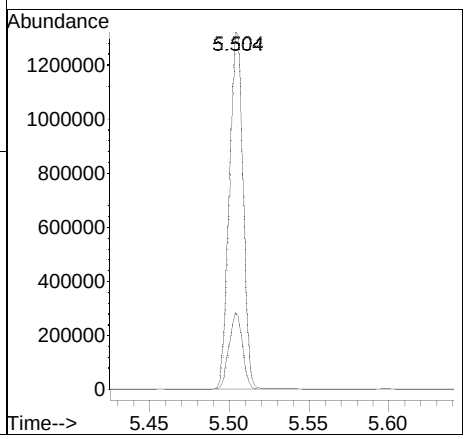


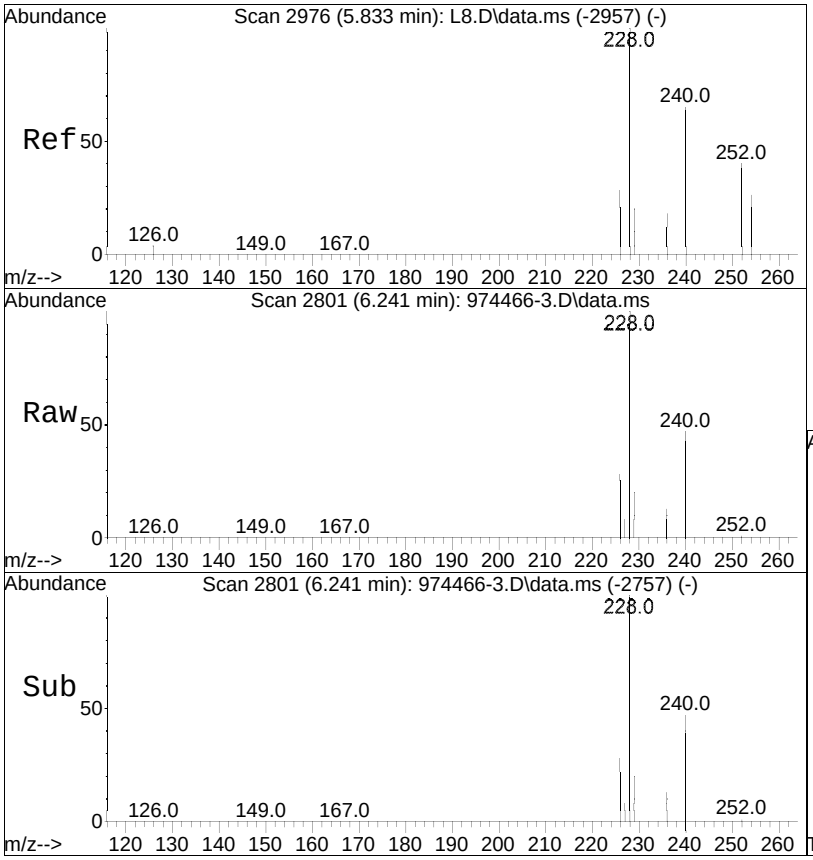



#29
Pyrene
Concen: 1814.56 ng/ml
RT:  5.504 min  Scan# 2337
Delta R.T.  -0.006 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:202 Resp:  774027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.2 | 16.5 | 24.7 |

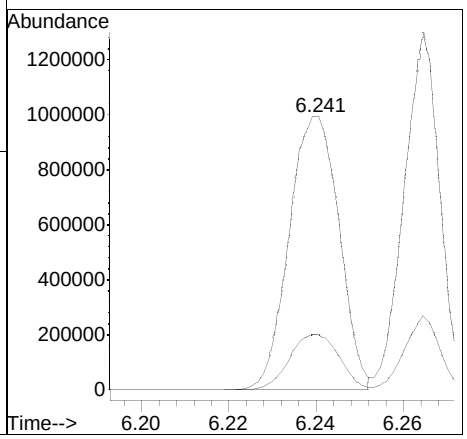


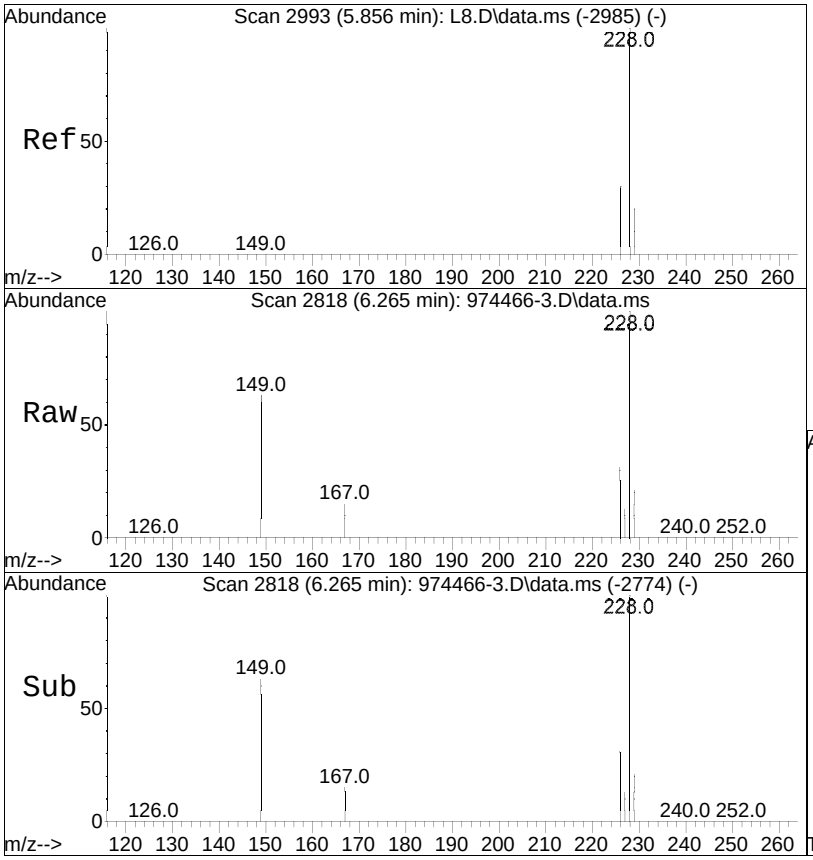



#32
Benzo[a]anthracene
Concen: 1924.38 ng/ml
RT:  6.241 min  Scan# 2801
Delta R.T.  -0.018 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:228 Resp:  787335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 20.2 | 15.8 | 23.8 |

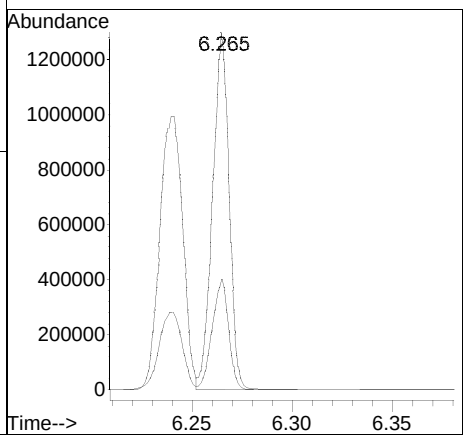


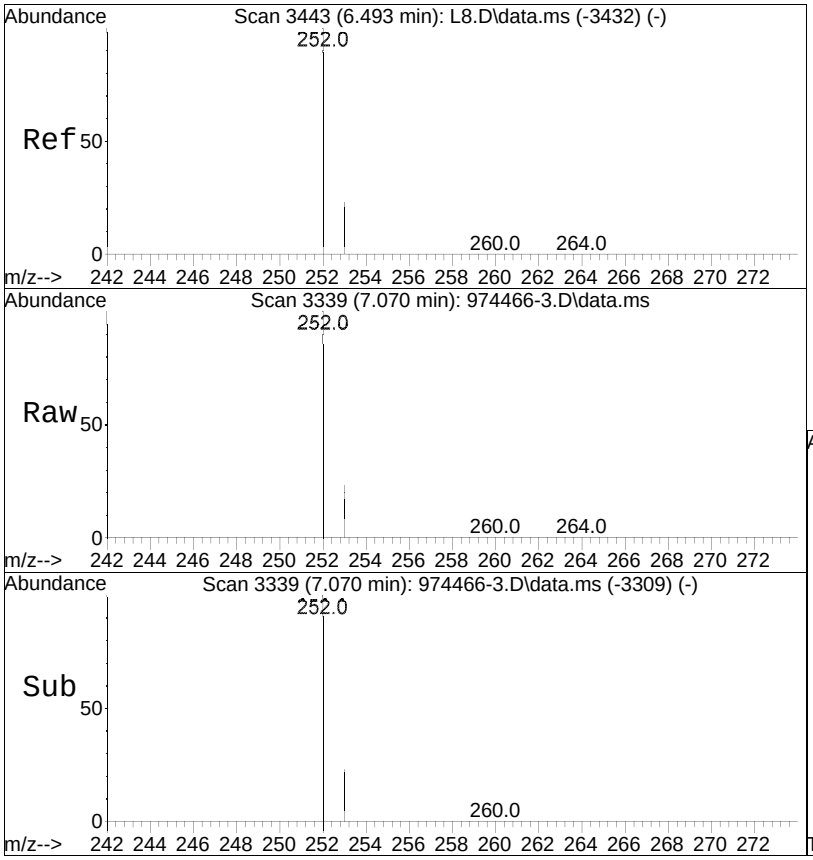



#34
Chrysene
Concen: 1832.54 ng/ml
RT:  6.265 min  Scan# 2818
Delta R.T.  -0.018 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:228 Resp:  740355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 30.9 | 23.9 | 35.9 |

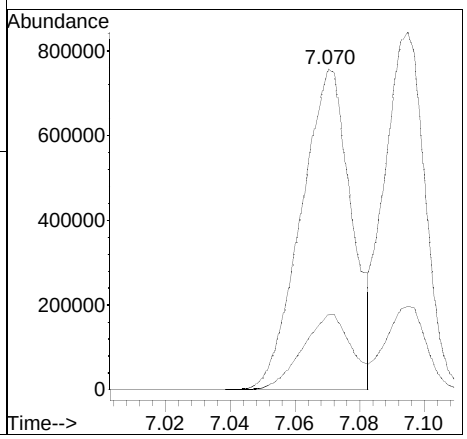


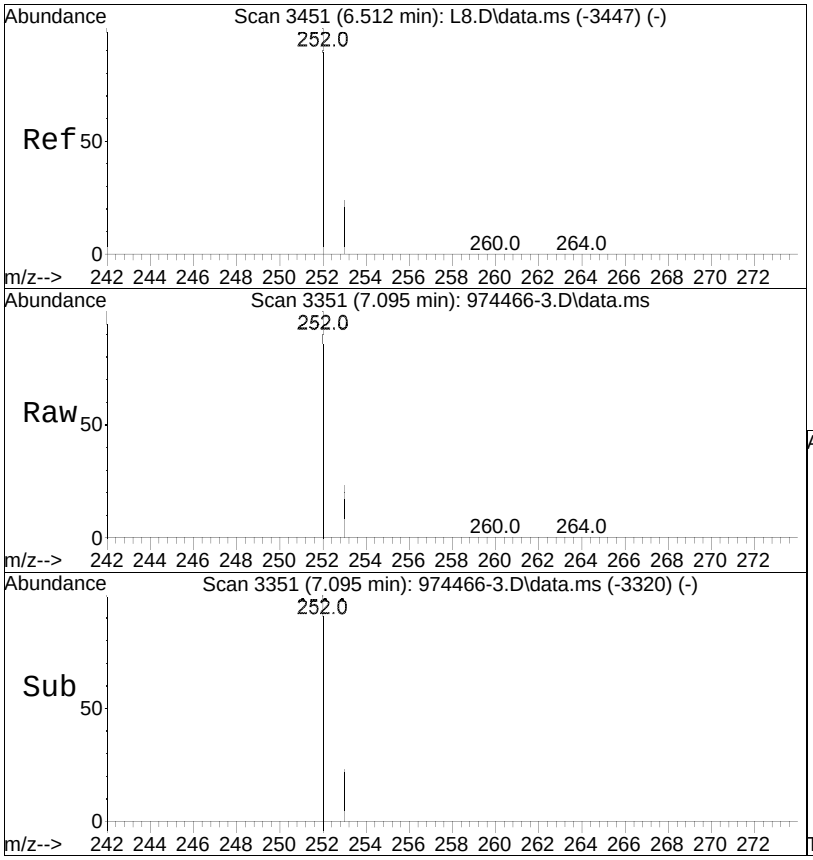



#37
Benzo[b]fluoranthene
Concen: 1737.27 ng/ml
RT:  7.070 min  Scan# 3339
Delta R.T.  -0.018 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:252 Resp:  819304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.0 | 18.0 | 27.0 |

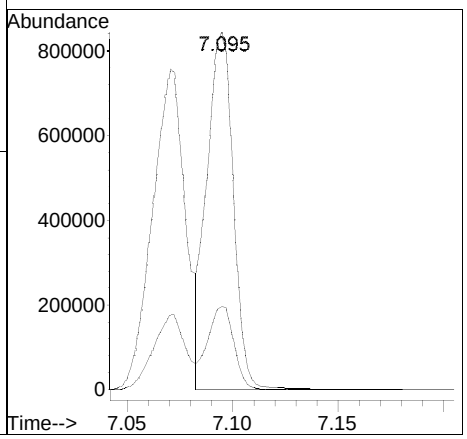


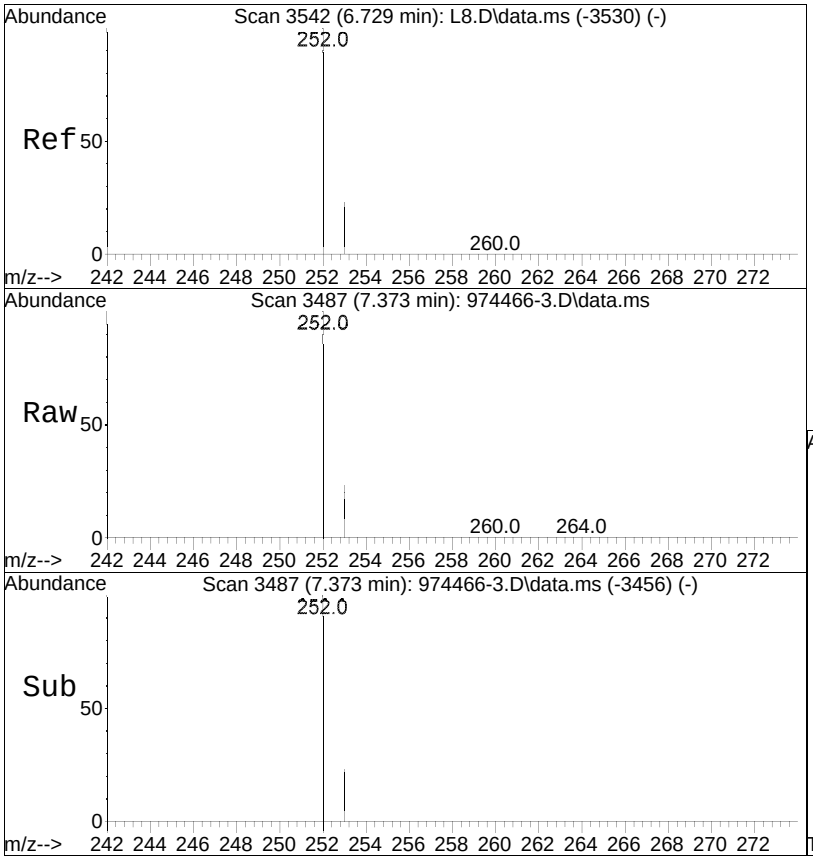



#38
Benzo[k]fluoranthene
Concen: 1683.85 ng/ml
RT:  7.095 min  Scan# 3351
Delta R.T.  -0.016 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:252 Resp:  733635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 23.4 | 18.3 | 27.5 |

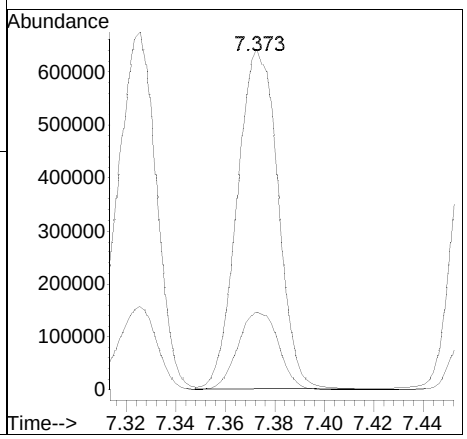


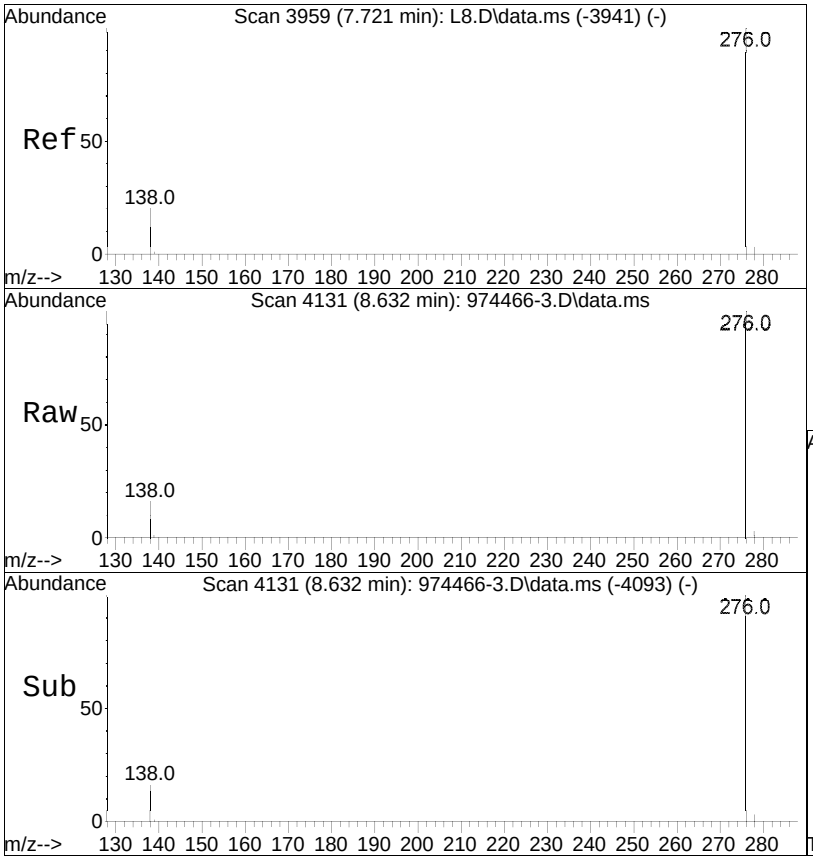



#39
Benzo[a]pyrene
Concen: 1743.13 ng/ml
RT:  7.373 min  Scan# 3487
Delta R.T.  -0.016 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:252 Resp:  728082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.8 | 17.9 | 26.9 |

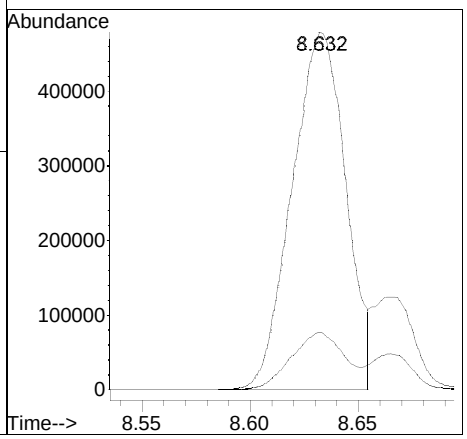


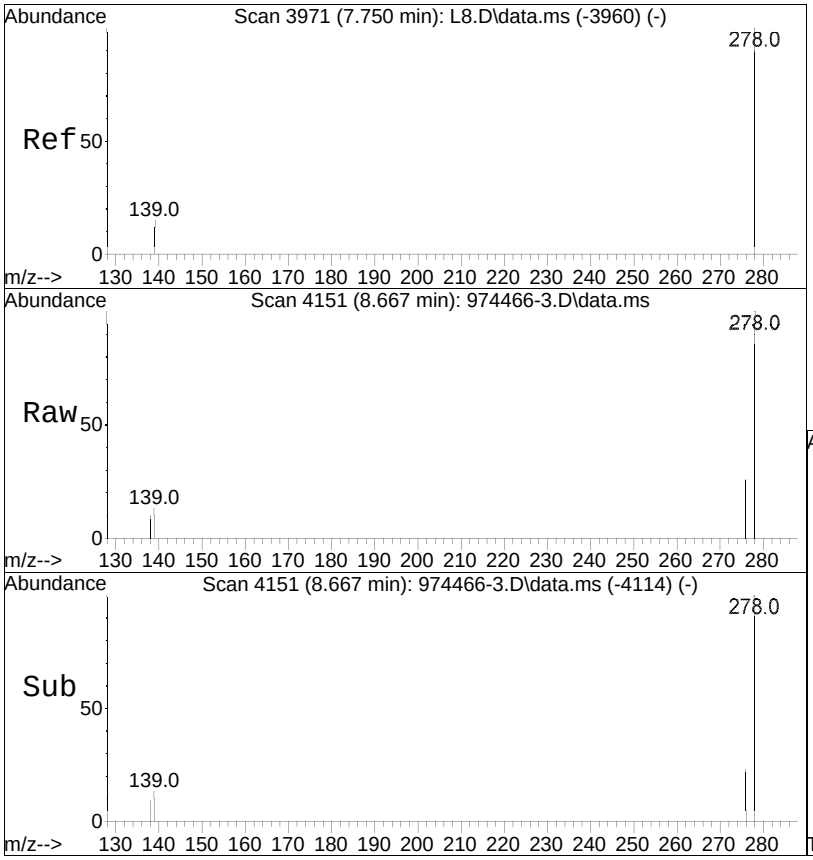



#40
Indeno[1,2,3-cd]pyrene
Concen: 1945.45 ng/ml
RT: 8.632 min Scan# 4131
Delta R.T. -0.014 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:276 Resp: 821438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 15.8 | 15.1 | 22.7 |

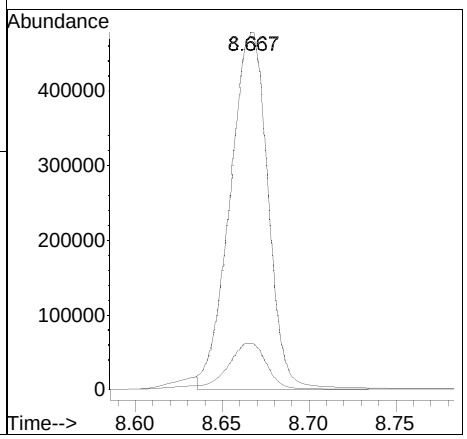


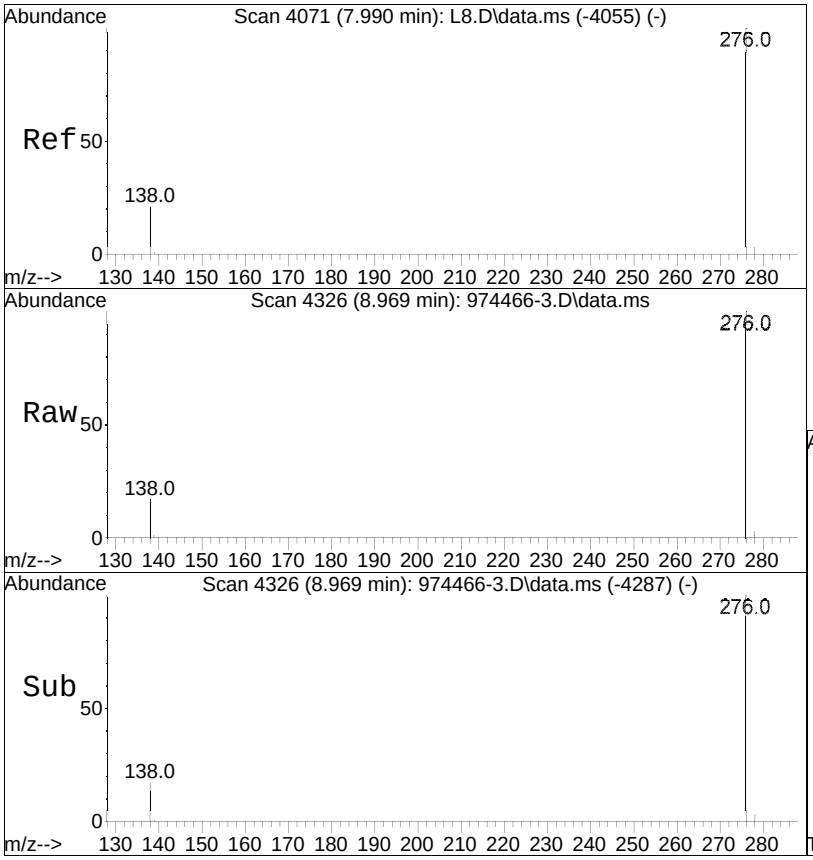



#41
Dibenzo[a,h]anthracene
Concen: 1919.13 ng/ml M6
RT: 8.667 min Scan# 4151
Delta R.T. -0.015 min
Lab File: 974466-3.D
Acq: 21 Sep 2024 06:11 pm

Tgt Ion:278 Resp: 721830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 13.8 | 13.3 | 19.9 |

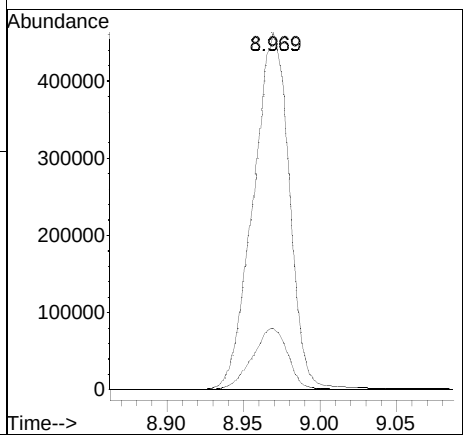





#42
Benzo[g,h,i]perylene
Concen: 1806.73 ng/ml
RT:  8.969 min  Scan# 4326
Delta R.T.  -0.012 min
Lab File:  974466-3.D
Acq: 21 Sep 2024  06:11 pm

Tgt Ion:276 Resp:  750365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 17.1 | 16.9 | 25.3 |

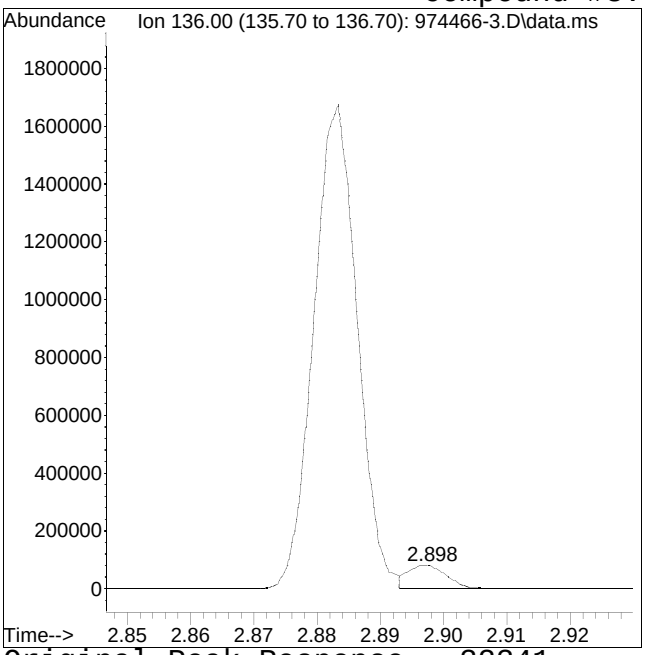


# Manual Integration Report

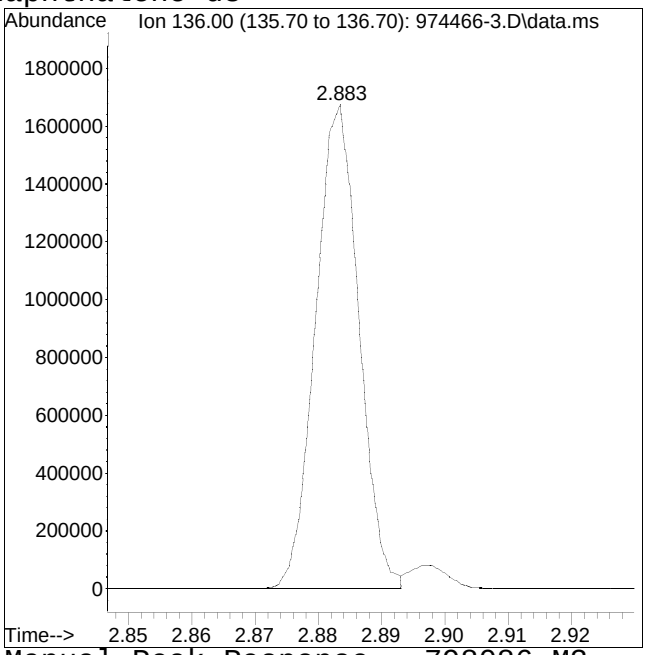
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 974466-3.D
Date Inj'd : 9/21/2024 6:11 pm
Sample : WG1974466-3,32,,RR,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 6:25 pm

## Compound #8: Naphthalene-d8




Original Peak Response = 32341




Manual Peak Response = 798086 M3

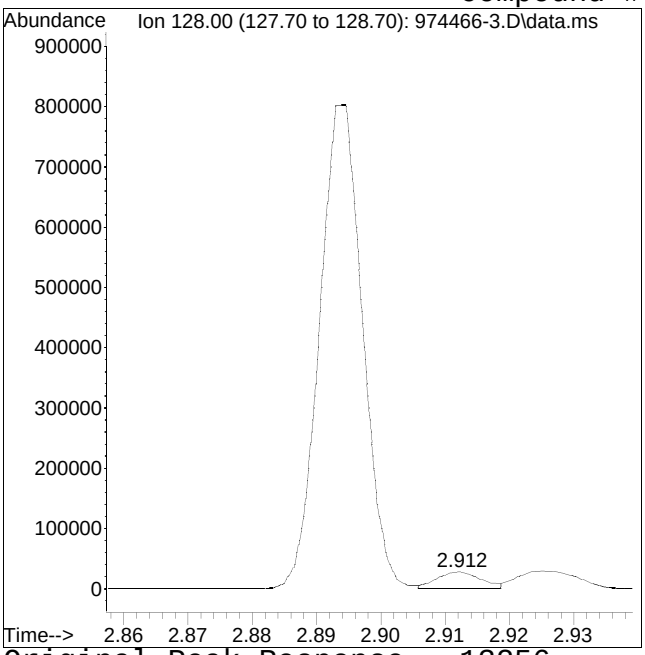
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

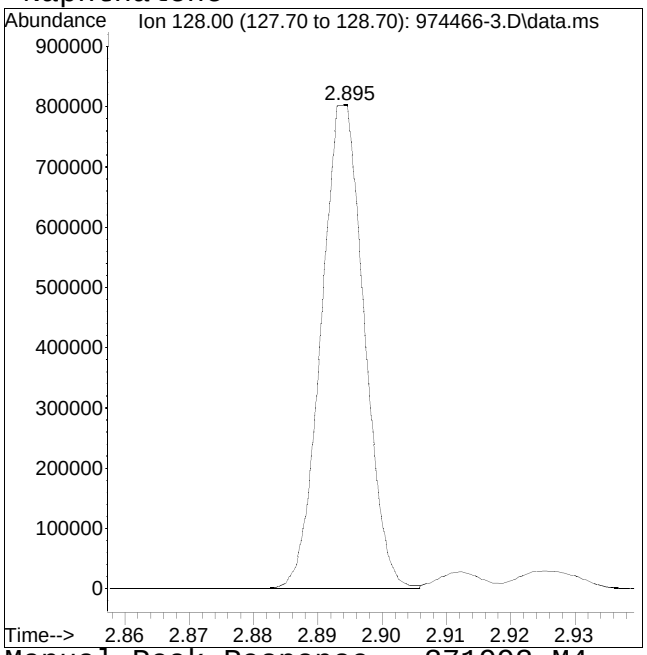
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 974466-3.D
Date Inj'd : 9/21/2024 6:11 pm
Sample : WG1974466-3,32,,RR,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 6:25 pm

## Compound #9: Naphthalene




Original Peak Response = 13256



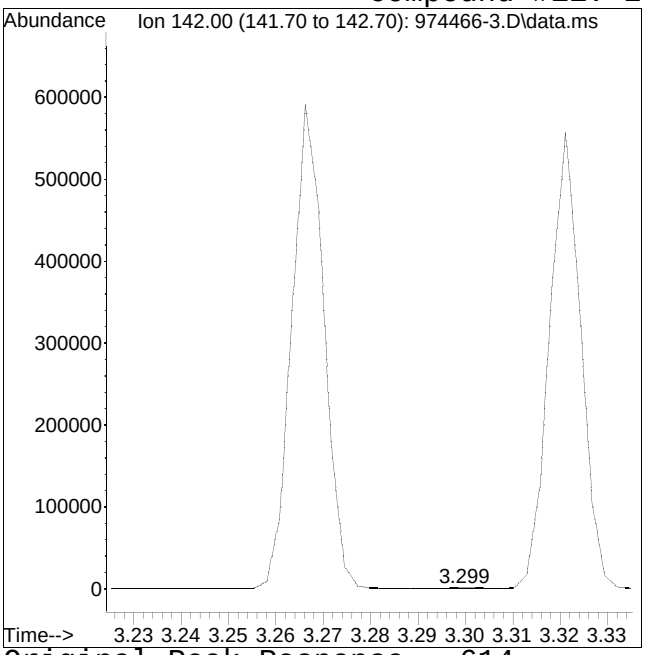

Manual Peak Response = 371993 M4

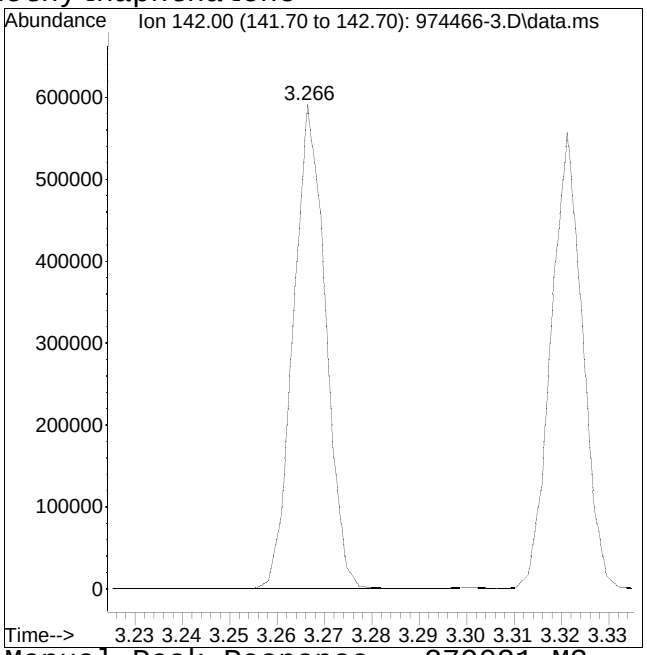
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\240921RVTQMethod : SIM-RVT_240621_sv119.M
Data File : 974466-3.D Operator : sv119:rp
Date Inj'd : 9/21/2024 6:11 pm Instrument : SV119
Sample : WG1974466-3,32,,RR,rp Quant Date : 9/21/2024 6:25 pm

Compound #11: 2-Methylnaphthalene




Original Peak Response = 614 Manual Peak Response = 279021 M3

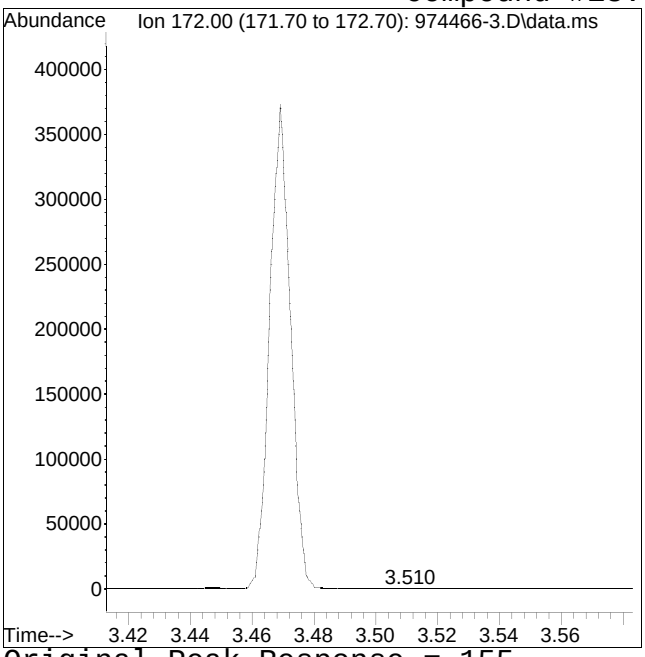
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

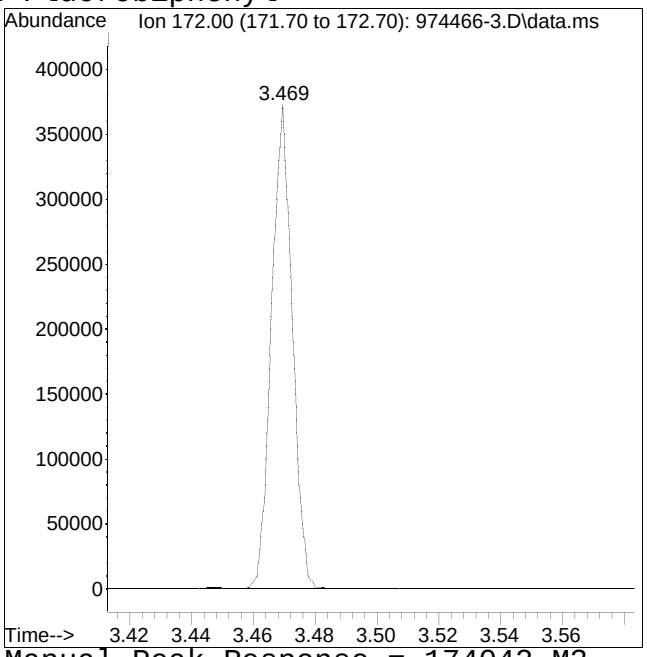
Data Path : I:\8270SIM\sv119\240921RVTQ
Data File : 974466-3.D
Date Inj'd : 9/21/2024 6:11 pm
Sample : WG1974466-3,32,,RR,rp

Method : SIM-RVT_240621_sv119.M
Operator : sv119:rp
Instrument : SV119
Quant Date : 9/21/2024 6:25 pm

Compound #13: 2-Fluorobiphenyl




Original Peak Response = 155



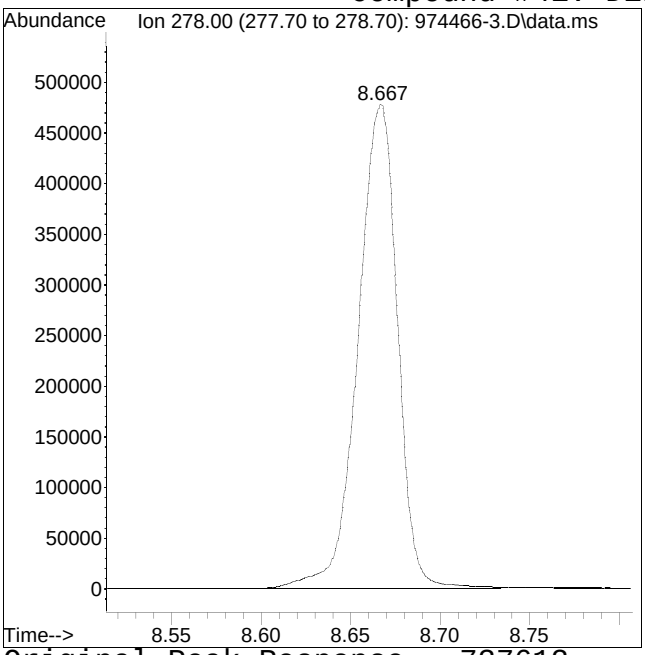

Manual Peak Response = 174042 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

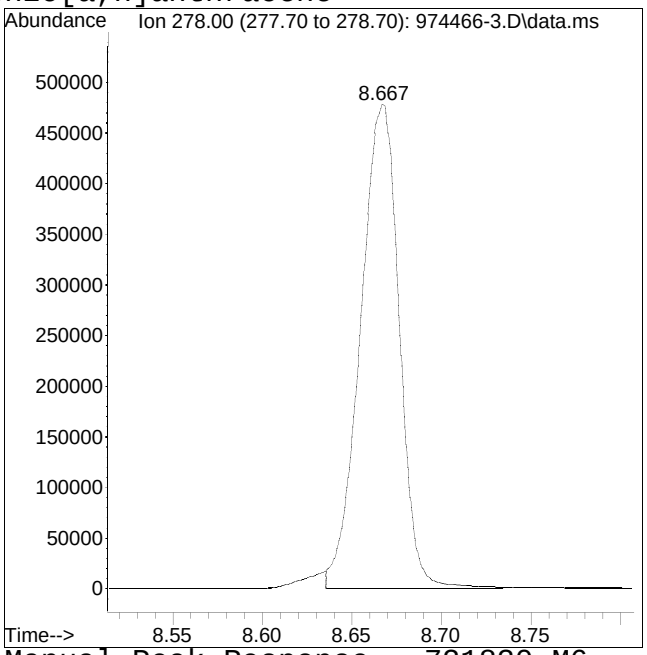
Manual Integration Report

Data Path : I:\8270SIM\sv119\240921RVTQMethod : SIM-RVT_240621_sv119.M
Data File : 974466-3.D Operator : sv119:rp
Date Inj'd : 9/21/2024 6:11 pm Instrument : SV119
Sample : WG1974466-3,32,,RR,rp Quant Date : 9/21/2024 6:25 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 737612




Manual Peak Response = 721830 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-4.D
Acq On : 21 Sep 2024 04:45 pm
Operator : SV125:dv
Sample : WG1974466-4,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 11:33:32 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.244 | 152 | 389367 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 87.28% | | | |
| 8) Naphthalene-d8 | 2.904 | 136 | 1438241 | 4000.000 | ng/ml | # 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 91.30% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 873356 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 86.02% | | | |
| 22) Phenanthrene-d10 | 4.725 | 188 | 1849911 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 86.22% | | | |
| 31) Chrysene-d12 | 6.266 | 240 | 1889459 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 80.80% | | | |
| 36) Perylene-d12 | 7.462 | 264 | 2111271 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 74.91% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.659 | 112 | 120093 | 1253.413 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 62.67% | | | |
| 3) Phenol-d6 | 2.053 | 99 | 109541 | 927.045 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 46.35% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 79883 | 1314.443 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 131.44%# | | | |
| 13) 2-Fluorobiphenyl | 3.505 | 172 | 271656 | 891.384 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 89.14% | | | |
| 21) 2,4,6-Tribromophenol | 4.331 | 330 | 98003 | 2584.565 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 129.23%# | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 385839 | 1026.348 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 102.63% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 200291 | 1907.612 | ng/ml | 100 |
| 6) Hexachloroethane | 2.501 | 117 | 74284 | 1747.918 | ng/ml | 99 |
| 9) Naphthalene | 2.914 | 128 | 665415 | 1737.069 | ng/ml# | 98 |
| 10) Hexachlorobutadiene | 2.991 | 225 | 123458 | 1595.231 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.297 | 142 | 458058 | 1866.995 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.569 | 162 | 500631 | 1927.060 | ng/ml | 94 |
| 16) Acenaphthylene | 3.805 | 152 | 801234 | 2123.602 | ng/ml | 100 |
| 18) Acenaphthene | 3.902 | 153 | 554446 | 2081.813 | ng/ml | 98 |
| 20) Fluorene | 4.194 | 166 | 638297 | 2186.247 | ng/ml | 99 |
| 24) Hexachlorobenzene | 4.511 | 284 | 260397 | 2199.631 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-4.D
Acq On : 21 Sep 2024 04:45 pm
Operator : SV125:dv
Sample : WG1974466-4,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 11:33:32 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 4.622 | 266 | 136514 | 2831.716 | ng/ml | 100 |
| 26) Phenanthrene | 4.738 | 178 | 1041048 | 2181.460 | ng/ml | 100 |
| 27) Anthracene | 4.766 | 178 | 1060303 | 2239.378 | ng/ml | 99 |
| 28) Fluoranthene | 5.414 | 202 | 1280786 | 2366.030 | ng/ml | 100 |
| 29) Pyrene | 5.546 | 202 | 1325862 | 2321.532 | ng/ml | 99 |
| 32) Benzo[a]anthracene | 6.258 | 228 | 1313620 | 2358.088 | ng/ml | 100 |
| 34) Chrysene | 6.282 | 228 | 1268572 | 2356.989 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 7.091 | 252 | 1361960 | 2756.863 | ng/ml | 99 |
| 38) Benzo[k]fluoranthene | 7.116 | 252 | 1288047 | 2660.943 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.399 | 252 | 1220760 | 2840.036 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.673 | 276 | 1266393 | 2805.215 | ng/ml | 99 |
| 41) Dibenzo[a,h]anthracene | 8.707 | 278 | 1217117M6 | 2314.922 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.012 | 276 | 1210184 | 2588.629 | ng/ml | 99 |

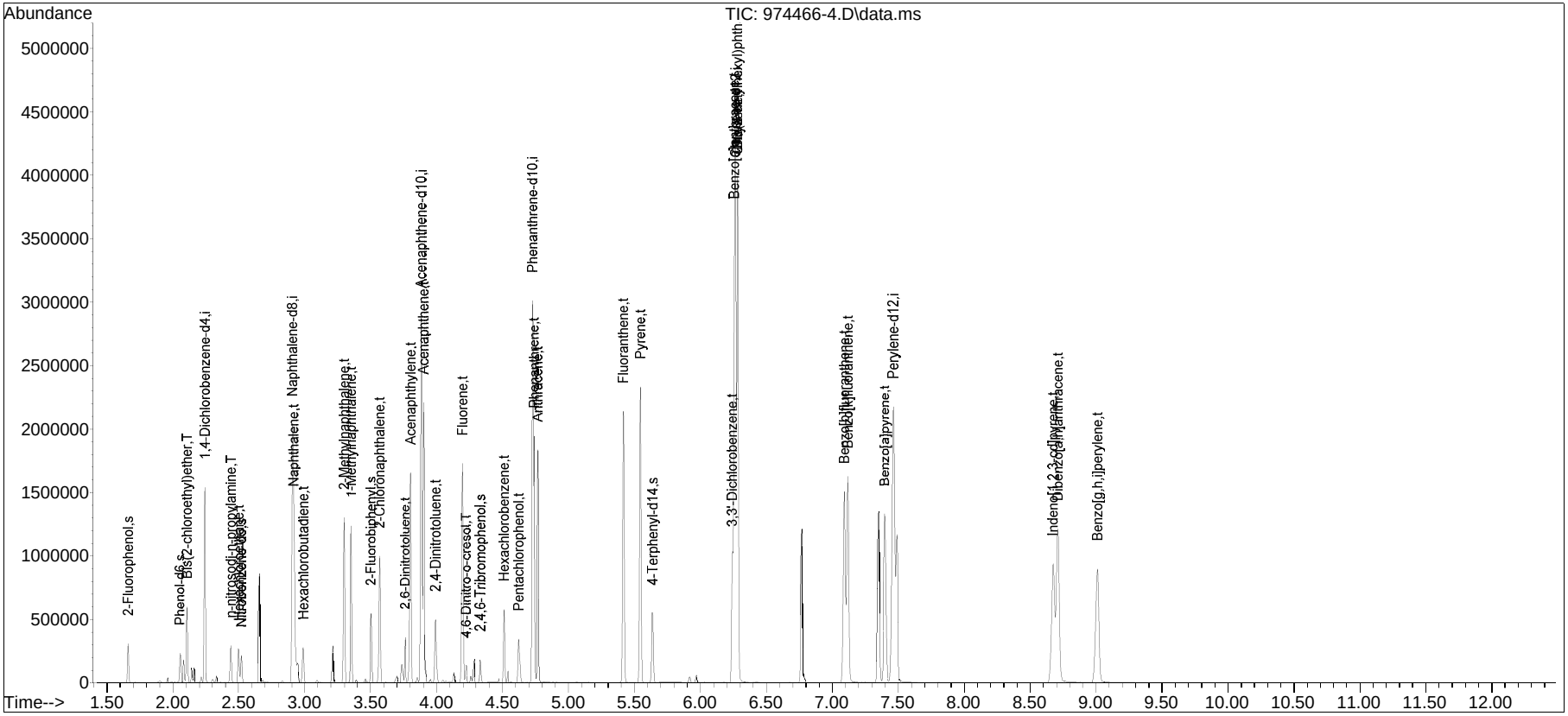
(#) = qualifier out of range (m) = manual integration (+) = signals summed

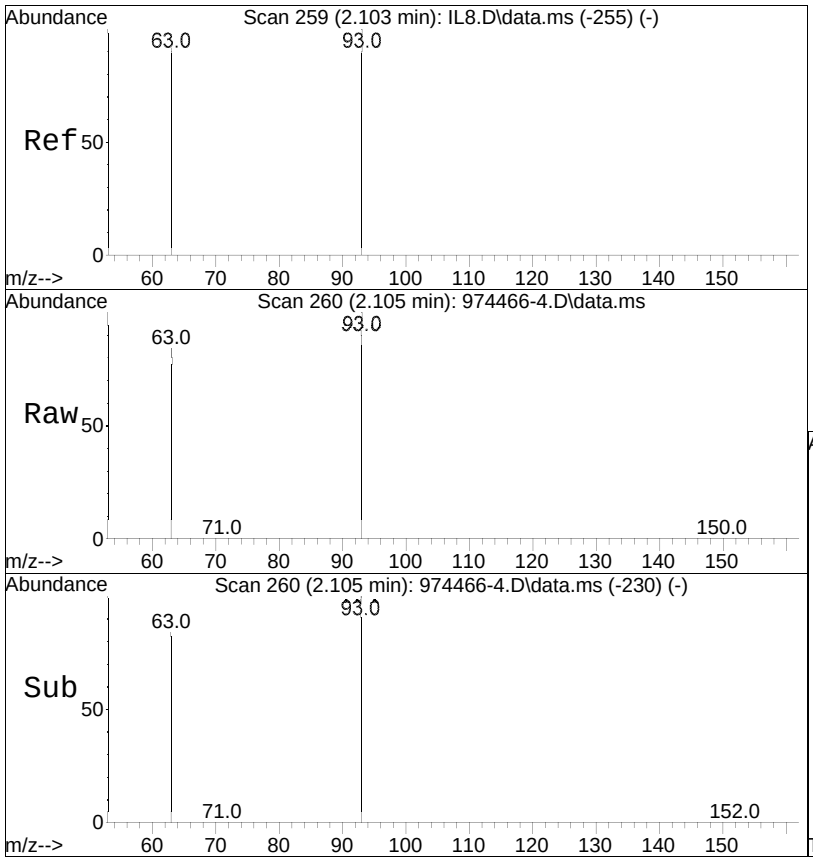
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-4.D
Acq On : 21 Sep 2024 04:45 pm
Operator : SV125:dv
Sample : WG1974466-4,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 11:33:32 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

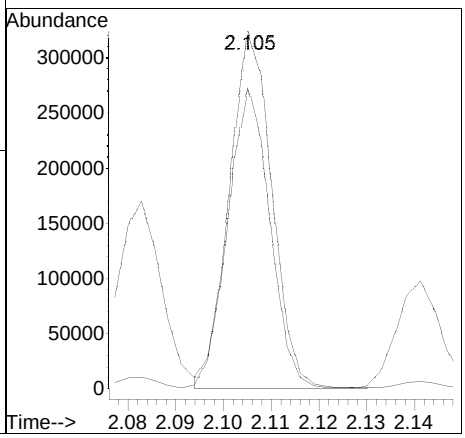


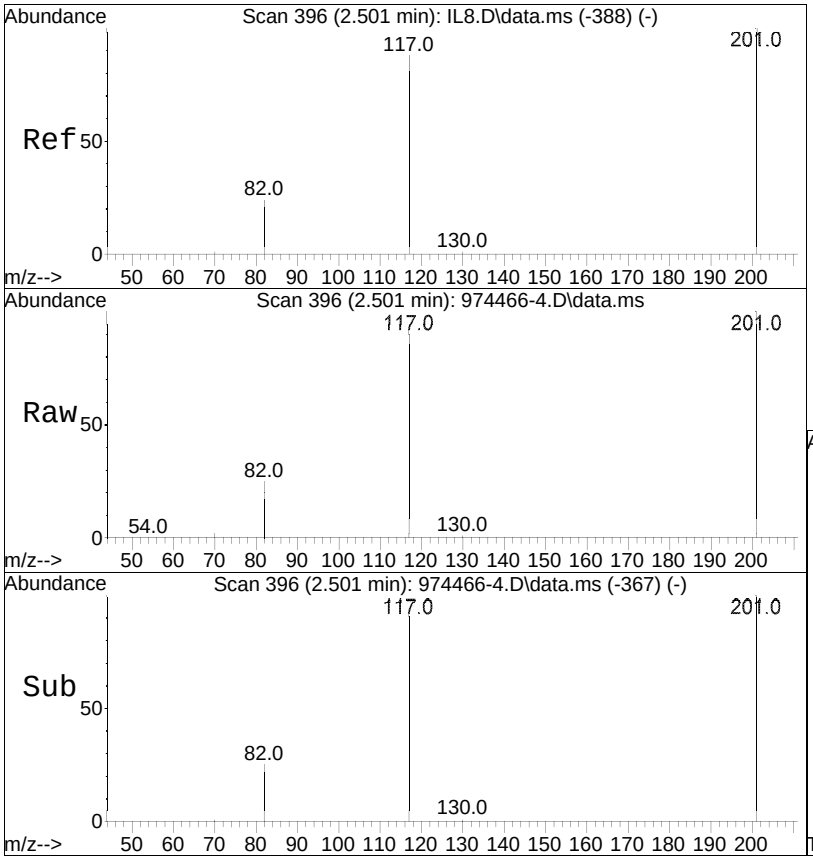



#4
Bis(2-chloroethyl)ether
Concen: 1907.61 ng/ml
RT: 2.105 min Scan# 260
Delta R.T. 0.003 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion: 93 Resp: 200291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 82.7 | 66.1 | 99.1 |

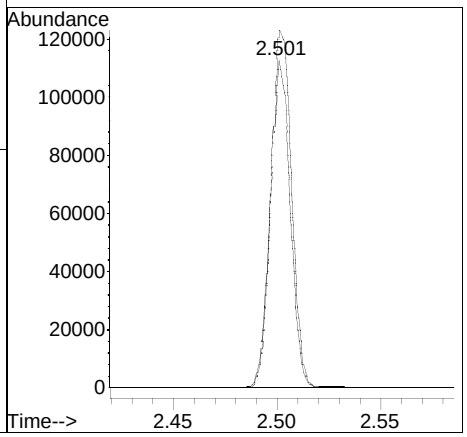


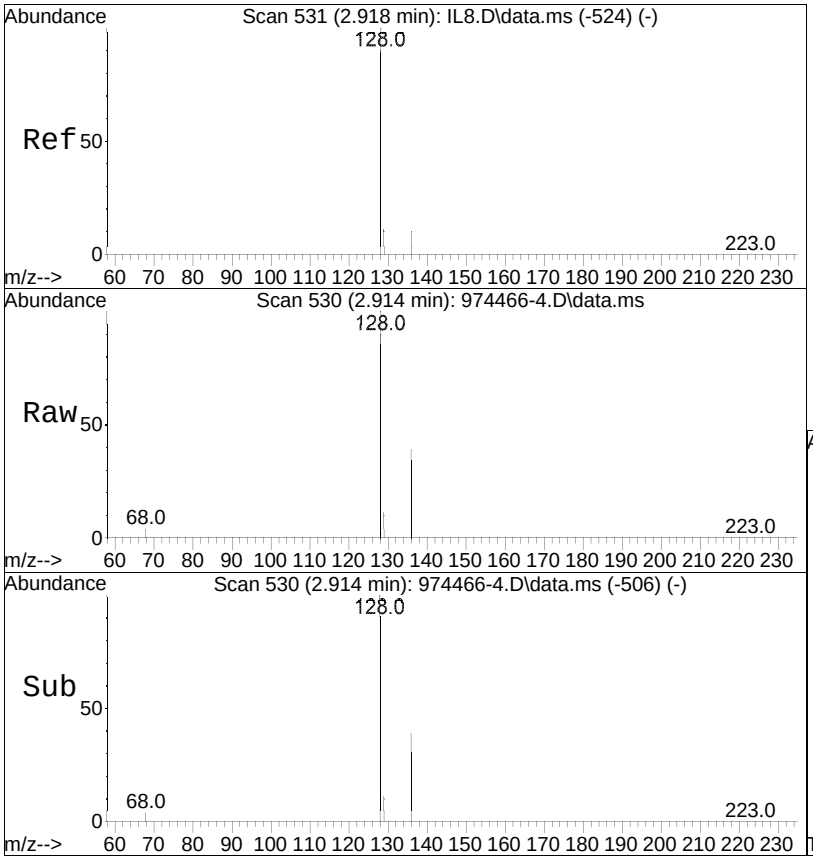



#6
Hexachloroethane
Concen: 1747.92 ng/ml
RT: 2.501 min Scan# 396
Delta R.T. 0.003 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:117 Resp: 74284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 111.8 | 89.9 | 134.9 |

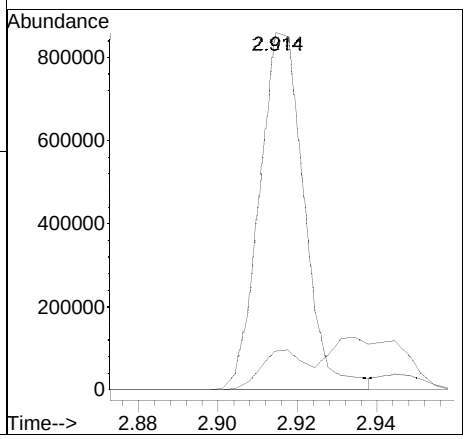


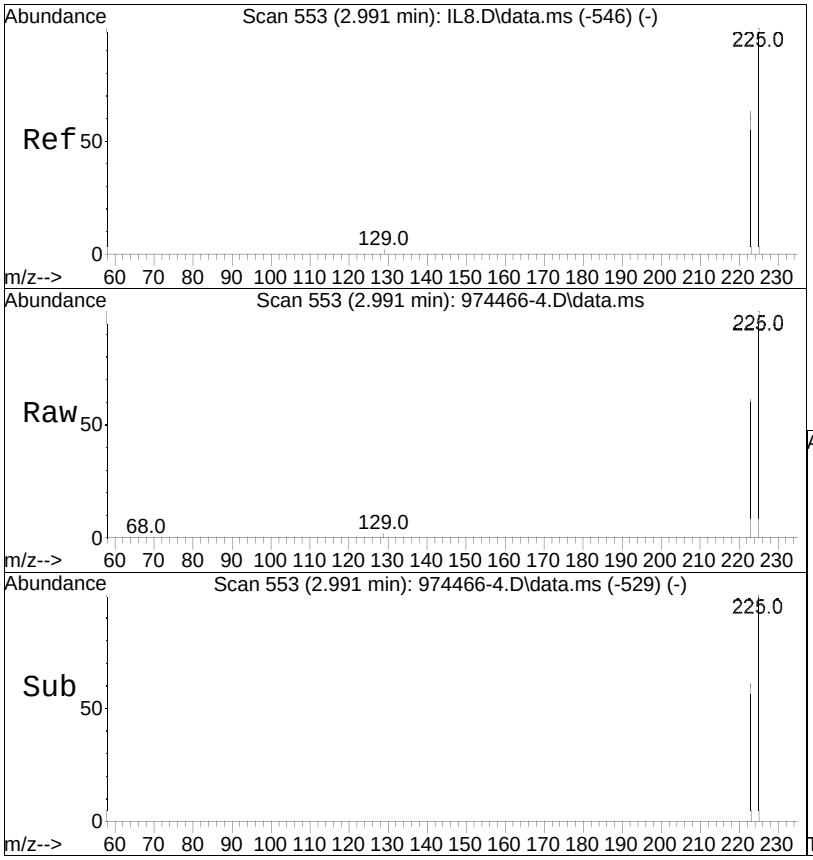



#9
Naphthalene
Concen: 1737.07 ng/ml
RT:  2.914 min  Scan# 530
Delta R.T.  -0.000 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:128 Resp:  665415

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.7 | 8.8 | 13.2 |
| 127 | 0.0 | 0.0 | 0.0 |

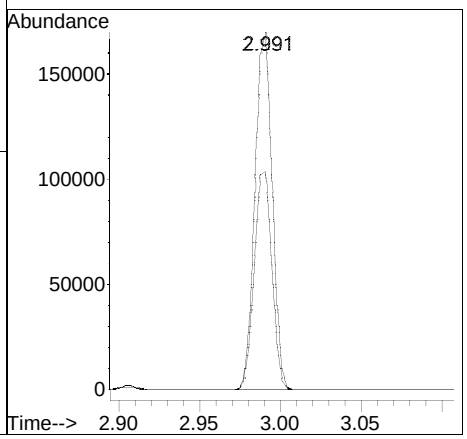


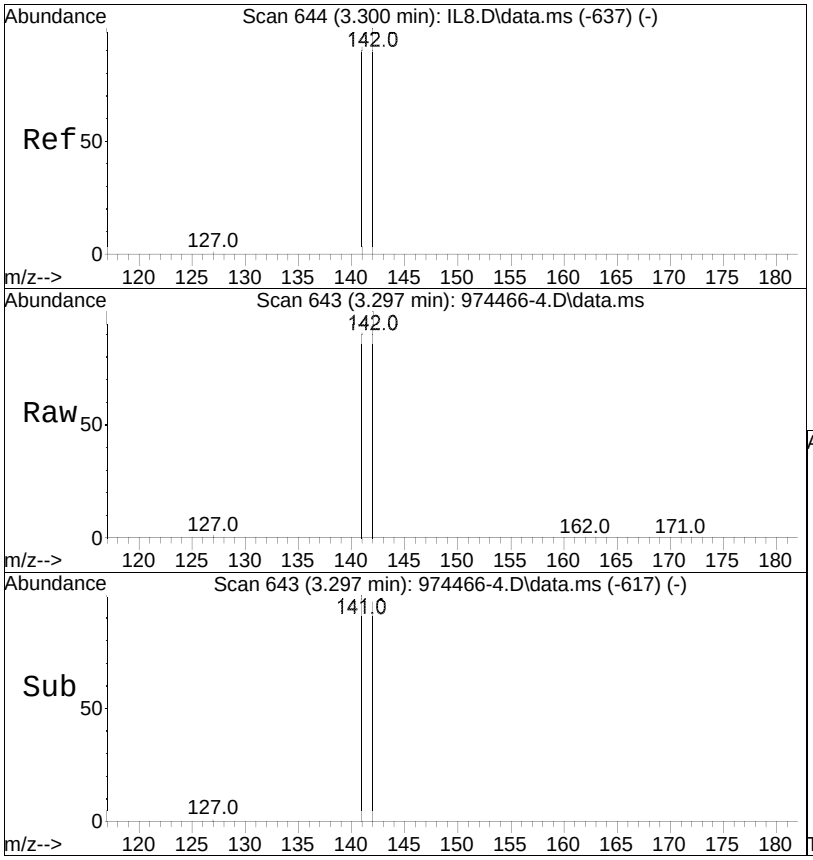



#10
Hexachlorobutadiene
Concen: 1595.23 ng/ml
RT: 2.991 min Scan# 553
Delta R.T. -0.000 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:225 Resp: 123458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 49.9 | 74.9 |

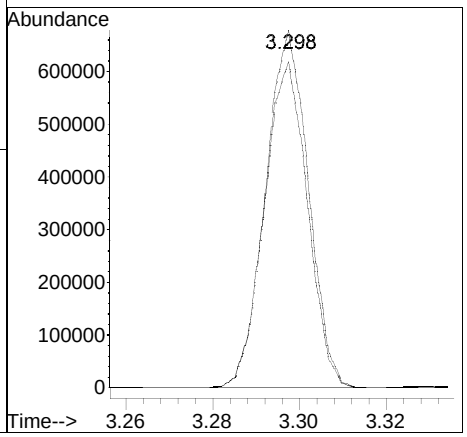


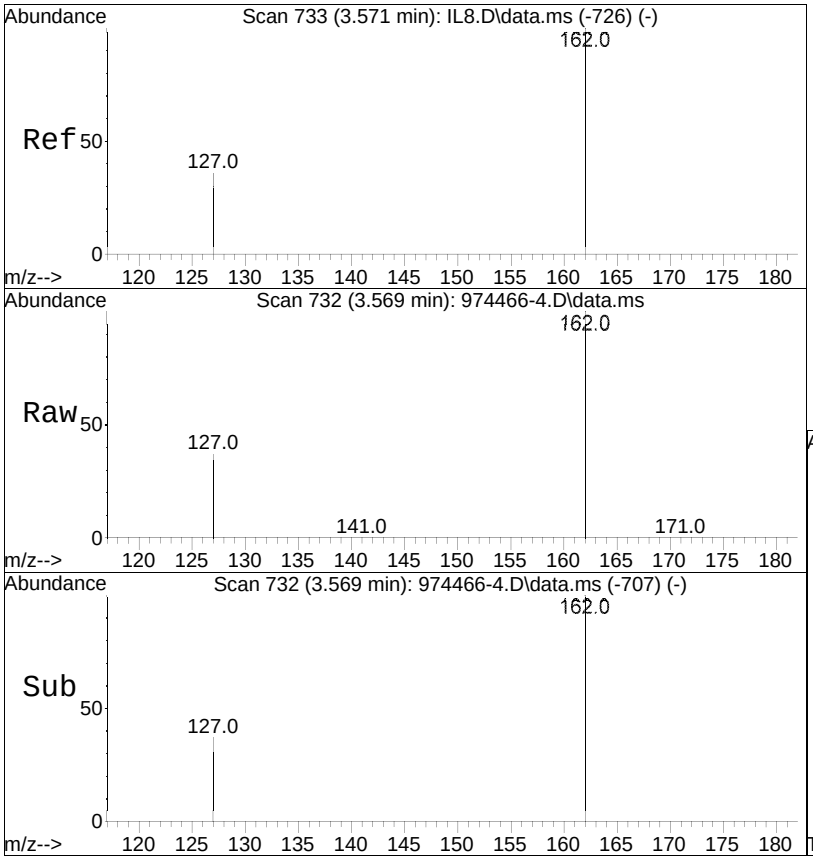



#11
2-Methylnaphthalene
Concen: 1867.00 ng/ml
RT: 3.297 min Scan# 643
Delta R.T. 0.000 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:142 Resp: 458058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 92.0 | 73.8 | 110.6 |

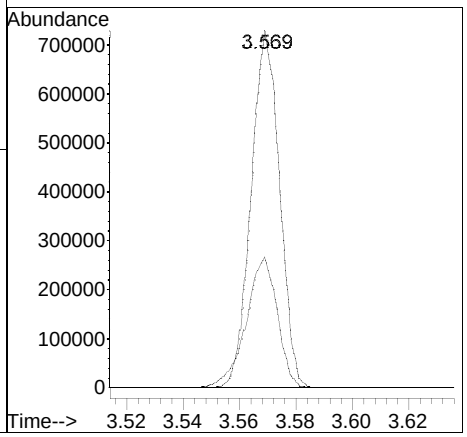


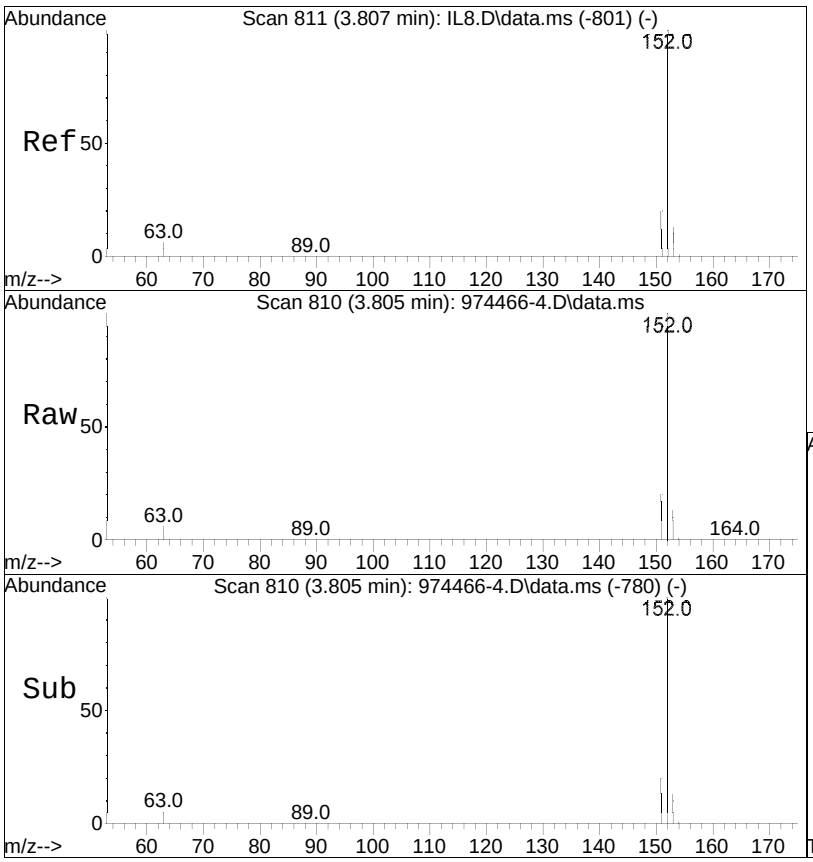



#14
2-Chloronaphthalene
Concen: 1927.06 ng/ml
RT:  3.569 min  Scan# 732
Delta R.T.  -0.003 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:162 Resp:  500631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 40.3 | 29.4 | 44.0 |

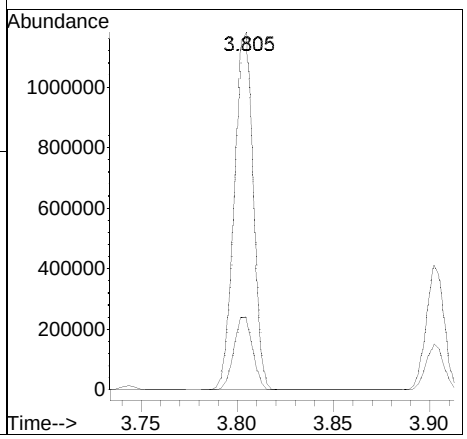


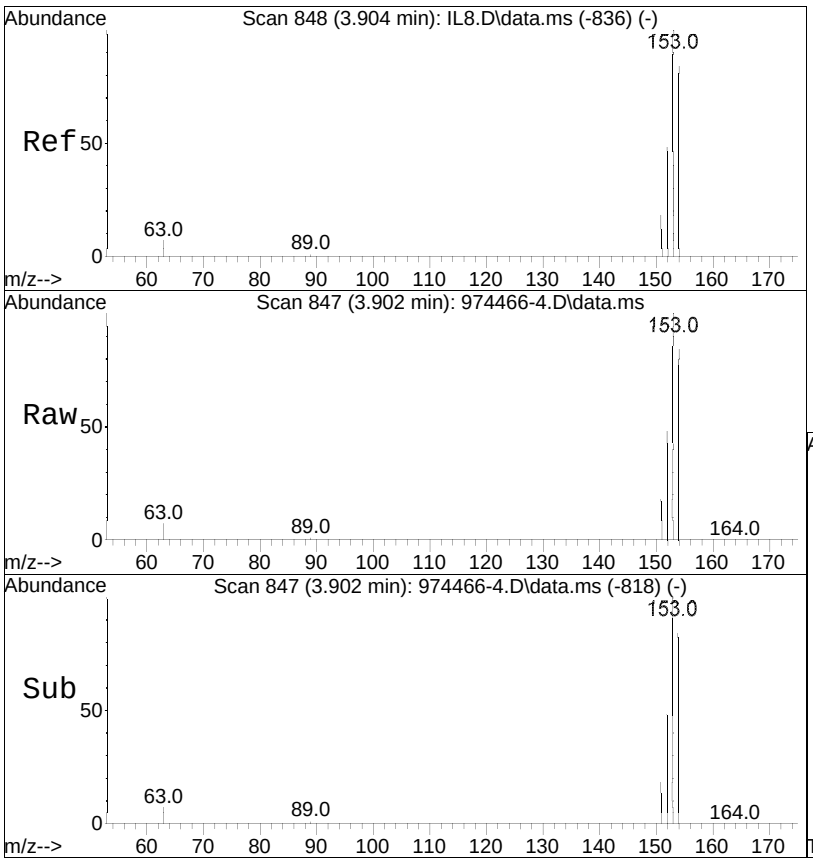



#16
Acenaphthylene
Concen: 2123.60 ng/ml
RT: 3.805 min Scan# 810
Delta R.T. 0.000 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:152 Resp: 801234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.5 | 16.2 | 24.4 |

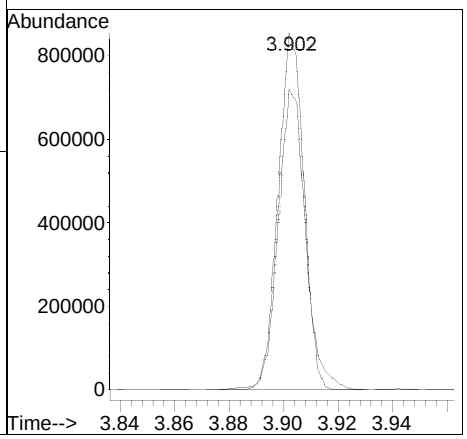


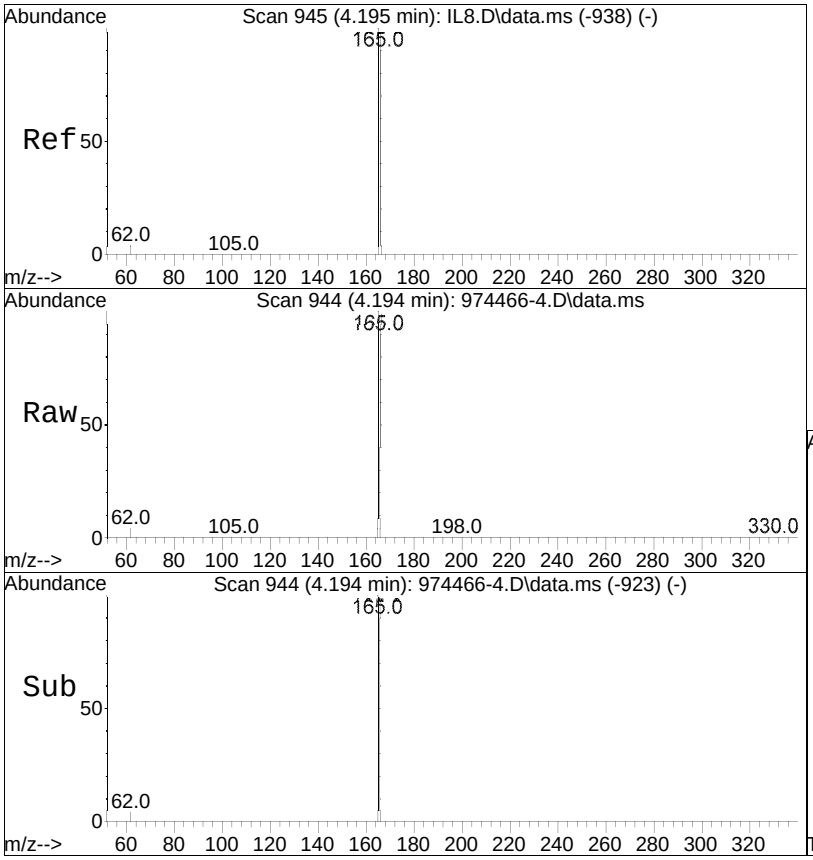



#18
Acenaphthene
Concen: 2081.81 ng/ml
RT:  3.902 min  Scan# 847
Delta R.T.  -0.002 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:153 Resp:  554446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 89.6 | 70.3 | 105.5 |

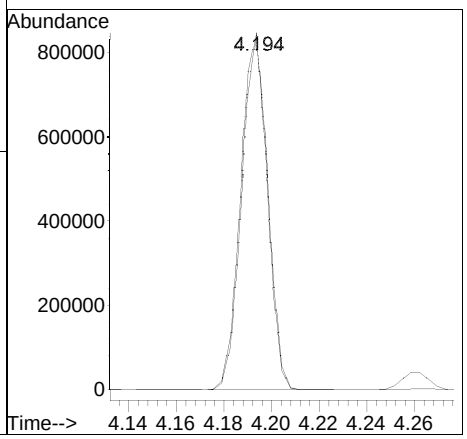


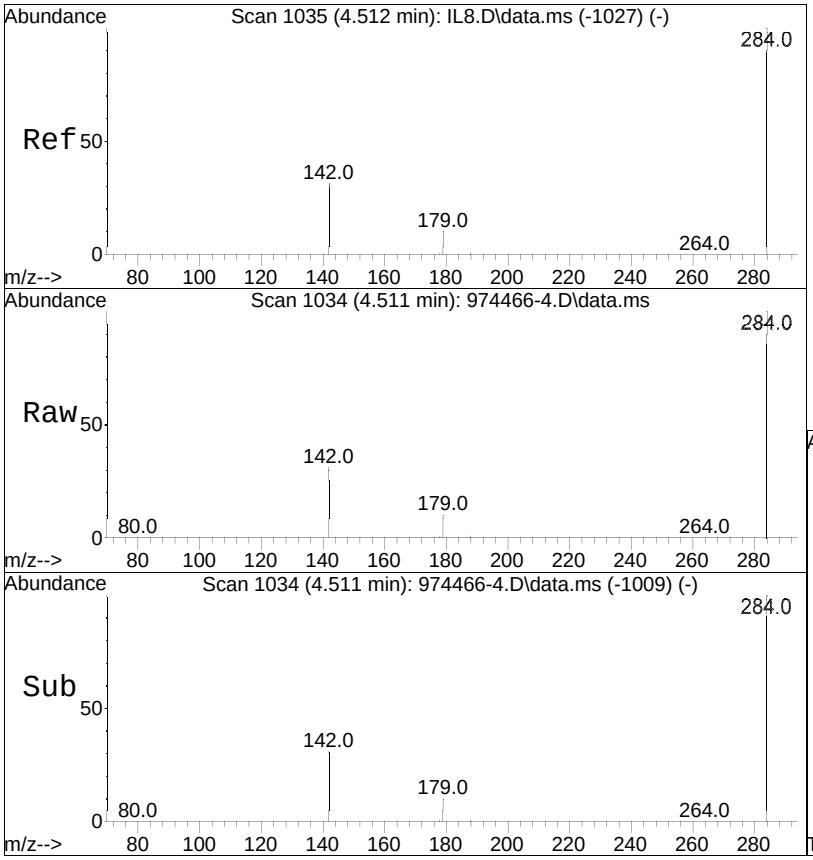



#20
Fluorene
Concen: 2186.25 ng/ml
RT:  4.194 min  Scan# 944
Delta R.T.  -0.002 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:166 Resp:  638297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 101.9 | 82.0 | 123.0 |

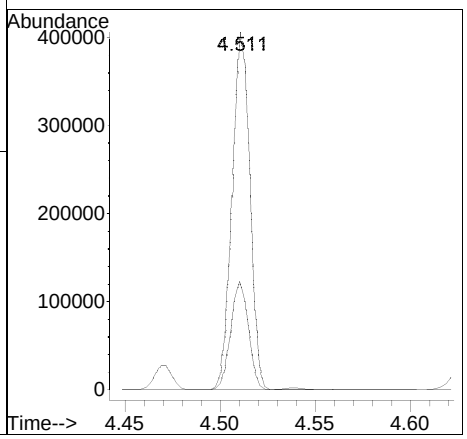


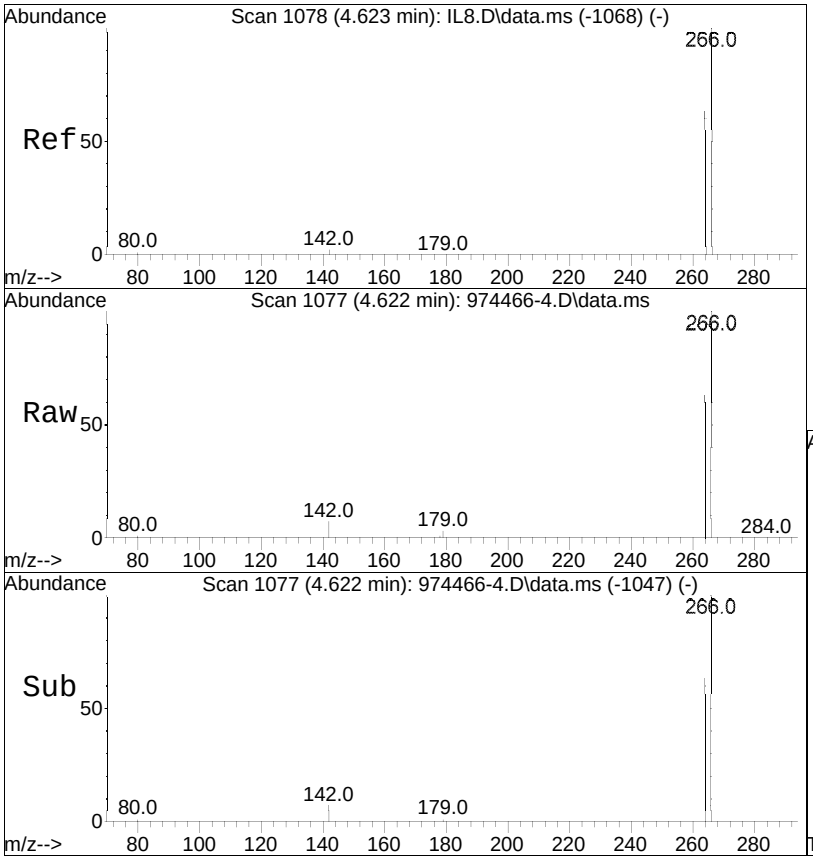



#24
Hexachlorobenzene
Concen: 2199.63 ng/ml
RT:  4.511 min  Scan# 1034
Delta R.T.  -0.001 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:284 Resp:  260397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 30.1 | 24.4 | 36.6 |

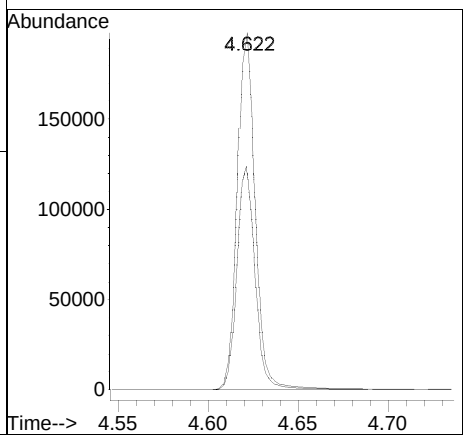


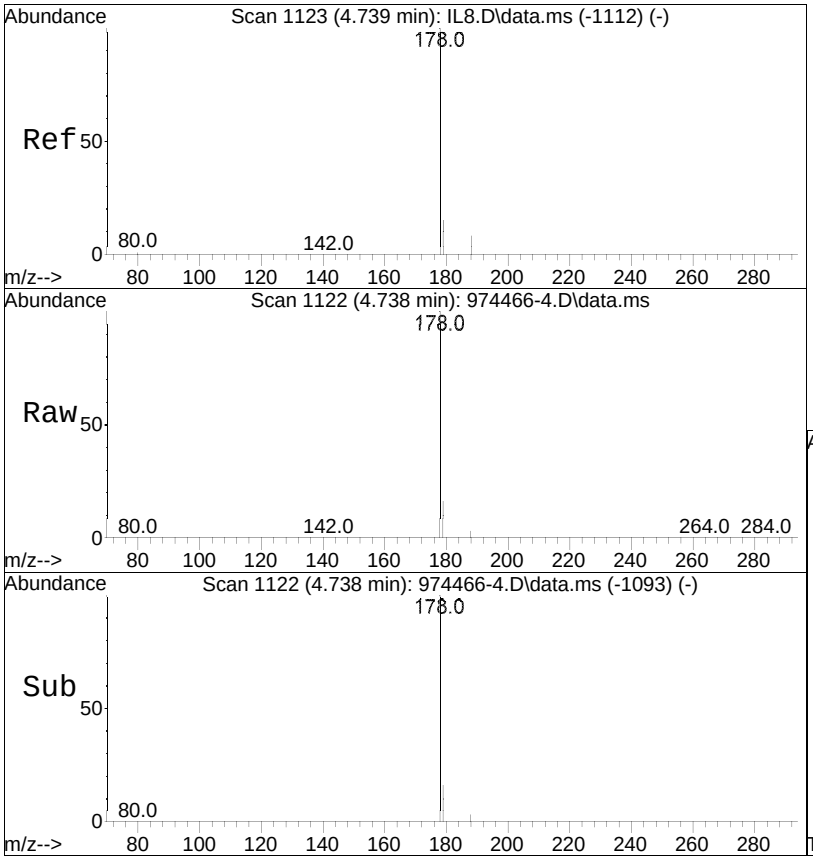



#25
Pentachlorophenol
Concen: 2831.72 ng/ml
RT: 4.622 min Scan# 1077
Delta R.T. -0.001 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:266 Resp: 136514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.3 | 50.4 | 75.6 |

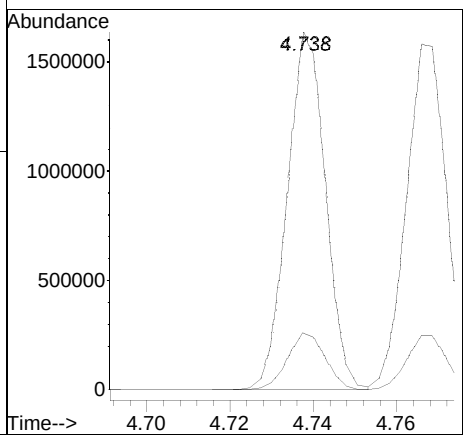


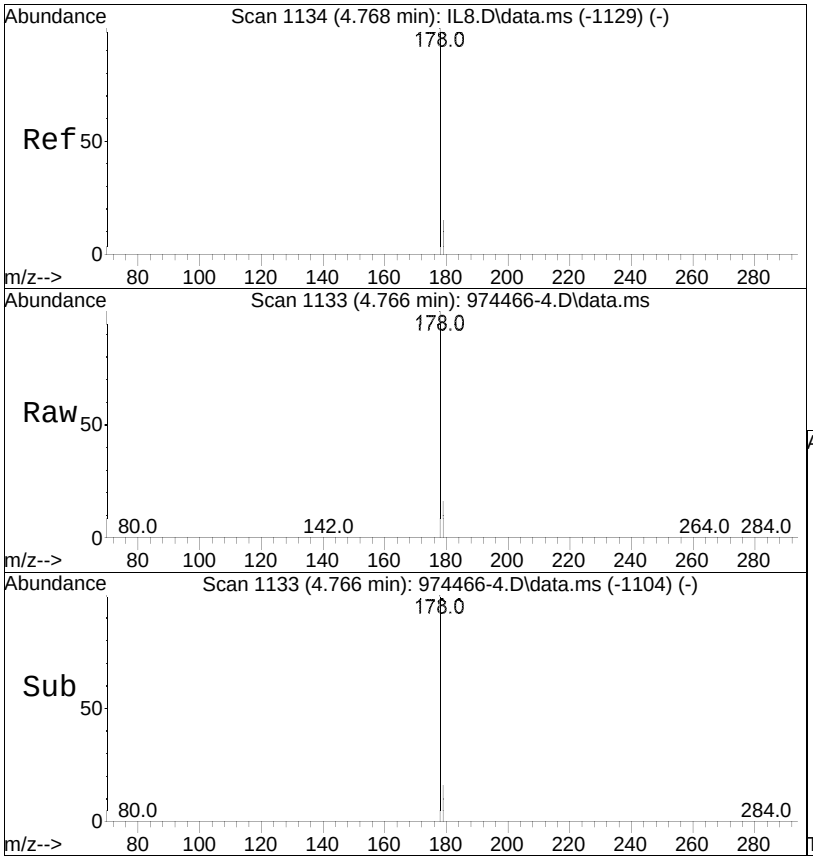



#26
Phenanthrene
Concen: 2181.46 ng/ml
RT: 4.738 min Scan# 1122
Delta R.T. -0.004 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:178 Resp: 1041048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.8 | 12.6 | 18.8 |

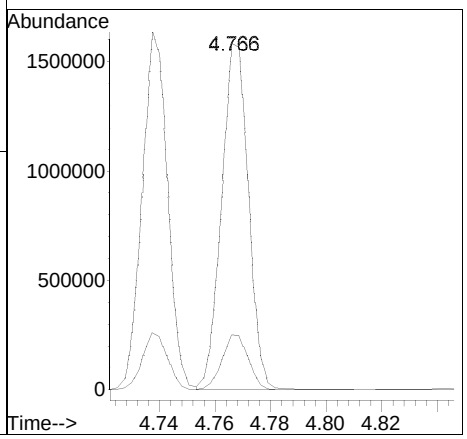


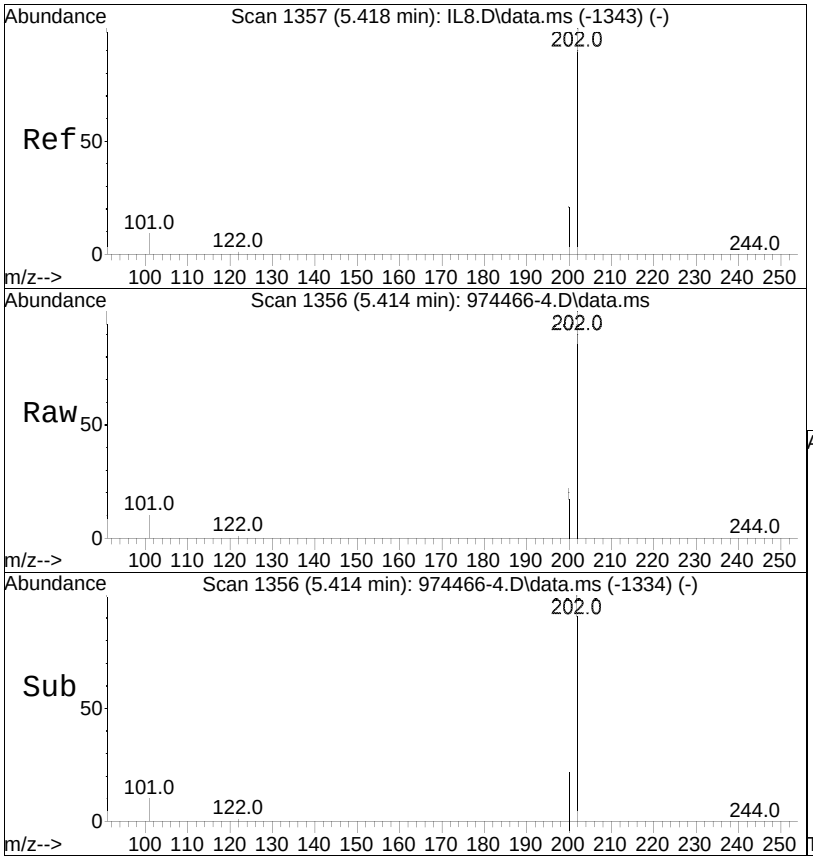



#27
Anthracene
Concen: 2239.38 ng/ml
RT:  4.766 min  Scan# 1133
Delta R.T.  -0.004 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:178 Resp: 1060303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.7 | 12.3 | 18.5 |

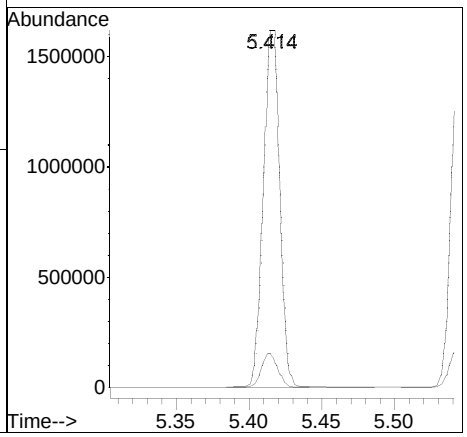


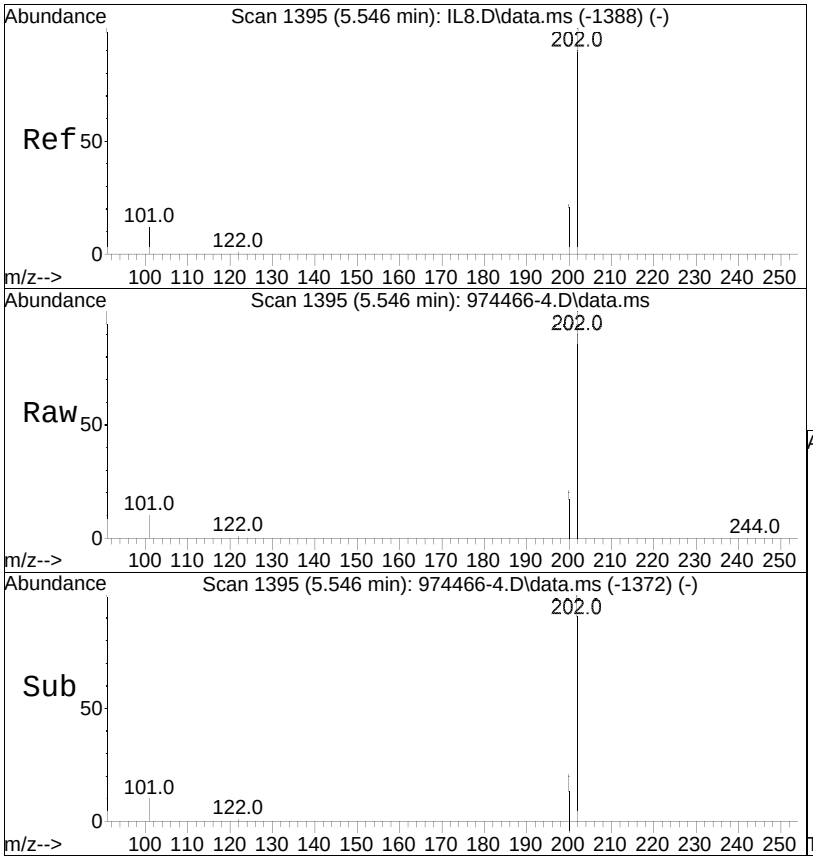



#28
Fluoranthene
Concen: 2366.03 ng/ml
RT:  5.414 min  Scan# 1356
Delta R.T.  -0.006 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:202 Resp: 1280786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.4 | 7.6 | 11.4 |

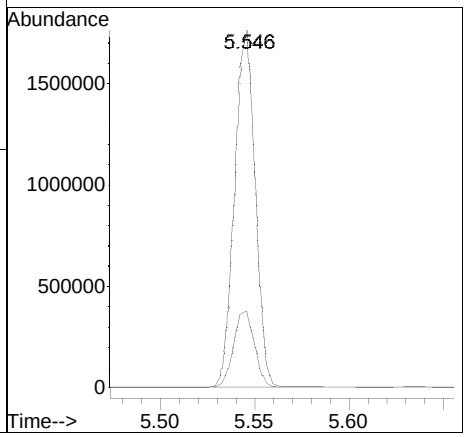


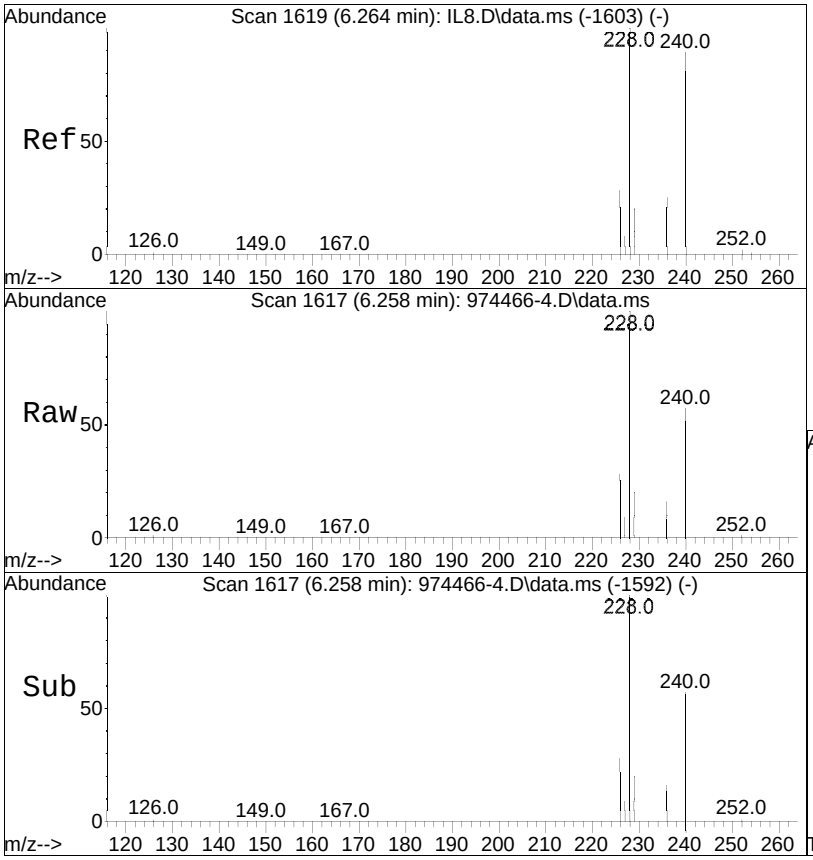



#29
Pyrene
Concen: 2321.53 ng/ml
RT:  5.546 min  Scan# 1395
Delta R.T.  -0.003 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:202 Resp: 1325862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.8 | 17.2 | 25.8 |

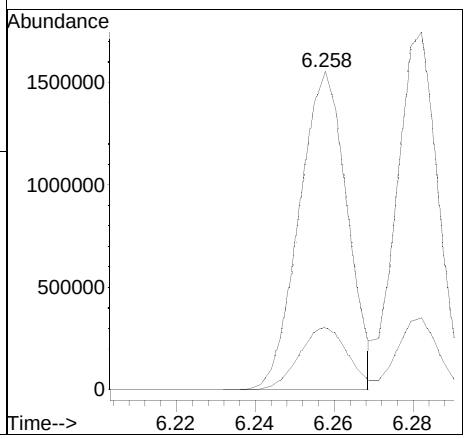


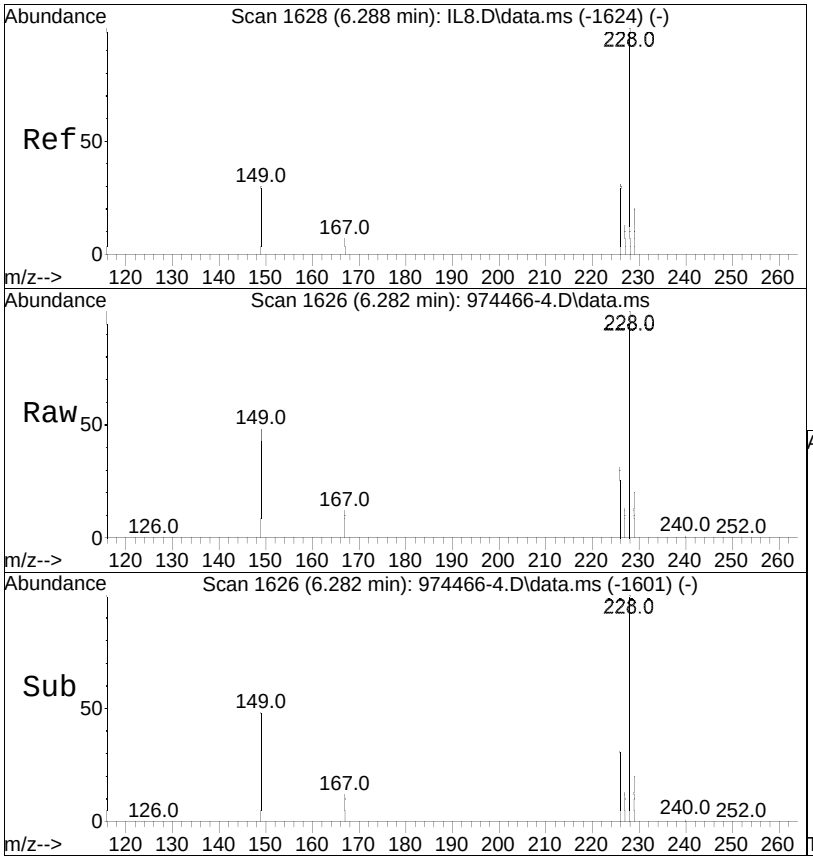



#32
Benzo[a]anthracene
Concen: 2358.09 ng/ml
RT: 6.258 min Scan# 1617
Delta R.T. -0.011 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:228 Resp: 1313620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.9 | 15.8 | 23.6 |

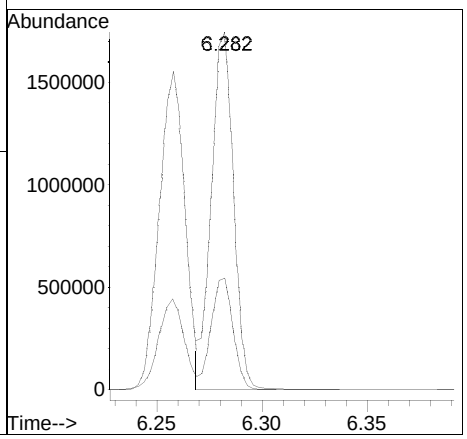


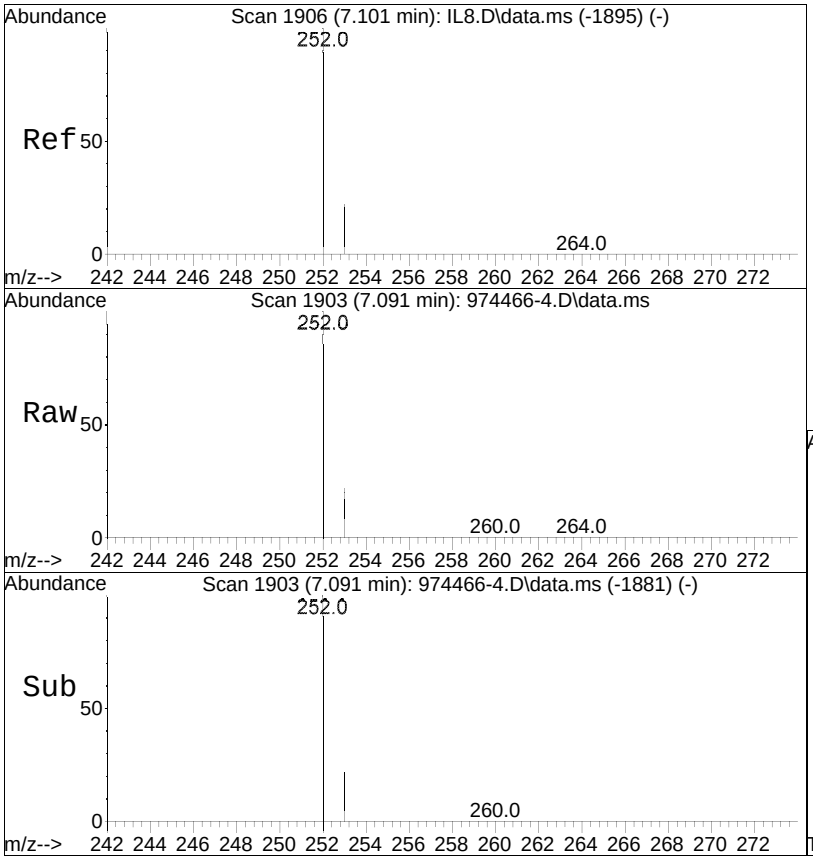



#34
Chrysene
Concen: 2356.99 ng/ml
RT:  6.282 min  Scan# 1626
Delta R.T.  -0.011 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:228 Resp: 1268572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.3 | 24.8 | 37.2 |

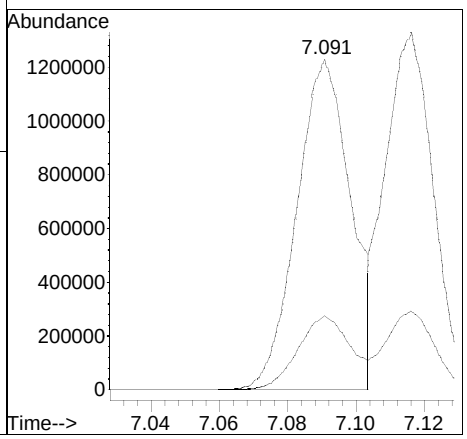


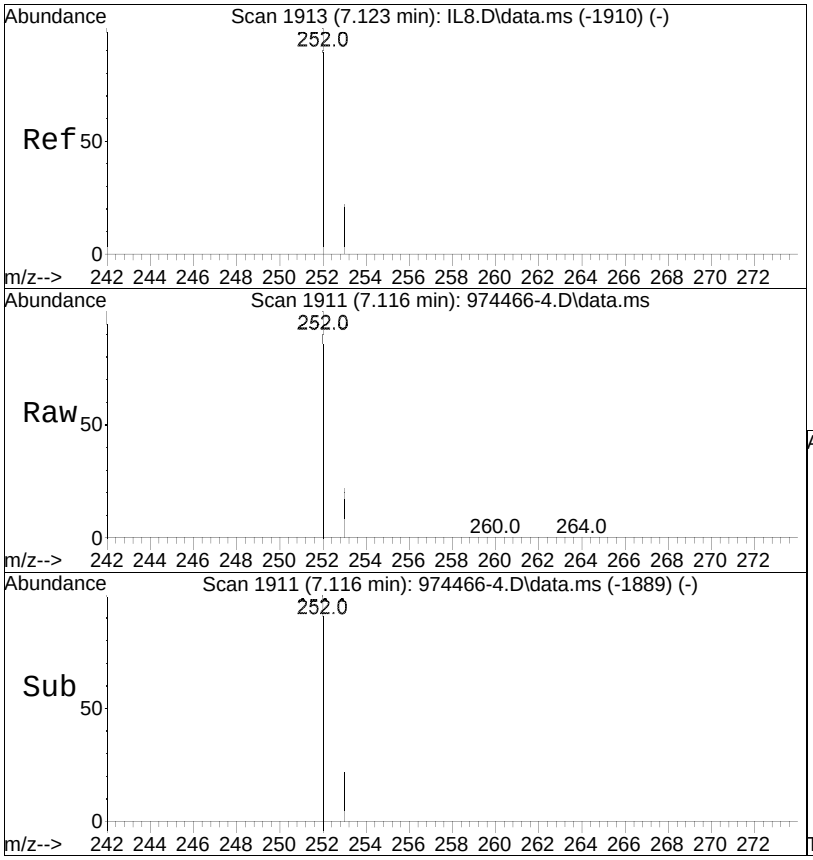



#37
Benzo[b]fluoranthene
Concen: 2756.86 ng/ml
RT: 7.091 min Scan# 1903
Delta R.T. -0.012 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:252 Resp: 1361960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.4 | 26.0 |

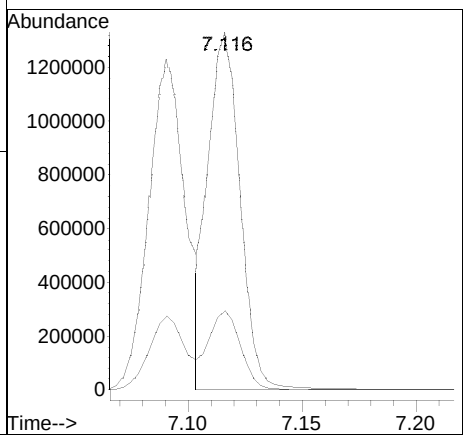


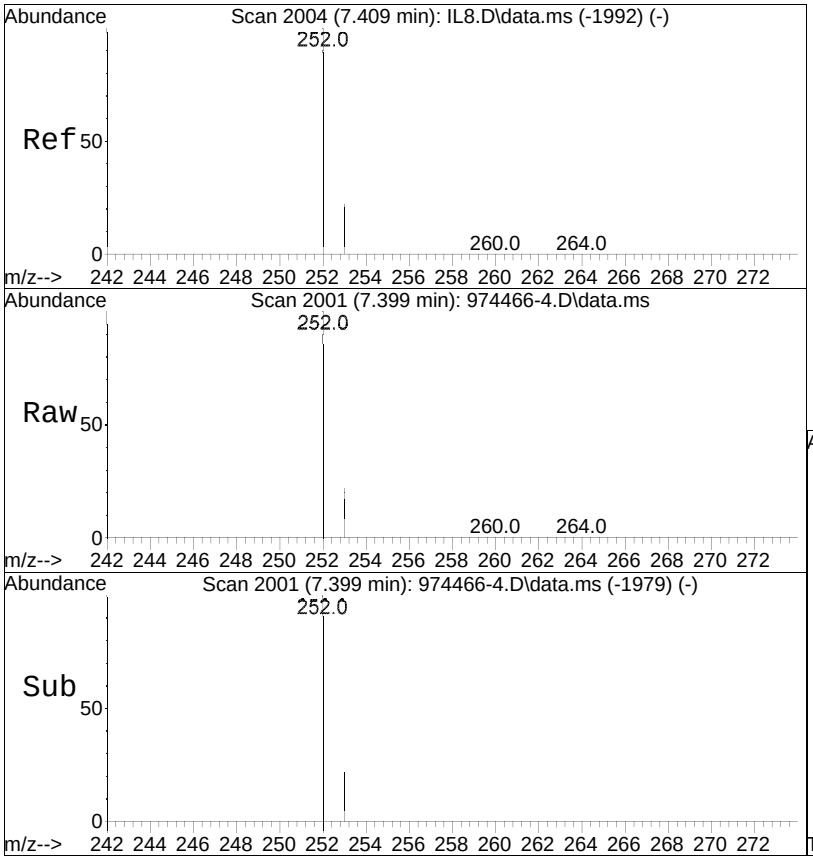



#38
Benzo[k]fluoranthene
Concen: 2660.94 ng/ml
RT: 7.116 min Scan# 1911
Delta R.T. -0.012 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:252 Resp: 1288047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.2 | 17.5 | 26.3 |

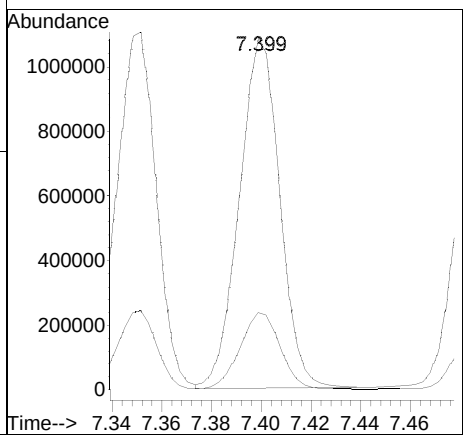


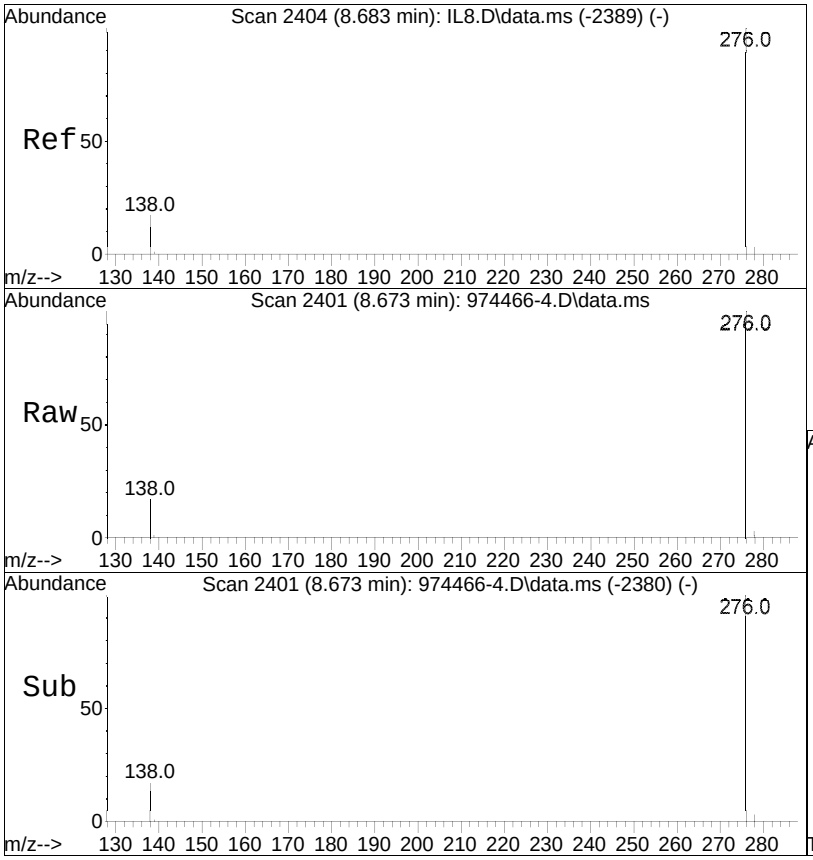



#39
Benzo[a]pyrene
Concen: 2840.04 ng/ml
RT: 7.399 min Scan# 2001
Delta R.T. -0.012 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:252 Resp: 1220760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.4 | 26.0 |

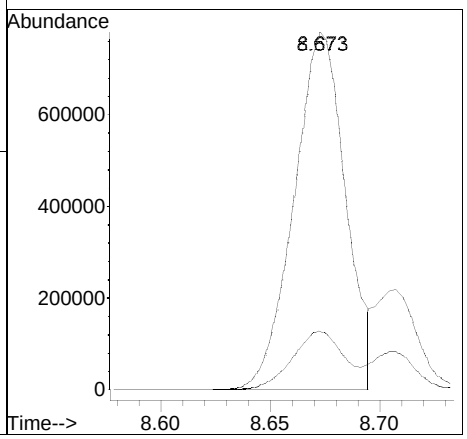


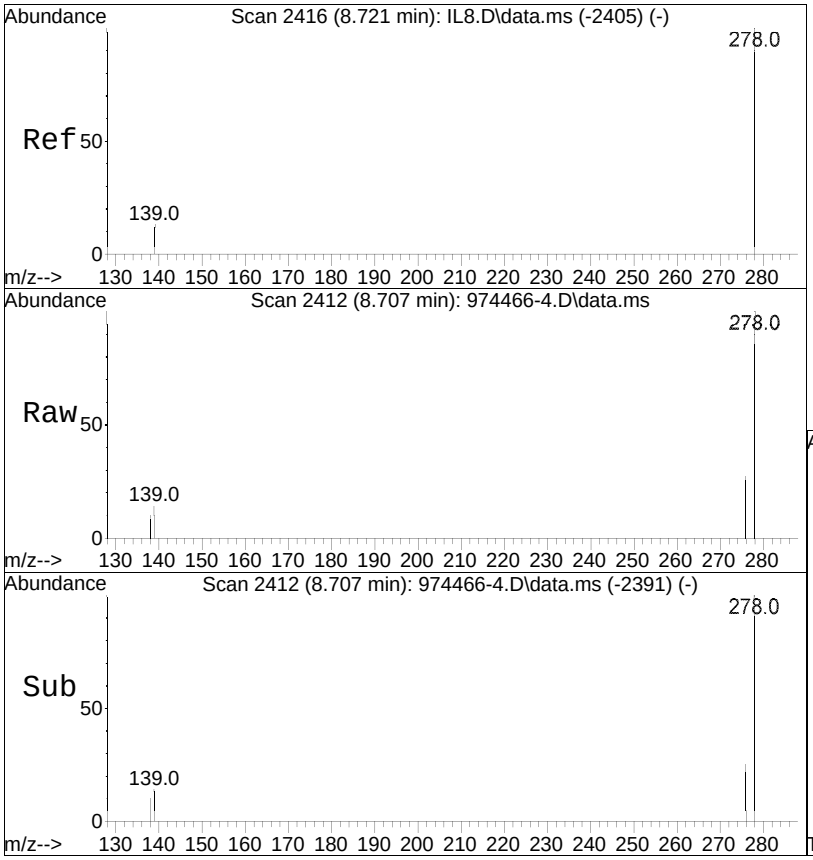



#40
Indeno[1,2,3-cd]pyrene
Concen: 2805.22 ng/ml
RT: 8.673 min Scan# 2401
Delta R.T. -0.015 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:276 Resp: 1266393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 16.7 | 13.1 | 19.7 |

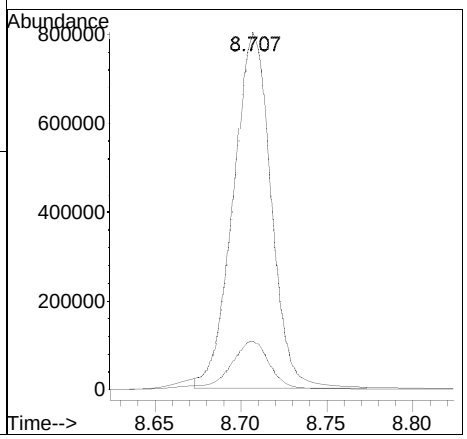


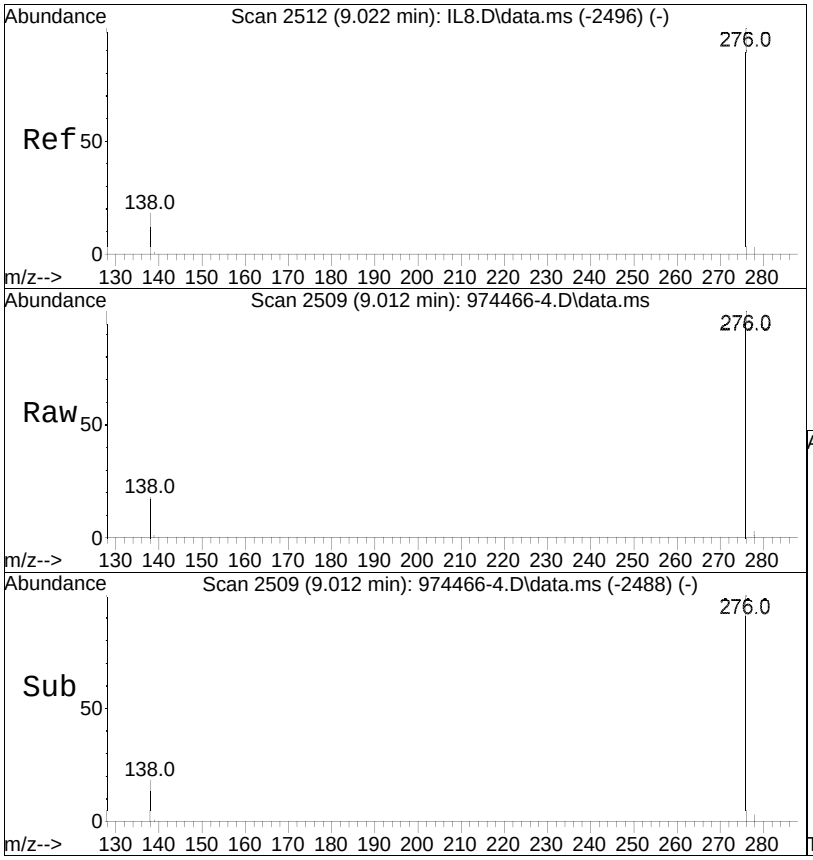



#41
Dibenzo[a,h]anthracene
Concen: 2314.92 ng/ml M6
RT:  8.707 min  Scan# 2412
Delta R.T.  -0.015 min
Lab File:  974466-4.D
Acq: 21 Sep 2024  04:45 pm

Tgt Ion:278 Resp: 1217117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 14.5 | 12.0 | 18.0 |

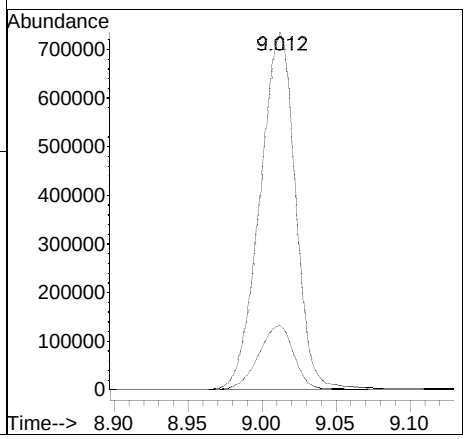





#42
Benzo[g,h,i]perylene
Concen: 2588.63 ng/ml
RT: 9.012 min Scan# 2509
Delta R.T. -0.015 min
Lab File: 974466-4.D
Acq: 21 Sep 2024 04:45 pm

Tgt Ion:276 Resp: 1210184

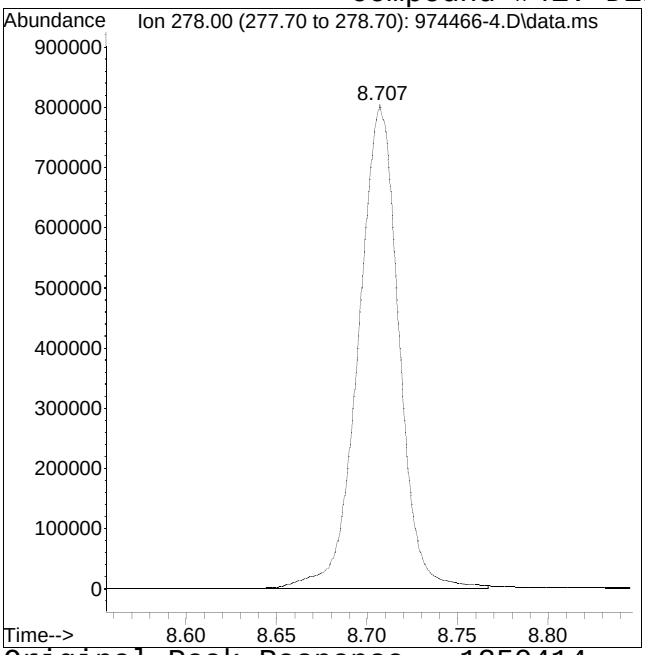
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.1 | 14.7 | 22.1 |



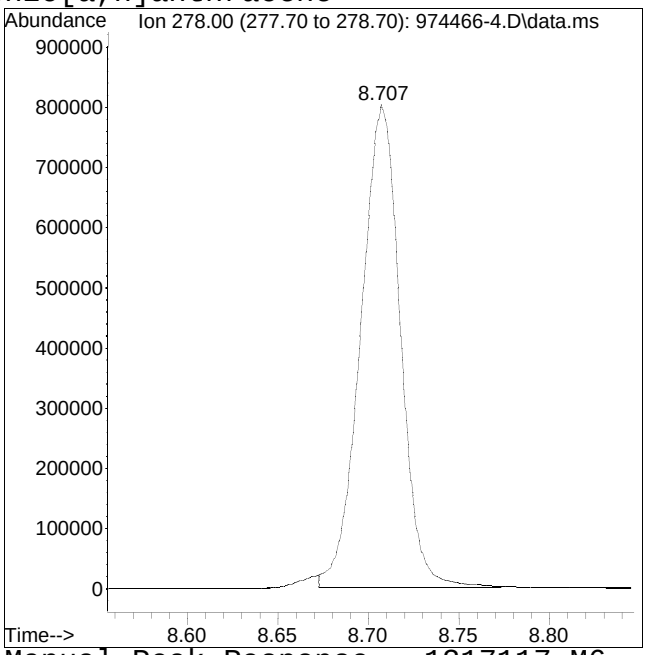
Manual Integration Report

Data Path : I:\8270SIM\SV125\240921RVTQMethod : SIM-RVT_240917n_sv125.M
Data File : 974466-4.D Operator : SV125:dv
Date Inj'd : 9/21/2024 4:45 pm Instrument : SV125
Sample : WG1974466-4,32,,rp Quant Date : 9/21/2024 5:00 pm

Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 1250414




Manual Peak Response = 1217117 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-5.D
Acq On : 21 Sep 2024 05:01 pm
Operator : SV125:dv
Sample : WG1974466-5,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 11:34:05 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 2.243 | 152 | 400353 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 446131 | | | Recovery = 89.74% | | | |
| 8) Naphthalene-d8 | 2.907 | 136 | 1478619 | 4000.000 | ng/ml | # 0.00 |
| Standard Area 1 = 1575323 | | | Recovery = 93.86% | | | |
| 17) Acenaphthene-d10 | 3.886 | 164 | 898754 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 1015344 | | | Recovery = 88.52% | | | |
| 22) Phenanthrene-d10 | 4.725 | 188 | 1893295 | 4000.000 | ng/ml | 0.00 |
| Standard Area 1 = 2145597 | | | Recovery = 88.24% | | | |
| 31) Chrysene-d12 | 6.266 | 240 | 1944304 | 4000.000 | ng/ml | -0.01 |
| Standard Area 1 = 2338315 | | | Recovery = 83.15% | | | |
| 36) Perylene-d12 | 7.465 | 264 | 2159957 | 4000.000 | ng/ml | -0.02 |
| Standard Area 1 = 2818319 | | | Recovery = 76.64% | | | |
| System Monitoring Compounds | | | | | | |
| 2) 2-Fluorophenol | 1.658 | 112 | 118804 | 1205.934 | ng/ml | 0.01 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 60.30% | | | |
| 3) Phenol-d6 | 2.052 | 99 | 108768 | 895.244 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 44.76% | | | |
| 7) Nitrobenzene-d5 | 2.521 | 82 | 80742 | 1292.121 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 129.21% | | | |
| 13) 2-Fluorobiphenyl | 3.504 | 172 | 262599 | 838.135 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 83.81% | | | |
| 21) 2,4,6-Tribromophenol | 4.329 | 330 | 96178 | 2464.758 | ng/ml | 0.00 |
| Spiked Amount 2000.000 | Range 15 - 110 | | Recovery = 123.24%# | | | |
| 30) 4-Terphenyl-d14 | 5.637 | 244 | 373527 | 970.829 | ng/ml | 0.00 |
| Spiked Amount 1000.000 | Range 30 - 130 | | Recovery = 97.08% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Bis(2-chloroethyl)ether | 2.105 | 93 | 195014 | 1806.385 | ng/ml | 100 |
| 6) Hexachloroethane | 2.501 | 117 | 71683 | 1640.431 | ng/ml | 100 |
| 9) Naphthalene | 2.917 | 128 | 643850 | 1634.875 | ng/ml# | 99 |
| 10) Hexachlorobutadiene | 2.990 | 225 | 118238 | 1486.062 | ng/ml | 100 |
| 11) 2-Methylnaphthalene | 3.297 | 142 | 444598 | 1762.648 | ng/ml | 100 |
| 14) 2-Chloronaphthalene | 3.568 | 162 | 484208 | 1812.946 | ng/ml | 94 |
| 16) Acenaphthylene | 3.804 | 152 | 776154 | 2000.954 | ng/ml | 99 |
| 18) Acenaphthene | 3.902 | 153 | 534208 | 1949.141 | ng/ml | 98 |
| 20) Fluorene | 4.192 | 166 | 613747 | 2042.755 | ng/ml | 100 |
| 24) Hexachlorobenzene | 4.511 | 284 | 250599 | 2068.358 | ng/ml | 99 |

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-5.D
Acq On : 21 Sep 2024 05:01 pm
Operator : SV125:dv
Sample : WG1974466-5,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 11:34:05 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\SV125\240921RVT\ccv0921.D
Sub List : DEFAULT - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) Pentachlorophenol | 4.622 | 266 | 132695 | 2706.967 | ng/ml | 100 |
| 26) Phenanthrene | 4.738 | 178 | 997930 | 2043.192 | ng/ml | 100 |
| 27) Anthracene | 4.767 | 178 | 1018385 | 2101.560 | ng/ml | 99 |
| 28) Fluoranthene | 5.417 | 202 | 1232013 | 2223.778 | ng/ml | 100 |
| 29) Pyrene | 5.546 | 202 | 1285816 | 2199.823 | ng/ml | 100 |
| 32) Benzo[a]anthracene | 6.257 | 228 | 1272478 | 2219.211 | ng/ml | 100 |
| 34) Chrysene | 6.282 | 228 | 1225251 | 2212.284 | ng/ml | 99 |
| 37) Benzo[b]fluoranthene | 7.091 | 252 | 1302026 | 2576.139 | ng/ml | 100 |
| 38) Benzo[k]fluoranthene | 7.116 | 252 | 1257489 | 2539.259 | ng/ml | 99 |
| 39) Benzo[a]pyrene | 7.402 | 252 | 1169206 | 2658.787 | ng/ml | 100 |
| 40) Indeno[1,2,3-cd]pyrene | 8.672 | 276 | 1231637 | 2666.732 | ng/ml | 100 |
| 41) Dibenzo[a,h]anthracene | 8.710 | 278 | 1153793M6 | 2160.383 | ng/ml | |
| 42) Benzo[g,h,i]perylene | 9.012 | 276 | 1152454 | 2409.577 | ng/ml | 99 |

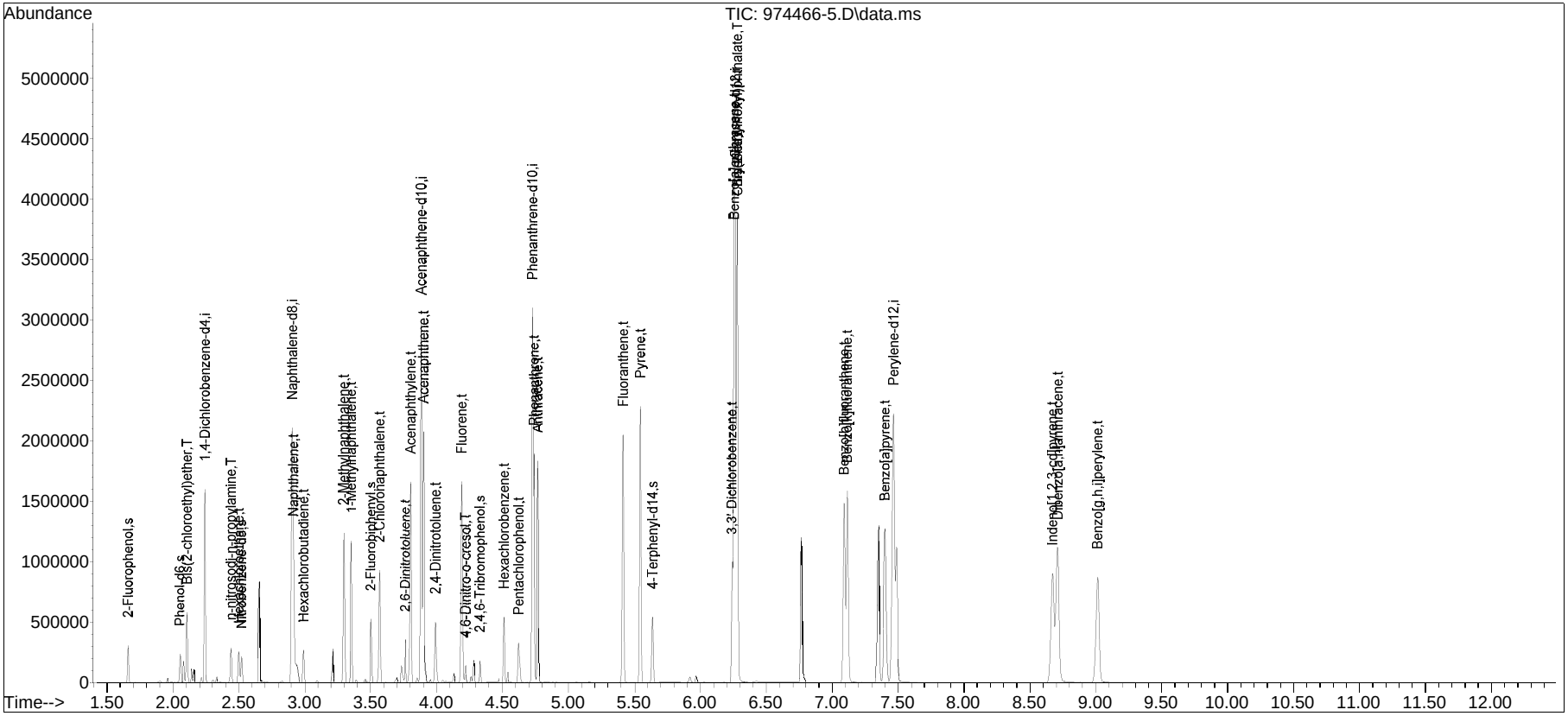
(#) = qualifier out of range (m) = manual integration (+) = signals summed

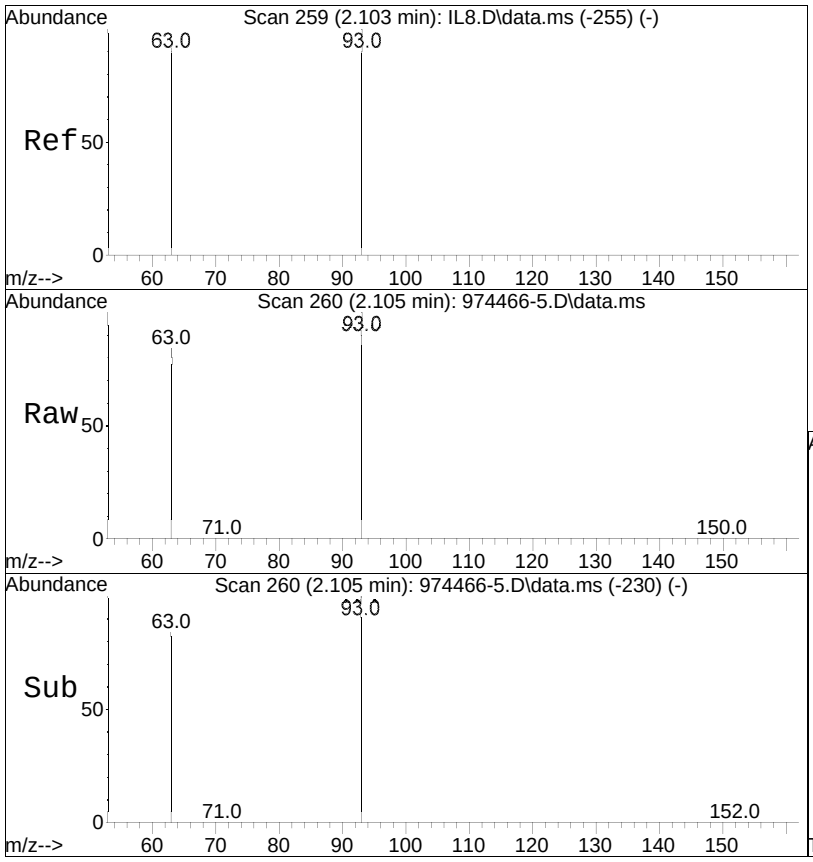
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV125\240921RVT\
Data File : 974466-5.D
Acq On : 21 Sep 2024 05:01 pm
Operator : SV125:dv
Sample : WG1974466-5,32,,rp
Misc : WG1974631,WG1974466,ical21503
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 11:34:05 2024
Quant Method : I:\8270sim\SV125\240921RVT\SIM-RVT_240917n_sv125.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 21 14:10:33 2024
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0921.D•

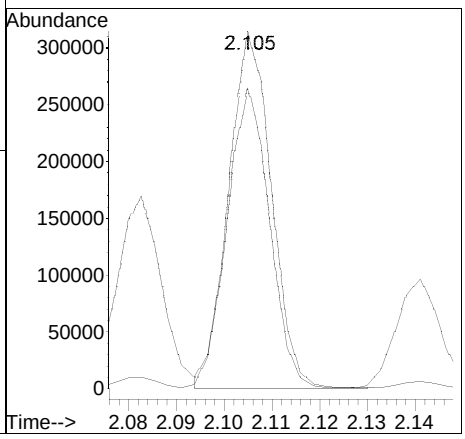


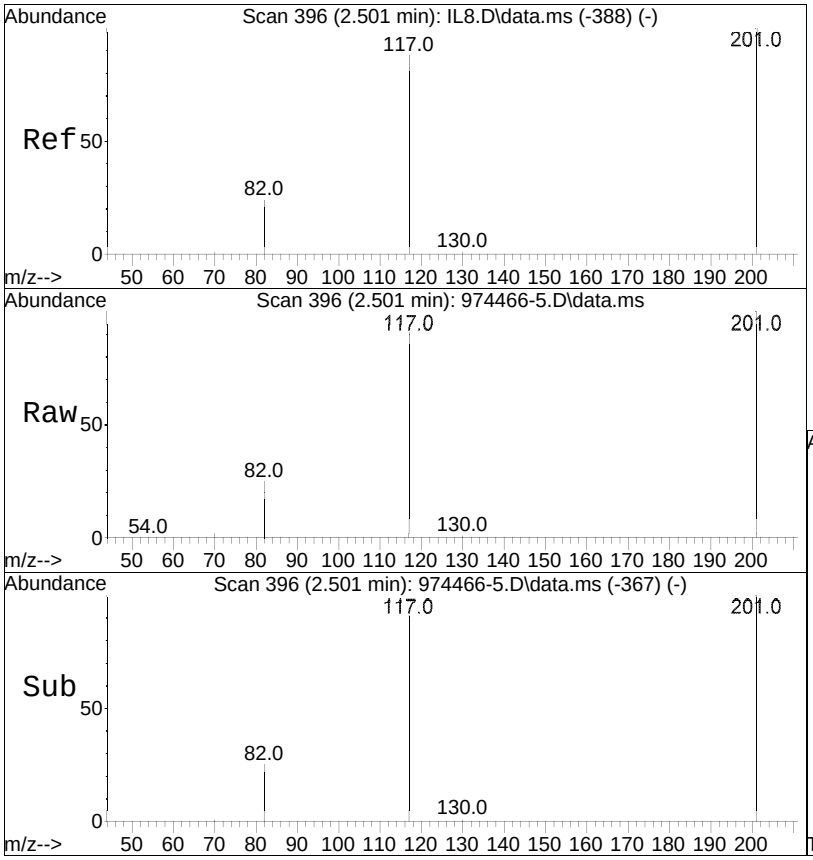



#4
Bis(2-chloroethyl)ether
Concen: 1806.39 ng/ml
RT: 2.105 min Scan# 260
Delta R.T. 0.002 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion: 93 Resp: 195014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 63 | 83.0 | 66.1 | 99.1 |

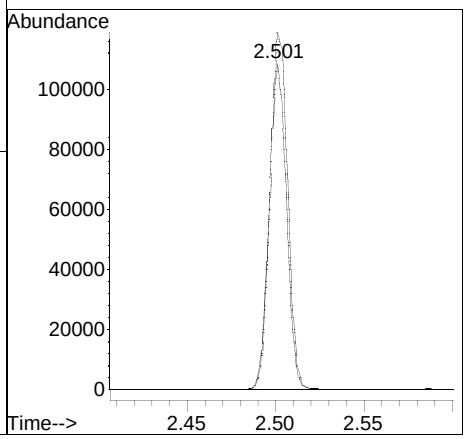


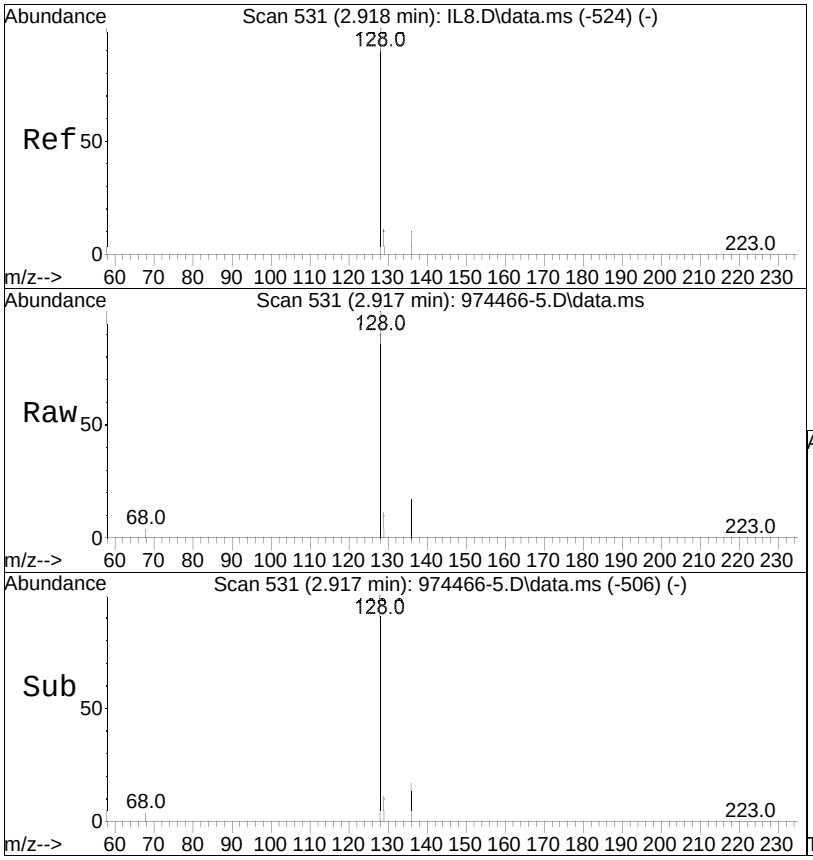



#6
Hexachloroethane
Concen: 1640.43 ng/ml
RT: 2.501 min Scan# 396
Delta R.T. 0.003 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:117 Resp: 71683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 112.0 | 89.9 | 134.9 |

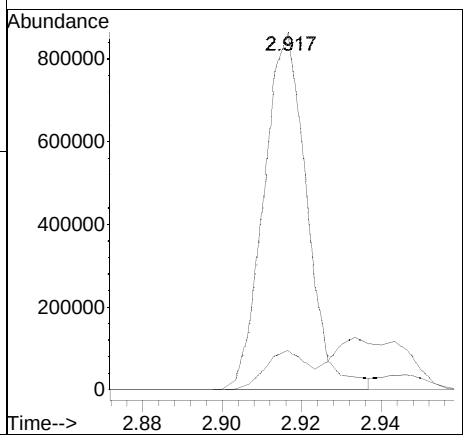


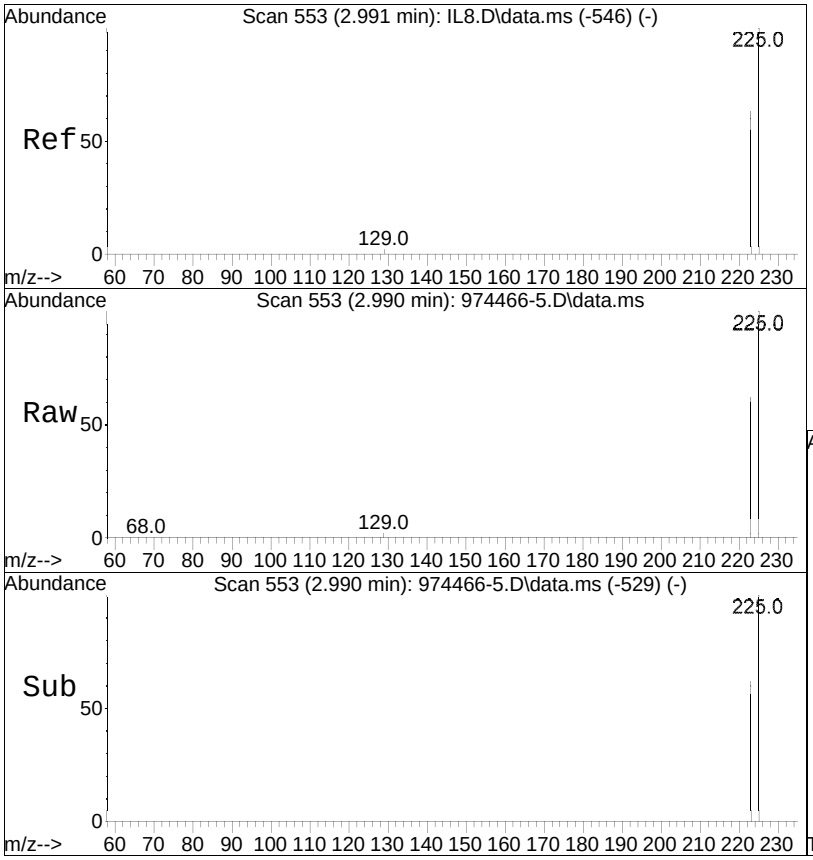



#9
Naphthalene
Concen: 1634.87 ng/ml
RT: 2.917 min Scan# 531
Delta R.T. 0.002 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:128 Resp: 643850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 129 | 11.2 | 8.8 | 13.2 |
| 127 | 0.0 | 0.0 | 0.0 |

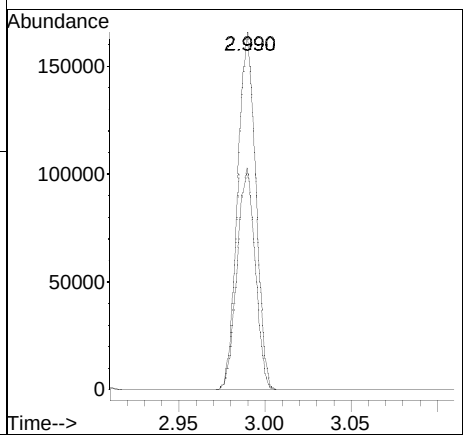


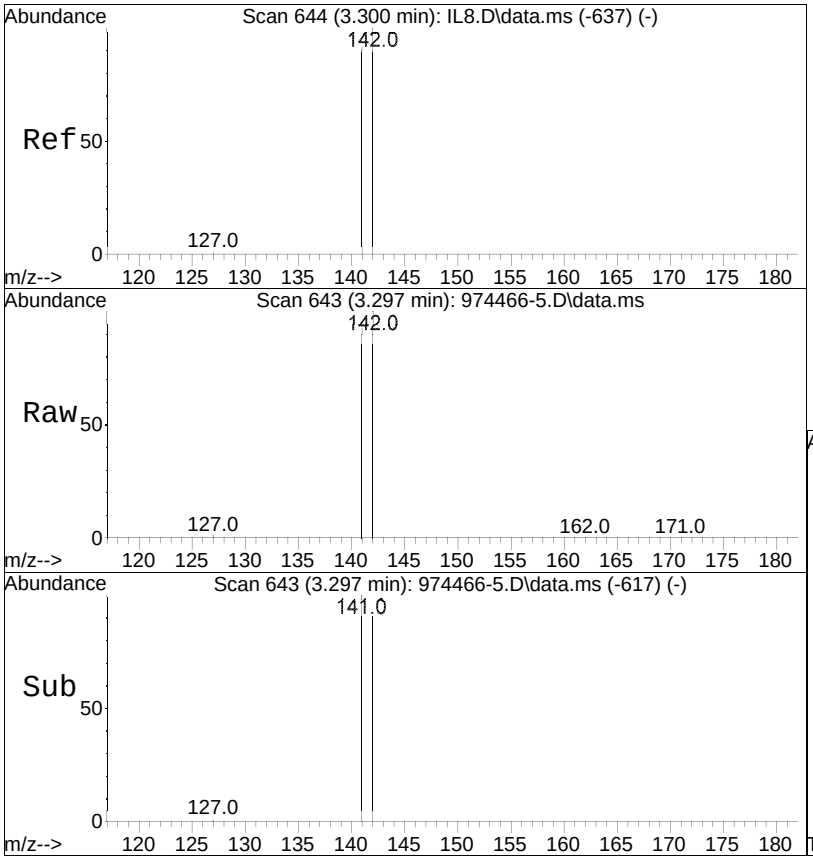



#10
Hexachlorobutadiene
Concen: 1486.06 ng/ml
RT:  2.990 min  Scan# 553
Delta R.T.  -0.001 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:225 Resp:  118238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 49.9 | 74.9 |

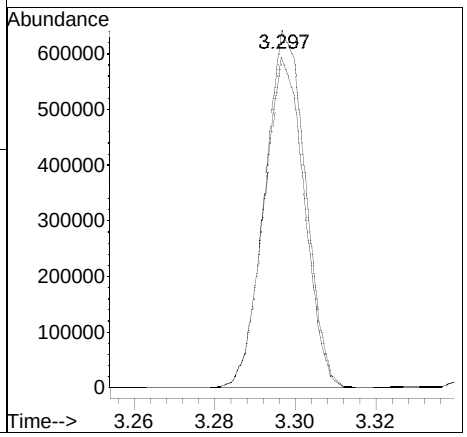


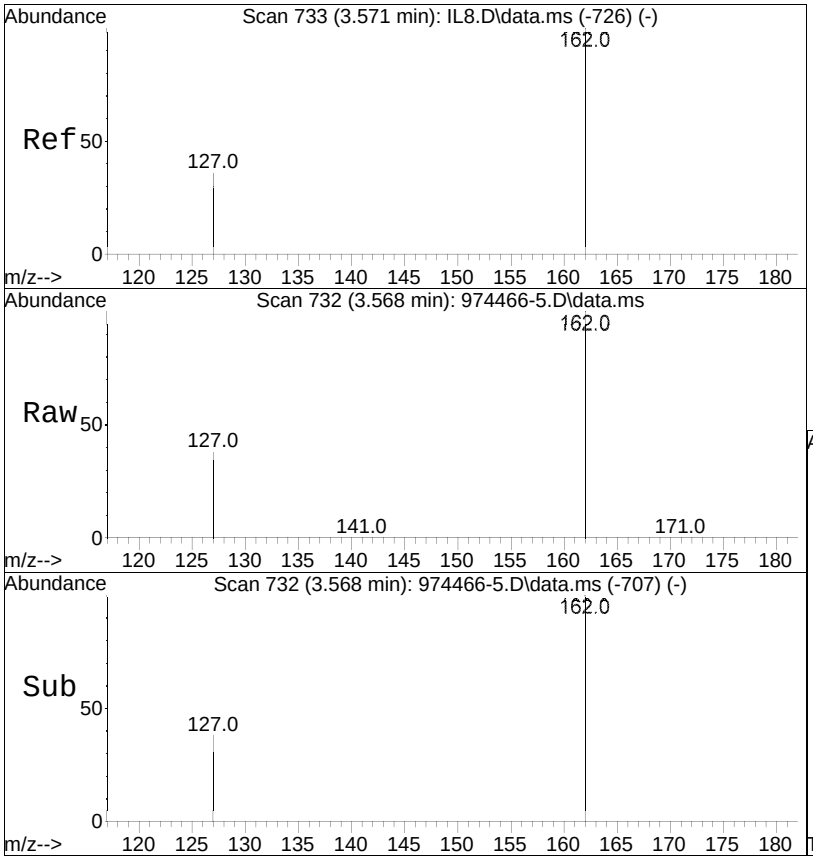



#11
2-Methylnaphthalene
Concen: 1762.65 ng/ml
RT:  3.297 min  Scan# 643
Delta R.T.  -0.001 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:142 Resp:  444598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 141 | 91.8 | 73.8 | 110.6 |

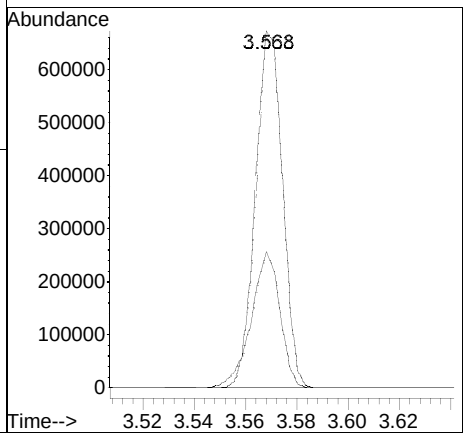


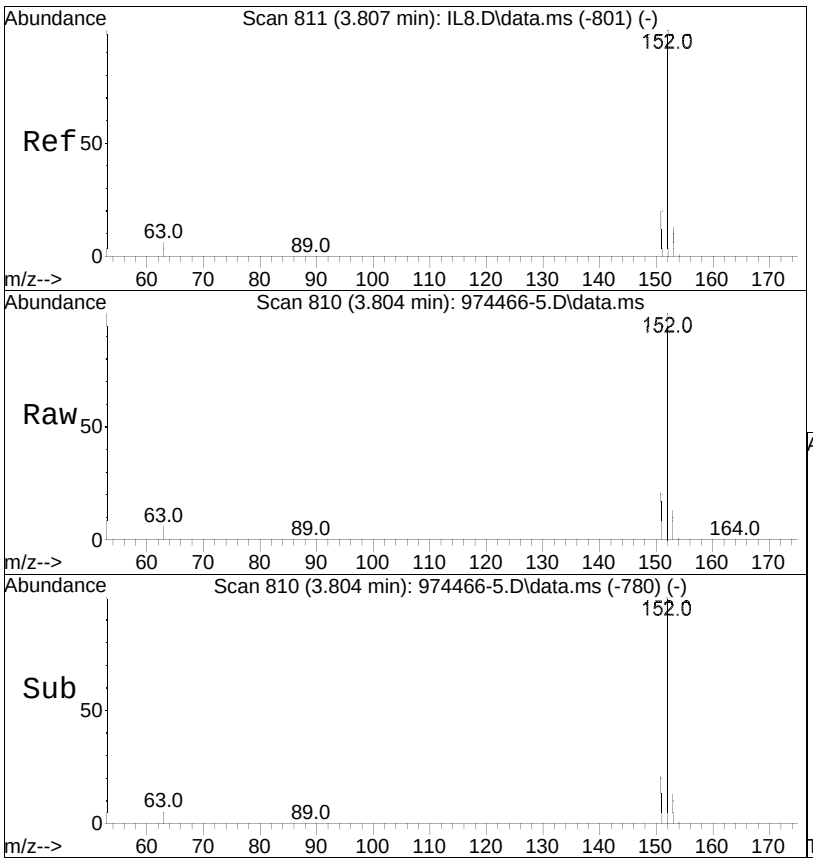



#14
2-Chloronaphthalene
Concen: 1812.95 ng/ml
RT:  3.568 min  Scan# 732
Delta R.T.  -0.004 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:162 Resp:  484208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 162 | 100 | | |
| 127 | 40.5 | 29.4 | 44.0 |

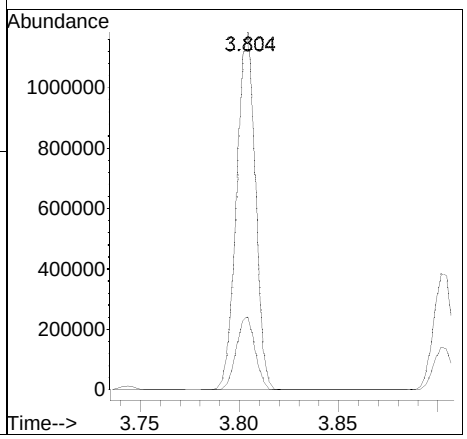


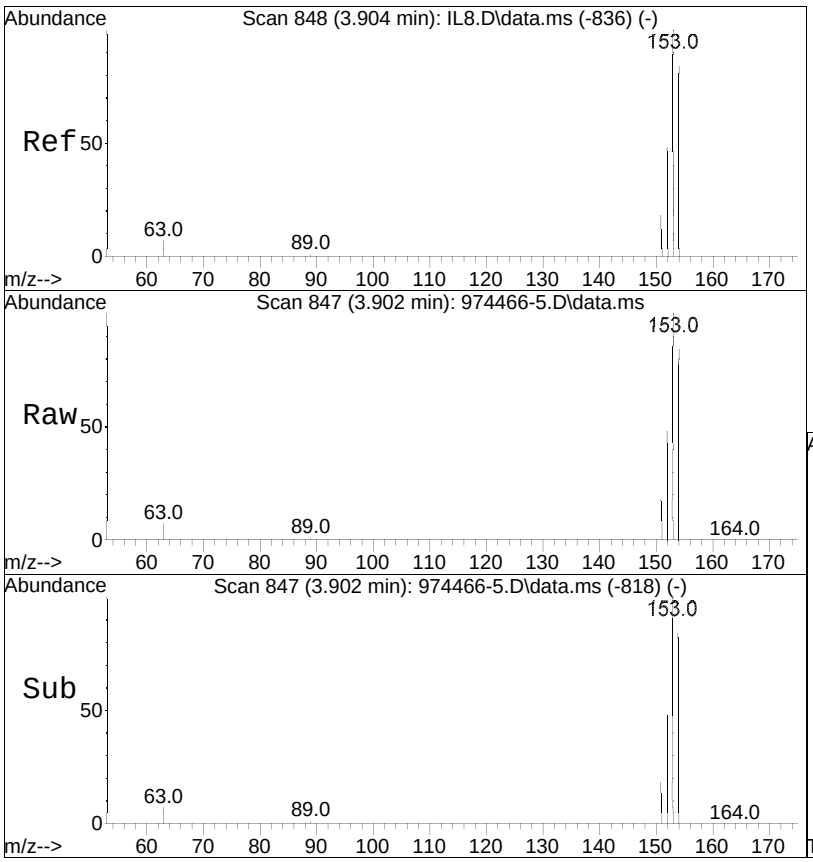



#16
Acenaphthylene
Concen: 2000.95 ng/ml
RT: 3.804 min Scan# 810
Delta R.T. -0.000 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:152 Resp: 776154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 151 | 20.5 | 16.2 | 24.4 |

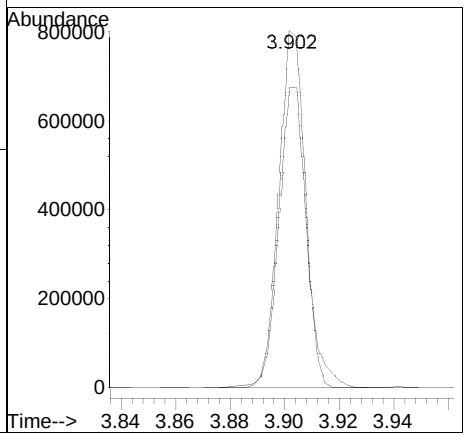


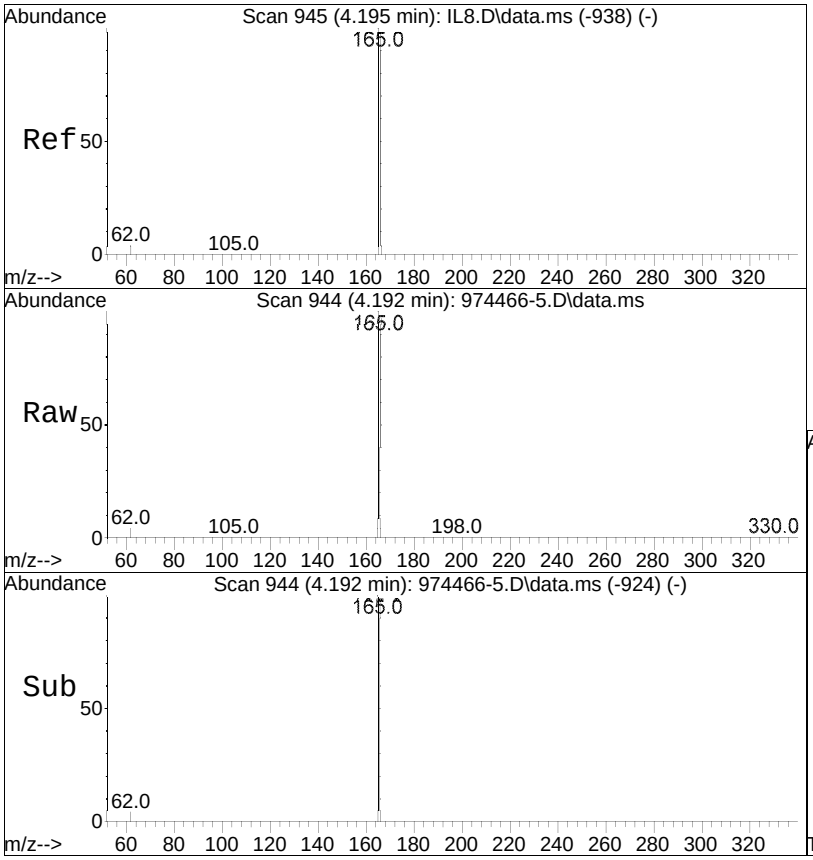



#18
Acenaphthene
Concen: 1949.14 ng/ml
RT:  3.902 min  Scan# 847
Delta R.T.  -0.003 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:153 Resp:  534208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 153 | 100 | | |
| 154 | 90.2 | 70.3 | 105.5 |

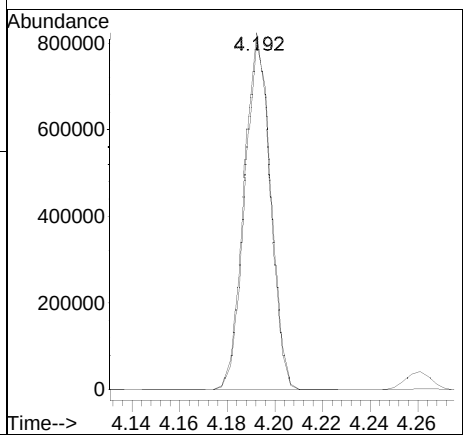


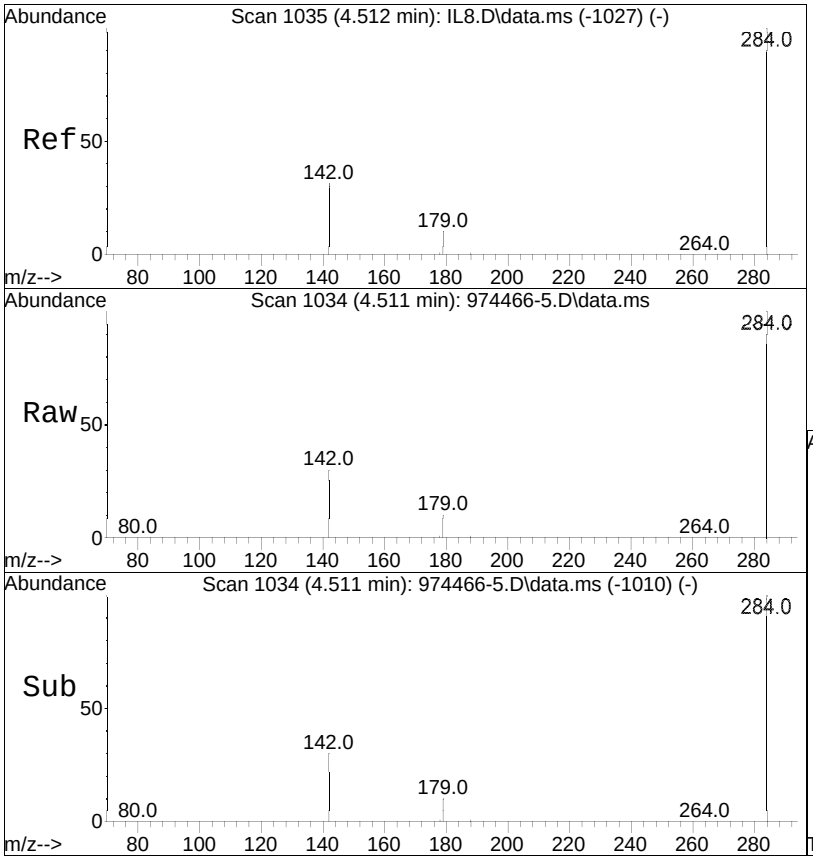



#20
Fluorene
Concen: 2042.76 ng/ml
RT:  4.192 min  Scan# 944
Delta R.T.  -0.004 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:166 Resp:  613747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 165 | 102.1 | 82.0 | 123.0 |

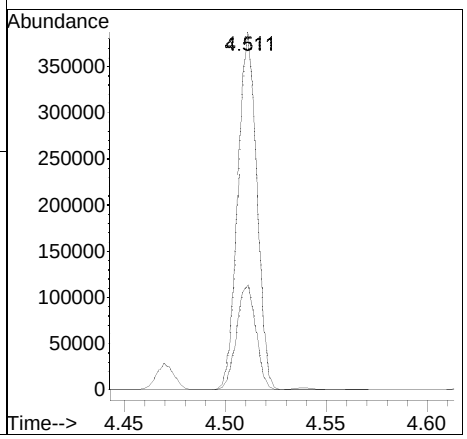


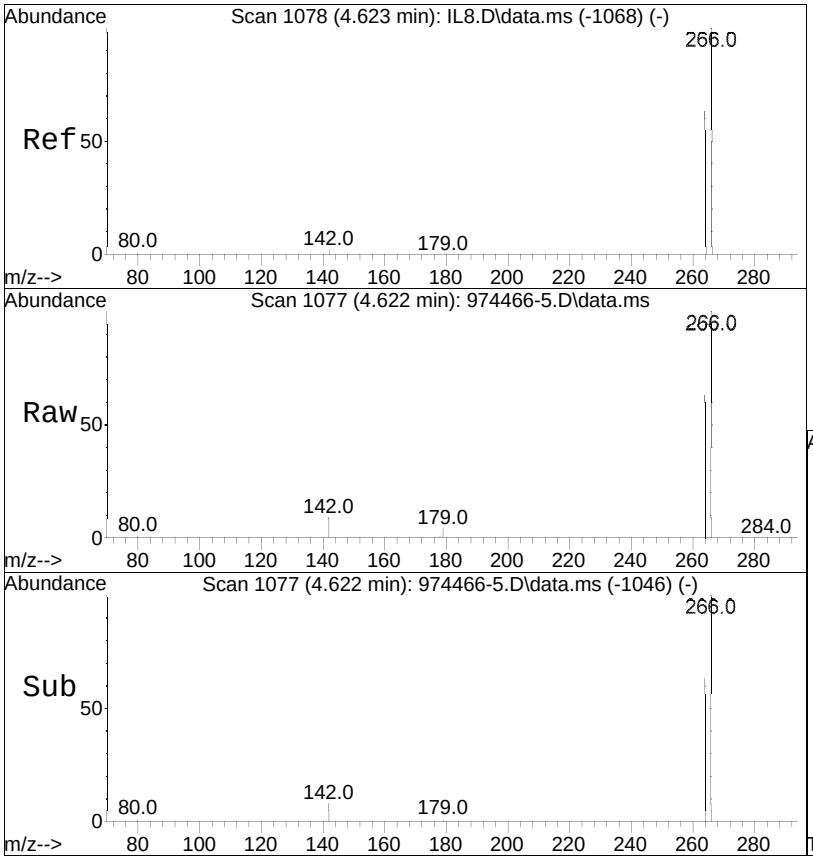



#24
Hexachlorobenzene
Concen: 2068.36 ng/ml
RT:  4.511 min  Scan# 1034
Delta R.T.  -0.001 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:284 Resp:  250599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 284 | 100 | | |
| 142 | 29.9 | 24.4 | 36.6 |

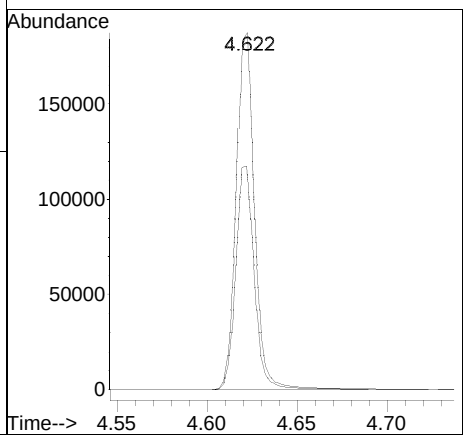


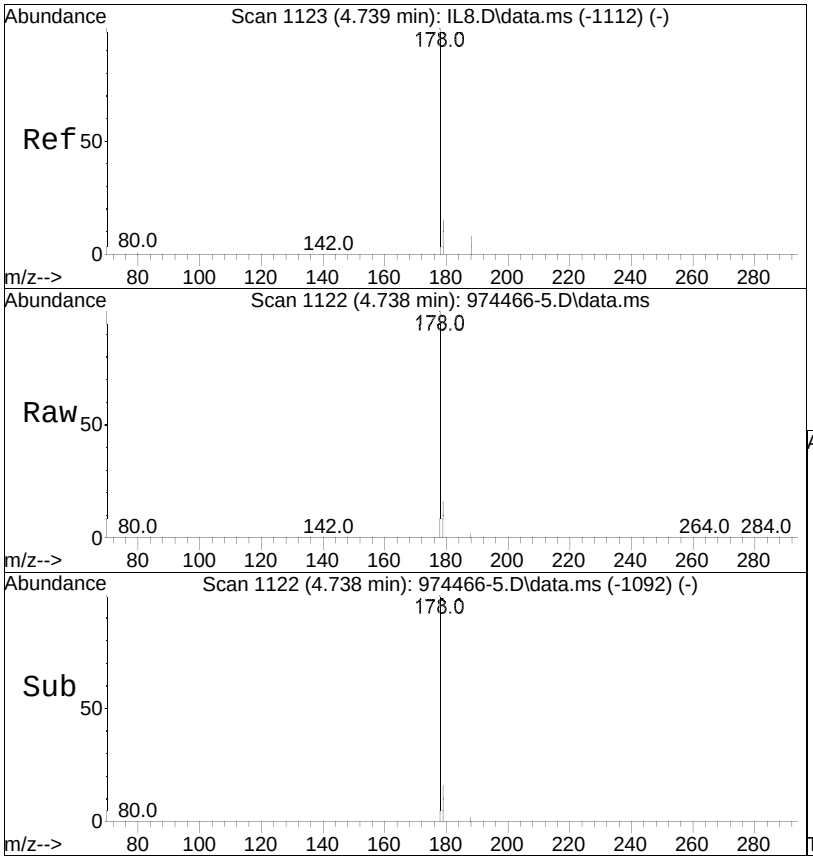



#25
Pentachlorophenol
Concen: 2706.97 ng/ml
RT: 4.622 min Scan# 1077
Delta R.T. -0.001 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:266 Resp: 132695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 266 | 100 | | |
| 264 | 63.3 | 50.4 | 75.6 |

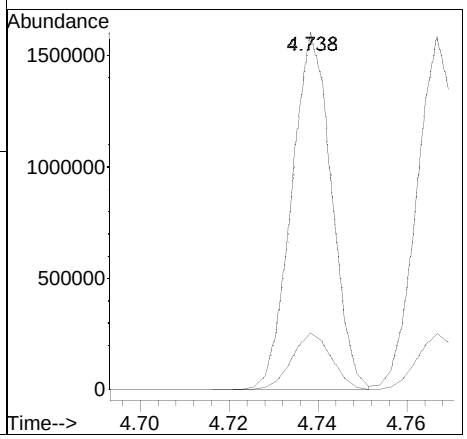


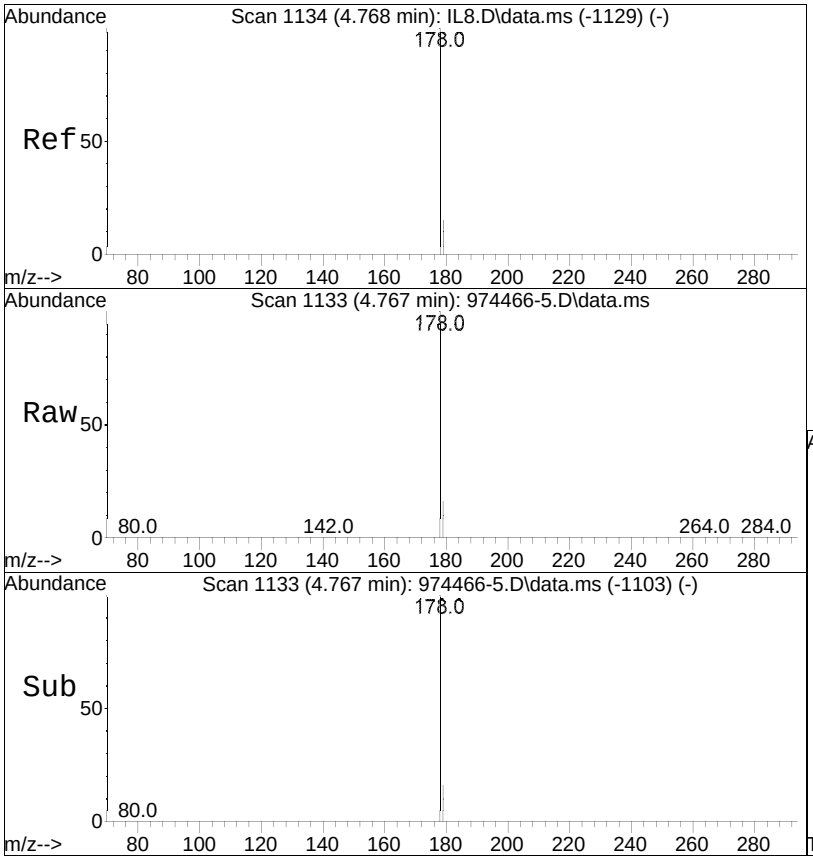



#26
Phenanthrene
Concen: 2043.19 ng/ml
RT:  4.738 min  Scan# 1122
Delta R.T.  -0.003 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:178 Resp:  997930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.8 | 12.6 | 18.8 |

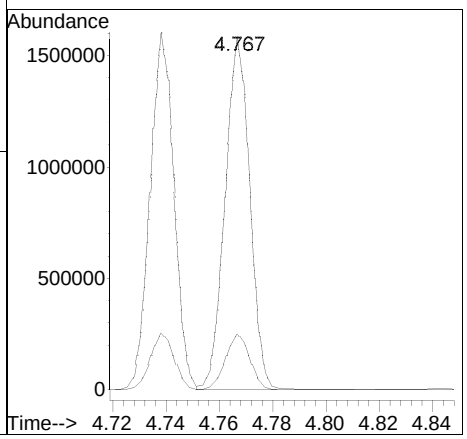


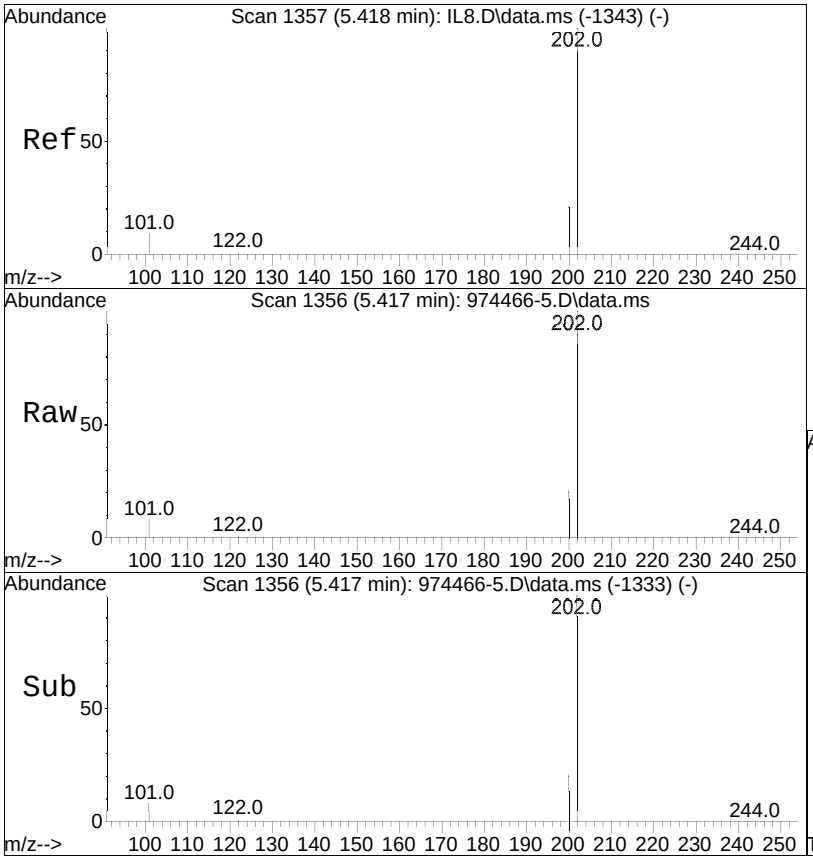



#27
Anthracene
Concen: 2101.56 ng/ml
RT:  4.767 min  Scan# 1133
Delta R.T.  -0.003 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:178 Resp: 1018385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 178 | 100 | | |
| 179 | 15.6 | 12.3 | 18.5 |

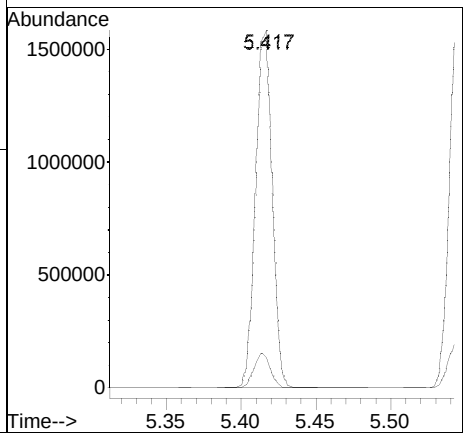


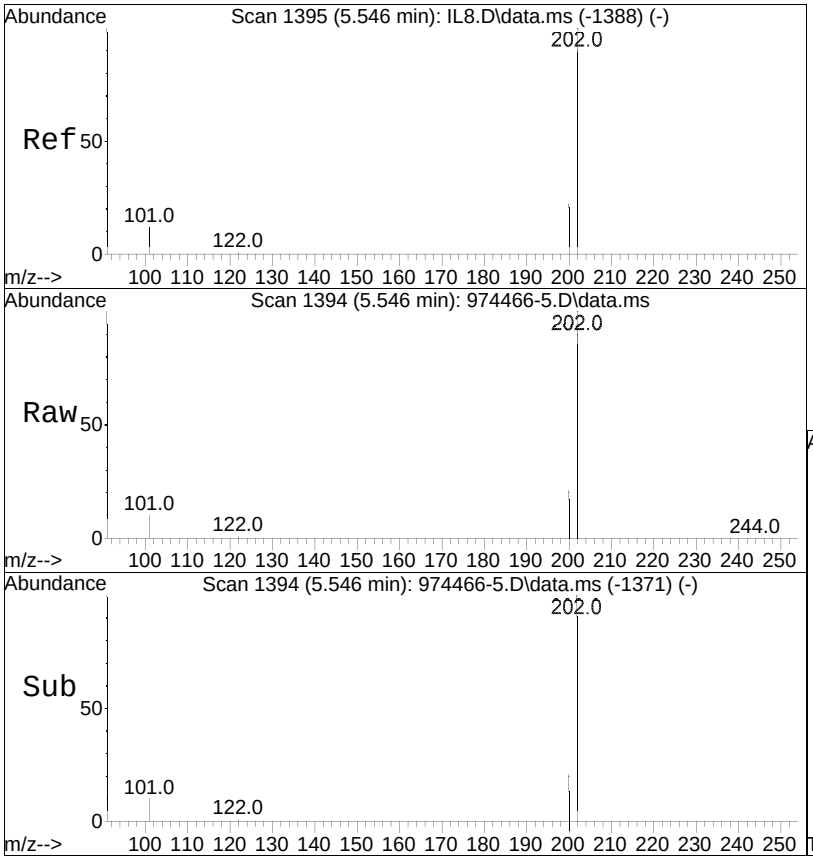



#28
Fluoranthene
Concen: 2223.78 ng/ml
RT:  5.417 min  Scan# 1356
Delta R.T.  -0.003 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:202 Resp: 1232013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 101 | 9.5 | 7.6 | 11.4 |

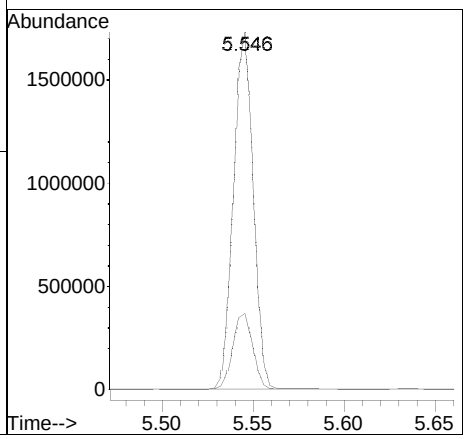


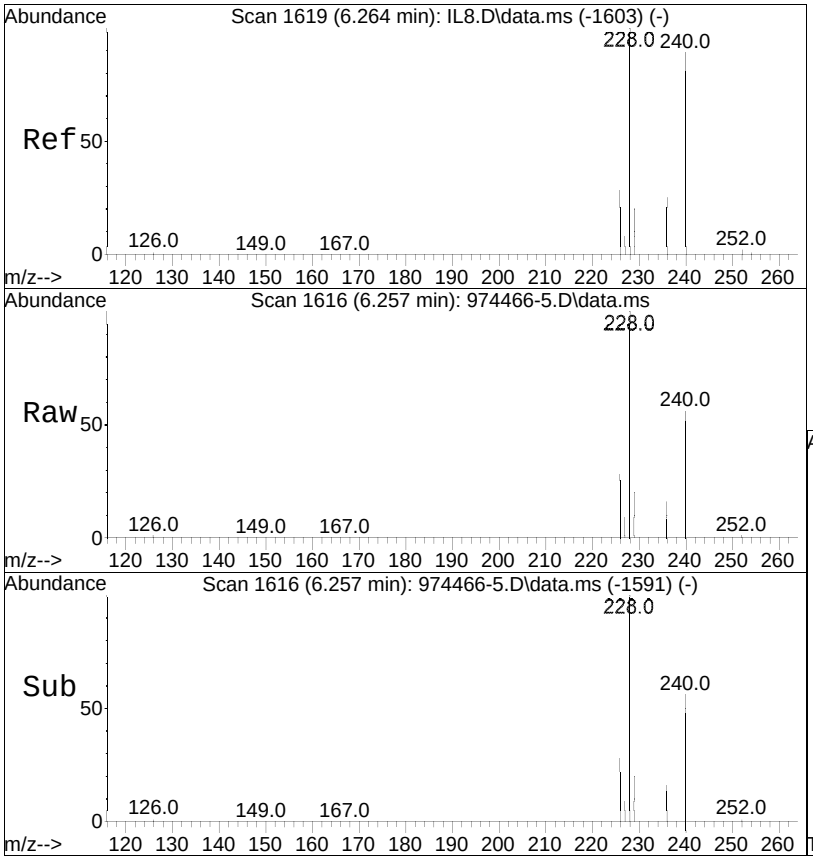



#29
Pyrene
Concen: 2199.82 ng/ml
RT:  5.546 min  Scan# 1394
Delta R.T.  -0.003 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:202 Resp: 1285816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 202 | 100 | | |
| 200 | 21.7 | 17.2 | 25.8 |

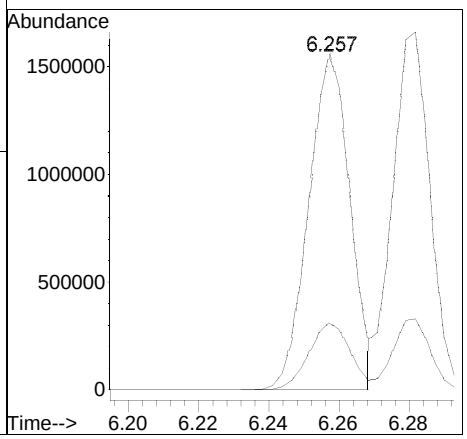


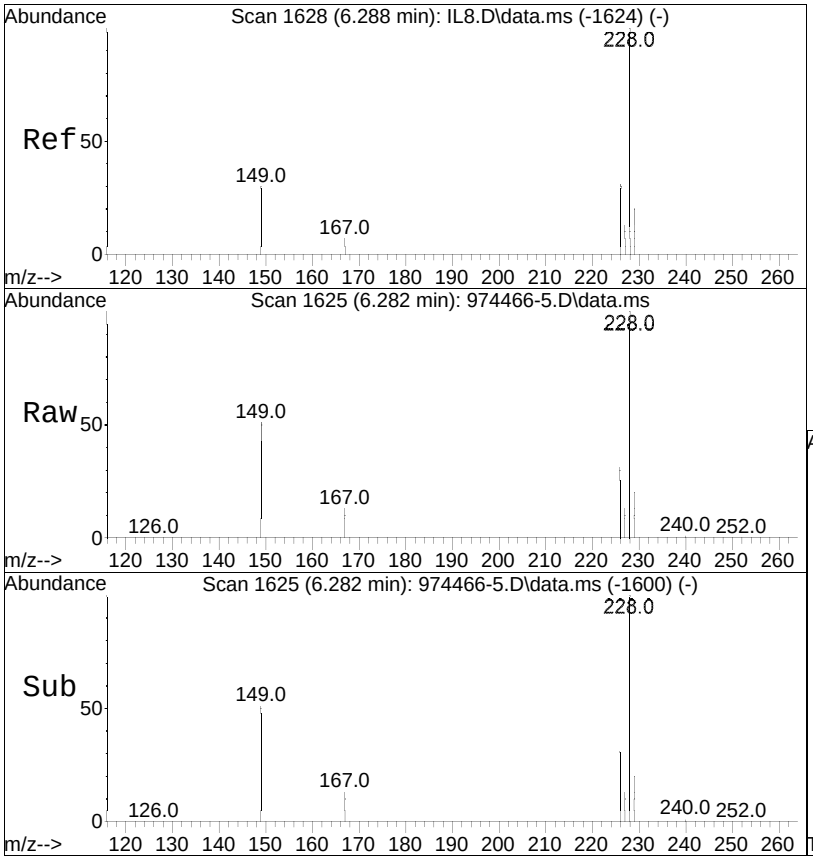



#32
Benzo[a]anthracene
Concen: 2219.21 ng/ml
RT:  6.257 min  Scan# 1616
Delta R.T.  -0.011 min
Lab File:  974466-5.D
Acq: 21 Sep 2024  05:01 pm

Tgt Ion:228 Resp: 1272478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 229 | 19.9 | 15.8 | 23.6 |

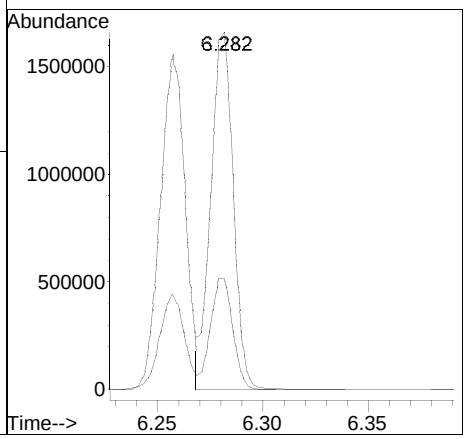


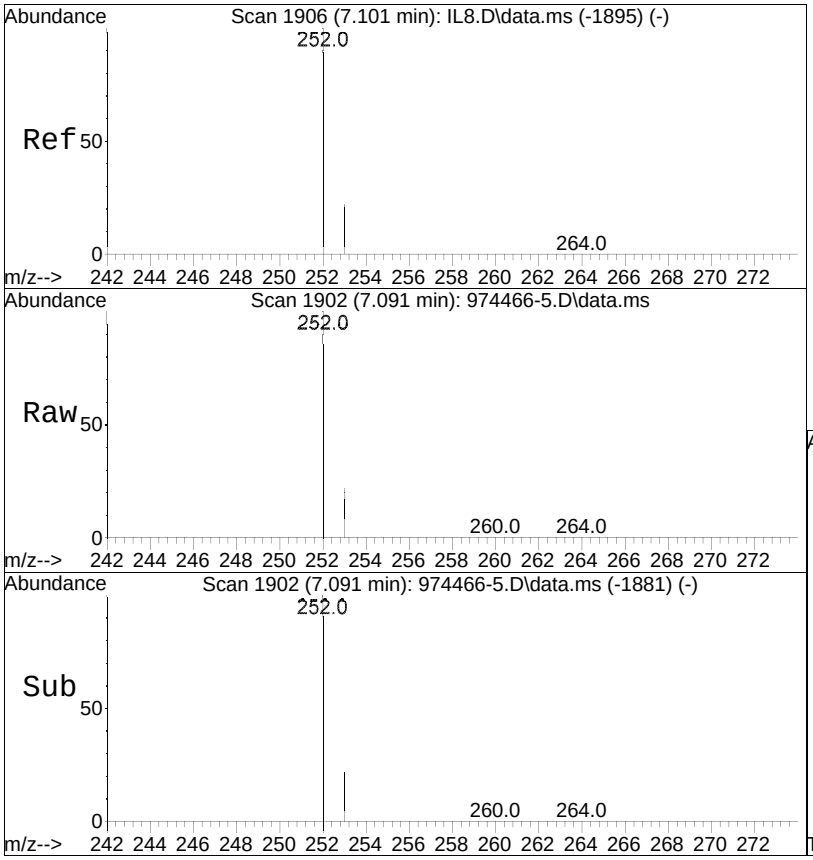



#34
Chrysene
Concen: 2212.28 ng/ml
RT: 6.282 min Scan# 1625
Delta R.T. -0.011 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:228 Resp: 1225251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 228 | 100 | | |
| 226 | 31.3 | 24.8 | 37.2 |

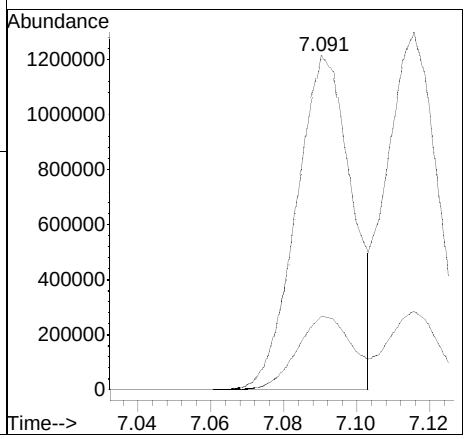


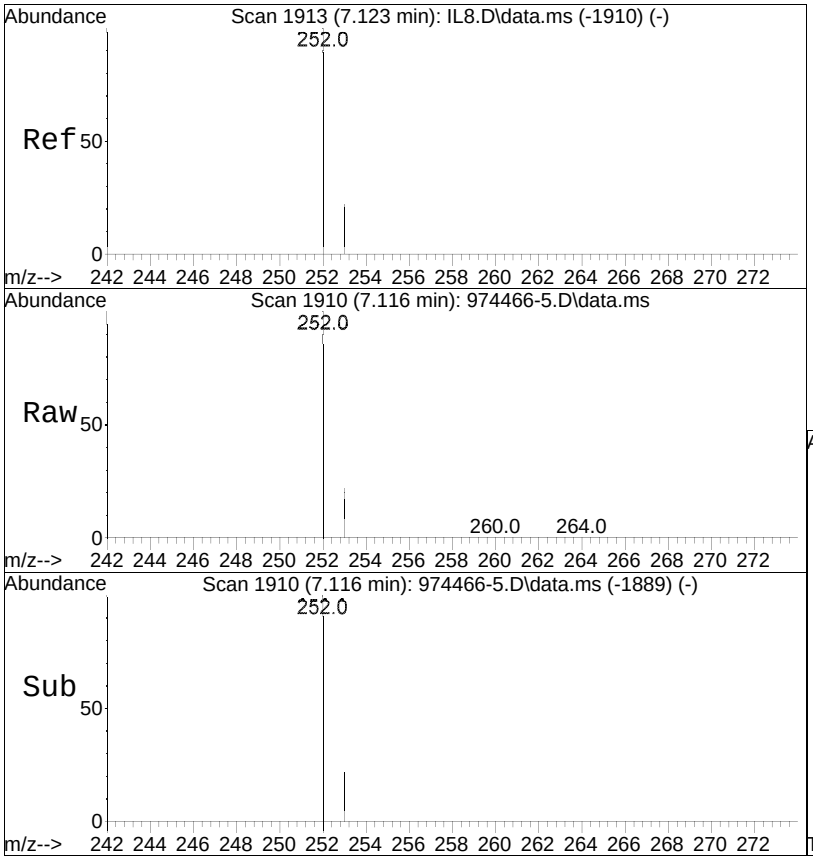



#37
Benzo[b]fluoranthene
Concen: 2576.14 ng/ml
RT: 7.091 min Scan# 1902
Delta R.T. -0.013 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:252 Resp: 1302026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.4 | 26.0 |

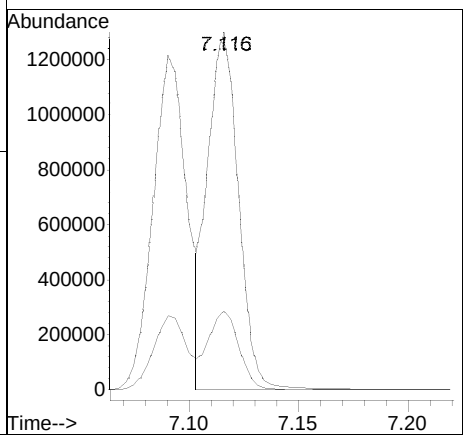


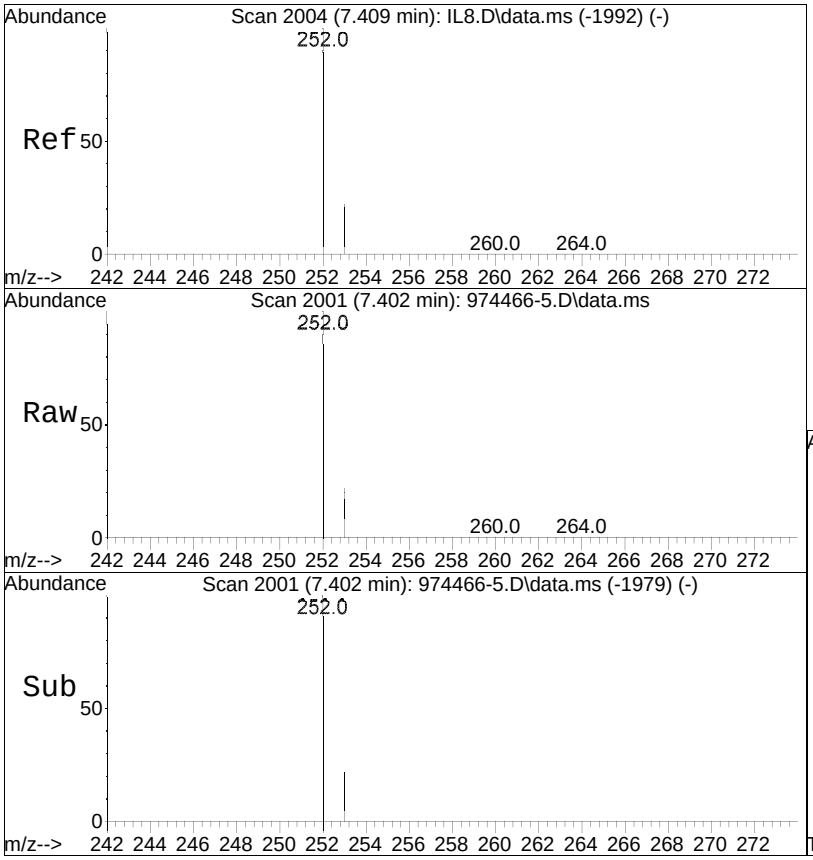



#38
Benzo[k]fluoranthene
Concen: 2539.26 ng/ml
RT: 7.116 min Scan# 1910
Delta R.T. -0.013 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:252 Resp: 1257489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 22.2 | 17.5 | 26.3 |

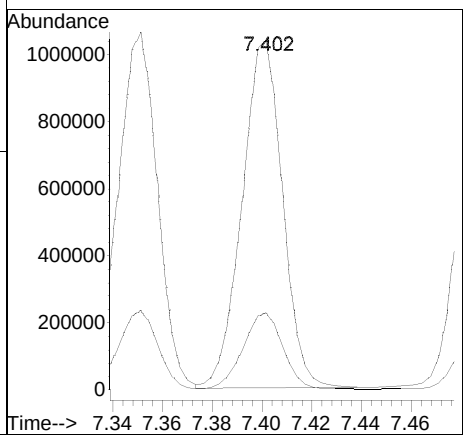


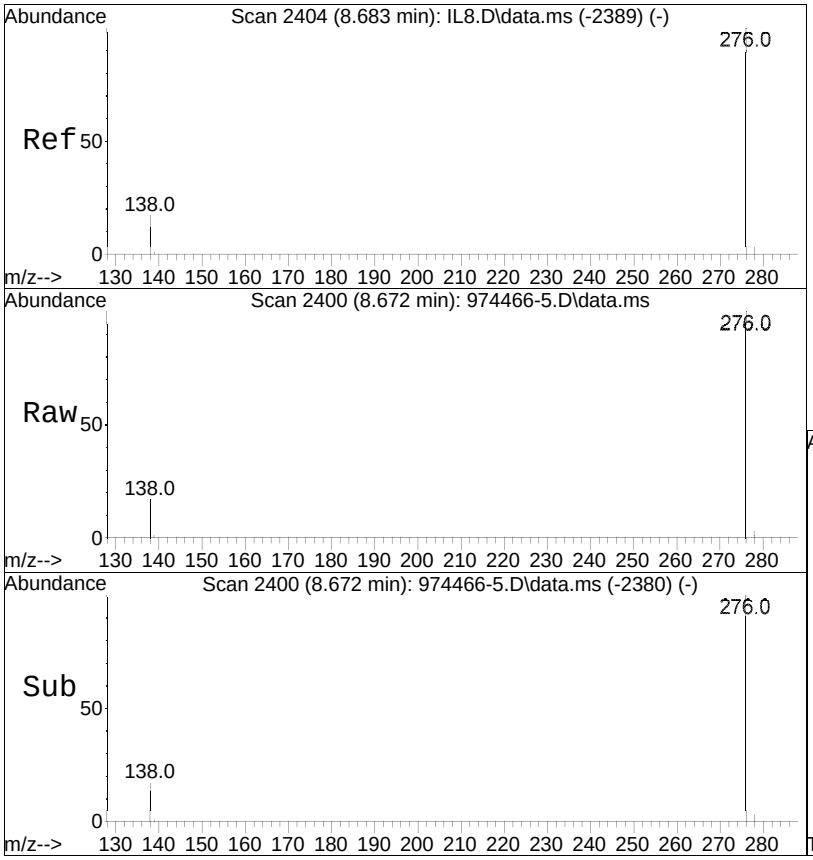



#39
Benzo[a]pyrene
Concen: 2658.79 ng/ml
RT: 7.402 min Scan# 2001
Delta R.T. -0.009 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:252 Resp: 1169206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 252 | 100 | | |
| 253 | 21.9 | 17.4 | 26.0 |

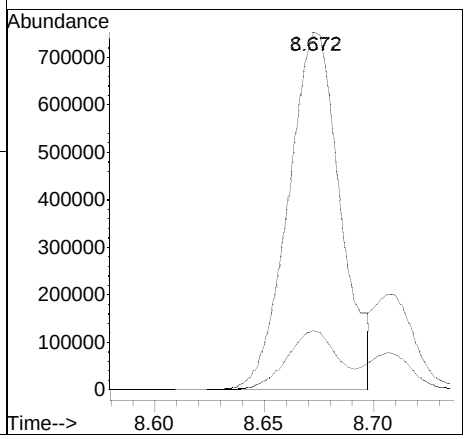


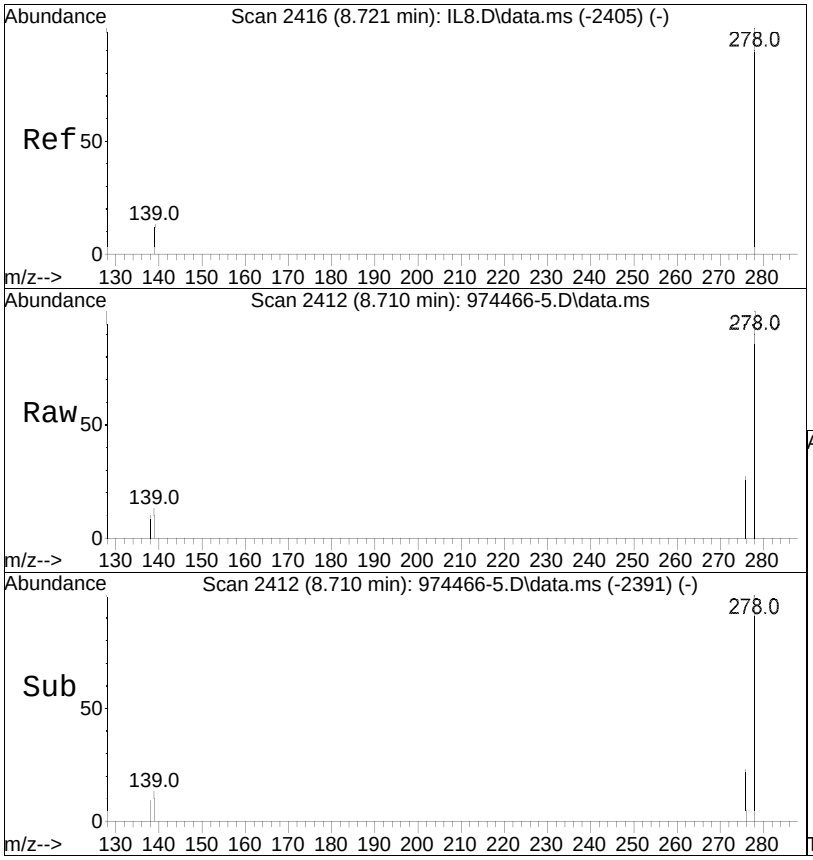



#40
Indeno[1,2,3-cd]pyrene
Concen: 2666.73 ng/ml
RT: 8.672 min Scan# 2400
Delta R.T. -0.016 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:276 Resp: 1231637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 16.3 | 13.1 | 19.7 |

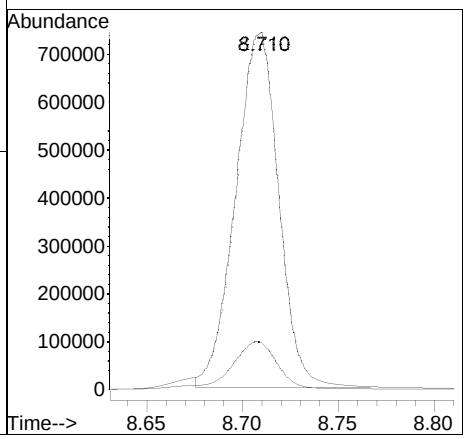


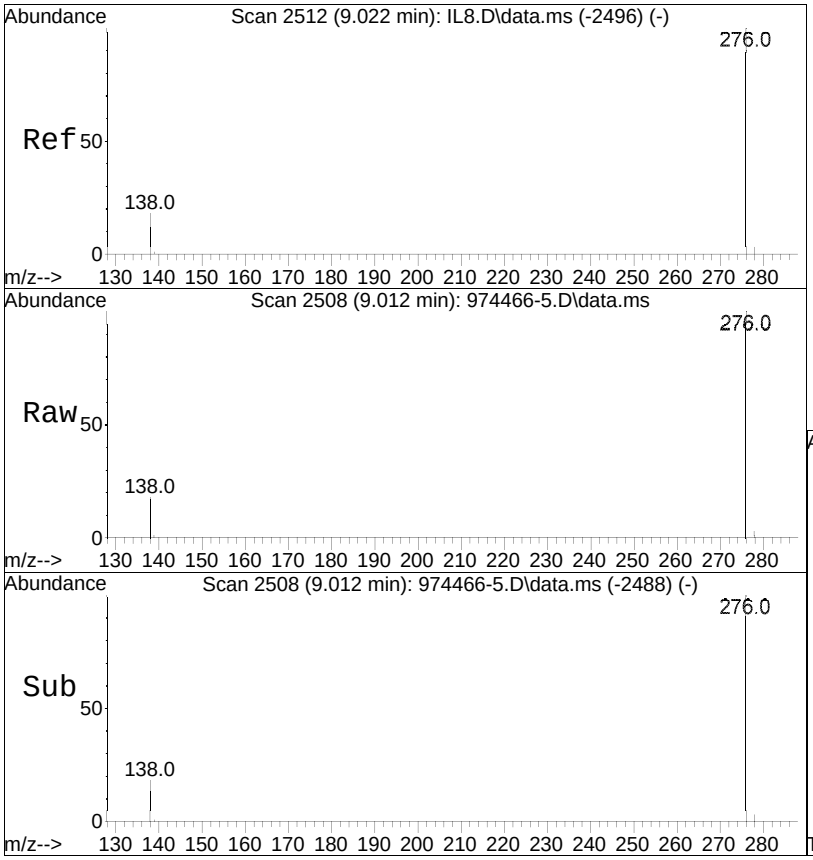



#41
Dibenzo[a,h]anthracene
Concen: 2160.38 ng/ml M6
RT: 8.710 min Scan# 2412
Delta R.T. -0.013 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:278 Resp: 1153793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 278 | 100 | | |
| 139 | 14.5 | 12.0 | 18.0 |

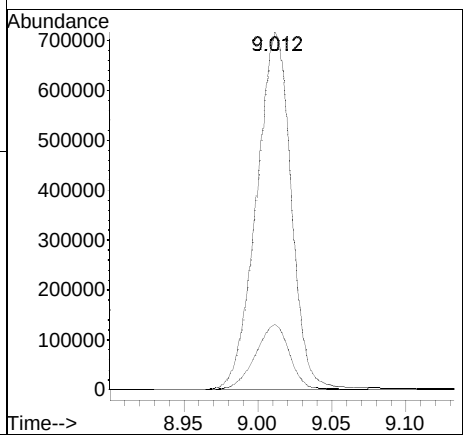





#42
Benzo[g,h,i]perylene
Concen: 2409.58 ng/ml
RT: 9.012 min Scan# 2508
Delta R.T. -0.016 min
Lab File: 974466-5.D
Acq: 21 Sep 2024 05:01 pm

Tgt Ion:276 Resp: 1152454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 276 | 100 | | |
| 138 | 18.1 | 14.7 | 22.1 |

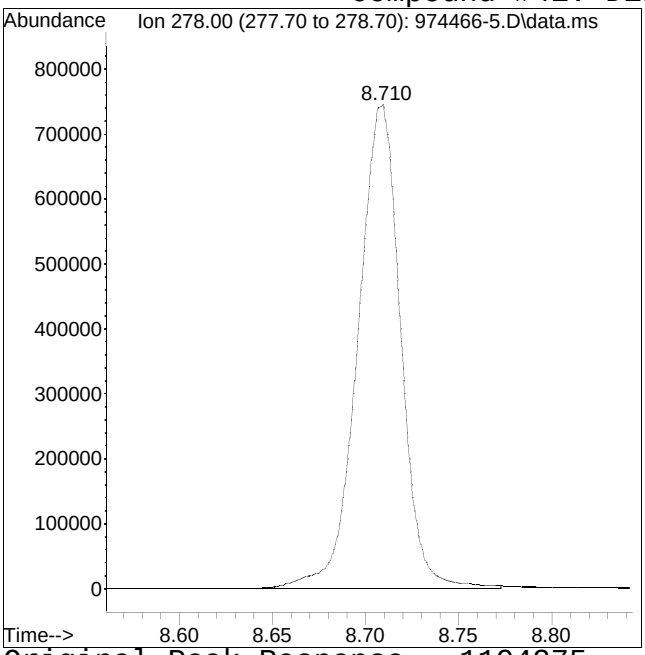


# Manual Integration Report

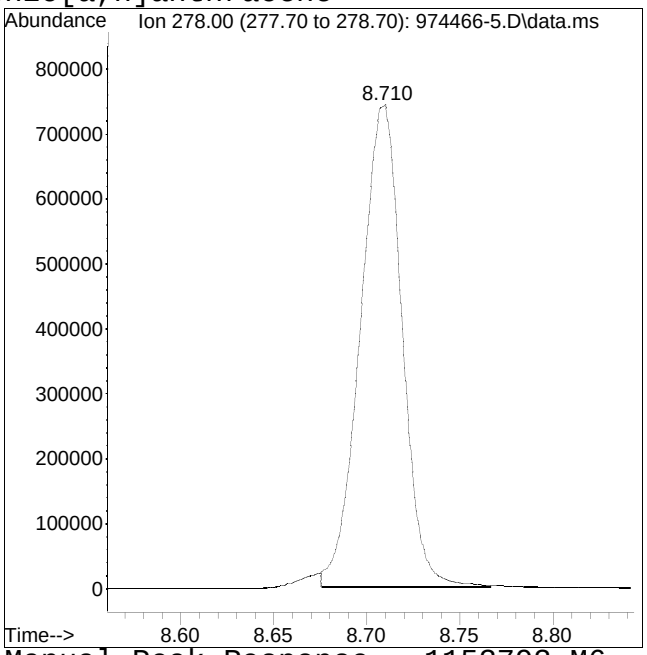
Data Path : I:\8270SIM\SV125\240921RVTQ
Data File : 974466-5.D
Date Inj'd : 9/21/2024 5:01 pm
Sample : WG1974466-5,32,,rp

Method : SIM-RVT_240917n_sv125.M
Operator : SV125:dv
Instrument : SV125
Quant Date : 9/21/2024 5:16 pm

## Compound #41: Dibenzo[a,h]anthracene




Original Peak Response = 1194275




Manual Peak Response = 1153793 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Calculation of Semi Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * 1000 * (1/Vo) * Vf

Where:
DF = Dilution Factor
Vo = Volume of Sample (mL)
Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: Amt * DF * 1000 * (1/Wt) * Vf * (100/TS)
Where:
DF = Dilution Factor
Wt = Weight of Sample (g)
Vf = Extraction Lab Final Volume (mL)
TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 24 2024, 05:40 pm

Work Group: WG1974466  for Department: 2 Organic Preparation

Created: 20-SEP-24  Due:  Operator: DAE

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 | MW-1SR | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-02 | MW-1DR2 | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-03 | MW-11S | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-04 | MW-11D | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453053-05 | DUP_091624 | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.1 |
| L2453125-07 | B1-GW | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-08 | B2-GW | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-09 | B5-GW | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453125-10 | B6-GW | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0923 | 0924 | S0 | Amber-A.1 |
| L2453695-01 | 2024 0918 MW-3 | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| L2453695-02 | 2024 0918 MW-2 | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| L2453695-03 | 2024 0918 MW-1 | C | NYTCL-8270-SIM-RVT | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.1 |
| WG1974466-1 | Laboratory Method Bl | S | NYTCL-8270-SIM-RVT | WATER | DONE | U | | | | |
| WG1974466-2 | Laboratory Control S | S | NYTCL-8270-SIM-RVT | WATER | DONE | U | | | | |
| WG1974466-3 | LCS Duplicate | S | NYTCL-8270-SIM-RVT | WATER | DONE | U | | | | |
| WG1974466-4 | Matrix Spike | S | NYTCL-8270-SIM-RVT | WATER | DONE | U | | | | |
| WG1974466-5 | Matrix Spike Duplica | S | NYTCL-8270-SIM-RVT | WATER | DONE | U | | | | |

Comments:

| | |
|---|---|
| WG1974466-3 | WG1974466-2 |
| WG1974466-4 | L2453053-01 |
| WG1974466-5 | L2453053-01 |

Analysis log File

Total Files Reported in Log : 13
Log Generated From Directory: I:\8270SIM\sv119\240621RVTical\

| No. | DATA FILE | INJ METH | SAMPLE NAME | MISC | DATE INJ'D |
|---|---|---|---|---|---|
| 1 | TUNE.D | DFTPPRVT.M | TUNE | WG1939716,,ical | 6/21/2024 2:09 pm |
| 2 | L10.D | SIM-RVT.M | IL10,32,, #10462 5000 n | WG1939716,,ical | 6/21/2024 2:50 pm |
| 3 | L9.D | SIM-RVT.M | IL9,32,, #10755 2500 ng | WG1939716,,ical | 6/21/2024 3:06 pm |
| 4 | L8.D | SIM-RVT.M | IL8,32,, #10463 1000 ng | WG1939716,,ical | 6/21/2024 3:23 pm |
| 5 | L7.D | SIM-RVT.M | IL7,32,, #10756 500 ng/ | WG1939716,,ical | 6/21/2024 3:39 pm |
| 6 | L6.D | SIM-RVT.M | IL6,32,, #10465 100 ng/ | WG1939716,,ical | 6/21/2024 3:55 pm |
| 7 | L5.D | SIM-RVT.M | IL5,32,, #10757 40 ng/m | WG1939716,,ical | 6/21/2024 4:12 pm |
| 8 | L4.D | SIM-RVT.M | IL4,32,, #10468 10 ng/m | WG1939716,,ical | 6/21/2024 4:28 pm |
| 9 | L3.D | SIM-RVT.M | IL3,32,, #10469 5 ng/ml | WG1939716,,ical | 6/21/2024 4:44 pm |
| 10 | L2.D | SIM-RVT.M | IL2,32,, #10758 2 ng/ml | WG1939716,,ical | 6/21/2024 5:01 pm |
| 11 | L1.D | SIM-RVT.M | IL1,32,, #10759 1 ng/ml | WG1939716,,ical | 6/21/2024 5:17 pm |
| 12 | ICV.D | SIM-RVT.M | CQICV,32,, #10475 1000 | WG1939716,,ical | 6/21/2024 5:33 pm |
| 13 | instblk.D | SIM-RVT.M | | | 6/21/2024 5:50 pm |

Analysis log File

Total Files Reported in Log : 14
Log Generated From Directory: I:\8270SIM\SV125\240917nRVTical\

| No. | DATA FILE | INJ METH | SAMPLE NAME | MISC | DATE INJ'D |
|---|---|---|---|---|---|
| 1 | Tune.D | DFTPP(100ml) | | | 9/17/2024 5:19 pm |
| 2 | Tunea.D | DFTPP(100ml) | TUNE #11000 | WG1973864,,ical | 9/17/2024 6:19 pm |
| 3 | IL10.D | fast-SIM-LVI | IL10,32,,5000.0 ng/ml # | WG1973864,,ical | 9/17/2024 6:45 pm |
| 4 | IL9.D | fast-SIM-LVI | IL9,32,,2500.0 ng/ml #1 | WG1973864,,ical | 9/17/2024 7:01 pm |
| 5 | IL8.D | fast-SIM-LVI | IL8,32,,1000.0 ng/ml #1 | WG1973864,,ical | 9/17/2024 7:17 pm |
| 6 | IL7.D | fast-SIM-LVI | IL7,32,,500.0 ng/ml #10 | WG1973864,,ical | 9/17/2024 7:33 pm |
| 7 | IL6.D | fast-SIM-LVI | IL6,32,,100.0 ng/ml #10 | WG1973864,,ical | 9/17/2024 7:49 pm |
| 8 | IL5.D | fast-SIM-LVI | IL5,32,,40.0 ng/ml #108 | WG1973864,,ical | 9/17/2024 8:05 pm |
| 9 | IL4.D | fast-SIM-LVI | IL4,32,,10.0 ng/ml #108 | WG1973864,,ical | 9/17/2024 8:21 pm |
| 10 | IL3.D | fast-SIM-LVI | IL3,32,,5.0 ng/ml #1089 | WG1973864,,ical | 9/17/2024 8:37 pm |
| 11 | IL2.D | fast-SIM-LVI | IL2,32,,2.0 ng/ml #1090 | WG1973864,,ical | 9/17/2024 8:53 pm |
| 12 | IL1.D | fast-SIM-LVI | IL1,32,,1.0 ng/ml #1089 | WG1973864,,ical | 9/17/2024 9:09 pm |
| 13 | ICV.D | fast-SIM-LVI | CQICV,32,, 1.000 Lot#10 | WG1973864,,ical | 9/17/2024 9:25 pm |
| 14 | insblk.D | fast-SIM-LVI | | | 9/17/2024 9:41 pm |

Dep.: GCMS
Inst: SV125
Date: **09/21/24**
Run:

Method
GC: SIM RVT

Seq: WG1974631
ICAL: 21503

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 48 | deg0921 | wg-1,32,,dftpp lot# 11000 | | | | 09/21 RAP |
| 49 | ccv0921 | wg-3,32,,CCV 10888 (0905) | OH, Bis high | | | 09/21 RAP |
| 50 | blank0921 | instument blank | | | | |
| | | | | | | |
| 1 | 974464-1 | WG1974464-1,32,,rp | RV- hit over RL | | | 09/21 RAP |
| 2 | 974464-2 | WG1974464-2,32,,rp | RR- compounds high | | | 09/21 RAP |
| 3 | 974464-3 | WG1974464-3,32,,rp | RR - compounds high | | | 09/21 RAP |
| 4 | 53694-01 | L2453694-01,32,,R1C,rp | RV - hit over RL | | | 09/21 RAP |
| 5 | 974466-2 | WG1974466-2,32,,rp | | | | 09/21 RAP |
| 6 | 974466-3 | WG1974466-3,32,,rp | | | | 09/21 RAP |
| 7 | 974466-1 | WG1974466-1,32,,rp | RV - hit over RL | | | 09/21 RAP |
| 8 | 53989-09 | L2453989-09,32,,R1C,rp | RV - hit over RL | | | 09/21 RAP |
| 9 | 53053-01 | L2453053-01,32,,rp | | | | 09/21 RAP |
| 10 | 974466-4 | WG1974466-4,32,,rp | | | | 09/23 DV |
| 11 | 974466-5 | WG1974466-5,32,,rp | | | Sv-MTC | 09/23 DV |
| 12 | 53695-01 | L2453695-01,32,,R3C,rp | | | | 09/23 DV |
| 13 | 53695-02 | L2453695-02,32,,R3C,rp | | | | 09/23 DV |
| 14 | 53695-03 | L2453695-03,32,,R3C,rp | | | | 09/23 DV |
| 15 | 53051-01 | L2453051-01,32,,rp | RX MB contamination | | | 09/23 DV |
| 16 | 53051-02 | L2453051-02,32,,rp | RX MB contamination | | | 09/23 DV |
| 17 | 53053-02 | L2453053-02,32,,rp | | | | 09/23 DV |
| 18 | 53053-03 | L2453053-03,32,,rp | | | | 09/23 DV |
| 19 | 53053-04 | L2453053-04,32,,rp | | | | 09/23 DV |
| 20 | 53053-05 | L2453053-05,32,,rp | | | | 09/23 DV |
| 21 | 974464-4 | WG1974464-4,32,,rp | | | | |
| 22 | 974464-5 | WG1974464-5,32,,rp | | | | |
| 23 | 53108-05 | L2453108-05,32,,rp | | | RAP | |
| | | | | | SV-kmh | |

Dep.: GCMS
Inst: SV119
Date: **09/21/24**
Run:

Method
GC: SIM RVT

Seq: WG1974651
ICAL: 21236

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 48 | deg0921 | wg-1,32,,dftpp SV119 lot# 11000 | | | | |
| 48 | deg0921a | wg-1,32,,dftpp SV119 lot# 10988 | | | | 09/21 RAP |
| 49 | ccv0921 | wg-3,32,,ICV 10884 (0920) | Bis low | | | 09/21 RAP |
| 50 | blank0921 | instrument blank | | | | |
| | | | | | | |
| 1 | 974238-1 | WG1974238-1,32,,rp | | | | 09/21 RAP |
| 2 | 974464-1 | WG1974464-1,32,,RR,rp | RV - hit over RL | | | |
| 3 | 974238-2 | WG1974238-2,32,,rp | | | | 09/21 RAP |
| 4 | 974238-3 | WG1974238-3,32,,rp | | | | 09/21 RAP |
| 5 | 51580-04 | L2451580-04,32,,rp | | | | 09/21 RAP |
| 6 | 52364-12 | L2452364-12RE,32,,rp,RE | | | | 09/21 RAP |
| 7 | 52364-01 | L2452364-01RE,32,,rp,RE | | | | 09/21 RAP |
| 8 | 974464-2 | WG1974464-2,32,,RR,rp | | | | 09/21 RAP |
| 9 | 974464-3 | WG1974464-3,32,,RR,rp | | | | 09/21 RAP |
| 10 | 974466-2 | WG1974466-2,32,,RR,rp | | | | 09/21 RAP |
| 11 | 974466-3 | WG1974466-3,32,,RR,rp | | | | 09/21 RAP |
| 12 | 52364-03 | L2452364-03RE,32,,rp,RE | | | | 09/21 RAP |
| 13 | 74464-1 | WG1974464-1,32,,RV,rp | | | | 09/23 DV |
| 14 | 74466-1 | WG1974466-1,32,,RV,rp | | | | 09/23 DV |
| 15 | 53694-01 | L2453694-01,32,,R1C,RV,rp | RX FB contaminated | | | 09/23 DV |
| 16 | 53989-09 | L2453989-09,32,,R1C,RV,rp | RX FB contaminated | | | 09/23 DV |
| 17 | 52364-04 | L2452364-04,32,,rp,RE | | | | 09/23 DV |
| 18 | 52364-08 | L2452364-08,32,,rp,RE | | | | 09/23 DV |
| 19 | 52364-09 | L2452364-09,32,,rp,RE | | | | 09/23 DV |
| 20 | 52364-10 | L2452364-10,32,,rp,RE | | | | 09/23 DV |
| 21 | 52364-11 | L2452364-11,32,,rp,RE | | | | 09/23 DV |
| 22 | 969966-4 | WG1969966-4,32,,rp | | | | |
| 23 | 969966-5 | WG1969966-5,32,,rp | | | | |
| 24 | 22662-76 | L2422662-76,32,,rp | | | | |
| 25 | 966115-4 | WG1966115-4,32,,rp | | | | |
| 26 | 966115-5 | WG1966115-5,32,,rp | | | | |
| 27 | 2662-123 | L2422662-123,32,,rp | | | | |
| 28 | 966740-4 | WG1966740-4,32,,rp | | | | |
| 29 | 966740-5 | WG1966740-5,32,,rp | | | | |
| 30 | 2662-127 | L2422662-127,32,,rp | | | | |
| 31 | 971916-4 | WG1971916-4,32,,rp | | | | |
| 32 | 971916-5 | WG1971916-5,32,,rp | | | | |
| 33 | 2662-129 | L2422662-129,32,,rp | | | | |
| 34 | 974360-4 | WG1974360-4,32,,rp | | | | |
| 35 | 974360-5 | WG1974360-5,32,,rp | | | | |
| 36 | 53108-05 | L2453108-05,32,,rp | | | RAP | |
| | | | | | SV-kmh | |

# ORGANIC ELN REPORT

**Workgroup: WG1974466**

**Prep Method:** EPA 3510C
**Solvent Type:** DCM **Lot #:** EJ049
**Surrogate Type:** ABN **Lot #:** 11001as,03/11/2025,
**Spike Type:** ABN-SIM **Lot #:** 10737ad,10/31/2024,10949af,0
**Spike Verify by:** DAE/DLP
**Lims Spikelot:** 8270-RVT

**Additional Reagents/Stds**

| | |
|---|---|
| H2SO4 | A091124 |
| Na2SO4 | 241169 |
| NaOH | 10NNaOH082824 |

**Conc.Method:** Buchi
**Solvent Type:** DCM
**Lot #:** EJ049

**Additional Reagents/Stds**

***Cleanup 1***

**Cleanup Method 1:**
**Cleanup Method 2:**
**Solvent Type:** **Lot #:**

**Additional Reagents/Stds**

| Sample/ Type | Extraction: Extract Date | Analyst | Sample Vol ml | Ph | Surr Amt ml | Spike Amt ml | Concentration: Conc Date | Analyst | Final Vol ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/20/24 23:41 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-02 SAMP | 09/20/24 23:41 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-03 SAMP | 09/20/24 23:41 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-04 SAMP | 09/20/24 23:41 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453053-05 SAMP | 09/20/24 23:41 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453125-07 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| L2453125-08 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |



Reported: 24-SEP-24 05:40 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974466**

| Sample/ Type | Extraction | | | | | | Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Extract Date | Analyst | Sample Vol **ml** | Ph | Surr Amt **ml** | Spike Amt **ml** | Conc Date | Analyst | Final Vol **ml** | Conc Unit |
| L2453125-09 WATER | 09/21/24 11:30 | Dayle Parsons | 100 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| L2453125-10 WATER | 09/21/24 11:30 | Dayle Parsons | 70 | <2,>12 | .1 | | 09/21/24 15:57 | Victor Kono | 1 | K |
| | **lim vol due to sediment** | | | | | | | | | |
| L2453695-01 WATER | 09/21/24 00:14 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453695-02 WATER | 09/21/24 00:14 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| L2453695-03 WATER | 09/21/24 00:14 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 06:40 | Shaylee Amidon | 1 | K |
| WG1974466-1 BLANK | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| | **Sharing Qc's with WG1974465** | | | | | | | | | |
| WG1974466-2 LCS | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974466-3 LCSD | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974466-4 MS | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |
| WG1974466-5 MSD | 09/20/24 23:38 | Daniel Erhagbai | 100 | <2,>12 | .1 | .1 | 09/21/24 05:57 | Shaylee Amidon | 1 | K |



Reported: 24-SEP-24 05:40 PM

# GC Extractable Analysis
# Herbicides

# Semivolatiles QC Summary

# Surrogate Recovery Summary
# Form 2
# Pesticides

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Water**

**GC Column 1: STX-CLP1**
**GC Column 2: STX-CLP2**

| CLIENT ID (LAB SAMPLE NO.) | 1 %REC | 2 %REC | 1 %REC | 2 %REC | OTHER (1) | OTHER (2) | TOT OUT |
|---|---|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 83 | 77 | -- | -- | | | 0 |
| MW-1DR2 (L2453053-02) | 86 | 81 | -- | -- | | | 0 |
| MW-11S (L2453053-03) | 86 | 80 | -- | -- | | | 0 |
| MW-11D (L2453053-04) | 75 | 74 | -- | -- | | | 0 |
| DUP_091624 (L2453053-05) | 72 | 72 | -- | -- | | | 0 |
| WG1974808-1BLANK | 78 | 74 | -- | -- | | | 0 |
| WG1974808-2LCS | 90 | 96 | -- | -- | | | 0 |
| WG1974808-3LCSD | 86 | 95 | -- | -- | | | 0 |
| MW-1SRMS | 85 | 101 | -- | -- | | | 0 |
| MW-1SRMSD | 57 | 49 | -- | -- | | | 0 |

**QC LIMITS**
**(30-150) S1 = DCAA**

*** Values outside of QC limits**

**FORM II HERB-8151**

# Laboratory Control Sample Summary
# Form 3
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974808-2 **Analysis Date** : 09/24/24 11:31 | **File ID** | : 22240924a-15 |
| **LCSD Sample ID** | : WG1974808-3 **Analysis Date** : 09/24/24 11:50 | **File ID** | : 22240924a-16 |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| MCPP | 500 | 619 | 124 | 500 | 619 | 124 | 0 | 30-150 | 25 |
| MCPA | 500 | 537 | 107 | 500 | 468 | 94 | 13 | 30-150 | 25 |
| Dalapon | 5 | 3.49 | 70 | 5 | 3.31 | 66 | 6 | 30-150 | 25 |
| Dicamba | 5 | 4.92 | 98 | 5 | 4.72 | 94 | 4 | 30-150 | 25 |
| Dichloroprop | 5 | 4.81 | 96 | 5 | 4.63 | 93 | 3 | 30-150 | 25 |
| 2,4-D | 5 | 4.82 | 96 | 5 | 4.61 | 92 | 4 | 30-150 | 25 |
| 2,4-DB | 5 | 5.07 | 101 | 5 | 4.52 | 90 | 12 | 30-150 | 25 |
| 2,4,5-T | 5 | 4.77 | 95 | 5 | 4.54 | 91 | 4 | 30-150 | 25 |
| 2,4,5-TP (Silvex) | 5 | 4.68 | 94 | 5 | 4.52 | 90 | 4 | 30-150 | 25 |
| Dinoseb | 5 | 2.99 | 60 | 5 | 2.88 | 58 | 3 | 30-150 | 25 |

# Matrix Spike Sample Summary
# Form 3
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/24/24 12:09 |
| **Matrix Spike** | : WG1974808-4 | **MS Analysis Date** | : 09/24/24 12:27 |
| **Matrix Spike Dup** | : WG1974808-5 | **MSD Analysis Date** | : 09/24/24 12:46 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| MCPP | ND | 500 | 592 | 118 | 500 | 281J | 56 | 71 Q | 30-150 | 25 |
| MCPA | ND | 500 | 486J | 97 | 500 | 476J | 95 | 2 | 30-150 | 25 |
| Dalapon | ND | 5 | 3.31J | 66 | 5 | 2.24J | 45 | 39 Q | 30-150 | 25 |
| Dicamba | ND | 5 | 4.67 | 93 | 5 | 2.81 | 56 | 50 Q | 30-150 | 25 |
| Dichloroprop | ND | 5 | 4.67J | 93 | 5 | 2.64J | 53 | 56 Q | 30-150 | 25 |
| 2,4-D | ND | 5 | 4.65J | 93 | 5 | 3.43J | 69 | 30 Q | 30-150 | 25 |
| 2,4-DB | ND | 5 | 4.65J | 93 | 5 | 3.44J | 69 | 30 Q | 30-150 | 25 |
| 2,4,5-T | ND | 5 | 4.67 | 93 | 5 | 2.79 | 56 | 50 Q | 30-150 | 25 |
| 2,4,5-TP (Silvex) | ND | 5 | 4.54 | 91 | 5 | 2.80 | 56 | 47 Q | 30-150 | 25 |
| Dinoseb | ND | 5 | 2.76J | 55 | 5 | 1.57J | 31 | 55 Q | 30-150 | 25 |

# Method Blank Summary
# Form 4
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974808-1 | **Lab File ID** | : 22240924a-14 |
| **Matrix** | : WATER | **Extraction Date** | : 09/22/24 |
| **Analysis Date (1)** | : 09/24/24 11:13 | **Analysis Date (2)** | : 09/24/24 11:13 |
| **Instrument ID (1)** | : PEST22 | **Instrument ID (2)** | : PEST22 |

| Client Sample No. | Lab Sample ID | Analysis Date 1 | Analysis Date 2 |
|---|---|---|---|
| WG1974808-2LCS | WG1974808-2 | 09/24/24 11:31 | 09/24/24 11:31 |
| WG1974808-3LCSD | WG1974808-3 | 09/24/24 11:50 | 09/24/24 11:50 |
| MW-1SR | L2453053-01 | 09/24/24 12:09 | 09/24/24 12:09 |
| MW-1SRMS | WG1974808-4 | 09/24/24 12:27 | 09/24/24 12:27 |
| MW-1SRMSD | WG1974808-5 | 09/24/24 12:46 | 09/24/24 12:46 |
| MW-1DR2 | L2453053-02 | 09/24/24 13:23 | 09/24/24 13:23 |
| MW-11S | L2453053-03 | 09/24/24 14:19 | 09/24/24 14:19 |
| MW-11D | L2453053-04 | 09/24/24 14:37 | 09/24/24 14:37 |
| DUP_091624 | L2453053-05 | 09/24/24 14:56 | 09/24/24 14:56 |

# Analytical Sequence
# Form 8b
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST22 | **Initial Calib. Date(s)** | : 09/20/24 09/20/24 |

| Client ID | Lab ID | Date/Time Analyzed |
|---|---|---|
| Herbicides L1 | R1879093-1 | 09/20/24 11:42 |
| Herbicides L2 | R1879093-2 | 09/20/24 12:01 |
| Herbicides L3 | R1879093-3 | 09/20/24 12:20 |
| Herbicides L4 | R1879093-4 | 09/20/24 12:38 |
| Herbicides L5 | R1879093-5 | 09/20/24 12:57 |
| Herbicides L6 | R1879093-6 | 09/20/24 13:15 |
| R1879093-7 ICV | R1879093-7 | 09/20/24 13:34 |
| WG1975389-1 CCAL | WG1975389-1 | 09/24/24 06:22 |
| WG1974808-1 BLANK | WG1974808-1 | 09/24/24 11:13 |
| WG1974808-2 LCS | WG1974808-2 | 09/24/24 11:31 |
| WG1974808-3 LCSD | WG1974808-3 | 09/24/24 11:50 |
| MW-1SR | L2453053-01 | 09/24/24 12:09 |
| MW-1SR MS | WG1974808-4 | 09/24/24 12:27 |
| MW-1SR MSD | WG1974808-5 | 09/24/24 12:46 |
| MW-1DR2 | L2453053-02 | 09/24/24 13:23 |
| WG1975389-2 CCAL | WG1975389-2 | 09/24/24 13:41 |
| MW-11S | L2453053-03 | 09/24/24 14:19 |
| MW-11D | L2453053-04 | 09/24/24 14:37 |
| DUP_091624 | L2453053-05 | 09/24/24 14:56 |

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14024-1
**Page:** 1

## Herbicides -EPA 8151A Long List (WATER)

**Holding Time:** 7 days
**Container/Sample Preservation:** 2 - Amber 1000ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCPP | 93-65-2 | 500 | 58.5 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| MCPA | 94-74-6 | 500 | 63.2 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| Dalapon | 75-99-0 | 20 | 0.81 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| Dicamba | 1918-00-9 | 1 | 0.243 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| Dichloroprop | 120-36-5 | 10 | 0.564 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| 2,4-D | 94-75-7 | 10 | 0.498 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| 2,4-DB | 94-82-6 | 10 | 0.729 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| 2,4,5-T | 93-76-5 | 2 | 0.531 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 2 | 0.539 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| Dinoseb | 88-85-7 | 5 | 0.573 | ug/l | 30-150 | 25 | 30-150 | 25 | 25 | | | |
| *DCAA* | *19719-28-9* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14022-1
**Page:** 1

## Herbicides -EPA 8151A Long List (SOIL)

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCPP | 93-65-2 | 3.33 | 1.04895 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| MCPA | 94-74-6 | 3.33 | 0.94239 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| Dalapon | 75-99-0 | 0.0333 | 0.0108891 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| Dicamba | 1918-00-9 | 0.0333 | 0.0055944 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| Dichloroprop | 120-36-5 | 0.0333 | 0.0095571 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| 2,4-D | 94-75-7 | 0.1665 | 0.0104895 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| 2,4-DB | 94-82-6 | 0.1665 | 0.0085581 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| 2,4,5-T | 93-76-5 | 0.1665 | 0.0051615 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 0.1665 | 0.0044289 | mg/kg | 30-150 | 30 | 30-150 | 30 | 30 | | | |
| *DCAA* | *19719-28-9* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Herbicide Sample Data

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/24/24 12:09 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-17 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/24/24 13:23 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-21 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/24/24 14:19 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-24 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/24/24 14:37 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-25 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/24/24 14:56 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-26 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

# Results Summary
# Form 1
# Chlorinated Herbicides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974808-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974808-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/24/24 11:13 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8151A | **Dilution Factor** | : 1 |
| **Lab File ID** | : 22240924a-14 | **Analyst** | : EMR |
| **Sample Amount** | : 1000 ml | **Instrument ID** | : PEST22 |
| **Extraction Method** | : EPA 8151A | **GC Column** | : STX-CLP1 |
| **Extract Volume** | : 10000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 93-65-2 | MCPP | ND | 500 | 58.5 | U |
| 94-74-6 | MCPA | ND | 500 | 63.2 | U |
| 75-99-0 | Dalapon | ND | 20.0 | 0.810 | U |
| 1918-00-9 | Dicamba | ND | 1.00 | 0.243 | U |
| 120-36-5 | Dichloroprop | ND | 10.0 | 0.564 | U |
| 94-75-7 | 2,4-D | ND | 10.0 | 0.498 | U |
| 94-82-6 | 2,4-DB | ND | 10.0 | 0.729 | U |
| 93-76-5 | 2,4,5-T | ND | 2.00 | 0.531 | U |
| 93-72-1 | 2,4,5-TP (Silvex) | ND | 2.00 | 0.539 | U |
| 88-85-7 | Dinoseb | ND | 5.00 | 0.573 | U |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-17.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:09
Operator : pest22:emr
Sample : L2453053-01,42,, p rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:46:00 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.434 | 1380.0E6 | 1749.5E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1387226827 | | | | Recovery = 99.48% | | |
| | Standard Area 1 : #2 = 1727304303 | | | | Recovery = 101.29% | | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.891 | 7.362 | 422.8E6 | 512.2E6 | 0.416M4 | 0.386M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 83.20% | 77.20% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

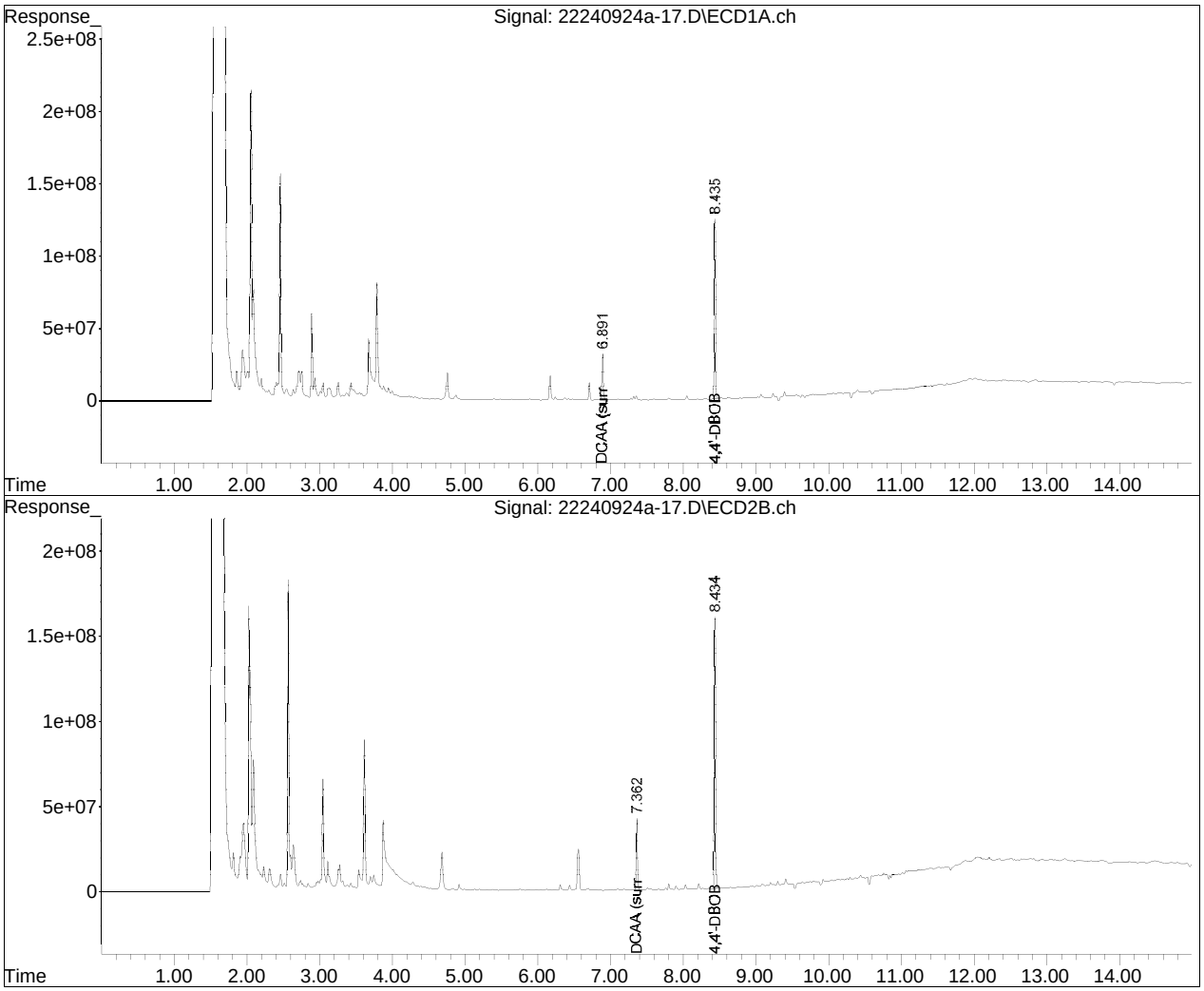
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-17.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:09
Operator : pest22:emr
Sample : L2453053-01,42,, p rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:46:00 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

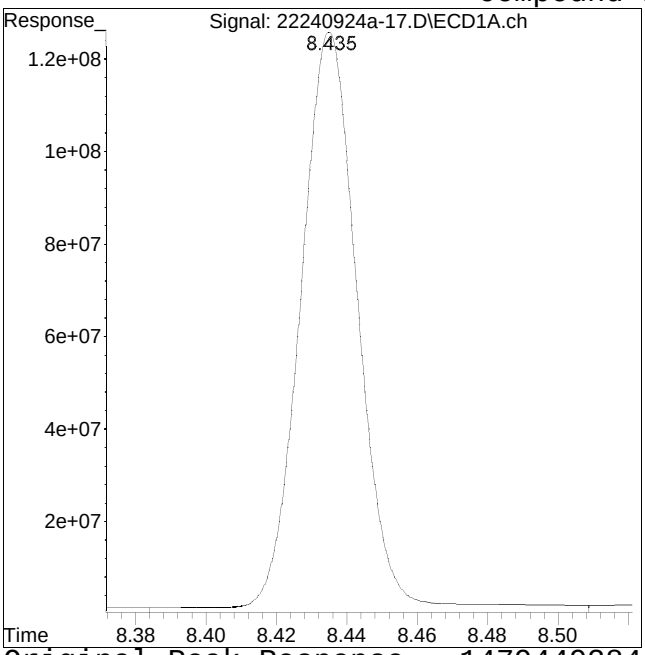
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

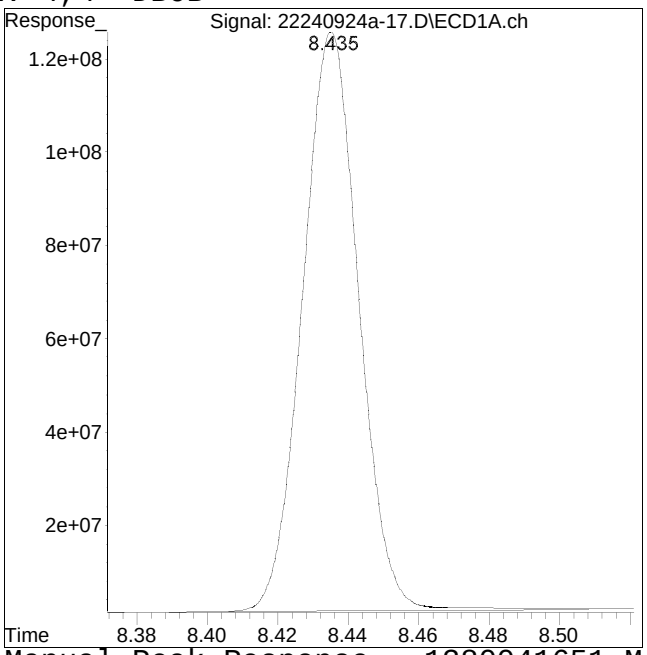


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-17.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:09 Instrument : Pest22
Sample : L2453053-01,42,, p rr Quant Date : 9/24/2024 12:46 pm

Compound #1: 4,4'-DBOB



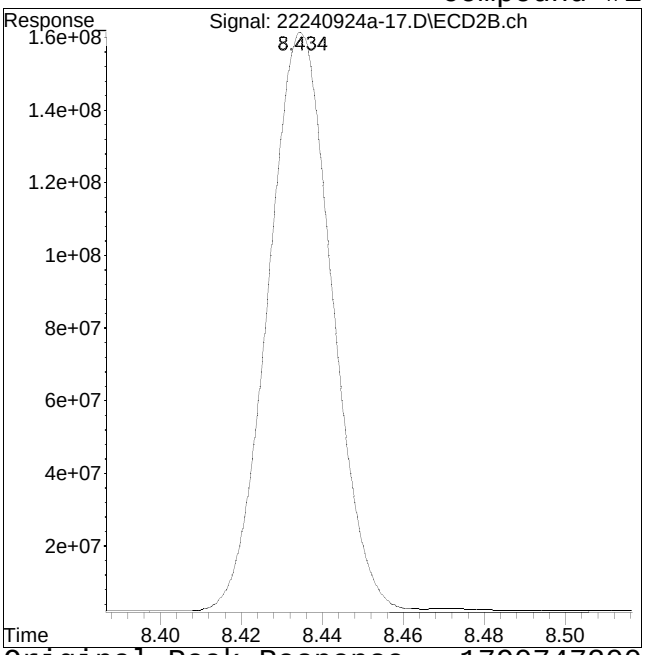



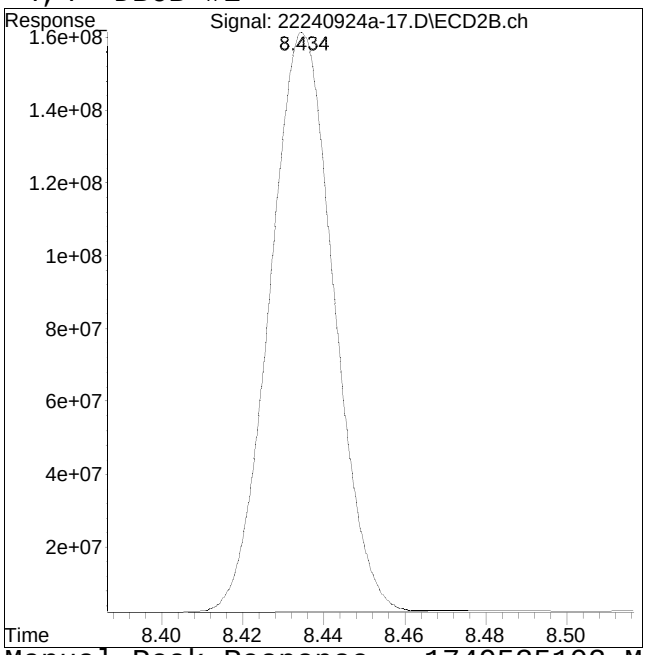

Original Peak Response = 1479449284 Manual Peak Response = 1380041651 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-17.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:09 Instrument : Pest22
Sample : L2453053-01,42,, p rr Quant Date : 9/24/2024 12:46 pm

Compound #14: 4,4'-DBOB #2



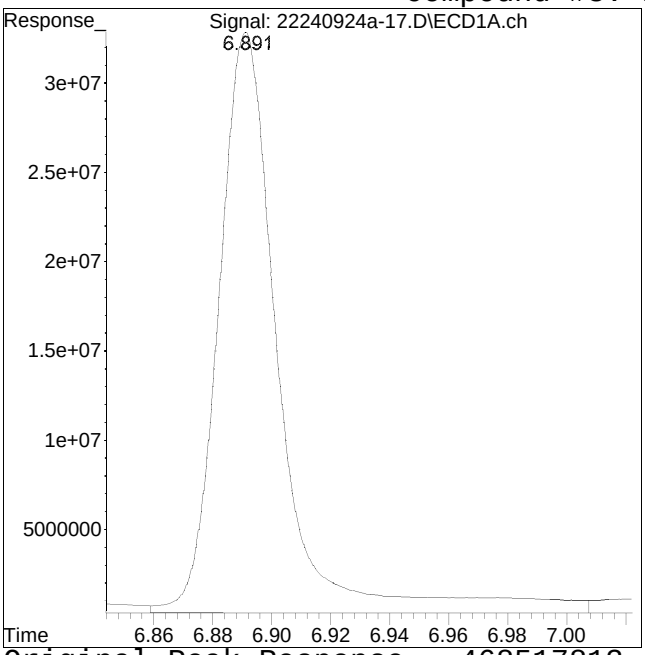



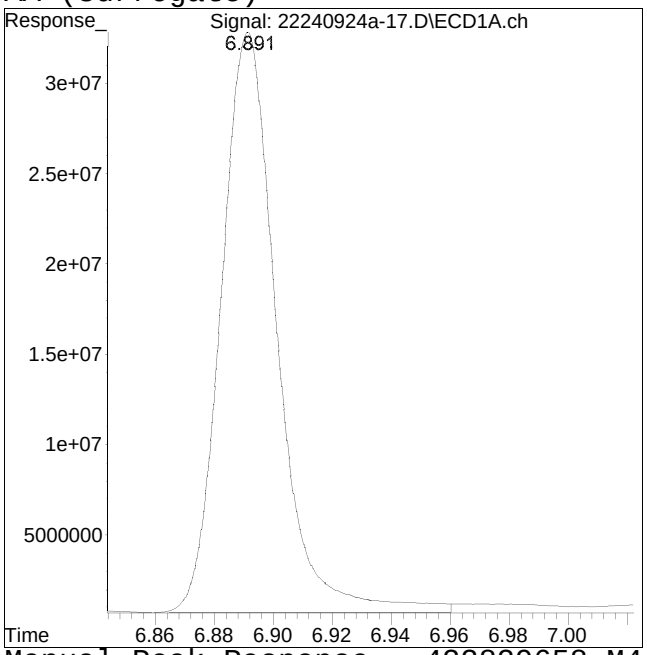

Original Peak Response = 1790747200 Manual Peak Response = 1749535102 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-17.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:09 Instrument : Pest22
Sample : L2453053-01,42,, p rr Quant Date : 9/24/2024 12:46 pm

## Compound #3: DCAA (surrogate)



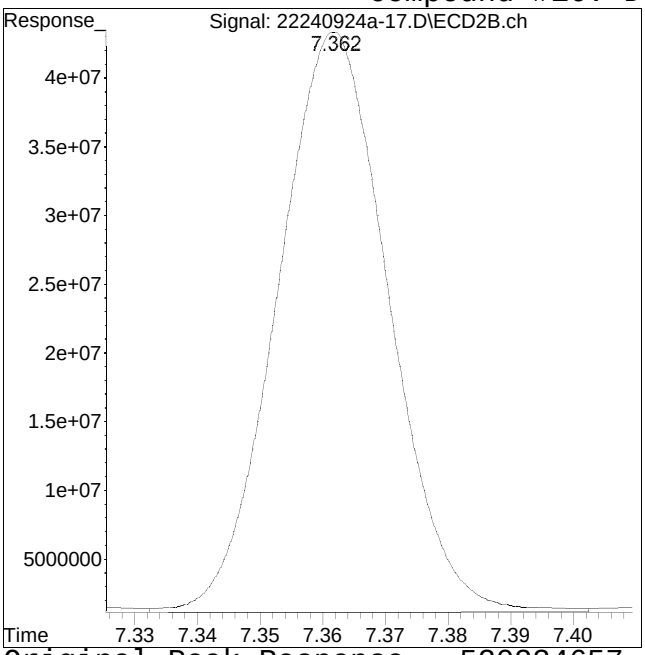




Original Peak Response = 468517813 Manual Peak Response = 422829658 M4
M4 = Poor automated baseline construction.

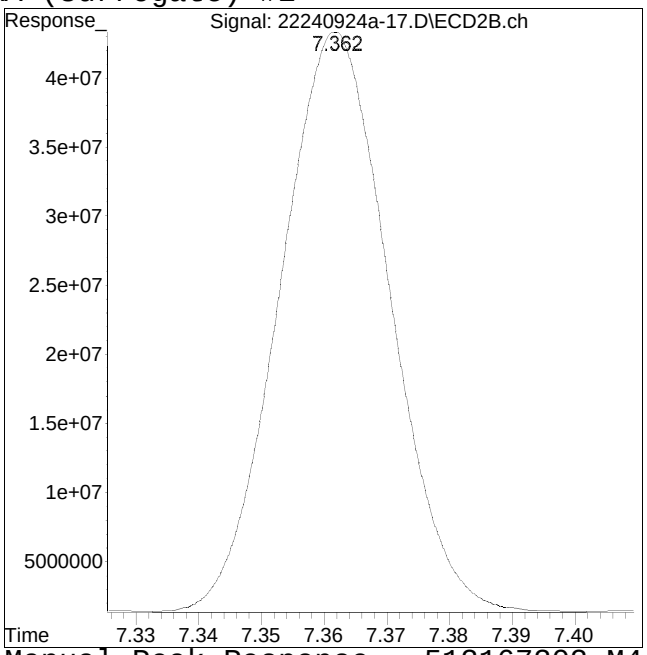
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-17.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:09 Instrument : Pest22
Sample : L2453053-01,42,, p rr Quant Date : 9/24/2024 12:46 pm

## Compound #16: DCAA (surrogate) #2




Original Peak Response = 520234657




Manual Peak Response = 512167302 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-21.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 13:23
Operator : pest22:emr
Sample : L2453053-02,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 14:10:12 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.434 | 1287.1E6 | 1628.6E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1387226827 | | | | Recovery = | 92.78% | |
| | Standard Area 1 : #2 = 1727304303 | | | | Recovery = | 94.29% | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.892 | 7.361 | 408.0E6 | 501.9E6 | 0.431M4 | 0.407M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 86.20% | 81.40% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

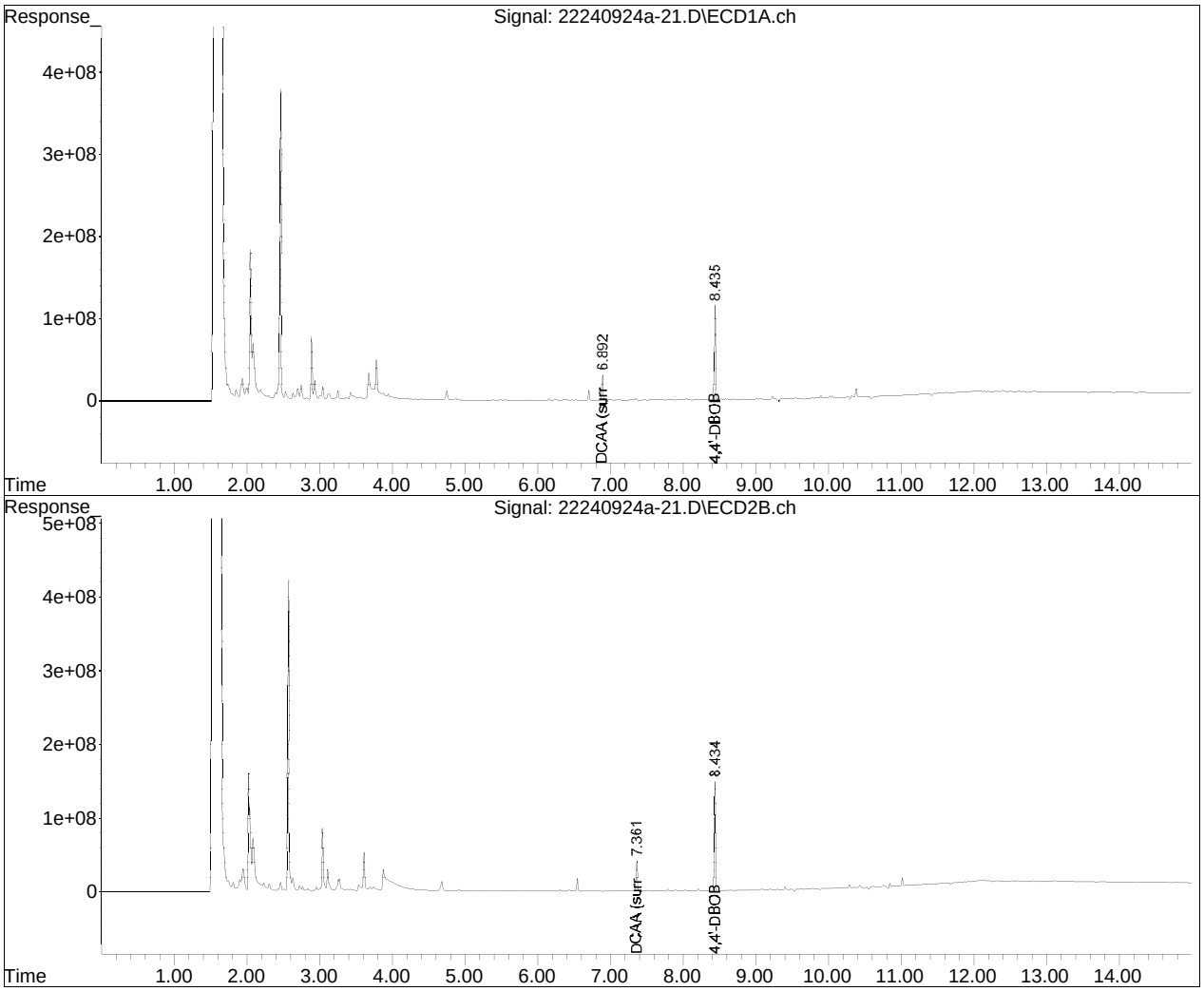
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-21.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 13:23
Operator : pest22:emr
Sample : L2453053-02,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 14:10:12 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

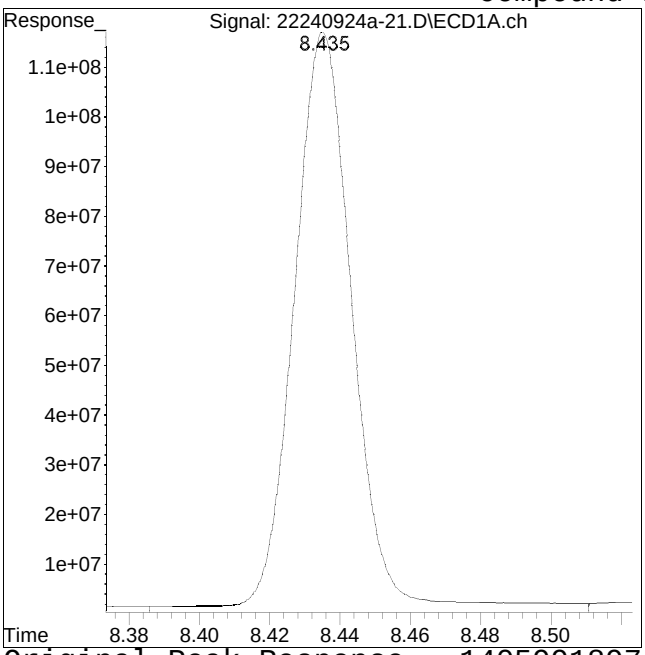
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

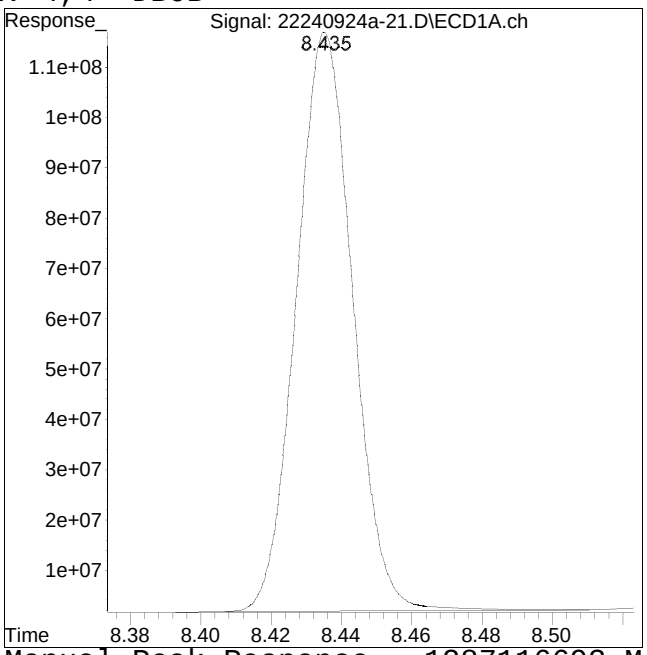


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-21.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:23 Instrument : Pest22
Sample : L2453053-02,42,, rr Quant Date : 9/24/2024 2:10 pm

Compound #1: 4,4'-DBOB



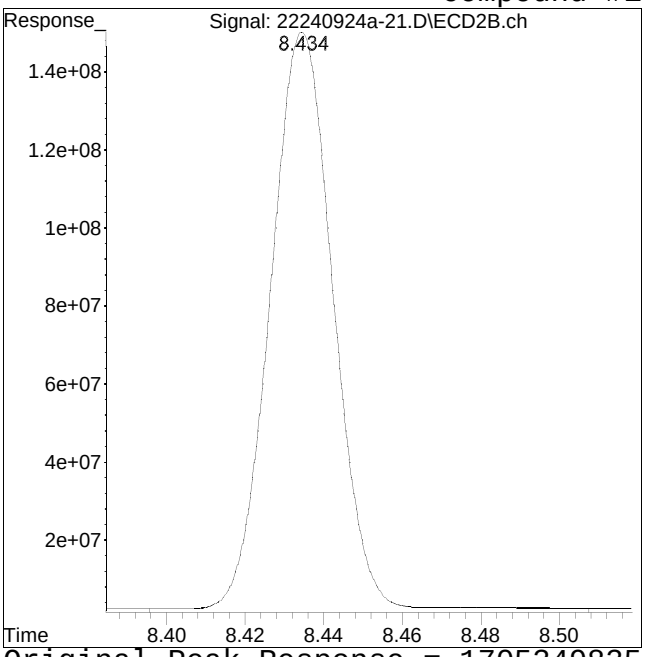



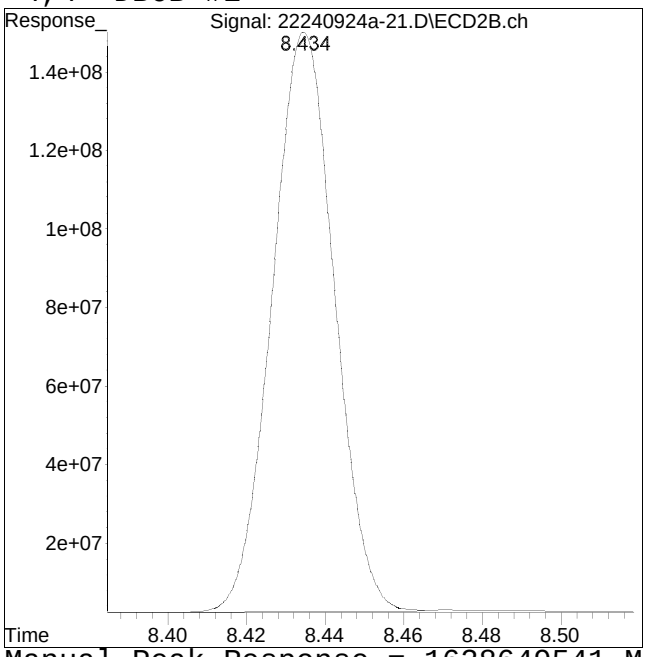

Original Peak Response = 1405991897 Manual Peak Response = 1287116693 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-21.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:23 Instrument : Pest22
Sample : L2453053-02,42,, rr Quant Date : 9/24/2024 2:10 pm

Compound #14: 4,4'-DBOB #2



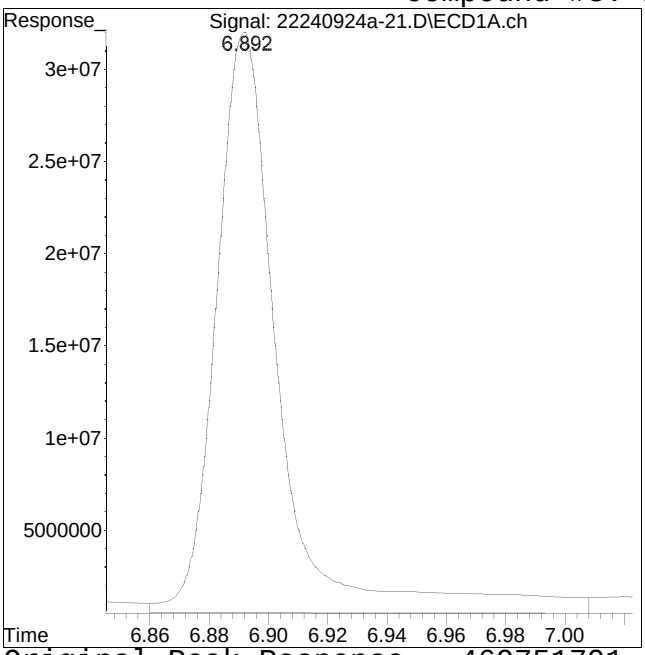




Original Peak Response = 1705349835 Manual Peak Response = 1628649541 M4
M4 = Poor automated baseline construction.

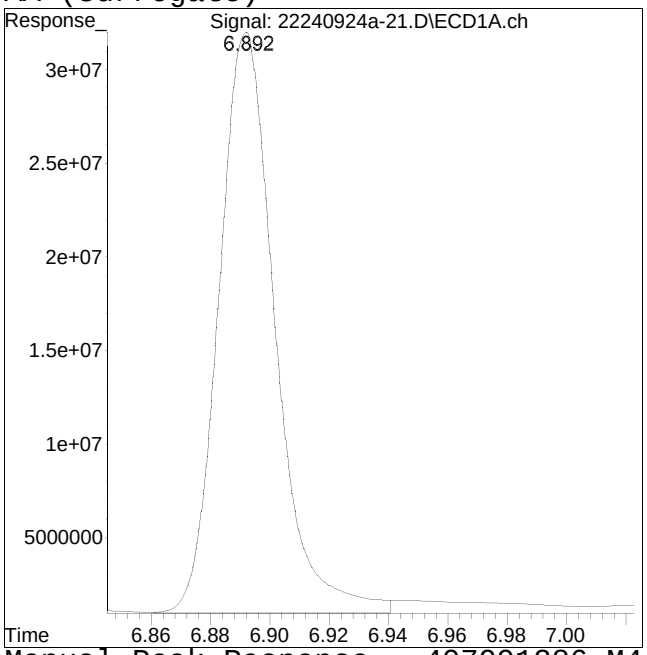
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-21.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:23 Instrument : Pest22
Sample : L2453053-02,42,, rr Quant Date : 9/24/2024 2:10 pm

Compound #3: DCAA (surrogate)




Original Peak Response = 469751791



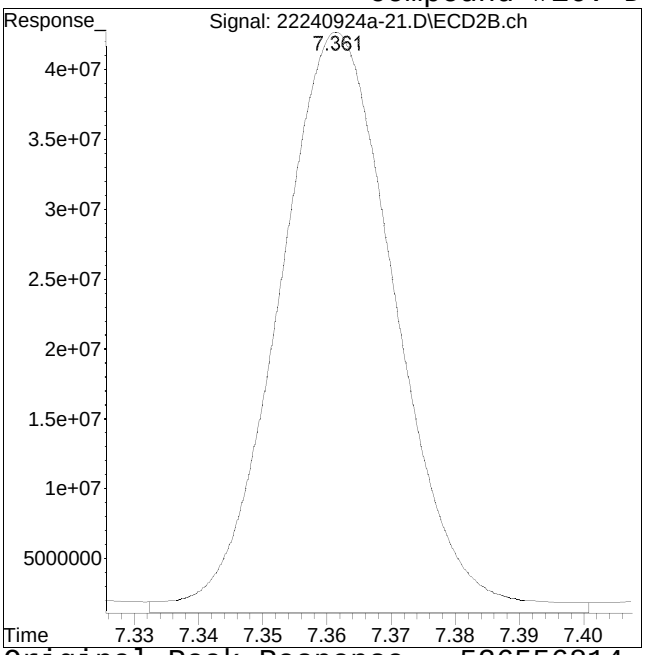

Manual Peak Response = 407991286 M4

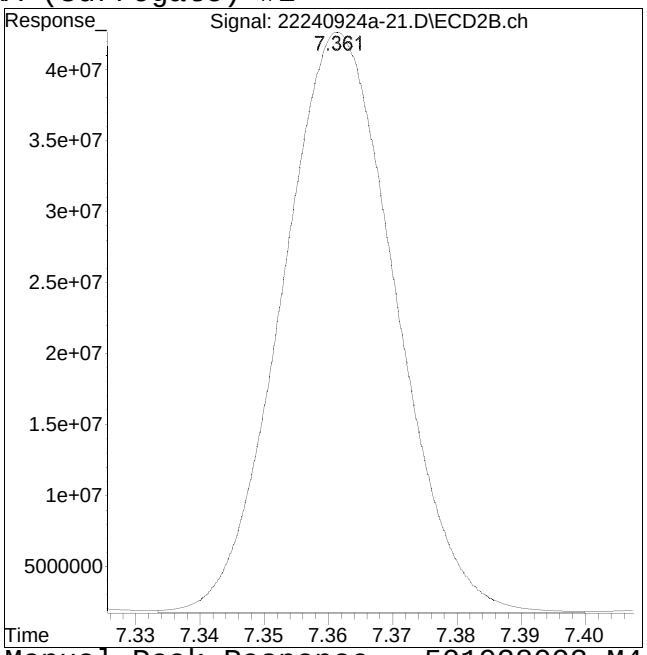
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-21.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:23 Instrument : Pest22
Sample : L2453053-02,42,, rr Quant Date : 9/24/2024 2:10 pm

## Compound #16: DCAA (surrogate) #2




Original Peak Response = 526556814 Manual Peak Response = 501928092 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-24.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 14:19
Operator : pest22:emr
Sample : L2453053-03,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:37 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-22.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.434 | 1225.1E6 | 1566.8E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1479579629 | | | | Recovery = | 82.80% | |
| | Standard Area 1 : #2 = 1819767682 | | | | Recovery = | 86.10% | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.892 | 7.361 | 386.7E6 | 476.7E6 | 0.429M4 | 0.401M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 85.80% | 80.20% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

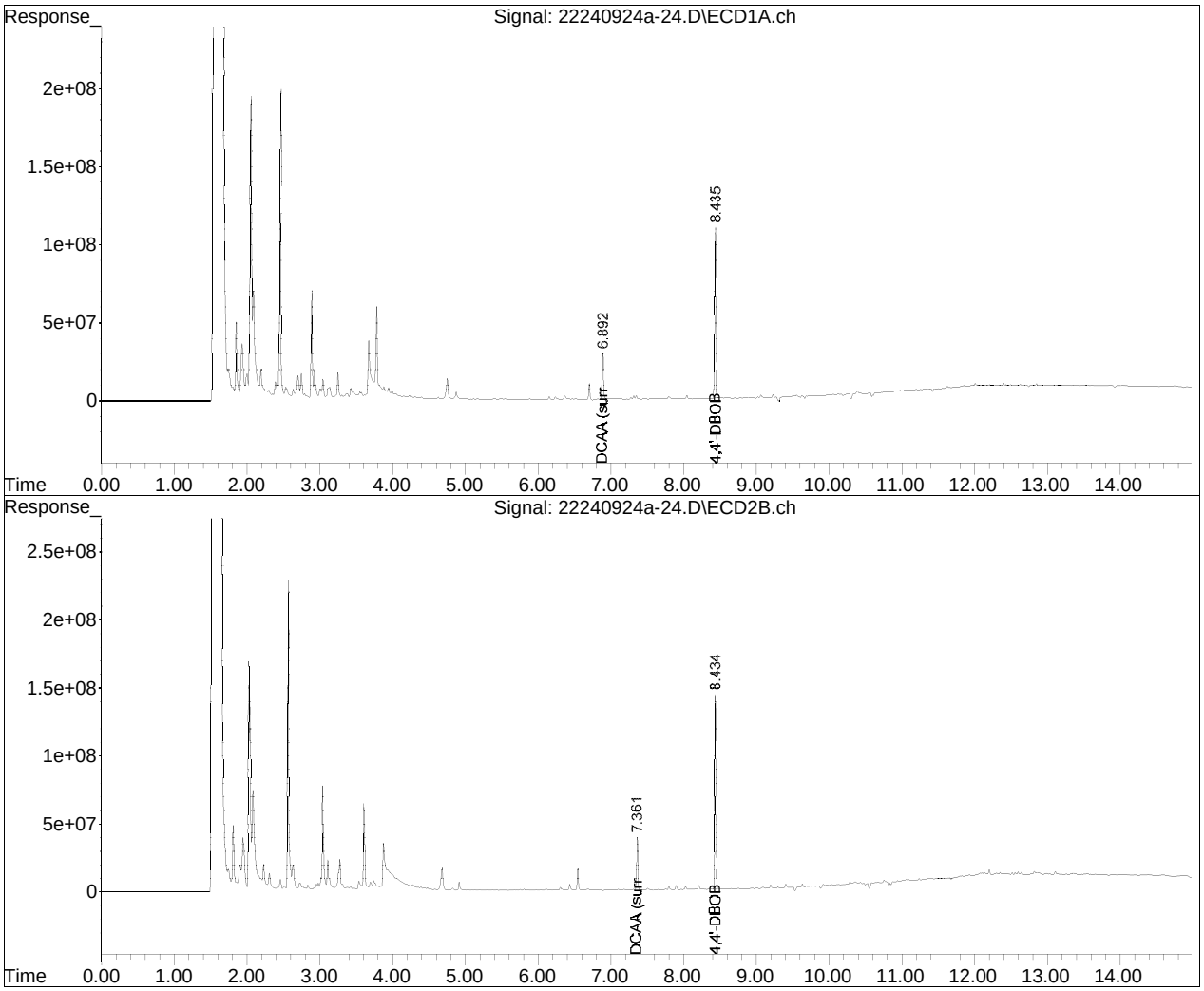
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-22.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-24.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 14:19
Operator : pest22:emr
Sample : L2453053-03,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:37 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

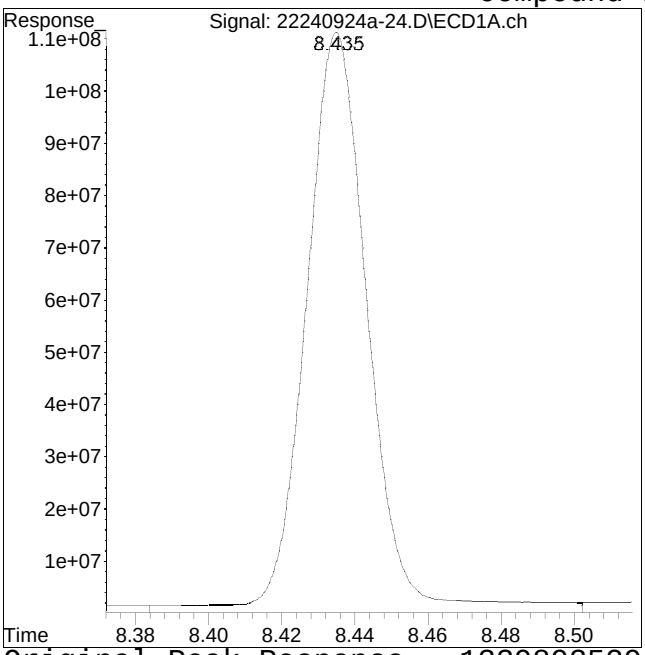
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

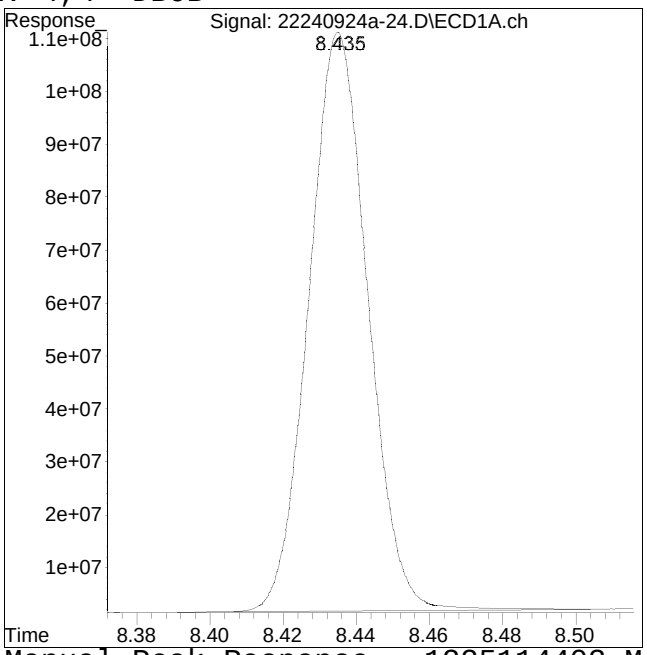


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-24.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:19 Instrument : Pest22
Sample : L2453053-03,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #1: 4,4'-DBOB



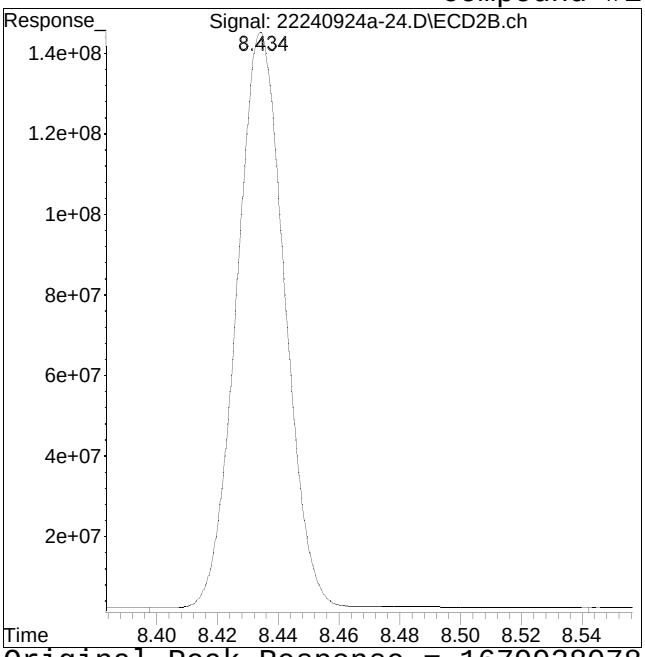



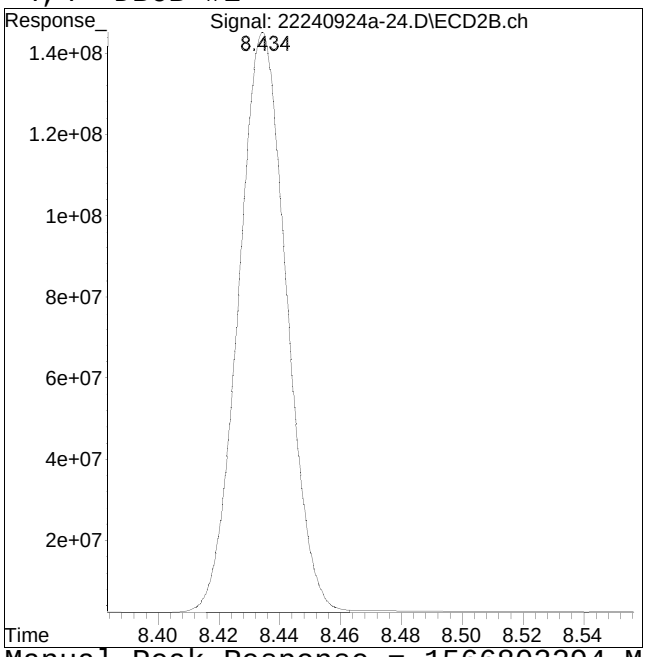

Original Peak Response = 1339893529 Manual Peak Response = 1225114403 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-24.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:19 Instrument : Pest22
Sample : L2453053-03,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #14: 4,4'-DBOB #2



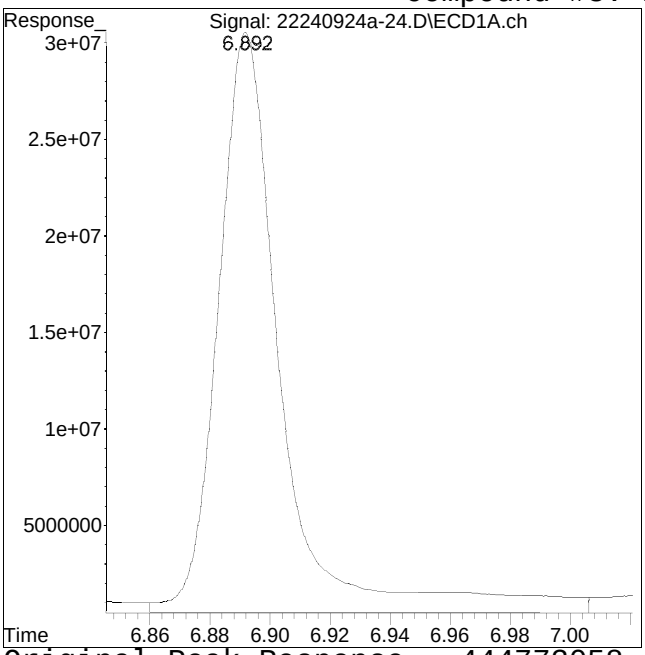



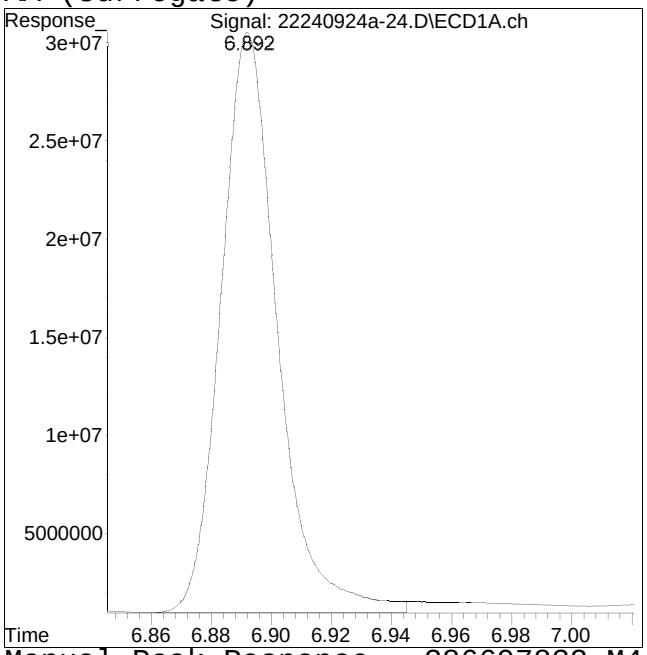

Original Peak Response = 1679938078 Manual Peak Response = 1566803294 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-24.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:19 Instrument : Pest22
Sample : L2453053-03,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #3: DCAA (surrogate)



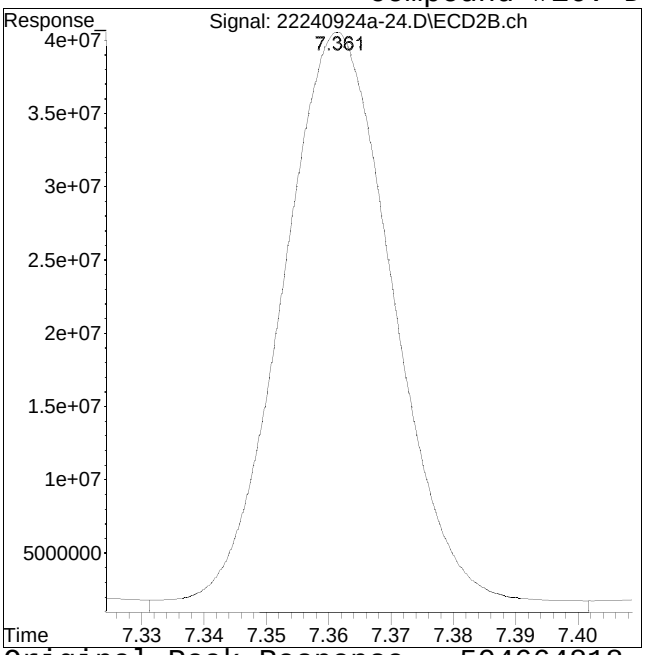




Original Peak Response = 444773058 Manual Peak Response = 386697832 M4
M4 = Poor automated baseline construction.

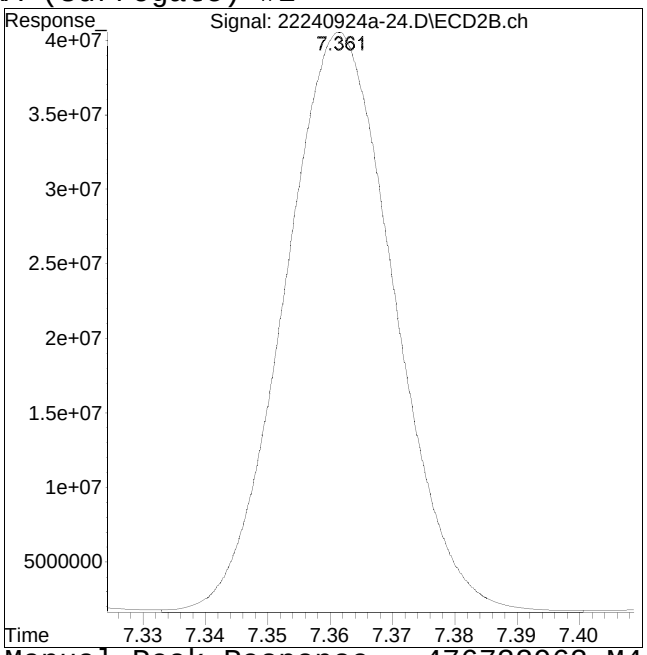
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-24.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:19 Instrument : Pest22
Sample : L2453053-03,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #16: DCAA (surrogate) #2




Original Peak Response = 504664818




Manual Peak Response = 476732962 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-25.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 14:37
Operator : pest22:emr
Sample : L2453053-04,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:38 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-22.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.435 | 1178.3E6 | 1427.7E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1479579629 | | | | Recovery = 79.64% | | |
| | Standard Area 1 : #2 = 1819767682 | | | | Recovery = 78.45% | | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.892 | 7.361 | 323.6E6 | 401.7E6 | 0.373M4 | 0.371M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 74.60% | 74.20% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

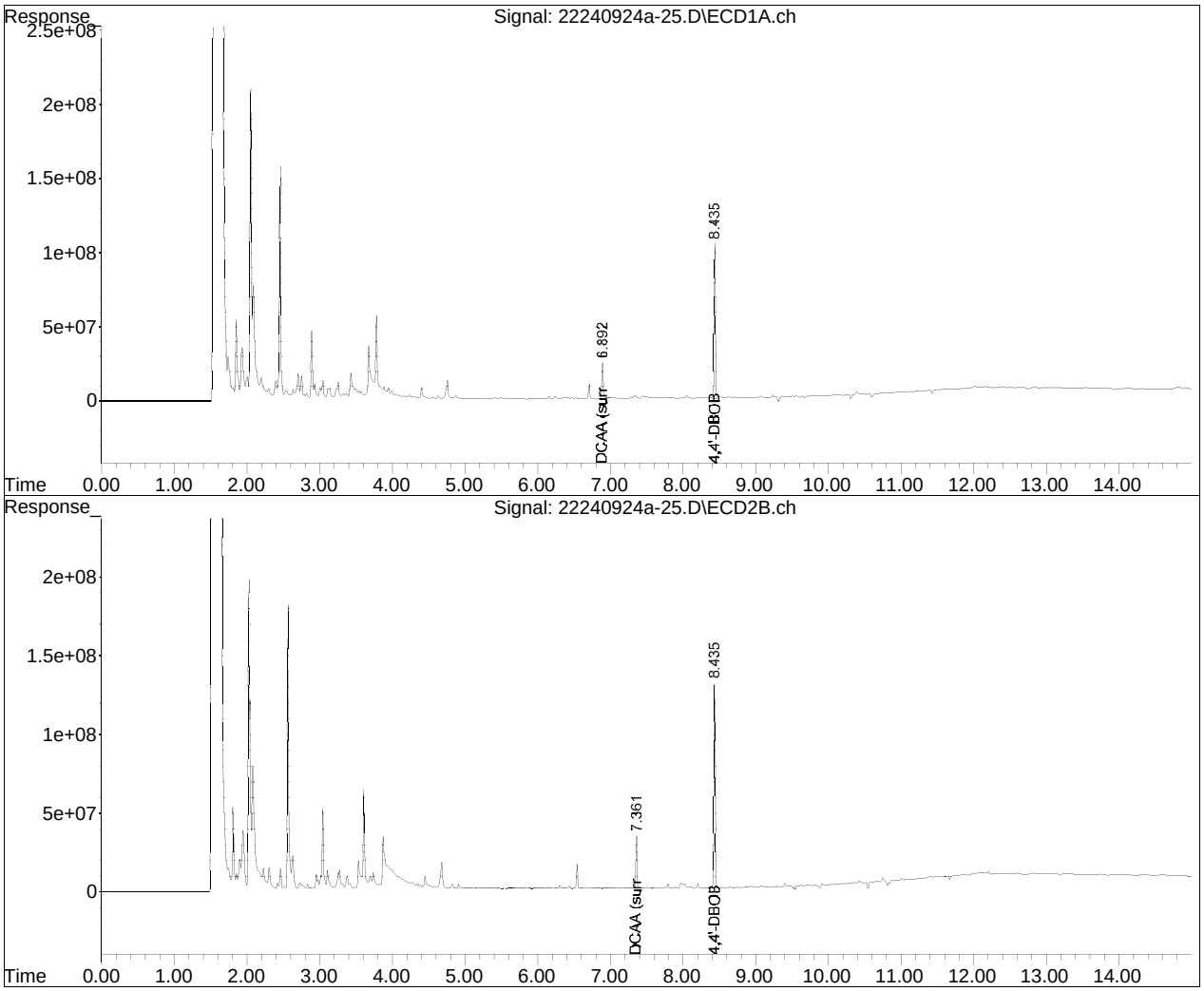
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-22.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-25.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 24 Sep 2024  14:37
Operator : pest22:emr
Sample : L2453053-04,42,,  rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 25  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:38 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

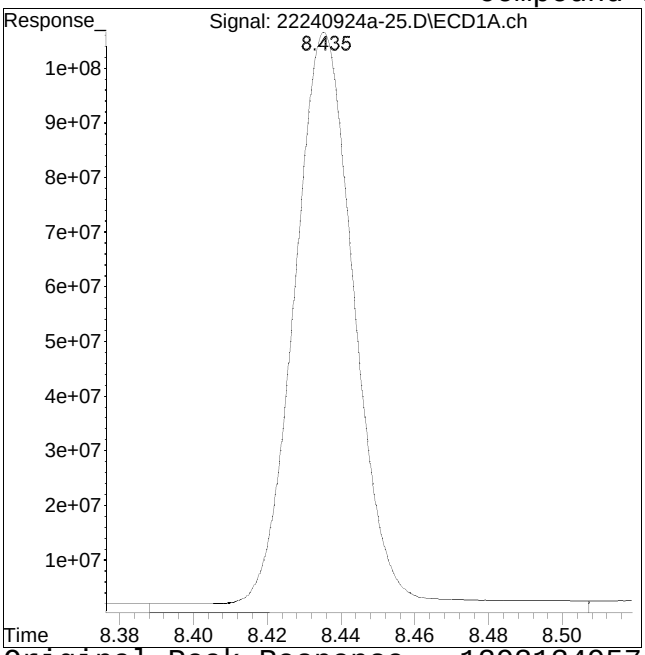
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

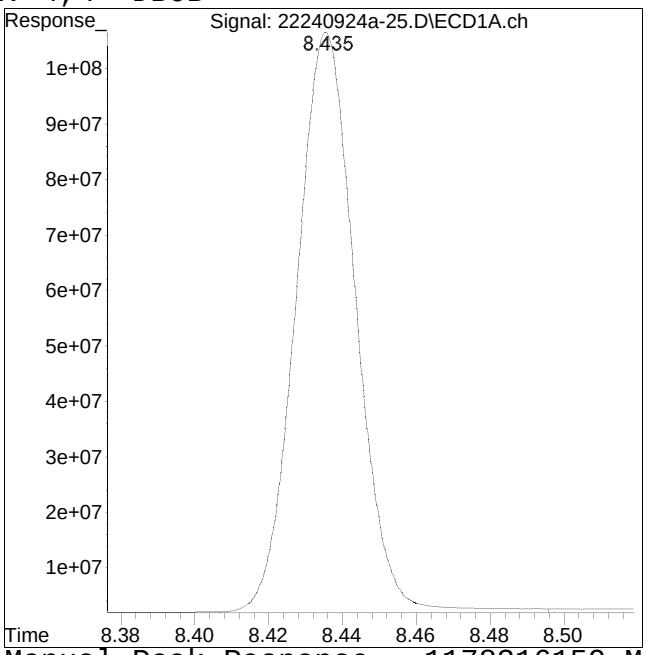


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-25.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:37 Instrument : Pest22
Sample : L2453053-04,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #1: 4,4'-DBOB



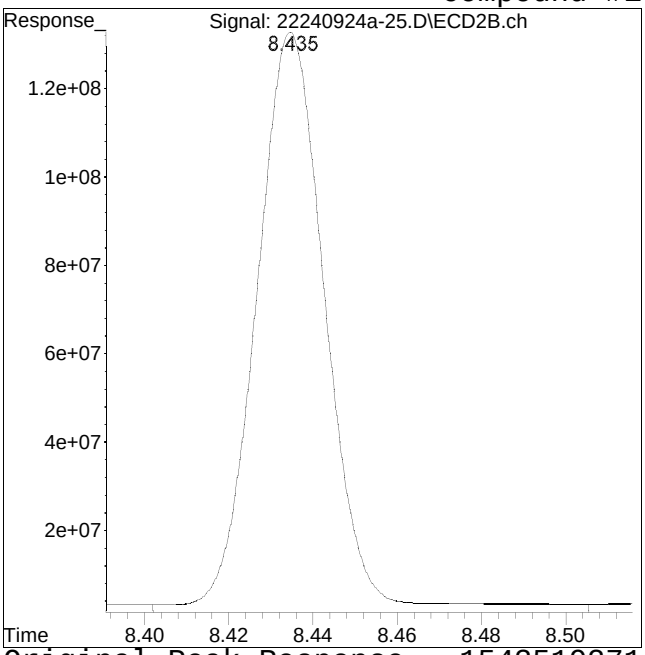



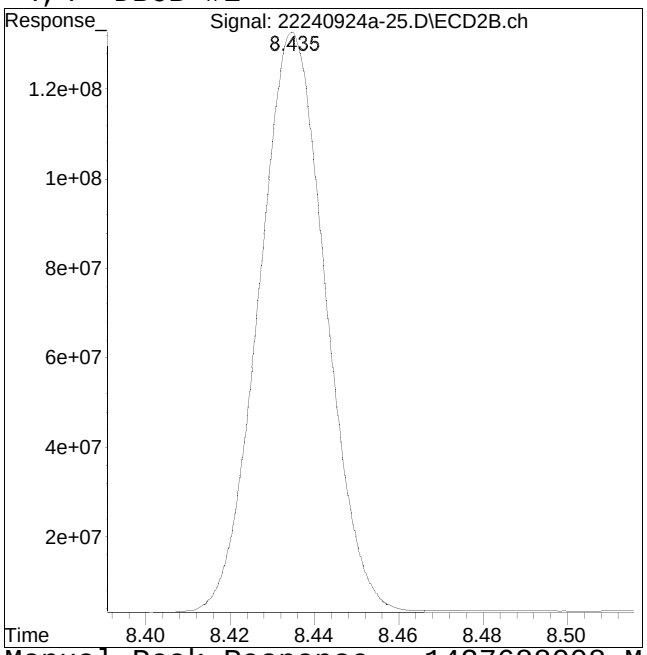

Original Peak Response = 1293134957 Manual Peak Response = 1178316159 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-25.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:37 Instrument : Pest22
Sample : L2453053-04,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #14: 4,4'-DBOB #2



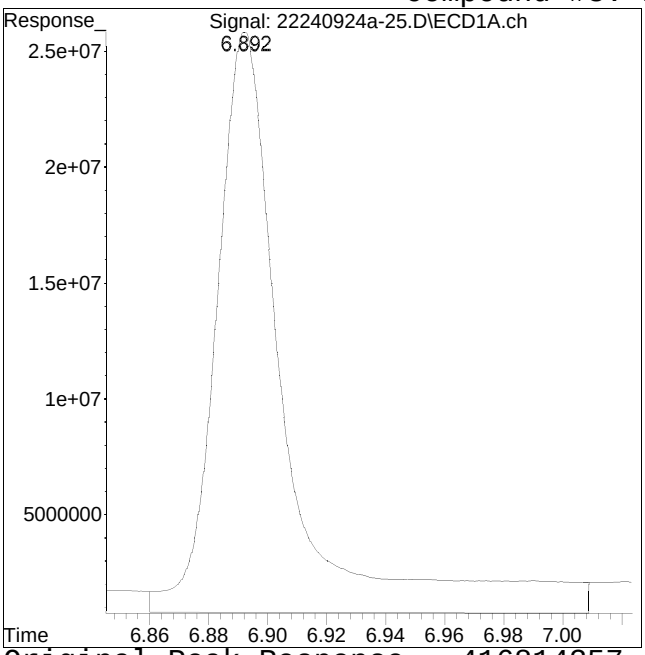



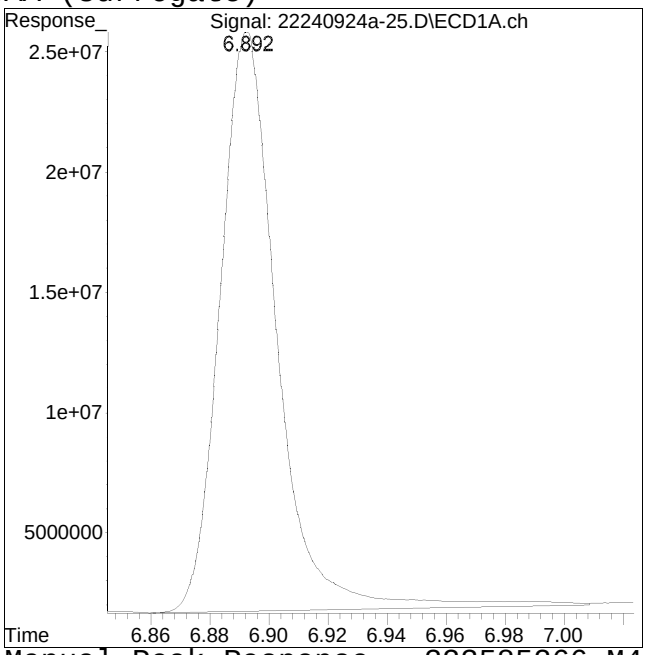

Original Peak Response = 1543519271 Manual Peak Response = 1427688008 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-25.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:37 Instrument : Pest22
Sample : L2453053-04,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #3: DCAA (surrogate)



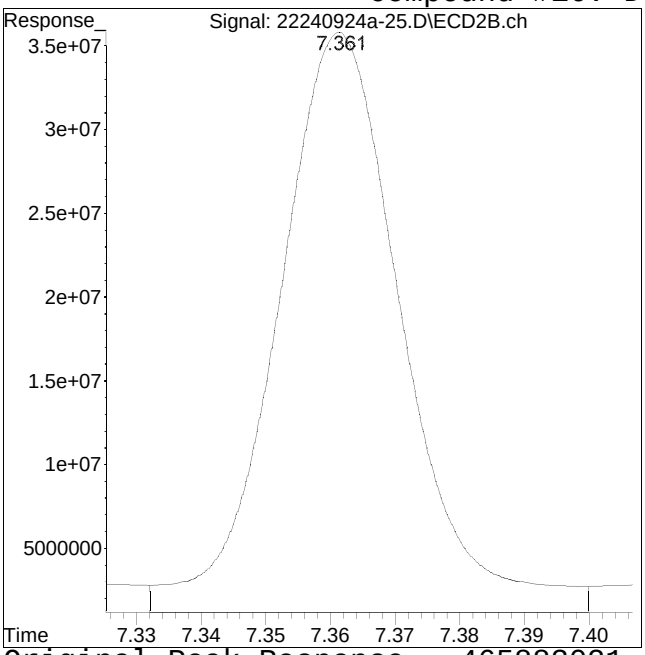



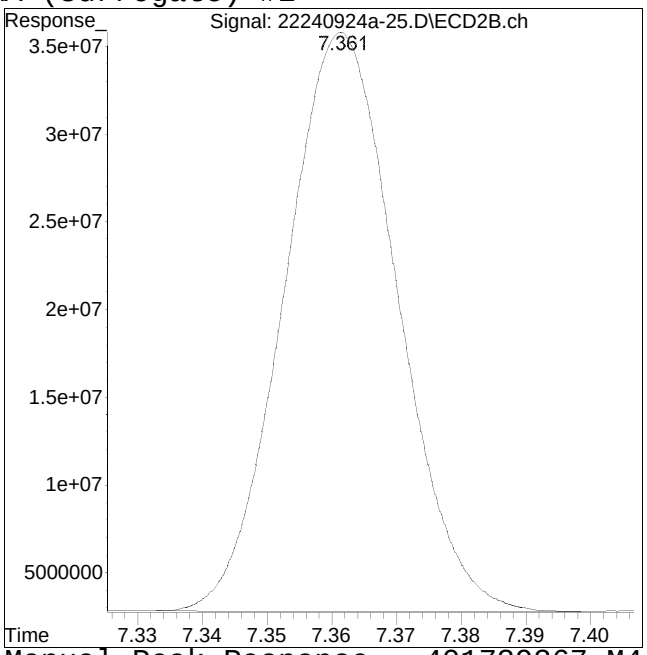

Original Peak Response = 416814357 Manual Peak Response = 323585266 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-25.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:37 Instrument : Pest22
Sample : L2453053-04,42,, rr Quant Date : 9/24/2024 3:13 pm

## Compound #16: DCAA (surrogate) #2




Original Peak Response = 465883021 Manual Peak Response = 401739367 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-26.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 14:56
Operator : pest22:emr
Sample : L2453053-05,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:39 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-22.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.436 | 8.434 | 1230.7E6 | 1522.8E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1479579629 | | | | Recovery = | 83.18% | |
| | Standard Area 1 : #2 = 1819767682 | | | | Recovery = | 83.68% | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.893 | 7.361 | 327.0E6 | 414.4E6 | 0.361M4 | 0.359M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 72.20% | 71.80% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

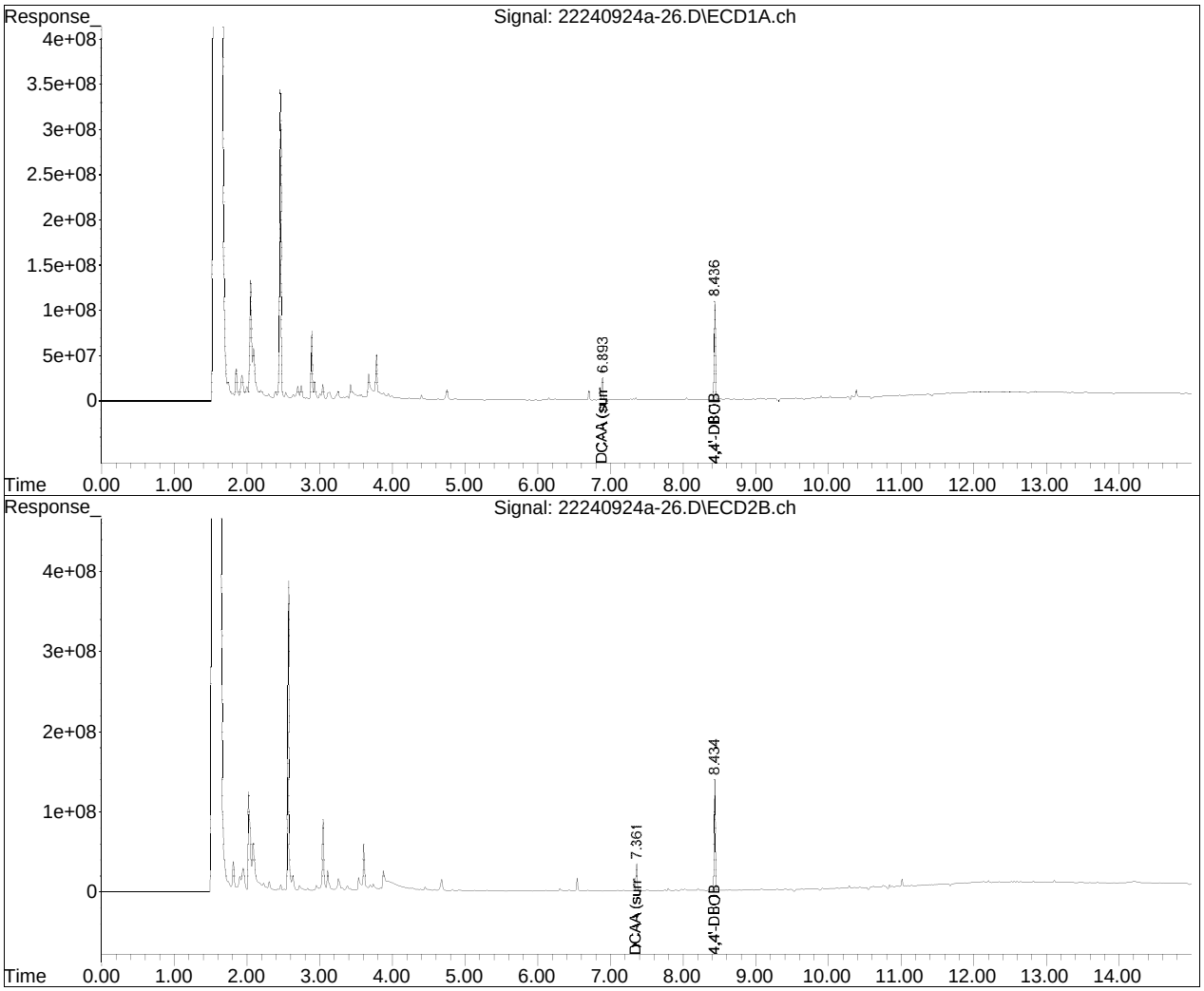
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-22.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-26.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 14:56
Operator : pest22:emr
Sample : L2453053-05,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:13:39 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

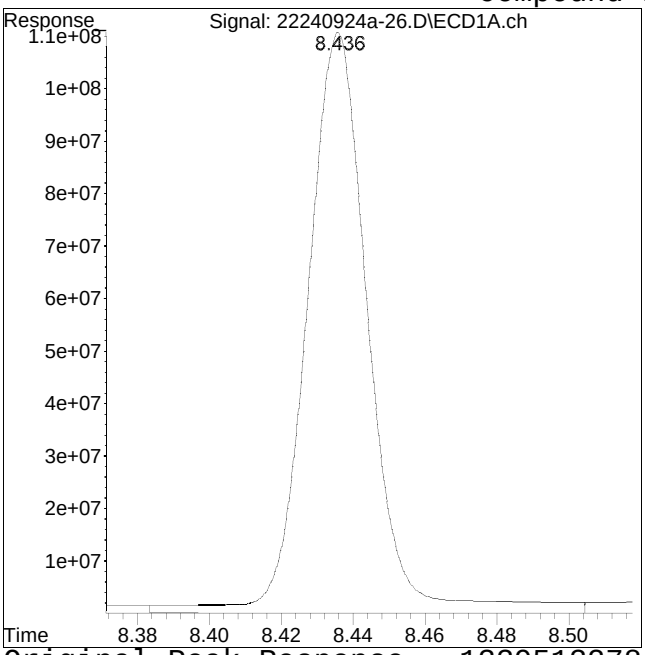
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

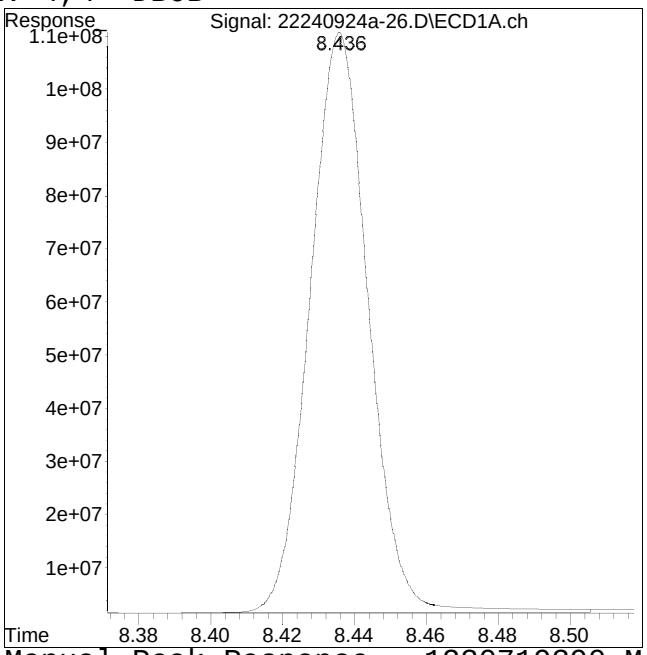


# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-26.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:56 Instrument : Pest22
Sample : L2453053-05,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #1: 4,4'-DBOB



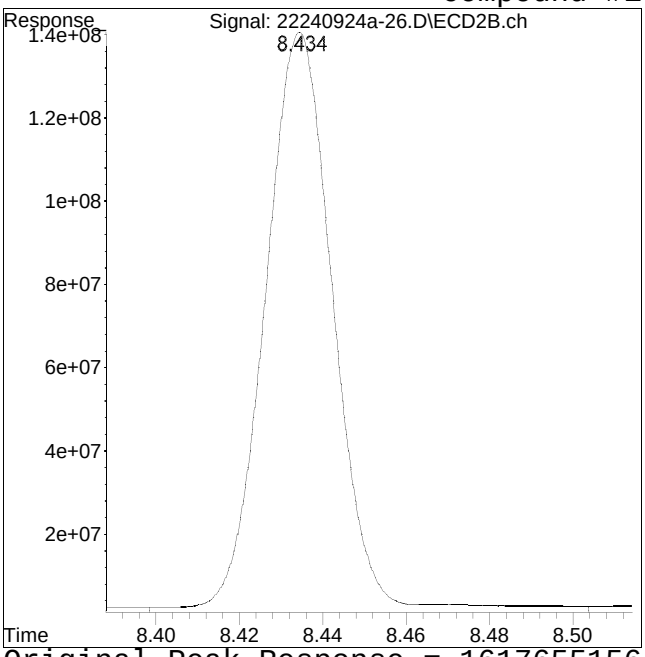



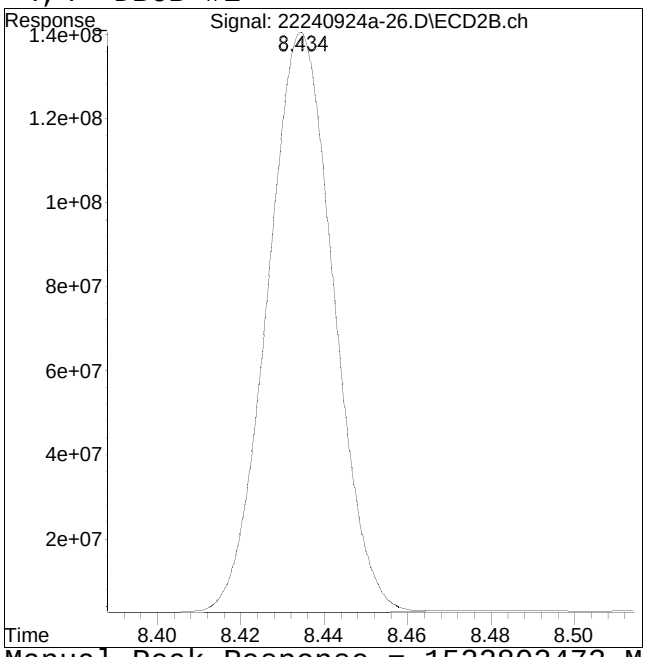

Original Peak Response = 1339513278 Manual Peak Response = 1230719390 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-26.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:56 Instrument : Pest22
Sample : L2453053-05,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #14: 4,4'-DBOB #2



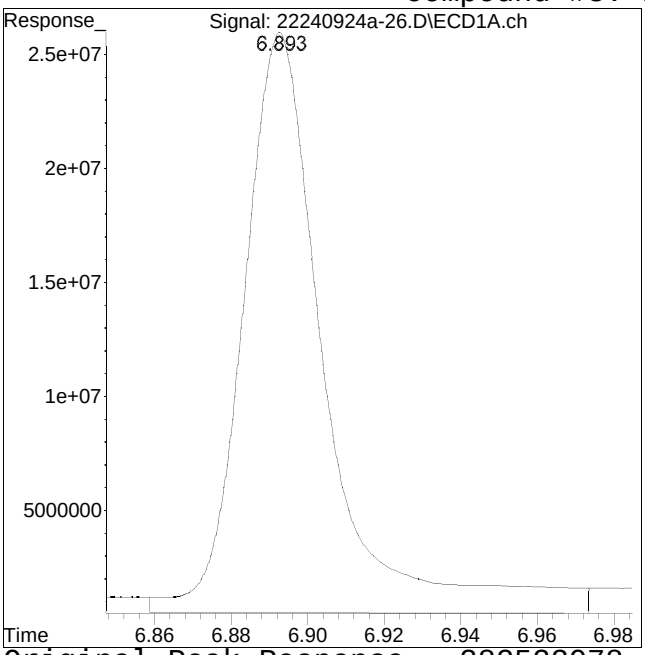



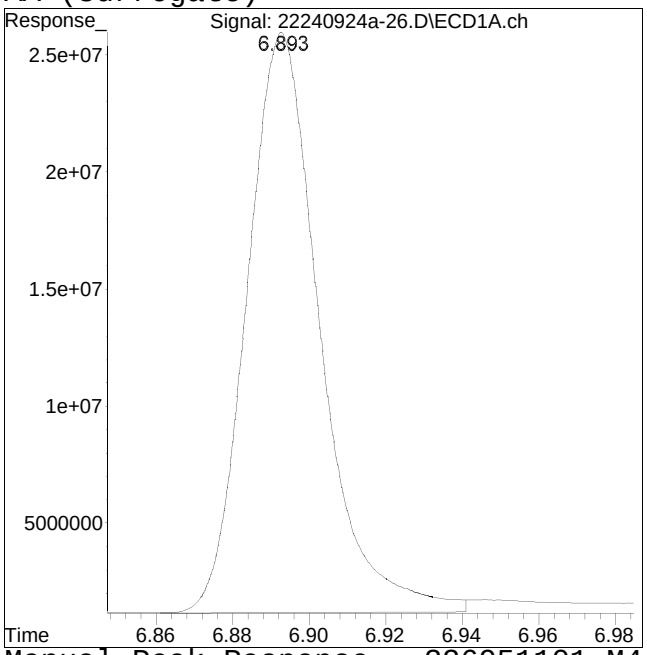

Original Peak Response = 1617655156 Manual Peak Response = 1522802473 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-26.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:56 Instrument : Pest22
Sample : L2453053-05,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #3: DCAA (surrogate)



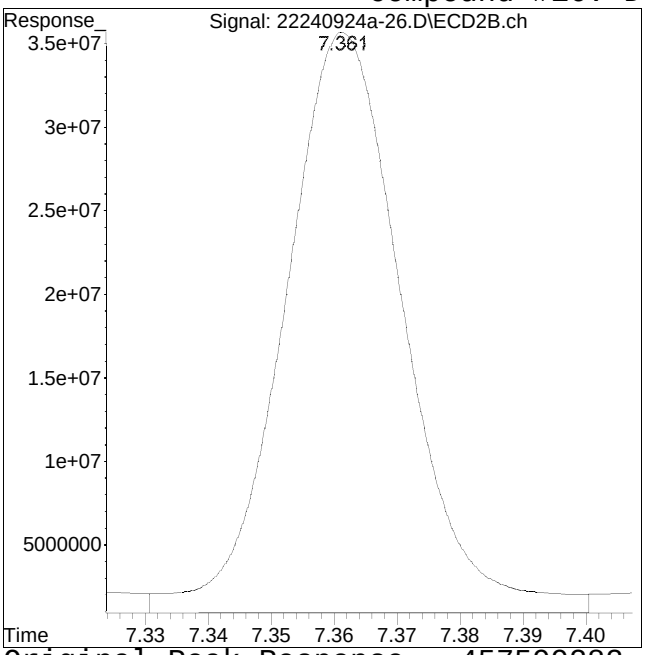



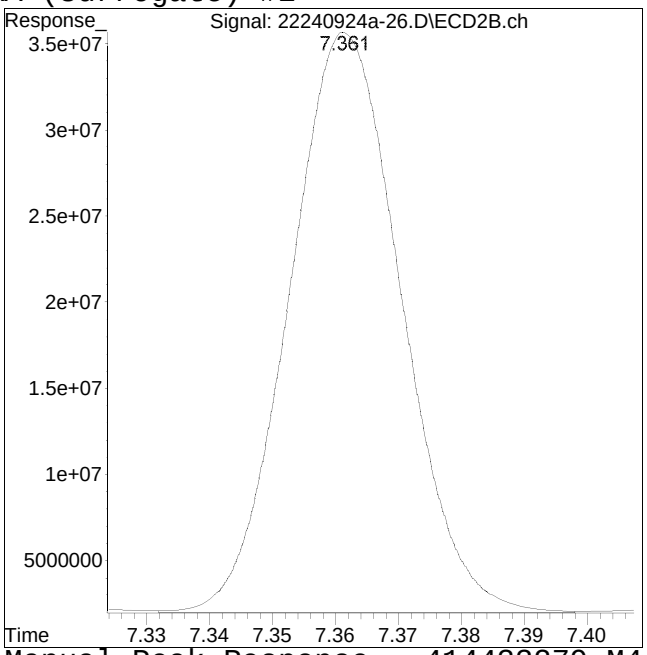

Original Peak Response = 382522978 Manual Peak Response = 326951101 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-26.D Operator : pest22:emr
Date Inj'd : 9/24/2024 14:56 Instrument : Pest22
Sample : L2453053-05,42,, rr Quant Date : 9/24/2024 3:13 pm

Compound #16: DCAA (surrogate) #2




Original Peak Response = 457599282 Manual Peak Response = 414433279 M4
M4 = Poor automated baseline construction.

# Herbicides Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST22** | **Ical Ref** | **: ICAL21511** |
| **Calibration dates** | **: 09/20/24 11:42 09/20/24 13:15** | | |

Calibration Files

1 =22240920i-02.D 2 =22240920i-03.D 3 =22240920i-04.D 4 =22240920i-05.D 5 =22240920i-06.D

6 =22240920i-07.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 4,4'-DBOB | ----------ISTD---------- | | | | | | | |
| 2) | t | Dalapon | 0.268 | 0.253 | 0.244 | 0.207 | 0.196 | | 0.234 | 13.27 |
| 3) | s | DCAA (surrogate) | 0.213 | 0.207 | 0.200 | 0.180 | 0.159 | 0.146 | 0.184 | 14.76 |
| 4) | t | Dicamba | 0.663 | 0.640 | 0.602 | 0.542 | 0.487 | 0.471 | 0.568 | 14.09 |
| 5) | t | MCPP | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 10.39 |
| 6) | t | MCPA | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 10.36 |
| 7) | t | Dichloroprop | 0.218 | 0.201 | 0.190 | 0.162 | 0.144 | 0.134 | 0.175 | 19.07 |
| 8) | t | 2,4-D | 0.260 | 0.236 | 0.223 | 0.201 | 0.182 | 0.174 | 0.213 | 15.60 |
| 9) | t | 2,4,5-TP (Silvex) | 0.882 | 0.856 | 0.832 | 0.739 | 0.680 | 0.645 | 0.772 | 12.73 |
| 10) | t | 2,4,5-T | 0.939 | 0.859 | 0.837 | 0.747 | 0.695 | 0.676 | 0.792 | 12.99 |
| 11) | t | 2,4-DB | 0.141 | 0.121 | 0.123 | 0.110 | 0.103 | 0.098 | 0.116 | 13.37 |
| 12) | t | Dinoseb | 0.754 | 0.680 | 0.636 | 0.533 | 0.481 | 0.459 | 0.590 | 19.96 |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST22** | **Ical Ref** | **: ICAL21511** |
| **Calibration dates** | **: 09/20/24 11:42 09/20/24 13:15** | | |

Signal #2 Calibration Files

1 =22240920i-02.D 2 =22240920i-03.D 3 =22240920i-04.D 4 =22240920i-05.D 5 =22240920i-06.D

6 =22240920i-07.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 4,4'-DBOB | ----------ISTD---------- | | | | | | | |
| 2) | t | Dalapon | 0.225 | 0.227 | 0.203 | 0.179 | 0.176 | | 0.202 | 12.00 |
| 3) | s | DCAA (surrogate) | 0.235 | 0.227 | 0.198 | 0.174 | 0.155 | 0.148 | 0.189 | 19.30 |
| 4) | t | Dicamba | 0.638 | 0.604 | 0.557 | 0.497 | 0.457 | 0.447 | 0.534 | 14.78 |
| 5) | t | MCPP | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 8.78 |
| 6) | t | MCPA | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 12.33 |
| 7) | t | Dichloroprop | 0.214 | 0.201 | 0.182 | 0.160 | 0.142 | 0.136 | 0.173 | 18.35 |
| 8) | t | 2,4-D | 0.270 | 0.252 | 0.231 | 0.204 | 0.189 | 0.185 | 0.222 | 15.74 |
| 9) | t | 2,4,5-TP (Sil | 0.905 | 0.874 | 0.820 | 0.723 | 0.673 | 0.659 | 0.776 | 13.57 |
| 10) | t | 2,4,5-T | 0.863 | 0.859 | 0.799 | 0.713 | 0.687 | 0.685 | 0.768 | 10.90 |
| 11) | t | 2,4-DB | 0.143 | 0.139 | 0.131 | 0.117 | 0.113 | 0.111 | 0.126 | 11.01 |
| 12) | t | Dinoseb | 0.557 | 0.554 | 0.517 | 0.455 | 0.429 | 0.425 | 0.490 | 12.42 |

# Response Factor Report Pest22

Method Path : I:\PEST\Pest22\2024\240920ical\
Method File : Herb22_2024_09_20_mgL_ICAL.m
Title : herb
Last Update : Mon Sep 23 11:28:20 2024
Response Via : Initial Calibration

Calibration Files
1 =22240920i-02.D 2 =22240920i-03.D 3 =22240920i-04.D 4 =22240920i-05.D 5 =22240920i-06.D
6 =22240920i-07.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 4,4'-DBOB | ----------ISTD---------- | | | | | | | |
| 2) | t | Dalapon | | 0.268 | 0.253 | 0.244 | 0.207 | 0.196 | 0.234 | 13.27 |
| 3) | s | DCAA (surrogate) | 0.213 | 0.207 | 0.200 | 0.180 | 0.159 | 0.146 | 0.184 | 14.76 |
| 4) | t | Dicamba | 0.663 | 0.640 | 0.602 | 0.542 | 0.487 | 0.471 | 0.568 | 14.09 |
| 5) | t | MCPP | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 10.39 |
| 6) | t | MCPA | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 10.36 |
| 7) | t | Dichloroprop | 0.218 | 0.201 | 0.190 | 0.162 | 0.144 | 0.134 | 0.175 | 19.07 |
| 8) | t | 2,4-D | 0.260 | 0.236 | 0.223 | 0.201 | 0.182 | 0.174 | 0.213 | 15.60 |
| 9) | t | 2,4,5-TP (Sil... | 0.882 | 0.856 | 0.832 | 0.739 | 0.680 | 0.645 | 0.772 | 12.73 |
| 10) | t | 2,4,5-T | 0.939 | 0.859 | 0.837 | 0.747 | 0.695 | 0.676 | 0.792 | 12.99 |
| 11) | t | 2,4-DB | 0.141 | 0.121 | 0.123 | 0.110 | 0.103 | 0.098 | 0.116 | 13.37 |
| 12) | t | Dinoseb | 0.754 | 0.680 | 0.636 | 0.533 | 0.481 | 0.459 | 0.590 | 19.96 |

Signal #2 Calibration Files
1 =22240920i-02.D 2 =22240920i-03.D 3 =22240920i-04.D 4 =22240920i-05.D 5 =22240920i-06.D
6 =22240920i-07.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 4,4'-DBOB | ----------ISTD---------- | | | | | | | |
| 2) | t | Dalapon | | 0.225 | 0.227 | 0.203 | 0.179 | 0.176 | 0.202 | 12.00 |
| 3) | s | DCAA (surrogate) | 0.235 | 0.227 | 0.198 | 0.174 | 0.155 | 0.148 | 0.189 | 19.30 |
| 4) | t | Dicamba | 0.638 | 0.604 | 0.557 | 0.497 | 0.457 | 0.447 | 0.534 | 14.78 |
| 5) | t | MCPP | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 8.78 |
| 6) | t | MCPA | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 12.33 |
| 7) | t | Dichloroprop | 0.214 | 0.201 | 0.182 | 0.160 | 0.142 | 0.136 | 0.173 | 18.35 |
| 8) | t | 2,4-D | 0.270 | 0.252 | 0.231 | 0.204 | 0.189 | 0.185 | 0.222 | 15.74 |
| 9) | t | 2,4,5-TP (Sil... | 0.905 | 0.874 | 0.820 | 0.723 | 0.673 | 0.659 | 0.776 | 13.57 |
| 10) | t | 2,4,5-T | 0.863 | 0.859 | 0.799 | 0.713 | 0.687 | 0.685 | 0.768 | 10.90 |
| 11) | t | 2,4-DB | 0.143 | 0.139 | 0.131 | 0.117 | 0.113 | 0.111 | 0.126 | 11.01 |

Method Path : I:\PEST\Pest22\2024\240920ical\
Method File : Herb22_2024_09_20_mgL_ICAL.m
Title : herb
Last Update : Mon Sep 23 11:28:20 2024
Response Via : Initial Calibration

Calibration Files
1 =22240920i-02.D 2 =22240920i-03.D 3 =22240920i-04.D 4 =22240920i-05.D 5 =22240920i-06.D
6 =22240920i-07.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 12) t | Dinoseb | 0.557 | 0.554 | 0.517 | 0.455 | 0.429 | 0.425 | 0.490 | 12.42 |

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 11:42 am
Operator : pest22:akm
Sample : il1herb,42e,,pp 11633 L0.005/5
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:33:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:33:19 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.436 | 8.435 | 1208.6E6 | 1536.3E6 | 0.250M4 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.906 | 7.365 | 48342330 | 67860898 | 0.054M4 | 0.058M4 |
| | | Spiked Amount | 0.500 | Range | 30 - 150 | Recovery = | 10.80%# | 11.60%# |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.327 | 2.321 | 64110826 | 69961534 | 0.055M4 | 0.051M4 |
| 4) | t | Dicamba | 7.079 | 7.542 | 150.7E6 | 184.3E6 | 0.055M4 | 0.056M4 |
| 5) | t | MCPP | 7.276 | 7.655 | 8760966 | 12721796 | 3.748M4 | 3.942M4 |
| 6) | t | MCPA | 7.424 | 7.882 | 20732761 | 31539153 | 4.929M4 | 5.385M4 |
| 7) | t | Dichloroprop | 7.786 | 8.201 | 49557404 | 61863211 | 0.059M4 | 0.058M4 |
| 8) | t | 2,4-D | 8.021f | 8.479 | 59112709 | 78070519 | 0.057M4 | 0.057M4 |
| 9) | t | 2,4,5-TP (Si | 8.719 | 9.137 | 202.5E6 | 264.1E6 | 0.054M4 | 0.055M4 |
| 10) | t | 2,4,5-T | 8.953f | 9.428 | 215.5E6 | 252.0E6 | 0.057M4 | 0.053M4 |
| 11) | t | 2,4-DB | 9.364f | 9.791 | 32612397 | 42276332 | 0.058M4 | 0.055M4 |
| 12) | t | Dinoseb | 10.088 | 10.011 | 173.2E6 | 162.6E6 | 0.064M4 | 0.054M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 11:42 am
Operator : pest22:akm
Sample : il1herb,42e,,pp 11633 L0.005/5
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:33:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:33:19 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

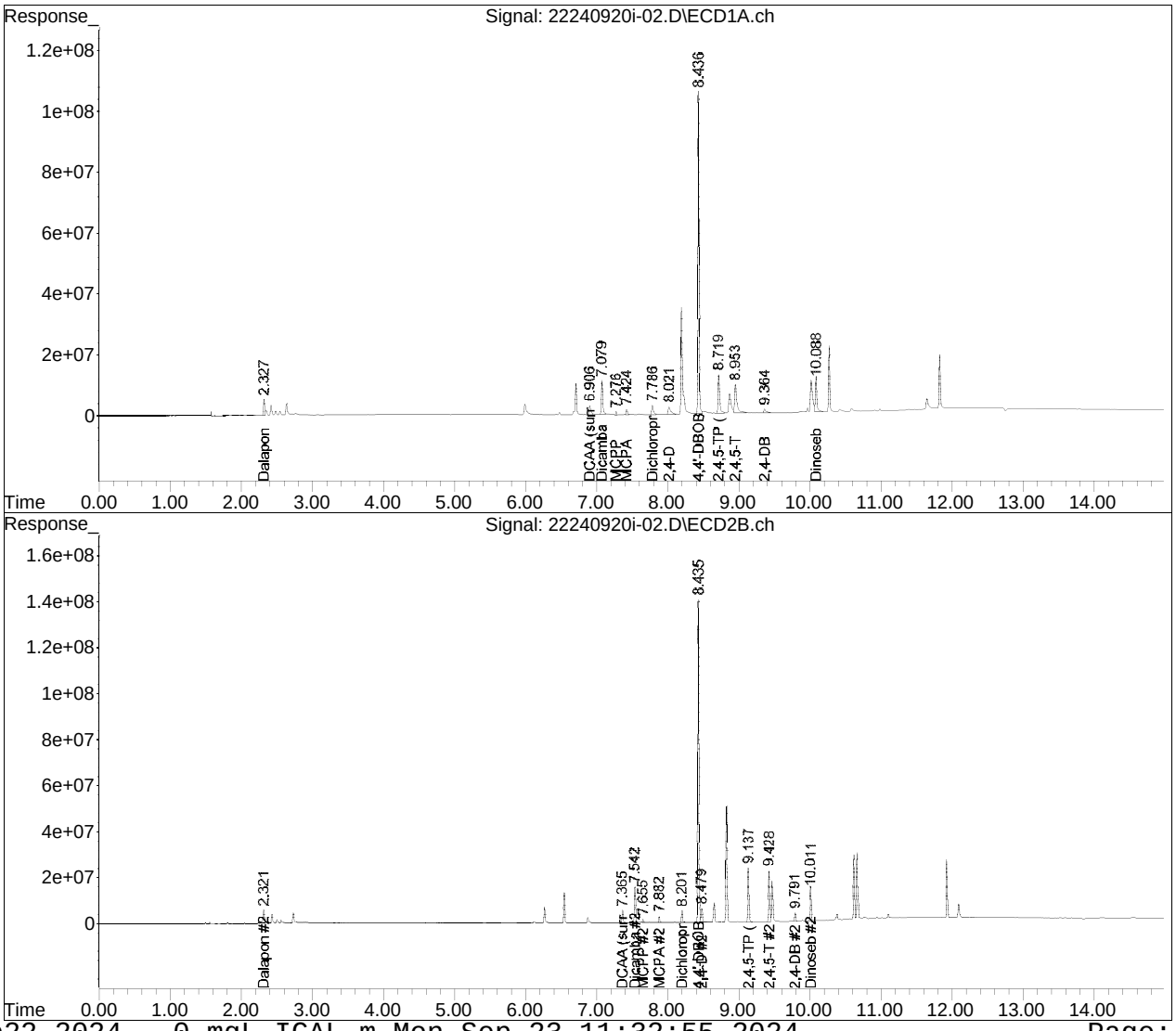
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 11:42 am
Operator : pest22:akm
Sample : il1herb,42e,,pp 11633 L0.005/5
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:33:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:33:19 2024
Response via : Initial Calibration
Integrator: ChemStation

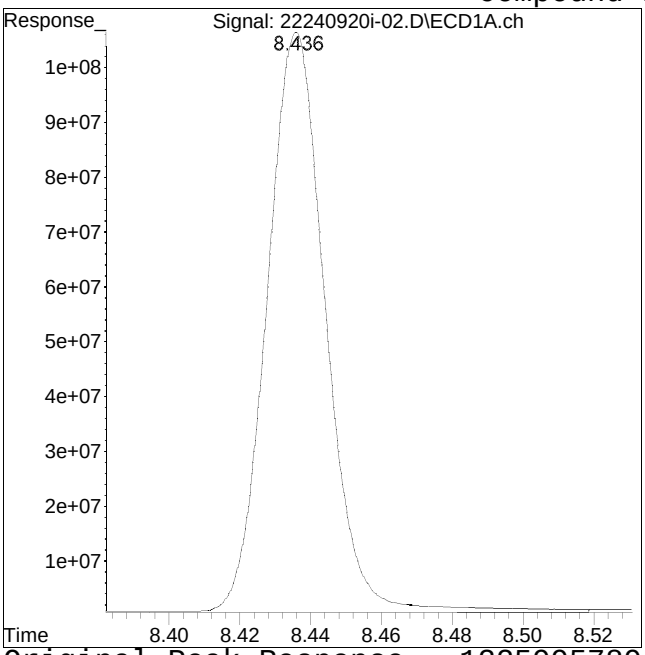
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

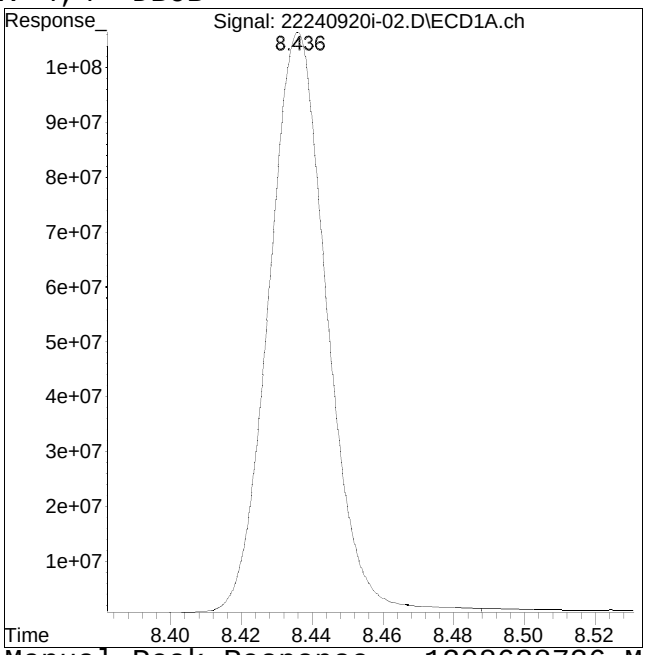


# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #1: 4,4'-DBOB



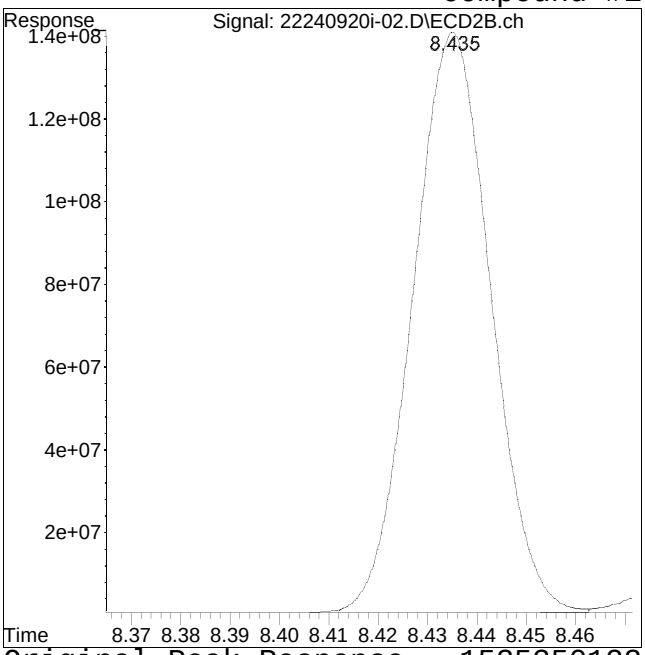



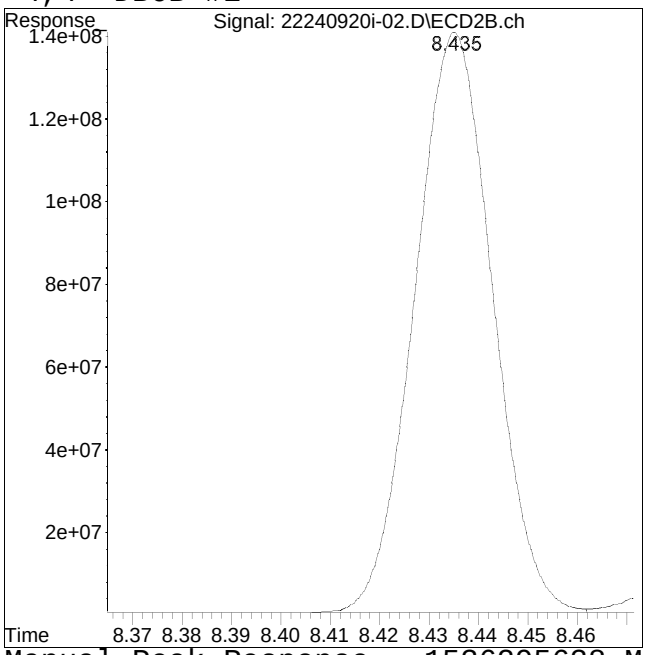

Original Peak Response = 1225995789 Manual Peak Response = 1208638736 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #14: 4,4'-DBOB #2



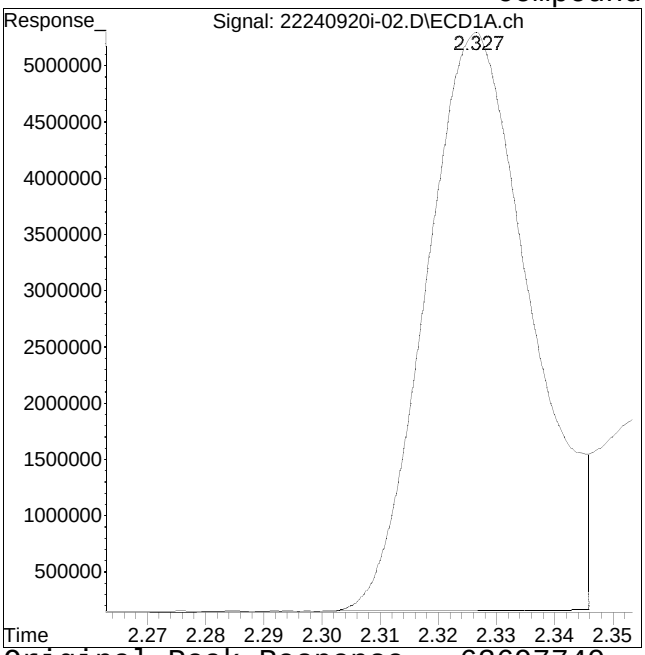




Original Peak Response = 1535350123 Manual Peak Response = 1536295638 M4
M4 = Poor automated baseline construction.

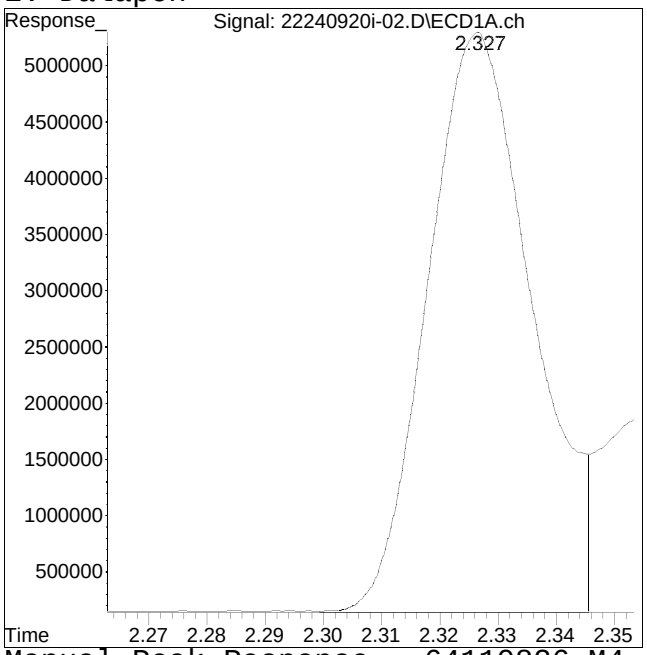
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #2: Dalapon




Original Peak Response = 63697740



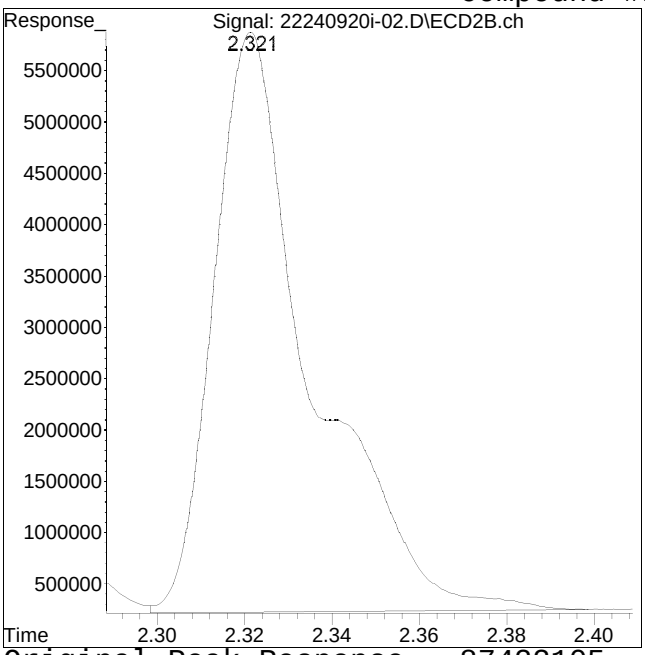

Manual Peak Response = 64110826 M4

M4 = Poor automated baseline construction.

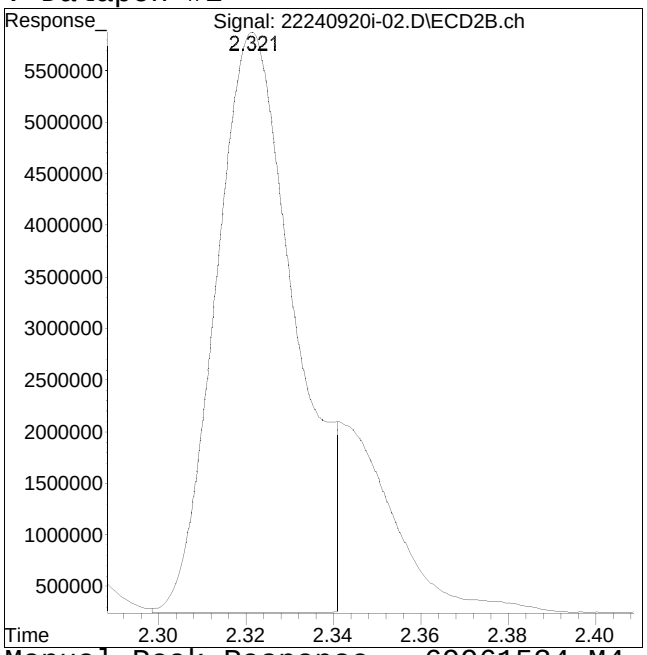
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #15: Dalapon #2




Original Peak Response = 87422105



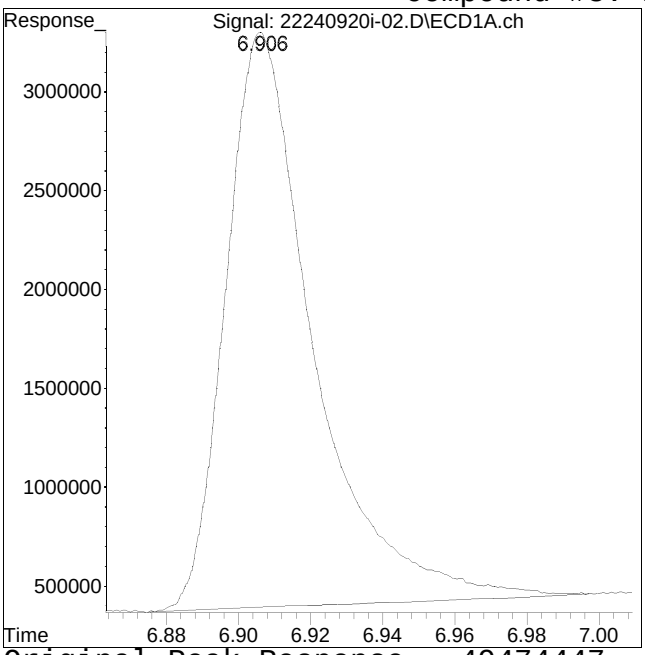

Manual Peak Response = 69961534 M4

M4 = Poor automated baseline construction.

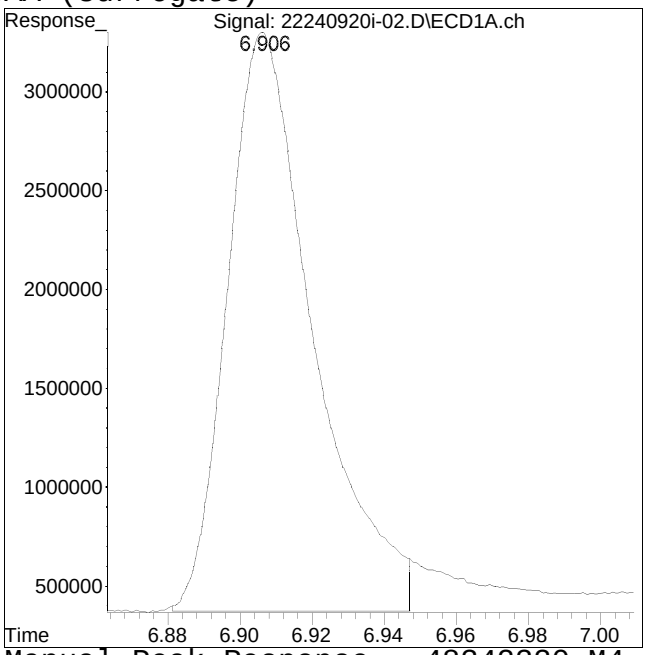
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #3: DCAA (surrogate)




Original Peak Response = 49474447



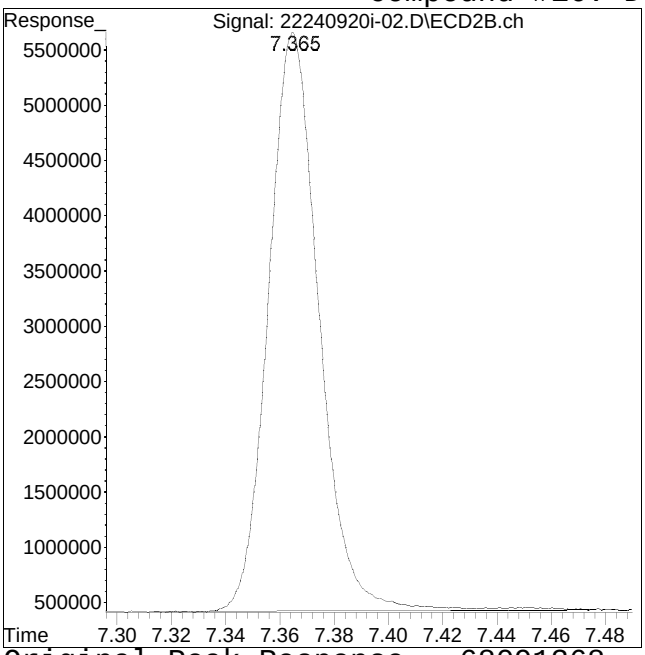

Manual Peak Response = 48342330 M4

M4 = Poor automated baseline construction.

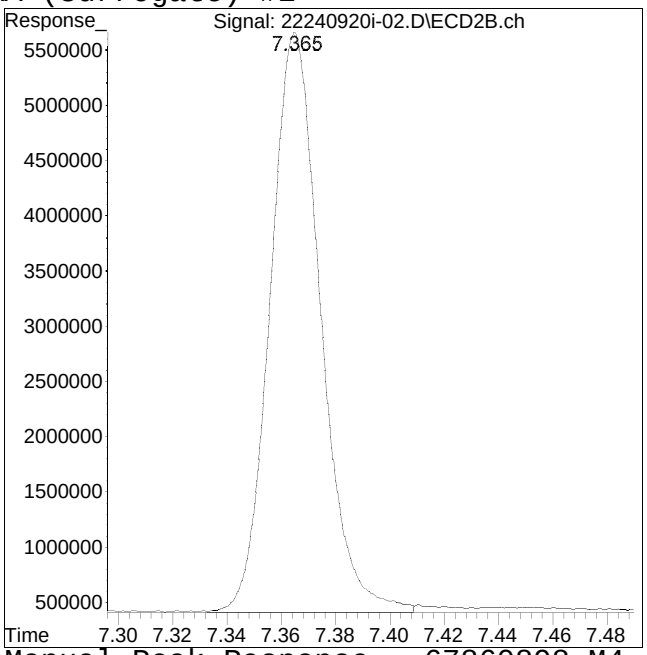
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #16: DCAA (surrogate) #2




Original Peak Response = 68091368



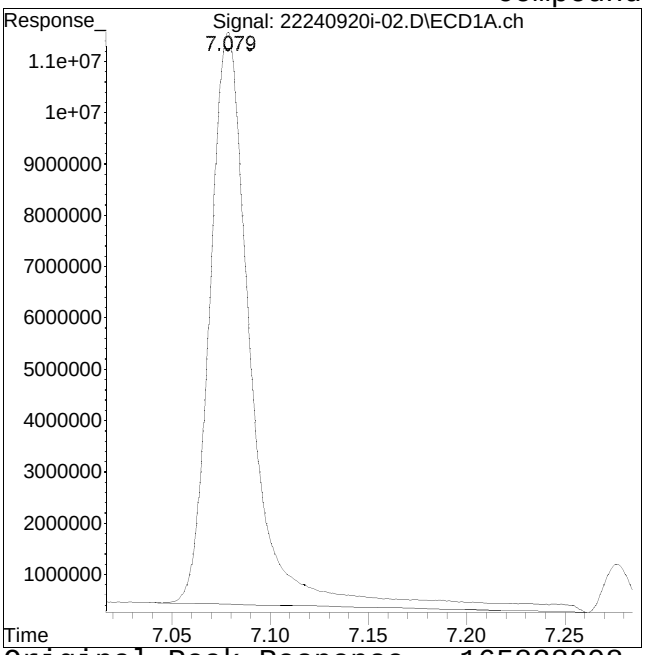

Manual Peak Response = 67860898 M4

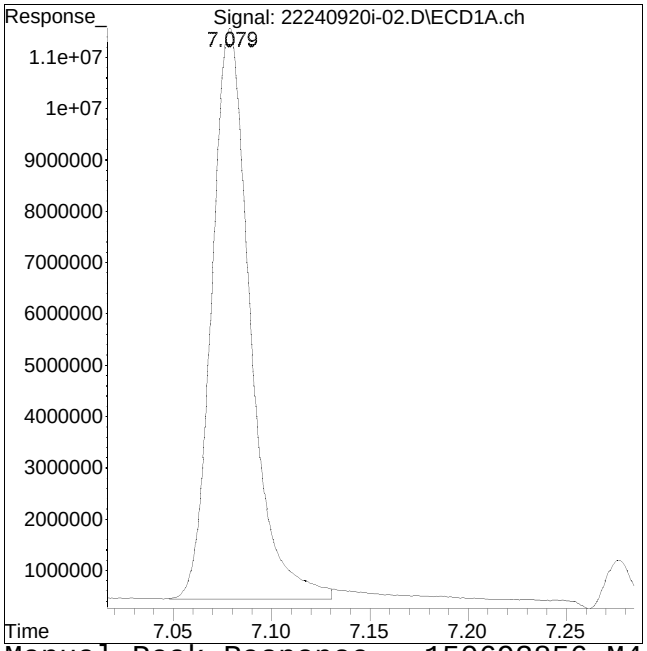
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #4: Dicamba



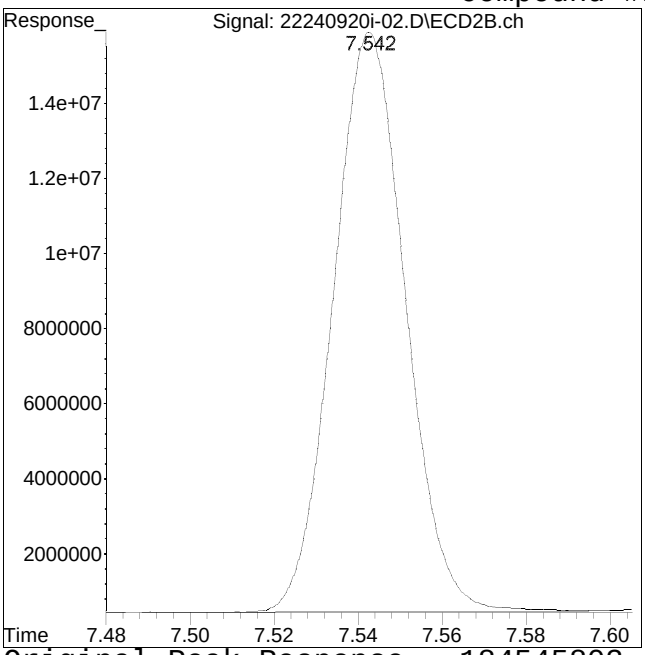



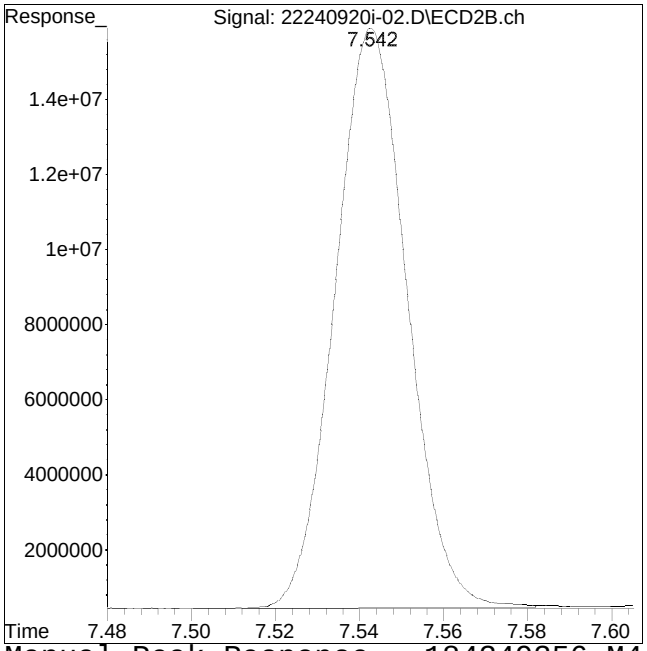

Original Peak Response = 165828208 Manual Peak Response = 150693856 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #17: Dicamba #2



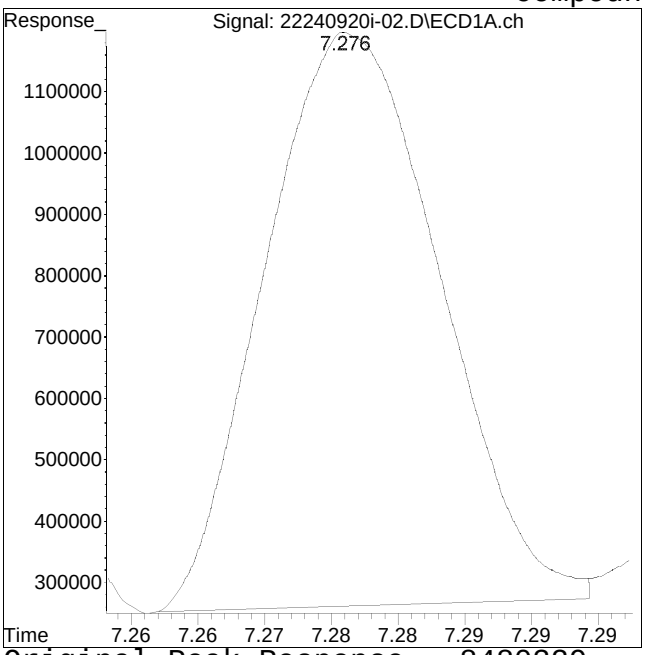




Original Peak Response = 184545803 Manual Peak Response = 184349356 M4
M4 = Poor automated baseline construction.

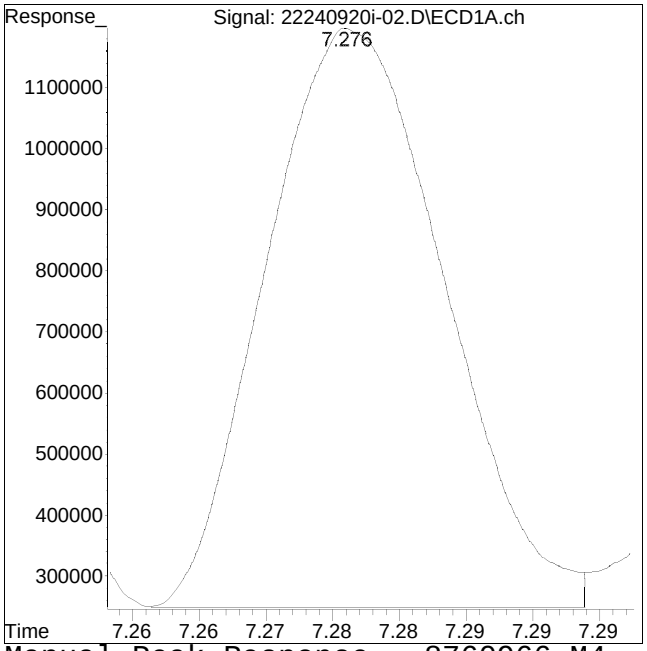
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #5: MCPP




Original Peak Response = 8480329



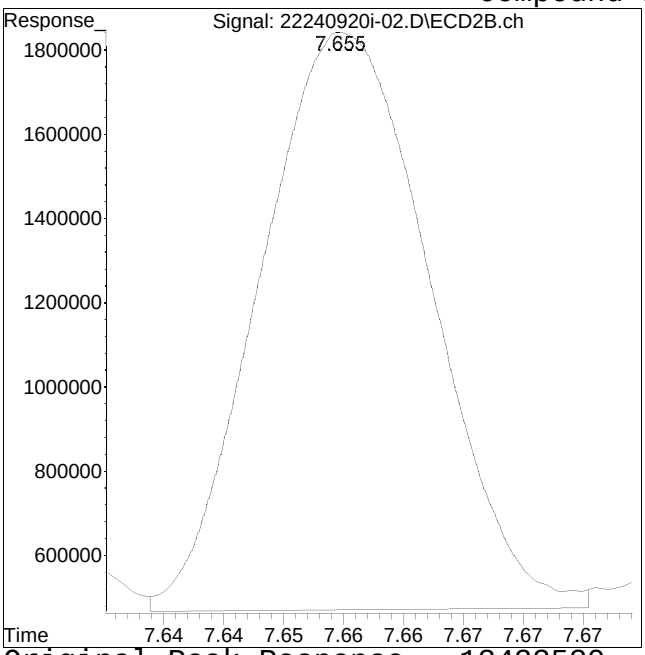

Manual Peak Response = 8760966 M4

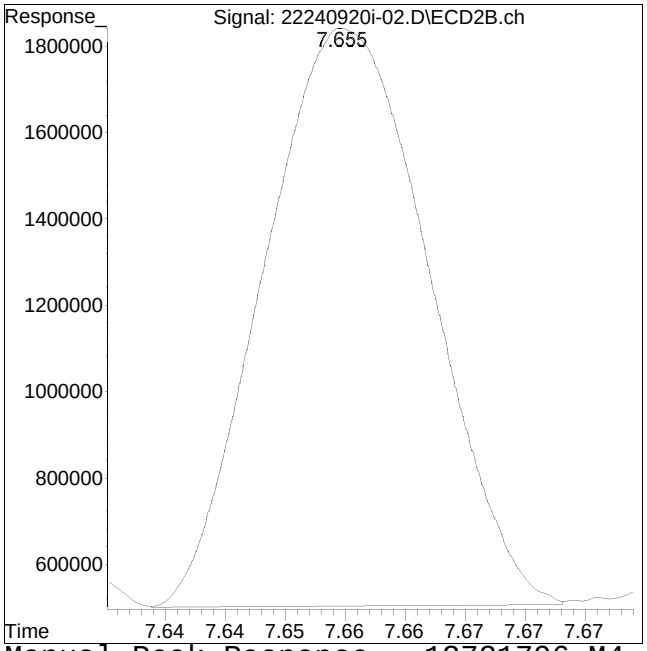
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #18: MCPP #2



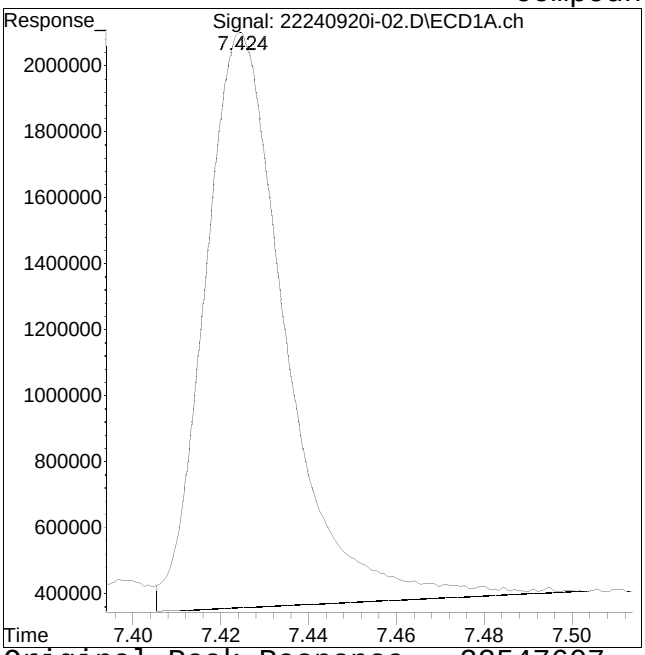




Original Peak Response = 13433530 Manual Peak Response = 12721796 M4
M4 = Poor automated baseline construction.

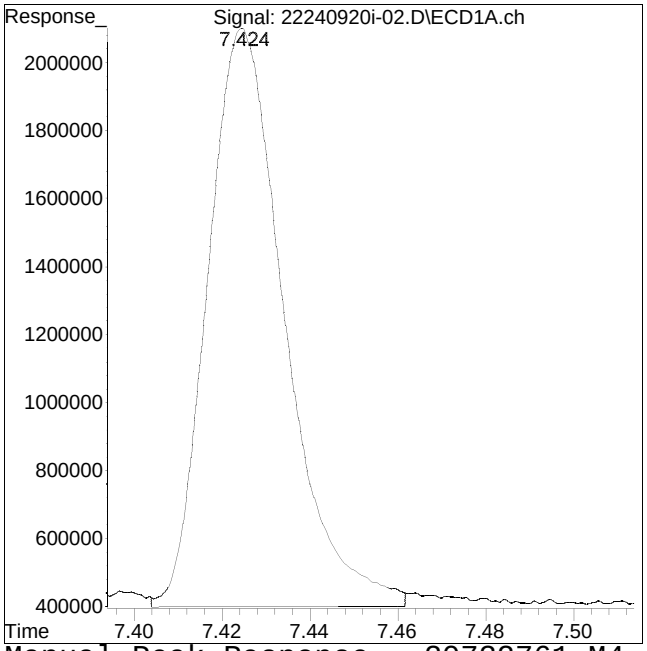
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #6: MCPA




Original Peak Response = 22547607



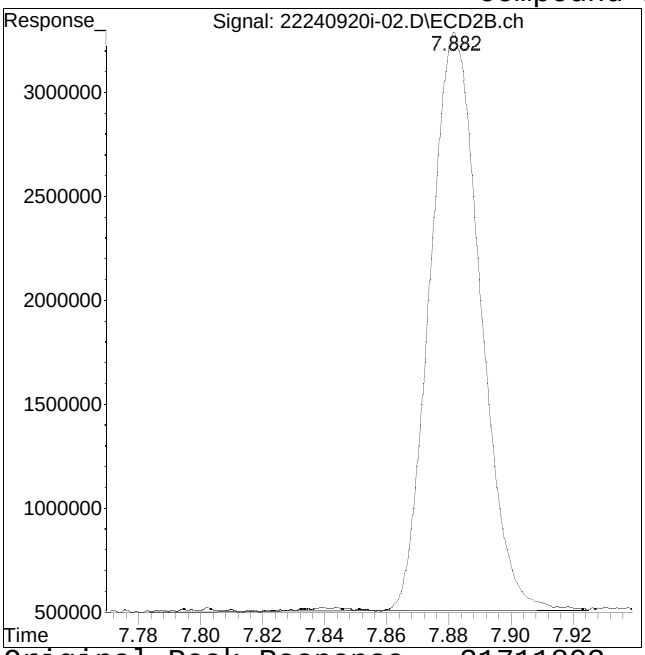

Manual Peak Response = 20732761 M4

M4 = Poor automated baseline construction.

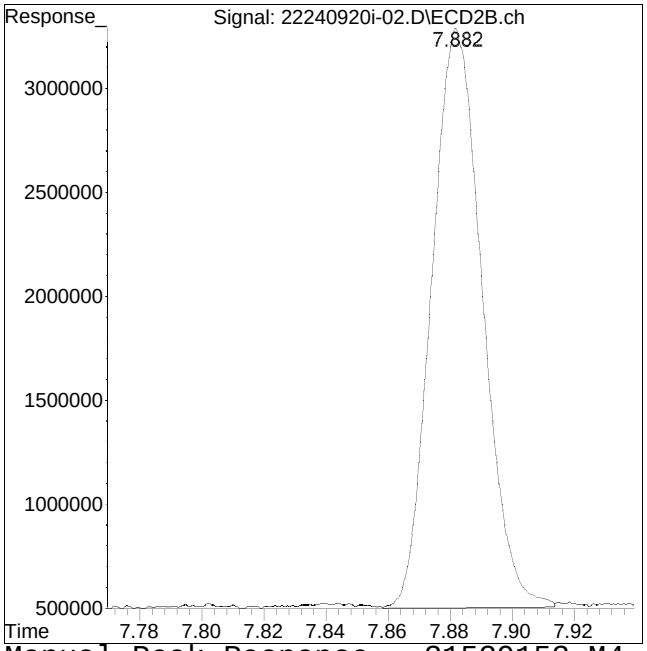
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #19: MCPA #2




Original Peak Response = 31711893



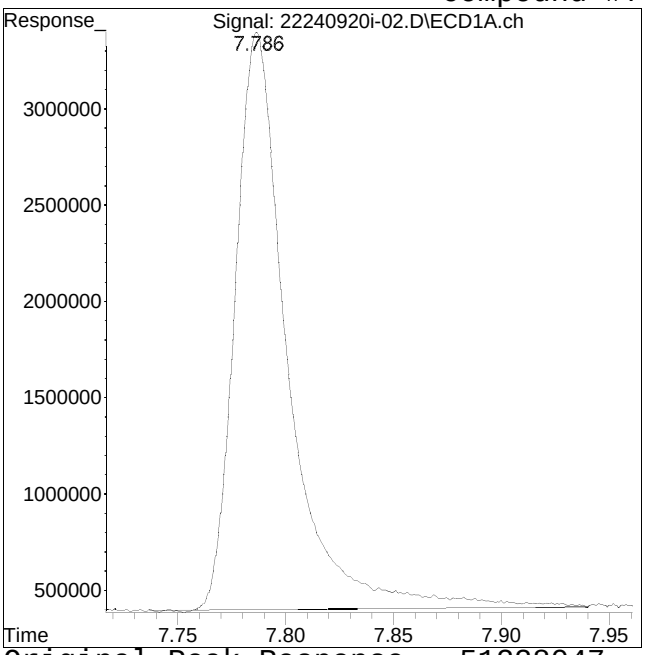

Manual Peak Response = 31539153 M4

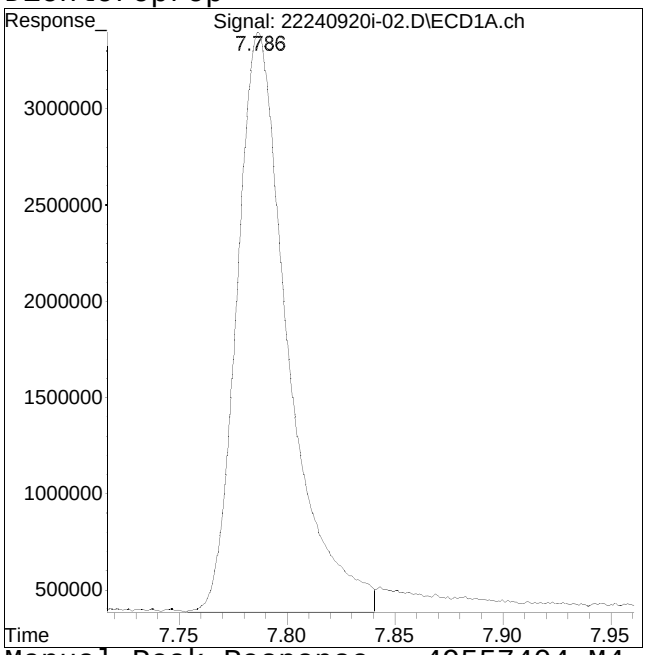
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #7: Dichloroprop



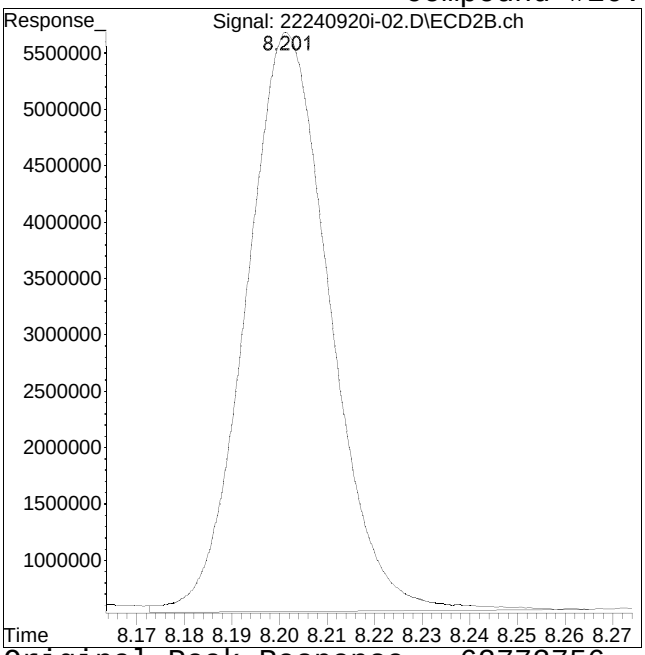




Original Peak Response = 51228047 Manual Peak Response = 49557404 M4
M4 = Poor automated baseline construction.

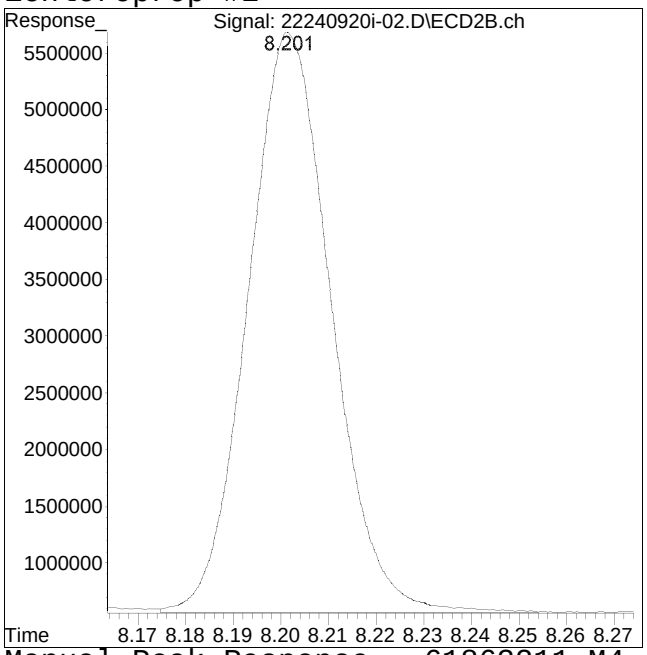
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #20: Dichloroprop #2




Original Peak Response = 62773756



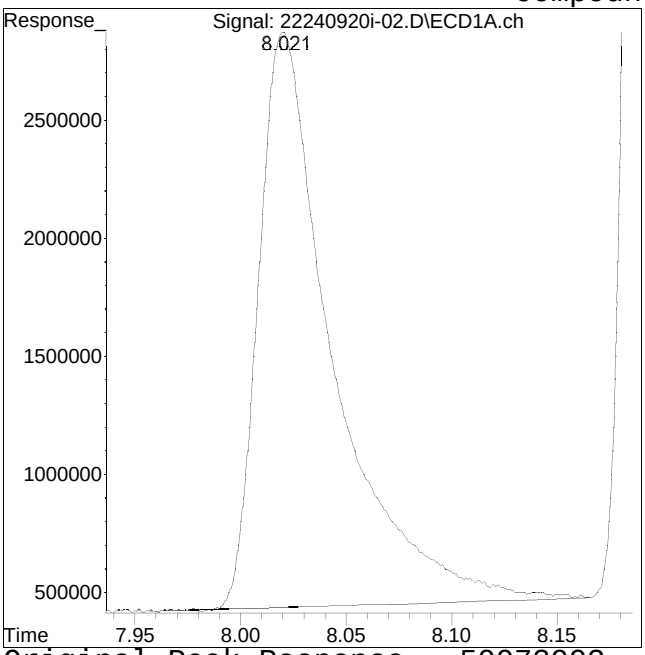

Manual Peak Response = 61863211 M4

M4 = Poor automated baseline construction.

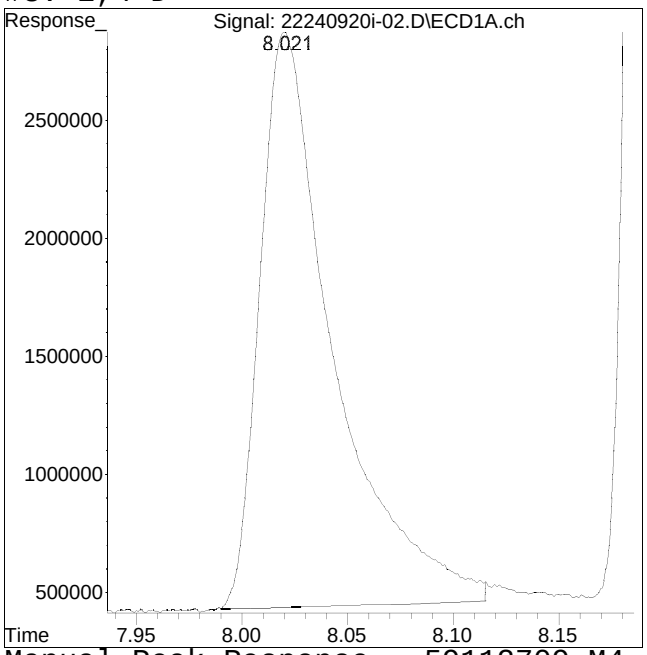
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #8: 2,4-D




Original Peak Response = 59973993



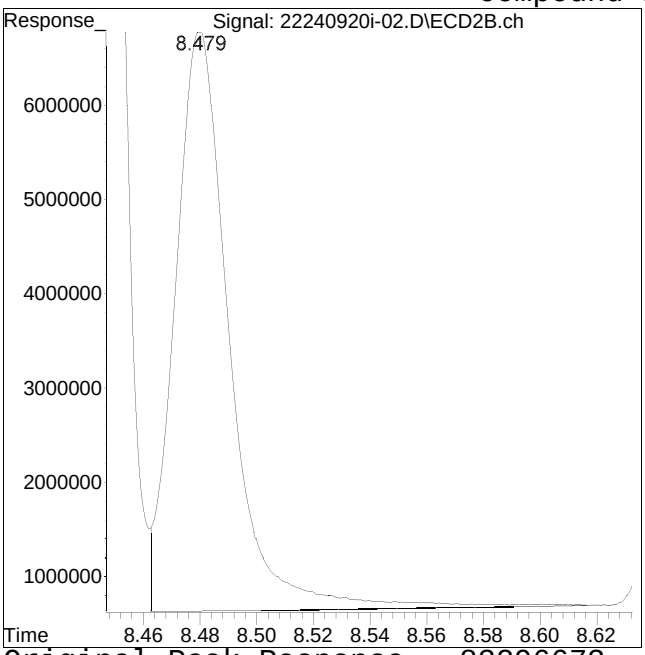

Manual Peak Response = 59112709 M4

M4 = Poor automated baseline construction.

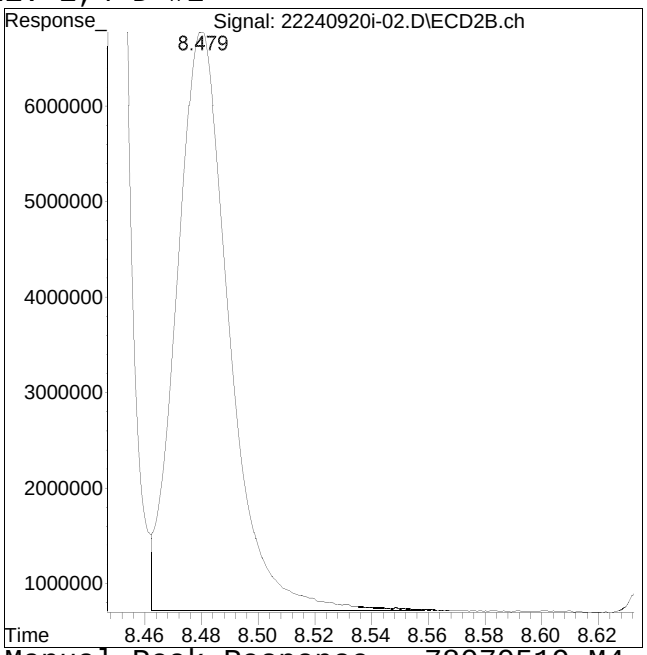
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #21: 2,4-D #2




Original Peak Response = 83296673



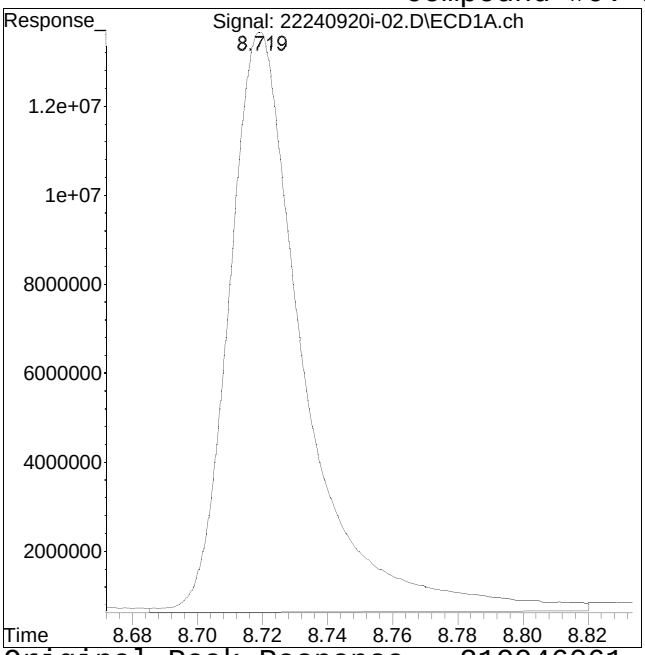

Manual Peak Response = 78070519 M4

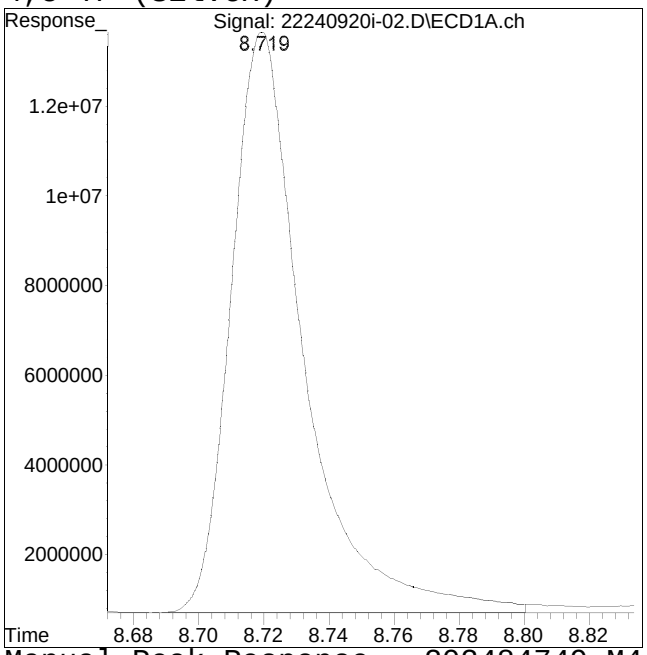
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #9: 2,4,5-TP (Silvex)



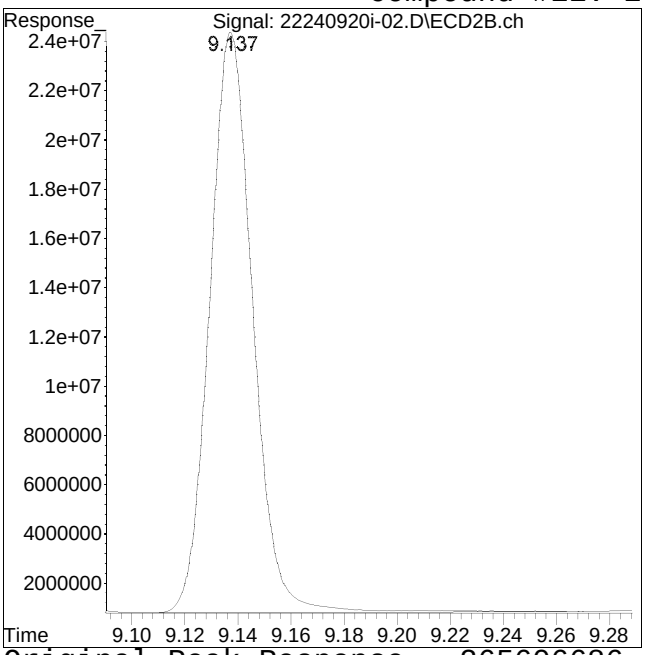




Original Peak Response = 210046061 Manual Peak Response = 202484749 M4
M4 = Poor automated baseline construction.

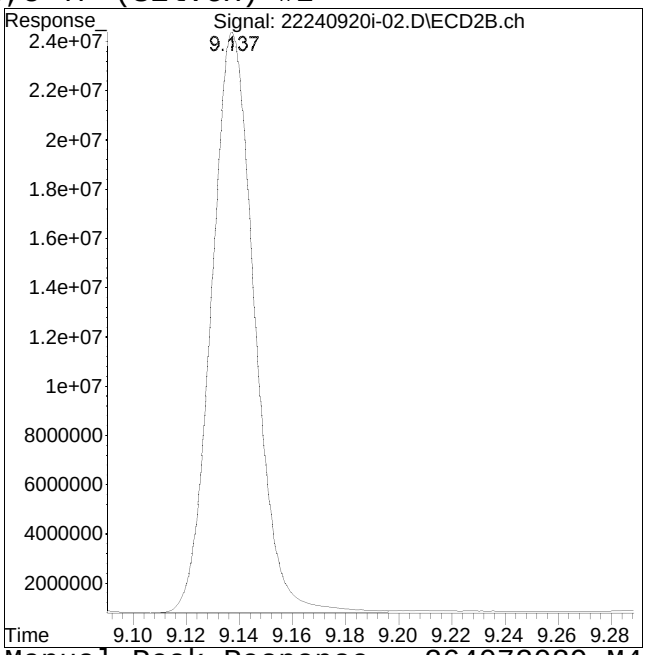
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #22: 2,4,5-TP (Silvex) #2




Original Peak Response = 265606686



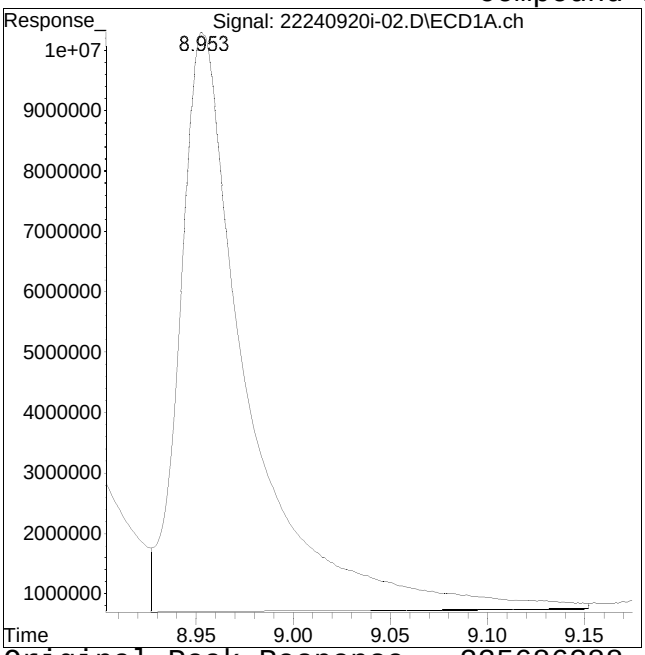

Manual Peak Response = 264072029 M4

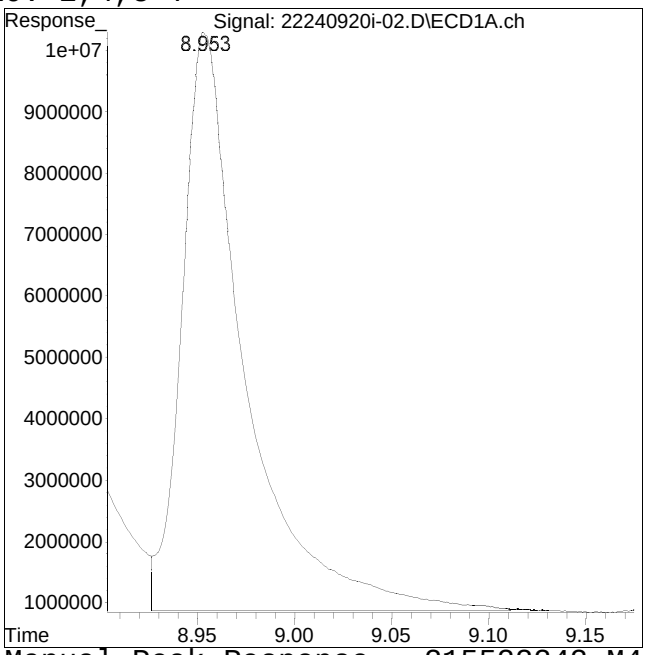
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #10: 2,4,5-T



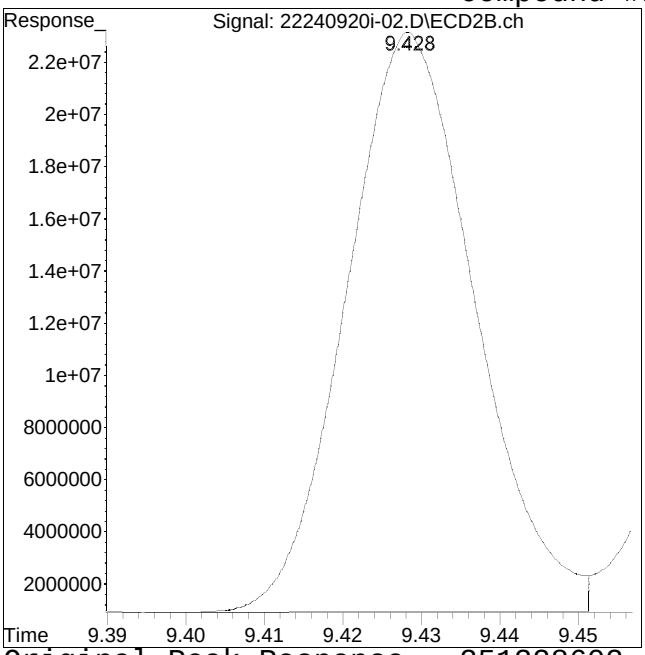



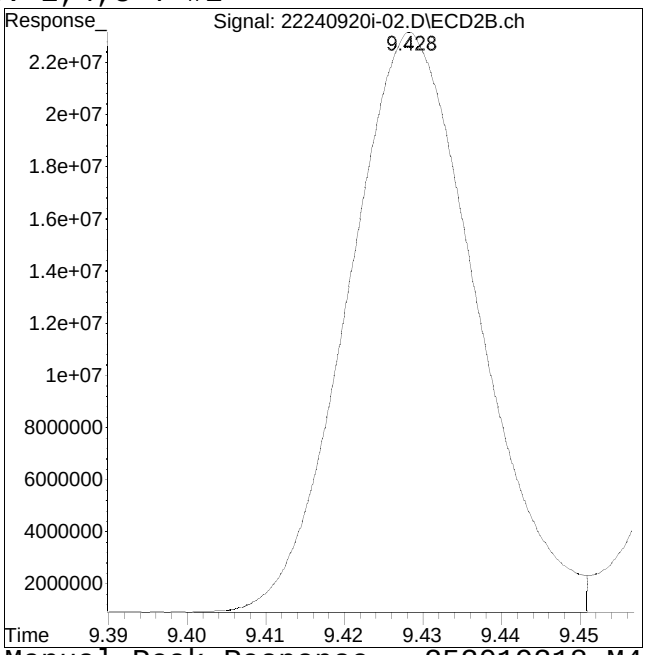

Original Peak Response = 235686388 Manual Peak Response = 215522242 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #23: 2,4,5-T #2



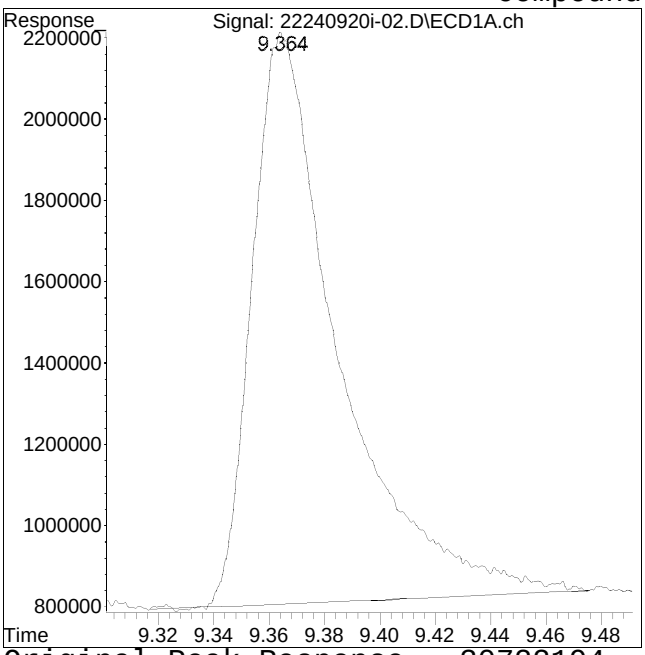




Original Peak Response = 251328602 Manual Peak Response = 252019318 M4
M4 = Poor automated baseline construction.

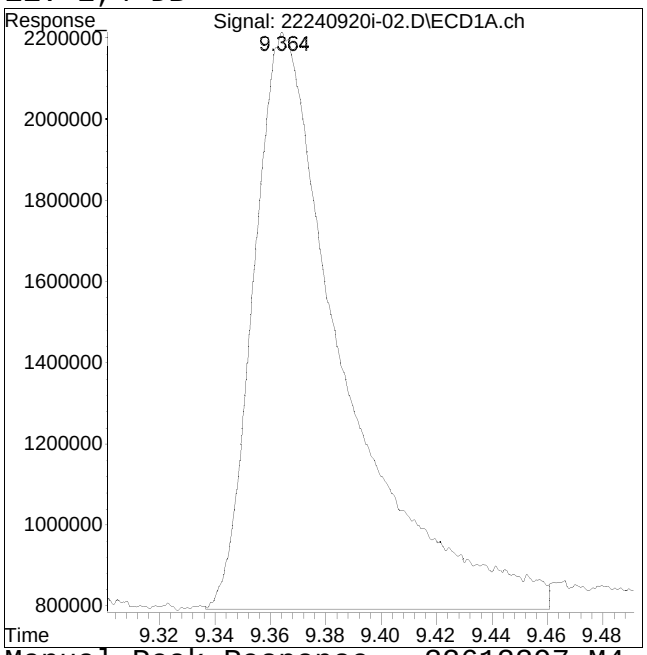
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #11: 2,4-DB




Original Peak Response = 30722194



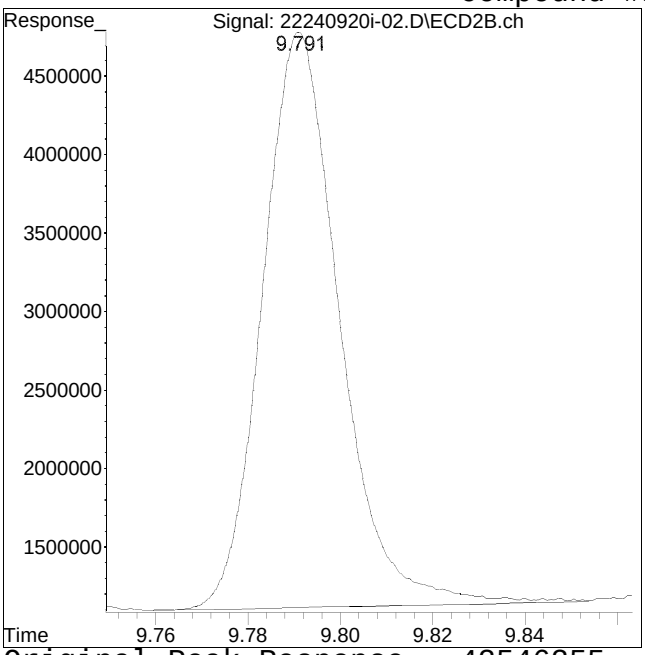

Manual Peak Response = 32612397 M4

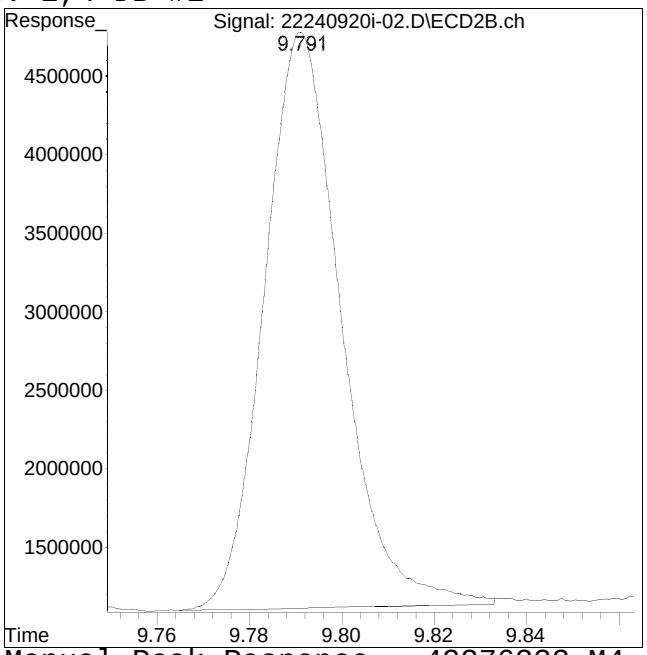
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

Compound #24: 2,4-DB #2



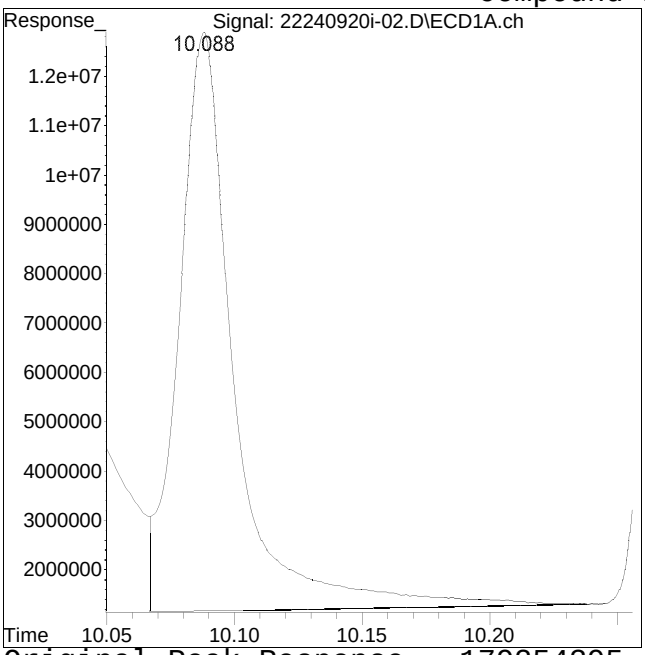



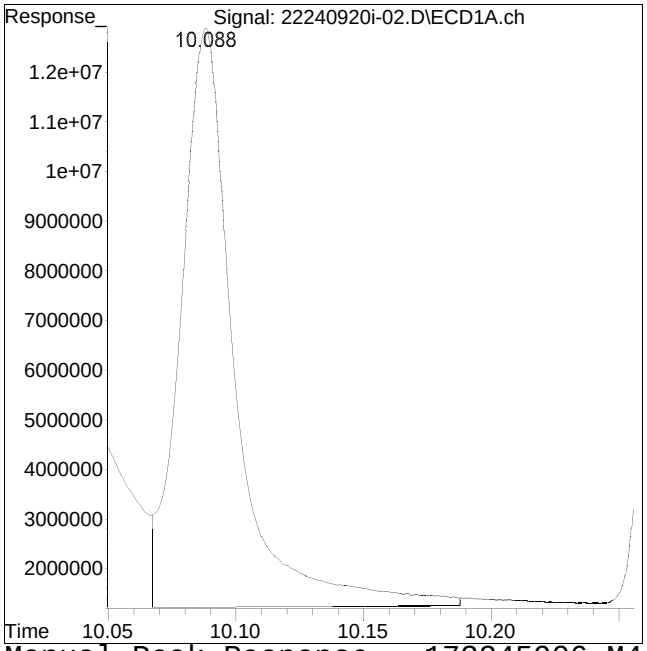

Original Peak Response = 42546255 Manual Peak Response = 42276332 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-02.D Operator : pest22:akm
Date Inj'd : 9/20/2024 11:42 am Instrument : Pest22
Sample : il1herb,42e,,pp 11633 L0.0Quant Date : 9/21/2024 8:33 am

## Compound #12: Dinoseb



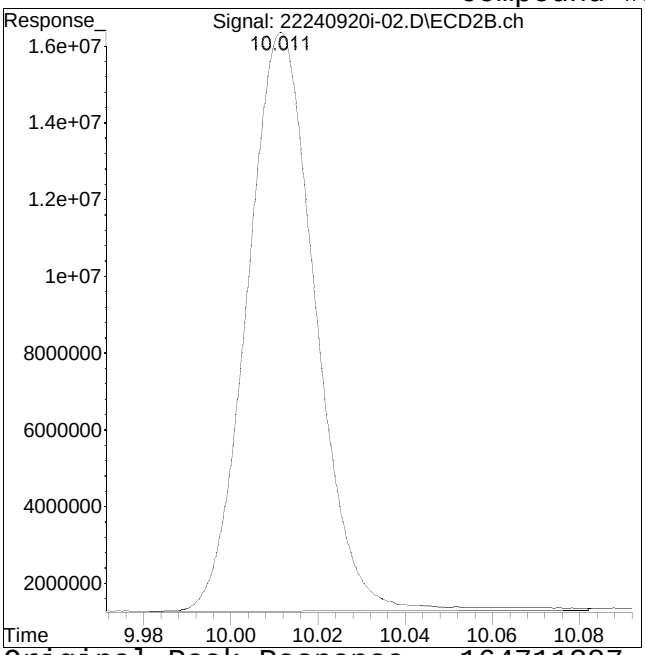

Original Peak Response = 179254395 Manual Peak Response = 173245906 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

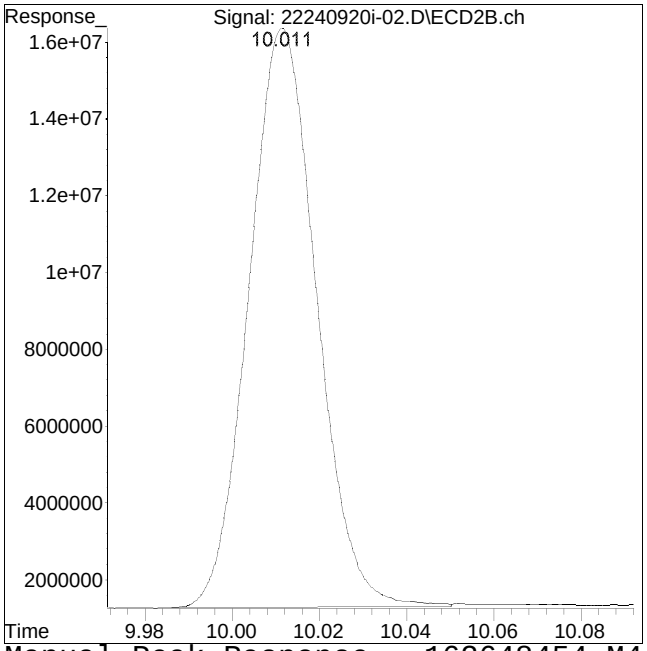
Data Path : I:\PEST\Pest22\2024\240920Q
Data File : 22240920i-02.D
Date Inj'd : 9/20/2024 11:42 am
Sample : il1herb,42e,,pp 11633 L0.0

Method : Herb22_2024_09_20_mgL_IC
Operator : pest22:akm
Instrument : Pest22
Quant Date : 9/21/2024 8:33 am

## Compound #25: Dinoseb #2




Original Peak Response = 164711387




Manual Peak Response = 162648454 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-03.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:01 pm
Operator : pest22:akm
Sample : il2herb,42e,,pp 11632 L0.1/10
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:27:37 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:27:30 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.437 | 8.435 | 1259.9E6 | 1596.4E6 | 0.250M4 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.903 | 7.364 | 98009582 | 136.2E6 | 0.109M4 | 0.118M4 |
| | | Spiked Amount | 0.500 | Range | 30 - 150 | Recovery = | 21.80%# | 23.60%# |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.326 | 2.321 | 122.9E6 | 130.8E6 | 0.104M3 | 0.099M3 |
| 4) | t | Dicamba | 7.077 | 7.542 | 303.3E6 | 362.5E6 | 0.110M4 | 0.111M4 |
| 5) | t | MCPP | 7.276 | 7.655 | 22437726 | 30753638 | 8.849M4 | 8.884M4 |
| 6) | t | MCPA | 7.423 | 7.882 | 45037977 | 63370790 | 10.397M4 | 10.753M4 |
| 7) | t | Dichloroprop | 7.784 | 8.202 | 95191965 | 120.5E6 | 0.114M4 | 0.115M4 |
| 8) | t | 2,4-D | 8.009 | 8.478 | 112.0E6 | 151.3E6 | 0.109M3 | 0.112M4 |
| 9) | t | 2,4,5-TP (Si | 8.714 | 9.136 | 409.7E6 | 530.4E6 | 0.108M3 | 0.111M4 |
| 10) | t | 2,4,5-T | 8.940 | 9.428 | 411.2E6 | 521.3E6 | 0.108M4 | 0.109 |
| 11) | t | 2,4-DB | 9.355 | 9.790 | 58377768 | 85050468 | 0.104M3 | 0.109M4 |
| 12) | t | Dinoseb | 10.087 | 10.011 | 325.4E6 | 336.1E6 | 0.122M4 | 0.111M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-03.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:01 pm
Operator : pest22:akm
Sample : il2herb,42e,,pp 11632 L0.1/10
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:27:37 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:27:30 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

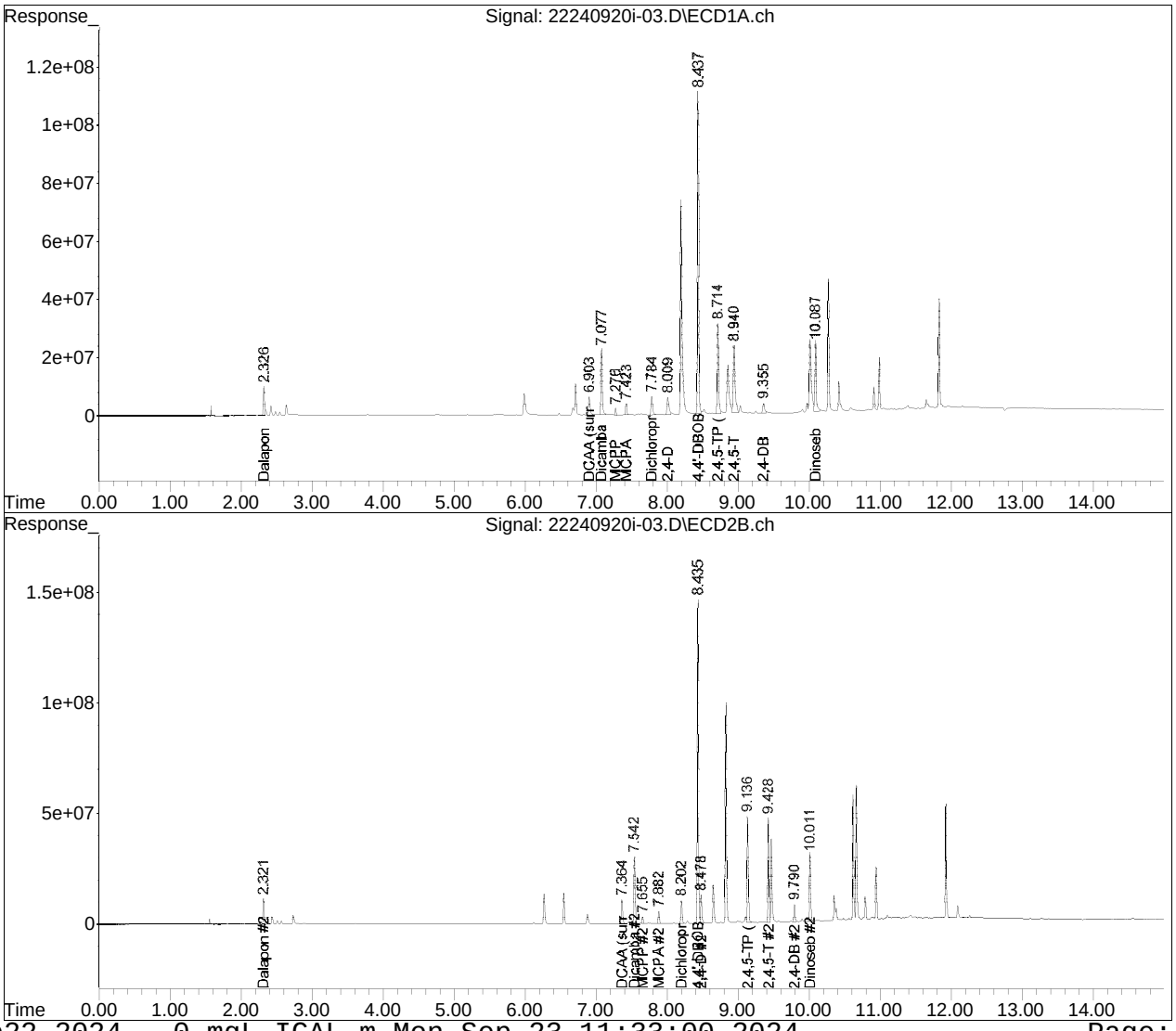
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-03.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:01 pm
Operator : pest22:akm
Sample : il2herb,42e,,pp 11632 L0.1/10
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:27:37 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:27:30 2024
Response via : Initial Calibration
Integrator: ChemStation

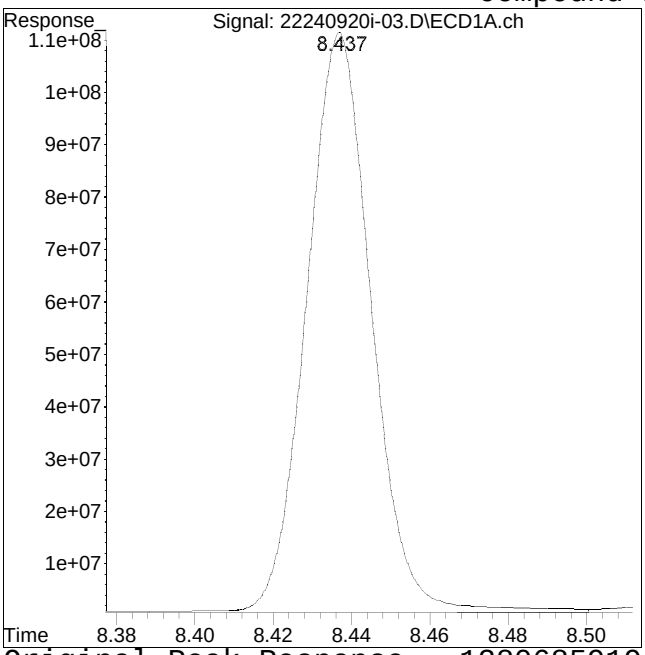
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

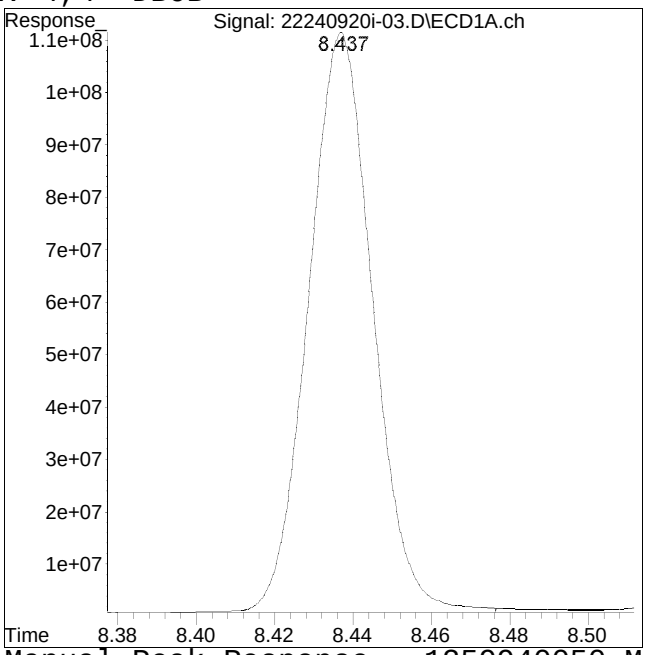


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #1: 4,4'-DBOB



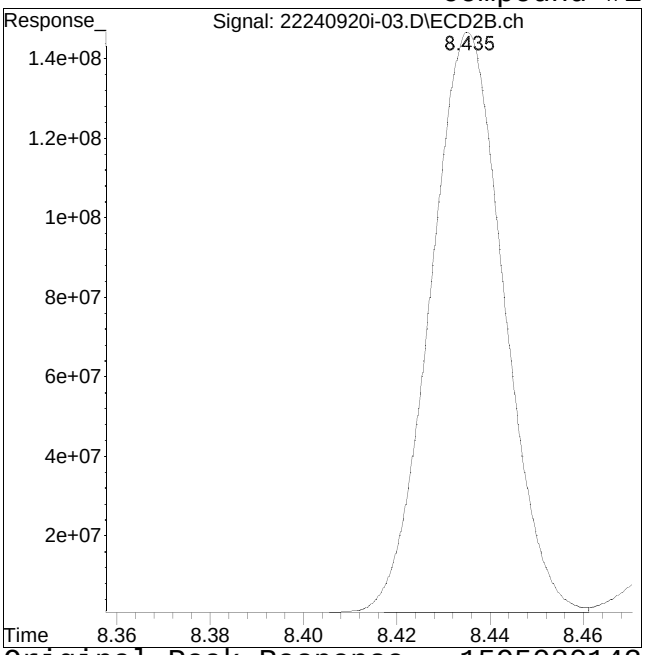



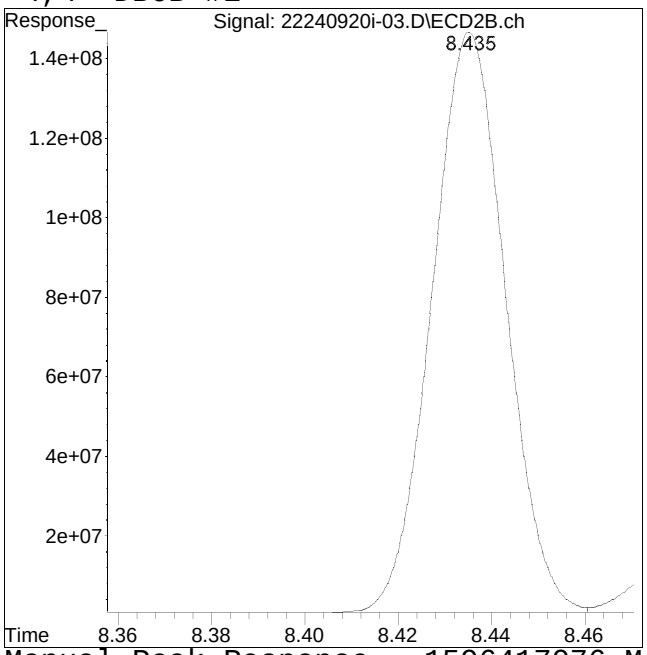

Original Peak Response = 1280685919 Manual Peak Response = 1259940050 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #14: 4,4'-DBOB #2



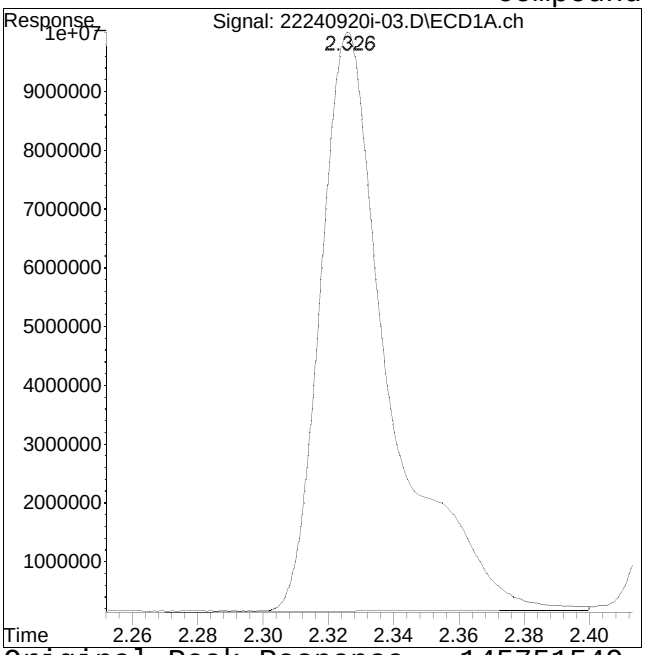



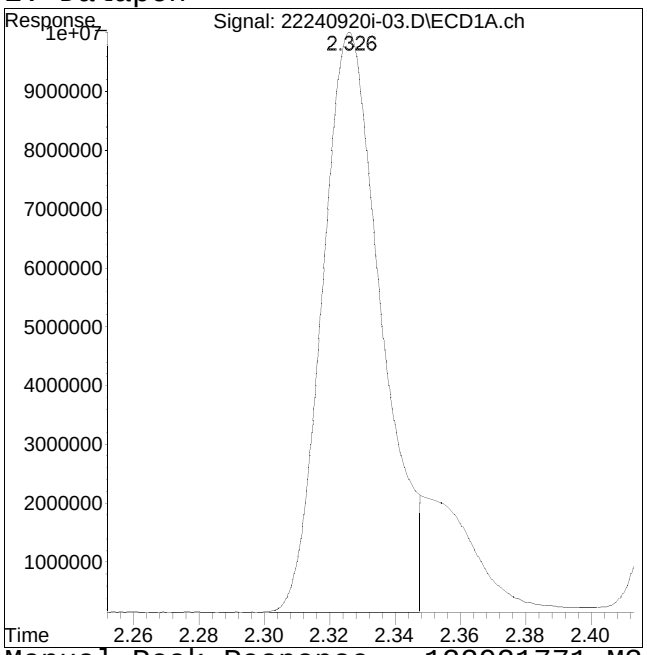

Original Peak Response = 1595080143 Manual Peak Response = 1596417076 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #2: Dalapon



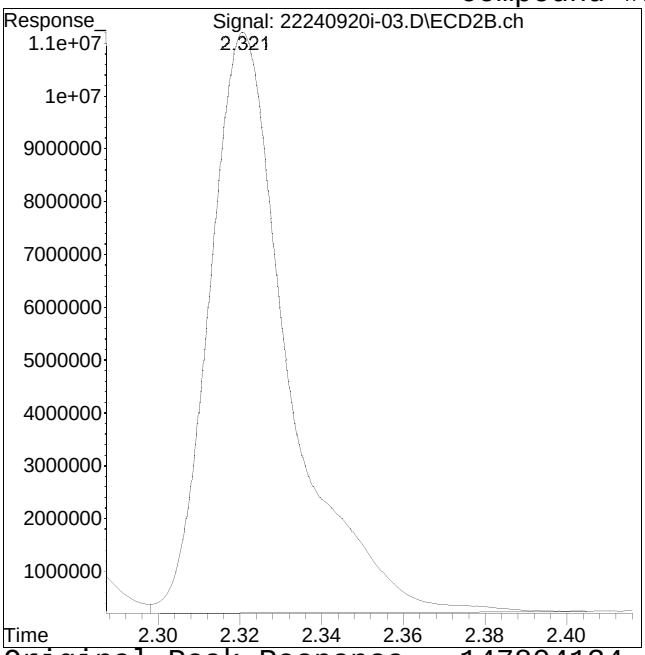



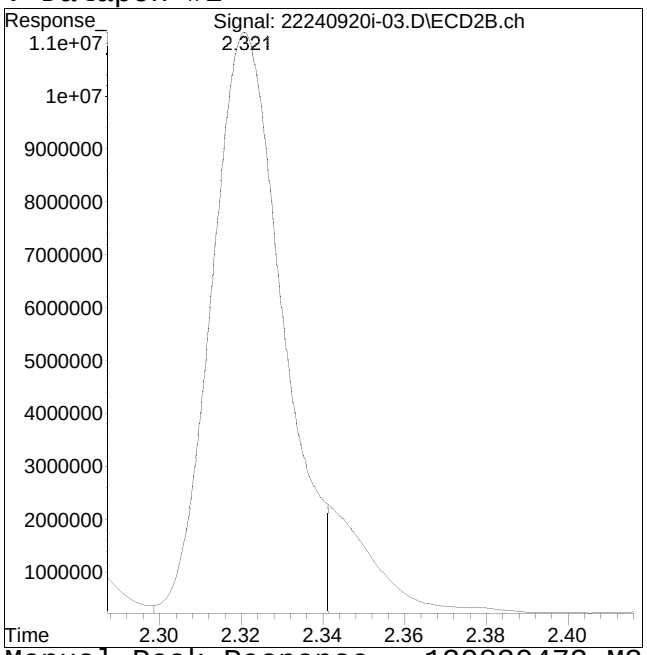

Original Peak Response = 145751549 Manual Peak Response = 122921771 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #15: Dalapon #2



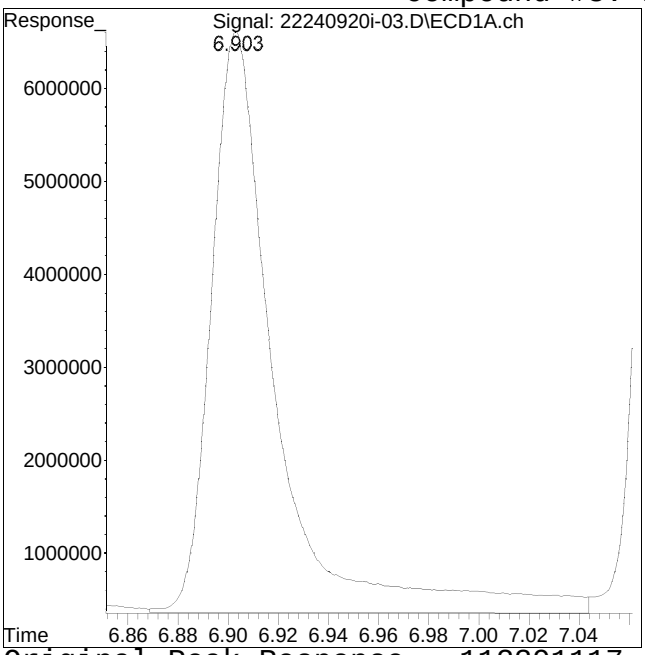




Original Peak Response = 147804134 Manual Peak Response = 130830473 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

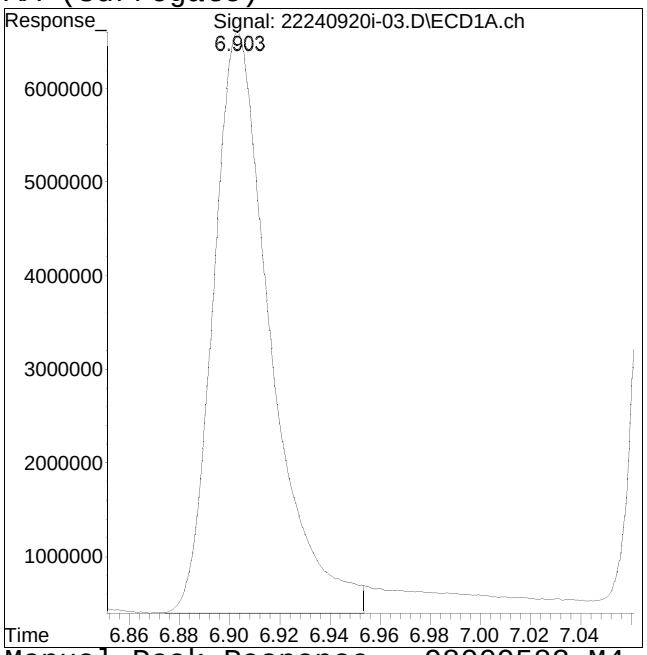
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #3: DCAA (surrogate)




Original Peak Response = 112391117



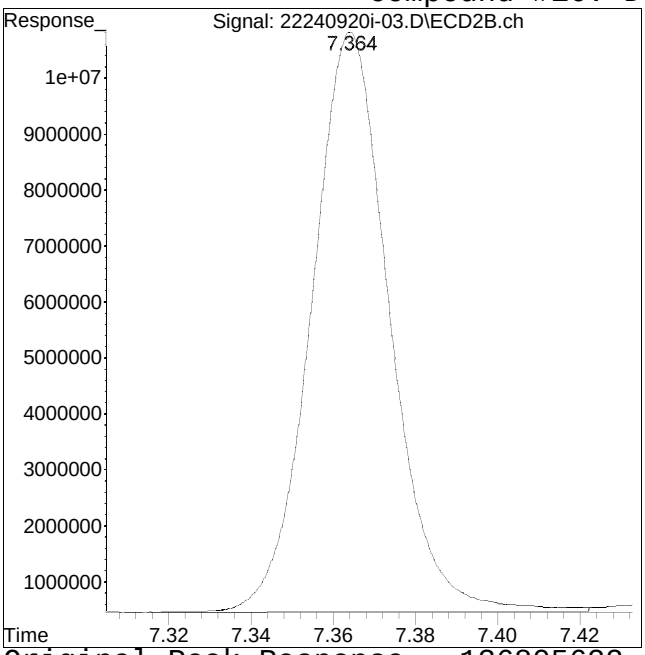

Manual Peak Response = 98009582 M4

M4 = Poor automated baseline construction.

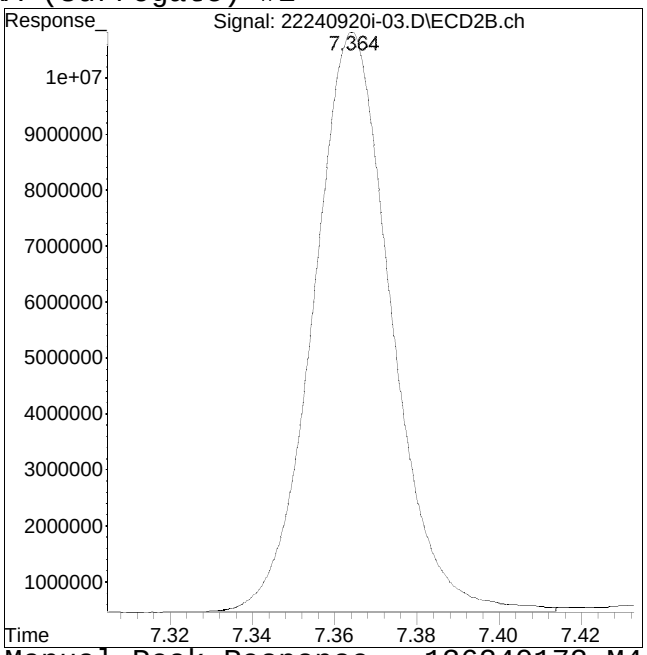
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #16: DCAA (surrogate) #2




Original Peak Response = 136805622

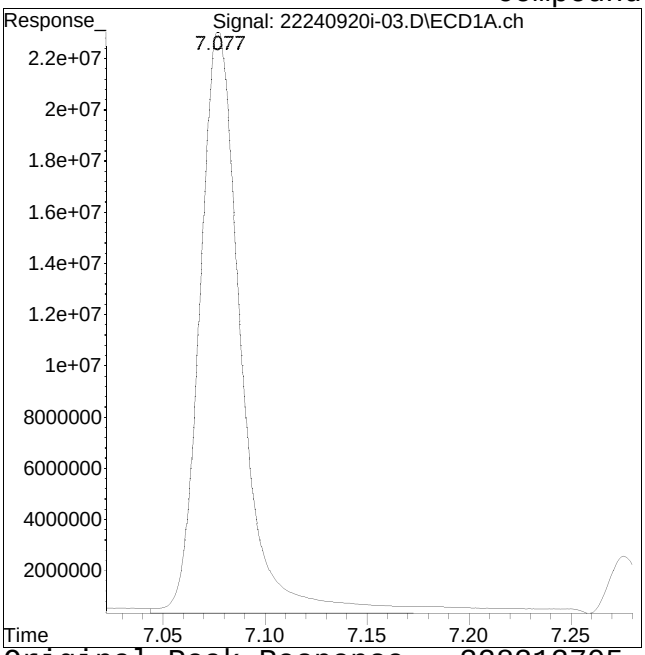


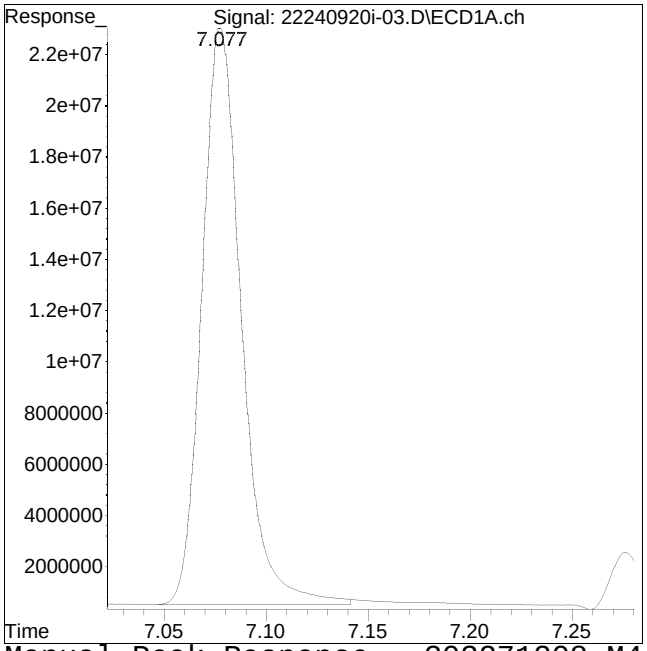

Manual Peak Response = 136240172 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #4: Dicamba



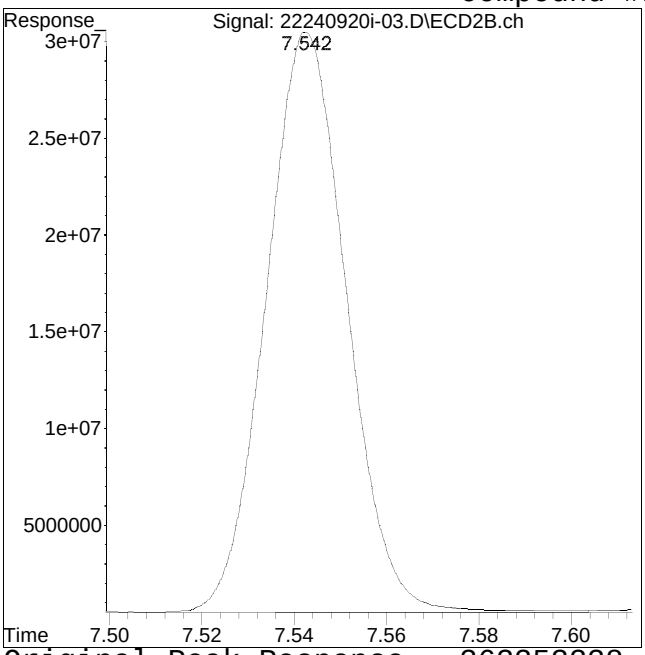



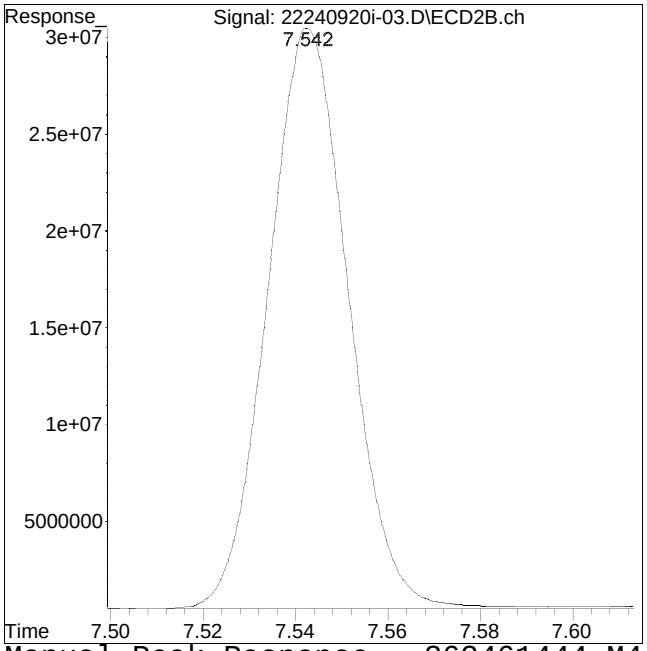

Original Peak Response = 328312705 Manual Peak Response = 303271208 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #17: Dicamba #2



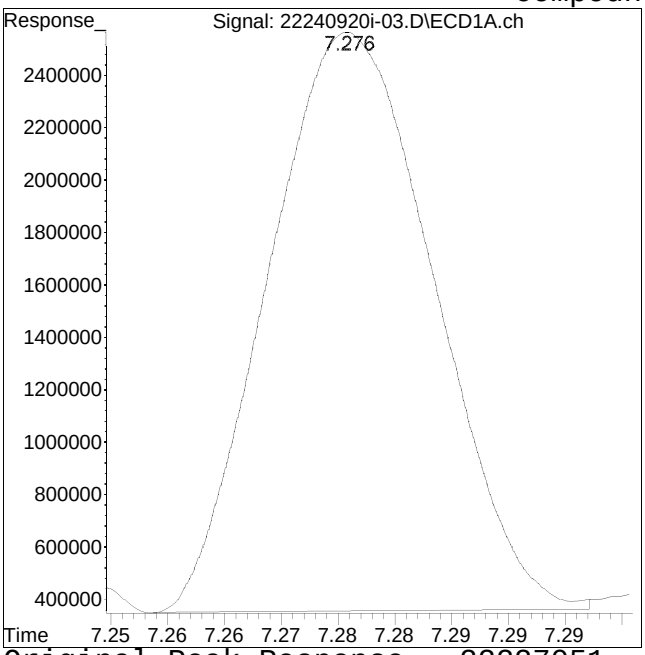




Original Peak Response = 363353338 Manual Peak Response = 362461444 M4
M4 = Poor automated baseline construction.

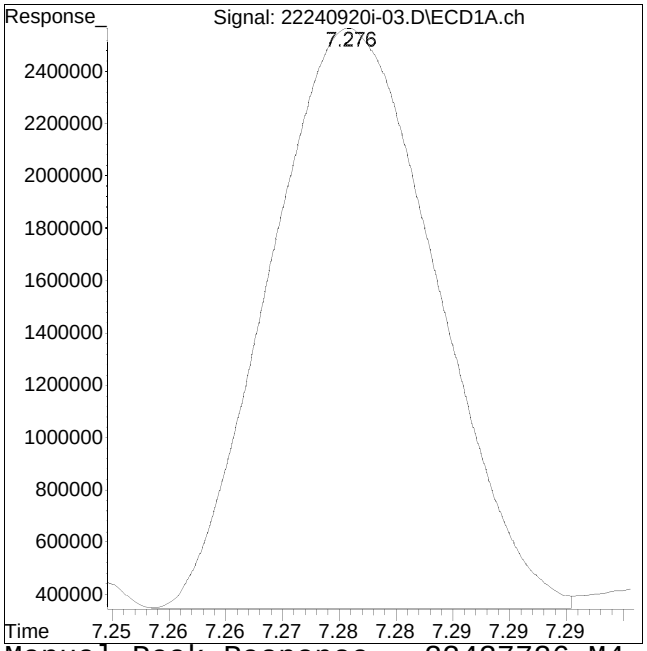
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #5: MCPP




Original Peak Response = 22227051



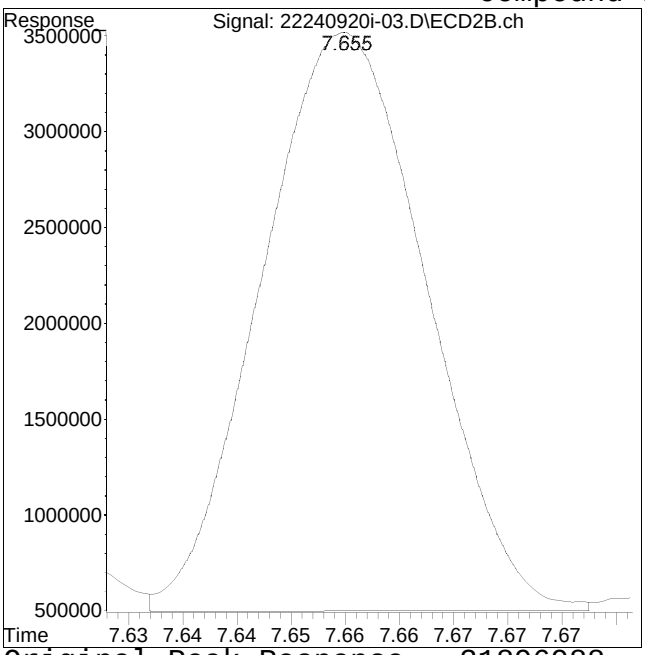

Manual Peak Response = 22437726 M4

M4 = Poor automated baseline construction.

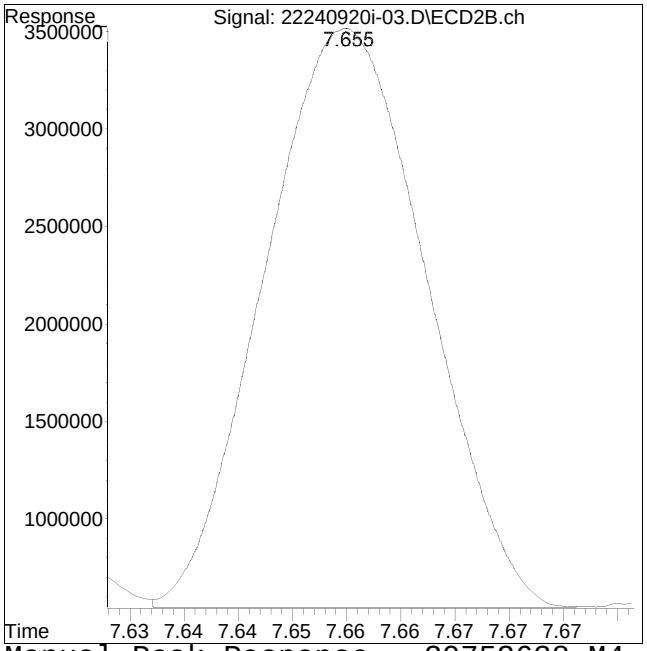
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #18: MCPP #2




Original Peak Response = 31896988

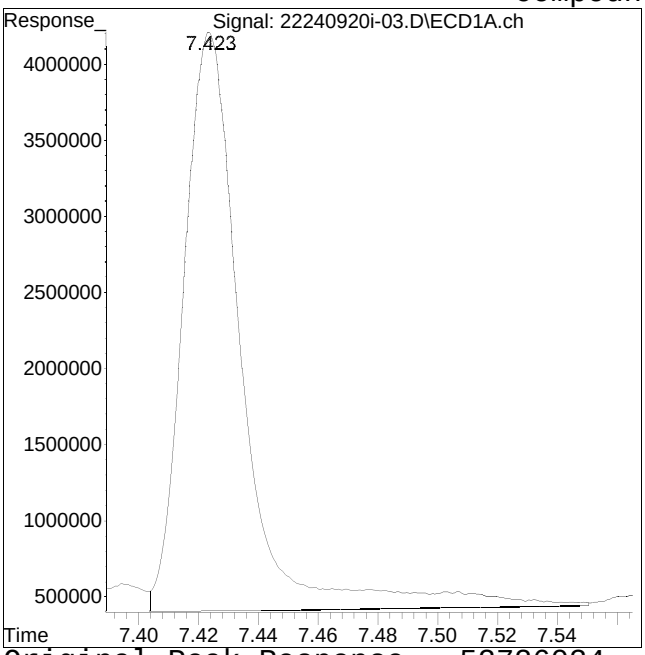



Manual Peak Response = 30753638 M4
M4 = Poor automated baseline construction.

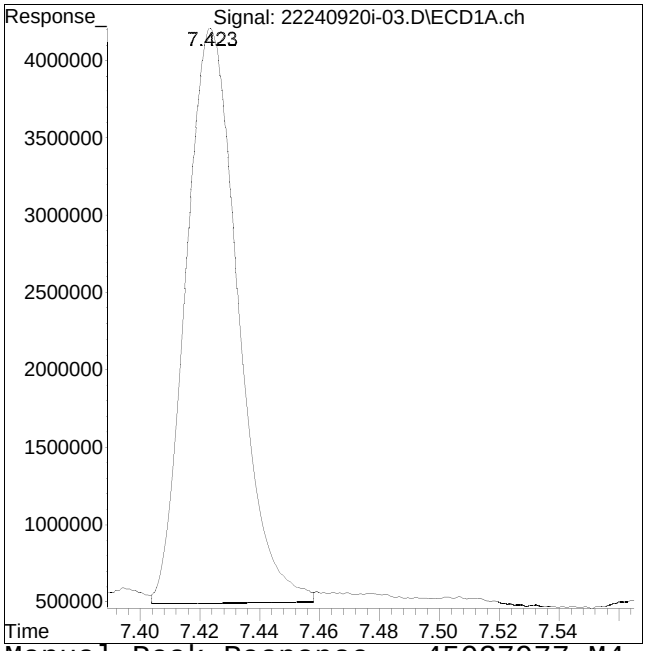
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #6: MCPA




Original Peak Response = 52726034



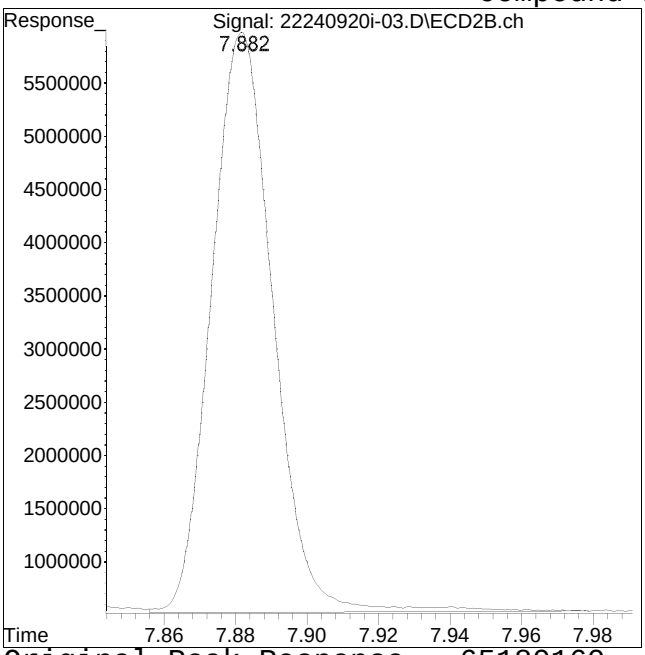

Manual Peak Response = 45037977 M4

M4 = Poor automated baseline construction.

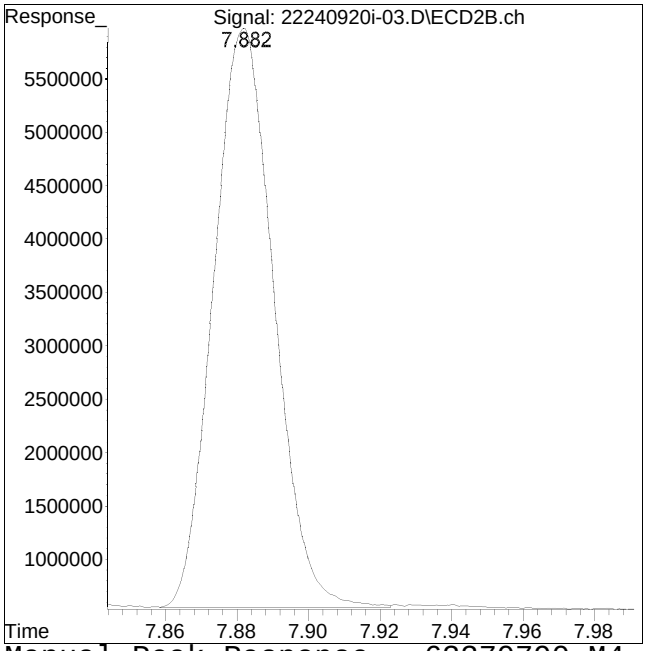
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #19: MCPA #2




Original Peak Response = 65180160



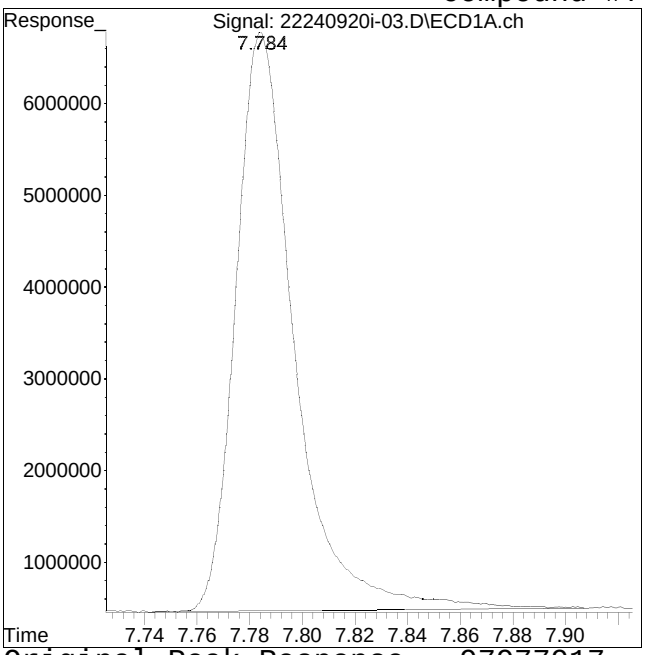

Manual Peak Response = 63370790 M4

M4 = Poor automated baseline construction.

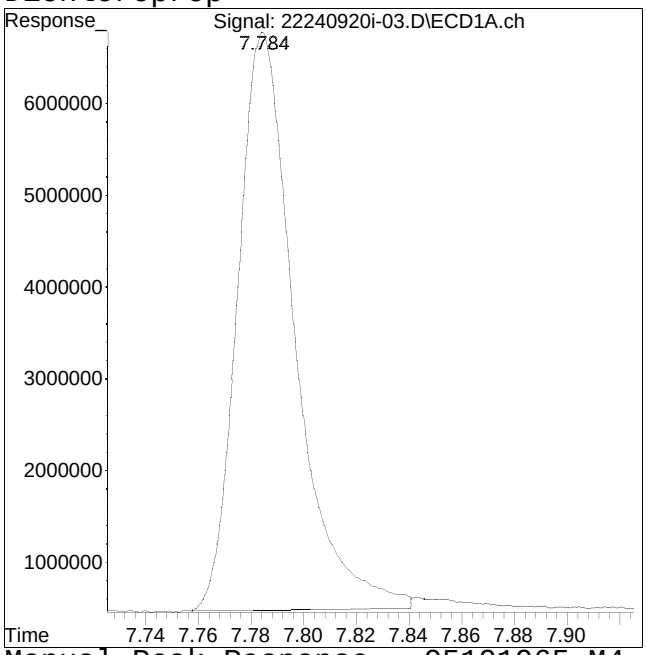
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #7: Dichloroprop




Original Peak Response = 97977917



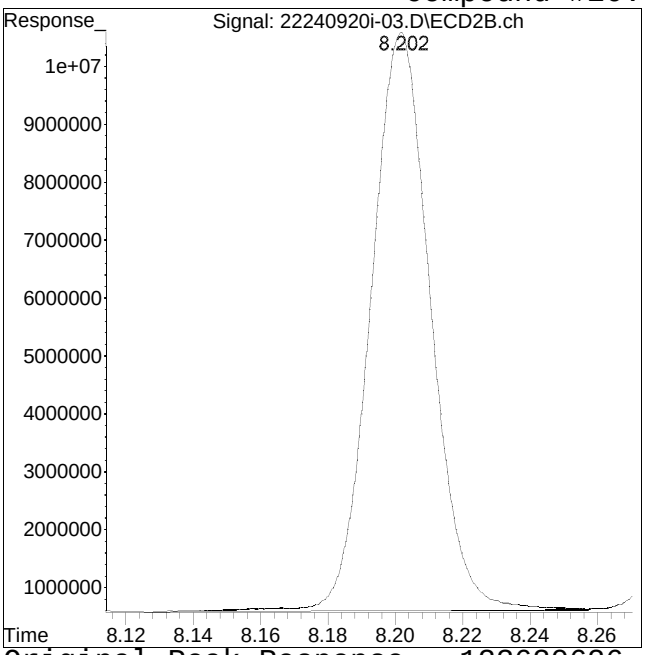

Manual Peak Response = 95191965 M4

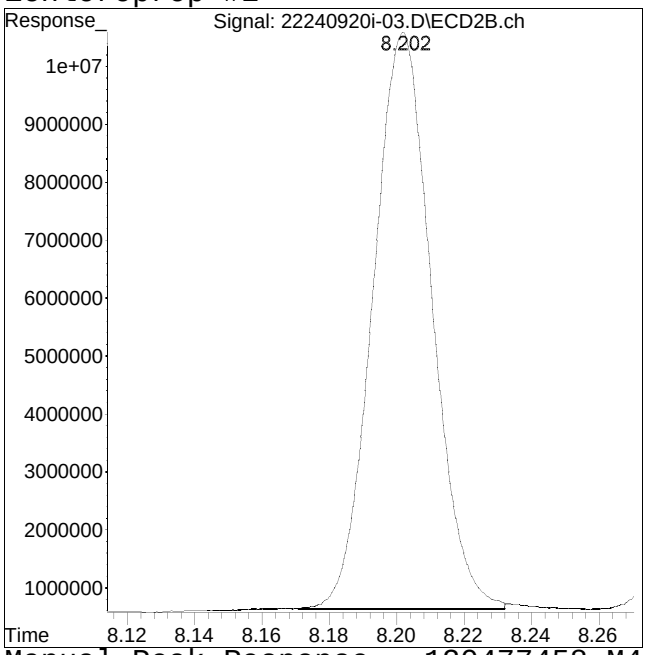
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #20: Dichloroprop #2



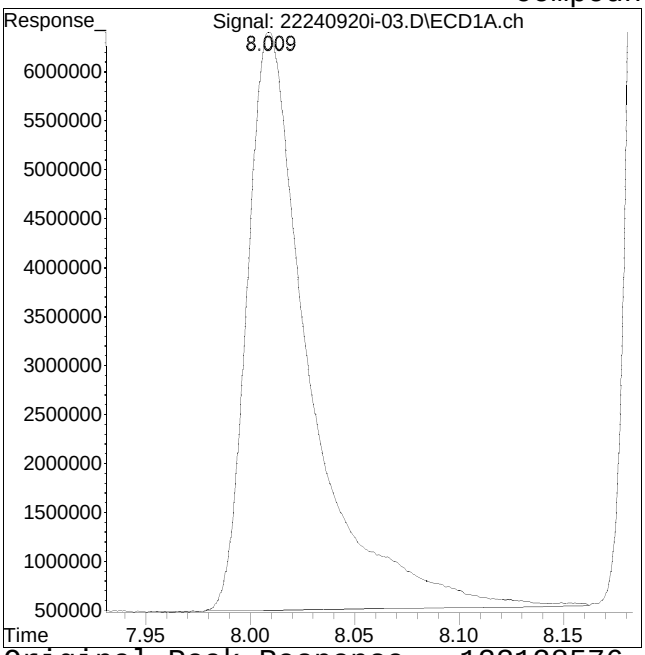



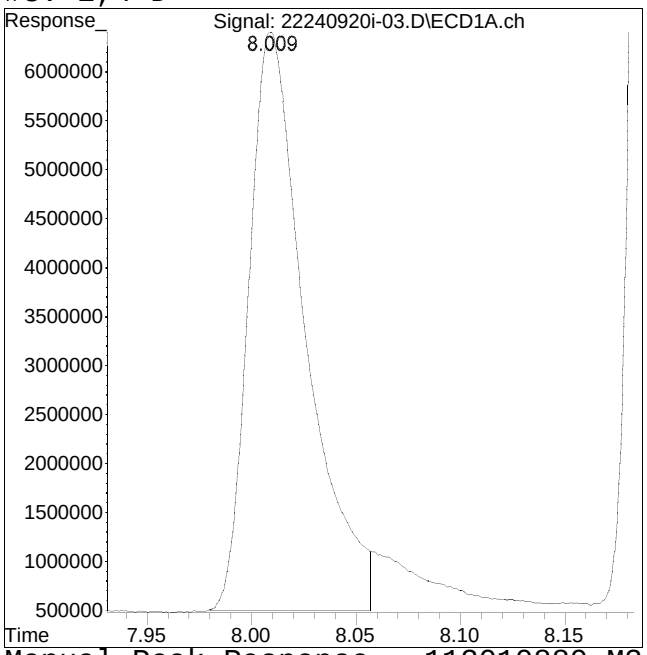

Original Peak Response = 123620626 Manual Peak Response = 120477458 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #8: 2,4-D



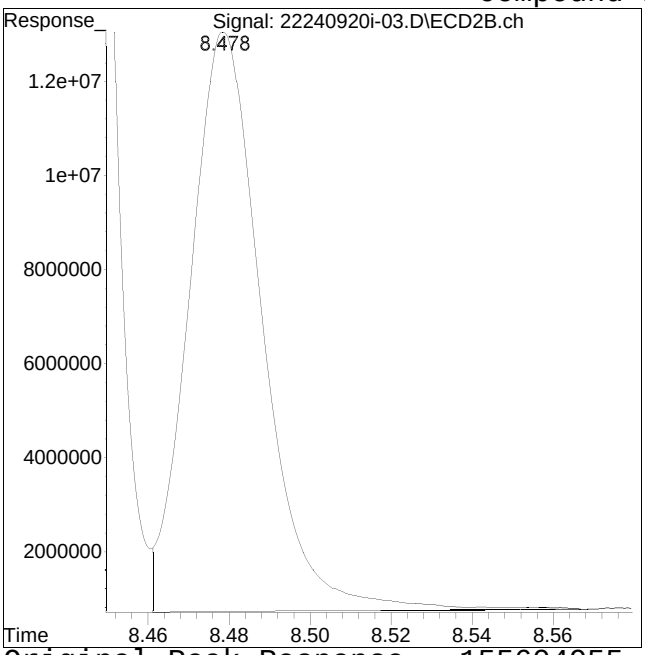




Original Peak Response = 123128576 Manual Peak Response = 112010880 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

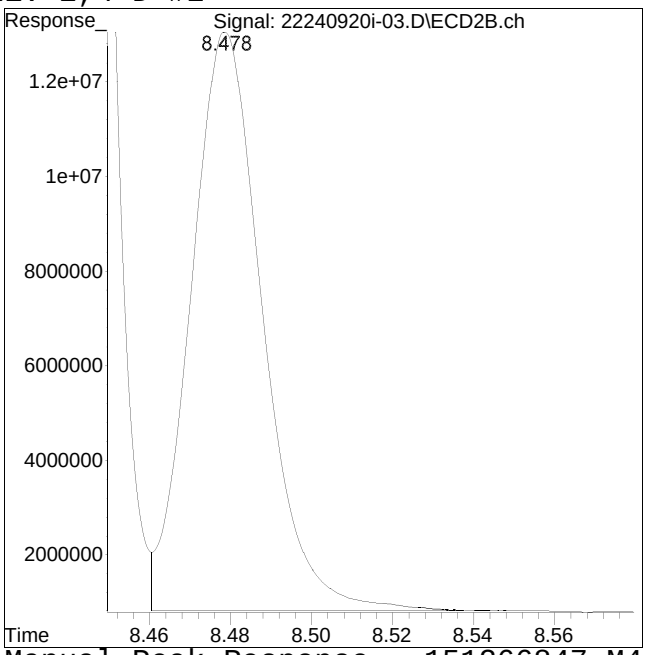
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #21: 2,4-D #2




Original Peak Response = 155604955

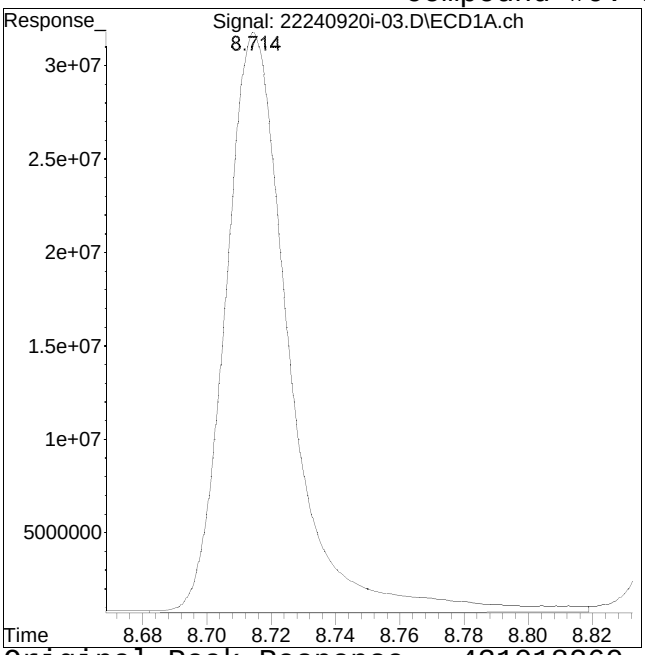


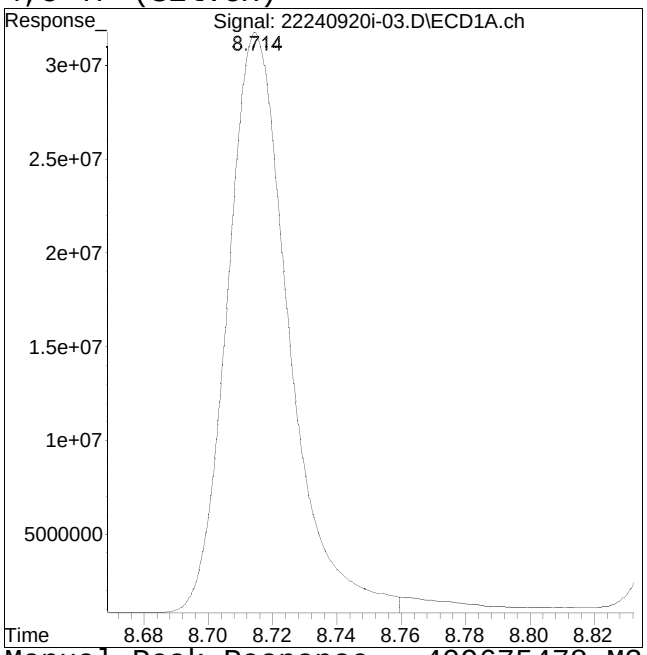

Manual Peak Response = 151266847 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #9: 2,4,5-TP (Silvex)



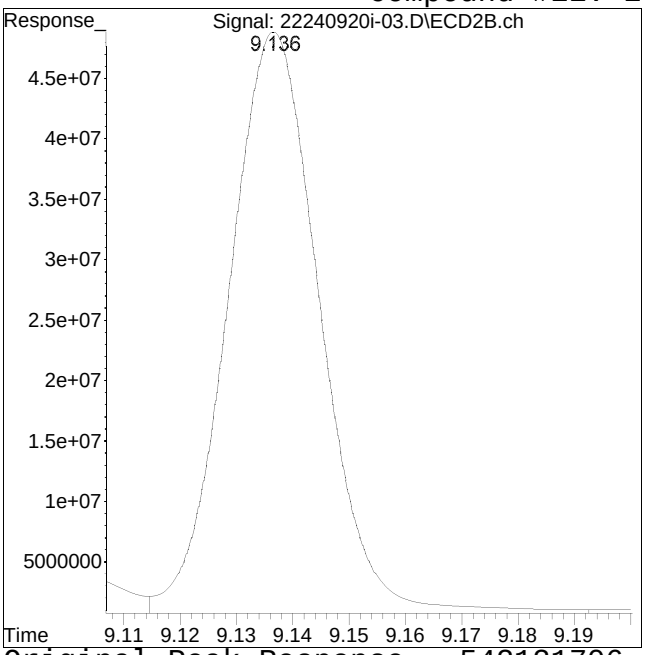




Original Peak Response = 431018260 Manual Peak Response = 409675478 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

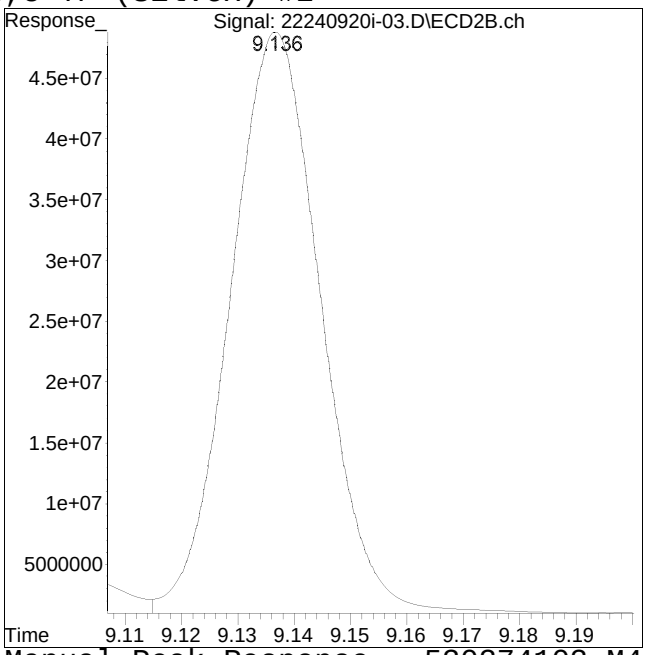
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #22: 2,4,5-TP (Silvex) #2




Original Peak Response = 542121706



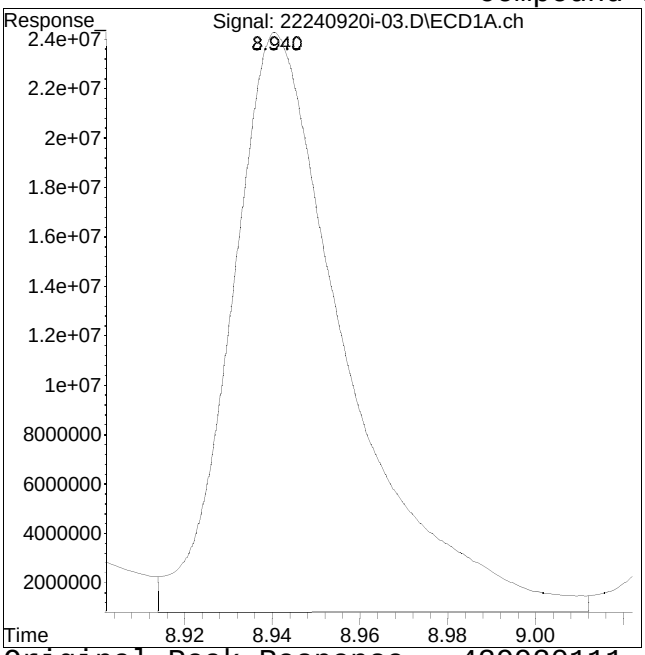

Manual Peak Response = 530374103 M4

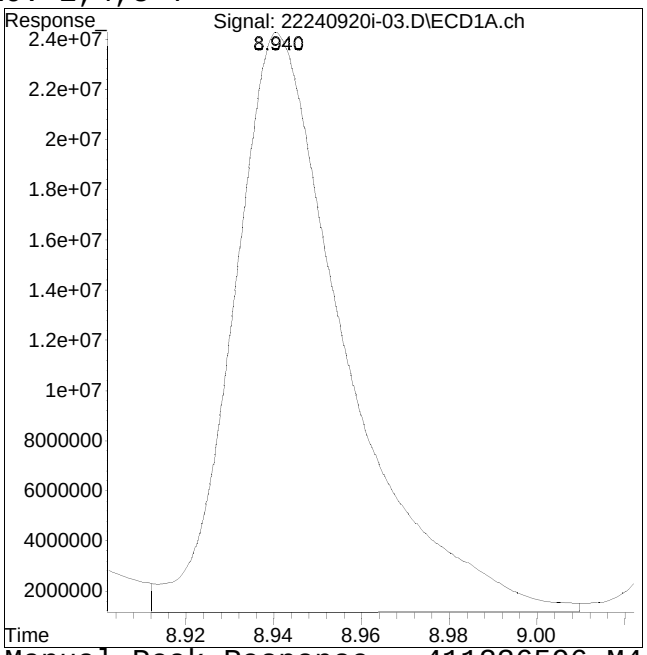
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #10: 2,4,5-T



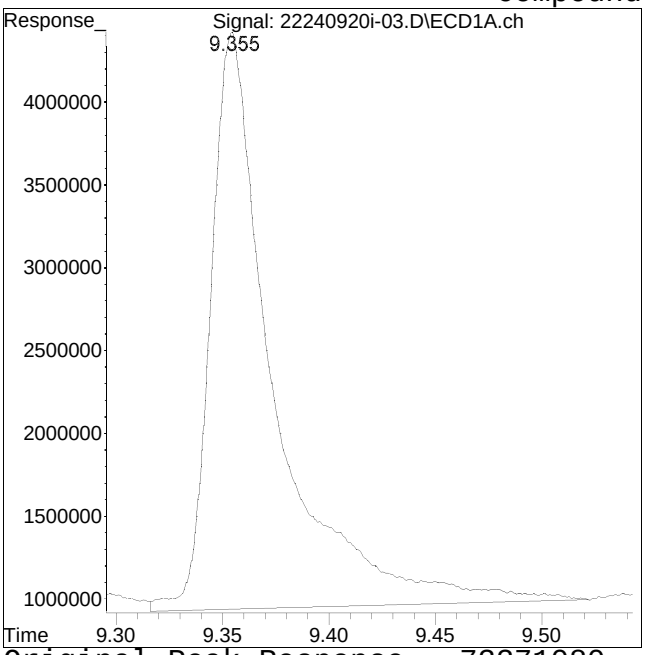



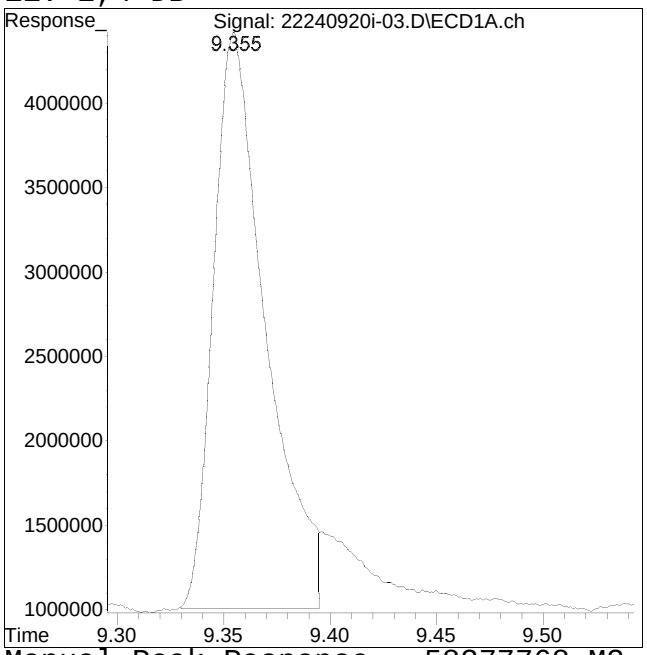

Original Peak Response = 429920111 Manual Peak Response = 411236596 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #11: 2,4-DB



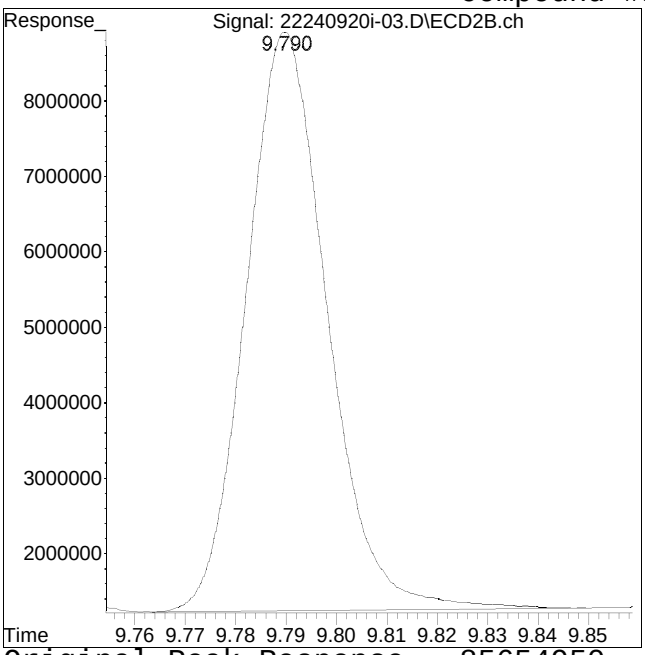



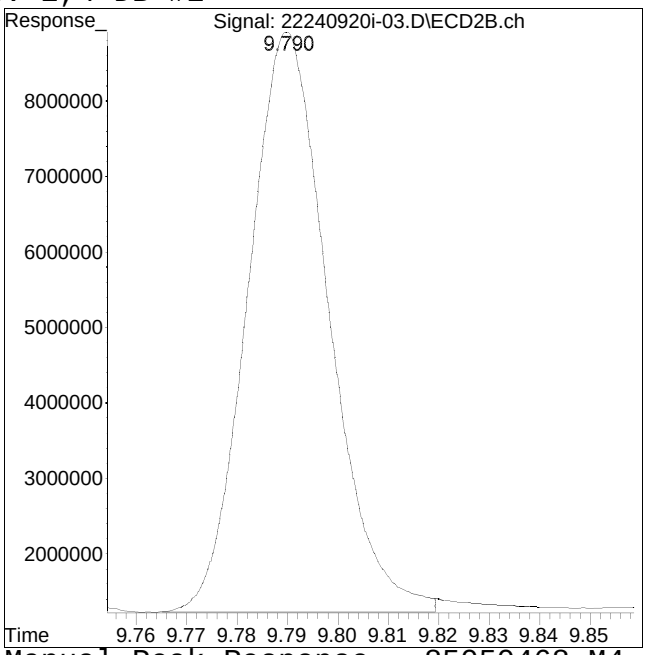

Original Peak Response = 73371080 Manual Peak Response = 58377768 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #24: 2,4-DB #2



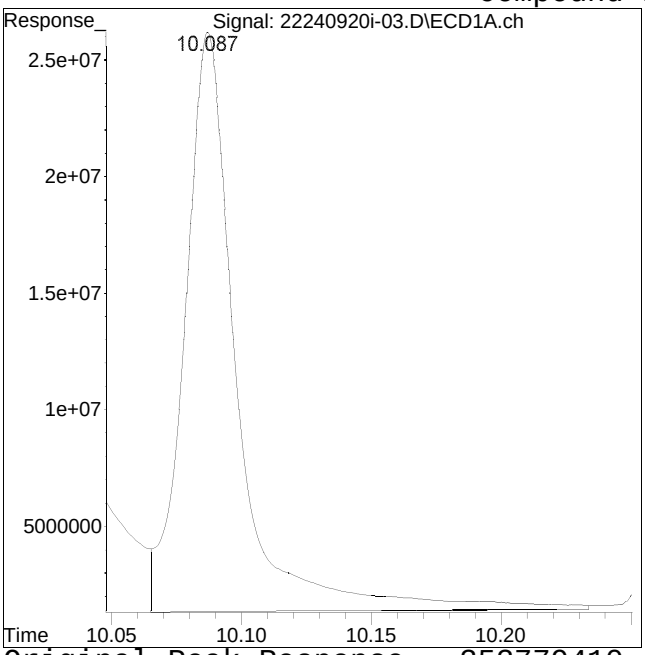



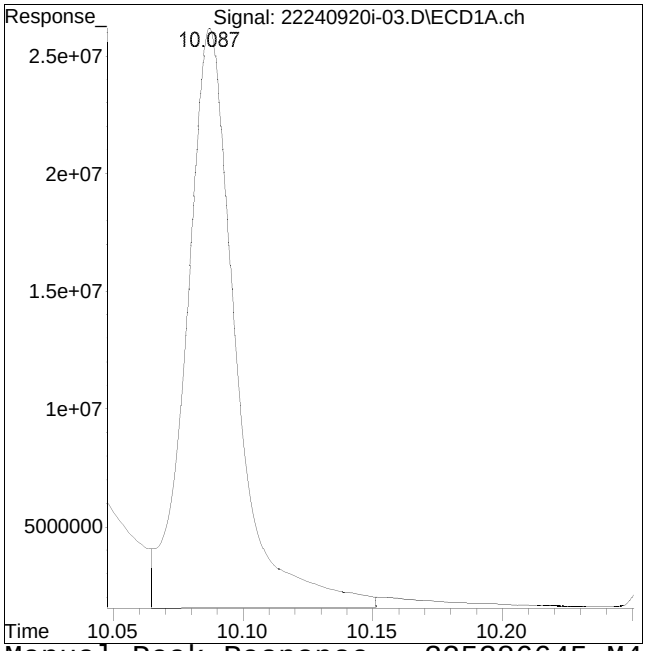

Original Peak Response = 85654950 Manual Peak Response = 85050468 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

Compound #12: Dinoseb



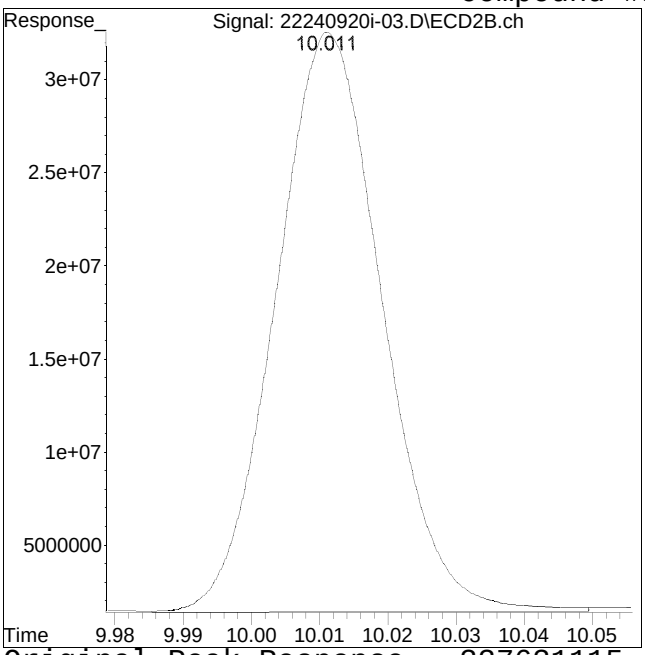




Original Peak Response = 353779410 Manual Peak Response = 325386645 M4
M4 = Poor automated baseline construction.

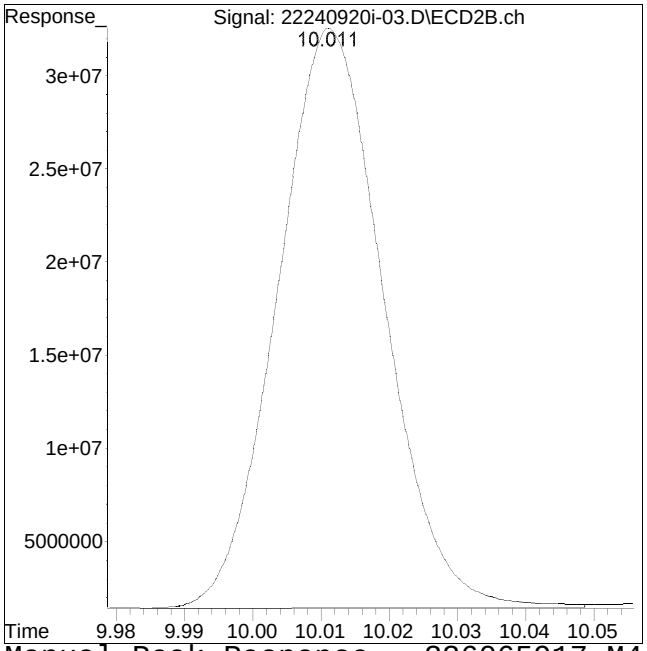
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-03.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:01 pm Instrument : Pest22
Sample : il2herb,42e,,pp 11632 L0.1Quant Date : 9/21/2024 8:27 am

## Compound #25: Dinoseb #2




Original Peak Response = 337631115




Manual Peak Response = 336065917 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:20 pm
Operator : pest22:akm
Sample : il3herb,42e,,pp 11631 L0.2/20
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 07:00:30 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 07:00:23 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.436 | 8.435 | 1257.9E6 | 1593.0E6 | 0.250M4 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.900 | 7.364 | 189.0E6 | 236.7E6 | 0.188M4 | 0.188M4 |
| | | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 37.60% | 37.60% |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.326 | 2.321 | 232.1E6 | 262.8E6 | 0.182M3 | 0.182M4 |
| 4) | t | Dicamba | 7.076 | 7.542 | 569.2E6 | 667.7E6 | 0.188M4 | 0.188M4 |
| 5) | t | MCPP | 7.276 | 7.655 | 48106360 | 64105928 | 18.800M4 | 18.800M4 |
| 6) | t | MCPA | 7.422 | 7.881 | 89263411 | 117.2E6 | 18.600M3 | 18.600M4 |
| 7) | t | Dichloroprop | 7.782 | 8.201 | 179.3E6 | 218.4E6 | 0.188M4 | 0.188M4 |
| 8) | t | 2,4-D | 8.004 | 8.478 | 211.2E6 | 277.3E6 | 0.188M3 | 0.188M4 |
| 9) | t | 2,4,5-TP (Si | 8.713 | 9.137 | 795.3E6 | 993.0E6 | 0.190M4 | 0.190M4 |
| 10) | t | 2,4,5-T | 8.941 | 9.428 | 800.2E6 | 967.1E6 | 0.190M3 | 0.190 |
| 11) | t | 2,4-DB | 9.351 | 9.790 | 119.1E6 | 160.5E6 | 0.192M4 | 0.192 |
| 12) | t | Dinoseb | 10.087 | 10.012 | 607.8E6 | 626.1E6 | 0.204M4 | 0.190M4 |
| | | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:20 pm
Operator : pest22:akm
Sample : il3herb,42e,,pp 11631 L0.2/20
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 07:00:30 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 07:00:23 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

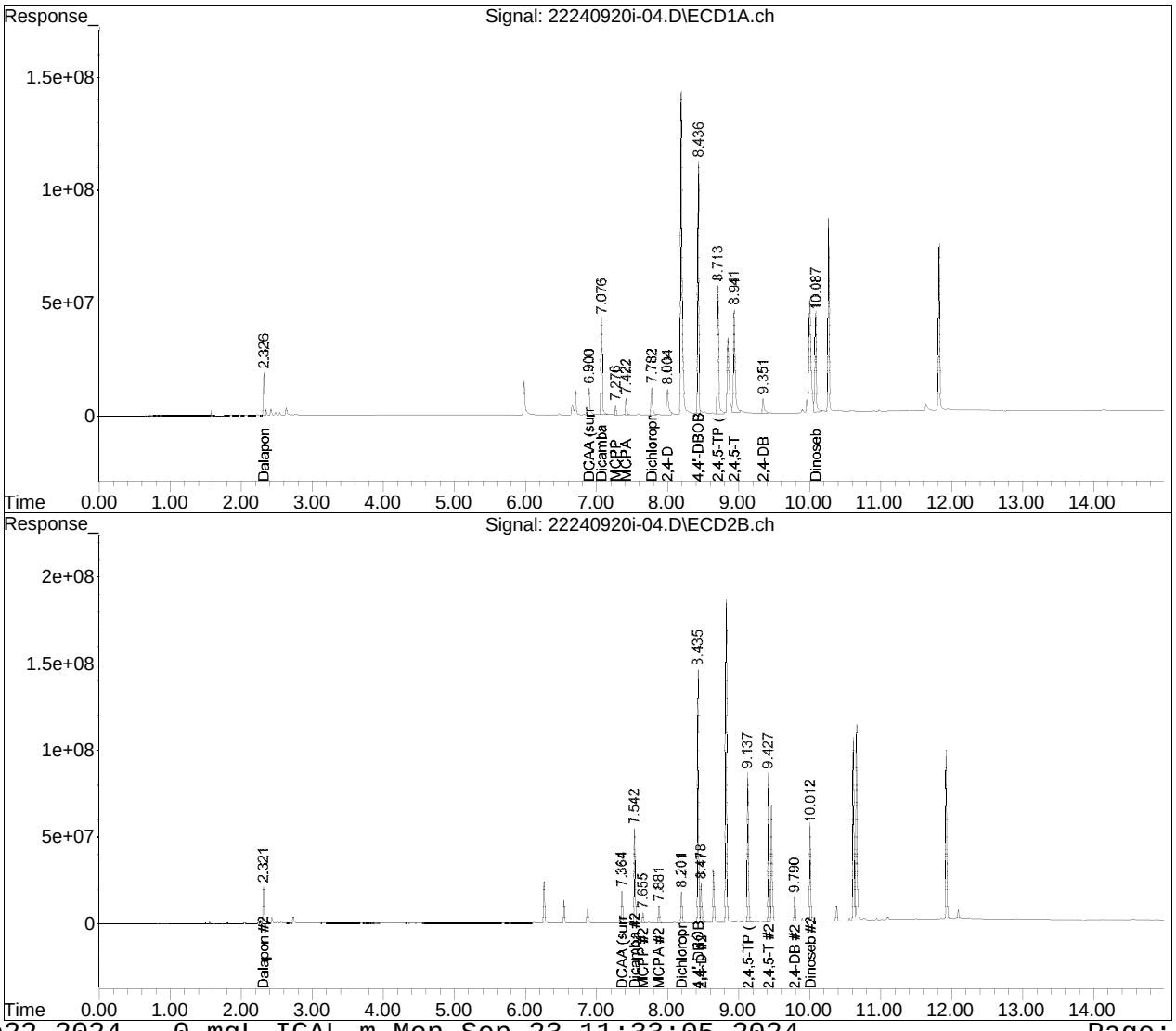
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-04.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 20 Sep 2024  12:20 pm
Operator : pest22:akm
Sample : il3herb,42e,,pp 11631 L0.2/20
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 4  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 07:00:30 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 07:00:23 2024
Response via : Initial Calibration
Integrator: ChemStation

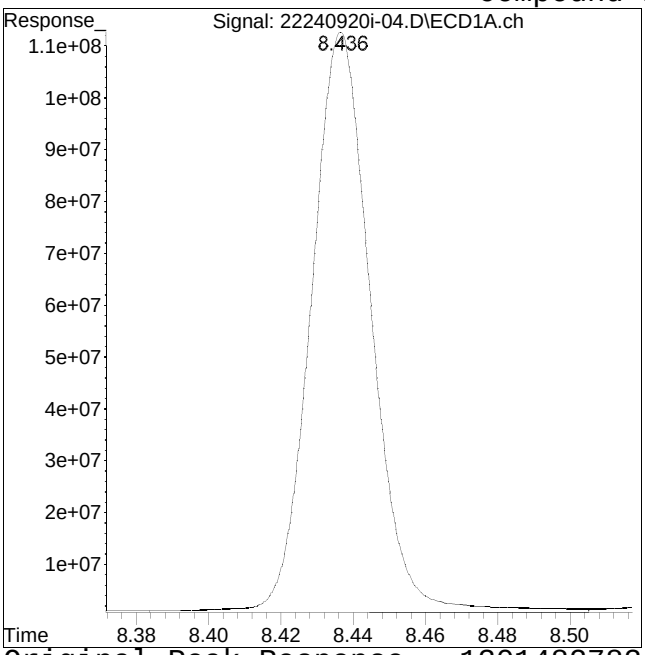
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

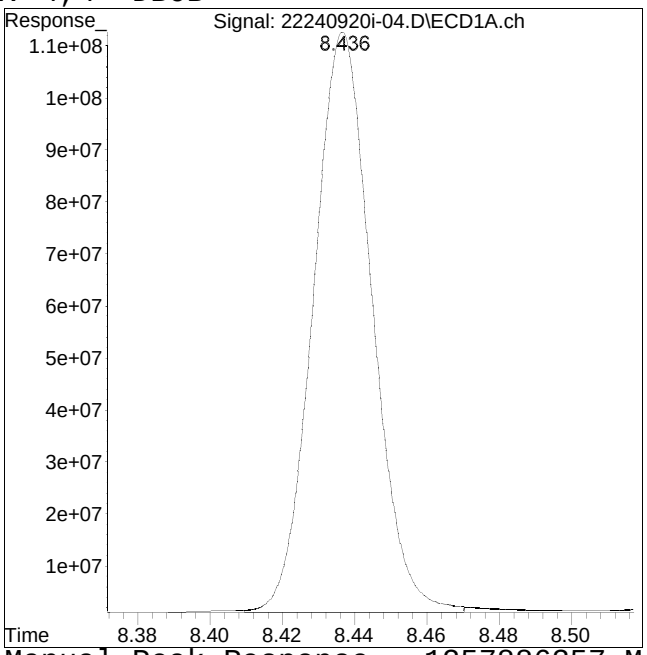


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #1: 4,4'-DBOB



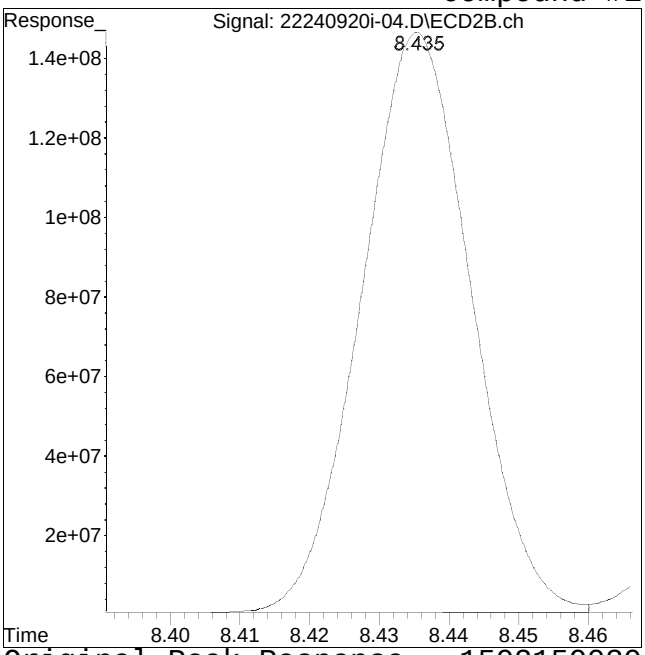



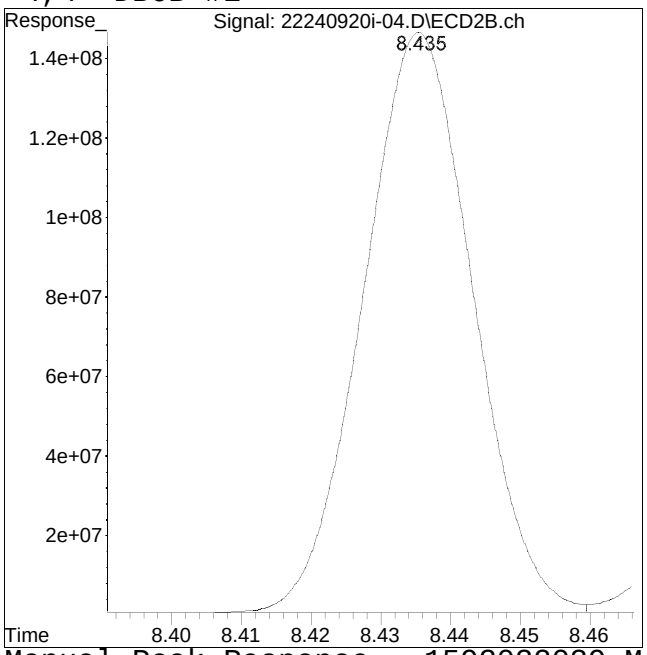

Original Peak Response = 1301482783 Manual Peak Response = 1257886357 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #14: 4,4'-DBOB #2



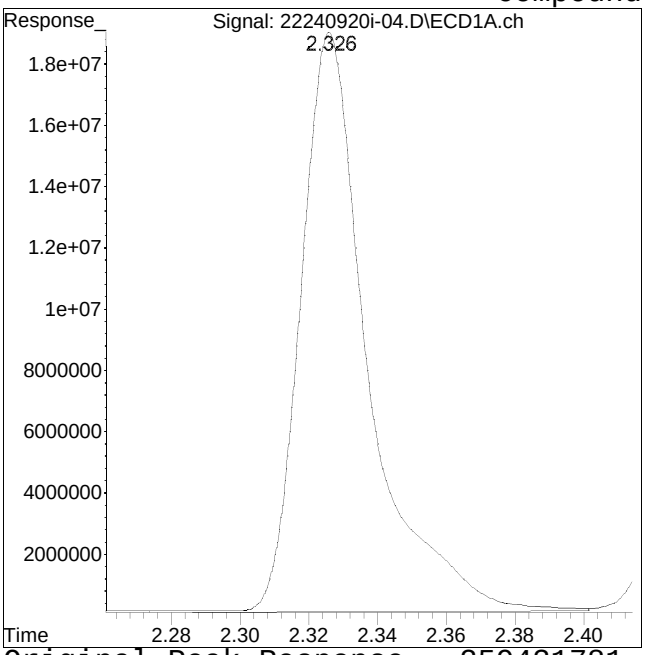



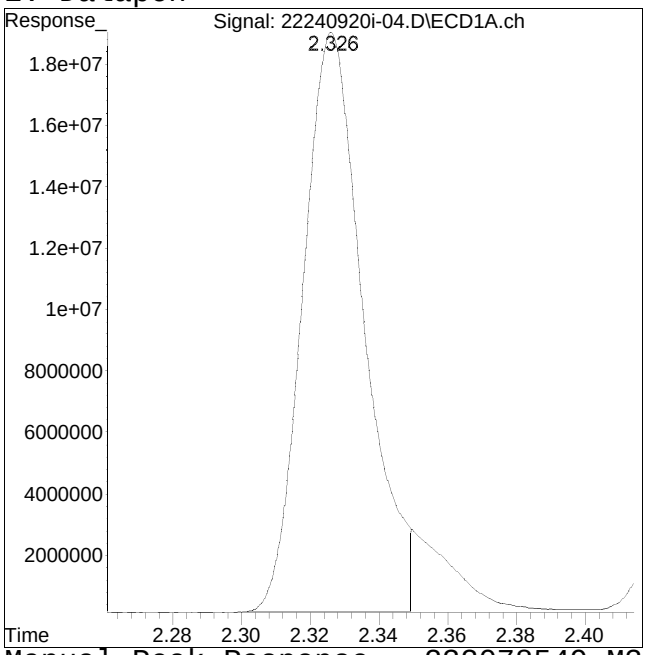

Original Peak Response = 1592159039 Manual Peak Response = 1593032039 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #2: Dalapon



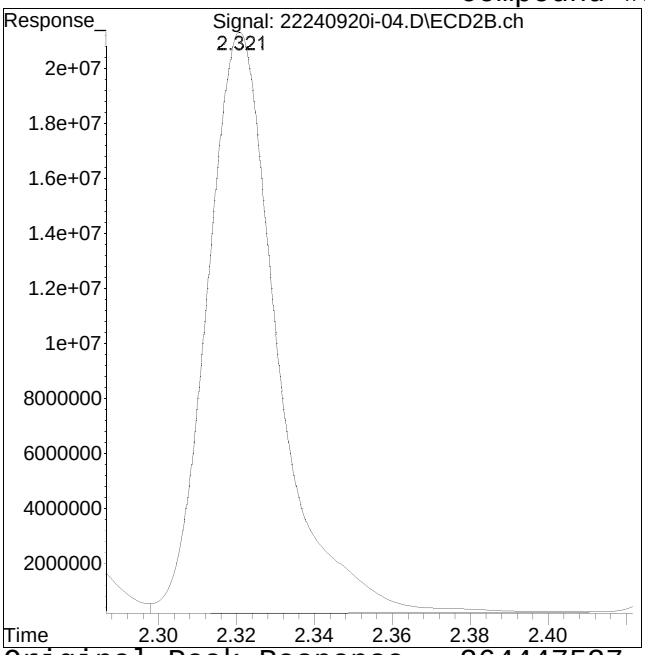



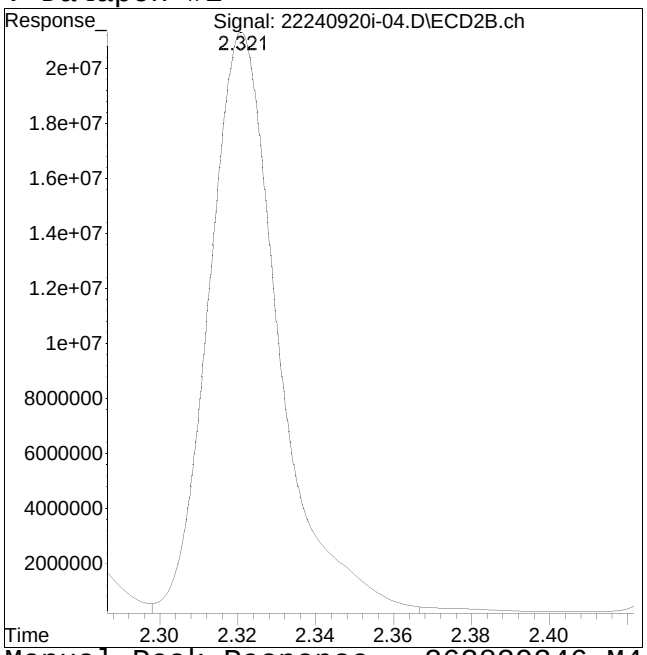

Original Peak Response = 259431781 Manual Peak Response = 232078549 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #15: Dalapon #2



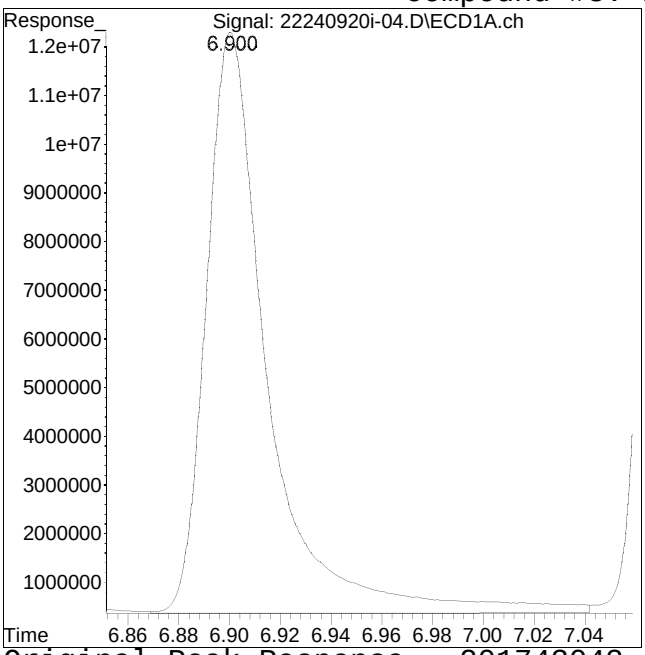



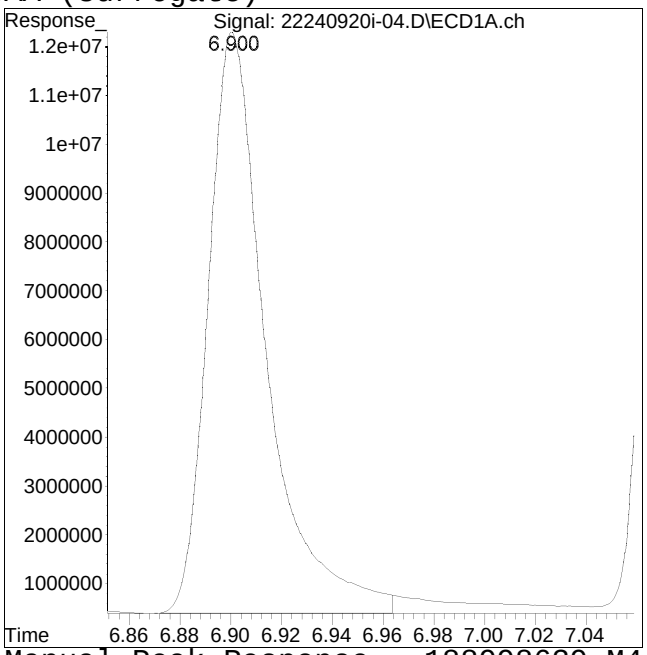

Original Peak Response = 264447537 Manual Peak Response = 262829346 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #3: DCAA (surrogate)



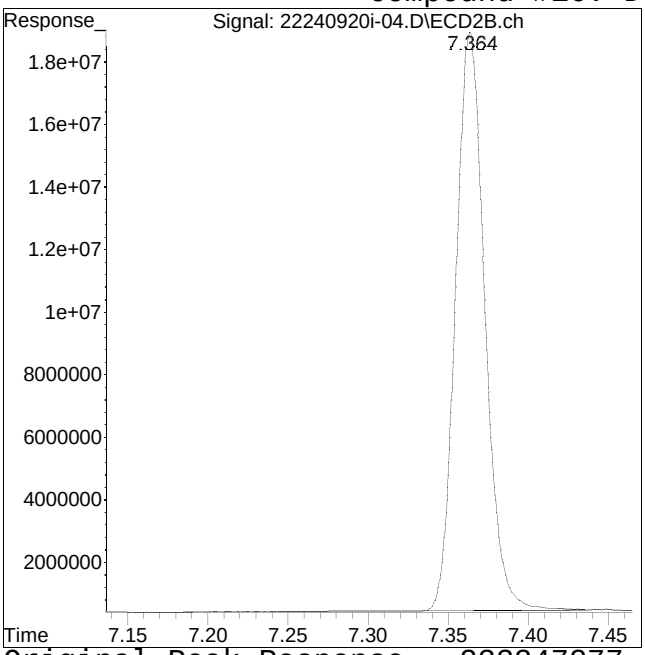



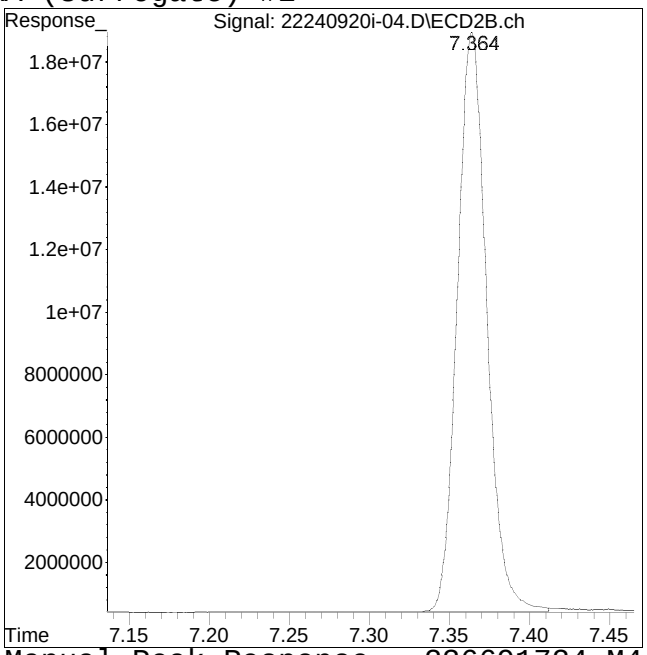

Original Peak Response = 201743043 Manual Peak Response = 188998639 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #16: DCAA (surrogate) #2



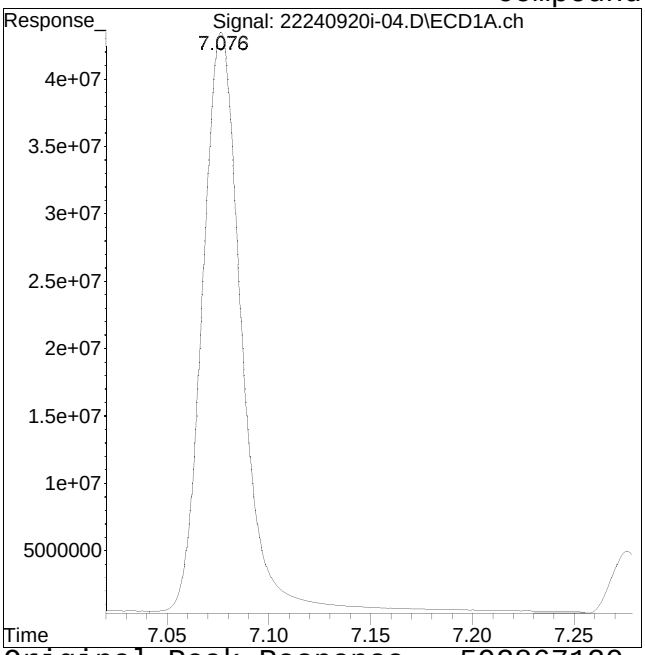



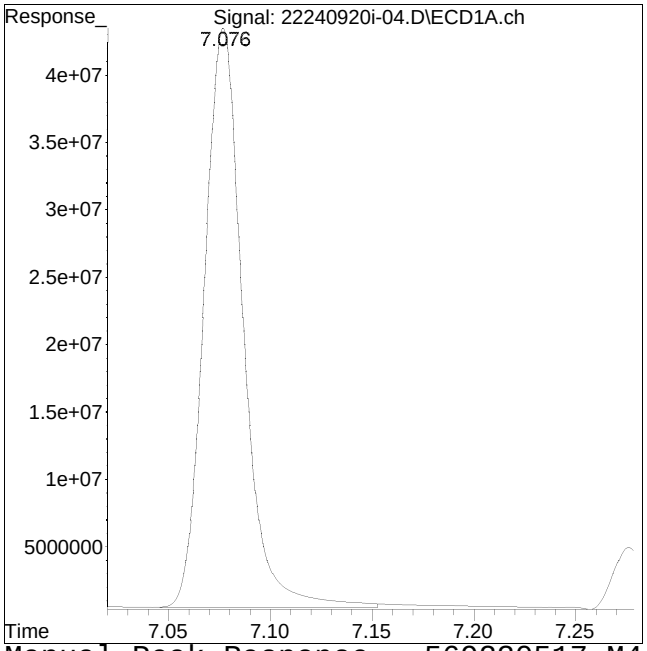

Original Peak Response = 233347277 Manual Peak Response = 236691724 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #4: Dicamba



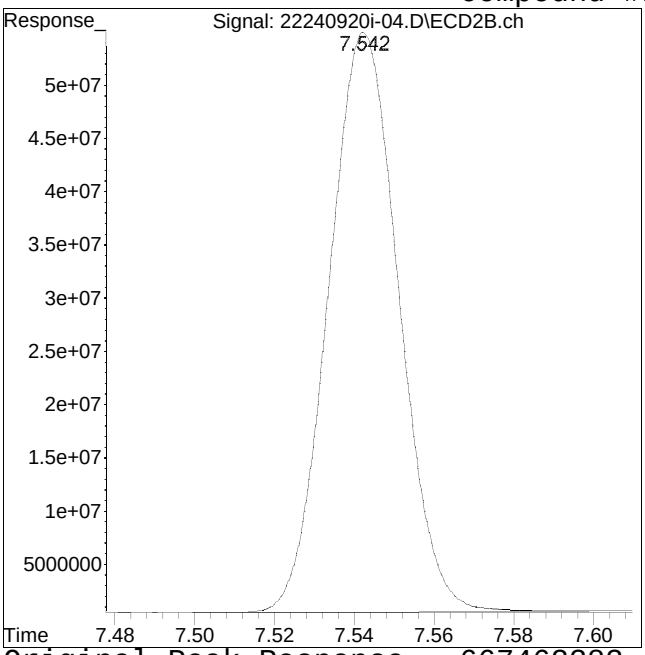




Original Peak Response = 592867120 Manual Peak Response = 569230517 M4
M4 = Poor automated baseline construction.

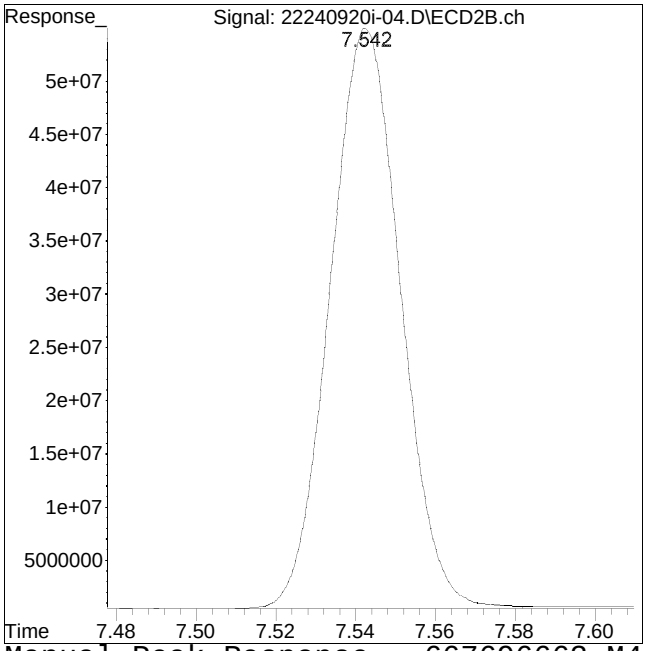
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #17: Dicamba #2




Original Peak Response = 667462383

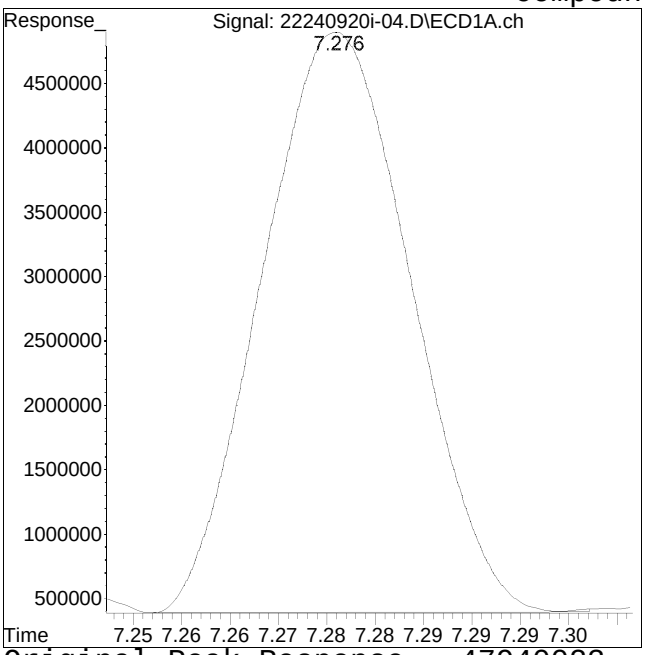



Manual Peak Response = 667696663 M4
M4 = Poor automated baseline construction.

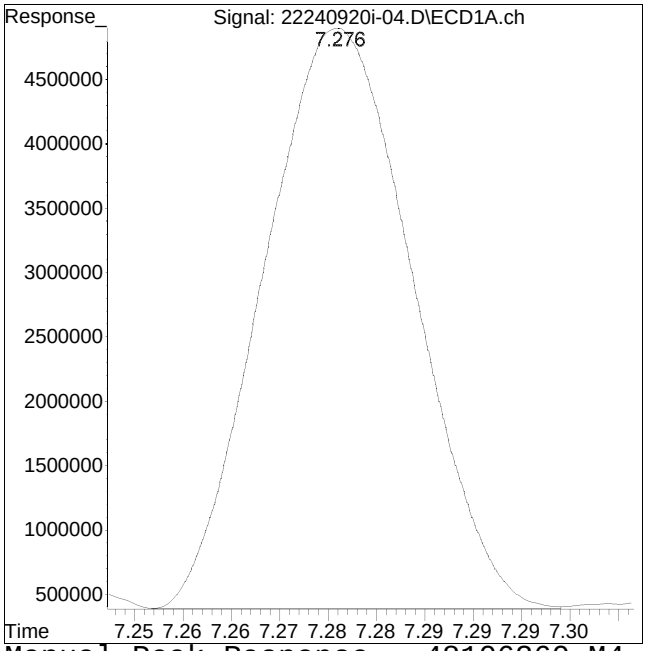
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #5: MCPP




Original Peak Response = 47940023



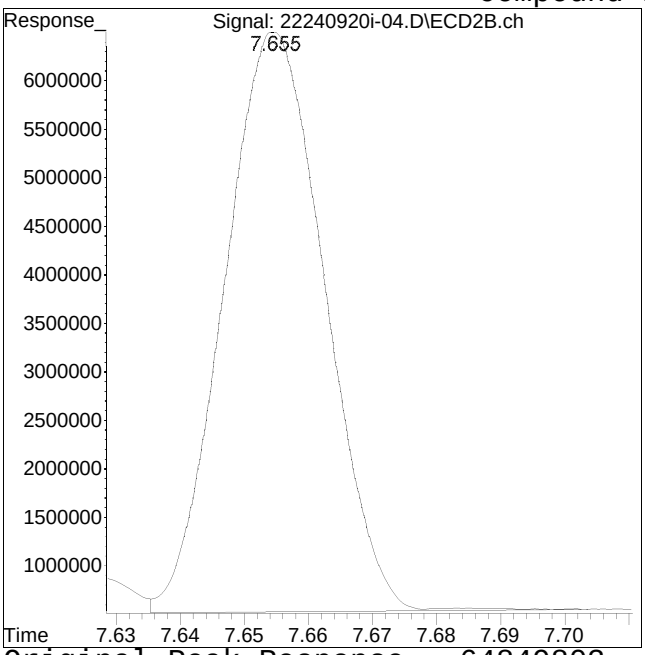

Manual Peak Response = 48106360 M4

M4 = Poor automated baseline construction.

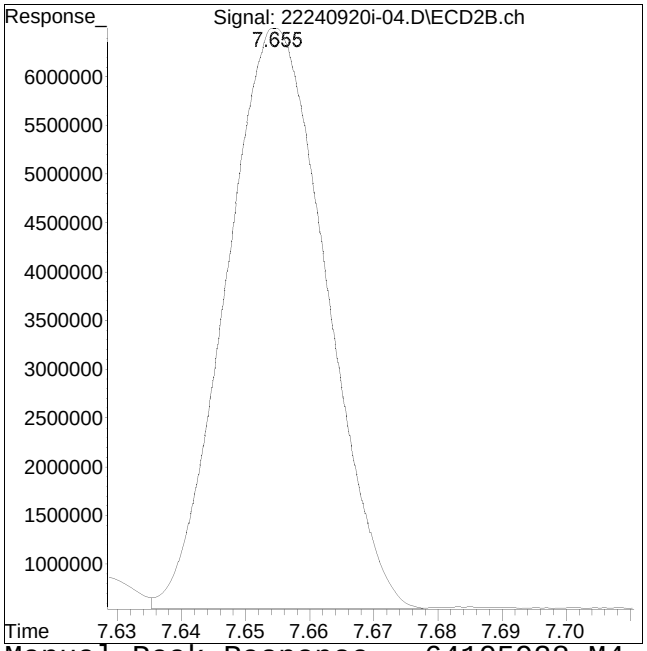
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #18: MCPP #2




Original Peak Response = 64849803



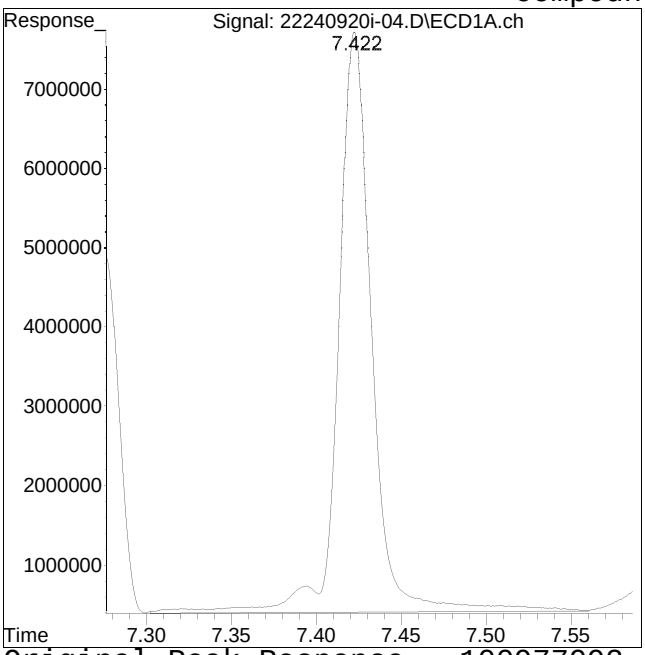

Manual Peak Response = 64105928 M4

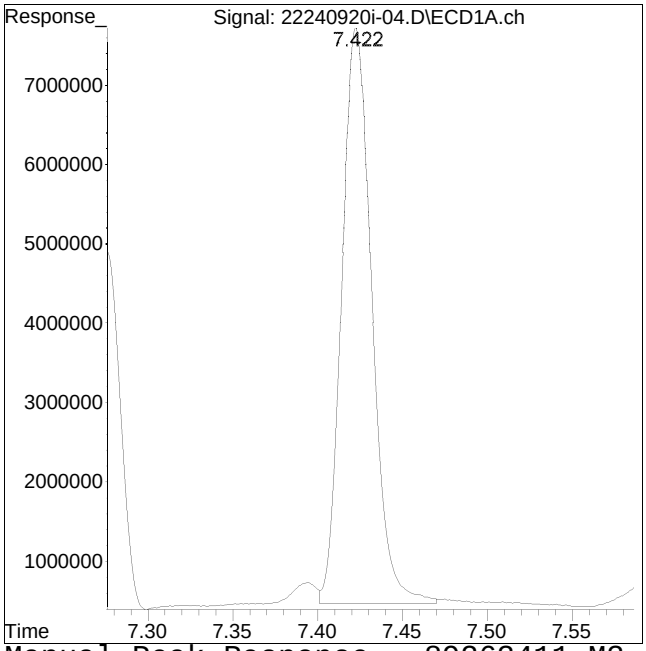
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #6: MCPA



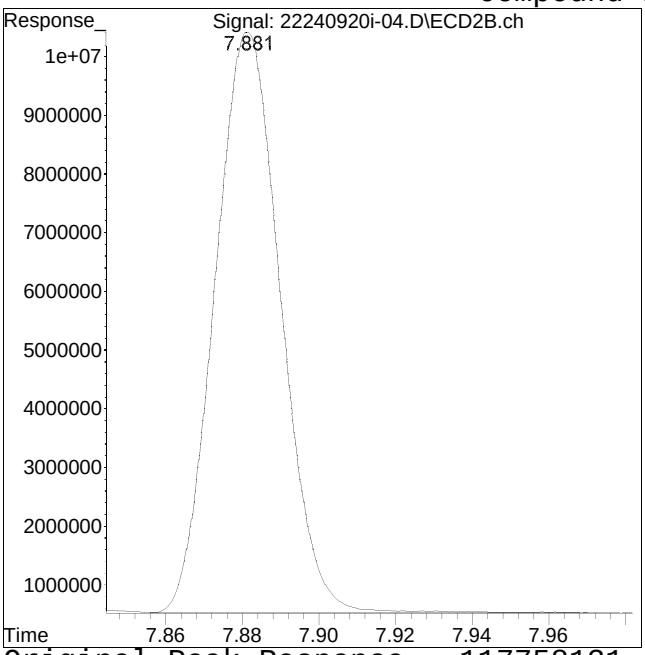




Original Peak Response = 100977992 Manual Peak Response = 89263411 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

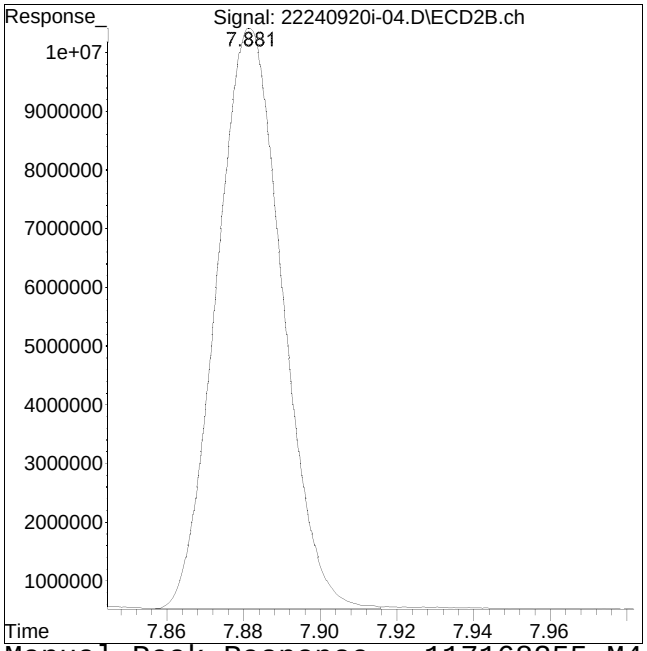
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #19: MCPA #2




Original Peak Response = 117758131



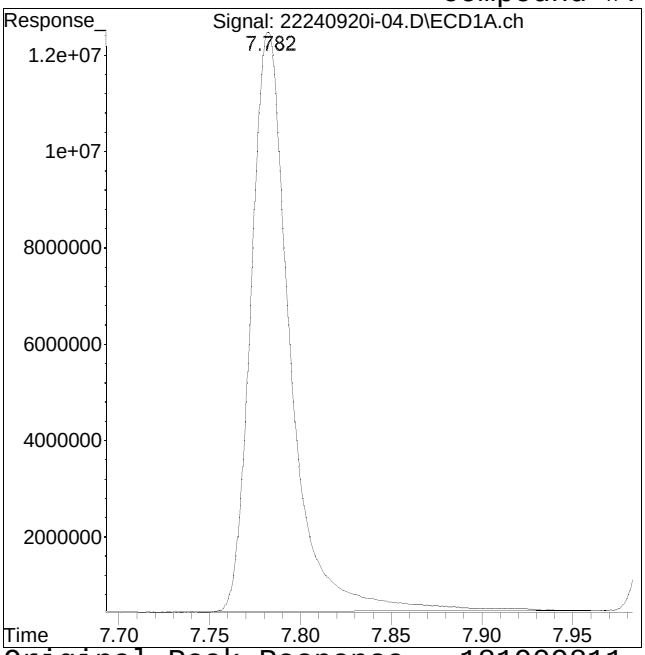

Manual Peak Response = 117168255 M4

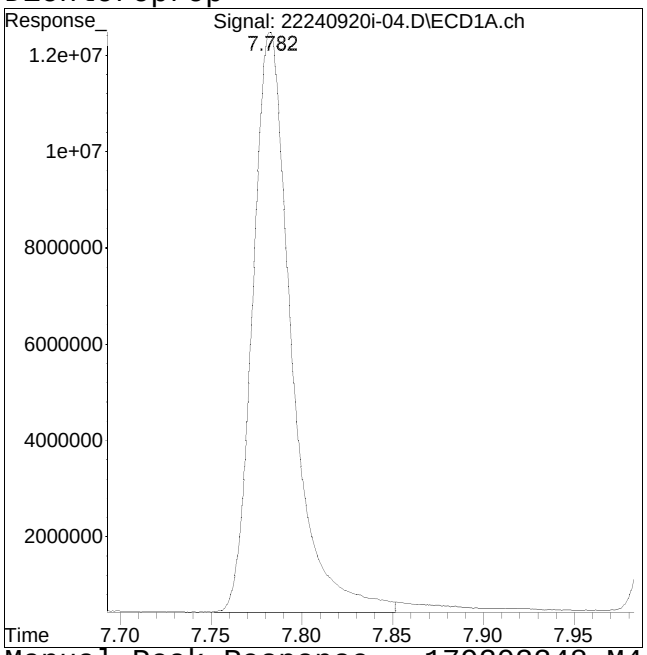
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #7: Dichloroprop



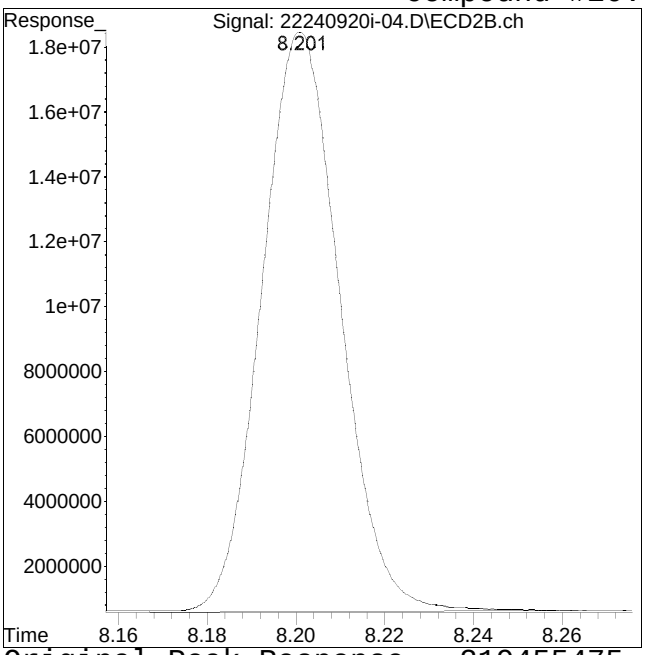




Original Peak Response = 181909811 Manual Peak Response = 179303348 M4
M4 = Poor automated baseline construction.

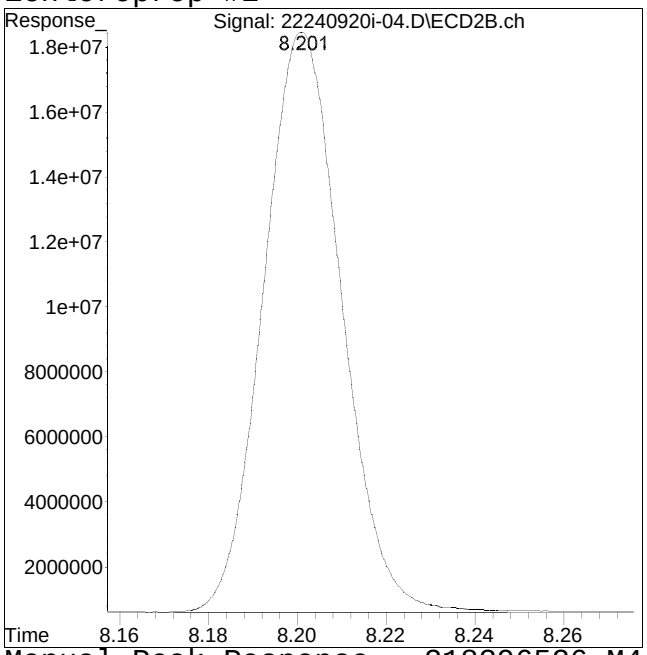
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #20: Dichloroprop #2




Original Peak Response = 219455475



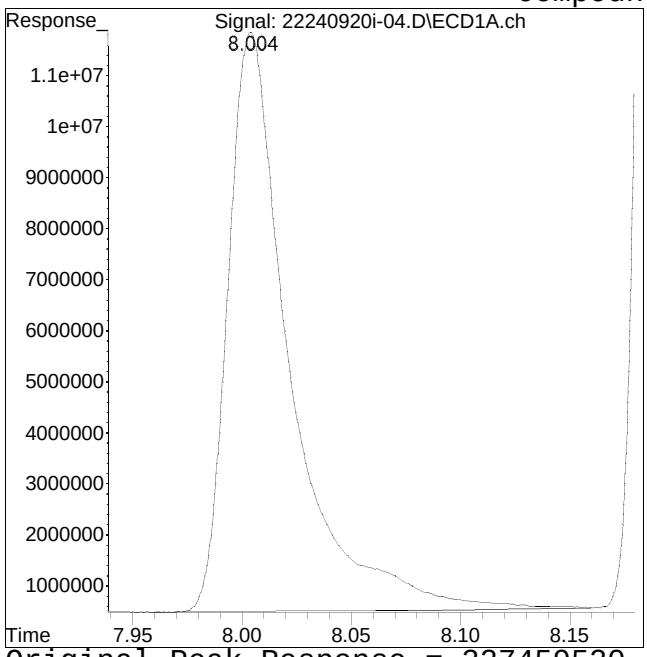

Manual Peak Response = 218396526 M4

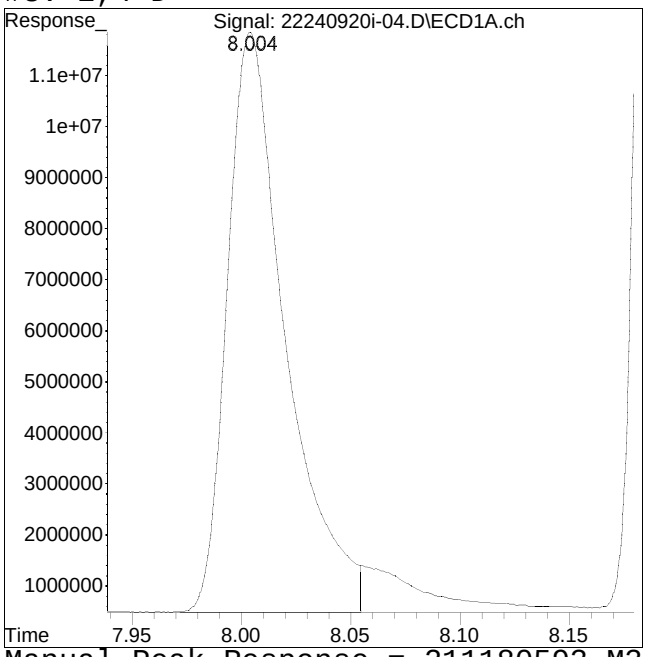
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #8: 2,4-D



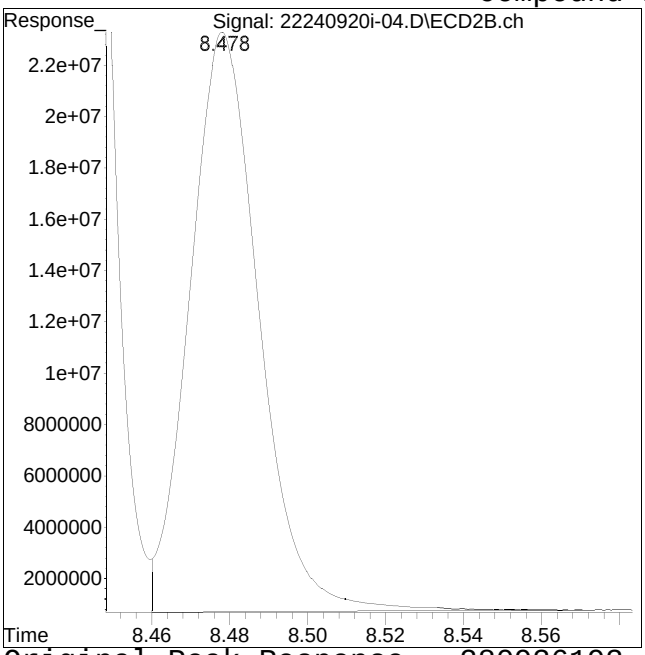



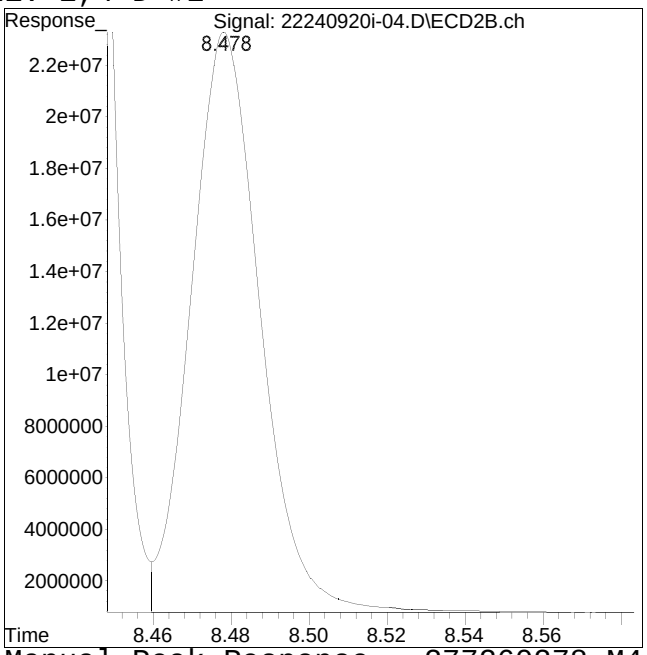

Original Peak Response = 227459520 Manual Peak Response = 211180593 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #21: 2,4-D #2



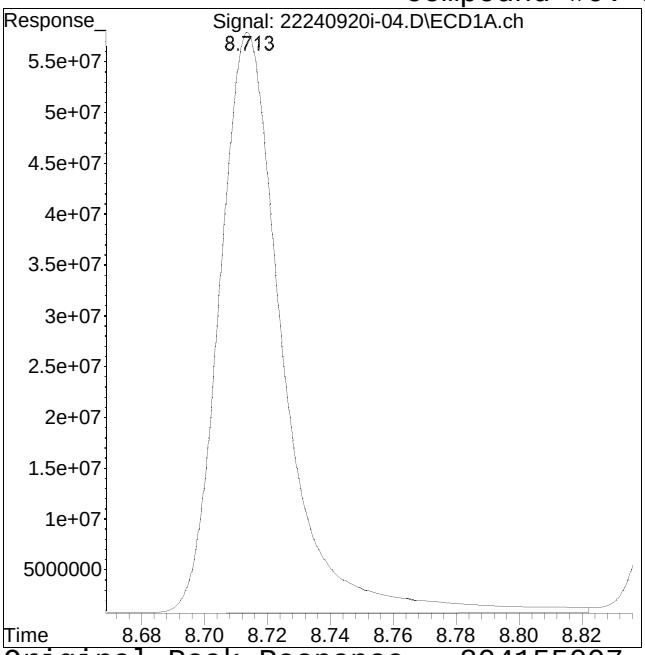



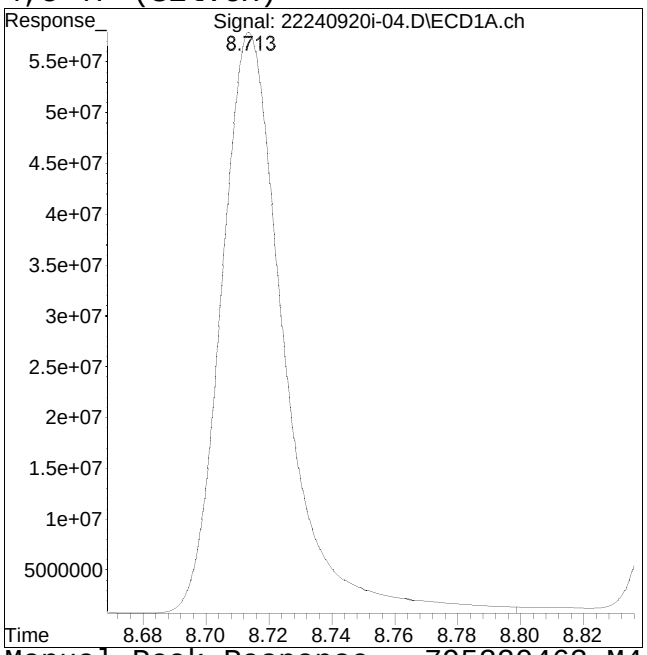

Original Peak Response = 280936193 Manual Peak Response = 277260278 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #9: 2,4,5-TP (Silvex)



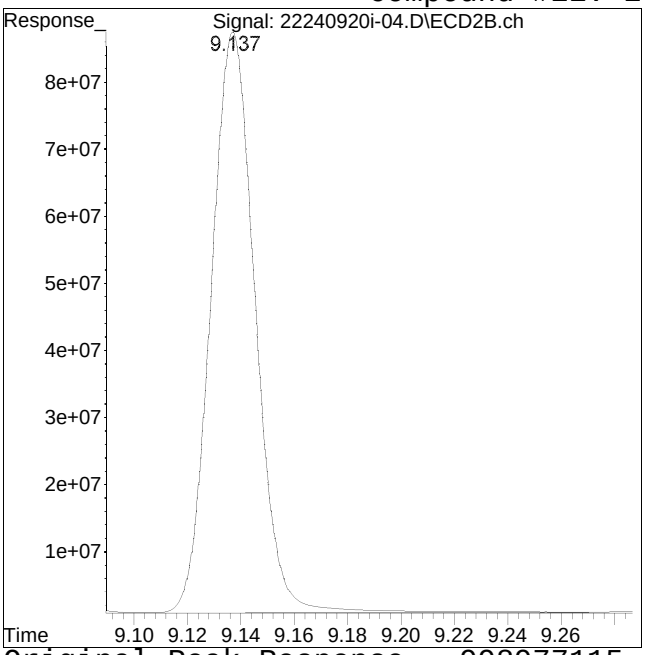



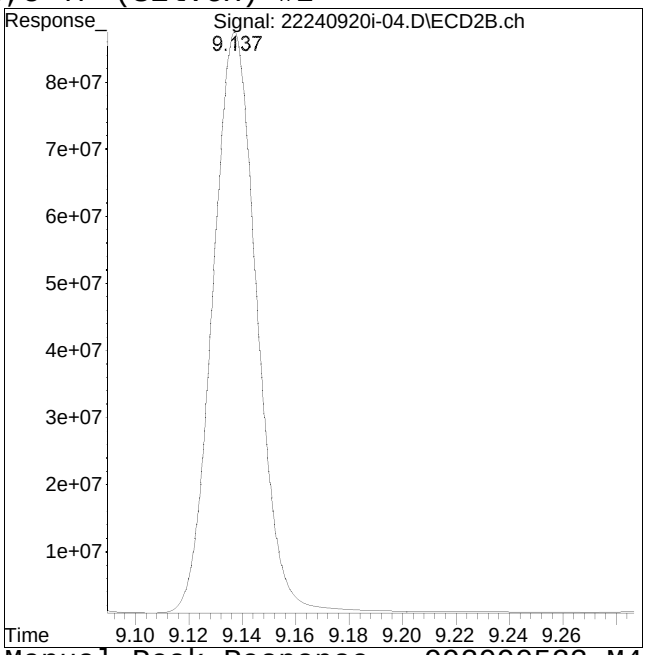

Original Peak Response = 804155007 Manual Peak Response = 795320463 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #22: 2,4,5-TP (Silvex) #2



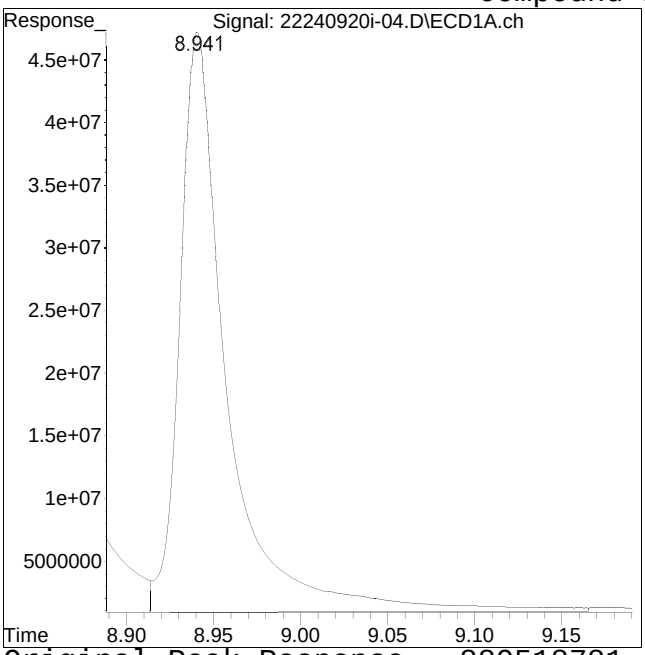



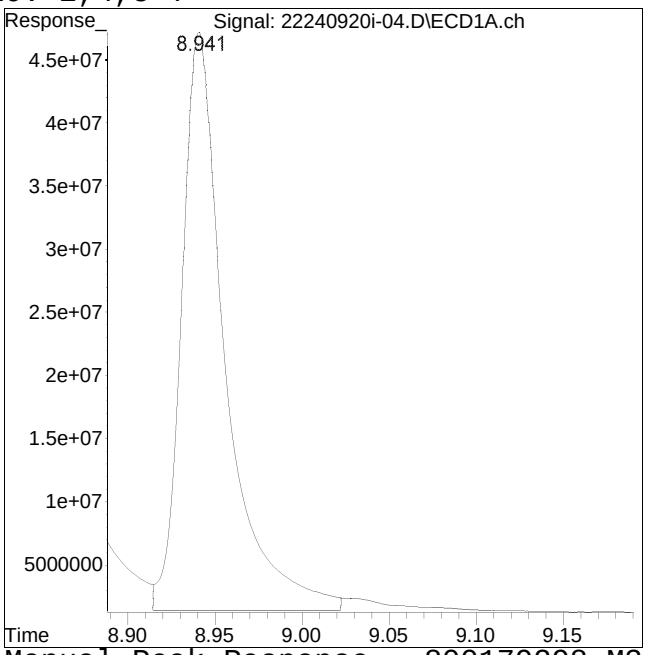

Original Peak Response = 998977115 Manual Peak Response = 992990533 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #10: 2,4,5-T



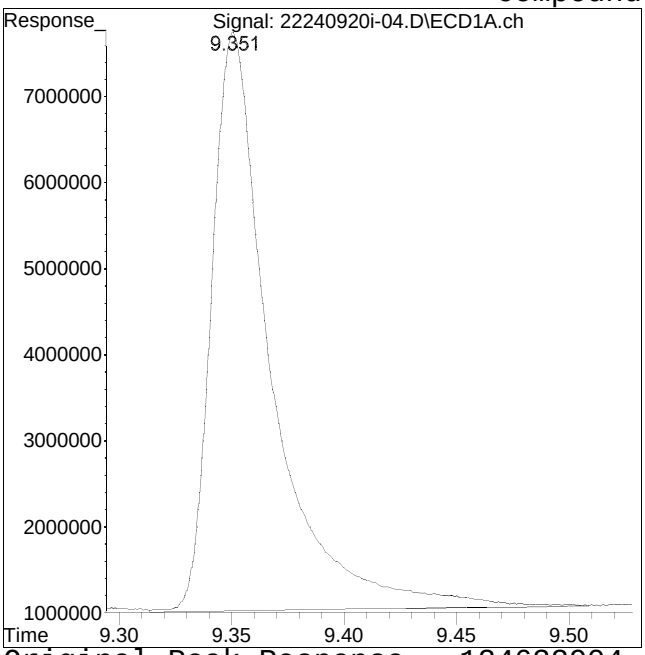



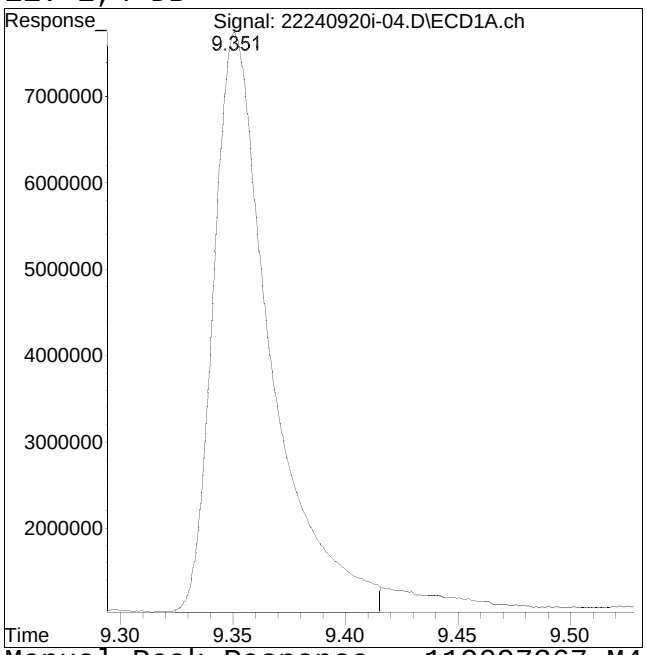

Original Peak Response = 889518781 Manual Peak Response = 800179298 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

Compound #11: 2,4-DB



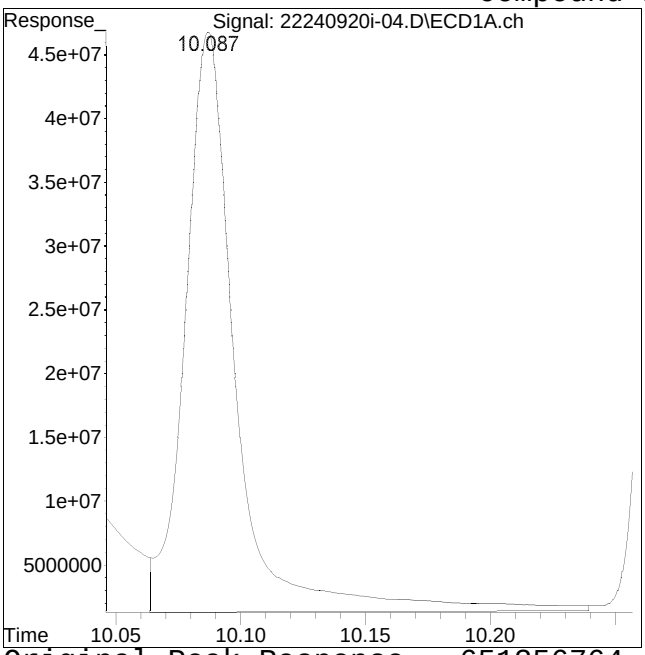




Original Peak Response = 124632904 Manual Peak Response = 119097367 M4
M4 = Poor automated baseline construction.

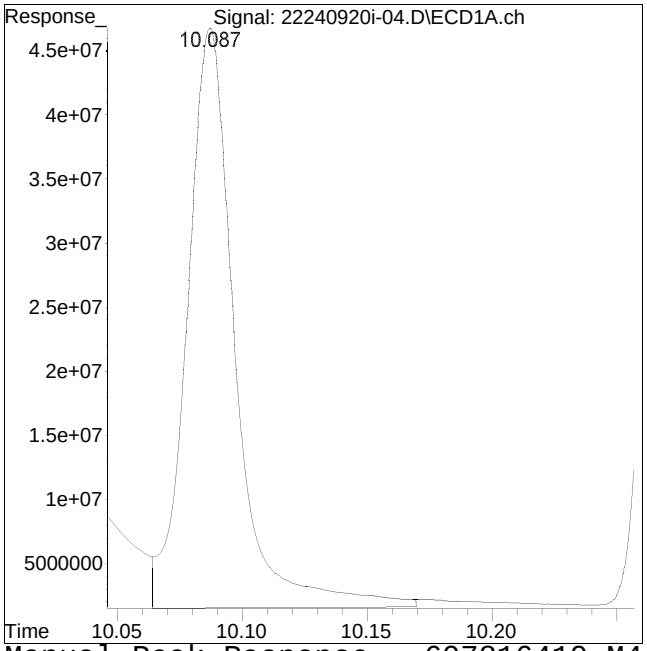
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #12: Dinoseb




Original Peak Response = 651356764



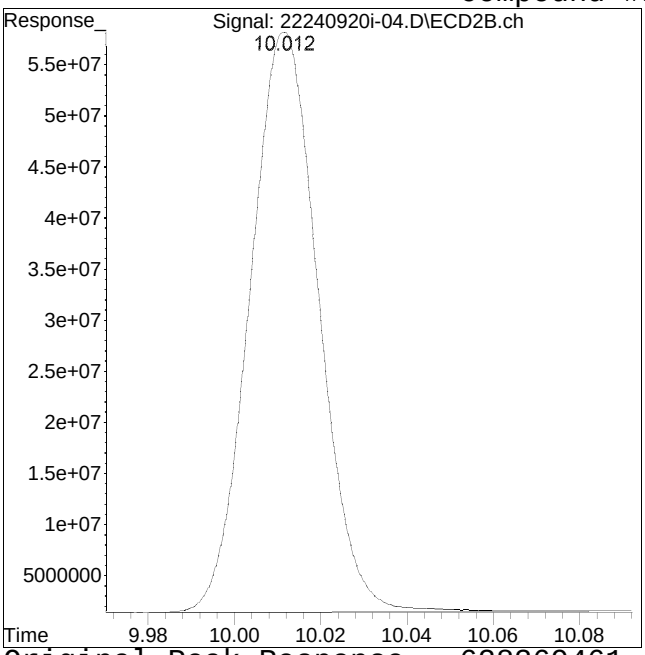

Manual Peak Response = 607816410 M4

M4 = Poor automated baseline construction.

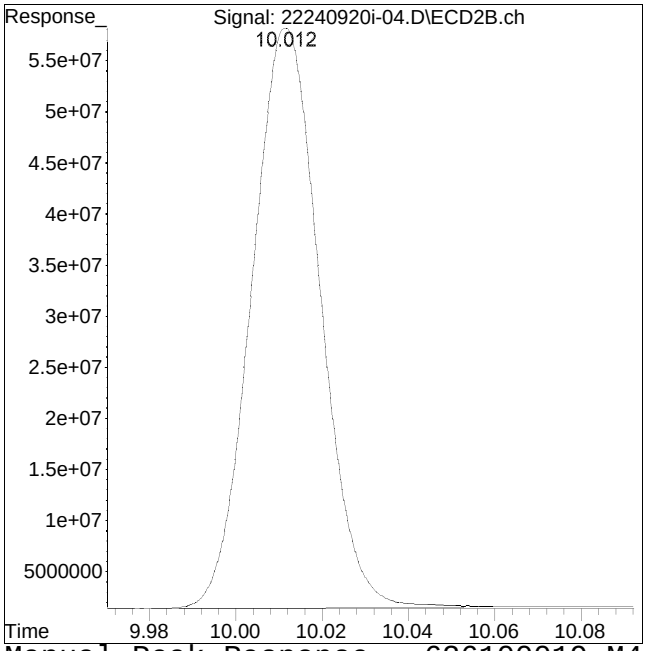
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-04.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:20 pm Instrument : Pest22
Sample : il3herb,42e,,pp 11631 L0.2Quant Date : 9/21/2024 7:00 am

## Compound #25: Dinoseb #2




Original Peak Response = 628369461




Manual Peak Response = 626100019 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:38 pm
Operator : pest22:akm
Sample : il4herb,42e,,pp 11630 L0.5/50
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:12:32 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:12:23 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.437 | 8.436 | 1196.7E6 | 1494.9E6 | 0.250M3 | 0.250 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.897 | 7.363 | 405.3E6 | 490.2E6 | 0.446M4 | 0.441M4 |
| | | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 89.20% | 88.20% |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.324 | 2.319 | 531.7E6 | 551.2E6 | 0.446M4 | 0.430M3 |
| 4) | t | Dicamba | 7.076 | 7.543 | 1218.9E6 | 1398.0E6 | 0.445M4 | 0.443M4 |
| 5) | t | MCPP | 7.276 | 7.655 | 114.8E6 | 150.8E6 | 47.079M4 | 47.069M4 |
| 6) | t | MCPA | 7.423 | 7.882 | 189.8E6 | 247.2E6 | 43.902M4 | 44.035M4 |
| 7) | t | Dichloroprop | 7.780 | 8.201 | 365.4E6 | 449.3E6 | 0.434M4 | 0.439M4 |
| 8) | t | 2,4-D | 7.997 | 8.477 | 453.2E6 | 573.5E6 | 0.446M4 | 0.440M4 |
| 9) | t | 2,4,5-TP (Si | 8.712 | 9.137 | 1679.8E6 | 2054.5E6 | 0.447M4 | 0.445M4 |
| 10) | t | 2,4,5-T | 8.936 | 9.427 | 1699.2E6 | 2025.0E6 | 0.448M3 | 0.448 |
| 11) | t | 2,4-DB | 9.345 | 9.789 | 253.8E6 | 336.5E6 | 0.454M3 | 0.453M4 |
| 12) | t | Dinoseb | 10.086 | 10.011 | 1212.2E6 | 1293.7E6 | 0.461M4 | 0.445M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:38 pm
Operator : pest22:akm
Sample : il4herb,42e,,pp 11630 L0.5/50
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:12:32 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:12:23 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

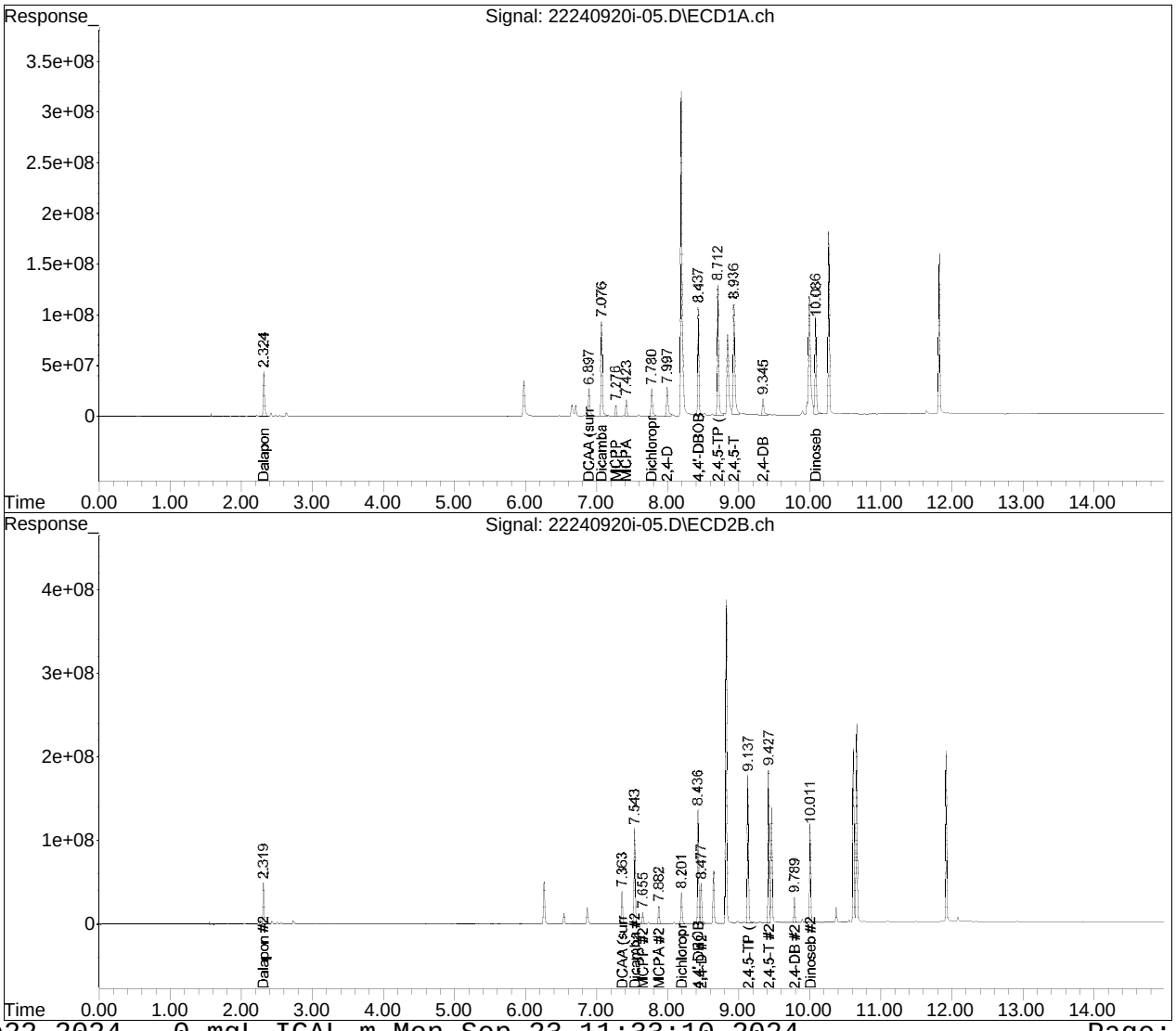
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:38 pm
Operator : pest22:akm
Sample : il4herb,42e,,pp 11630 L0.5/50
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:12:32 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:12:23 2024
Response via : Initial Calibration
Integrator: ChemStation

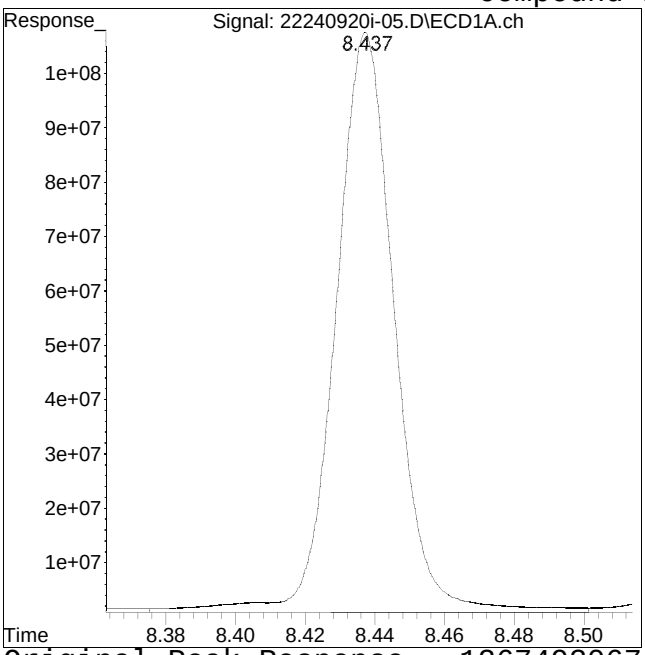
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

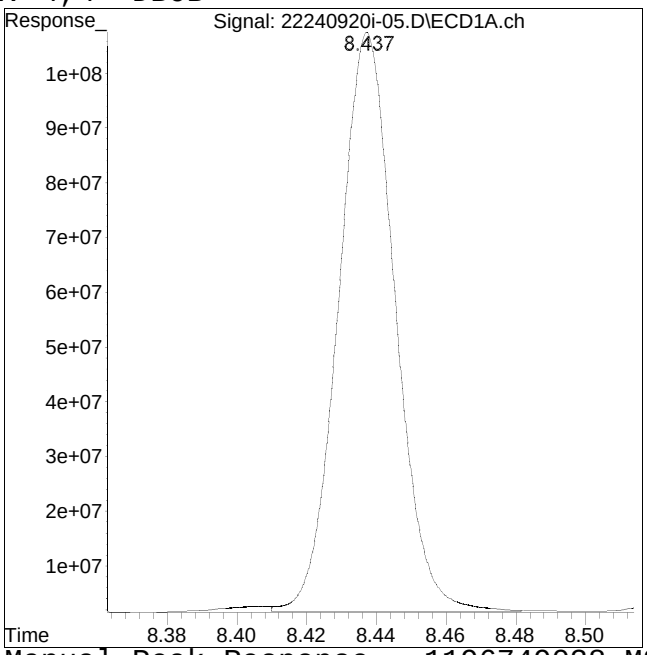


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #1: 4,4'-DBOB



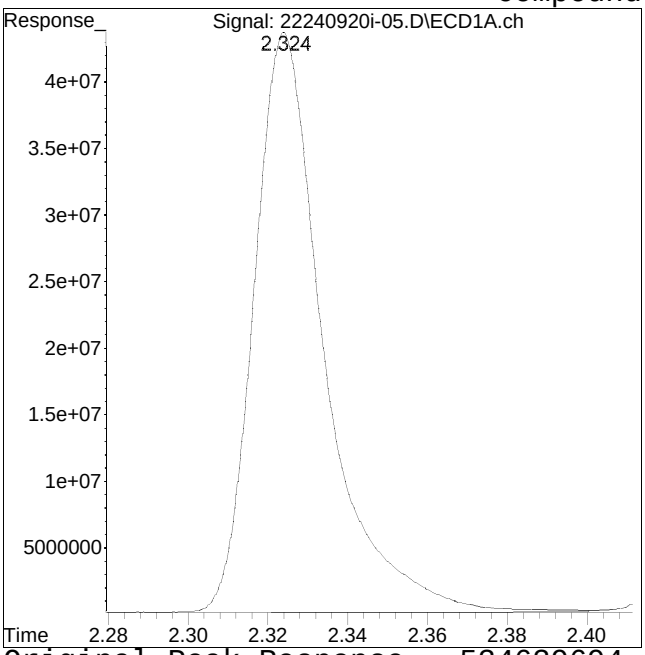



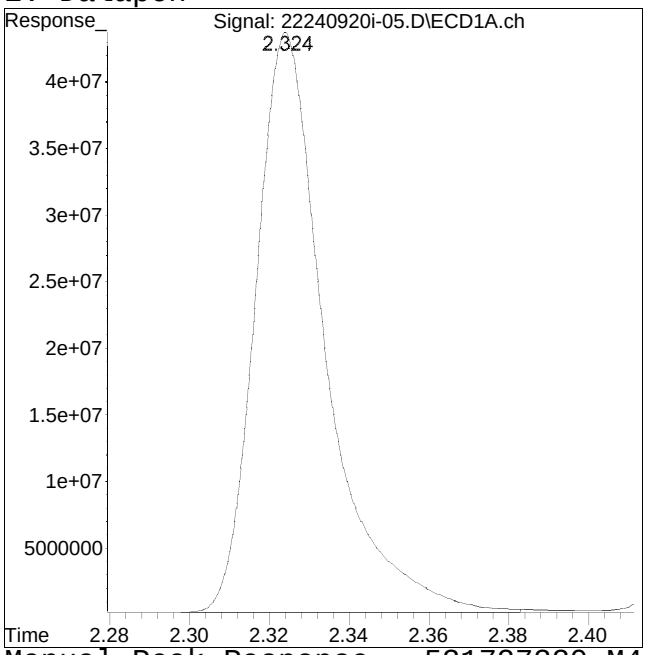

Original Peak Response = 1267493067 Manual Peak Response = 1196749038 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

## Compound #2: Dalapon



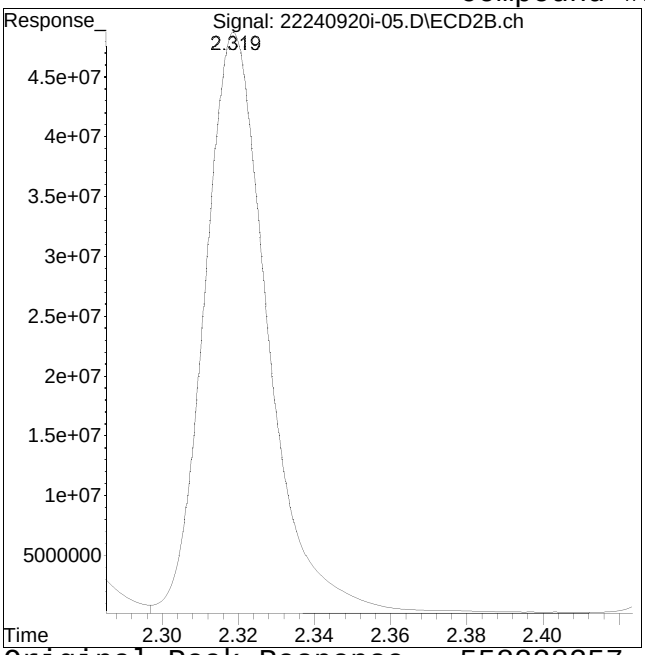



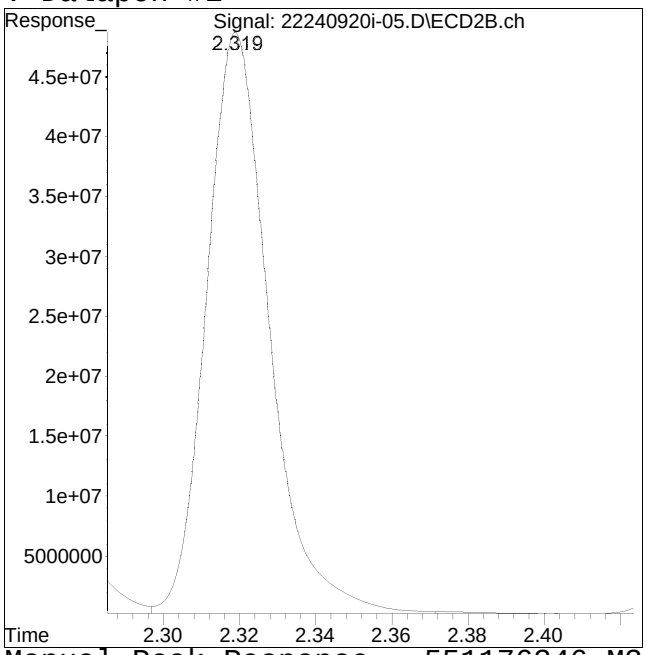

Original Peak Response = 534639694 Manual Peak Response = 531727320 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #15: Dalapon #2



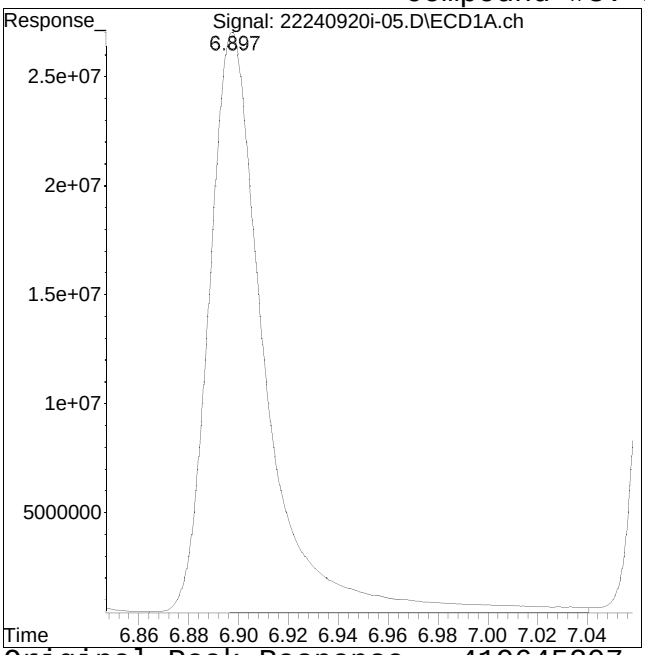



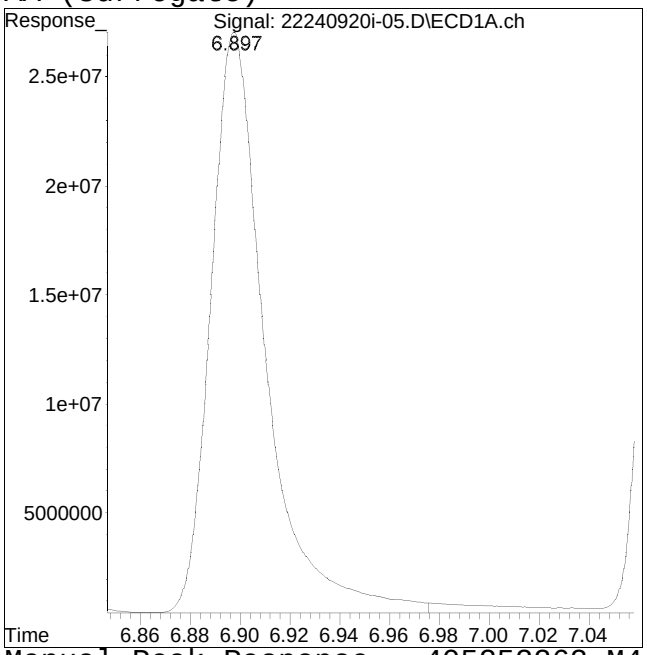

Original Peak Response = 558228357 Manual Peak Response = 551176346 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

## Compound #3: DCAA (surrogate)



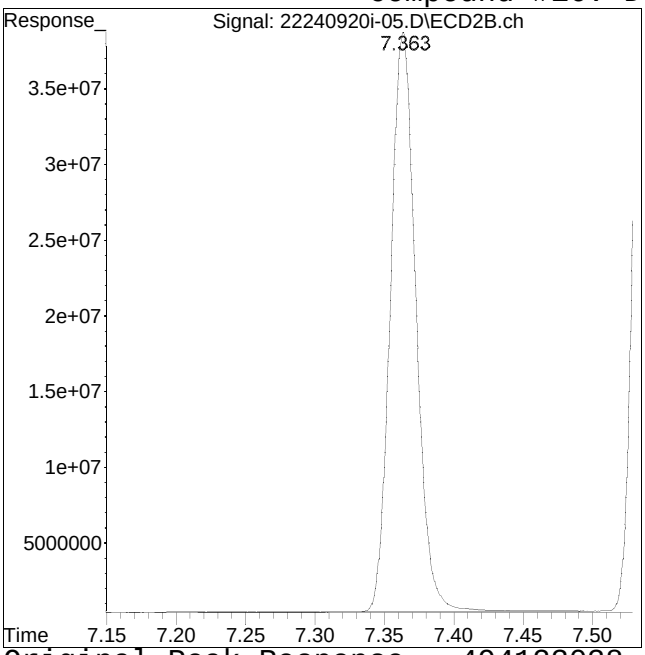




Original Peak Response = 419645207 Manual Peak Response = 405252262 M4
M4 = Poor automated baseline construction.

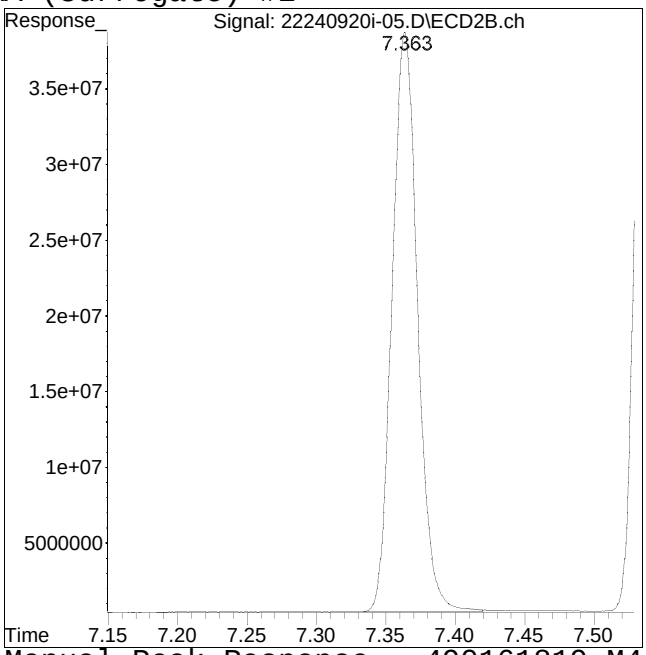
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #16: DCAA (surrogate) #2




Original Peak Response = 494123038

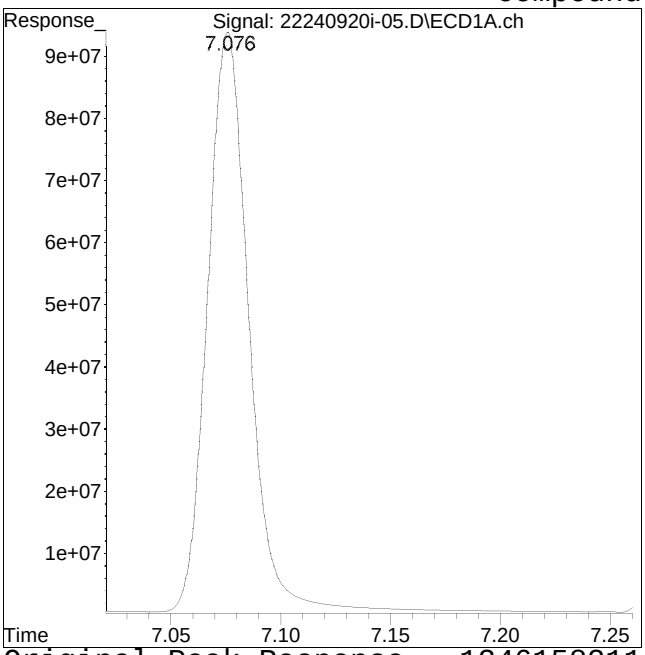


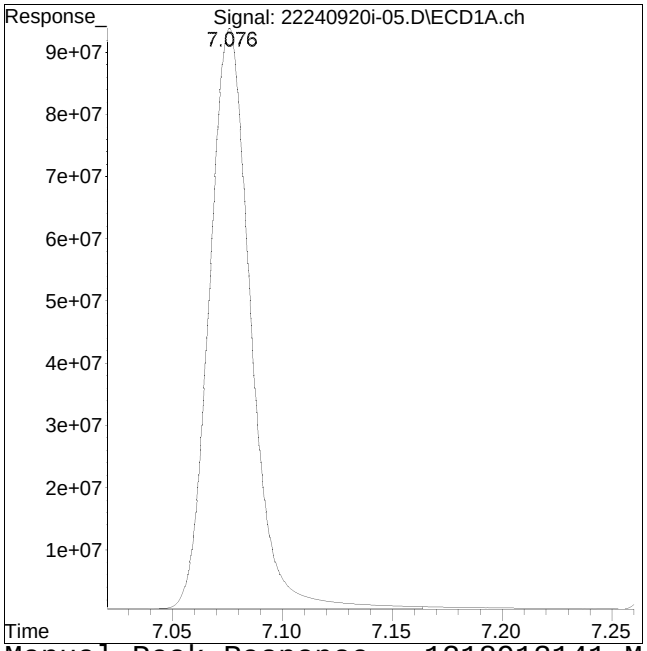

Manual Peak Response = 490161819 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #4: Dicamba



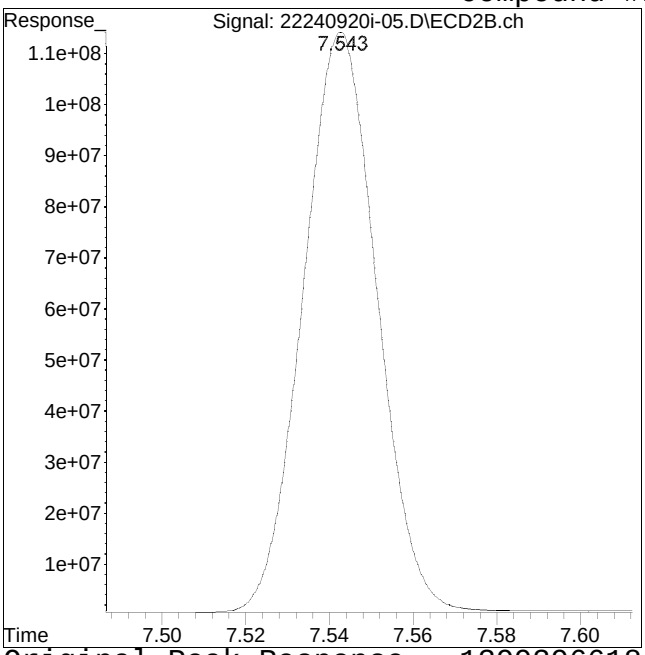



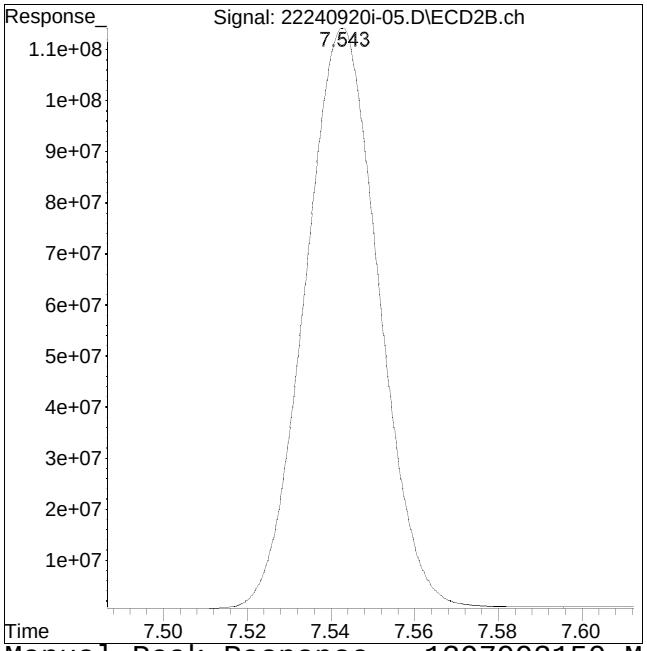

Original Peak Response = 1246158211 Manual Peak Response = 1218913141 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #17: Dicamba #2



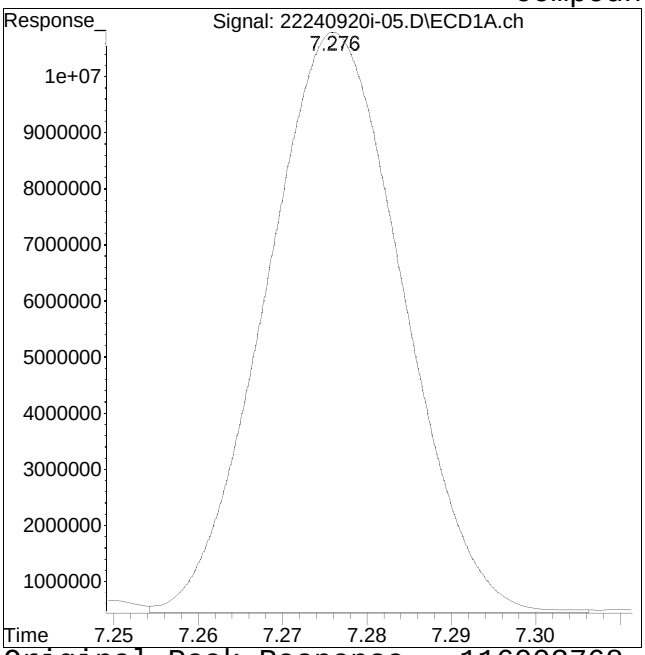



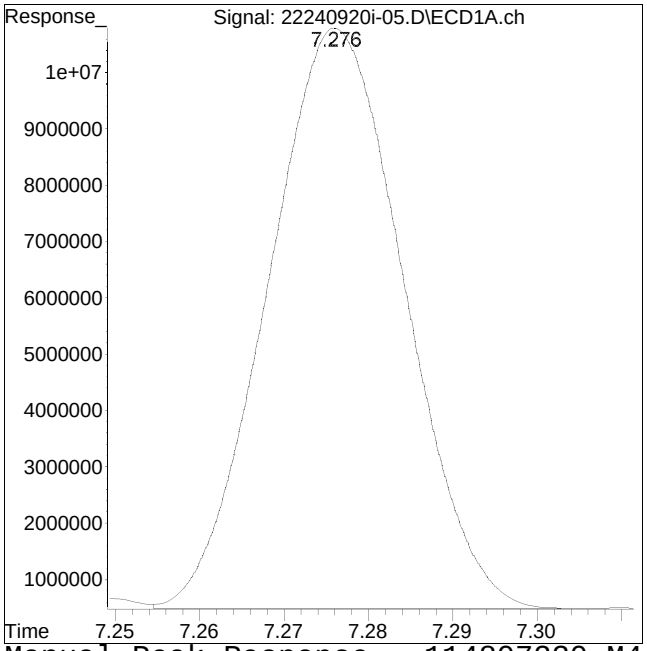

Original Peak Response = 1399396618 Manual Peak Response = 1397993150 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #5: MCPP



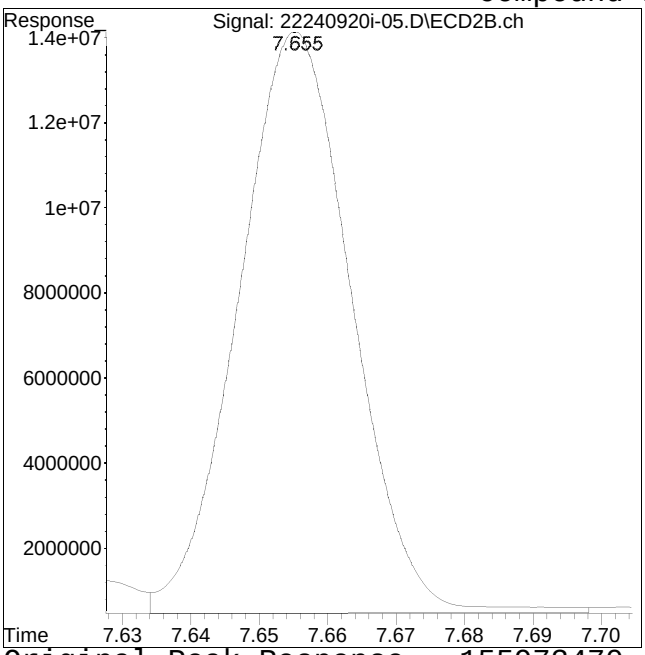



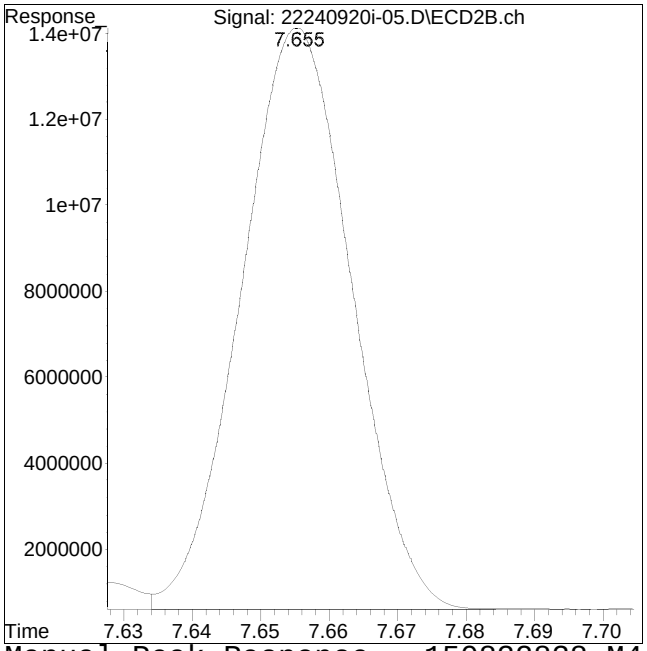

Original Peak Response = 116003768 Manual Peak Response = 114807230 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #18: MCPP #2



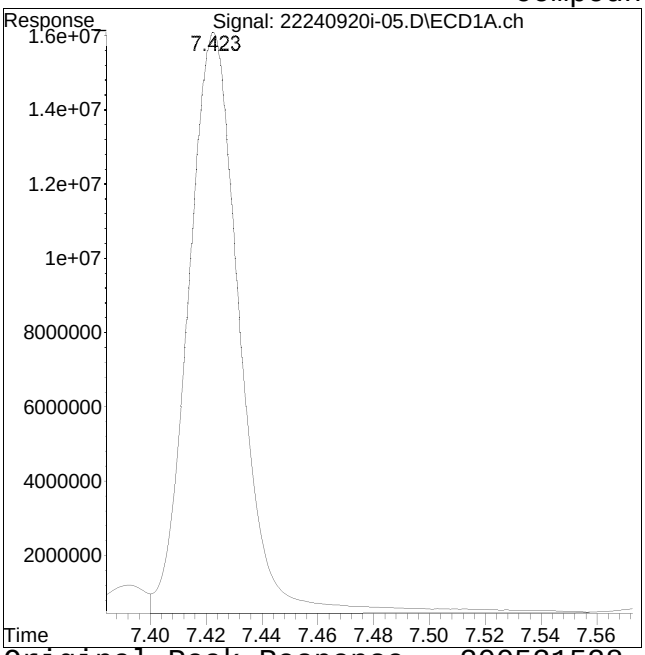



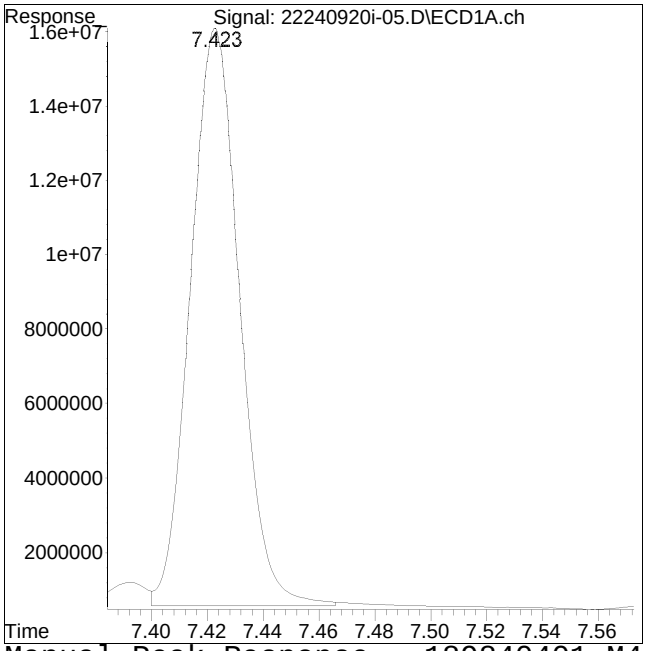

Original Peak Response = 155973470 Manual Peak Response = 150832838 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #6: MCPA



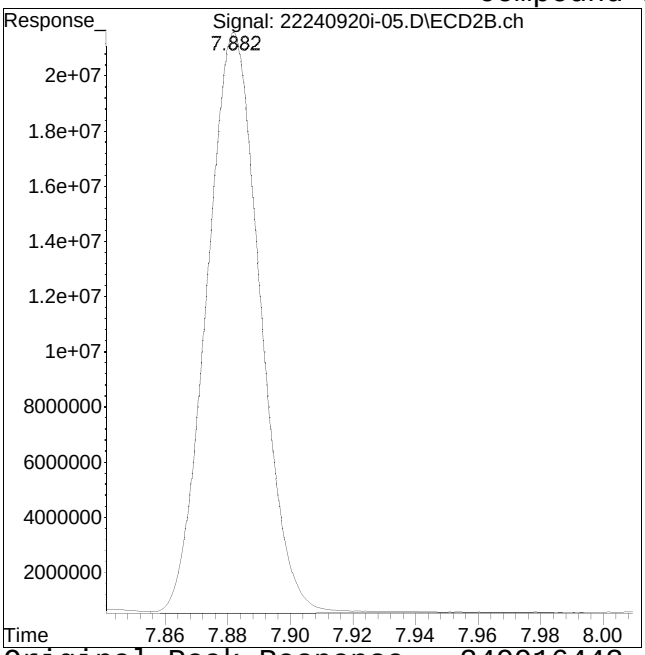




Original Peak Response = 200531528 Manual Peak Response = 189840401 M4
M4 = Poor automated baseline construction.

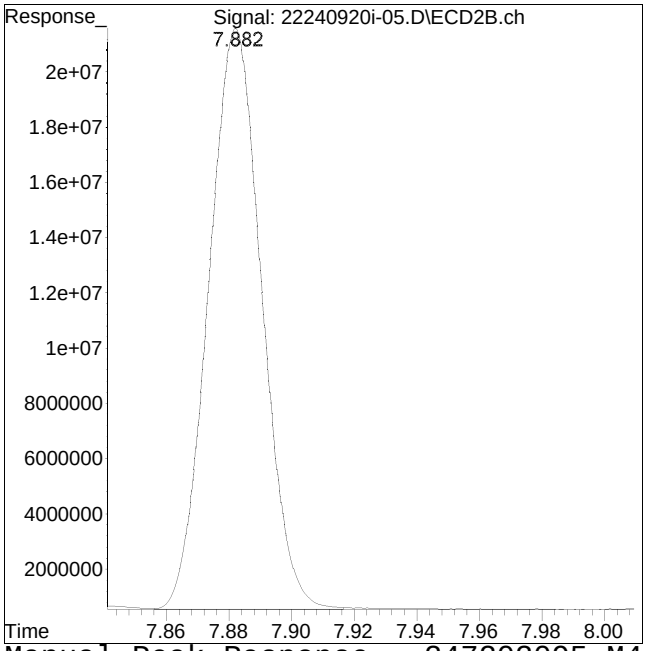
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #19: MCPA #2




Original Peak Response = 249916443



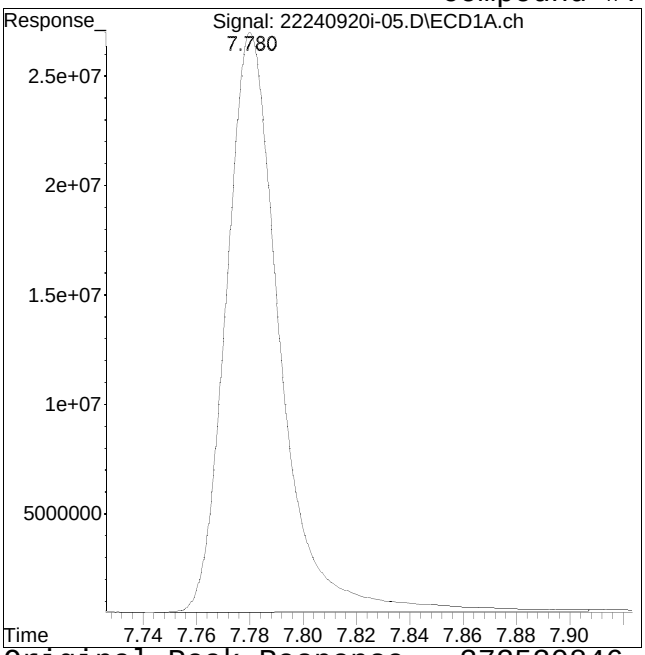

Manual Peak Response = 247203095 M4

M4 = Poor automated baseline construction.

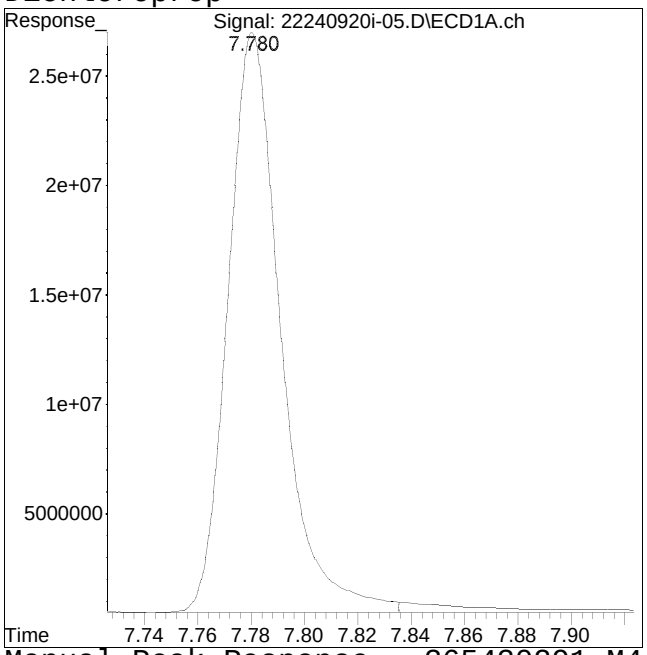
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

## Compound #7: Dichloroprop




Original Peak Response = 373530846



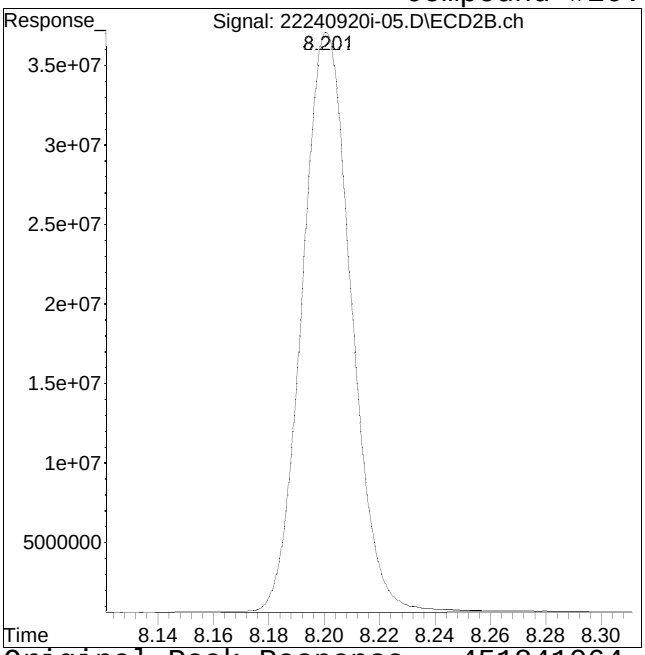

Manual Peak Response = 365430291 M4

M4 = Poor automated baseline construction.

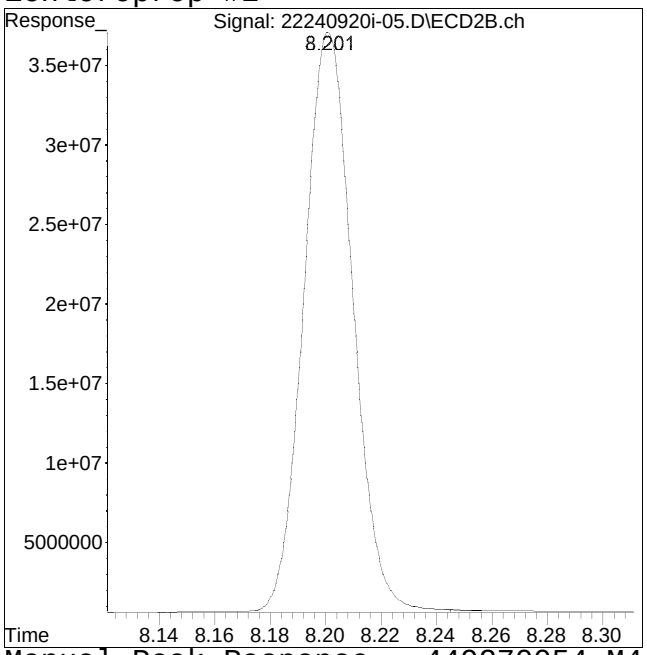
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

## Compound #20: Dichloroprop #2




Original Peak Response = 451841064



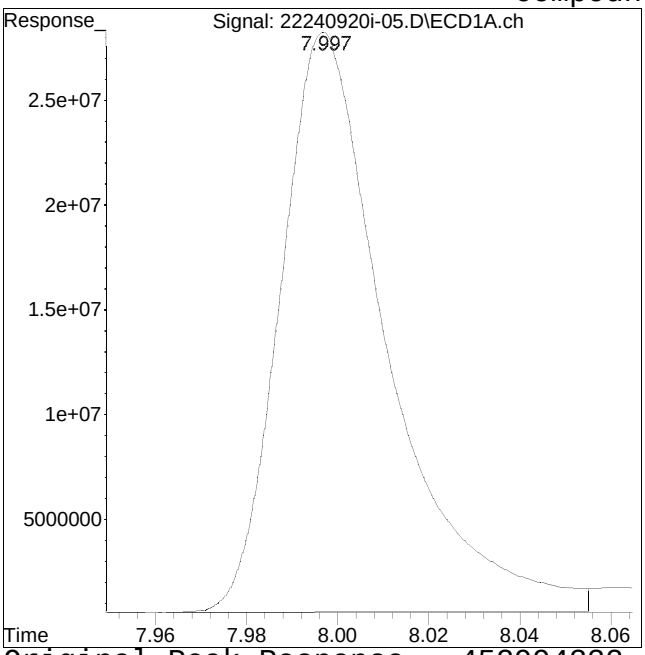

Manual Peak Response = 449270054 M4

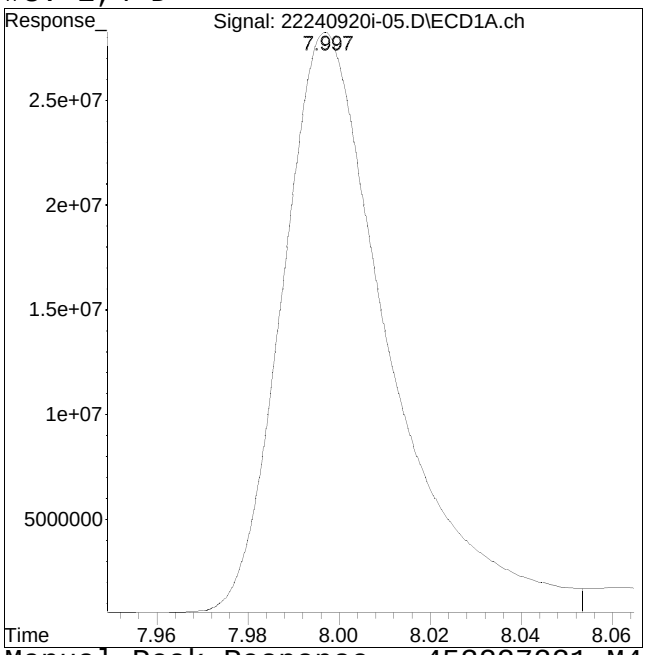
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #8: 2,4-D



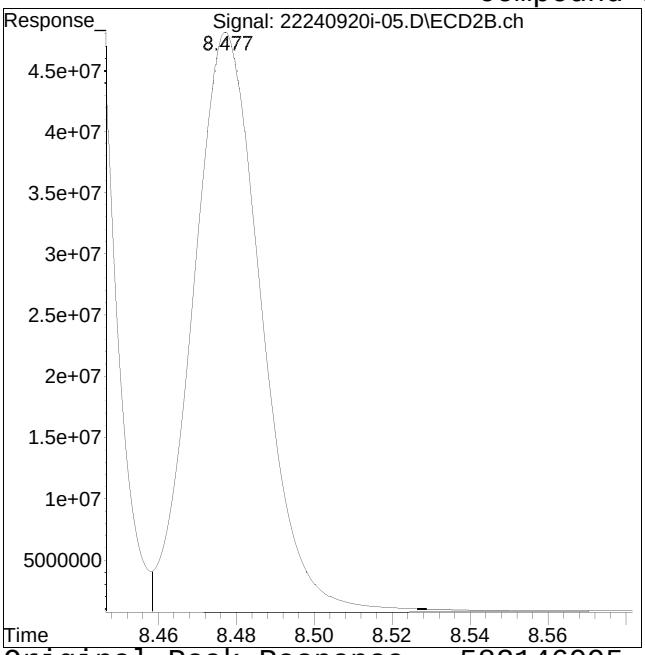




Original Peak Response = 452994332 Manual Peak Response = 453227221 M4
M4 = Poor automated baseline construction.

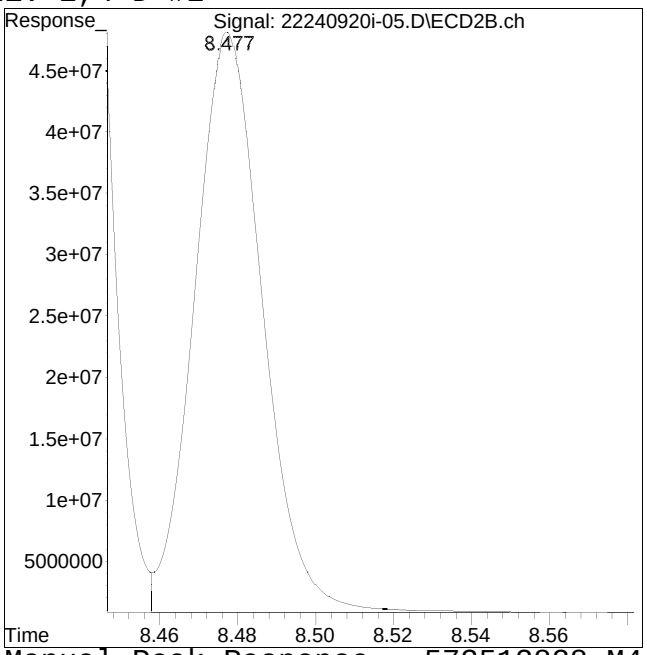
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #21: 2,4-D #2




Original Peak Response = 582146995

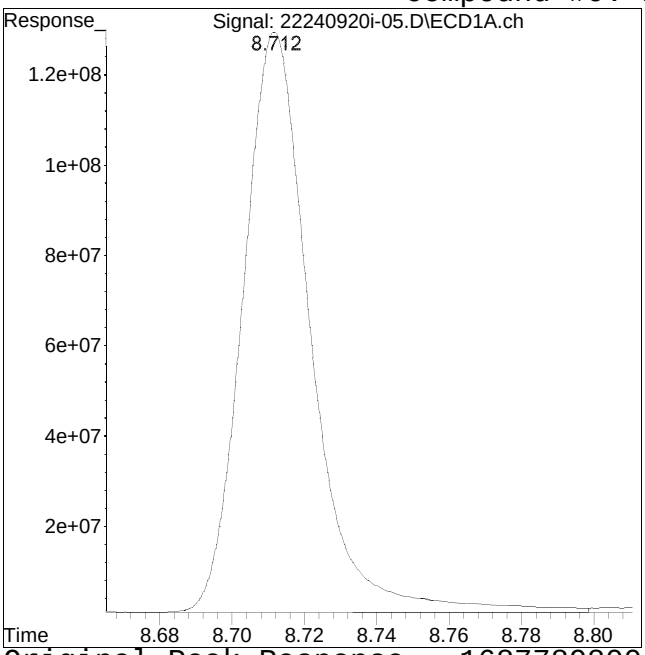


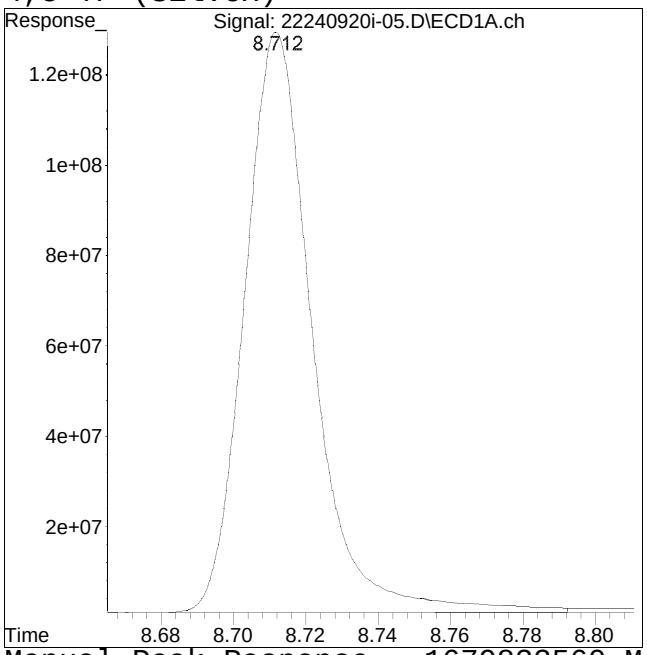

Manual Peak Response = 573512828 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #9: 2,4,5-TP (Silvex)



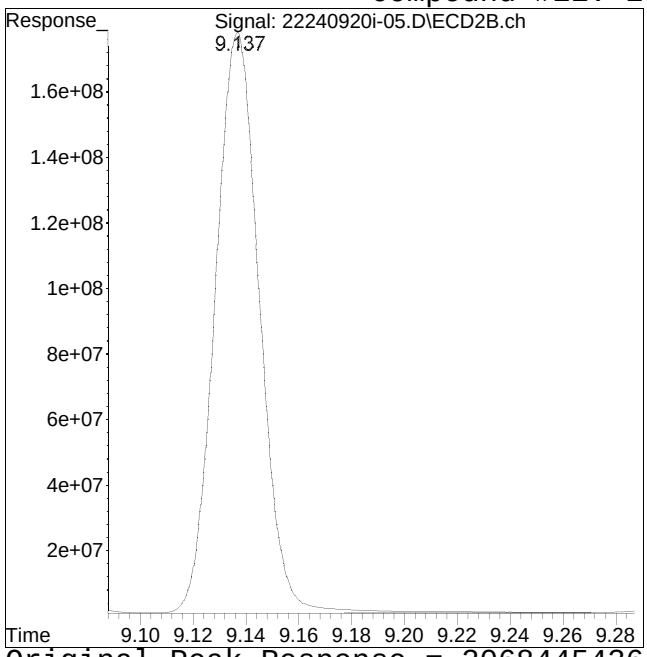



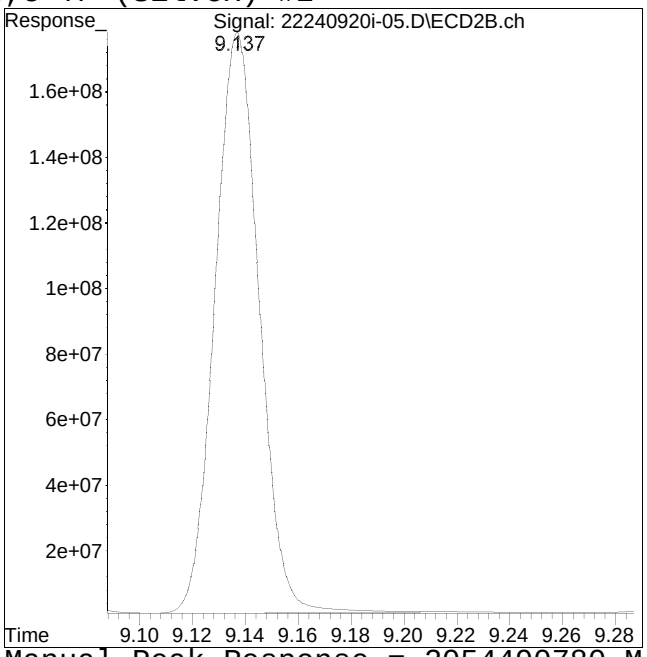

Original Peak Response = 1687789800 Manual Peak Response = 1679833560 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #22: 2,4,5-TP (Silvex) #2



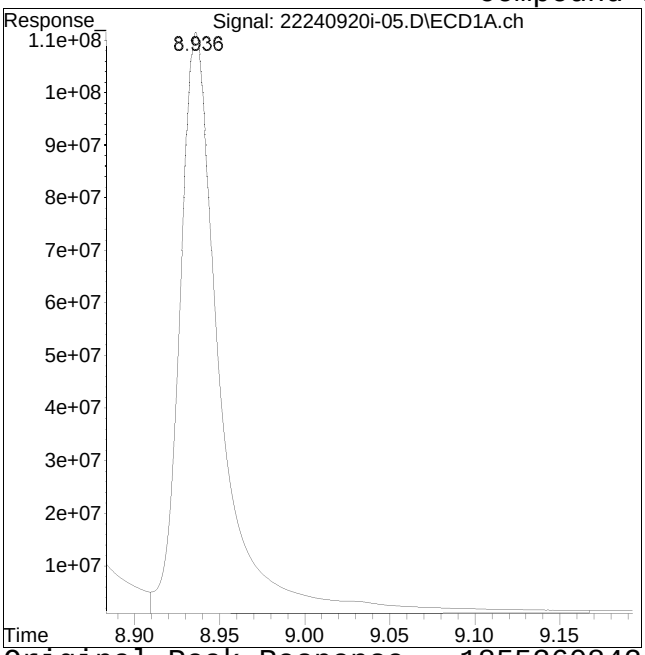



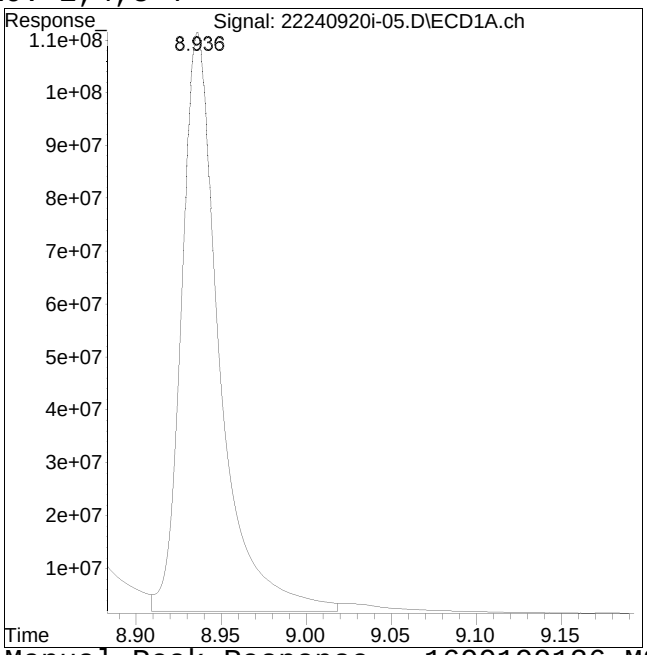

Original Peak Response = 2068445436 Manual Peak Response = 2054490780 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #10: 2,4,5-T



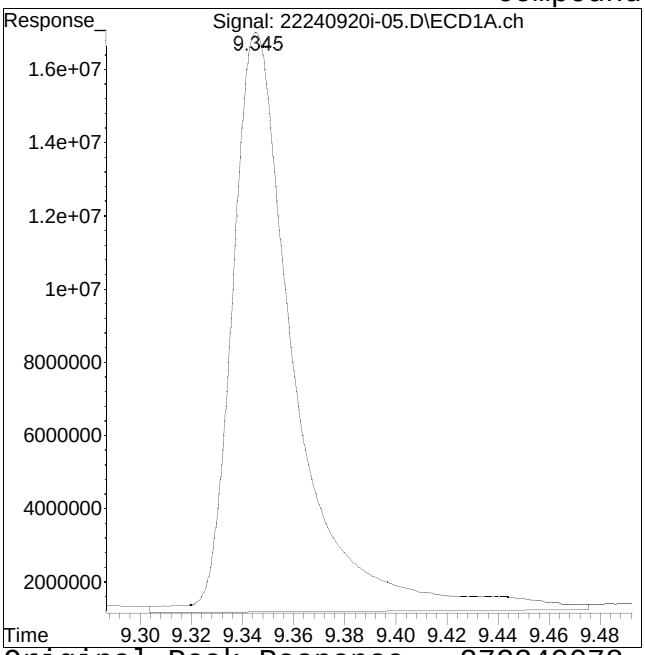



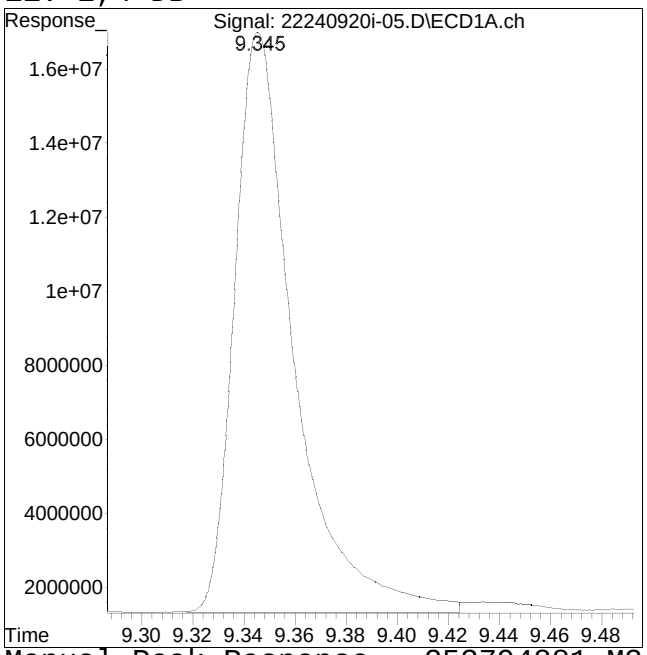

Original Peak Response = 1855360842 Manual Peak Response = 1699199126 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #11: 2,4-DB



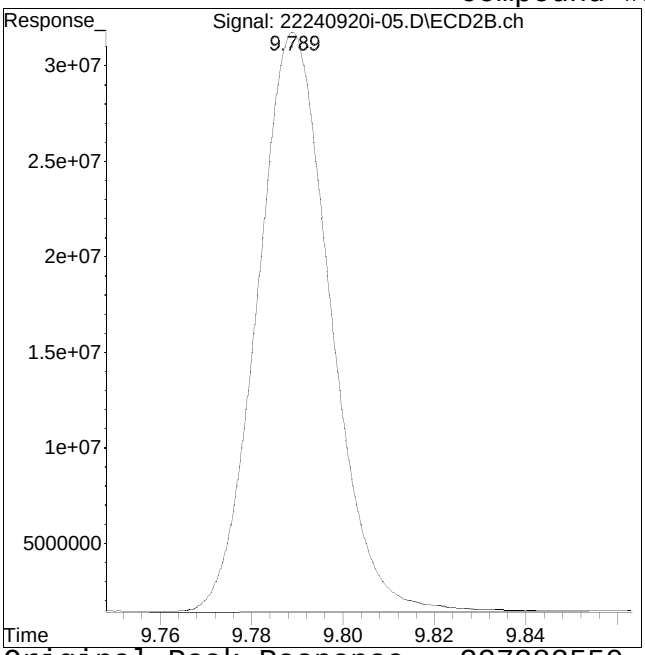



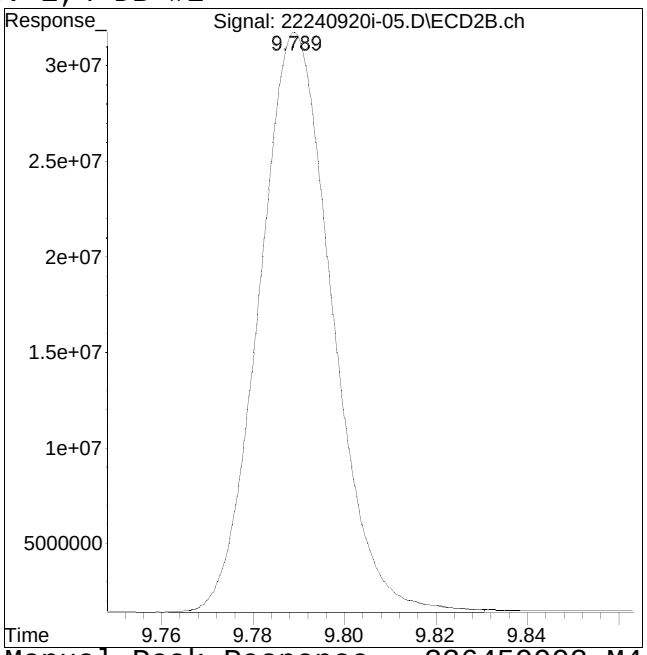

Original Peak Response = 272349078 Manual Peak Response = 253794881 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #24: 2,4-DB #2



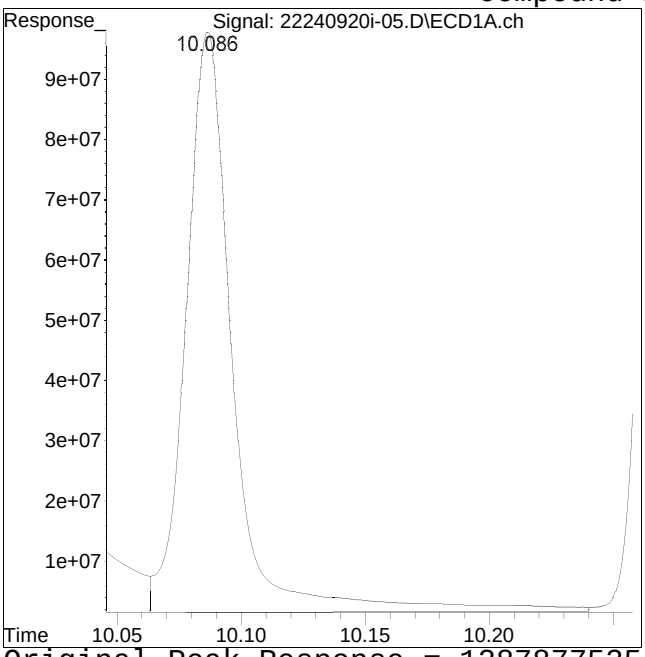



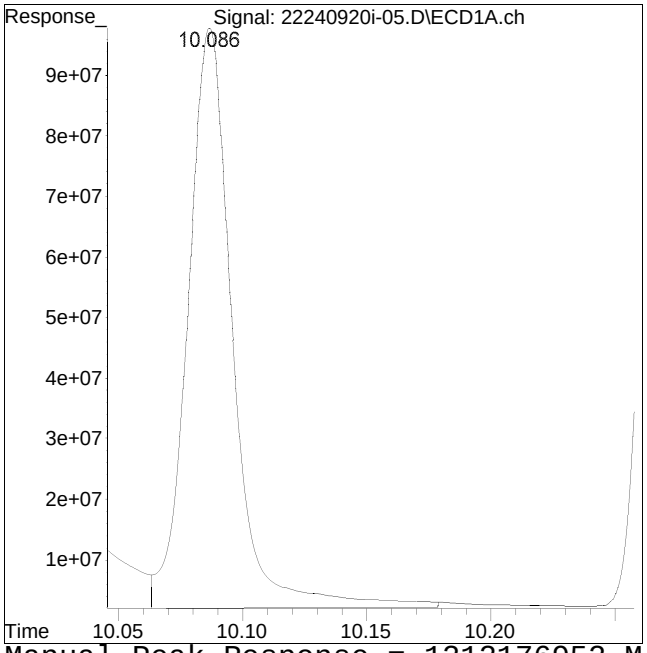

Original Peak Response = 337382550 Manual Peak Response = 336459992 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

Compound #12: Dinoseb



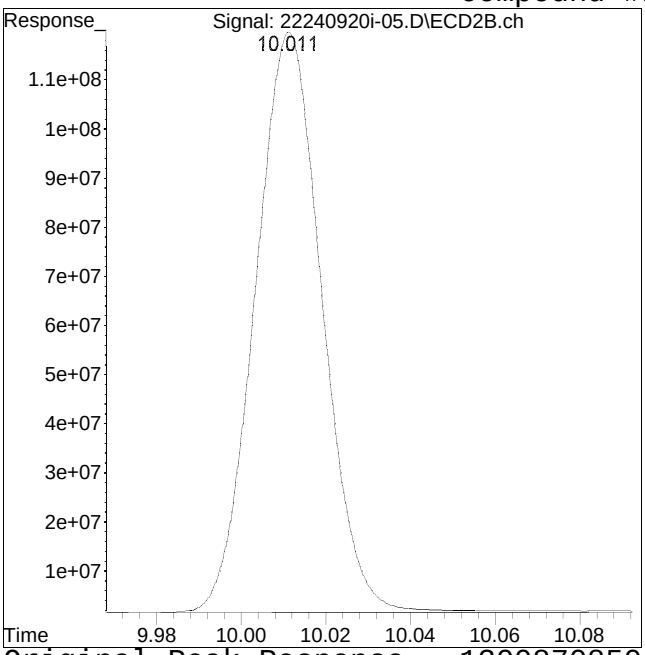



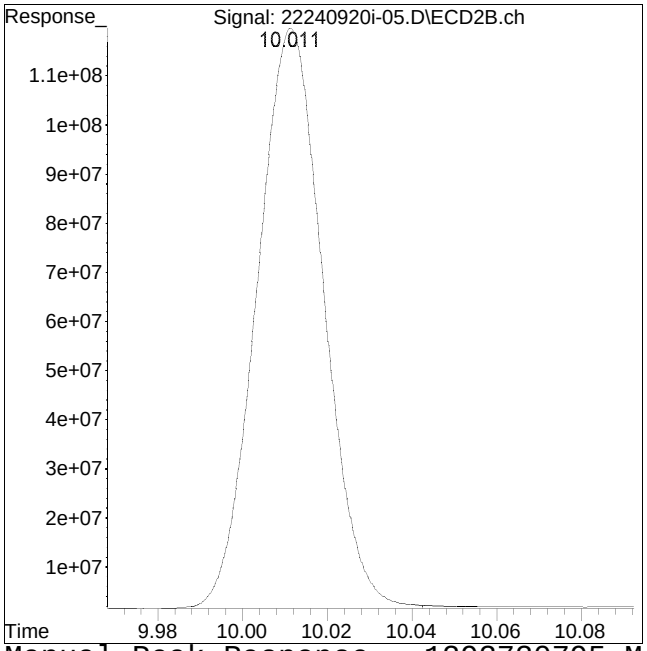

Original Peak Response = 1287877535 Manual Peak Response = 1212176952 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-05.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:38 pm Instrument : Pest22
Sample : il4herb,42e,,pp 11630 L0.5Quant Date : 9/21/2024 8:12 am

## Compound #25: Dinoseb #2




Original Peak Response = 1300870850 Manual Peak Response = 1293730795 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:57 pm
Operator : pest22:akm
Sample : il5herb,42e,,pp 11629 L1/100
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:18:10 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:18:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.436 | 8.435 | 1532.6E6 | 1855.1E6 | 0.250M3 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.894 | 7.362 | 915.2E6 | 1083.4E6 | 0.831M4 | 0.831M4 |
| | | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 166.20%# | 166.20%# |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.325 | 2.319 | 1152.2E6 | 1208.8E6 | 0.801 | 0.804M4 |
| 4) | t | Dicamba | 7.074 | 7.542 | 2807.6E6 | 3186.2E6 | 0.842M4 | 0.852M4 |
| 5) | t | MCPP | 7.276 | 7.656 | 293.7E6 | 386.6E6 | 94.030M4 | 96.121M4 |
| 6) | t | MCPA | 7.423 | 7.883 | 443.2E6 | 579.1E6 | 83.934M3 | 86.173M4 |
| 7) | t | Dichloroprop | 7.777 | 8.200 | 831.5E6 | 993.6E6 | 0.820M4 | 0.829M4 |
| 8) | t | 2,4-D | 7.991 | 8.476 | 1048.0E6 | 1315.7E6 | 0.845 | 0.852M4 |
| 9) | t | 2,4,5-TP (Si | 8.708 | 9.136 | 3958.1E6 | 4741.4E6 | 0.861M4 | 0.865M4 |
| 10) | t | 2,4,5-T | 8.930 | 9.426 | 4045.2E6 | 4839.8E6 | 0.869M4 | 0.890M4 |
| 11) | t | 2,4-DB | 9.339 | 9.788 | 606.3E6 | 806.0E6 | 0.881M4 | 0.901M4 |
| 12) | t | Dinoseb | 10.085 | 10.011 | 2799.3E6 | 3024.5E6 | 0.877M4 | 0.872M4 |
| | | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:57 pm
Operator : pest22:akm
Sample : il5herb,42e,,pp 11629 L1/100
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:18:10 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:18:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

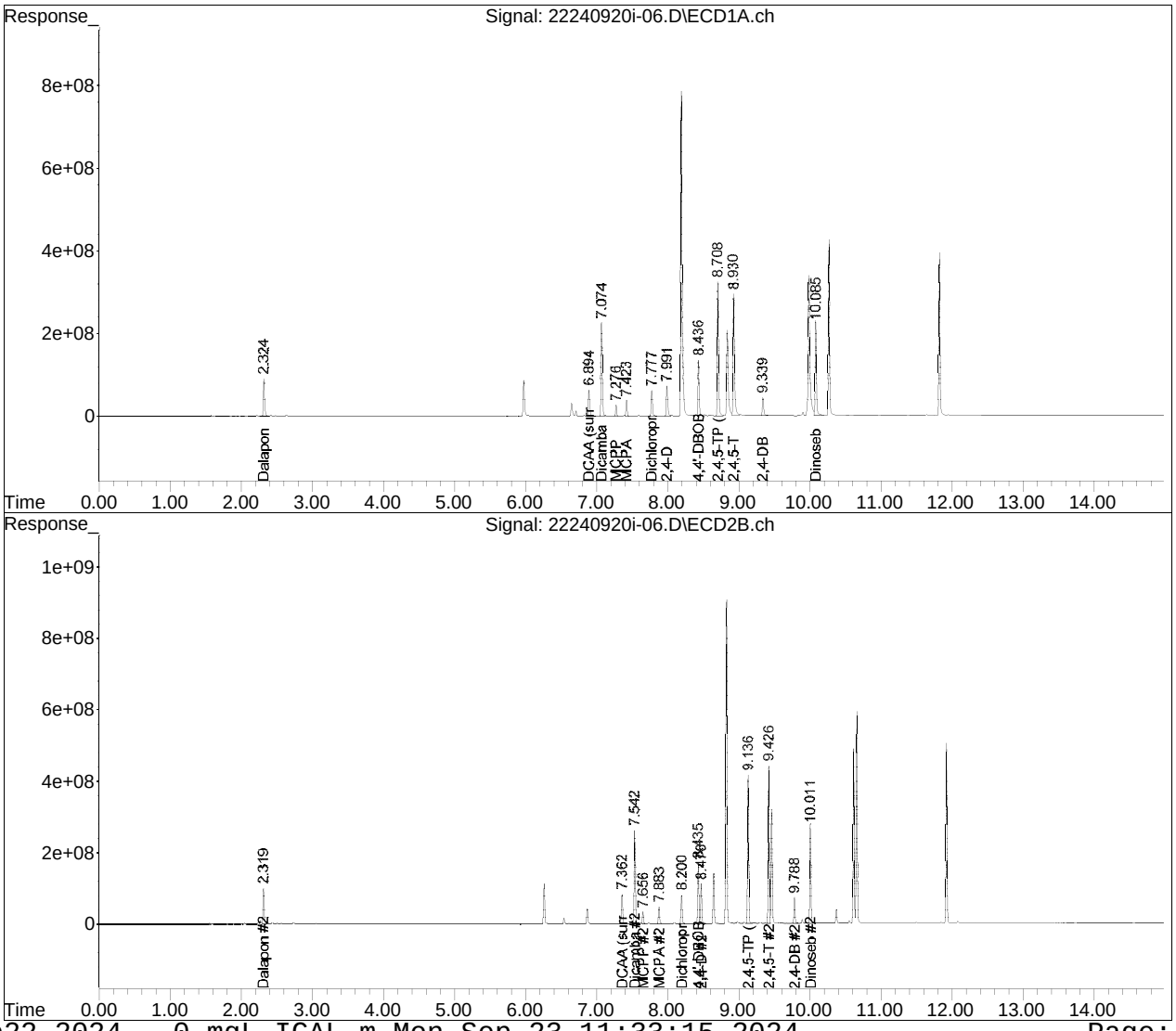
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 12:57 pm
Operator : pest22:akm
Sample : il5herb,42e,,pp 11629 L1/100
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:18:10 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:18:02 2024
Response via : Initial Calibration
Integrator: ChemStation

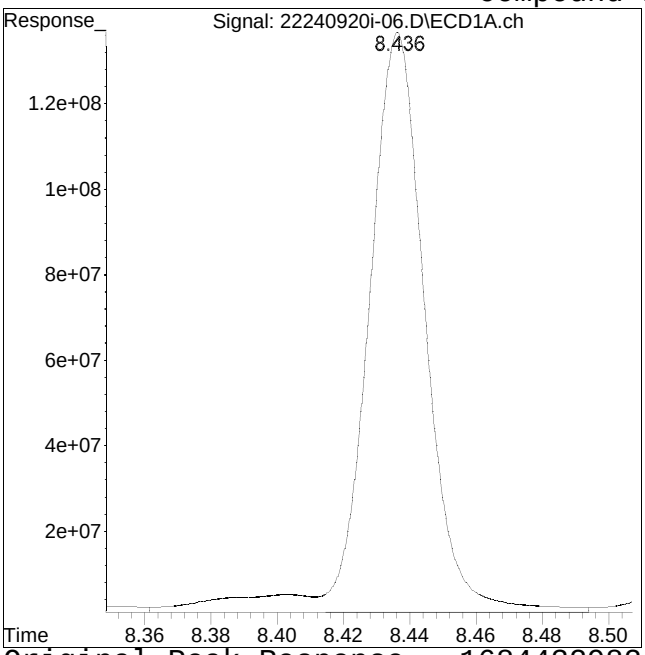
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

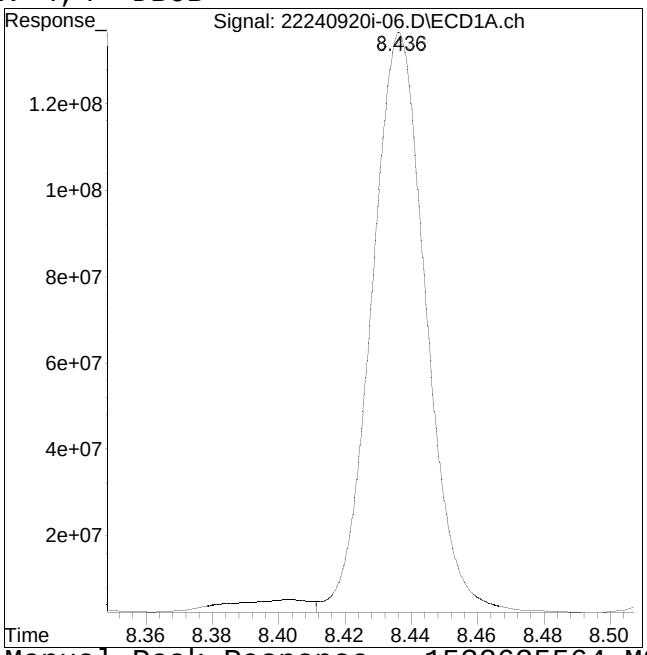


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #1: 4,4'-DBOB



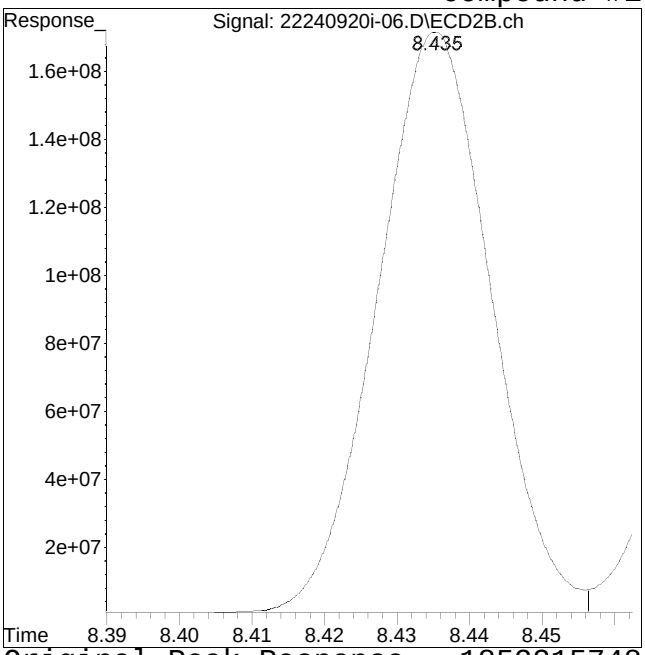



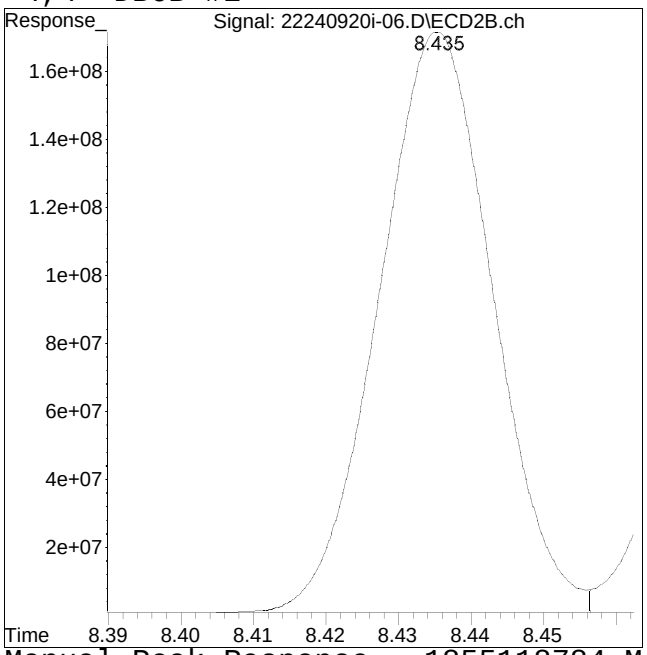

Original Peak Response = 1684432982 Manual Peak Response = 1532635564 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #14: 4,4'-DBOB #2



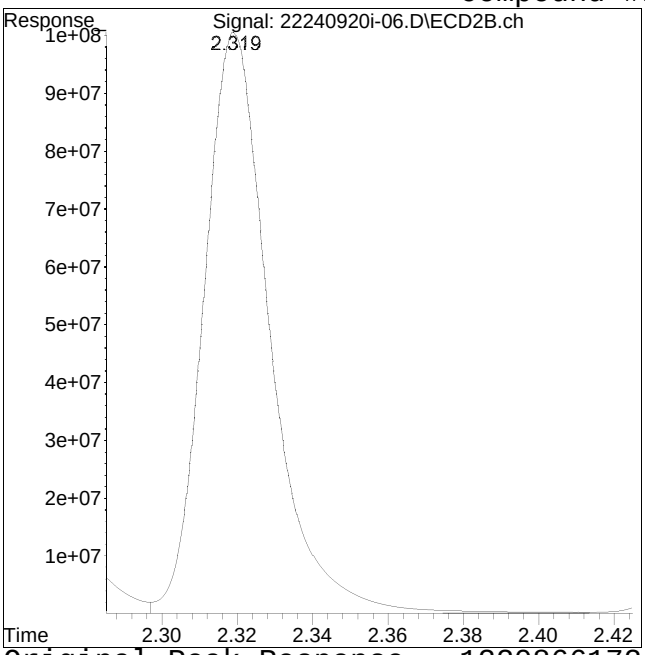



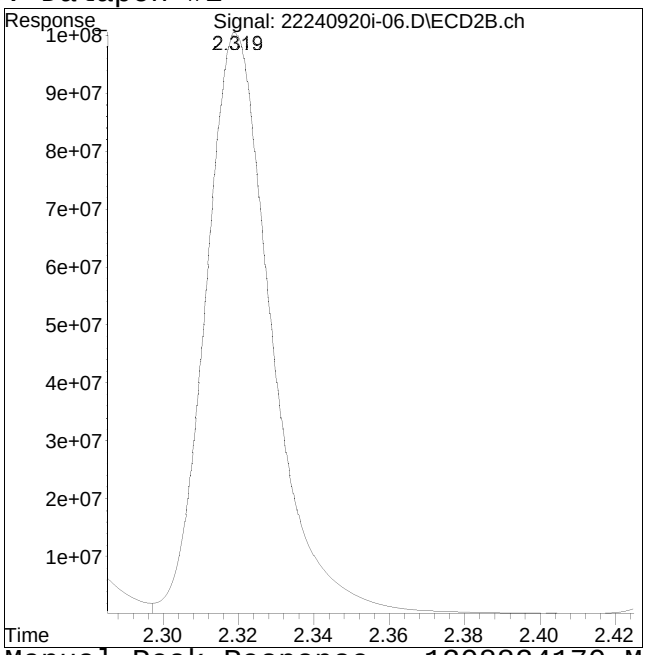

Original Peak Response = 1852215748 Manual Peak Response = 1855118784 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #15: Dalapon #2



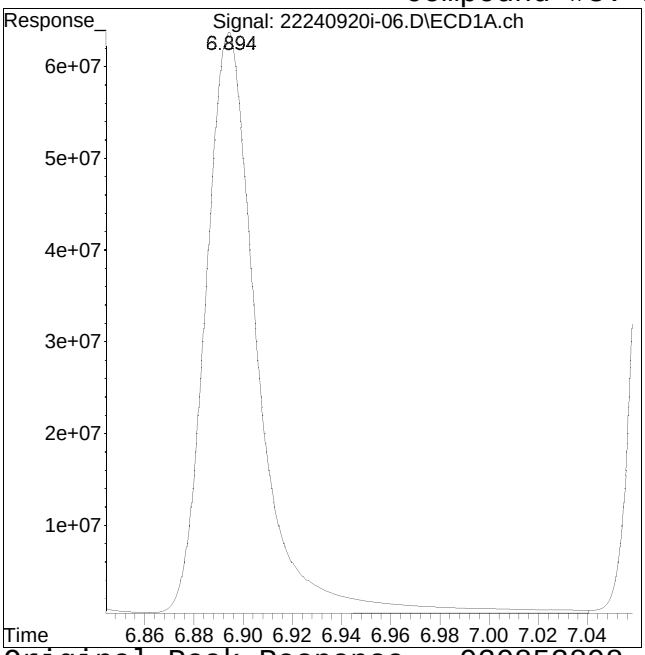




Original Peak Response = 1220866172 Manual Peak Response = 1208824170 M4
M4 = Poor automated baseline construction.

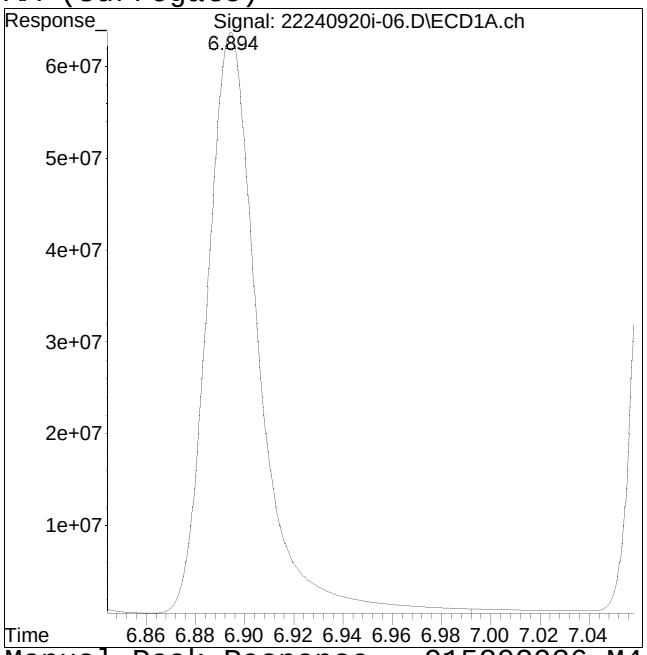
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #3: DCAA (surrogate)




Original Peak Response = 930853898



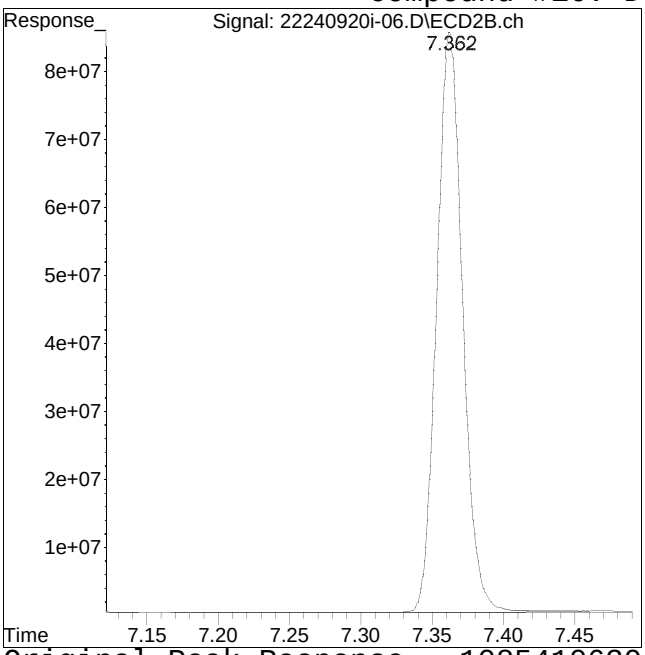

Manual Peak Response = 915202936 M4

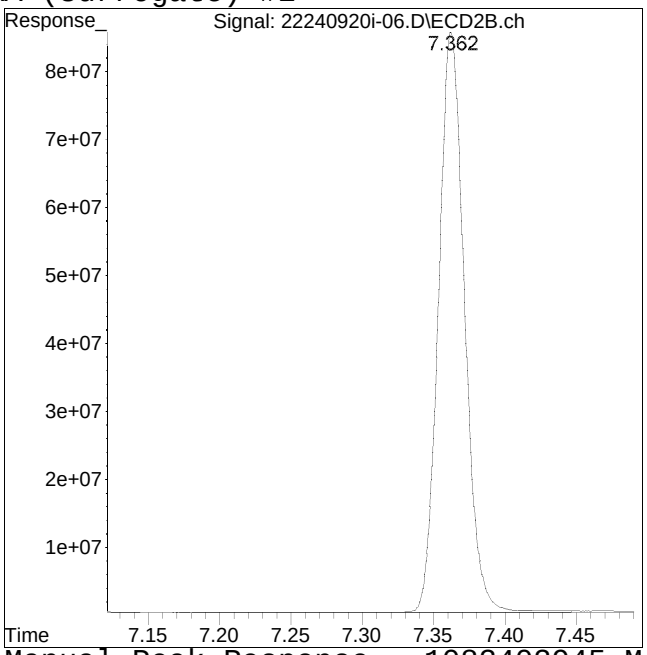
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #16: DCAA (surrogate) #2



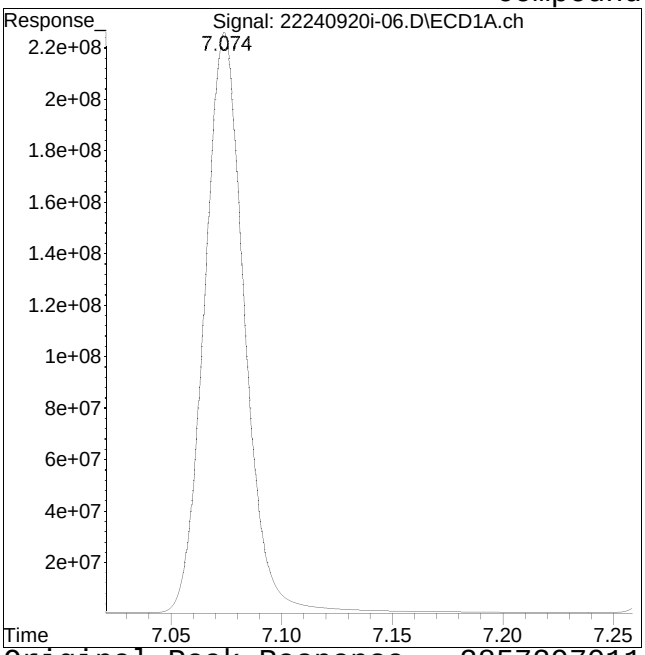



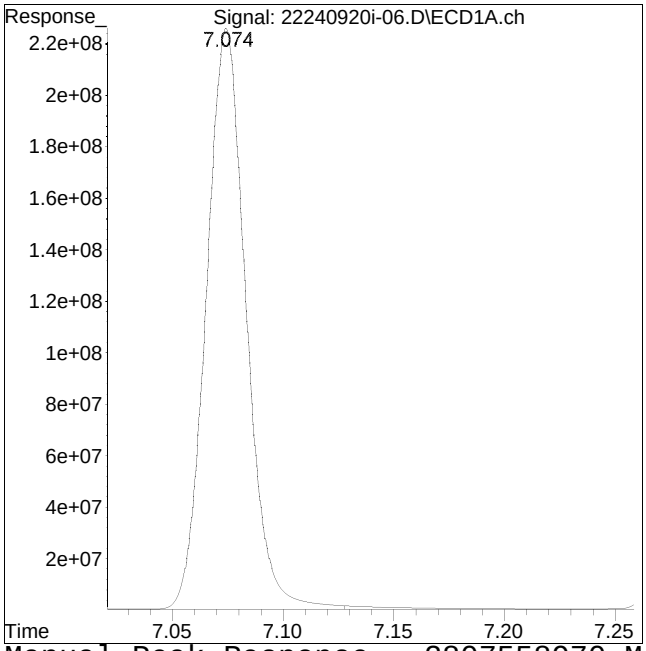

Original Peak Response = 1085410630 Manual Peak Response = 1083403945 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #4: Dicamba



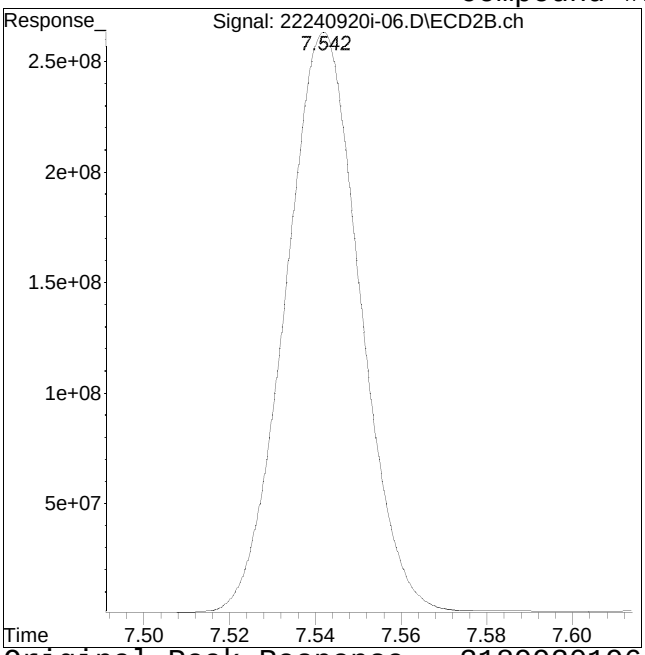



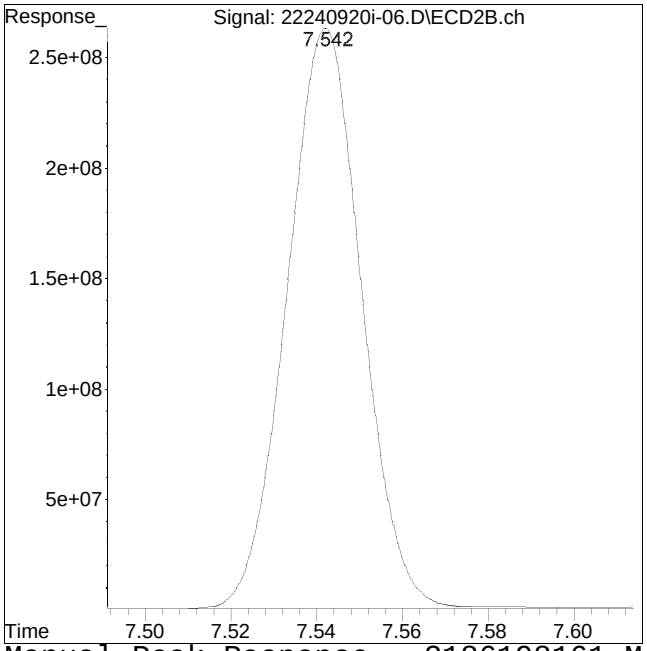

Original Peak Response = 2857297011 Manual Peak Response = 2807558970 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #17: Dicamba #2



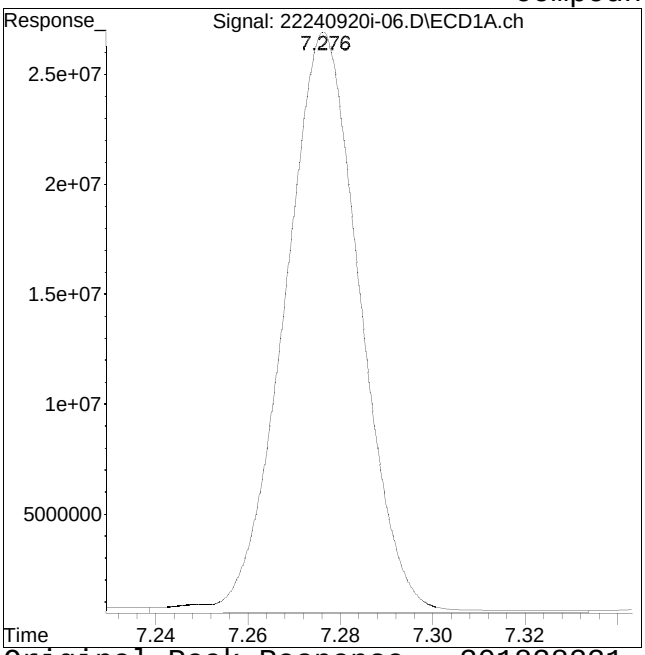



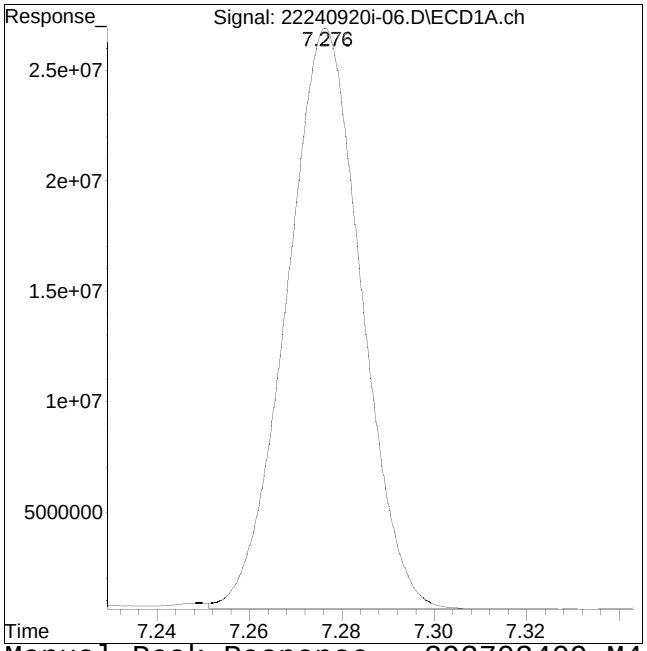

Original Peak Response = 3189920196 Manual Peak Response = 3186198161 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #5: MCPP



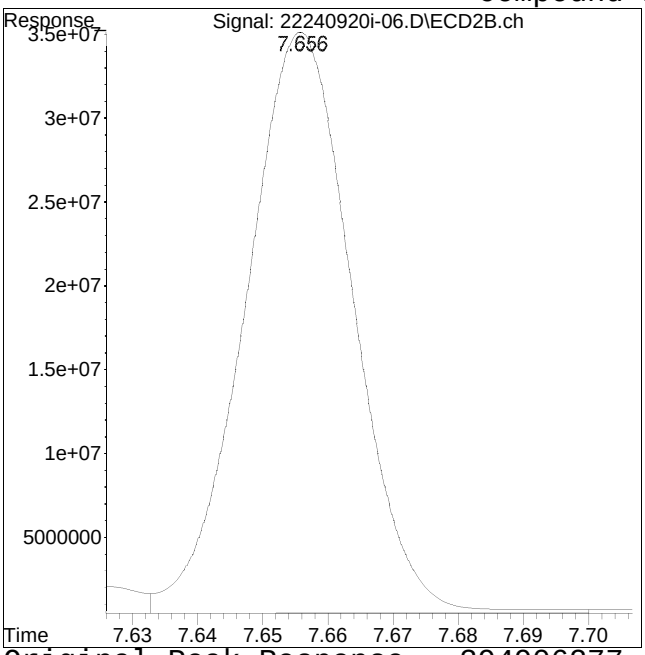



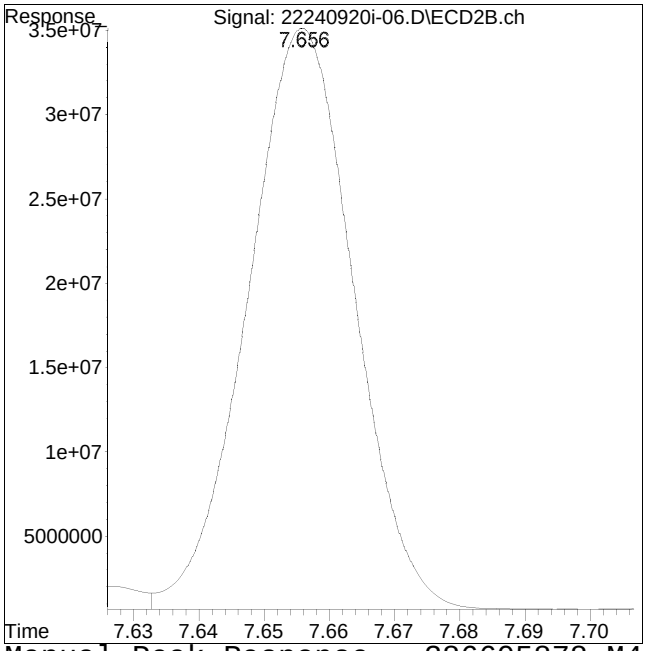

Original Peak Response = 301838331 Manual Peak Response = 293703409 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #18: MCPP #2



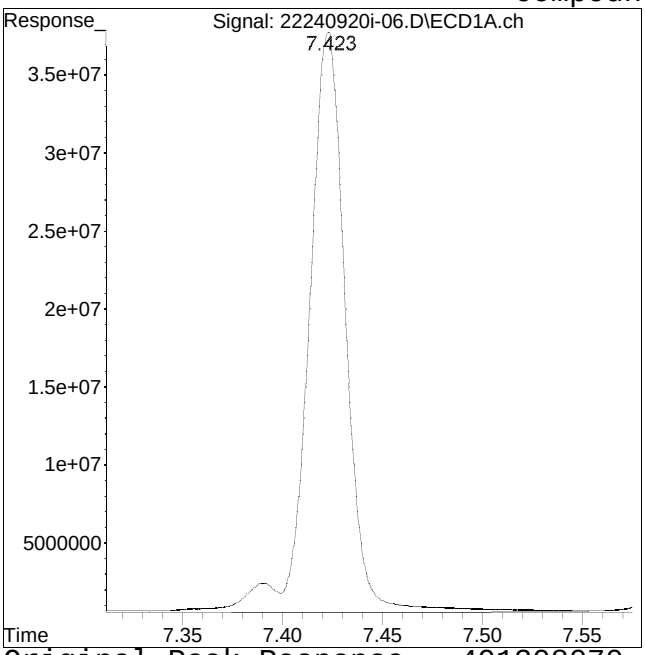



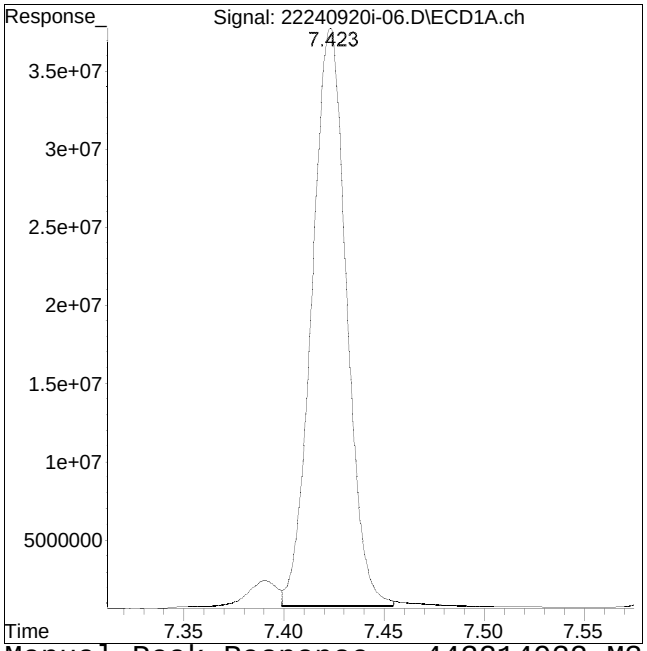

Original Peak Response = 394906277 Manual Peak Response = 386605878 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #6: MCPA



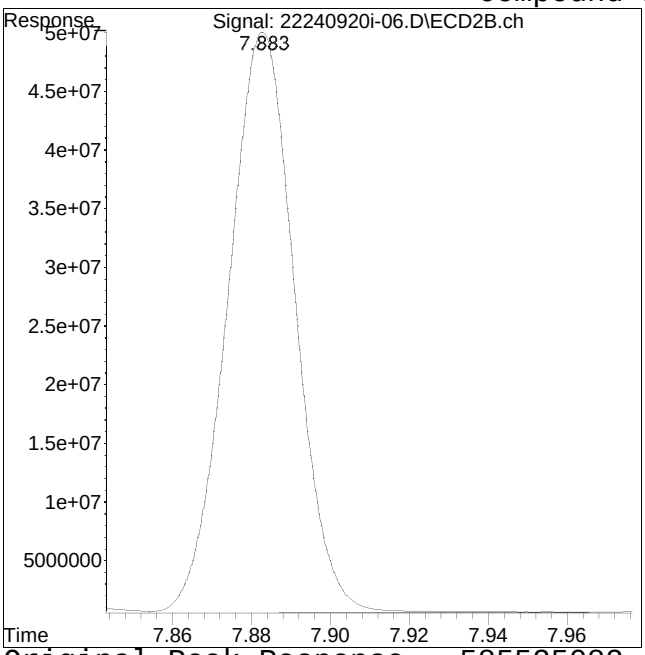



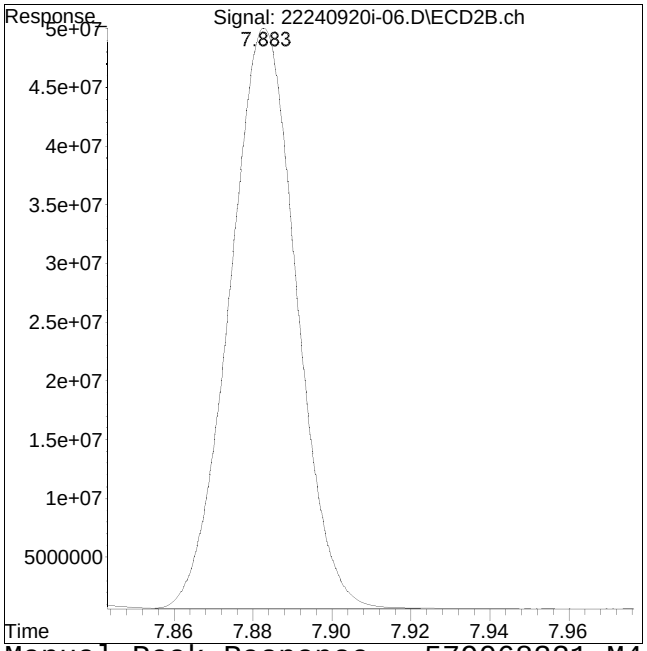

Original Peak Response = 491308070 Manual Peak Response = 443214932 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #19: MCPA #2



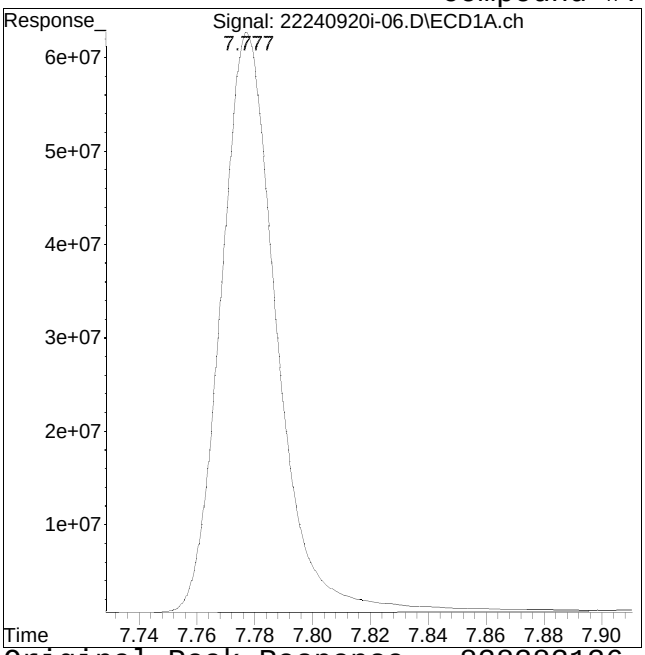




Original Peak Response = 585525082 Manual Peak Response = 579068321 M4
M4 = Poor automated baseline construction.

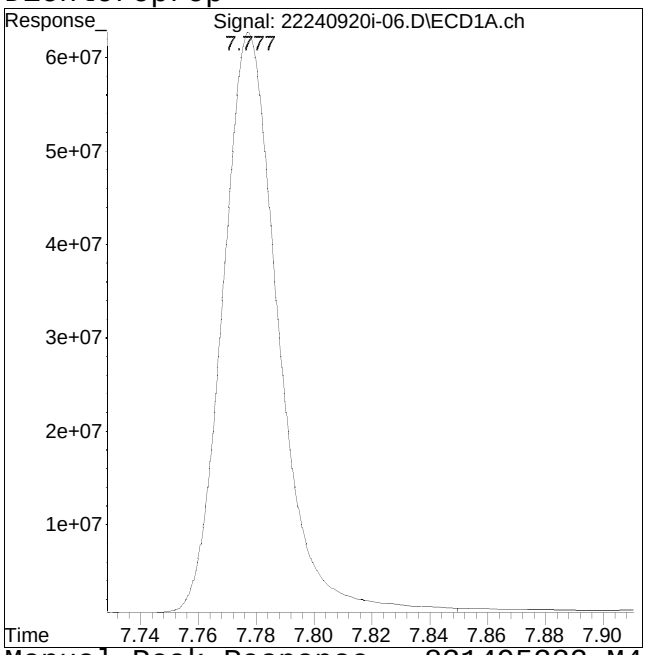
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

## Compound #7: Dichloroprop




Original Peak Response = 838383136



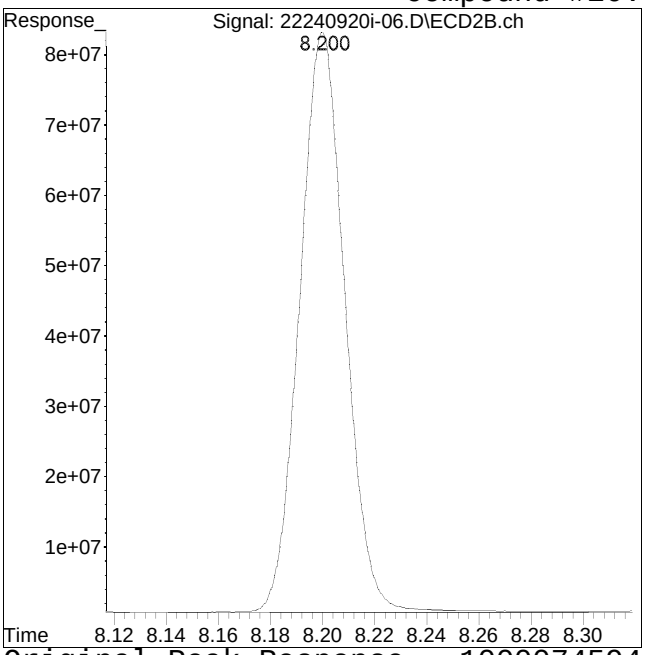

Manual Peak Response = 831495322 M4

M4 = Poor automated baseline construction.

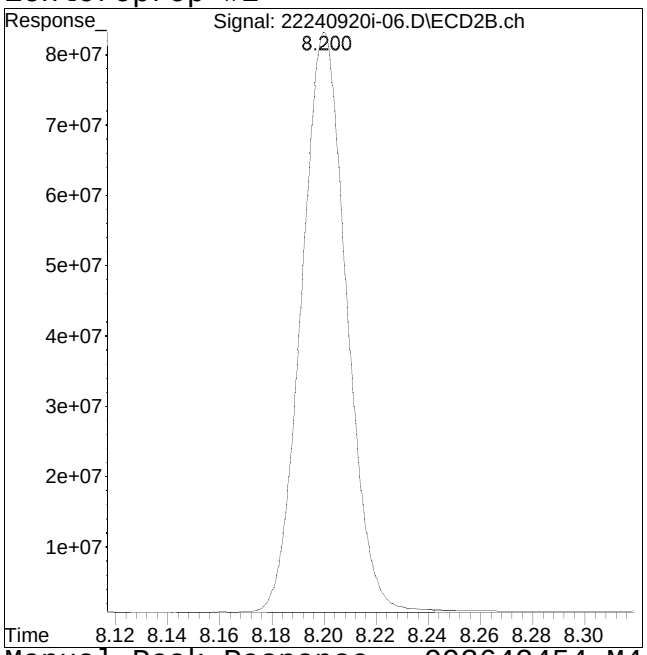
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

## Compound #20: Dichloroprop #2




Original Peak Response = 1000074594



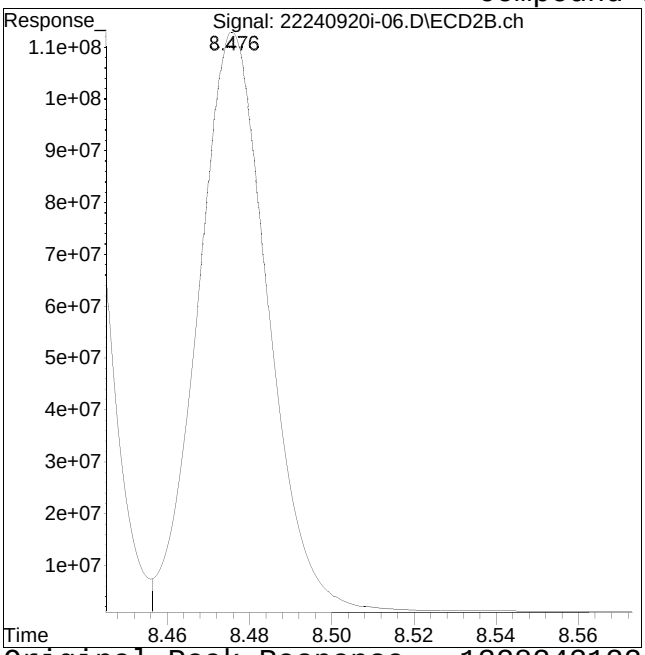

Manual Peak Response = 993642454 M4

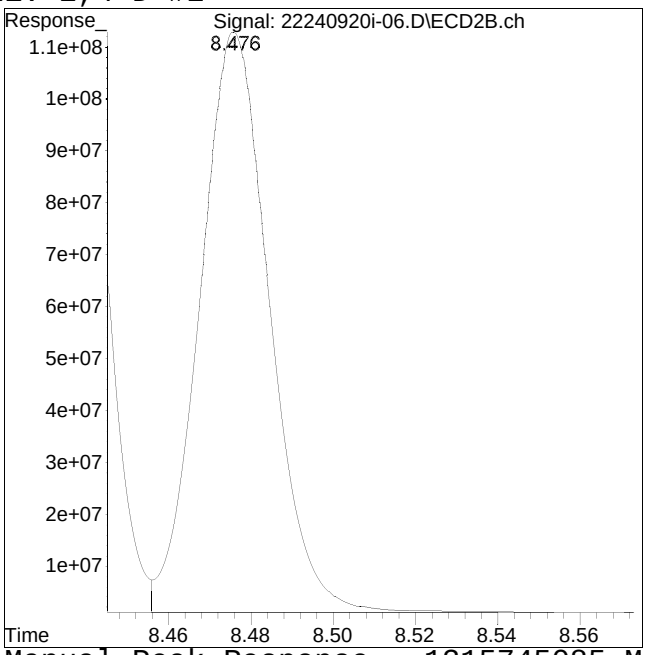
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #21: 2,4-D #2



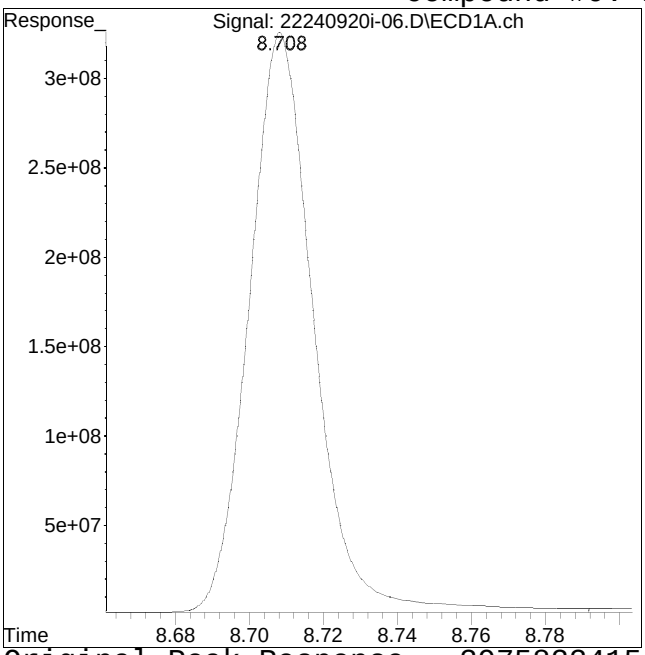



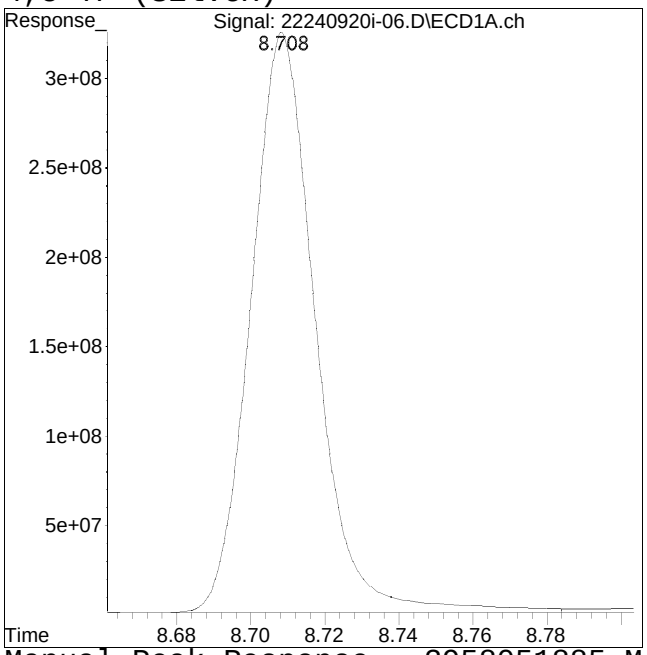

Original Peak Response = 1328243122 Manual Peak Response = 1315745085 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #9: 2,4,5-TP (Silvex)



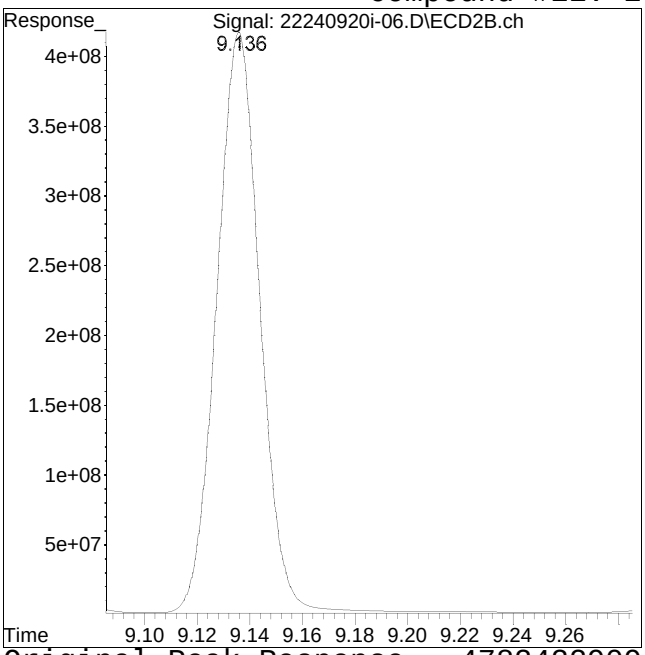



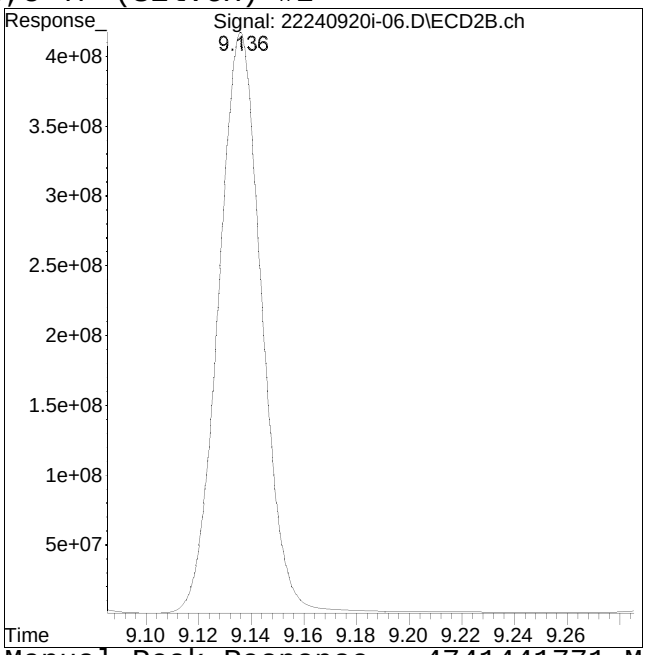

Original Peak Response = 3975823415 Manual Peak Response = 3958051885 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #22: 2,4,5-TP (Silvex) #2



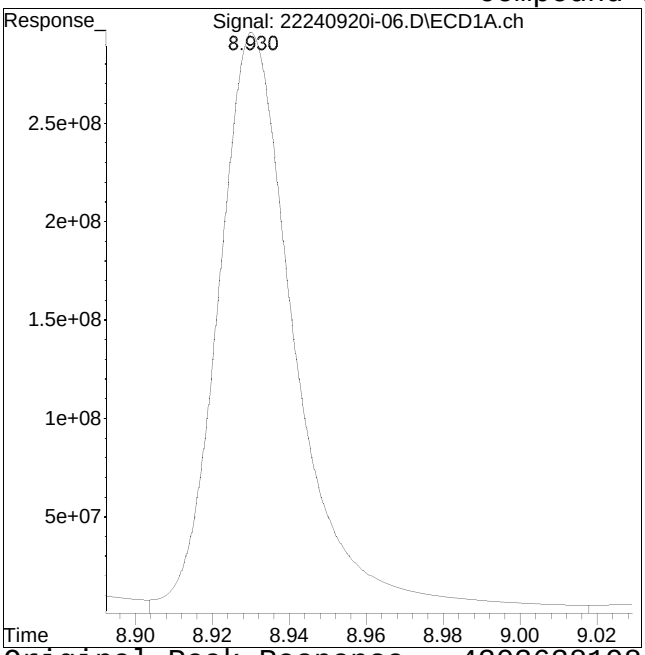



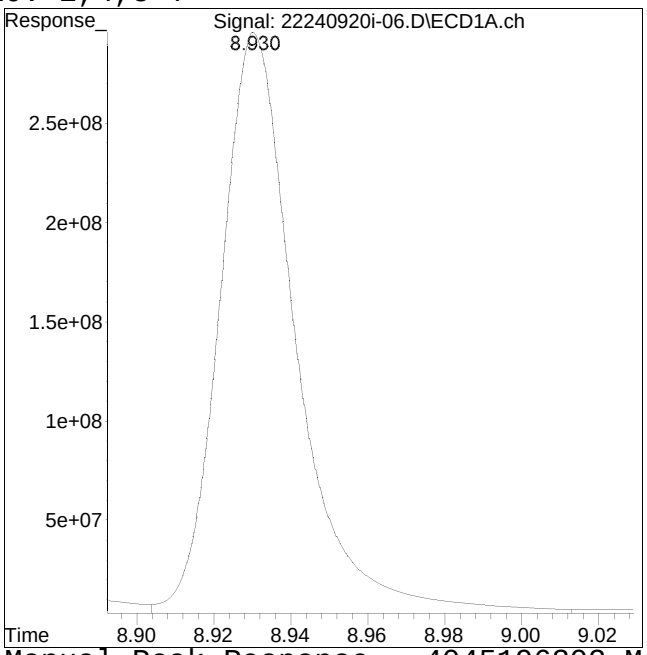

Original Peak Response = 4782422909 Manual Peak Response = 4741441771 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #10: 2,4,5-T



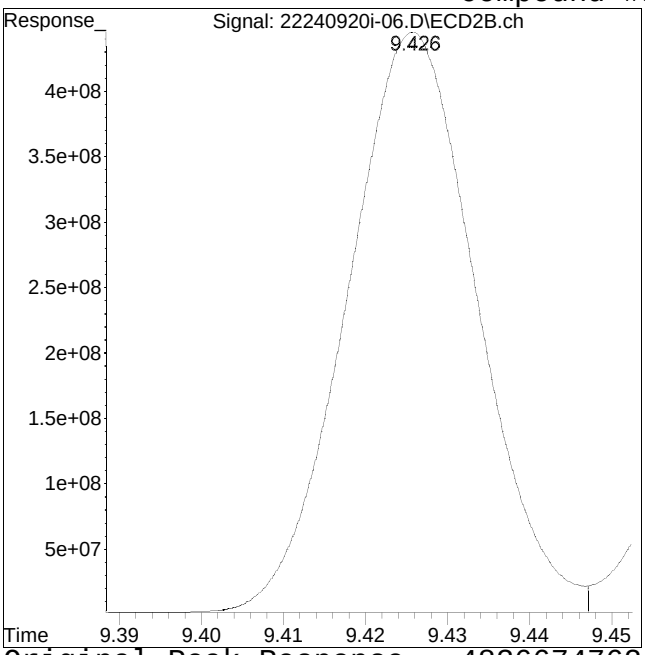



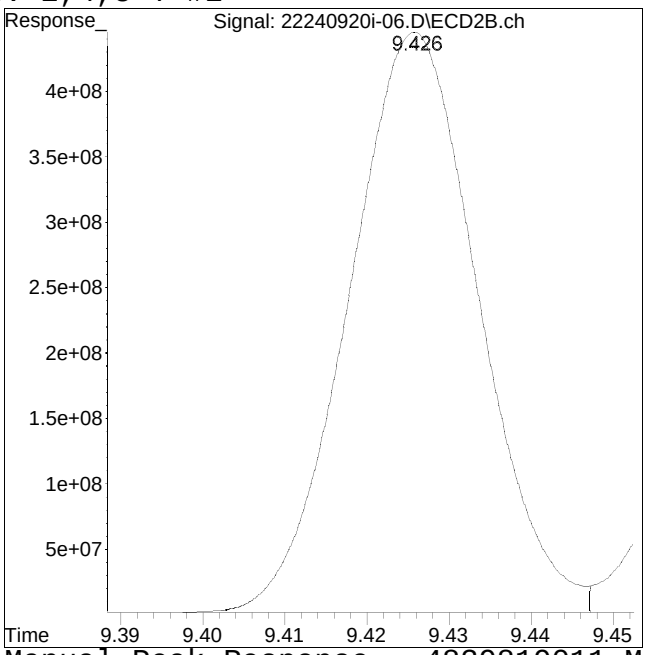

Original Peak Response = 4203638198 Manual Peak Response = 4045196302 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #23: 2,4,5-T #2



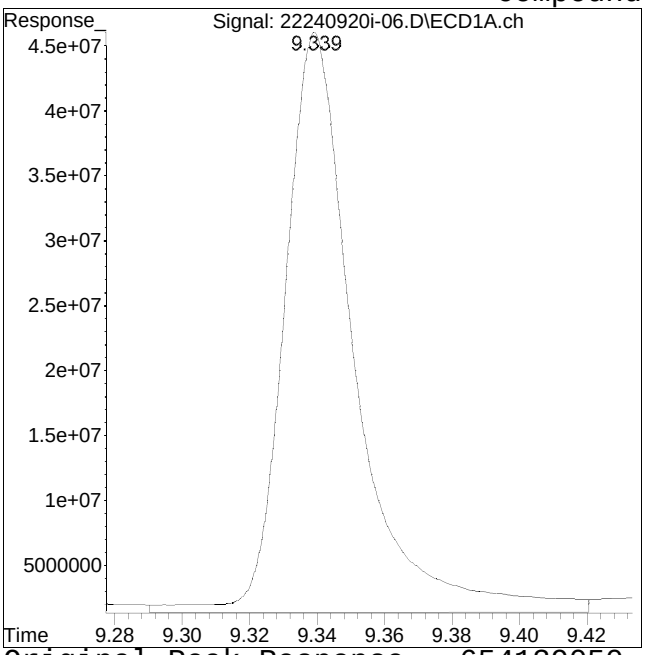



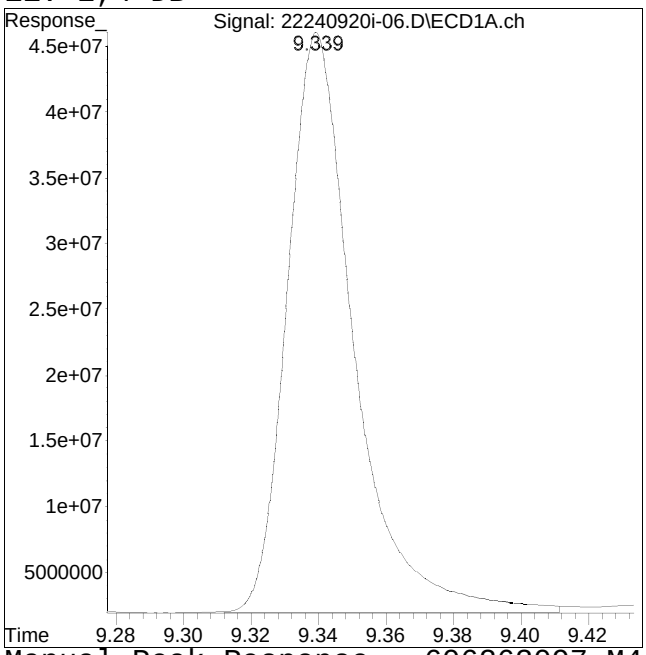

Original Peak Response = 4836674762 Manual Peak Response = 4839819011 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #11: 2,4-DB



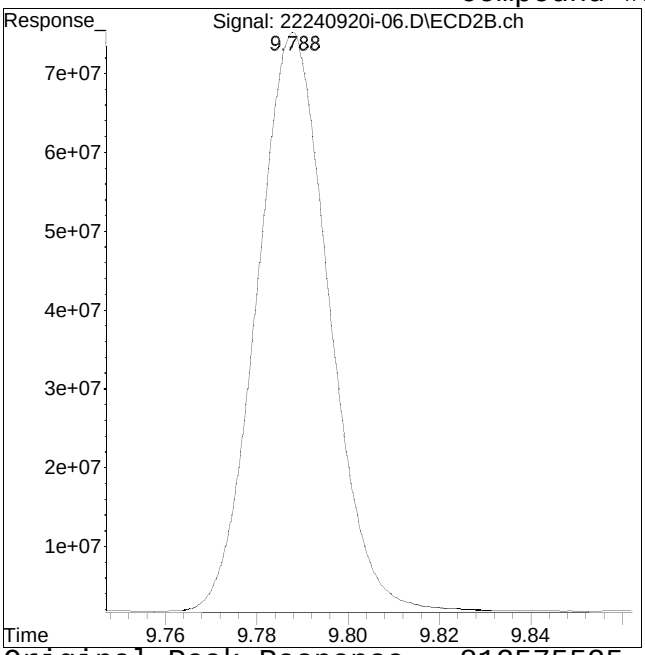



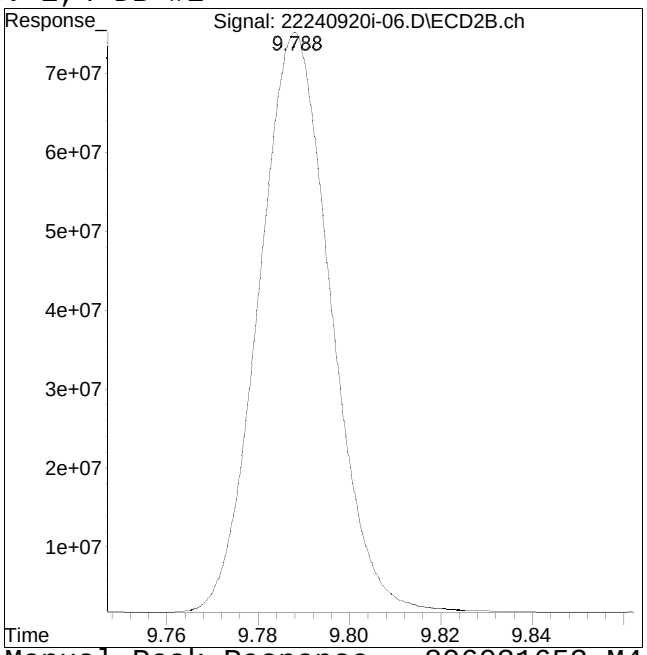

Original Peak Response = 654139050 Manual Peak Response = 606263097 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #24: 2,4-DB #2



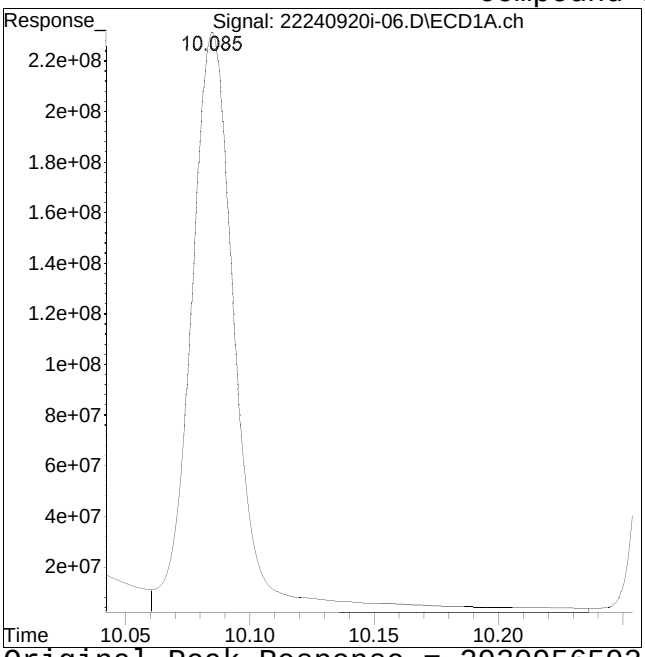



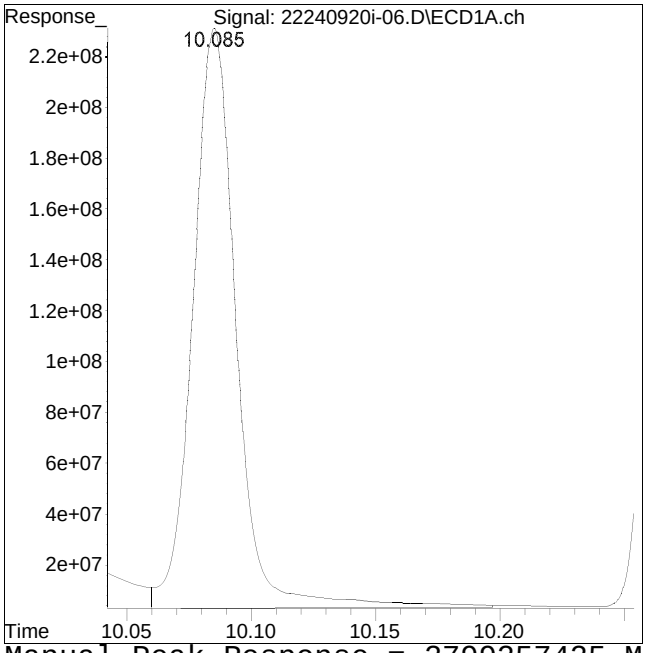

Original Peak Response = 812575525 Manual Peak Response = 806031653 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #12: Dinoseb



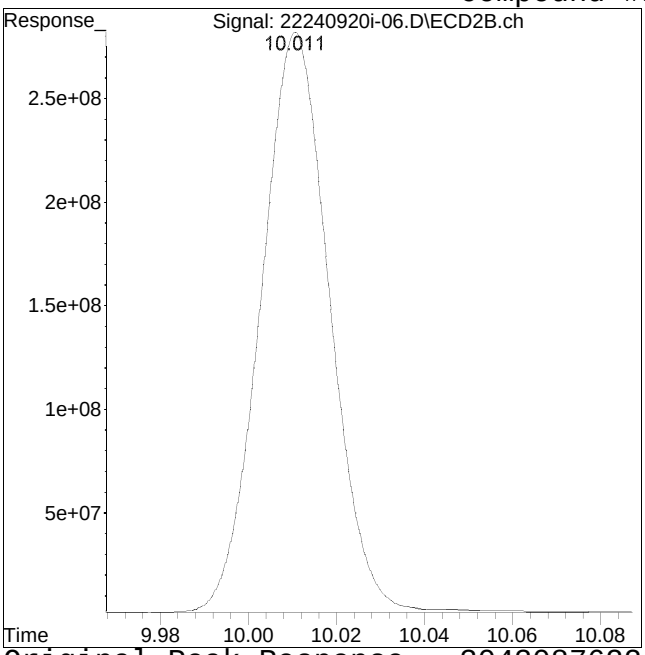



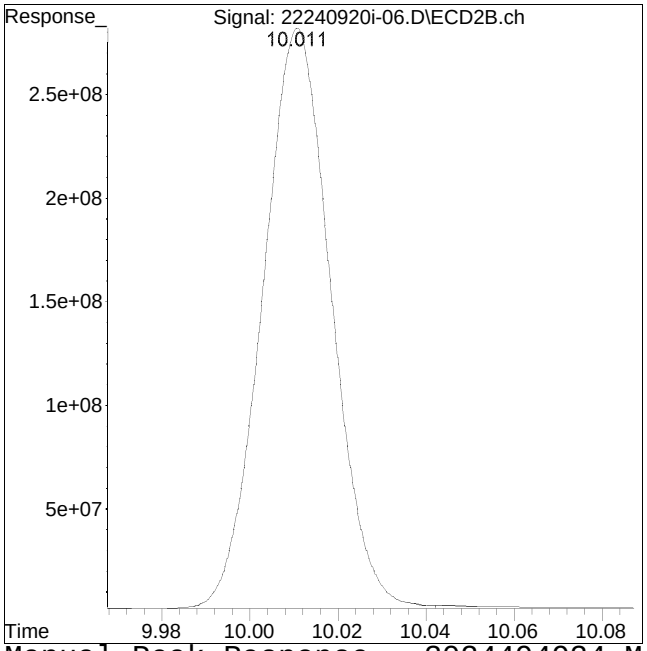

Original Peak Response = 2930956592 Manual Peak Response = 2799257425 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-06.D Operator : pest22:akm
Date Inj'd : 9/20/2024 12:57 pm Instrument : Pest22
Sample : il5herb,42e,,pp 11629 L1/1Quant Date : 9/21/2024 8:18 am

Compound #25: Dinoseb #2




Original Peak Response = 3043087622 Manual Peak Response = 3024494934 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:15 pm
Operator : pest22:akm
Sample : il6herb,42e,,pp 11628 L2/200
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:22:56 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:22:48 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.436 | 8.435 | 1438.5E6 | 1699.0E6 | 0.250M4 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.893 | 7.361 | 1579.8E6 | 1885.6E6 | 1.604M4 | 1.644M4 |
| | | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 320.80%# | 328.80%# |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.326 | 2.321 | 2051.2E6 | 2176.5E6 | 1.584M4 | 1.634M4 |
| 4) | t | Dicamba | 7.074 | 7.541 | 5099.0E6 | 5716.3E6 | 1.686M4 | 1.717M4 |
| 5) | t | MCPP | 7.279 | 7.658 | 555.6E6 | 731.0E6 | 189.132M4 | 195.725M4 |
| 6) | t | MCPA | 7.425 | 7.885 | 805.6E6 | 1049.9E6 | 167.836M4 | 174.202M4 |
| 7) | t | Dichloroprop | 7.776 | 8.199 | 1445.0E6 | 1739.5E6 | 1.595M4 | 1.649M4 |
| 8) | t | 2,4-D | 7.988 | 8.475 | 1880.9E6 | 2368.0E6 | 1.675 | 1.722M4 |
| 9) | t | 2,4,5-TP (Si | 8.707 | 9.135 | 7054.9E6 | 8507.5E6 | 1.694M4 | 1.742M4 |
| 10) | t | 2,4,5-T | 8.929 | 9.425 | 7389.1E6 | 8840.9E6 | 1.738M4 | 1.805M4 |
| 11) | t | 2,4-DB | 9.337 | 9.787 | 1082.2E6 | 1447.5E6 | 1.731M4 | 1.803M4 |
| 12) | t | Dinoseb | 10.085 | 10.010 | 5021.9E6 | 5486.8E6 | 1.739M4 | 1.768M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:15 pm
Operator : pest22:akm
Sample : il6herb,42e,,pp 11628 L2/200
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:22:56 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:22:48 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

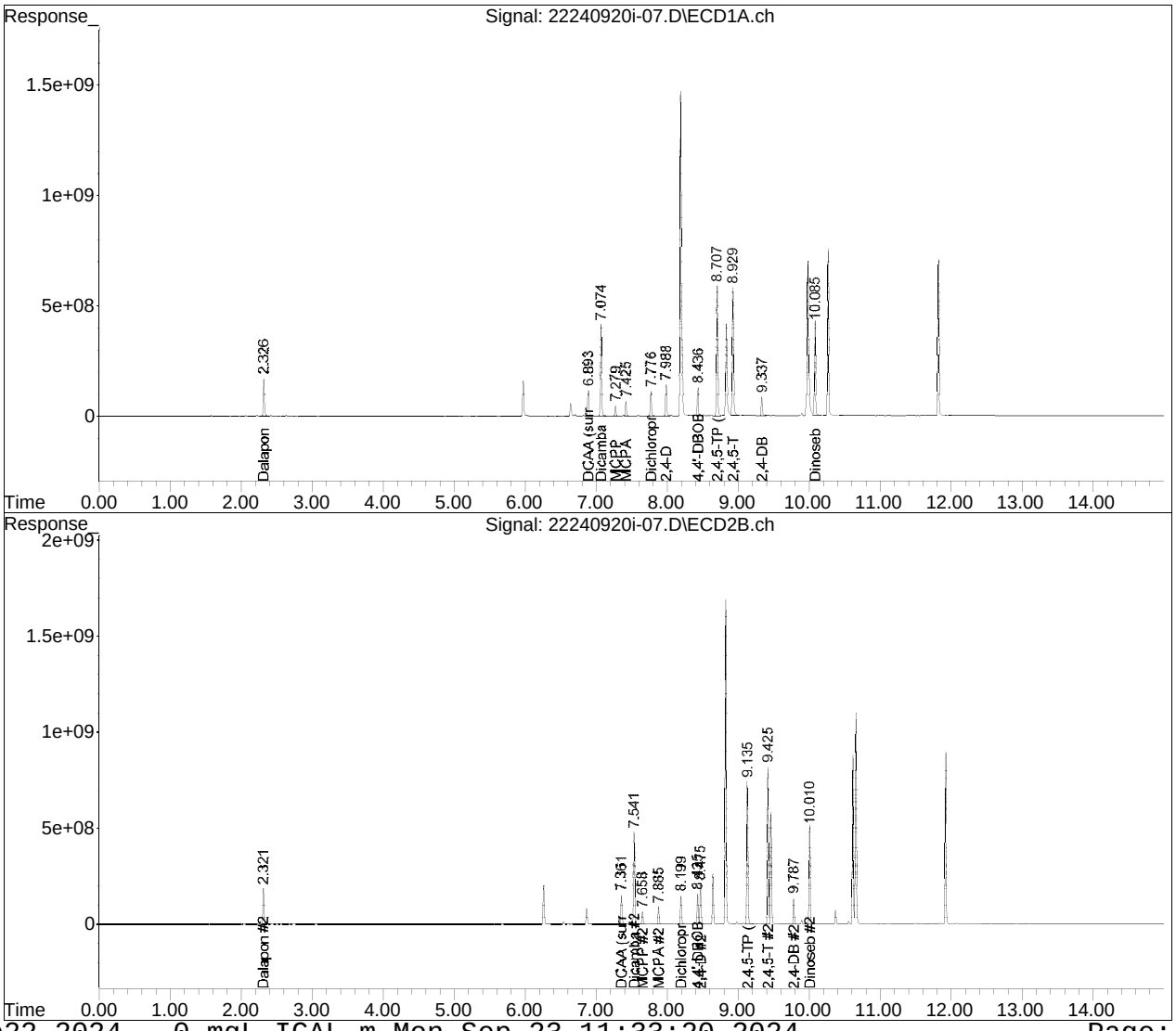
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:15 pm
Operator : pest22:akm
Sample : il6herb,42e,,pp 11628 L2/200
Misc : WG1975124, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 21 08:22:56 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Sat Sep 21 08:22:48 2024
Response via : Initial Calibration
Integrator: ChemStation

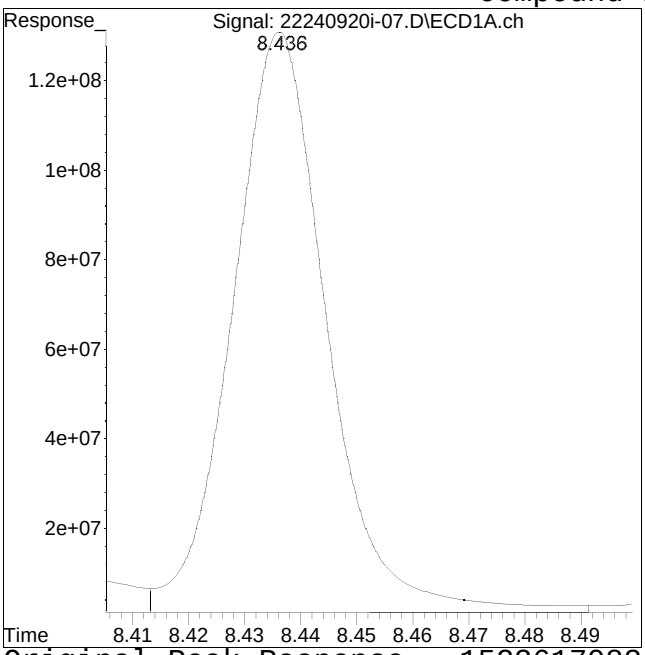
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

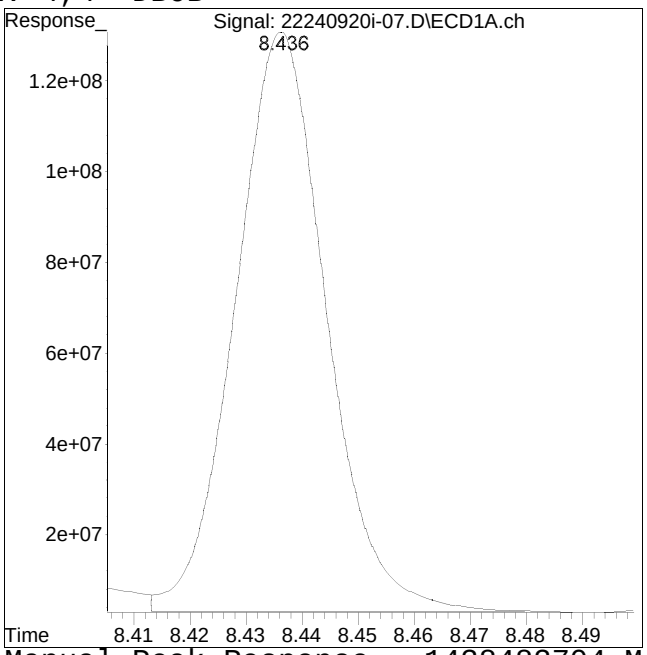


# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #1: 4,4'-DBOB



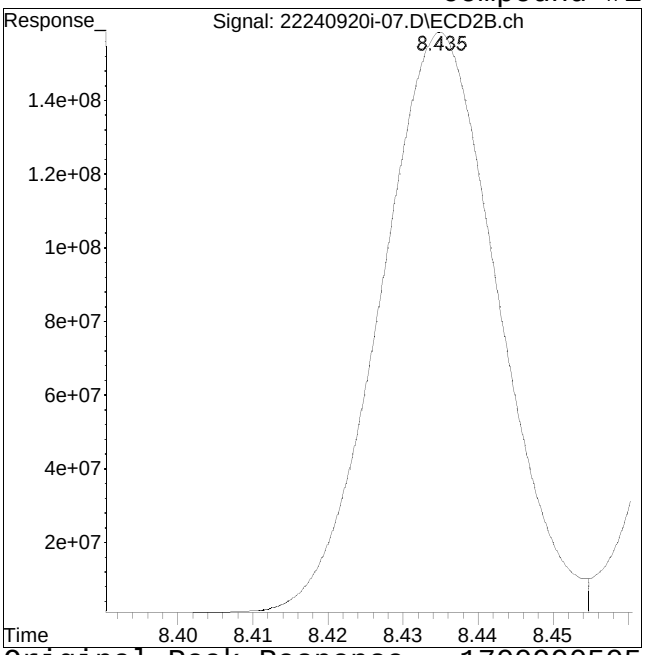



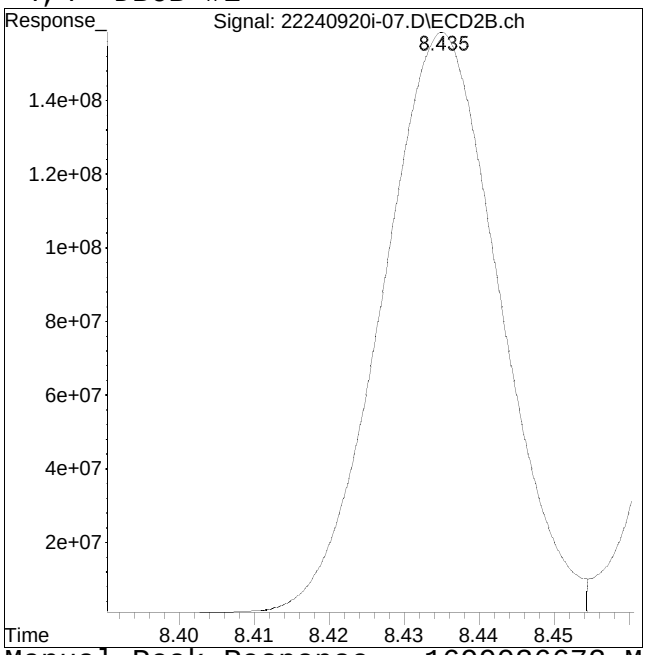

Original Peak Response = 1523617083 Manual Peak Response = 1438483704 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #14: 4,4'-DBOB #2



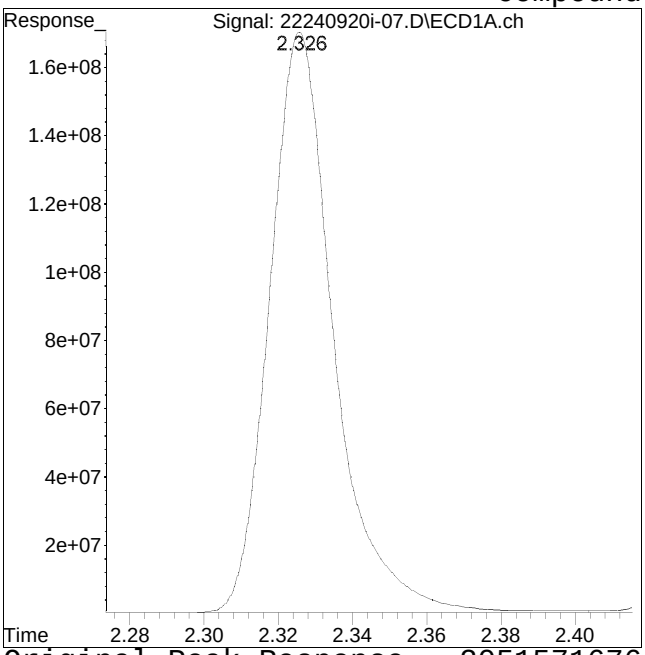




Original Peak Response = 1700990505 Manual Peak Response = 1699036672 M4
M4 = Poor automated baseline construction.

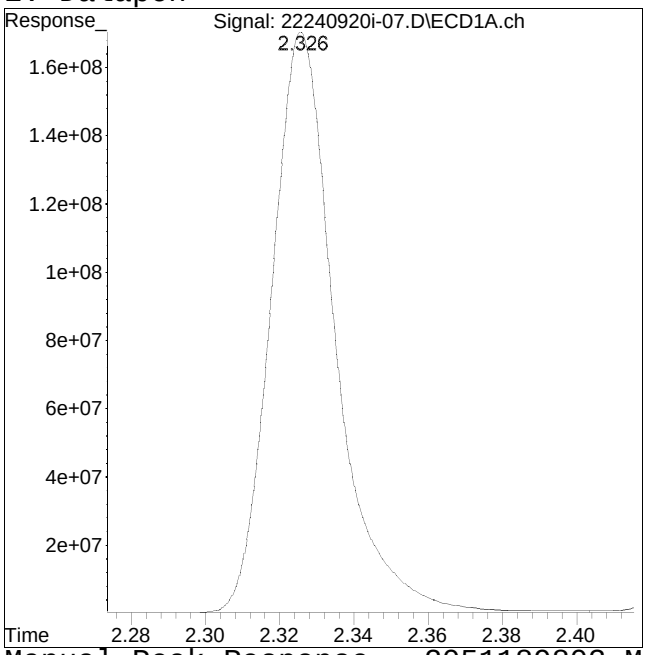
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #2: Dalapon




Original Peak Response = 2051571676

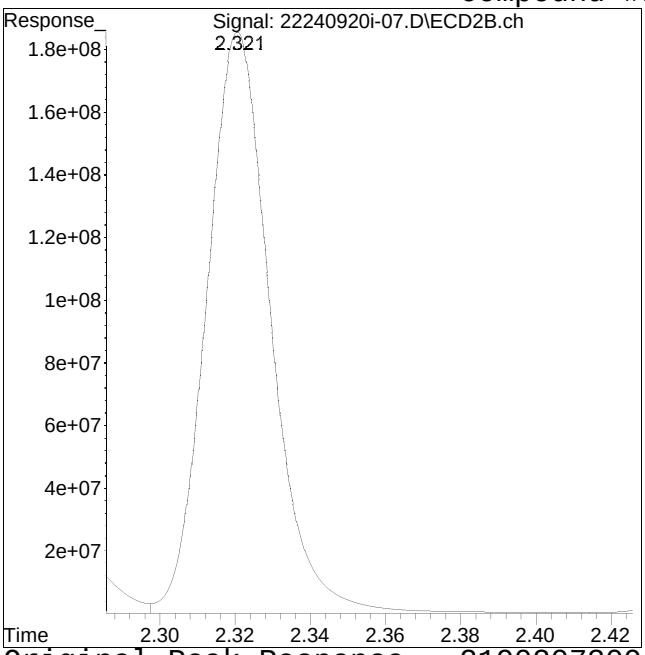


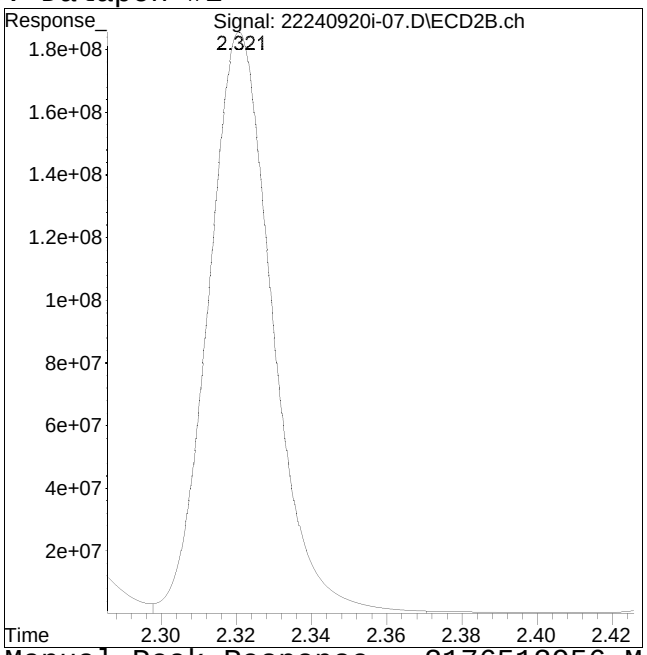

Manual Peak Response = 2051189803 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #15: Dalapon #2



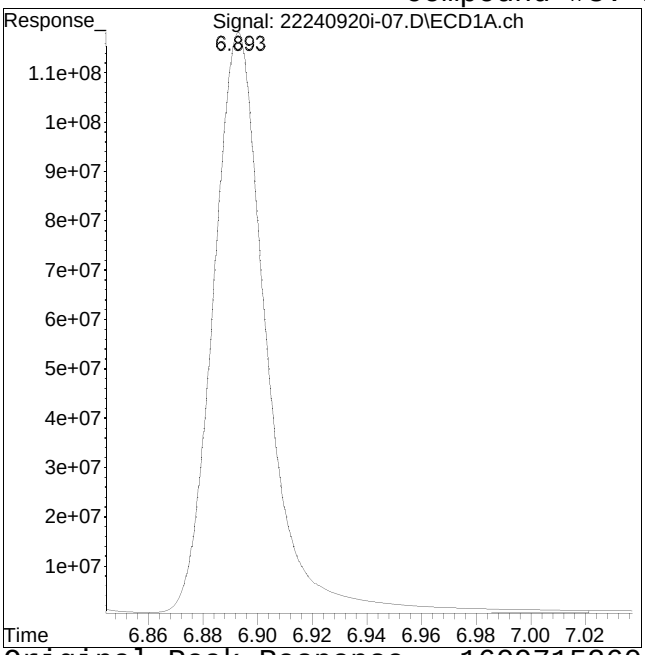



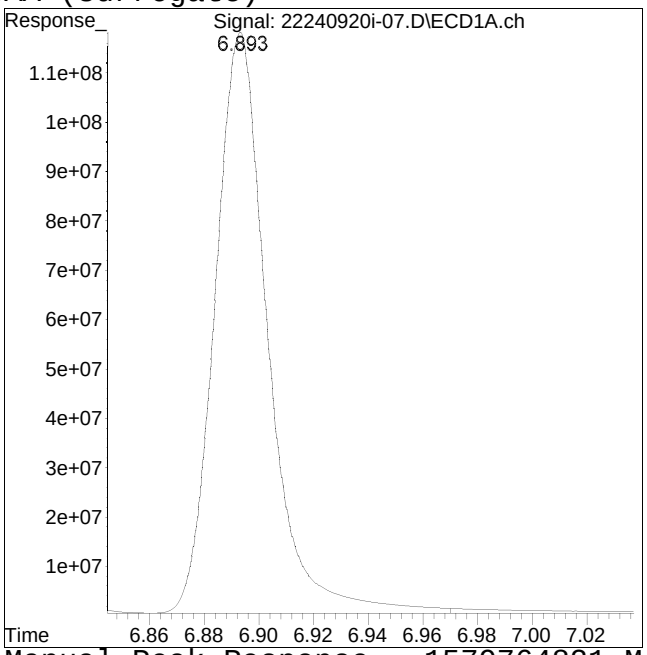

Original Peak Response = 2190207309 Manual Peak Response = 2176513956 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #3: DCAA (surrogate)



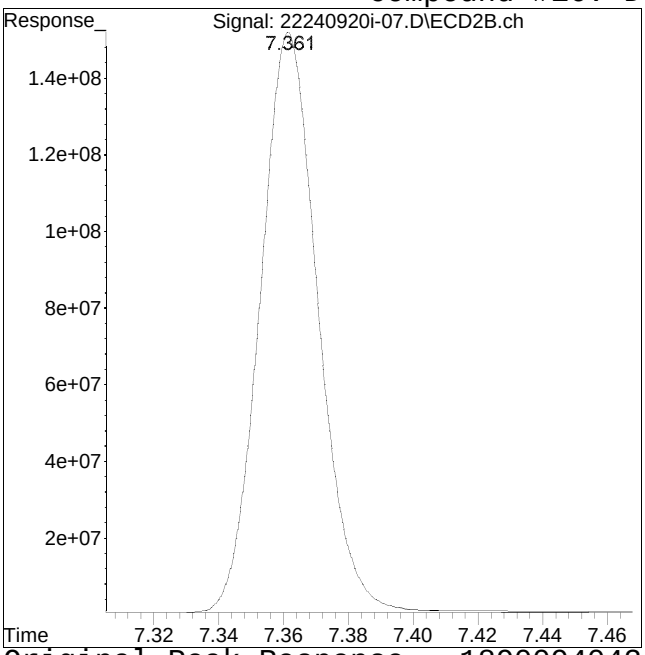



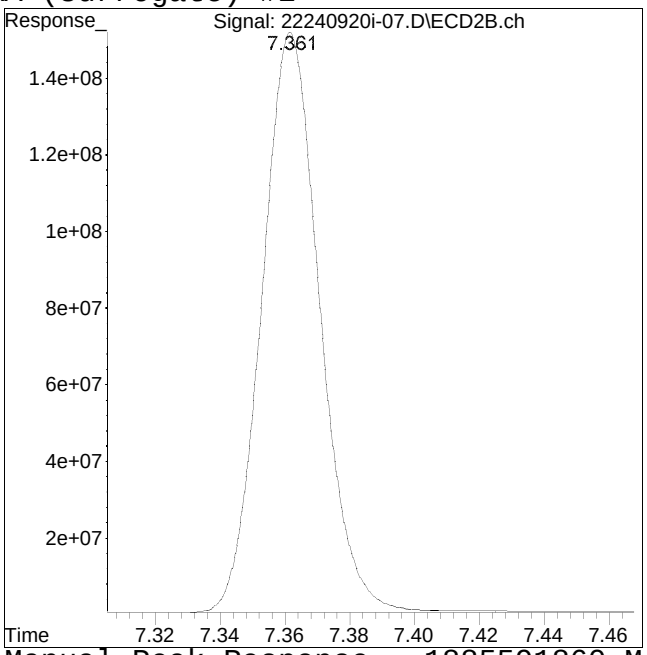

Original Peak Response = 1609715260 Manual Peak Response = 1579764821 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #16: DCAA (surrogate) #2



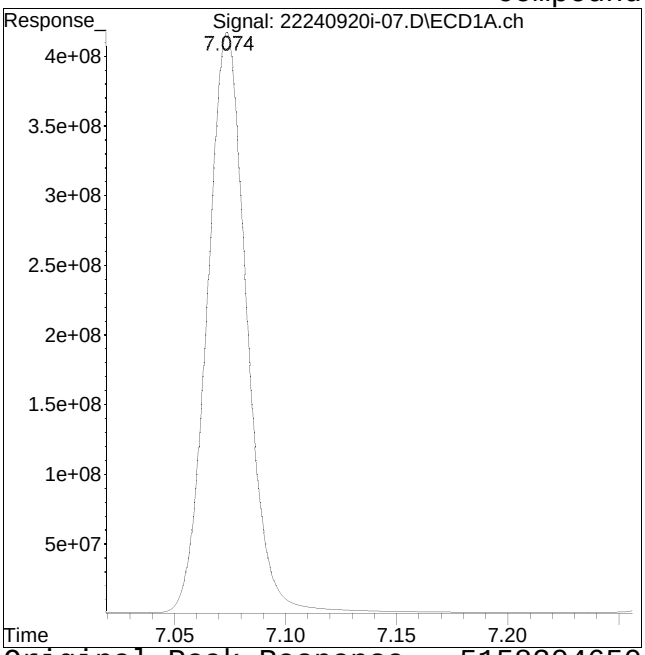



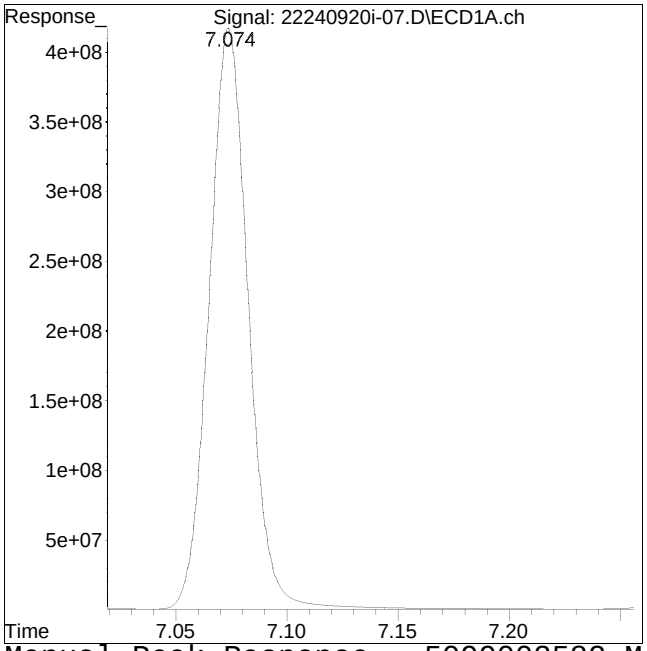

Original Peak Response = 1890094043 Manual Peak Response = 1885591860 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #4: Dicamba



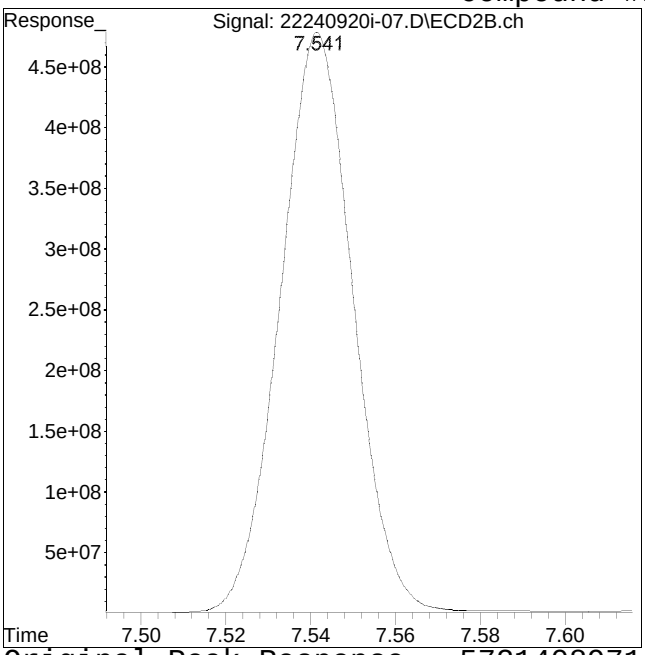



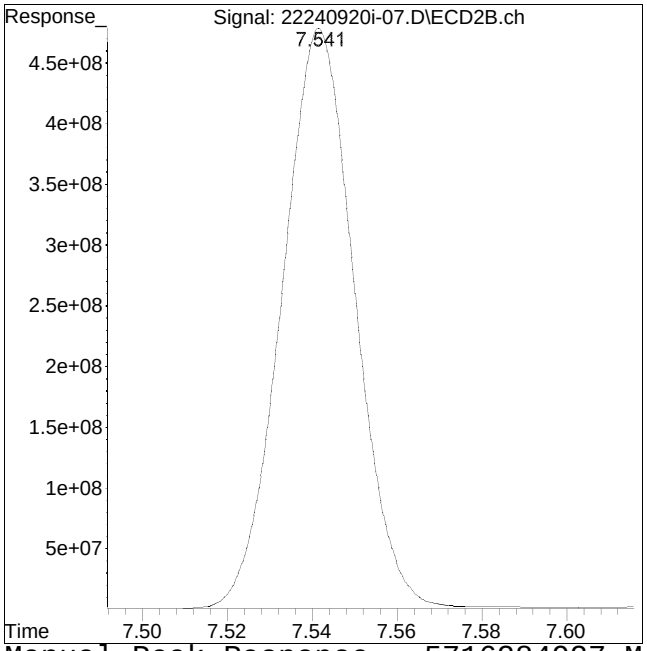

Original Peak Response = 5158304650 Manual Peak Response = 5099002582 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #17: Dicamba #2



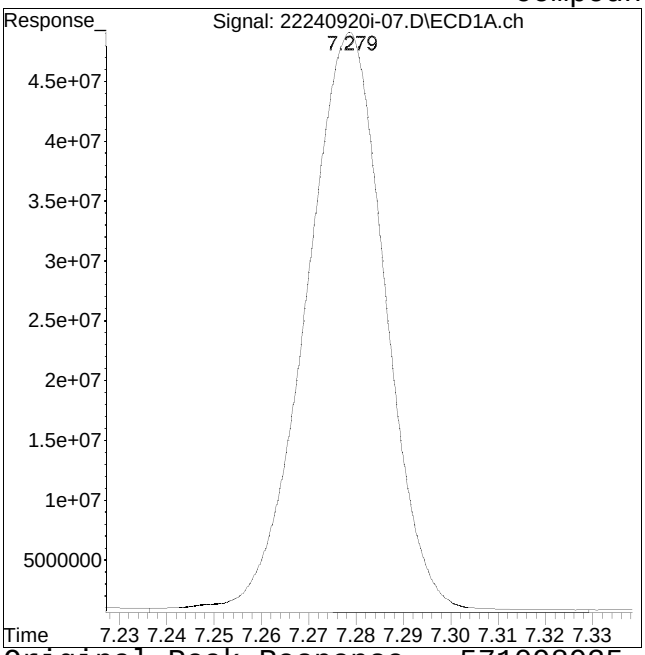



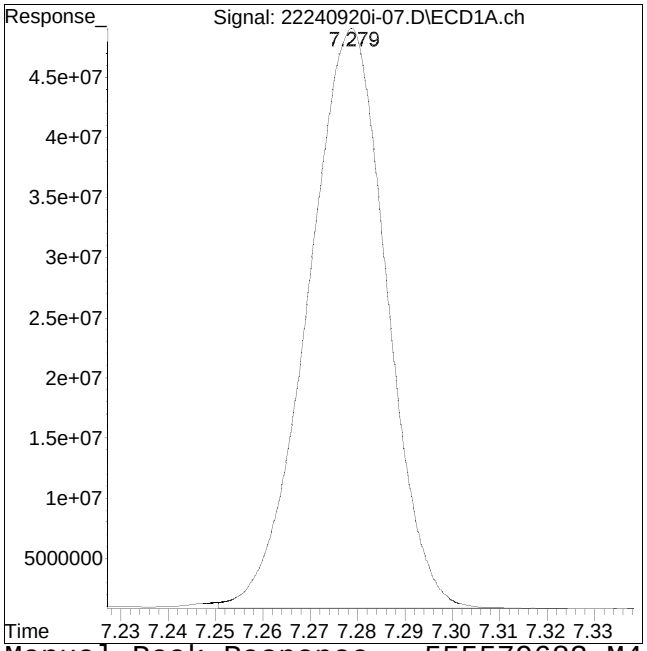

Original Peak Response = 5721408971 Manual Peak Response = 5716284927 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #5: MCPP



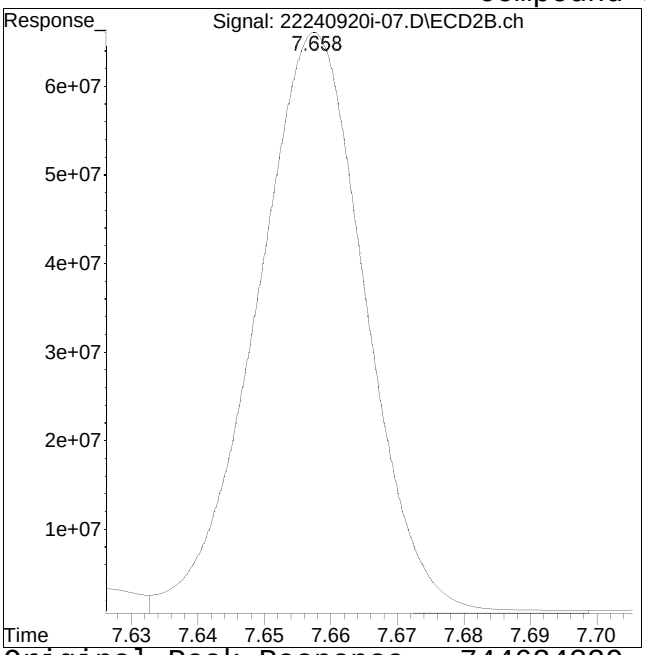



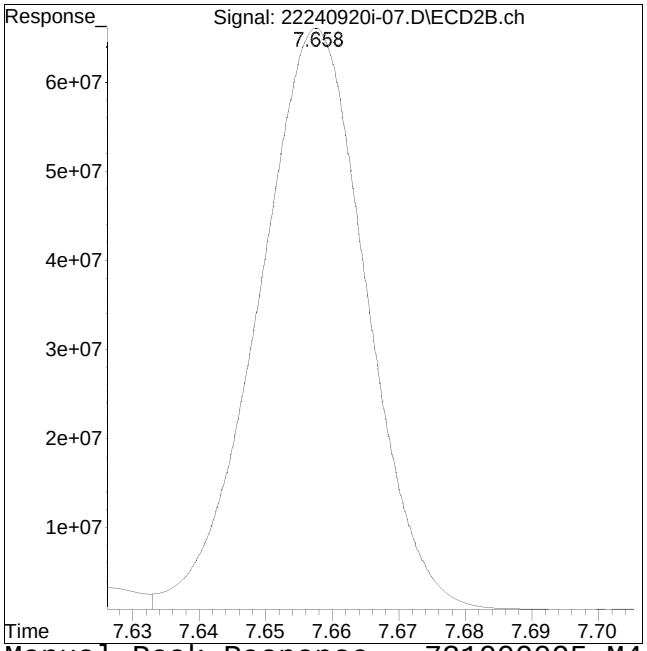

Original Peak Response = 571098935 Manual Peak Response = 555579683 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #18: MCPP #2



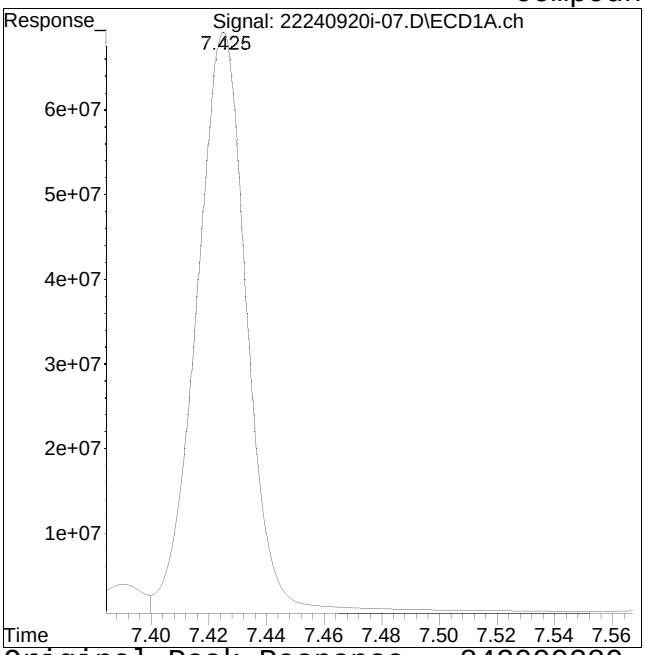




Original Peak Response = 744624339 Manual Peak Response = 731000095 M4
M4 = Poor automated baseline construction.

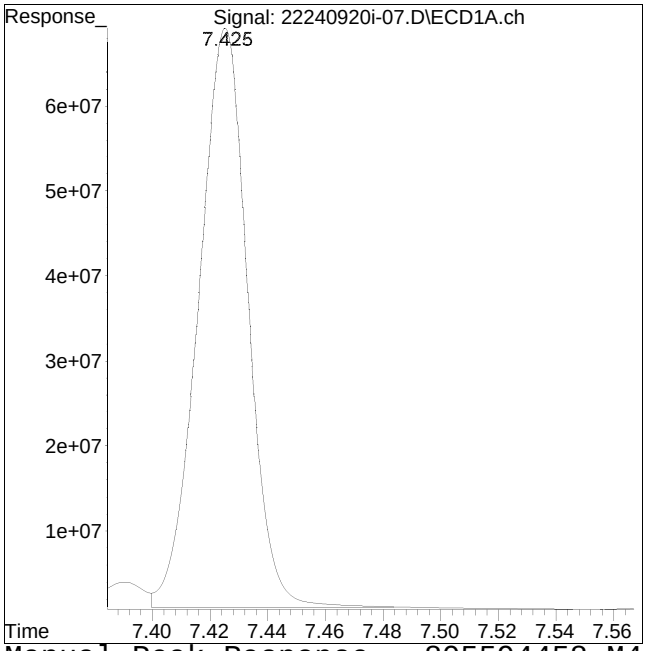
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #6: MCPA




Original Peak Response = 842009389



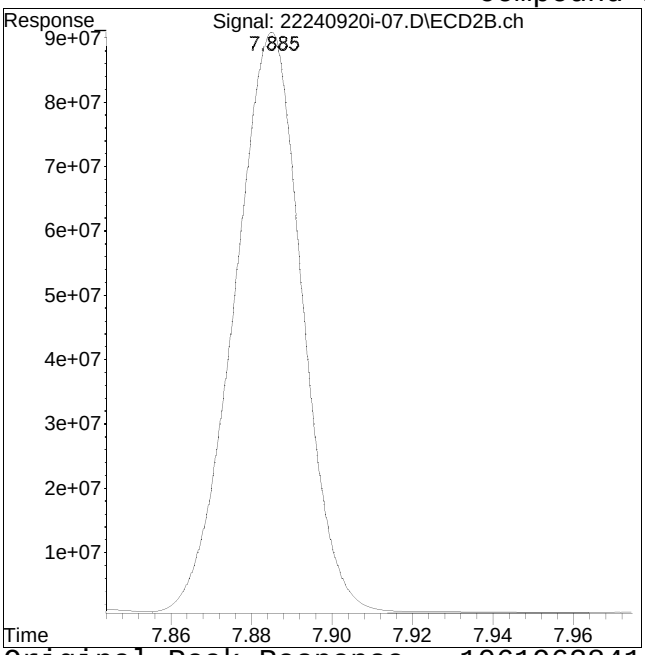

Manual Peak Response = 805594458 M4

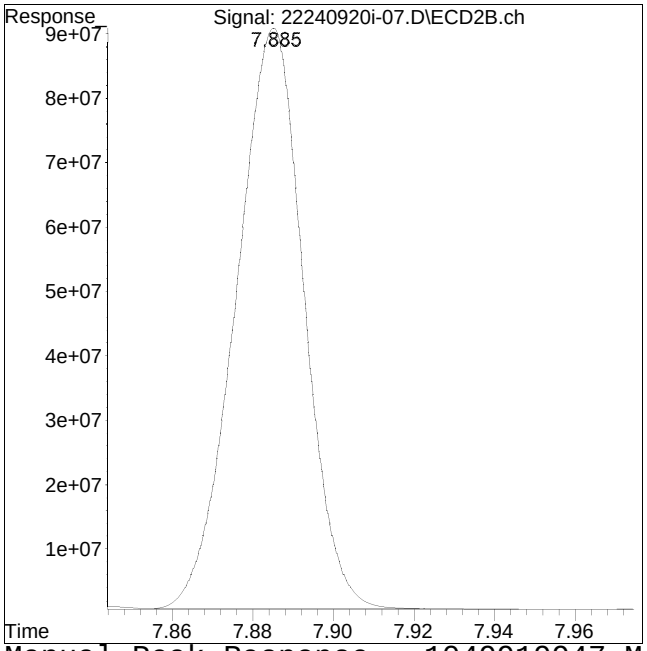
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #19: MCPA #2



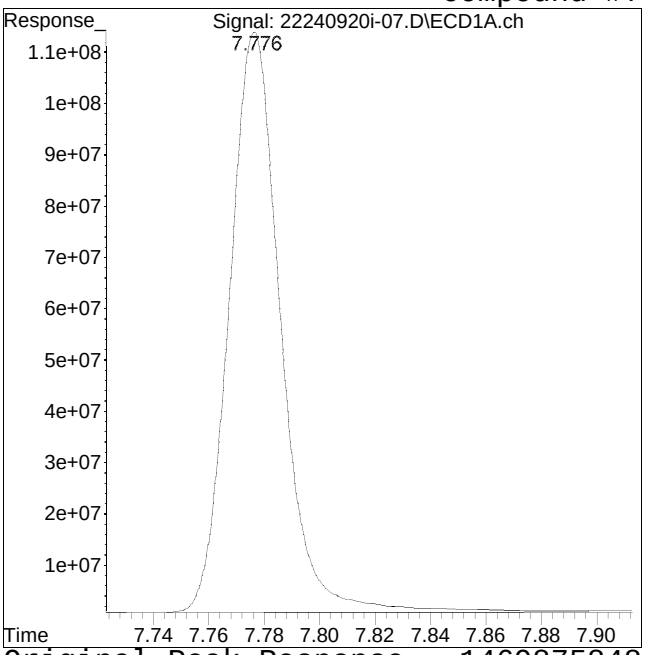



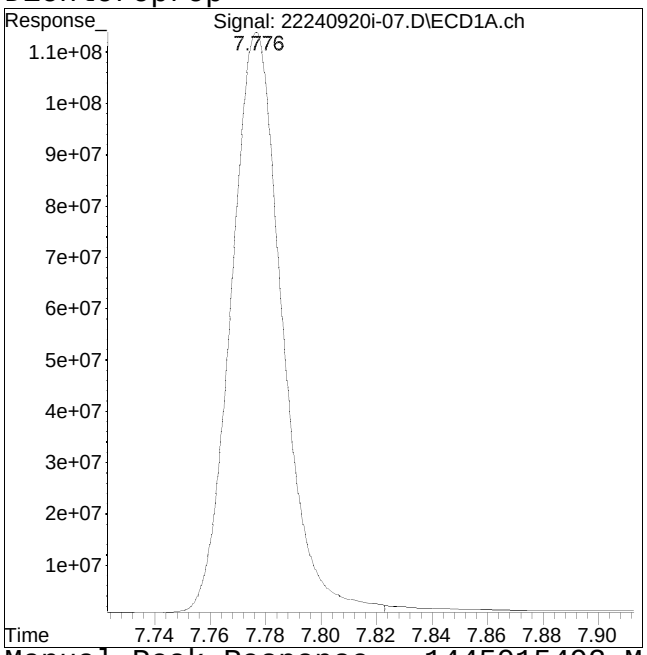

Original Peak Response = 1061963841 Manual Peak Response = 1049919947 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #7: Dichloroprop



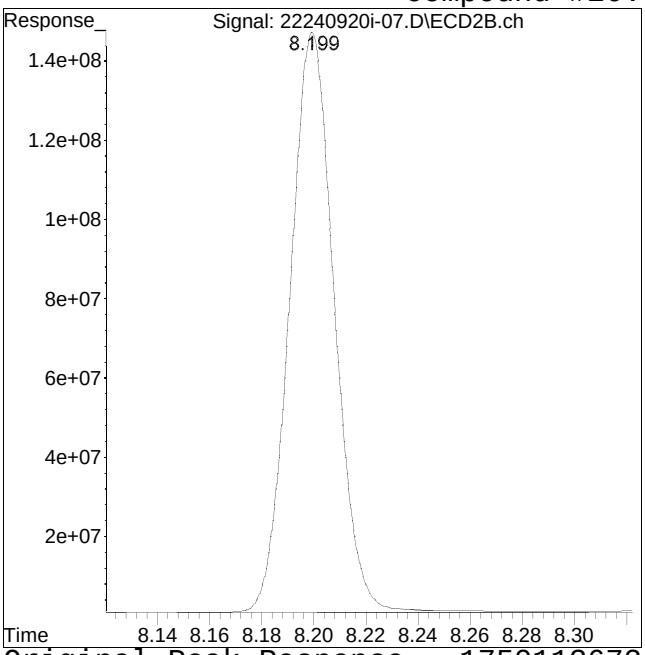




Original Peak Response = 1469875848 Manual Peak Response = 1445015492 M4
M4 = Poor automated baseline construction.

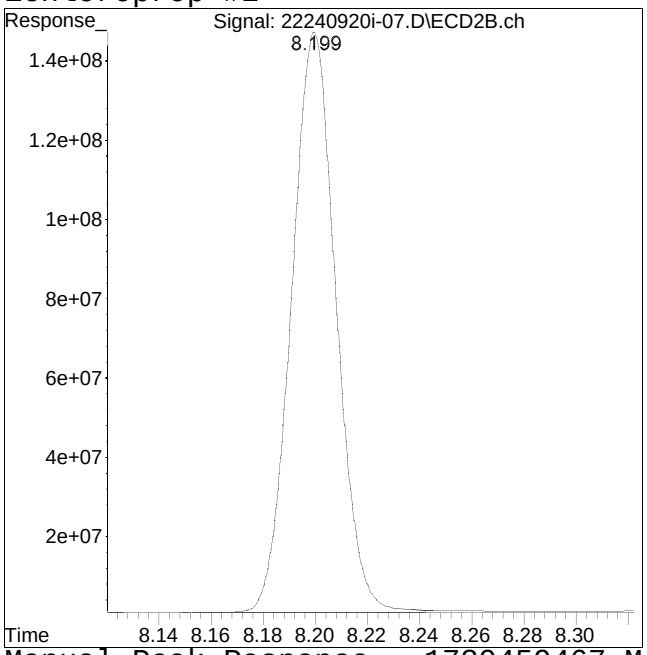
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

## Compound #20: Dichloroprop #2




Original Peak Response = 1750113672



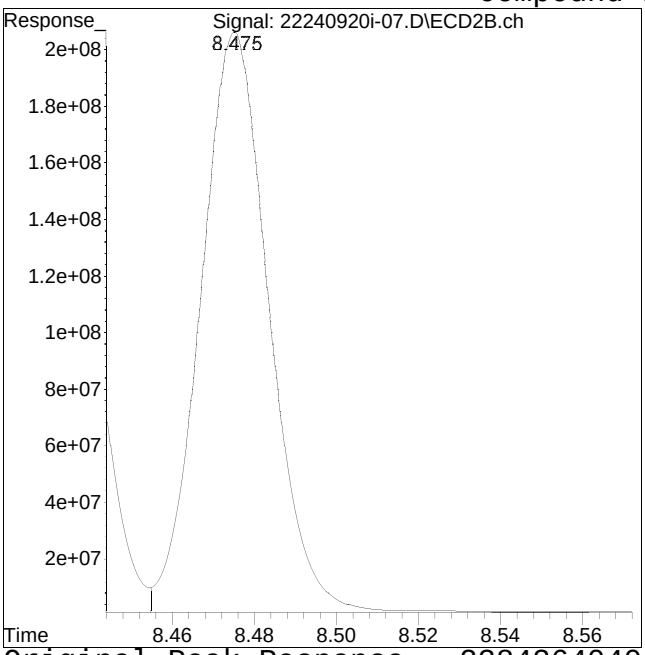

Manual Peak Response = 1739459467 M4

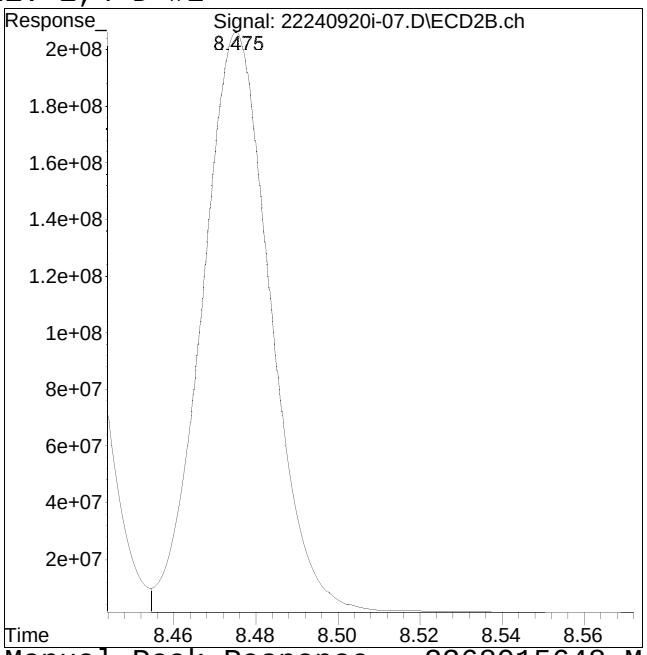
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #21: 2,4-D #2



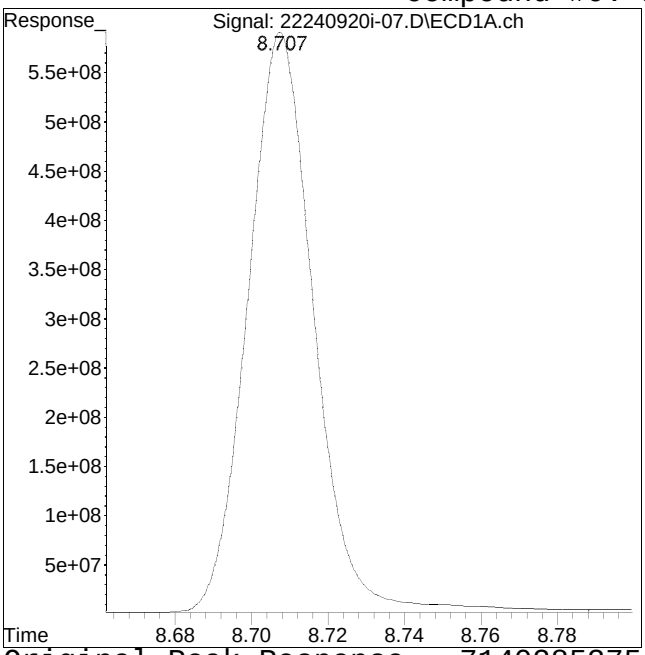



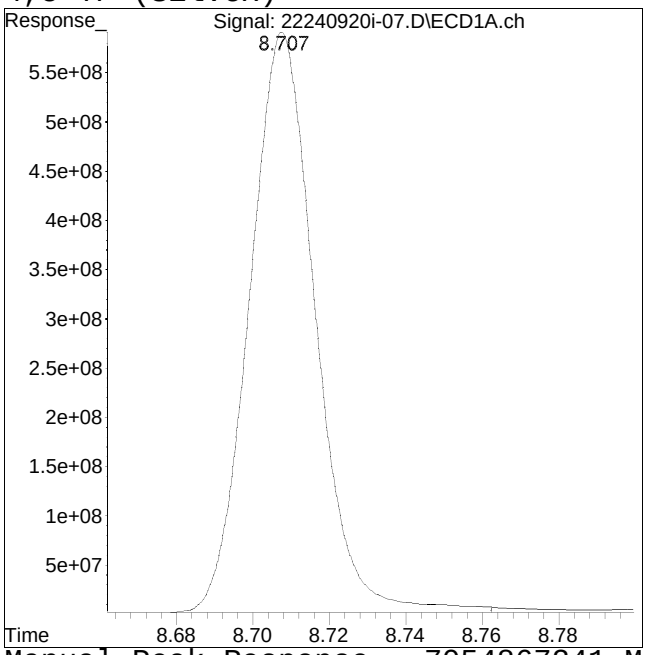

Original Peak Response = 2384364040 Manual Peak Response = 2368015648 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #9: 2,4,5-TP (Silvex)



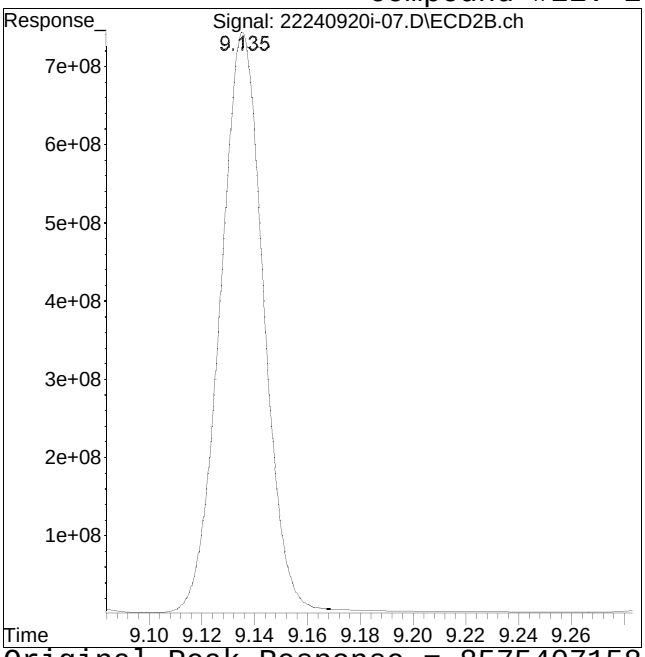



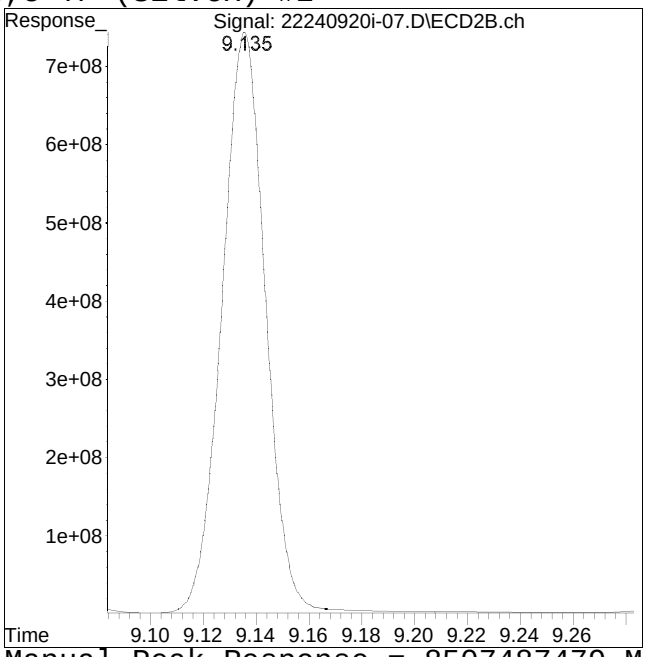

Original Peak Response = 7140285375 Manual Peak Response = 7054867241 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #22: 2,4,5-TP (Silvex) #2



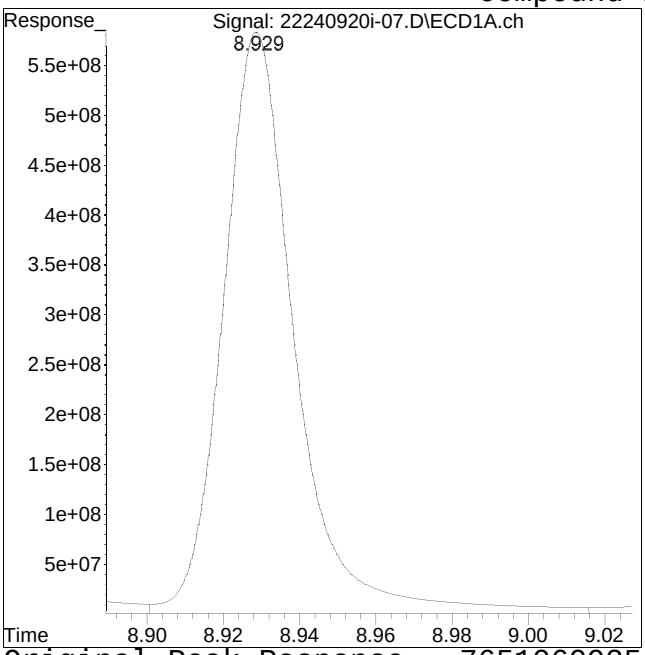



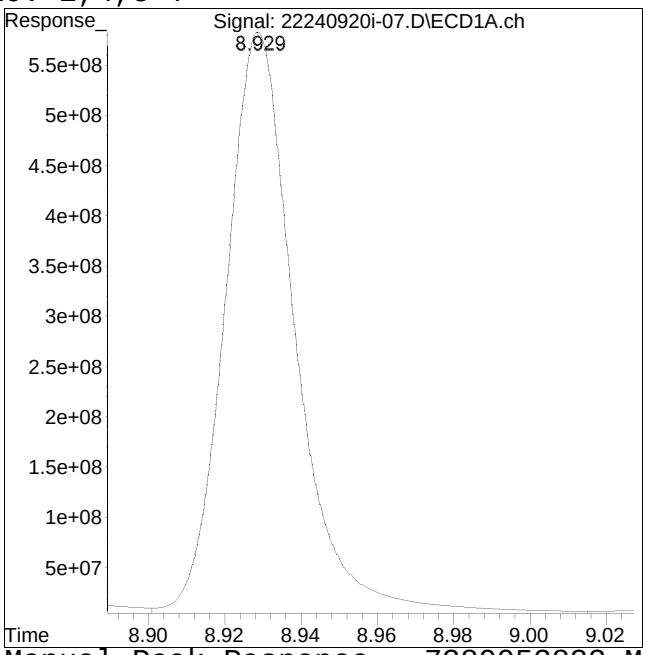

Original Peak Response = 8575407158 Manual Peak Response = 8507487479 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #10: 2,4,5-T



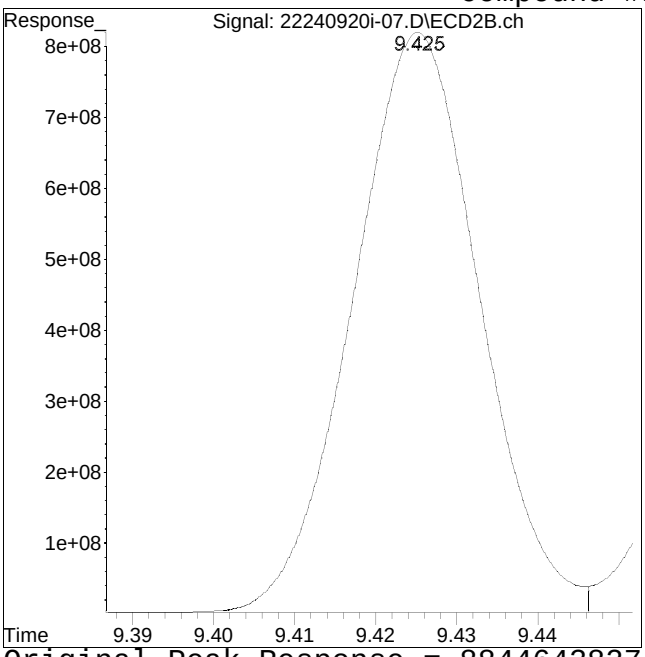



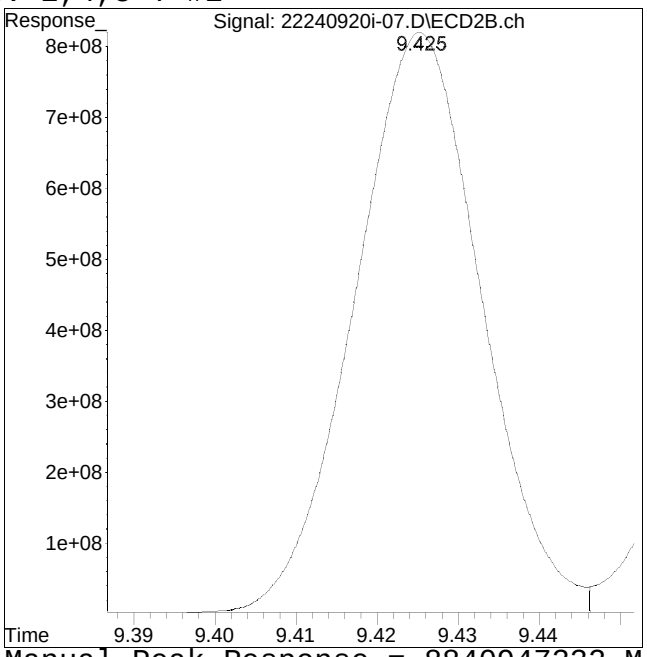

Original Peak Response = 7651069925 Manual Peak Response = 7389053833 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #23: 2,4,5-T #2



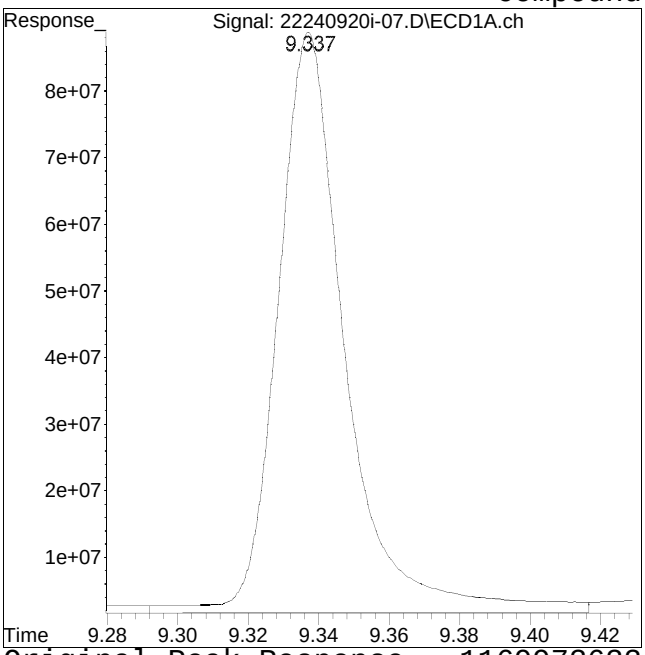



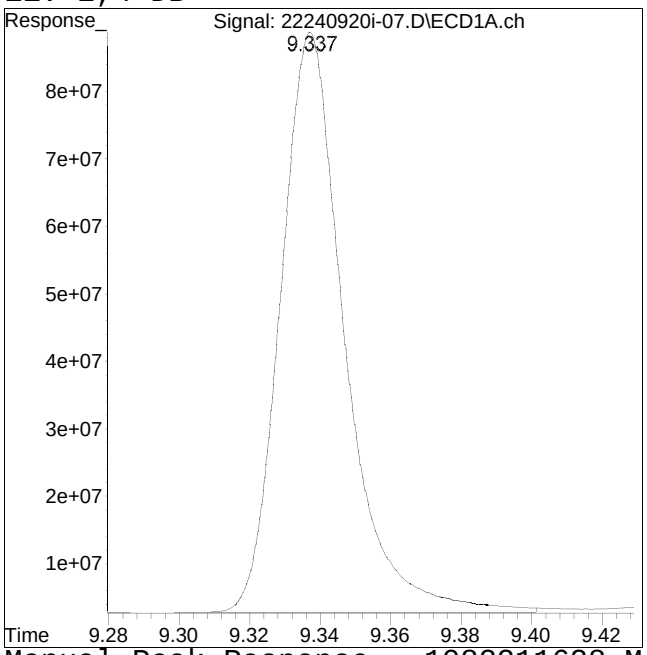

Original Peak Response = 8844643827 Manual Peak Response = 8840947332 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #11: 2,4-DB



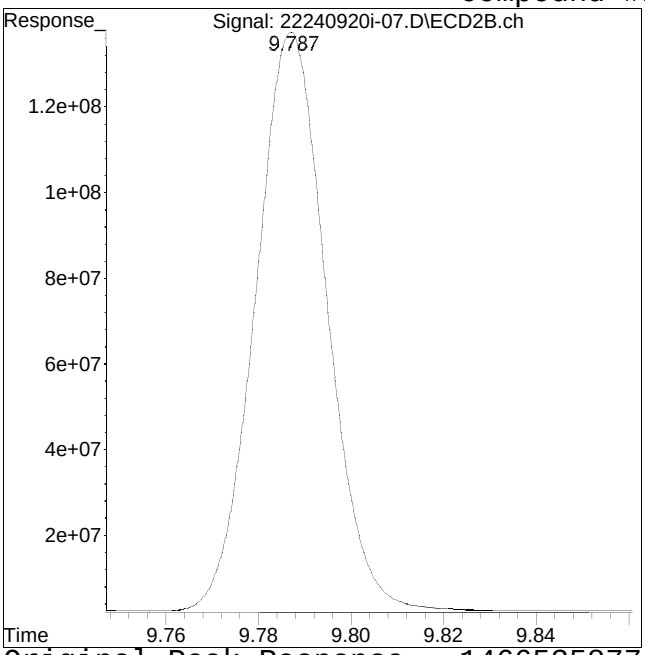



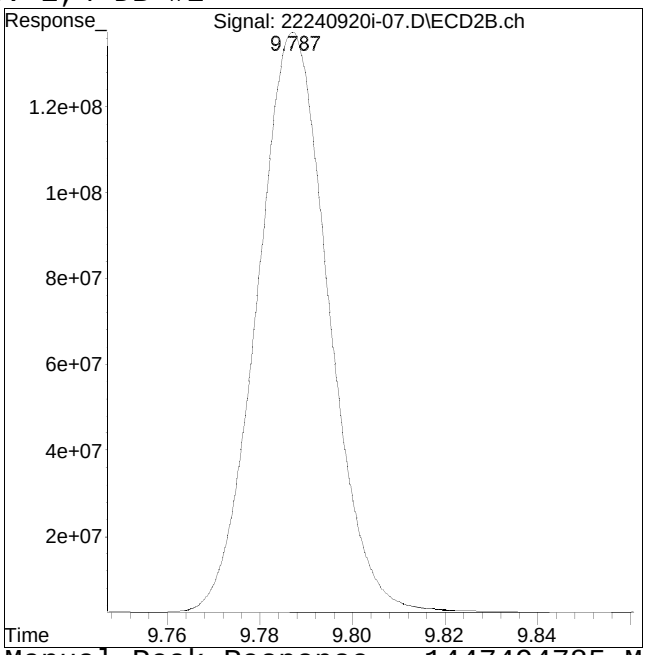

Original Peak Response = 1169973633 Manual Peak Response = 1082211628 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #24: 2,4-DB #2



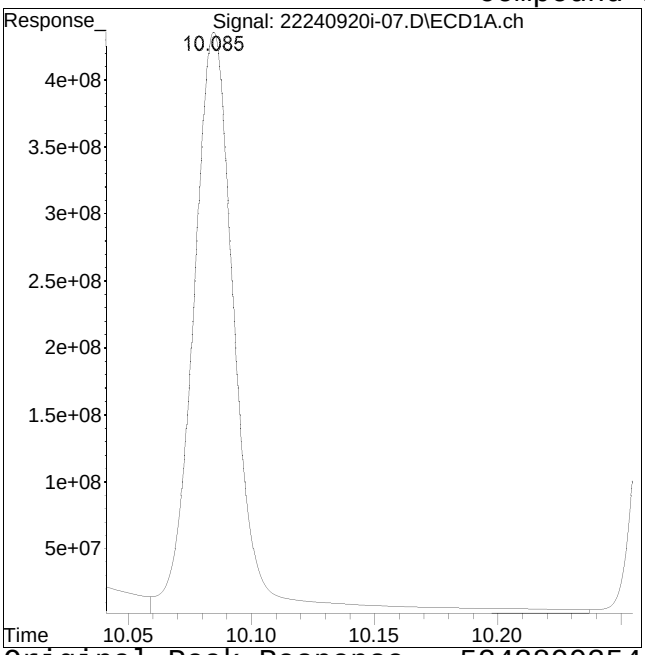



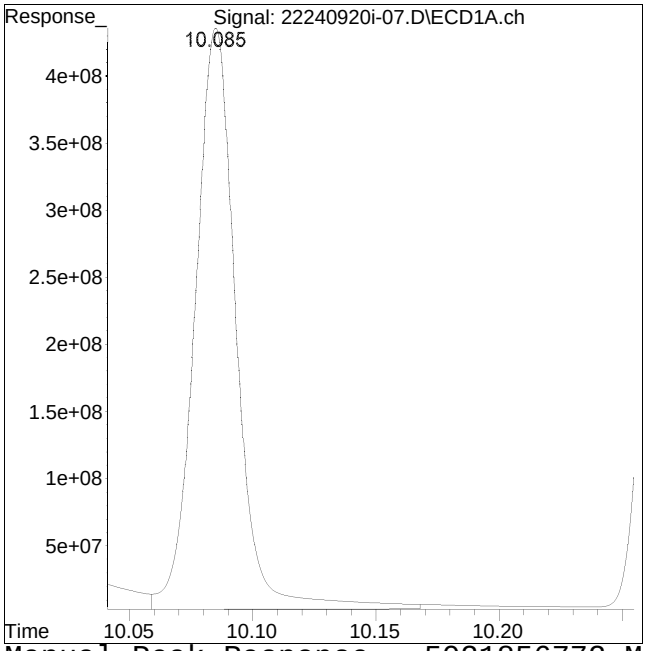

Original Peak Response = 1466535877 Manual Peak Response = 1447494785 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #12: Dinoseb



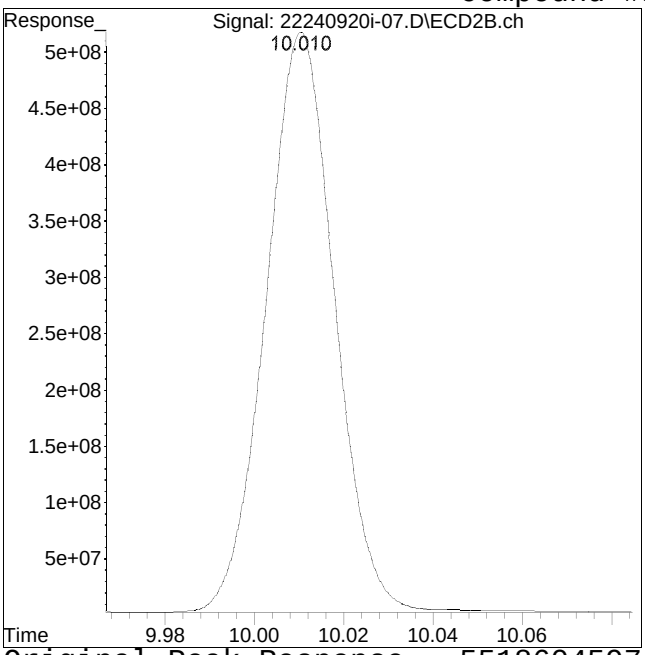



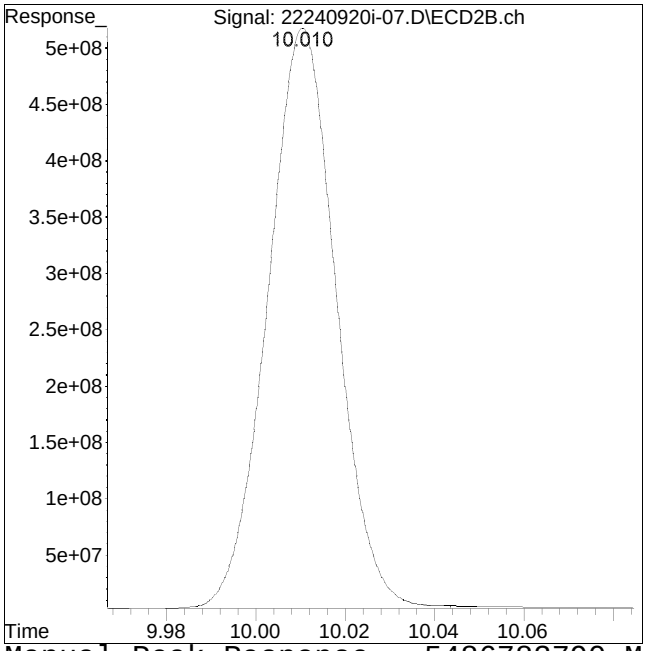

Original Peak Response = 5243899354 Manual Peak Response = 5021856772 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-07.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:15 pm Instrument : Pest22
Sample : il6herb,42e,,pp 11628 L2/2Quant Date : 9/21/2024 8:22 am

Compound #25: Dinoseb #2




Original Peak Response = 5518604597 Manual Peak Response = 5486783790 M4
M4 = Poor automated baseline construction.

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-08.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 20 Sep 2024  01:34 pm
Operator  : pest22:akm
Sample    : cicv,42e,,pp 11634 L0.2/20 ICV
Misc      : WG1975124,
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 11:28:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title  : herb
QLast Update : Mon Sep 23 11:28:26 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 2 | t | Dalapon | | 0.234 | 0.193 | 17.5# | 84 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.184 | 0.182 | 1.1 | 100 | 0.00 |
| 4 | t | Dicamba | | 0.568 | 0.533 | 6.2 | 98 | 0.00 |
| 5 | t | MCPP | | 0.00048 | 0.00050 | -4.2 | 109 | 0.00 |
| 6 | t | MCPA | | 0.00087 | 0.00088 | -1.1 | 102 | 0.00 |
| 7 | t | Dichloroprop | | 0.175 | 0.183 | -4.6 | 107 | 0.00 |
| 8 | t | 2,4-D | | 0.213 | 0.205 | 3.8 | 101 | 0.00 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.772 | 0.759 | 1.7 | 101 | 0.00 |
| 10 | t | 2,4,5-T | | 0.792 | 0.804 | -1.5 | 106 | 0.00 |
| 11 | t | 2,4-DB | | 0.116 | 0.115 | 0.9 | 103 | 0.00 |
| 12 | t | Dinoseb | | 0.590 | 0.602 | -2.0 | 104 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 2 | t | Dalapon | | 0.202 | 0.190 | 5.9 | 90 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.189 | 0.186 | 1.6 | 101 | 0.00 |
| 4 | t | Dicamba | | 0.534 | 0.512 | 4.1 | 99 | 0.00 |
| 5 | t | MCPP | | 0.00053 | 0.00053 | 0.0 | 106 | 0.00 |
| 6 | t | MCPA | | 0.00095 | 0.00093 | 2.1 | 101 | 0.00 |
| 7 | t | Dichloroprop | | 0.173 | 0.184 | -6.4 | 108 | 0.00 |
| 8 | t | 2,4-D | | 0.222 | 0.217 | 2.3 | 101 | 0.00 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.776 | 0.762 | 1.8 | 100 | 0.00 |
| 10 | t | 2,4,5-T | | 0.768 | 0.760 | 1.0 | 102 | 0.00 |
| 11 | t | 2,4-DB | | 0.126 | 0.122 | 3.2 | 100 | 0.00 |
| 12 | t | Dinoseb | | 0.490 | 0.500 | -2.0 | 104 | 0.00 |

## Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-08.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 20 Sep 2024  01:34 pm
Operator  : pest22:akm
Sample    : cicv,42e,,pp 11634 L0.2/20 ICV
Misc      : WG1975124,
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 11:28:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title  : herb
QLast Update : Mon Sep 23 11:28:26 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| Compound | AvgRF | CCRF | %Dev | Area% Dev(Min) |
|---|---|---|---|---|

Signal #2

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:34 pm
Operator : pest22:akm
Sample : cicv,42e,,pp 11634 L0.2/20 ICV
Misc : WG1975124,
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 11:28:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Mon Sep 23 11:28:26 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.435 | 8.434 | 1387.4E6 | 1712.5E6 | 0.250M3 | 0.250M4 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.898 | 7.363 | 189.4E6 | 239.0E6 | 0.185M4 | 0.184M4 |
| | | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 37.00% | 36.80% |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.323 | 2.319 | 195.2E6 | 237.3E6 | 0.151M3 | 0.172M4 |
| 4) | t | Dicamba | 7.074 | 7.541 | 556.4E6 | 659.8E6 | 0.177M4 | 0.181M3 |
| 5) | t | MCPP | 7.274 | 7.654 | 52572878 | 68048496 | 19.591M4 | 18.916M4 |
| 6) | t | MCPA | 7.421 | 7.880 | 90927411 | 118.5E6 | 18.833M4 | 18.150M4 |
| 7) | t | Dichloroprop | 7.780 | 8.200 | 191.4E6 | 236.7E6 | 0.197M4 | 0.200M3 |
| 8) | t | 2,4-D | 8.001 | 8.477 | 213.4E6 | 279.6E6 | 0.181M3 | 0.184M4 |
| 9) | t | 2,4,5-TP (Si | 8.711 | 9.135 | 800.6E6 | 991.2E6 | 0.187M4 | 0.187M4 |
| 10) | t | 2,4,5-T | 8.939 | 9.426 | 848.2E6 | 989.7E6 | 0.193M4 | 0.188M4 |
| 11) | t | 2,4-DB | 9.349 | 9.788 | 122.7E6 | 160.1E6 | 0.191M4 | 0.186M4 |
| 12) | t | Dinoseb | 10.085 | 10.010 | 634.3E6 | 650.9E6 | 0.194M4 | 0.194M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:34 pm
Operator : pest22:akm
Sample : cicv,42e,,pp 11634 L0.2/20 ICV
Misc : WG1975124,
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 11:28:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Mon Sep 23 11:28:26 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

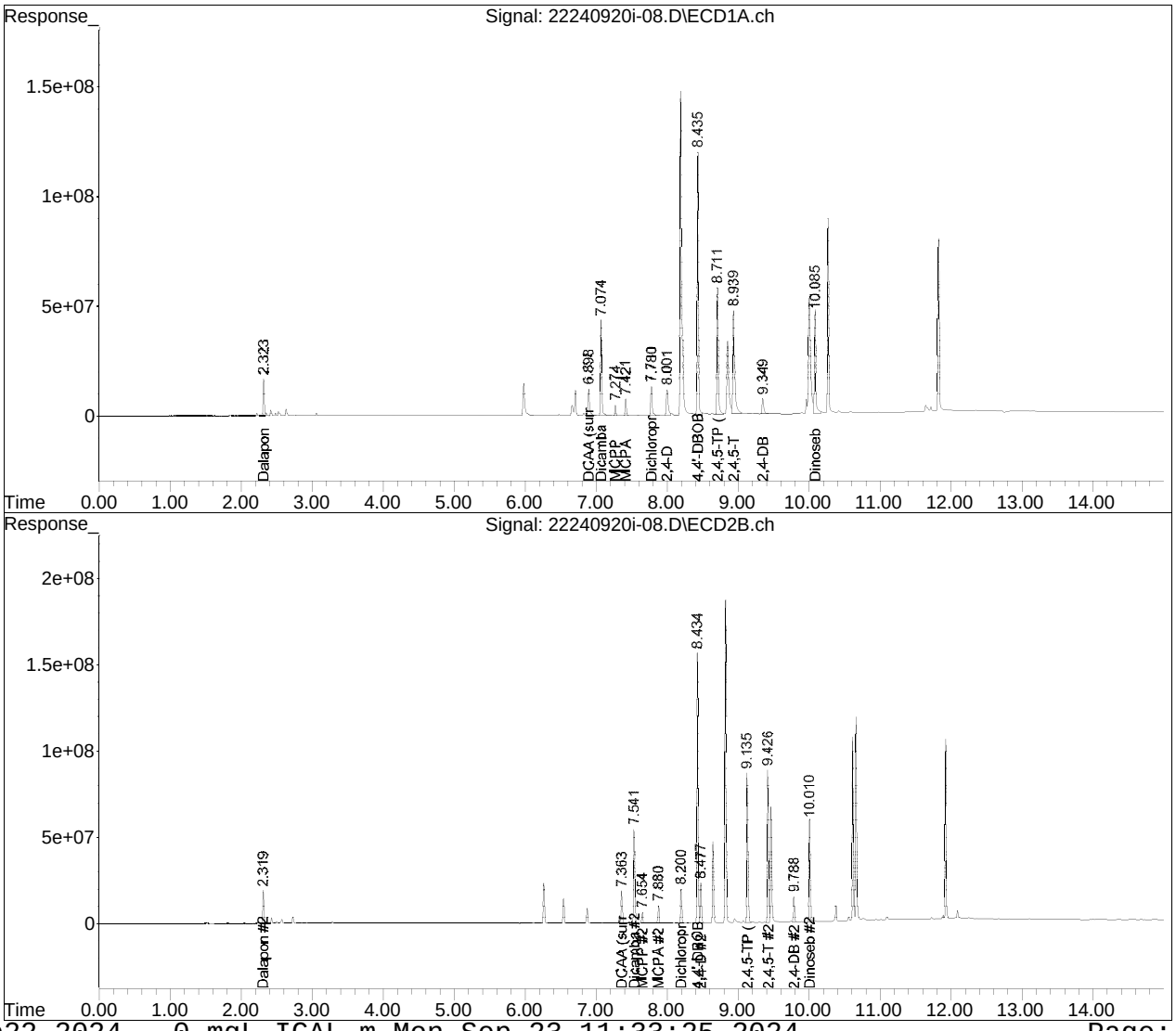
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240920ical\
Data File : 22240920i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2024 01:34 pm
Operator : pest22:akm
Sample : cicv,42e,,pp 11634 L0.2/20 ICV
Misc : WG1975124,
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 11:28:26 2024
Quant Method : I:\PEST\Pest22\2024\240920ical\Herb22_2024_09_20_mgL_ICAL.m
Quant Title : herb
QLast Update : Mon Sep 23 11:28:26 2024
Response via : Initial Calibration
Integrator: ChemStation

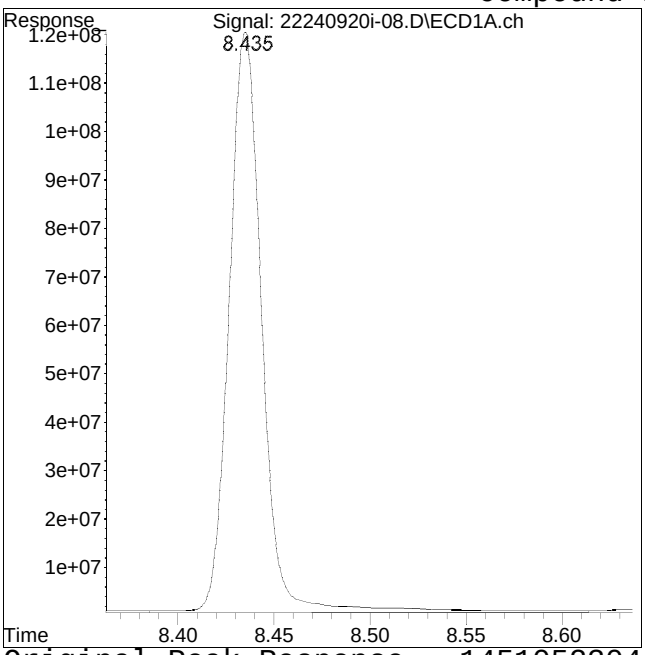
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

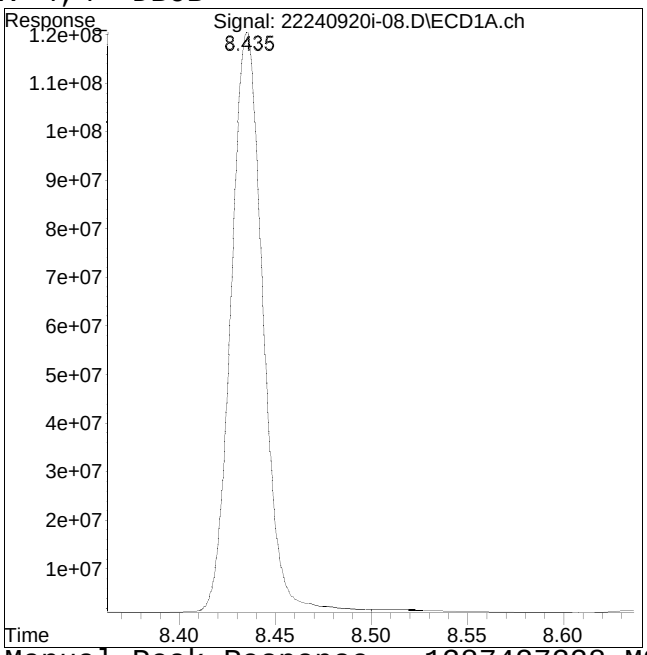


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #1: 4,4'-DBOB



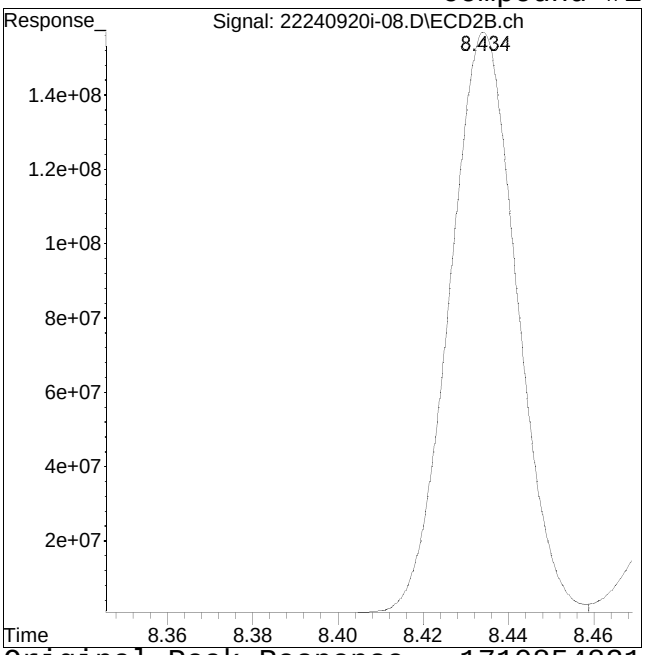



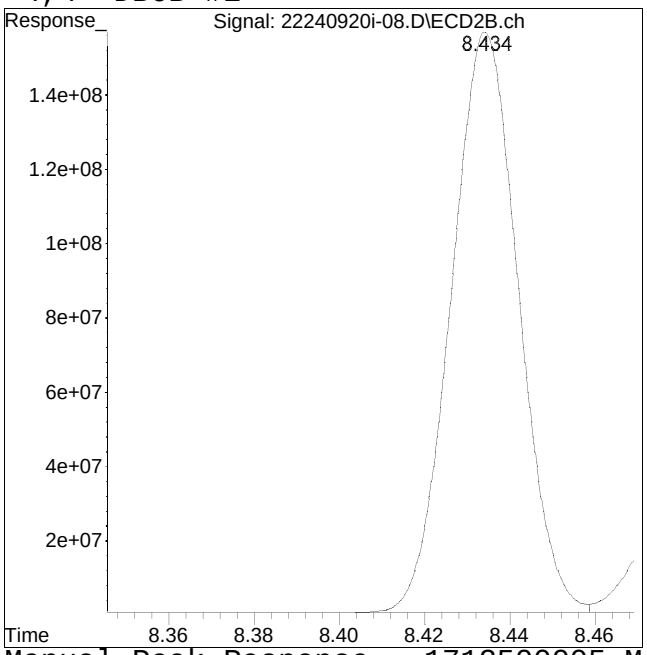

Original Peak Response = 1451052304 Manual Peak Response = 1387427328 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #14: 4,4'-DBOB #2



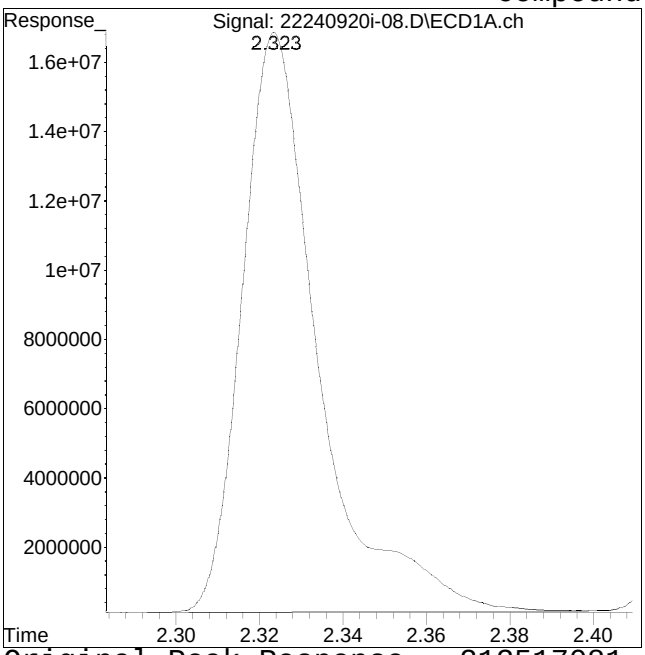



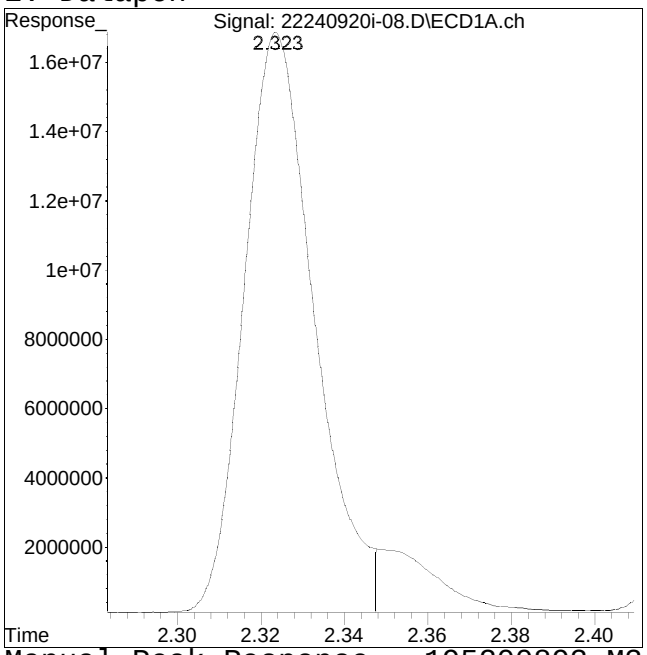

Original Peak Response = 1710854821 Manual Peak Response = 1712500005 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #2: Dalapon



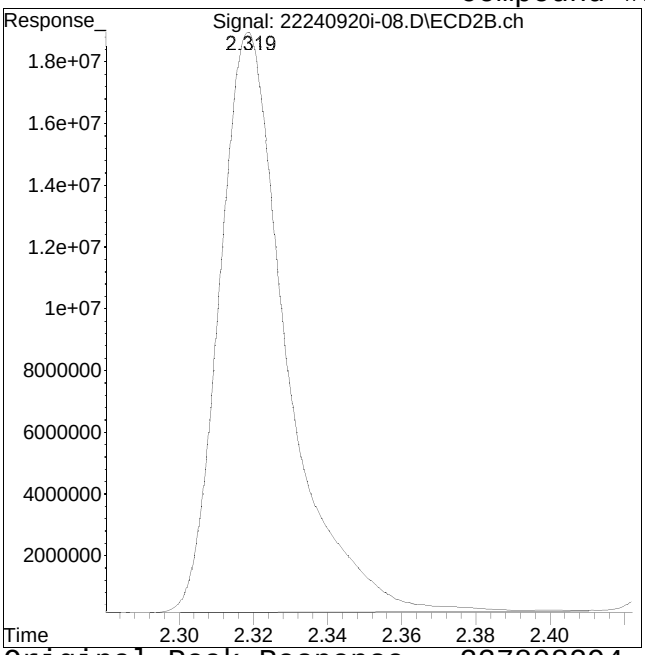




Original Peak Response = 213517081 Manual Peak Response = 195200893 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

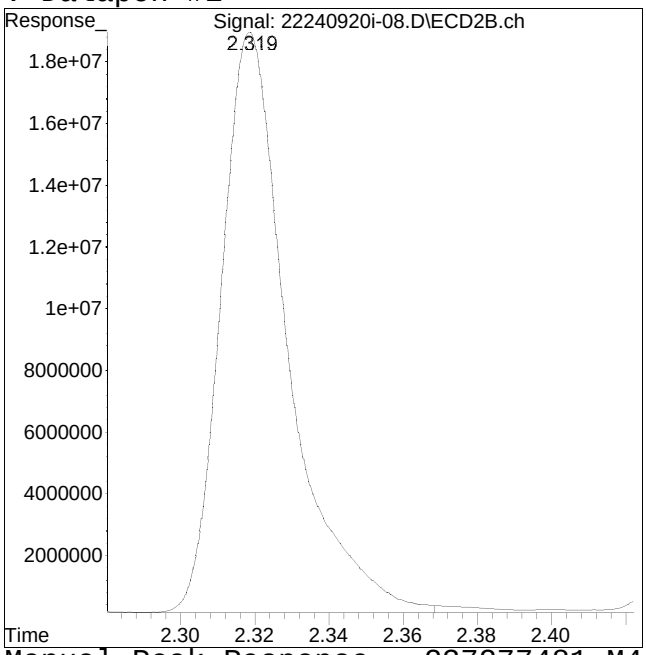
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #15: Dalapon #2




Original Peak Response = 237808294



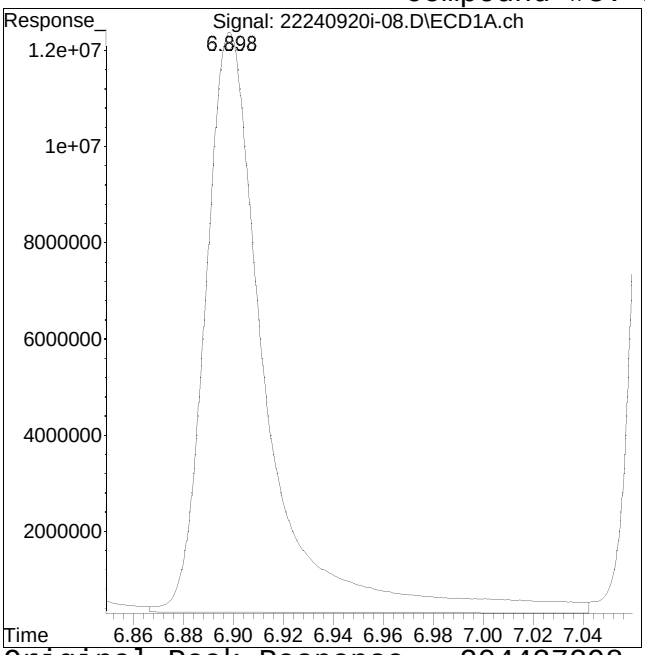

Manual Peak Response = 237277481 M4

M4 = Poor automated baseline construction.

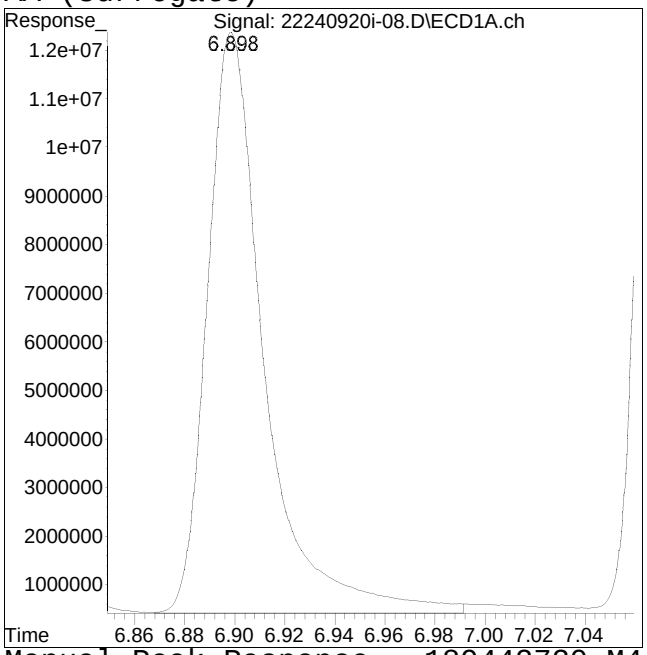
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #3: DCAA (surrogate)




Original Peak Response = 204437298

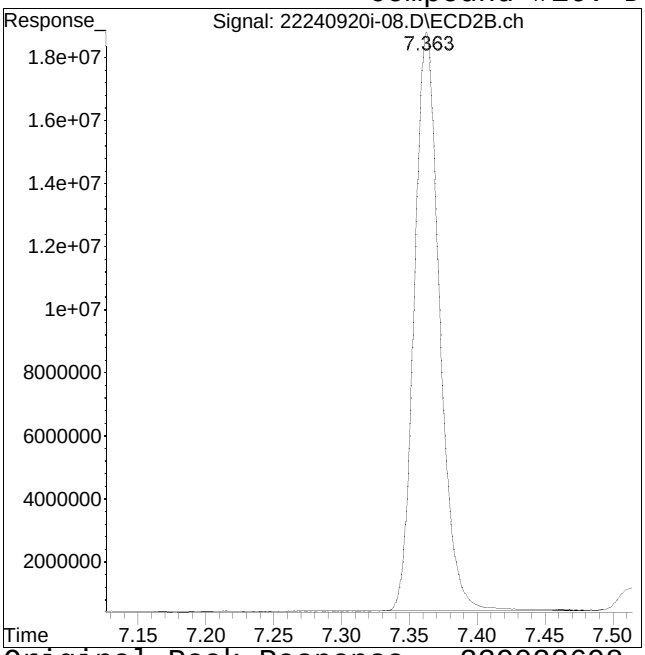


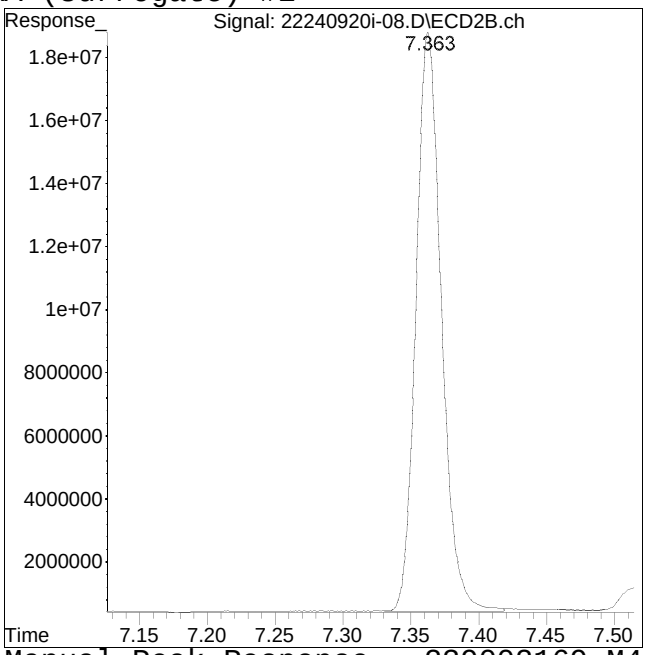

Manual Peak Response = 189442720 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #16: DCAA (surrogate) #2



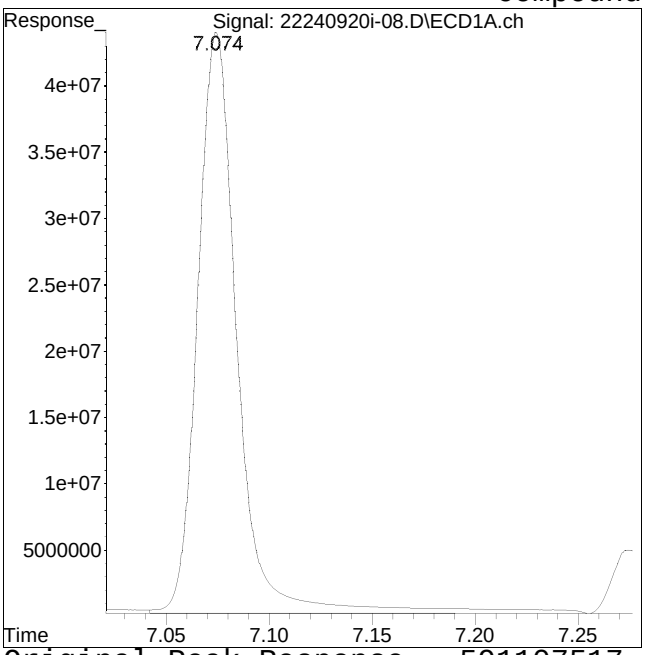



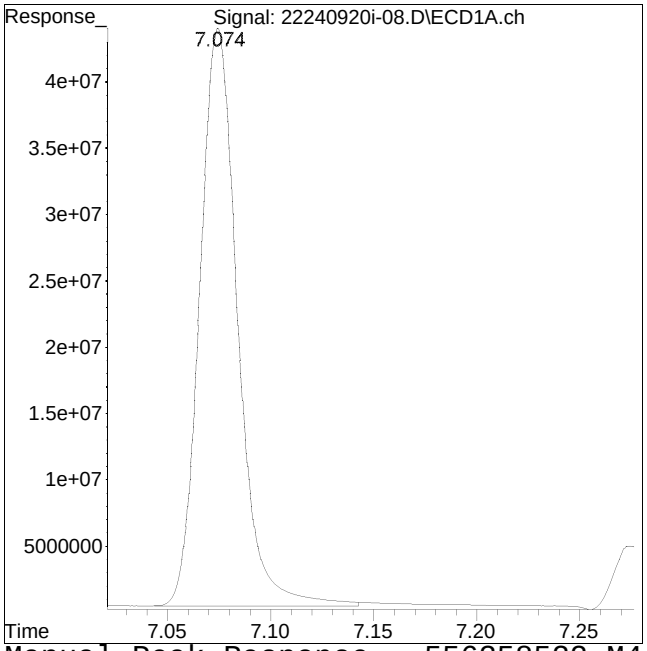

Original Peak Response = 239022698 Manual Peak Response = 239002169 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #4: Dicamba



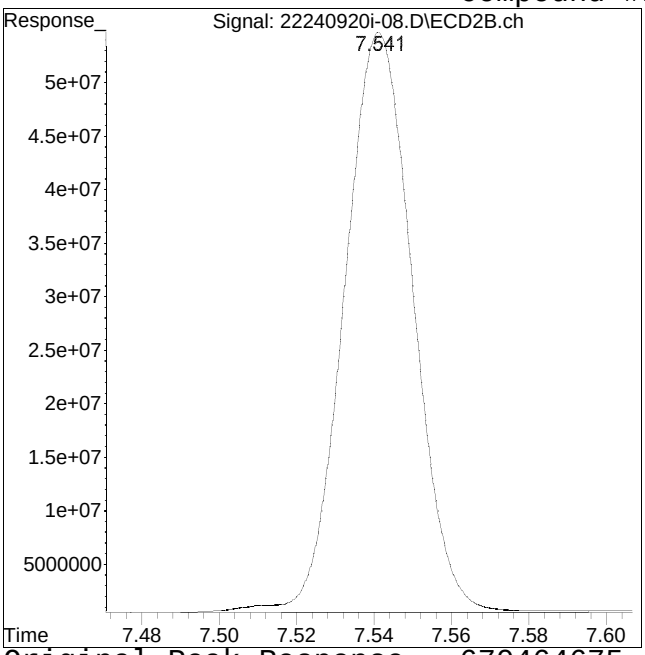



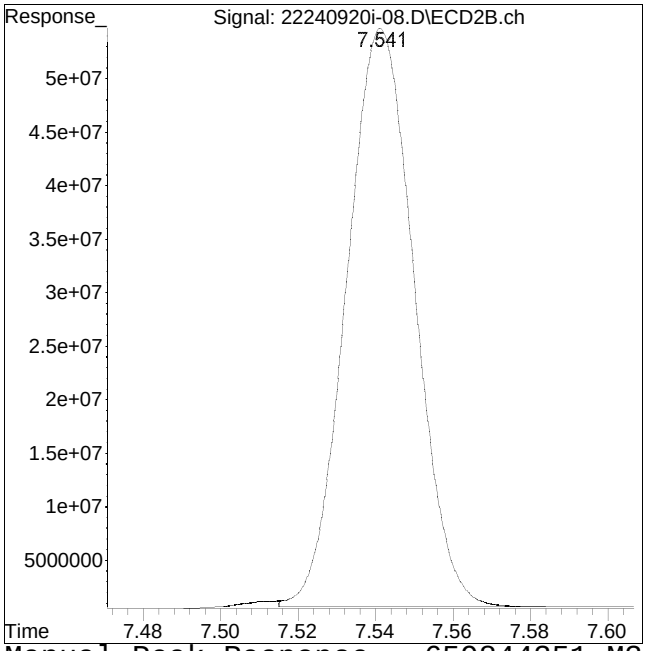

Original Peak Response = 591107517 Manual Peak Response = 556358522 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #17: Dicamba #2



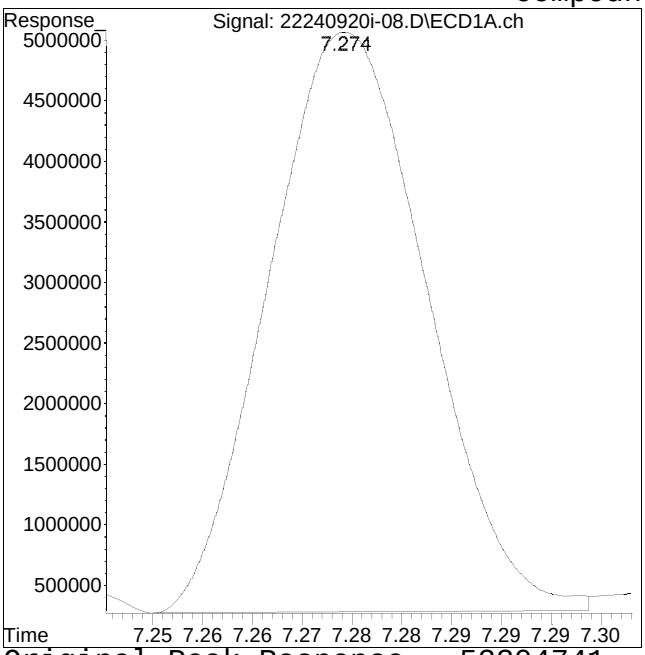



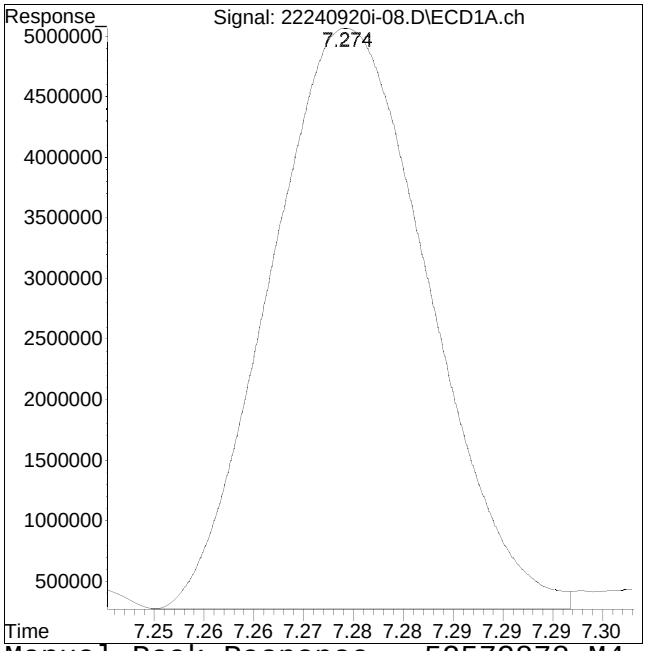

Original Peak Response = 670464675 Manual Peak Response = 659844351 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #5: MCPP



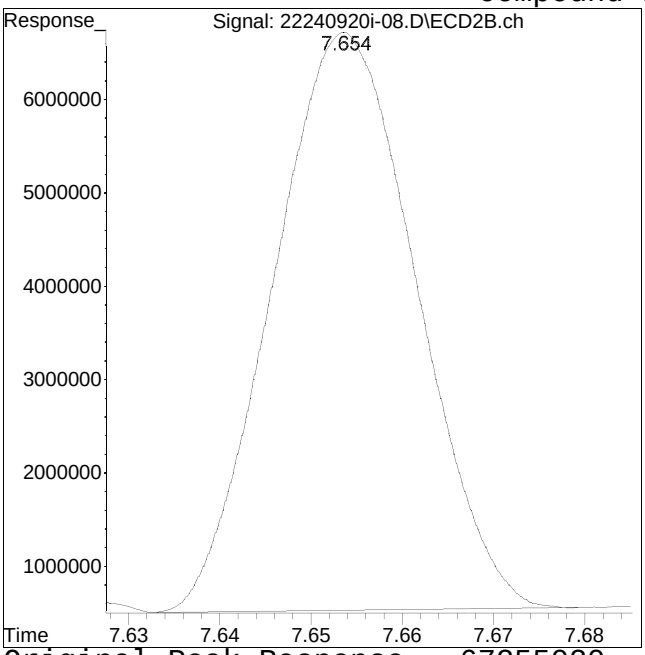




Original Peak Response = 52304741 Manual Peak Response = 52572878 M4
M4 = Poor automated baseline construction.

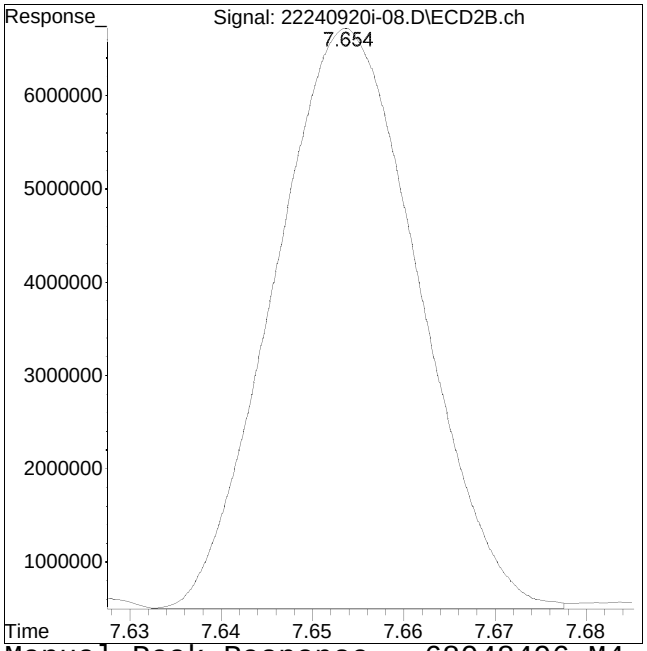
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #18: MCPP #2




Original Peak Response = 67255020



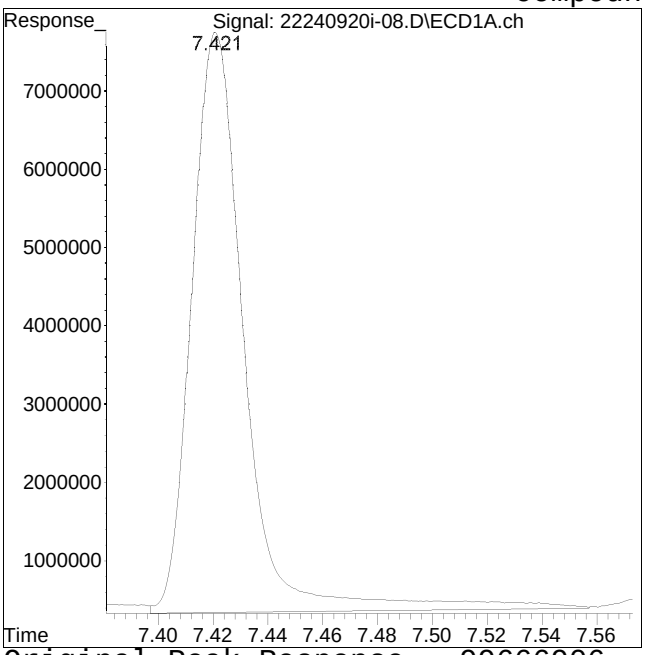

Manual Peak Response = 68048496 M4

M4 = Poor automated baseline construction.

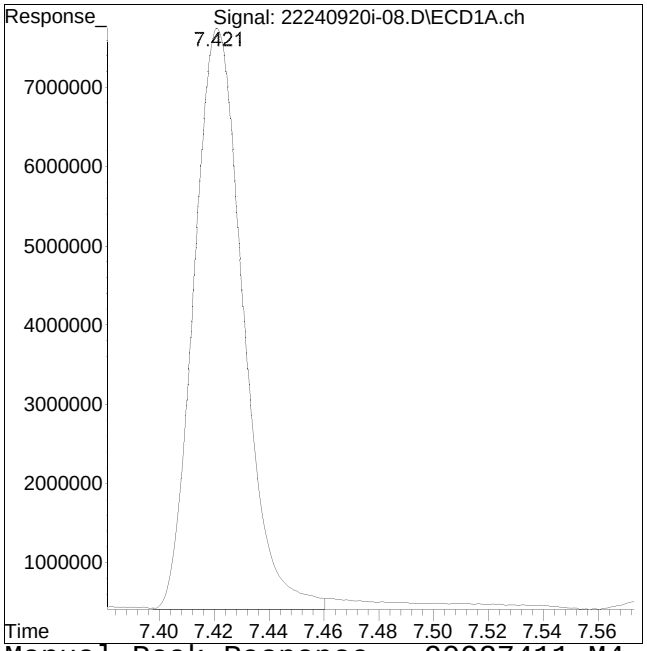
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #6: MCPA




Original Peak Response = 99666906



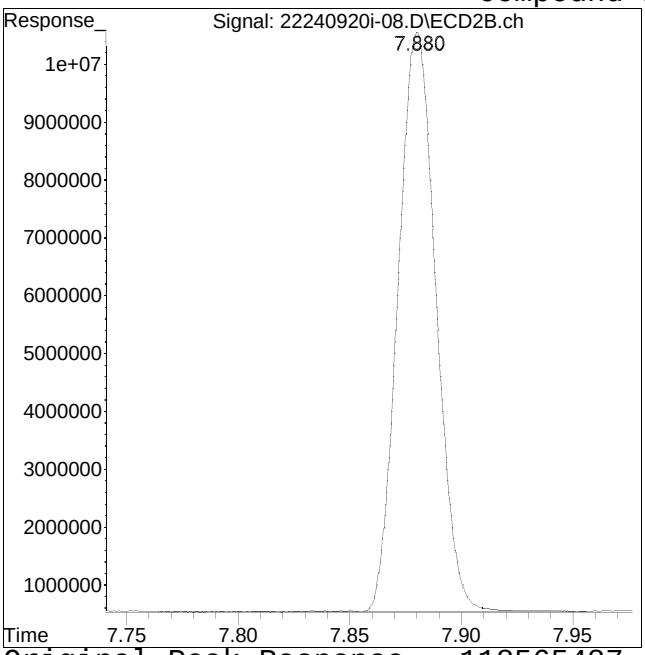

Manual Peak Response = 90927411 M4

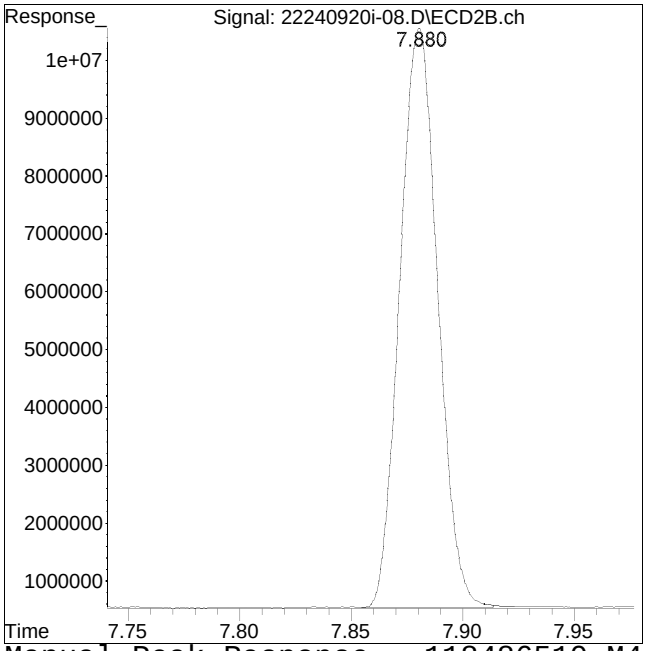
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #19: MCPA #2



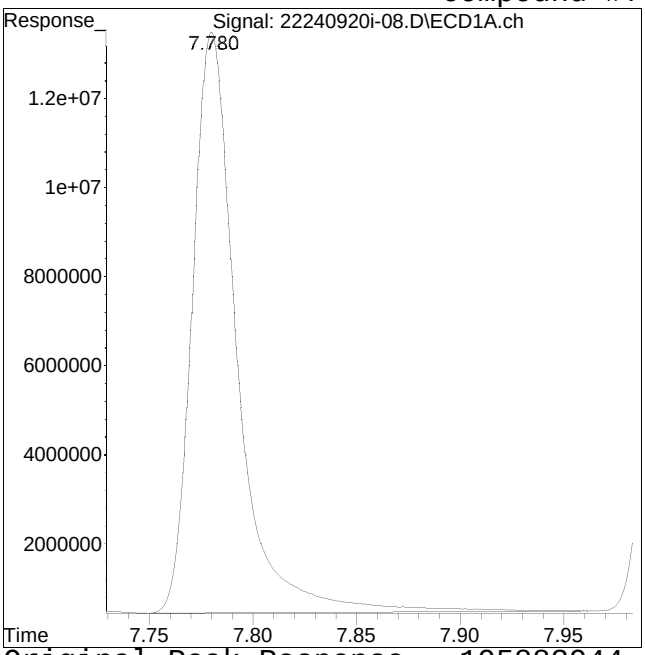



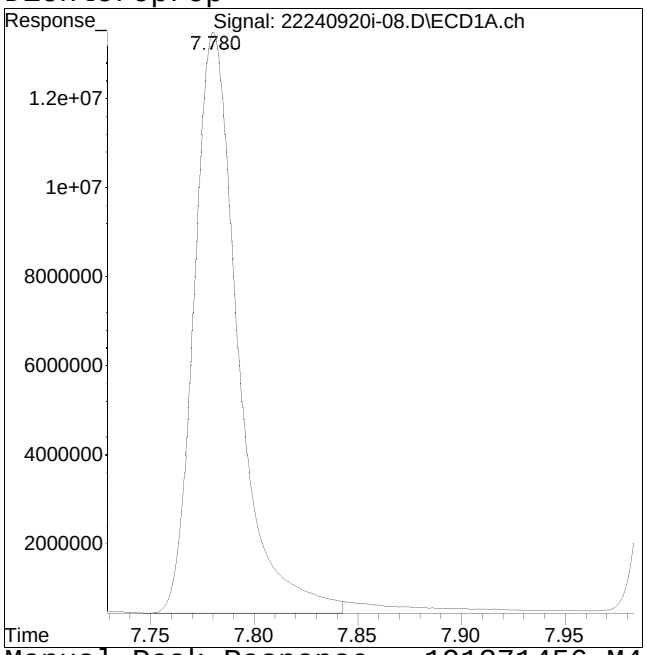

Original Peak Response = 118565487 Manual Peak Response = 118486510 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #7: Dichloroprop



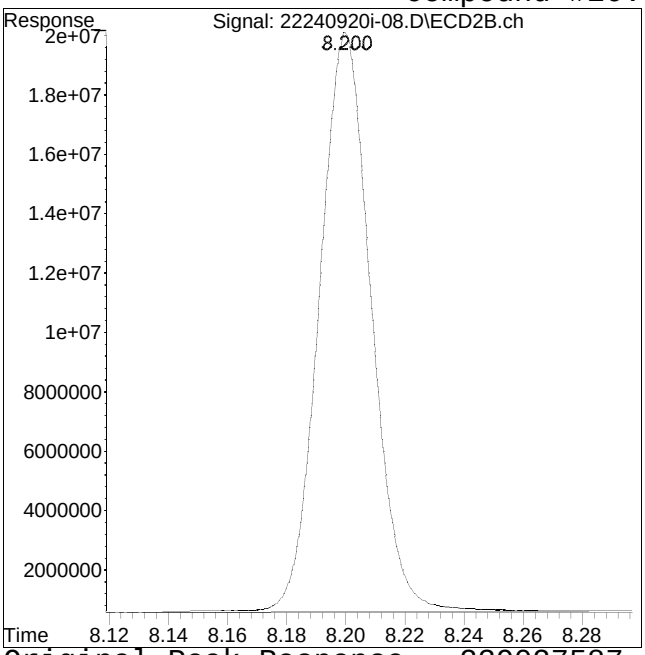



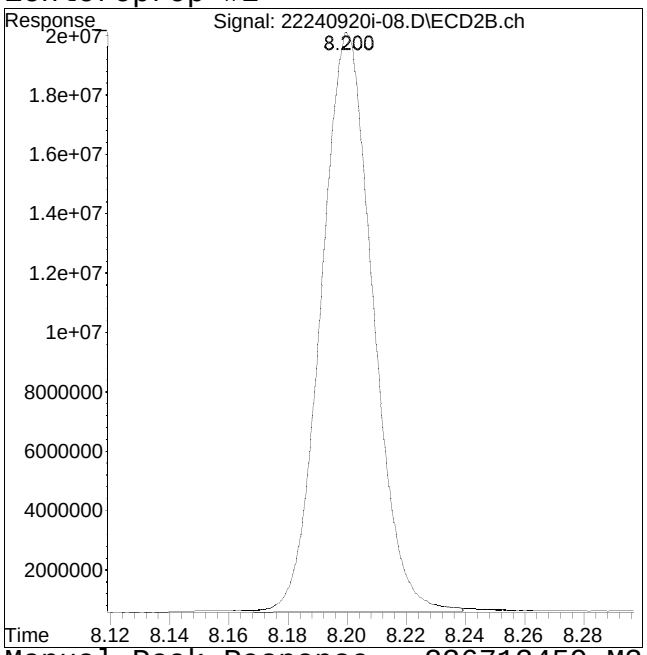

Original Peak Response = 195883944 Manual Peak Response = 191371456 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #20: Dichloroprop #2



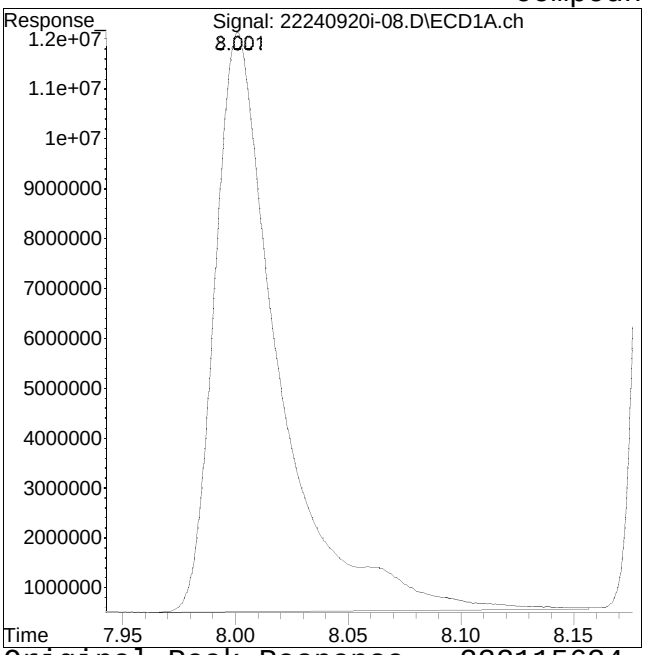



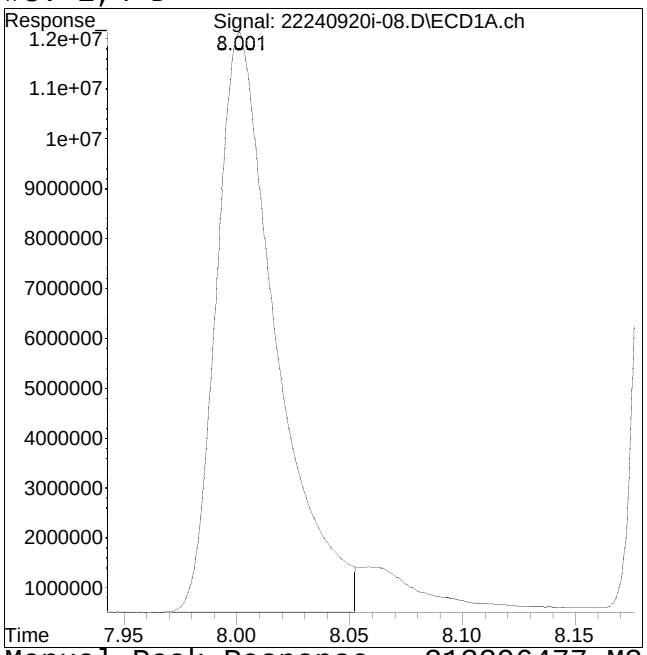

Original Peak Response = 239027587 Manual Peak Response = 236713459 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #8: 2,4-D



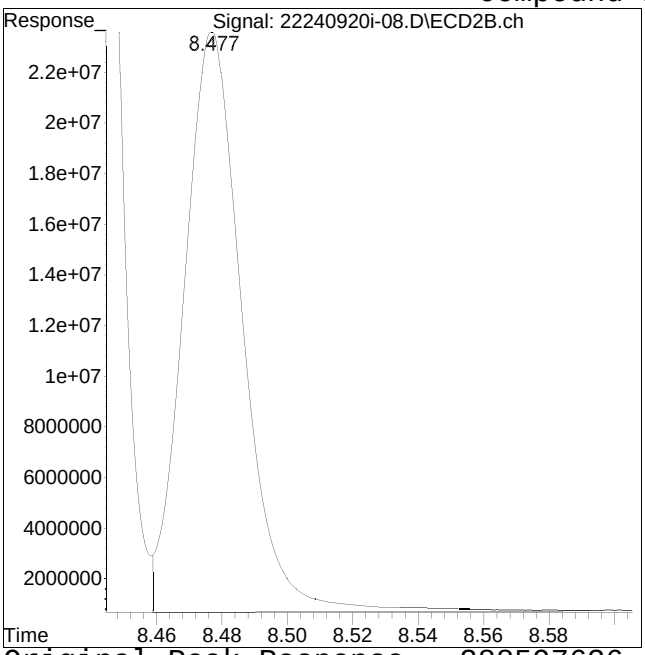




Original Peak Response = 232115634 Manual Peak Response = 213396477 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

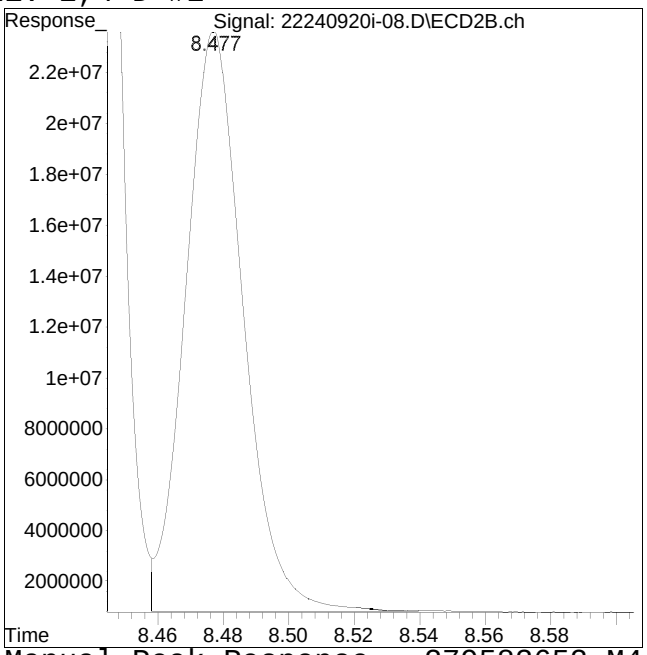
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #21: 2,4-D #2




Original Peak Response = 288597636



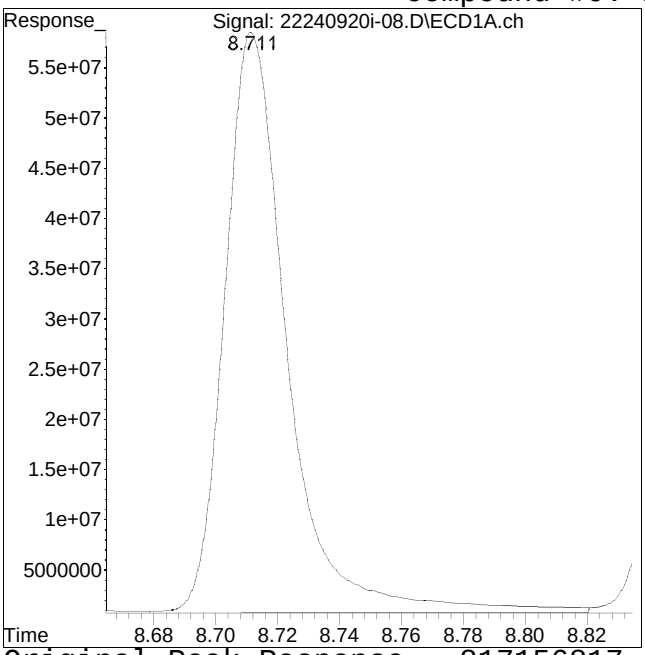

Manual Peak Response = 279583652 M4

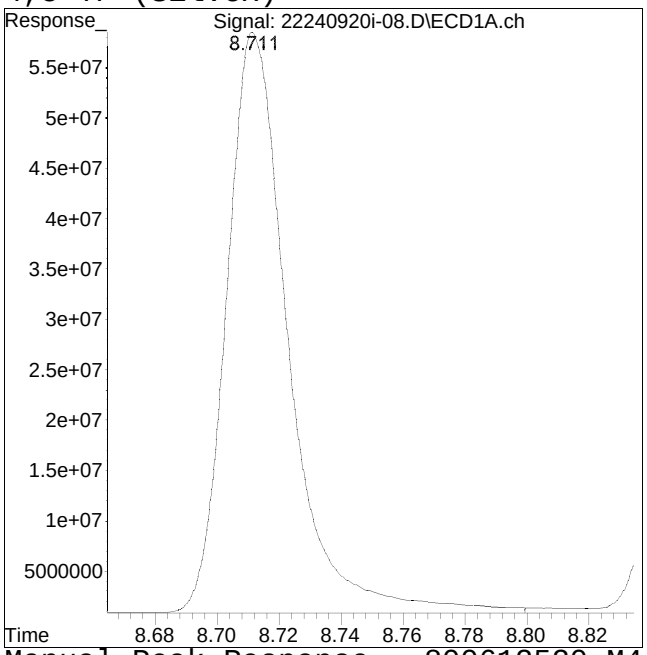
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #9: 2,4,5-TP (Silvex)



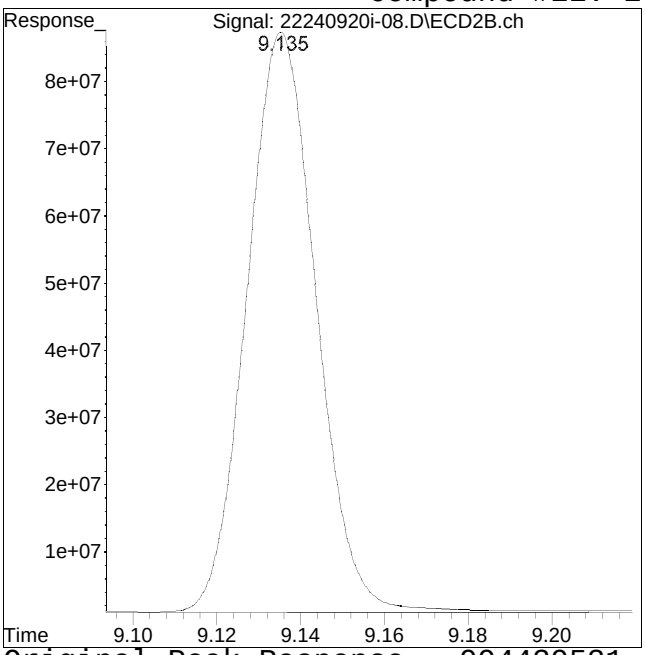



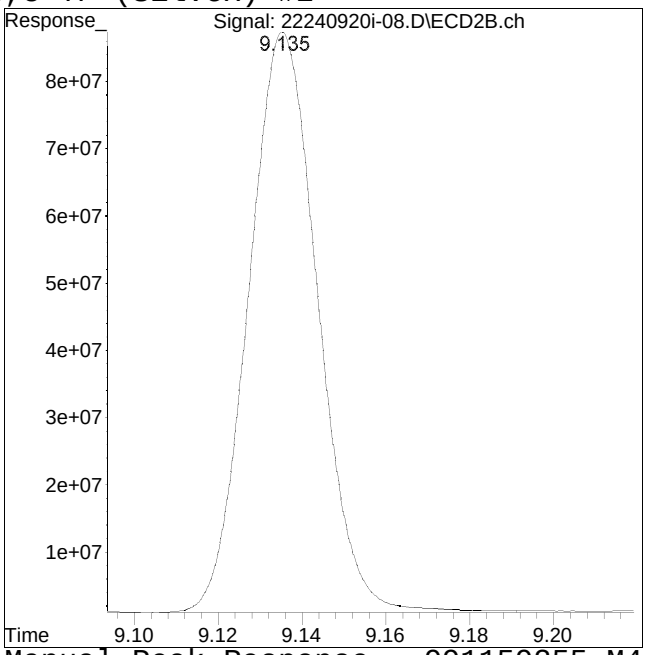

Original Peak Response = 817156817 Manual Peak Response = 800612520 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #22: 2,4,5-TP (Silvex) #2



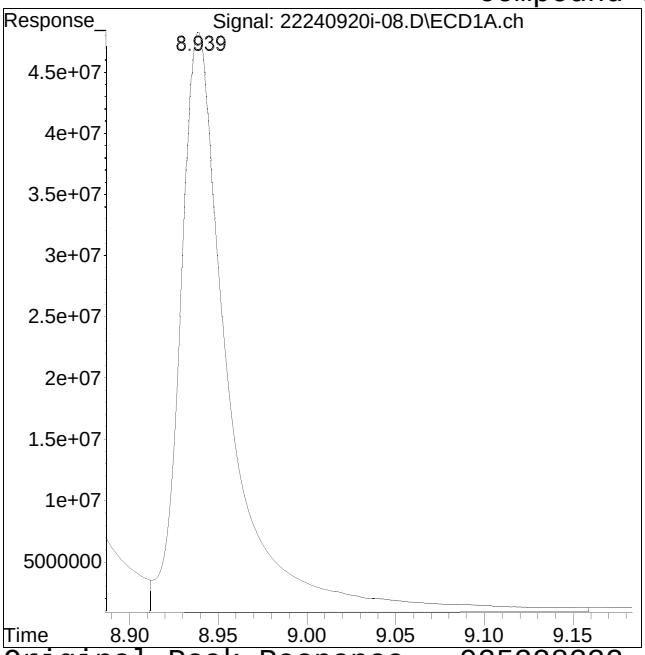




Original Peak Response = 994439531 Manual Peak Response = 991159255 M4
M4 = Poor automated baseline construction.

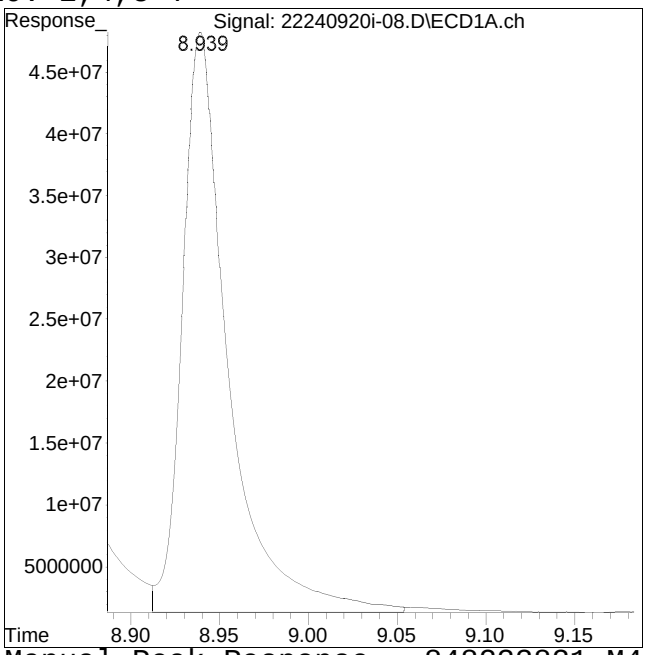
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #10: 2,4,5-T




Original Peak Response = 925328332

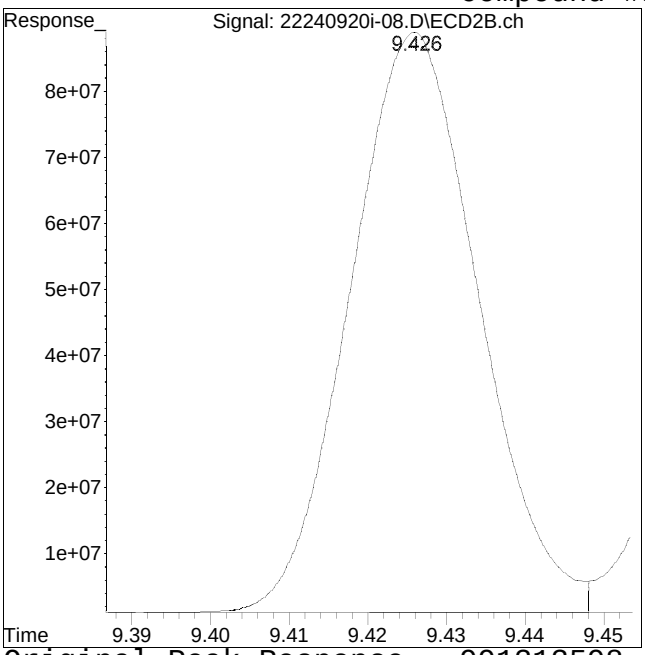


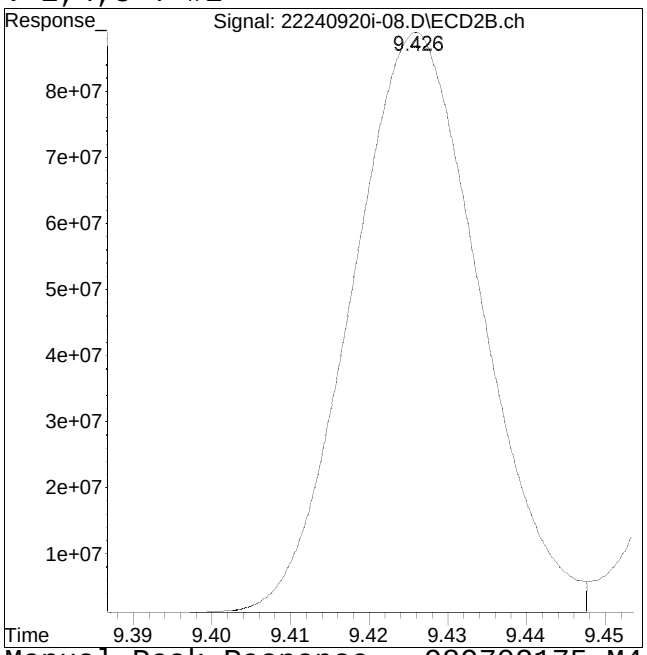

Manual Peak Response = 848233821 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

## Compound #23: 2,4,5-T #2



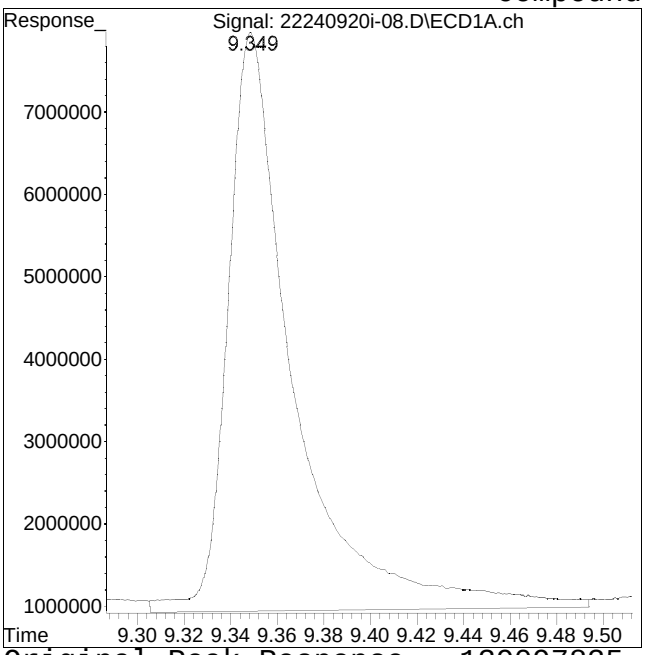




Original Peak Response = 991313598 Manual Peak Response = 989702175 M4
M4 = Poor automated baseline construction.

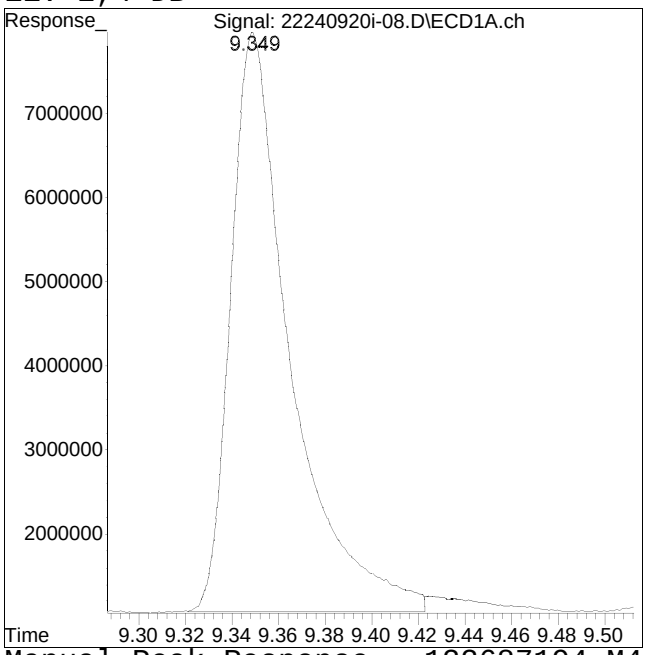
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #11: 2,4-DB




Original Peak Response = 139097835

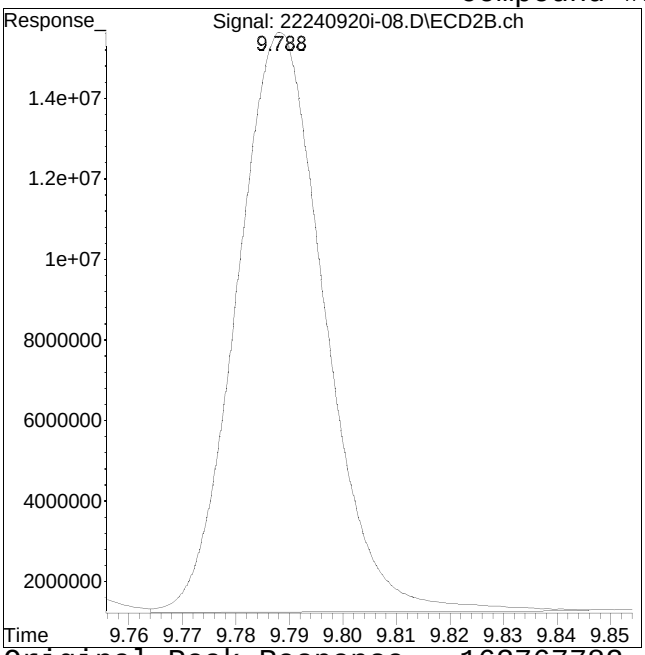


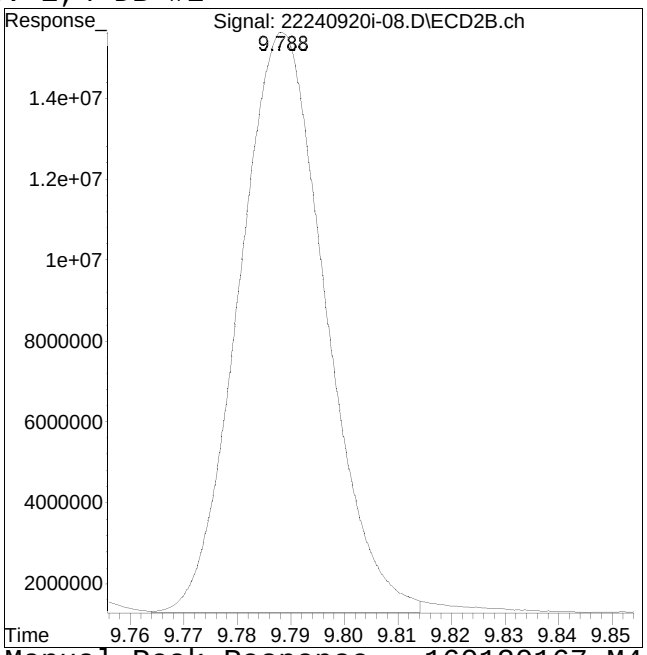

Manual Peak Response = 122687194 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #24: 2,4-DB #2



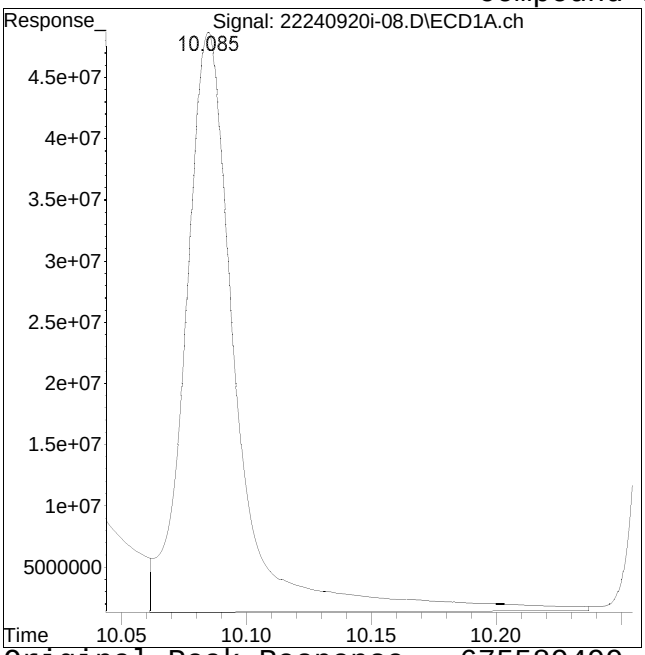



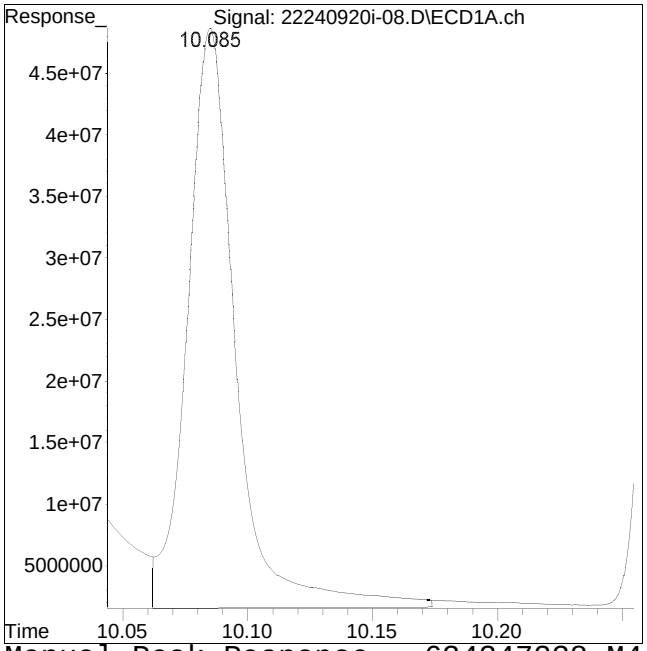

Original Peak Response = 163767782 Manual Peak Response = 160120167 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #12: Dinoseb



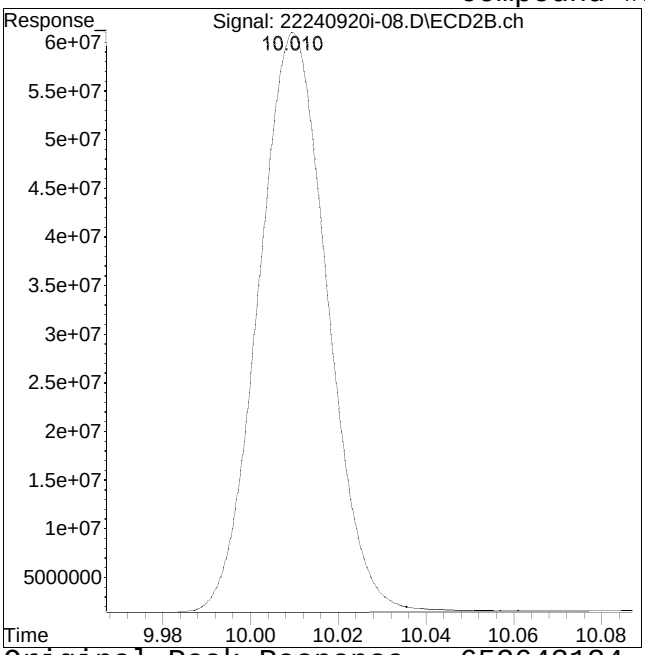



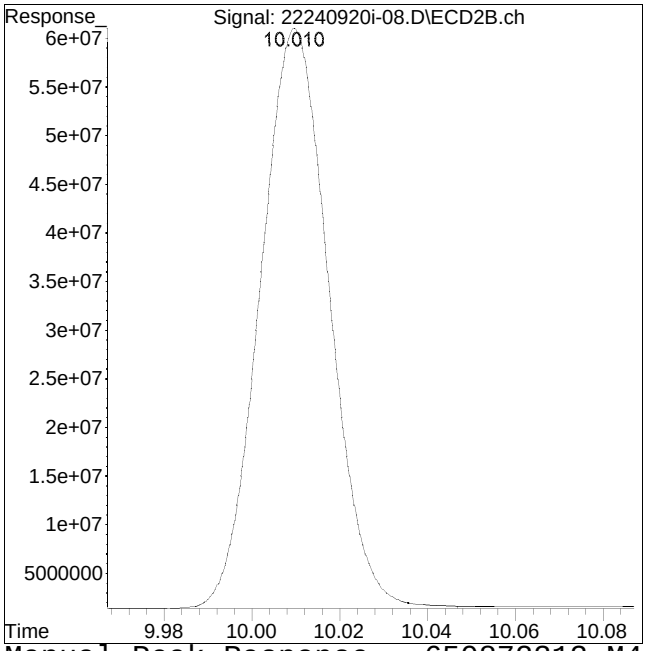

Original Peak Response = 675589499 Manual Peak Response = 634347238 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240920QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240920i-08.D Operator : pest22:akm
Date Inj'd : 9/20/2024 1:34 pm Instrument : Pest22
Sample : cicv,42e,,pp 11634 L0.2/20Quant Date : 9/23/2024 11:28 am

Compound #25: Dinoseb #2




Original Peak Response = 652643134 Manual Peak Response = 650872313 M4
M4 = Poor automated baseline construction.

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST22 | **Calibration Date** | : 09/24/24 06:22 | | |
| **Lab File ID** | : 22240924a-01 | **Init. Calib. Date(s)** | : 09/20/24 | 09/20/24 | |
| **Sample No** | : WG1975389-1 | **Init. Calib. Times** | : 11:42 | 13:15 | |
| **Channel** | : A | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 4,4'-DBOB | 1 | 1 | - | 0 | 15 | 105 | 0 |
| Dalapon | 0.234 | 0.242 | - | -3.4 | 15 | 105 | 0 |
| DCAA (surrogate) | 0.184 | 0.208 | - | -13 | 15 | 115 | 0 |
| Dicamba | 0.568 | 0.614 | - | -8.1 | 15 | 113 | 0 |
| MCPP | 0.00048 | 0.0005 | - | -4.2 | 15 | 108 | 0 |
| MCPA | 0.00087 | 0.00096 | - | -10.3 | 15 | 111 | 0 |
| Dichloroprop | 0.175 | 0.198 | - | -13.1 | 15 | 115 | 0 |
| 2,4-D | 0.213 | 0.233 | - | -9.4 | 15 | 115 | 0 |
| 2,4,5-TP (Silvex) | 0.772 | 0.872 | - | -13 | 15 | 116 | 0 |
| 2,4,5-T | 0.792 | 0.87 | - | -9.8 | 15 | 115 | 0 |
| 2,4-DB | 0.116 | 0.127 | - | -9.5 | 15 | 114 | 0 |
| Dinoseb | 0.59 | 0.621 | - | -5.3 | 15 | 108 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST22 | **Calibration Date** | : 09/24/24 06:22 | | |
| **Lab File ID** | : 22240924a-01 | **Init. Calib. Date(s)** | : 09/20/24 | 09/20/24 | |
| **Sample No** | : WG1975389-1 | **Init. Calib. Times** | : 11:42 | 13:15 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 4,4'-DBOB | 1 | 1 | - | 0 | 15 | 106 | 0 |
| Dalapon | 0.202 | 0.227 | - | -12.4 | 15 | 109 | 0 |
| DCAA (surrogate) | 0.189 | 0.209 | - | -10.6 | 15 | 115 | 0 |
| Dicamba | 0.534 | 0.584 | - | -9.4 | 15 | 114 | 0 |
| MCPP | 0.00053 | 0.00058 | - | -9.4 | 15 | 117 | 0 |
| MCPA | 0.00095 | 0.00104 | - | -9.5 | 15 | 114 | 0 |
| Dichloroprop | 0.173 | 0.191 | - | -10.4 | 15 | 113 | 0 |
| 2,4-D | 0.222 | 0.243 | - | -9.5 | 15 | 114 | 0 |
| 2,4,5-TP (Silvex) | 0.776 | 0.848 | - | -9.3 | 15 | 112 | 0 |
| 2,4,5-T | 0.768 | 0.832 | - | -8.3 | 15 | 113 | 0 |
| 2,4-DB | 0.126 | 0.138 | - | -9.5 | 15 | 114 | 0 |
| Dinoseb | 0.49 | 0.533 | - | -8.8 | 15 | 112 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | |
|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | |
| **Instrument ID** | : PEST22 | **Calibration Date** | : 09/24/24 13:41 | |
| **Lab File ID** | : 22240924a-22 | **Init. Calib. Date(s)** | : 09/20/24 | 09/20/24 |
| **Sample No** | : WG1975389-2 | **Init. Calib. Times** | : 11:42 | 13:15 |
| **Channel** | : A | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 4,4'-DBOB | 1 | 1 | - | 0 | 15 | 112 | 0 |
| Dalapon | 0.234 | 0.21 | - | 10.3 | 15 | 97 | 0 |
| DCAA (surrogate) | 0.184 | 0.207 | - | -12.5 | 15 | 122 | 0 |
| Dicamba | 0.568 | 0.602 | - | -6 | 15 | 118 | 0 |
| MCPP | 0.00048 | 0.00049 | - | -2.1 | 15 | 113 | 0 |
| MCPA | 0.00087 | 0.00093 | - | -6.9 | 15 | 114 | 0 |
| Dichloroprop | 0.175 | 0.182 | - | -4 | 15 | 113 | 0 |
| 2,4-D | 0.213 | 0.222 | - | -4.2 | 15 | 117 | -.01 |
| 2,4,5-TP (Silvex) | 0.772 | 0.827 | - | -7.1 | 15 | 117 | 0 |
| 2,4,5-T | 0.792 | 0.854 | - | -7.8 | 15 | 120 | -.01 |
| 2,4-DB | 0.116 | 0.134 | - | -15.5* | 15 | 128 | -.01 |
| Dinoseb | 0.59 | 0.521 | - | 11.7 | 15 | 96 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST22 | **Calibration Date** | : 09/24/24 13:41 | | |
| **Lab File ID** | : 22240924a-22 | **Init. Calib. Date(s)** | : 09/20/24 | 09/20/24 | |
| **Sample No** | : WG1975389-2 | **Init. Calib. Times** | : 11:42 | 13:15 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 4,4'-DBOB | 1 | 1 | - | 0 | 15 | 112 | 0 |
| Dalapon | 0.202 | 0.199 | - | 1.5 | 15 | 100 | 0 |
| DCAA (surrogate) | 0.189 | 0.197 | - | -4.2 | 15 | 114 | 0 |
| Dicamba | 0.534 | 0.551 | - | -3.2 | 15 | 113 | 0 |
| MCPP | 0.00053 | 0.00055 | - | -3.8 | 15 | 117 | 0 |
| MCPA | 0.00095 | 0.00099 | - | -4.2 | 15 | 115 | 0 |
| Dichloroprop | 0.173 | 0.18 | - | -4 | 15 | 113 | 0 |
| 2,4-D | 0.222 | 0.233 | - | -5 | 15 | 115 | 0 |
| 2,4,5-TP (Silvex) | 0.776 | 0.828 | - | -6.7 | 15 | 115 | 0 |
| 2,4,5-T | 0.768 | 0.808 | - | -5.2 | 15 | 116 | 0 |
| 2,4-DB | 0.126 | 0.13 | - | -3.2 | 15 | 113 | 0 |
| Dinoseb | 0.49 | 0.533 | - | -8.8 | 15 | 118 | 0 |

* Value outside of QC limits.

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-01.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 24 Sep 2024  06:22
Operator  : pest22:peg
Sample    : wg1975389-1,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc      : wg1975389,,ical21511
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 06:52:03 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title  : herb
QLast Update : Tue Sep 24 06:51:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 2 | t | Dalapon | | 0.234 | 0.242 | -3.4 | 105 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.184 | 0.208 | -13.0 | 115 | 0.00 |
| 4 | t | Dicamba | | 0.568 | 0.614 | -8.1 | 113 | 0.00 |
| 5 | t | MCPP | | 0.00048 | 0.00050 | -4.2 | 108 | 0.00 |
| 6 | t | MCPA | | 0.00087 | 0.00096 | -10.3 | 111 | 0.00 |
| 7 | t | Dichloroprop | | 0.175 | 0.198 | -13.1 | 115 | 0.00 |
| 8 | t | 2,4-D | | 0.213 | 0.233 | -9.4 | 115 | 0.00 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.772 | 0.872 | -13.0 | 116 | 0.00 |
| 10 | t | 2,4,5-T | | 0.792 | 0.870 | -9.8 | 115 | 0.00 |
| 11 | t | 2,4-DB | | 0.116 | 0.127 | -9.5 | 114 | 0.00 |
| 12 | t | Dinoseb | | 0.590 | 0.621 | -5.3 | 108 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 2 | t | Dalapon | | 0.202 | 0.227 | -12.4 | 109 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.189 | 0.209 | -10.6 | 115 | 0.00 |
| 4 | t | Dicamba | | 0.534 | 0.584 | -9.4 | 114 | 0.00 |
| 5 | t | MCPP | | 0.00053 | 0.00058 | -9.4 | 117 | 0.00 |
| 6 | t | MCPA | | 0.00095 | 0.00104 | -9.5 | 114 | 0.00 |
| 7 | t | Dichloroprop | | 0.173 | 0.191 | -10.4 | 113 | 0.00 |
| 8 | t | 2,4-D | | 0.222 | 0.243 | -9.5 | 114 | 0.00 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.776 | 0.848 | -9.3 | 112 | 0.00 |
| 10 | t | 2,4,5-T | | 0.768 | 0.832 | -8.3 | 113 | 0.00 |
| 11 | t | 2,4-DB | | 0.126 | 0.138 | -9.5 | 114 | 0.00 |
| 12 | t | Dinoseb | | 0.490 | 0.533 | -8.8 | 112 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-01.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 24 Sep 2024  06:22
Operator  : pest22:peg
Sample    : wg1975389-1,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc      : wg1975389,,ical21511
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 06:52:03 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title  : herb
QLast Update : Tue Sep 24 06:51:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| Compound | AvgRF | CCRF | %Dev | Area% Dev(Min) |
|---|---|---|---|---|

Signal #2

---

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-01.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 06:22
Operator : pest22:peg
Sample : wg1975389-1,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc : wg1975389,,ical21511
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 06:52:03 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 4,4'-DBOB | 8.434 | 8.435 | 1387.2E6 | 1727.3E6 | 0.250M4 | 0.250 |
| | | System Monitoring Compounds | | | | | | |
| 3) | s | DCAA (surrog | 6.899 | 7.363 | 217.2E6 | 272.1E6 | 0.213M4 | 0.208M4 |
| | | Spiked Amount | 0.500 | Range | 30 - 150 | Recovery = | 42.60% | 41.60% |
| | | Target Compounds | | | | | | |
| 2) | t | Dalapon | 2.324 | 2.319 | 244.4E6 | 285.9E6 | 0.189M3 | 0.205M4 |
| 4) | t | Dicamba | 7.075 | 7.542 | 640.9E6 | 758.2E6 | 0.203M4 | 0.206M4 |
| 5) | t | MCPP | 7.274 | 7.654 | 51923594 | 74894866 | 19.352 | 20.641M4 |
| 6) | t | MCPA | 7.420 | 7.881 | 98769696 | 133.2E6 | 20.460M4 | 20.225M4 |
| 7) | t | Dichloroprop | 7.781 | 8.200 | 206.8E6 | 247.5E6 | 0.213M4 | 0.208M4 |
| 8) | t | 2,4-D | 8.003 | 8.477 | 242.8E6 | 315.8E6 | 0.206M3 | 0.206M4 |
| 9) | t | 2,4,5-TP (Si | 8.712 | 9.136 | 919.3E6 | 1113.3E6 | 0.215M4 | 0.208M3 |
| 10) | t | 2,4,5-T | 8.940 | 9.427 | 916.8E6 | 1092.5E6 | 0.209M3 | 0.206 |
| 11) | t | 2,4-DB | 9.350 | 9.789 | 135.4E6 | 183.1E6 | 0.210M4 | 0.211 |
| 12) | t | Dinoseb | 10.084 | 10.011 | 654.9E6 | 699.9E6 | 0.200M4 | 0.207 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-01.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 06:22
Operator : pest22:peg
Sample : wg1975389-1,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc : wg1975389,,ical21511
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 06:52:03 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|

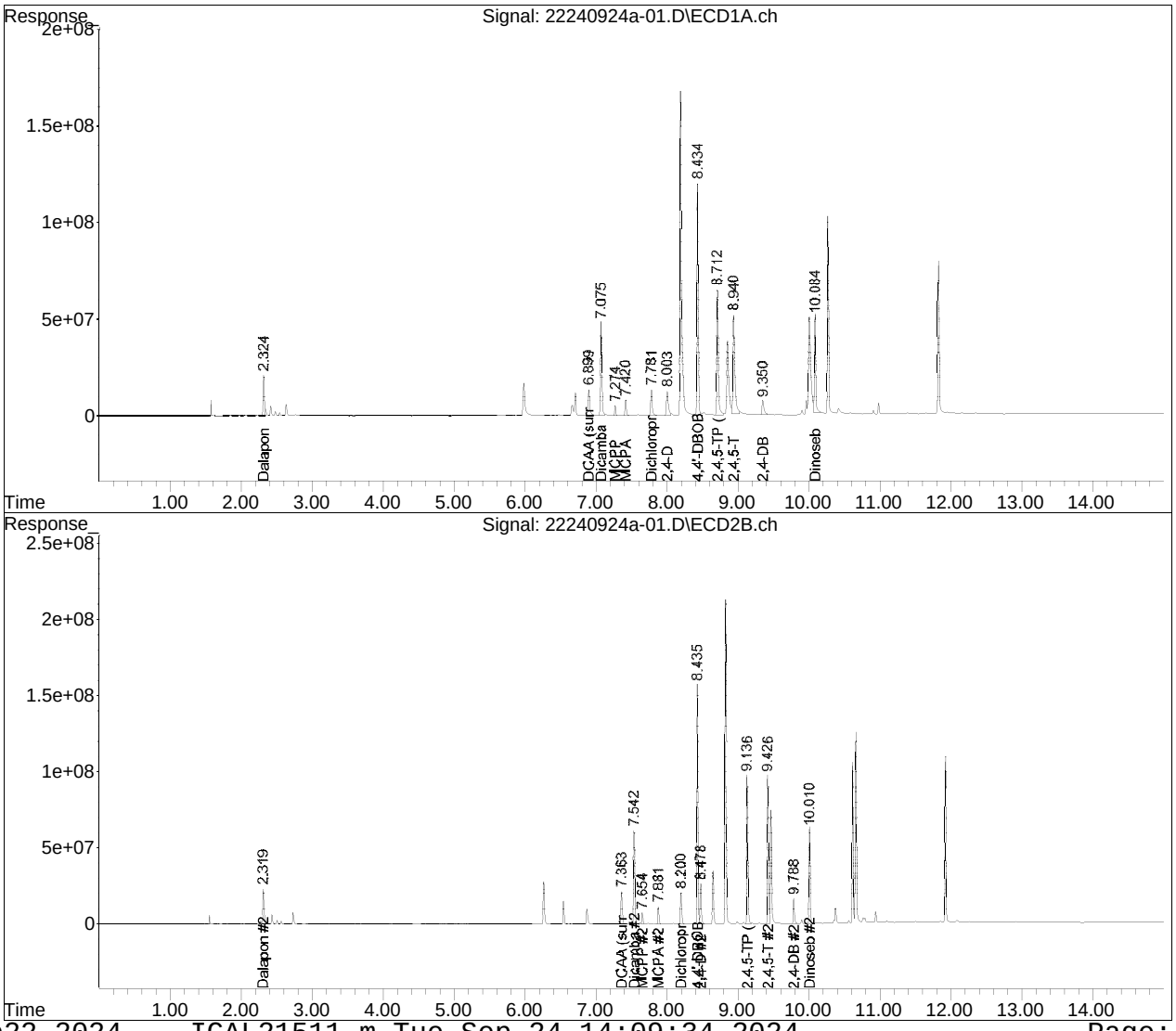
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-01.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 06:22
Operator : pest22:peg
Sample : wg1975389-1,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc : wg1975389,,ical21511
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 06:52:03 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:55 2024
Response via : Initial Calibration
Integrator: ChemStation

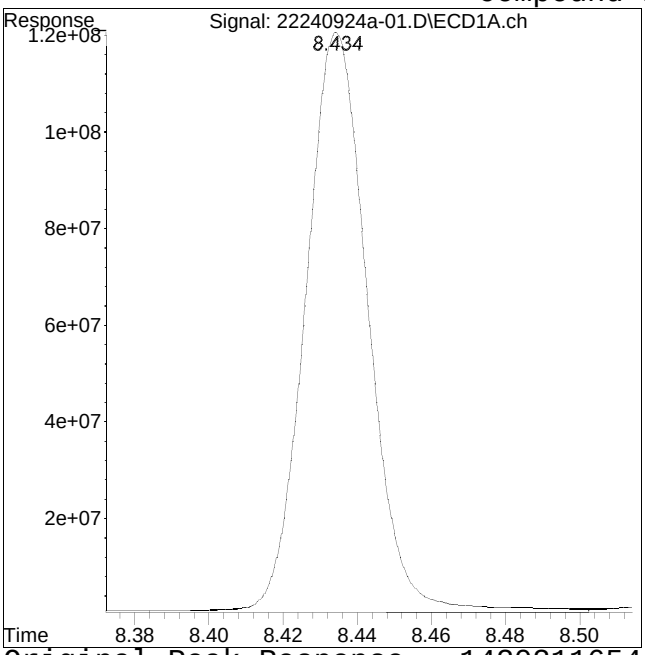
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

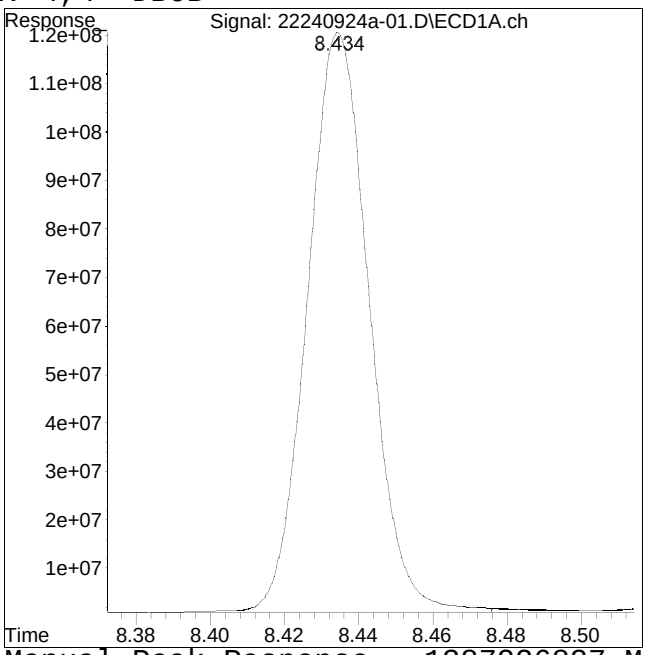


# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #1: 4,4'-DBOB



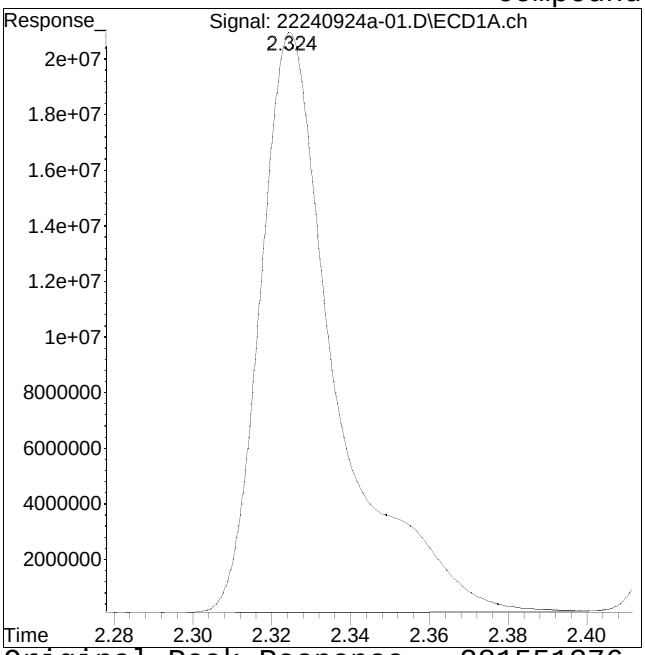



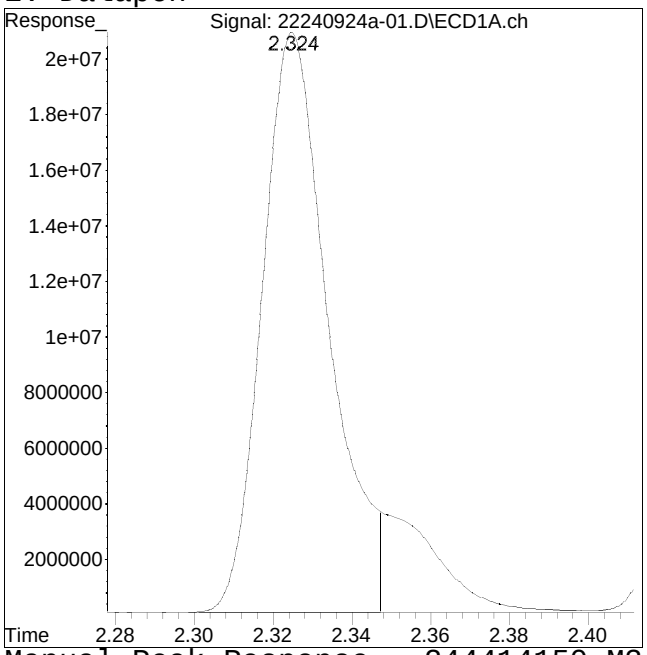

Original Peak Response = 1420211654 Manual Peak Response = 1387226827 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #2: Dalapon



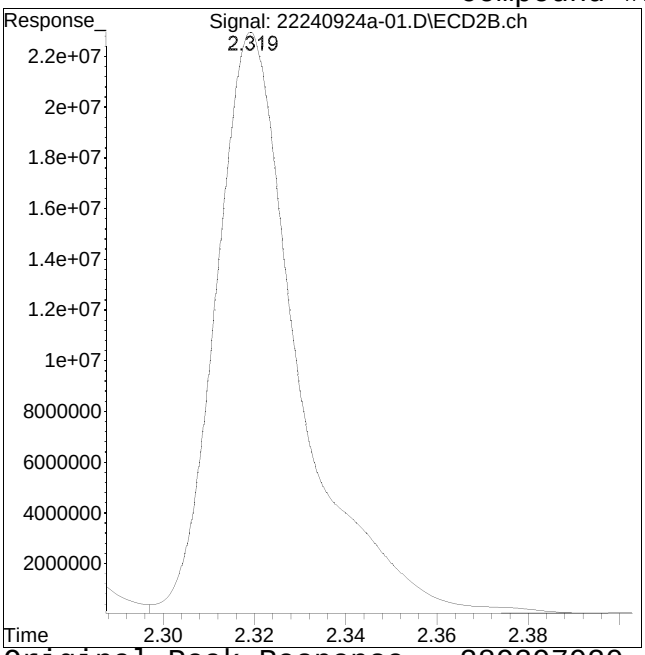



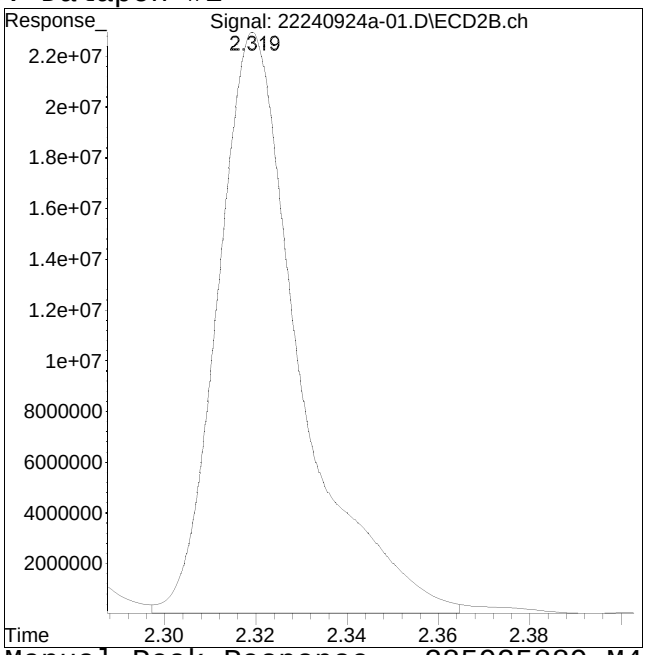

Original Peak Response = 281551376 Manual Peak Response = 244414150 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #15: Dalapon #2



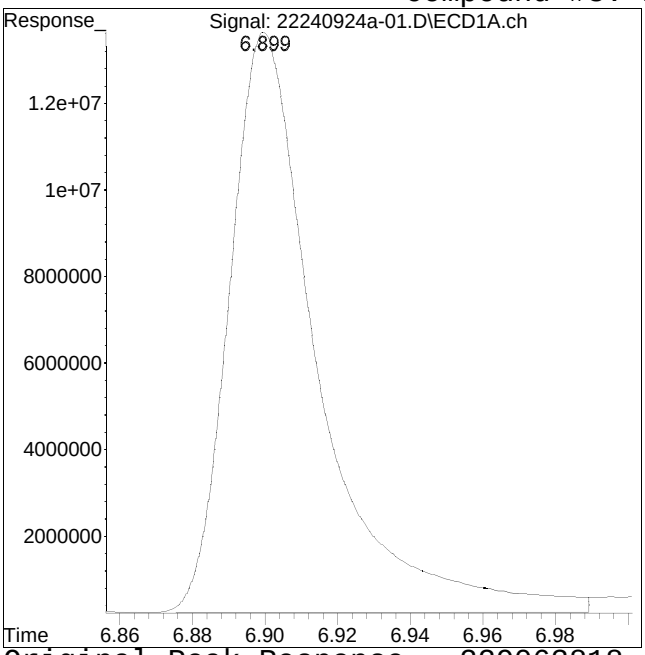



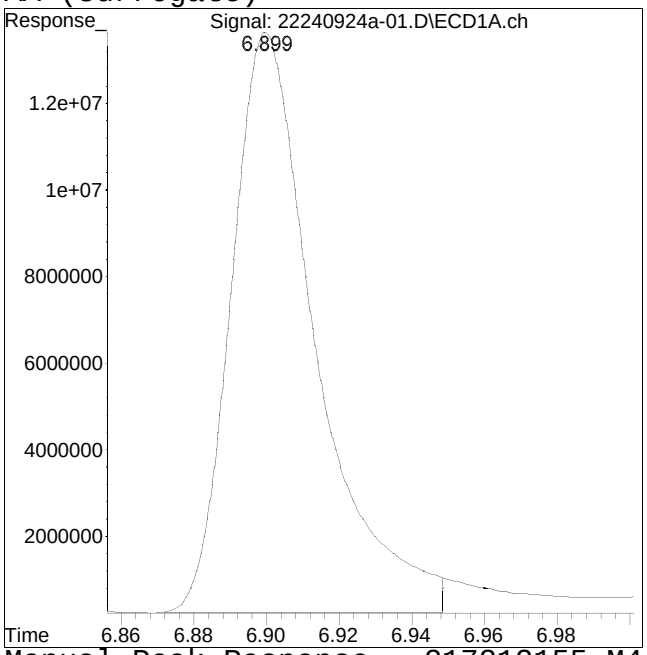

Original Peak Response = 289397920 Manual Peak Response = 285925889 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #3: DCAA (surrogate)



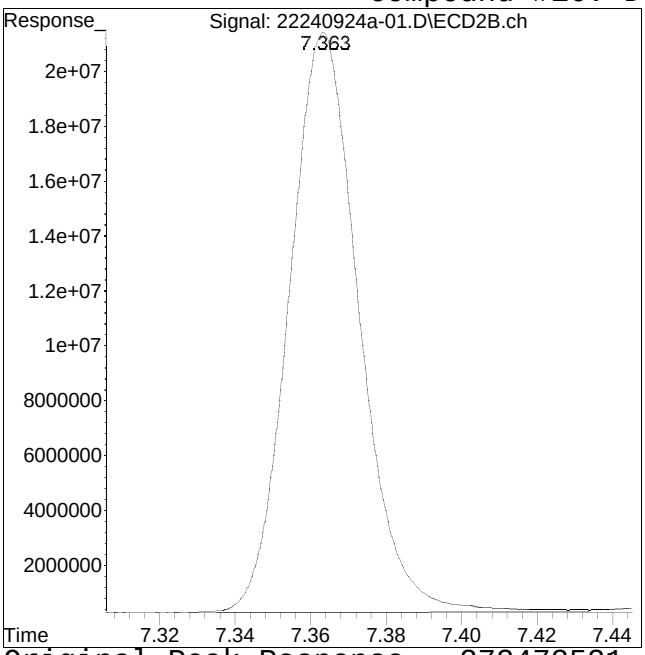




Original Peak Response = 229063818 Manual Peak Response = 217212155 M4
M4 = Poor automated baseline construction.

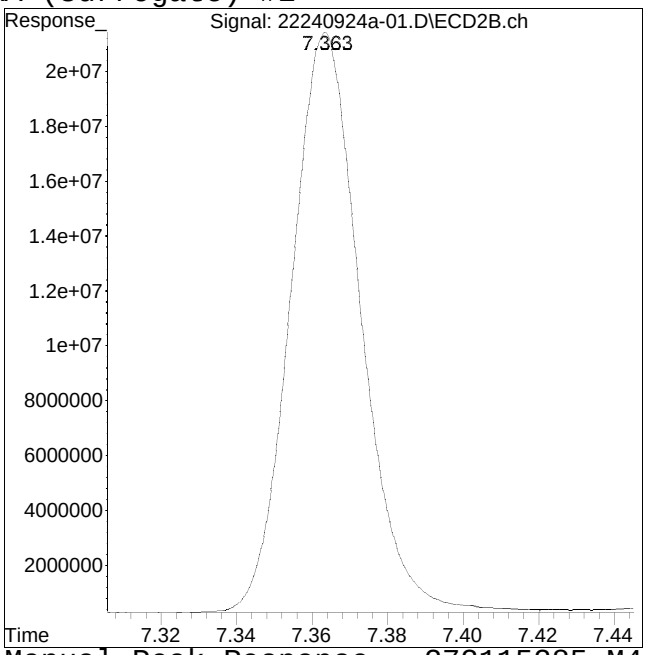
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #16: DCAA (surrogate) #2




Original Peak Response = 272472521

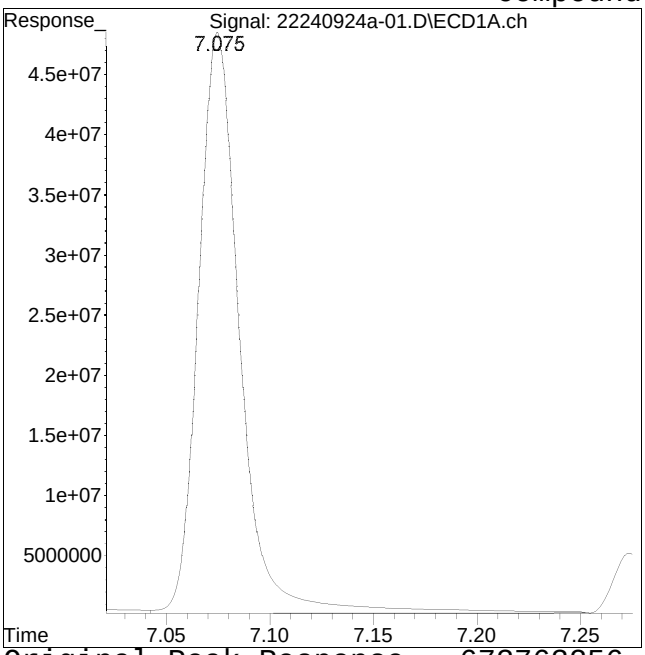



Manual Peak Response = 272115285 M4
M4 = Poor automated baseline construction.

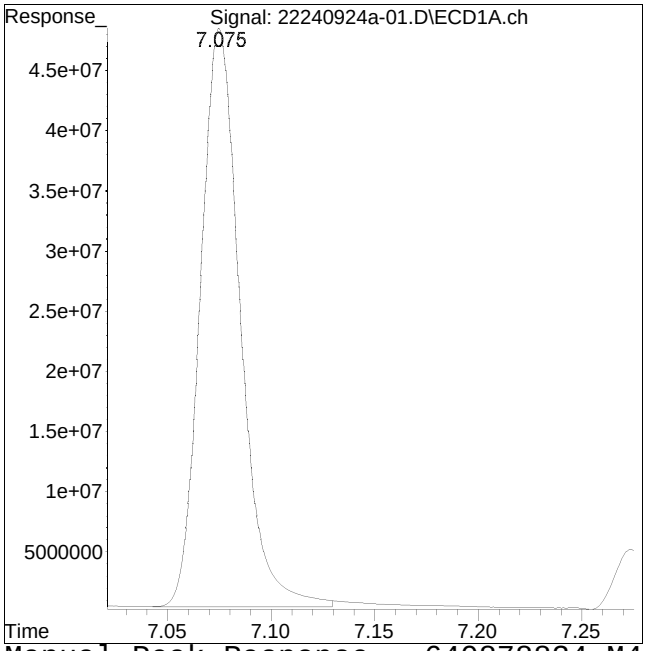
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #4: Dicamba




Original Peak Response = 673763256



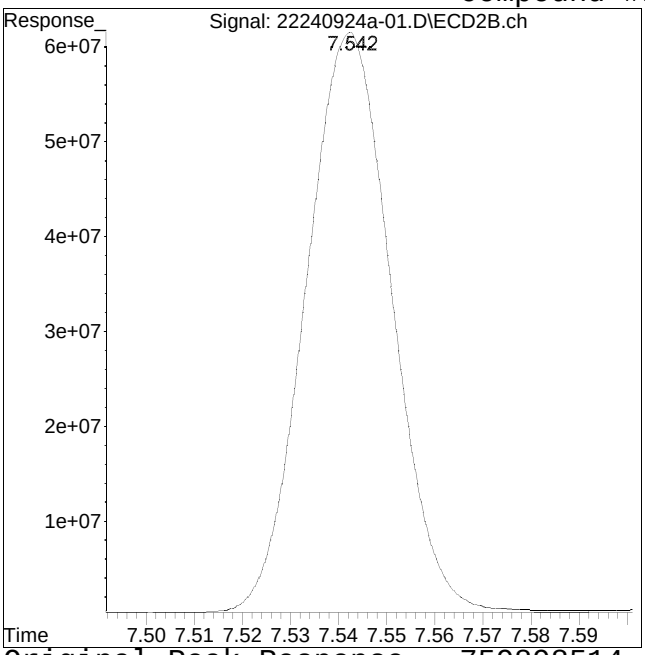

Manual Peak Response = 640878834 M4

M4 = Poor automated baseline construction.

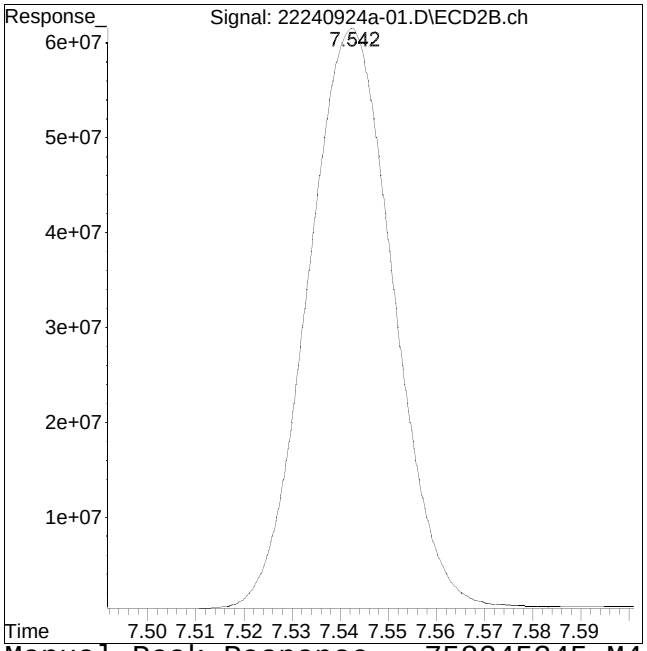
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #17: Dicamba #2




Original Peak Response = 759898514



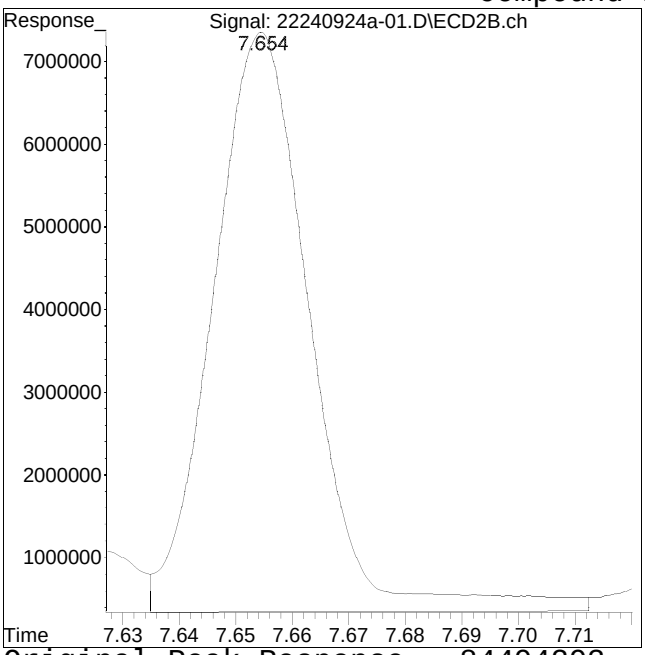

Manual Peak Response = 758245345 M4

M4 = Poor automated baseline construction.

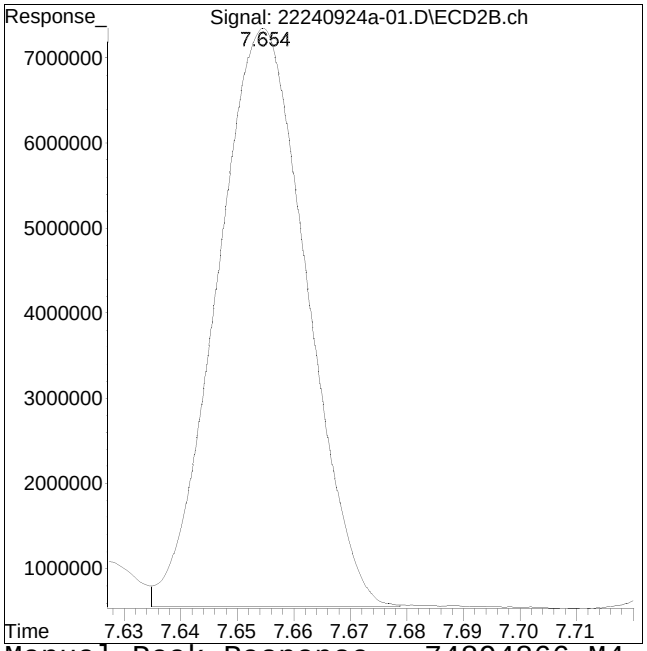
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #18: MCPP #2




Original Peak Response = 84494293



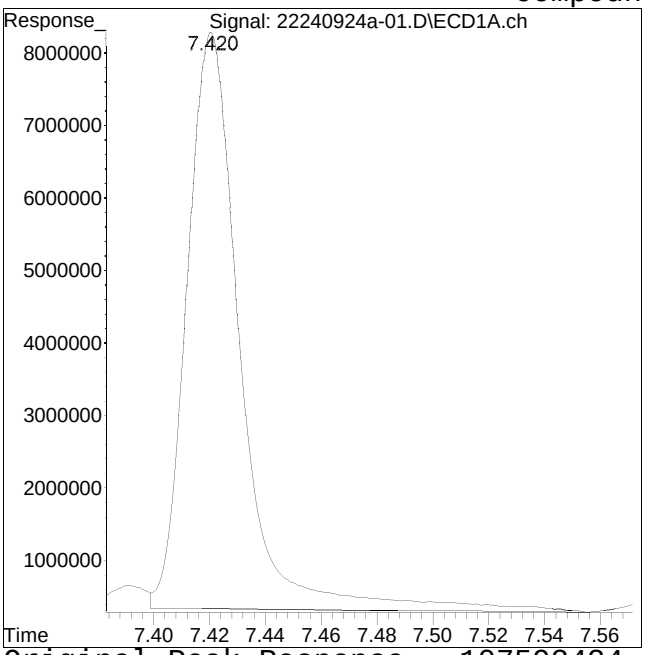

Manual Peak Response = 74894866 M4

M4 = Poor automated baseline construction.

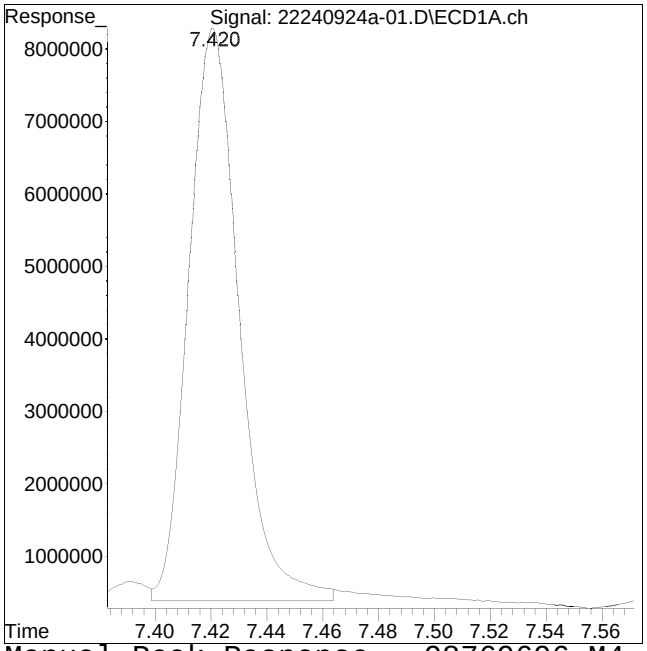
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #6: MCPA




Original Peak Response = 107592424

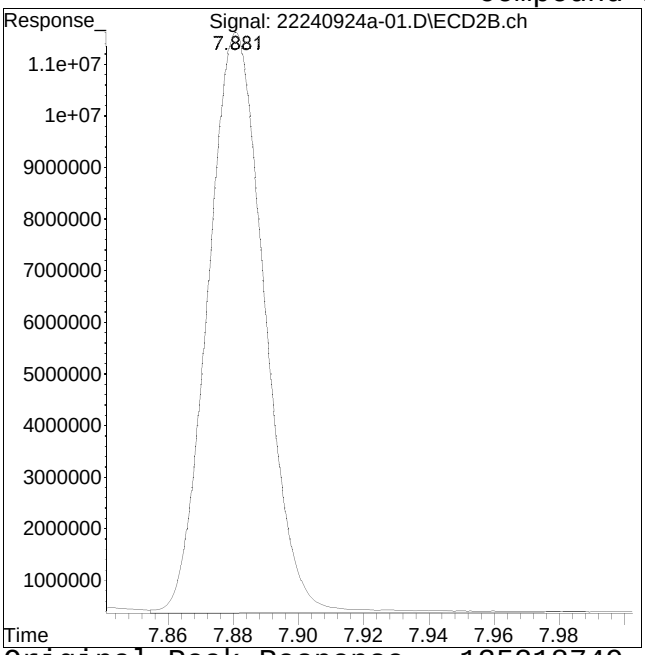


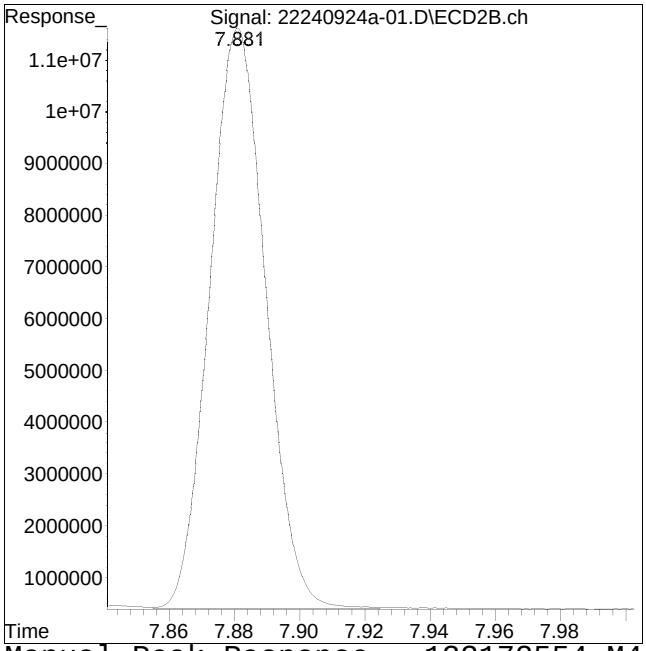

Manual Peak Response = 98769696 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #19: MCPA #2



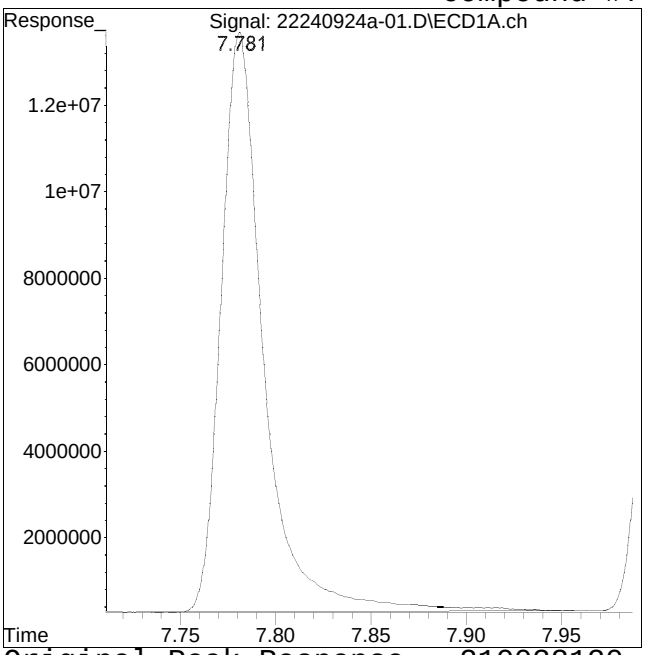




Original Peak Response = 135218749 Manual Peak Response = 133172554 M4
M4 = Poor automated baseline construction.

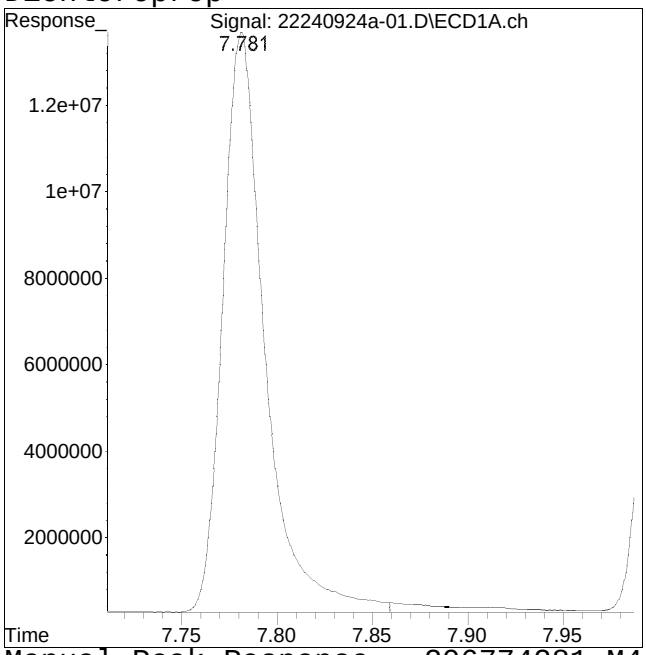
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #7: Dichloroprop




Original Peak Response = 210032120



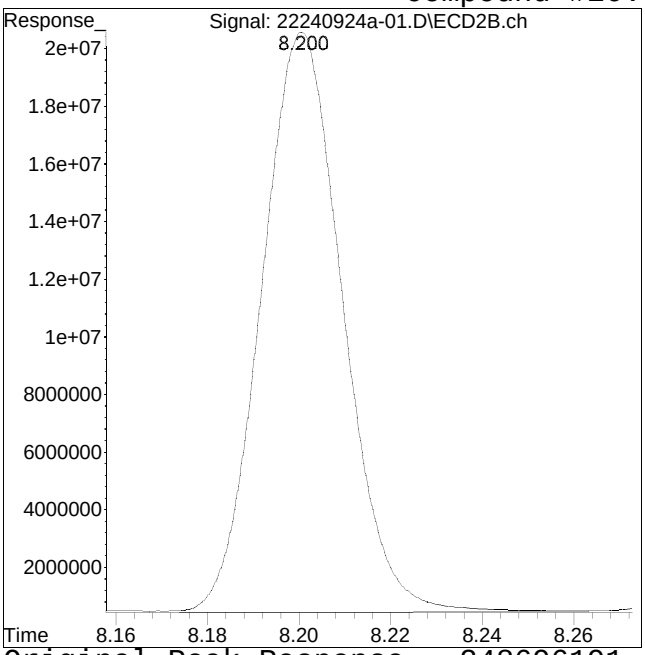

Manual Peak Response = 206774281 M4

M4 = Poor automated baseline construction.

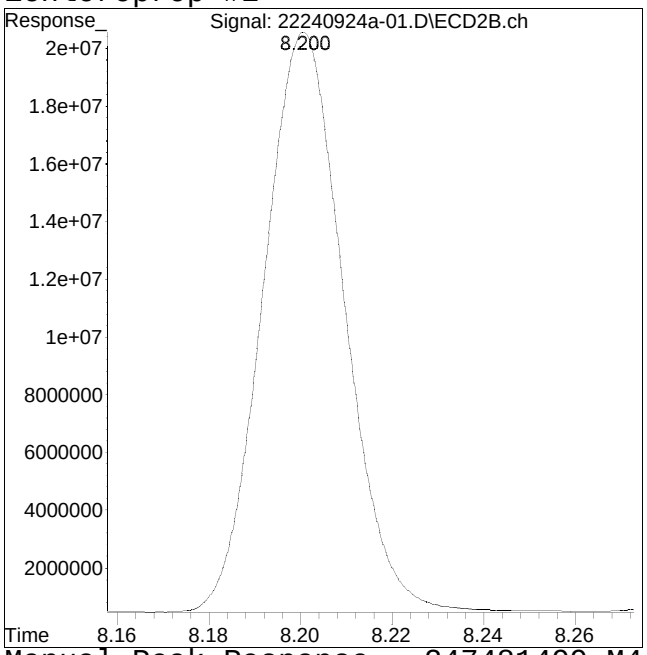
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #20: Dichloroprop #2




Original Peak Response = 248696191



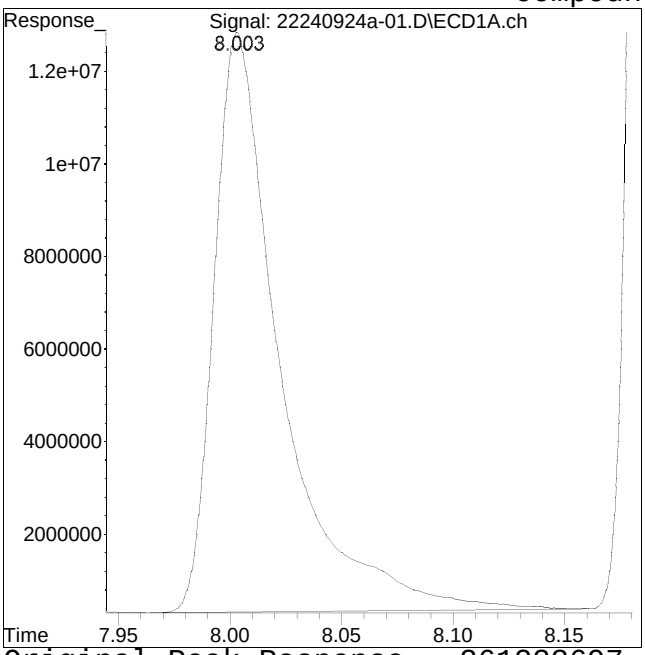

Manual Peak Response = 247481499 M4

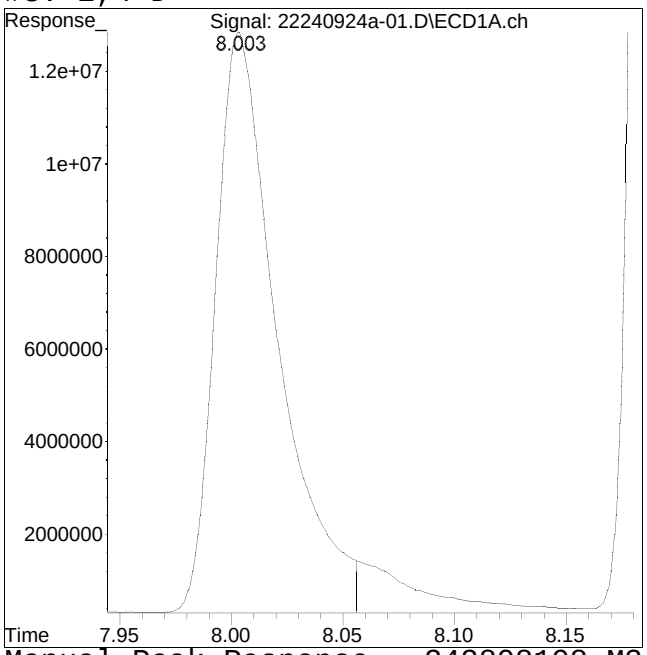
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #8: 2,4-D



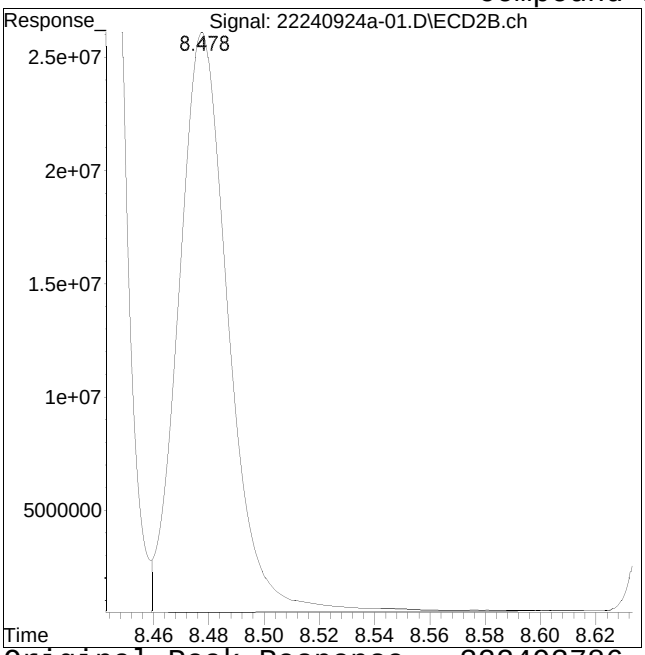




Original Peak Response = 261223697 Manual Peak Response = 242808198 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

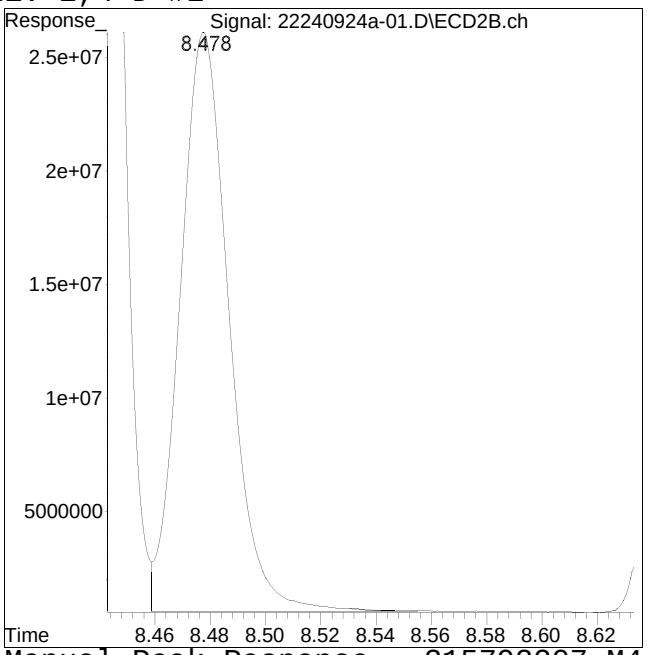
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #21: 2,4-D #2




Original Peak Response = 322493786

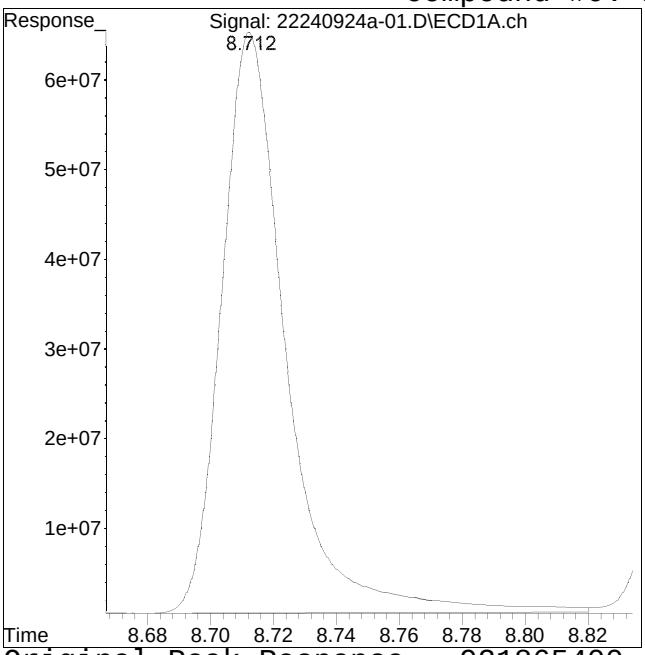



Manual Peak Response = 315792207 M4
M4 = Poor automated baseline construction.

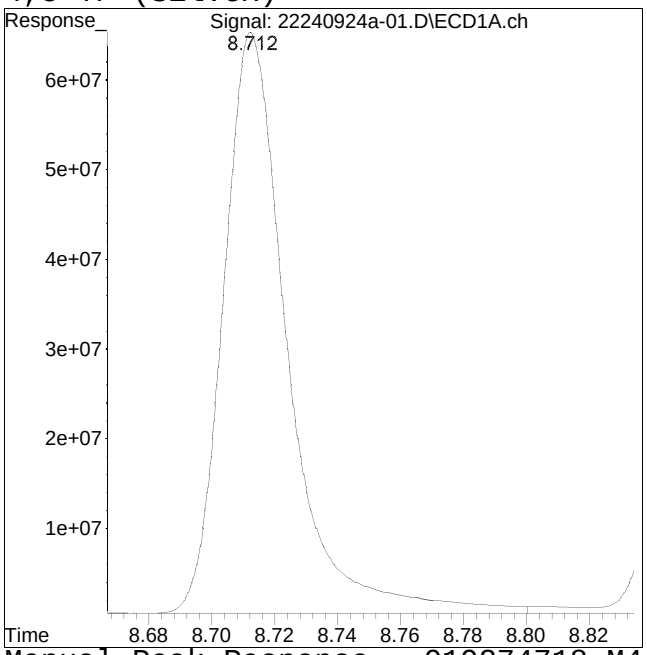
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #9: 2,4,5-TP (Silvex)




Original Peak Response = 921865400



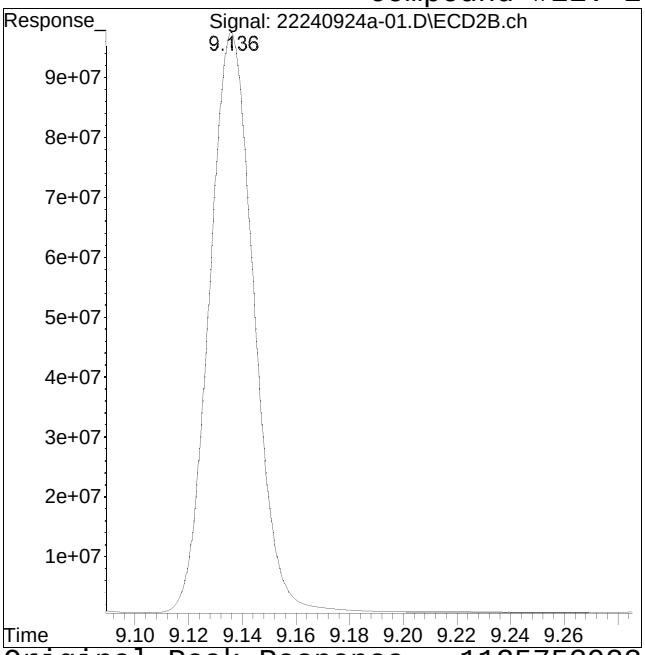

Manual Peak Response = 919274718 M4

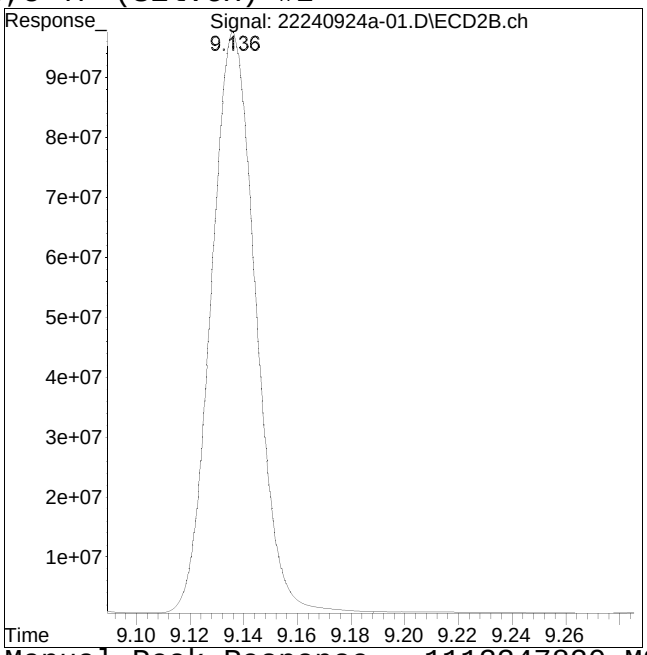
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #22: 2,4,5-TP (Silvex) #2



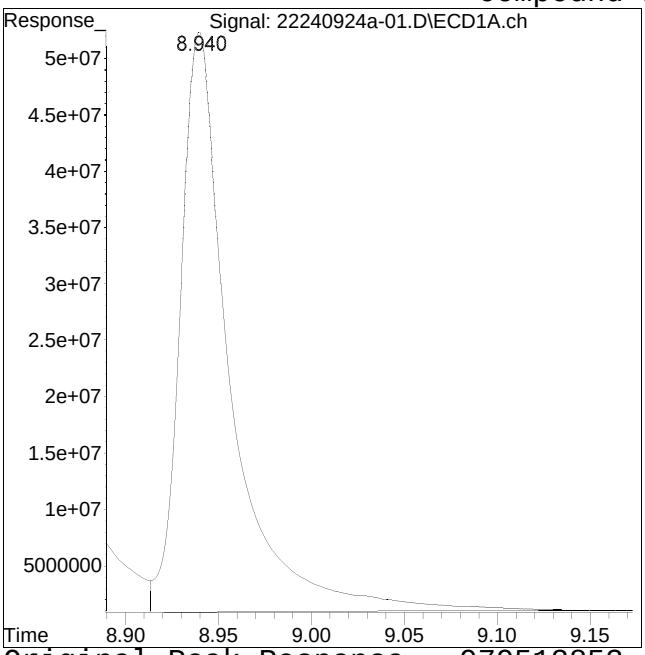



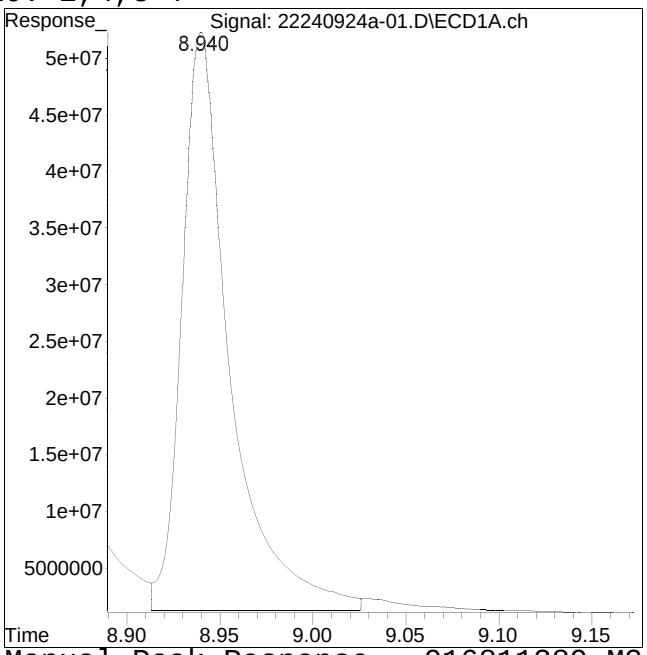

Original Peak Response = 1125753923 Manual Peak Response = 1113347820 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #10: 2,4,5-T



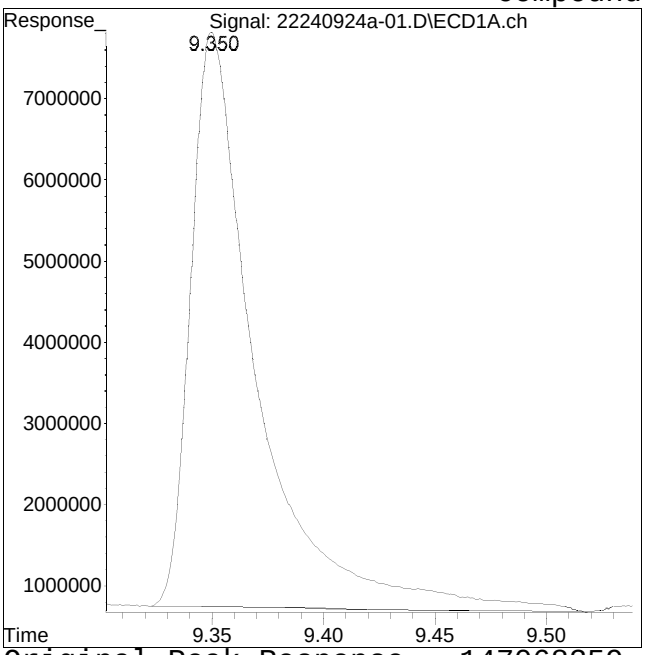



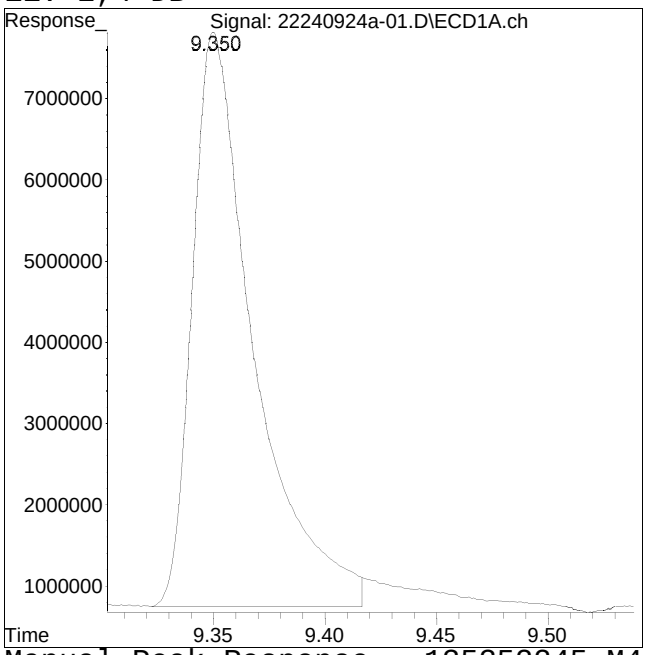

Original Peak Response = 979512853 Manual Peak Response = 916811389 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

Compound #11: 2,4-DB



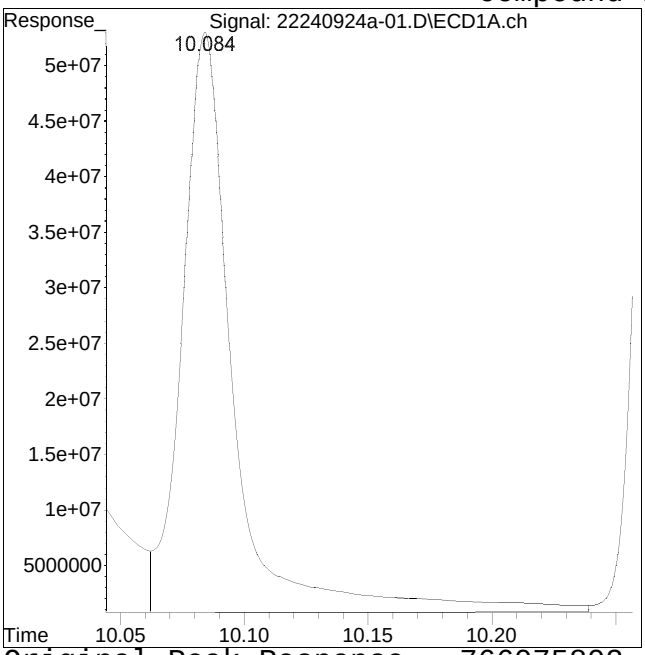




Original Peak Response = 147068359 Manual Peak Response = 135352245 M4
M4 = Poor automated baseline construction.

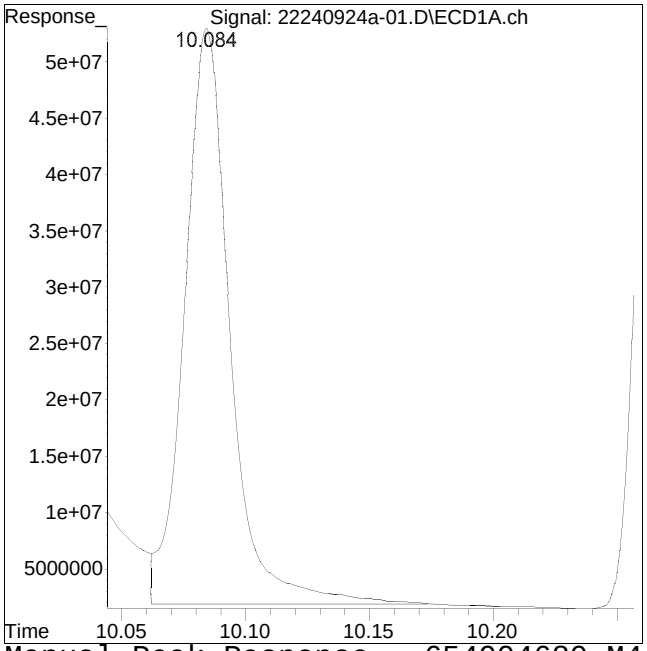
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-01.D Operator : pest22:peg
Date Inj'd : 9/24/2024 6:22 Instrument : Pest22
Sample : wg1975389-1,42,,herb11705 Quant Date : 9/24/2024 6:52 am

## Compound #12: Dinoseb




Original Peak Response = 766075802




Manual Peak Response = 654904680 M4

M4 = Poor automated baseline construction.

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-22.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 24 Sep 2024  13:41
Operator  : pest22:emr
Sample    : wg1975389-2,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc      : wg1975389,,ical21511
ALS Vial  : 22   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:08:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title  : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 2 | t | Dalapon | | 0.234 | 0.210 | 10.3 | 97 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.184 | 0.207 | -12.5 | 122 | 0.00 |
| 4 | t | Dicamba | | 0.568 | 0.602 | -6.0 | 118 | 0.00 |
| 5 | t | MCPP | | 0.00048 | 0.00049 | -2.1 | 113 | 0.00 |
| 6 | t | MCPA | | 0.00087 | 0.00093 | -6.9 | 114 | 0.00 |
| 7 | t | Dichloroprop | | 0.175 | 0.182 | -4.0 | 113 | 0.00 |
| 8 | t | 2,4-D | | 0.213 | 0.222 | -4.2 | 117 | -0.01 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.772 | 0.827 | -7.1 | 117 | 0.00 |
| 10 | t | 2,4,5-T | | 0.792 | 0.854 | -7.8 | 120 | -0.01 |
| 11 | t | 2,4-DB | | 0.116 | 0.134 | -15.5# | 128 | -0.01 |
| 12 | t | Dinoseb | | 0.590 | 0.521 | 11.7 | 96 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 4,4'-DBOB | ^ | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 2 | t | Dalapon | | 0.202 | 0.199 | 1.5 | 100 | 0.00 |
| 3 | s | DCAA (surrogate) | | 0.189 | 0.197 | -4.2 | 114 | 0.00 |
| 4 | t | Dicamba | | 0.534 | 0.551 | -3.2 | 113 | 0.00 |
| 5 | t | MCPP | | 0.00053 | 0.00055 | -3.8 | 117 | 0.00 |
| 6 | t | MCPA | | 0.00095 | 0.00099 | -4.2 | 115 | 0.00 |
| 7 | t | Dichloroprop | | 0.173 | 0.180 | -4.0 | 113 | 0.00 |
| 8 | t | 2,4-D | | 0.222 | 0.233 | -5.0 | 115 | 0.00 |
| 9 | t | 2,4,5-TP (Silvex) | | 0.776 | 0.828 | -6.7 | 115 | 0.00 |
| 10 | t | 2,4,5-T | | 0.768 | 0.808 | -5.2 | 116 | 0.00 |
| 11 | t | 2,4-DB | | 0.126 | 0.130 | -3.2 | 113 | 0.00 |
| 12 | t | Dinoseb | | 0.490 | 0.533 | -8.8 | 118 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-22.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 24 Sep 2024  13:41
Operator  : pest22:emr
Sample    : wg1975389-2,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc      : wg1975389,,ical21511
ALS Vial  : 22   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:08:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title  : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

| Compound | AvgRF | CCRF | %Dev | Area% Dev(Min) |
|---|---|---|---|---|

Signal #2

---

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-22.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 13:41
Operator : pest22:emr
Sample : wg1975389-2,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc : wg1975389,,ical21511
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:08:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 4,4'-DBOB | 8.436 | 8.435 | 1479.6E6 | 1819.8E6 | 0.250 | 0.250 |
| | System Monitoring Compounds | | | | | | |
| 3) s | DCAA (surrog | 6.893 | 7.361 | 230.3E6 | 270.2E6 | 0.211M4 | 0.196M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 42.20% | 39.20% |
| | Target Compounds | | | | | | |
| 2) t | Dalapon | 2.323 | 2.318 | 226.2E6 | 264.1E6 | 0.164M4 | 0.180M4 |
| 4) t | Dicamba | 7.073 | 7.542 | 670.3E6 | 754.0E6 | 0.200 | 0.194 |
| 5) t | MCPP | 7.275 | 7.654 | 54211417 | 74721439 | 18.943 | 19.547 |
| 6) t | MCPA | 7.422 | 7.881 | 102.2E6 | 134.6E6 | 19.843 | 19.403 |
| 7) t | Dichloroprop | 7.776 | 8.199 | 202.9E6 | 245.9E6 | 0.196M4 | 0.196M4 |
| 8) t | 2,4-D | 7.990 | 8.476 | 247.5E6 | 319.0E6 | 0.197 | 0.197 |
| 9) t | 2,4,5-TP (Si | 8.707 | 9.135 | 930.1E6 | 1144.6E6 | 0.204 | 0.203 |
| 10) t | 2,4,5-T | 8.929 | 9.425 | 959.9E6 | 1117.6E6 | 0.205 | 0.200 |
| 11) t | 2,4-DB | 9.337 | 9.786 | 151.9E6 | 181.8E6 | 0.221 | 0.199M4 |
| 12) t | Dinoseb | 10.084 | 10.009 | 586.2E6 | 736.9E6 | 0.168M4 | 0.207M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

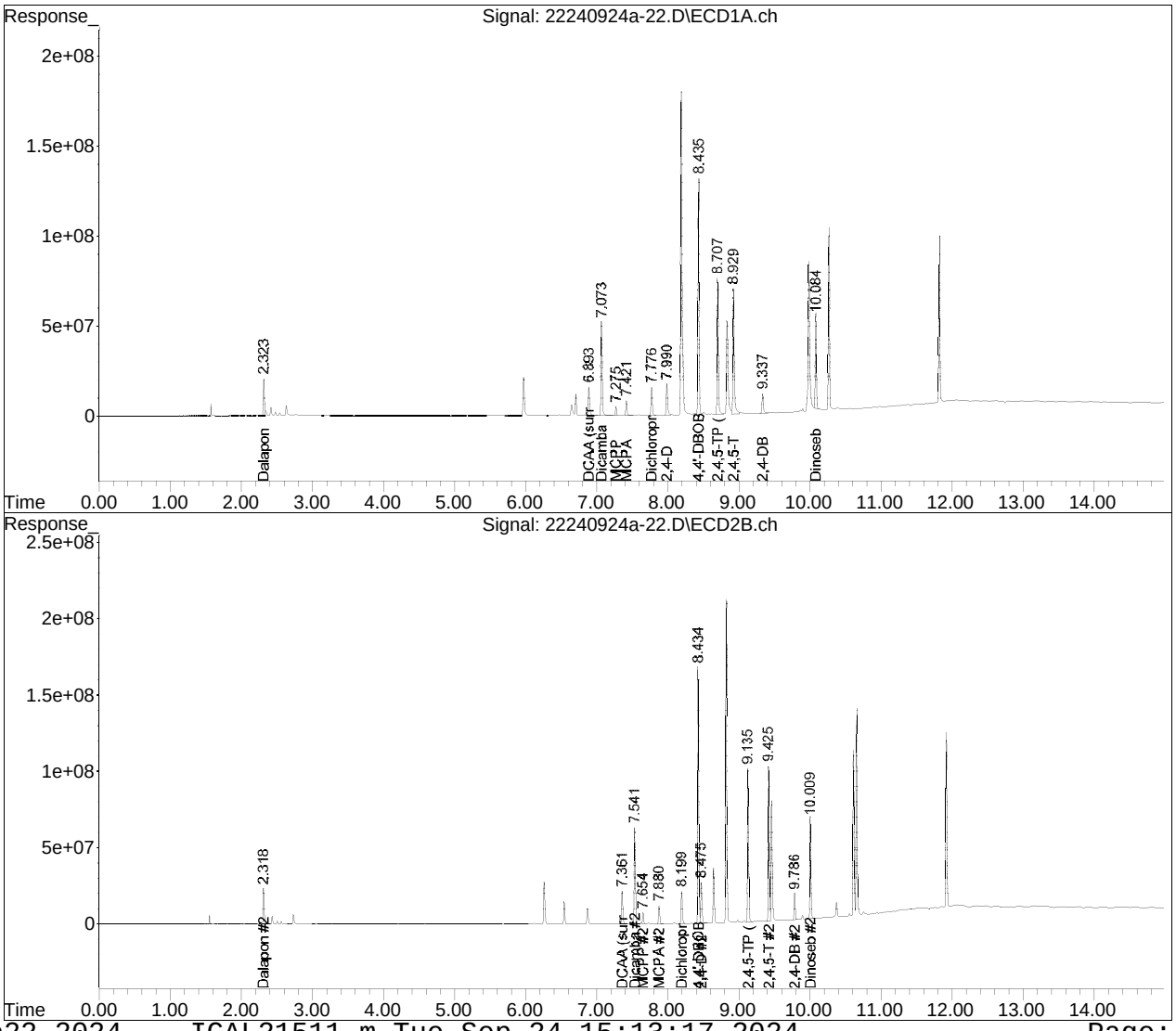
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-22.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 13:41
Operator : pest22:emr
Sample : wg1975389-2,42,,herb11705 (Sig #1); herb11705 (Sig #2)
Misc : wg1975389,,ical21511
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 15:08:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

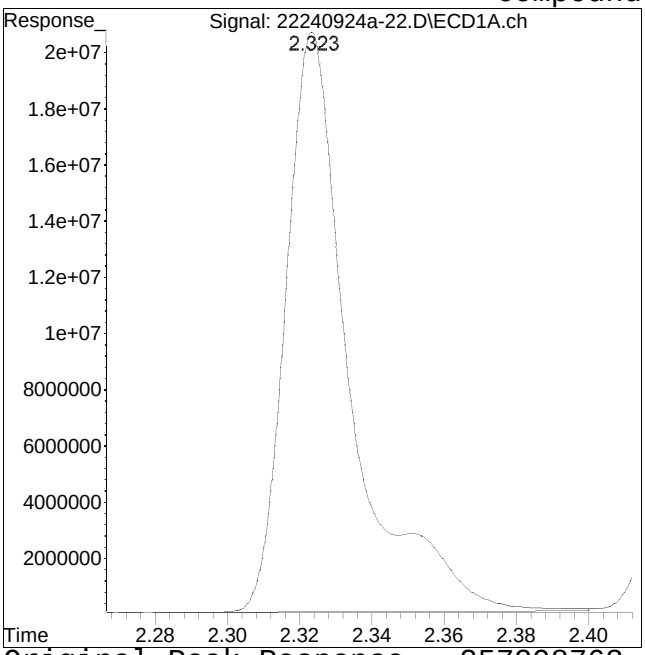
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

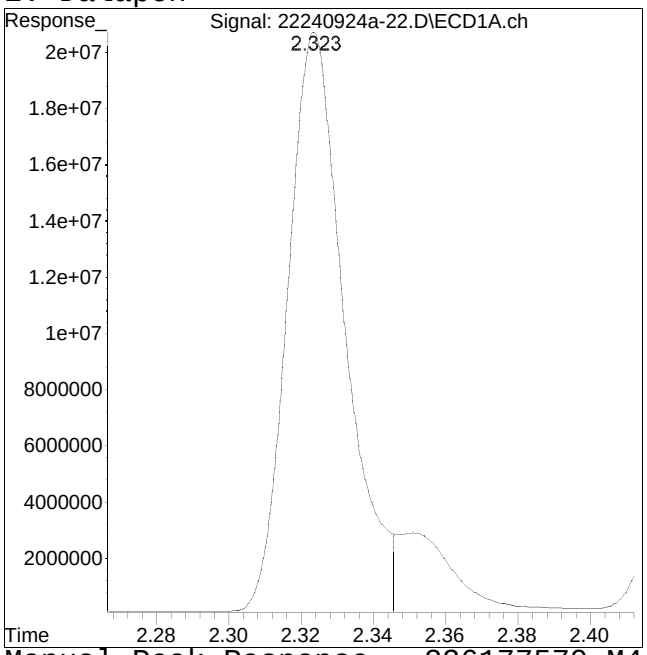


# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

## Compound #2: Dalapon



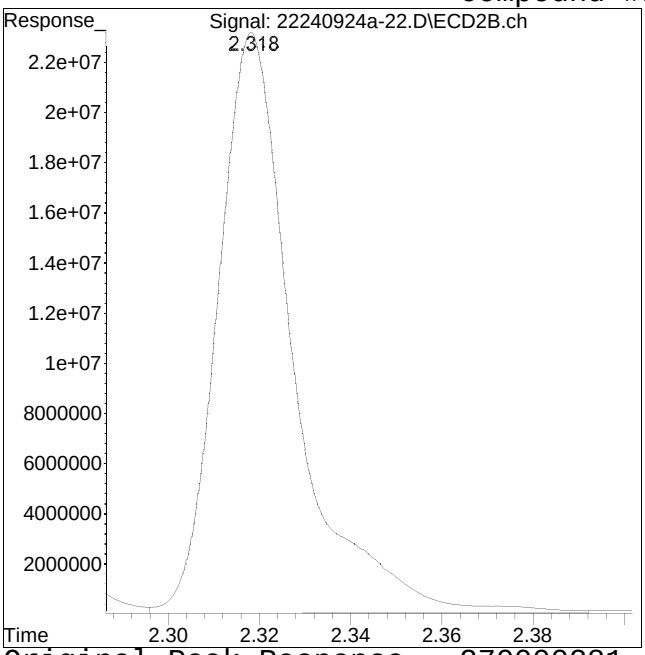




Original Peak Response = 257298763 Manual Peak Response = 226177570 M4
M4 = Poor automated baseline construction.

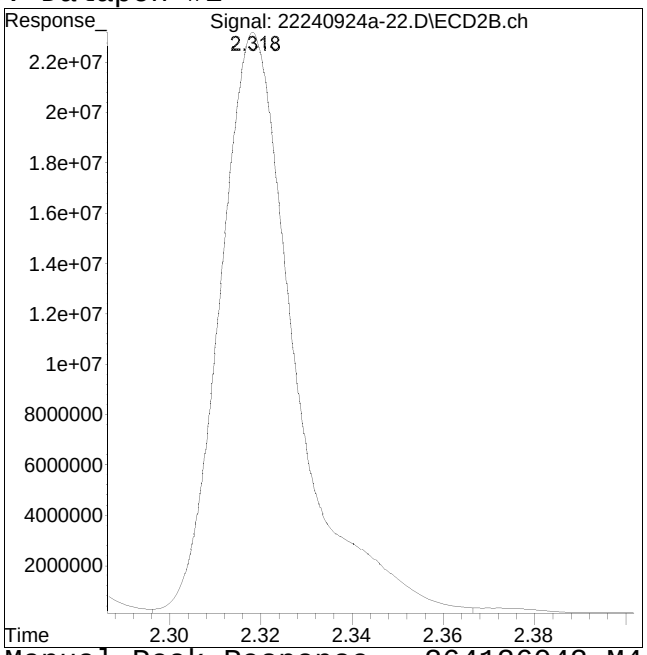
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #15: Dalapon #2




Original Peak Response = 270000281



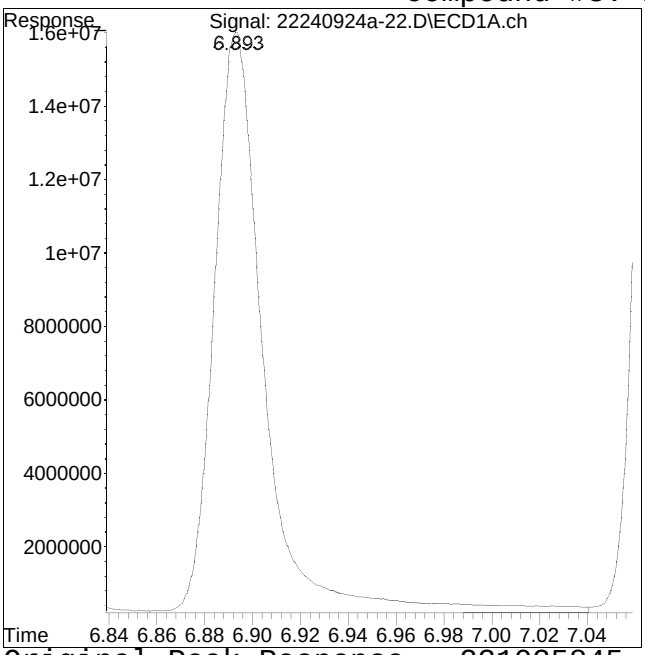

Manual Peak Response = 264126042 M4

M4 = Poor automated baseline construction.

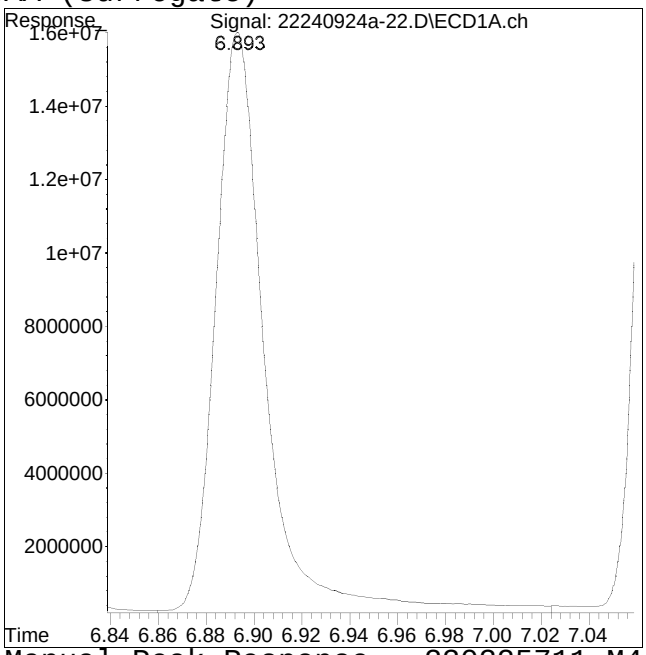
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #3: DCAA (surrogate)




Original Peak Response = 231025845



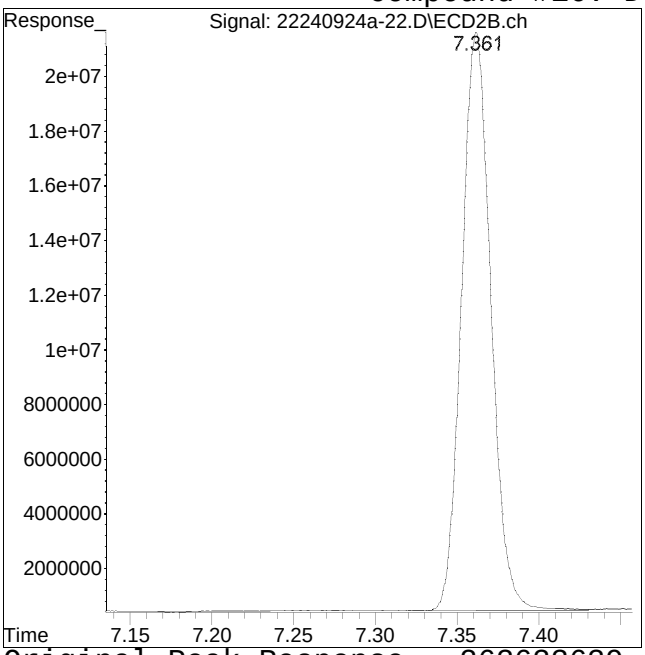

Manual Peak Response = 230325711 M4

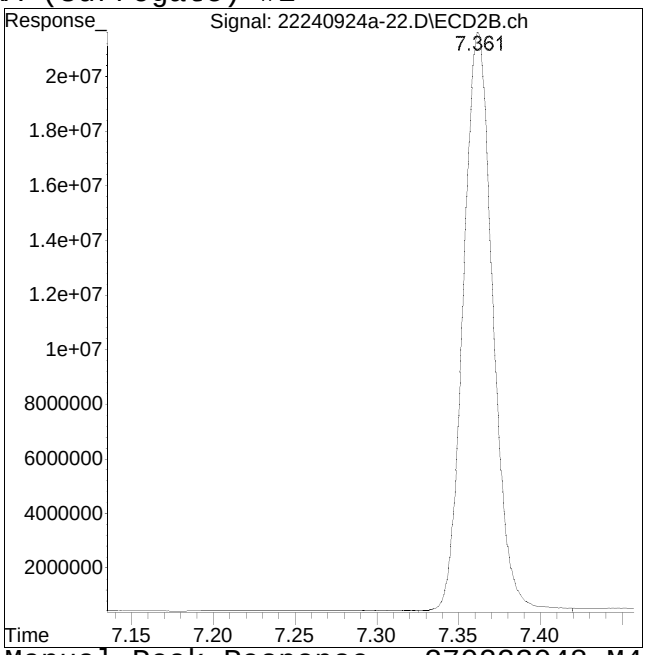
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #16: DCAA (surrogate) #2



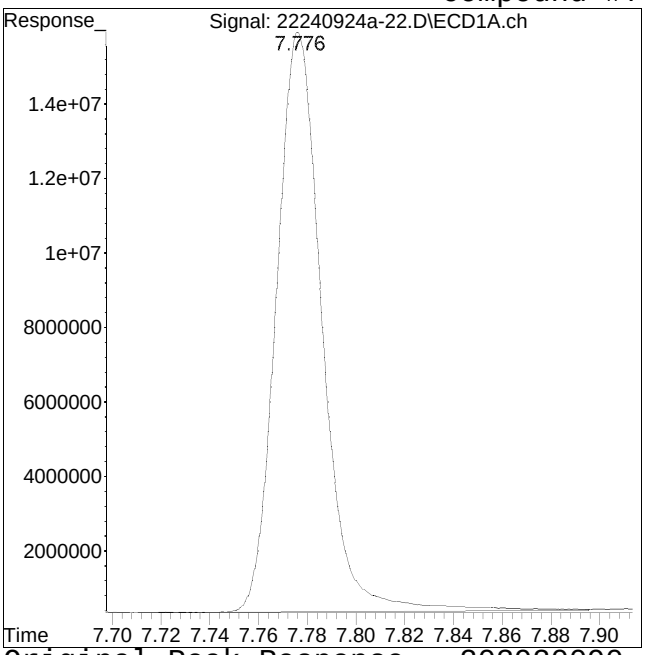



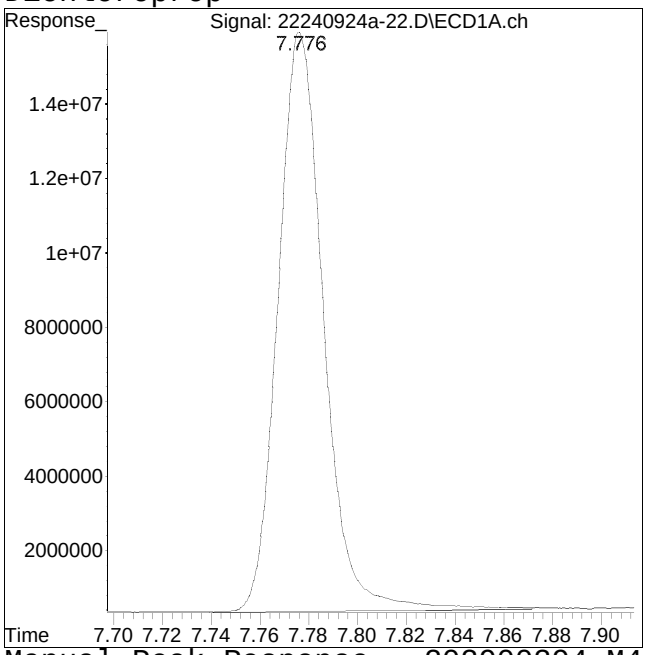

Original Peak Response = 263633639 Manual Peak Response = 270223048 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #7: Dichloroprop



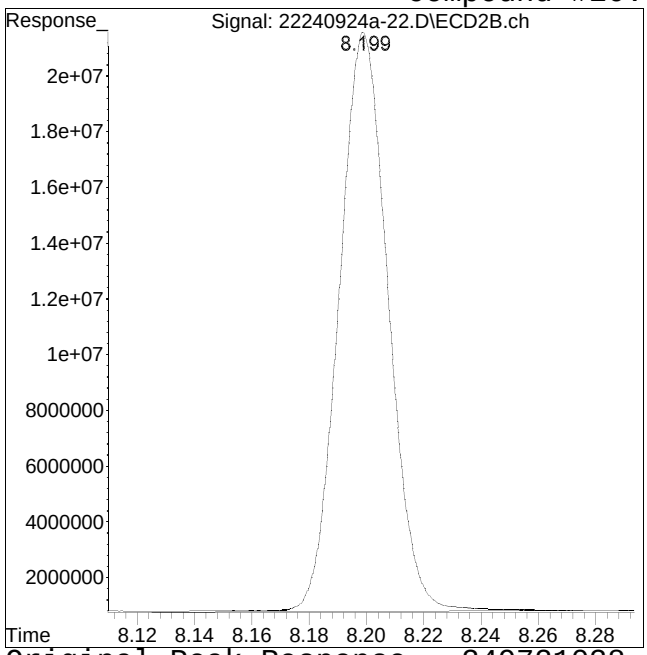




Original Peak Response = 203920090 Manual Peak Response = 202900394 M4
M4 = Poor automated baseline construction.

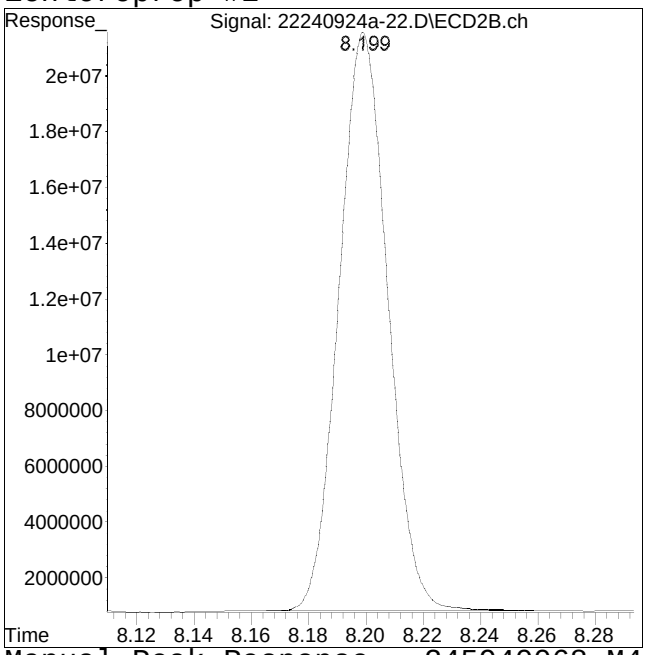
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #20: Dichloroprop #2




Original Peak Response = 249721038



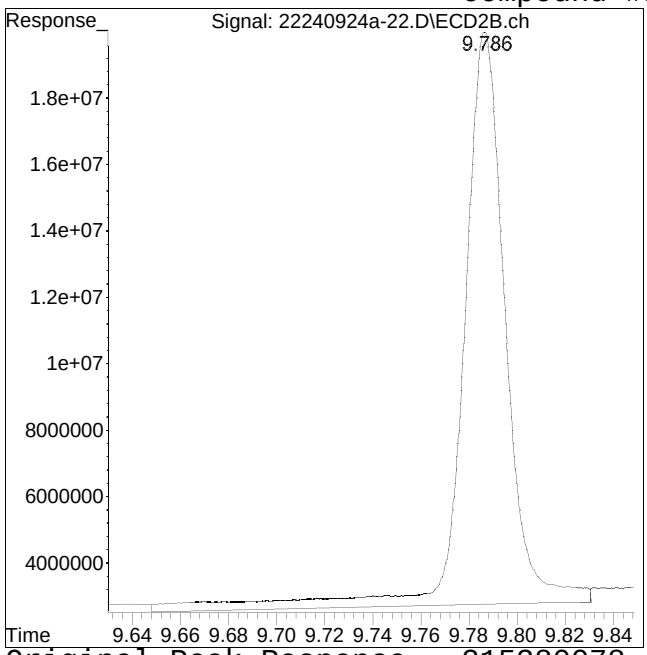

Manual Peak Response = 245940068 M4

M4 = Poor automated baseline construction.

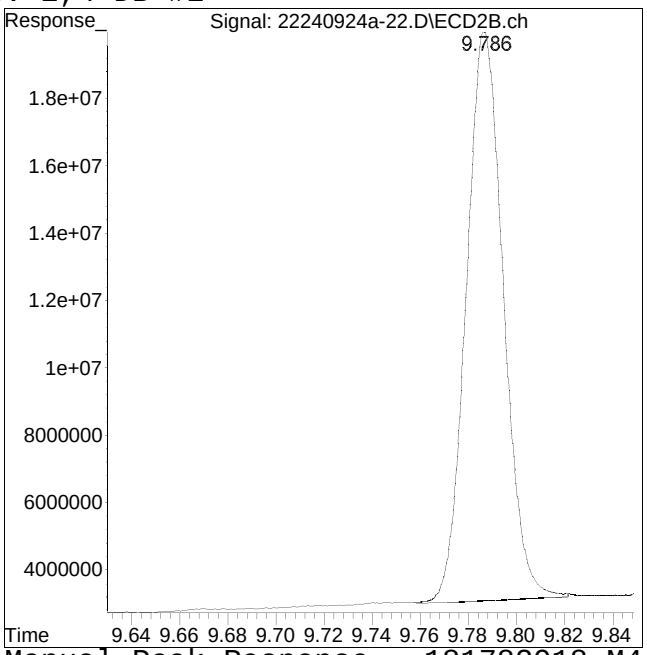
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #24: 2,4-DB #2




Original Peak Response = 215380078



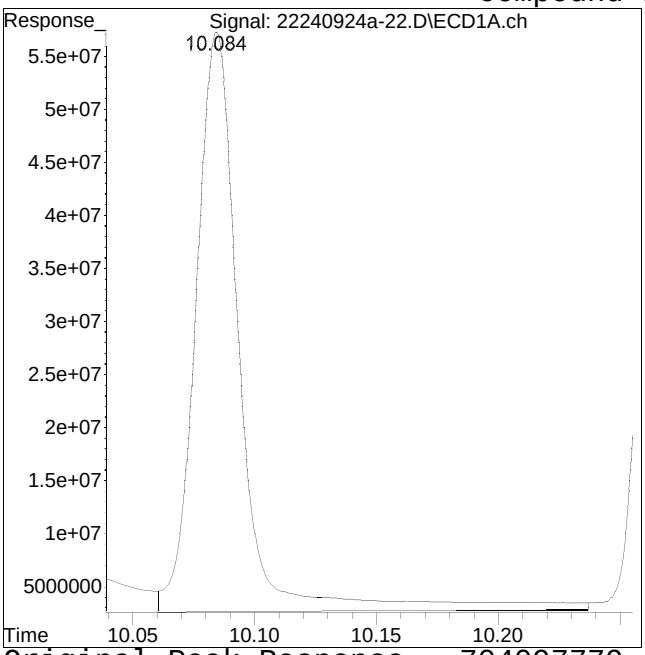

Manual Peak Response = 181782918 M4

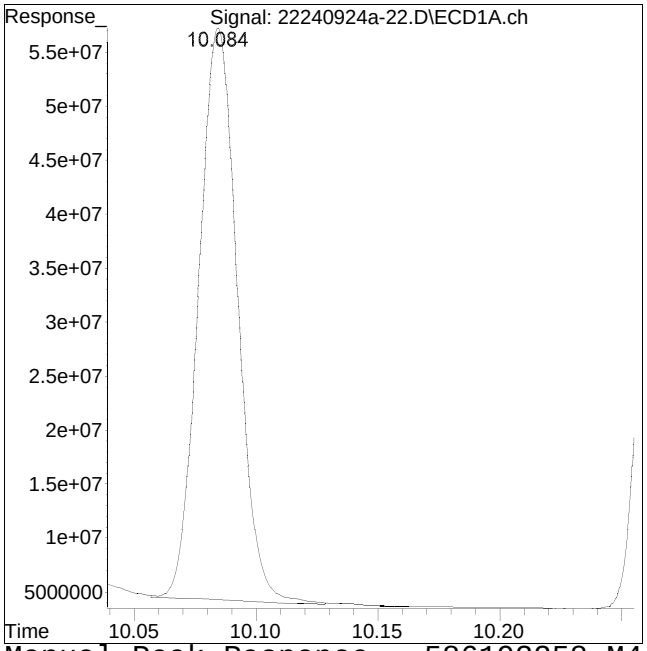
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #12: Dinoseb



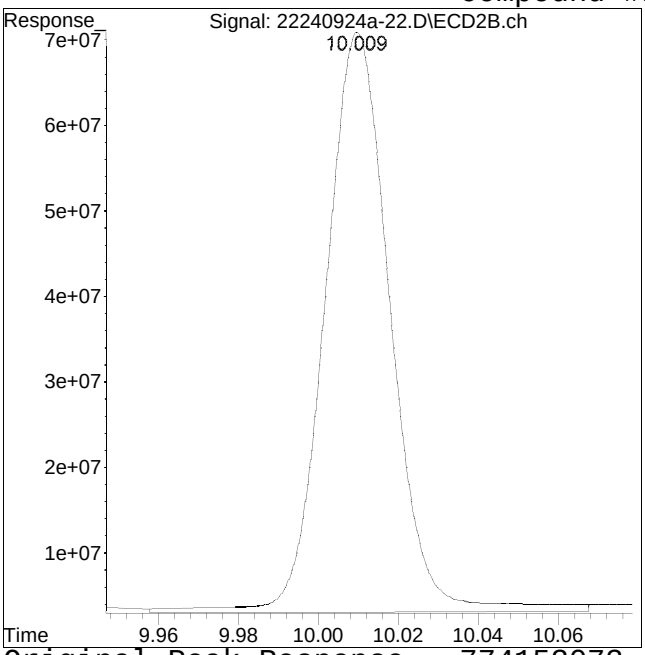



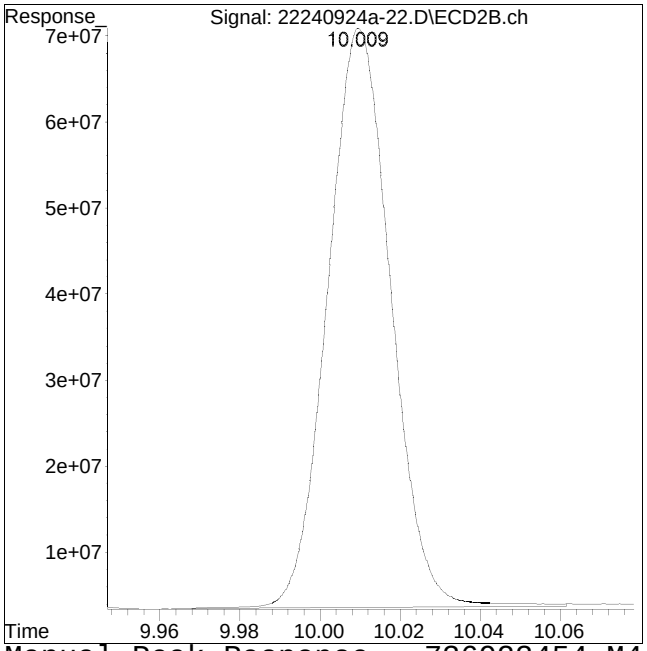

Original Peak Response = 704097779 Manual Peak Response = 586193258 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-22.D Operator : pest22:emr
Date Inj'd : 9/24/2024 13:41 Instrument : Pest22
Sample : wg1975389-2,42,,herb11705 Quant Date : 9/24/2024 3:08 pm

Compound #25: Dinoseb #2




Original Peak Response = 774153073 Manual Peak Response = 736923454 M4
M4 = Poor automated baseline construction.

# RT Shift  Summary

# Identification Summary
# Form 10
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |

**No Detections Found**

# Herbicides Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-14.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 11:13
Operator : pest22:emr
Sample : WG1974808-1,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:57 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.435 | 1104.9E6 | 1405.4E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1387226827 | | | | Recovery = | 79.65% | |
| | Standard Area 1 : #2 = 1727304303 | | | | Recovery = | 81.36% | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.891 | 7.361 | 315.4E6 | 396.6E6 | 0.388M4 | 0.372M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 77.60% | 74.40% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | Dicamba | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | MCPP | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | MCPA | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | Dichloroprop | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | 2,4-D | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | 2,4,5-TP (Si | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | 2,4,5-T | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | 2,4-DB | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Dinoseb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |

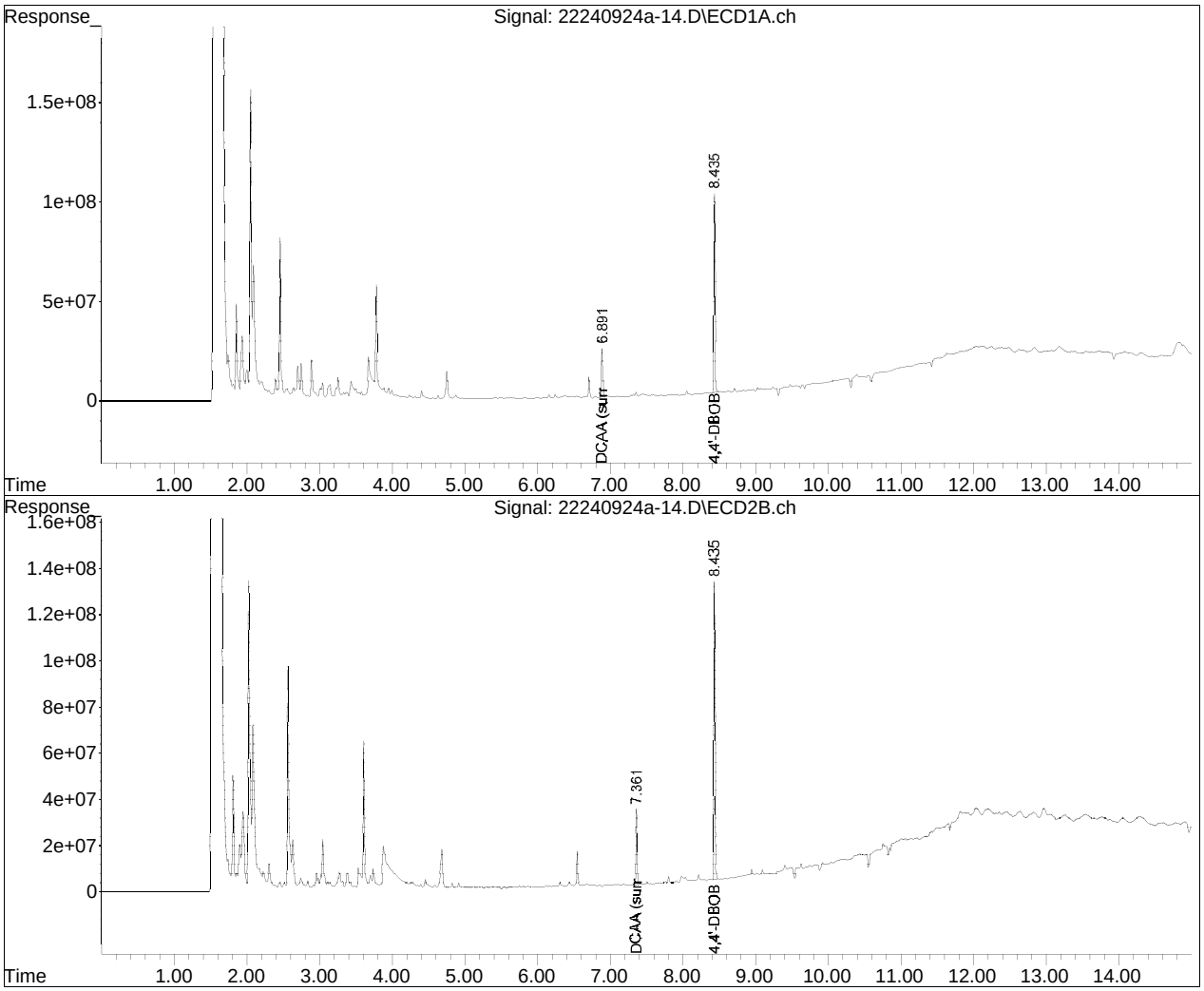
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-14.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 11:13
Operator : pest22:emr
Sample : WG1974808-1,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:57 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

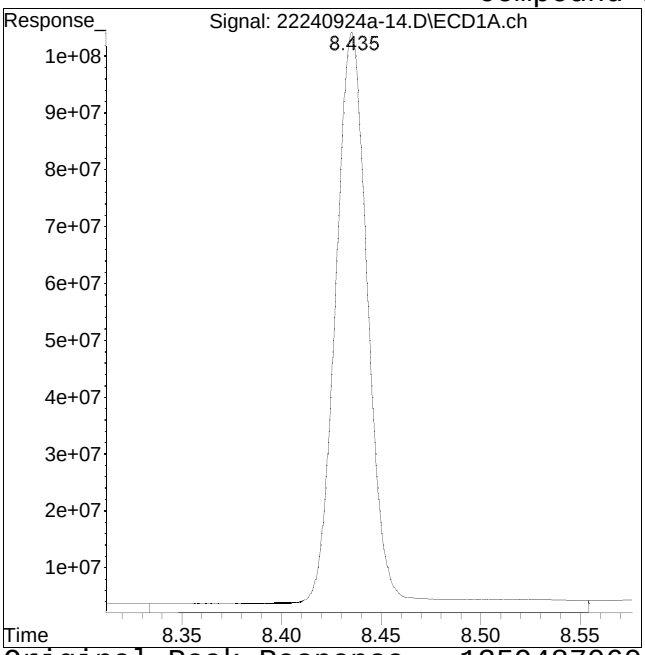
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

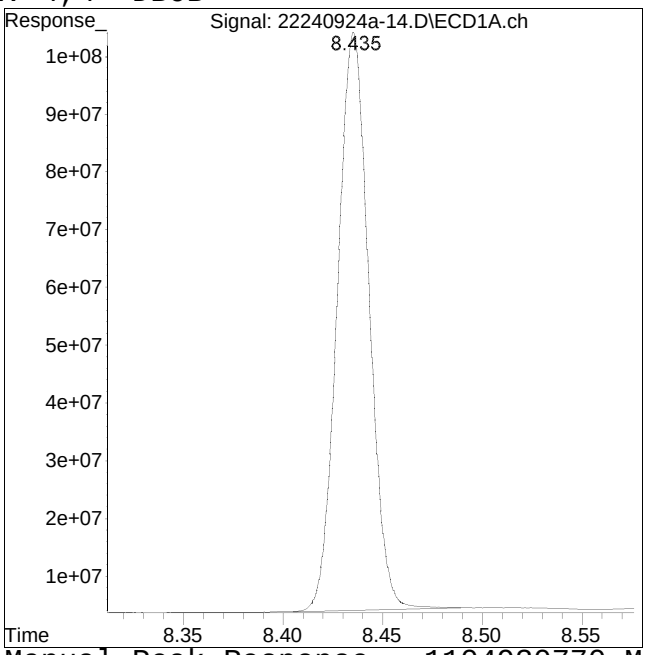


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-14.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:13 Instrument : Pest22
Sample : WG1974808-1,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #1: 4,4'-DBOB



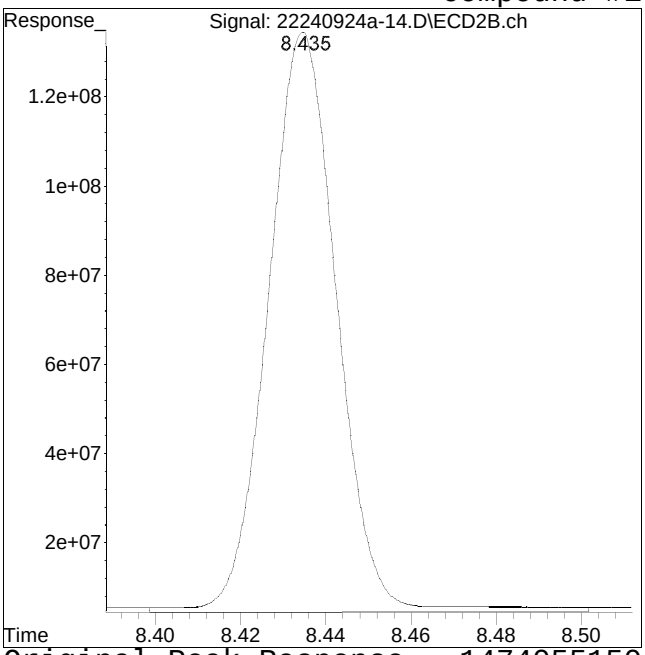



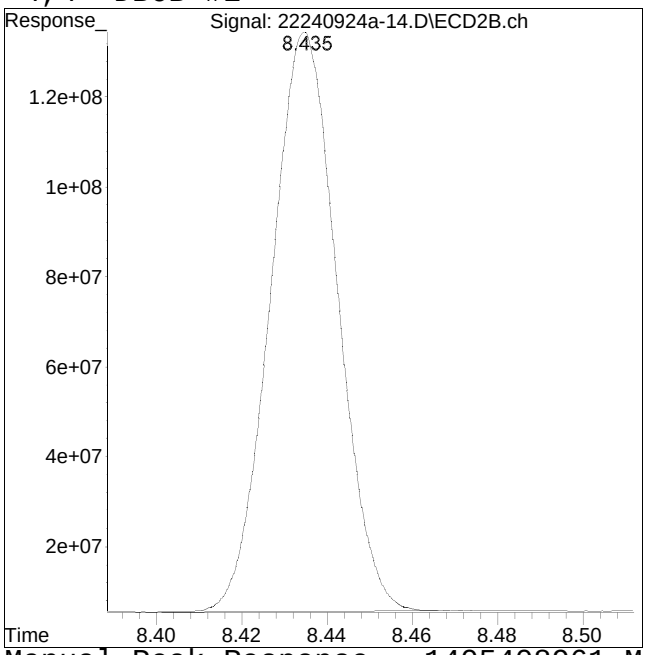

Original Peak Response = 1359487060 Manual Peak Response = 1104930770 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-14.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:13 Instrument : Pest22
Sample : WG1974808-1,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #14: 4,4'-DBOB #2



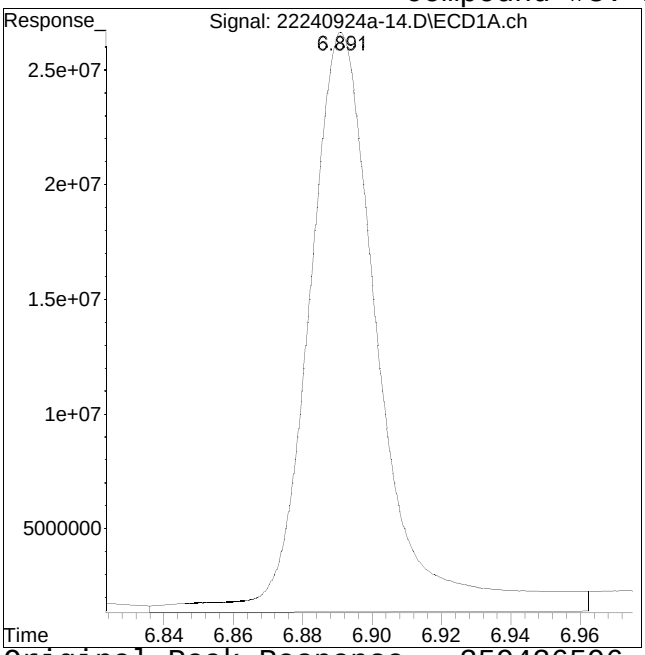



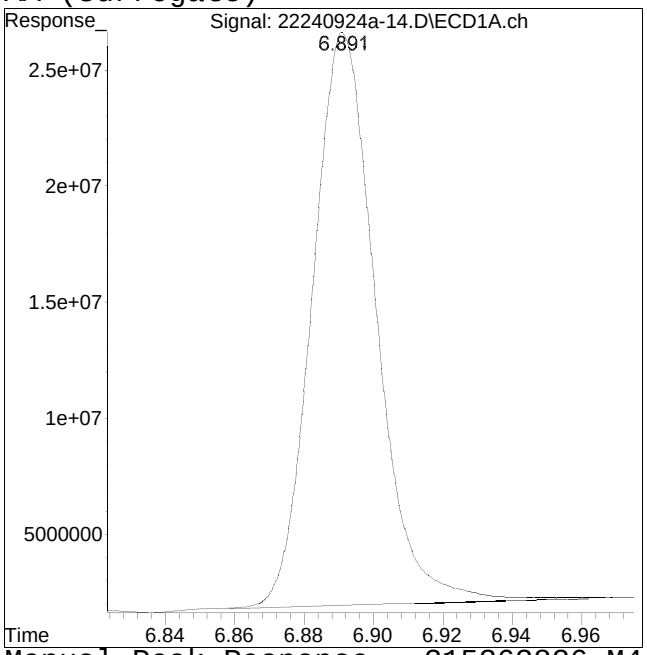

Original Peak Response = 1474055150 Manual Peak Response = 1405408961 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-14.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:13 Instrument : Pest22
Sample : WG1974808-1,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #3: DCAA (surrogate)



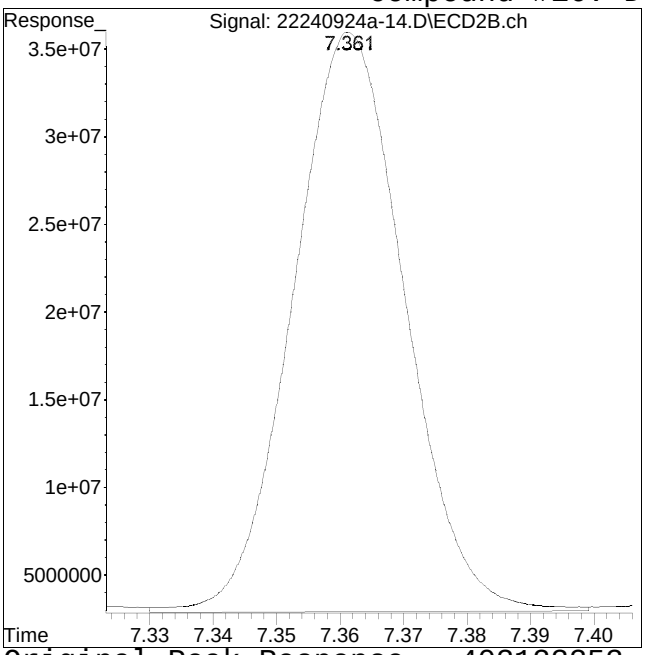



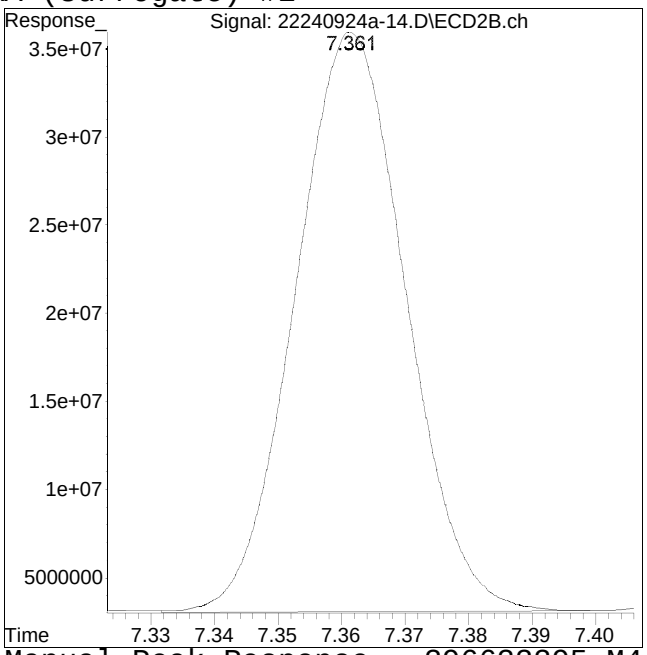

Original Peak Response = 359436596 Manual Peak Response = 315363826 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-14.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:13 Instrument : Pest22
Sample : WG1974808-1,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #16: DCAA (surrogate) #2




Original Peak Response = 403123353 Manual Peak Response = 396633395 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-15.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 11:31
Operator : pest22:emr
Sample : WG1974808-2,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.435 | 1274.3E6 | 1591.3E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1387226827 | | | | Recovery = | 91.86% | |
| | Standard Area 1 : #2 = 1727304303 | | | | Recovery = | 92.13% | |
| System Monitoring Compounds | | | | | | | |
| 3) s | DCAA (surrog | 6.891 | 7.363 | 422.6E6 | 581.8E6 | 0.450M4 | 0.482 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 90.00% | 96.40% |
| Target Compounds | | | | | | | |
| 2) t | Dalapon | 2.331 | 2.325 | 415.2E6 | 575.7E6 | 0.349 | 0.448M4 |
| 4) t | Dicamba | 7.073 | 7.542 | 1423.9E6 | 1647.8E6 | 0.492M4 | 0.485M4 |
| 5) t | MCPP | 7.276 | 7.656 | 152.5E6 | 177.6E6 | 61.874M4 | 53.130 |
| 6) t | MCPA | 7.422 | 7.882 | 238.3E6 | 310.9E6 | 53.736 | 51.259 |
| 7) t | Dichloroprop | 7.775 | 8.199 | 428.2E6 | 521.2E6 | 0.481M4 | 0.474M4 |
| 8) t | 2,4-D | 7.986f | 8.476 | 522.5E6 | 714.1E6 | 0.482M4 | 0.505 |
| 9) t | 2,4,5-TP (Si | 8.706 | 9.135 | 1840.2E6 | 2187.0E6 | 0.468M4 | 0.443M4 |
| 10) t | 2,4,5-T | 8.925 | 9.425 | 1924.1E6 | 2322.1E6 | 0.477M4 | 0.475M4 |
| 11) t | 2,4-DB | 9.334f | 9.786 | 299.6E6 | 365.5E6 | 0.507M4 | 0.457M4 |
| 12) t | Dinoseb | 10.084 | 10.010 | 900.2E6 | 1146.2E6 | 0.299M4 | 0.368M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

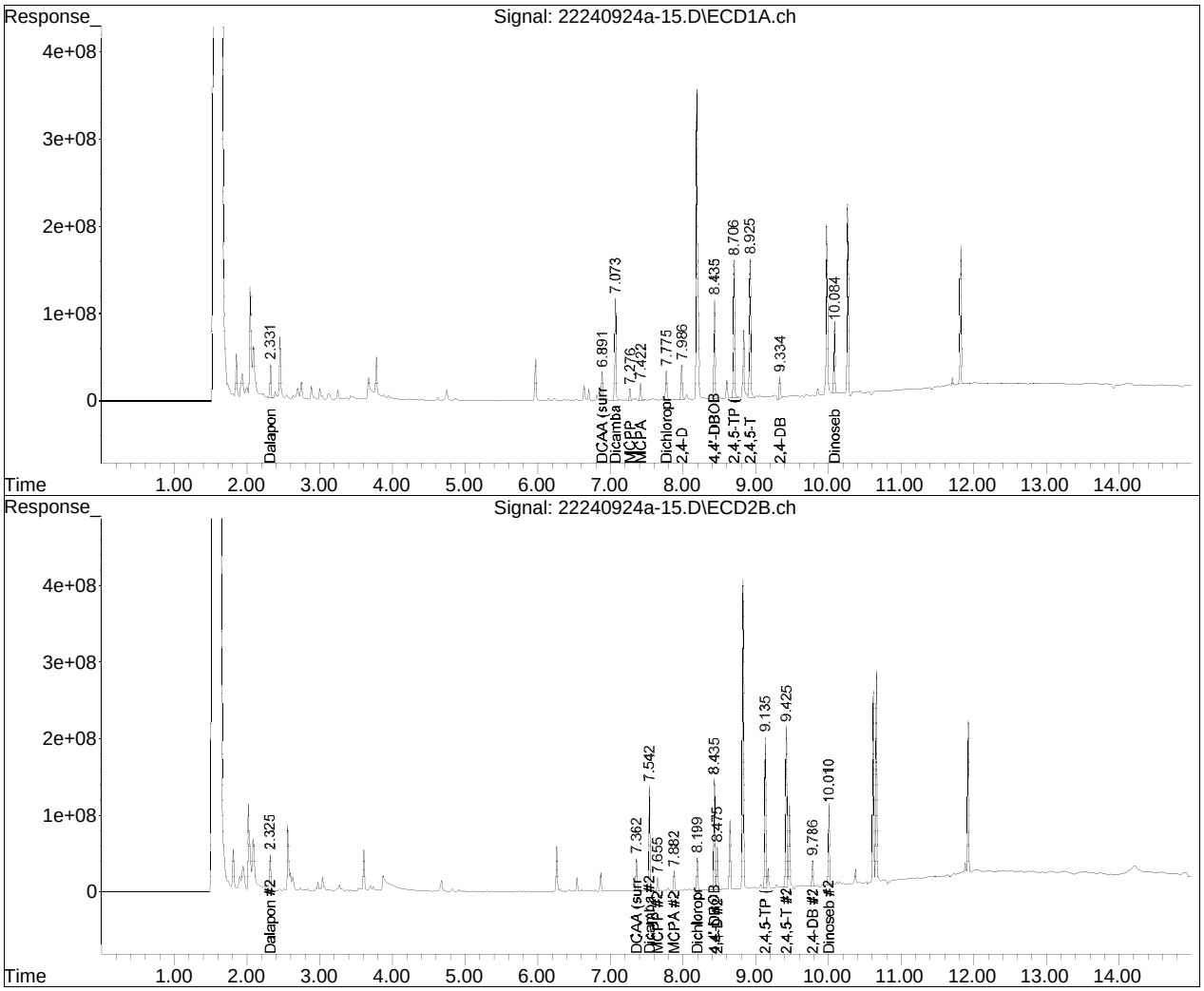
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-15.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 24 Sep 2024  11:31
Operator : pest22:emr
Sample : WG1974808-2,42,,  rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 15  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:58 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

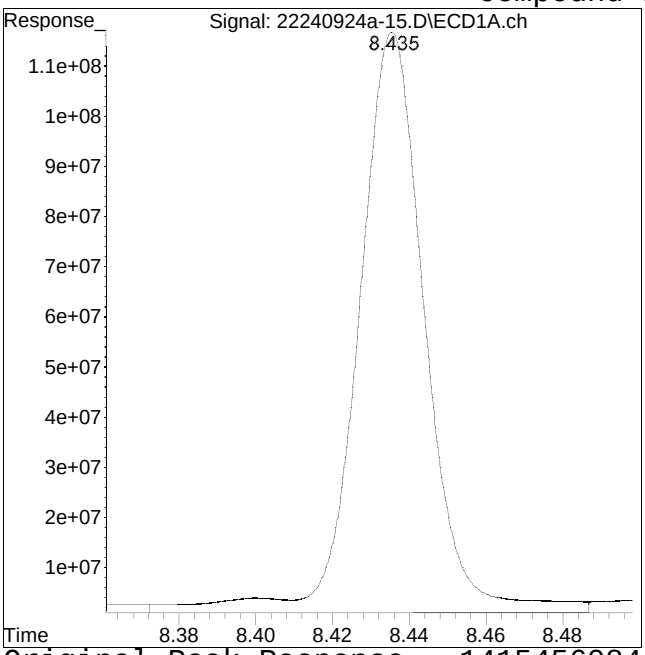
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

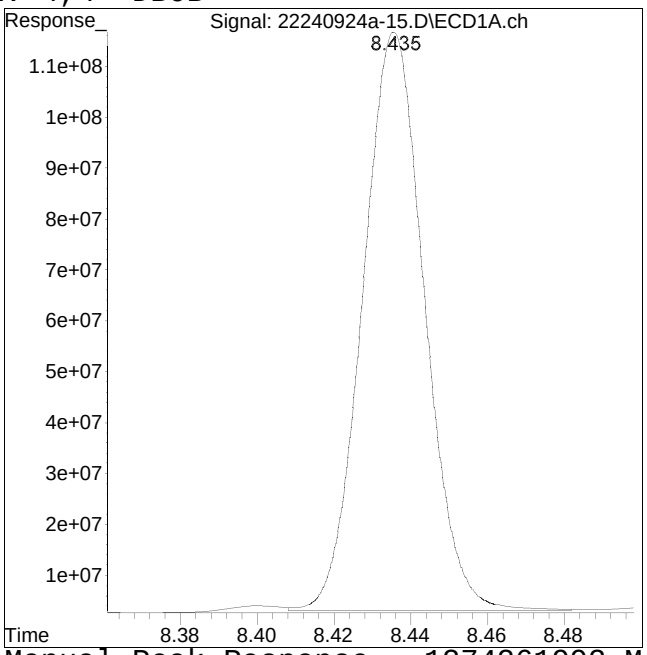


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #1: 4,4'-DBOB



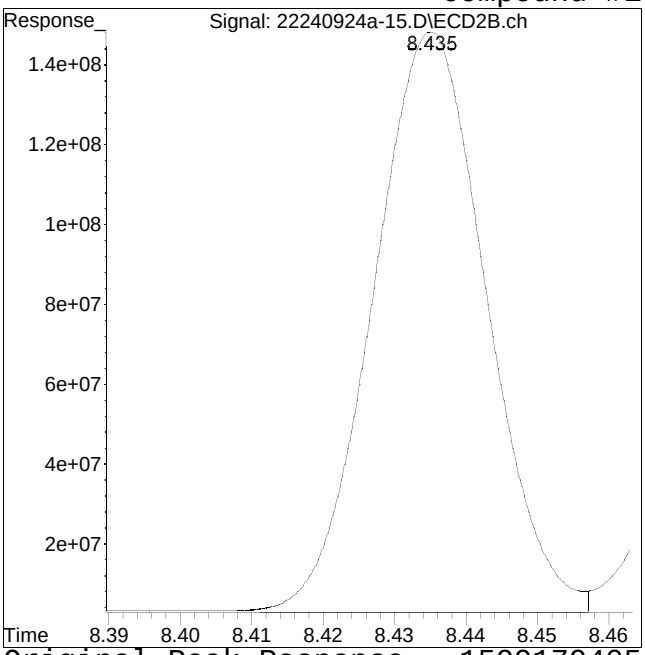



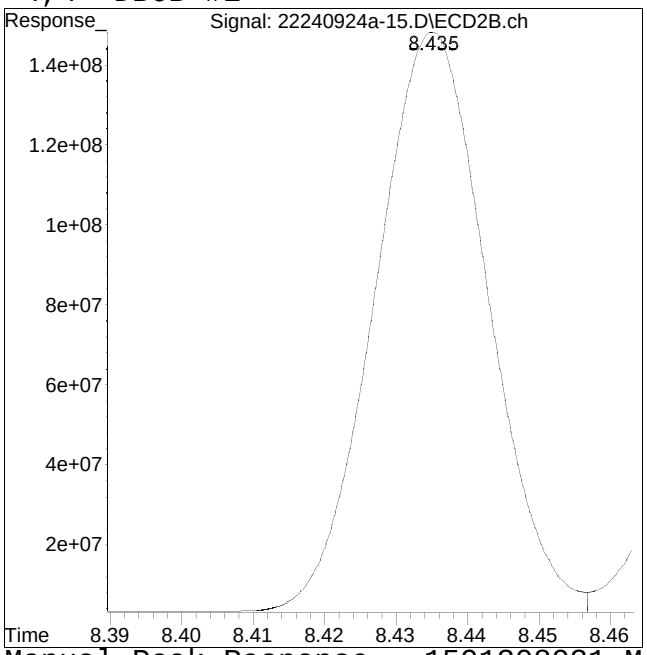

Original Peak Response = 1415456084 Manual Peak Response = 1274261992 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #14: 4,4'-DBOB #2



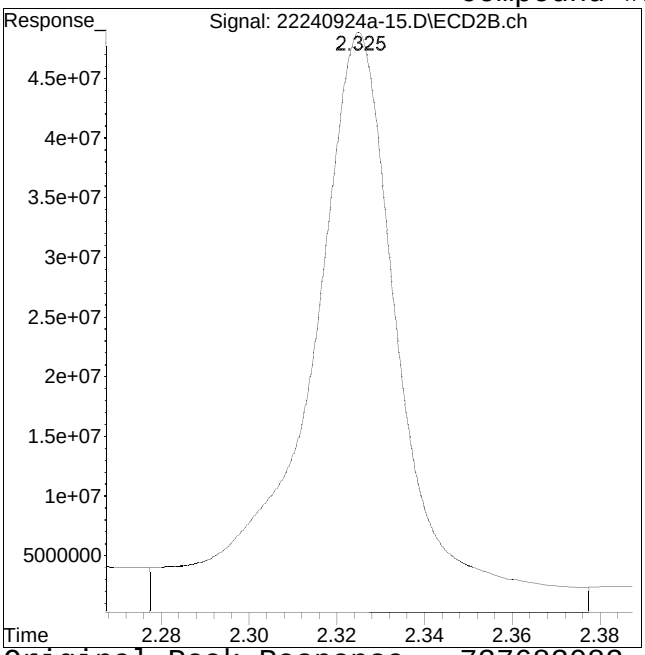



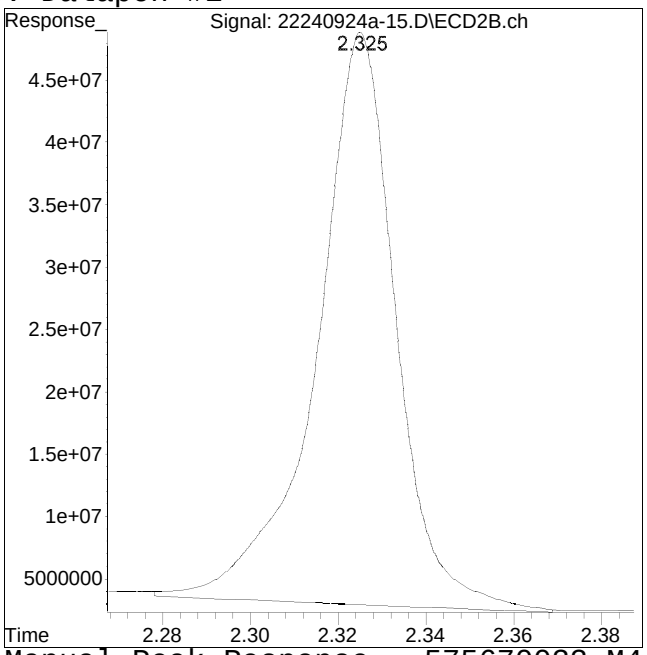

Original Peak Response = 1599179405 Manual Peak Response = 1591308931 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #15: Dalapon #2



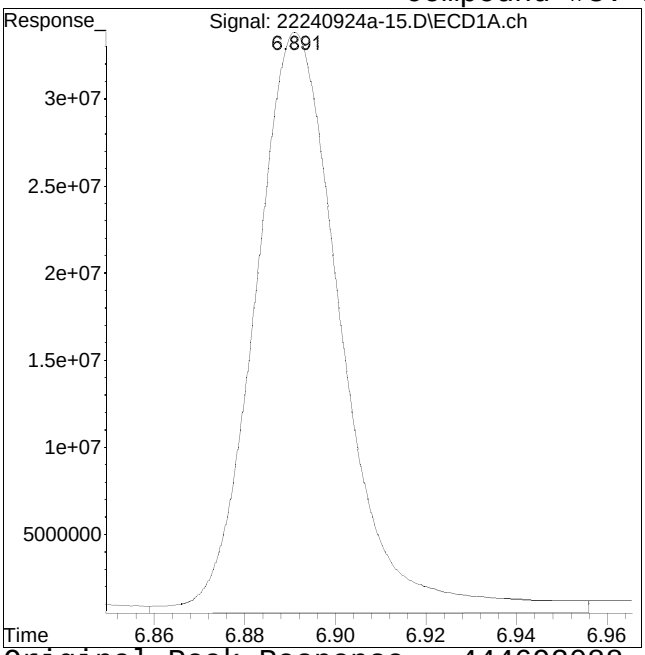




Original Peak Response = 737683083 Manual Peak Response = 575670033 M4
M4 = Poor automated baseline construction.

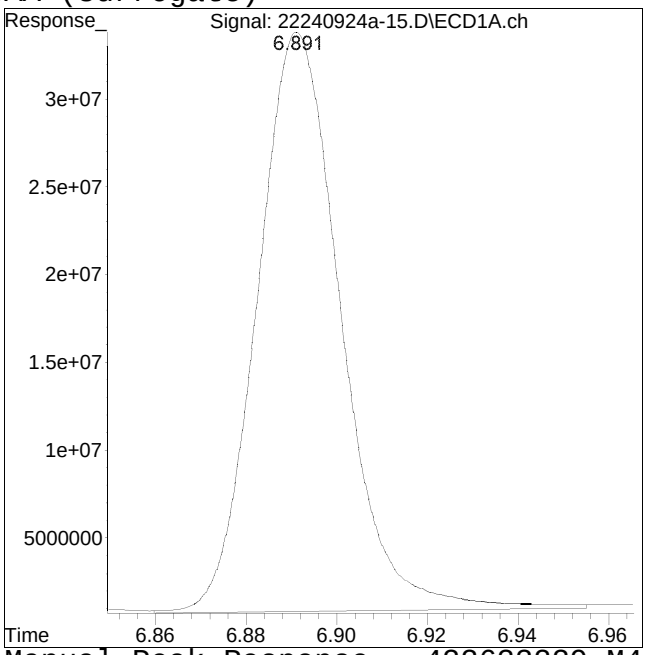
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #3: DCAA (surrogate)




Original Peak Response = 444692088

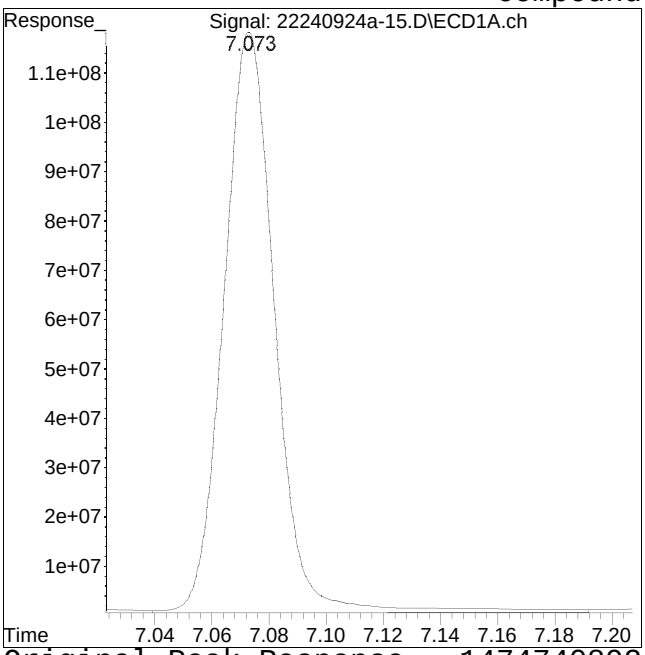


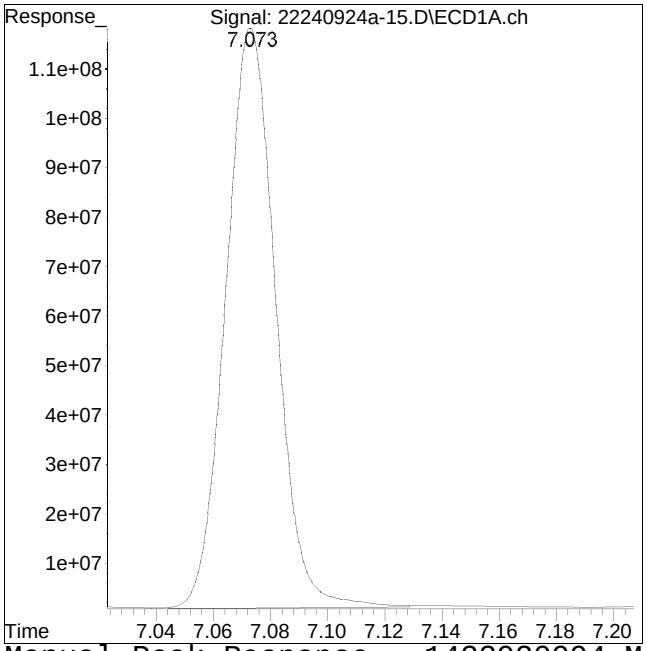

Manual Peak Response = 422633229 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #4: Dicamba



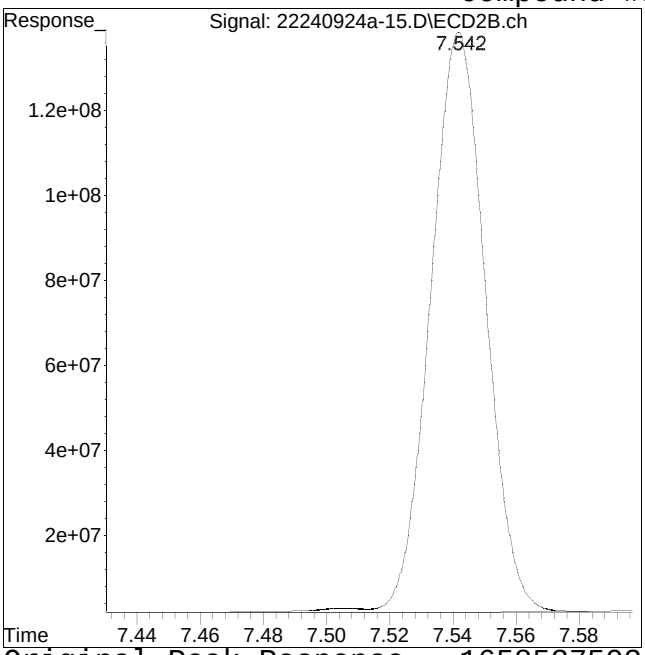



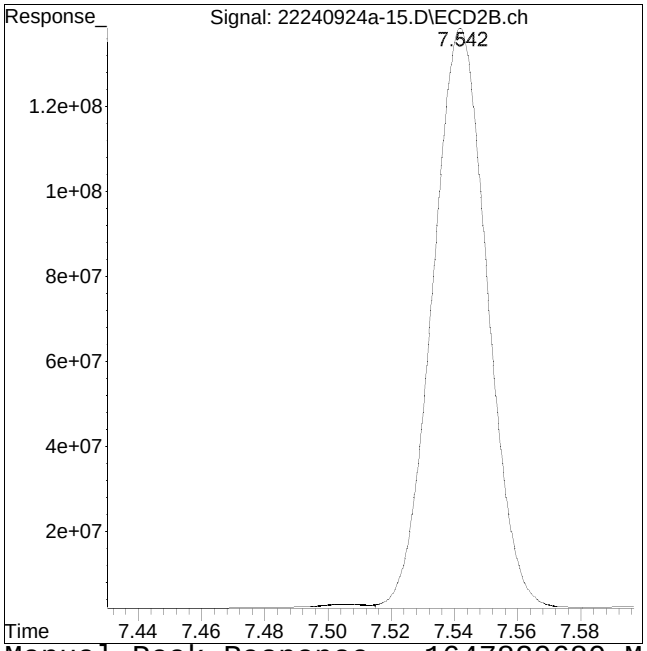

Original Peak Response = 1474740892 Manual Peak Response = 1423920994 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #17: Dicamba #2



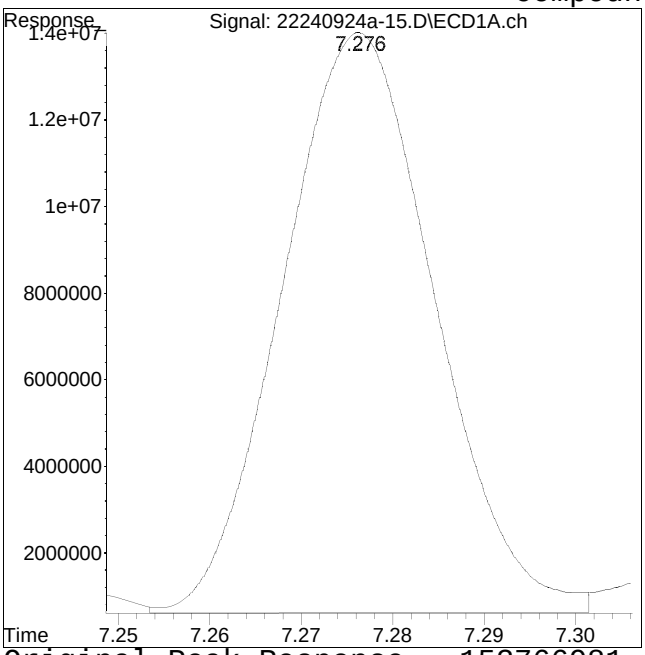




Original Peak Response = 1658527503 Manual Peak Response = 1647820680 M4
M4 = Poor automated baseline construction.

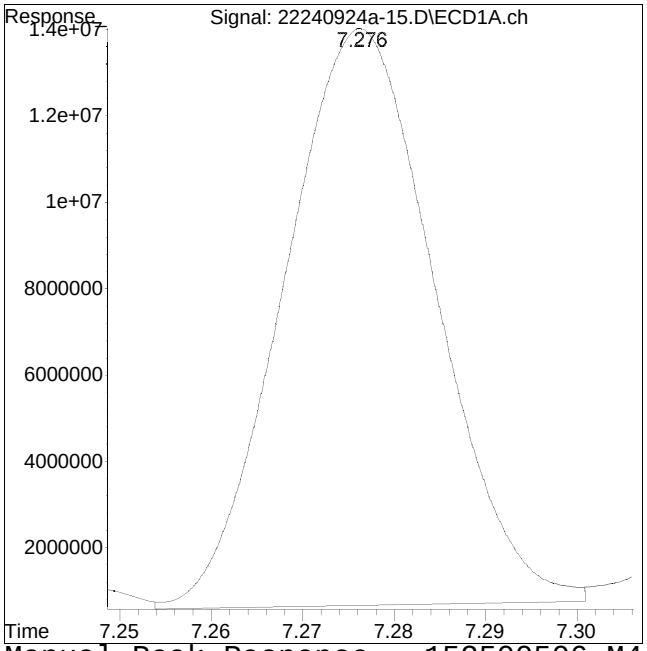
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #5: MCPP




Original Peak Response = 153766981



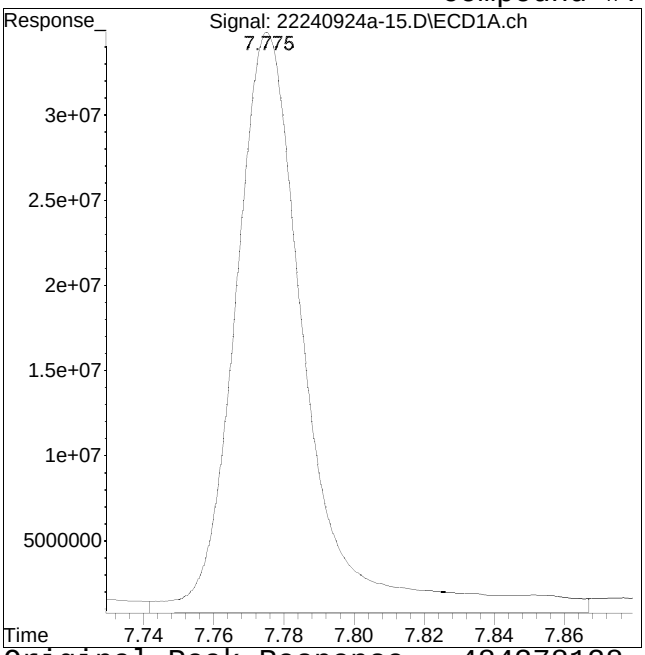

Manual Peak Response = 152500506 M4

M4 = Poor automated baseline construction.

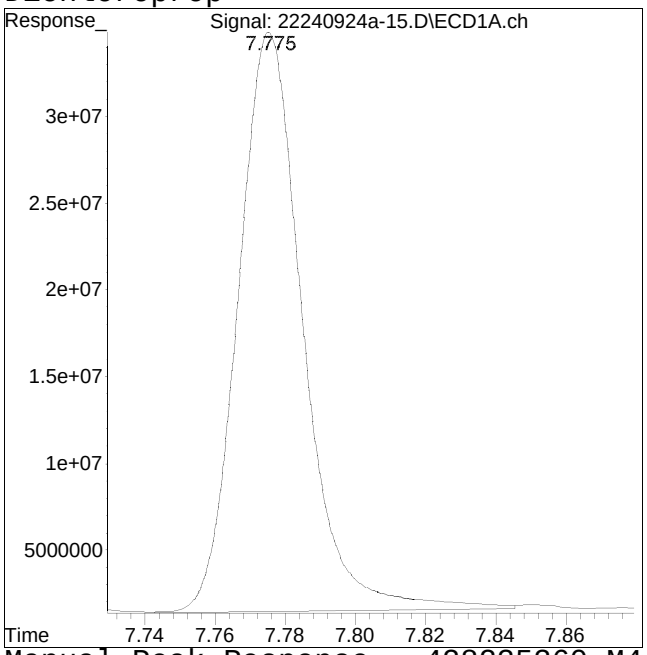
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #7: Dichloroprop




Original Peak Response = 484378128

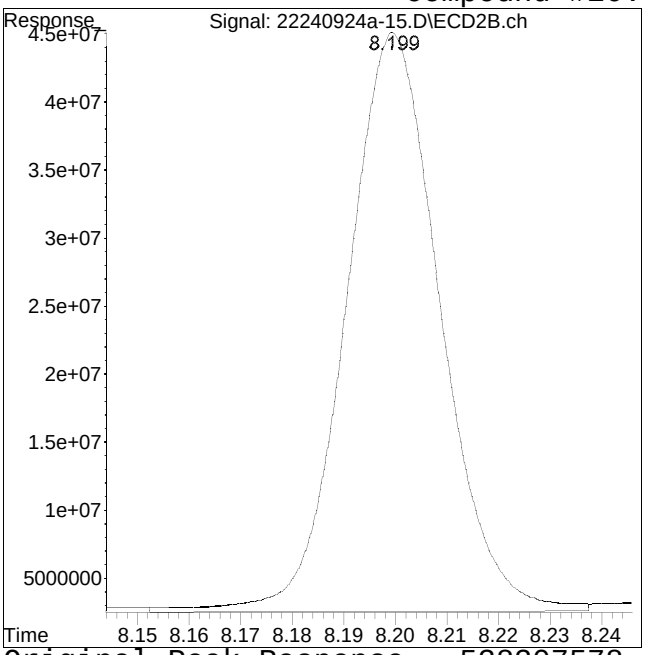


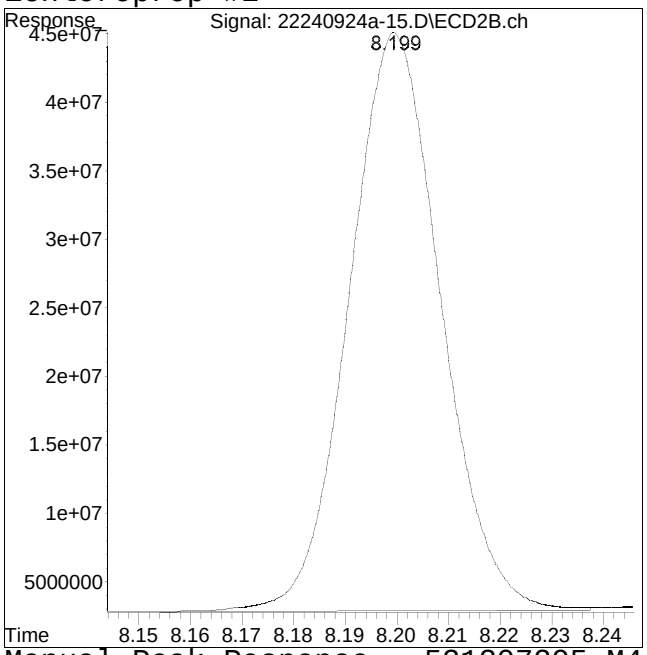

Manual Peak Response = 428235360 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #20: Dichloroprop #2



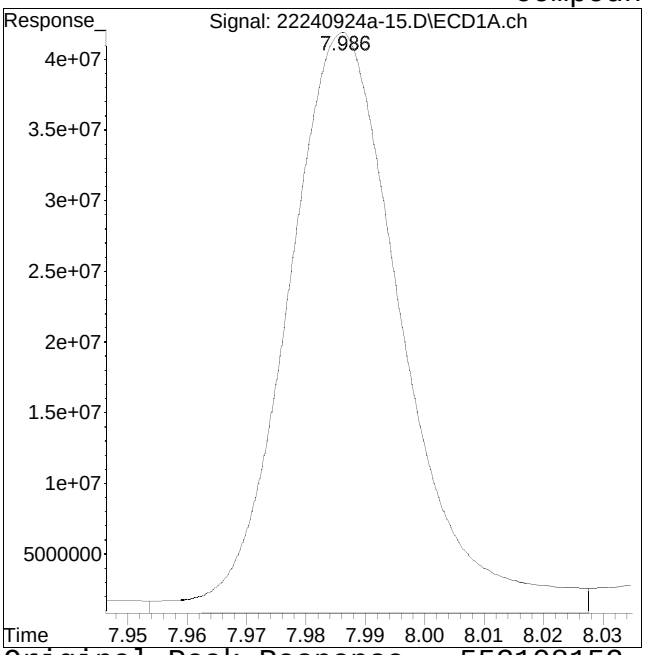



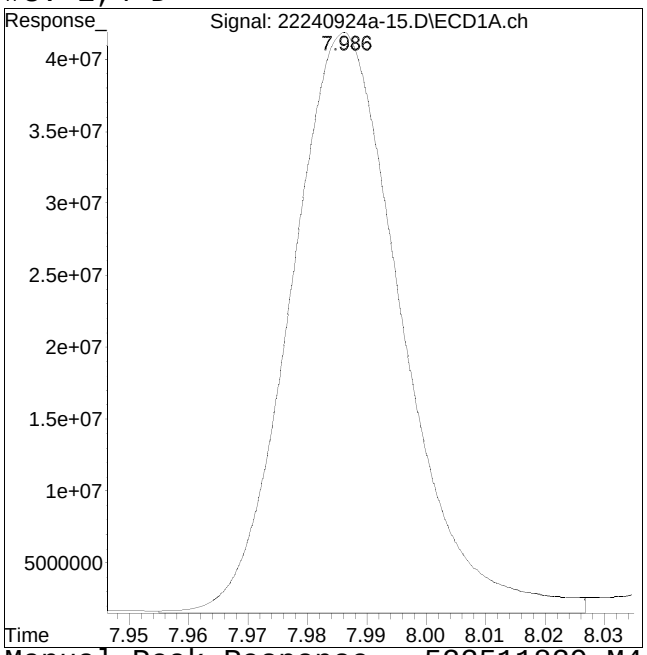

Original Peak Response = 538307578 Manual Peak Response = 521207295 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #8: 2,4-D



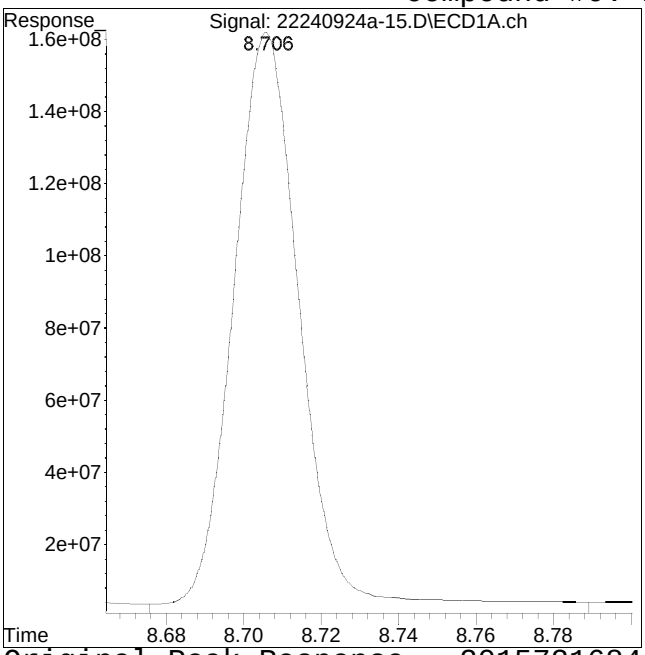



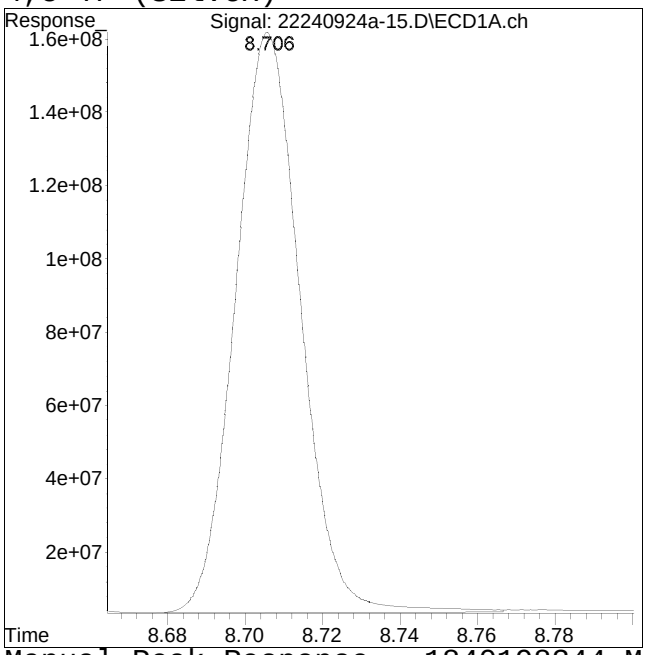

Original Peak Response = 553108152 Manual Peak Response = 522511829 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #9: 2,4,5-TP (Silvex)



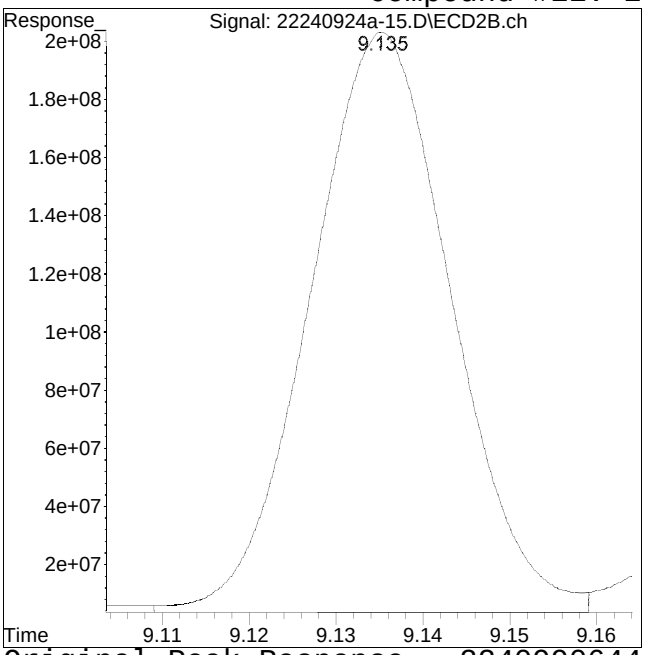



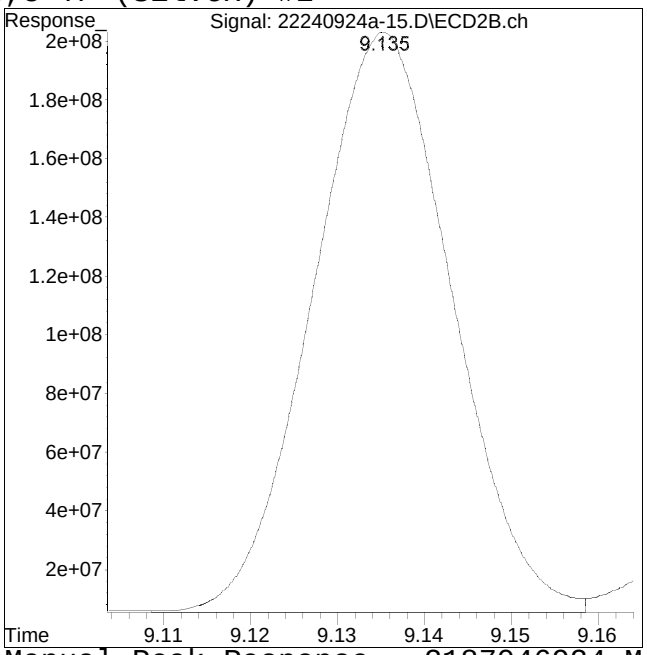

Original Peak Response = 2015721684 Manual Peak Response = 1840198344 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #22: 2,4,5-TP (Silvex) #2



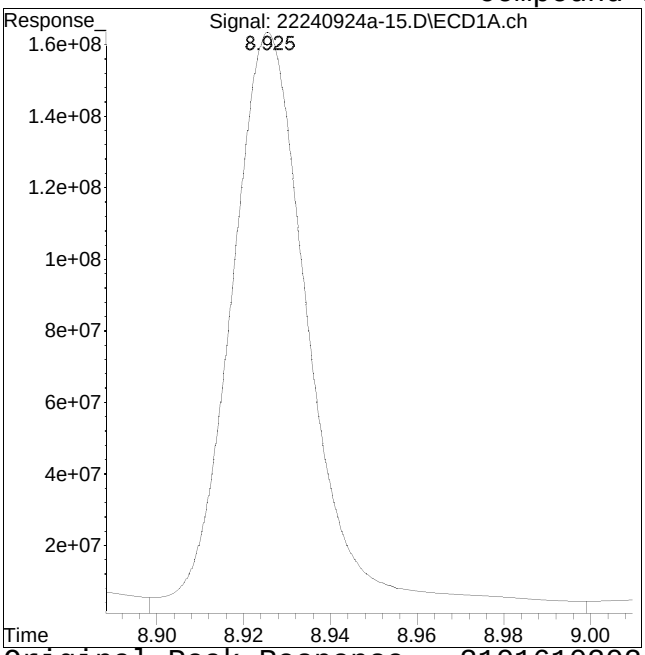



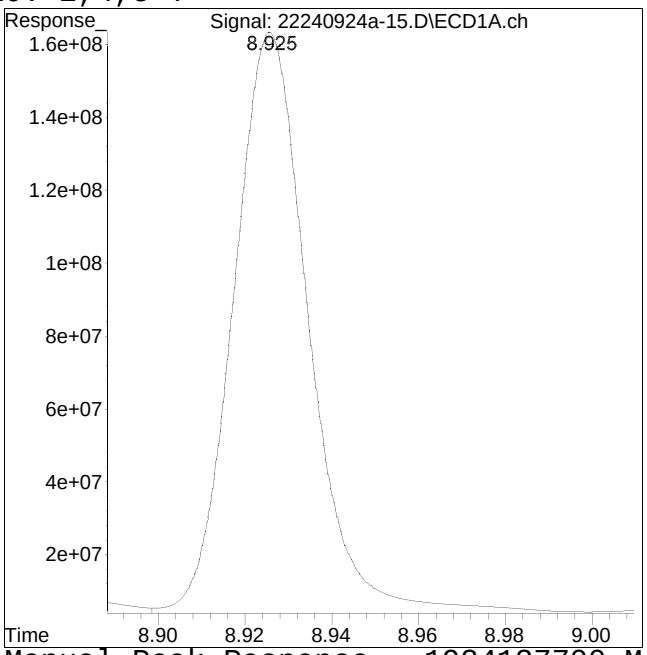

Original Peak Response = 2240990644 Manual Peak Response = 2187046924 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #10: 2,4,5-T



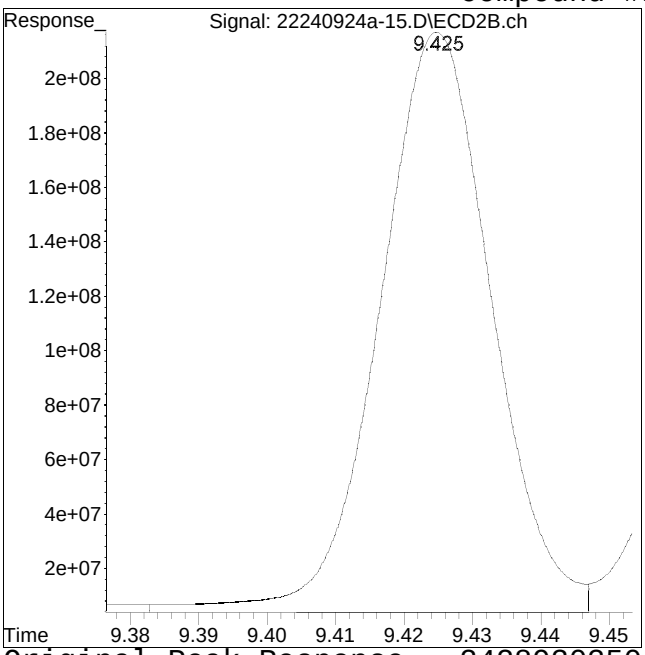




Original Peak Response = 2101610202 Manual Peak Response = 1924137700 M4
M4 = Poor automated baseline construction.

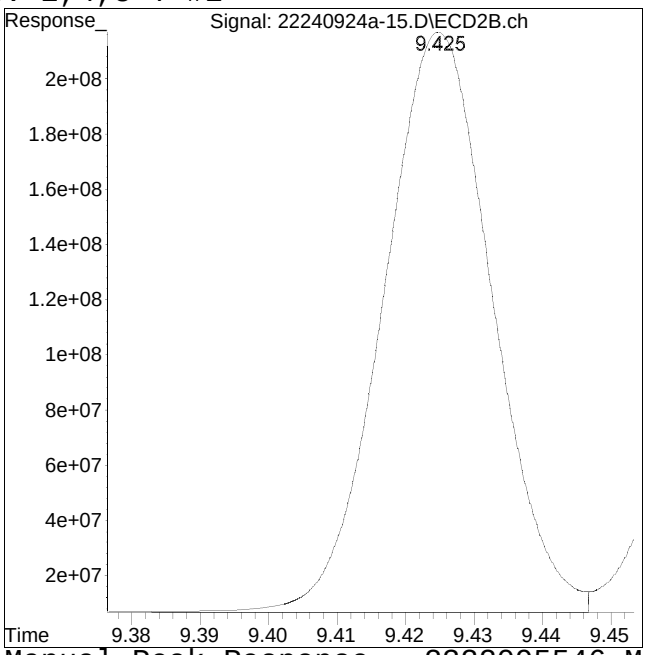
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #23: 2,4,5-T #2




Original Peak Response = 2428930350



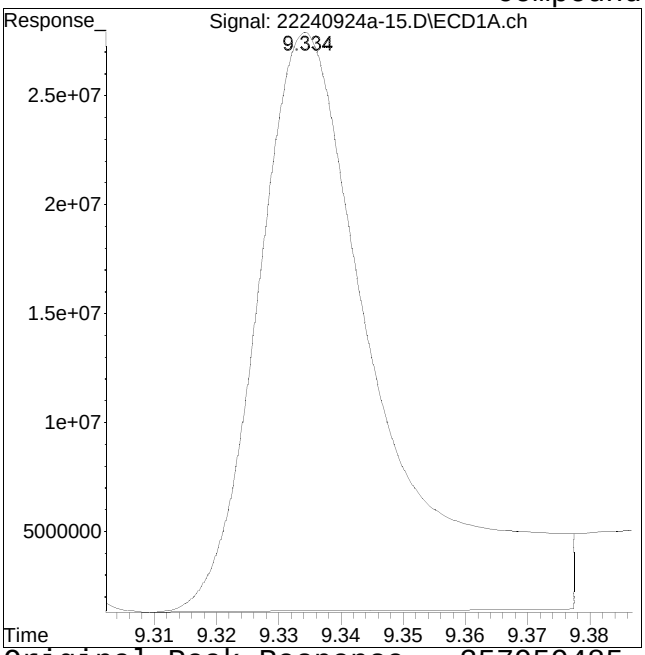

Manual Peak Response = 2322095546 M4

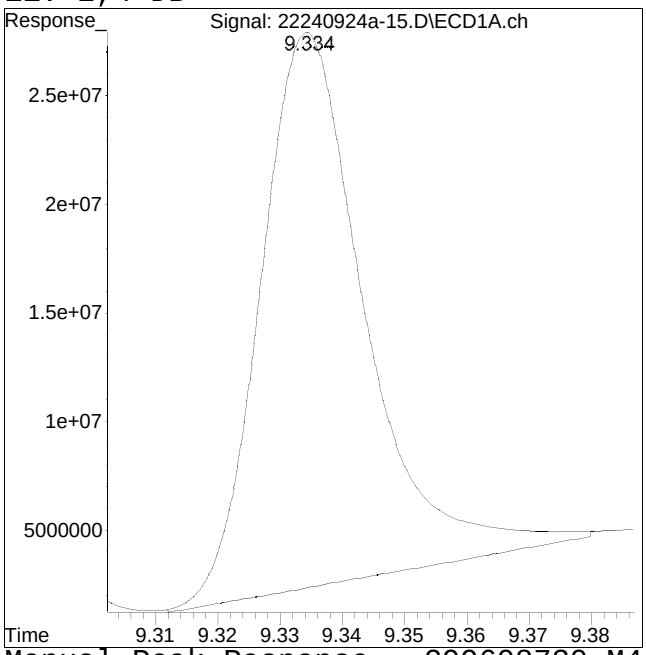
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #11: 2,4-DB



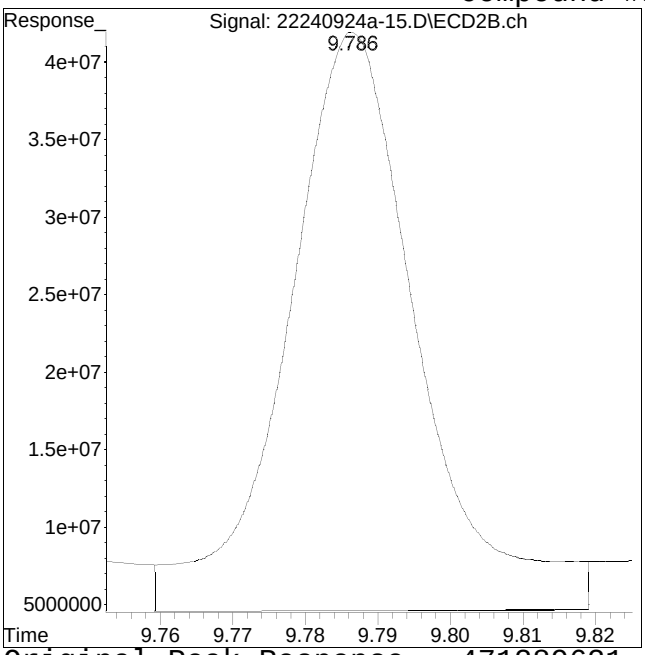




Original Peak Response = 357959485 Manual Peak Response = 299608730 M4
M4 = Poor automated baseline construction.

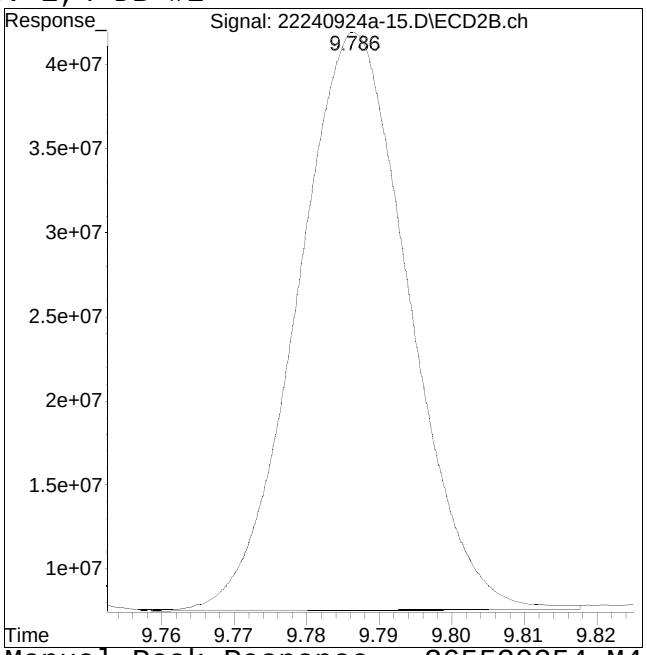
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #24: 2,4-DB #2




Original Peak Response = 471289621



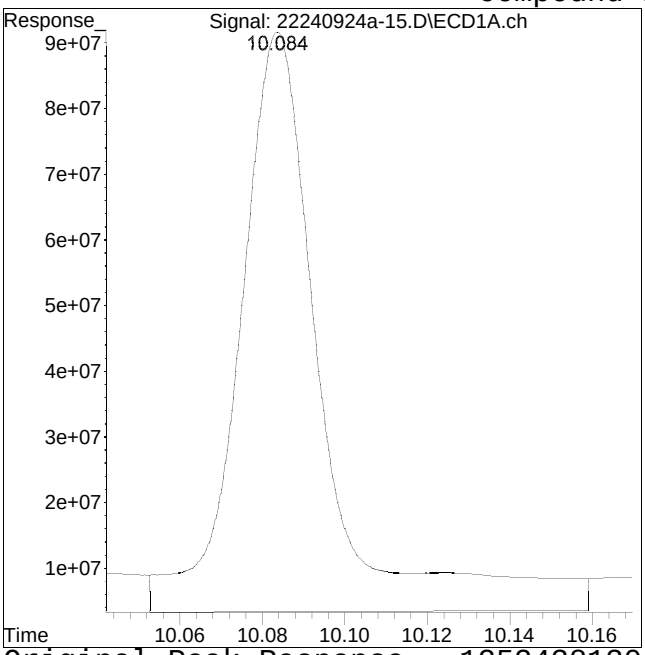

Manual Peak Response = 365530254 M4

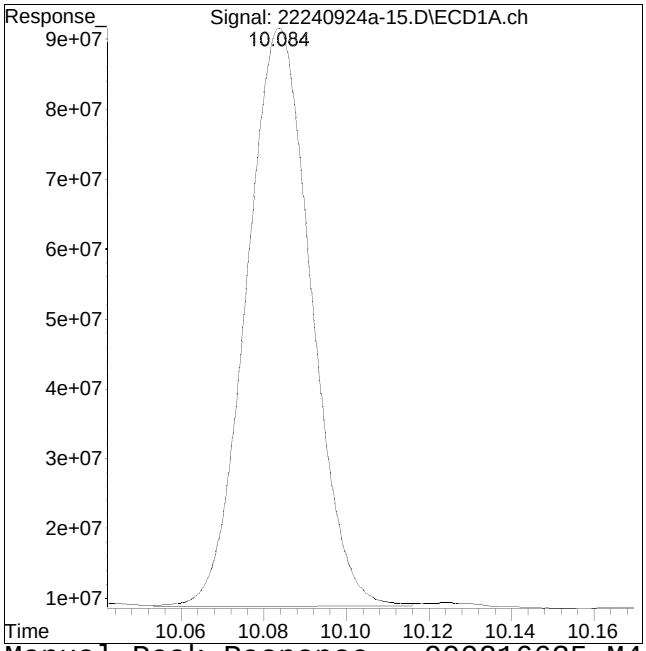
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #12: Dinoseb



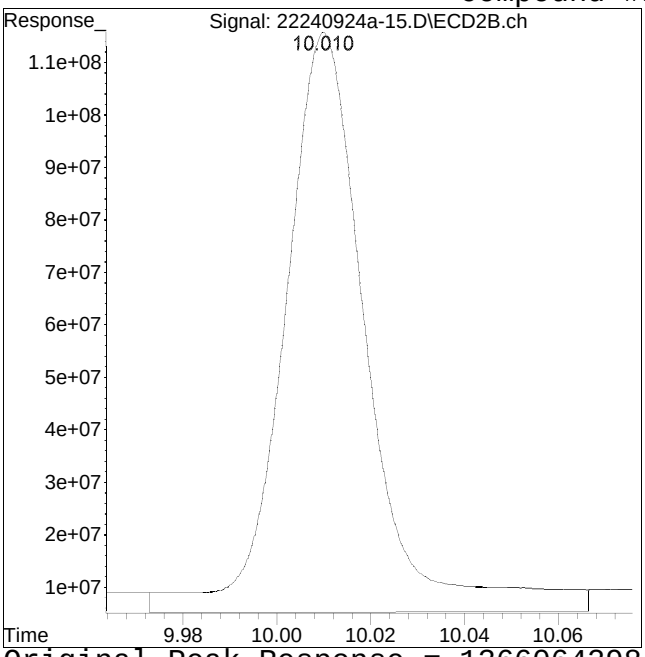



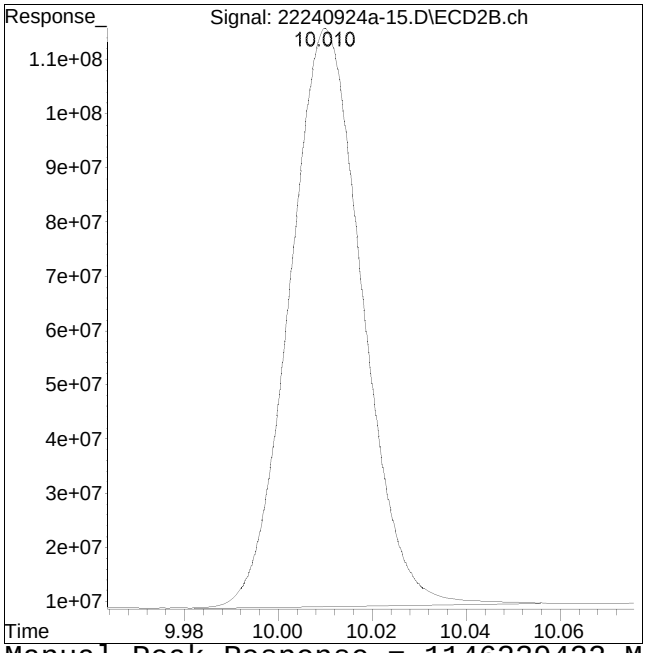

Original Peak Response = 1252438130 Manual Peak Response = 900216635 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-15.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:31 Instrument : Pest22
Sample : WG1974808-2,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #25: Dinoseb #2




Original Peak Response = 1366064298 Manual Peak Response = 1146239432 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-16.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 11:50
Operator : pest22:emr
Sample : WG1974808-3,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:59 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) i 4,4'-DBOB | 8.434 | 8.434 | 1315.7E6 | 1614.5E6 | 0.250M3 | 0.250M4 |
| Standard Area 1 : #1 = 1387226827 | | | | Recovery = | 94.85% | |
| Standard Area 1 : #2 = 1727304303 | | | | Recovery = | 93.47% | |
| System Monitoring Compounds | | | | | | |
| 3) s DCAA (surrog | 6.890 | 7.362 | 414.1E6 | 581.8E6 | 0.428M4 | 0.476 |
| Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 85.60% | 95.20% |
| Target Compounds | | | | | | |
| 2) t Dalapon | 2.330 | 2.325 | 406.7E6 | 591.3E6 | 0.331M4 | 0.454M4 |
| 4) t Dicamba | 7.072 | 7.541 | 1410.3E6 | 1636.9E6 | 0.472M4 | 0.475M4 |
| 5) t MCPP | 7.276 | 7.655 | 157.6E6 | 184.0E6 | 61.946 | 54.241 |
| 6) t MCPA | 7.421 | 7.881 | 214.3E6 | 305.8E6 | 46.806M4 | 49.694M4 |
| 7) t Dichloroprop | 7.774 | 8.199 | 425.9E6 | 517.7E6 | 0.463M4 | 0.464M4 |
| 8) t 2,4-D | 7.985f | 8.474 | 516.0E6 | 704.6E6 | 0.461M4 | 0.492M4 |
| 9) t 2,4,5-TP (Si | 8.705 | 9.134 | 1836.1E6 | 2160.8E6 | 0.452M4 | 0.431M4 |
| 10) t 2,4,5-T | 8.925 | 9.424 | 1894.0E6 | 2337.2E6 | 0.454M4 | 0.471M4 |
| 11) t 2,4-DB | 9.334f | 9.786 | 275.7E6 | 352.0E6 | 0.452M4 | 0.433M4 |
| 12) t Dinoseb | 10.083 | 10.010 | 894.1E6 | 1147.5E6 | 0.288M4 | 0.363M4 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |

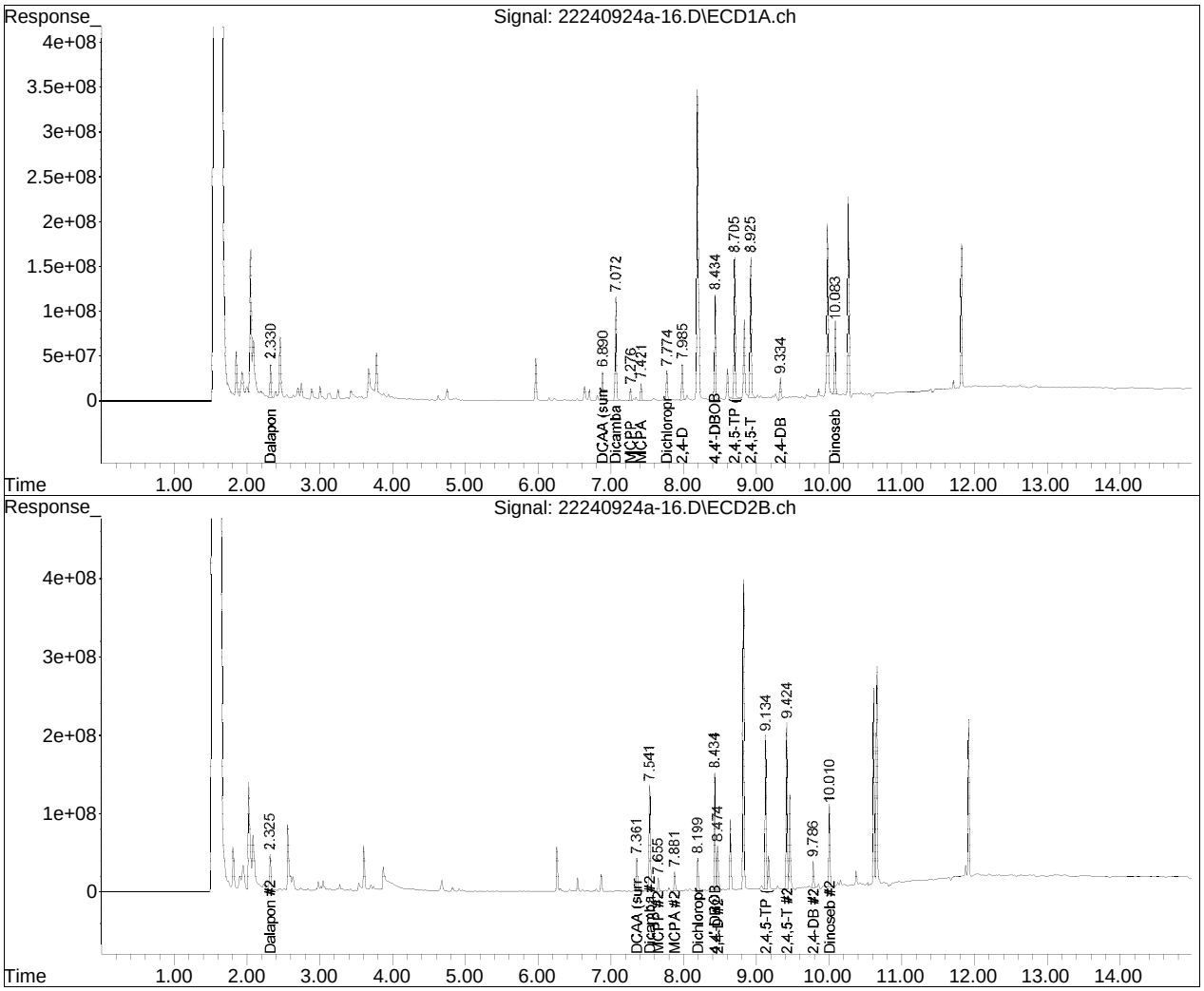
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-16.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 11:50
Operator : pest22:emr
Sample : WG1974808-3,42,, rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:45:59 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

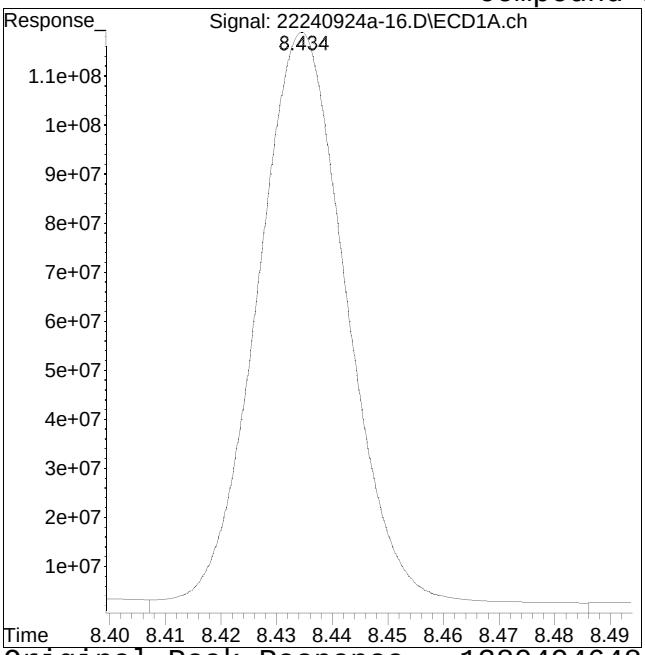
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

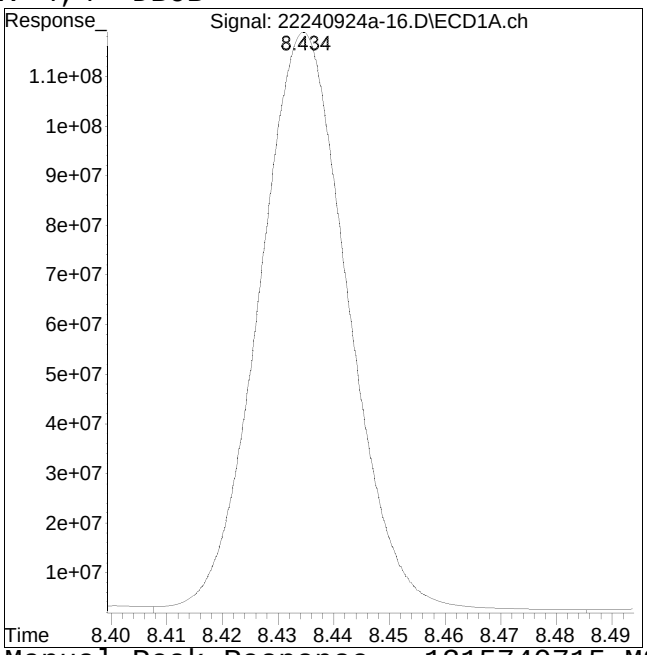


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #1: 4,4'-DBOB



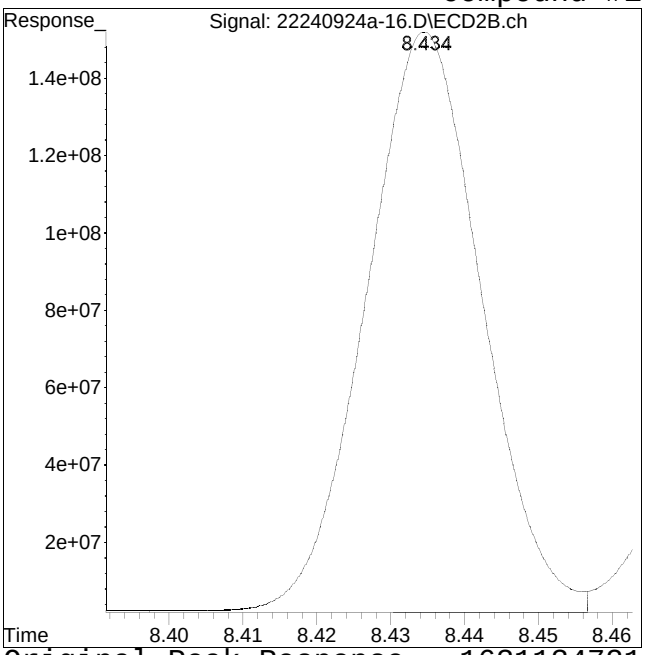



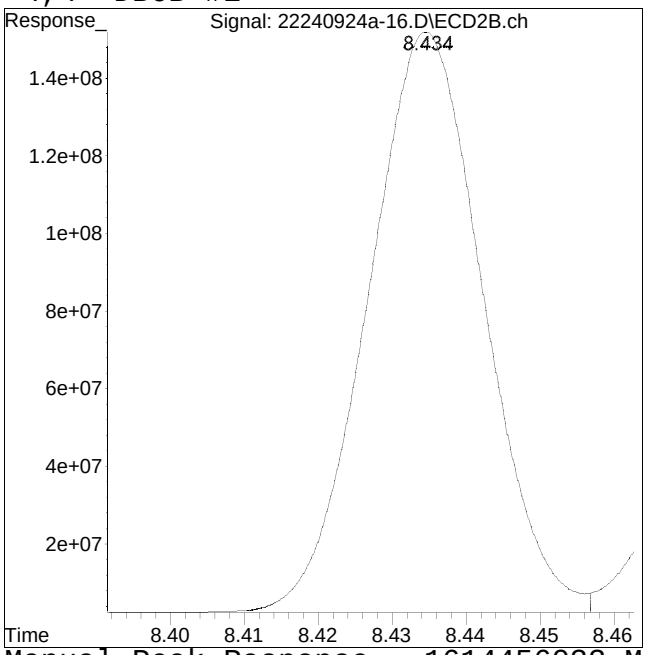

Original Peak Response = 1380494648 Manual Peak Response = 1315740715 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #14: 4,4'-DBOB #2



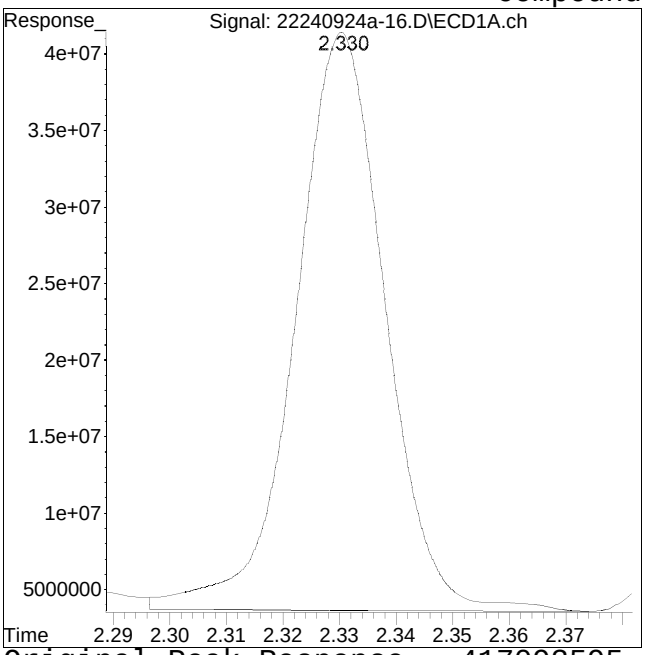



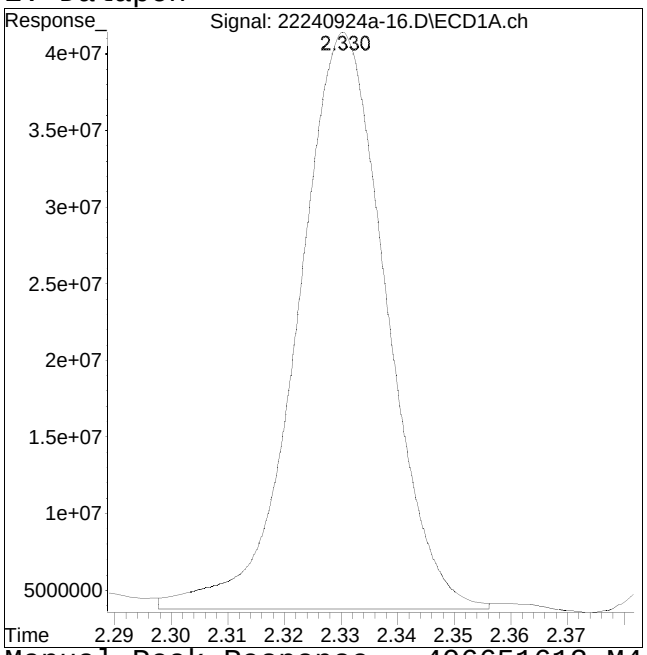

Original Peak Response = 1631134721 Manual Peak Response = 1614456033 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #2: Dalapon



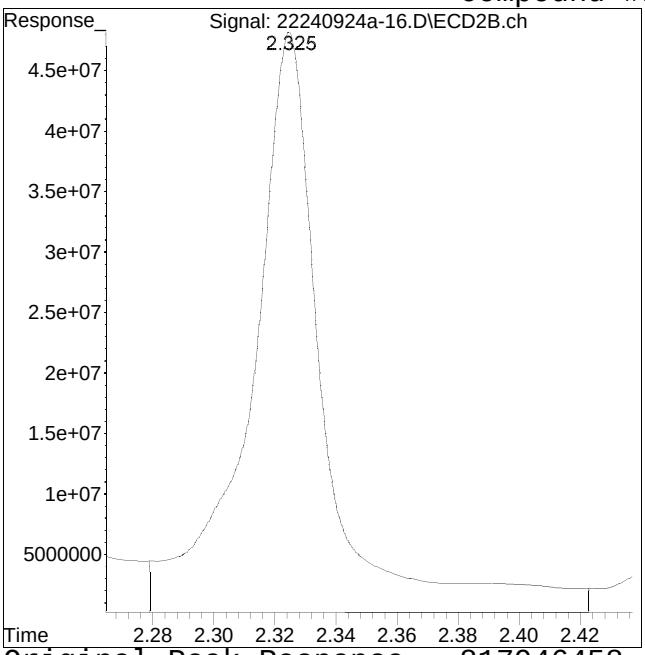



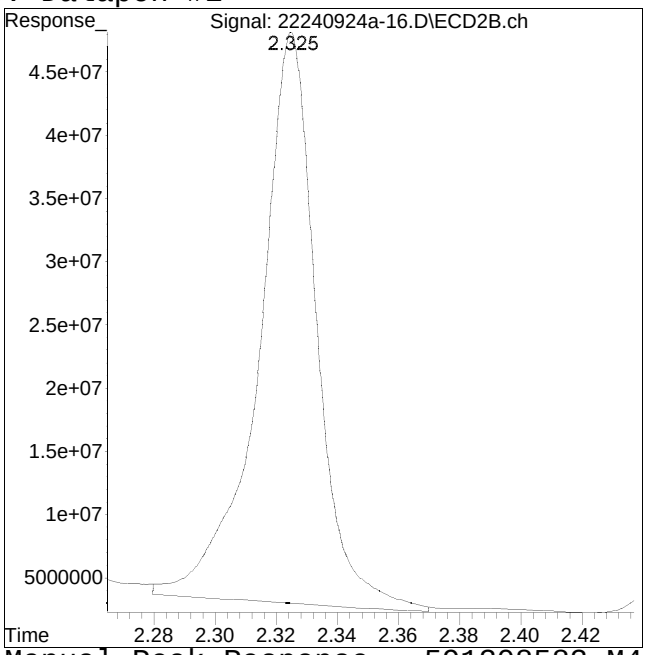

Original Peak Response = 417093595 Manual Peak Response = 406651612 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #15: Dalapon #2



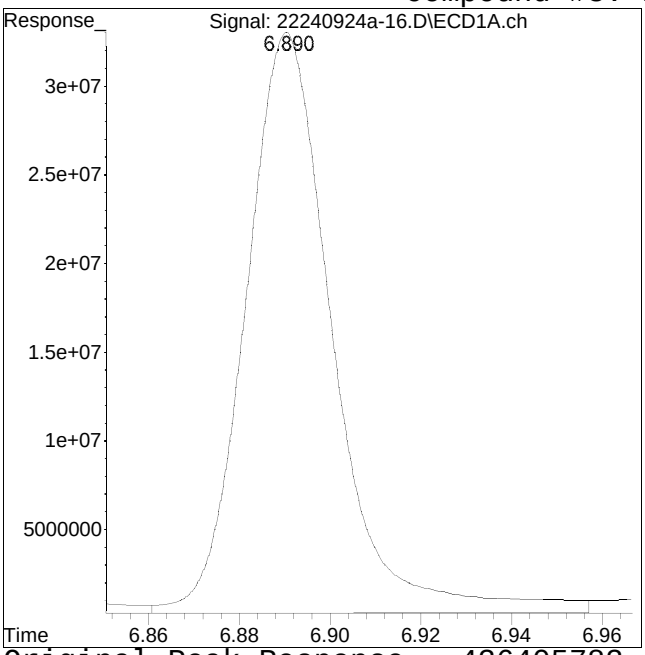



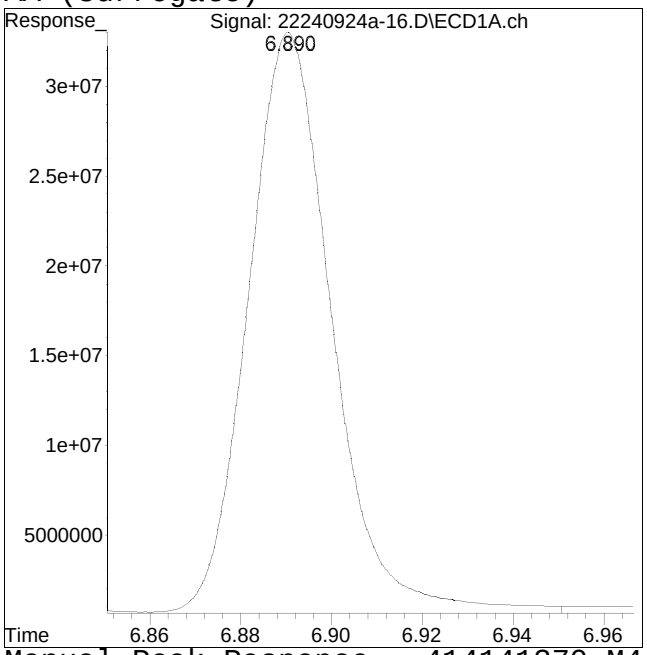

Original Peak Response = 817946458 Manual Peak Response = 591308583 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #3: DCAA (surrogate)



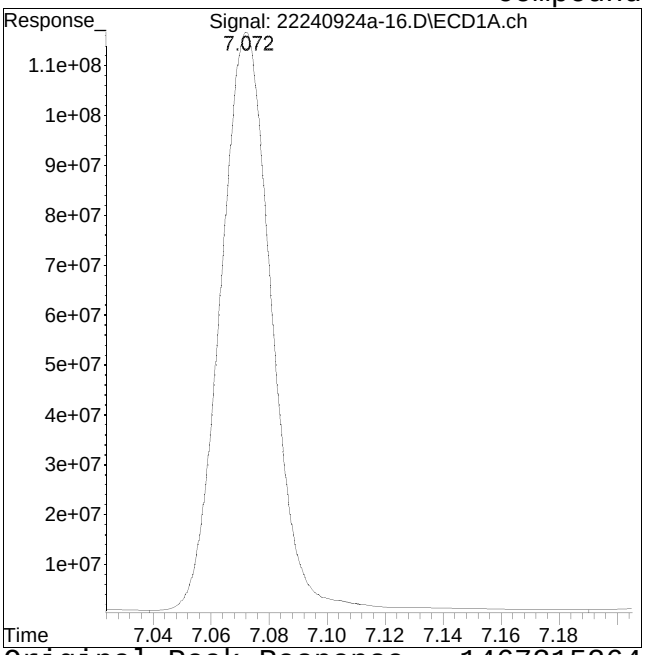



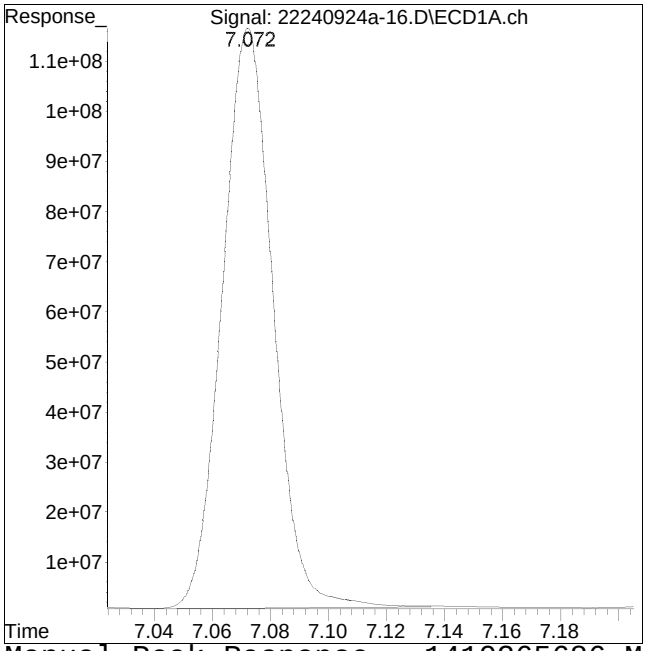

Original Peak Response = 436405783 Manual Peak Response = 414141370 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #4: Dicamba



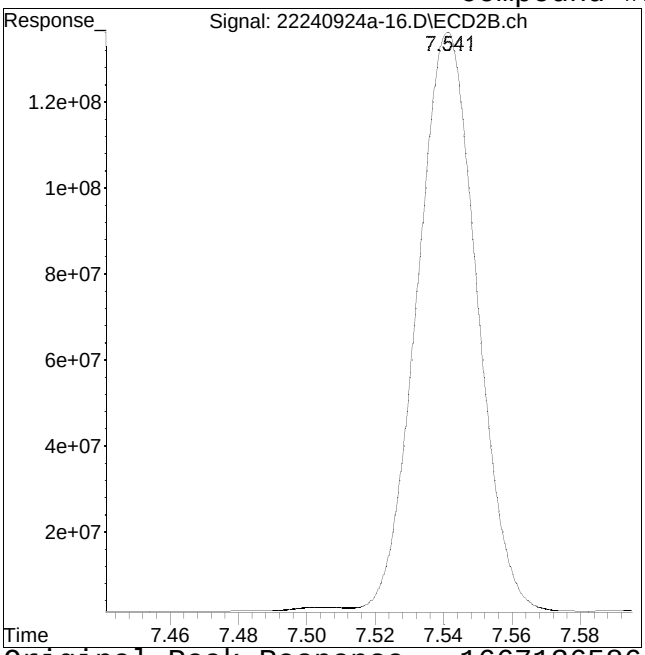



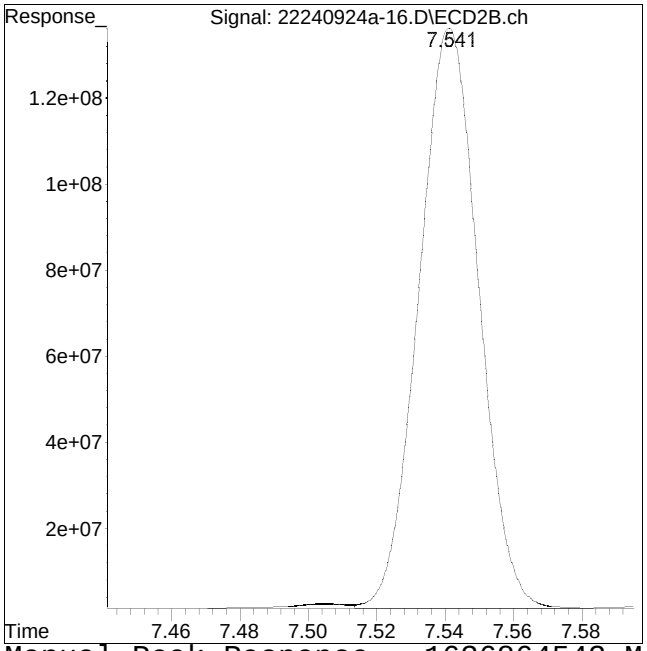

Original Peak Response = 1467315264 Manual Peak Response = 1410265686 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #17: Dicamba #2



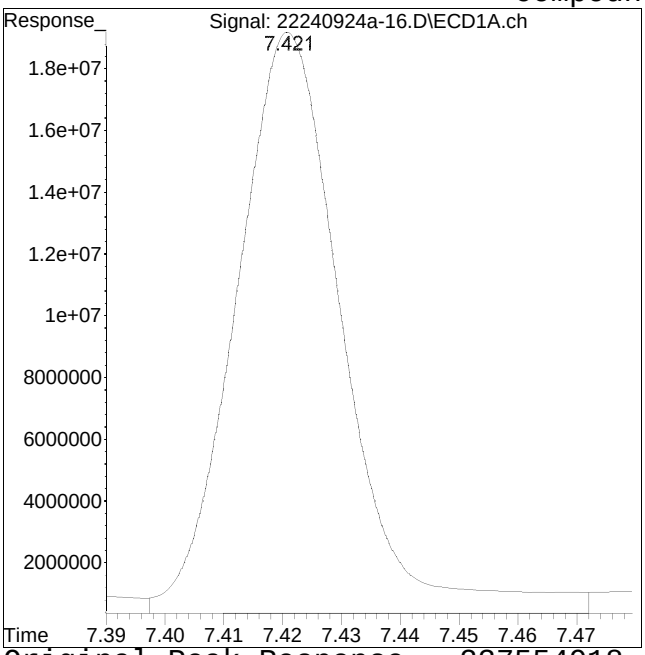




Original Peak Response = 1667136586 Manual Peak Response = 1636864543 M4
M4 = Poor automated baseline construction.

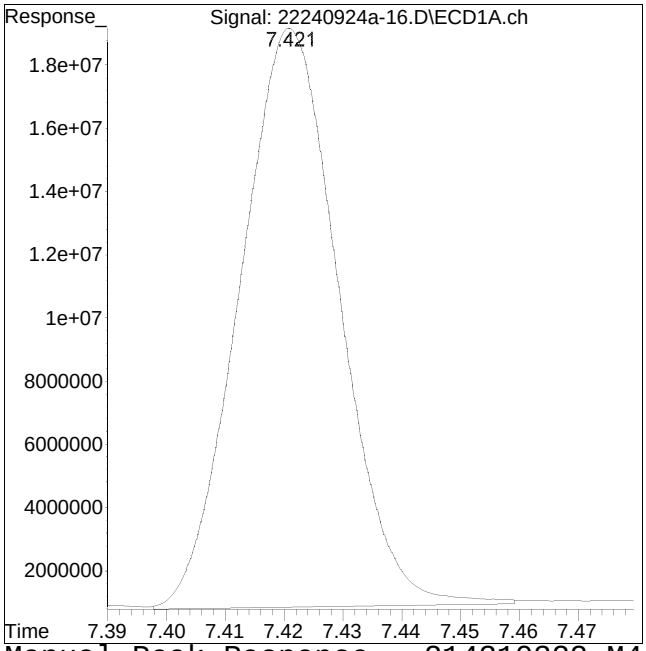
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #6: MCPA




Original Peak Response = 237554918



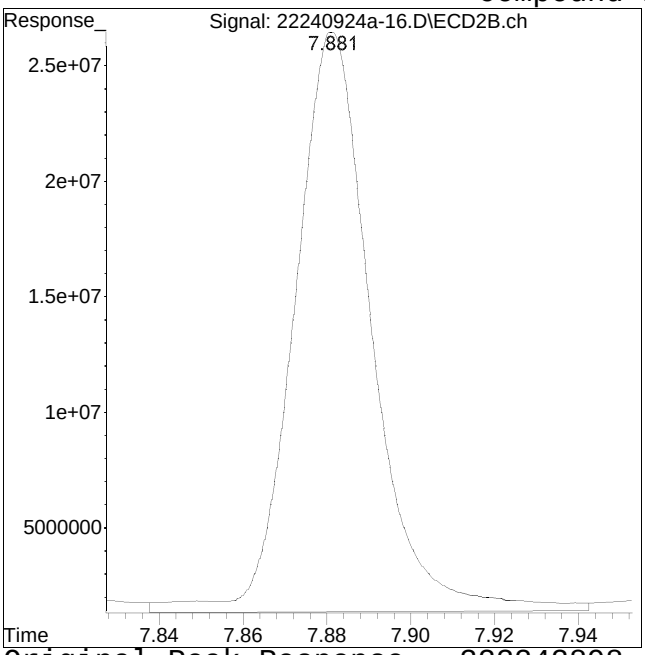

Manual Peak Response = 214310322 M4

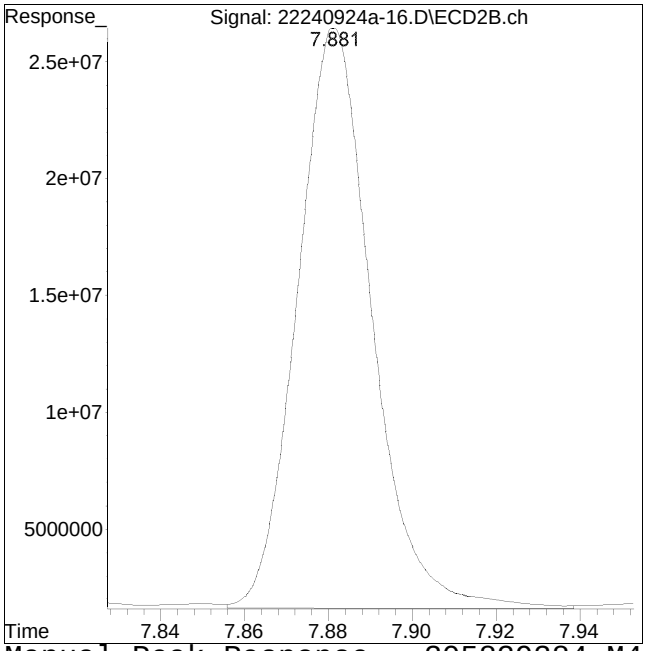
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #19: MCPA #2



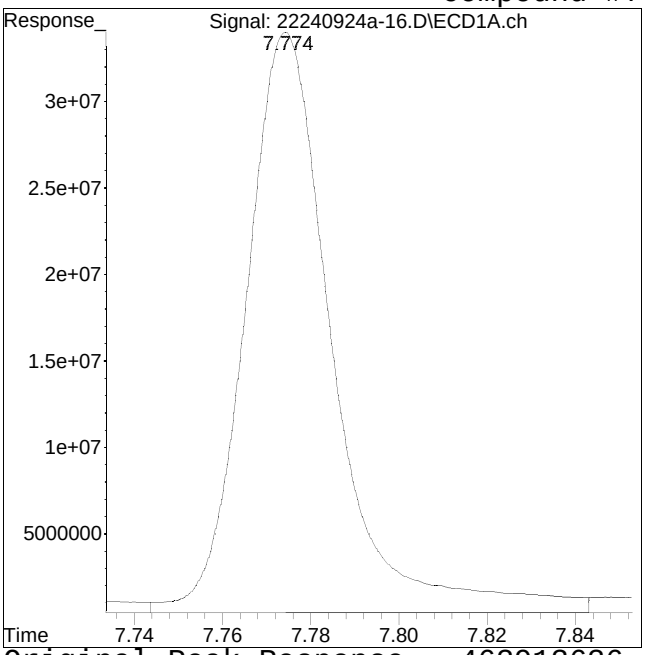



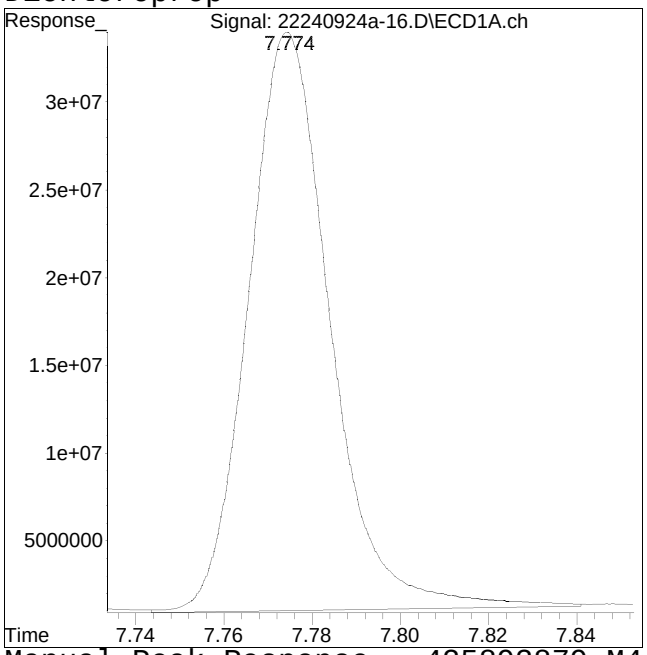

Original Peak Response = 323242898 Manual Peak Response = 305839384 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #7: Dichloroprop



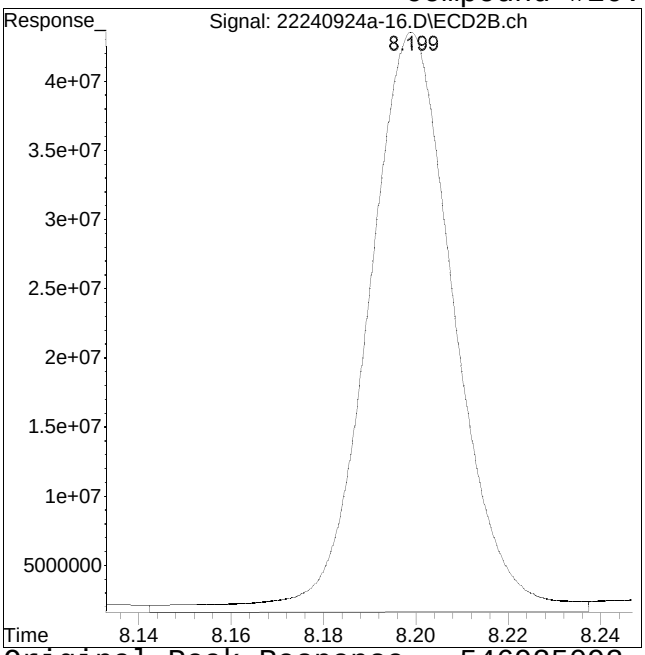



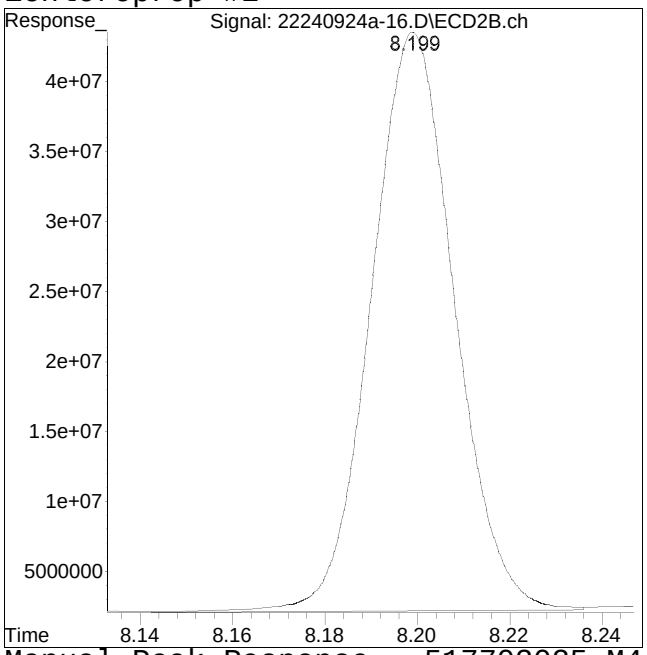

Original Peak Response = 463913636 Manual Peak Response = 425893879 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #20: Dichloroprop #2



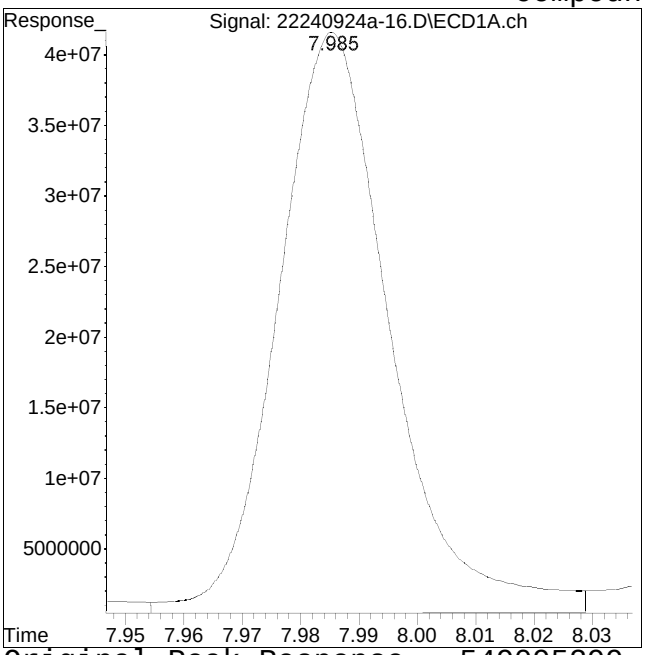



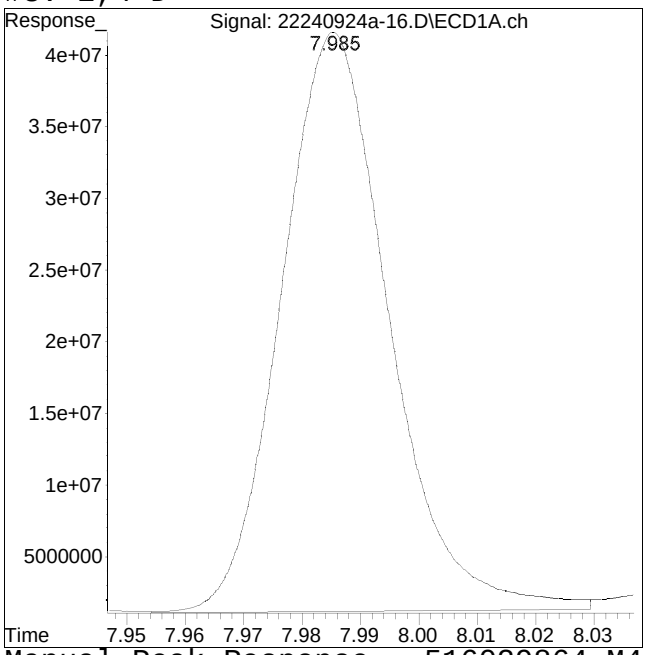

Original Peak Response = 546925093 Manual Peak Response = 517703025 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #8: 2,4-D



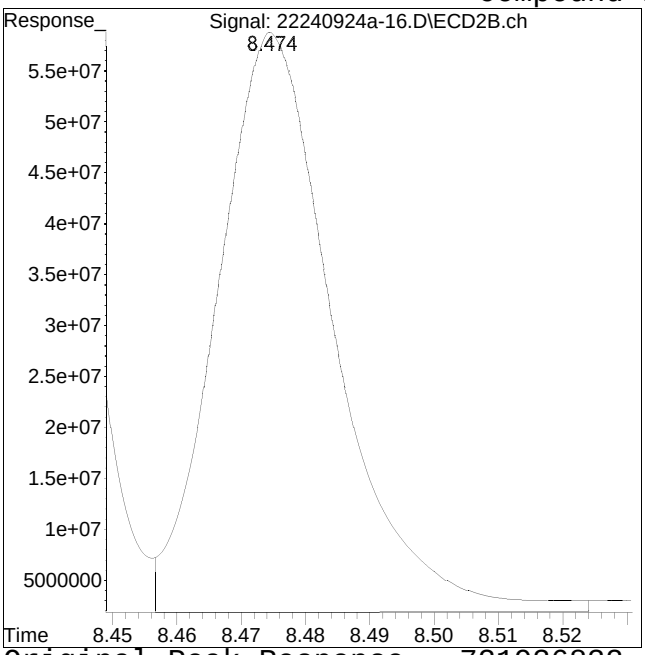



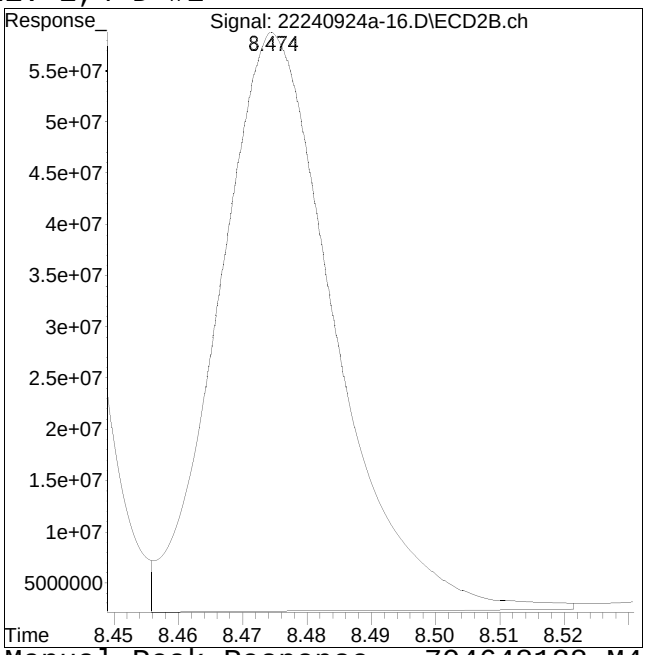

Original Peak Response = 549095299 Manual Peak Response = 516029864 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #21: 2,4-D #2



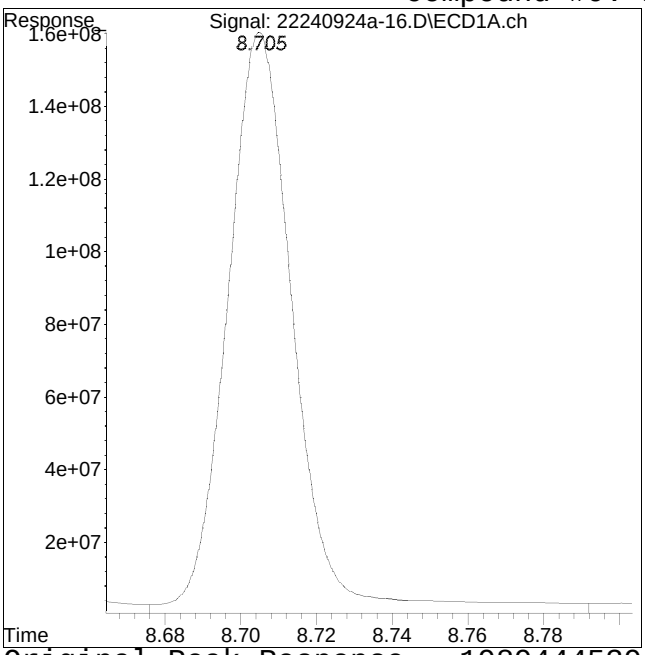



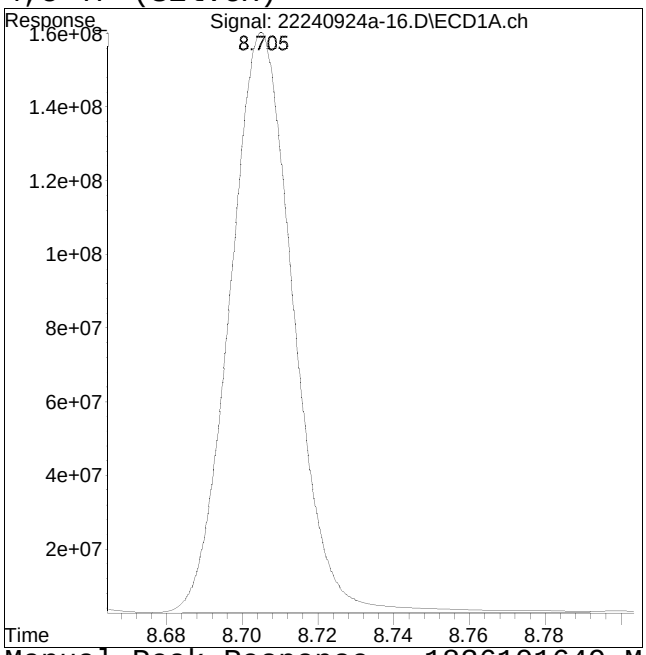

Original Peak Response = 721936832 Manual Peak Response = 704648128 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #9: 2,4,5-TP (Silvex)



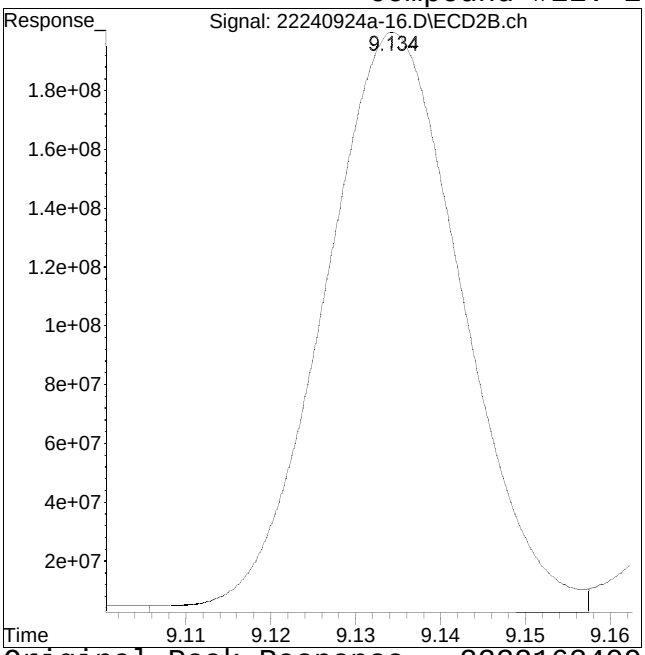



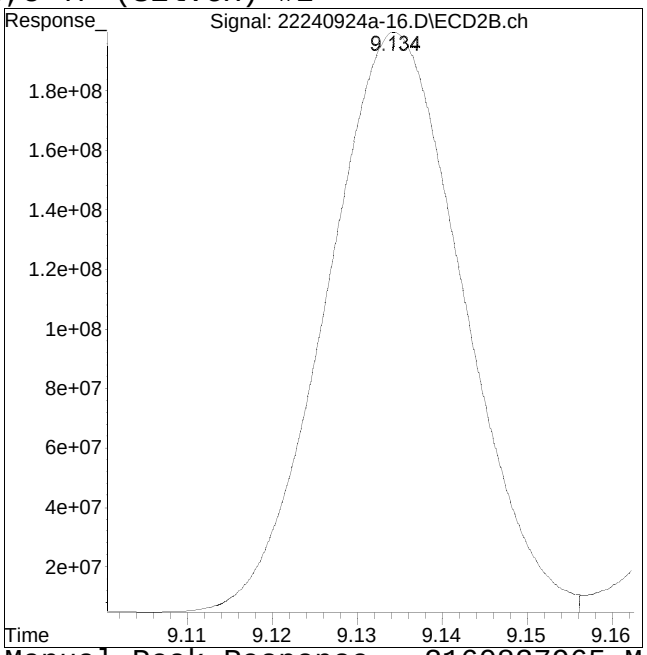

Original Peak Response = 1989444539 Manual Peak Response = 1836101649 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #22: 2,4,5-TP (Silvex) #2



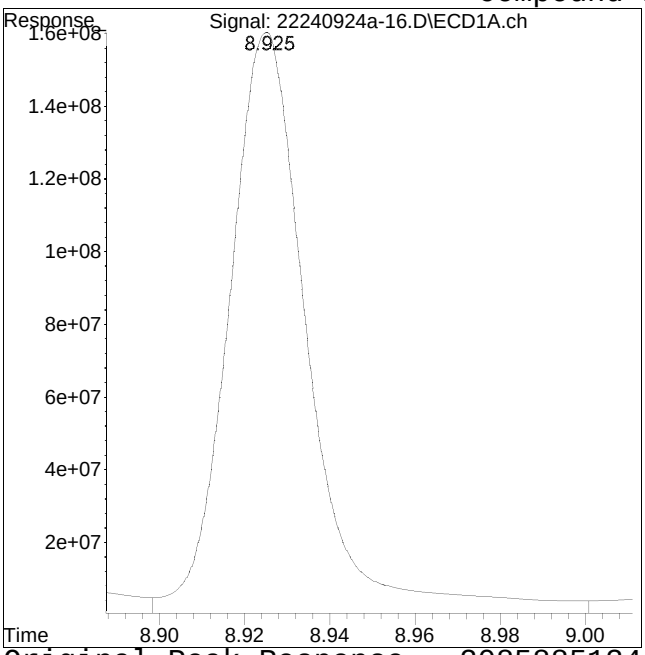



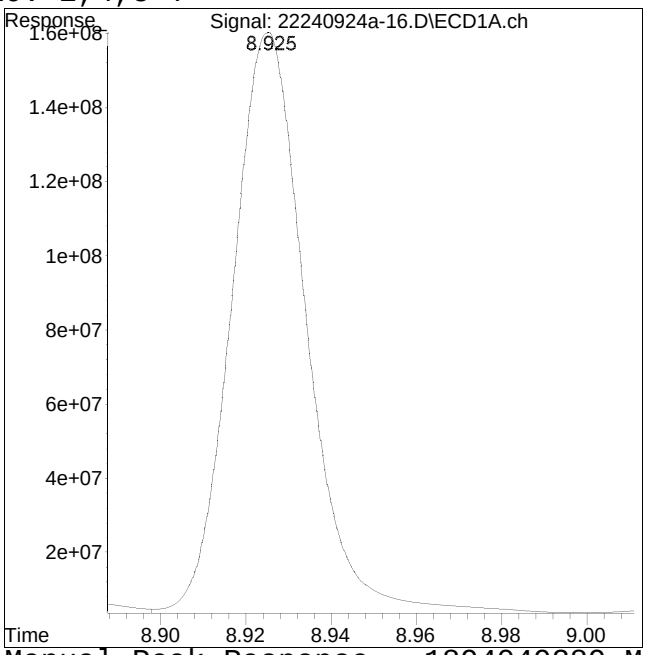

Original Peak Response = 2232163409 Manual Peak Response = 2160837965 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #10: 2,4,5-T



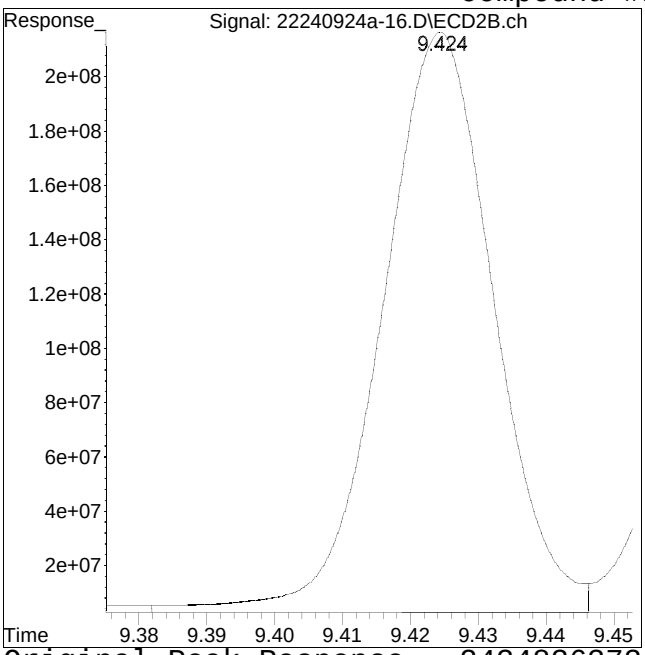



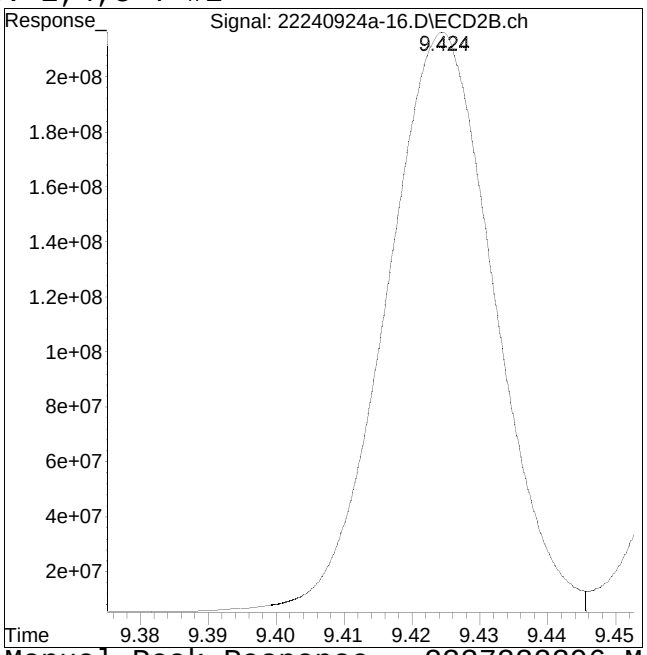

Original Peak Response = 2085885134 Manual Peak Response = 1894049289 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #23: 2,4,5-T #2



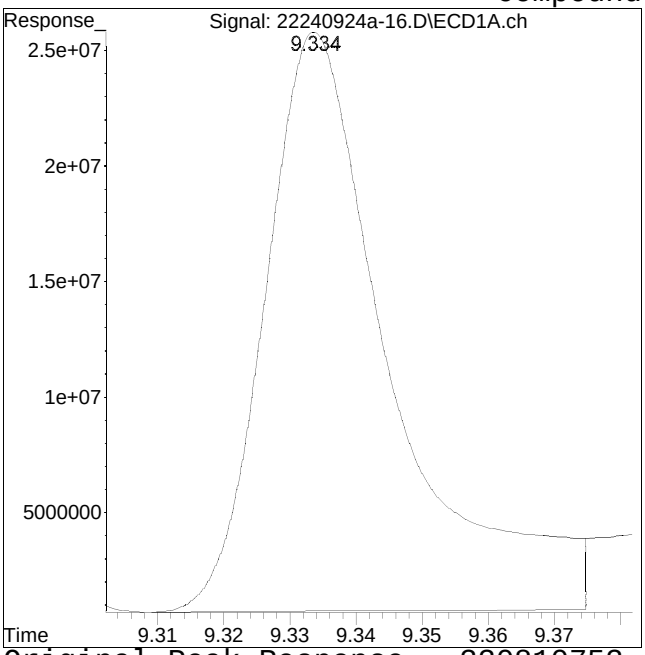



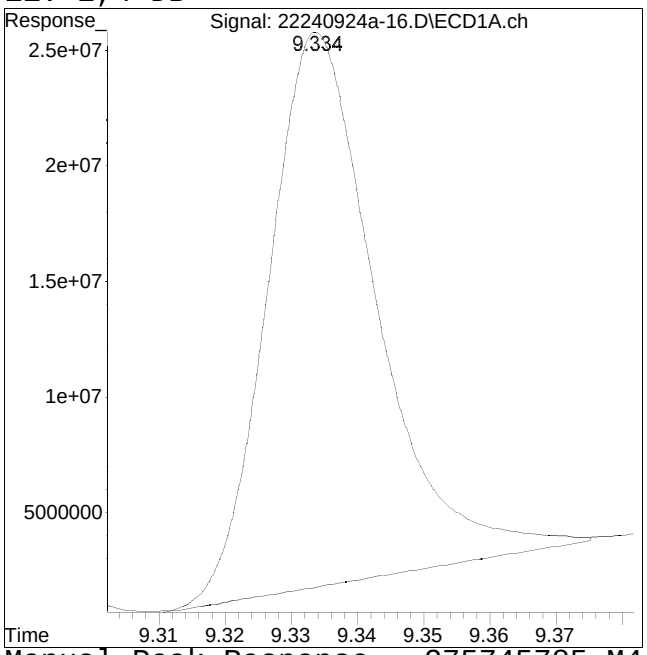

Original Peak Response = 2434836373 Manual Peak Response = 2337232396 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #11: 2,4-DB



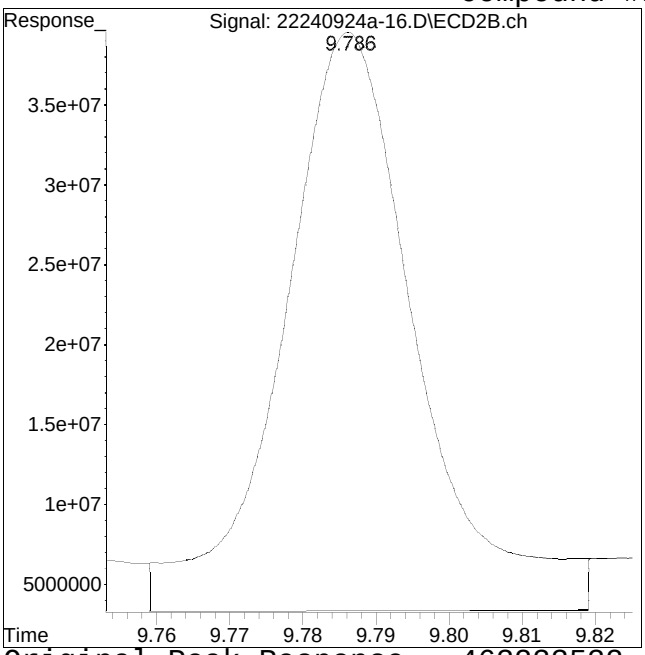




Original Peak Response = 330810753 Manual Peak Response = 275745785 M4
M4 = Poor automated baseline construction.

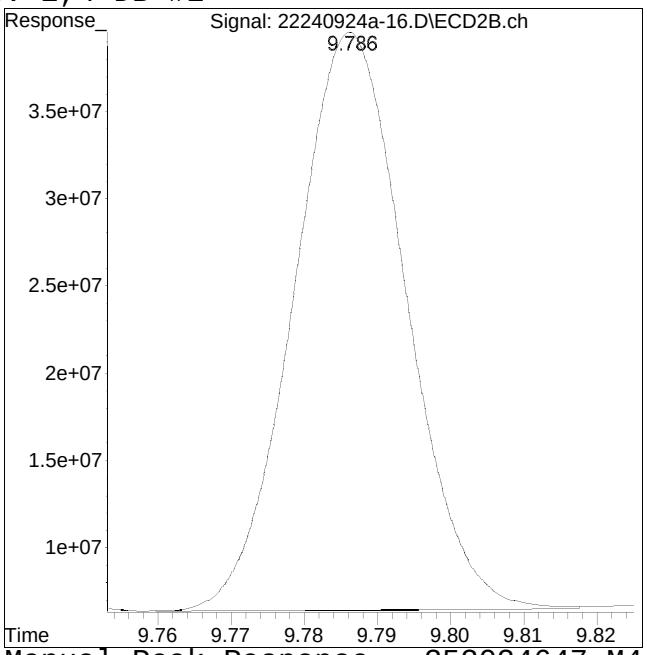
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #24: 2,4-DB #2




Original Peak Response = 463233532

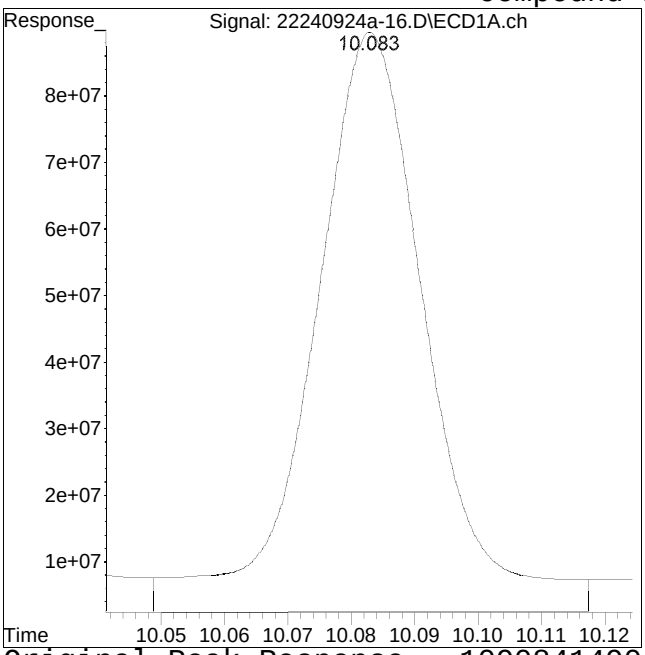



Manual Peak Response = 352024647 M4
M4 = Poor automated baseline construction.

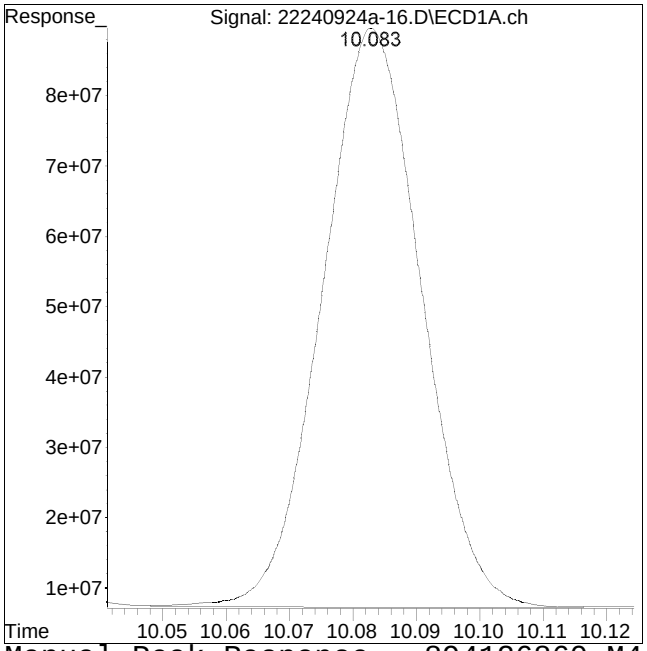
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #12: Dinoseb




Original Peak Response = 1090841490



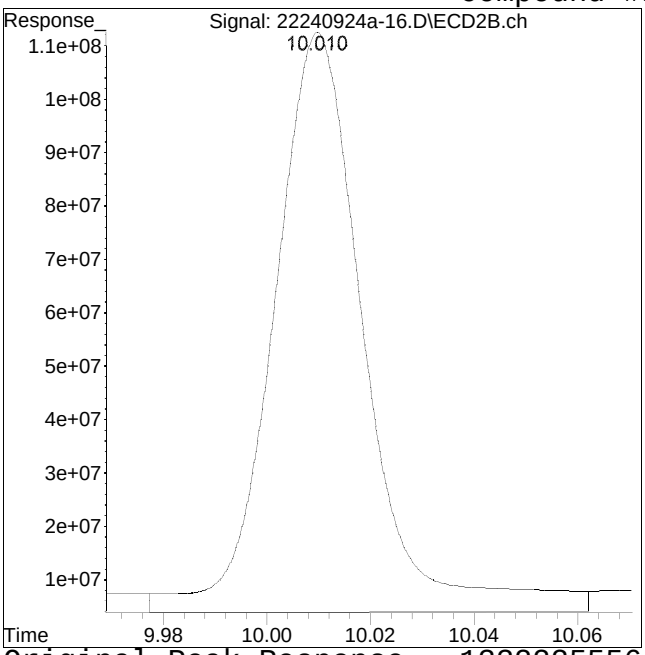

Manual Peak Response = 894126860 M4

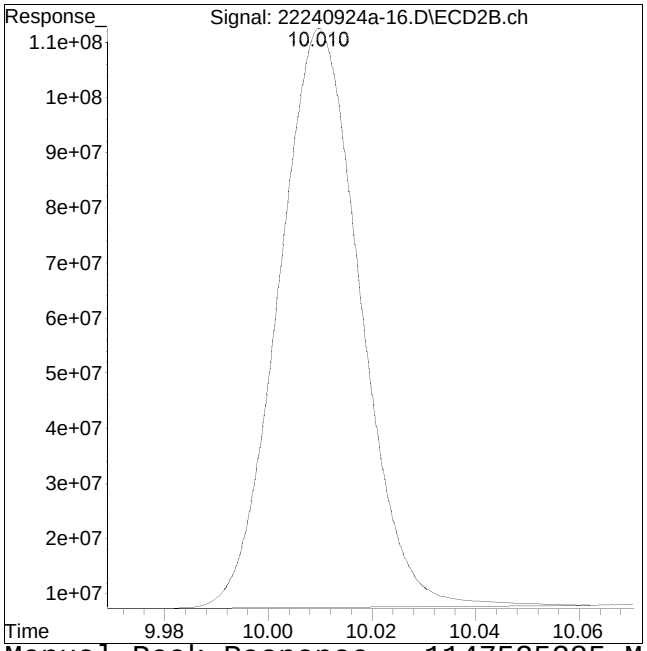
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-16.D Operator : pest22:emr
Date Inj'd : 9/24/2024 11:50 Instrument : Pest22
Sample : WG1974808-3,42,, rr Quant Date : 9/24/2024 12:45 pm

Compound #25: Dinoseb #2




Original Peak Response = 1332225556 Manual Peak Response = 1147525285 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-18.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:27
Operator : pest22:emr
Sample : WG1974808-4,42,, ms rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:46:01 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) i 4,4'-DBOB | 8.435 | 8.434 | 1415.6E6 | 1760.6E6 | 0.250M4 | 0.250M4 |
| Standard Area 1 : #1 = 1387226827 | | | | Recovery = 102.05% | | |
| Standard Area 1 : #2 = 1727304303 | | | | Recovery = 101.92% | | |
| System Monitoring Compounds | | | | | | |
| 3) s DCAA (surrog | 6.891 | 7.361 | 442.4E6 | 671.9E6 | 0.424M4 | 0.504M4 |
| Spiked Amount 0.500 | Range 30 - 150 | | Recovery = | 84.80% | 100.80% | |
| Target Compounds | | | | | | |
| 2) t Dalapon | 2.330 | 2.324 | 437.7E6 | 650.6E6 | 0.331M4 | 0.458M4 |
| 4) t Dicamba | 7.072 | 7.541 | 1502.3E6 | 1771.5E6 | 0.467M4 | 0.472M4 |
| 5) t MCPP | 7.276 | 7.655 | 162.1E6 | 192.5E6 | 59.187M4 | 52.057 |
| 6) t MCPA | 7.421 | 7.881 | 239.6E6 | 333.8E6 | 48.630M4 | 49.743 |
| 7) t Dichloroprop | 7.775 | 8.199 | 461.9E6 | 562.8E6 | 0.467M4 | 0.463M4 |
| 8) t 2,4-D | 7.986f | 8.475 | 560.8E6 | 767.2E6 | 0.465M4 | 0.491M4 |
| 9) t 2,4,5-TP (Si | 8.705 | 9.134 | 1986.0E6 | 2405.7E6 | 0.454M4 | 0.440M4 |
| 10) t 2,4,5-T | 8.925 | 9.424 | 2094.1E6 | 2563.6E6 | 0.467M4 | 0.474M4 |
| 11) t 2,4-DB | 9.334f | 9.785 | 305.5E6 | 392.9E6 | 0.465M4 | 0.444M4 |
| 12) t Dinoseb | 10.083 | 10.009 | 923.8E6 | 1164.7E6 | 0.276M4 | 0.338M4 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |

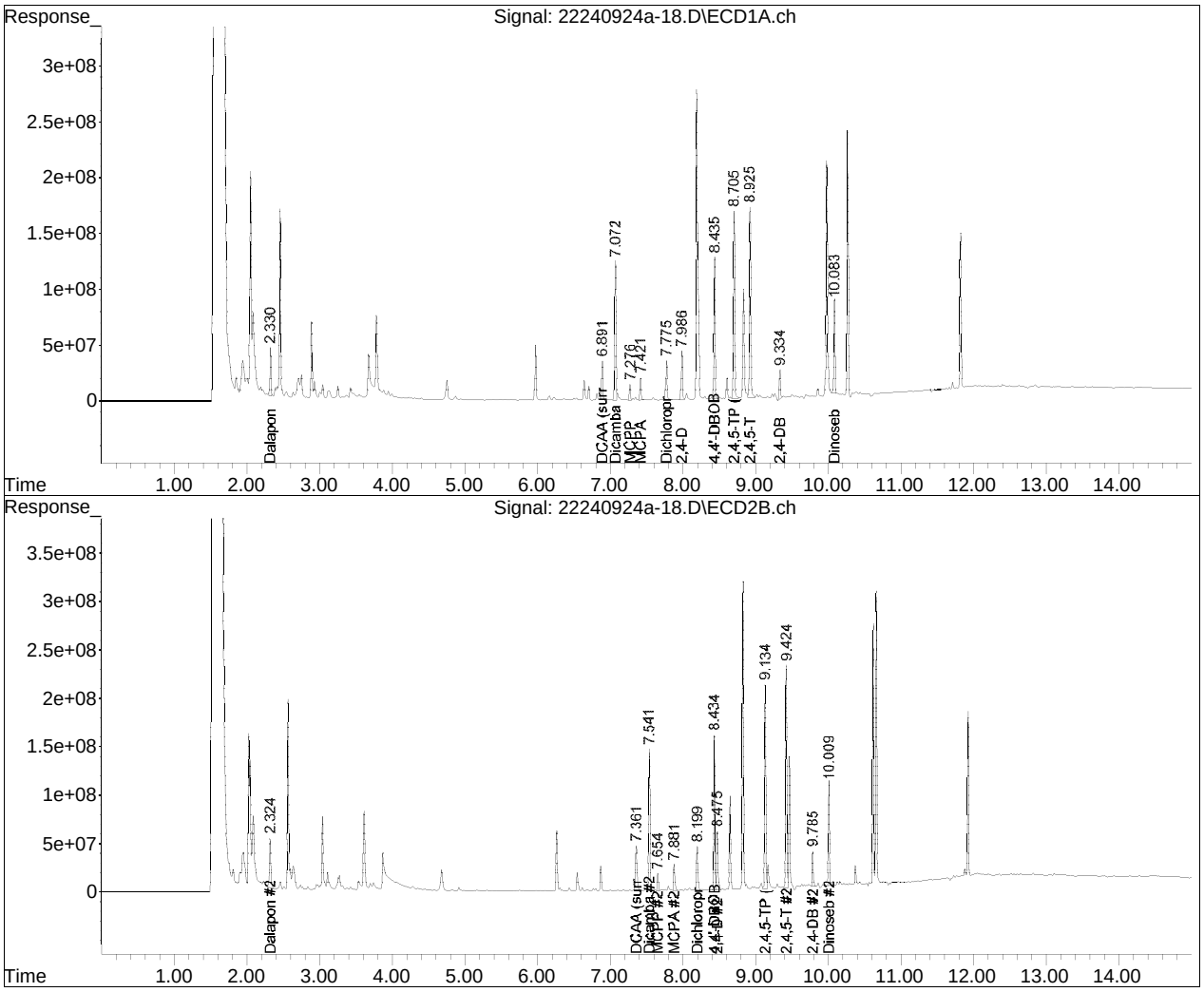
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-18.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:27
Operator : pest22:emr
Sample : WG1974808-4,42,, ms rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 12:46:01 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

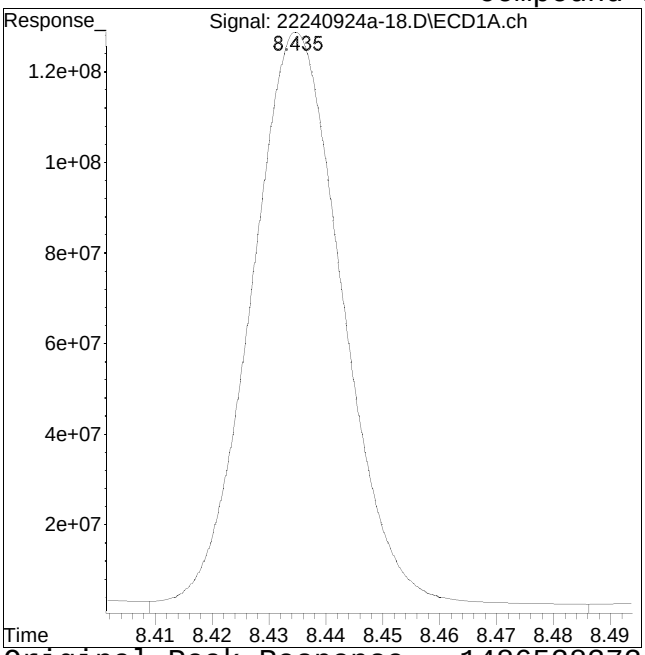
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

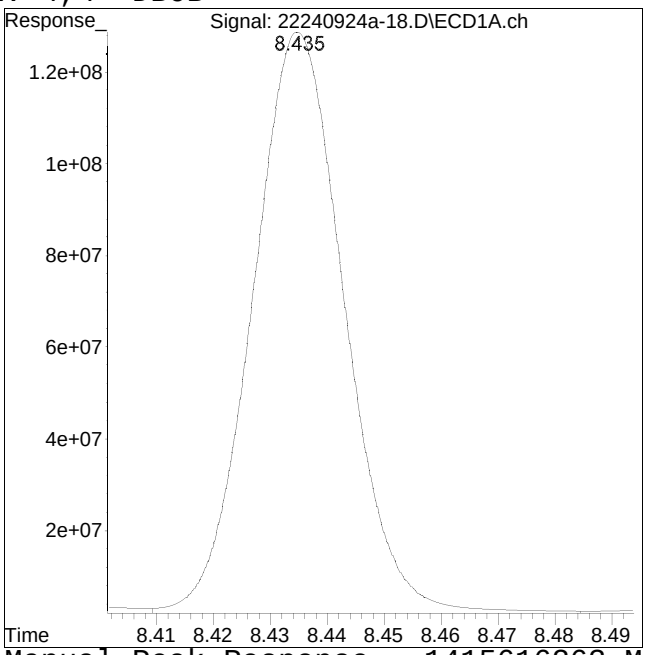


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #1: 4,4'-DBOB



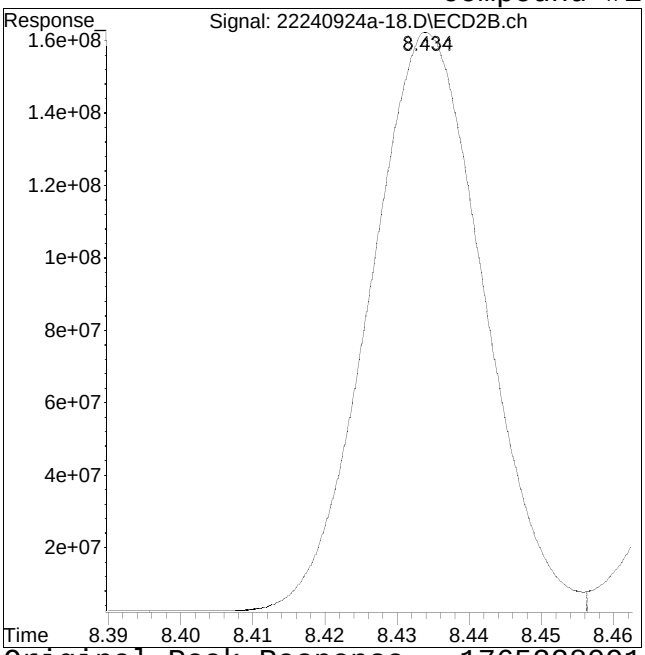



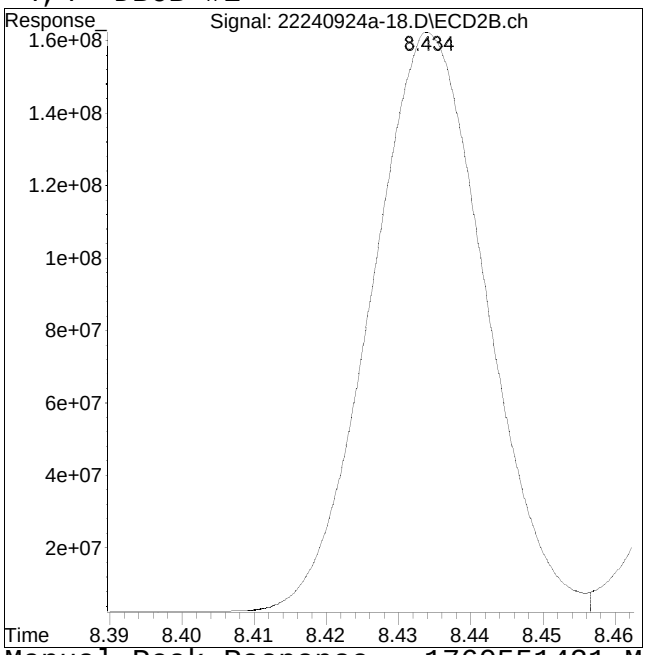

Original Peak Response = 1486528373 Manual Peak Response = 1415616263 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #14: 4,4'-DBOB #2



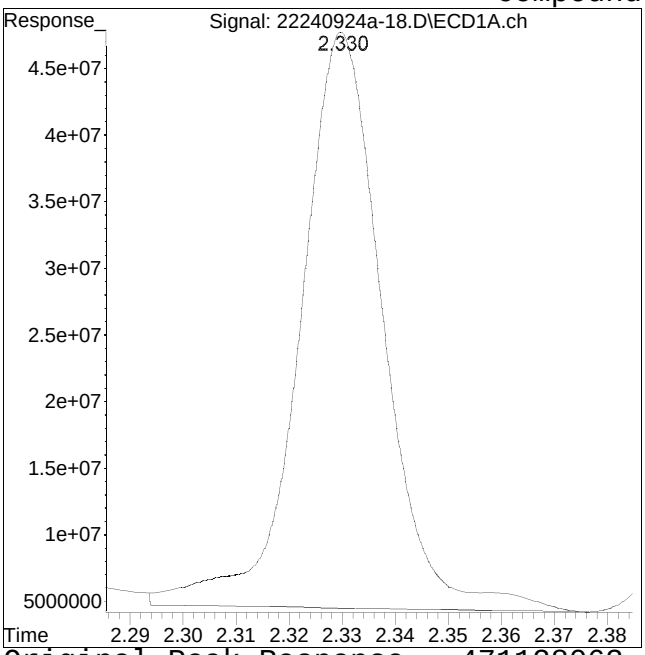



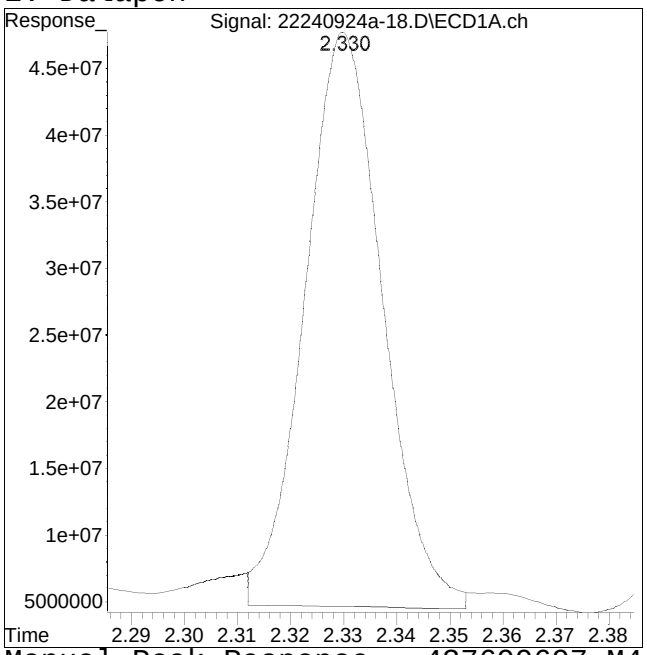

Original Peak Response = 1765228091 Manual Peak Response = 1760551421 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #2: Dalapon



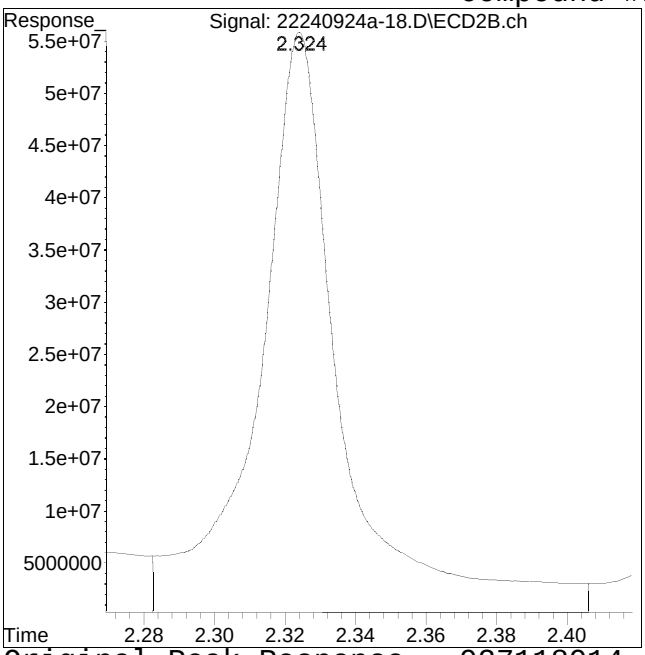



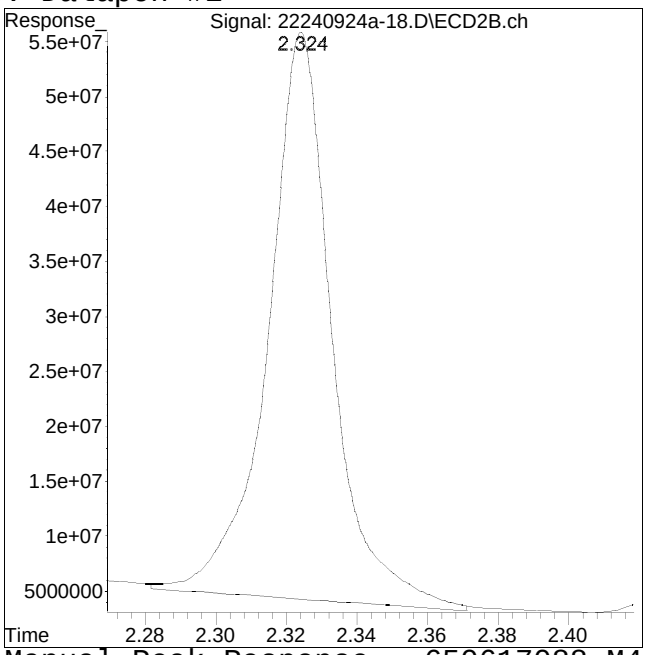

Original Peak Response = 471128063 Manual Peak Response = 437699697 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #15: Dalapon #2



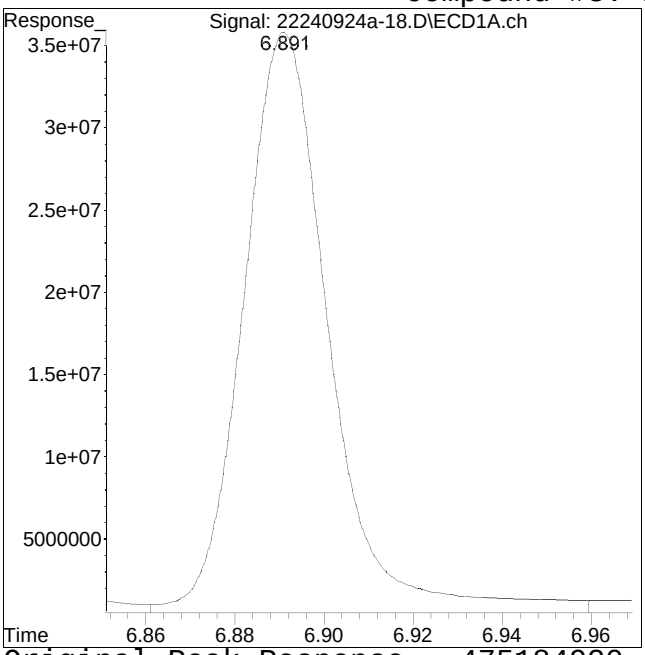




Original Peak Response = 927118914 Manual Peak Response = 650617088 M4
M4 = Poor automated baseline construction.

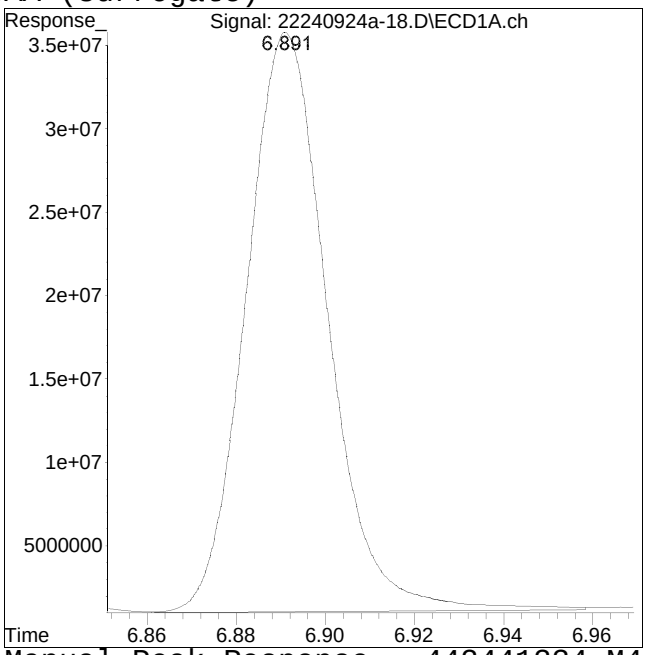
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #3: DCAA (surrogate)




Original Peak Response = 475184920

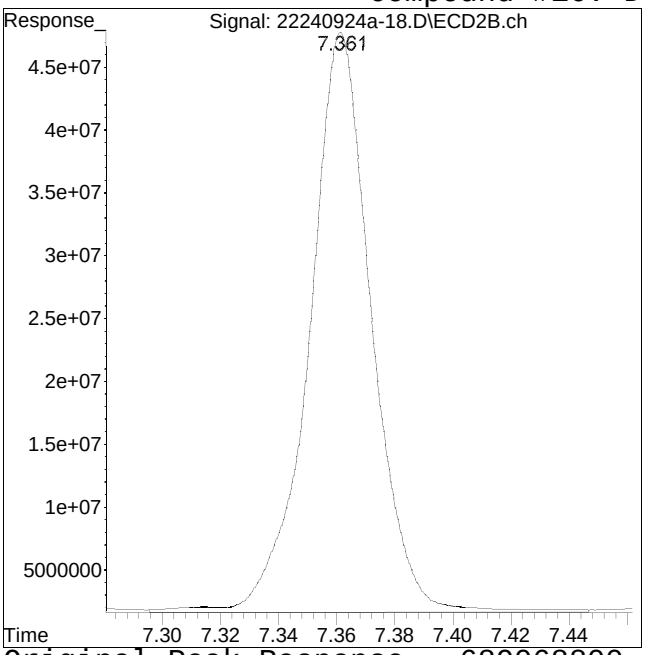


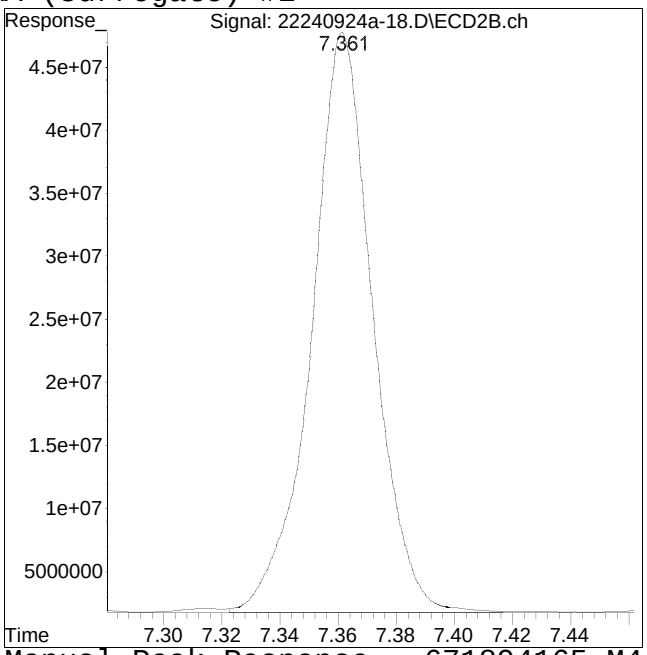

Manual Peak Response = 442441334 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #16: DCAA (surrogate) #2



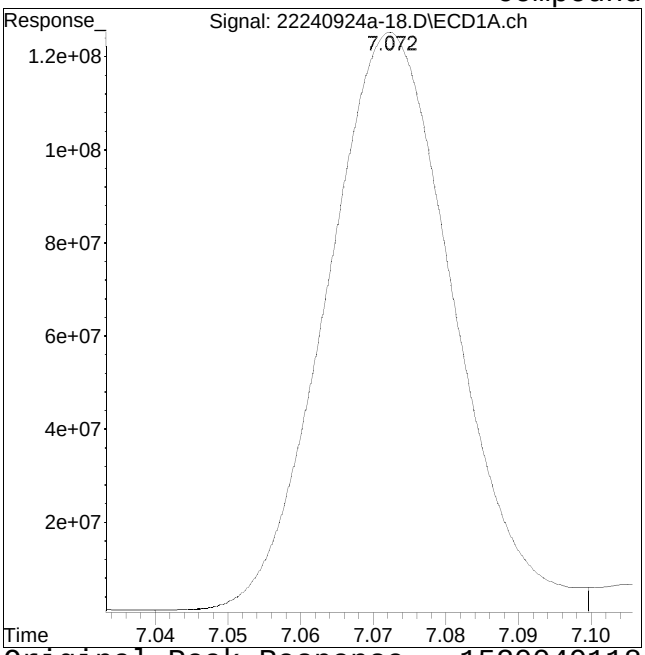



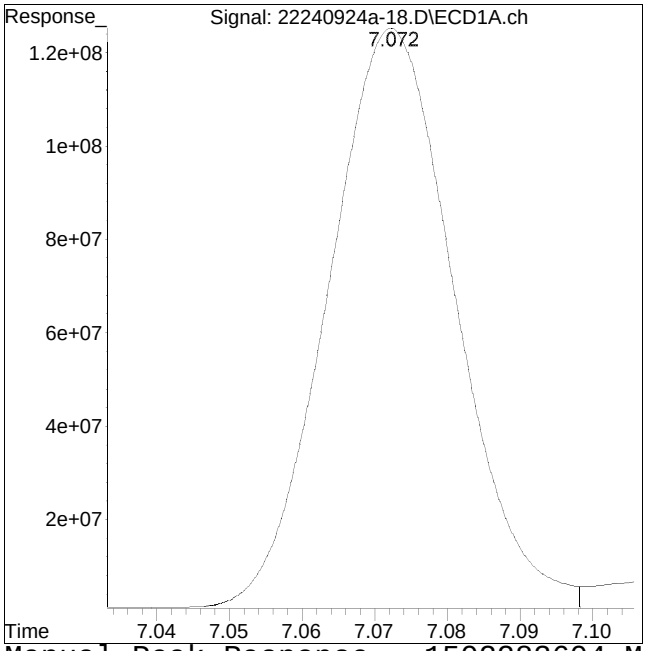

Original Peak Response = 689068800 Manual Peak Response = 671894165 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #4: Dicamba



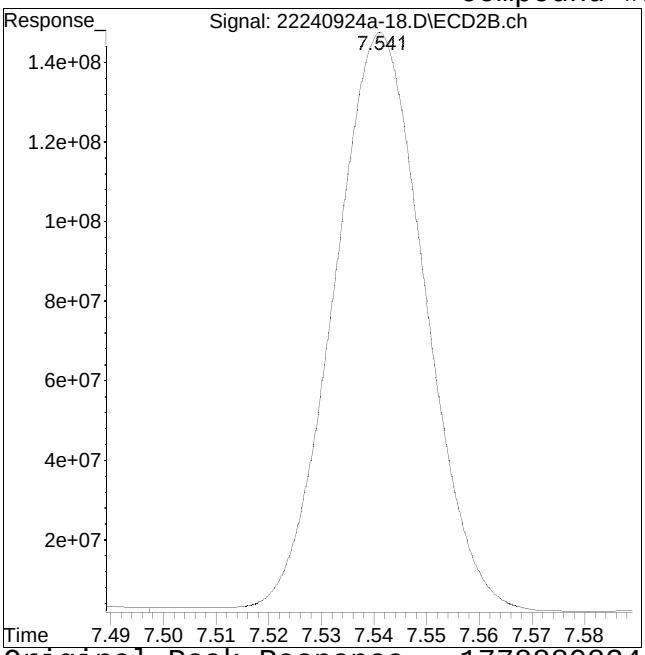



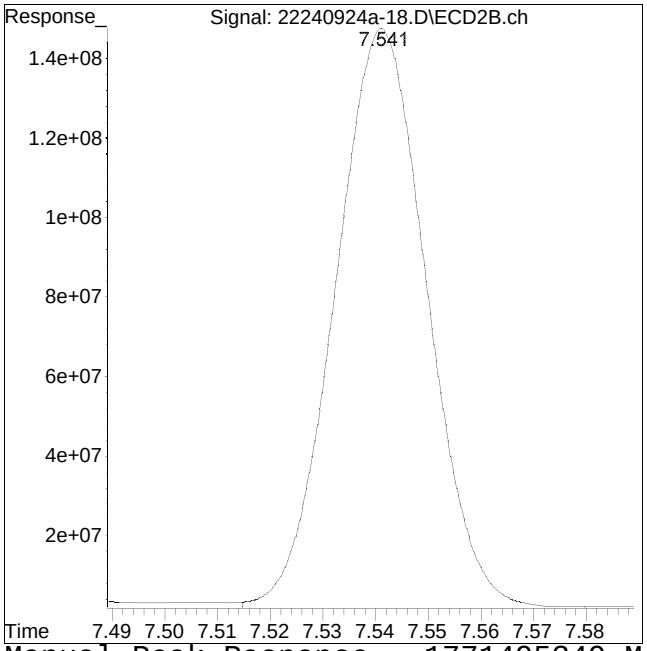

Original Peak Response = 1520049118 Manual Peak Response = 1502283604 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #17: Dicamba #2



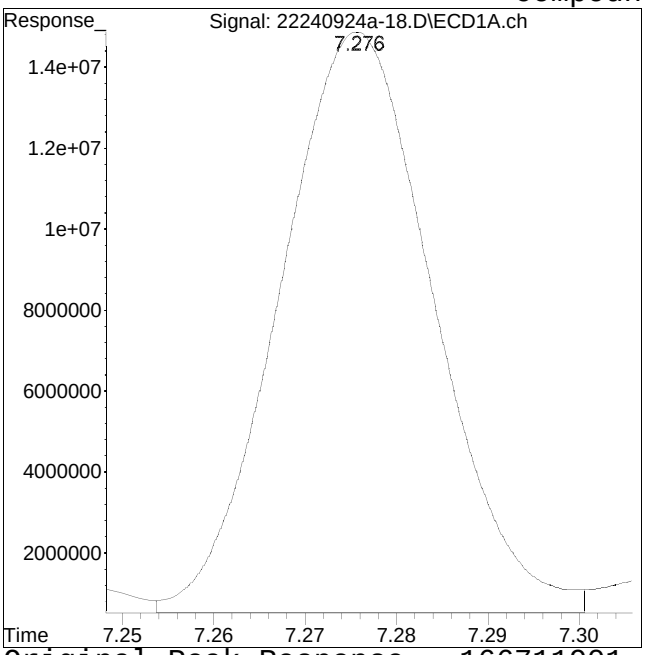




Original Peak Response = 1778889834 Manual Peak Response = 1771495349 M4
M4 = Poor automated baseline construction.

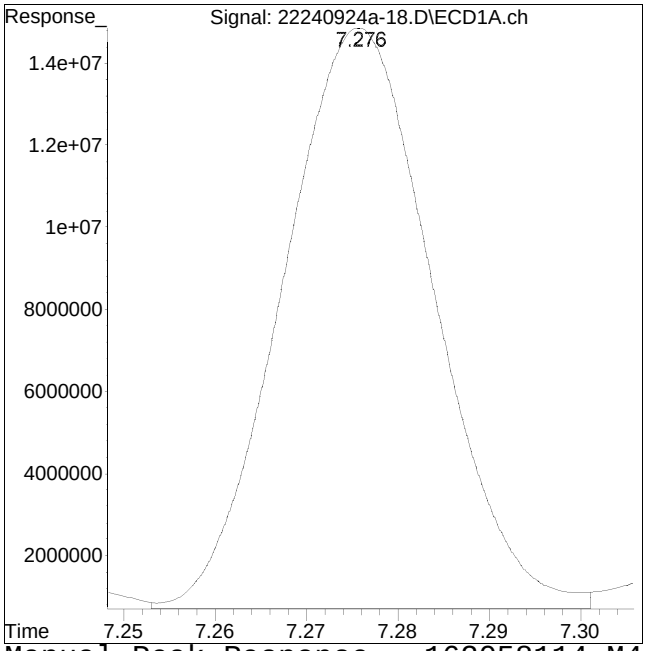
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #5: MCPP




Original Peak Response = 166711901

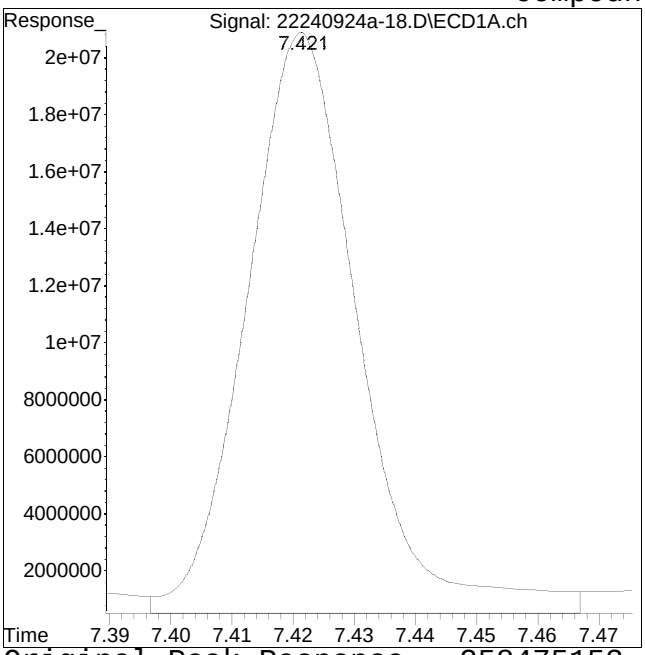



Manual Peak Response = 162058114 M4
M4 = Poor automated baseline construction.

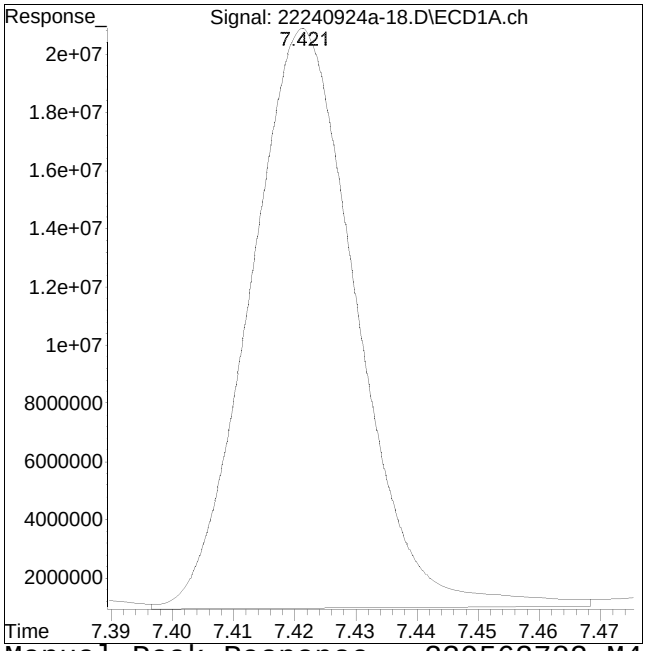
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #6: MCPA




Original Peak Response = 258475153



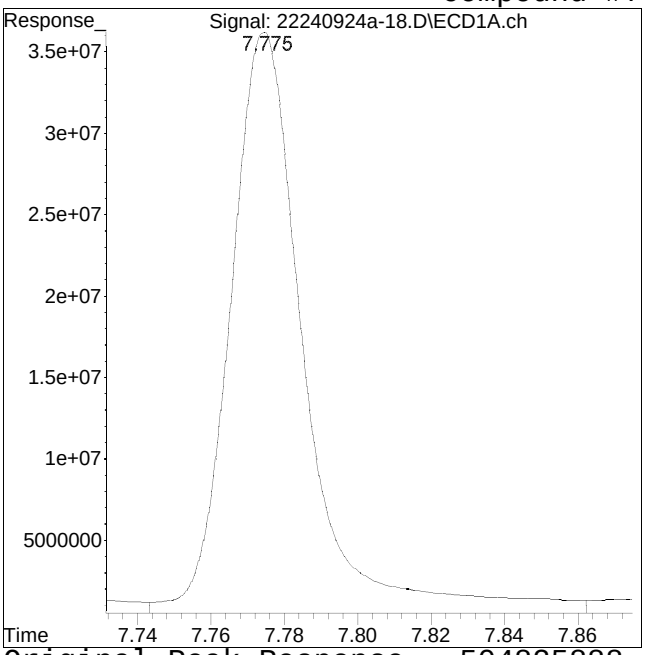

Manual Peak Response = 239563782 M4

M4 = Poor automated baseline construction.

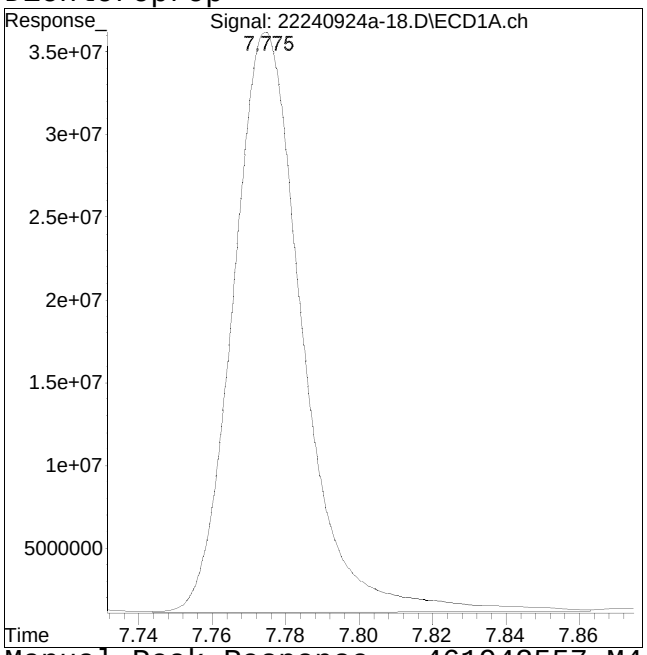
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #7: Dichloroprop




Original Peak Response = 504825888

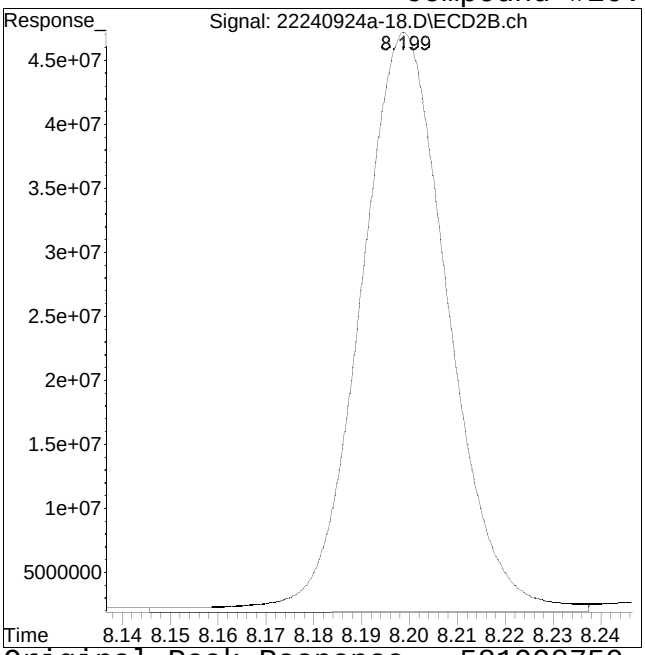



Manual Peak Response = 461942557 M4
M4 = Poor automated baseline construction.

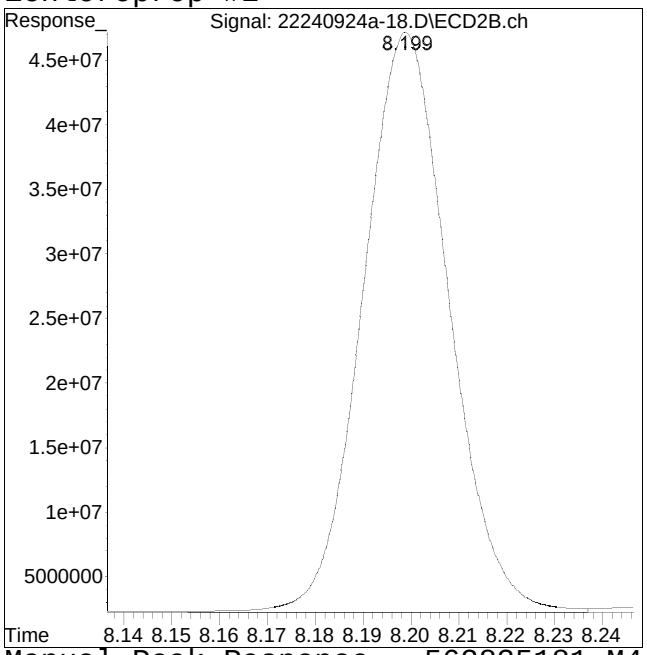
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

## Compound #20: Dichloroprop #2




Original Peak Response = 581998750



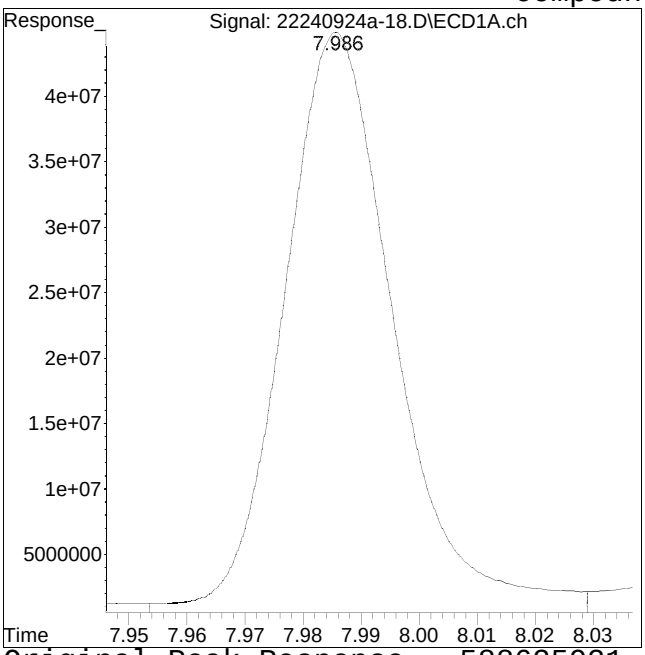

Manual Peak Response = 562835181 M4

M4 = Poor automated baseline construction.

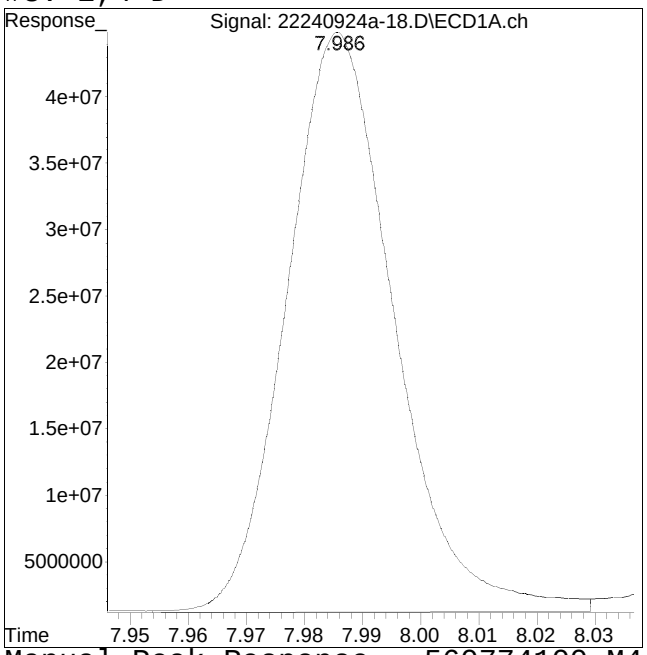
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #8: 2,4-D




Original Peak Response = 588625921



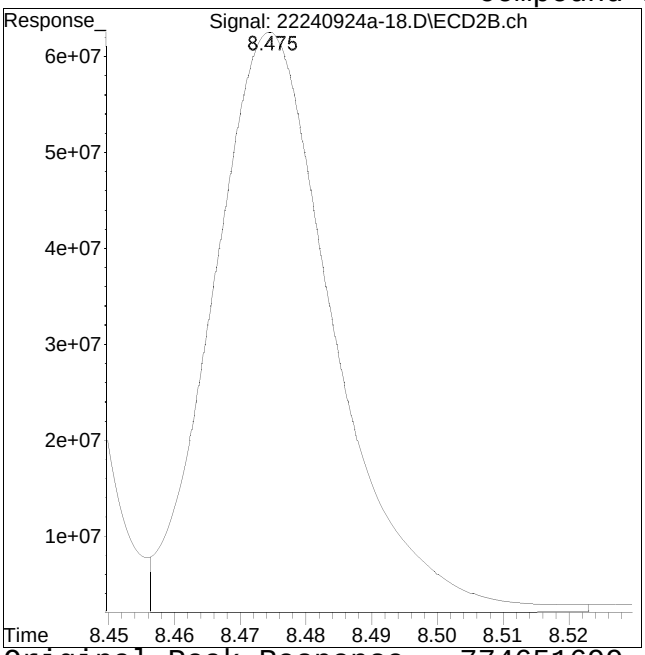

Manual Peak Response = 560774100 M4

M4 = Poor automated baseline construction.

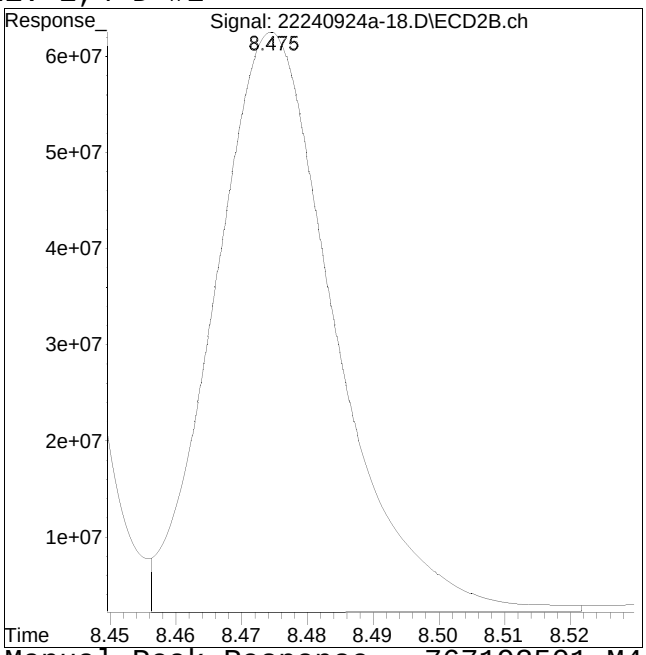
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #21: 2,4-D #2




Original Peak Response = 774651699



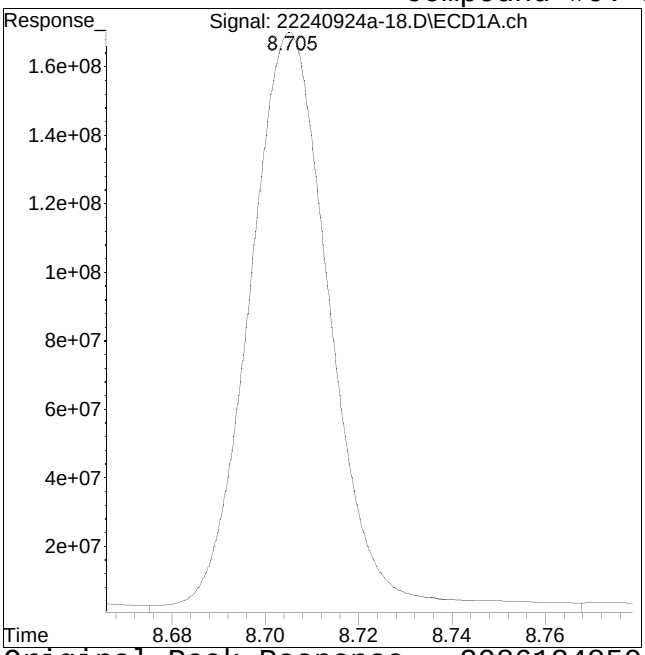

Manual Peak Response = 767193501 M4

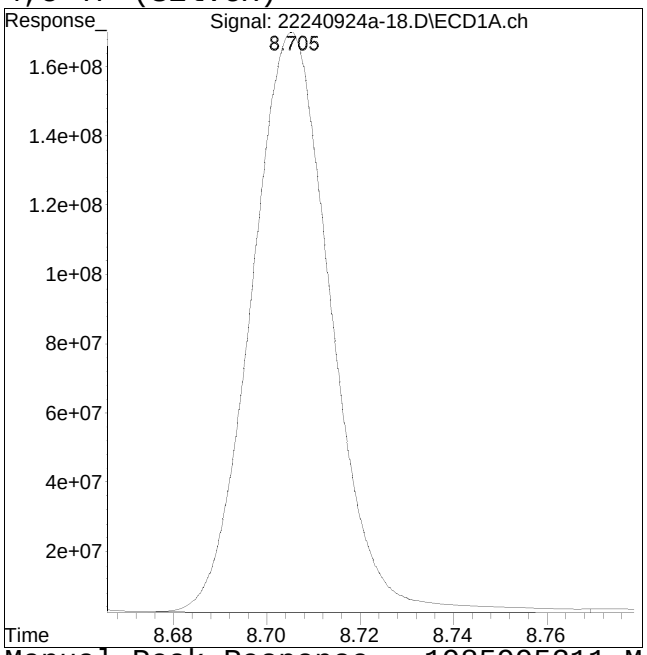
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #9: 2,4,5-TP (Silvex)



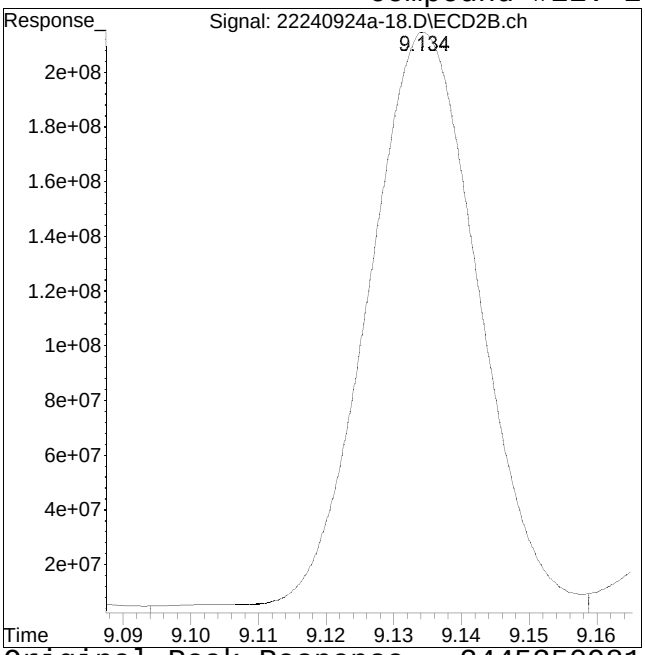



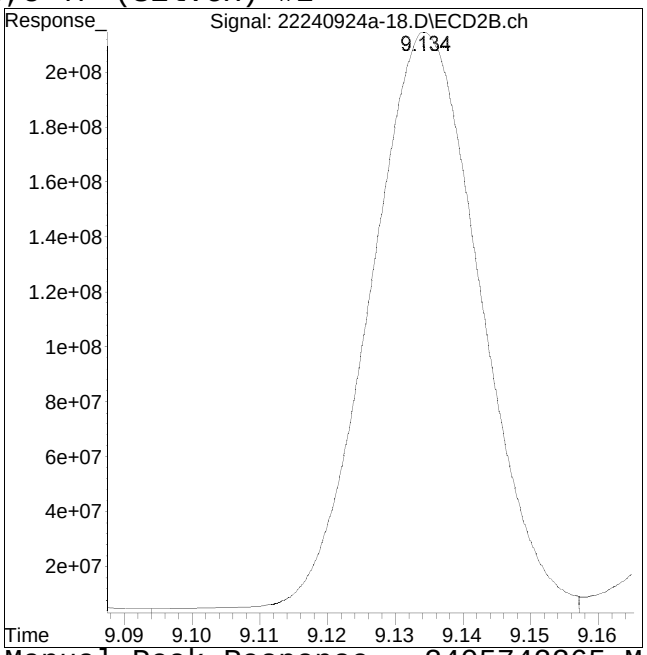

Original Peak Response = 2086124850 Manual Peak Response = 1985995211 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #22: 2,4,5-TP (Silvex) #2



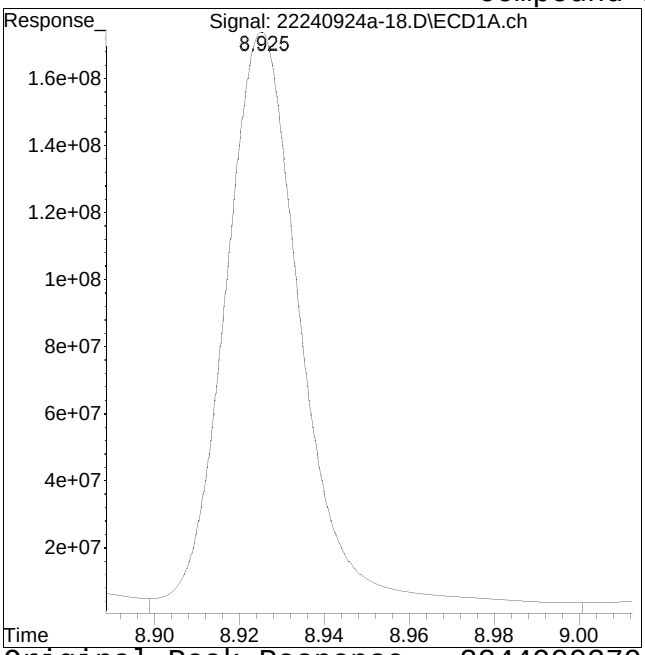



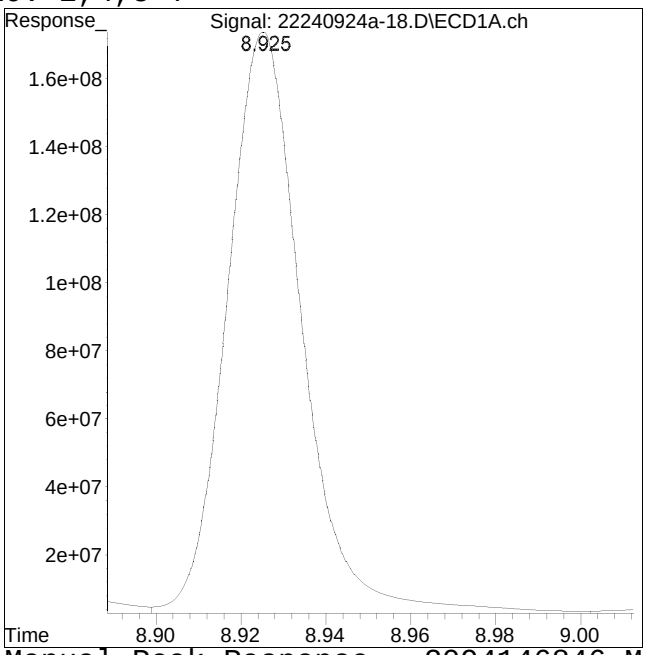

Original Peak Response = 2445350981 Manual Peak Response = 2405742265 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #10: 2,4,5-T



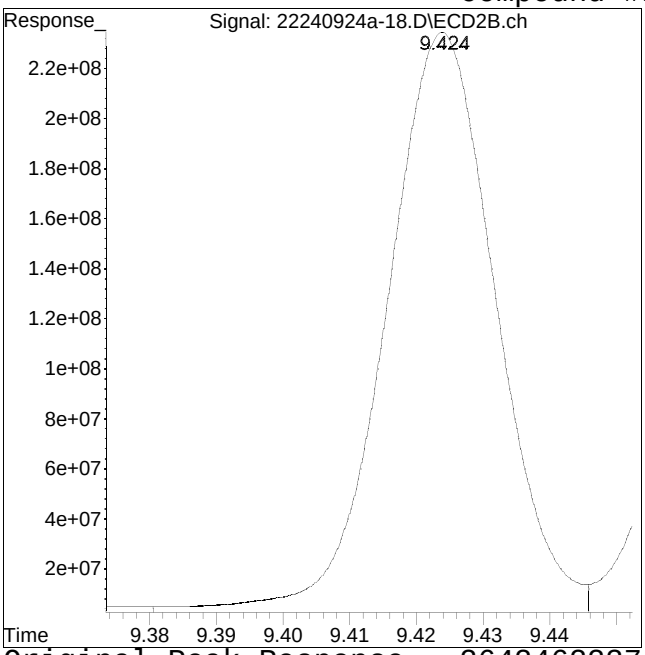



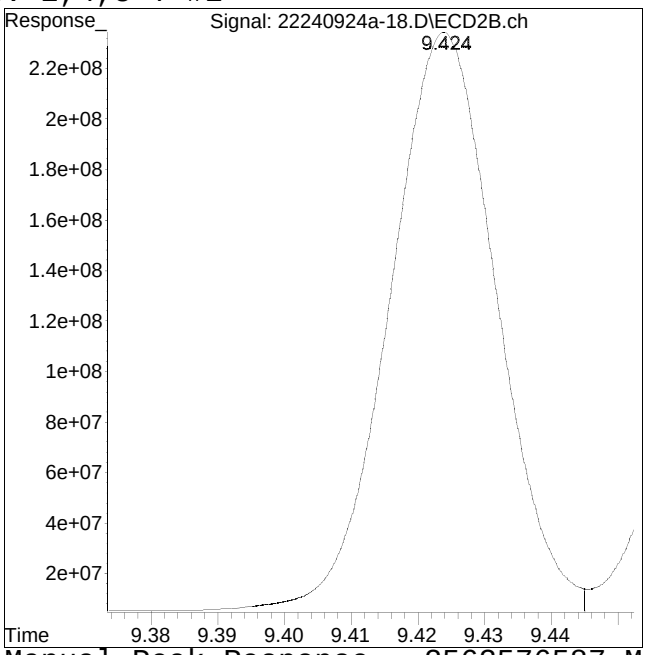

Original Peak Response = 2244999379 Manual Peak Response = 2094146846 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #23: 2,4,5-T #2



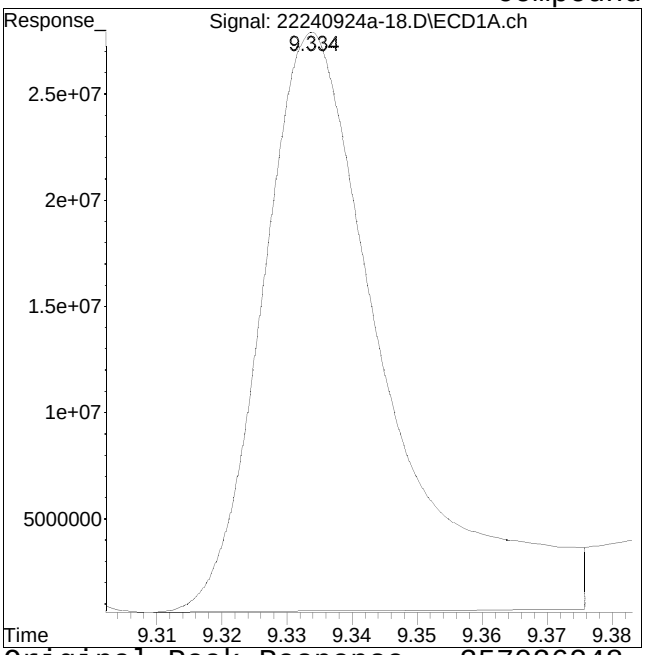



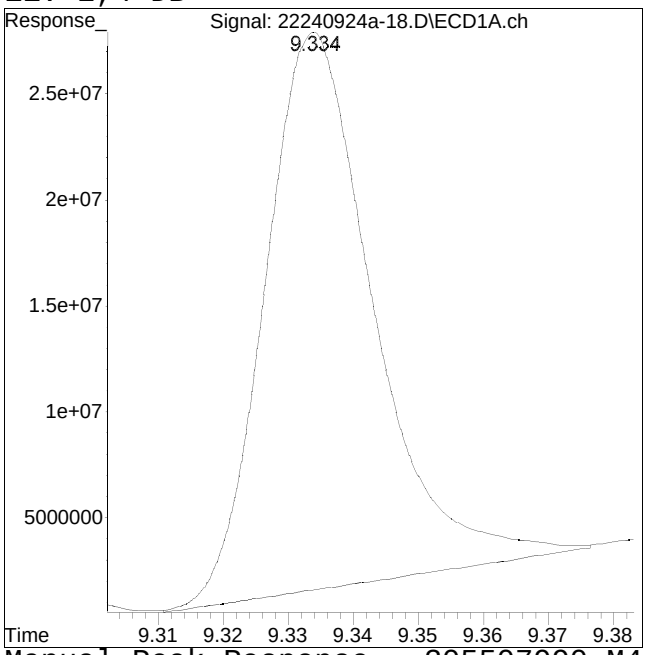

Original Peak Response = 2642462237 Manual Peak Response = 2563576587 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #11: 2,4-DB



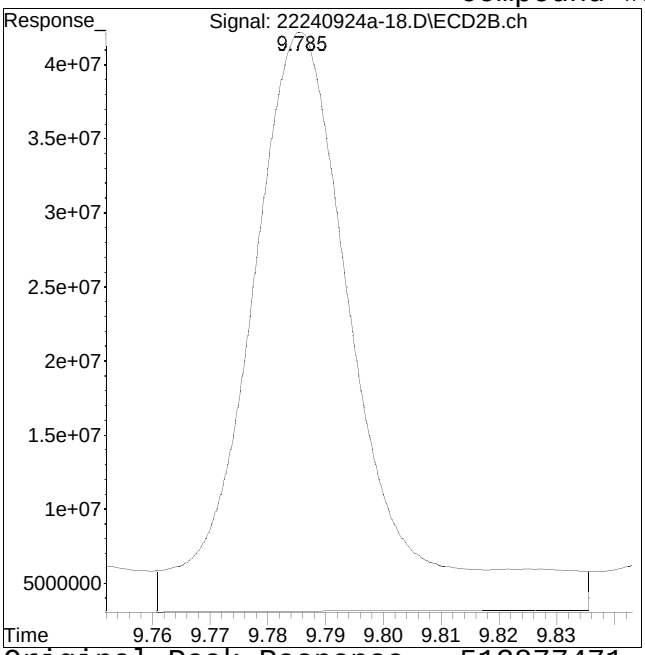




Original Peak Response = 357026248 Manual Peak Response = 305507990 M4
M4 = Poor automated baseline construction.

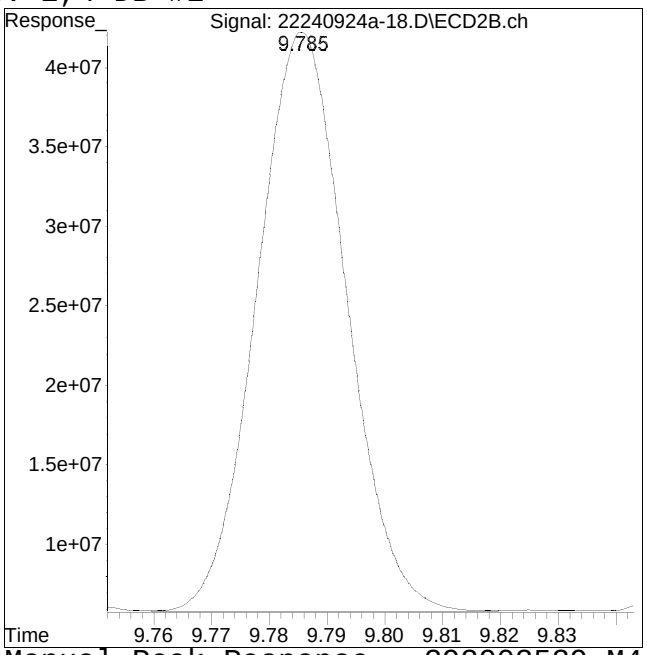
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #24: 2,4-DB #2




Original Peak Response = 513877471



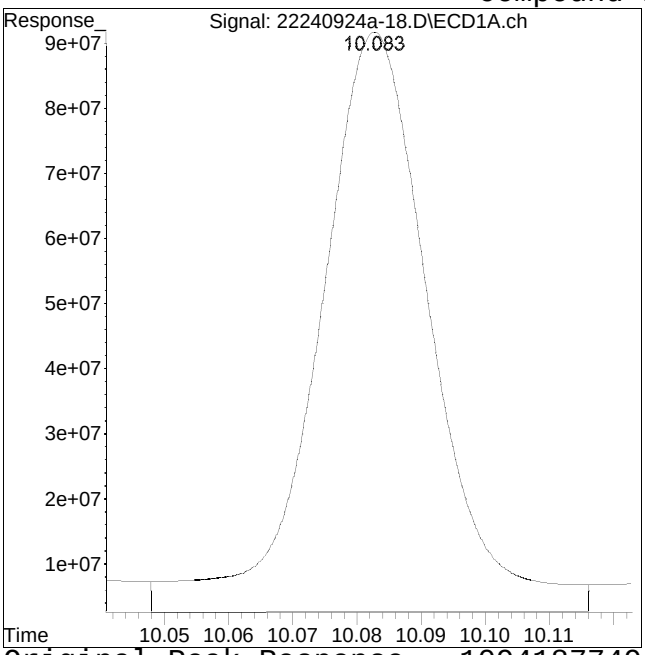

Manual Peak Response = 392903539 M4

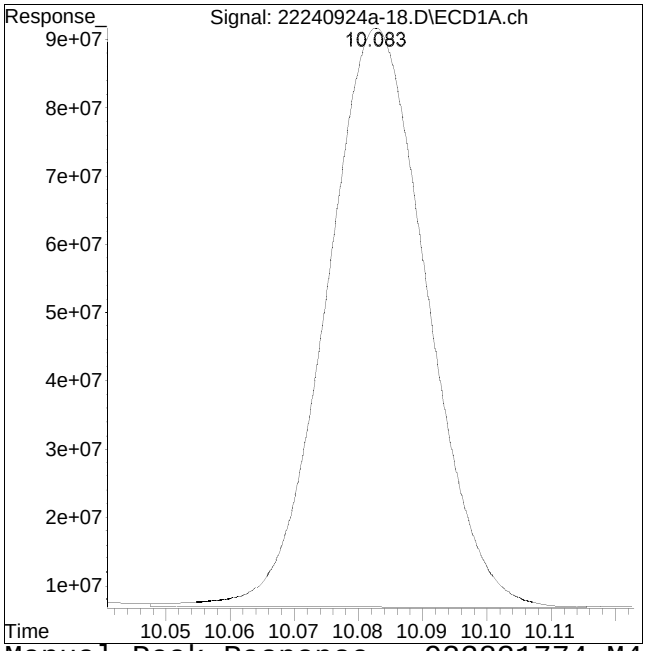
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #12: Dinoseb



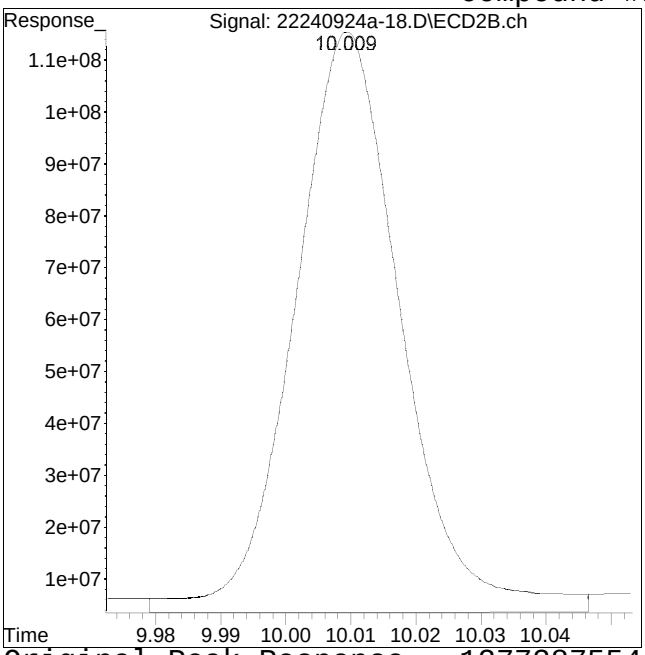



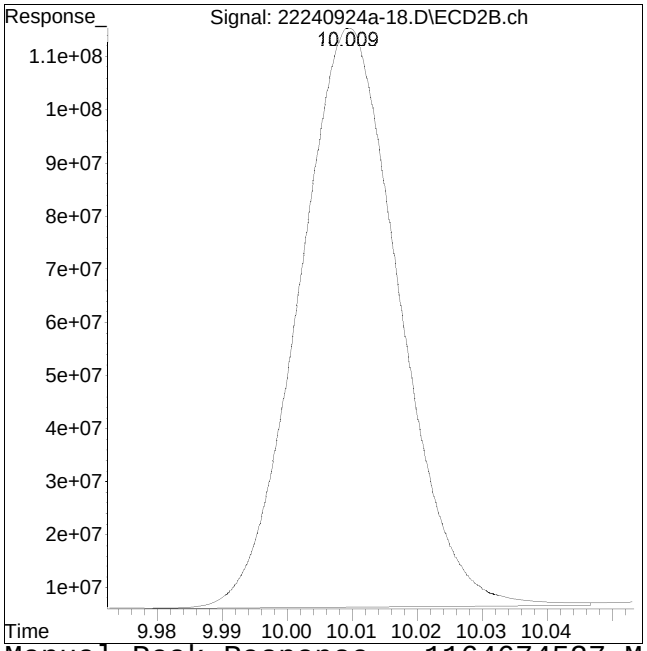

Original Peak Response = 1094187749 Manual Peak Response = 923831774 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-18.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:27 Instrument : Pest22
Sample : WG1974808-4,42,, ms rr Quant Date : 9/24/2024 12:46 pm

Compound #25: Dinoseb #2




Original Peak Response = 1277387554 Manual Peak Response = 1164674527 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-19.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:46
Operator : pest22:emr
Sample : WG1974808-5,42,, msd rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 14:10:10 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest22\2024\240924a\22240924a-01.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | mg/l | mg/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 4,4'-DBOB | 8.435 | 8.435 | 1164.1E6 | 1705.7E6 | 0.250M4 | 0.250M4 |
| | Standard Area 1 : #1 = 1387226827 | | | | Recovery = | 83.92% | |
| | Standard Area 1 : #2 = 1727304303 | | | | Recovery = | 98.75% | |
| | System Monitoring Compounds | | | | | | |
| 3) s | DCAA (surrog | 6.891 | 7.361 | 244.3E6 | 318.5E6 | 0.285M4 | 0.246M4 |
| | Spiked Amount | 0.500 | Range 30 - 150 | | Recovery = | 57.00% | 49.20% |
| | Target Compounds | | | | | | |
| 2) t | Dalapon | 2.330 | 2.324 | 244.2E6 | 399.1E6 | 0.224M4 | 0.290M4 |
| 4) t | Dicamba | 7.072 | 7.541 | 741.8E6 | 989.8E6 | 0.281M4 | 0.272M4 |
| 5) t | MCPP | 7.275 | 7.655 | 63282195 | 96289360 | 28.105M4 | 26.872M4 |
| 6) t | MCPA | 7.420 | 7.880 | 192.7E6 | 144.4E6 | 47.571M4 | 22.211M4 |
| 7) t | Dichloroprop | 7.775 | 8.199 | 215.2E6 | 279.2E6 | 0.264M4 | 0.237M4 |
| 8) t | 2,4-D | 7.986f | 8.474 | 339.5E6 | 479.8E6 | 0.343M4 | 0.317M4 |
| 9) t | 2,4,5-TP (Si | 8.705 | 9.132 | 1006.3E6 | 2298.1E6 | 0.280M4 | 0.434M4 |
| 10) t | 2,4,5-T | 8.924f | 9.424 | 1030.0E6 | 1254.0E6 | 0.279M4 | 0.239M4 |
| 11) t | 2,4-DB | 9.333f | 9.785 | 186.1E6 | 157.1E6 | 0.344M4 | 0.183M4 |
| 12) t | Dinoseb | 10.083 | 10.009 | 431.8E6 | 604.3E6 | 0.157M4 | 0.181M4 |

SemiQuant Compounds - Not Calibrated on this Instrument

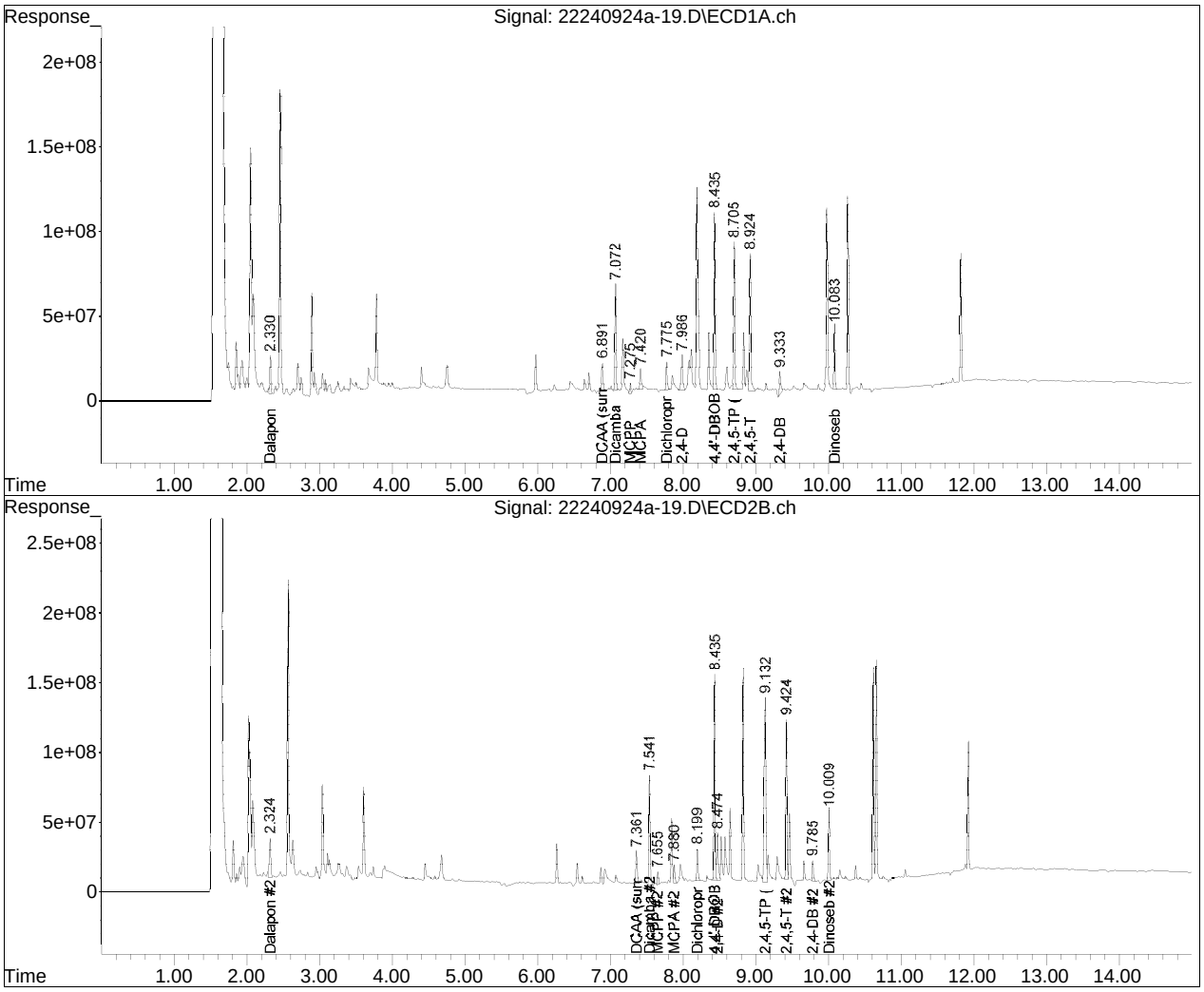
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\22240924a-01.D•

Data Path : I:\PEST\Pest22\2024\240924a\
Data File : 22240924a-19.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 24 Sep 2024 12:46
Operator : pest22:emr
Sample : WG1974808-5,42,, msd rr
Misc : wg1975389,WG1974808,ical21511
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 24 14:10:10 2024
Quant Method : I:\PEST\Pest22\2024\240924a\Herb22_2024_09_20_mgL_ICAL21511.m
Quant Title : herb
QLast Update : Tue Sep 24 06:51:54 2024
Response via : Initial Calibration
Integrator: ChemStation

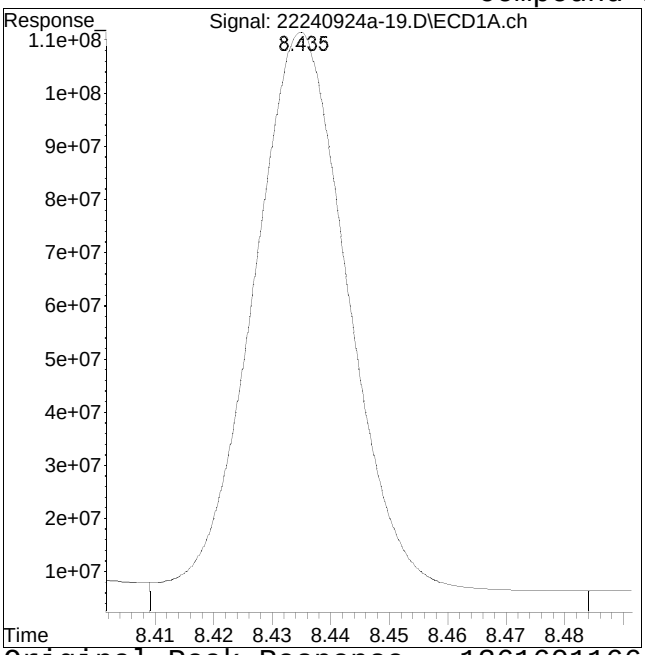
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

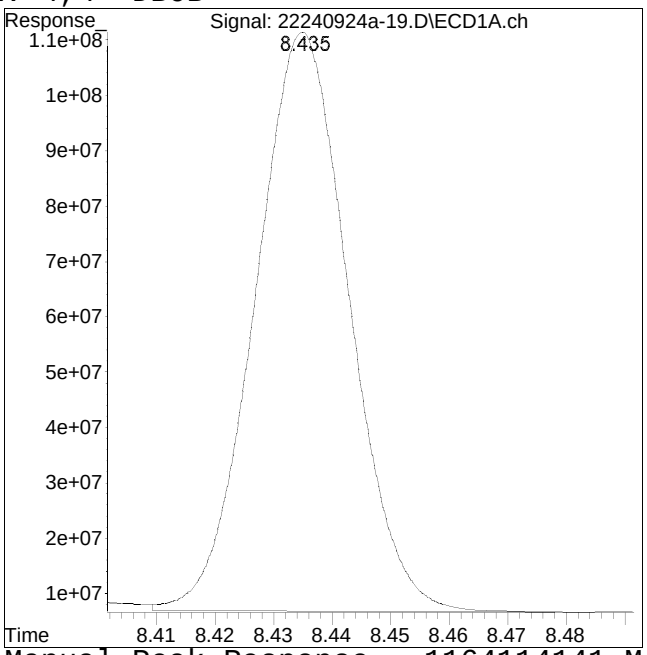


Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #1: 4,4'-DBOB



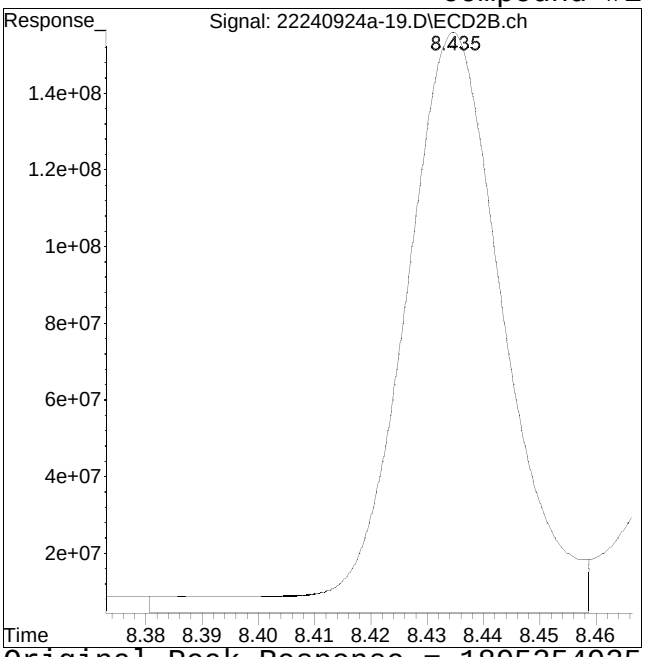



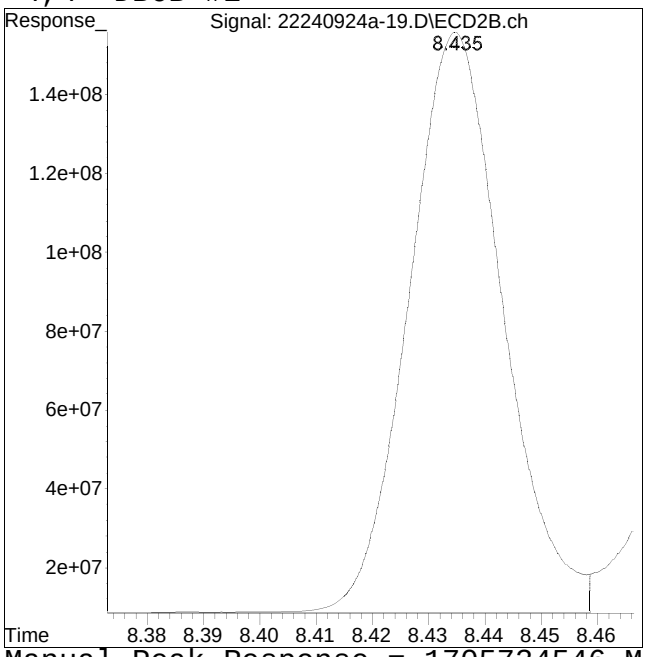

Original Peak Response = 1361601166 Manual Peak Response = 1164114141 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #14: 4,4'-DBOB #2



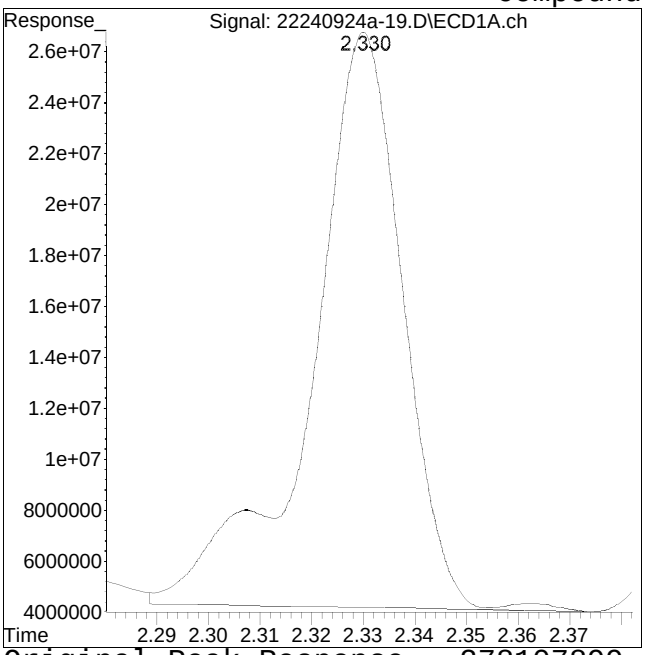



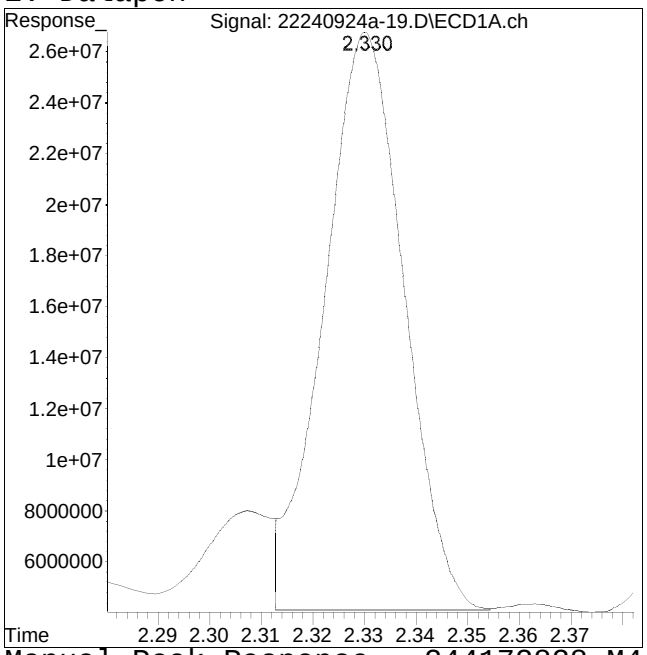

Original Peak Response = 1895354935 Manual Peak Response = 1705734546 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #2: Dalapon



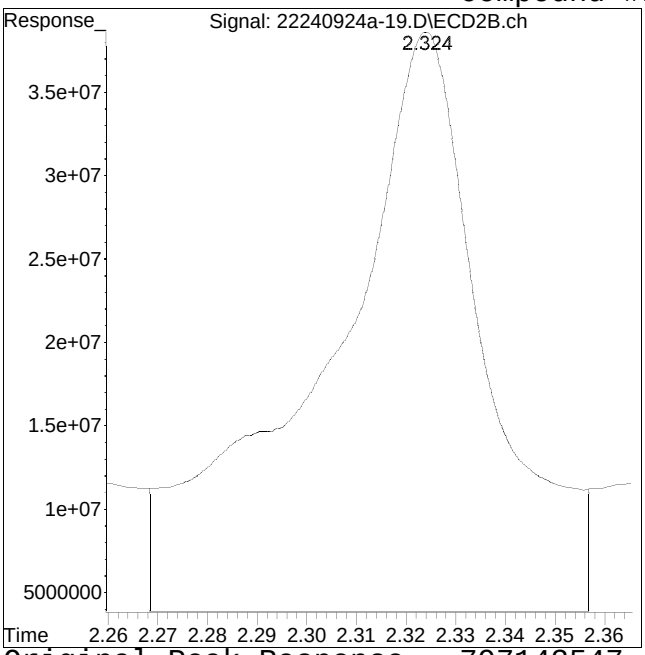




Original Peak Response = 278107899 Manual Peak Response = 244172828 M4
M4 = Poor automated baseline construction.

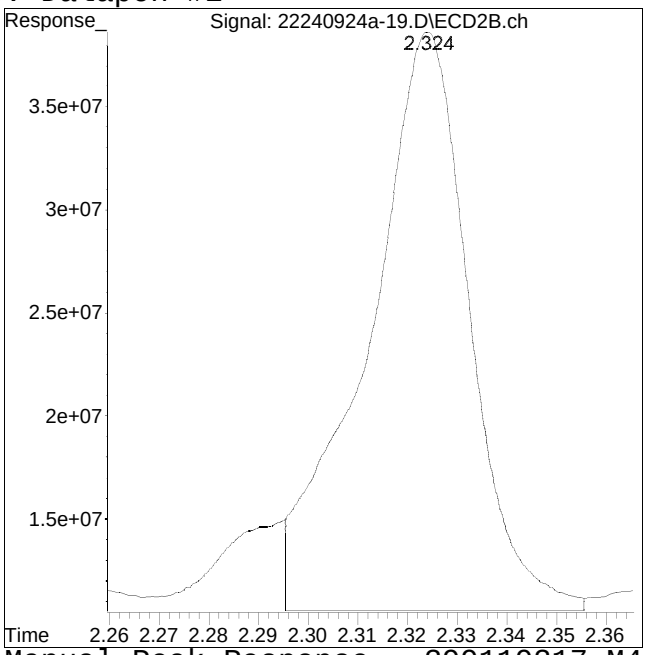
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #15: Dalapon #2




Original Peak Response = 797143547



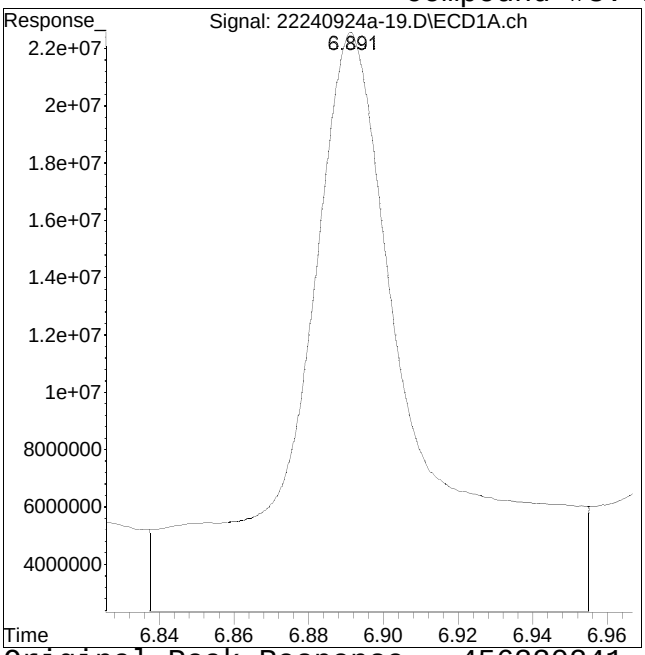

Manual Peak Response = 399119317 M4

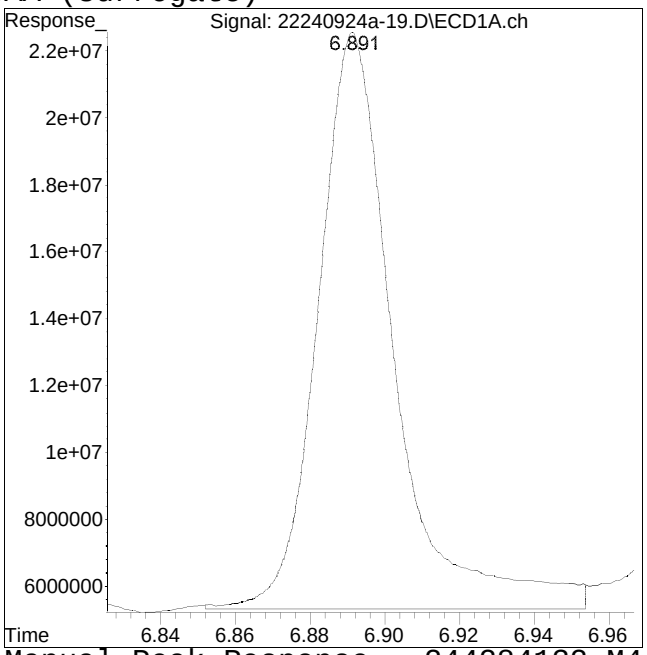
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #3: DCAA (surrogate)



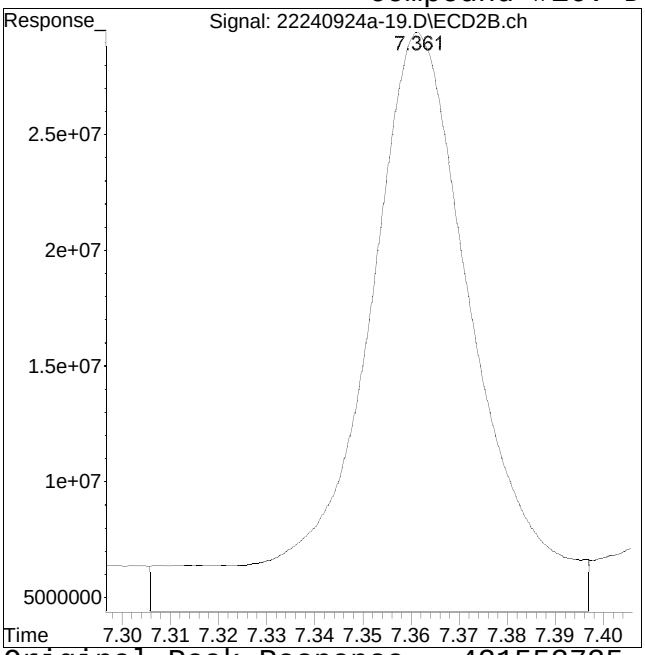



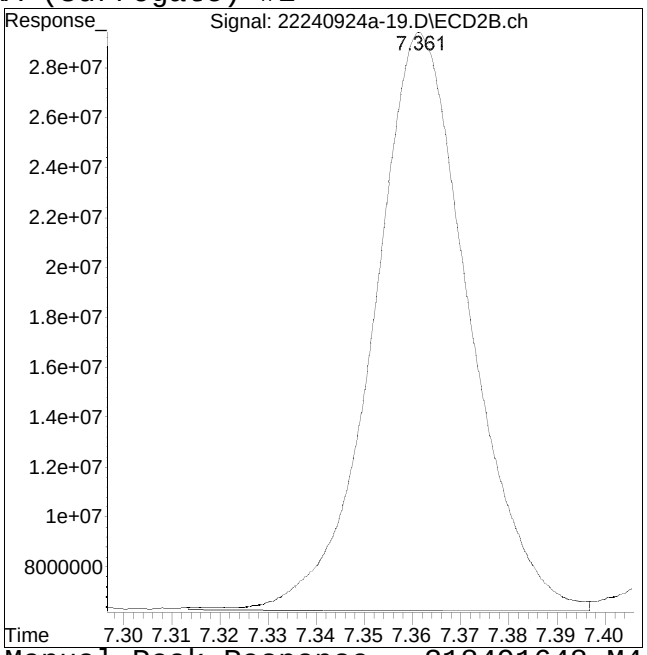

Original Peak Response = 456330241 Manual Peak Response = 244284132 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

## Compound #16: DCAA (surrogate) #2



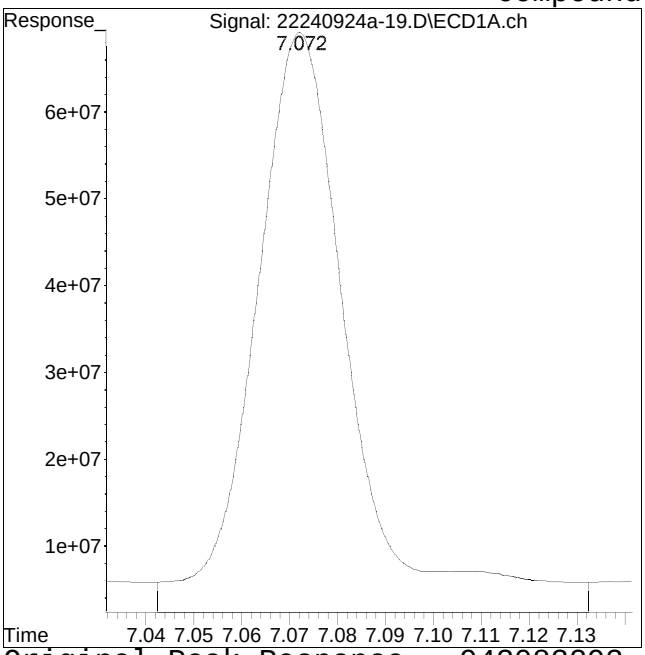



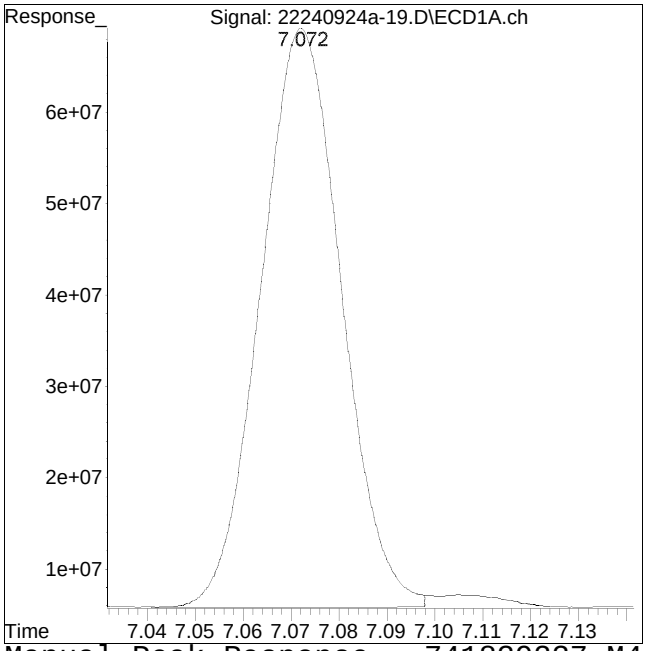

Original Peak Response = 421553735 Manual Peak Response = 318491648 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

## Compound #4: Dicamba



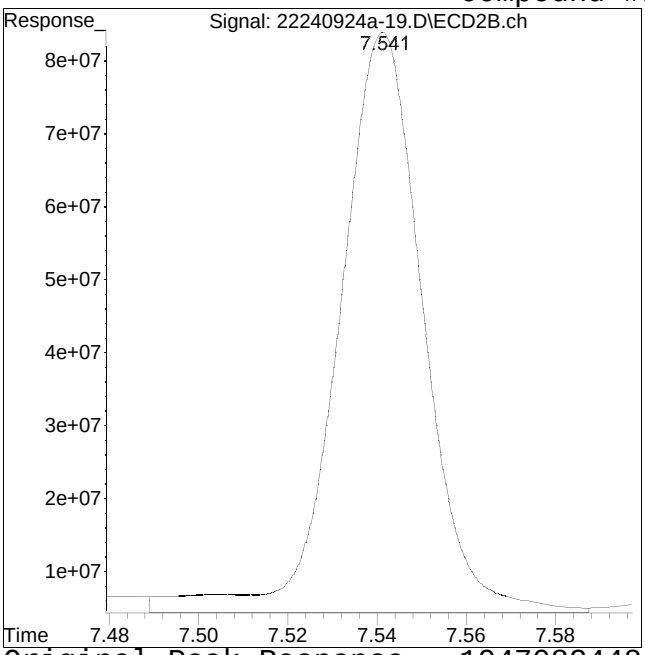




Original Peak Response = 943083293 Manual Peak Response = 741839237 M4
M4 = Poor automated baseline construction.

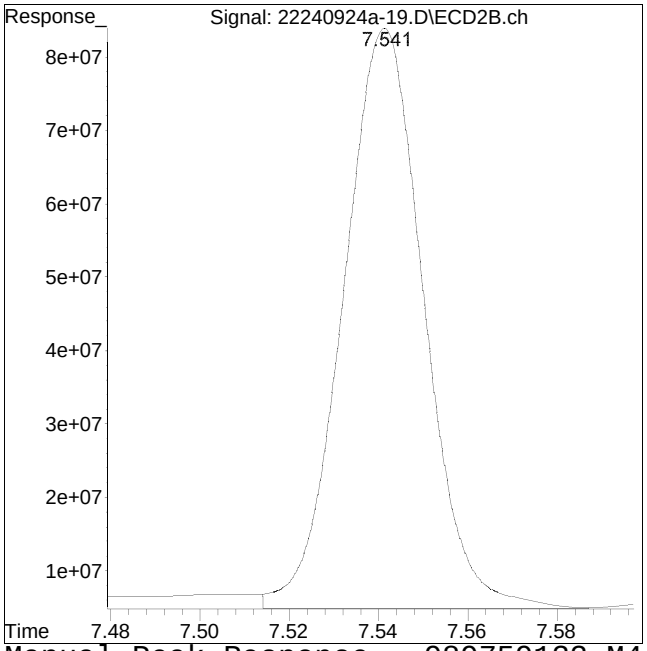
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #17: Dicamba #2




Original Peak Response = 1047082448



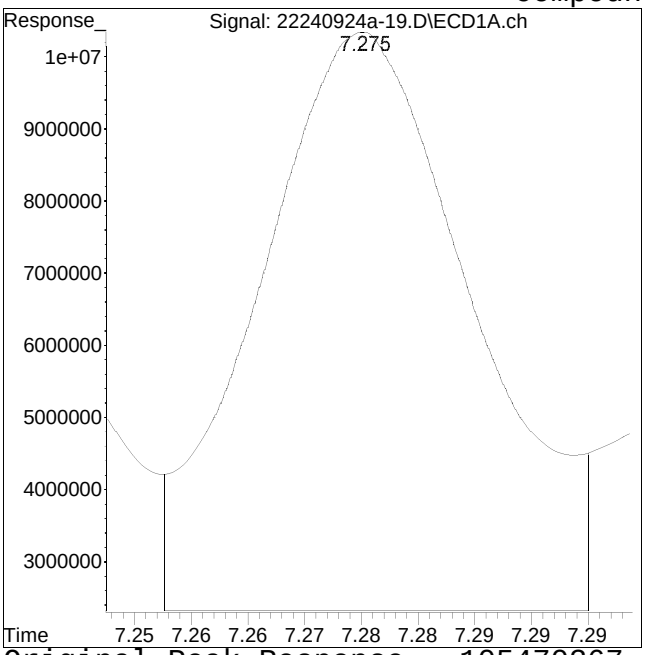

Manual Peak Response = 989759133 M4

M4 = Poor automated baseline construction.

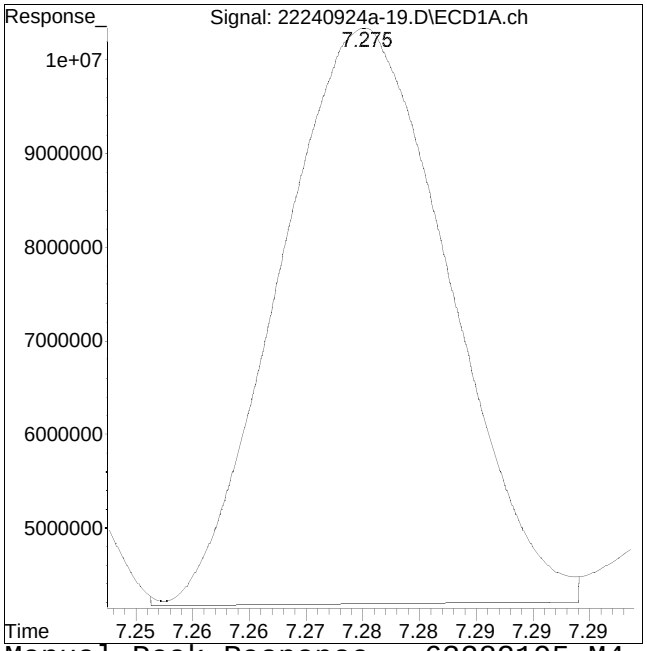
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #5: MCPP




Original Peak Response = 105470367



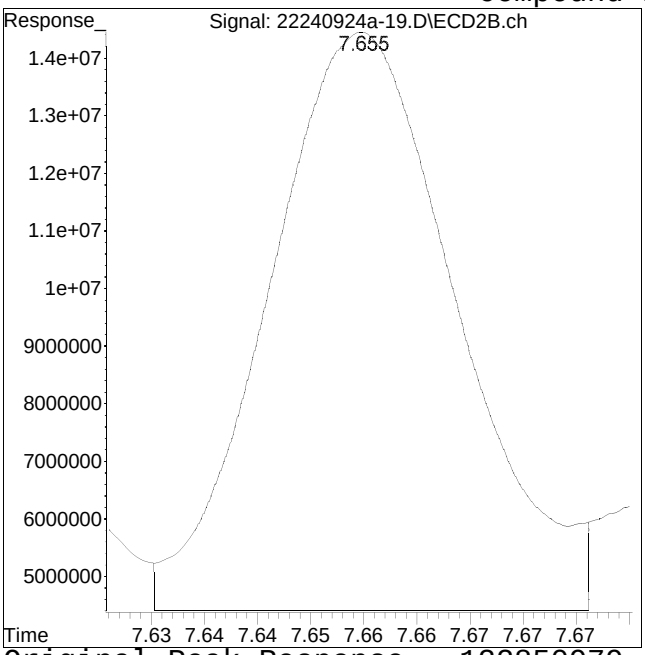

Manual Peak Response = 63282195 M4

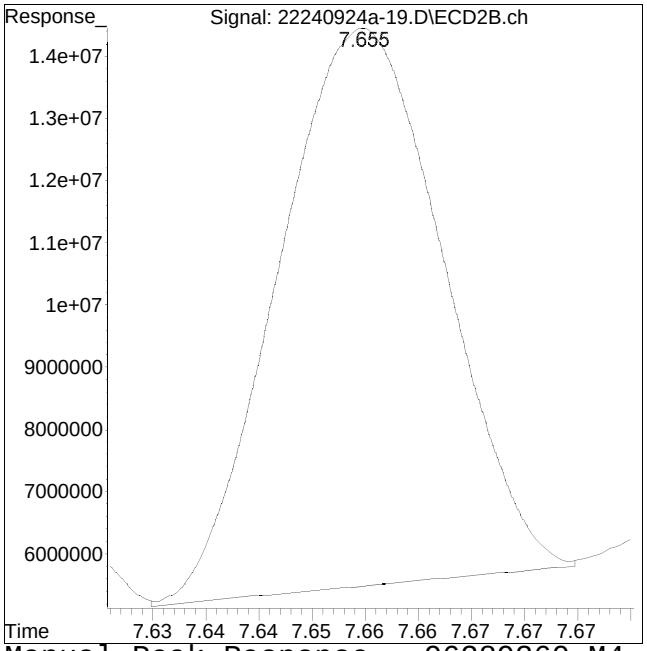
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #18: MCPP #2



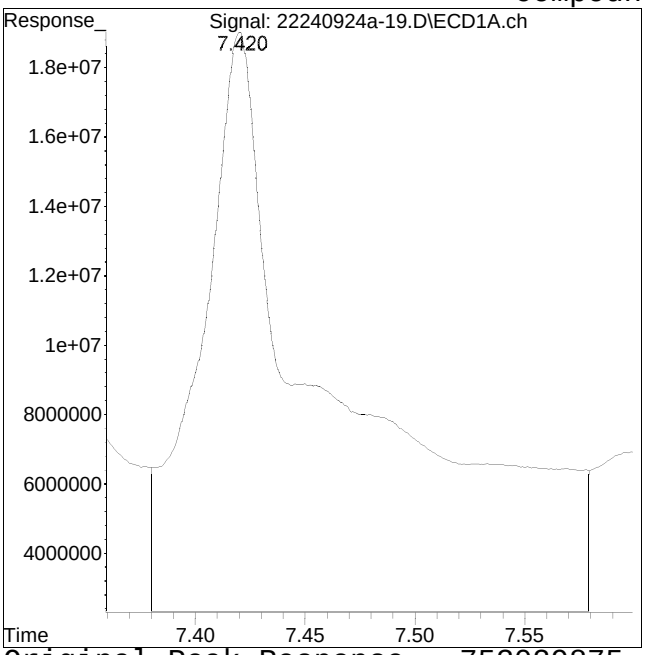




Original Peak Response = 122850979 Manual Peak Response = 96289360 M4
M4 = Poor automated baseline construction.

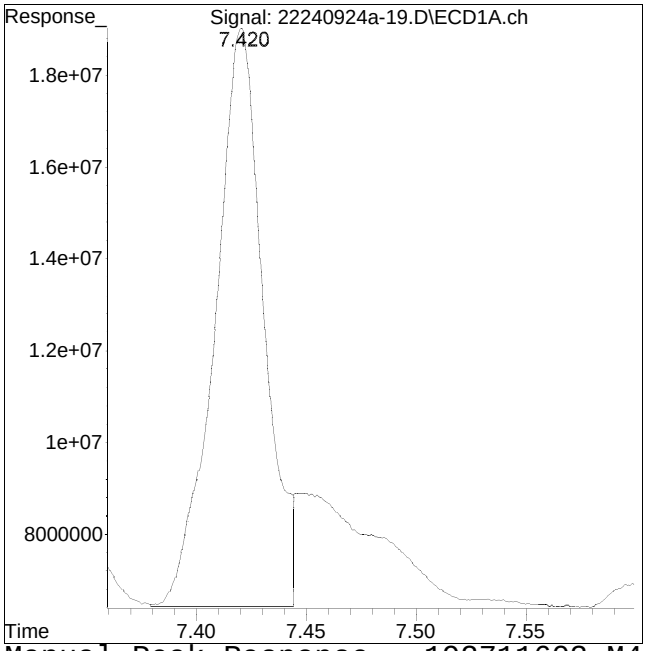
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #6: MCPA




Original Peak Response = 753029875



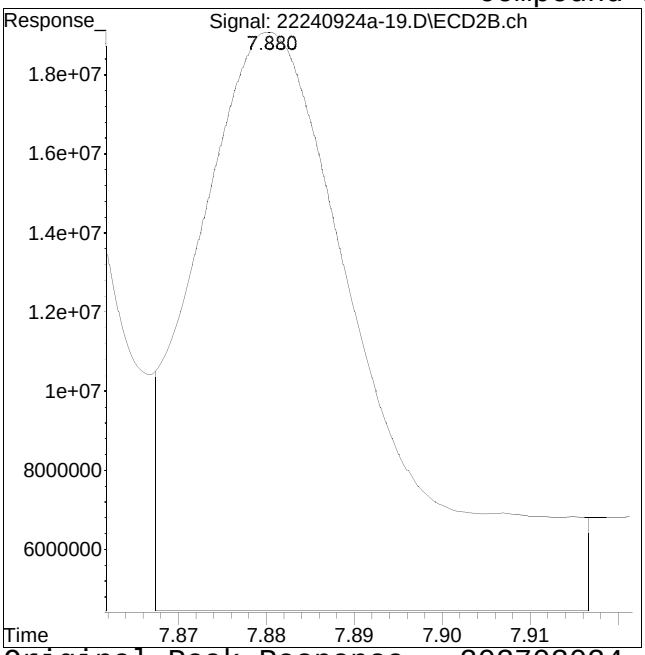

Manual Peak Response = 192711603 M4

M4 = Poor automated baseline construction.

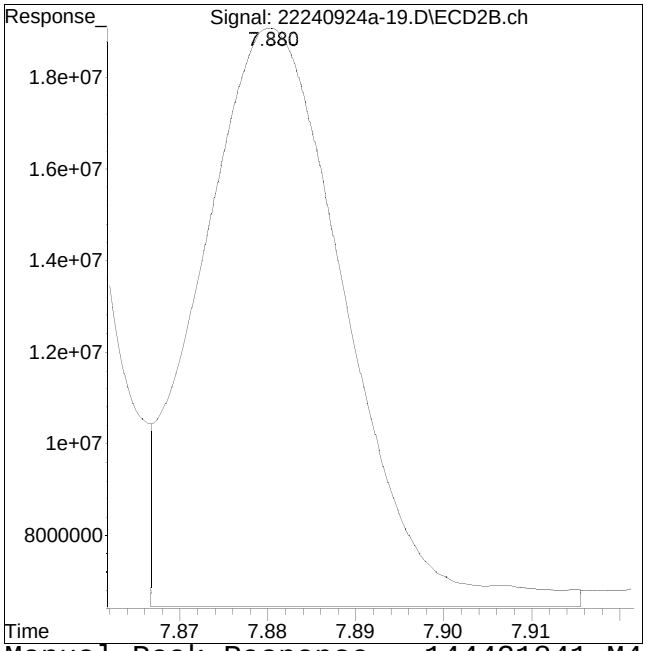
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #19: MCPA #2




Original Peak Response = 203703024



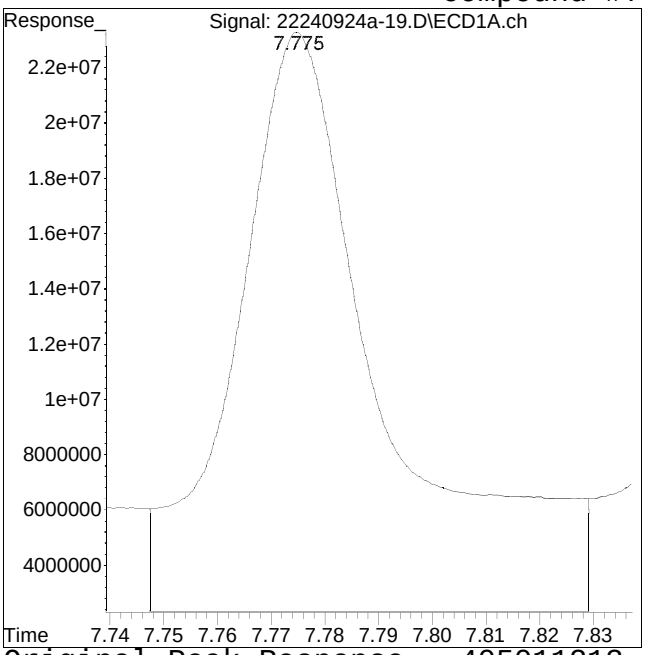

Manual Peak Response = 144421841 M4

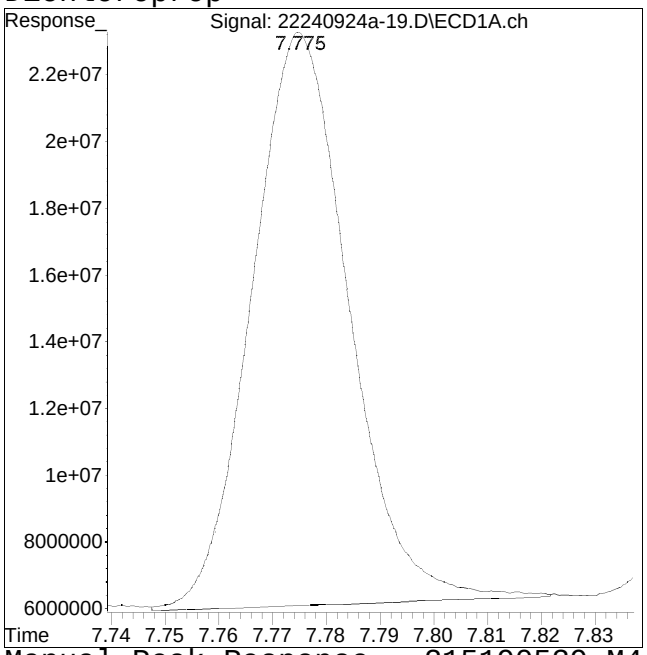
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #7: Dichloroprop



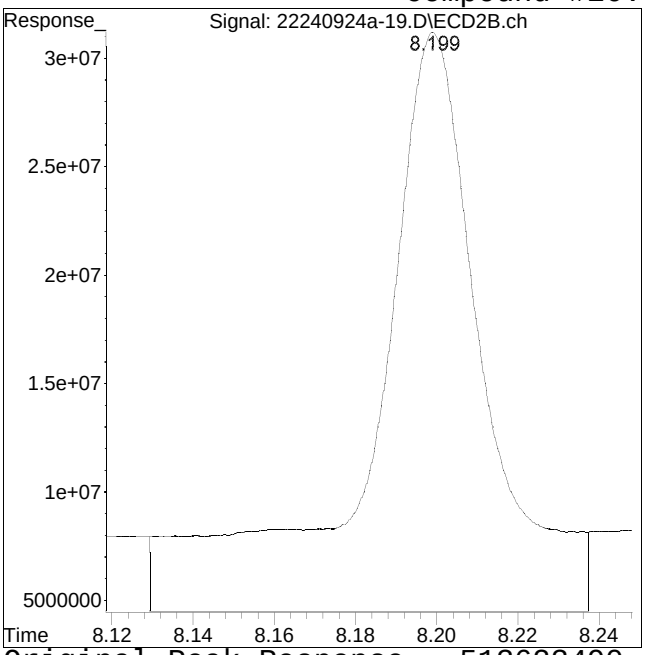




Original Peak Response = 405011213 Manual Peak Response = 215190539 M4
M4 = Poor automated baseline construction.

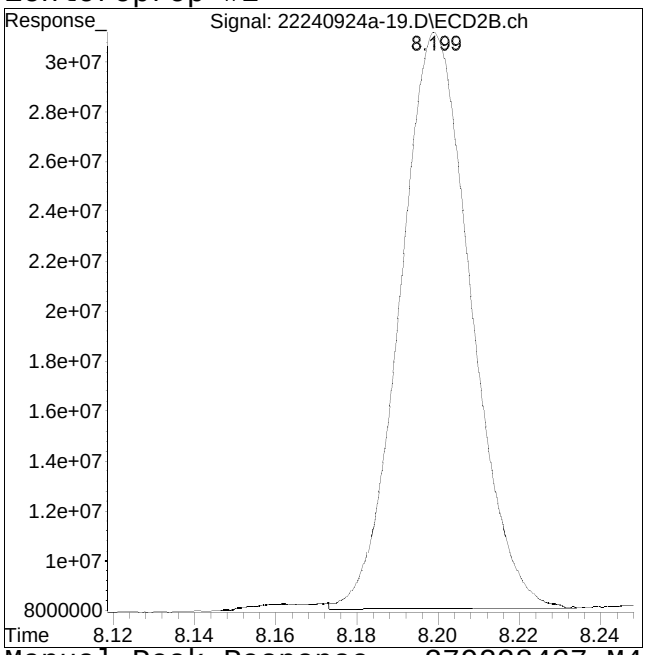
# Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

## Compound #20: Dichloroprop #2




Original Peak Response = 513623490



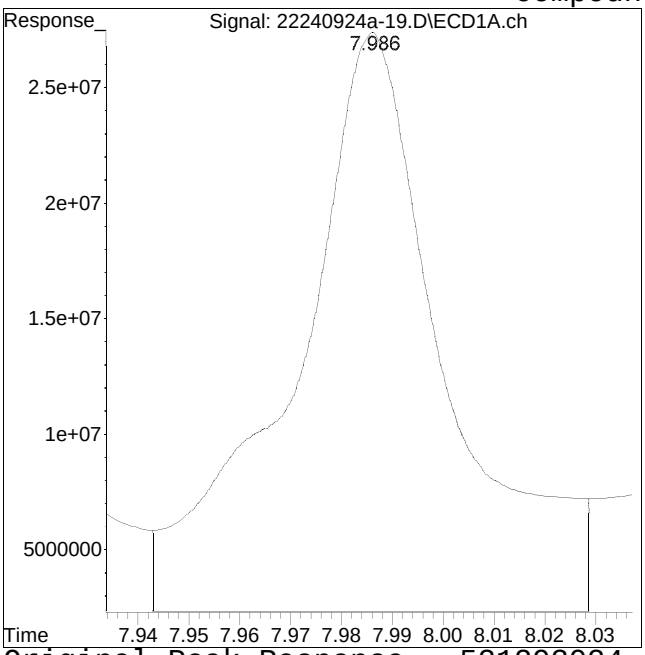

Manual Peak Response = 279228437 M4

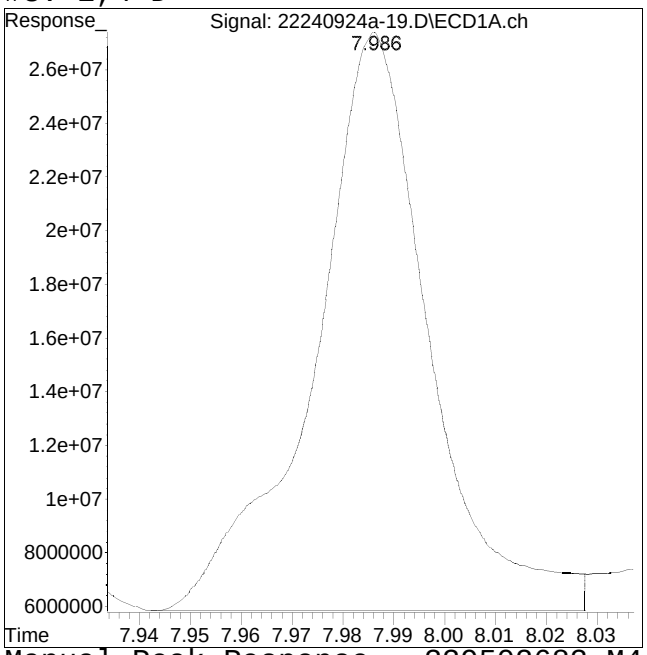
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #8: 2,4-D



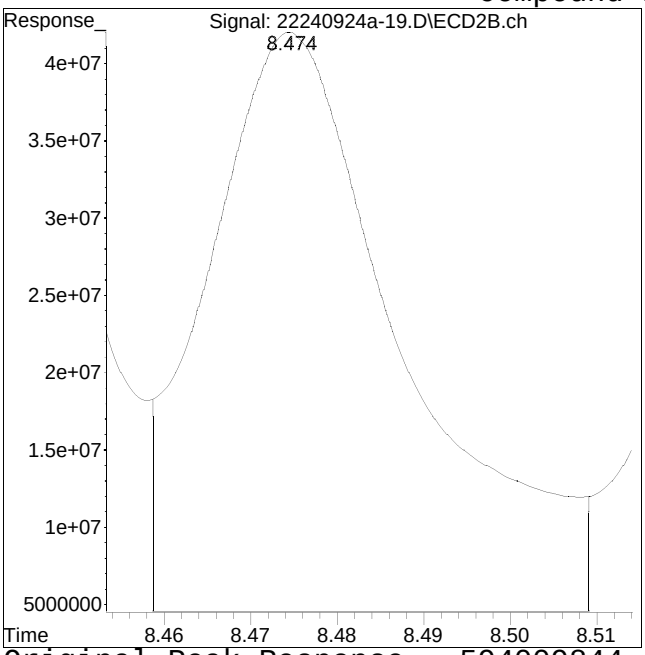




Original Peak Response = 521293924 Manual Peak Response = 339502683 M4
M4 = Poor automated baseline construction.

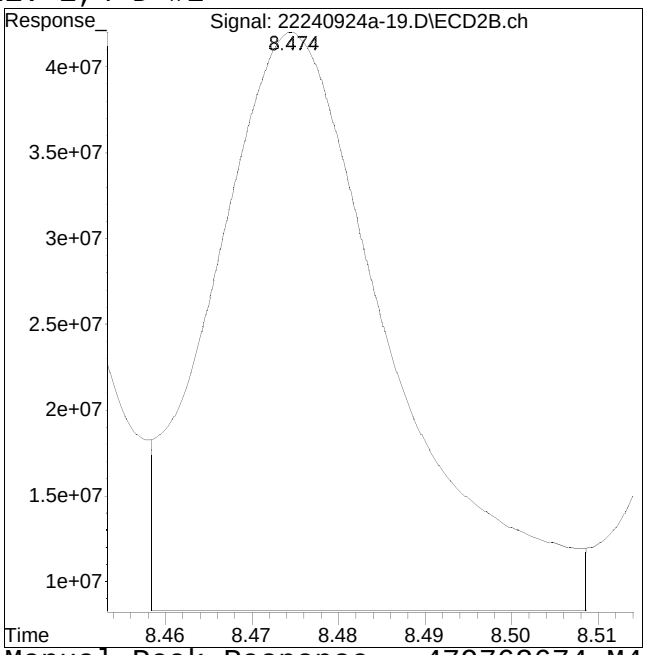
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #21: 2,4-D #2




Original Peak Response = 594009844



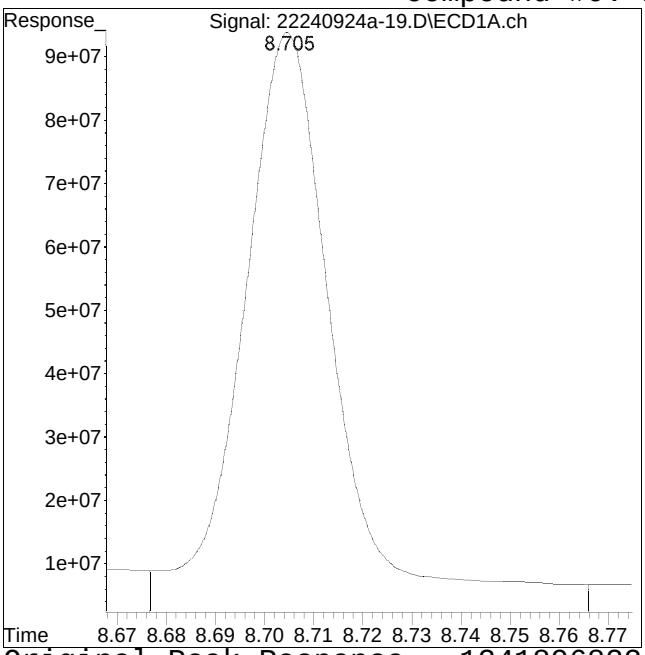

Manual Peak Response = 479762674 M4

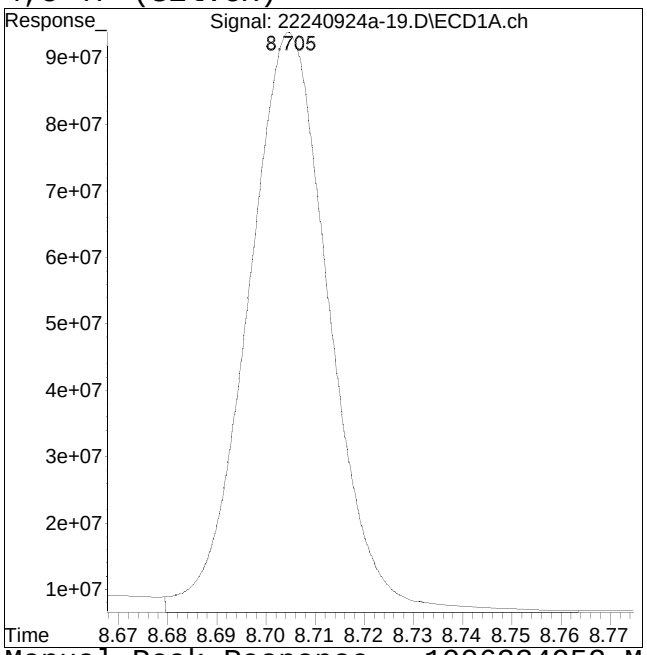
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #9: 2,4,5-TP (Silvex)



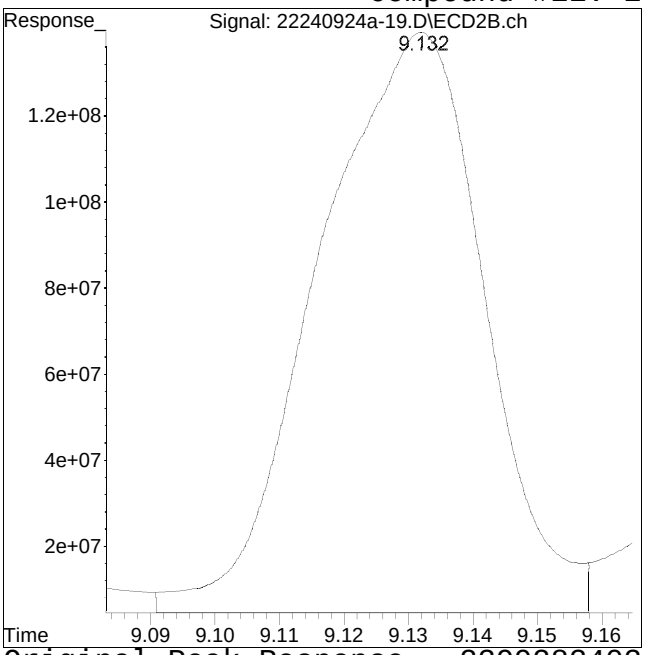



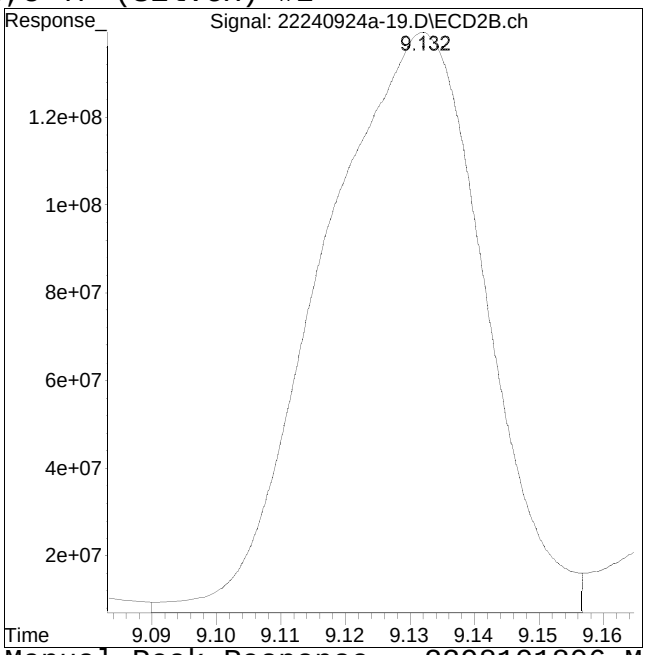

Original Peak Response = 1241896822 Manual Peak Response = 1006334952 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #22: 2,4,5-TP (Silvex) #2



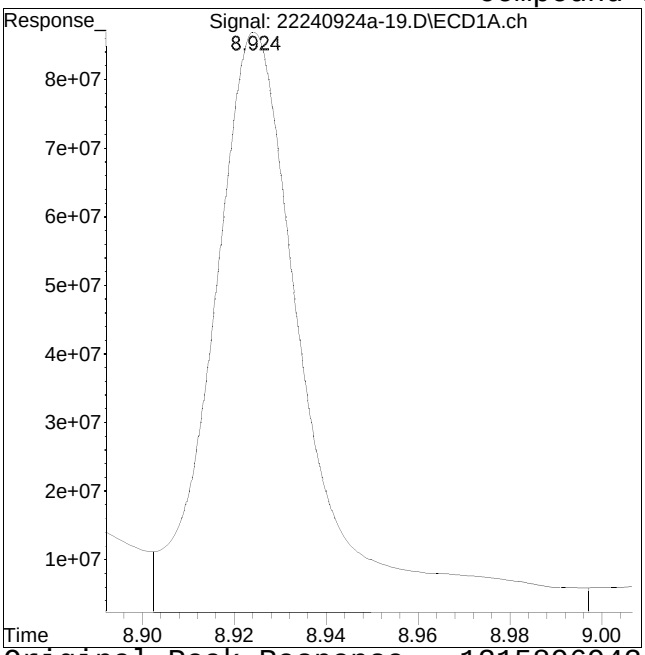



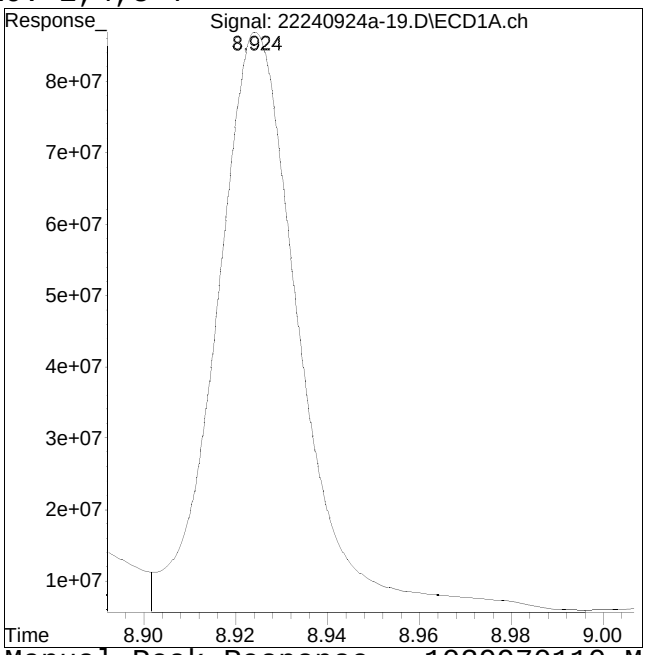

Original Peak Response = 2399283403 Manual Peak Response = 2298101806 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #10: 2,4,5-T



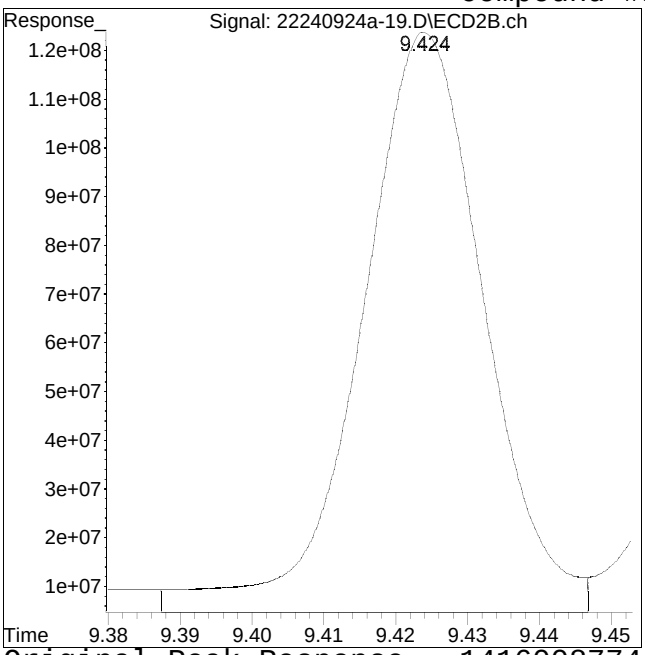




Original Peak Response = 1215896943 Manual Peak Response = 1029970110 M4
M4 = Poor automated baseline construction.

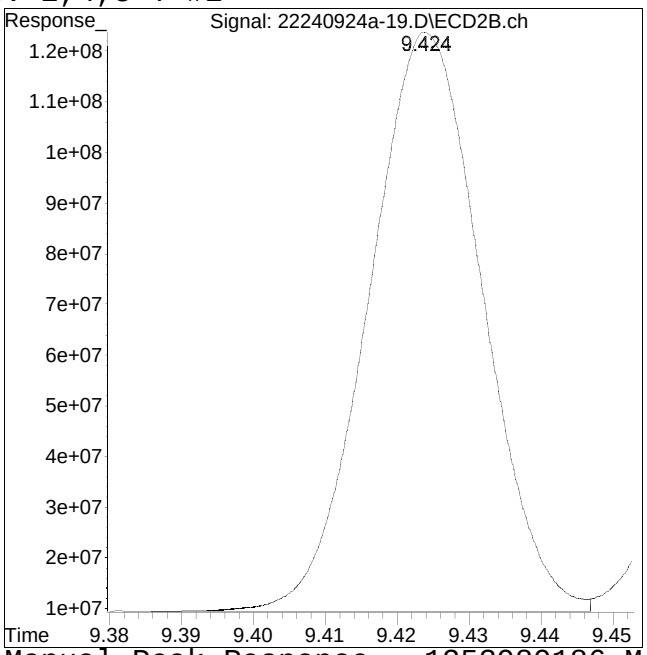
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #23: 2,4,5-T #2




Original Peak Response = 1416008774



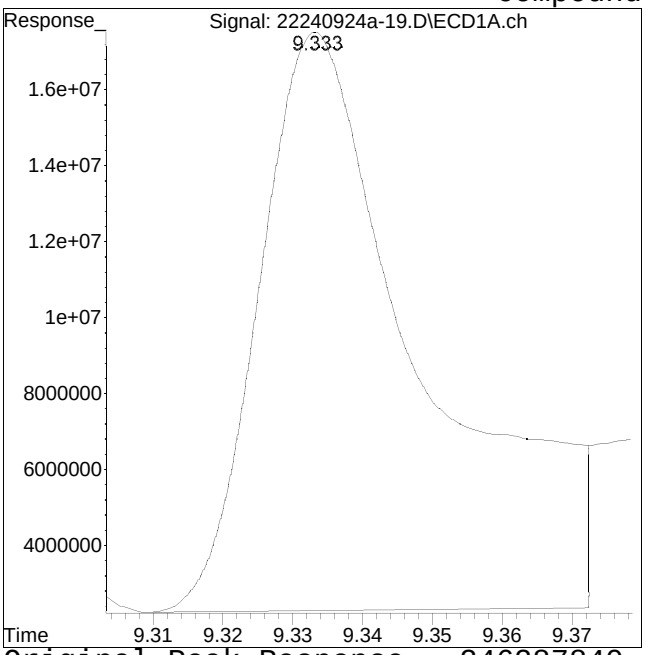

Manual Peak Response = 1253989186 M4

M4 = Poor automated baseline construction.

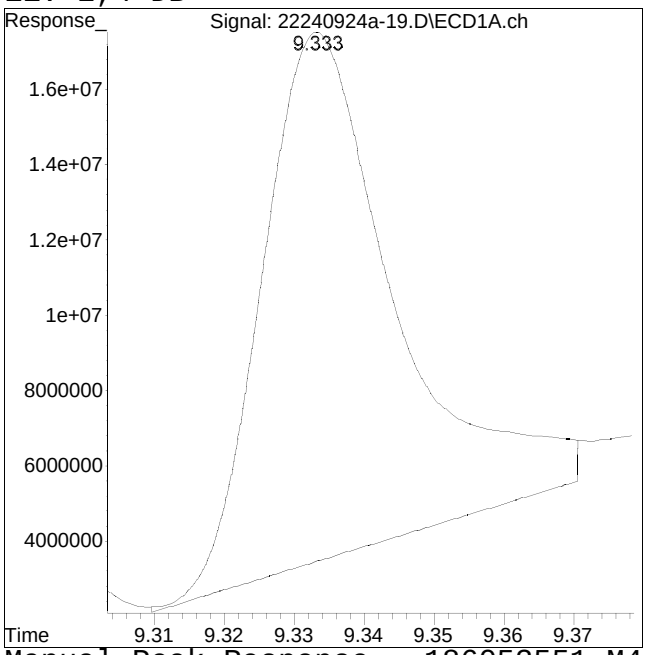
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #11: 2,4-DB




Original Peak Response = 246287840



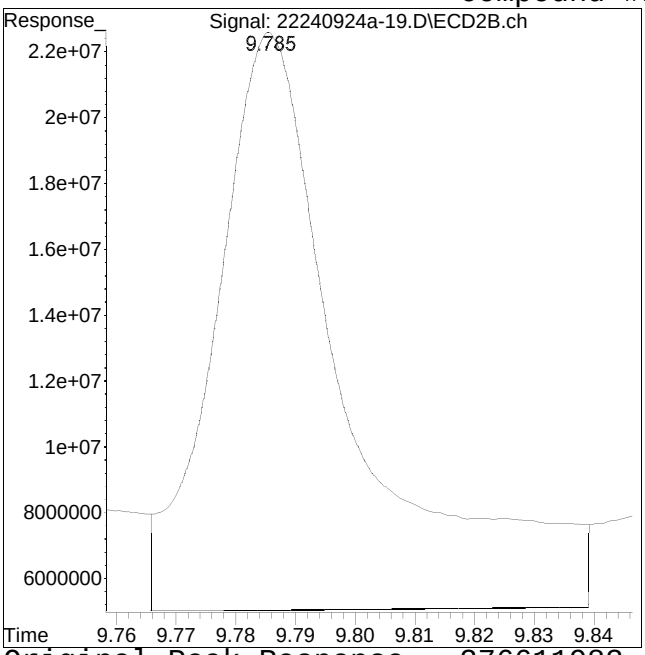

Manual Peak Response = 186053551 M4

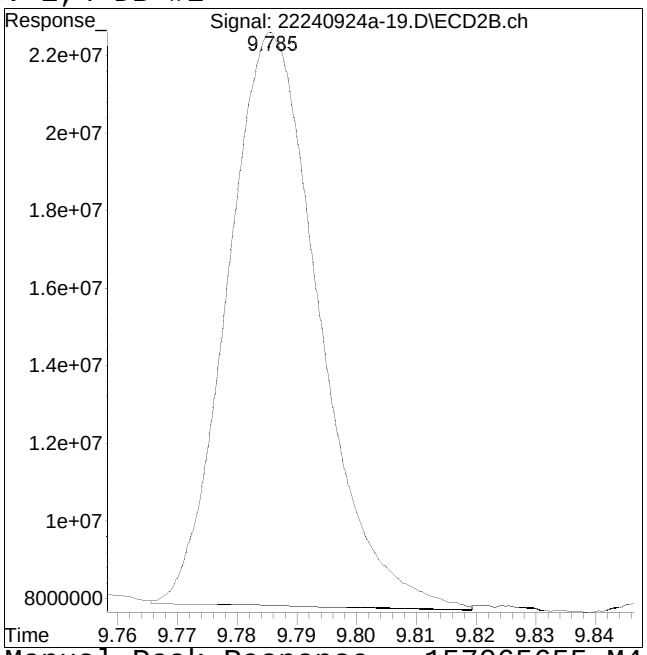
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #24: 2,4-DB #2



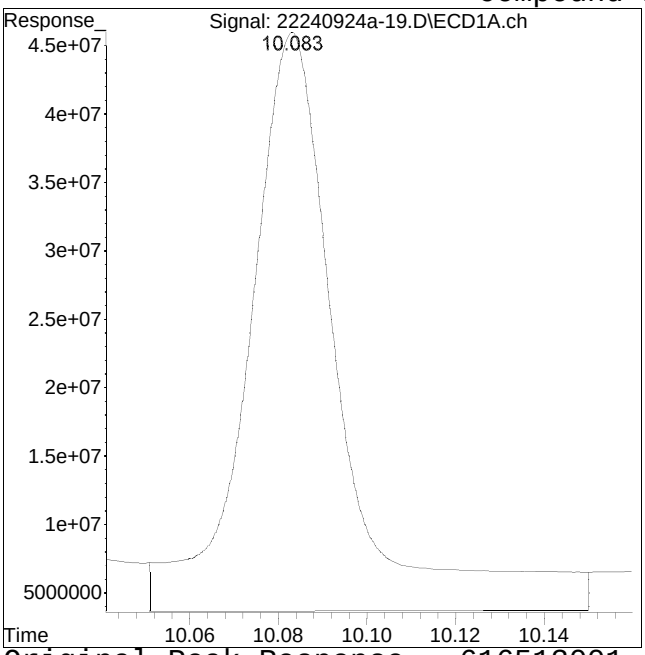




Original Peak Response = 276611983 Manual Peak Response = 157065655 M4
M4 = Poor automated baseline construction.

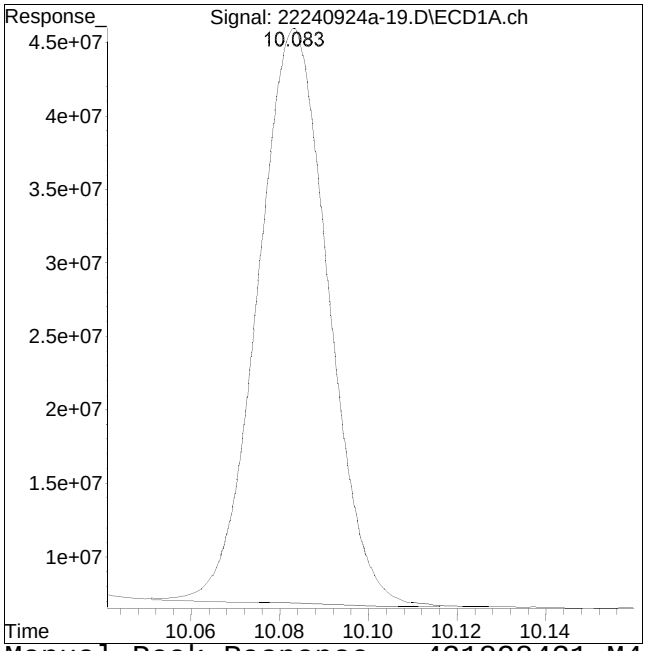
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #12: Dinoseb




Original Peak Response = 616513001



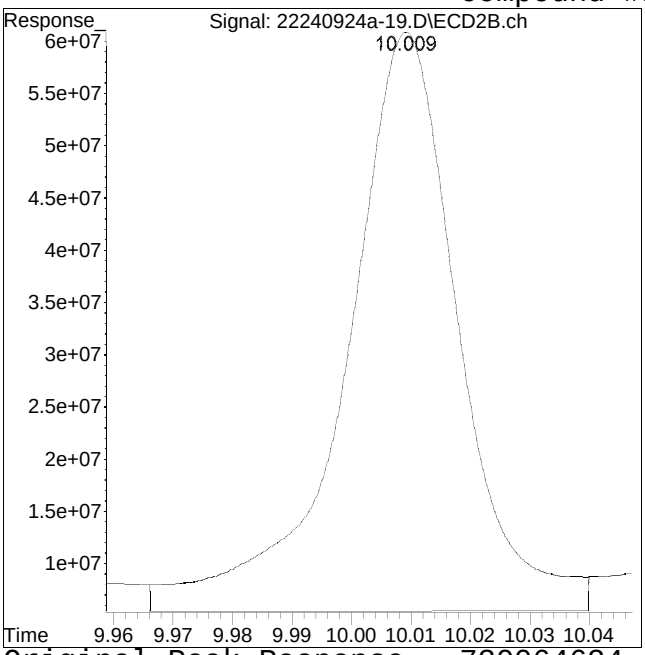

Manual Peak Response = 431828431 M4

M4 = Poor automated baseline construction.

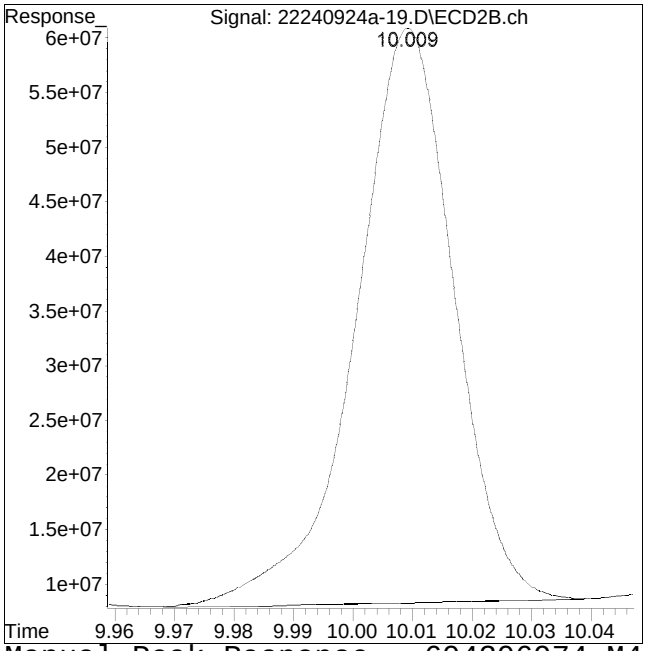
Manual Integration Report

Data Path : I:\PEST\Pest22\2024\240924QMethod : Herb22_2024_09_20_mgL_IC
Data File : 22240924a-19.D Operator : pest22:emr
Date Inj'd : 9/24/2024 12:46 Instrument : Pest22
Sample : WG1974808-5,42,, msd rr Quant Date : 9/24/2024 2:10 pm

Compound #25: Dinoseb #2




Original Peak Response = 730064624




Manual Peak Response = 604306974 M4

M4 = Poor automated baseline construction.

# Calculation of Herbicides

Aqueous Concentration Formula:
ug/L = [(As)*(Cis)*(D)*Vf]/[(Ais)*(RF)*(Vs)*1000]

Where:
As – Peak area of analyte
Ais – Peak area of internal standard
Cis – Concentration of internal standard (ug/L)
D – Dilution factor (D=1 for no dilution)
Vf – Final extract volume (mL)
Vs – Initial volume extracted (mL)
RF – Mean response factor

Soil/Solid Concentration Formula:
ug/kg = [(As)*(Cis)*(D)*Vf]/[(Ais)*(RF)*(Ws)*1000]

Where:
As – Peak area of analyte
Ais – Peak area of internal standard
Cis – Concentration of internal standard (ug/L)
D – Dilution factor (D=1 for no dilution)
Vf – Final extract volume (mL)
Ws – Initial weight extracted (g)
RF – Mean response factor

Dep.: PEST
Inst: PEST_22
Date: **09/20/24**
Run: ical

Method
GC: herb

Seq: WG1975124
IS: pp11738

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | 22240920i-01 | blank,42e,,pp 11738 --- | | | | |
| 2 | 22240920i-02 | il1herb,42e,,pp 11633 L0.005/5 | | | | PEG 9/21 |
| 3 | 22240920i-03 | il2herb,42e,,pp 11632 L0.1/10 | | | | PEG 9/21 |
| 4 | 22240920i-04 | il3herb,42e,,pp 11631 L0.2/20 | | | | PEG 9/21 |
| 5 | 22240920i-05 | il4herb,42e,,pp 11630 L0.5/50 | | | | PEG 9/21 |
| 6 | 22240920i-06 | il5herb,42e,,pp 11629 L1/100 | | | | PEG 9/21 |
| 7 | 22240920i-07 | il6herb,42e,,pp 11628 L2/200 | | | | PEG 9/21 |
| 8 | 22240920i-08 | cicv,42e,,pp 11634 L0.2/20 ICV | | | akm | PEG 9/21 |

Dep.: PEST
Inst: PEST_22
Date: **09/24/24**
Run: a

Method
GC: herb

Seq: wg1975389
IS: pp11738

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | 22240924a-01 | herb11705 | | | | peg 9/24 |
| 2 | 22240924a-02 | WG1972519-1,42,, | | | | EMR 9/24 |
| 3 | 22240924a-03 | WG1972519-2,42,, | | | | EMR 9/24 |
| 4 | 22240924a-04 | WG1972519-3,42,, | | | | EMR 9/24 |
| 5 | 22240924a-05 | L2452930-35,42,, | | | | EMR 9/24 |
| 6 | 22240924a-06 | L2453583-01,42,,,R3C p rr | | | | EMR 9/24 |
| 7 | 22240924a-07 | WG1974542-4,42,, ms rr | | | | EMR 9/24 |
| 8 | 22240924a-08 | WG1974542-5,42,, dup rr | | | | EMR 9/24 |
| 9 | 22240924a-09 | L2453583-02,42,,,R3C rr | | | | EMR 9/24 |
| 10 | 22240924a-10 | L2453583-03,42,,,R3C rr | | | | EMR 9/24 |
| 11 | 22240924a-11 | L2453583-04,42,,,R3C rr | | | | EMR 9/24 |
| 12 | 22240924a-12 | L2453583-05,42,,,R3C rr | | | | EMR 9/24 |
| 13 | 22240924a-13 | L2453583-06,42,,,R3C rr | | | | EMR 9/24 |
| 14 | 22240924a-14 | WG1974808-1,42,, rr | | | | EMR 9/24 |
| 15 | 22240924a-15 | WG1974808-2,42,, rr | | | | EMR 9/24 |
| 16 | 22240924a-16 | WG1974808-3,42,, rr | | | | EMR 9/24 |
| 17 | 22240924a-17 | L2453053-01,42,, p rr | | | | EMR 9/24 |
| 18 | 22240924a-18 | WG1974808-4,42,, ms rr | | | | EMR 9/24 |
| 19 | 22240924a-19 | WG1974808-5,42,, msd rr | | | | EMR 9/24 |
| 20 | 22240924a-20 | L2453583-05d,42,5,,R3C 24d | t 20-sep-24 07:35 | | | EMR 9/24 |
| 21 | 22240924a-21 | L2453053-02,42,, rr | | | | EMR 9/24 |
| 22 | 22240924a-22 | herb11705 | 20% | | | EMR 9/24 |
| 23 | 22240924a-23 | L2453583-05d,42,10,,R3C 24d | | | | EMR 9/24 |
| 24 | 22240924a-24 | L2453053-03,42,, rr | | | | EMR 9/24 |
| 25 | 22240924a-25 | L2453053-04,42,, rr | | | | EMR 9/24 |
| 26 | 22240924a-26 | L2453053-05,42,, rr | | | | EMR 9/24 |
| 27 | 22240924a-27 | WG1974681-1,42,, t rr | | | | |
| 28 | 22240924a-28 | WG1974681-2,42,, t rr | | | | |
| 29 | 22240924a-29 | WG1974681-3,42,, t rr | | | | |
| 30 | 22240924a-30 | WG1974679-1,42,, t rr | | | | |
| 31 | 22240924a-31 | WG1974679-2,42,, t rr | | | | |
| 32 | 22240924a-32 | WG1974679-3,42,, t rr | | | | |
| 33 | 22240924a-33 | L2453167-03,42,, t rr | | | | |
| 34 | 22240924a-34 | L2453422-15,42,, t rr | | | | |
| 35 | 22240924a-35 | L2453404-16,42,, t rr | | | | |
| 36 | 22240924a-36 | L2453566-01,42,, t rr | | | | |
| 37 | 22240924a-37 | L2453721-02,42,, t rr | | | peg | |
| 38 | 22240924a-38 | L2453721-03,42,, t rr | | | | |
| 39 | 22240924a-39 | herb11705 | | | peg | |
| 40 | 22240924a-40 | L2453167-01,42,, t rr | | | akm | |

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 24 2024, 05:06 pm

Work Group: WG1974808  for Department: 2 Organic Preparation

Created: 22-SEP-24  Due:  Operator: GLM

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 | MW-1SR | S | HERB-8151 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A1 |
| L2453053-02 | MW-1DR2 | S | HERB-8151 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A1 |
| L2453053-03 | MW-11S | S | HERB-8151 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A1 |
| L2453053-04 | MW-11D | S | HERB-8151 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A1 |
| L2453053-05 | DUP_091624 | S | HERB-8151 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A1 |
| WG1974808-1 | Laboratory Method Bl | S | HERB-8151 | WATER | DONE | U | | | | |
| WG1974808-2 | Laboratory Control S | S | HERB-8151 | WATER | DONE | U | | | | |
| WG1974808-3 | LCS Duplicate | S | HERB-8151 | WATER | DONE | U | | | | |
| WG1974808-4 | Matrix Spike | S | HERB-8151 | WATER | DONE | U | | | | |
| WG1974808-5 | Matrix Spike Duplica | S | HERB-8151 | WATER | DONE | U | | | | |

Comments:

| | |
|---|---|
| WG1974808-3 | WG1974808-2 |
| WG1974808-4 | L2453053-01 |
| WG1974808-5 | L2453053-01 |

# ORGANIC ELN REPORT

**Workgroup:** WG1974808

**Prep Method:** EPA 8151A
**Solvent Type:** Diethyl ether
**Surrogate Type:** Herbicide
**Spike Type:** Herbicides
**Spike Verify by:** JW
**Lims Spikelot:** HERB8151

**Lot #:** 24050143
**Lot #:** PP11710bc,01/26/2025,5l,25,10
**Lot #:** PP11709ad,01/26/2025,5l,10,3

**Additional Reagents/Stds**

| | |
|---|---|
| 12N H2SO4 | 12A091224 |
| 25% NaOH | Na091024 |
| Acidified Na2SO4 | AS092024 |
| DCM | EJ049 |
| Diethyl ether | EI976 |
| Na2S2O3 | NA |
| NaCl | 24C2556110 |

**Conc.Method:** S-EVAP/N-EVAP
**Solvent Type:** Diethyl ether
**Lot #:** 24050143

**Additional Reagents/Stds**

| | |
|---|---|
| Acidified Na2SO4 | AS092024 |
| Diazomethane | D091924 |
| Hexane | EJ061 |
| Isooctane | STBK8849 |
| Methanol | 64039 |
| Silicic Acid | MKCL9565 |

***Cleanup 1***

**Cleanup Method 1:**
**Cleanup Method 2:**
**Solvent Type:** **Lot #:**

**Additional Reagents/Stds**

**Extraction** | **Concentration**

| Sample/ Type | Extract Date | Analyst | Sample Vol ml | Ph | Trc Check | Surr Amt ml | Spike Amt ml | Hydrolysis Start | Hydrolysis Stop | Conc Date | Analyst | Conc Volume ml | Methylation Date | ml ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| L2453053-02 SAMP | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| L2453053-03 SAMP | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| L2453053-04 SAMP | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| L2453053-05 SAMP | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |



Reported: 24-SEP-24 05:06 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974808**

| Sample/ Type | Extraction | | | | | | | | | Concentration | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Extract Date | Analyst | Sample Vol **ml** | Ph | Trc Check | Surr Amt **ml** | Spike Amt **ml** | Hydrolysis Start | Hydrolysis Stop | Conc Date | Analyst | Conc Volume **ml** | Methylation Date | ml **ml** | Conc Unit |
| WG1974808-1 BLANK | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 **ANA** | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| WG1974808-2 LCS | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | .5 | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| WG1974808-3 LCSD | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | .5 | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| WG1974808-4 MS | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | .5 | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |
| WG1974808-5 MSD | 09/22/24 12:26 | Jessica Westover | 1000 | >12,<2 | N/A | .5 | .5 | 09/22/24 13:30 | 09/22/24 15:00 | 09/23/24 00:45 | Yaw Adu | 0.5 | 09/23/24 02:30 | 10 | S-EVAP-G#N7 |



Reported: 24-SEP-24 05:06 PM

# GC Extractable Analysis Polychlorinated Biphenyls (PCB)

# Aroclor QC Summary

# Surrogate Recovery Summary
# Form 2
# PCBs

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Water**

**GC Column 1: CLP-Pesticide**
**GC Column 2: CLP-PesticideII**

| CLIENT ID (LAB SAMPLE NO.) | TCX 1 %REC | TCX 2 %REC | DCB 1 %REC | DCB 2 %REC | OTHER (1) | OTHER (2) | TOT OUT |
|---|---|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 76 | 68 | 77 | 75 | | | 0 |
| MW-1DR2 (L2453053-02) | 74 | 66 | 73 | 71 | | | 0 |
| MW-11S (L2453053-03) | 74 | 66 | 80 | 72 | | | 0 |
| MW-11D (L2453053-04) | 78 | 68 | 73 | 71 | | | 0 |
| DUP_091624 (L2453053-05) | 74 | 65 | 73 | 66 | | | 0 |
| WG1974231-1BLANK | 75 | 66 | 86 | 79 | | | 0 |
| WG1974231-2LCS | 83 | 73 | 93 | 83 | | | 0 |
| WG1974231-3LCSD | 85 | 73 | 92 | 84 | | | 0 |
| MW-1SRMS | 83 | 71 | 80 | 77 | | | 0 |
| MW-1SRMSD | 85 | 73 | 85 | 73 | | | 0 |

**QC LIMITS**
**(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE**
**(30-150) DCBP = DECACHLOROBIPHENYL**

*** Values outside of QC limits**

# Laboratory Control Sample Summary
# Form 3
# PCBs

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974231-2 **Analysis Date** : 09/22/24 14:23 | **File ID** | : P2240922a-33 |
| **LCSD Sample ID** | : WG1974231-3 **Analysis Date** : 09/22/24 14:32 | **File ID** | : P2240922a-34 |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aroclor 1016 | 1.78 | 1.45 | 81 | 1.78 | 1.46 | 82 | 1 | 40-140 | 50 |
| Aroclor 1260 | 1.78 | 1.49 | 83 | 1.78 | 1.49 | 83 | 0 | 40-140 | 50 |

# Matrix Spike Sample Summary
# Form 3
# PCBs

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/23/24 16:44 |
| **Matrix Spike** | : WG1974231-4 | **MS Analysis Date** | : 09/23/24 16:53 |
| **Matrix Spike Dup** | : WG1974231-5 | **MSD Analysis Date** | : 09/23/24 17:02 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aroclor 1016 | ND | 1.78 | 1.43 | 80 | 1.78 | 1.55 | 87 | 8 | 40-140 | 50 |
| Aroclor 1260 | ND | 1.78 | 1.46 | 82 | 1.78 | 1.58 | 88 | 8 | 40-140 | 50 |

# Method Blank Summary
# Form 4
# PCBs

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974231-1 | **Lab File ID** | : P2240922a-32 |
| **Matrix** | : WATER | **Extraction Date** | : 09/20/24 |
| **Sulfur Cleanup** | : Y | | |
| **Analysis Date (1)** | : 09/22/24 14:15 | **Analysis Date (2)** | : 09/22/24 14:15 |
| **Instrument ID (1)** | : PEST2 | **Instrument ID (2)** | : PEST2 |

| Client Sample No. | Lab Sample ID | Analysis Date 1 | Analysis Date 2 |
|---|---|---|---|
| WG1974231-2LCS | WG1974231-2 | 09/22/24 14:23 | 09/22/24 14:23 |
| WG1974231-3LCSD | WG1974231-3 | 09/22/24 14:32 | 09/22/24 14:32 |
| MW-1SR | L2453053-01 | 09/23/24 16:44 | 09/23/24 16:44 |
| MW-1SRMS | WG1974231-4 | 09/23/24 16:53 | 09/23/24 16:53 |
| MW-1SRMSD | WG1974231-5 | 09/23/24 17:02 | 09/23/24 17:02 |
| MW-1DR2 | L2453053-02 | 09/23/24 17:11 | 09/23/24 17:11 |
| DUP_091624 | L2453053-05 | 09/23/24 17:19 | 09/23/24 17:19 |
| MW-11D | L2453053-04 | 09/23/24 17:28 | 09/23/24 17:28 |
| MW-11S | L2453053-03 | 09/23/24 17:37 | 09/23/24 17:37 |

# Analytical Sequence
# Form 8b
# PCBs

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST2 | **Initial Calib. Date(s)** | : 09/16/24 09/16/24 |

| Client ID | Lab ID | Date/Time Analyzed |
|---|---|---|
| 1016/1260 L1 (4ug/L) | R1876926-1 | 09/16/24 15:29 |
| 1016/1260 L2 (10ug/L) | R1876926-2 | 09/16/24 15:38 |
| 1016/1260 L3 (20ug/L) | R1876926-3 | 09/16/24 15:47 |
| 1016/1260 L4 (30ug/L) | R1876926-4 | 09/16/24 15:55 |
| 1016/1260 L5 (40ug/L) | R1876926-5 | 09/16/24 16:04 |
| 1016/1260 L6 (50ug/L) | R1876926-6 | 09/16/24 16:13 |
| 1016/1260 L7 (100ug/L) | R1876926-8 | 09/16/24 16:22 |
| 1016/1260 L8 (250ug/L) | R1876926-7 | 09/16/24 16:30 |
| 1016/1260 L9 (500ug/L) | R1876926-9 | 09/16/24 16:39 |
| 1016/1260 L10 (1000ug/L) | R1876926-10 | 09/16/24 16:48 |
| R1876926-11 ICV | R1876926-11 | 09/16/24 16:56 |
| 1221/1254 L8 (250ug/L) | R1876926-12 | 09/16/24 17:14 |
| 1248 L8 (250ug/L) | R1876926-13 | 09/16/24 17:23 |
| 1232/1262 L8 (250ug/L) | R1876926-14 | 09/16/24 17:32 |
| 1242/1268 L8 (250ug/L) | R1876926-15 | 09/16/24 17:41 |
| R1876926-16 ICV | R1876926-16 | 09/16/24 17:49 |
| R1876926-17 ICV | R1876926-17 | 09/16/24 17:58 |
| R1876926-19 ICV | R1876926-19 | 09/16/24 18:07 |
| R1876926-18 ICV | R1876926-18 | 09/16/24 18:15 |
| WG1974776-4 CCAL | WG1974776-4 | 09/22/24 09:56 |
| WG1974231-1 BLANK | WG1974231-1 | 09/22/24 14:15 |
| WG1974231-2 LCS | WG1974231-2 | 09/22/24 14:23 |
| WG1974231-3 LCSD | WG1974231-3 | 09/22/24 14:32 |
| WG1974934-5 CCAL | WG1974934-5 | 09/23/24 14:51 |
| MW-1SR | L2453053-01 | 09/23/24 16:44 |
| MW-1SR MS | WG1974231-4 | 09/23/24 16:53 |
| MW-1SR MSD | WG1974231-5 | 09/23/24 17:02 |
| MW-1DR2 | L2453053-02 | 09/23/24 17:11 |
| DUP_091624 | L2453053-05 | 09/23/24 17:19 |
| MW-11D | L2453053-04 | 09/23/24 17:28 |
| MW-11S | L2453053-03 | 09/23/24 17:37 |

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14021-1
**Page:** 1

## PCB - EPA 8082A (WATER)

**Holding Time:** 365 days
**Container/Sample Preservation:** 2 - Amber 1000ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12674-11-2 | 0.25 | 0.0156 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1221 | 11104-28-2 | 0.25 | 0.0221 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1232 | 11141-16-5 | 0.25 | 0.046 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1242 | 53469-21-9 | 0.25 | 0.0362 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1248 | 12672-29-6 | 0.25 | 0.0455 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1254 | 11097-69-1 | 0.25 | 0.0168 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1260 | 11096-82-5 | 0.25 | 0.0344 | ug/l | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1262 | 37324-23-5 | 0.25 | 0.033 | ug/l | 40-140 | 30 | 40-140 | 50 | 50 | | | |
| Aroclor 1268 | 11100-14-4 | 0.25 | 0.0317 | ug/l | 40-140 | 30 | 40-140 | 50 | 50 | | | |
| PCBs, Total | 1336-36-3 | 0.25 | 0.0156 | ug/l | | | | 50 | 50 | | | |
| *2,4,5,6-Tetrachloro-m-xylene* | *877-09-8* | | | | | | | | | *30-150* | | |
| *Decachlorobiphenyl* | *2051-24-3* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14022-1
**Page:** 1

## PCB - EPA 8082A (SOIL)

**Holding Time:** 365 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12674-11-2 | 50 | 4.44 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1221 | 11104-28-2 | 50 | 5.01 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1232 | 11141-16-5 | 50 | 10.6 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1242 | 53469-21-9 | 50 | 6.74 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1248 | 12672-29-6 | 50 | 7.5 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1254 | 11097-69-1 | 50 | 5.47 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1260 | 11096-82-5 | 50 | 9.24 | ug/kg | 40-140 | 50 | 40-140 | 50 | 50 | | | |
| Aroclor 1262 | 37324-23-5 | 50 | 6.35 | ug/kg | 40-140 | 30 | 40-140 | 50 | 50 | | | |
| Aroclor 1268 | 11100-14-4 | 50 | 5.18 | ug/kg | 40-140 | 30 | 40-140 | 50 | 50 | | | |
| PCBs, Total | 1336-36-3 | 50 | 4.44 | ug/kg | | | | 50 | 50 | | | |
| *2,4,5,6-Tetrachloro-m-xylene* | *877-09-8* | | | | | | | | | *30-150* | | |
| *Decachlorobiphenyl* | *2051-24-3* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Aroclor Sample Data

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 16:44 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240923a-53 | **Analyst** | : MEO |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 17:11 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240923a-56 | **Analyst** | : MEO |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 17:37 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240923a-59 | **Analyst** | : MEO |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 17:28 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240923a-58 | **Analyst** | : MEO |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 17:19 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240923a-57 | **Analyst** | : MEO |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

# Results Summary
# Form 1
# Polychlorinated Biphenyls by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974231-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974231-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 14:15 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/20/24 |
| **Analytical Method** | : 1,8082A | **Dilution Factor** | : 1 |
| **Lab File ID** | : P2240922a-32 | **Analyst** | : SDC |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST2 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLP-Pesticide |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : Y | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 12674-11-2 | Aroclor 1016 | ND | 0.071 | 0.061 | U |
| 11104-28-2 | Aroclor 1221 | ND | 0.071 | 0.061 | U |
| 11141-16-5 | Aroclor 1232 | ND | 0.071 | 0.061 | U |
| 53469-21-9 | Aroclor 1242 | ND | 0.071 | 0.061 | U |
| 12672-29-6 | Aroclor 1248 | ND | 0.071 | 0.061 | U |
| 11097-69-1 | Aroclor 1254 | ND | 0.071 | 0.061 | U |
| 11096-82-5 | Aroclor 1260 | ND | 0.071 | 0.061 | U |
| 37324-23-5 | Aroclor 1262 | ND | 0.071 | 0.061 | U |
| 11100-14-4 | Aroclor 1268 | ND | 0.071 | 0.061 | U |
| 1336-36-3 | PCBs, Total | ND | 0.071 | 0.061 | U |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-53.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 16:44
Operator : Pest2:meo
Sample : L2453053-01,42,, p
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 53 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:17 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.252 | 229.4E6 | 285.0E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 199763160 | | | | Recovery = | 114.83% | |
| | Standard Area 1 : #2 = 308903176 | | | | Recovery = | 92.27% | |
| 14) i | 2154_1br2nb | 1.184 | 1.252 | 229.4E6 | 285.0E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.252 | 229.4E6 | 285.0E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.252 | 229.4E6 | 285.0E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.252 | 229.4E6 | 285.0E6 | 25.000 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.623 | 202.2E6 | 253.3E6 | 15.189 | 13.562 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 75.94% | 67.81% |
| 3) s | Decachlorobi | 4.024 | 4.541 | 162.5E6 | 187.2E6 | 15.347M4 | 14.912M4 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 76.73% | 74.56% |
| Target Compounds | | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-53.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 16:44
Operator : Pest2:meo
Sample : L2453053-01,42,, p
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 53 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:17 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-53.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 16:44
Operator : Pest2:meo
Sample : L2453053-01,42,, p
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 53 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:17 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

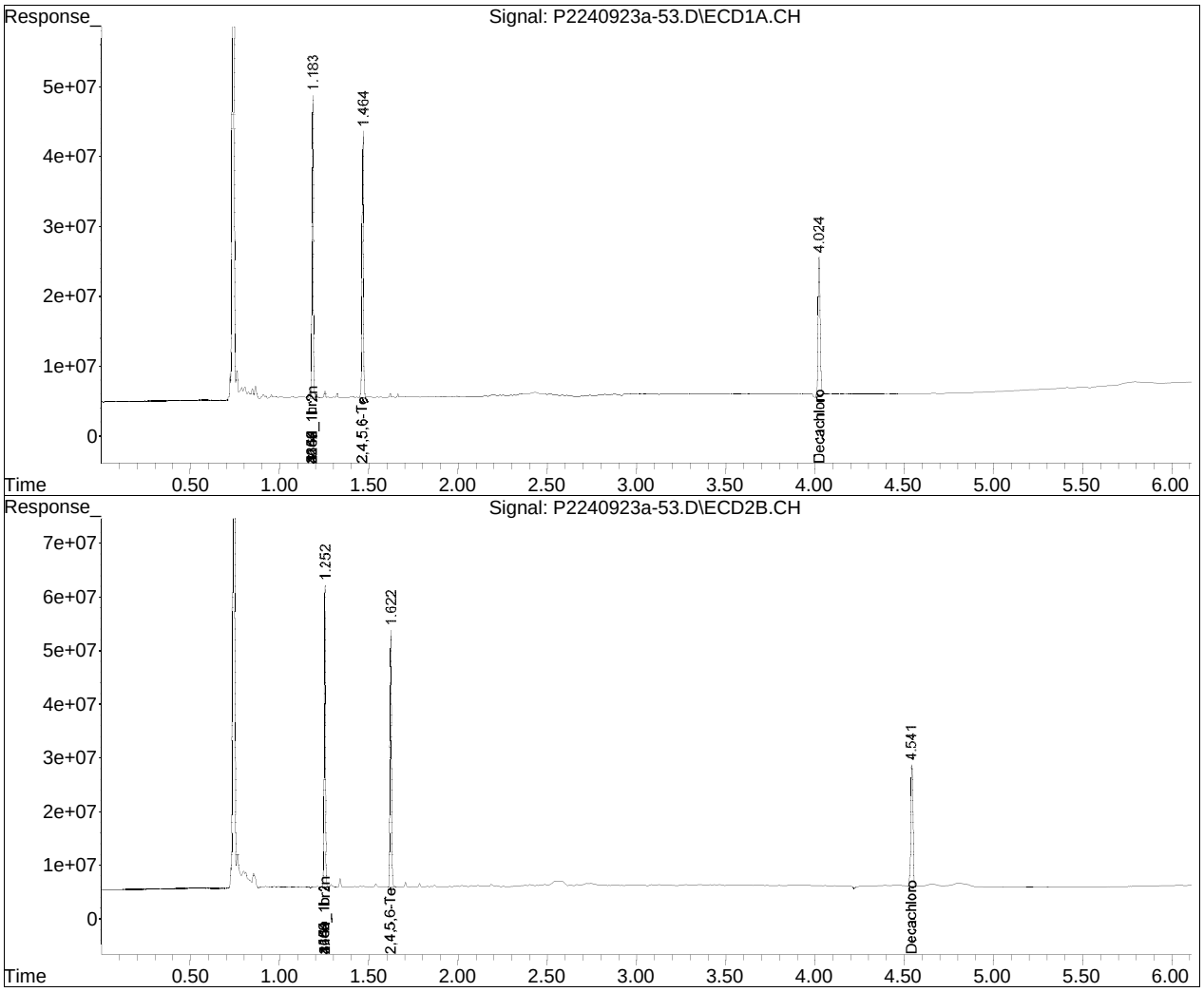
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedP2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-53.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  16:44
Operator : Pest2:meo
Sample : L2453053-01,42,, p
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 53 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:17 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

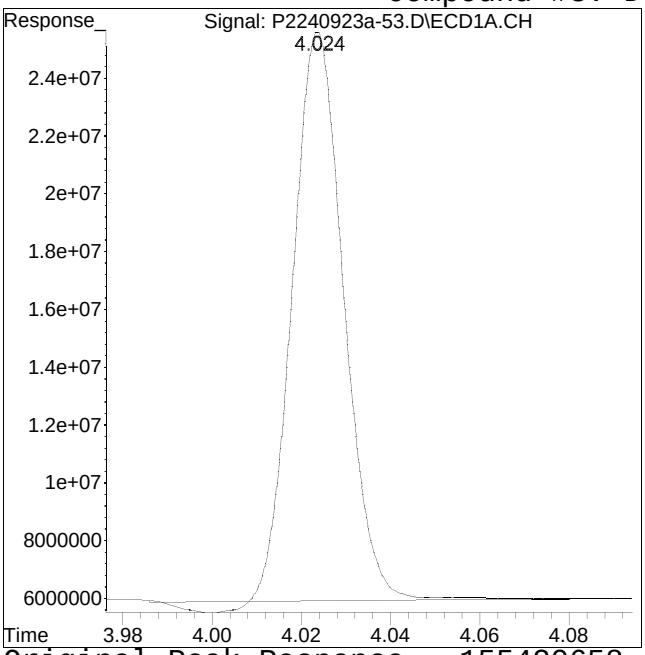
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

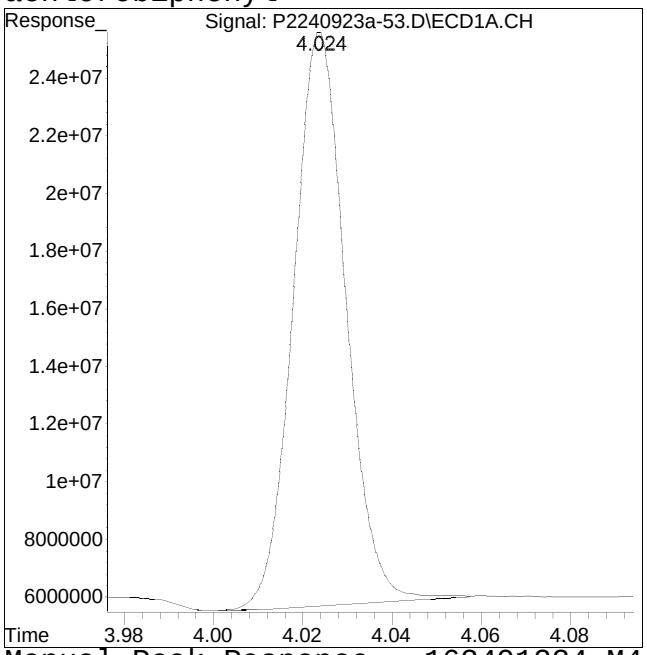


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-53.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:44 Instrument : Pest 2
Sample : L2453053-01,42,, p Quant Date : 9/24/2024 9:06 am

Compound #3: Decachlorobiphenyl



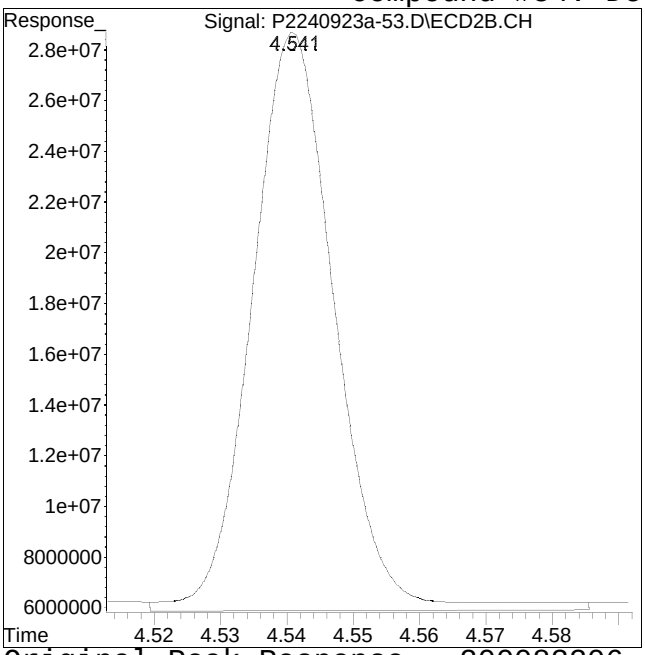



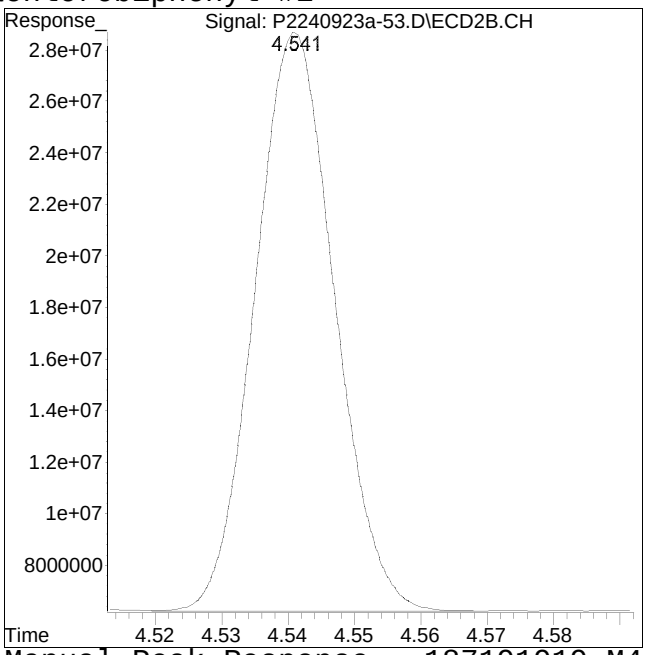

Original Peak Response = 155420658 Manual Peak Response = 162491224 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-53.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:44 Instrument : Pest 2
Sample : L2453053-01,42,, p Quant Date : 9/24/2024 9:06 am

## Compound #54: Decachlorobiphenyl #2




Original Peak Response = 200083306 Manual Peak Response = 187191919 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:11
Operator : Pest2:meo
Sample : L2453053-02,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:27 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 223.8E6 | 276.9E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 199763160 | | | | Recovery = | 112.04% | |
| | Standard Area 1 : #2 = 308903176 | | | | Recovery = | 89.65% | |
| 14) i | 2154_1br2nb | 1.184 | 1.253 | 223.8E6 | 276.9E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.253 | 223.8E6 | 276.9E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.253 | 223.8E6 | 276.9E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.253 | 223.8E6 | 276.9E6 | 25.000 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.623 | 192.9E6 | 240.6E6 | 14.851 | 13.259 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 74.26% | 66.30% |
| 3) s | Decachlorobi | 4.024 | 4.541 | 150.9E6 | 173.4E6 | 14.608M4 | 14.218 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 73.04% | 71.09% |
| Target Compounds | | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:11
Operator : Pest2:meo
Sample : L2453053-02,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:27 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:11
Operator : Pest2:meo
Sample : L2453053-02,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:27 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

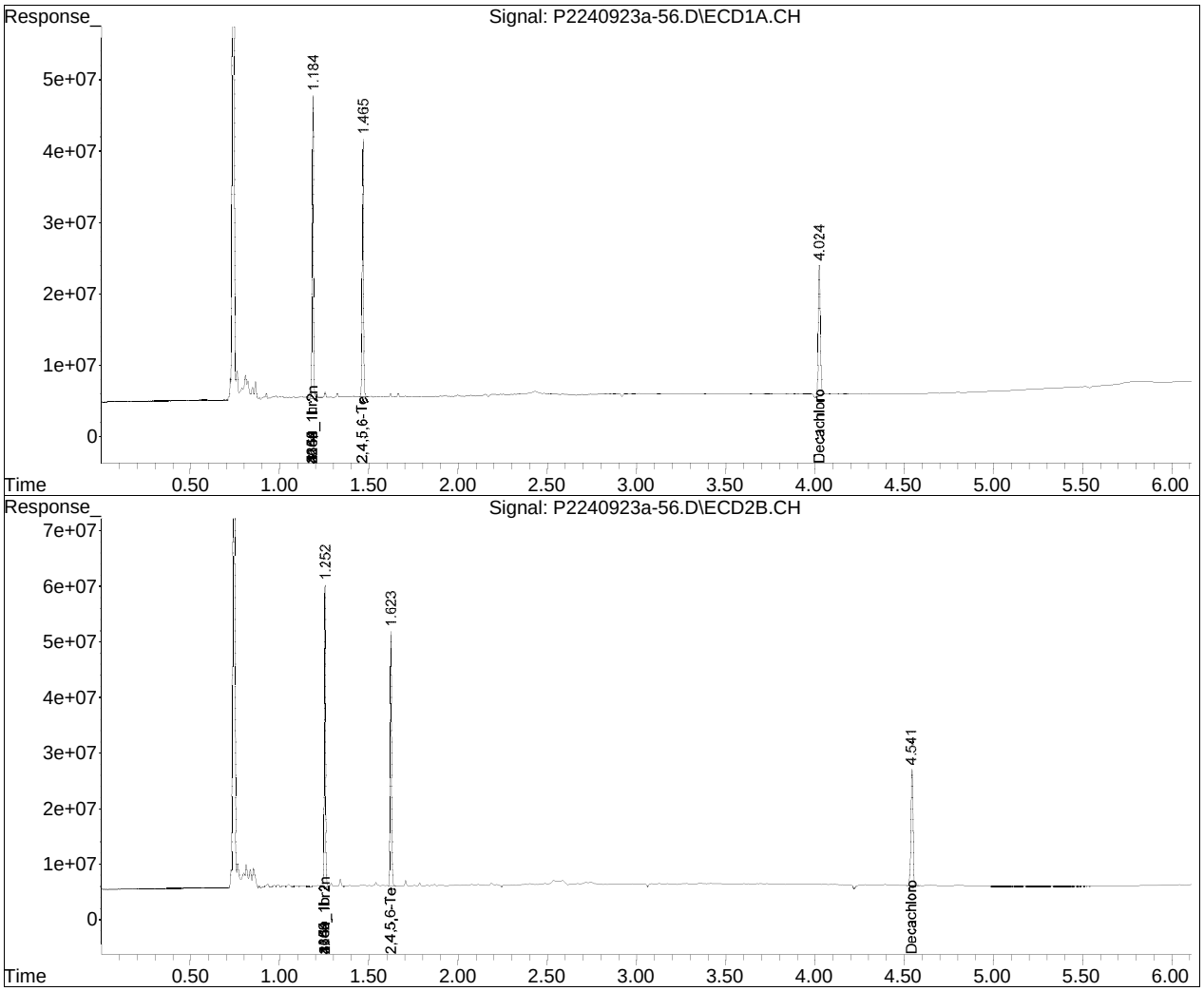
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedP2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-56.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  17:11
Operator : Pest2:meo
Sample : L2453053-02,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 56 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:27 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

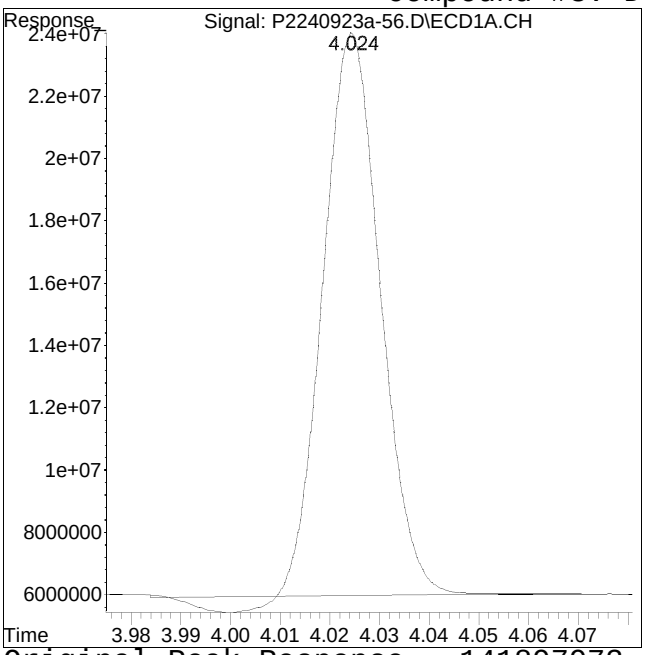
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

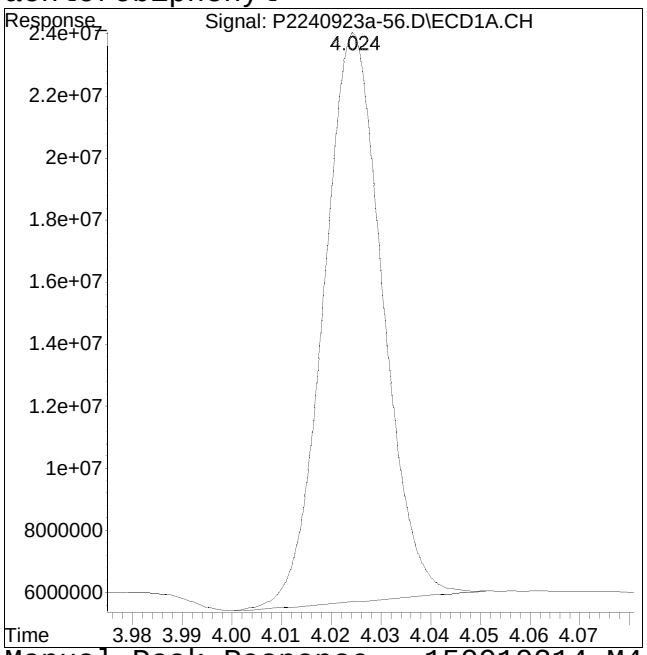


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-56.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:11 Instrument : Pest 2
Sample : L2453053-02,42,, Quant Date : 9/24/2024 9:06 am

Compound #3: Decachlorobiphenyl




Original Peak Response = 141897973 Manual Peak Response = 150910214 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-57.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:19
Operator : Pest2:meo
Sample : L2453053-05,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 57 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:30 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 244.3E6 | 301.1E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 199763160 | | | | Recovery = | 122.28% | |
| | Standard Area 1 : #2 = 308903176 | | | | Recovery = | 97.49% | |
| 14) i | 2154_1br2nb | 1.184 | 1.253 | 244.3E6 | 301.1E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.253 | 244.3E6 | 301.1E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.253 | 244.3E6 | 301.1E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.253 | 244.3E6 | 301.1E6 | 25.000 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.464 | 1.623 | 210.5E6 | 257.0E6 | 14.852 | 13.022 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 74.26% | 65.11% |
| 3) s | Decachlorobi | 4.023 | 4.541 | 164.6E6 | 174.7E6 | 14.598M4 | 13.172 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 72.99% | 65.86% |
| Target Compounds | | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-57.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:19
Operator : Pest2:meo
Sample : L2453053-05,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 57 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:30 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-57.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:19
Operator : Pest2:meo
Sample : L2453053-05,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 57 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:30 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

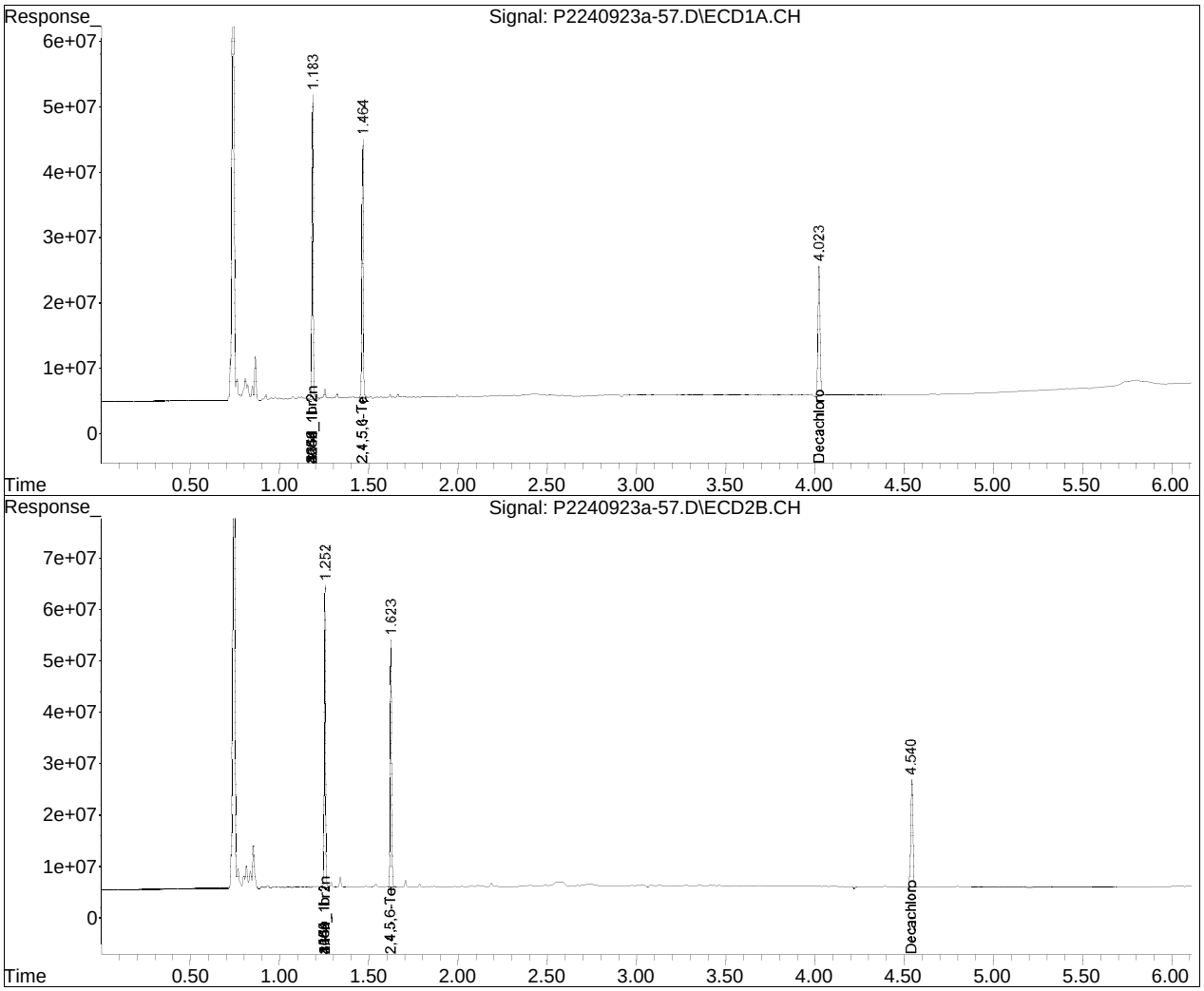
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedP2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-57.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  17:19
Operator : Pest2:meo
Sample : L2453053-05,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 57 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:30 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

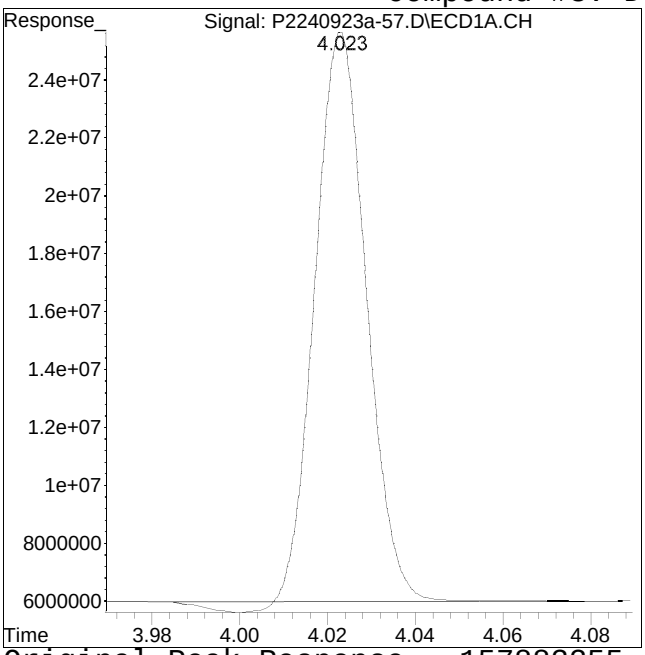
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



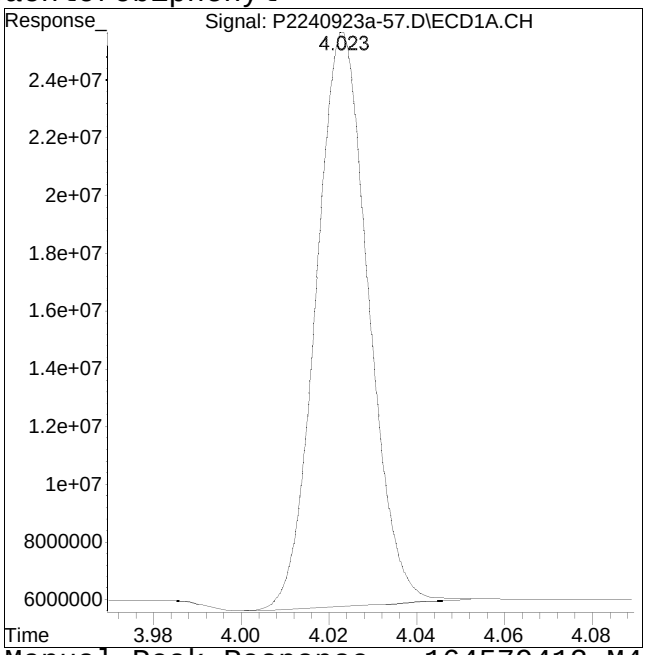
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-57.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:19 Instrument : Pest 2
Sample : L2453053-05,42,, Quant Date : 9/24/2024 9:06 am

Compound #3: Decachlorobiphenyl




Original Peak Response = 157883355




Manual Peak Response = 164579412 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-58.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:28
Operator : Pest2:meo
Sample : L2453053-04,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 58 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:33 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 224.7E6 | 280.3E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 199763160 | | | | Recovery = | 112.46% | |
| | Standard Area 1 : #2 = 308903176 | | | | Recovery = | 90.73% | |
| 14) i | 2154_1br2nb | 1.184 | 1.253 | 224.7E6 | 280.3E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.253 | 224.7E6 | 280.3E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.253 | 224.7E6 | 280.3E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.253 | 224.7E6 | 280.3E6 | 25.000 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.464 | 1.623 | 203.2E6 | 250.5E6 | 15.585 | 13.639 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 77.92% | 68.19% |
| 3) s | Decachlorobi | 4.022 | 4.540 | 151.0E6 | 175.7E6 | 14.565M4 | 14.233M4 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 72.82% | 71.17% |
| Target Compounds | | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-58.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:28
Operator : Pest2:meo
Sample : L2453053-04,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 58 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:33 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-58.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:28
Operator : Pest2:meo
Sample : L2453053-04,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 58 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:33 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

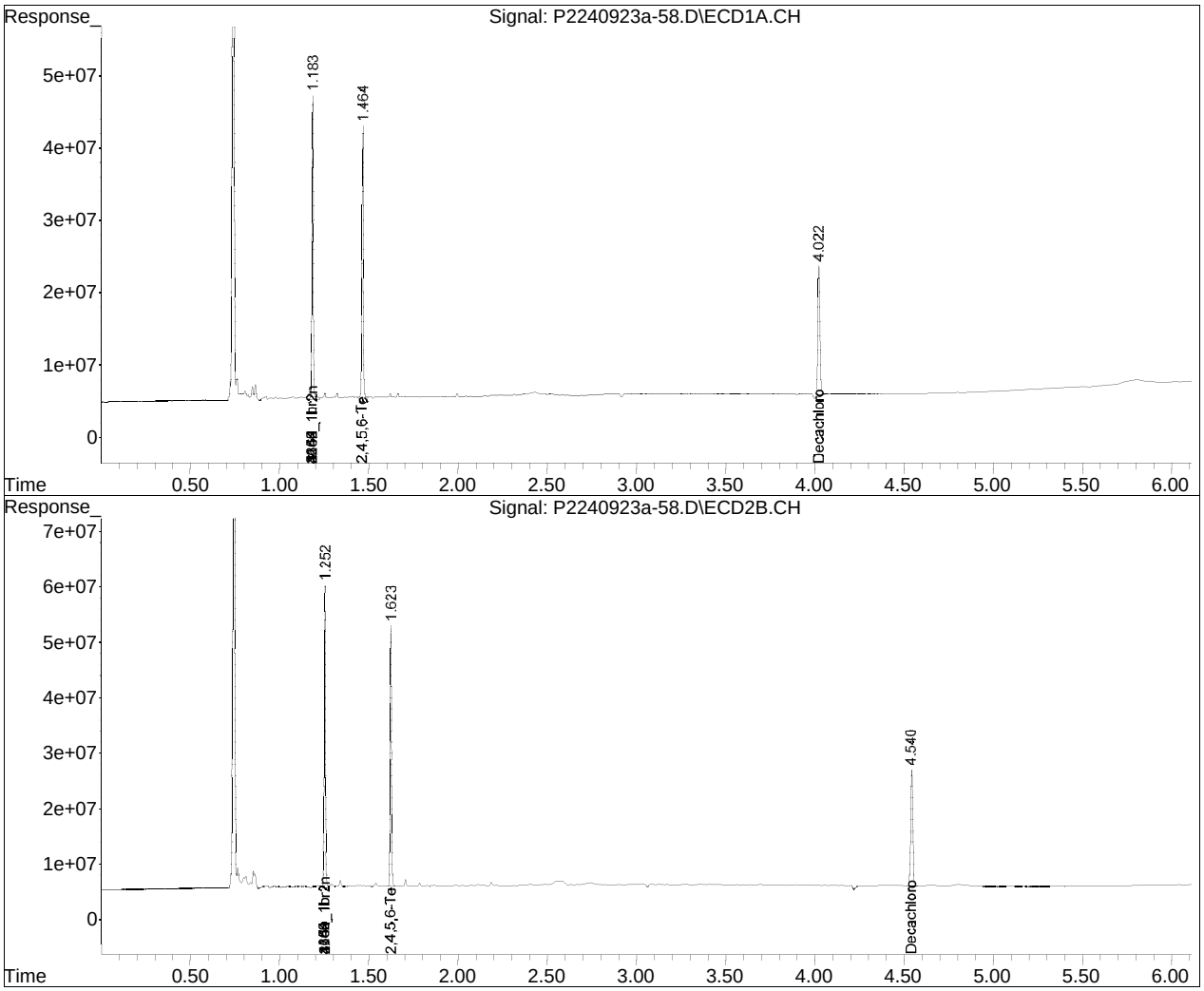
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedP2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-58.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  17:28
Operator : Pest2:meo
Sample : L2453053-04,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 58 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:33 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

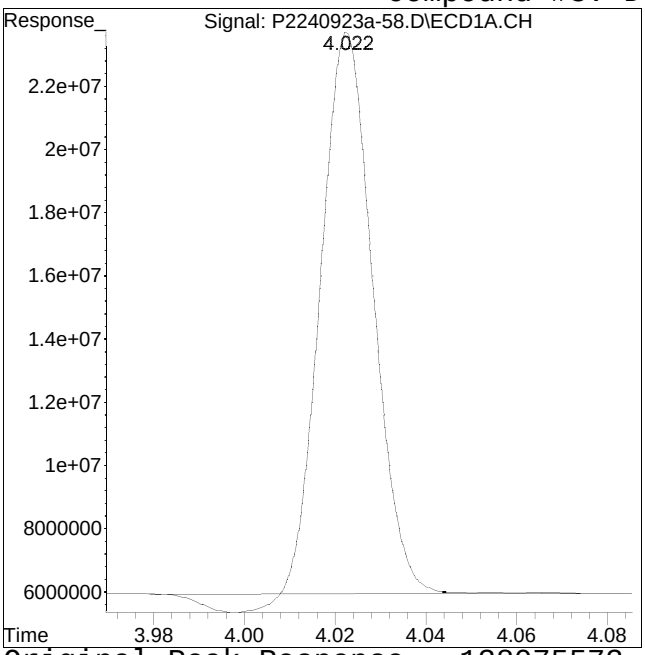
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

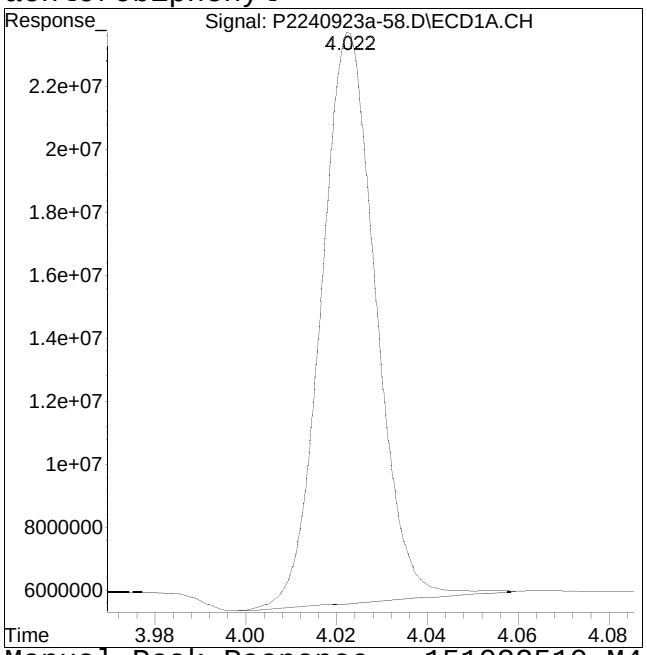


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-58.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:28 Instrument : Pest 2
Sample : L2453053-04,42,, Quant Date : 9/24/2024 9:06 am

Compound #3: Decachlorobiphenyl



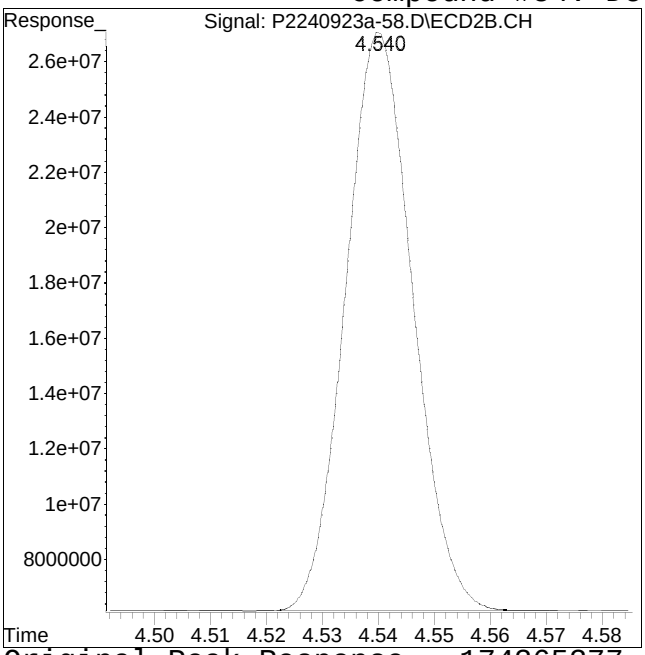




Original Peak Response = 138075573 Manual Peak Response = 151022510 M4
M4 = Poor automated baseline construction.

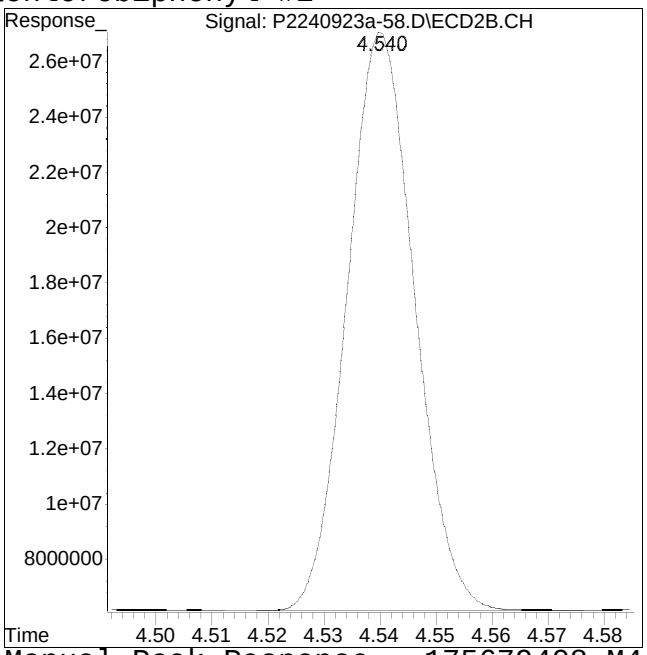
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-58.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:28 Instrument : Pest 2
Sample : L2453053-04,42,, Quant Date : 9/24/2024 9:06 am

## Compound #54: Decachlorobiphenyl #2




Original Peak Response = 174365377




Manual Peak Response = 175679408 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-59.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:37
Operator : Pest2:meo
Sample : L2453053-03,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 59 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:35 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 233.5E6 | 293.6E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 199763160 | | | | Recovery = | 116.89% | |
| | Standard Area 1 : #2 = 308903176 | | | | Recovery = | 95.04% | |
| 14) i | 2154_1br2nb | 1.184 | 1.253 | 233.5E6 | 293.6E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.253 | 233.5E6 | 293.6E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.253 | 233.5E6 | 293.6E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.253 | 233.5E6 | 293.6E6 | 25.000 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.623 | 201.8E6 | 252.2E6 | 14.895 | 13.112 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 74.48% | 65.56% |
| 3) s | Decachlorobi | 4.025 | 4.541 | 172.4E6 | 185.9E6 | 15.997 | 14.375M4 |
| | Spiked Amount 20.000 | Range 30 - 150 | | | Recovery = | 79.98% | 71.88% |
| Target Compounds | | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-59.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:37
Operator : Pest2:meo
Sample : L2453053-03,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 59 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:35 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-59.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:37
Operator : Pest2:meo
Sample : L2453053-03,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 59 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:35 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

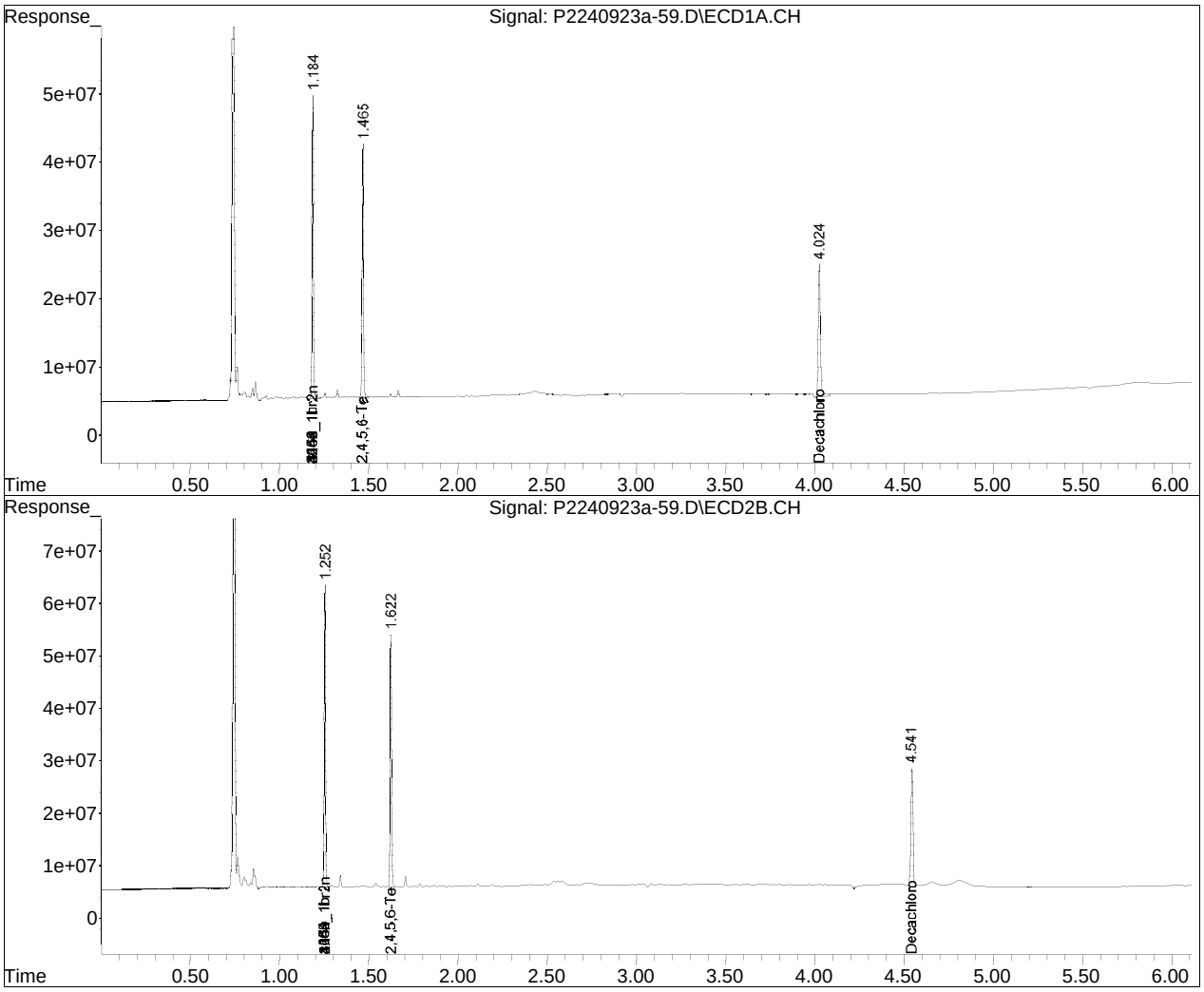
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedP2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-59.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  17:37
Operator : Pest2:meo
Sample : L2453053-03,42,,
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 59 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:35 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

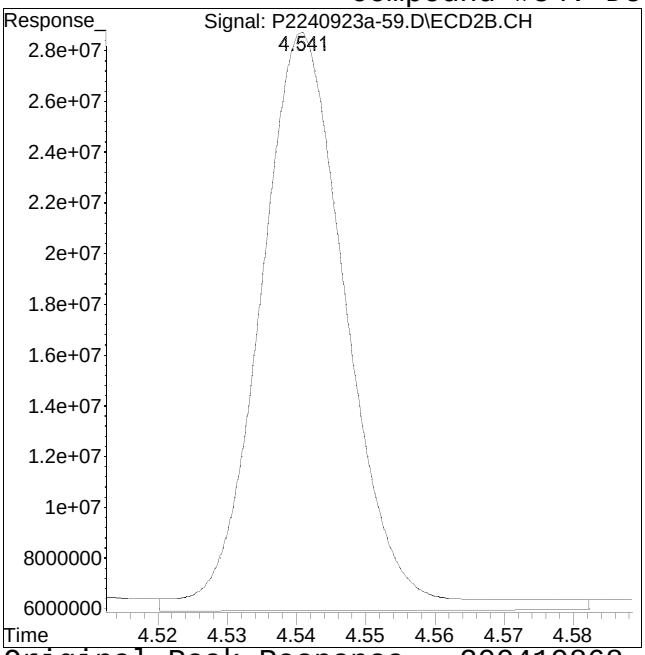
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

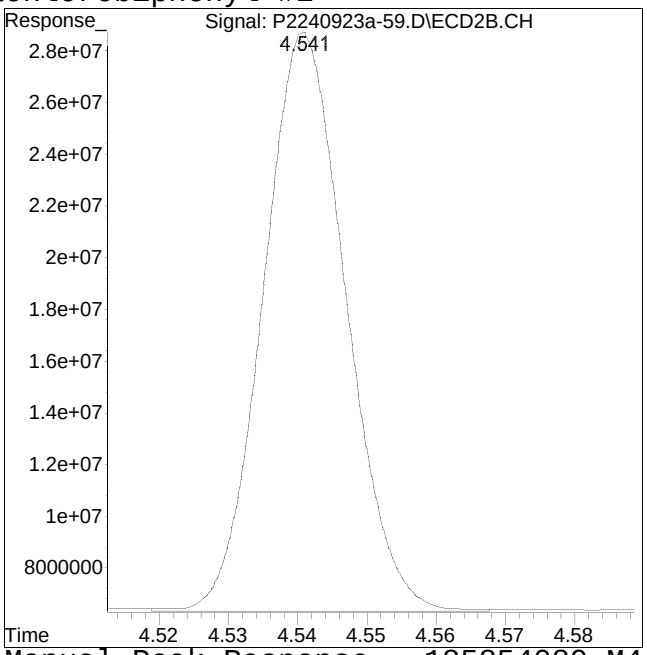


# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-59.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:37 Instrument : Pest 2
Sample : L2453053-03,42,, Quant Date : 9/24/2024 9:06 am

## Compound #54: Decachlorobiphenyl #2




Original Peak Response = 200419868 Manual Peak Response = 185854080 M4
M4 = Poor automated baseline construction.

# Aroclor Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# PCBs

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST2** | **Ical Ref** | **: ICAL21500** |
| **Calibration dates** | **: 09/16/24 15:29 09/16/24 17:41** | | |

Calibration Files

1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D

6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1660_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra | 1.490 | 1.424 | 1.460 | 1.428 | 1.400 | 1.446 | 1.417 | 1.478 | 1.494 | 1.469 | 1.451 | 2.24 |
| 3) | s | Decachlorobip | 1.362 | 1.224 | 1.181 | 1.174 | 1.164 | 1.157 | 1.107 | 1.080 | 1.054 | 1.035 | 1.154 | 8.22 |
| 4) | l1 | 1016-1 | 0.029 | 0.030 | 0.029 | 0.028 | 0.027 | 0.028 | 0.026 | 0.026 | 0.025 | 0.023 | 0.027 | 7.47 |
| 5) | l1 | 1016-2 | 0.064 | 0.063 | 0.064 | 0.064 | 0.061 | 0.059 | 0.056 | 0.055 | 0.053 | 0.050 | 0.059 | 8.57 |
| 6) | l1 | 1016-3 | 0.126 | 0.112 | 0.123 | 0.118 | 0.113 | 0.118 | 0.113 | 0.116 | 0.116 | 0.112 | 0.117 | 3.99 |
| 7) | l1 | 1016-4 | 0.052 | 0.047 | 0.055 | 0.051 | 0.049 | 0.049 | 0.046 | 0.049 | 0.048 | 0.046 | 0.049 | 5.95 |
| 8) | l1 | 1016-5 | 0.063 | 0.048 | 0.062 | 0.057 | 0.056 | 0.056 | 0.051 | 0.051 | 0.050 | 0.048 | 0.054 | 9.85 |
| 9) | l2 | 1260-1 | 0.083 | 0.079 | 0.077 | 0.075 | 0.074 | 0.076 | 0.072 | 0.071 | 0.070 | 0.069 | 0.075 | 5.92 |
| 10) | l2 | 1260-2 | 0.123 | 0.119 | 0.117 | 0.114 | 0.114 | 0.116 | 0.111 | 0.108 | 0.107 | 0.105 | 0.113 | 4.92 |
| 11) | l2 | 1260-3 | 0.068 | 0.067 | 0.069 | 0.069 | 0.070 | 0.071 | 0.068 | 0.069 | 0.068 | 0.067 | 0.069 | 1.76 |
| 12) | l2 | 1260-4 | 0.159 | 0.156 | 0.150 | 0.148 | 0.148 | 0.149 | 0.147 | 0.150 | 0.149 | 0.149 | 0.151 | 2.68 |
| 13) | l2 | 1260-5 | 0.118 | 0.110 | 0.110 | 0.109 | 0.105 | 0.107 | 0.104 | 0.104 | 0.103 | 0.104 | 0.108 | 4.14 |
| 14) | i | 2154_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 15) | l3 | 1221-1 | | | | | | | | 0.015 | | | 0.015 | 0.00 |
| 16) | l3 | 1221-2 | | | | | | | | 0.009 | | | 0.009 | 0.00 |
| 17) | l3 | 1221-3 | | | | | | | | 0.037 | | | 0.037 | 0.00 |
| 18) | l4 | 1254-1 | | | | | | | | 0.052 | | | 0.052 | 0.00 |
| 19) | l4 | 1254-2 | | | | | | | | 0.093 | | | 0.093 | 0.00 |
| 20) | l4 | 1254-3 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 21) | l4 | 1254-4 | | | | | | | | 0.071 | | | 0.071 | 0.00 |
| 22) | l4 | 1254-5 | | | | | | | | 0.099 | | | 0.099 | 0.00 |
| 23) | i | 4268_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 24) | l6 | 1242-1 | | | | | | | | 0.021 | | | 0.021 | 0.00 |
| 25) | l6 | 1242-2 | | | | | | | | 0.046 | | | 0.046 | 0.00 |
| 26) | l6 | 1242-3 | | | | | | | | 0.096 | | | 0.096 | 0.00 |
| 27) | l6 | 1242-4 | | | | | | | | 0.040 | | | 0.040 | 0.00 |
| 28) | l6 | 1242-5 | | | | | | | | 0.032 | | | 0.032 | 0.00 |
| 29) | l9 | 1268-1 | | | | | | | | 0.209 | | | 0.209 | 0.00 |
| 30) | l9 | 1268-2 | | | | | | | | 0.189 | | | 0.189 | 0.00 |
| 31) | l9 | 1268-3 | | | | | | | | 0.154 | | | 0.154 | 0.00 |
| 32) | l9 | 1268-4 | | | | | | | | 0.067 | | | 0.067 | 0.00 |
| 33) | l9 | 1268-5 | | | | | | | | 0.467 | | | 0.467 | 0.00 |
| 34) | i | 1248_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 35) | l7 | 1248-1 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 36) | l7 | 1248-2 | | | | | | | | 0.078 | | | 0.078 | 0.00 |

# Initial Calibration Summary
# Form 6
# PCBs

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST2** | **Ical Ref** | **: ICAL21500** |
| **Calibration dates** | **: 09/16/24 15:29 09/16/24 17:41** | | |

Calibration Files

1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D

6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) l7 | 1248-3 | | | | | | | | 0.070 | | | 0.070 | 0.00 |
| 38) l7 | 1248-4 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 39) l7 | 1248-5 | | | | | | | | 0.056 | | | 0.056 | 0.00 |
| 40) i | 3262_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 41) l5 | 1232-1 | | | | | | | | 0.029 | | | 0.029 | 0.00 |
| 42) l5 | 1232-2 | | | | | | | | 0.027 | | | 0.027 | 0.00 |
| 43) l5 | 1232-3 | | | | | | | | 0.055 | | | 0.055 | 0.00 |
| 44) l5 | 1232-4 | | | | | | | | 0.023 | | | 0.023 | 0.00 |
| 45) l5 | 1232-5 | | | | | | | | 0.017 | | | 0.017 | 0.00 |
| 46) l8 | 1262-1 | | | | | | | | 0.083 | | | 0.083 | 0.00 |
| 47) l8 | 1262-2 | | | | | | | | 0.105 | | | 0.105 | 0.00 |
| 48) l8 | 1262-3 | | | | | | | | 0.091 | | | 0.091 | 0.00 |
| 49) l8 | 1262-4 | | | | | | | | 0.185 | | | 0.185 | 0.00 |
| 50) l8 | 1262-5 | | | | | | | | 0.059 | | | 0.059 | 0.00 |

# Initial Calibration Summary
# Form 6
# PCBs

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST2** | **Ical Ref** | **: ICAL21500** |
| **Calibration dates** | **: 09/16/24 15:29 09/16/24 17:41** | | |

Signal #2 Calibration Files

1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1660_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra | 1.800 | 1.723 | 1.775 | 1.642 | 1.617 | 1.647 | 1.569 | 1.541 | 1.557 | 1.512 | 1.638 | 6.08 |
| 3) | s | Decachlorobip | 1.382 | 1.282 | 1.205 | 1.148 | 1.113 | 1.087 | 1.044 | 0.934 | 0.918 | 0.900 | 1.101 | 14.52 |
| 4) | l1 | 1016-1 | 0.036 | 0.034 | 0.033 | 0.032 | 0.030 | 0.030 | 0.030 | 0.027 | 0.026 | 0.024 | 0.030 | 12.95 |
| 5) | l1 | 1016-2 | 0.069 | 0.069 | 0.072 | 0.069 | 0.070 | 0.070 | 0.067 | 0.059 | 0.056 | 0.052 | 0.065 | 10.57 |
| 6) | l1 | 1016-3 | 0.153 | 0.145 | 0.143 | 0.137 | 0.131 | 0.132 | 0.128 | 0.118 | 0.114 | 0.109 | 0.131 | 10.79 |
| 7) | l1 | 1016-4 | 0.063 | 0.057 | 0.058 | 0.055 | 0.053 | 0.054 | 0.052 | 0.047 | 0.045 | 0.043 | 0.053 | 11.94 |
| 8) | l1 | 1016-5 | 0.049 | 0.046 | 0.045 | 0.042 | 0.042 | 0.043 | 0.044 | 0.039 | 0.036 | 0.035 | 0.042 | 10.65 |
| 9) | l2 | 1260-1 | 0.094 | 0.093 | 0.088 | 0.088 | 0.083 | 0.090 | 0.078 | 0.072 | 0.069 | 0.066 | 0.082 | 12.52 |
| 10) | l2 | 1260-2 | 0.113 | 0.111 | 0.105 | 0.101 | 0.097 | 0.105 | 0.093 | 0.085 | 0.082 | 0.079 | 0.097 | 12.54 |
| 11) | l2 | 1260-3 | 0.094 | 0.090 | 0.084 | 0.081 | 0.080 | 0.084 | 0.078 | 0.069 | 0.068 | 0.065 | 0.079 | 12.09 |
| 12) | l2 | 1260-4 | 0.174 | 0.171 | 0.165 | 0.162 | 0.158 | 0.160 | 0.151 | 0.139 | 0.138 | 0.135 | 0.155 | 8.92 |
| 13) | l2 | 1260-5 | 0.121 | 0.127 | 0.118 | 0.114 | 0.112 | 0.114 | 0.112 | 0.097 | 0.096 | 0.094 | 0.111 | 10.22 |
| 14) | i | 2154_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 15) | l3 | 1221-1 | | | | | | | | 0.017 | | | 0.017 | 0.00 |
| 16) | l3 | 1221-2 | | | | | | | | 0.011 | | | 0.011 | 0.00 |
| 17) | l3 | 1221-3 | | | | | | | | 0.040 | | | 0.040 | 0.00 |
| 18) | l4 | 1254-1 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 19) | l4 | 1254-2 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 20) | l4 | 1254-3 | | | | | | | | 0.109 | | | 0.109 | 0.00 |
| 21) | l4 | 1254-4 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 22) | l4 | 1254-5 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 23) | i | 4268_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 24) | l6 | 1242-1 | | | | | | | | 0.021 | | | 0.021 | 0.00 |
| 25) | l6 | 1242-2 | | | | | | | | 0.048 | | | 0.048 | 0.00 |
| 26) | l6 | 1242-3 | | | | | | | | 0.095 | | | 0.095 | 0.00 |
| 27) | l6 | 1242-4 | | | | | | | | 0.039 | | | 0.039 | 0.00 |
| 28) | l6 | 1242-5 | | | | | | | | 0.031 | | | 0.031 | 0.00 |
| 29) | l9 | 1268-1 | | | | | | | | 0.190 | | | 0.190 | 0.00 |
| 30) | l9 | 1268-2 | | | | | | | | 0.169 | | | 0.169 | 0.00 |
| 31) | l9 | 1268-3 | | | | | | | | 0.141 | | | 0.141 | 0.00 |
| 32) | l9 | 1268-4 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 33) | l9 | 1268-5 | | | | | | | | 0.399 | | | 0.399 | 0.00 |
| 34) | i | 1248_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 35) | l7 | 1248-1 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 36) | l7 | 1248-2 | | | | | | | | 0.043 | | | 0.043 | 0.00 |

# Initial Calibration Summary
# Form 6
# PCBs

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST2** | **Ical Ref** | **: ICAL21500** |
| **Calibration dates** | **: 09/16/24 15:29 09/16/24 17:41** | | |

Signal #2 Calibration Files

1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) l7 | 1248-3 | | | | | | | | 0.053 | | | 0.053 | 0.00 |
| 38) l7 | 1248-4 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 39) l7 | 1248-5 | | | | | | | | 0.067 | | | 0.067 | 0.00 |
| 40) i | 3262_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 41) l5 | 1232-1 | | | | | | | | 0.030 | | | 0.030 | 0.00 |
| 42) l5 | 1232-2 | | | | | | | | 0.031 | | | 0.031 | 0.00 |
| 43) l5 | 1232-3 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 44) l5 | 1232-4 | | | | | | | | 0.024 | | | 0.024 | 0.00 |
| 45) l5 | 1232-5 | | | | | | | | 0.018 | | | 0.018 | 0.00 |
| 46) l8 | 1262-1 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 47) l8 | 1262-2 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 48) l8 | 1262-3 | | | | | | | | 0.091 | | | 0.091 | 0.00 |
| 49) l8 | 1262-4 | | | | | | | | 0.174 | | | 0.174 | 0.00 |
| 50) l8 | 1262-5 | | | | | | | | 0.062 | | | 0.062 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1660_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra... | 1.490 | 1.424 | 1.460 | 1.428 | 1.400 | 1.446 | 1.417 | 1.478 | 1.494 | 1.469 | 1.451 | 2.24 |
| 3) | s | Decachlorobip... | 1.362 | 1.224 | 1.181 | 1.174 | 1.164 | 1.157 | 1.107 | 1.080 | 1.054 | 1.035 | 1.154 | 8.22 |
| 4) | l1 | 1016-1 | 0.029 | 0.030 | 0.029 | 0.028 | 0.027 | 0.028 | 0.026 | 0.026 | 0.025 | 0.023 | 0.027 | 7.47 |
| 5) | l1 | 1016-2 | 0.064 | 0.063 | 0.064 | 0.064 | 0.061 | 0.059 | 0.056 | 0.055 | 0.053 | 0.050 | 0.059 | 8.57 |
| 6) | l1 | 1016-3 | 0.126 | 0.112 | 0.123 | 0.118 | 0.113 | 0.118 | 0.113 | 0.116 | 0.116 | 0.112 | 0.117 | 3.99 |
| 7) | l1 | 1016-4 | 0.052 | 0.047 | 0.055 | 0.051 | 0.049 | 0.049 | 0.046 | 0.049 | 0.048 | 0.046 | 0.049 | 5.95 |
| 8) | l1 | 1016-5 | 0.063 | 0.048 | 0.062 | 0.057 | 0.056 | 0.056 | 0.051 | 0.051 | 0.050 | 0.048 | 0.054 | 9.85 |
| 9) | l2 | 1260-1 | 0.083 | 0.079 | 0.077 | 0.075 | 0.074 | 0.076 | 0.072 | 0.071 | 0.070 | 0.069 | 0.075 | 5.92 |
| 10) | l2 | 1260-2 | 0.123 | 0.119 | 0.117 | 0.114 | 0.114 | 0.116 | 0.111 | 0.108 | 0.107 | 0.105 | 0.113 | 4.92 |
| 11) | l2 | 1260-3 | 0.068 | 0.067 | 0.069 | 0.069 | 0.070 | 0.071 | 0.068 | 0.069 | 0.068 | 0.067 | 0.069 | 1.76 |
| 12) | l2 | 1260-4 | 0.159 | 0.156 | 0.150 | 0.148 | 0.148 | 0.149 | 0.147 | 0.150 | 0.149 | 0.149 | 0.151 | 2.68 |
| 13) | l2 | 1260-5 | 0.118 | 0.110 | 0.110 | 0.109 | 0.105 | 0.107 | 0.104 | 0.104 | 0.103 | 0.104 | 0.108 | 4.14 |
| 14) | i | 2154_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 15) | l3 | 1221-1 | | | | | | | | 0.015 | | | 0.015 | 0.00 |
| 16) | l3 | 1221-2 | | | | | | | | 0.009 | | | 0.009 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17) | l3 | 1221-3 | | | | | | | | 0.037 | | | 0.037 | 0.00 |
| 18) | l4 | 1254-1 | | | | | | | | 0.052 | | | 0.052 | 0.00 |
| 19) | l4 | 1254-2 | | | | | | | | 0.093 | | | 0.093 | 0.00 |
| 20) | l4 | 1254-3 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 21) | l4 | 1254-4 | | | | | | | | 0.071 | | | 0.071 | 0.00 |
| 22) | l4 | 1254-5 | | | | | | | | 0.099 | | | 0.099 | 0.00 |
| 23) | i | 4268_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 24) | l6 | 1242-1 | | | | | | | | 0.021 | | | 0.021 | 0.00 |
| 25) | l6 | 1242-2 | | | | | | | | 0.046 | | | 0.046 | 0.00 |
| 26) | l6 | 1242-3 | | | | | | | | 0.096 | | | 0.096 | 0.00 |
| 27) | l6 | 1242-4 | | | | | | | | 0.040 | | | 0.040 | 0.00 |
| 28) | l6 | 1242-5 | | | | | | | | 0.032 | | | 0.032 | 0.00 |
| 29) | l9 | 1268-1 | | | | | | | | 0.209 | | | 0.209 | 0.00 |
| 30) | l9 | 1268-2 | | | | | | | | 0.189 | | | 0.189 | 0.00 |
| 31) | l9 | 1268-3 | | | | | | | | 0.154 | | | 0.154 | 0.00 |
| 32) | l9 | 1268-4 | | | | | | | | 0.067 | | | 0.067 | 0.00 |
| 33) | l9 | 1268-5 | | | | | | | | 0.467 | | | 0.467 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34) | i | 1248_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 35) | l7 | 1248-1 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 36) | l7 | 1248-2 | | | | | | | | 0.078 | | | 0.078 | 0.00 |
| 37) | l7 | 1248-3 | | | | | | | | 0.070 | | | 0.070 | 0.00 |
| 38) | l7 | 1248-4 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 39) | l7 | 1248-5 | | | | | | | | 0.056 | | | 0.056 | 0.00 |
| 40) | i | 3262_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 41) | l5 | 1232-1 | | | | | | | | 0.029 | | | 0.029 | 0.00 |
| 42) | l5 | 1232-2 | | | | | | | | 0.027 | | | 0.027 | 0.00 |
| 43) | l5 | 1232-3 | | | | | | | | 0.055 | | | 0.055 | 0.00 |
| 44) | l5 | 1232-4 | | | | | | | | 0.023 | | | 0.023 | 0.00 |
| 45) | l5 | 1232-5 | | | | | | | | 0.017 | | | 0.017 | 0.00 |
| 46) | l8 | 1262-1 | | | | | | | | 0.083 | | | 0.083 | 0.00 |
| 47) | l8 | 1262-2 | | | | | | | | 0.105 | | | 0.105 | 0.00 |
| 48) | l8 | 1262-3 | | | | | | | | 0.091 | | | 0.091 | 0.00 |
| 49) | l8 | 1262-4 | | | | | | | | 0.185 | | | 0.185 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50) l8 | 1262-5 | | | | | | | | 0.059 | | | 0.059 | 0.00 |

Signal #2 Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) i | 1660_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 2) s | 2,4,5,6-Tetra... | 1.800 | 1.723 | 1.775 | 1.642 | 1.617 | 1.647 | 1.569 | 1.541 | 1.557 | 1.512 | 1.638 | 6.08 |
| 3) s | Decachlorobip... | 1.382 | 1.282 | 1.205 | 1.148 | 1.113 | 1.087 | 1.044 | 0.934 | 0.918 | 0.900 | 1.101 | 14.52 |
| 4) l1 | 1016-1 | 0.036 | 0.034 | 0.033 | 0.032 | 0.030 | 0.030 | 0.030 | 0.027 | 0.026 | 0.024 | 0.030 | 12.95 |
| 5) l1 | 1016-2 | 0.069 | 0.069 | 0.072 | 0.069 | 0.070 | 0.070 | 0.067 | 0.059 | 0.056 | 0.052 | 0.065 | 10.57 |
| 6) l1 | 1016-3 | 0.153 | 0.145 | 0.143 | 0.137 | 0.131 | 0.132 | 0.128 | 0.118 | 0.114 | 0.109 | 0.131 | 10.79 |
| 7) l1 | 1016-4 | 0.063 | 0.057 | 0.058 | 0.055 | 0.053 | 0.054 | 0.052 | 0.047 | 0.045 | 0.043 | 0.053 | 11.94 |
| 8) l1 | 1016-5 | 0.049 | 0.046 | 0.045 | 0.042 | 0.042 | 0.043 | 0.044 | 0.039 | 0.036 | 0.035 | 0.042 | 10.65 |
| 9) l2 | 1260-1 | 0.094 | 0.093 | 0.088 | 0.088 | 0.083 | 0.090 | 0.078 | 0.072 | 0.069 | 0.066 | 0.082 | 12.52 |
| 10) l2 | 1260-2 | 0.113 | 0.111 | 0.105 | 0.101 | 0.097 | 0.105 | 0.093 | 0.085 | 0.082 | 0.079 | 0.097 | 12.54 |
| 11) l2 | 1260-3 | 0.094 | 0.090 | 0.084 | 0.081 | 0.080 | 0.084 | 0.078 | 0.069 | 0.068 | 0.065 | 0.079 | 12.09 |
| 12) l2 | 1260-4 | 0.174 | 0.171 | 0.165 | 0.162 | 0.158 | 0.160 | 0.151 | 0.139 | 0.138 | 0.135 | 0.155 | 8.92 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13) | l2 | 1260-5 | 0.121 | 0.127 | 0.118 | 0.114 | 0.112 | 0.114 | 0.112 | 0.097 | 0.096 | 0.094 | 0.111 | 10.22 |
| 14) | i | 2154_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 15) | l3 | 1221-1 | | | | | | | | 0.017 | | | 0.017 | 0.00 |
| 16) | l3 | 1221-2 | | | | | | | | 0.011 | | | 0.011 | 0.00 |
| 17) | l3 | 1221-3 | | | | | | | | 0.040 | | | 0.040 | 0.00 |
| 18) | l4 | 1254-1 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 19) | l4 | 1254-2 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 20) | l4 | 1254-3 | | | | | | | | 0.109 | | | 0.109 | 0.00 |
| 21) | l4 | 1254-4 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 22) | l4 | 1254-5 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 23) | i | 4268_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 24) | l6 | 1242-1 | | | | | | | | 0.021 | | | 0.021 | 0.00 |
| 25) | l6 | 1242-2 | | | | | | | | 0.048 | | | 0.048 | 0.00 |
| 26) | l6 | 1242-3 | | | | | | | | 0.095 | | | 0.095 | 0.00 |
| 27) | l6 | 1242-4 | | | | | | | | 0.039 | | | 0.039 | 0.00 |
| 28) | l6 | 1242-5 | | | | | | | | 0.031 | | | 0.031 | 0.00 |
| 29) | l9 | 1268-1 | | | | | | | | 0.190 | | | 0.190 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30) | l9 | 1268-2 | | | | | | | | 0.169 | | | 0.169 | 0.00 |
| 31) | l9 | 1268-3 | | | | | | | | 0.141 | | | 0.141 | 0.00 |
| 32) | l9 | 1268-4 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 33) | l9 | 1268-5 | | | | | | | | 0.399 | | | 0.399 | 0.00 |
| 34) | i | 1248_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 35) | l7 | 1248-1 | | | | | | | | 0.062 | | | 0.062 | 0.00 |
| 36) | l7 | 1248-2 | | | | | | | | 0.043 | | | 0.043 | 0.00 |
| 37) | l7 | 1248-3 | | | | | | | | 0.053 | | | 0.053 | 0.00 |
| 38) | l7 | 1248-4 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 39) | l7 | 1248-5 | | | | | | | | 0.067 | | | 0.067 | 0.00 |
| 40) | i | 3262_1br2nb | ----------ISTD---------- | | | | | | | | | | | |
| 41) | l5 | 1232-1 | | | | | | | | 0.030 | | | 0.030 | 0.00 |
| 42) | l5 | 1232-2 | | | | | | | | 0.031 | | | 0.031 | 0.00 |
| 43) | l5 | 1232-3 | | | | | | | | 0.060 | | | 0.060 | 0.00 |
| 44) | l5 | 1232-4 | | | | | | | | 0.024 | | | 0.024 | 0.00 |
| 45) | l5 | 1232-5 | | | | | | | | 0.018 | | | 0.018 | 0.00 |

# Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2024\240916I\
Method File : P2_PCB_09_16_24_RVT_ICAL.m
Title : pcb
Last Update : Tue Sep 17 11:03:22 2024
Response Via : Initial Calibration

Calibration Files
1 =P2240916i-06.D 2 =P2240916i-07.D 3 =P2240916i-08.D 4 =P2240916i-09.D 5 =P2240916i-10.D
6 =P2240916i-11.D 7 =P2240916i-12.D 8 =P2240916i-20.D 9 =P2240916i-14.D 10 =P2240916i-15.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46) | l8 1262-1 | | | | | | | | 0.073 | | | 0.073 | 0.00 |
| 47) | l8 1262-2 | | | | | | | | 0.101 | | | 0.101 | 0.00 |
| 48) | l8 1262-3 | | | | | | | | 0.091 | | | 0.091 | 0.00 |
| 49) | l8 1262-4 | | | | | | | | 0.174 | | | 0.174 | 0.00 |
| 50) | l8 1262-5 | | | | | | | | 0.062 | | | 0.062 | 0.00 |

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(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:29 pm
Operator : pest2:kb/sdc
Sample : il11660,42,,pp11790 4PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:25:26 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:23:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.183 | 1.252 | 223.1E6 | 252.1E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.464 | 1.623 | 3404182 | 4646960 | 0.265M4 | 0.269 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.05%# | 0.05%# |
| 3) s | Decachlorobi | 4.024 | 4.542 | 6221294 | 7133944 | 0.584M4 | 0.584 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.12%# | 0.12%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.601 | 1.822 | 1029923 | 1469461 | 3.981M2 | 4.440 |
| 5) l1 | 1016-2 | 1.741 | 1.992 | 2300019 | 2790342 | 4.056M4 | 3.950M4 |
| 6) l1 | 1016-3 | 1.928 | 2.193 | 4483244 | 6158924 | 4.263 | 4.314M1 |
| 7) l1 | 1016-4 | 1.984 | 2.253 | 1839001 | 2560108 | 4.022 | 4.457 |
| 8) l1 | 1016-5 | 2.152 | 2.463 | 2234094 | 1986914 | 4.476M4 | 4.427 |
| Sum | 1016-1 | | | 11886280 | 14965749 | 20.798 | 21.588 |
| Average | 1016-1 | | | | | 4.160 | 4.318 |
| 9) l2 | 1260-1 | 2.693 | 3.072 | 2975268 | 3811020 | 4.339M3 | 4.214 |
| 10) l2 | 1260-2 | 2.824 | 3.173 | 4378607 | 4567332 | 4.215M3 | 4.284 |
| 11) l2 | 1260-3 | 3.139 | 3.565 | 2430624 | 3790654 | 3.979M4 | 4.412 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:29 pm
Operator : pest2:kb/sdc
Sample : il11660,42,,pp11790 4PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:25:26 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:23:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 12) l2 | 1260-4 | 3.294 | 3.694 | 5691017 | 7034236 | 4.216M4 | 4.209 |
| 13) l2 | 1260-5 | 3.442 | 3.894 | 4203645 | 4879989 | 4.289M1 | 4.038M4 |
| Sum | 1260-1 | | | 19679161 | 24083232 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 4.208 | 4.231 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:29 pm
Operator : pest2:kb/sdc
Sample : il11660,42,,pp11790 4PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:25:26 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:23:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:29 pm
Operator : pest2:kb/sdc
Sample : il11660,42,,pp11790 4PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:25:26 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:23:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

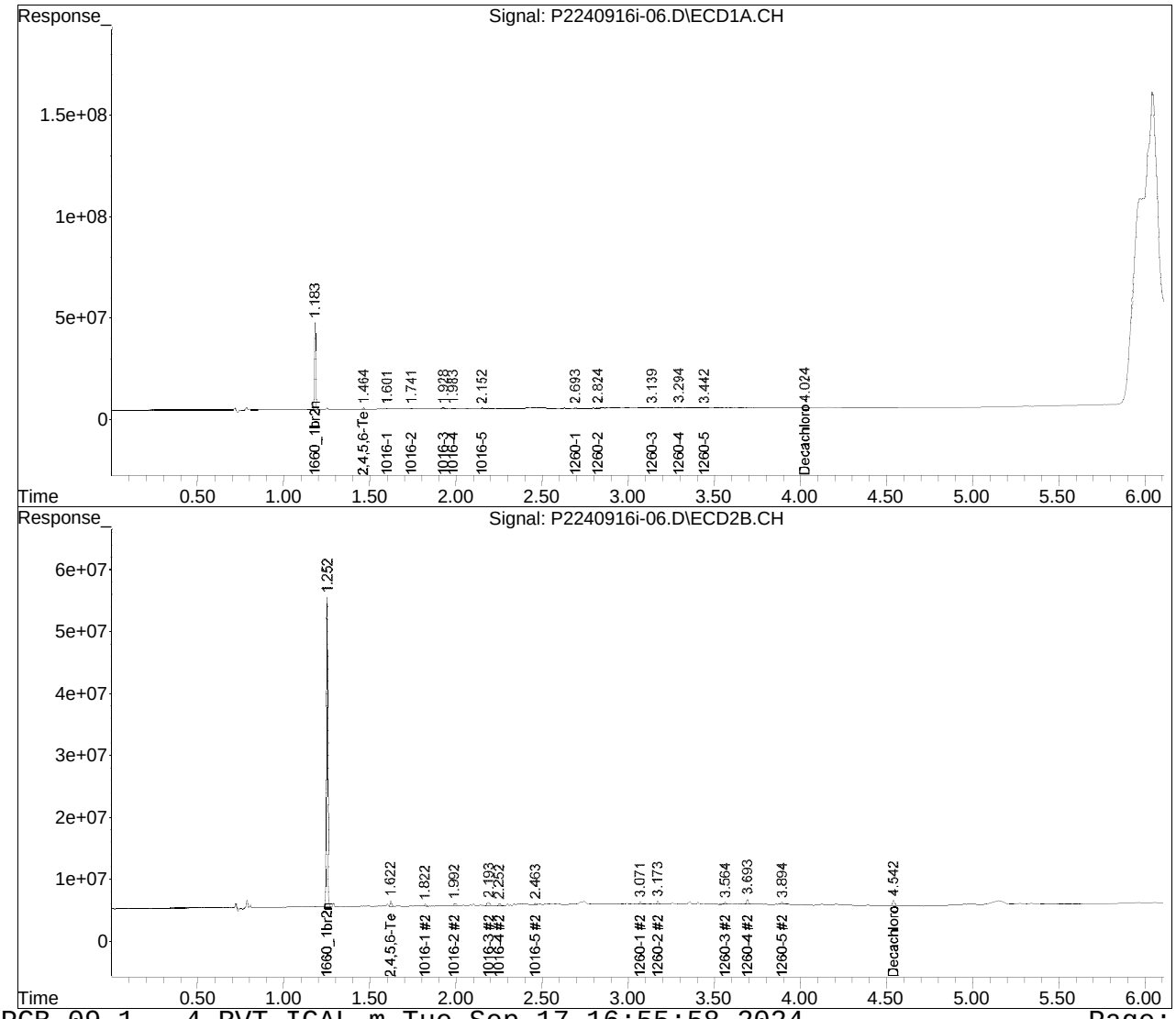
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:29 pm
Operator : pest2:kb/sdc
Sample : il11660,42,,pp11790 4PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:25:26 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:23:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

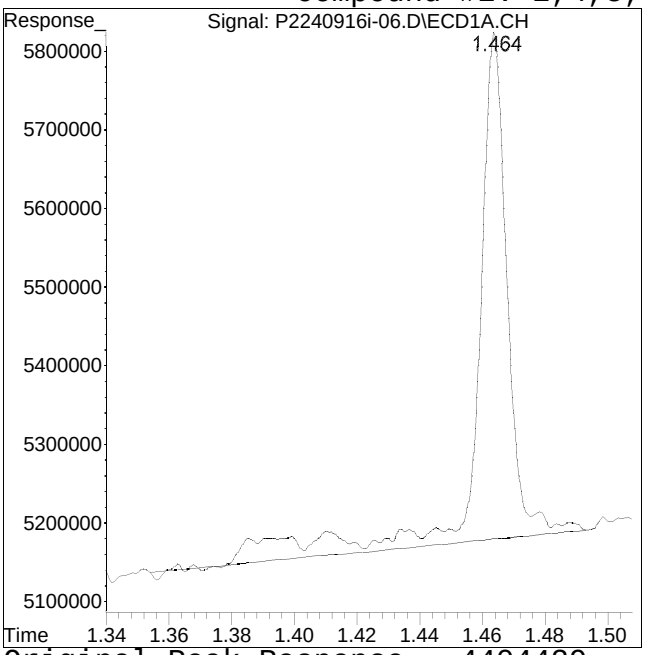
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



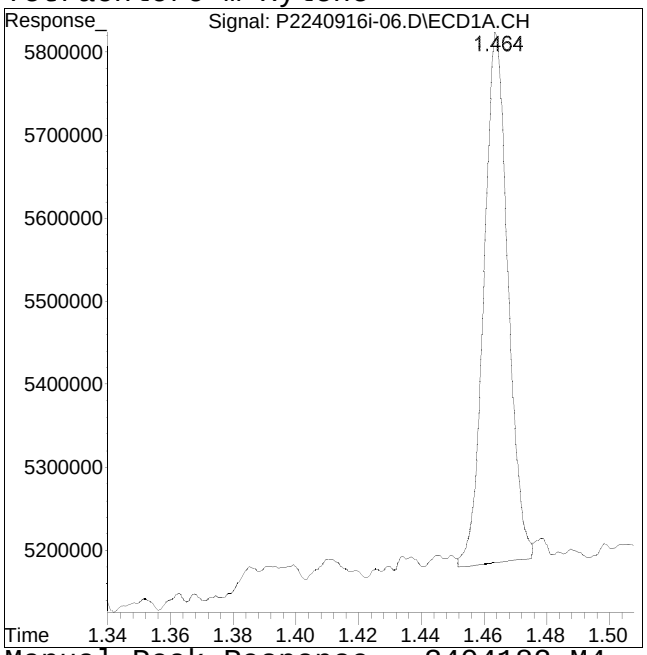
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 4404429



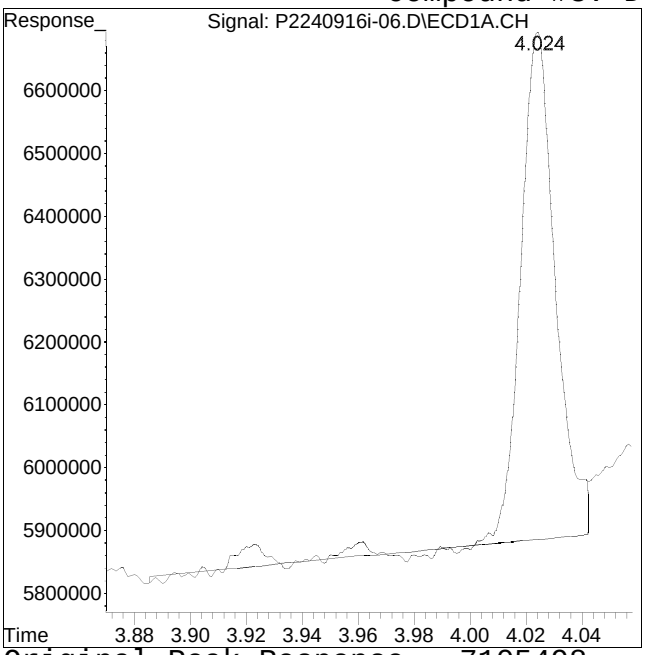

Manual Peak Response = 3404182 M4

M4 = Poor automated baseline construction.

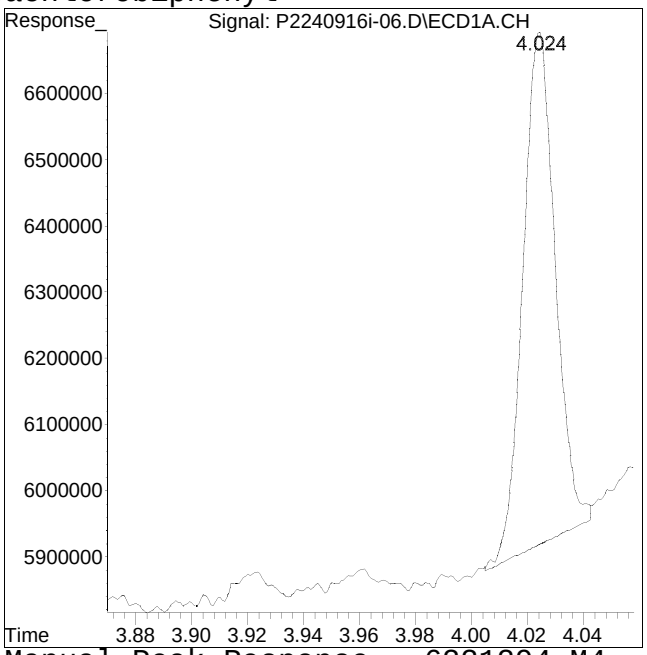
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #3: Decachlorobiphenyl




Original Peak Response = 7105498



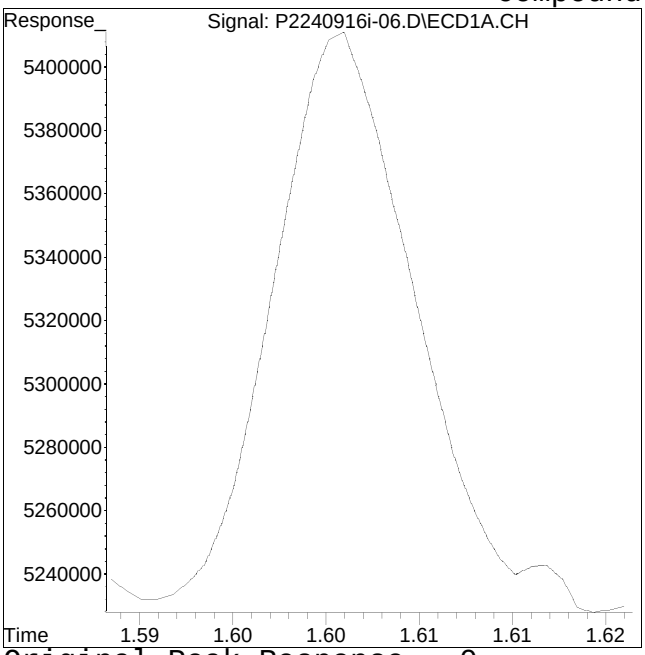

Manual Peak Response = 6221294 M4

M4 = Poor automated baseline construction.

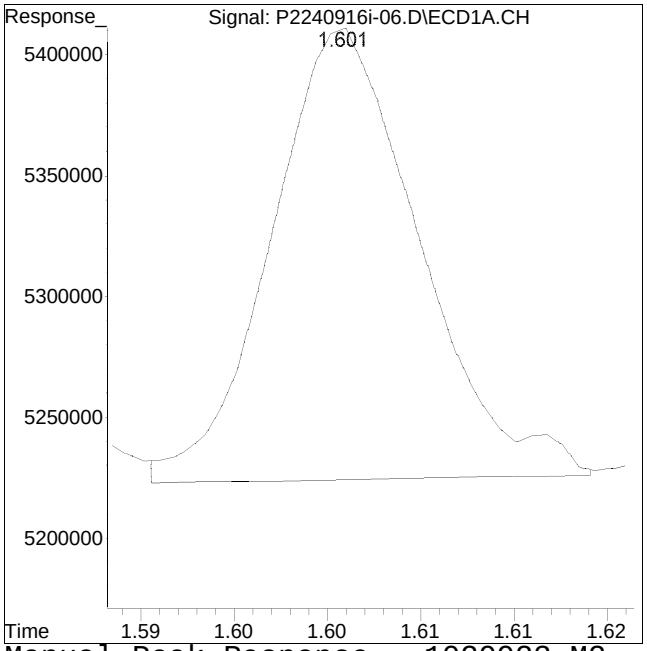
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #4: 1016-1




Original Peak Response = 0



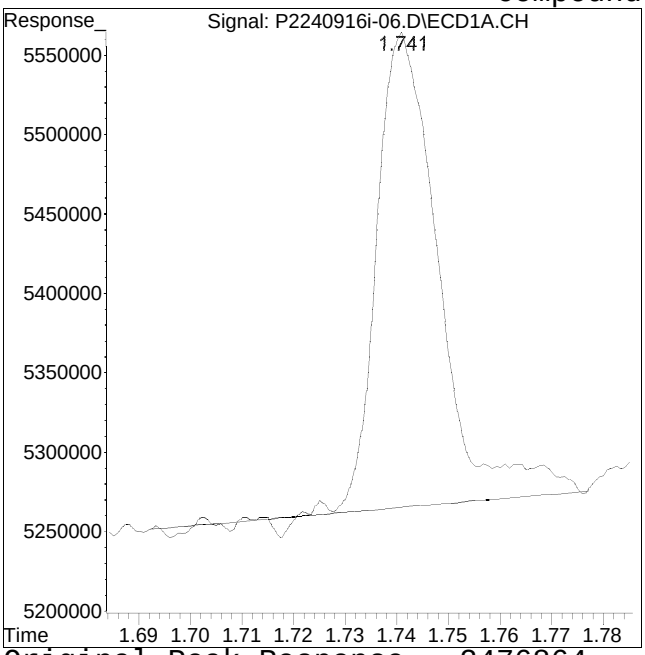

Manual Peak Response = 1029923 M2

M2 = Peak not found by automatic integration algorithm.

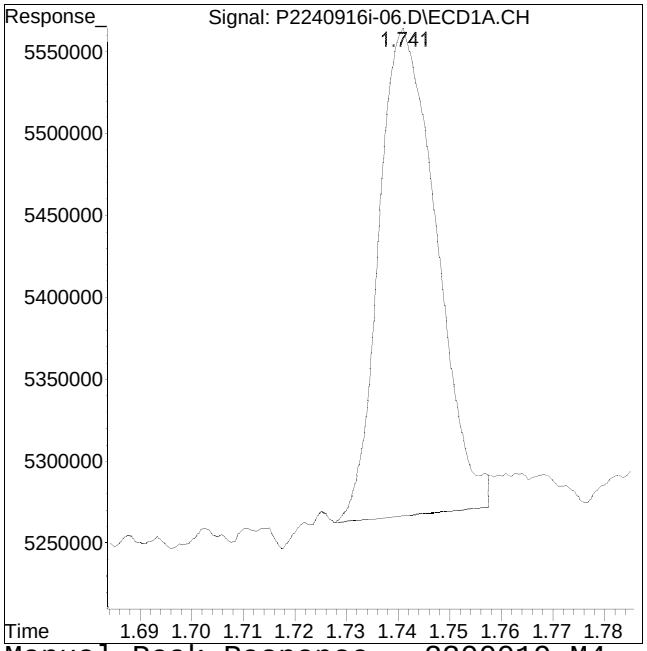
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #5: 1016-2




Original Peak Response = 2476864



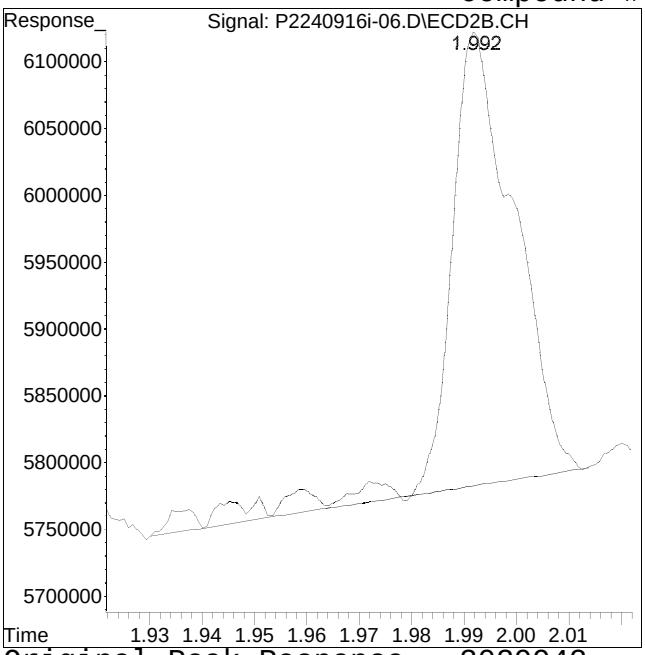

Manual Peak Response = 2300019 M4

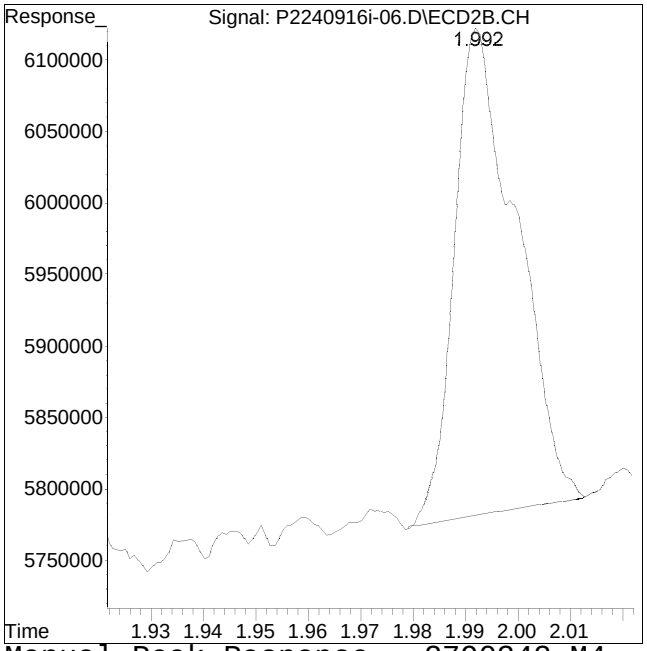
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #56: 1016-2 #2



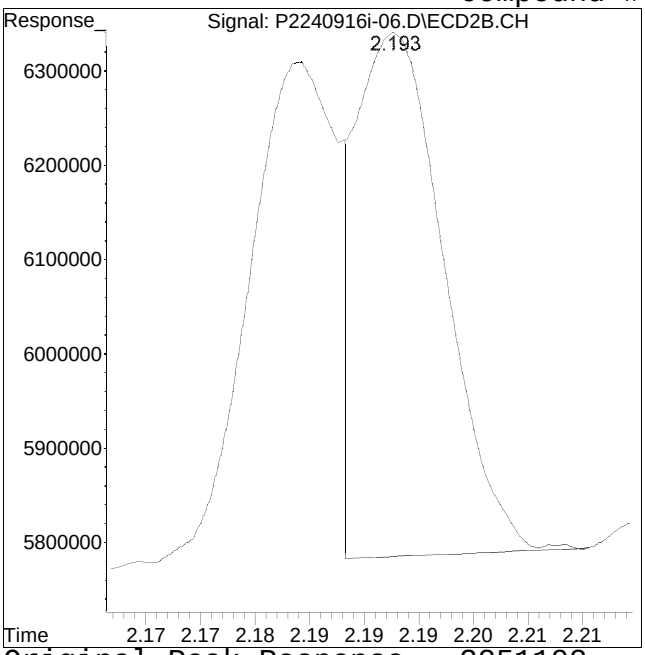



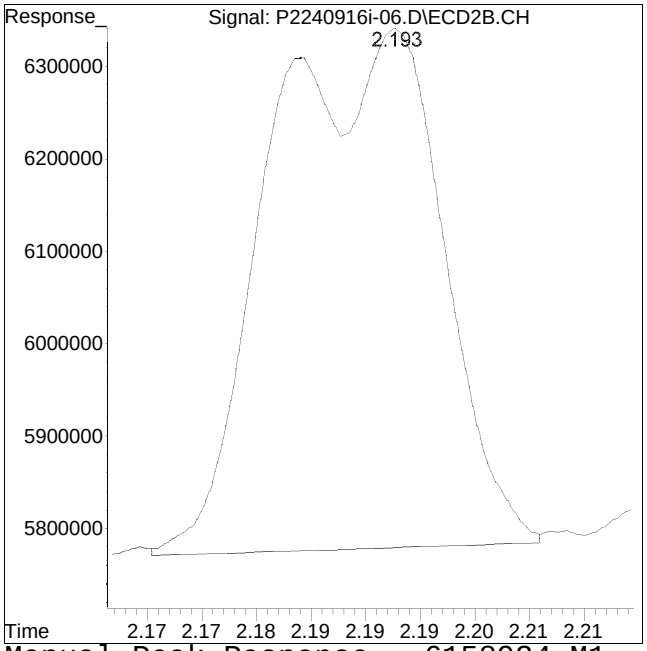

Original Peak Response = 3029942 Manual Peak Response = 2790342 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #57: 1016-3 #2



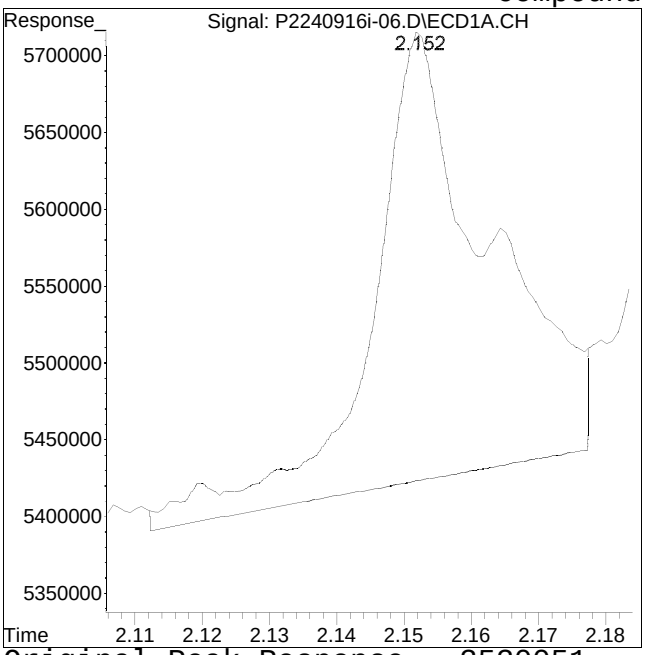




Original Peak Response = 3251102 Manual Peak Response = 6158924 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

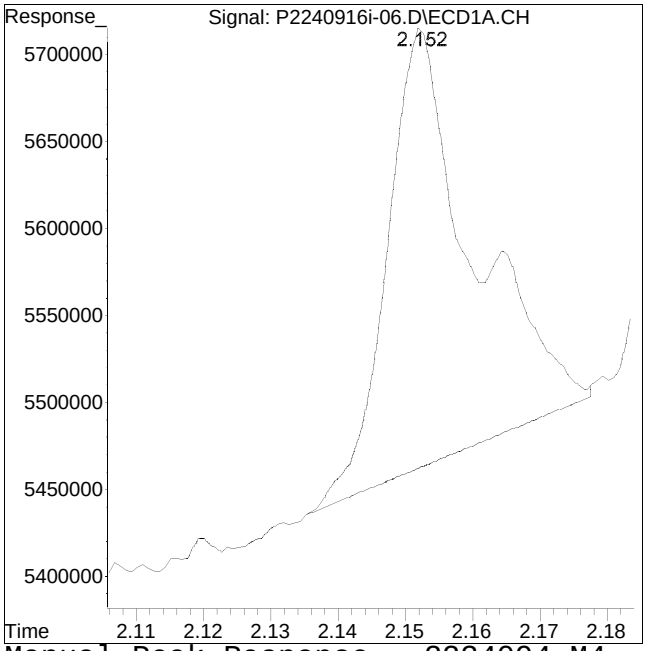
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #8: 1016-5




Original Peak Response = 3530051



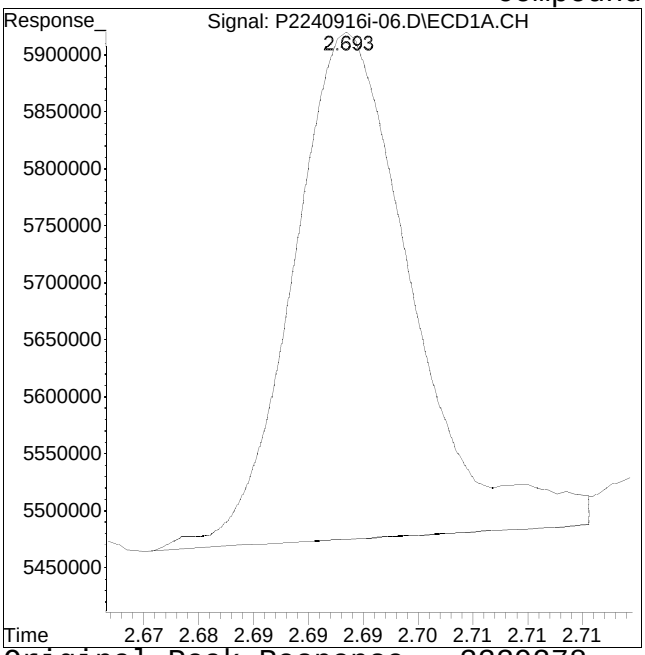

Manual Peak Response = 2234094 M4

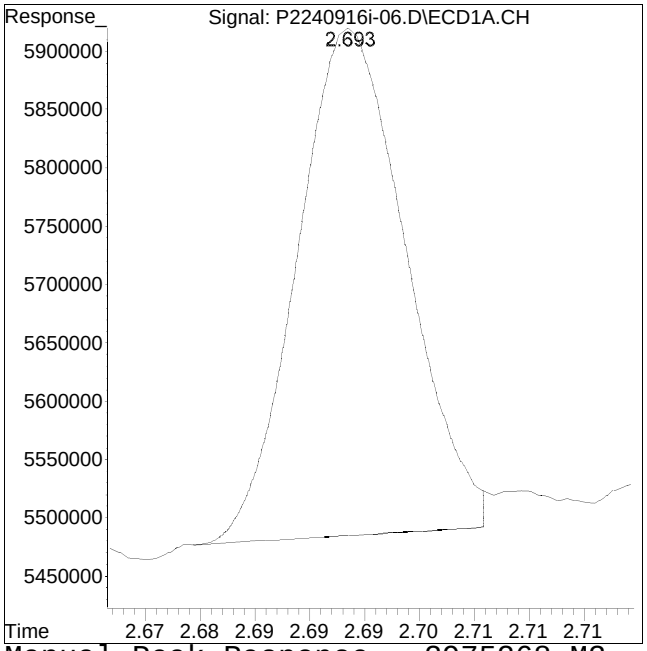
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #9: 1260-1



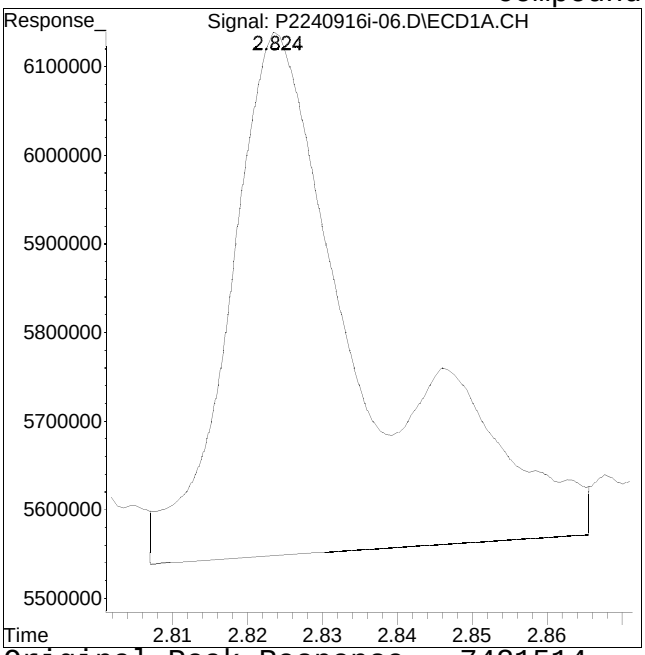



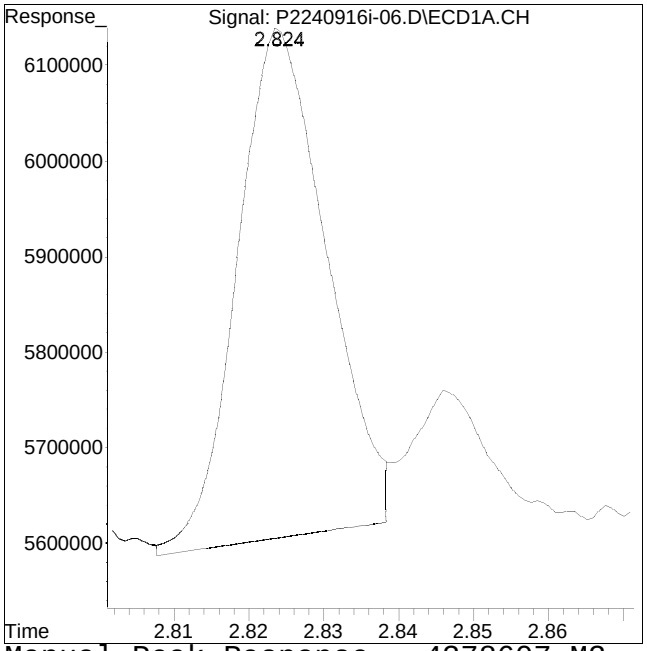

Original Peak Response = 3339278 Manual Peak Response = 2975268 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #10: 1260-2



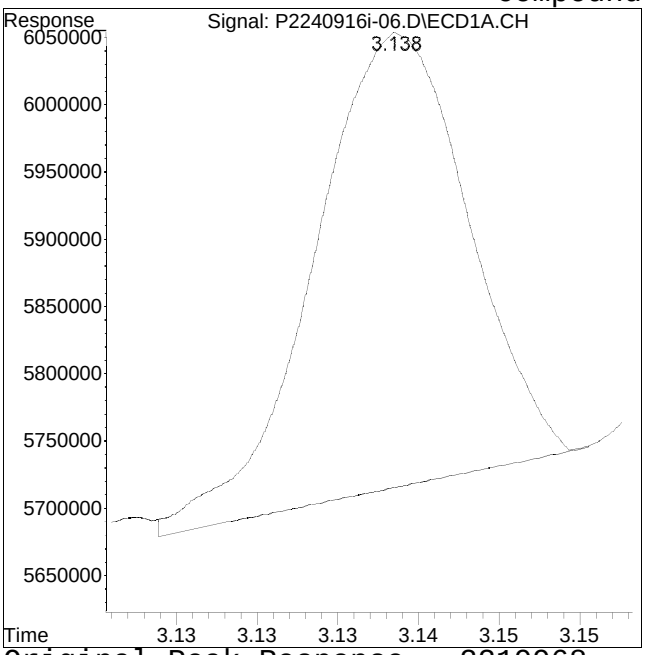




Original Peak Response = 7421514 Manual Peak Response = 4378607 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

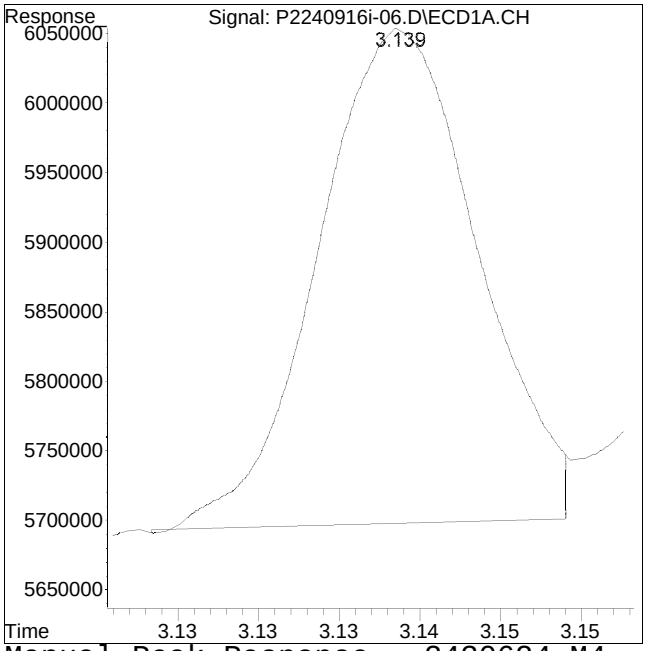
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #11: 1260-3




Original Peak Response = 2219968



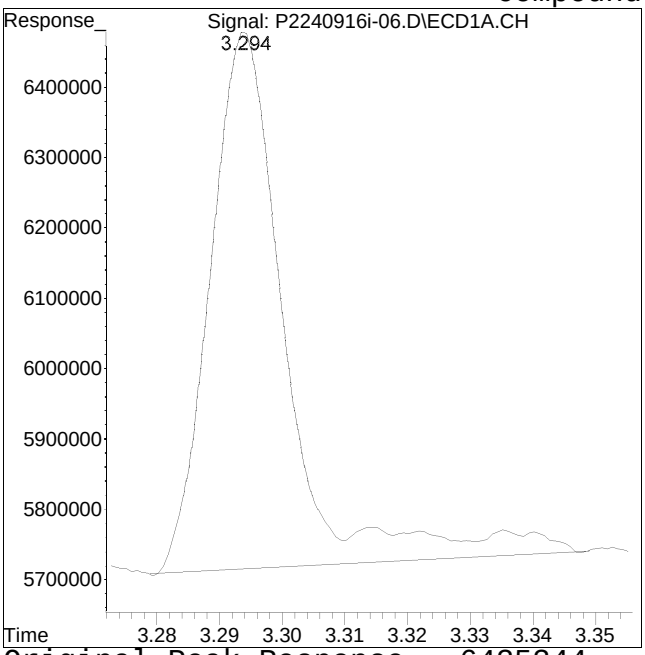

Manual Peak Response = 2430624 M4

M4 = Poor automated baseline construction.

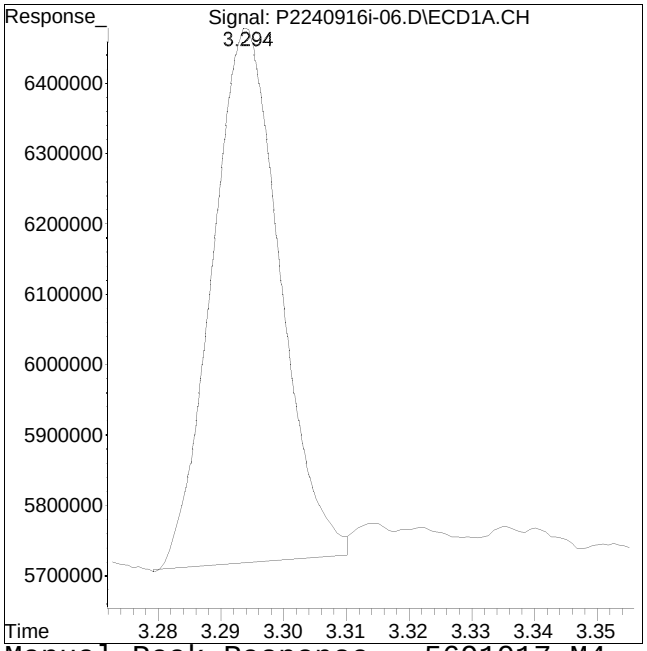
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #12: 1260-4




Original Peak Response = 6435344



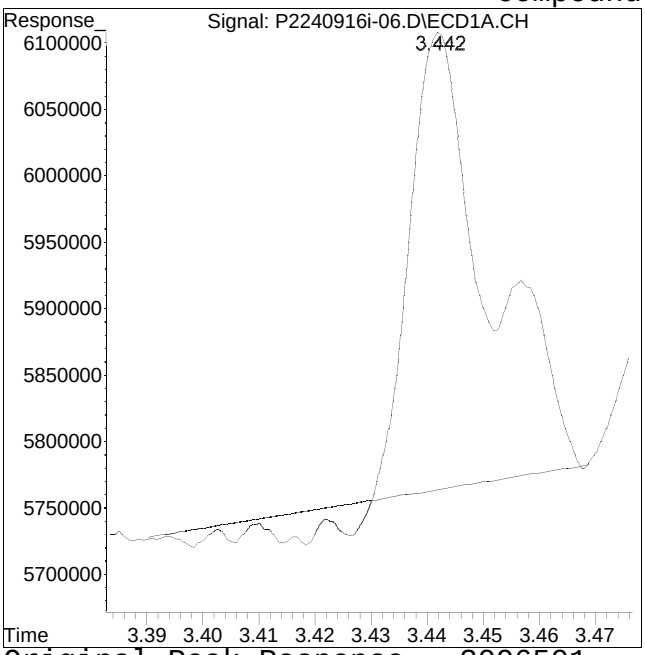

Manual Peak Response = 5691017 M4

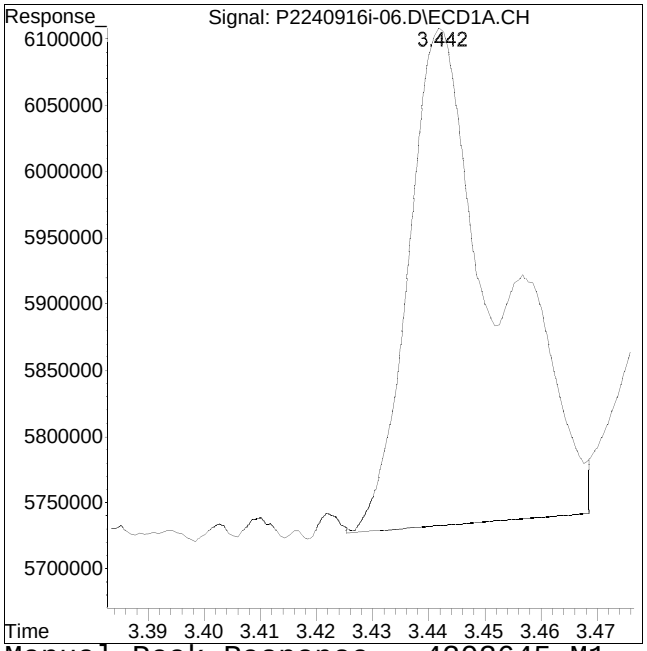
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #13: 1260-5



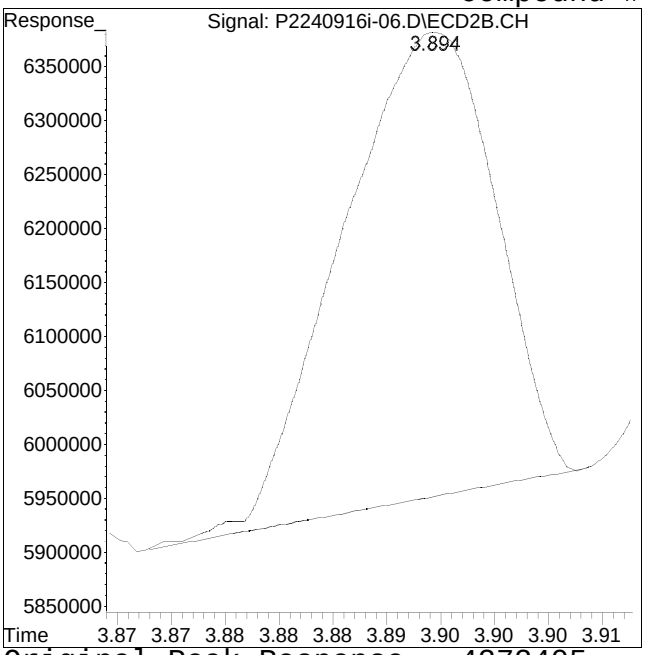



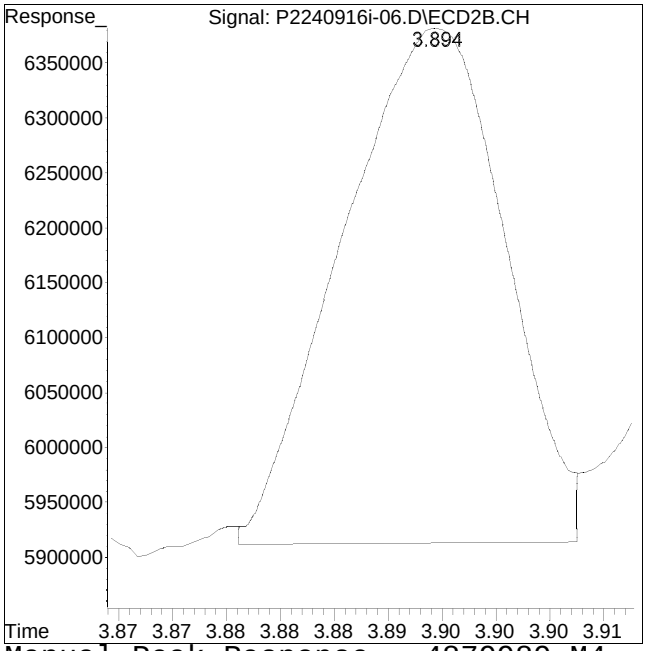

Original Peak Response = 3096501 Manual Peak Response = 4203645 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-06.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:29 pm Instrument : Pest 2
Sample : il11660,42,,pp11790 4PPB Quant Date : 9/16/2024 4:25 pm

Compound #64: 1260-5 #2




Original Peak Response = 4272405 Manual Peak Response = 4879989 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:38 pm
Operator : pest2:kb/sdc
Sample : il21660,42,,pp11790 10PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:21:06 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:20:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.252 | 219.1E6 | 243.8E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.623 | 7987682 | 10752059 | 0.631M4 | 0.646 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.13%# | 0.13%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 13731354 | 15996221 | 1.331 | 1.395 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.27%# | 0.28%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 2592848 | 3299517 | 10.311 | 10.472 |
| 5) l1 | 1016-2 | 1.743 | 1.992 | 5479904 | 6752278 | 9.761 | 9.828M4 |
| 6) l1 | 1016-3 | 1.930 | 2.193 | 9836137 | 14142824 | 9.300M4 | 10.371M4 |
| 7) l1 | 1016-4 | 1.984 | 2.253 | 4120248 | 5578996 | 8.812M4 | 10.068 |
| 8) l1 | 1016-5 | 2.154 | 2.464 | 4247732 | 4514739 | 8.123 | 10.618 |
| Sum | 1016-1 | | | 26276868 | 34288354 | 46.305 | 51.358 |
| Average | 1016-1 | | | | | 9.261 | 10.272 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 6922616 | 9057396 | 10.423M4 | 10.546 |
| 10) l2 | 1260-2 | 2.825 | 3.174 | 10390964 | 10827414 | 10.279M4 | 10.775 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 5904233 | 8783091 | 9.765M4 | 10.885 |
| 12) l2 | 1260-4 | 3.295 | 3.695 | 13679789 | 16641459 | 10.484M4 | 10.453 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:38 pm
Operator : pest2:kb/sdc
Sample : il21660,42,,pp11790 10PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:21:06 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:20:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 13) l2 | 1260-5 | 3.443 | 3.896 | 9648416 | 12378615 | 10.036M4 | 10.915M4 |
| Sum | 1260-1 | | | 46546019 | 57687975 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 10.197 | 10.715 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:38 pm
Operator : pest2:kb/sdc
Sample : il21660,42,,pp11790 10PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:21:06 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:20:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:38 pm
Operator : pest2:kb/sdc
Sample : il21660,42,,pp11790 10PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:21:06 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:20:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

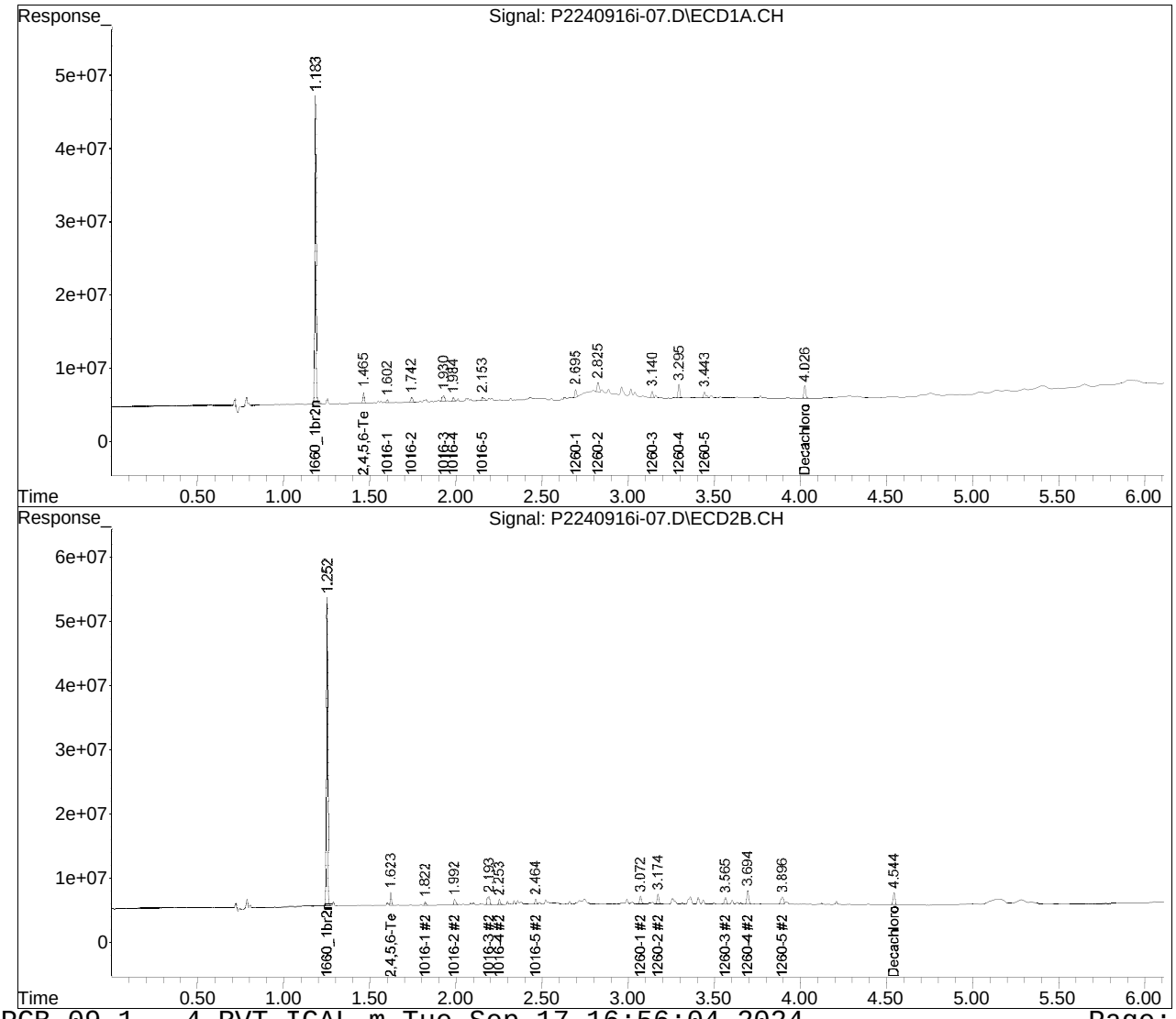
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:38 pm
Operator : pest2:kb/sdc
Sample : il21660,42,,pp11790 10PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:21:06 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:20:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

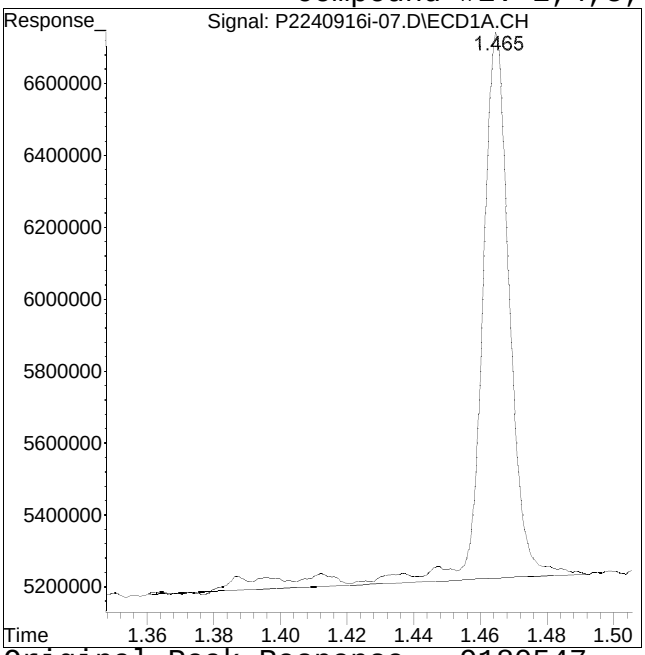
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

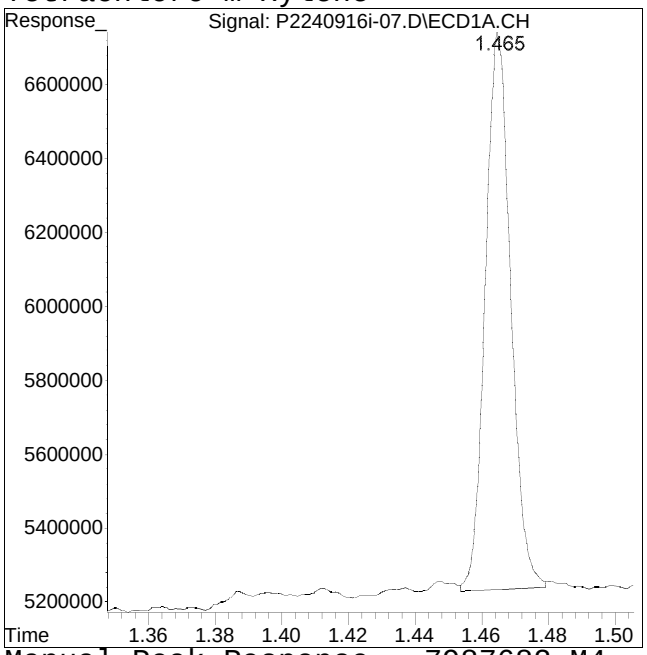


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



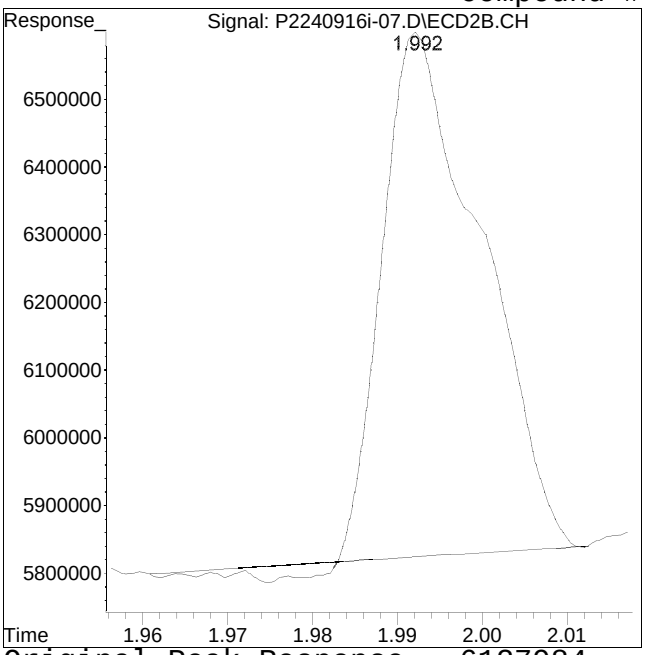




Original Peak Response = 9180547 Manual Peak Response = 7987682 M4
M4 = Poor automated baseline construction.

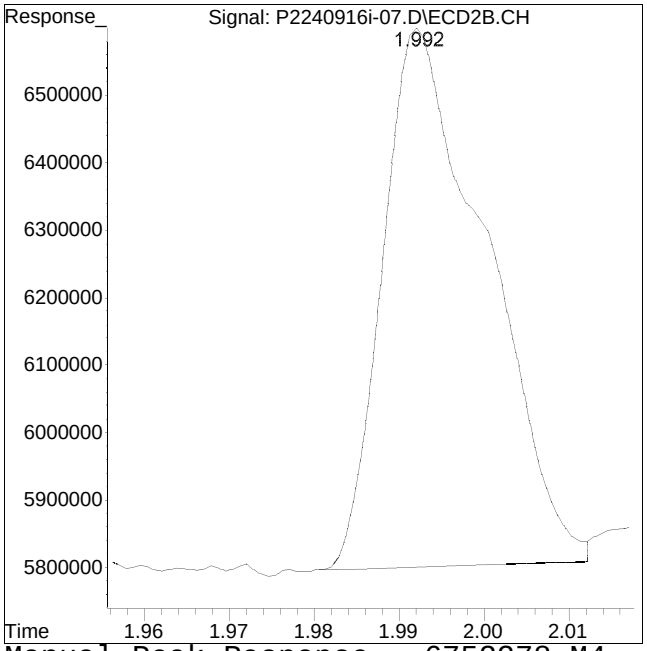
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #56: 1016-2 #2




Original Peak Response = 6127984



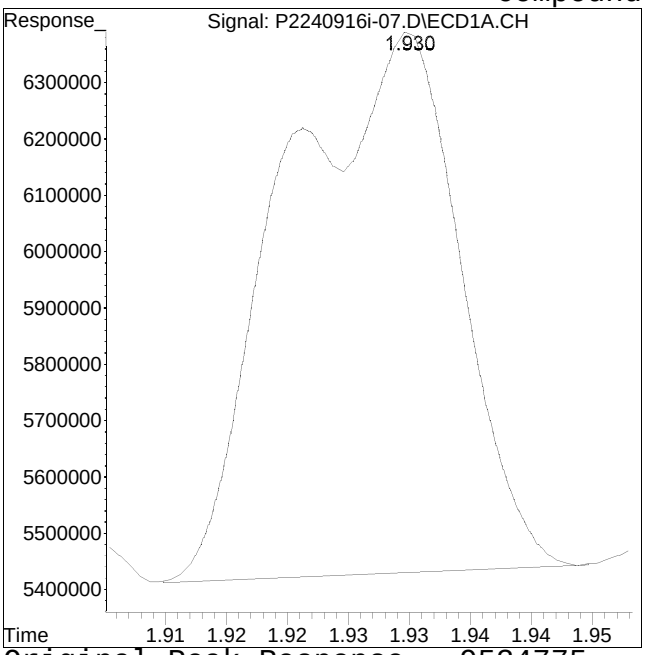

Manual Peak Response = 6752278 M4

M4 = Poor automated baseline construction.

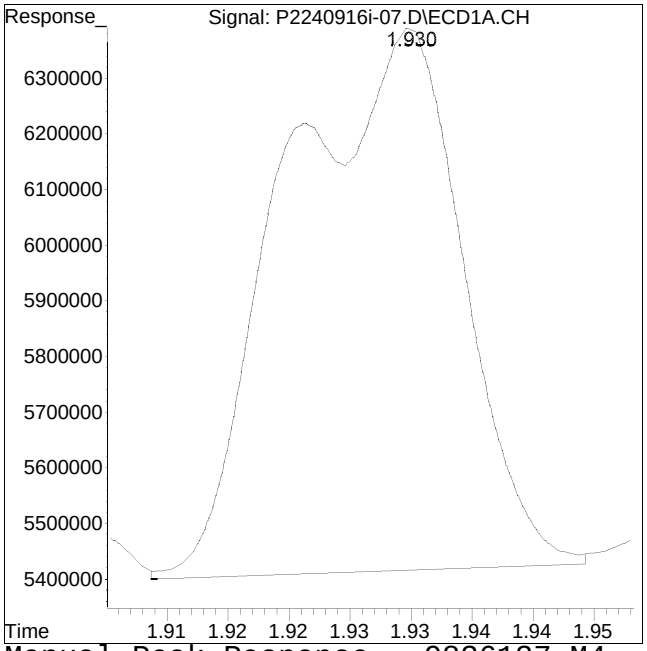
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #6: 1016-3




Original Peak Response = 9534775



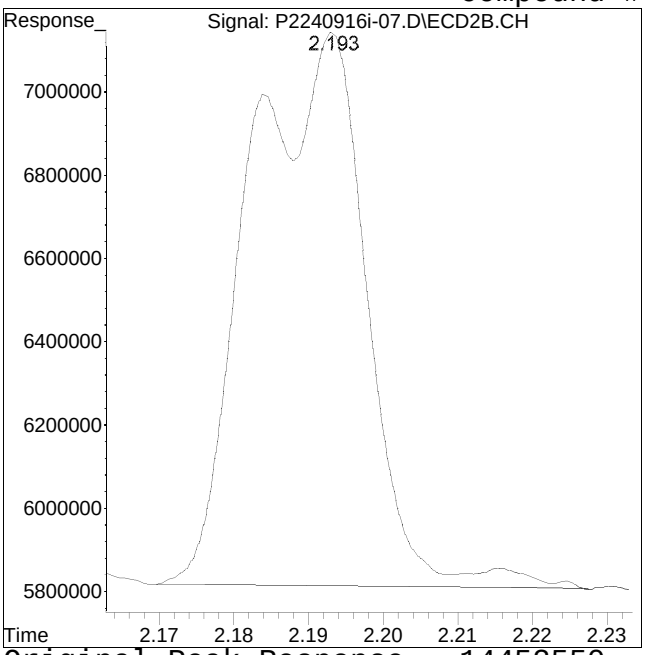

Manual Peak Response = 9836137 M4

M4 = Poor automated baseline construction.

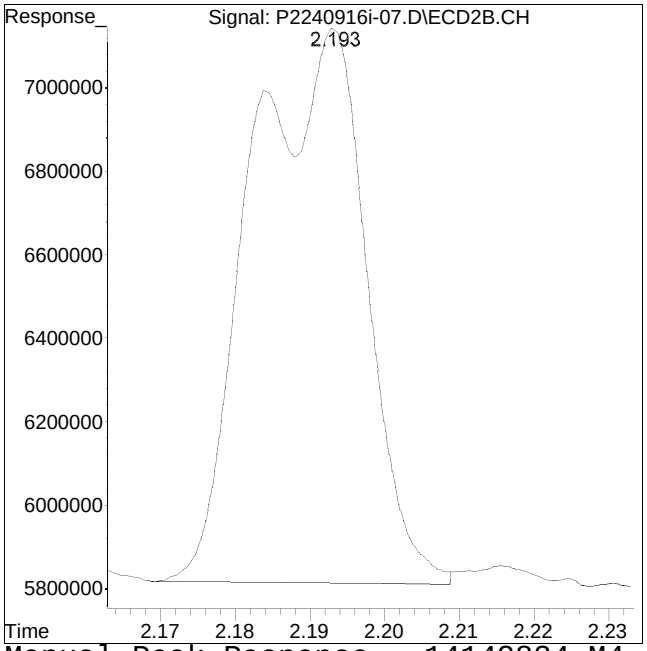
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #57: 1016-3 #2




Original Peak Response = 14452550



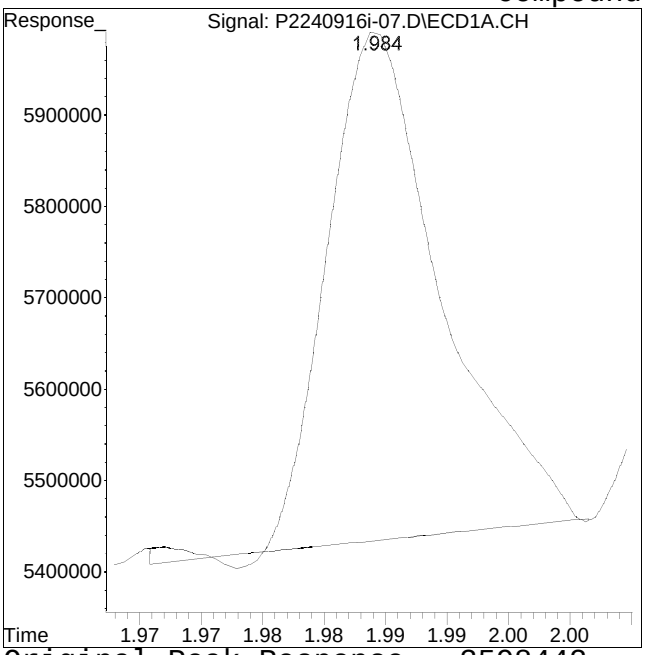

Manual Peak Response = 14142824 M4

M4 = Poor automated baseline construction.

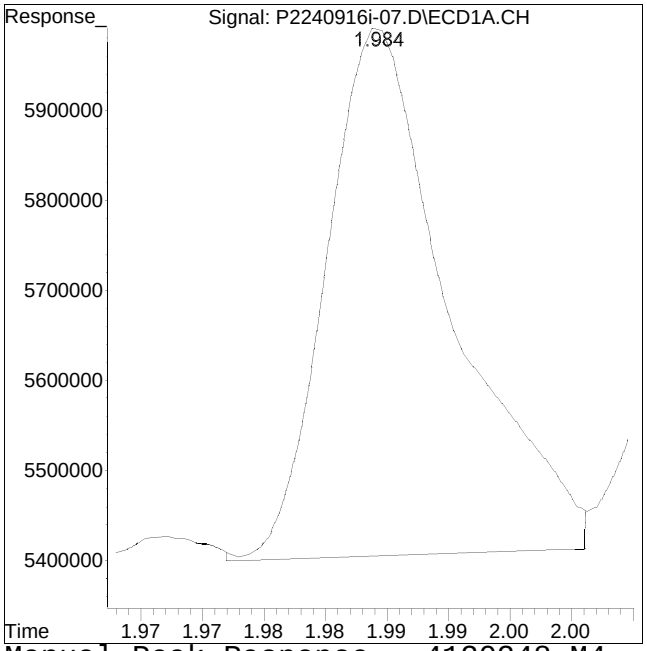
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #7: 1016-4




Original Peak Response = 3598442



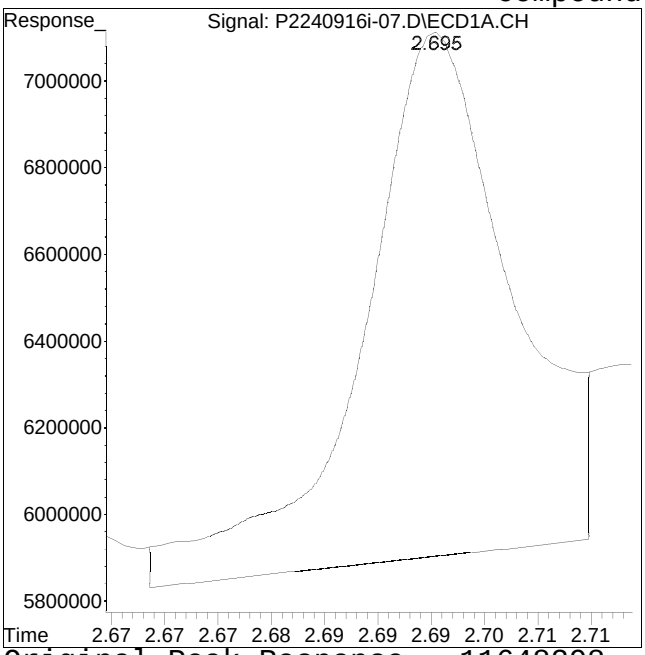

Manual Peak Response = 4120248 M4

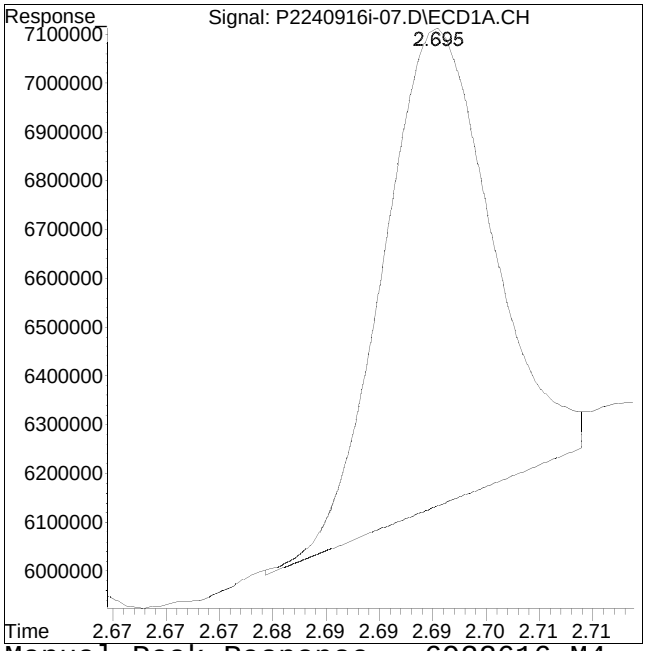
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #9: 1260-1



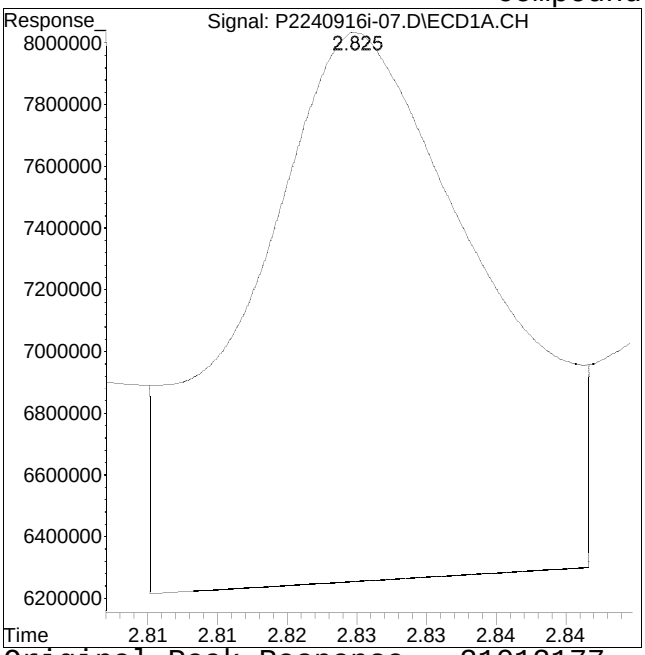




Original Peak Response = 11648298 Manual Peak Response = 6922616 M4
M4 = Poor automated baseline construction.

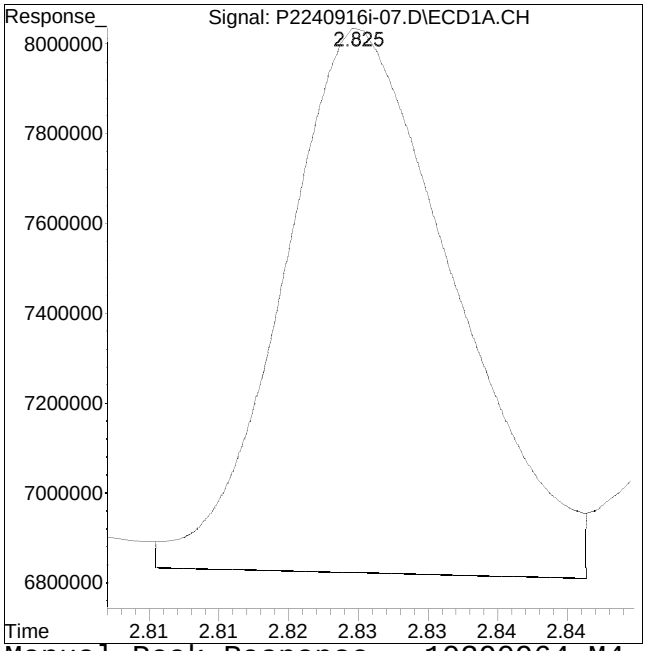
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #10: 1260-2




Original Peak Response = 21012177



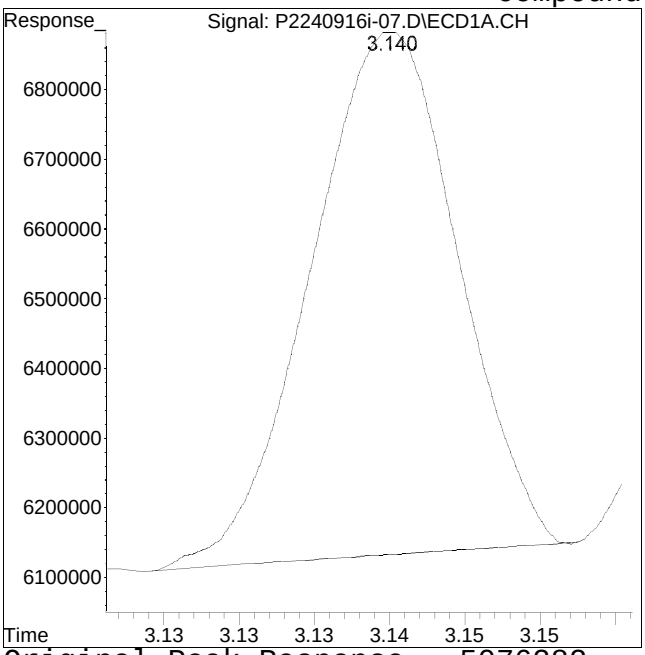

Manual Peak Response = 10390964 M4

M4 = Poor automated baseline construction.

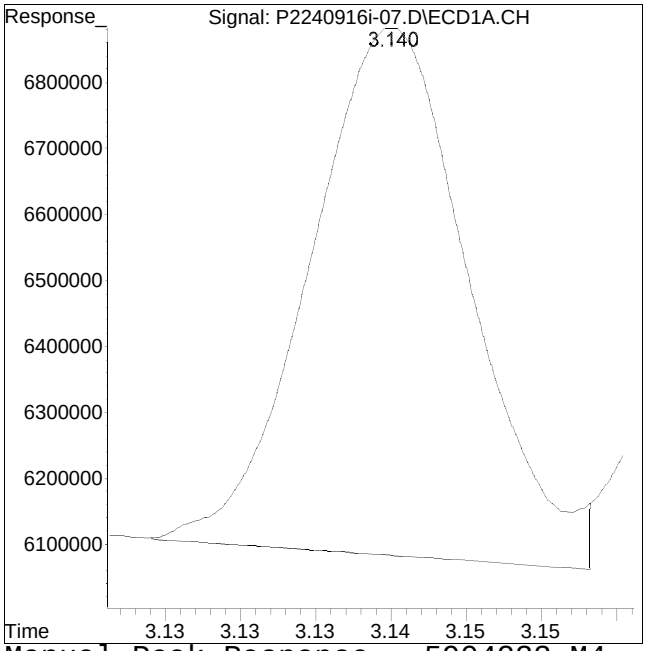
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #11: 1260-3




Original Peak Response = 5076282



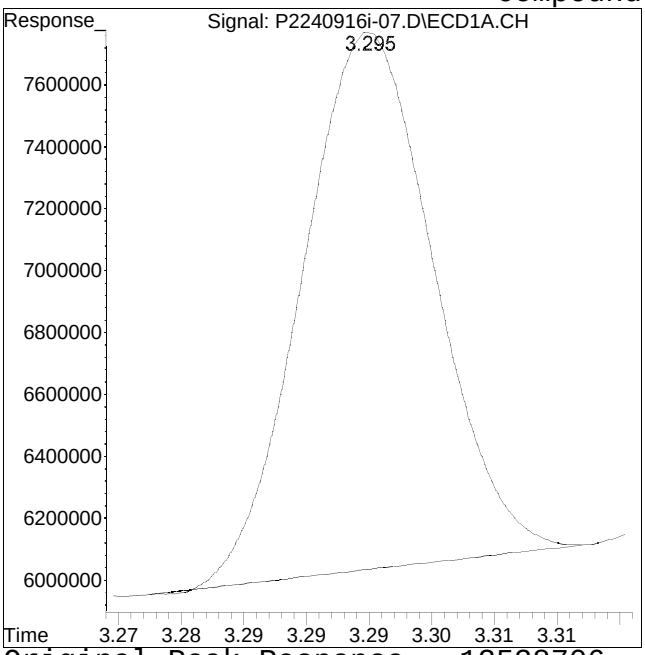

Manual Peak Response = 5904233 M4

M4 = Poor automated baseline construction.

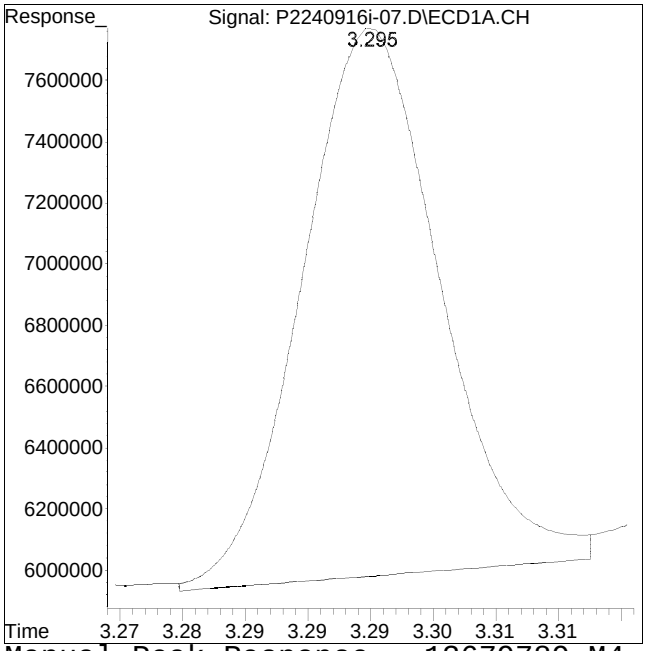
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #12: 1260-4




Original Peak Response = 12538706



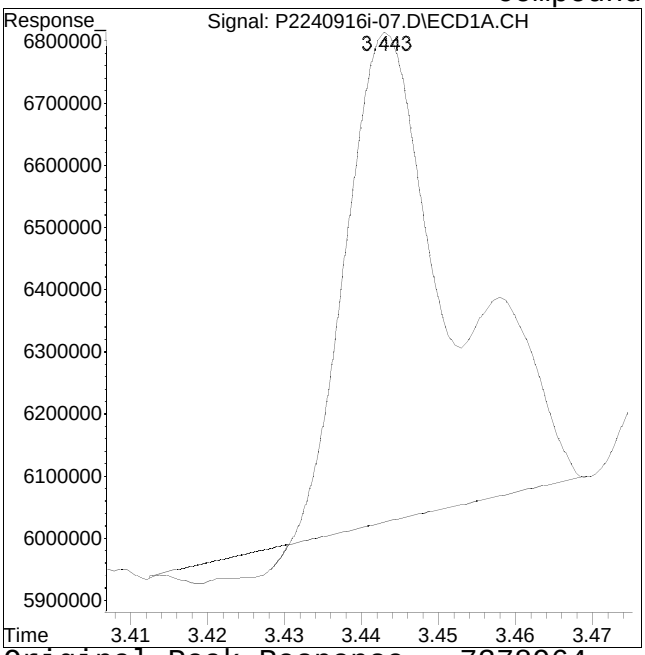

Manual Peak Response = 13679789 M4

M4 = Poor automated baseline construction.

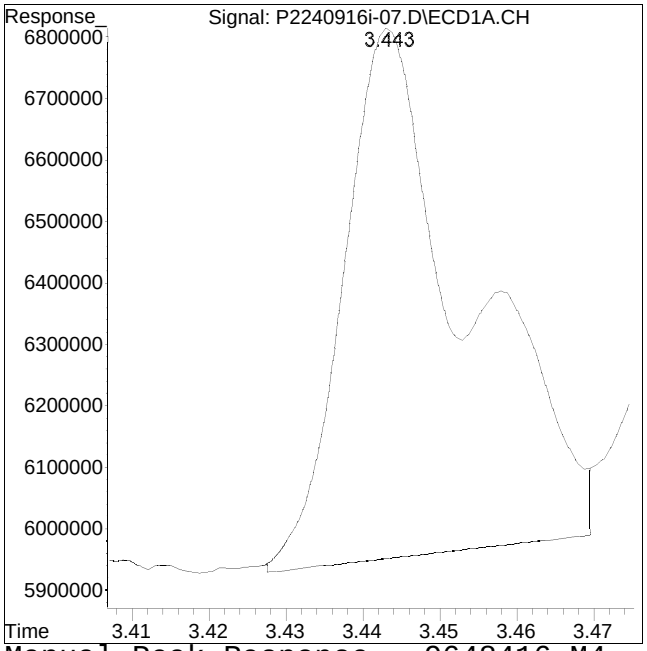
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #13: 1260-5




Original Peak Response = 7378964



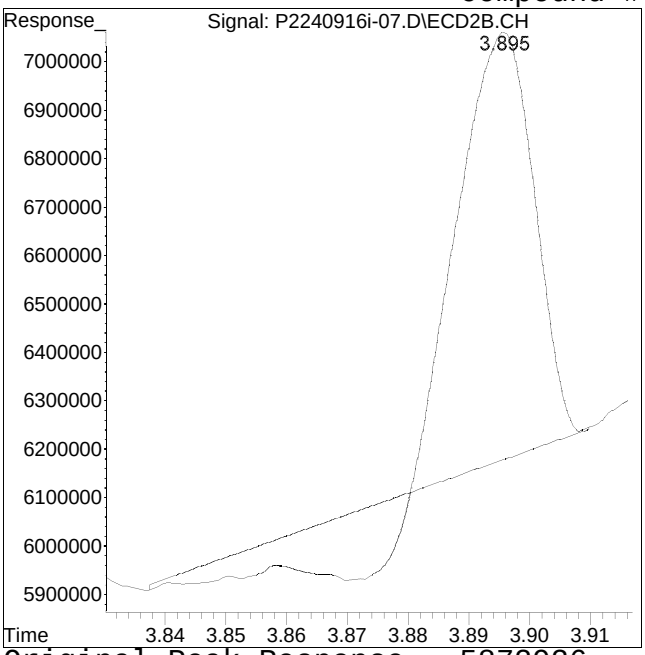

Manual Peak Response = 9648416 M4

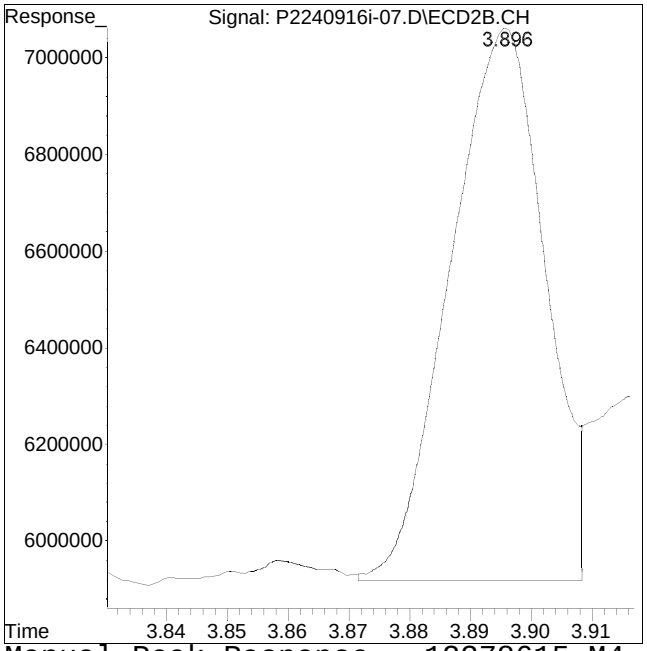
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-07.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:38 pm Instrument : Pest 2
Sample : il21660,42,,pp11790 10PPB Quant Date : 9/16/2024 4:21 pm

Compound #64: 1260-5 #2




Original Peak Response = 5872926 Manual Peak Response = 12378615 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:47 pm
Operator : pest2:kb/sdc
Sample : il31660,42,,pp11790 20PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:19:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:18:55 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 214.3E6 | 243.4E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.623 | 16020654 | 22117529 | 1.309M4 | 1.384 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.26%# | 0.28%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 25914732 | 30032686 | 2.576 | 2.688 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.52%# | 0.54%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.603 | 1.823 | 5018375 | 6360232 | 20.831 | 20.435 |
| 5) l1 | 1016-2 | 1.743 | 1.992 | 10998480 | 13977131 | 20.066 | 20.762M4 |
| 6) l1 | 1016-3 | 1.930 | 2.194 | 21149857 | 27872165 | 20.918 | 20.960 |
| 7) l1 | 1016-4 | 1.985 | 2.253 | 9501897 | 11367344 | 21.624 | 21.119 |
| 8) l1 | 1016-5 | 2.154 | 2.464 | 10607500 | 8713170 | 21.543 | 21.072 |
| | Sum 1016-1 | | | 57276108 | 68290042 | 104.982 | 104.349 |
| | Average 1016-1 | | | | | 20.996 | 20.870 |
| 9) l2 | 1260-1 | 2.696 | 3.072 | 13204544 | 17107728 | 20.673 | 19.899 |
| 10) l2 | 1260-2 | 2.826 | 3.174 | 19987171 | 20486116 | 20.441 | 20.853 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 11909007 | 16402627 | 20.284M4 | 20.730 |
| 12) l2 | 1260-4 | 3.295 | 3.695 | 25682756 | 32138585 | 20.258M4 | 20.438 |
| 13) l2 | 1260-5 | 3.443 | 3.896 | 18874650 | 23027119 | 20.154M1 | 20.680 |
| | Sum 1260-1 | | | 89658127 | 109.2E6 | NoCal | NoCal D |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:47 pm
Operator : pest2:kb/sdc
Sample : il31660,42,,pp11790 20PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:19:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:18:55 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | 1260-1 | | | | | 20.362 | 20.520 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:47 pm
Operator : pest2:kb/sdc
Sample : il31660,42,,pp11790 20PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:19:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:18:55 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

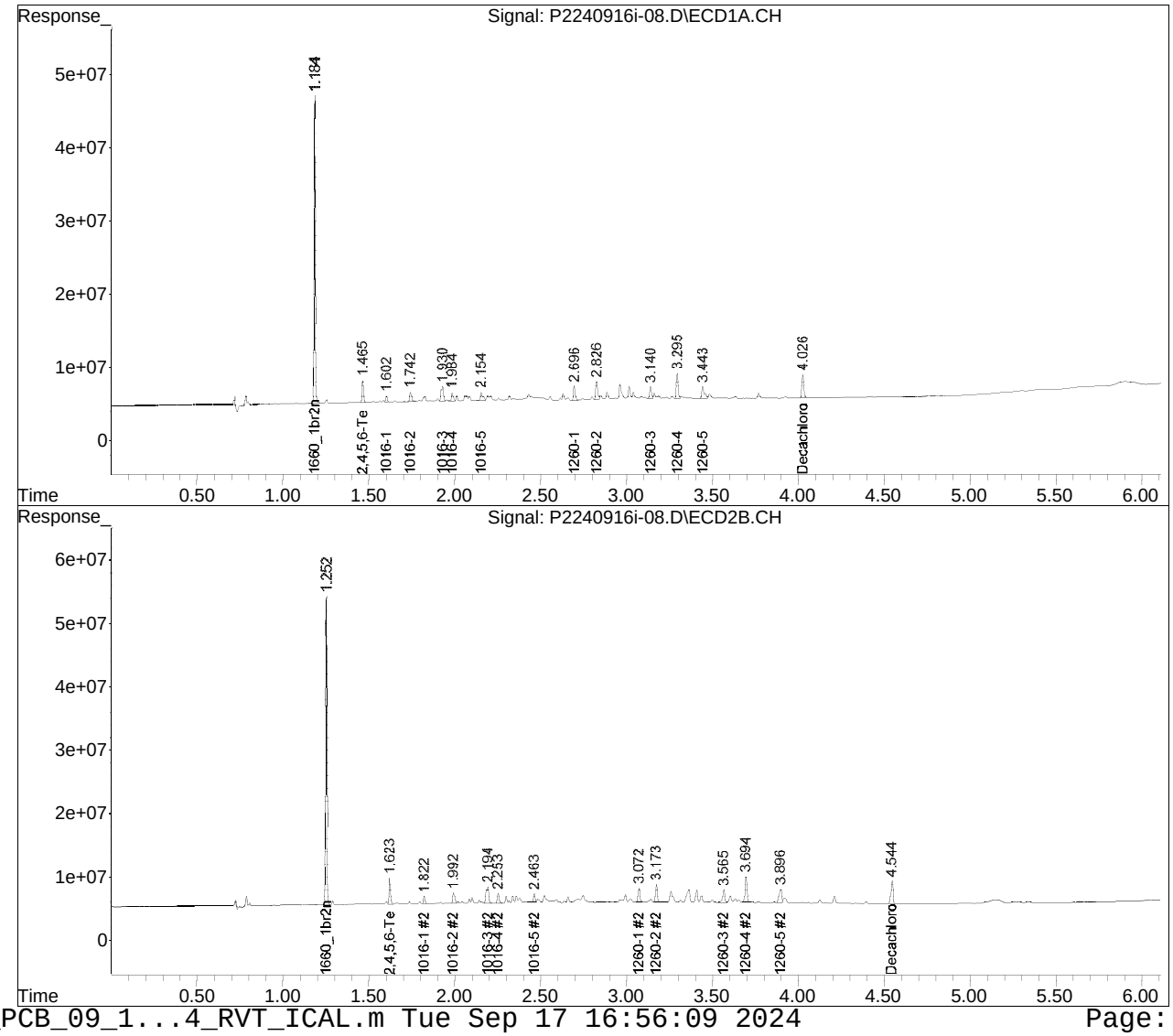
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:47 pm
Operator : pest2:kb/sdc
Sample : il31660,42,,pp11790 20PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:19:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:18:55 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

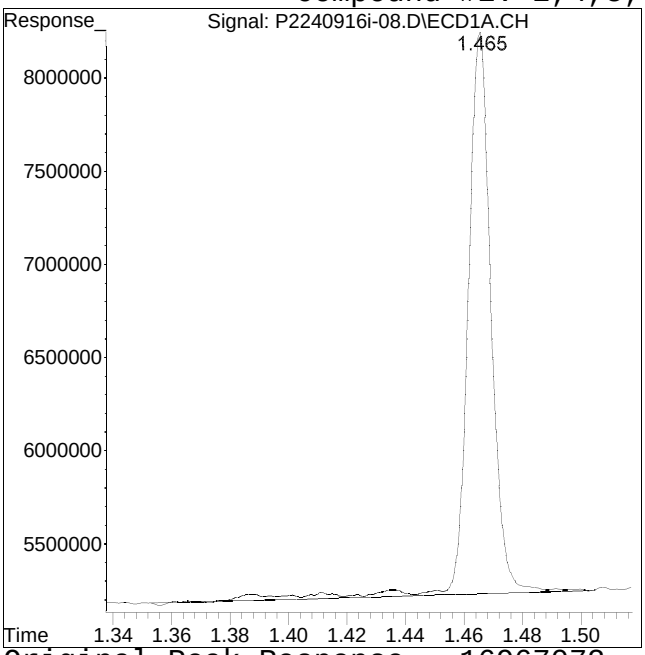
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

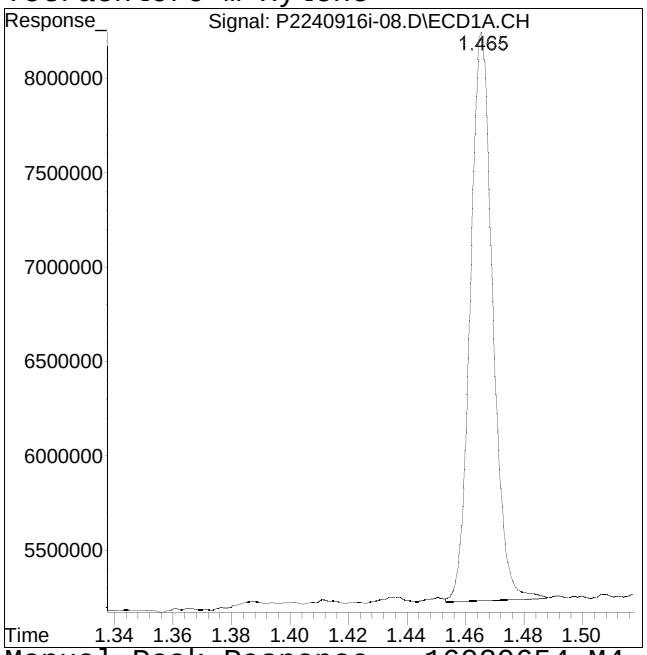


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-08.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:47 pm Instrument : Pest 2
Sample : il31660,42,,pp11790 20PPB Quant Date : 9/16/2024 4:19 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



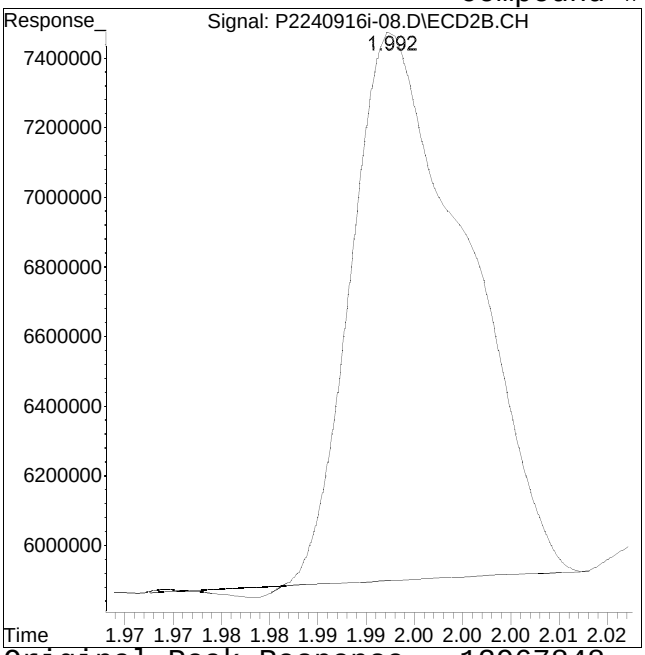




Original Peak Response = 16967072 Manual Peak Response = 16020654 M4
M4 = Poor automated baseline construction.

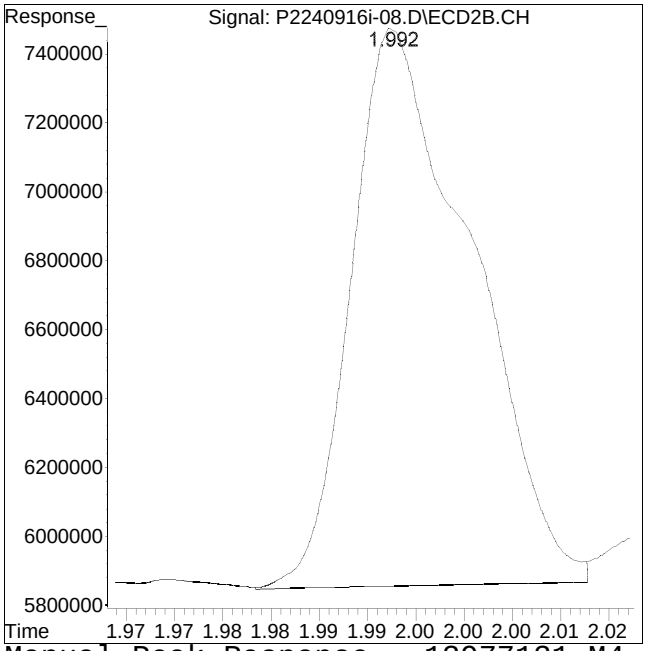
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-08.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:47 pm Instrument : Pest 2
Sample : il31660,42,,pp11790 20PPB Quant Date : 9/16/2024 4:19 pm

Compound #56: 1016-2 #2




Original Peak Response = 12967848



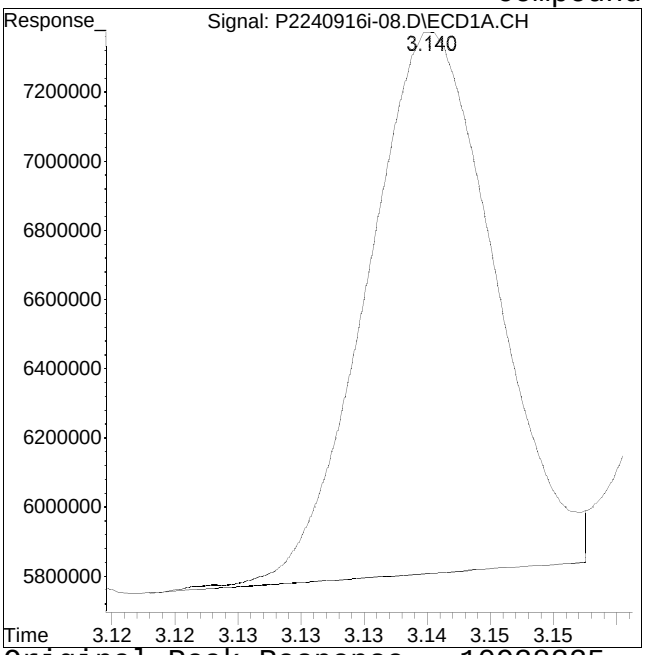

Manual Peak Response = 13977131 M4

M4 = Poor automated baseline construction.

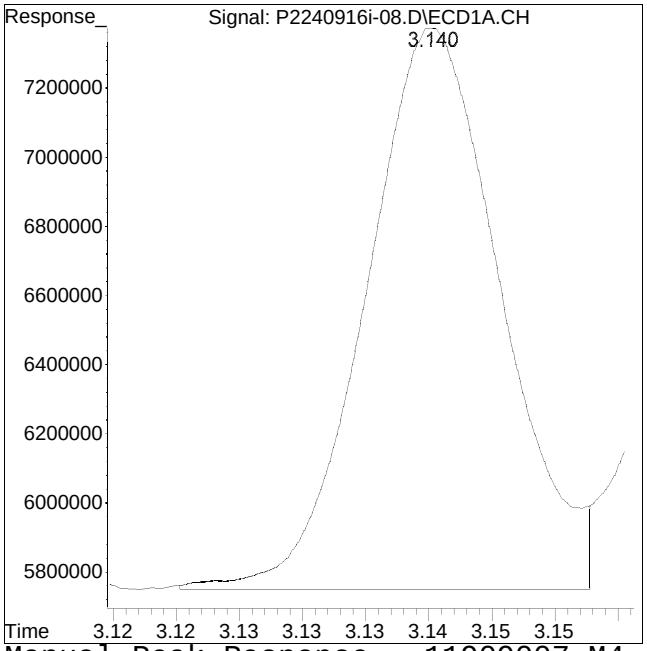
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-08.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:47 pm Instrument : Pest 2
Sample : il31660,42,,pp11790 20PPB Quant Date : 9/16/2024 4:19 pm

Compound #11: 1260-3




Original Peak Response = 10938335



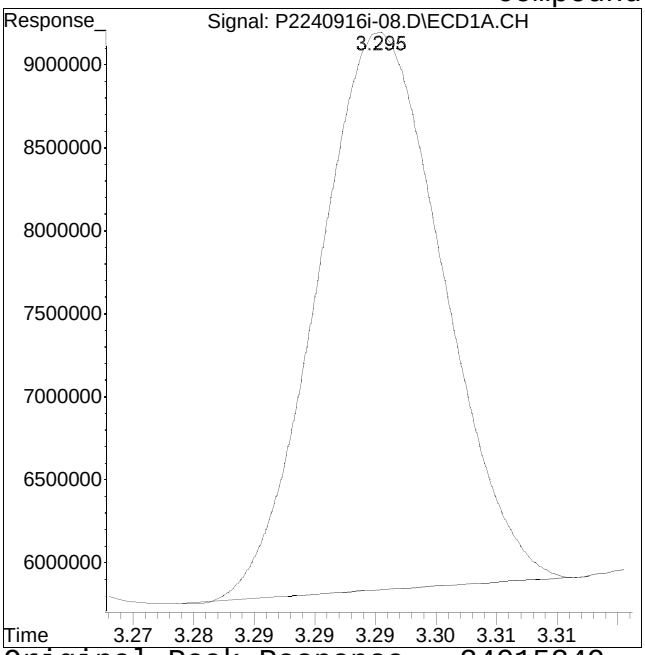

Manual Peak Response = 11909007 M4

M4 = Poor automated baseline construction.

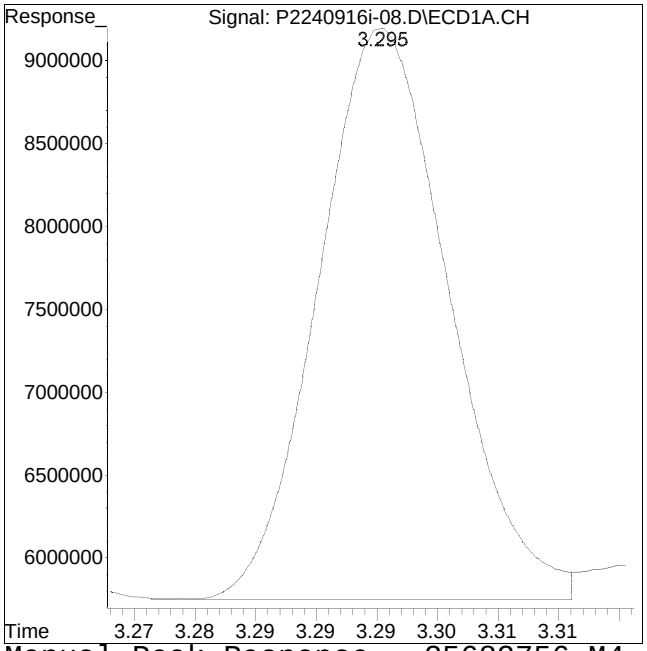
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-08.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:47 pm Instrument : Pest 2
Sample : il31660,42,,pp11790 20PPB Quant Date : 9/16/2024 4:19 pm

Compound #12: 1260-4




Original Peak Response = 24015249



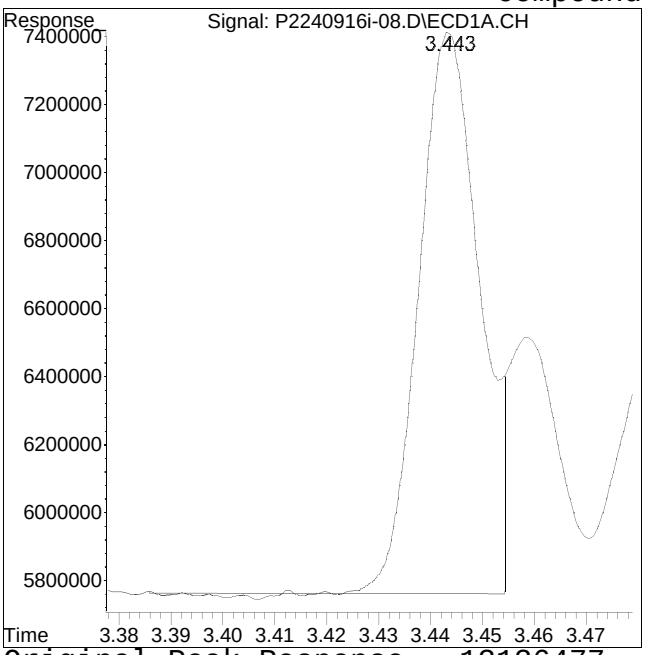

Manual Peak Response = 25682756 M4

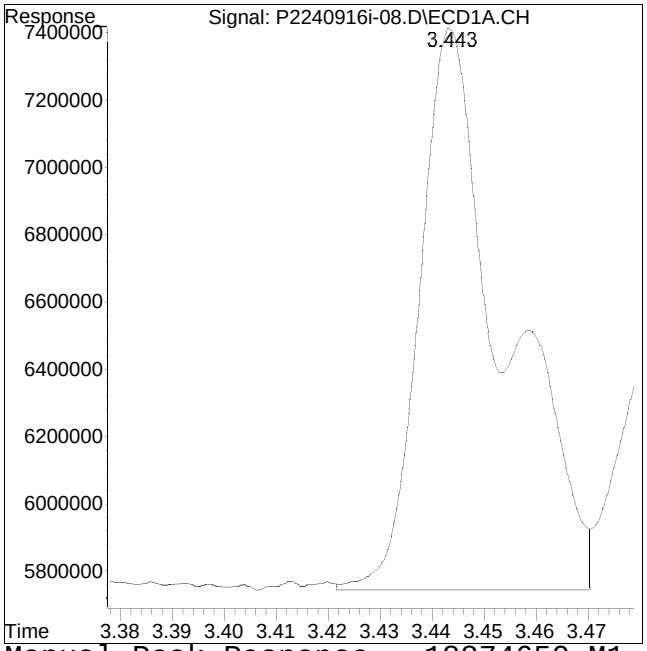
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-08.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:47 pm Instrument : Pest 2
Sample : il31660,42,,pp11790 20PPB Quant Date : 9/16/2024 4:19 pm

Compound #13: 1260-5




Original Peak Response = 13136477 Manual Peak Response = 18874650 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:55 pm
Operator : pest2:kb/sdc
Sample : il41660,42,,pp11790 30PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:17:31 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:12:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 216.0E6 | 247.4E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 23701420 | 31194363 | 1.889M4 | 1.847 |
| | Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | 0.38%# | 0.37%# |
| 3) s | Decachlorobi | 4.026 | 4.545 | 38950596 | 43606128 | 3.826 | 3.759 |
| | Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | 0.77%# | 0.75%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 7287008 | 9490556 | 29.170 | 27.538 |
| 5) l1 | 1016-2 | 1.742 | 1.993 | 16579873 | 20527486 | 31.702 | 29.491M4 |
| 6) l1 | 1016-3 | 1.930 | 2.194 | 30584344 | 40547738 | 29.036 | 29.808 |
| 7) l1 | 1016-4 | 1.984 | 2.254 | 13291546 | 16412600 | 28.306 | 28.349 |
| 8) l1 | 1016-5 | 2.154 | 2.465 | 14893970 | 12608593 | 27.402 | 29.750 |
| | Sum 1016-1 | | | 82636742 | 99586974 | 145.616 | 144.936 |
| | Average 1016-1 | | | | | 29.123 | 28.987 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 19320420 | 26215729 | 28.174 | 29.264 |
| 10) l2 | 1260-2 | 2.825 | 3.174 | 29577395 | 29956727 | 29.692 | 28.863 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 17759471 | 24127405 | 29.713 | 29.179 |
| 12) l2 | 1260-4 | 3.295 | 3.695 | 38348158 | 47949577 | 29.629M4 | 28.723 |
| 13) l2 | 1260-5 | 3.443 | 3.897 | 28327981 | 33953657 | 29.791M1 | 29.646 |
| | Sum 1260-1 | | | 133.3E6 | 162.2E6 | NoCal | NoCal D |
| | Average 1260-1 | | | | | 29.400 | 29.135 |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:55 pm
Operator : pest2:kb/sdc
Sample : il41660,42,,pp11790 30PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:17:31 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:12:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:55 pm
Operator : pest2:kb/sdc
Sample : il41660,42,,pp11790 30PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:17:31 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:12:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

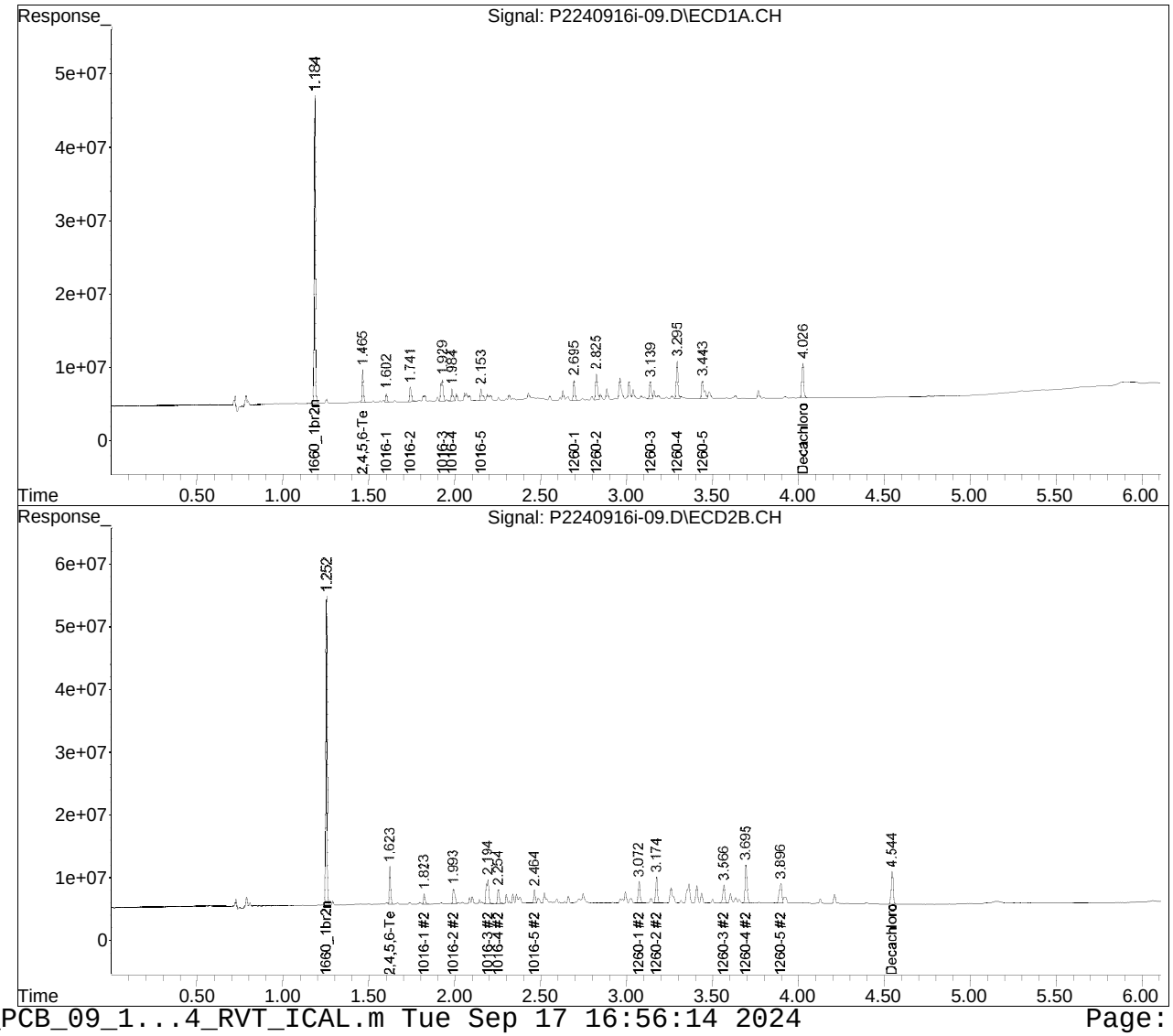
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 3:55 pm
Operator : pest2:kb/sdc
Sample : il41660,42,,pp11790 30PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:17:31 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:12:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

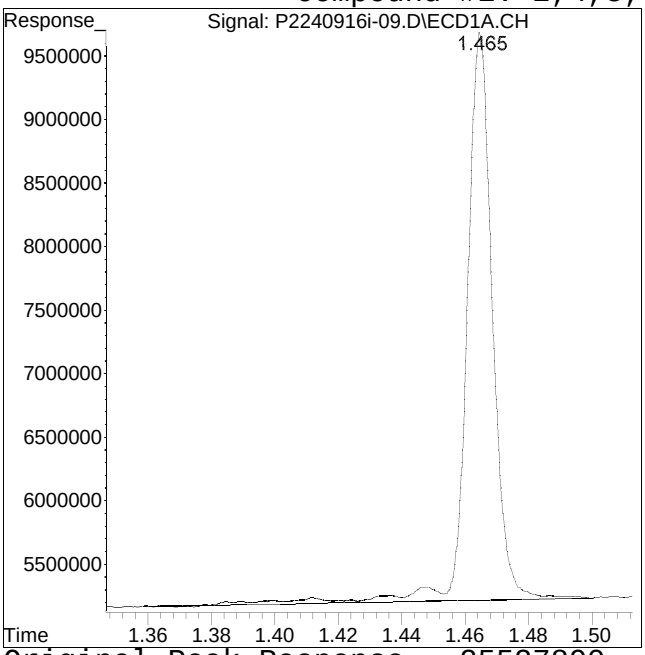
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



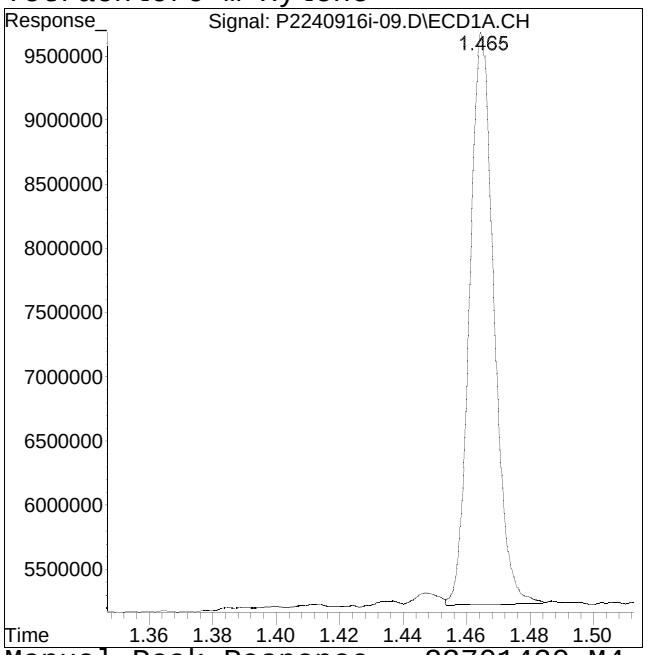
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-09.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:55 pm Instrument : Pest 2
Sample : il41660,42,,pp11790 30PPB Quant Date : 9/16/2024 4:17 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 25527890



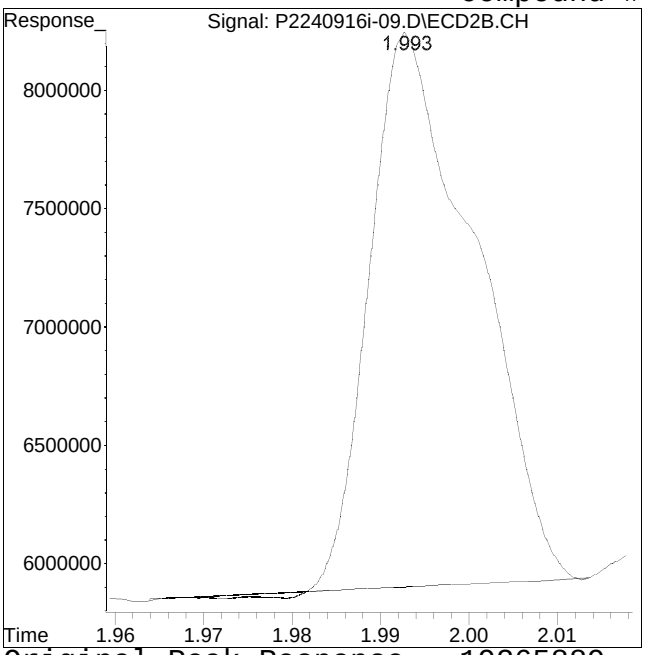

Manual Peak Response = 23701420 M4

M4 = Poor automated baseline construction.

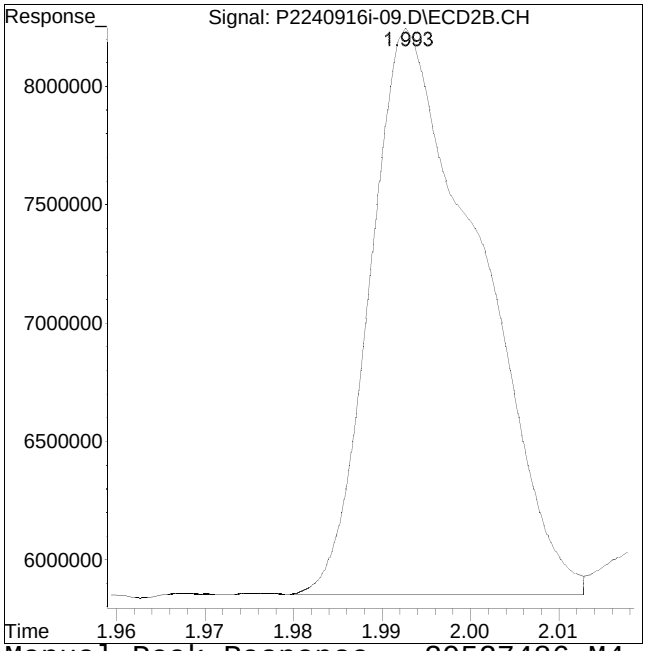
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-09.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:55 pm Instrument : Pest 2
Sample : il41660,42,,pp11790 30PPB Quant Date : 9/16/2024 4:17 pm

Compound #56: 1016-2 #2




Original Peak Response = 19265889



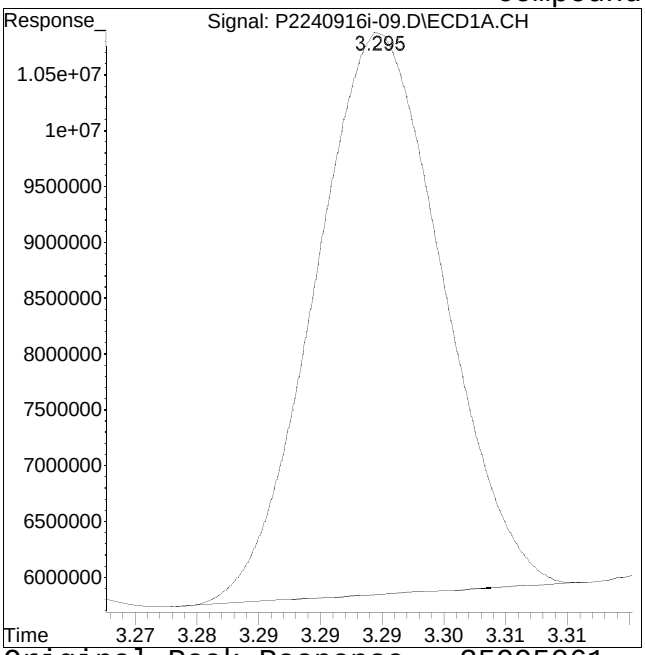

Manual Peak Response = 20527486 M4

M4 = Poor automated baseline construction.

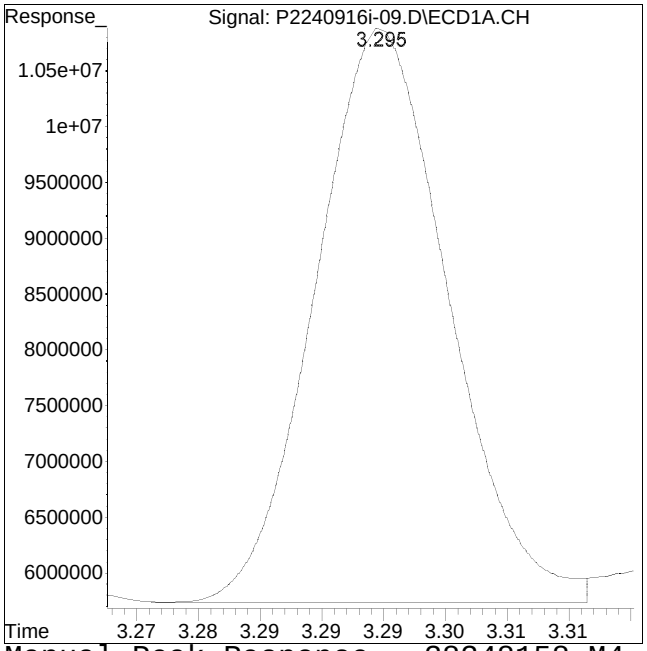
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-09.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:55 pm Instrument : Pest 2
Sample : il41660,42,,pp11790 30PPB Quant Date : 9/16/2024 4:17 pm

Compound #12: 1260-4




Original Peak Response = 35995061



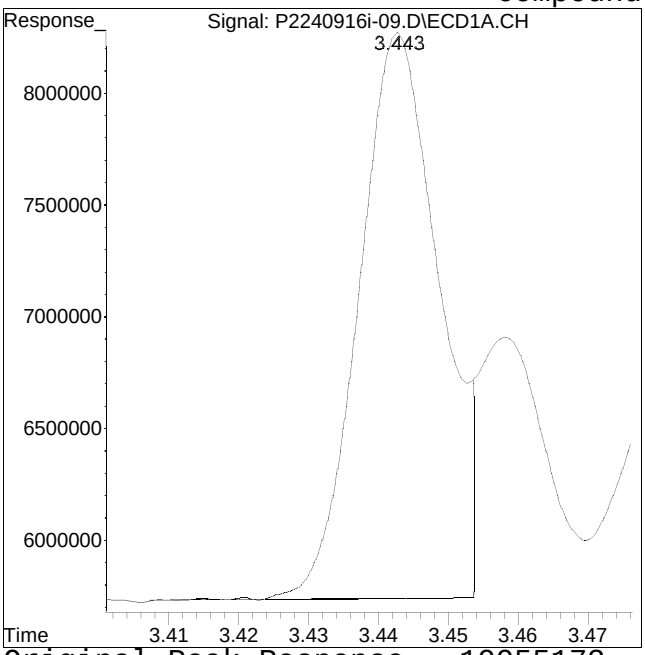

Manual Peak Response = 38348158 M4

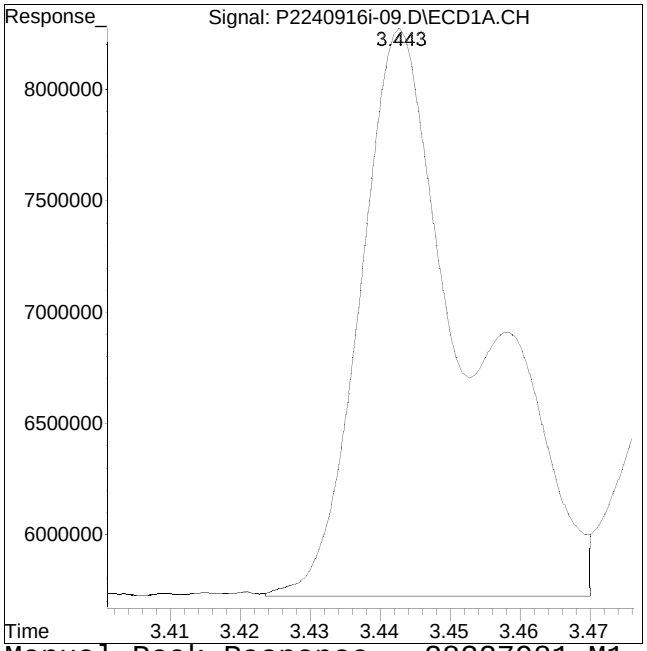
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-09.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 3:55 pm Instrument : Pest 2
Sample : il41660,42,,pp11790 30PPB Quant Date : 9/16/2024 4:17 pm

Compound #13: 1260-5




Original Peak Response = 19955172 Manual Peak Response = 28327981 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:04 pm
Operator : pest2:kb/sdc
Sample : il51660,42,,pp11790 40PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:28:47 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:28:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 216.4E6 | 249.1E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 31028289 | 41234103 | 2.471 | 2.385 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.49%# | 0.48%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 51601040 | 56755220 | 4.826 | 4.543 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.97%# | 0.91%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 9304445 | 12151923 | 37.122 | 36.165 |
| 5) l1 | 1016-2 | 1.742 | 1.994 | 20984858 | 27943430 | 38.015 | 40.159 |
| 6) l1 | 1016-3 | 1.930 | 2.194 | 39280097 | 52100559 | 37.879 | 36.222 |
| 7) l1 | 1016-4 | 1.984 | 2.254 | 16995850 | 21059831 | 38.267 | 36.078 |
| 8) l1 | 1016-5 | 2.154 | 2.465 | 19236393 | 16893873 | 38.583 | 37.107 |
| | Sum 1016-1 | | | 105.8E6 | 130.1E6 | 189.865 | 185.732 |
| | Average 1016-1 | | | | | 37.973 | 37.146 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 25459305 | 33045513 | 37.479 | 36.494 |
| 10) l2 | 1260-2 | 2.825 | 3.175 | 39329833 | 38676250 | 38.511 | 36.078 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 24327242 | 31748249 | 41.111 | 36.463 |
| 12) l2 | 1260-4 | 3.295 | 3.696 | 51329323 | 63121572 | 38.676M4 | 37.732 |
| 13) l2 | 1260-5 | 3.443 | 3.897 | 36401098 | 44712642 | 37.610M1 | 37.354 |
| | Sum 1260-1 | | | 176.8E6 | 211.3E6 | NoCal | NoCal D |
| | Average 1260-1 | | | | | 38.677 | 36.824 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:04 pm
Operator : pest2:kb/sdc
Sample : il51660,42,,pp11790 40PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:28:47 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:28:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:04 pm
Operator : pest2:kb/sdc
Sample : il51660,42,,pp11790 40PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:28:47 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:28:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

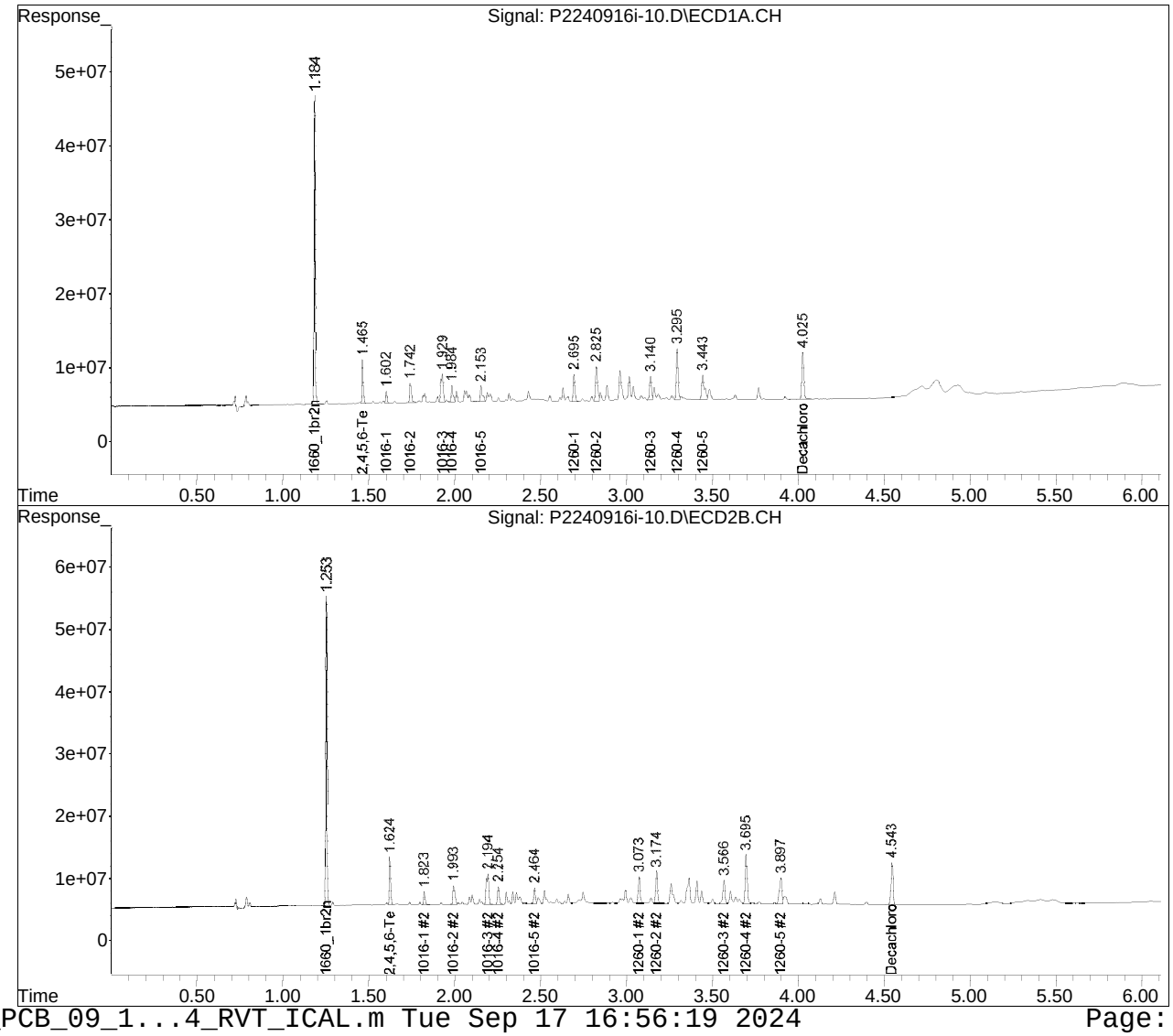
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:04 pm
Operator : pest2:kb/sdc
Sample : il51660,42,,pp11790 40PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:28:47 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:28:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

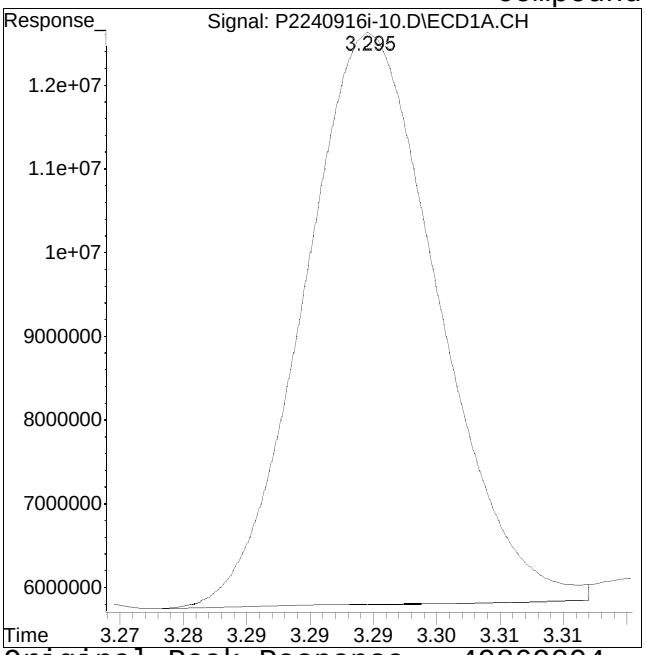
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



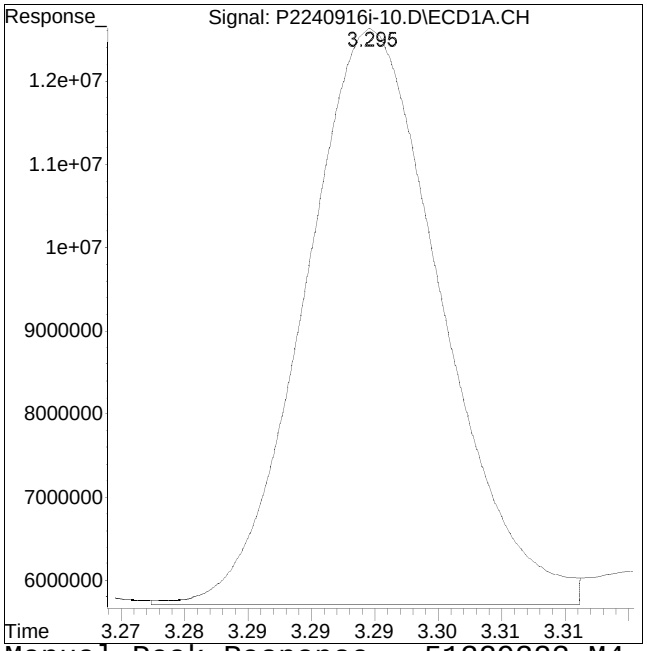
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-10.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:04 pm Instrument : Pest 2
Sample : il51660,42,,pp11790 40PPB Quant Date : 9/16/2024 4:28 pm

Compound #12: 1260-4




Original Peak Response = 49869094



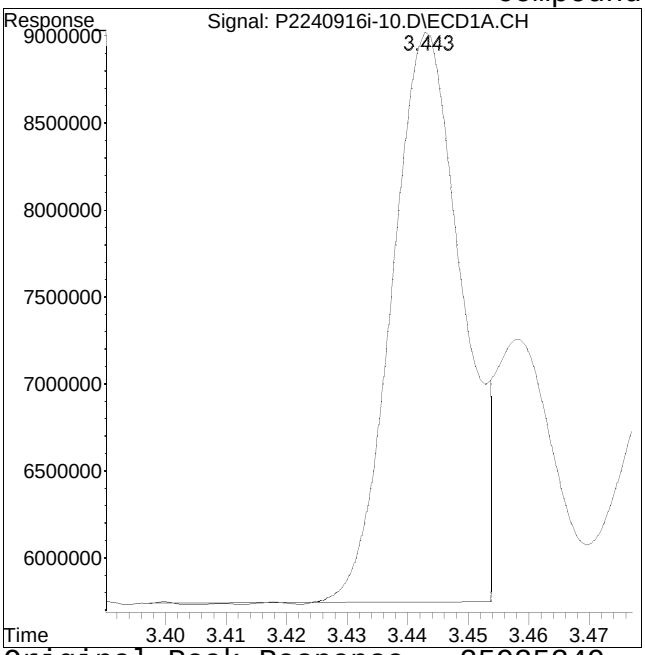

Manual Peak Response = 51329323 M4

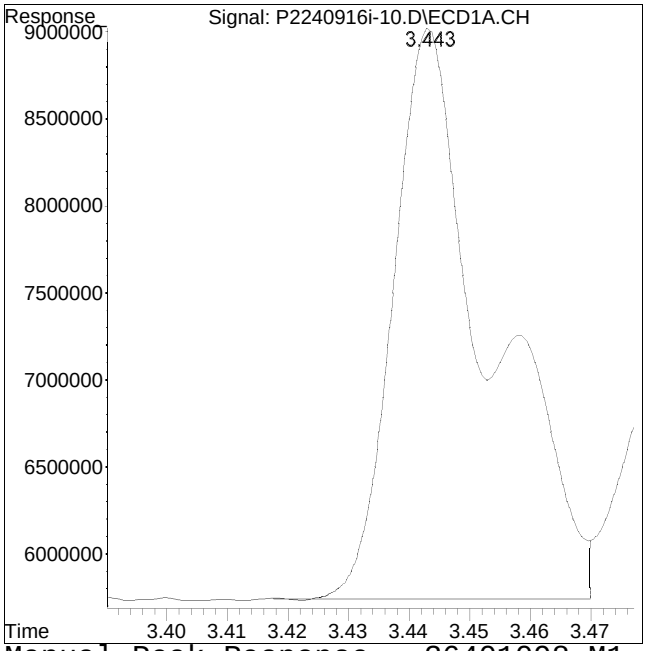
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-10.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:04 pm Instrument : Pest 2
Sample : il51660,42,,pp11790 40PPB Quant Date : 9/16/2024 4:28 pm

Compound #13: 1260-5




Original Peak Response = 25935349 Manual Peak Response = 36401098 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:13 pm
Operator : pest2:kb/sdc
Sample : il61660,42,,pp11790 50PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:30:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:29:49 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.254 | 213.0E6 | 248.5E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 39428033 | 52397795 | 3.212M4 | 3.080 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.64%# | 0.62%# |
| 3) s | Decachlorobi | 4.025 | 4.546 | 63094250 | 69128698 | 6.065 | 5.673 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 1.21%# | 1.13%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.824 | 11776281 | 15111645 | 48.430 | 45.952 |
| 5) l1 | 1016-2 | 1.742 | 1.994 | 25061708 | 34577252 | 46.588 | 49.761 |
| 6) l1 | 1016-3 | 1.929 | 2.194 | 50302979 | 65581605 | 49.811 | 46.574 |
| 7) l1 | 1016-4 | 1.984 | 2.255 | 20972386 | 26755739 | 48.393 | 46.855 |
| 8) l1 | 1016-5 | 2.153 | 2.465 | 23796597 | 21258213 | 48.837 | 47.482 |
| | Sum 1016-1 | | | 131.9E6 | 163.3E6 | 242.057 | 236.624 |
| | Average 1016-1 | | | | | 48.411 | 47.325 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 32210793 | 44682243 | 48.789 | 50.335 |
| 10) l2 | 1260-2 | 2.824 | 3.175 | 49517504 | 52152053 | 49.629 | 49.729 |
| 11) l2 | 1260-3 | 3.139 | 3.566 | 30106707 | 42000177 | 51.404 | 49.212 |
| 12) l2 | 1260-4 | 3.295 | 3.696 | 63286689 | 79371969 | 48.769 | 48.094 |
| 13) l2 | 1260-5 | 3.442 | 3.897 | 45478274 | 56662066 | 48.316M1 | 48.076 |
| | Sum 1260-1 | | | 220.6E6 | 274.9E6 | NoCal | NoCal D |
| | Average 1260-1 | | | | | 49.382 | 49.089 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:13 pm
Operator : pest2:kb/sdc
Sample : il61660,42,,pp11790 50PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:30:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:29:49 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:13 pm
Operator : pest2:kb/sdc
Sample : il61660,42,,pp11790 50PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:30:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:29:49 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

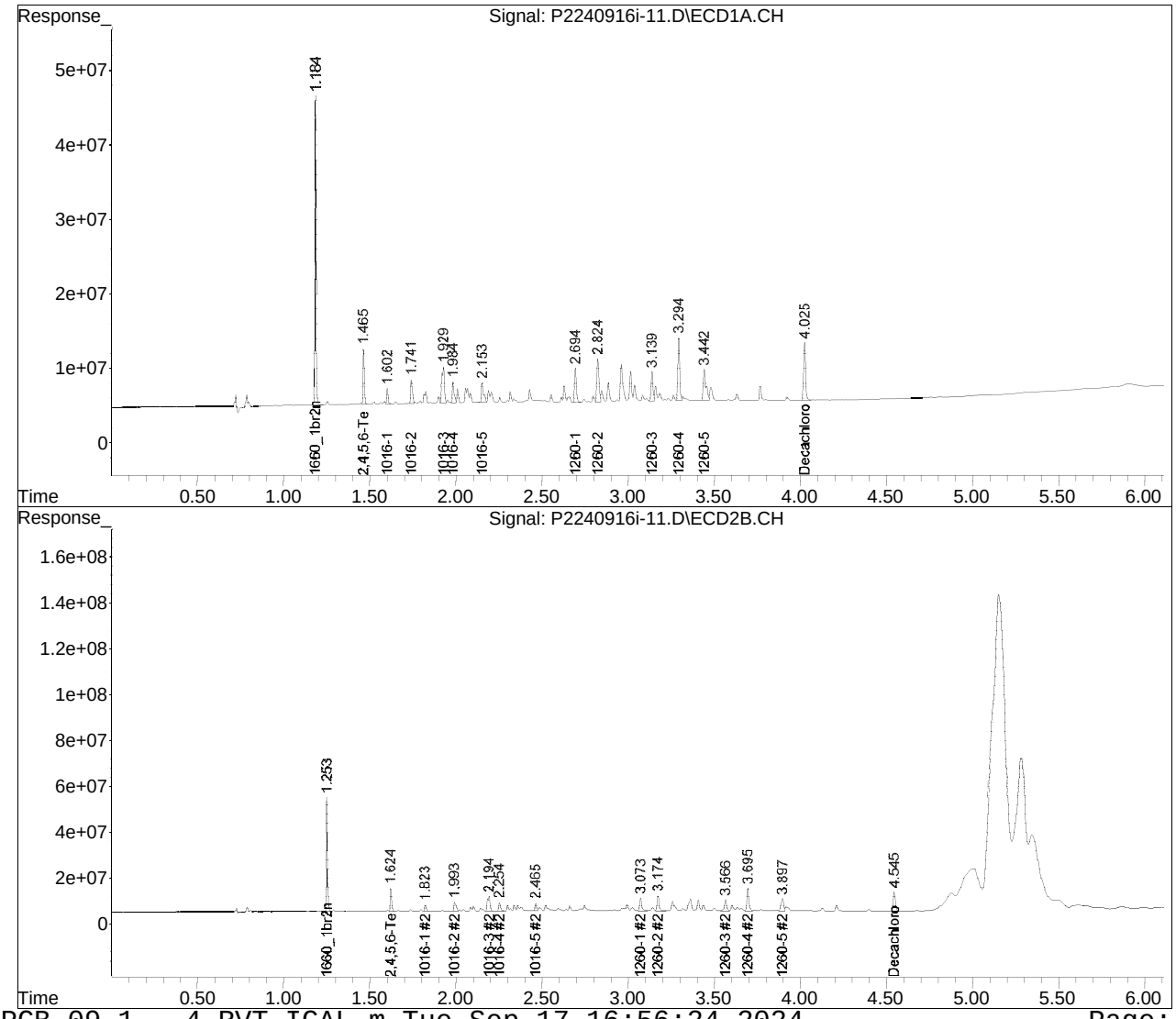
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:13 pm
Operator : pest2:kb/sdc
Sample : il61660,42,,pp11790 50PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:30:03 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:29:49 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

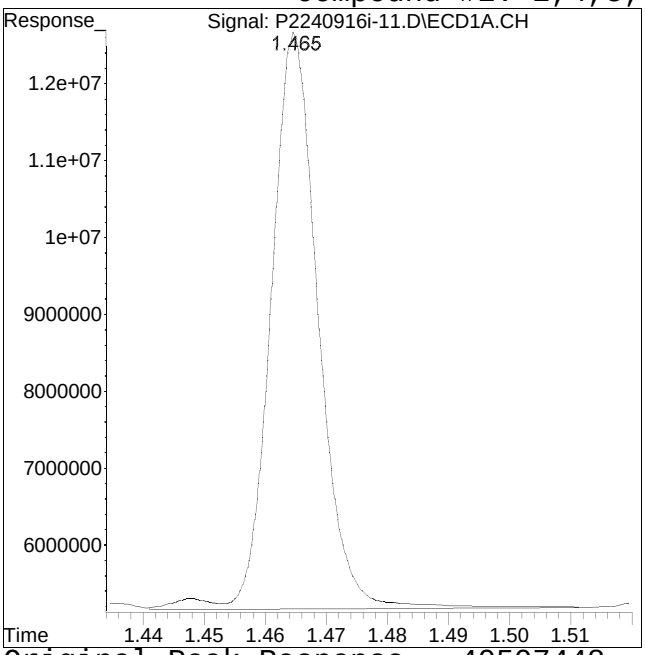
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

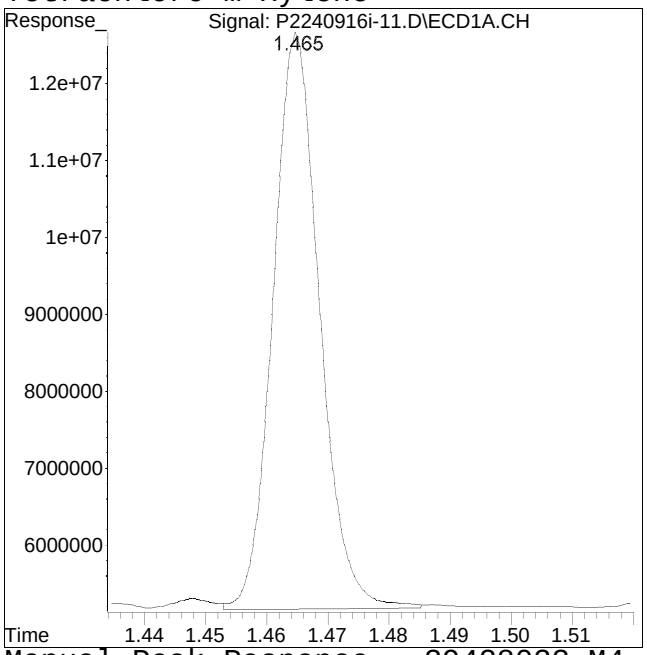


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-11.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:13 pm Instrument : Pest 2
Sample : il61660,42,,pp11790 50PPB Quant Date : 9/16/2024 4:30 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



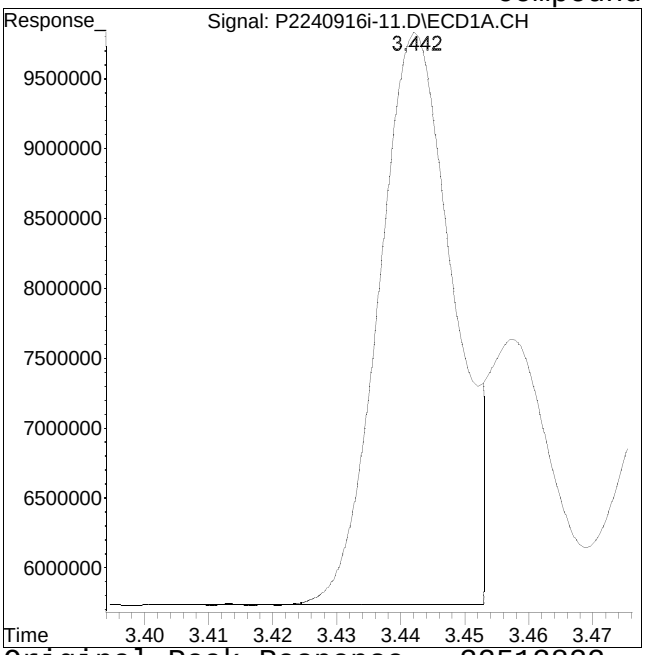



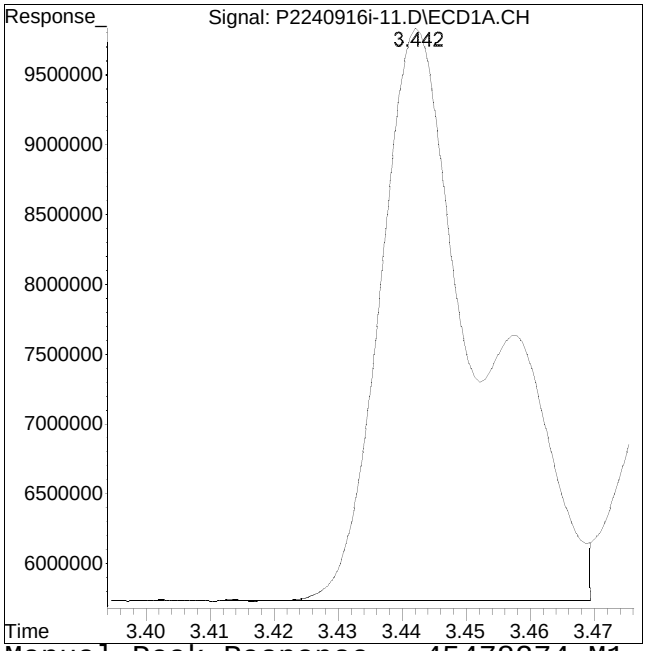

Original Peak Response = 40507448 Manual Peak Response = 39428033 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-11.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:13 pm Instrument : Pest 2
Sample : il61660,42,,pp11790 50PPB Quant Date : 9/16/2024 4:30 pm

Compound #13: 1260-5




Original Peak Response = 32513832 Manual Peak Response = 45478274 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:22 pm
Operator : pest2:kb/sdc
Sample : il71660,42,,pp11790 100PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:31:08 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:30:56 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.253 | 210.7E6 | 240.5E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.624 | 76441607 | 96600800 | 6.292 | 5.904 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 1.26%# | 1.18%# |
| 3) s | Decachlorobi | 4.027 | 4.544 | 119.4E6 | 128.5E6 | 11.710 | 11.107 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 2.34%# | 2.22%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.603 | 1.824 | 22017271 | 28864311 | 92.028 | 91.929 |
| 5) l1 | 1016-2 | 1.743 | 1.994 | 47238846 | 64270248 | 89.804 | 95.644 |
| 6) l1 | 1016-3 | 1.931 | 2.195 | 95325099 | 123.2E6 | 95.495 | 91.422 |
| 7) l1 | 1016-4 | 1.985 | 2.255 | 38810588 | 49683299 | 91.030 | 90.850 |
| 8) l1 | 1016-5 | 2.155 | 2.465 | 42584511 | 42071374 | 88.703 | 97.915 |
| | Sum 1016-1 | | | 246.0E6 | 308.1E6 | 457.061 | 467.760 |
| | Average 1016-1 | | | | | 91.412 | 93.552 |
| 9) l2 | 1260-1 | 2.696 | 3.073 | 61018752 | 75472461 | 93.824 | 87.748 |
| 10) l2 | 1260-2 | 2.826 | 3.175 | 93199351 | 89344045 | 94.559 | 88.104 |
| 11) l2 | 1260-3 | 3.141 | 3.566 | 57022126 | 75028500 | 97.976 | 91.074 |
| 12) l2 | 1260-4 | 3.296 | 3.695 | 123.5E6 | 145.4E6 | 96.592M4 | 91.595 |
| 13) l2 | 1260-5 | 3.444 | 3.896 | 87596965 | 107.9E6 | 94.622M1 | 95.246 |
| | Sum 1260-1 | | | 422.3E6 | 493.2E6 | NoCal | NoCal D |
| | Average 1260-1 | | | | | 95.514 | 90.753 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:22 pm
Operator : pest2:kb/sdc
Sample : il71660,42,,pp11790 100PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:31:08 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:30:56 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:22 pm
Operator : pest2:kb/sdc
Sample : il71660,42,,pp11790 100PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:31:08 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:30:56 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

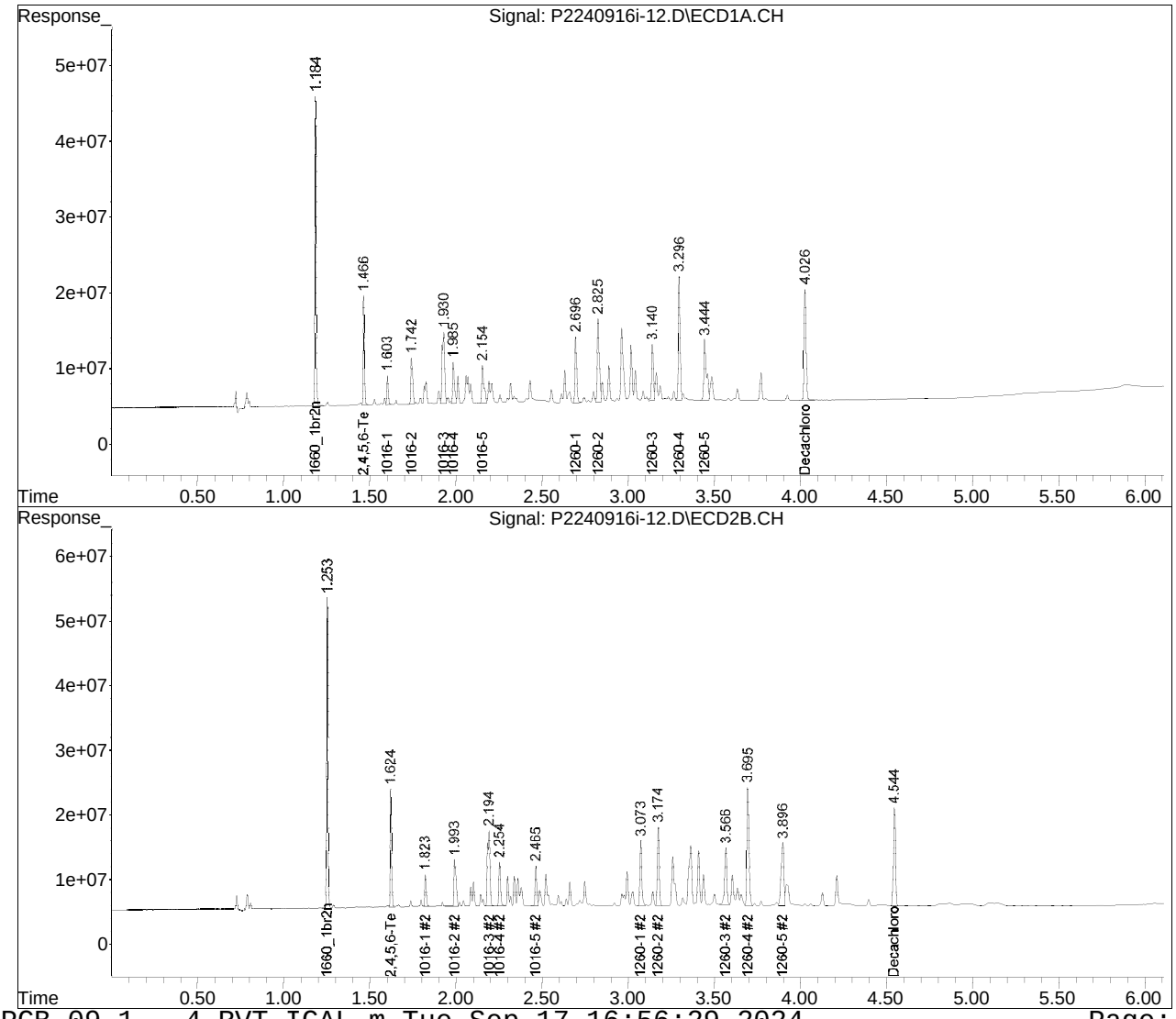
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:22 pm
Operator : pest2:kb/sdc
Sample : il71660,42,,pp11790 100PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:31:08 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:30:56 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

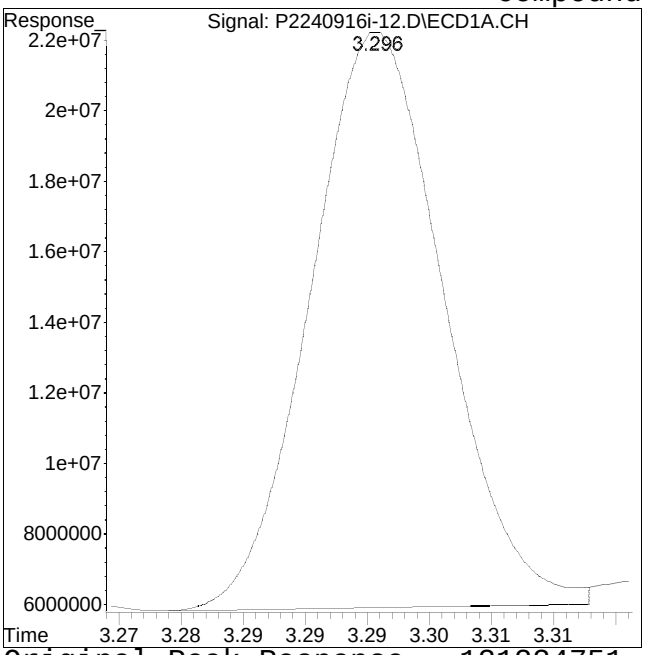
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

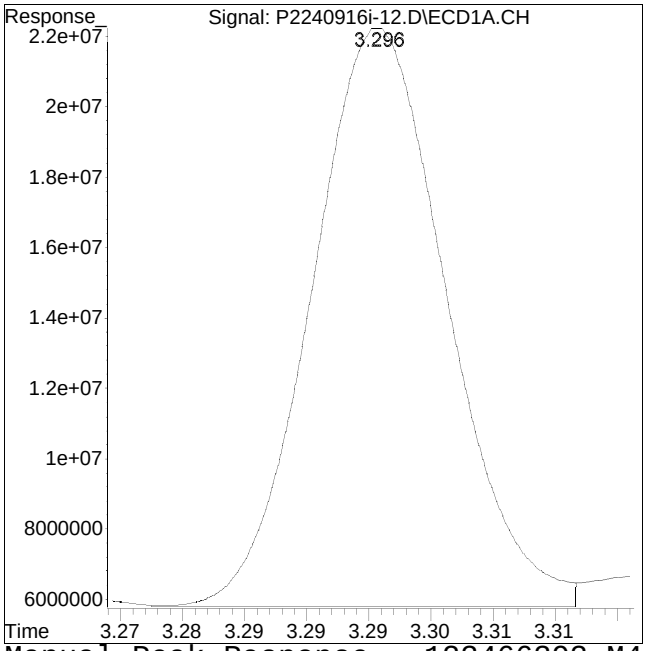


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-12.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:22 pm Instrument : Pest 2
Sample : il71660,42,,pp11790 100PPBQuant Date : 9/16/2024 4:31 pm

Compound #12: 1260-4



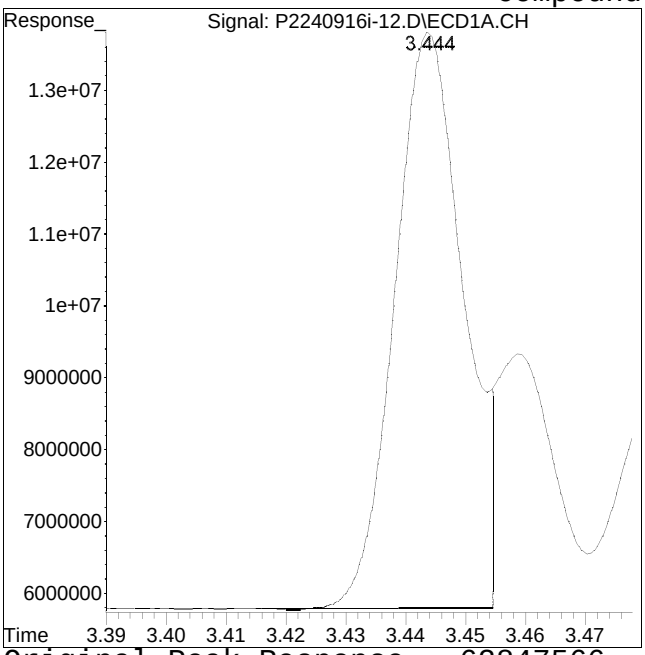



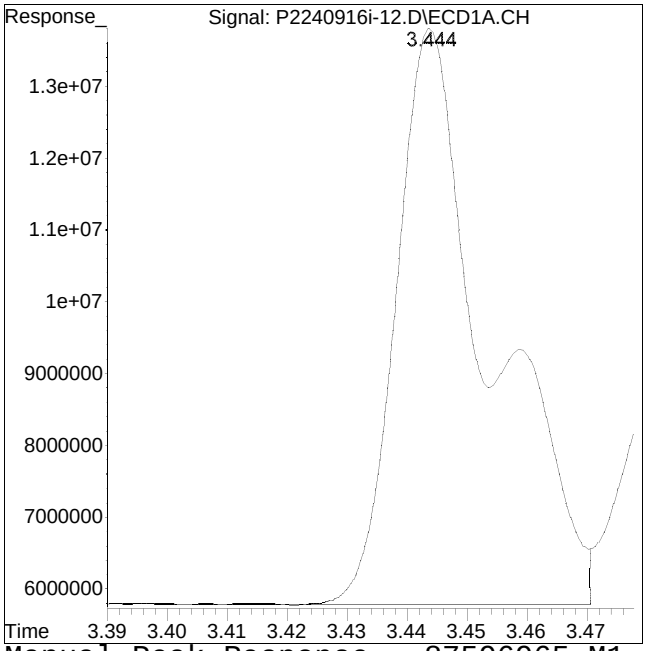

Original Peak Response = 121224751 Manual Peak Response = 123466393 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-12.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:22 pm Instrument : Pest 2
Sample : il71660,42,,pp11790 100PPBQuant Date : 9/16/2024 4:31 pm

Compound #13: 1260-5




Original Peak Response = 62847566 Manual Peak Response = 87596965 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:30 pm
Operator : pest2:kb/sdc
Sample : il81660,42,,pp11790 250PPB
Misc : WG1972777,,
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:56:36 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:32:03 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 209.4E6 | 247.1E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 198.1E6 | 243.7E6 | 16.440 | 14.662 |
| Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | | 3.29%# | 2.93%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 289.5E6 | 295.4E6 | 28.907 | 25.336 |
| Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | | 5.78%# | 5.07%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 53816714 | 66436867 | 228.892 | 208.375 |
| 5) l1 | 1016-2 | 1.742 | 1.994 | 114.9E6 | 146.9E6 | 222.931 | 214.174 |
| 6) l1 | 1016-3 | 1.929 | 2.194 | 242.2E6 | 290.9E6 | 245.615 | 212.759 |
| 7) l1 | 1016-4 | 1.984 | 2.254 | 101.9E6 | 116.8E6 | 243.501 | 210.701 |
| 8) l1 | 1016-5 | 2.153 | 2.465 | 107.4E6 | 96028481 | 228.639 | 218.205 |
| Sum | 1016-1 | | | 620.1E6 | 717.1E6 | 1169.577 | 1064.213 |
| Average | 1016-1 | | | | | 233.915 | 212.843 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 148.2E6 | 178.2E6 | 231.225 | 205.306 |
| 10) l2 | 1260-2 | 2.825 | 3.175 | 225.8E6 | 210.2E6 | 232.254 | 205.300 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 143.7E6 | 171.1E6 | 249.056 | 204.767 |
| 12) l2 | 1260-4 | 3.295 | 3.696 | 314.4E6 | 344.3E6 | 248.663 | 213.721 |
| 13) l2 | 1260-5 | 3.443 | 3.897 | 218.3E6 | 240.1E6 | 239.061 | 207.625 |
| Sum | 1260-1 | | | 1050.4E6 | 1143.9E6 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 240.052 | 207.344 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:30 pm
Operator : pest2:kb/sdc
Sample : il81660,42,,pp11790 250PPB
Misc : WG1972777,,
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:56:36 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:32:03 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:30 pm
Operator : pest2:kb/sdc
Sample : il81660,42,,pp11790 250PPB
Misc : WG1972777,,
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:56:36 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:32:03 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

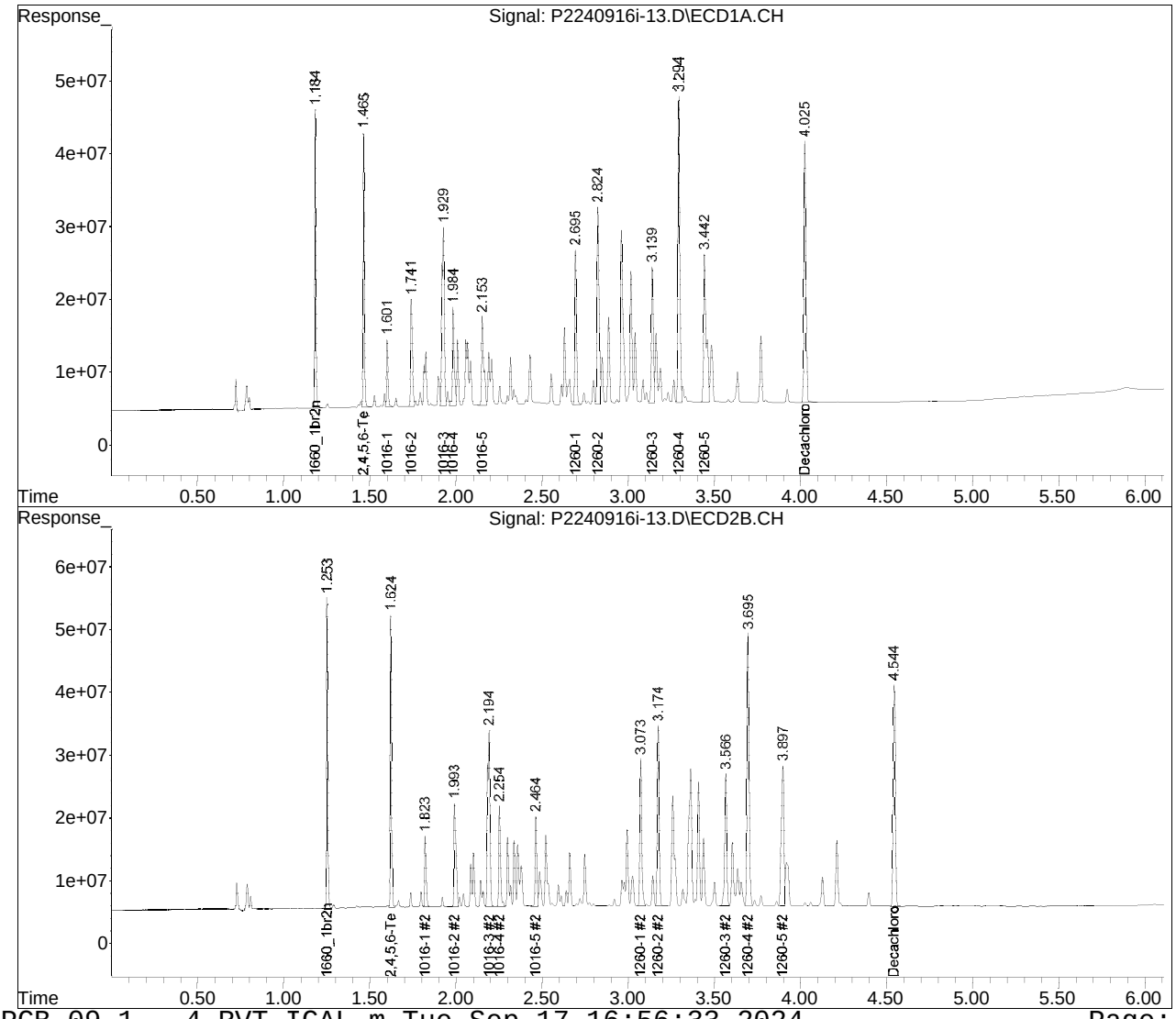
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:30 pm
Operator : pest2:kb/sdc
Sample : il81660,42,,pp11790 250PPB
Misc : WG1972777,,
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:56:36 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:32:03 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-13.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:30 pm Instrument : Pest 2
Sample : il81660,42,,pp11790 250PPBQuant Date : 9/16/2024 4:56 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-14.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:39 pm
Operator : pest2:kb/sdc
Sample : il91660,42,,pp11790 500PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:58:10 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:57:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 206.3E6 | 240.6E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.624 | 394.6E6 | 479.5E6 | 33.136 | 29.939 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 6.63%# | 5.99%# |
| 3) s | Decachlorobi | 4.028 | 4.546 | 556.8E6 | 565.3E6 | 57.126 | 51.121 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 11.43%# | 10.22%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.603 | 1.823 | 102.8E6 | 122.9E6 | 448.557 | 404.315 |
| 5) l1 | 1016-2 | 1.743 | 1.994 | 219.3E6 | 268.6E6 | 437.984 | 409.461 |
| 6) l1 | 1016-3 | 1.930 | 2.195 | 477.4E6 | 547.7E6 | 492.570 | 419.329 |
| 7) l1 | 1016-4 | 1.985 | 2.255 | 196.6E6 | 217.3E6 | 478.609 | 410.689 |
| 8) l1 | 1016-5 | 2.155 | 2.465 | 206.7E6 | 173.8E6 | 451.741 | 412.201 |
| Sum | 1016-1 | | | 1202.8E6 | 1330.4E6 | 2309.461 | 2055.995 |
| Average | 1016-1 | | | | | 461.892 | 411.199 |
| 9) l2 | 1260-1 | 2.696 | 3.074 | 290.4E6 | 332.2E6 | 464.353 | 402.053 |
| 10) l2 | 1260-2 | 2.826 | 3.176 | 442.3E6 | 394.0E6 | 466.004 | 404.192 |
| 11) l2 | 1260-3 | 3.141 | 3.567 | 279.4E6 | 325.4E6 | 491.884 | 409.295 |
| 12) l2 | 1260-4 | 3.297 | 3.696 | 615.3E6 | 665.2E6 | 494.292 | 432.005 |
| 13) l2 | 1260-5 | 3.444 | 3.898 | 426.7E6 | 461.7E6 | 476.947 | 418.995 |
| Sum | 1260-1 | | | 2054.1E6 | 2178.6E6 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 478.696 | 413.308 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-14.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:39 pm
Operator : pest2:kb/sdc
Sample : il91660,42,,pp11790 500PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:58:10 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:57:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-14.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:39 pm
Operator : pest2:kb/sdc
Sample : il91660,42,,pp11790 500PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:58:10 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:57:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

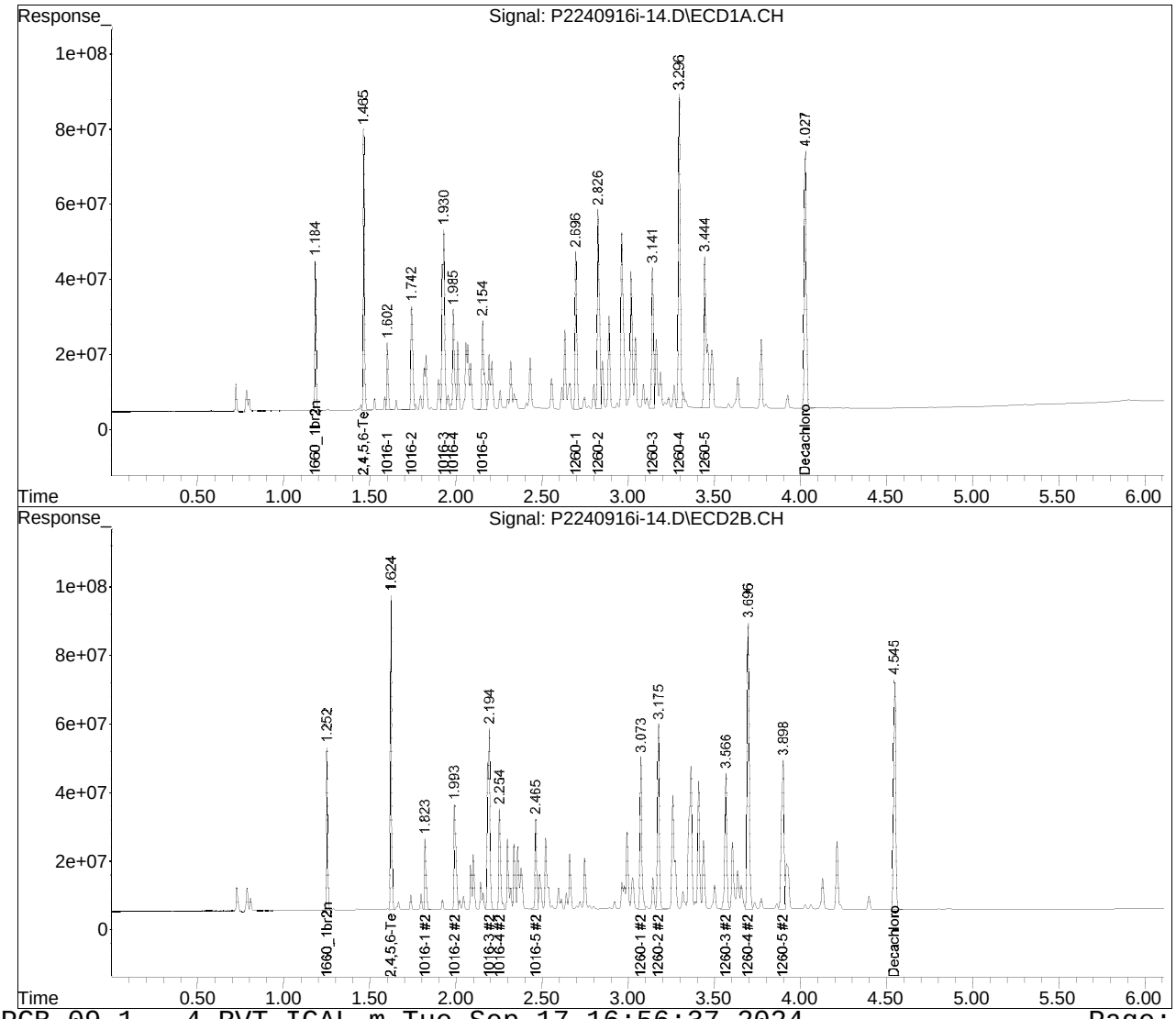
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-14.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:39 pm
Operator : pest2:kb/sdc
Sample : il91660,42,,pp11790 500PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:58:10 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:57:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-14.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:39 pm Instrument : Pest 2
Sample : il91660,42,,pp11790 500PPBQuant Date : 9/16/2024 4:58 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-15.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:48 pm
Operator : pest2:kb/sdc
Sample : il101660,42,,pp11790 1000PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:59:04 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:58:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 213.9E6 | 249.2E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 804.8E6 | 964.9E6 | 64.917 | 58.578 |
| Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | | 12.98%# | 11.72%# |
| 3) s | Decachlorobi | 4.027 | 4.545 | 1134.0E6 | 1148.2E6 | 113.551 | 102.519 |
| Spiked Amount | 500.000 | Range 30 - 150 | | Recovery = | | 22.71%# | 20.50%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 200.2E6 | 235.5E6 | 852.356 | 764.041 |
| 5) l1 | 1016-2 | 1.742 | 1.994 | 431.5E6 | 519.6E6 | 842.627M3 | 780.292 |
| 6) l1 | 1016-3 | 1.930 | 2.194 | 958.5E6 | 1090.3E6 | 955.450 | 820.441 |
| 7) l1 | 1016-4 | 1.984 | 2.254 | 392.5E6 | 428.8E6 | 925.916 | 797.902 |
| 8) l1 | 1016-5 | 2.154 | 2.465 | 410.0E6 | 345.4E6 | 873.459 | 806.498 |
| Sum | 1016-1 | | | 2392.8E6 | 2619.6E6 | 4449.807 | 3969.173 |
| Average | 1016-1 | | | | | 889.961 | 793.835 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 588.5E6 | 655.9E6 | 914.891 | 783.269 |
| 10) l2 | 1260-2 | 2.825 | 3.175 | 898.4E6 | 783.6E6 | 919.719 | 792.833 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 575.2E6 | 648.6E6 | 978.288 | 803.666 |
| 12) l2 | 1260-4 | 3.296 | 3.696 | 1278.5E6 | 1348.5E6 | 991.785 | 858.288 |
| 13) l2 | 1260-5 | 3.443 | 3.897 | 893.2E6 | 933.2E6 | 967.764M1 | 832.359 |
| Sum | 1260-1 | | | 4233.8E6 | 4369.8E6 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 954.489 | 814.083 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-15.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:48 pm
Operator : pest2:kb/sdc
Sample : il101660,42,,pp11790 1000PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:59:04 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:58:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-15.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:48 pm
Operator : pest2:kb/sdc
Sample : il101660,42,,pp11790 1000PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:59:04 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:58:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

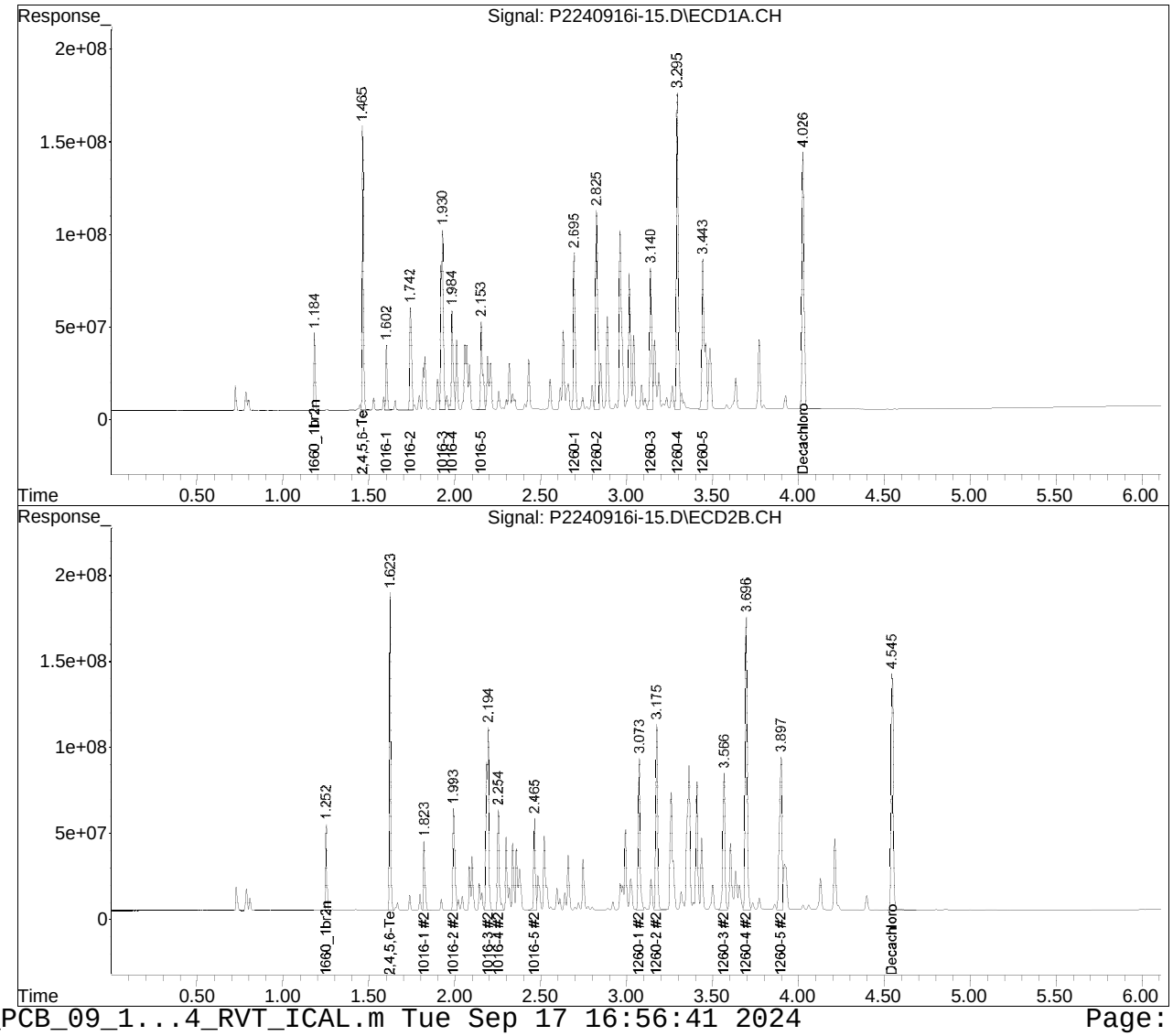
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-15.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:48 pm
Operator : pest2:kb/sdc
Sample : il101660,42,,pp11790 1000PPB
Misc : WG1972777,, (Sig #1); vyper (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 16:59:04 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:58:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

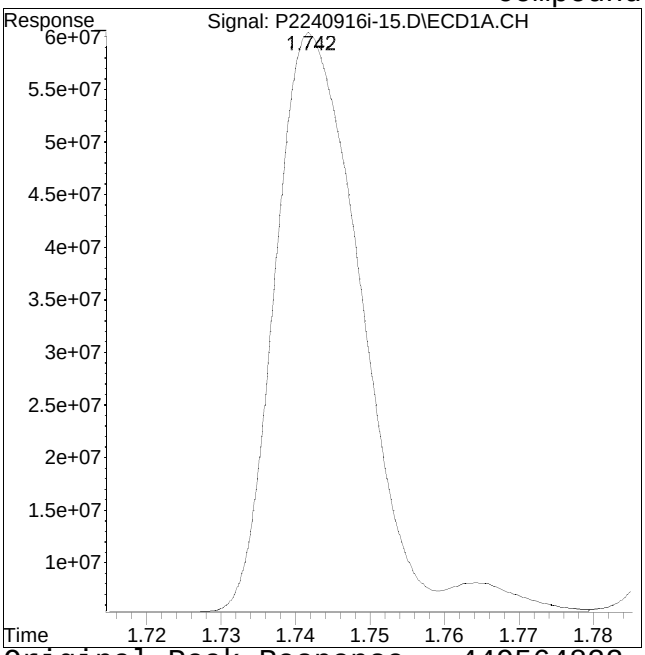
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

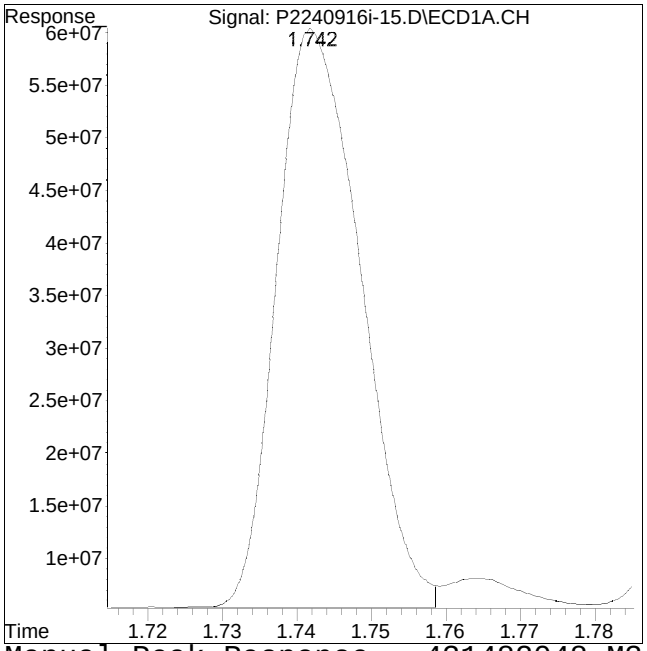


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-15.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:48 pm Instrument : Pest 2
Sample : il101660,42,,pp11790 1000PQuant Date : 9/16/2024 4:59 pm

Compound #5: 1016-2



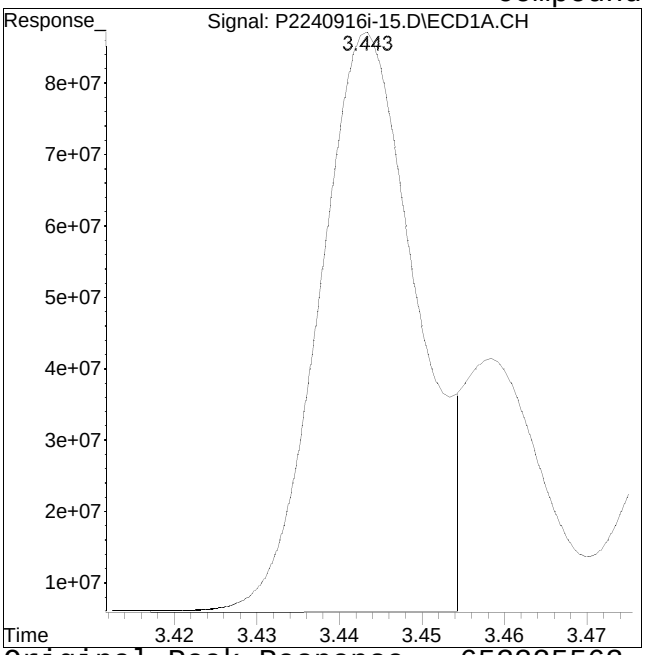



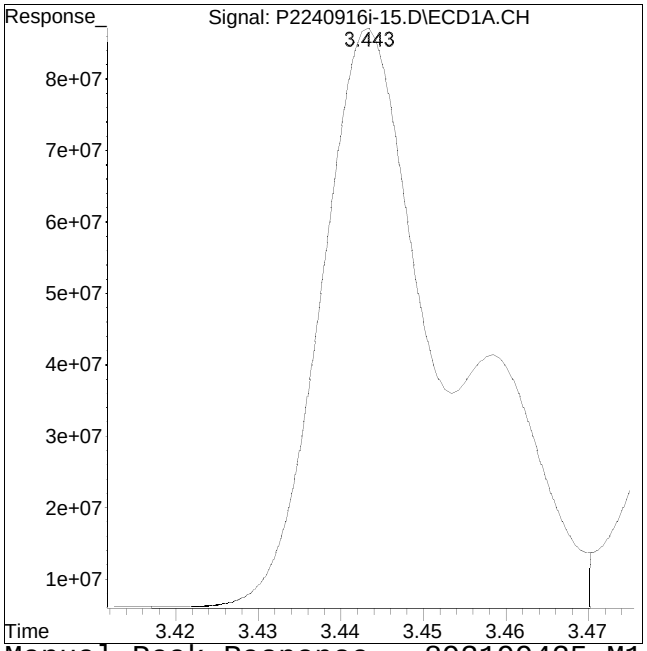

Original Peak Response = 449564822 Manual Peak Response = 431482048 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-15.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:48 pm Instrument : Pest 2
Sample : il101660,42,,pp11790 1000PQuant Date : 9/16/2024 4:59 pm

Compound #13: 1260-5




Original Peak Response = 653325563 Manual Peak Response = 893199425 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   4:56 pm
Operator  : pest2:kb/sdc
Sample    : cicv1660,42,, ICV 250 pp11765
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 12 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.427 | 1.7 | 96 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.071 | 7.2 | 98 | 0.00 |
| 4 | l1 | 1016-1 | | 0.027 | 0.024 | 11.1 | 94 | 0.00 |
| 5 | l1 | 1016-2 | | 0.059 | 0.057 | 3.4 | 103 | 0.00 |
| 6 | l1 | 1016-3 | | 0.117 | 0.120 | -2.6 | 103 | 0.00 |
| 7 | l1 | 1016-4 | | 0.049 | 0.050 | -2.0 | 102 | 0.00 |
| 8 | l1 | 1016-5 | | 0.054 | 0.050 | 7.4 | 97 | 0.00 |
| 9 | l2 | 1260-1 | | 0.075 | 0.075 | 0.0 | 105 | 0.00 |
| 10 | l2 | 1260-2 | | 0.113 | 0.118 | -4.4 | 108 | 0.00 |
| 11 | l2 | 1260-3 | | 0.069 | 0.063 | 8.7 | 90 | 0.00 |
| 12 | l2 | 1260-4 | | 0.151 | 0.135 | 10.6 | 89 | 0.00 |
| 13 | l2 | 1260-5 | | 0.108 | 0.099 | 8.3 | 94 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.471 | 10.2 | 93 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 0.971 | 11.8 | 102 | 0.00 |
| 4 | l1 | 1016-1 | | 0.030 | 0.026 | 13.3 | 96 | 0.00 |
| 5 | l1 | 1016-2 | | 0.065 | 0.062 | 4.6 | 103 | 0.00 |
| 6 | l1 | 1016-3 | | 0.131 | 0.125 | 4.6 | 104 | 0.00 |
| 7 | l1 | 1016-4 | | 0.053 | 0.050 | 5.7 | 104 | 0.00 |
| 8 | l1 | 1016-5 | | 0.042 | 0.040 | 4.8 | 101 | 0.00 |
| 9 | l2 | 1260-1 | | 0.082 | 0.080 | 2.4 | 109 | 0.00 |
| 10 | l2 | 1260-2 | | 0.097 | 0.090 | 7.2 | 103 | 0.00 |
| 11 | l2 | 1260-3 | | 0.079 | 0.067 | 15.2 | 95 | 0.00 |
| 12 | l2 | 1260-4 | | 0.155 | 0.131 | 15.5 | 92 | 0.00 |
| 13 | l2 | 1260-5 | | 0.111 | 0.097 | 12.6 | 98 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   4:56 pm
Operator  : pest2:kb/sdc
Sample    : cicv1660,42,, ICV 250 pp11765
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 12 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| Evaluate Continuing Calibration Report - Not Founds | | | | | | | | |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.18# |
| 15 | l3 | 1221-1 | | 0.015 | 0.000 | 100.0# | 0# | -1.53# |
| 16 | l3 | 1221-2 | | 0.00922 | 0.00000 | 100.0# | 0# | -1.59# |
| 17 | l3 | 1221-3 | | 0.037 | 0.000 | 100.0# | 0# | -1.60# |
| 18 | l4 | 1254-1 | | 0.052 | 0.000 | 100.0# | 0# | -2.32# |
| 19 | l4 | 1254-2 | | 0.093 | 0.000 | 100.0# | 0# | -2.43# |
| 20 | l4 | 1254-3 | | 0.101 | 0.000 | 100.0# | 0# | -2.61# |
| 21 | l4 | 1254-4 | | 0.071 | 0.000 | 100.0# | 0# | -2.74# |
| 22 | l4 | 1254-5 | | 0.099 | 0.000 | 100.0# | 0# | -2.96# |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.18# |
| 24 | l6 | 1242-1 | | 0.021 | 0.000 | 100.0# | 0# | -1.60# |
| 25 | l6 | 1242-2 | | 0.046 | 0.000 | 100.0# | 0# | -1.74# |
| 26 | l6 | 1242-3 | | 0.096 | 0.000 | 100.0# | 0# | -1.93# |
| 27 | l6 | 1242-4 | | 0.040 | 0.000 | 100.0# | 0# | -1.98# |
| 28 | l6 | 1242-5 | | 0.032 | 0.000 | 100.0# | 0# | -2.34# |
| 29 | l9 | 1268-1 | | 0.209 | 0.000 | 100.0# | 0# | -3.46# |
| 30 | l9 | 1268-2 | | 0.189 | 0.000 | 100.0# | 0# | -3.48# |
| 31 | l9 | 1268-3 | | 0.154 | 0.000 | 100.0# | 0# | -3.58# |
| 32 | l9 | 1268-4 | | 0.067 | 0.000 | 100.0# | 0# | -3.77# |
| 33 | l9 | 1268-5 | | 0.467 | 0.000 | 100.0# | 0# | -3.92# |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.18# |
| 35 | l7 | 1248-1 | | 0.060 | 0.000 | 100.0# | 0# | -1.93# |
| 36 | l7 | 1248-2 | | 0.078 | 0.000 | 100.0# | 0# | -2.06# |
| 37 | l7 | 1248-3 | | 0.070 | 0.000 | 100.0# | 0# | -2.15# |
| 38 | l7 | 1248-4 | | 0.060 | 0.000 | 100.0# | 0# | -2.34# |
| 39 | l7 | 1248-5 | | 0.056 | 0.000 | 100.0# | 0# | -2.35# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   4:56 pm
Operator  : pest2:kb/sdc
Sample    : cicv1660,42,, ICV 250 pp11765
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 12 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.19# |
| 41 | l5 | 1232-1 | | 0.029 | 0.000 | 100.0# | 0# | -1.60# |
| 42 | l5 | 1232-2 | | 0.027 | 0.000 | 100.0# | 0# | -1.74# |
| 43 | l5 | 1232-3 | | 0.055 | 0.000 | 100.0# | 0# | -1.93# |
| 44 | l5 | 1232-4 | | 0.023 | 0.000 | 100.0# | 0# | -1.99# |
| 45 | l5 | 1232-5 | | 0.017 | 0.000 | 100.0# | 0# | -2.34# |
| 46 | l8 | 1262-1 | | 0.083 | 0.000 | 100.0# | 0# | -2.83# |
| 47 | l8 | 1262-2 | | 0.105 | 0.000 | 100.0# | 0# | -3.02# |
| 48 | l8 | 1262-3 | | 0.091 | 0.000 | 100.0# | 0# | -3.14# |
| 49 | l8 | 1262-4 | | 0.185 | 0.000 | 100.0# | 0# | -3.30# |
| 50 | l8 | 1262-5 | | 0.059 | 0.000 | 100.0# | 0# | -3.77# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.25# |
| 15 | l3 | 1221-1 | | 0.017 | 0.000 | 100.0# | 0# | -1.74# |
| 16 | l3 | 1221-2 | | 0.011 | 0.000 | 100.0# | 0# | -1.80# |
| 17 | l3 | 1221-3 | | 0.040 | 0.000 | 100.0# | 0# | -1.82# |
| 18 | l4 | 1254-1 | | 0.062 | 0.000 | 100.0# | 0# | -2.66# |
| 19 | l4 | 1254-2 | | 0.073 | 0.000 | 100.0# | 0# | -2.75# |
| 20 | l4 | 1254-3 | | 0.109 | 0.000 | 100.0# | 0# | -2.98# |
| 21 | l4 | 1254-4 | | 0.073 | 0.000 | 100.0# | 0# | -3.09# |
| 22 | l4 | 1254-5 | | 0.101 | 0.000 | 100.0# | 0# | -3.36# |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.25# |
| 24 | l6 | 1242-1 | | 0.021 | 0.000 | 100.0# | 0# | -1.82# |
| 25 | l6 | 1242-2 | | 0.048 | 0.000 | 100.0# | 0# | -1.99# |
| 26 | l6 | 1242-3 | | 0.095 | 0.000 | 100.0# | 0# | -2.19# |
| 27 | l6 | 1242-4 | | 0.039 | 0.000 | 100.0# | 0# | -2.25# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   4:56 pm
Operator  : pest2:kb/sdc
Sample    : cicv1660,42,, ICV 250 pp11765
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 12 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | l6 | 1242-5 | | 0.031 | 0.000 | 100.0# | 0# | -2.64# |
| 29 | l9 | 1268-1 | | 0.190 | 0.000 | 100.0# | 0# | -3.89# |
| 30 | l9 | 1268-2 | | 0.169 | 0.000 | 100.0# | 0# | -3.92# |
| 31 | l9 | 1268-3 | | 0.141 | 0.000 | 100.0# | 0# | -4.06# |
| 32 | l9 | 1268-4 | | 0.062 | 0.000 | 100.0# | 0# | -4.21# |
| 33 | l9 | 1268-5 | | 0.399 | 0.000 | 100.0# | 0# | -4.40# |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.25# |
| 35 | l7 | 1248-1 | | 0.062 | 0.000 | 100.0# | 0# | -2.19# |
| 36 | l7 | 1248-2 | | 0.043 | 0.000 | 100.0# | 0# | -2.34# |
| 37 | l7 | 1248-3 | | 0.053 | 0.000 | 100.0# | 0# | -2.47# |
| 38 | l7 | 1248-4 | | 0.060 | 0.000 | 100.0# | 0# | -2.64# |
| 39 | l7 | 1248-5 | | 0.067 | 0.000 | 100.0# | 0# | -2.66# |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.25# |
| 41 | l5 | 1232-1 | | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 42 | l5 | 1232-2 | | 0.031 | 0.000 | 100.0# | 0# | -1.99# |
| 43 | l5 | 1232-3 | | 0.060 | 0.000 | 100.0# | 0# | -2.20# |
| 44 | l5 | 1232-4 | | 0.024 | 0.000 | 100.0# | 0# | -2.26# |
| 45 | l5 | 1232-5 | | 0.018 | 0.000 | 100.0# | 0# | -2.64# |
| 46 | l8 | 1262-1 | | 0.073 | 0.000 | 100.0# | 0# | -3.18# |
| 47 | l8 | 1262-2 | | 0.101 | 0.000 | 100.0# | 0# | -3.41# |
| 48 | l8 | 1262-3 | | 0.091 | 0.000 | 100.0# | 0# | -3.57# |
| 49 | l8 | 1262-4 | | 0.174 | 0.000 | 100.0# | 0# | -3.70# |
| 50 | l8 | 1262-5 | | 0.062 | 0.000 | 100.0# | 0# | -4.21# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:56 pm
Operator : pest2:kb/sdc
Sample : cicv1660,42,, ICV 250 pp11765
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.253 | 207.5E6 | 241.8E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 189.5E6 | 227.7E6 | 15.734 | 14.369 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 3.15%# | 2.87%# |
| 3) s | Decachlorobi | 4.026 | 4.546 | 284.6E6 | 300.6E6 | 29.709 | 28.227 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 5.94%# | 5.65%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 50606294 | 63958975 | 225.388 | 219.107 |
| 5) l1 | 1016-2 | 1.742 | 1.994 | 118.2E6 | 150.6E6 | 241.846 | 238.413 |
| 6) l1 | 1016-3 | 1.930 | 2.195 | 249.4E6 | 302.5E6 | 257.436 | 238.973 |
| 7) l1 | 1016-4 | 1.985 | 2.254 | 103.5E6 | 121.2E6 | 253.545 | 237.312M3 |
| 8) l1 | 1016-5 | 2.154 | 2.465 | 104.7E6 | 96973955 | 232.767 | 238.013 |
| | Sum 1016-1 | | | 626.4E6 | 735.3E6 | 1210.982 | 1171.817 |
| Average | 1016-1 | | | | | 242.196 | 234.363 |
| 9) l2 | 1260-1 | 2.695 | 3.073 | 155.4E6 | 194.0E6 | 251.189 | 244.146 |
| 10) l2 | 1260-2 | 2.825 | 3.175 | 244.6E6 | 217.1E6 | 260.221 | 231.239 |
| 11) l2 | 1260-3 | 3.140 | 3.566 | 130.0E6 | 163.2E6 | 228.428 | 212.615 |
| 12) l2 | 1260-4 | 3.295 | 3.696 | 280.0E6 | 317.0E6 | 224.090 | 210.968 |
| 13) l2 | 1260-5 | 3.443 | 3.898 | 204.9E6 | 234.4E6 | 229.547 | 219.185 |
| | Sum 1260-1 | | | 1014.9E6 | 1125.7E6 | NoCal | NoCal D |
| Average | 1260-1 | | | | | 238.695 | 223.631 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:56 pm
Operator : pest2:kb/sdc
Sample : cicv1660,42,, ICV 250 pp11765
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:56 pm
Operator : pest2:kb/sdc
Sample : cicv1660,42,, ICV 250 pp11765
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

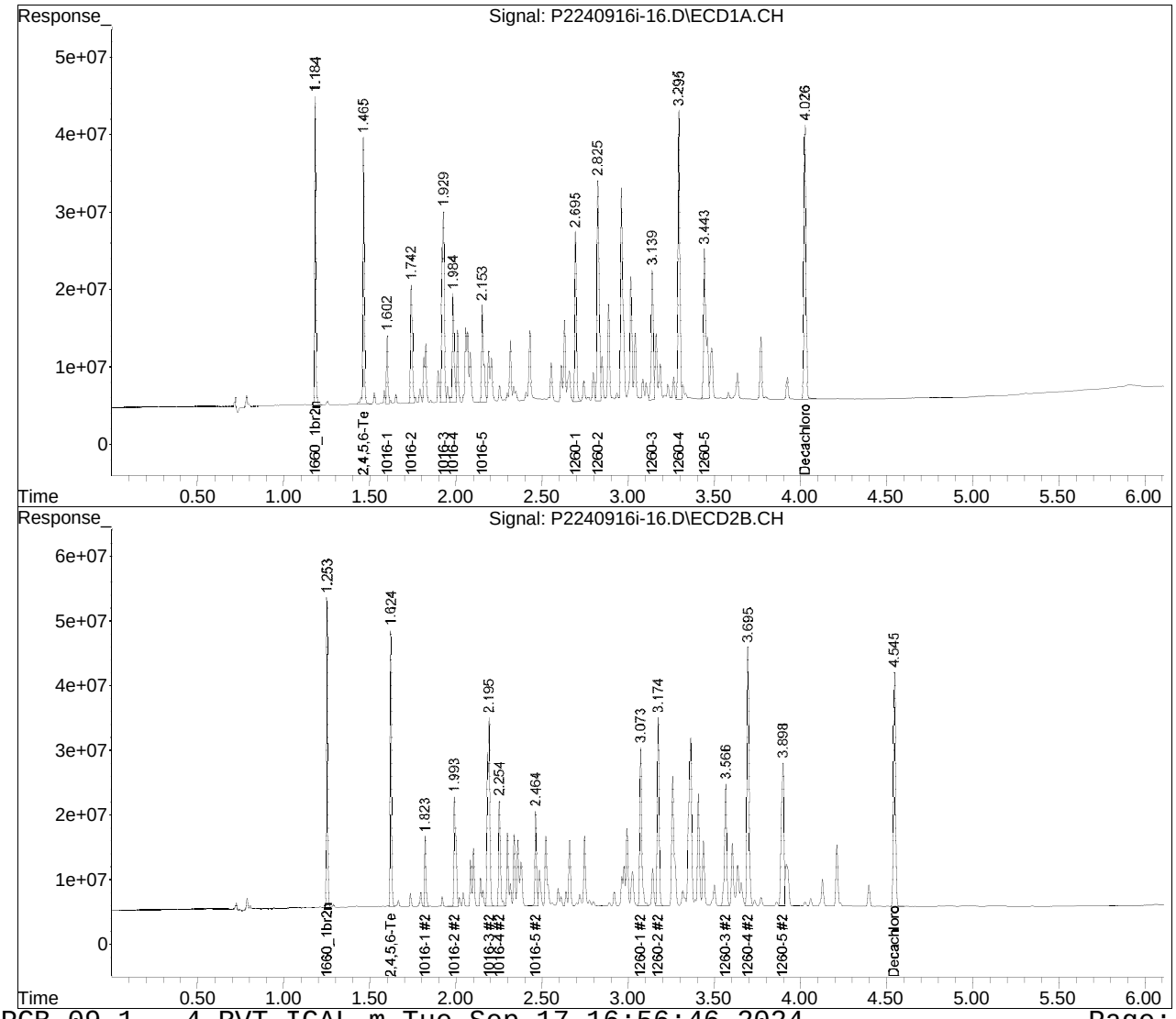
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-16.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 4:56 pm
Operator : pest2:kb/sdc
Sample : cicv1660,42,, ICV 250 pp11765
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 16 17:05:53 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Mon Sep 16 16:59:53 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

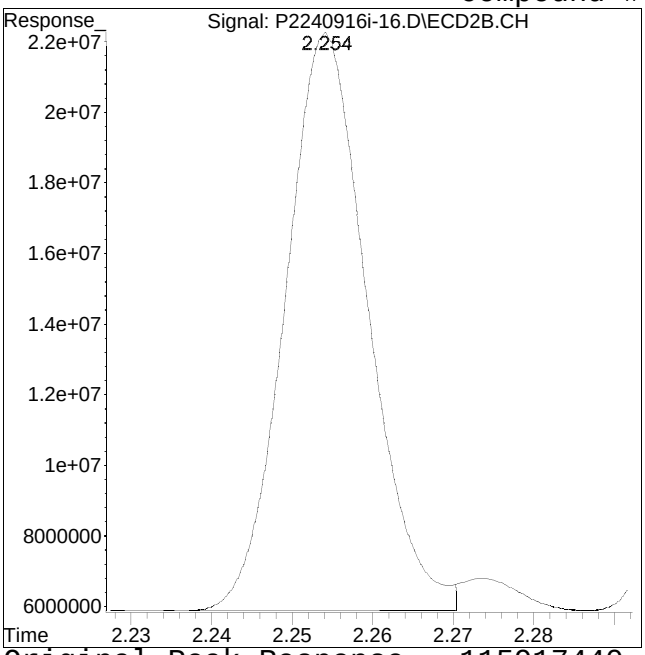
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

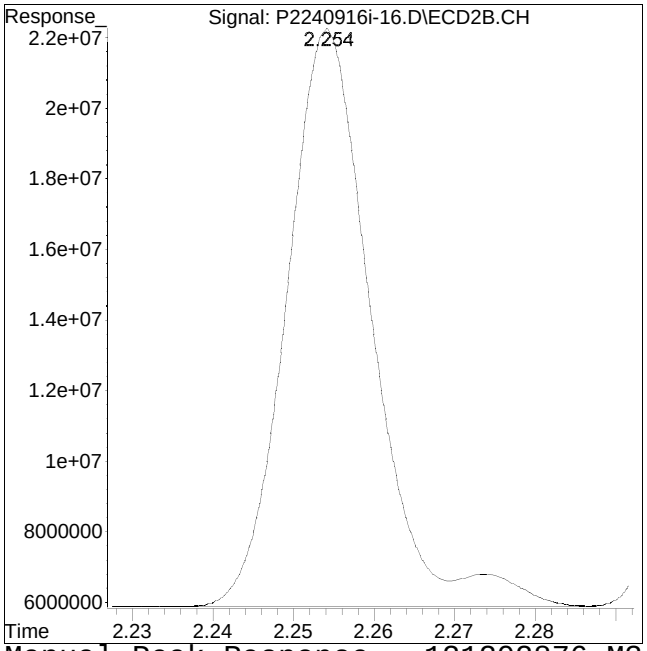


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-16.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 4:56 pm Instrument : Pest 2
Sample : cicv1660,42,, ICV 250 pp11Quant Date : 9/16/2024 5:05 pm

Compound #58: 1016-4 #2




Original Peak Response = 115917440 Manual Peak Response = 121202876 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-18.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:14 pm
Operator : pest2:kb/sdc
Sample : il82154,42,, 250 pp11766
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:46:07 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:45:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) i | 2154_1br2nb | 1.185 | 1.253 | 215.5E6 | 246.9E6 | 25.000 | 25.000M4 |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 3) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 1.528 | 1.738 | 32214968 | 43006075 | 250.084 | 214.878 |
| 16) l3 | 1221-2 | 1.586 | 1.798 | 19872002 | 27225760 | 236.799 | 241.463 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-18.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:14 pm
Operator : pest2:kb/sdc
Sample : il82154,42,, 250 pp11766
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:46:07 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:45:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) l3 | 1221-3 | 1.603 | 1.824 | 79473918 | 98685926 | 232.143 | 231.833 |
| Sum | 1221-1 | | | 131.6E6 | 168.9E6 | 719.026 | 688.175 |
| Average | 1221-1 | | | | | 239.675 | 229.392 |
| 18) l4 | 1254-1 | 2.318 | 2.662 | 113.1E6 | 153.6E6 | 251.864 | 235.750 |
| 19) l4 | 1254-2 | 2.430 | 2.749 | 201.2E6 | 180.1E6 | 266.589 | 243.450 |
| 20) l4 | 1254-3 | 2.613 | 2.978 | 218.2E6 | 267.9E6 | 240.465 | 225.681 |
| 21) l4 | 1254-4 | 2.743 | 3.089 | 153.9E6 | 179.0E6 | 240.276 | 215.193 |
| 22) l4 | 1254-5 | 2.964 | 3.364 | 212.7E6 | 248.8E6 | 235.784 | 244.611 |
| Sum | 1254-1 | | | 899.2E6 | 1029.3E6 | NoCal | NoCal D |
| Average | 1254-1 | | | | | 246.995 | 232.937 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-18.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:14 pm
Operator : pest2:kb/sdc
Sample : il82154,42,, 250 pp11766
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:46:07 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:45:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

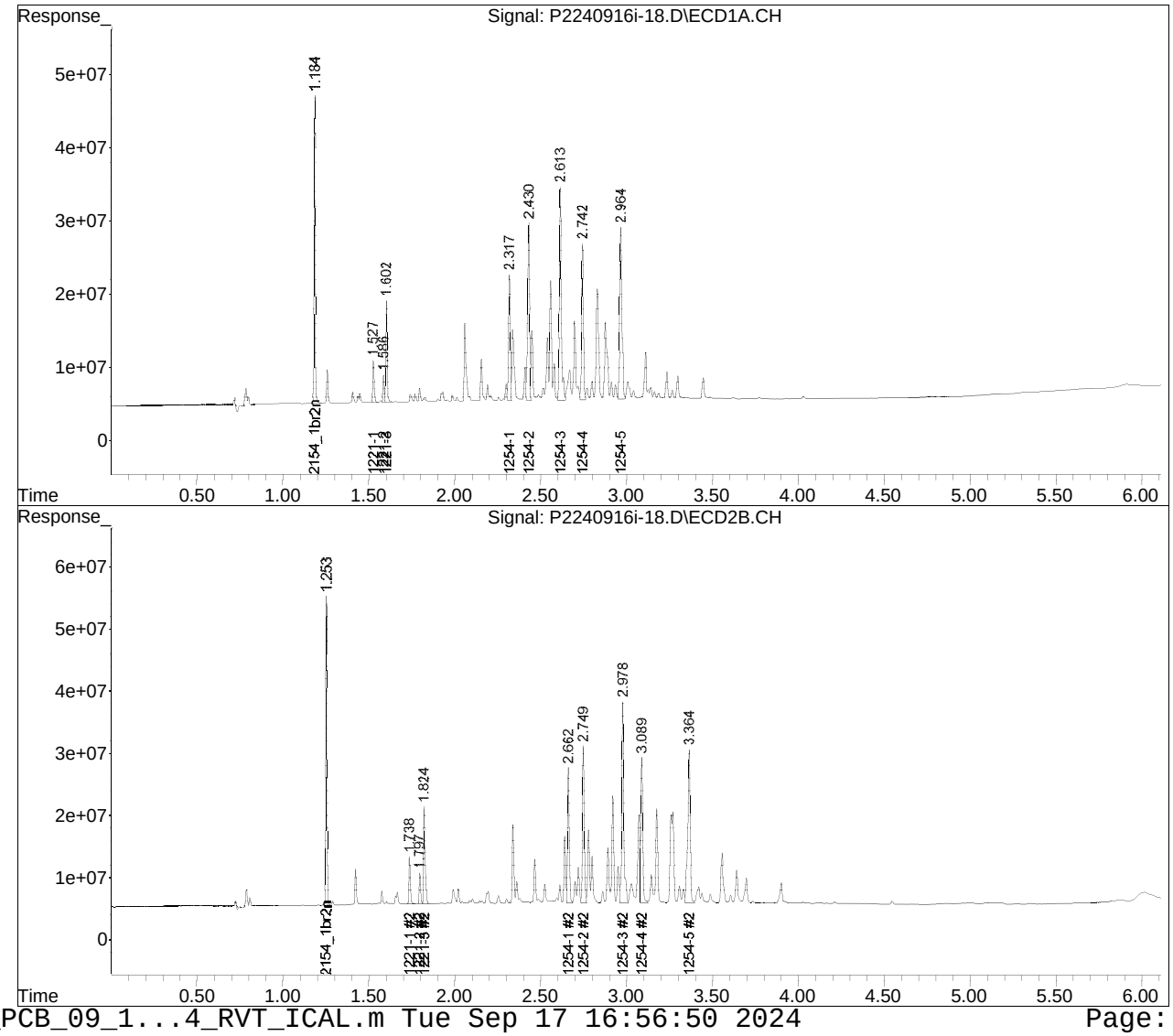
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-18.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:14 pm
Operator : pest2:kb/sdc
Sample : il82154,42,, 250 pp11766
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:46:07 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:45:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

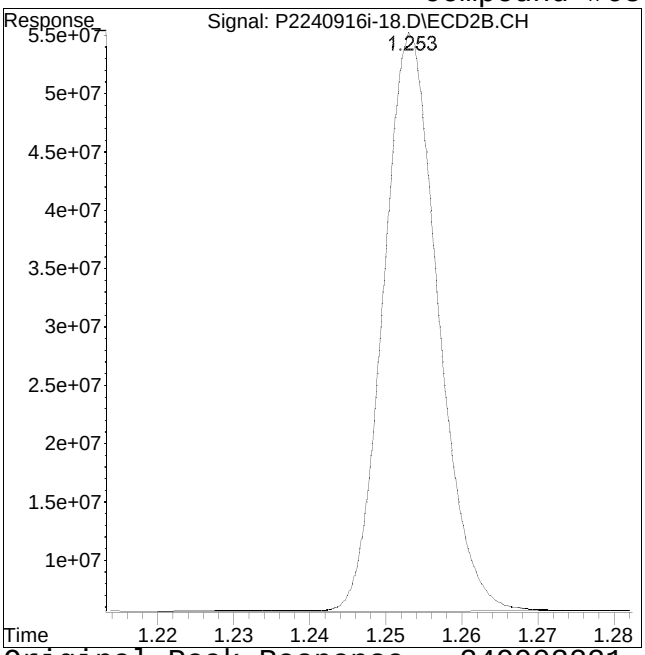
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

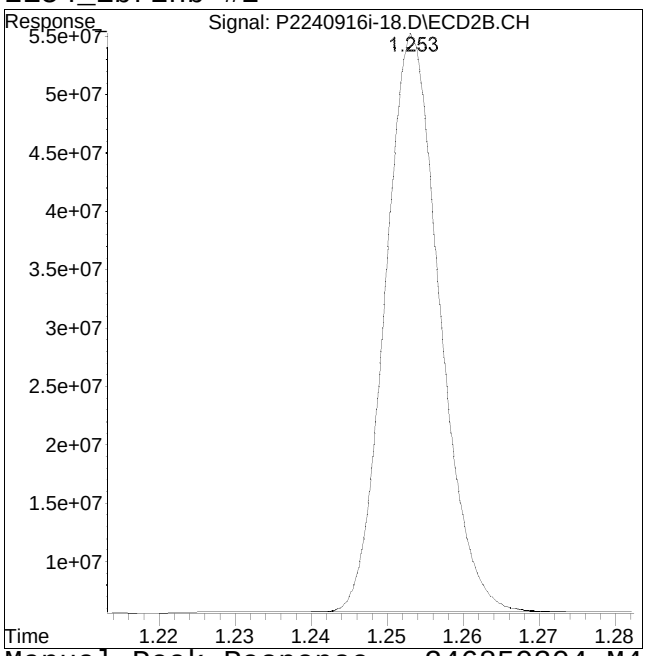


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-18.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:14 pm Instrument : Pest 2
Sample : il82154,42,, 250 pp11766 Quant Date : 9/17/2024 10:46 am

Compound #65: 2154_1br2nb #2




Original Peak Response = 249903221 Manual Peak Response = 246850304 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:23 pm
Operator : pest2:kb/sdc
Sample : il81248,42,, 250 pp11767
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:50:35 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:50:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 1.185 | 1.253 | 207.0E6 | 246.7E6 | 25.000 | 25.000M4 |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 3) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:23 pm
Operator : pest2:kb/sdc
Sample : il81248,42,, 250 pp11767
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:50:35 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:50:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 1.927 | 2.186 | 124.4E6 | 154.0E6 | 244.542 | 251.173 |
| 36) l7 | 1248-2 | 2.059 | 2.339 | 162.4E6 | 105.4E6 | 252.084M3 | 255.629 |
| 37) l7 | 1248-3 | 2.155 | 2.465 | 145.3E6 | 130.2E6 | 251.859 | 241.978 |
| 38) l7 | 1248-4 | 2.336 | 2.640 | 123.3E6 | 146.9E6 | 243.705M3 | 248.148 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:23 pm
Operator : pest2:kb/sdc
Sample : il81248,42,, 250 pp11767
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:50:35 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:50:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 2.349 | 2.664 | 114.9E6 | 164.9E6 | 243.648M3 | 248.334 |
| Sum | 1248-1 | | | 670.3E6 | 701.4E6 | NoCal | NoCal D |
| Average | 1248-1 | | | | | 247.167 | 249.052 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

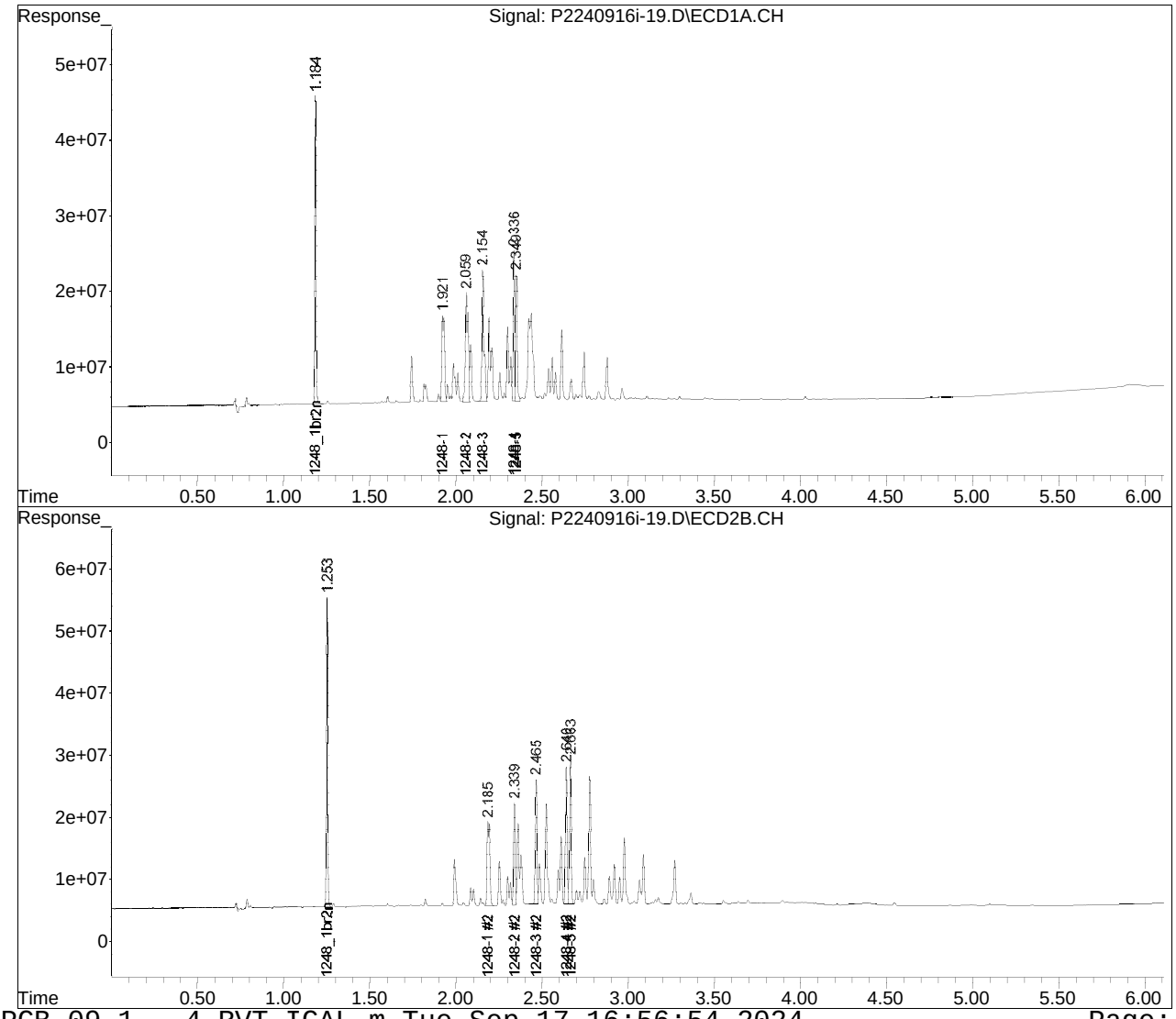
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:23 pm
Operator : pest2:kb/sdc
Sample : il81248,42,, 250 pp11767
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 10:50:35 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 10:50:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

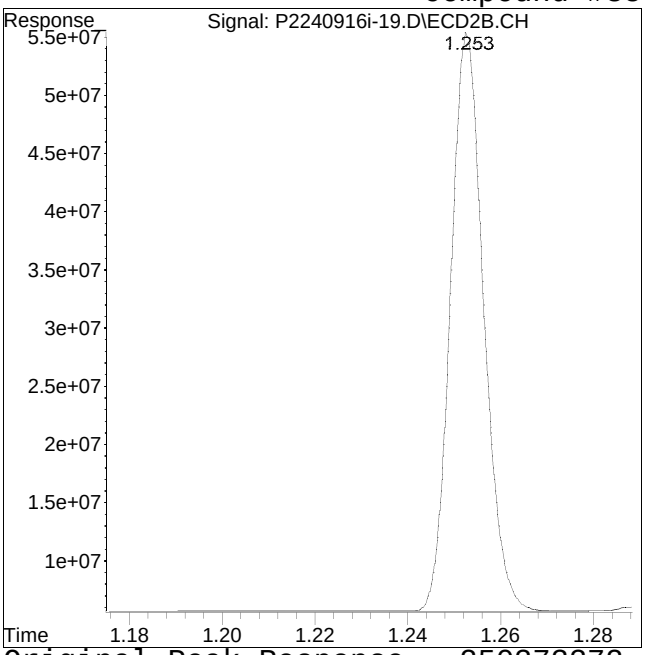
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

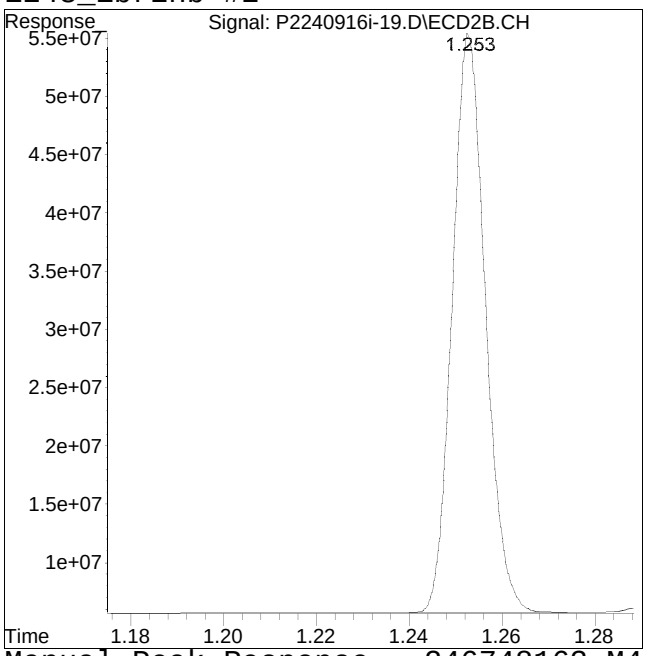


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-19.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:23 pm Instrument : Pest 2
Sample : il81248,42,, 250 pp11767 Quant Date : 9/17/2024 10:50 am

Compound #85: 1248_1br2nb #2



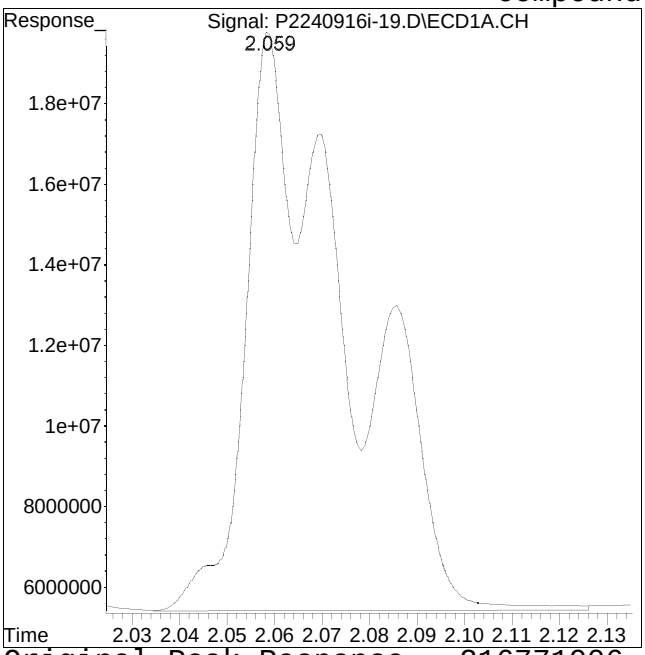



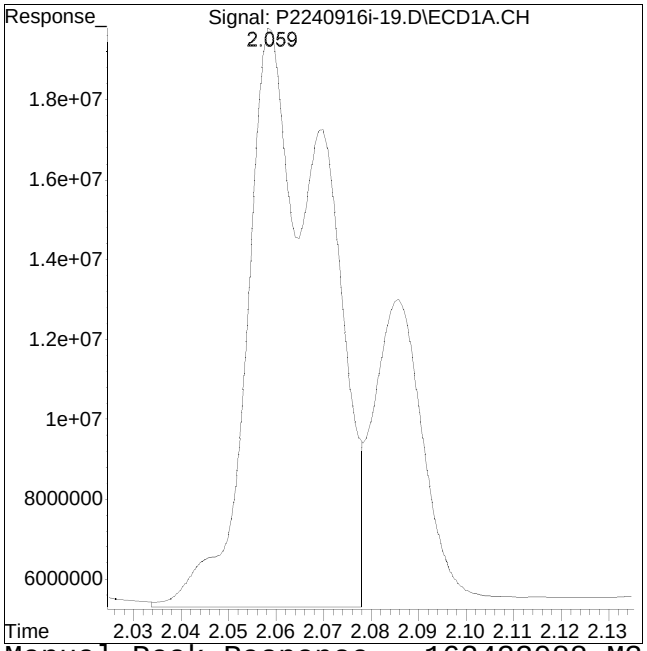

Original Peak Response = 250373372 Manual Peak Response = 246748163 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-19.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:23 pm Instrument : Pest 2
Sample : il81248,42,, 250 pp11767 Quant Date : 9/17/2024 10:50 am

Compound #36: 1248-2



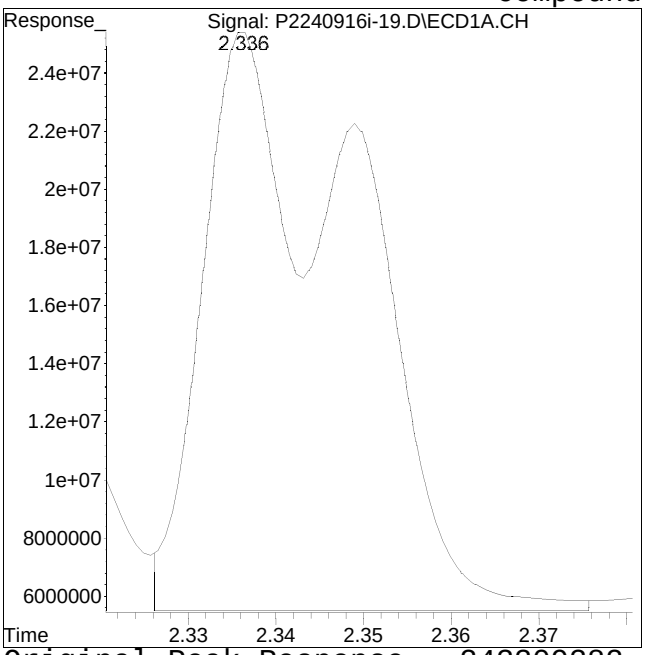



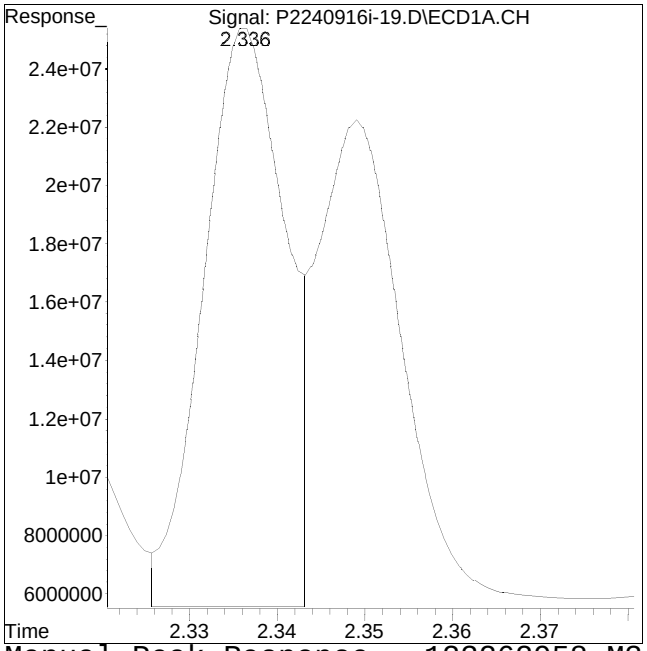

Original Peak Response = 216771906 Manual Peak Response = 162433088 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-19.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:23 pm Instrument : Pest 2
Sample : il81248,42,, 250 pp11767 Quant Date : 9/17/2024 10:50 am

Compound #38: 1248-4



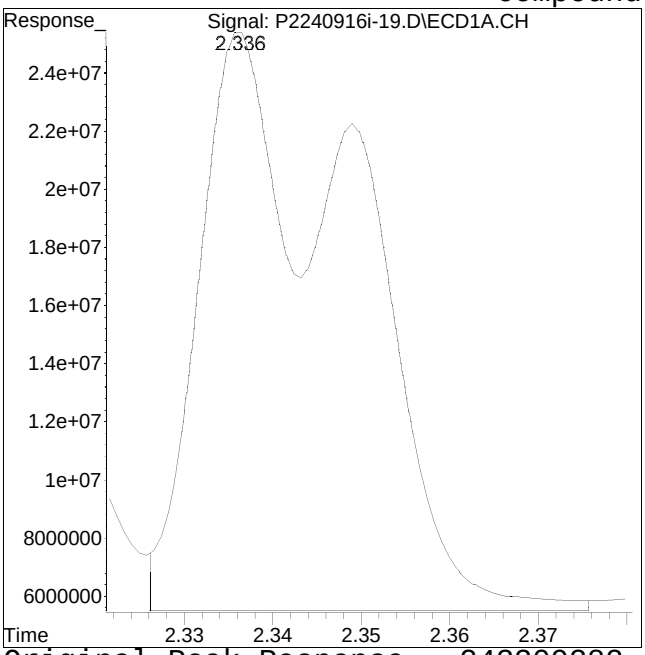



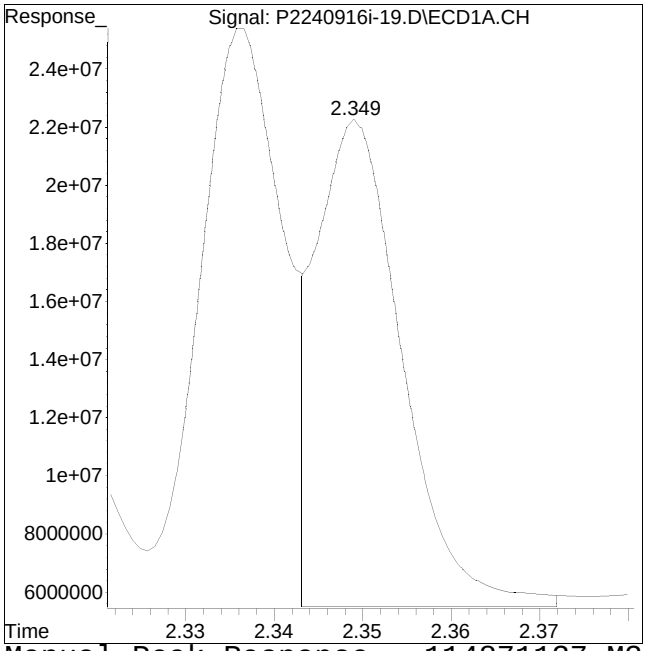

Original Peak Response = 243309382 Manual Peak Response = 123262958 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-19.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:23 pm Instrument : Pest 2
Sample : il81248,42,, 250 pp11767 Quant Date : 9/17/2024 10:50 am

Compound #39: 1248-5




Original Peak Response = 243309382 Manual Peak Response = 114871137 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:32 pm
Operator : pest2:kb/sdc
Sample : il83262,42,, 250 pp11768
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:02:45 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:02:37 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 1.185 | 1.254 | 209.0E6 | 243.5E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 500.000 | Range 30 - 150 | Recovery | = | 0.00%# | 0.00%# |
| 3) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 500.000 | Range 30 - 150 | Recovery | = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:32 pm
Operator : pest2:kb/sdc
Sample : il83262,42,, 250 pp11768
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:02:45 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:02:37 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:32 pm
Operator : pest2:kb/sdc
Sample : il83262,42,, 250 pp11768
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:02:45 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:02:37 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 1.603 | 1.824 | 60291065 | 72344592 | 250.000 | 250.000 |
| 42) l5 | 1232-2 | 1.743 | 1.994 | 55810869 | 76163797 | 225.715 | 247.951 |
| 43) l5 | 1232-3 | 1.931 | 2.195 | 115.7E6 | 145.2E6 | 242.627 | 240.522 |
| 44) l5 | 1232-4 | 1.986 | 2.255 | 47966543 | 58938339 | 223.978 | 236.986 |
| 45) l5 | 1232-5 | 2.337 | 2.640 | 34955113 | 43285797 | 250.000 | 250.000 |
| Sum | 1232-1 | | | 314.7E6 | 395.9E6 | 1192.320 | 1225.460 |
| Average | 1232-1 | | | | | 238.464 | 245.092 |
| 46) l8 | 1262-1 | 2.826 | 3.175 | 173.5E6 | 177.8E6 | 250.000 | 250.000 |
| 47) l8 | 1262-2 | 3.017 | 3.409 | 218.9E6 | 245.2E6 | 250.000 | 250.000 |
| 48) l8 | 1262-3 | 3.141 | 3.567 | 190.3E6 | 221.6E6 | 250.000 | 250.000 |
| 49) l8 | 1262-4 | 3.296 | 3.696 | 386.4E6 | 424.3E6 | 250.000 | 250.000 |
| 50) l8 | 1262-5 | 3.770 | 4.212 | 123.6E6 | 150.7E6 | 250.000 | 250.000 |
| Sum | 1262-1 | | | 1092.7E6 | 1219.6E6 | 1250.000 | 1250.000 |
| Average | 1262-1 | | | | | 250.000 | 250.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 1092.7E6 | 1219.6E6 | 1250.000 | 1250.000 |
| Average | 1262-1 | | | | | 250.000 | 250.000 |

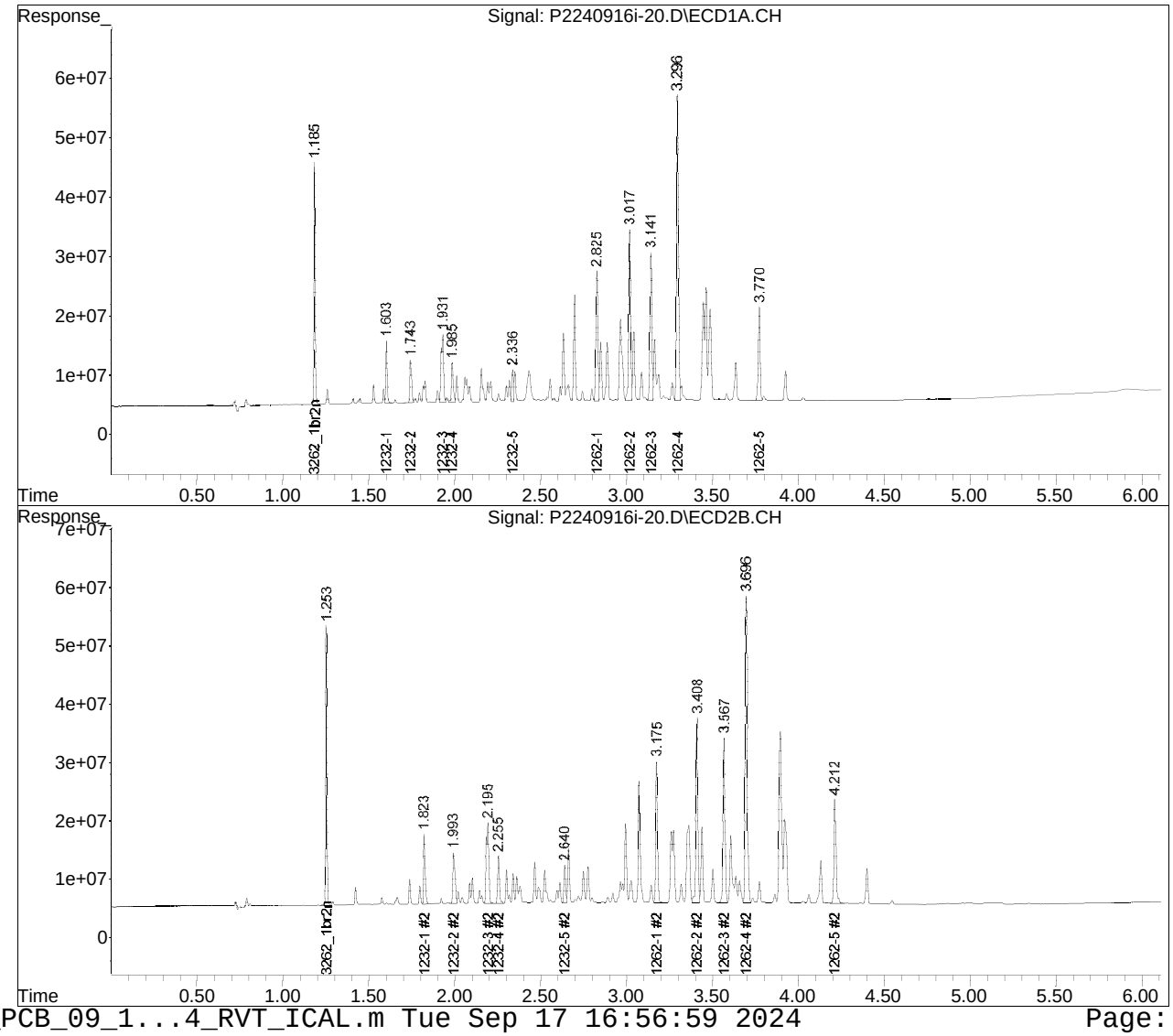
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:32 pm
Operator : pest2:kb/sdc
Sample : il83262,42,, 250 pp11768
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:02:45 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:02:37 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\PCB\Pest2\2024\240916I\ | QMethod | : P2_PCB_09_16_24_RVT_ICAL |
| Data File | : P2240916i-20.D | Operator | : pest2:kb/sdc |
| Date Inj'd | : 9/16/2024 5:32 pm | Instrument | : Pest 2 |
| Sample | : il83262,42,, 250 pp11768 | Quant Date | : 9/17/2024 11:02 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:41 pm
Operator : pest2:kb/sdc
Sample : il84268,42,, 250 pp11769
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:01:15 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:01:04 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) i | 2154_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) i | 4268_1br2nb | 1.185 | 1.254 | 203.5E6 | 250.0E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 40) i | 3262_1br2nb | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 3) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:41 pm
Operator : pest2:kb/sdc
Sample : il84268,42,, 250 pp11769
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:01:15 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:01:04 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l | |
|---|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. | |
| Average | 1221-1 | | | | | 0.000 | 0.000 | |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. | |
| Average | 1254-1 | | | | | 0.000 | 0.000 | |
| 24) l6 | 1242-1 | 1.603 | 1.824 | 42935320 | 52847778 | 191.580 | 237.473 | |
| 25) l6 | 1242-2 | 1.743 | 1.994 | 93917968 | 119.7E6 | 220.107 | 235.971 | |
| 26) l6 | 1242-3 | 1.930 | 2.195 | 195.1E6 | 237.8E6 | 242.153 | 242.904 | |
| 27) l6 | 1242-4 | 1.985 | 2.255 | 82159676 | 96723683 | 233.398 | 243.823 | |
| 28) l6 | 1242-5 | 2.336 | 2.640 | 65305903 | 78224584 | 301.933 | 224.393 | |
| Sum | 1242-1 | | | 479.4E6 | 585.3E6 | 1189.172 | 1184.563 | |
| Average | 1242-1 | | | | | 237.834 | 236.913 | |
| 29) l9 | 1268-1 | 3.459 | 3.892 | 424.3E6 | 475.8E6 | 247.758 | 243.028 | |
| 30) l9 | 1268-2 | 3.480 | 3.918 | 384.0E6 | 423.1E6 | 224.334 | 237.127 | |
| 31) l9 | 1268-3 | 3.582 | 4.060 | 312.6E6 | 351.7E6 | 238.816 | 237.498 | |
| 32) l9 | 1268-4 | 3.769 | 4.212 | 136.6E6 | 154.0E6 | 263.636 | 222.601 | |
| 33) l9 | 1268-5 | 3.923 | 4.397 | 950.3E6 | 998.3E6 | 238.312 | 239.513 | |
| Sum | 1268-1 | | | 2207.8E6 | 2402.8E6 | N.D. | N.D. | D |
| Average | 1268-1 | | | | | 242.571 | 235.953 | |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. | |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:41 pm
Operator : pest2:kb/sdc
Sample : il84268,42,, 250 pp11769
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:01:15 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:01:04 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

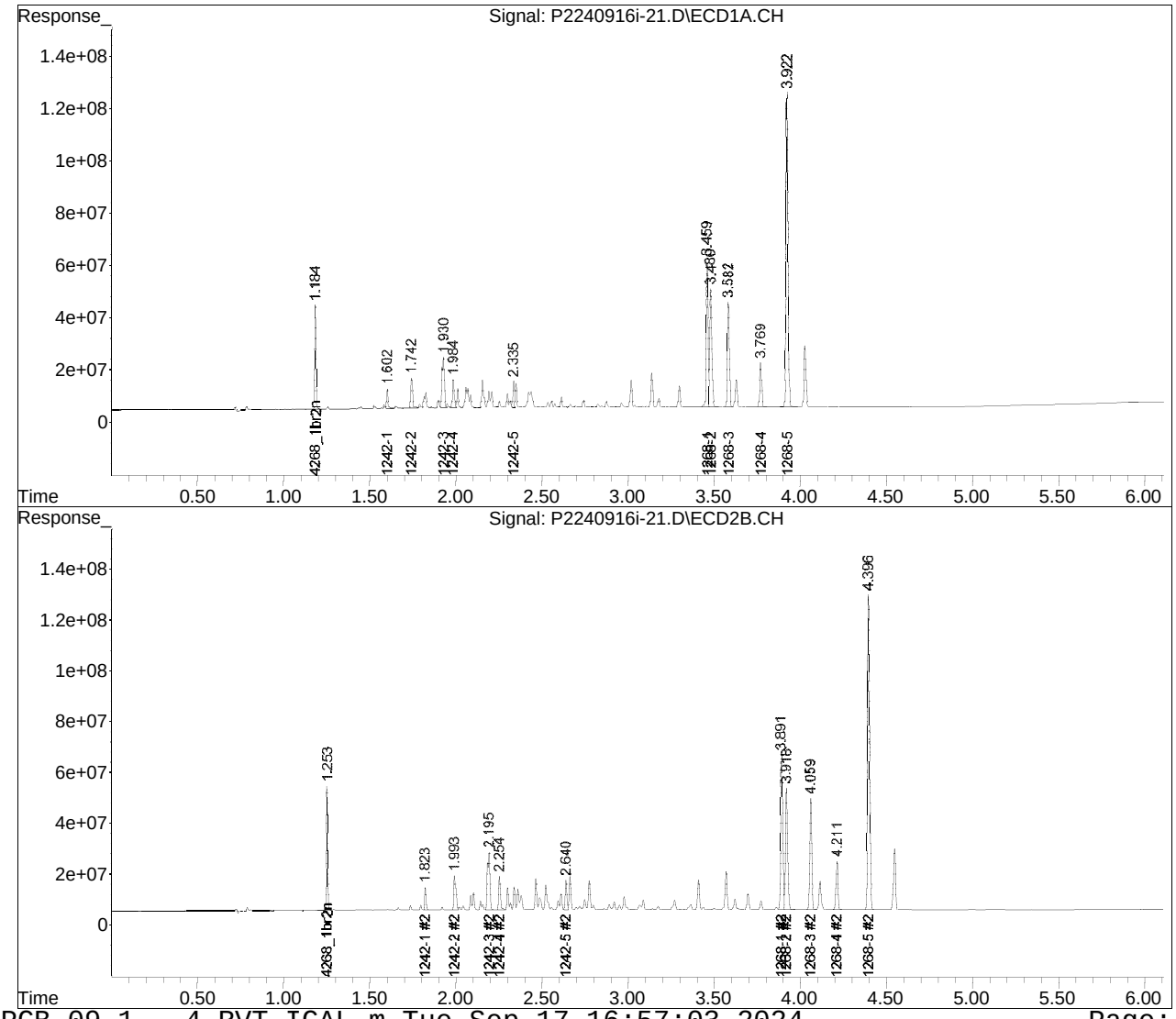
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:41 pm
Operator : pest2:kb/sdc
Sample : il84268,42,, 250 pp11769
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:01:15 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:01:04 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\PCB\Pest2\2024\240916I\ | QMethod | : P2_PCB_09_16_24_RVT_ICAL |
| Data File | : P2240916i-21.D | Operator | : pest2:kb/sdc |
| Date Inj'd | : 9/16/2024 5:41 pm | Instrument | : Pest 2 |
| Sample | : il84268,42,, 250 pp11769 | Quant Date | : 9/17/2024 11:01 am |

There are no manual integrations or false positives in this file.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:49 pm
Operator  : pest2:kb/sdc
Sample    : cicv2154,42,, 250 pp11770
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.393 | 4.0 | 94 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.066 | 7.6 | 99 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 15 | l3 | 1221-1 | | 0.015 | 0.014 | 6.7 | 93 | 0.00 |
| 16 | l3 | 1221-2 | | 0.00922 | 0.00853 | 7.5 | 90 | 0.00 |
| 17 | l3 | 1221-3 | | 0.037 | 0.035 | 5.4 | 92 | 0.00 |
| 18 | l4 | 1254-1 | | 0.052 | 0.052 | 0.0 | 96 | 0.00 |
| 19 | l4 | 1254-2 | | 0.093 | 0.096 | -3.2 | 100 | 0.00 |
| 20 | l4 | 1254-3 | | 0.101 | 0.102 | -1.0 | 98 | 0.00 |
| 21 | l4 | 1254-4 | | 0.071 | 0.071 | 0.0 | 97 | 0.00 |
| 22 | l4 | 1254-5 | | 0.099 | 0.092 | 7.1 | 91 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.457 | 11.1 | 94 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 0.945 | 14.2 | 101 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 15 | l3 | 1221-1 | | 0.017 | 0.016 | 5.9 | 92 | 0.00 |
| 16 | l3 | 1221-2 | | 0.011 | 0.010 | 9.1 | 94 | 0.00 |
| 17 | l3 | 1221-3 | | 0.040 | 0.037 | 7.5 | 93 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:49 pm
Operator  : pest2:kb/sdc
Sample    : cicv2154,42,, 250 pp11770
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 18 | l4 | 1254-1 | | 0.062 | 0.061 | 1.6 | 97 | 0.00 |
| 19 | l4 | 1254-2 | | 0.073 | 0.068 | 6.8 | 94 | 0.00 |
| 20 | l4 | 1254-3 | | 0.109 | 0.104 | 4.6 | 96 | 0.00 |
| 21 | l4 | 1254-4 | | 0.073 | 0.070 | 4.1 | 96 | 0.00 |
| 22 | l4 | 1254-5 | | 0.101 | 0.090 | 10.9 | 90 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 101 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | | 0.027 | 0.000 | 100.0# | 0# | -1.60# |
| 5 | l1 | 1016-2 | | 0.059 | 0.000 | 100.0# | 0# | -1.74# |
| 6 | l1 | 1016-3 | | 0.117 | 0.000 | 100.0# | 0# | -1.93# |
| 7 | l1 | 1016-4 | | 0.049 | 0.000 | 100.0# | 0# | -1.98# |
| 8 | l1 | 1016-5 | | 0.054 | 0.000 | 100.0# | 0# | -2.15# |
| 9 | l2 | 1260-1 | | 0.075 | 0.000 | 100.0# | 0# | -2.70# |
| 10 | l2 | 1260-2 | | 0.113 | 0.000 | 100.0# | 0# | -2.83# |
| 11 | l2 | 1260-3 | | 0.069 | 0.000 | 100.0# | 0# | -3.14# |
| 12 | l2 | 1260-4 | | 0.151 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | l2 | 1260-5 | | 0.108 | 0.000 | 100.0# | 0# | -3.44# |
| 24 | l6 | 1242-1 | | 0.021 | 0.000 | 100.0# | 0# | -1.60# |
| 25 | l6 | 1242-2 | | 0.046 | 0.000 | 100.0# | 0# | -1.74# |
| 26 | l6 | 1242-3 | | 0.096 | 0.000 | 100.0# | 0# | -1.93# |
| 27 | l6 | 1242-4 | | 0.040 | 0.000 | 100.0# | 0# | -1.98# |
| 28 | l6 | 1242-5 | | 0.032 | 0.000 | 100.0# | 0# | -2.34# |
| 29 | l9 | 1268-1 | | 0.209 | 0.000 | 100.0# | 0# | -3.46# |
| 30 | l9 | 1268-2 | | 0.189 | 0.000 | 100.0# | 0# | -3.48# |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:49 pm
Operator  : pest2:kb/sdc
Sample    : cicv2154,42,, 250 pp11770
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 31 | l9 | 1268-3 | 0.154 | 0.000 | 100.0# | 0# | -3.58# |
| 32 | l9 | 1268-4 | 0.067 | 0.000 | 100.0# | 0# | -3.77# |
| 33 | l9 | 1268-5 | 0.467 | 0.000 | 100.0# | 0# | -3.92# |
| 35 | l7 | 1248-1 | 0.060 | 0.000 | 100.0# | 0# | -1.93# |
| 36 | l7 | 1248-2 | 0.078 | 0.000 | 100.0# | 0# | -2.06# |
| 37 | l7 | 1248-3 | 0.070 | 0.000 | 100.0# | 0# | -2.15# |
| 38 | l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.34# |
| 39 | l7 | 1248-5 | 0.056 | 0.000 | 100.0# | 0# | -2.35# |
| 41 | l5 | 1232-1 | 0.029 | 0.000 | 100.0# | 0# | -1.60# |
| 42 | l5 | 1232-2 | 0.027 | 0.000 | 100.0# | 0# | -1.74# |
| 43 | l5 | 1232-3 | 0.055 | 0.000 | 100.0# | 0# | -1.93# |
| 44 | l5 | 1232-4 | 0.023 | 0.000 | 100.0# | 0# | -1.99# |
| 45 | l5 | 1232-5 | 0.017 | 0.000 | 100.0# | 0# | -2.34# |
| 46 | l8 | 1262-1 | 0.083 | 0.000 | 100.0# | 0# | -2.83# |
| 47 | l8 | 1262-2 | 0.105 | 0.000 | 100.0# | 0# | -3.02# |
| 48 | l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.14# |
| 49 | l8 | 1262-4 | 0.185 | 0.000 | 100.0# | 0# | -3.30# |
| 50 | l8 | 1262-5 | 0.059 | 0.000 | 100.0# | 0# | -3.77# |

Signal #2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 5 | l1 | 1016-2 | 0.065 | 0.000 | 100.0# | 0# | -1.99# |
| 6 | l1 | 1016-3 | 0.131 | 0.000 | 100.0# | 0# | -2.19# |
| 7 | l1 | 1016-4 | 0.053 | 0.000 | 100.0# | 0# | -2.25# |
| 8 | l1 | 1016-5 | 0.042 | 0.000 | 100.0# | 0# | -2.46# |
| 9 | l2 | 1260-1 | 0.082 | 0.000 | 100.0# | 0# | -3.07# |
| 10 | l2 | 1260-2 | 0.097 | 0.000 | 100.0# | 0# | -3.17# |
| 11 | l2 | 1260-3 | 0.079 | 0.000 | 100.0# | 0# | -3.57# |
| 12 | l2 | 1260-4 | 0.155 | 0.000 | 100.0# | 0# | -3.70# |
| 13 | l2 | 1260-5 | 0.111 | 0.000 | 100.0# | 0# | -3.90# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:49 pm
Operator  : pest2:kb/sdc
Sample    : cicv2154,42,, 250 pp11770
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 24 l6 | 1242-1 | 0.021 | 0.000 | 100.0# | 0# | -1.82# |
| 25 l6 | 1242-2 | 0.048 | 0.000 | 100.0# | 0# | -1.99# |
| 26 l6 | 1242-3 | 0.095 | 0.000 | 100.0# | 0# | -2.19# |
| 27 l6 | 1242-4 | 0.039 | 0.000 | 100.0# | 0# | -2.25# |
| 28 l6 | 1242-5 | 0.031 | 0.000 | 100.0# | 0# | -2.64# |
| 29 l9 | 1268-1 | 0.190 | 0.000 | 100.0# | 0# | -3.89# |
| 30 l9 | 1268-2 | 0.169 | 0.000 | 100.0# | 0# | -3.92# |
| 31 l9 | 1268-3 | 0.141 | 0.000 | 100.0# | 0# | -4.06# |
| 32 l9 | 1268-4 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |
| 33 l9 | 1268-5 | 0.399 | 0.000 | 100.0# | 0# | -4.40# |
| 35 l7 | 1248-1 | 0.062 | 0.000 | 100.0# | 0# | -2.19# |
| 36 l7 | 1248-2 | 0.043 | 0.000 | 100.0# | 0# | -2.34# |
| 37 l7 | 1248-3 | 0.053 | 0.000 | 100.0# | 0# | -2.47# |
| 38 l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.64# |
| 39 l7 | 1248-5 | 0.067 | 0.000 | 100.0# | 0# | -2.66# |
| 41 l5 | 1232-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 42 l5 | 1232-2 | 0.031 | 0.000 | 100.0# | 0# | -1.99# |
| 43 l5 | 1232-3 | 0.060 | 0.000 | 100.0# | 0# | -2.20# |
| 44 l5 | 1232-4 | 0.024 | 0.000 | 100.0# | 0# | -2.26# |
| 45 l5 | 1232-5 | 0.018 | 0.000 | 100.0# | 0# | -2.64# |
| 46 l8 | 1262-1 | 0.073 | 0.000 | 100.0# | 0# | -3.18# |
| 47 l8 | 1262-2 | 0.101 | 0.000 | 100.0# | 0# | -3.41# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.57# |
| 49 l8 | 1262-4 | 0.174 | 0.000 | 100.0# | 0# | -3.70# |
| 50 l8 | 1262-5 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:49 pm
Operator : pest2:kb/sdc
Sample : cicv2154,42,, 250 pp11770
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 209.2E6 | 246.8E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 1.185 | 1.254 | 209.2E6 | 246.8E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.185 | 1.254 | 209.2E6 | 246.8E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.185 | 1.254 | 209.2E6 | 246.8E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.185 | 1.254 | 209.2E6 | 246.8E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.624 | 186.5E6 | 230.1E6 | 15.364 | 14.228 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 3.07%# | 2.85%# |
| 3) s | Decachlorobi | 4.027 | 4.545 | 285.5E6 | 298.7E6 | 29.570 | 27.477 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 5.91%# | 5.50%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 1.527 | 1.738 | 29919584 | 39651692 | 239.214 | 230.534 |
| 16) l3 | 1221-2 | 1.586 | 1.797 | 17855926 | 25596338 | 231.435 | 235.072M3 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:49 pm
Operator : pest2:kb/sdc
Sample : cicv2154,42,, 250 pp11770
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) l3 | 1221-3 | 1.602 | 1.823 | 73306971 | 91388301 | 237.579M3 | 231.547M3 |
| Sum | 1221-1 | | | 121.1E6 | 156.6E6 | 708.228 | 697.154 |
| Average | 1221-1 | | | | | 236.076 | 232.385 |
| 18) l4 | 1254-1 | 2.318 | 2.662 | 108.9E6 | 149.4E6 | 247.864 | 243.242 |
| 19) l4 | 1254-2 | 2.430 | 2.749 | 200.3E6 | 169.0E6 | 256.414 | 234.706 |
| 20) l4 | 1254-3 | 2.613 | 2.978 | 213.8E6 | 256.9E6 | 252.422 | 239.769 |
| 21) l4 | 1254-4 | 2.742 | 3.089 | 149.0E6 | 172.1E6 | 249.375 | 240.436 |
| 22) l4 | 1254-5 | 2.964 | 3.364 | 192.7E6 | 222.6E6 | 233.391 | 223.792 |
| Sum | 1254-1 | | | 864.8E6 | 970.1E6 | 1239.466 | 1181.946 |
| Average | 1254-1 | | | | | 247.893 | 236.389 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:49 pm
Operator : pest2:kb/sdc
Sample : cicv2154,42,, 250 pp11770
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

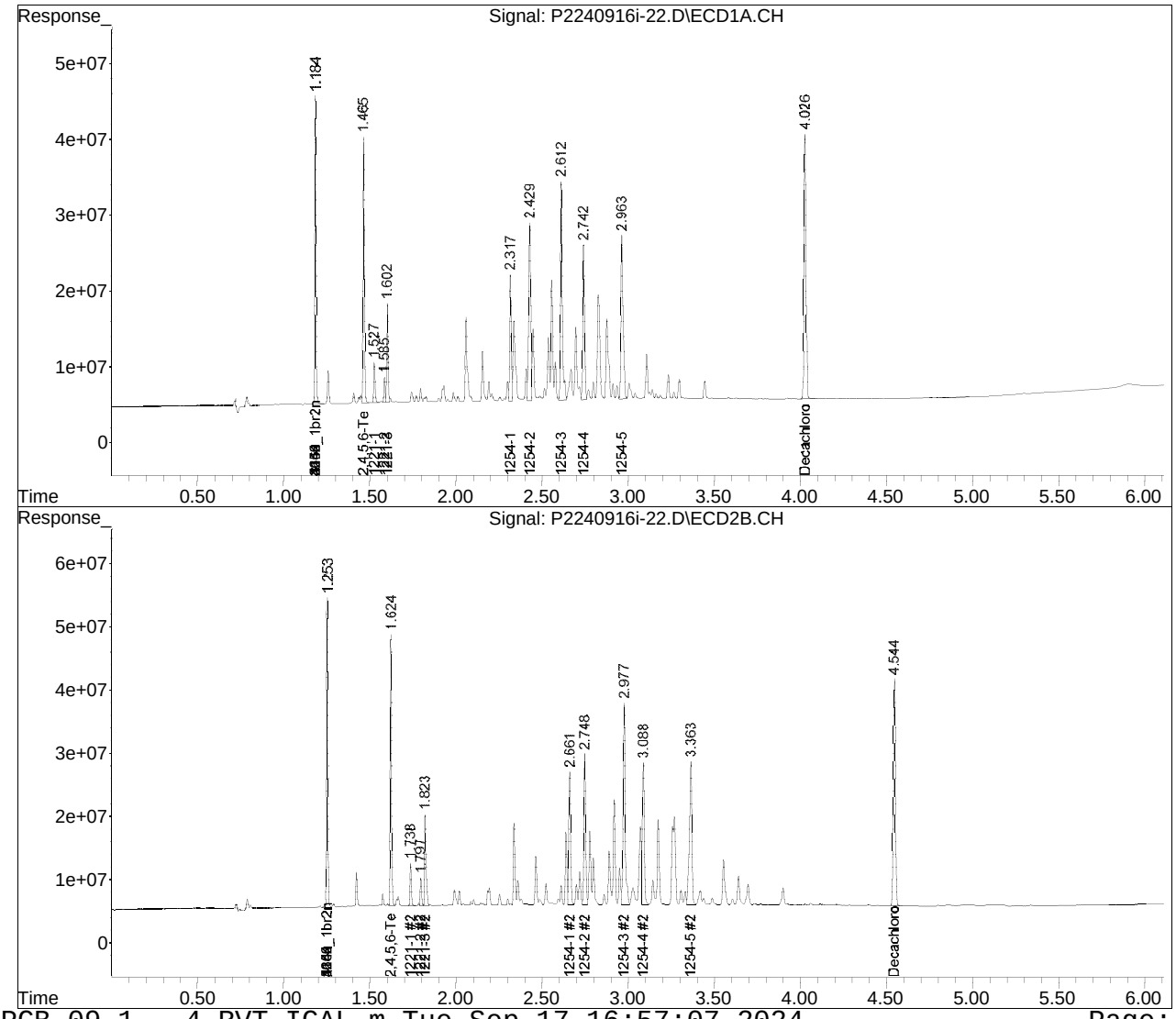
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:49 pm
Operator : pest2:kb/sdc
Sample : cicv2154,42,, 250 pp11770
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:04:27 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

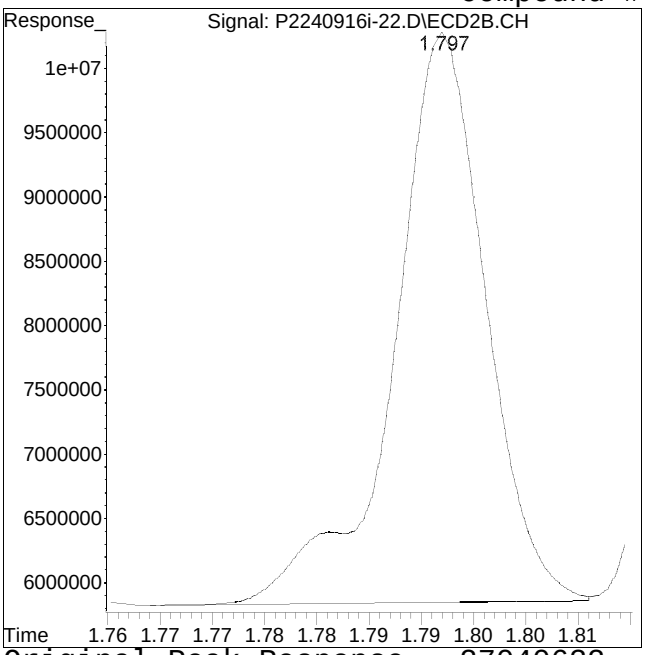
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

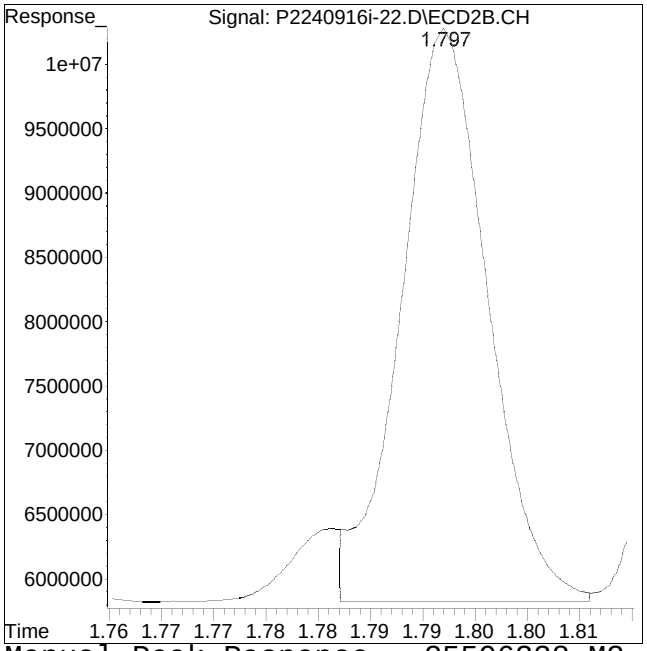


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-22.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:49 pm Instrument : Pest 2
Sample : cicv2154,42,, 250 pp11770 Quant Date : 9/17/2024 11:04 am

Compound #67: 1221-2 #2



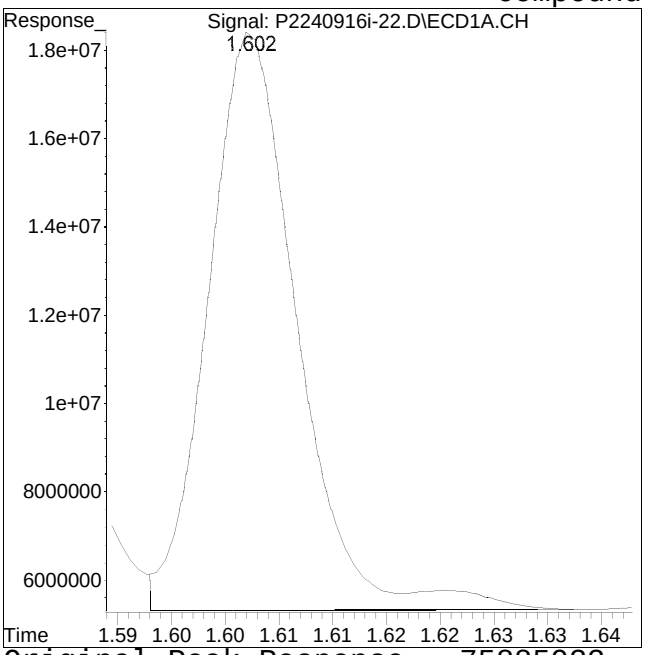



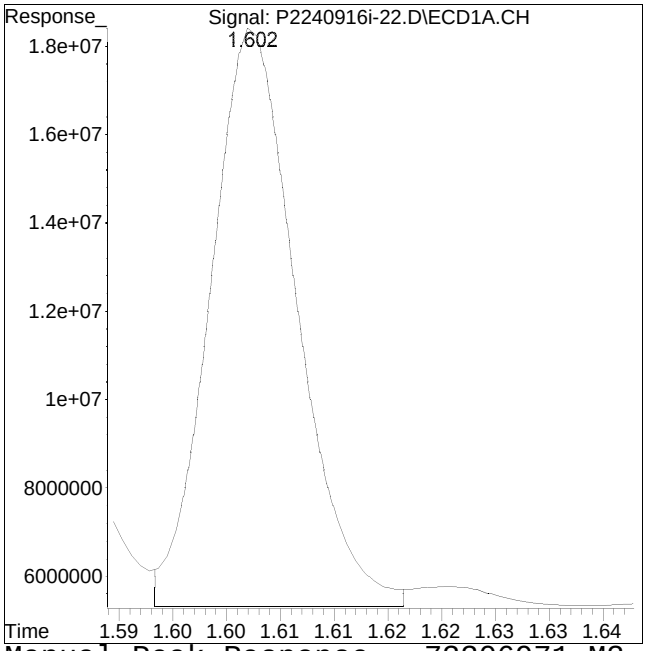

Original Peak Response = 27040632 Manual Peak Response = 25596338 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-22.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:49 pm Instrument : Pest 2
Sample : cicv2154,42,, 250 pp11770 Quant Date : 9/17/2024 11:04 am

Compound #17: 1221-3



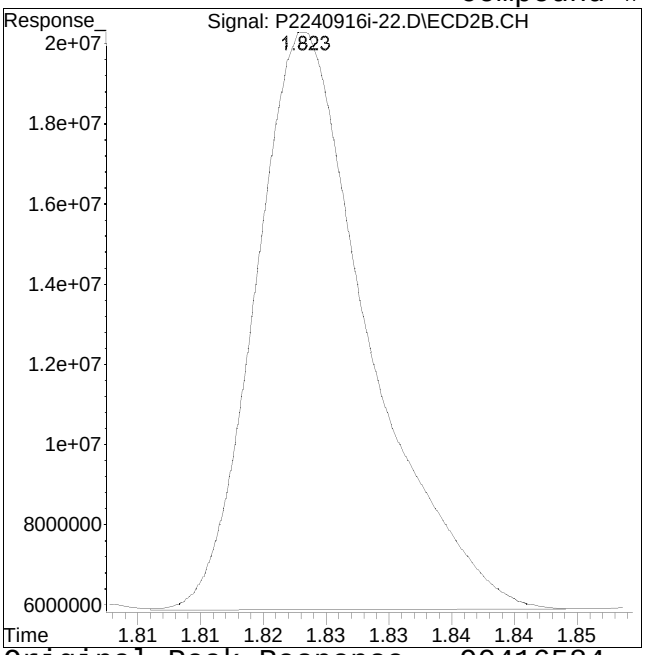



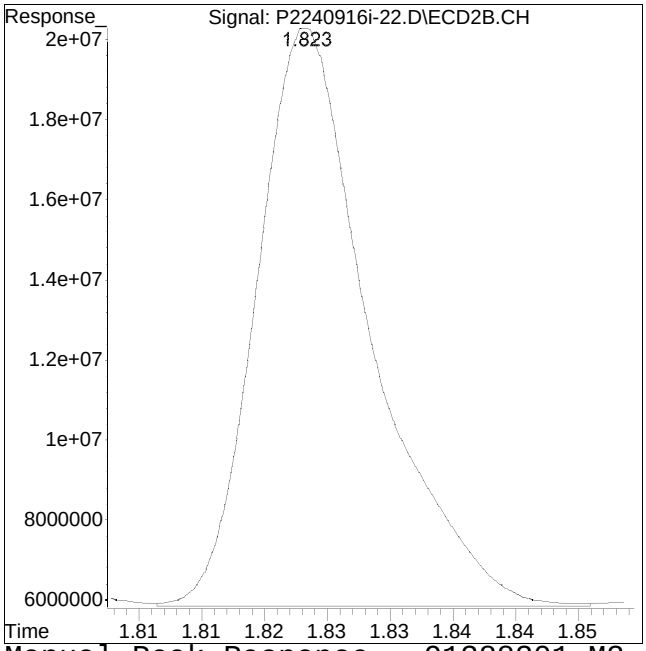

Original Peak Response = 75885933 Manual Peak Response = 73306971 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-22.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:49 pm Instrument : Pest 2
Sample : cicv2154,42,, 250 pp11770 Quant Date : 9/17/2024 11:04 am

Compound #68: 1221-3 #2




Original Peak Response = 90416584 Manual Peak Response = 91388301 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:58 pm
Operator  : pest2:kb/sdc
Sample    : cicv1248,42,, 250 pp11771
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 18 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.663 | -14.6 | 108 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.221 | -5.8 | 108 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 35 | l7 | 1248-1 | | 0.060 | 0.070 | -16.7 | 113 | 0.00 |
| 36 | l7 | 1248-2 | | 0.078 | 0.077 | 1.3 | 95 | 0.00 |
| 37 | l7 | 1248-3 | | 0.070 | 0.069 | 1.4 | 95 | 0.00 |
| 38 | l7 | 1248-4 | | 0.060 | 0.062 | -3.3 | 100 | 0.00 |
| 39 | l7 | 1248-5 | | 0.056 | 0.061 | -8.9 | 106 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.691 | -3.2 | 108 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 1.088 | 1.2 | 114 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 35 | l7 | 1248-1 | | 0.062 | 0.074 | -19.4 | 116 | 0.00 |
| 36 | l7 | 1248-2 | | 0.043 | 0.041 | 4.7 | 94 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:58 pm
Operator  : pest2:kb/sdc
Sample    : cicv1248,42,, 250 pp11771
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 18 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 37 | l7 | 1248-3 | | 0.053 | 0.051 | 3.8 | 96 | 0.00 |
| 38 | l7 | 1248-4 | | 0.060 | 0.059 | 1.7 | 98 | 0.00 |
| 39 | l7 | 1248-5 | | 0.067 | 0.069 | -3.0 | 102 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | | 0.027 | 0.000 | 100.0# | 0# | -1.60# |
| 5 | l1 | 1016-2 | | 0.059 | 0.000 | 100.0# | 0# | -1.74# |
| 6 | l1 | 1016-3 | | 0.117 | 0.000 | 100.0# | 0# | -1.93# |
| 7 | l1 | 1016-4 | | 0.049 | 0.000 | 100.0# | 0# | -1.98# |
| 8 | l1 | 1016-5 | | 0.054 | 0.000 | 100.0# | 0# | -2.15# |
| 9 | l2 | 1260-1 | | 0.075 | 0.000 | 100.0# | 0# | -2.70# |
| 10 | l2 | 1260-2 | | 0.113 | 0.000 | 100.0# | 0# | -2.83# |
| 11 | l2 | 1260-3 | | 0.069 | 0.000 | 100.0# | 0# | -3.14# |
| 12 | l2 | 1260-4 | | 0.151 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | l2 | 1260-5 | | 0.108 | 0.000 | 100.0# | 0# | -3.44# |
| 15 | l3 | 1221-1 | | 0.015 | 0.000 | 100.0# | 0# | -1.53# |
| 16 | l3 | 1221-2 | | 0.00922 | 0.00000 | 100.0# | 0# | -1.59# |
| 17 | l3 | 1221-3 | | 0.037 | 0.000 | 100.0# | 0# | -1.60# |
| 18 | l4 | 1254-1 | | 0.052 | 0.000 | 100.0# | 0# | -2.32# |
| 19 | l4 | 1254-2 | | 0.093 | 0.000 | 100.0# | 0# | -2.43# |
| 20 | l4 | 1254-3 | | 0.101 | 0.000 | 100.0# | 0# | -2.61# |
| 21 | l4 | 1254-4 | | 0.071 | 0.000 | 100.0# | 0# | -2.74# |
| 22 | l4 | 1254-5 | | 0.099 | 0.000 | 100.0# | 0# | -2.96# |
| 24 | l6 | 1242-1 | | 0.021 | 0.000 | 100.0# | 0# | -1.60# |
| 25 | l6 | 1242-2 | | 0.046 | 0.000 | 100.0# | 0# | -1.74# |
| 26 | l6 | 1242-3 | | 0.096 | 0.000 | 100.0# | 0# | -1.93# |
| 27 | l6 | 1242-4 | | 0.040 | 0.000 | 100.0# | 0# | -1.98# |
| 28 | l6 | 1242-5 | | 0.032 | 0.000 | 100.0# | 0# | -2.34# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:58 pm
Operator  : pest2:kb/sdc
Sample    : cicv1248,42,, 250 pp11771
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 18 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 29 l9 | 1268-1 | 0.209 | 0.000 | 100.0# | 0# | -3.46# |
| 30 l9 | 1268-2 | 0.189 | 0.000 | 100.0# | 0# | -3.48# |
| 31 l9 | 1268-3 | 0.154 | 0.000 | 100.0# | 0# | -3.58# |
| 32 l9 | 1268-4 | 0.067 | 0.000 | 100.0# | 0# | -3.77# |
| 33 l9 | 1268-5 | 0.467 | 0.000 | 100.0# | 0# | -3.92# |
| 41 l5 | 1232-1 | 0.029 | 0.000 | 100.0# | 0# | -1.60# |
| 42 l5 | 1232-2 | 0.027 | 0.000 | 100.0# | 0# | -1.74# |
| 43 l5 | 1232-3 | 0.055 | 0.000 | 100.0# | 0# | -1.93# |
| 44 l5 | 1232-4 | 0.023 | 0.000 | 100.0# | 0# | -1.99# |
| 45 l5 | 1232-5 | 0.017 | 0.000 | 100.0# | 0# | -2.34# |
| 46 l8 | 1262-1 | 0.083 | 0.000 | 100.0# | 0# | -2.83# |
| 47 l8 | 1262-2 | 0.105 | 0.000 | 100.0# | 0# | -3.02# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.14# |
| 49 l8 | 1262-4 | 0.185 | 0.000 | 100.0# | 0# | -3.30# |
| 50 l8 | 1262-5 | 0.059 | 0.000 | 100.0# | 0# | -3.77# |
| Signal #2 | | | | | | |
| 4 l1 | 1016-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 5 l1 | 1016-2 | 0.065 | 0.000 | 100.0# | 0# | -1.99# |
| 6 l1 | 1016-3 | 0.131 | 0.000 | 100.0# | 0# | -2.19# |
| 7 l1 | 1016-4 | 0.053 | 0.000 | 100.0# | 0# | -2.25# |
| 8 l1 | 1016-5 | 0.042 | 0.000 | 100.0# | 0# | -2.46# |
| 9 l2 | 1260-1 | 0.082 | 0.000 | 100.0# | 0# | -3.07# |
| 10 l2 | 1260-2 | 0.097 | 0.000 | 100.0# | 0# | -3.17# |
| 11 l2 | 1260-3 | 0.079 | 0.000 | 100.0# | 0# | -3.57# |
| 12 l2 | 1260-4 | 0.155 | 0.000 | 100.0# | 0# | -3.70# |
| 13 l2 | 1260-5 | 0.111 | 0.000 | 100.0# | 0# | -3.90# |
| 15 l3 | 1221-1 | 0.017 | 0.000 | 100.0# | 0# | -1.74# |
| 16 l3 | 1221-2 | 0.011 | 0.000 | 100.0# | 0# | -1.80# |
| 17 l3 | 1221-3 | 0.040 | 0.000 | 100.0# | 0# | -1.82# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   5:58 pm
Operator  : pest2:kb/sdc
Sample    : cicv1248,42,, 250 pp11771
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 18 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 18 l4 | 1254-1 | 0.062 | 0.000 | 100.0# | 0# | -2.66# |
| 19 l4 | 1254-2 | 0.073 | 0.000 | 100.0# | 0# | -2.75# |
| 20 l4 | 1254-3 | 0.109 | 0.000 | 100.0# | 0# | -2.98# |
| 21 l4 | 1254-4 | 0.073 | 0.000 | 100.0# | 0# | -3.09# |
| 22 l4 | 1254-5 | 0.101 | 0.000 | 100.0# | 0# | -3.36# |
| 24 l6 | 1242-1 | 0.021 | 0.000 | 100.0# | 0# | -1.82# |
| 25 l6 | 1242-2 | 0.048 | 0.000 | 100.0# | 0# | -1.99# |
| 26 l6 | 1242-3 | 0.095 | 0.000 | 100.0# | 0# | -2.19# |
| 27 l6 | 1242-4 | 0.039 | 0.000 | 100.0# | 0# | -2.25# |
| 28 l6 | 1242-5 | 0.031 | 0.000 | 100.0# | 0# | -2.64# |
| 29 l9 | 1268-1 | 0.190 | 0.000 | 100.0# | 0# | -3.89# |
| 30 l9 | 1268-2 | 0.169 | 0.000 | 100.0# | 0# | -3.92# |
| 31 l9 | 1268-3 | 0.141 | 0.000 | 100.0# | 0# | -4.06# |
| 32 l9 | 1268-4 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |
| 33 l9 | 1268-5 | 0.399 | 0.000 | 100.0# | 0# | -4.40# |
| 41 l5 | 1232-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 42 l5 | 1232-2 | 0.031 | 0.000 | 100.0# | 0# | -1.99# |
| 43 l5 | 1232-3 | 0.060 | 0.000 | 100.0# | 0# | -2.20# |
| 44 l5 | 1232-4 | 0.024 | 0.000 | 100.0# | 0# | -2.26# |
| 45 l5 | 1232-5 | 0.018 | 0.000 | 100.0# | 0# | -2.64# |
| 46 l8 | 1262-1 | 0.073 | 0.000 | 100.0# | 0# | -3.18# |
| 47 l8 | 1262-2 | 0.101 | 0.000 | 100.0# | 0# | -3.41# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.57# |
| 49 l8 | 1262-4 | 0.174 | 0.000 | 100.0# | 0# | -3.70# |
| 50 l8 | 1262-5 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:58 pm
Operator : pest2:kb/sdc
Sample : cicv1248,42,, 250 pp11771
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 200.5E6 | 242.9E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 1.185 | 1.254 | 200.5E6 | 242.9E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.185 | 1.254 | 200.5E6 | 242.9E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.185 | 1.254 | 200.5E6 | 242.9E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.185 | 1.254 | 200.5E6 | 242.9E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 213.5E6 | 262.9E6 | 18.345 | 16.519 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 3.67%# | 3.30%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 313.3E6 | 338.1E6 | 33.848 | 31.607 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 6.77%# | 6.32%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:58 pm
Operator : pest2:kb/sdc
Sample : cicv1248,42,, 250 pp11771
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 1.930 | 2.194 | 140.9E6 | 179.3E6 | 292.359 | 295.742 |
| 36) l7 | 1248-2 | 2.057 | 2.339 | 154.8E6 | 99401870 | 245.867M1 | 239.644 |
| 37) l7 | 1248-3 | 2.153 | 2.465 | 137.7E6 | 125.0E6 | 244.604 | 243.815 |
| 38) l7 | 1248-4 | 2.335 | 2.640 | 123.8E6 | 144.3E6 | 259.212 | 249.605 |
| 39) l7 | 1248-5 | 2.348 | 2.663 | 121.4E6 | 167.8E6 | 272.812 | 258.383 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:58 pm
Operator : pest2:kb/sdc
Sample : cicv1248,42,, 250 pp11771
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1248-1 | | | 678.7E6 | 715.8E6 | 1314.855 | 1287.190 |
| Average | 1248-1 | | | | | 262.971 | 257.438 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

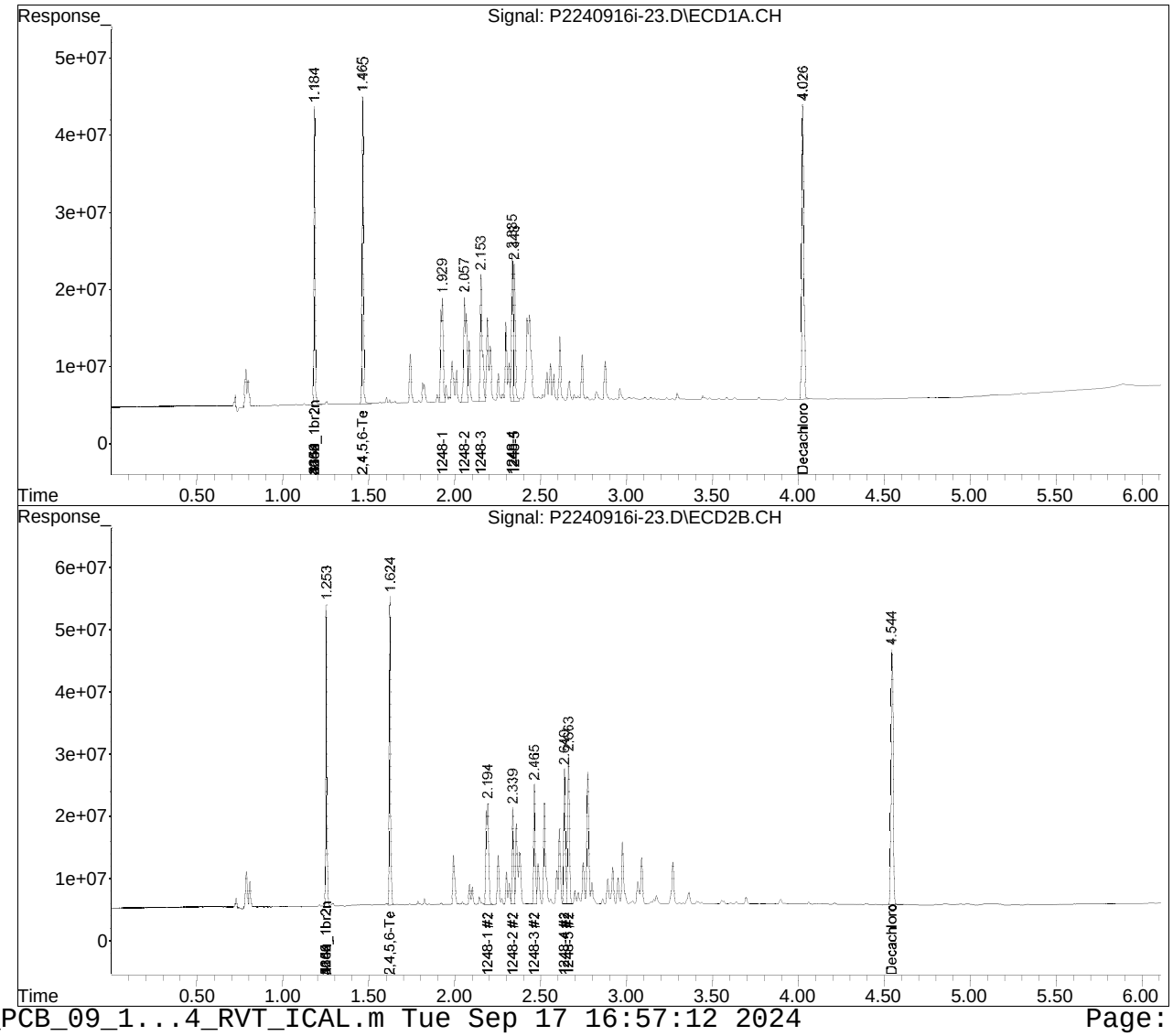
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-23.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 5:58 pm
Operator : pest2:kb/sdc
Sample : cicv1248,42,, 250 pp11771
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:05:09 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

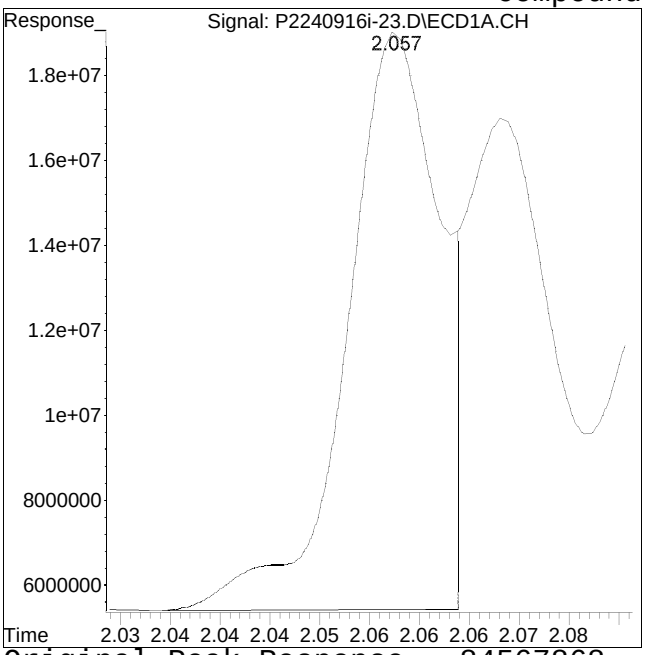
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



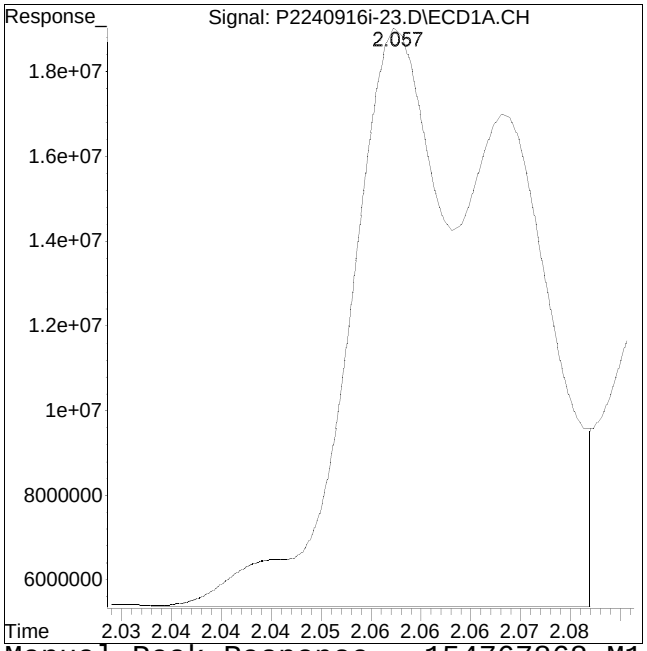
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-23.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 5:58 pm Instrument : Pest 2
Sample : cicv1248,42,, 250 pp11771 Quant Date : 9/17/2024 11:05 am

Compound #36: 1248-2




Original Peak Response = 84567868




Manual Peak Response = 154767868 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:07 pm
Operator  : pest2:kb/sdc
Sample    : cicv3262,42,, 250 pp11773
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 19 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.477 | -1.8 | 95 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.142 | 1.0 | 100 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 41 | l5 | 1232-1 | | 0.029 | 0.034 | -17.2 | 113 | 0.00 |
| 42 | l5 | 1232-2 | | 0.027 | 0.026 | 3.7 | 94 | 0.00 |
| 43 | l5 | 1232-3 | | 0.055 | 0.056 | -1.8 | 96 | 0.00 |
| 44 | l5 | 1232-4 | | 0.023 | 0.023 | 0.0 | 97 | 0.00 |
| 45 | l5 | 1232-5 | | 0.017 | 0.018 | -5.9 | 103 | 0.00 |
| 46 | l8 | 1262-1 | | 0.083 | 0.083 | 0.0 | 95 | 0.00 |
| 47 | l8 | 1262-2 | | 0.105 | 0.105 | 0.0 | 95 | 0.00 |
| 48 | l8 | 1262-3 | | 0.091 | 0.092 | -1.1 | 96 | 0.00 |
| 49 | l8 | 1262-4 | | 0.185 | 0.186 | -0.5 | 95 | 0.00 |
| 50 | l8 | 1262-5 | | 0.059 | 0.059 | 0.0 | 95 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.585 | 3.2 | 98 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 1.007 | 8.5 | 103 | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:07 pm
Operator  : pest2:kb/sdc
Sample    : cicv3262,42,, 250 pp11773
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 19 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 41 | l5 | 1232-1 | | 0.030 | 0.035 | -16.7 | 113 | 0.00 |
| 42 | l5 | 1232-2 | | 0.031 | 0.031 | 0.0 | 97 | 0.00 |
| 43 | l5 | 1232-3 | | 0.060 | 0.059 | 1.7 | 97 | 0.00 |
| 44 | l5 | 1232-4 | | 0.024 | 0.024 | 0.0 | 96 | 0.00 |
| 45 | l5 | 1232-5 | | 0.018 | 0.018 | 0.0 | 100 | 0.00 |
| 46 | l8 | 1262-1 | | 0.073 | 0.072 | 1.4 | 95 | 0.00 |
| 47 | l8 | 1262-2 | | 0.101 | 0.099 | 2.0 | 95 | 0.00 |
| 48 | l8 | 1262-3 | | 0.091 | 0.090 | 1.1 | 96 | 0.00 |
| 49 | l8 | 1262-4 | | 0.174 | 0.169 | 2.9 | 94 | 0.00 |
| 50 | l8 | 1262-5 | | 0.062 | 0.060 | 3.2 | 93 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | | 0.027 | 0.000 | 100.0# | 0# | -1.60# |
| 5 | l1 | 1016-2 | | 0.059 | 0.000 | 100.0# | 0# | -1.74# |
| 6 | l1 | 1016-3 | | 0.117 | 0.000 | 100.0# | 0# | -1.93# |
| 7 | l1 | 1016-4 | | 0.049 | 0.000 | 100.0# | 0# | -1.98# |
| 8 | l1 | 1016-5 | | 0.054 | 0.000 | 100.0# | 0# | -2.15# |
| 9 | l2 | 1260-1 | | 0.075 | 0.000 | 100.0# | 0# | -2.70# |
| 10 | l2 | 1260-2 | | 0.113 | 0.000 | 100.0# | 0# | -2.83# |
| 11 | l2 | 1260-3 | | 0.069 | 0.000 | 100.0# | 0# | -3.14# |
| 12 | l2 | 1260-4 | | 0.151 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | l2 | 1260-5 | | 0.108 | 0.000 | 100.0# | 0# | -3.44# |
| 15 | l3 | 1221-1 | | 0.015 | 0.000 | 100.0# | 0# | -1.53# |
| 16 | l3 | 1221-2 | | 0.00922 | 0.00000 | 100.0# | 0# | -1.59# |
| 17 | l3 | 1221-3 | | 0.037 | 0.000 | 100.0# | 0# | -1.60# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:07 pm
Operator  : pest2:kb/sdc
Sample    : cicv3262,42,, 250 pp11773
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 19 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 18 | l4 | 1254-1 | 0.052 | 0.000 | 100.0# | 0# | -2.32# |
| 19 | l4 | 1254-2 | 0.093 | 0.000 | 100.0# | 0# | -2.43# |
| 20 | l4 | 1254-3 | 0.101 | 0.000 | 100.0# | 0# | -2.61# |
| 21 | l4 | 1254-4 | 0.071 | 0.000 | 100.0# | 0# | -2.74# |
| 22 | l4 | 1254-5 | 0.099 | 0.000 | 100.0# | 0# | -2.96# |
| 24 | l6 | 1242-1 | 0.021 | 0.000 | 100.0# | 0# | -1.60# |
| 25 | l6 | 1242-2 | 0.046 | 0.000 | 100.0# | 0# | -1.74# |
| 26 | l6 | 1242-3 | 0.096 | 0.000 | 100.0# | 0# | -1.93# |
| 27 | l6 | 1242-4 | 0.040 | 0.000 | 100.0# | 0# | -1.98# |
| 28 | l6 | 1242-5 | 0.032 | 0.000 | 100.0# | 0# | -2.34# |
| 29 | l9 | 1268-1 | 0.209 | 0.000 | 100.0# | 0# | -3.46# |
| 30 | l9 | 1268-2 | 0.189 | 0.000 | 100.0# | 0# | -3.48# |
| 31 | l9 | 1268-3 | 0.154 | 0.000 | 100.0# | 0# | -3.58# |
| 32 | l9 | 1268-4 | 0.067 | 0.000 | 100.0# | 0# | -3.77# |
| 33 | l9 | 1268-5 | 0.467 | 0.000 | 100.0# | 0# | -3.92# |
| 35 | l7 | 1248-1 | 0.060 | 0.000 | 100.0# | 0# | -1.93# |
| 36 | l7 | 1248-2 | 0.078 | 0.000 | 100.0# | 0# | -2.06# |
| 37 | l7 | 1248-3 | 0.070 | 0.000 | 100.0# | 0# | -2.15# |
| 38 | l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.34# |
| 39 | l7 | 1248-5 | 0.056 | 0.000 | 100.0# | 0# | -2.35# |

Signal #2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 5 | l1 | 1016-2 | 0.065 | 0.000 | 100.0# | 0# | -1.99# |
| 6 | l1 | 1016-3 | 0.131 | 0.000 | 100.0# | 0# | -2.19# |
| 7 | l1 | 1016-4 | 0.053 | 0.000 | 100.0# | 0# | -2.25# |
| 8 | l1 | 1016-5 | 0.042 | 0.000 | 100.0# | 0# | -2.46# |
| 9 | l2 | 1260-1 | 0.082 | 0.000 | 100.0# | 0# | -3.07# |
| 10 | l2 | 1260-2 | 0.097 | 0.000 | 100.0# | 0# | -3.17# |
| 11 | l2 | 1260-3 | 0.079 | 0.000 | 100.0# | 0# | -3.57# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:07 pm
Operator  : pest2:kb/sdc
Sample    : cicv3262,42,, 250 pp11773
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 19 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 12 l2 | 1260-4 | 0.155 | 0.000 | 100.0# | 0# | -3.70# |
| 13 l2 | 1260-5 | 0.111 | 0.000 | 100.0# | 0# | -3.90# |
| 15 l3 | 1221-1 | 0.017 | 0.000 | 100.0# | 0# | -1.74# |
| 16 l3 | 1221-2 | 0.011 | 0.000 | 100.0# | 0# | -1.80# |
| 17 l3 | 1221-3 | 0.040 | 0.000 | 100.0# | 0# | -1.82# |
| 18 l4 | 1254-1 | 0.062 | 0.000 | 100.0# | 0# | -2.66# |
| 19 l4 | 1254-2 | 0.073 | 0.000 | 100.0# | 0# | -2.75# |
| 20 l4 | 1254-3 | 0.109 | 0.000 | 100.0# | 0# | -2.98# |
| 21 l4 | 1254-4 | 0.073 | 0.000 | 100.0# | 0# | -3.09# |
| 22 l4 | 1254-5 | 0.101 | 0.000 | 100.0# | 0# | -3.36# |
| 24 l6 | 1242-1 | 0.021 | 0.000 | 100.0# | 0# | -1.82# |
| 25 l6 | 1242-2 | 0.048 | 0.000 | 100.0# | 0# | -1.99# |
| 26 l6 | 1242-3 | 0.095 | 0.000 | 100.0# | 0# | -2.19# |
| 27 l6 | 1242-4 | 0.039 | 0.000 | 100.0# | 0# | -2.25# |
| 28 l6 | 1242-5 | 0.031 | 0.000 | 100.0# | 0# | -2.64# |
| 29 l9 | 1268-1 | 0.190 | 0.000 | 100.0# | 0# | -3.89# |
| 30 l9 | 1268-2 | 0.169 | 0.000 | 100.0# | 0# | -3.92# |
| 31 l9 | 1268-3 | 0.141 | 0.000 | 100.0# | 0# | -4.06# |
| 32 l9 | 1268-4 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |
| 33 l9 | 1268-5 | 0.399 | 0.000 | 100.0# | 0# | -4.40# |
| 35 l7 | 1248-1 | 0.062 | 0.000 | 100.0# | 0# | -2.19# |
| 36 l7 | 1248-2 | 0.043 | 0.000 | 100.0# | 0# | -2.34# |
| 37 l7 | 1248-3 | 0.053 | 0.000 | 100.0# | 0# | -2.47# |
| 38 l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.64# |
| 39 l7 | 1248-5 | 0.067 | 0.000 | 100.0# | 0# | -2.66# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:07 pm
Operator : pest2:kb/sdc
Sample : cicv3262,42,, 250 pp11773
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 198.2E6 | 235.7E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 1.185 | 1.254 | 198.2E6 | 235.7E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.185 | 1.254 | 198.2E6 | 235.7E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.185 | 1.254 | 198.2E6 | 235.7E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.185 | 1.254 | 198.2E6 | 235.7E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.625 | 187.3E6 | 239.1E6 | 16.288 | 15.477 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 3.26%# | 3.10%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 289.7E6 | 304.0E6 | 31.672 | 29.276 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 6.33%# | 5.86%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:07 pm
Operator : pest2:kb/sdc
Sample : cicv3262,42,, 250 pp11773
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 | 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) l6 | 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 | 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 | 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 | 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l9 | 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l9 | 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l9 | 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) l9 | 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:07 pm
Operator : pest2:kb/sdc
Sample : cicv3262,42,, 250 pp11773
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 1.603 | 1.824 | 68269965 | 81414585 | 298.488 | 290.625 |
| 42) l5 | 1232-2 | 1.743 | 1.994 | 52386986 | 73941054 | 247.432 | 250.711 |
| 43) l5 | 1232-3 | 1.930 | 2.195 | 111.0E6 | 140.2E6 | 252.978 | 249.333 |
| 44) l5 | 1232-4 | 1.985 | 2.255 | 46547705 | 56591438 | 255.806 | 247.965 |
| 45) l5 | 1232-5 | 2.336 | 2.641 | 36041624 | 43471742 | 271.797 | 259.357 |
| Sum | 1232-1 | | | 314.2E6 | 395.6E6 | 1326.500 | 1297.990 |
| Average | 1232-1 | | | | | 265.300 | 259.598 |
| 46) l8 | 1262-1 | 2.825 | 3.175 | 165.3E6 | 168.8E6 | 251.208 | 245.187 |
| 47) l8 | 1262-2 | 3.016 | 3.409 | 209.0E6 | 233.6E6 | 251.679 | 246.122 |
| 48) l8 | 1262-3 | 3.140 | 3.567 | 182.7E6 | 212.0E6 | 253.128 | 246.995 |
| 49) l8 | 1262-4 | 3.295 | 3.696 | 368.0E6 | 398.7E6 | 251.038 | 242.663 |
| 50) l8 | 1262-5 | 3.769 | 4.212 | 117.6E6 | 140.8E6 | 250.989 | 241.242 |
| Sum | 1262-1 | | | 1042.7E6 | 1153.9E6 | 1258.042 | 1222.209 |
| Average | 1262-1 | | | | | 251.608 | 244.442 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | 1262-1 | | | 1042.7E6 | 1153.9E6 | 1258.042 | 1222.209 |
| Average | 1262-1 | | | | | 251.608 | 244.442 |

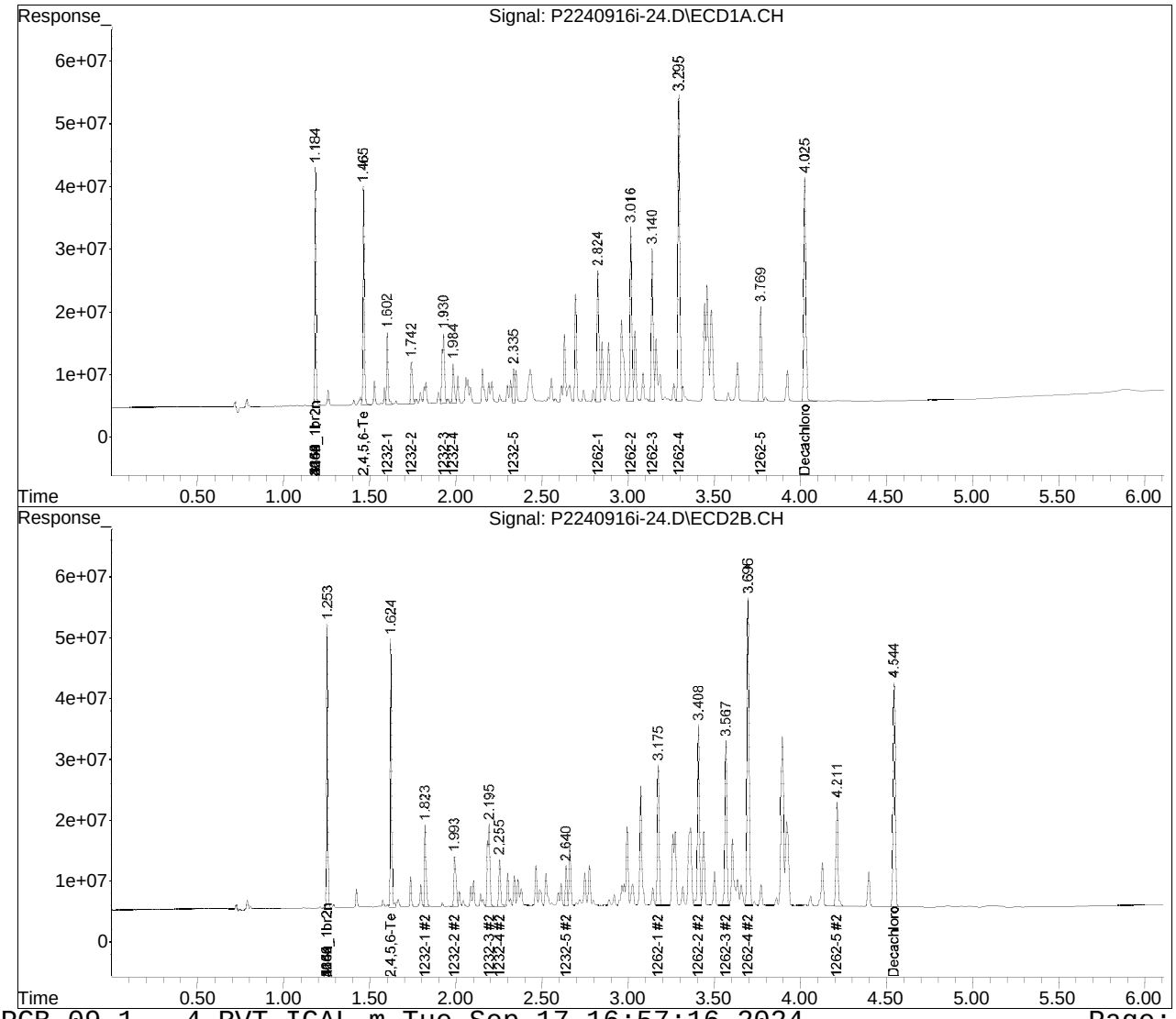
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-24.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 16 Sep 2024  6:07 pm
Operator : pest2:kb/sdc
Sample : cicv3262,42,, 250 pp11773
Misc : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:00 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\PCB\Pest2\2024\240916I\ | QMethod | : P2_PCB_09_16_24_RVT_ICAL |
| Data File | : P2240916i-24.D | Operator | : pest2:kb/sdc |
| Date Inj'd | : 9/16/2024 6:07 pm | Instrument | : Pest 2 |
| Sample | : cicv3262,42,, 250 pp11773 | Quant Date | : 9/17/2024 11:06 am |

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:15 pm
Operator  : pest2:kb/sdc
Sample    : cicv4268,42,, 250 pp11772
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 20 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.522 | -4.9 | 98 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.730 | -49.9# | 152# | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 24 | l6 | 1242-1 | | 0.021 | 0.022 | -4.8 | 104 | 0.00 |
| 25 | l6 | 1242-2 | | 0.046 | 0.052 | -13.0 | 111 | 0.00 |
| 26 | l6 | 1242-3 | | 0.096 | 0.102 | -6.2 | 104 | 0.00 |
| 27 | l6 | 1242-4 | | 0.040 | 0.043 | -7.5 | 104 | 0.00 |
| 28 | l6 | 1242-5 | | 0.032 | 0.033 | -3.1 | 101 | 0.00 |
| 29 | l9 | 1268-1 | | 0.209 | 0.236 | -12.9 | 111 | 0.00 |
| 30 | l9 | 1268-2 | | 0.189 | 0.209 | -10.6 | 109 | 0.00 |
| 31 | l9 | 1268-3 | | 0.154 | 0.157 | -1.9 | 100 | 0.00 |
| 32 | l9 | 1268-4 | | 0.067 | 0.067 | 0.0 | 98 | 0.00 |
| 33 | l9 | 1268-5 | | 0.467 | 0.442 | 5.4 | 93 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 95 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.565 | 4.5 | 98 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 1.500 | -36.2# | 155# | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:15 pm
Operator  : pest2:kb/sdc
Sample    : cicv4268,42,, 250 pp11772
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 20 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 24 | l6 | 1242-1 | | 0.021 | 0.024 | -14.3 | 106 | 0.00 |
| 25 | l6 | 1242-2 | | 0.048 | 0.053 | -10.4 | 105 | 0.00 |
| 26 | l6 | 1242-3 | | 0.095 | 0.104 | -9.5 | 104 | 0.00 |
| 27 | l6 | 1242-4 | | 0.039 | 0.042 | -7.7 | 103 | 0.00 |
| 28 | l6 | 1242-5 | | 0.031 | 0.034 | -9.7 | 104 | 0.00 |
| 29 | l9 | 1268-1 | | 0.190 | 0.219 | -15.3 | 109 | 0.00 |
| 30 | l9 | 1268-2 | | 0.169 | 0.189 | -11.8 | 106 | 0.00 |
| 31 | l9 | 1268-3 | | 0.141 | 0.145 | -2.8 | 98 | 0.00 |
| 32 | l9 | 1268-4 | | 0.062 | 0.063 | -1.6 | 98 | 0.00 |
| 33 | l9 | 1268-5 | | 0.399 | 0.389 | 2.5 | 93 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | | 0.027 | 0.000 | 100.0# | 0# | -1.60# |
| 5 | l1 | 1016-2 | | 0.059 | 0.000 | 100.0# | 0# | -1.74# |
| 6 | l1 | 1016-3 | | 0.117 | 0.000 | 100.0# | 0# | -1.93# |
| 7 | l1 | 1016-4 | | 0.049 | 0.000 | 100.0# | 0# | -1.98# |
| 8 | l1 | 1016-5 | | 0.054 | 0.000 | 100.0# | 0# | -2.15# |
| 9 | l2 | 1260-1 | | 0.075 | 0.000 | 100.0# | 0# | -2.70# |
| 10 | l2 | 1260-2 | | 0.113 | 0.000 | 100.0# | 0# | -2.83# |
| 11 | l2 | 1260-3 | | 0.069 | 0.000 | 100.0# | 0# | -3.14# |
| 12 | l2 | 1260-4 | | 0.151 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | l2 | 1260-5 | | 0.108 | 0.000 | 100.0# | 0# | -3.44# |
| 15 | l3 | 1221-1 | | 0.015 | 0.000 | 100.0# | 0# | -1.53# |
| 16 | l3 | 1221-2 | | 0.00922 | 0.00000 | 100.0# | 0# | -1.59# |
| 17 | l3 | 1221-3 | | 0.037 | 0.000 | 100.0# | 0# | -1.60# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:15 pm
Operator  : pest2:kb/sdc
Sample    : cicv4268,42,, 250 pp11772
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 20 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 18 | l4 | 1254-1 | 0.052 | 0.000 | 100.0# | 0# | -2.32# |
| 19 | l4 | 1254-2 | 0.093 | 0.000 | 100.0# | 0# | -2.43# |
| 20 | l4 | 1254-3 | 0.101 | 0.000 | 100.0# | 0# | -2.61# |
| 21 | l4 | 1254-4 | 0.071 | 0.000 | 100.0# | 0# | -2.74# |
| 22 | l4 | 1254-5 | 0.099 | 0.000 | 100.0# | 0# | -2.96# |
| 35 | l7 | 1248-1 | 0.060 | 0.000 | 100.0# | 0# | -1.93# |
| 36 | l7 | 1248-2 | 0.078 | 0.000 | 100.0# | 0# | -2.06# |
| 37 | l7 | 1248-3 | 0.070 | 0.000 | 100.0# | 0# | -2.15# |
| 38 | l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.34# |
| 39 | l7 | 1248-5 | 0.056 | 0.000 | 100.0# | 0# | -2.35# |
| 41 | l5 | 1232-1 | 0.029 | 0.000 | 100.0# | 0# | -1.60# |
| 42 | l5 | 1232-2 | 0.027 | 0.000 | 100.0# | 0# | -1.74# |
| 43 | l5 | 1232-3 | 0.055 | 0.000 | 100.0# | 0# | -1.93# |
| 44 | l5 | 1232-4 | 0.023 | 0.000 | 100.0# | 0# | -1.99# |
| 45 | l5 | 1232-5 | 0.017 | 0.000 | 100.0# | 0# | -2.34# |
| 46 | l8 | 1262-1 | 0.083 | 0.000 | 100.0# | 0# | -2.83# |
| 47 | l8 | 1262-2 | 0.105 | 0.000 | 100.0# | 0# | -3.02# |
| 48 | l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.14# |
| 49 | l8 | 1262-4 | 0.185 | 0.000 | 100.0# | 0# | -3.30# |
| 50 | l8 | 1262-5 | 0.059 | 0.000 | 100.0# | 0# | -3.77# |

Signal #2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 5 | l1 | 1016-2 | 0.065 | 0.000 | 100.0# | 0# | -1.99# |
| 6 | l1 | 1016-3 | 0.131 | 0.000 | 100.0# | 0# | -2.19# |
| 7 | l1 | 1016-4 | 0.053 | 0.000 | 100.0# | 0# | -2.25# |
| 8 | l1 | 1016-5 | 0.042 | 0.000 | 100.0# | 0# | -2.46# |
| 9 | l2 | 1260-1 | 0.082 | 0.000 | 100.0# | 0# | -3.07# |
| 10 | l2 | 1260-2 | 0.097 | 0.000 | 100.0# | 0# | -3.17# |
| 11 | l2 | 1260-3 | 0.079 | 0.000 | 100.0# | 0# | -3.57# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 16 Sep 2024   6:15 pm
Operator  : pest2:kb/sdc
Sample    : cicv4268,42,, 250 pp11772
Misc      : WG1972777,, (Sig #1);  (Sig #2)
ALS Vial  : 20 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 12 l2 | 1260-4 | 0.155 | 0.000 | 100.0# | 0# | -3.70# |
| 13 l2 | 1260-5 | 0.111 | 0.000 | 100.0# | 0# | -3.90# |
| 15 l3 | 1221-1 | 0.017 | 0.000 | 100.0# | 0# | -1.74# |
| 16 l3 | 1221-2 | 0.011 | 0.000 | 100.0# | 0# | -1.80# |
| 17 l3 | 1221-3 | 0.040 | 0.000 | 100.0# | 0# | -1.82# |
| 18 l4 | 1254-1 | 0.062 | 0.000 | 100.0# | 0# | -2.66# |
| 19 l4 | 1254-2 | 0.073 | 0.000 | 100.0# | 0# | -2.75# |
| 20 l4 | 1254-3 | 0.109 | 0.000 | 100.0# | 0# | -2.98# |
| 21 l4 | 1254-4 | 0.073 | 0.000 | 100.0# | 0# | -3.09# |
| 22 l4 | 1254-5 | 0.101 | 0.000 | 100.0# | 0# | -3.36# |
| 35 l7 | 1248-1 | 0.062 | 0.000 | 100.0# | 0# | -2.19# |
| 36 l7 | 1248-2 | 0.043 | 0.000 | 100.0# | 0# | -2.34# |
| 37 l7 | 1248-3 | 0.053 | 0.000 | 100.0# | 0# | -2.47# |
| 38 l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.64# |
| 39 l7 | 1248-5 | 0.067 | 0.000 | 100.0# | 0# | -2.66# |
| 41 l5 | 1232-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 42 l5 | 1232-2 | 0.031 | 0.000 | 100.0# | 0# | -1.99# |
| 43 l5 | 1232-3 | 0.060 | 0.000 | 100.0# | 0# | -2.20# |
| 44 l5 | 1232-4 | 0.024 | 0.000 | 100.0# | 0# | -2.26# |
| 45 l5 | 1232-5 | 0.018 | 0.000 | 100.0# | 0# | -2.64# |
| 46 l8 | 1262-1 | 0.073 | 0.000 | 100.0# | 0# | -3.18# |
| 47 l8 | 1262-2 | 0.101 | 0.000 | 100.0# | 0# | -3.41# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.57# |
| 49 l8 | 1262-4 | 0.174 | 0.000 | 100.0# | 0# | -3.70# |
| 50 l8 | 1262-5 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:15 pm
Operator : pest2:kb/sdc
Sample : cicv4268,42,, 250 pp11772
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 199.3E6 | 238.2E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 1.185 | 1.254 | 199.3E6 | 238.2E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.185 | 1.254 | 199.3E6 | 238.2E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.185 | 1.254 | 199.3E6 | 238.2E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.185 | 1.254 | 199.3E6 | 238.2E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.625 | 194.1E6 | 238.6E6 | 16.787 | 15.284 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 3.36%# | 3.06%# |
| 3) s | Decachlorobi | 4.026 | 4.544 | 441.2E6 | 457.5E6 | 47.972 | 43.605 |
| | Spiked Amount 500.000 | Range 30 - 150 | | Recovery = | | 9.59%# | 8.72%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:15 pm
Operator : pest2:kb/sdc
Sample : cicv4268,42,, 250 pp11772
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 1.602 | 1.823 | 44493355 | 56043063 | 264.571 | 278.221 |
| 25) l6 | 1242-2 | 1.741 | 1.994 | 104.1E6 | 125.4E6 | 283.000M1 | 274.871 |
| 26) l6 | 1242-3 | 1.930 | 2.195 | 203.6E6 | 247.3E6 | 266.424 | 272.811 |
| 27) l6 | 1242-4 | 1.984 | 2.255 | 85044716 | 99394063 | 264.271 | 269.601 |
| 28) l6 | 1242-5 | 2.335 | 2.640 | 66155142 | 81559141 | 258.626 | 273.542 |
| Sum | 1242-1 | | | 503.4E6 | 609.7E6 | 1336.892 | 1369.046 |
| Average | 1242-1 | | | | | 267.378 | 273.809 |
| 29) l9 | 1268-1 | 3.458 | 3.891 | 470.6E6 | 520.6E6 | 283.128 | 287.064 |
| 30) l9 | 1268-2 | 3.479 | 3.918 | 417.3E6 | 449.7E6 | 277.418 | 278.906 |
| 31) l9 | 1268-3 | 3.581 | 4.059 | 313.3E6 | 345.8E6 | 255.903 | 257.951 |
| 32) l9 | 1268-4 | 3.768 | 4.211 | 134.4E6 | 150.9E6 | 251.151 | 257.023 |
| 33) l9 | 1268-5 | 3.922 | 4.397 | 881.6E6 | 926.0E6 | 236.864 | 243.367 |
| Sum | 1268-1 | | | 2217.2E6 | 2393.0E6 | 1304.464 | 1324.311 |
| Average | 1268-1 | | | | | 260.893 | 264.862 |
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:15 pm
Operator : pest2:kb/sdc
Sample : cicv4268,42,, 250 pp11772
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

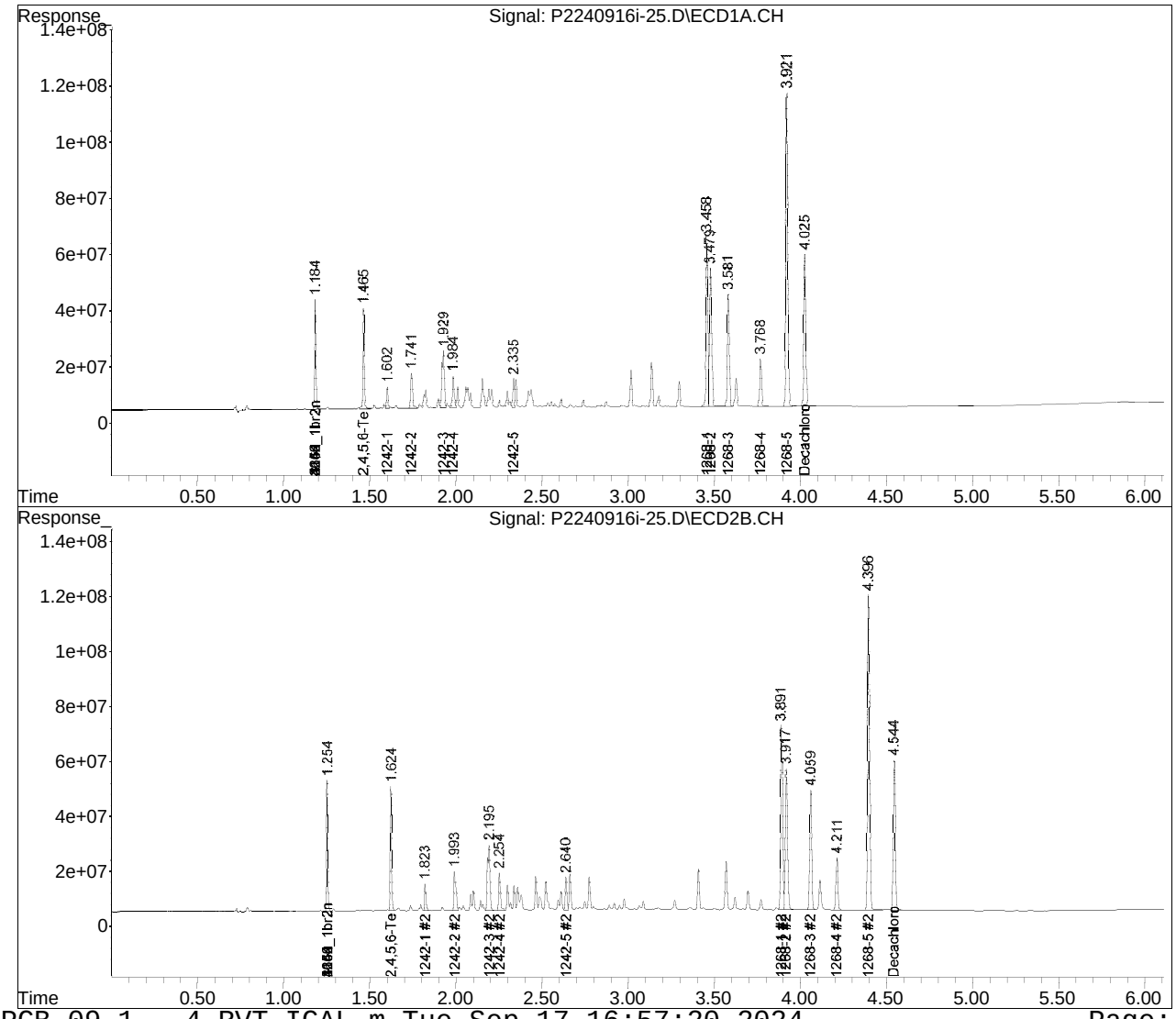
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240916I\
Data File : P2240916i-25.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Sep 2024 6:15 pm
Operator : pest2:kb/sdc
Sample : cicv4268,42,, 250 pp11772
Misc : WG1972777,, (Sig #1); (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 17 11:06:44 2024
Quant Method : I:\PCB\Pest2\2024\240916I\P2_PCB_09_16_24_RVT_ICAL.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

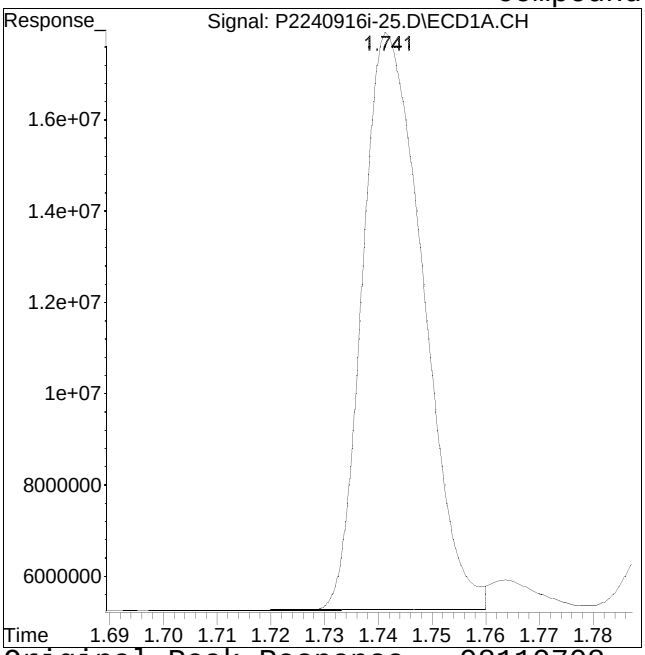
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

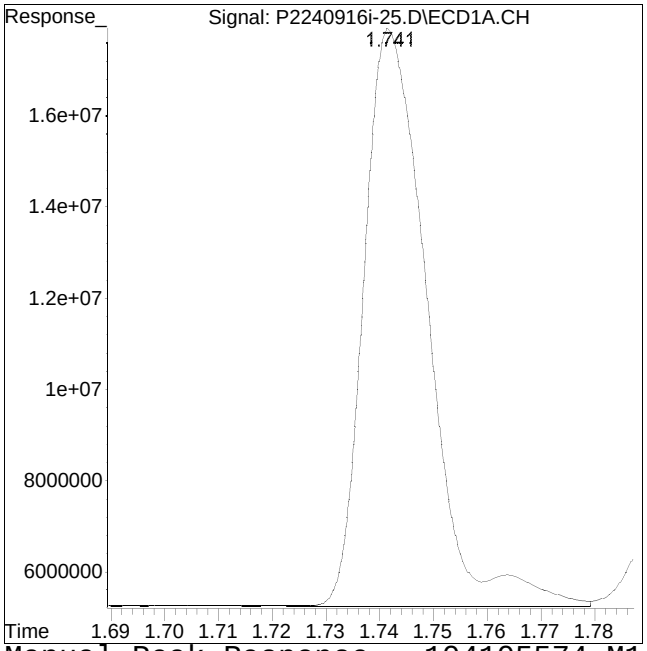


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240916I\QMethod : P2_PCB_09_16_24_RVT_ICAL
Data File : P2240916i-25.D Operator : pest2:kb/sdc
Date Inj'd : 9/16/2024 6:15 pm Instrument : Pest 2
Sample : cicv4268,42,, 250 pp11772 Quant Date : 9/17/2024 11:06 am

Compound #25: 1242-2




Original Peak Response = 98110708 Manual Peak Response = 104105574 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# PCBs

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST2 | **Calibration Date** | : 09/22/24 09:56 | | |
| **Lab File ID** | : P2240922a-08 | **Init. Calib. Date(s)** | : 09/16/24 | 09/16/24 | |
| **Sample No** | : WG1974776-4 | **Init. Calib. Times** | : 15:29 | 17:41 | |
| **Channel** | : A | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1660_1br2nb | 1 | 1 | - | 0 | 20 | 106 | 0 |
| 2,4,5,6-Tetrachloro-m-xylen | 1.451 | 1.443 | - | 0.6 | 20 | 106 | 0 |
| Decachlorobiphenyl | 1.154 | 1.633 | - | -41.5* | 20 | 164 | 0 |
| 2154_1br2nb | 1 | 1 | - | 0 | 20 | 105 | 0 |
| 4268_1br2nb | 1 | 1 | - | 0 | 20 | 112 | 0 |
| 1242-1 | 0.021 | 0.021 | - | 0 | 20 | 110 | 0 |
| 1242-2 | 0.046 | 0.046 | - | 0 | 20 | 112 | 0 |
| 1242-3 | 0.096 | 0.096 | - | 0 | 20 | 111 | 0 |
| 1242-4 | 0.04 | 0.04 | - | 0 | 20 | 110 | 0 |
| 1242-5 | 0.032 | 0.032 | - | 0 | 20 | 110 | 0 |
| 1268-1 | 0.209 | 0.223 | - | -6.7 | 20 | 120 | 0 |
| 1268-2 | 0.189 | 0.195 | - | -3.2 | 20 | 115 | 0 |
| 1268-3 | 0.154 | 0.141 | - | 8.4 | 20 | 102 | 0 |
| 1268-4 | 0.067 | 0.063 | - | 6 | 20 | 105 | 0 |
| 1268-5 | 0.467 | 0.421 | - | 9.9 | 20 | 101 | 0 |
| 1248_1br2nb | 1 | 1 | - | 0 | 20 | 110 | 0 |
| 3262_1br2nb | 1 | 1 | - | 0 | 20 | 109 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# PCBs

| | | | | |
|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | |
| **Instrument ID** | : PEST2 | **Calibration Date** | : 09/22/24 09:56 | |
| **Lab File ID** | : P2240922a-08 | **Init. Calib. Date(s)** | : 09/16/24 | 09/16/24 |
| **Sample No** | : WG1974776-4 | **Init. Calib. Times** | : 15:29 | 17:41 |
| **Channel** | : B | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1660_1br2nb | 1 | 1 | - | 0 | 20 | 111 | 0 |
| 2,4,5,6-Tetrachloro-m-xyl | 1.638 | 1.404 | - | 14.3 | 20 | 101 | 0 |
| Decachlorobiphenyl | 1.101 | 1.349 | - | -22.5* | 20 | 160 | 0 |
| 2154_1br2nb | 1 | 1 | - | 0 | 20 | 111 | 0 |
| 4268_1br2nb | 1 | 1 | - | 0 | 20 | 110 | 0 |
| 1242-1 | 0.021 | 0.021 | - | 0 | 20 | 111 | 0 |
| 1242-2 | 0.048 | 0.048 | - | 0 | 20 | 110 | 0 |
| 1242-3 | 0.095 | 0.095 | - | 0 | 20 | 109 | 0 |
| 1242-4 | 0.039 | 0.039 | - | 0 | 20 | 110 | 0 |
| 1242-5 | 0.031 | 0.03 | - | 3.2 | 20 | 107 | 0 |
| 1268-1 | 0.19 | 0.196 | - | -3.2 | 20 | 113 | 0 |
| 1268-2 | 0.169 | 0.171 | - | -1.2 | 20 | 111 | 0 |
| 1268-3 | 0.141 | 0.132 | - | 6.4 | 20 | 103 | 0 |
| 1268-4 | 0.062 | 0.058 | - | 6.5 | 20 | 103 | 0 |
| 1268-5 | 0.399 | 0.353 | - | 11.5 | 20 | 97 | 0 |
| 1248_1br2nb | 1 | 1 | - | 0 | 20 | 111 | 0 |
| 3262_1br2nb | 1 | 1 | - | 0 | 20 | 113 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# PCBs

| | | | | |
|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | |
| **Instrument ID** | : PEST2 | **Calibration Date** | : 09/23/24 14:51 | |
| **Lab File ID** | : P2240923a-43 | **Init. Calib. Date(s)** | : 09/16/24 | 09/16/24 |
| **Sample No** | : WG1974934-5 | **Init. Calib. Times** | : 15:29 | 17:41 |
| **Channel** | : A | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1660_1br2nb | 1 | 1 | - | 0 | 20 | 93 | 0 |
| 2,4,5,6-Tetrachloro-m-xylen | 1.451 | 1.518 | - | -4.6 | 20 | 98 | 0 |
| Decachlorobiphenyl | 1.154 | 1.2 | - | -4 | 20 | 106 | 0 |
| 1016-1 | 0.027 | 0.027 | - | 0 | 20 | 101 | 0 |
| 1016-2 | 0.059 | 0.055 | - | 6.8 | 20 | 96 | 0 |
| 1016-3 | 0.117 | 0.133 | - | -13.7 | 20 | 110 | 0 |
| 1016-4 | 0.049 | 0.055 | - | -12.2 | 20 | 109 | 0 |
| 1016-5 | 0.054 | 0.065 | - | -20.4* | 20 | 121 | 0 |
| 1260-1 | 0.075 | 0.085 | - | -13.3 | 20 | 114 | 0 |
| 1260-2 | 0.113 | 0.132 | - | -16.8 | 20 | 116 | 0 |
| 1260-3 | 0.069 | 0.072 | - | -4.3 | 20 | 100 | 0 |
| 1260-4 | 0.151 | 0.144 | - | 4.6 | 20 | 91 | 0 |
| 1260-5 | 0.108 | 0.114 | - | -5.6 | 20 | 104 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# PCBs

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST2 | **Calibration Date** | : 09/23/24 14:51 | | |
| **Lab File ID** | : P2240923a-43 | **Init. Calib. Date(s)** | : 09/16/24 | 09/16/24 | |
| **Sample No** | : WG1974934-5 | **Init. Calib. Times** | : 15:29 | 17:41 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1660_1br2nb #2 | 1 | 1 | - | 0 | 20 | 125 | 0 |
| 2,4,5,6-Tetrachloro-m-xylen | 1.638 | 1.34 | - | 18.2 | 20 | 109 | 0 |
| Decachlorobiphenyl #2 | 1.101 | 0.793 | - | 28* | 20 | 106 | 0 |
| 1016-1 #2 | 0.03 | 0.024 | - | 20 | 20 | 110 | 0 |
| 1016-2 #2 | 0.065 | 0.056 | - | 13.8 | 20 | 117 | 0 |
| 1016-3 #2 | 0.131 | 0.12 | - | 8.4 | 20 | 127 | 0 |
| 1016-4 #2 | 0.053 | 0.05 | - | 5.7 | 20 | 132 | 0 |
| 1016-5 #2 | 0.042 | 0.03 | - | 28.6* | 20 | 98 | 0 |
| 1260-1 #2 | 0.082 | 0.064 | - | 22* | 20 | 111 | 0 |
| 1260-2 #2 | 0.097 | 0.074 | - | 23.7* | 20 | 109 | 0 |
| 1260-3 #2 | 0.079 | 0.058 | - | 26.6* | 20 | 105 | 0 |
| 1260-4 #2 | 0.155 | 0.1 | - | 35.5* | 20 | 90 | 0 |
| 1260-5 #2 | 0.111 | 0.079 | - | 28.8* | 20 | 102 | 0 |

* Value outside of QC limits.

# Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.443 | 0.6 | 106 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.633 | -41.5# | 164# | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 24 | l6 | 1242-1 | | 0.021 | 0.021 | 0.0 | 110 | 0.00 |
| 25 | l6 | 1242-2 | | 0.046 | 0.046 | 0.0 | 112 | 0.00 |
| 26 | l6 | 1242-3 | | 0.096 | 0.096 | 0.0 | 111 | 0.00 |
| 27 | l6 | 1242-4 | | 0.040 | 0.040 | 0.0 | 110 | 0.00 |
| 28 | l6 | 1242-5 | | 0.032 | 0.032 | 0.0 | 110 | 0.00 |
| 29 | l9 | 1268-1 | | 0.209 | 0.223 | -6.7 | 120 | 0.00 |
| 30 | l9 | 1268-2 | | 0.189 | 0.195 | -3.2 | 115 | 0.00 |
| 31 | l9 | 1268-3 | | 0.154 | 0.141 | 8.4 | 102 | 0.00 |
| 32 | l9 | 1268-4 | | 0.067 | 0.063 | 6.0 | 105 | 0.00 |
| 33 | l9 | 1268-5 | | 0.467 | 0.421 | 9.9 | 101 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 109 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.638 | 1.404 | 14.3 | 101 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.101 | 1.349 | -22.5# | 160# | 0.00 |
| 14 | i | 2154_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 111 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 23 | i | 4268_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 24 | l6 | 1242-1 | | 0.021 | 0.021 | 0.0 | 111 | 0.00 |
| 25 | l6 | 1242-2 | | 0.048 | 0.048 | 0.0 | 110 | 0.00 |
| 26 | l6 | 1242-3 | | 0.095 | 0.095 | 0.0 | 109 | 0.00 |
| 27 | l6 | 1242-4 | | 0.039 | 0.039 | 0.0 | 110 | 0.00 |
| 28 | l6 | 1242-5 | | 0.031 | 0.030 | 3.2 | 107 | 0.00 |
| 29 | l9 | 1268-1 | | 0.190 | 0.196 | -3.2 | 113 | 0.00 |
| 30 | l9 | 1268-2 | | 0.169 | 0.171 | -1.2 | 111 | 0.00 |
| 31 | l9 | 1268-3 | | 0.141 | 0.132 | 6.4 | 103 | 0.00 |
| 32 | l9 | 1268-4 | | 0.062 | 0.058 | 6.5 | 103 | 0.00 |
| 33 | l9 | 1268-5 | | 0.399 | 0.353 | 11.5 | 97 | 0.00 |
| 34 | i | 1248_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 40 | i | 3262_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 113 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | l1 | 1016-1 | | 0.027 | 0.000 | 100.0# | 0# | -1.60# |
| 5 | l1 | 1016-2 | | 0.059 | 0.000 | 100.0# | 0# | -1.74# |
| 6 | l1 | 1016-3 | | 0.117 | 0.000 | 100.0# | 0# | -1.93# |
| 7 | l1 | 1016-4 | | 0.049 | 0.000 | 100.0# | 0# | -1.98# |
| 8 | l1 | 1016-5 | | 0.054 | 0.000 | 100.0# | 0# | -2.15# |
| 9 | l2 | 1260-1 | | 0.075 | 0.000 | 100.0# | 0# | -2.69# |
| 10 | l2 | 1260-2 | | 0.113 | 0.000 | 100.0# | 0# | -2.83# |
| 11 | l2 | 1260-3 | | 0.069 | 0.000 | 100.0# | 0# | -3.14# |
| 12 | l2 | 1260-4 | | 0.151 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | l2 | 1260-5 | | 0.108 | 0.000 | 100.0# | 0# | -3.44# |
| 15 | l3 | 1221-1 | | 0.015 | 0.000 | 100.0# | 0# | -1.53# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 16 l3 | 1221-2 | 0.00922 | 0.00000 | 100.0# | 0# | -1.59# |
| 17 l3 | 1221-3 | 0.037 | 0.000 | 100.0# | 0# | -1.60# |
| 18 l4 | 1254-1 | 0.052 | 0.000 | 100.0# | 0# | -2.32# |
| 19 l4 | 1254-2 | 0.093 | 0.000 | 100.0# | 0# | -2.43# |
| 20 l4 | 1254-3 | 0.101 | 0.000 | 100.0# | 0# | -2.61# |
| 21 l4 | 1254-4 | 0.071 | 0.000 | 100.0# | 0# | -2.74# |
| 22 l4 | 1254-5 | 0.099 | 0.000 | 100.0# | 0# | -2.96# |
| 35 l7 | 1248-1 | 0.060 | 0.000 | 100.0# | 0# | -1.93# |
| 36 l7 | 1248-2 | 0.078 | 0.000 | 100.0# | 0# | -2.06# |
| 37 l7 | 1248-3 | 0.070 | 0.000 | 100.0# | 0# | -2.15# |
| 38 l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.34# |
| 39 l7 | 1248-5 | 0.056 | 0.000 | 100.0# | 0# | -2.35# |
| 41 l5 | 1232-1 | 0.029 | 0.000 | 100.0# | 0# | -1.60# |
| 42 l5 | 1232-2 | 0.027 | 0.000 | 100.0# | 0# | -1.74# |
| 43 l5 | 1232-3 | 0.055 | 0.000 | 100.0# | 0# | -1.93# |
| 44 l5 | 1232-4 | 0.023 | 0.000 | 100.0# | 0# | -1.99# |
| 45 l5 | 1232-5 | 0.017 | 0.000 | 100.0# | 0# | -2.34# |
| 46 l8 | 1262-1 | 0.083 | 0.000 | 100.0# | 0# | -2.83# |
| 47 l8 | 1262-2 | 0.105 | 0.000 | 100.0# | 0# | -3.02# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.14# |
| 49 l8 | 1262-4 | 0.185 | 0.000 | 100.0# | 0# | -3.30# |
| 50 l8 | 1262-5 | 0.059 | 0.000 | 100.0# | 0# | -3.77# |
| Signal #2 | | | | | | |
| 4 l1 | 1016-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 5 l1 | 1016-2 | 0.065 | 0.000 | 100.0# | 0# | -1.99# |
| 6 l1 | 1016-3 | 0.131 | 0.000 | 100.0# | 0# | -2.19# |
| 7 l1 | 1016-4 | 0.053 | 0.000 | 100.0# | 0# | -2.25# |
| 8 l1 | 1016-5 | 0.042 | 0.000 | 100.0# | 0# | -2.46# |

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|
| 9 l2 | 1260-1 | 0.082 | 0.000 | 100.0# | 0# | -3.07# |
| 10 l2 | 1260-2 | 0.097 | 0.000 | 100.0# | 0# | -3.17# |
| 11 l2 | 1260-3 | 0.079 | 0.000 | 100.0# | 0# | -3.57# |
| 12 l2 | 1260-4 | 0.155 | 0.000 | 100.0# | 0# | -3.70# |
| 13 l2 | 1260-5 | 0.111 | 0.000 | 100.0# | 0# | -3.90# |
| 15 l3 | 1221-1 | 0.017 | 0.000 | 100.0# | 0# | -1.74# |
| 16 l3 | 1221-2 | 0.011 | 0.000 | 100.0# | 0# | -1.80# |
| 17 l3 | 1221-3 | 0.040 | 0.000 | 100.0# | 0# | -1.82# |
| 18 l4 | 1254-1 | 0.062 | 0.000 | 100.0# | 0# | -2.66# |
| 19 l4 | 1254-2 | 0.073 | 0.000 | 100.0# | 0# | -2.75# |
| 20 l4 | 1254-3 | 0.109 | 0.000 | 100.0# | 0# | -2.98# |
| 21 l4 | 1254-4 | 0.073 | 0.000 | 100.0# | 0# | -3.09# |
| 22 l4 | 1254-5 | 0.101 | 0.000 | 100.0# | 0# | -3.36# |
| 35 l7 | 1248-1 | 0.062 | 0.000 | 100.0# | 0# | -2.19# |
| 36 l7 | 1248-2 | 0.043 | 0.000 | 100.0# | 0# | -2.34# |
| 37 l7 | 1248-3 | 0.053 | 0.000 | 100.0# | 0# | -2.46# |
| 38 l7 | 1248-4 | 0.060 | 0.000 | 100.0# | 0# | -2.64# |
| 39 l7 | 1248-5 | 0.067 | 0.000 | 100.0# | 0# | -2.66# |
| 41 l5 | 1232-1 | 0.030 | 0.000 | 100.0# | 0# | -1.82# |
| 42 l5 | 1232-2 | 0.031 | 0.000 | 100.0# | 0# | -1.99# |
| 43 l5 | 1232-3 | 0.060 | 0.000 | 100.0# | 0# | -2.19# |
| 44 l5 | 1232-4 | 0.024 | 0.000 | 100.0# | 0# | -2.25# |
| 45 l5 | 1232-5 | 0.018 | 0.000 | 100.0# | 0# | -2.64# |
| 46 l8 | 1262-1 | 0.073 | 0.000 | 100.0# | 0# | -3.17# |
| 47 l8 | 1262-2 | 0.101 | 0.000 | 100.0# | 0# | -3.41# |
| 48 l8 | 1262-3 | 0.091 | 0.000 | 100.0# | 0# | -3.57# |
| 49 l8 | 1262-4 | 0.174 | 0.000 | 100.0# | 0# | -3.70# |
| 50 l8 | 1262-5 | 0.062 | 0.000 | 100.0# | 0# | -4.21# |

* Evaluation of CC level amount vs concentration.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:56
Operator  : pest2:sdc
Sample    : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc      : WG1974776,,ICAL21500
ALS Vial  : 8 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| Compound | AvgRF | CCRF | %Dev | Area% Dev(Min) |
|---|---|---|---|---|

(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.182 | 1.251 | 227.1E6 | 274.4E6 | 25.000 | 25.000 |
| 14) i | 2154_1br2nb | 1.182 | 1.251 | 227.1E6 | 274.4E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.182 | 1.251 | 227.1E6 | 274.4E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.182 | 1.251 | 227.1E6 | 274.4E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.182 | 1.251 | 227.1E6 | 274.4E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.463 | 1.621 | 209.7E6 | 246.5E6 | 15.910 | 13.709 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | | 79.55% | 68.55% |
| 3) s | Decachlorobi | 4.022 | 4.540 | 474.6E6 | 473.9E6 | 45.280 | 39.207 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | | 226.40%# | 196.04%# |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |
| 15) l3 | 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 | 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) l3 | 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 | 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 | 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 | 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) l4 | 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 | 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 | 1242-1 | 1.600 | 1.820 | 47433538 | 58423311 | 247.454 | 251.787 |
| 25) l6 | 1242-2 | 1.740 | 1.990 | 105.5E6 | 131.4E6 | 251.597 | 250.006 |
| 26) l6 | 1242-3 | 1.927 | 2.191 | 217.4E6 | 260.0E6 | 249.571 | 248.981 |
| 27) l6 | 1242-4 | 1.981 | 2.250 | 90657429 | 106.8E6 | 247.154 | 251.379M1 |
| 28) l6 | 1242-5 | 2.332 | 2.636 | 72094547 | 83679631 | 247.271 | 243.641 |
| Sum | 1242-1 | | | 533.1E6 | 640.2E6 | 1243.048 | 1245.794 |
| Average | 1242-1 | | | | | 248.610 | 249.159 |
| 29) l9 | 1268-1 | 3.455 | 3.888 | 507.1E6 | 537.8E6 | 267.675M3 | 257.448 |
| 30) l9 | 1268-2 | 3.476 | 3.914 | 442.1E6 | 468.4E6 | 257.853 | 252.179 |
| 31) l9 | 1268-3 | 3.578 | 4.055 | 319.7E6 | 362.1E6 | 229.101 | 234.513M4 |
| 32) l9 | 1268-4 | 3.765 | 4.208 | 144.1E6 | 159.3E6 | 236.302M4 | 235.601 |
| 33) l9 | 1268-5 | 3.919 | 4.392 | 955.6E6 | 968.9E6 | 225.234 | 221.059 |
| Sum | 1268-1 | | | 2368.6E6 | 2496.5E6 | 1216.164 | 1200.801 |
| Average | 1268-1 | | | | | 243.233 | 240.160 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 35) l7 | 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 | 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 | 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 38) l7 | 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 39) l7 | 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 | 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 | 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 43) l5 | 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 | 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 | 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 | 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 | 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 | 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 | 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 | 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| Sum | 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average | 1262-1 | | | | | 0.000 | 0.000 |

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,, lvi pp11775 (Sig #2)
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

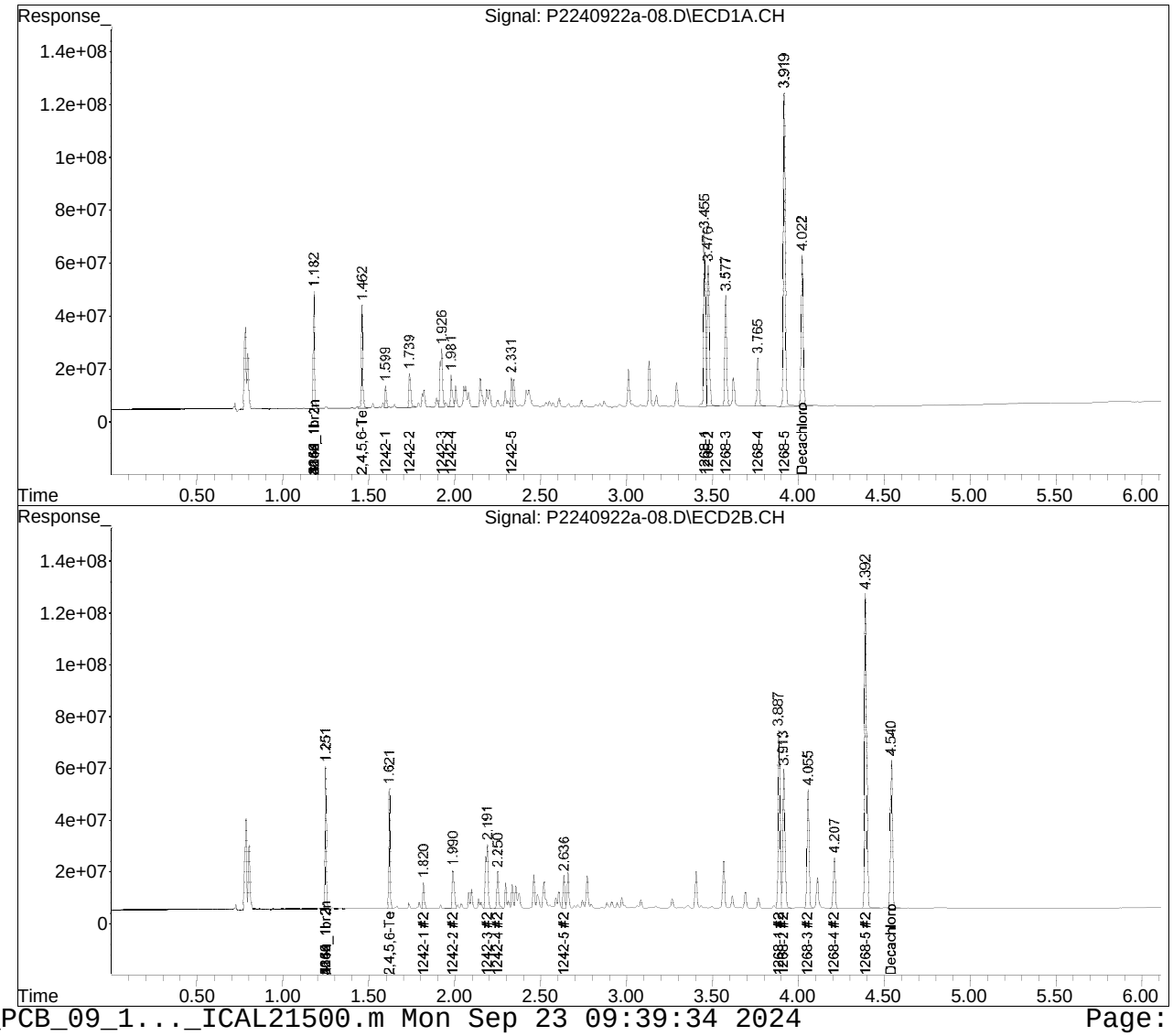
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:56
Operator : pest2:sdc
Sample : WG1974776-4,42,,cicv4268,42,, lvi pp11775 (Sig #1); cicv4268,42,,
Misc : WG1974776,,ICAL21500
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:20:20 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

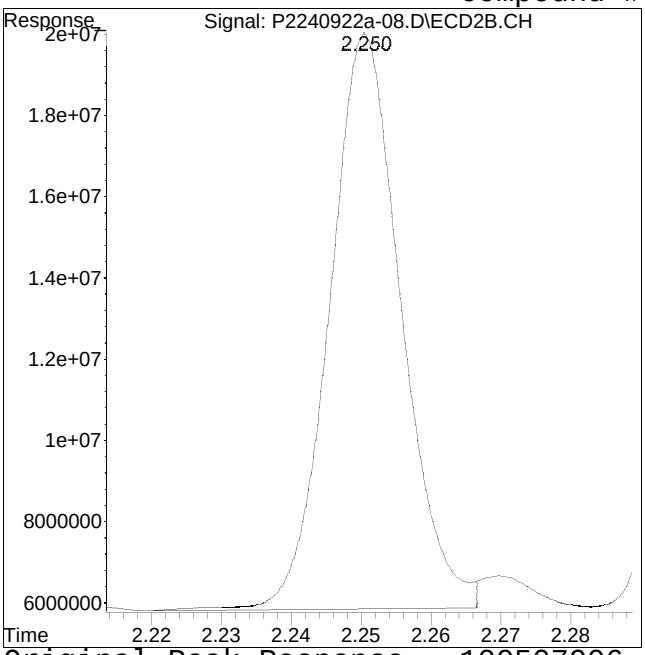
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

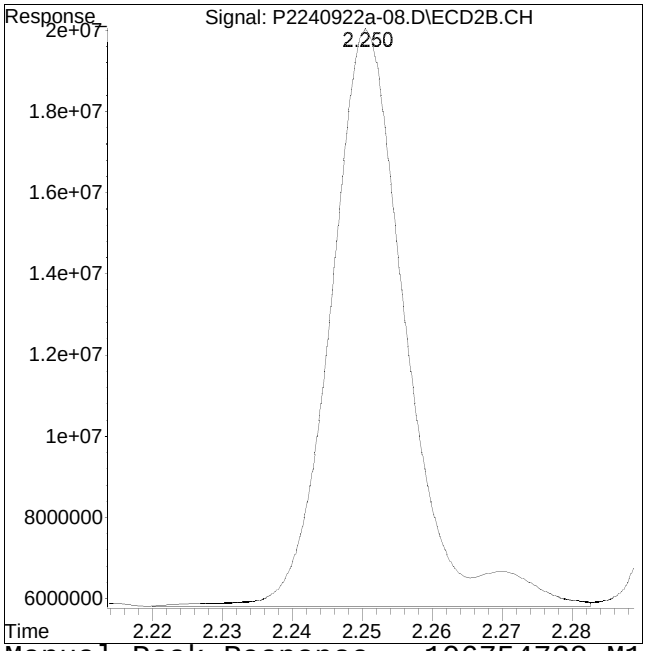


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-08.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 9:56 Instrument : Pest 2
Sample : WG1974776-4,42,,cicv4268,4Quant Date : 9/22/2024 10:20 am

Compound #78: 1242-4 #2



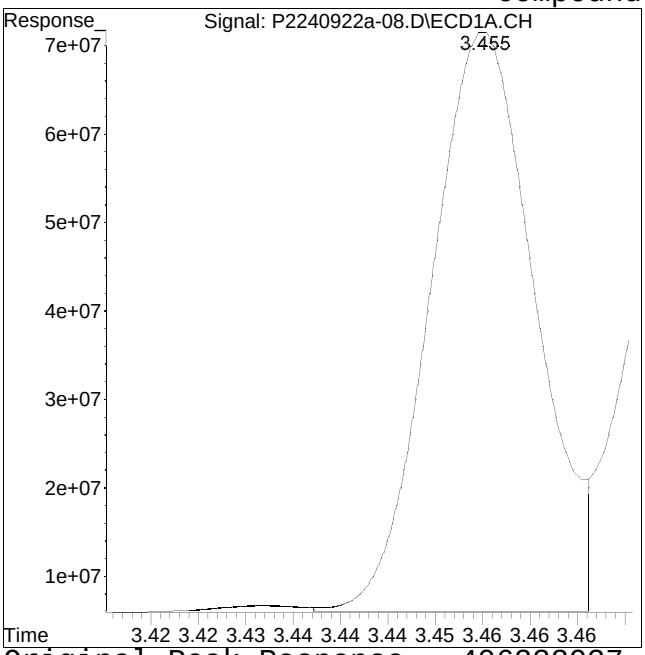



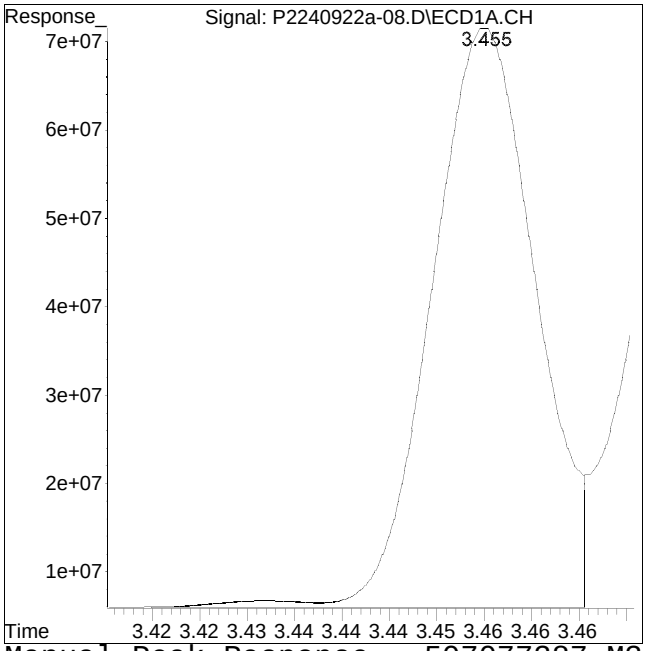

Original Peak Response = 100507906 Manual Peak Response = 106754738 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-08.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 9:56 Instrument : Pest 2
Sample : WG1974776-4,42,,cicv4268,4Quant Date : 9/22/2024 10:20 am

Compound #29: 1268-1



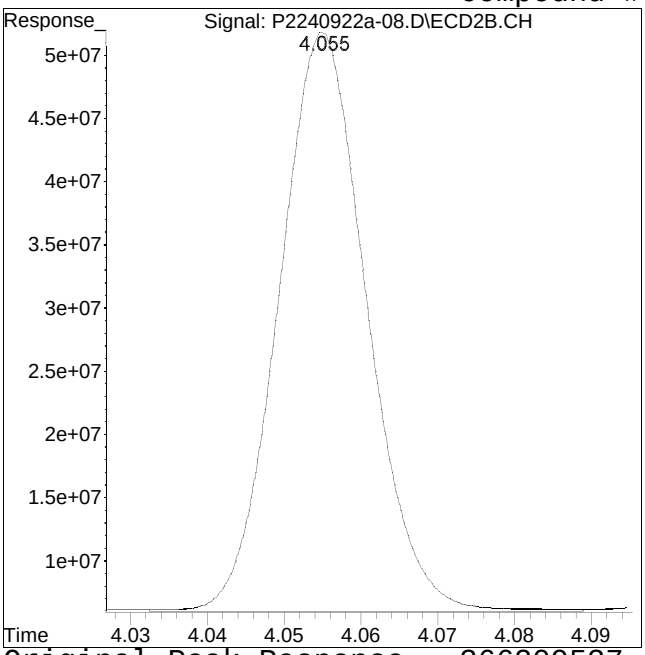



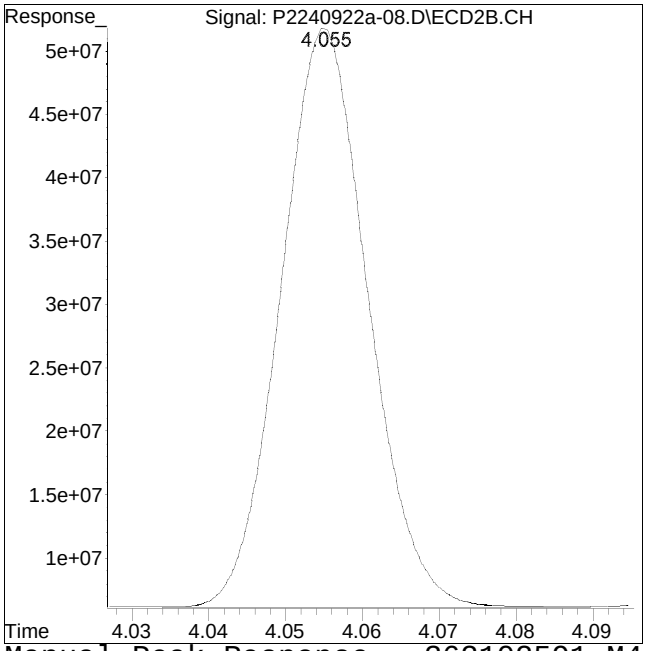

Original Peak Response = 496332937 Manual Peak Response = 507077387 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-08.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 9:56 Instrument : Pest 2
Sample : WG1974776-4,42,,cicv4268,4Quant Date : 9/22/2024 10:20 am

Compound #82: 1268-3 #2



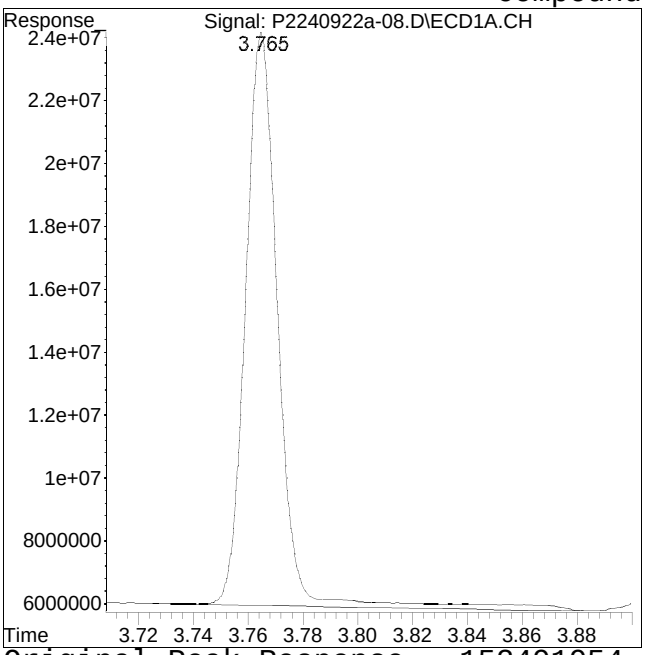




Original Peak Response = 366209537 Manual Peak Response = 362102591 M4
M4 = Poor automated baseline construction.

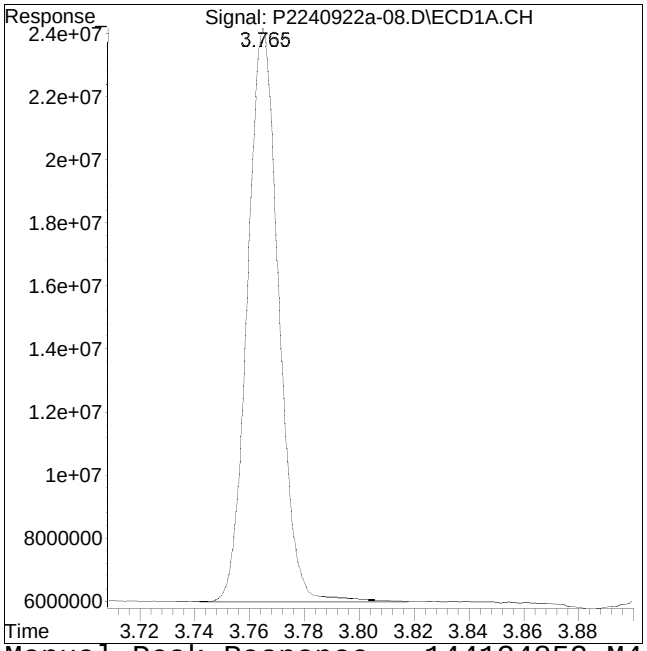
Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-08.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 9:56 Instrument : Pest 2
Sample : WG1974776-4,42,,cicv4268,4Quant Date : 9/22/2024 10:20 am

Compound #32: 1268-4




Original Peak Response = 152491954




Manual Peak Response = 144134852 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 23 Sep 2024   2:51 pm
Operator  : Pest2: rmp
Sample    : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp 11776 (Sig #2)
Misc      : WG1974934,,ICAL21500
ALS Vial  : 43 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1660_1br2nb | ^ | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.451 | 1.518 | -4.6 | 98 | 0.00 |
| 3 | s | Decachlorobiphenyl | | 1.154 | 1.200 | -4.0 | 106 | 0.00 |
| 4 | l1 | 1016-1 | | 0.027 | 0.027 | 0.0 | 101 | 0.00 |
| 5 | l1 | 1016-2 | | 0.059 | 0.055 | 6.8 | 96 | 0.00 |
| 6 | l1 | 1016-3 | | 0.117 | 0.133 | -13.7 | 110 | 0.00 |
| 7 | l1 | 1016-4 | | 0.049 | 0.055 | -12.2 | 109 | 0.00 |
| 8 | l1 | 1016-5 | | 0.054 | 0.065 | -20.4# | 121 | 0.00 |
| 9 | l2 | 1260-1 | | 0.075 | 0.085 | -13.3 | 114 | 0.00 |
| 10 | l2 | 1260-2 | | 0.113 | 0.132 | -16.8 | 116 | 0.00 |
| 11 | l2 | 1260-3 | | 0.069 | 0.072 | -4.3 | 100 | 0.00 |
| 12 | l2 | 1260-4 | | 0.151 | 0.144 | 4.6 | 91 | 0.00 |
| 13 | l2 | 1260-5 | | 0.108 | 0.114 | -5.6 | 104 | 0.00 |
| 52 | i | 1660_1br2nb #2 | ^ | 1.000 | 1.000 | 0.0 | 125 | 0.00 |
| 53 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.638 | 1.340 | 18.2 | 109 | 0.00 |
| 54 | s | Decachlorobiphenyl #2 | | 1.101 | 0.793 | 28.0# | 106 | 0.00 |
| 55 | l1 | 1016-1 #2 | | 0.030 | 0.024 | 20.0 | 110 | 0.00 |
| 56 | l1 | 1016-2 #2 | | 0.065 | 0.056 | 13.8 | 117 | 0.00 |
| 57 | l1 | 1016-3 #2 | | 0.131 | 0.120 | 8.4 | 127 | 0.00 |
| 58 | l1 | 1016-4 #2 | | 0.053 | 0.050 | 5.7 | 132 | 0.00 |
| 59 | l1 | 1016-5 #2 | | 0.042 | 0.030 | 28.6# | 98 | 0.00 |
| 60 | l2 | 1260-1 #2 | | 0.082 | 0.064 | 22.0# | 111 | 0.00 |
| 61 | l2 | 1260-2 #2 | | 0.097 | 0.074 | 23.7# | 109 | 0.00 |
| 62 | l2 | 1260-3 #2 | | 0.079 | 0.058 | 26.6# | 105 | 0.00 |
| 63 | l2 | 1260-4 #2 | | 0.155 | 0.100 | 35.5# | 90 | 0.00 |
| 64 | l2 | 1260-5 #2 | | 0.111 | 0.079 | 28.8# | 102 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 23 Sep 2024   2:51 pm
Operator  : Pest2: rmp
Sample    : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp 11776 (Sig #2)
Misc      : WG1974934,,ICAL21500
ALS Vial  : 43 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title  : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| Compound | AvgRF | CCRF | %Dev | Area% Dev(Min) |
|---|---|---|---|---|

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 2:51 pm
Operator : Pest2: rmp
Sample : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp 11776 (Sig #2)
Misc : WG1974934,,ICAL21500
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.183 | 1.249 | 199.8E6 | 308.9E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.619 | 194.0E6 | 264.9E6 | 16.736 | 13.086M4 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | | 83.68% | 65.43% |
| 3) s | Decachlorobi | 4.026 | 4.539 | 306.7E6 | 313.5E6 | 33.269 | 23.045 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | | 166.35%# | 115.22% |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.603 | 1.818 | 54600955 | 73340967 | 252.640 | 196.642M4 |
| 5) l1 | 1016-2 | 1.744 | 1.989 | 109.8E6 | 171.5E6 | 233.282 | 212.508M4 |
| 6) l1 | 1016-3 | 1.931 | 2.189 | 266.5E6 | 369.8E6 | 285.726 | 228.645M4 |
| 7) l1 | 1016-4 | 1.986 | 2.249 | 110.6E6 | 154.7E6 | 281.489 | 237.138M4 |
| 8) l1 | 1016-5 | 2.155 | 2.460 | 129.4E6 | 93831883 | 298.953 | 180.249M4 |
| | Sum 1016-1 | | | 670.9E6 | 863.3E6 | 1352.092 | 1055.182 |
| | Average 1016-1 | | | | | 270.418 | 211.036 |
| 9) l2 | 1260-1 | 2.697 | 3.068 | 169.0E6 | 197.6E6 | 283.845 | 194.632M4 |
| 10) l2 | 1260-2 | 2.827 | 3.169 | 263.0E6 | 228.1E6 | 290.644 | 190.189M4 |
| 11) l2 | 1260-3 | 3.141 | 3.561 | 143.6E6 | 179.1E6 | 262.112 | 182.591 |
| 12) l2 | 1260-4 | 3.296 | 3.690 | 286.9E6 | 308.6E6 | 238.506 | 160.769 |
| 13) l2 | 1260-5 | 3.444 | 3.892 | 228.0E6 | 244.9E6 | 265.396M1 | 179.244 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 2:51 pm
Operator : Pest2: rmp
Sample : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp 11776 (Sig #2)
Misc : WG1974934,,ICAL21500
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1260-1 | | | 1090.5E6 | 1158.3E6 | 1340.504 | 907.425 |
| Average 1260-1 | | | | | 268.101 | 181.485 |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 2:51 pm
Operator : Pest2: rmp
Sample : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp 11776 (Sig #2)
Misc : WG1974934,,ICAL21500
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

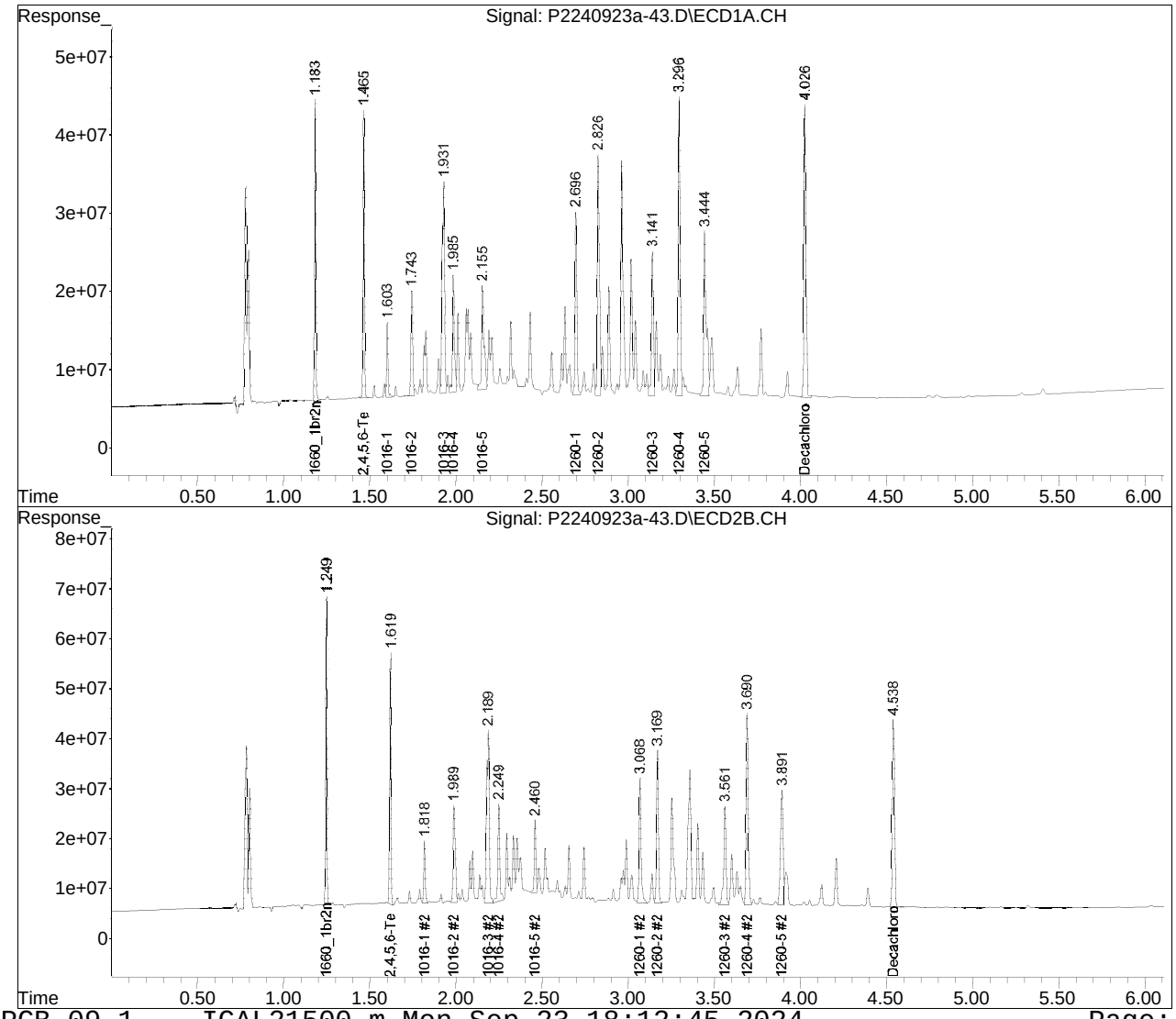
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660ation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923A\
Data File : P2240923a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 2:51 pm
Operator : Pest2: rmp
Sample : WG1974934-5,42,,cicv +1660 lvi pp11776 (Sig #1); cicv +1660 lvi pp
Misc : WG1974934,,ICAL21500
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 23 14:58:22 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

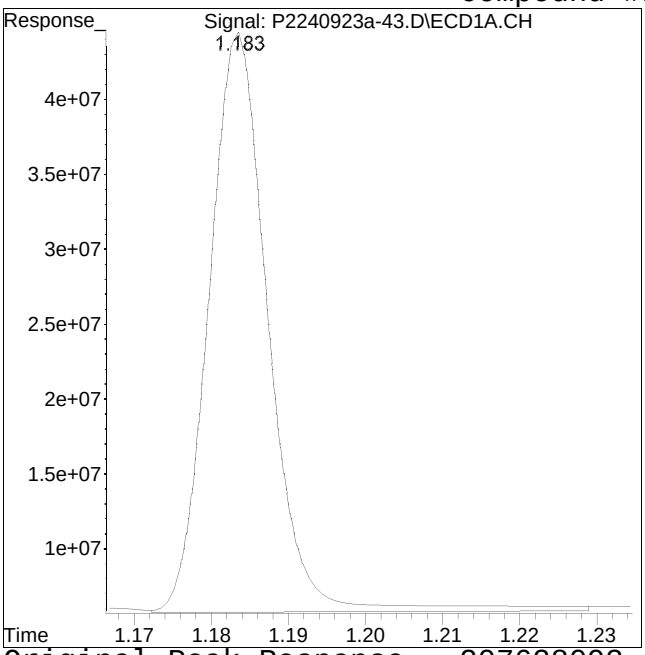
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

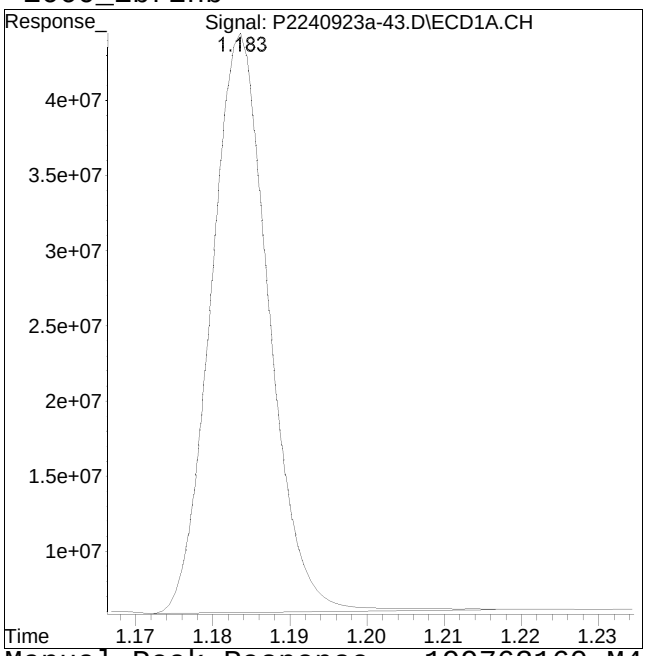


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #1: 1660_1br2nb



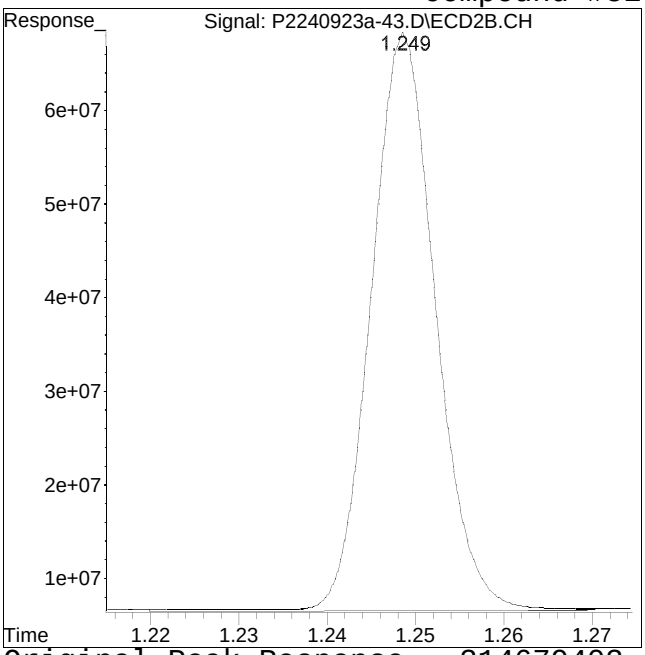



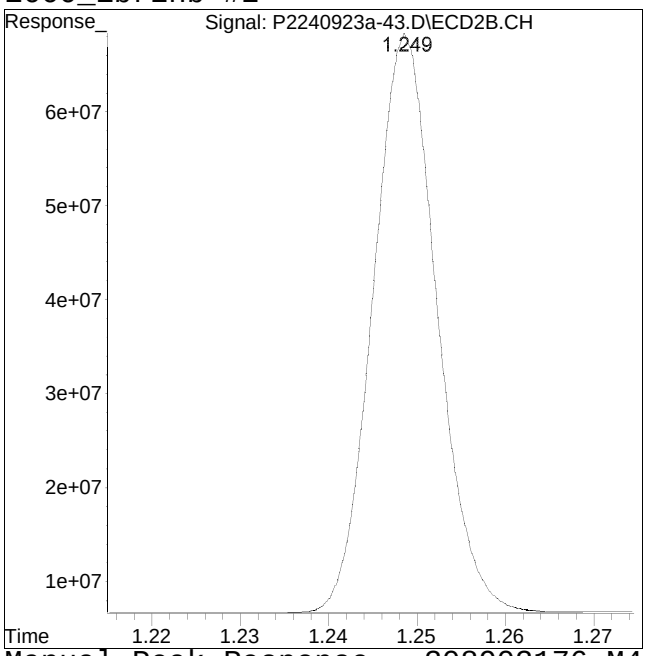

Original Peak Response = 207628093 Manual Peak Response = 199763160 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #52: 1660_1br2nb #2



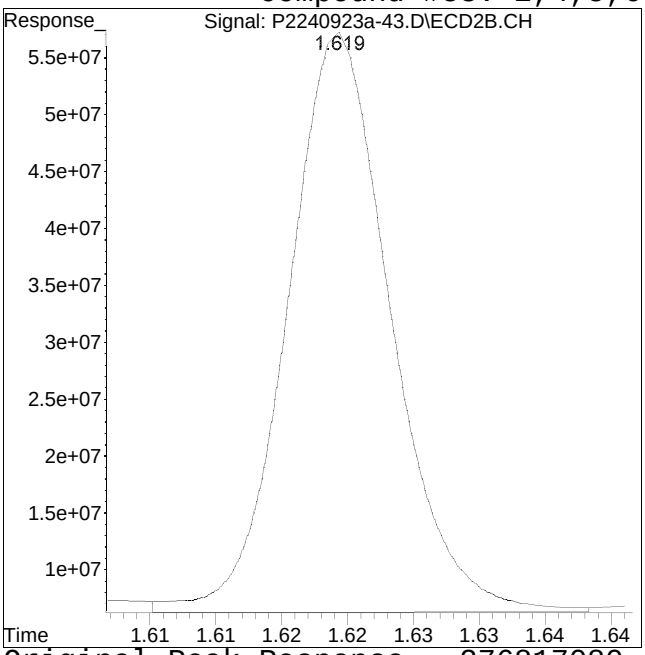




Original Peak Response = 314679403 Manual Peak Response = 308903176 M4
M4 = Poor automated baseline construction.

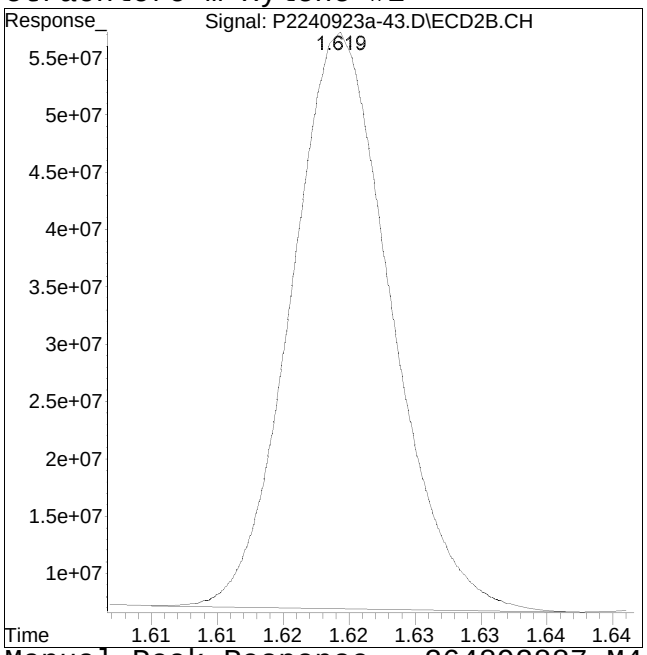
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 276817080



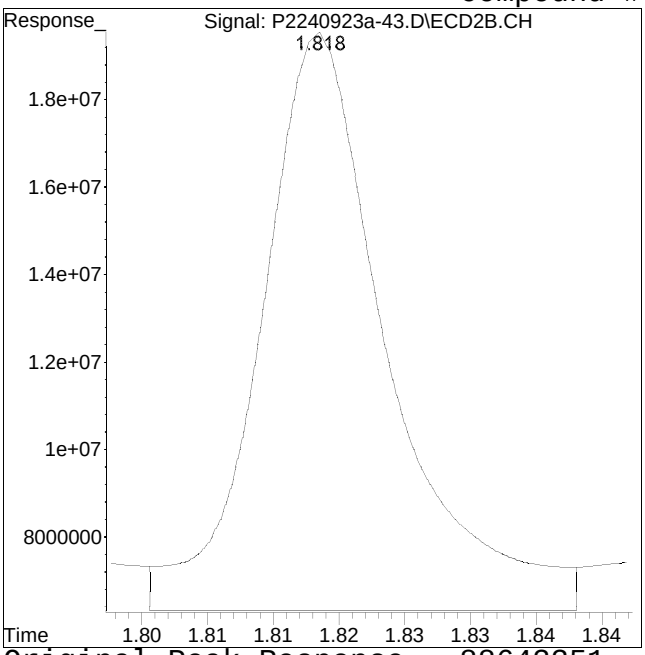

Manual Peak Response = 264892887 M4

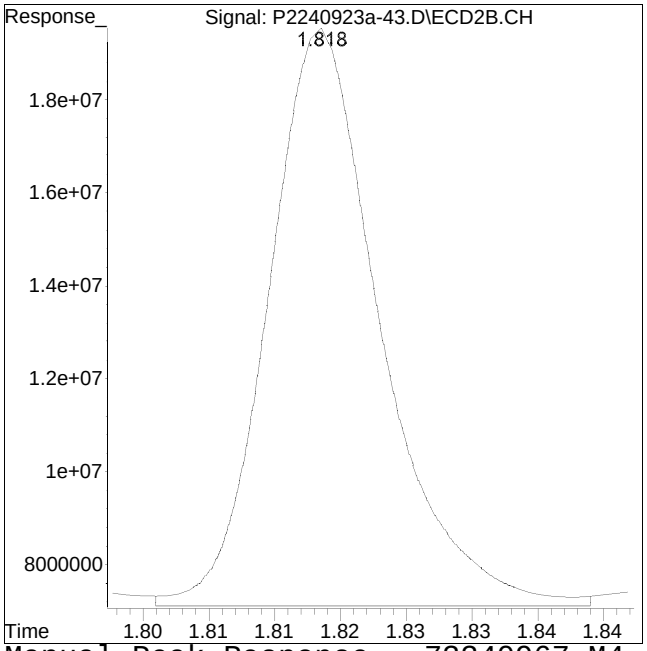
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #55: 1016-1 #2



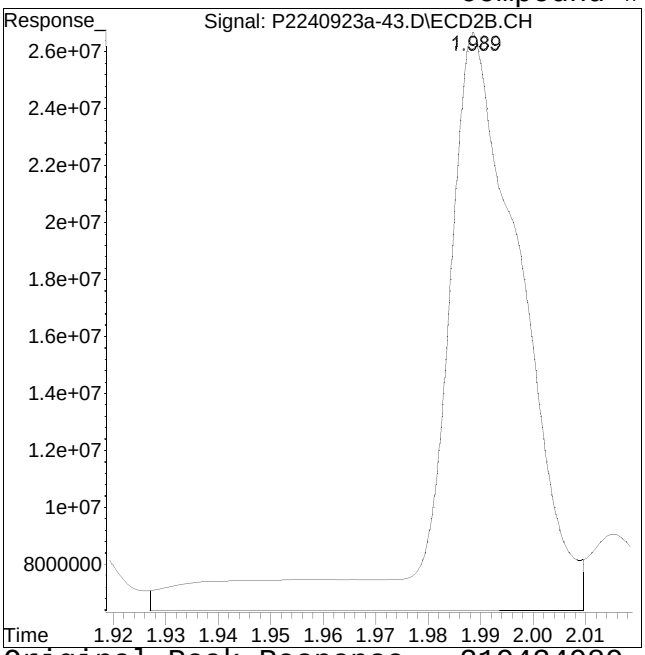




Original Peak Response = 88643351 Manual Peak Response = 73340967 M4
M4 = Poor automated baseline construction.

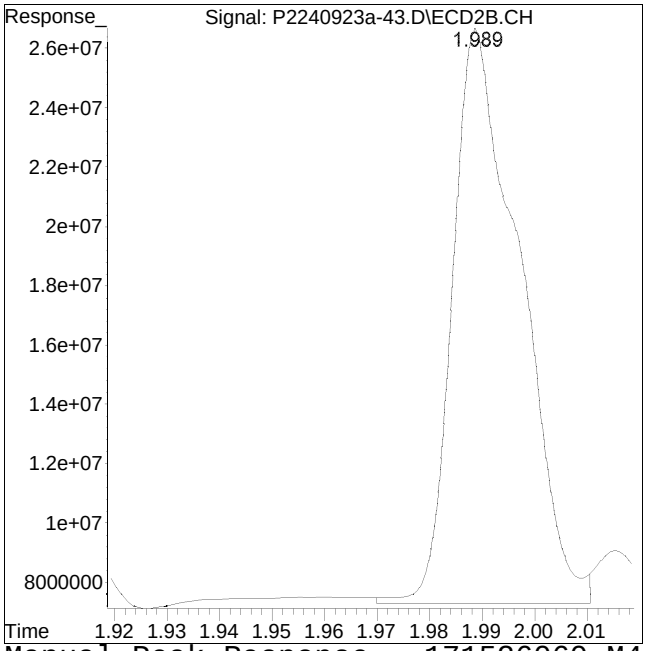
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

## Compound #56: 1016-2 #2




Original Peak Response = 219434989



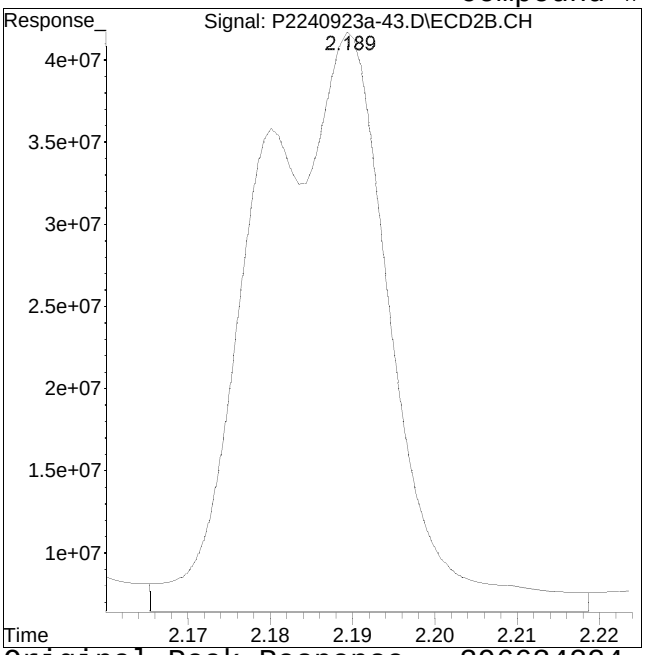

Manual Peak Response = 171526060 M4

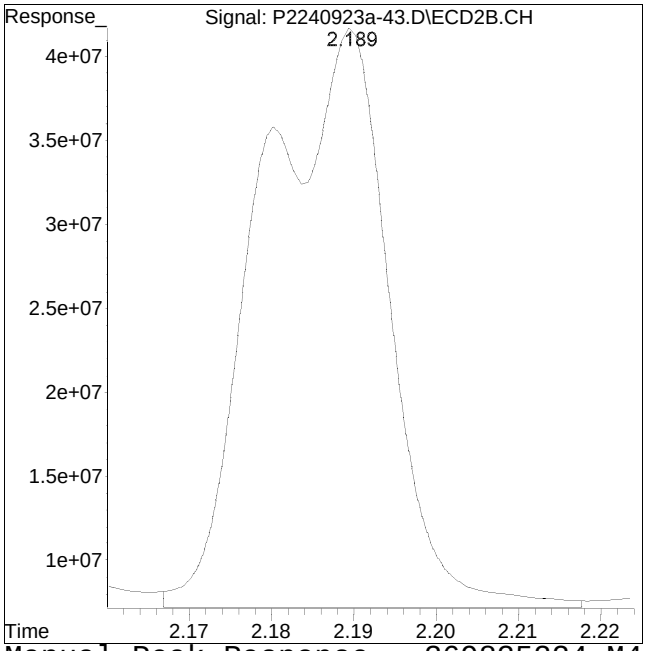
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #57: 1016-3 #2



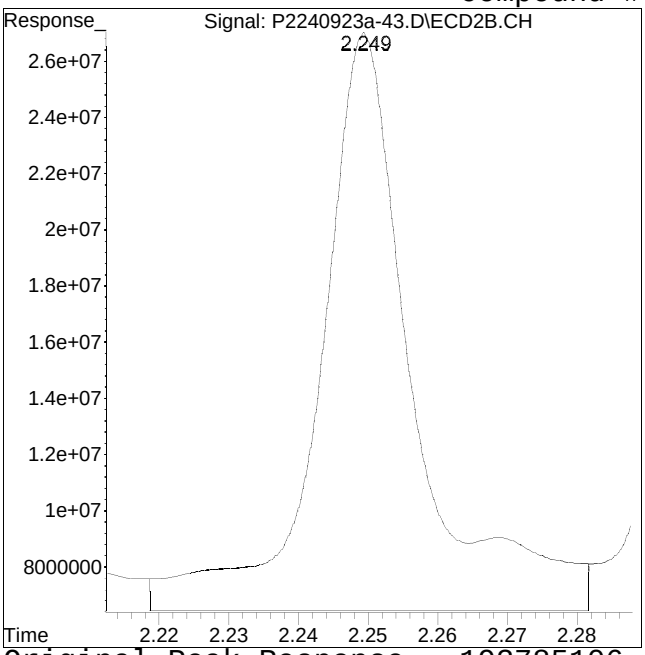



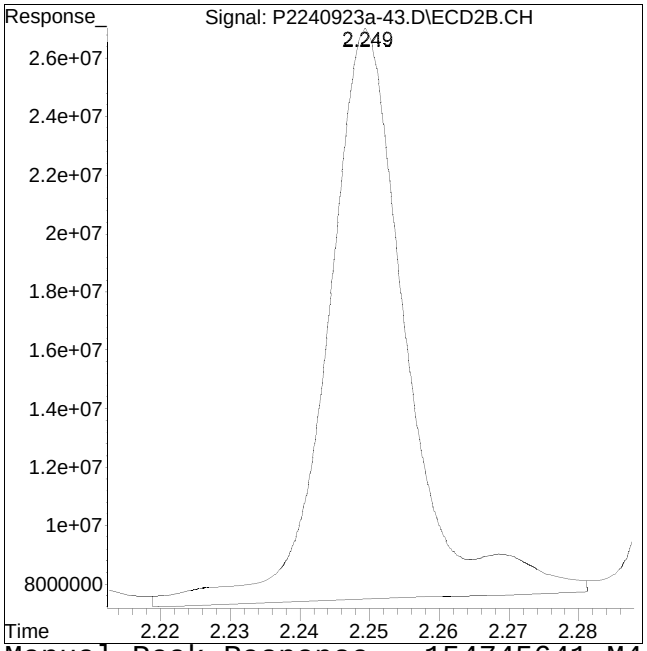

Original Peak Response = 396634224 Manual Peak Response = 369835224 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #58: 1016-4 #2



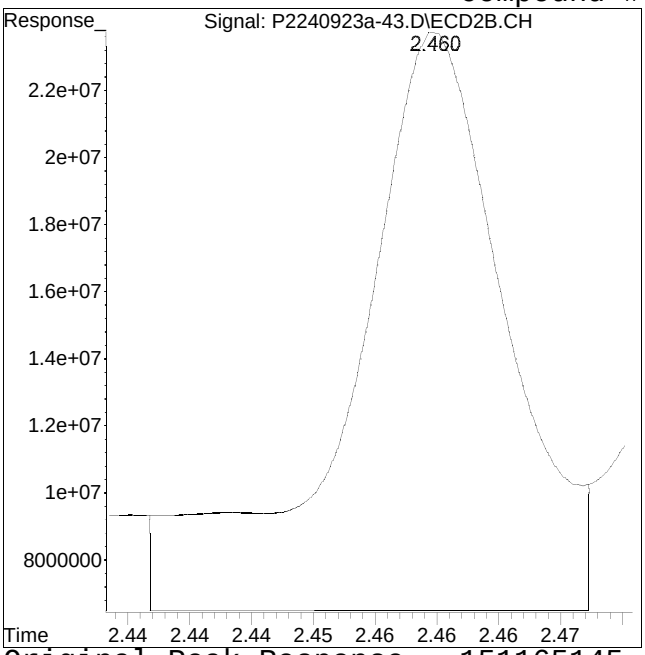



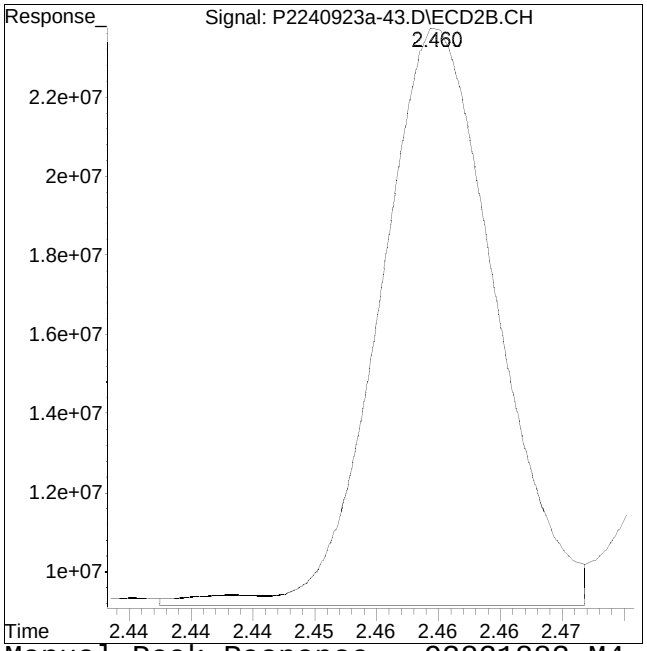

Original Peak Response = 193785106 Manual Peak Response = 154745641 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #59: 1016-5 #2



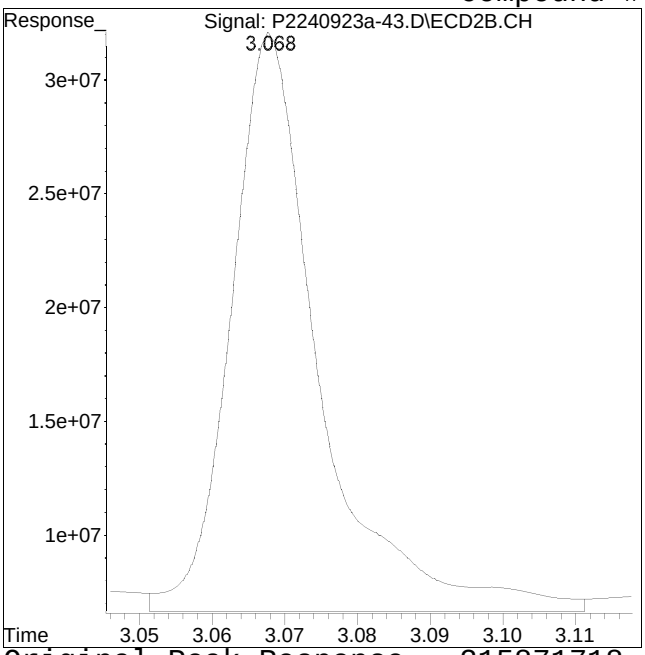



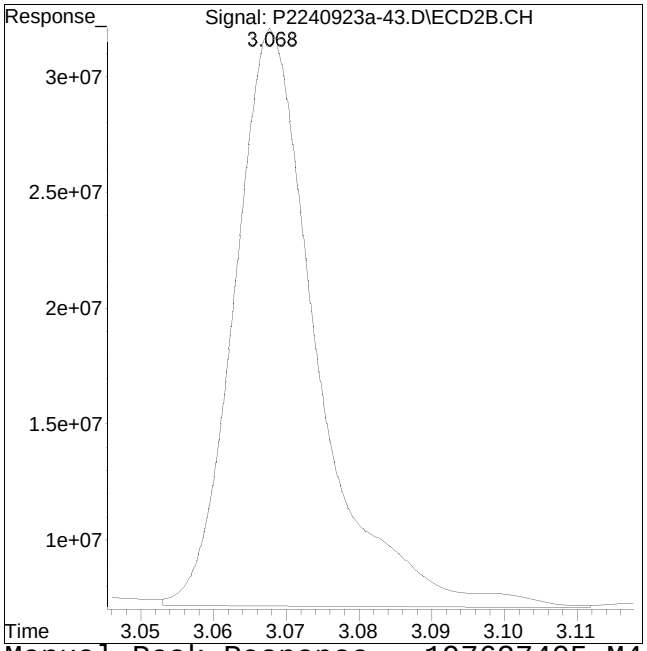

Original Peak Response = 151165145 Manual Peak Response = 93831883 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #60: 1260-1 #2



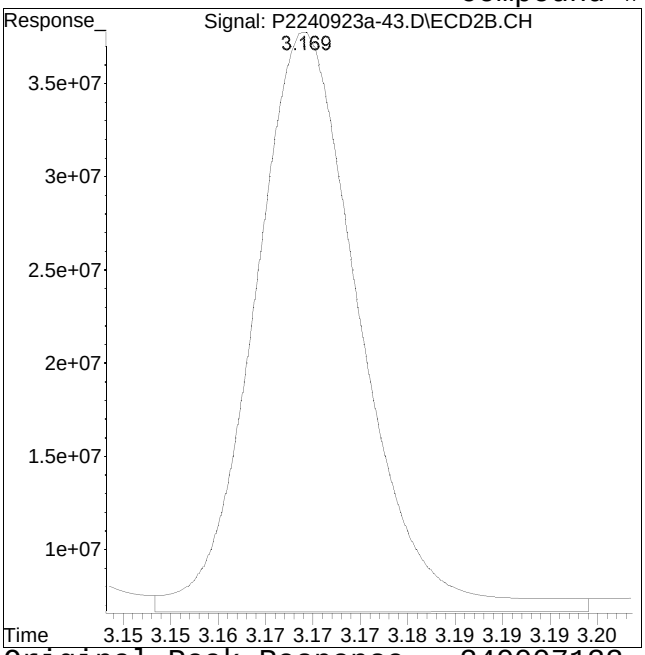



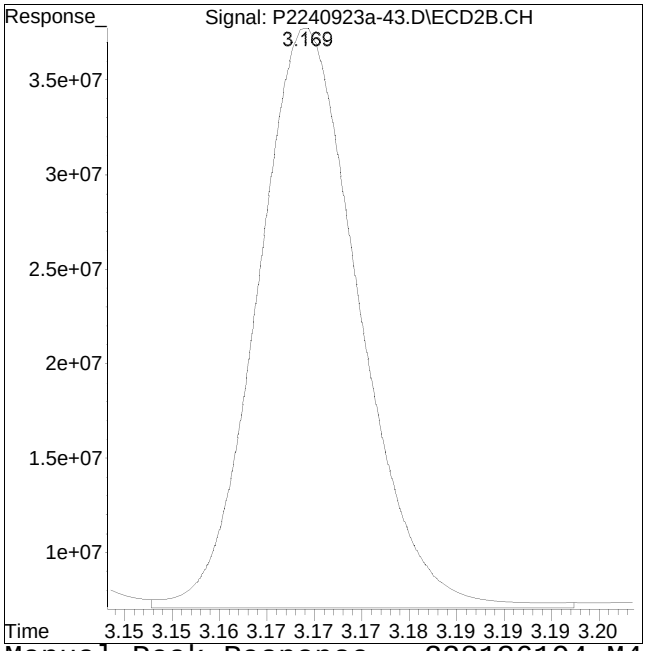

Original Peak Response = 215871718 Manual Peak Response = 197627405 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #61: 1260-2 #2



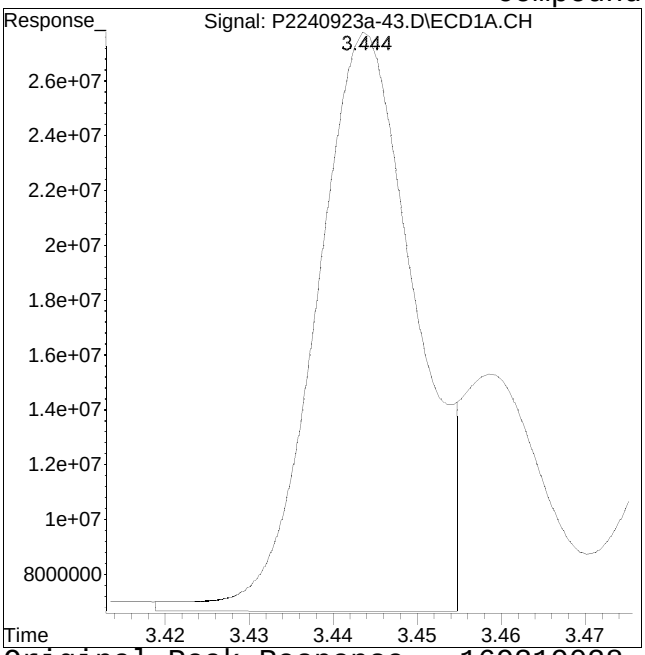




Original Peak Response = 240007133 Manual Peak Response = 228136194 M4
M4 = Poor automated baseline construction.

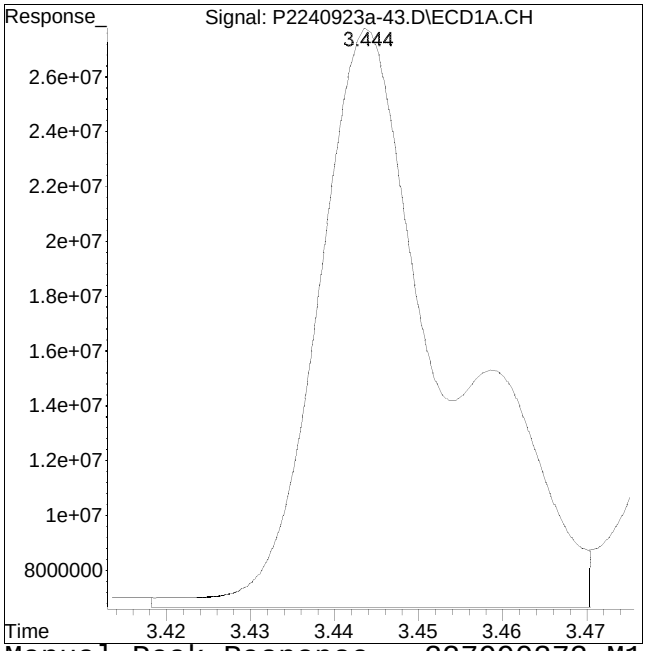
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-43.D Operator : Pest2: rmp
Date Inj'd : 9/23/2024 2:51 pm Instrument : Pest 2
Sample : WG1974934-5,42,,cicv +1660Quant Date : 9/23/2024 2:58 pm

Compound #13: 1260-5




Original Peak Response = 169319028




Manual Peak Response = 227990373 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# RT Shift  Summary

# Identification Summary
# Form 10
# PCBs

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |

**No Detections Found**

# Aroclor Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-32.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:15
Operator : pest2:sdc
Sample : WG1974231-1,42,, 233 lan (Sig #1); WG1974233-1,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:47 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.184 | 1.254 | 231.7E6 | 287.0E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 221724914 | | | | Recovery = | 104.50% | |
| | Standard Area 1 : #2 = 285322290 | | | | Recovery = | 100.60% | |
| 14) i | 2154_1br2nb | 1.184 | 1.254 | 231.7E6 | 287.0E6 | 25.000 | 25.000 |
| 23) i | 4268_1br2nb | 1.184 | 1.254 | 231.7E6 | 287.0E6 | 25.000 | 25.000 |
| 34) i | 1248_1br2nb | 1.184 | 1.254 | 231.7E6 | 287.0E6 | 25.000 | 25.000 |
| 40) i | 3262_1br2nb | 1.184 | 1.254 | 231.7E6 | 287.0E6 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 202.7E6 | 248.4E6 | 15.074 | 13.206 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 75.37% | 66.03% | |
| 3) s | Decachlorobi | 4.024 | 4.543 | 183.2E6 | 199.2E6 | 17.130 | 15.754 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 85.65% | 78.77% | |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) l1 | 1016-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) l1 | 1016-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) l1 | 1016-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) l1 | 1016-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum 1016-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1016-1 | | | | | 0.000 | 0.000 |
| 9) l2 | 1260-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) l2 | 1260-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) l2 | 1260-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) l2 | 1260-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) l2 | 1260-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum 1260-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1260-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-32.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:15
Operator : pest2:sdc
Sample : WG1974231-1,42,, 233 lan (Sig #1); WG1974233-1,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:47 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 15) l3 1221-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) l3 1221-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) l3 1221-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| 18) l4 1254-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) l4 1254-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) l4 1254-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) l4 1254-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) l4 1254-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| 24) l6 1242-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) l6 1242-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 26) l6 1242-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 27) l6 1242-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) l6 1242-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| 29) l9 1268-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l9 1268-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l9 1268-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l9 1268-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 33) l9 1268-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| 35) l7 1248-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l7 1248-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l7 1248-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 38) l7 1248-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-32.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:15
Operator : pest2:sdc
Sample : WG1974231-1,42,, 233 lan (Sig #1); WG1974233-1,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:47 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 39) l7 1248-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| 41) l5 1232-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 42) l5 1232-2 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 43) l5 1232-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 44) l5 1232-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 45) l5 1232-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| 46) l8 1262-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 47) l8 1262-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 48) l8 1262-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 49) l8 1262-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 50) l8 1262-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

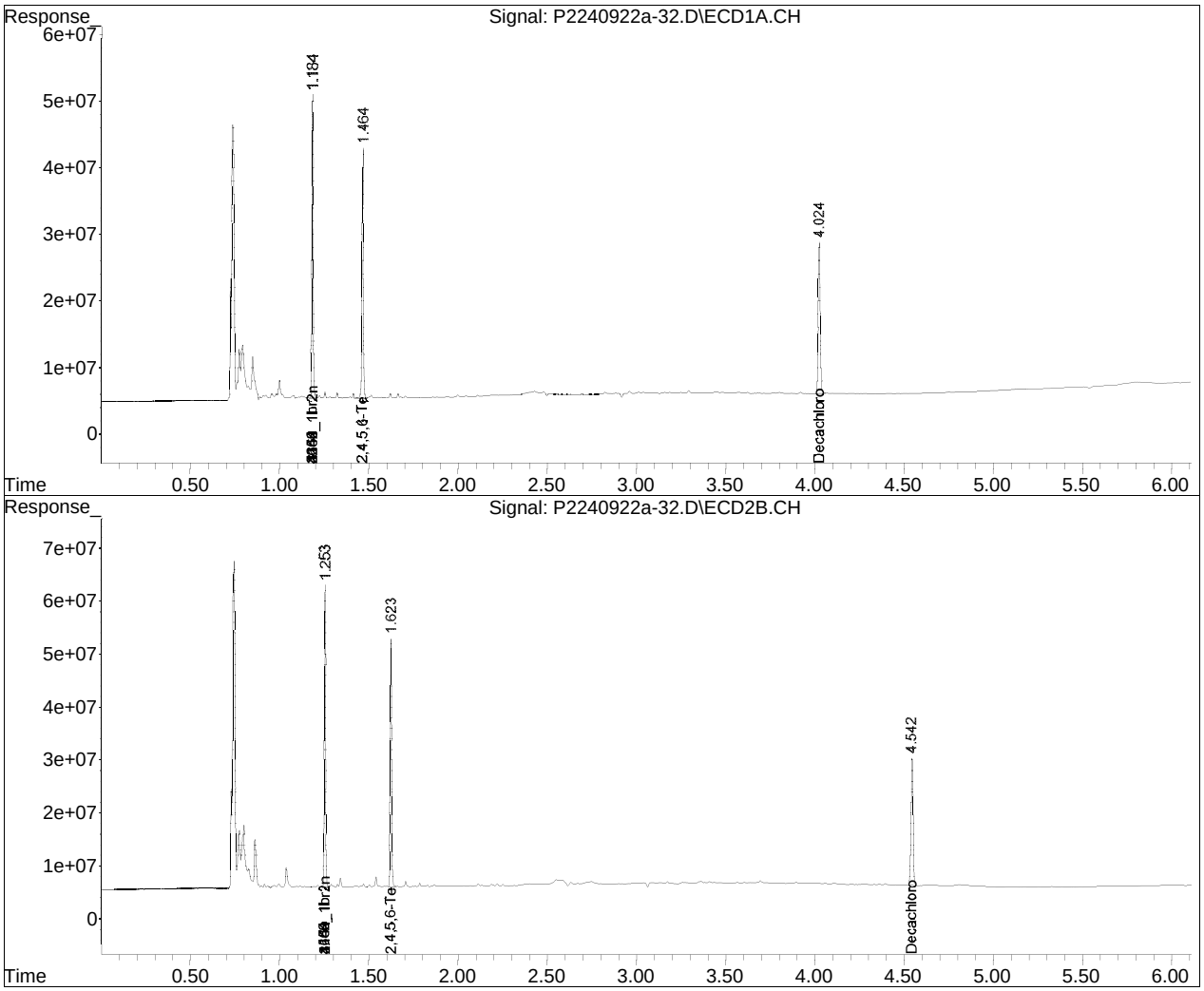
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2240922a-04.D•

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-32.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  14:15
Operator : pest2:sdc
Sample : WG1974231-1,42,, 233 lan (Sig #1); WG1974233-1,42,, 231 lan (Sig #
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 32 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:47 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



Manual Integration Report

| | | | |
|---|---|---|---|
| Data Path | : I:\PCB\Pest2\2024\240922A\ | QMethod | : P2_PCB_09_16_24_iRVT_ICA |
| Data File | : P2240922a-32.D | Operator | : pest2:sdc |
| Date Inj'd | : 9/22/2024 14:15 | Instrument | : Pest 2 |
| Sample | : WG1974231-1,42,, 233 lan | Quant Date | : 9/22/2024 3:55 pm |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-33.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:23
Operator : pest2:sdc
Sample : WG1974231-2,42,, 233 lan (Sig #1); WG1974233-2,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:49 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : 1660 - 1660

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 220.3E6 | 275.8E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 221724914 | | | | Recovery = | 99.38% | |
| | Standard Area 1 : #2 = 285322290 | | | | Recovery = | 96.65% | |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.465 | 1.624 | 212.5E6 | 264.1E6 | 16.617 | 14.613 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 83.09% | 73.06% | |
| 3) s | Decachlorobi | 4.025 | 4.543 | 188.4E6 | 201.2E6 | 18.523 | 16.566 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 92.62% | 82.83% | |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.602 | 1.823 | 46121213 | 62742207 | 193.472 | 188.437 |
| 5) l1 | 1016-2 | 1.742 | 1.993 | 105.5E6 | 136.4E6 | 203.241 | 189.310 |
| 6) l1 | 1016-3 | 1.929 | 2.194 | 208.4E6 | 259.8E6 | 202.592 | 179.909 |
| 7) l1 | 1016-4 | 1.983 | 2.254 | 89665360 | 109.0E6 | 206.872M1 | 187.036 |
| 8) l1 | 1016-5 | 2.153 | 2.464 | 100.7E6 | 93868897 | 210.850 | 201.985 |
| | Sum 1016-1 | | | 550.3E6 | 661.8E6 | 1017.027 | 946.676 |
| | Average 1016-1 | | | | | 203.405 | 189.335 |
| 9) l2 | 1260-1 | 2.694 | 3.072 | 133.9E6 | 179.0E6 | 203.842 | 197.476 |
| 10) l2 | 1260-2 | 2.824 | 3.174 | 205.7E6 | 194.8E6 | 206.152 | 181.892 |
| 11) l2 | 1260-3 | 3.139 | 3.566 | 126.8E6 | 160.7E6 | 209.795 | 183.611 |
| 12) l2 | 1260-4 | 3.294 | 3.695 | 281.7E6 | 319.8E6 | 212.372 | 186.610 |
| 13) l2 | 1260-5 | 3.441 | 3.895 | 200.7E6 | 227.2E6 | 211.769M1 | 186.256 |
| | Sum 1260-1 | | | 948.8E6 | 1081.5E6 | 1043.930 | 935.844 |
| | Average 1260-1 | | | | | 208.786 | 187.169 |
| | Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1221-1 | | | | | 0.000 | 0.000 |
| | Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1254-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-33.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:23
Operator : pest2:sdc
Sample : WG1974231-2,42,, 233 lan (Sig #1); WG1974233-2,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:49 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

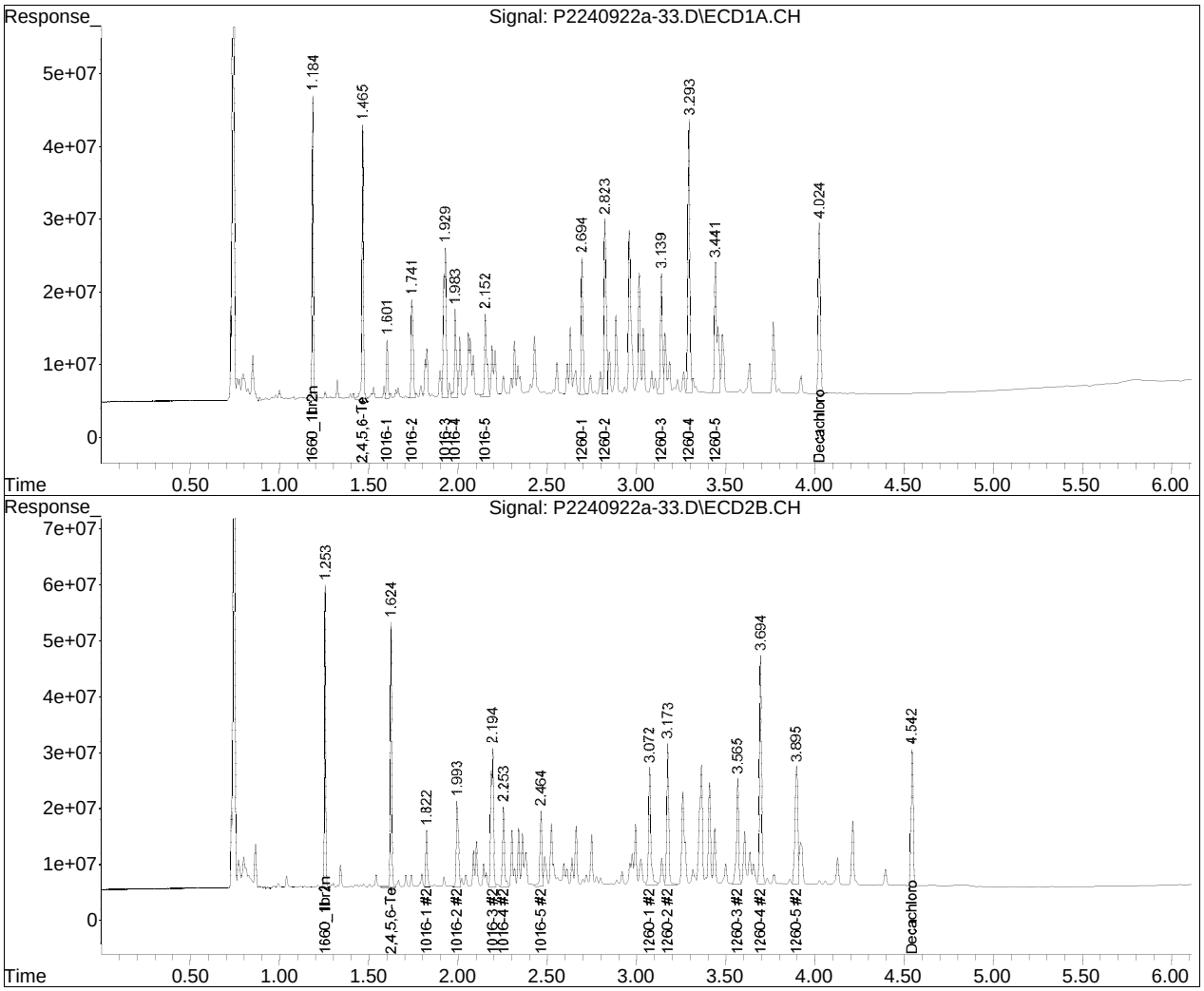
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2024\240922A\P2240922a-04.D•

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-33.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  14:23
Operator : pest2:sdc
Sample : WG1974231-2,42,, 233 lan (Sig #1); WG1974233-2,42,, 231 lan (Sig #
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 33 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:55:49 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

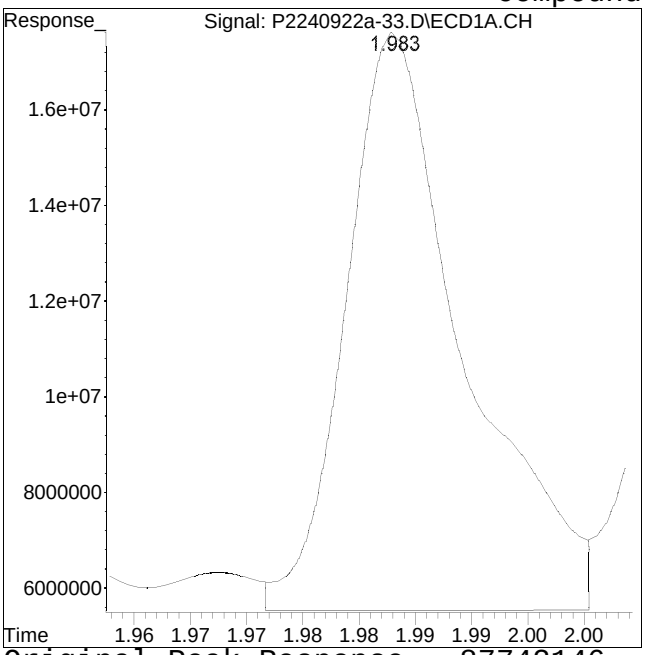
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

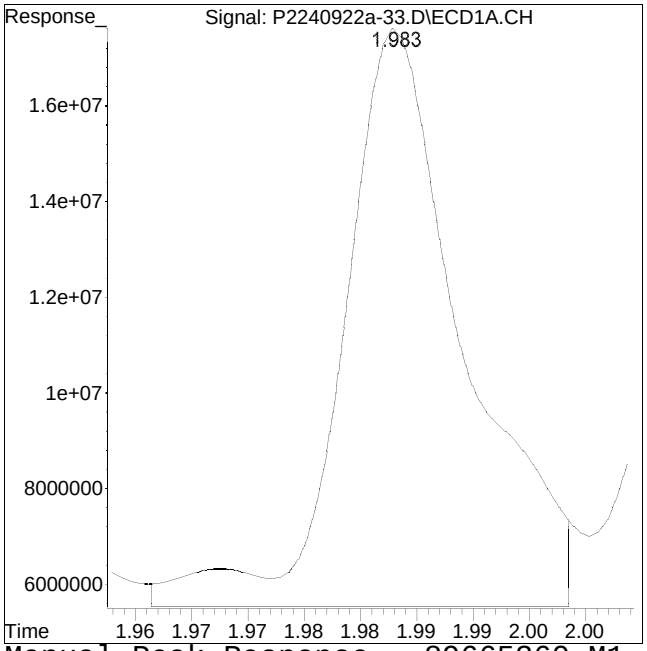


# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-33.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 14:23 Instrument : Pest 2
Sample : WG1974231-2,42,, 233 lan Quant Date : 9/22/2024 3:55 pm

Compound #7: 1016-4



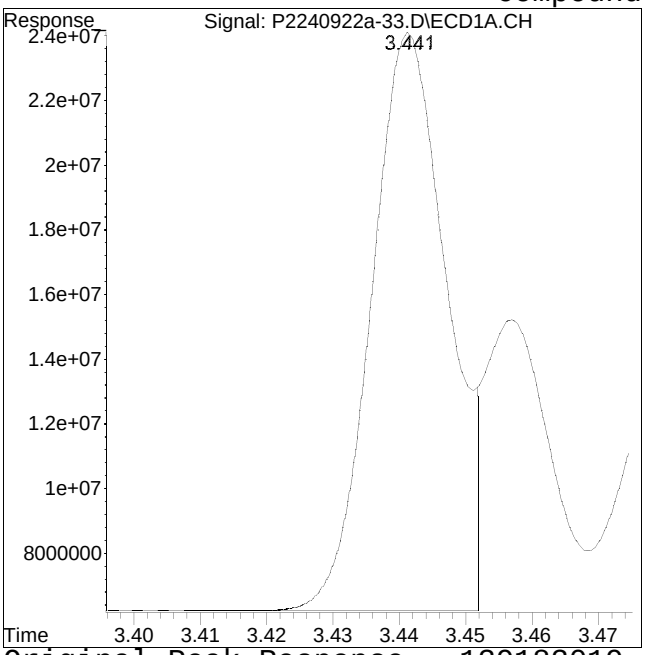



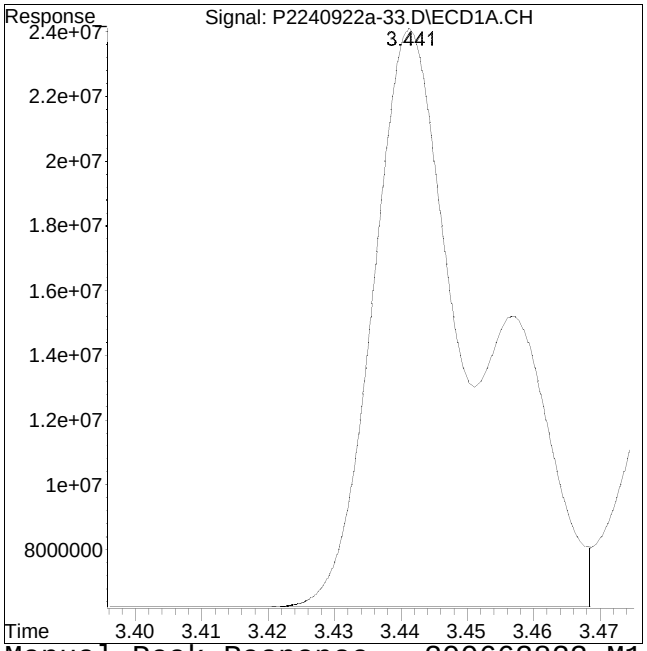

Original Peak Response = 87742146 Manual Peak Response = 89665360 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-33.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 14:23 Instrument : Pest 2
Sample : WG1974231-2,42,, 233 lan Quant Date : 9/22/2024 3:55 pm

Compound #13: 1260-5




Original Peak Response = 139183019 Manual Peak Response = 200663823 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-34.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:32
Operator : pest2:sdc
Sample : WG1974231-3,42,, 233 lan (Sig #1); WG1974233-3,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:56:19 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : 1660 - 1660

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1660_1br2nb | 1.185 | 1.254 | 226.0E6 | 282.2E6 | 25.000 | 25.000 |
| | Standard Area 1 : #1 = 221724914 | | | | Recovery = | 101.95% | |
| | Standard Area 1 : #2 = 285322290 | | | | Recovery = | 98.90% | |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.466 | 1.624 | 223.0E6 | 271.5E6 | 16.998 | 14.682 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 84.99% | 73.41% | |
| 3) s | Decachlorobi | 4.026 | 4.543 | 191.8E6 | 208.9E6 | 18.383 | 16.807 |
| | Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 91.91% | 84.03% | |
| | Target Compounds | | | | | | |
| 4) l1 | 1016-1 | 1.603 | 1.823 | 47672210 | 63882784 | 194.935 | 187.508 |
| 5) l1 | 1016-2 | 1.741 | 1.993 | 106.7E6 | 138.4E6 | 200.318M3 | 187.763 |
| 6) l1 | 1016-3 | 1.929 | 2.194 | 216.7E6 | 270.1E6 | 205.323 | 182.771 |
| 7) l1 | 1016-4 | 1.984 | 2.254 | 94854306 | 112.3E6 | 213.324 | 188.323 |
| 8) l1 | 1016-5 | 2.153 | 2.464 | 103.8E6 | 96678813 | 211.893 | 203.310 |
| | Sum 1016-1 | | | 569.7E6 | 681.3E6 | 1025.792 | 949.675 |
| | Average 1016-1 | | | | | 205.158 | 189.935 |
| 9) l2 | 1260-1 | 2.695 | 3.072 | 136.6E6 | 182.3E6 | 202.628 | 196.546 |
| 10) l2 | 1260-2 | 2.824 | 3.174 | 208.6E6 | 200.1E6 | 203.760 | 182.630 |
| 11) l2 | 1260-3 | 3.139 | 3.566 | 130.8E6 | 166.6E6 | 210.935 | 185.995 |
| 12) l2 | 1260-4 | 3.294 | 3.695 | 289.8E6 | 333.1E6 | 212.954 | 189.960 |
| 13) l2 | 1260-5 | 3.442 | 3.896 | 205.6E6 | 237.0E6 | 211.531M1 | 189.920 |
| | Sum 1260-1 | | | 971.4E6 | 1119.2E6 | 1041.808 | 945.051 |
| | Average 1260-1 | | | | | 208.362 | 189.010 |
| | Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1221-1 | | | | | 0.000 | 0.000 |
| | Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| | Average 1254-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-34.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 14:32
Operator : pest2:sdc
Sample : WG1974231-3,42,, 233 lan (Sig #1); WG1974233-3,42,, 231 lan (Sig #2)
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:56:19 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240922A\P2240922a-04.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

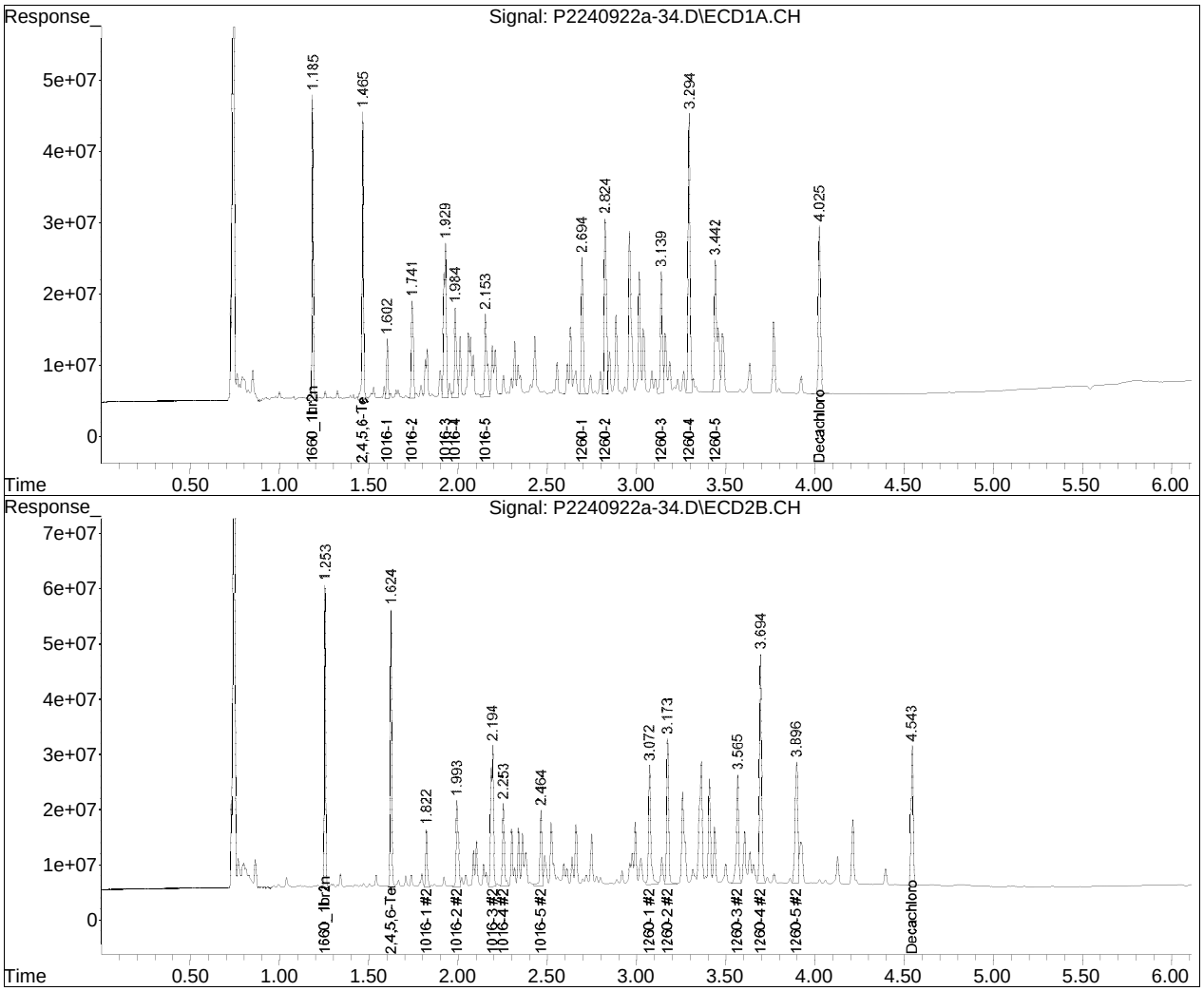
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2024\240922A\P2240922a-04.D•

Data Path : I:\PCB\Pest2\2024\240922A\
Data File : P2240922a-34.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  14:32
Operator : pest2:sdc
Sample : WG1974231-3,42,, 233 lan (Sig #1); WG1974233-3,42,, 231 lan (Sig #
Misc : WG1974776,WG1974231,ICAL21500
ALS Vial : 34 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 22 15:56:19 2024
Quant Method : I:\PCB\Pest2\2024\240922A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

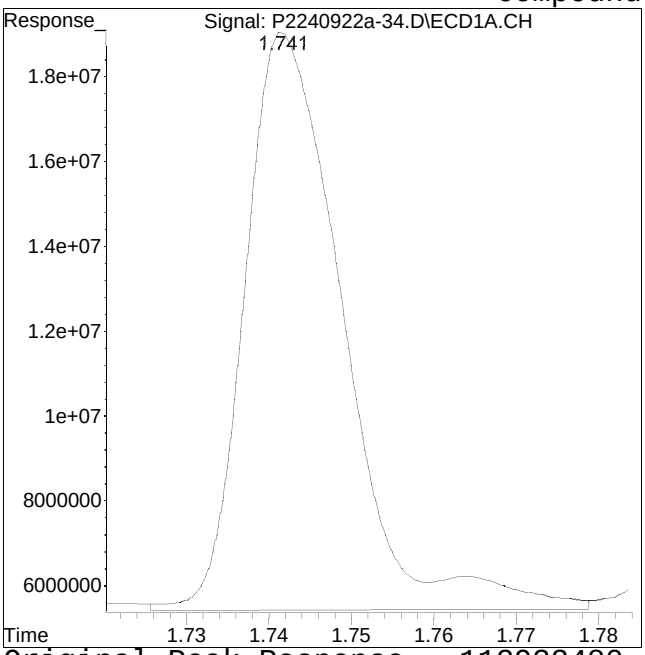
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

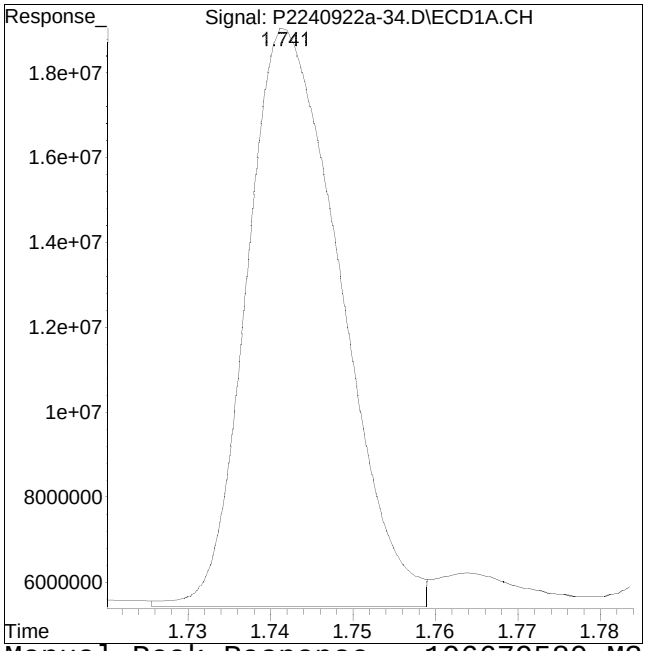


Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-34.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 14:32 Instrument : Pest 2
Sample : WG1974231-3,42,, 233 lan Quant Date : 9/22/2024 3:56 pm

Compound #5: 1016-2



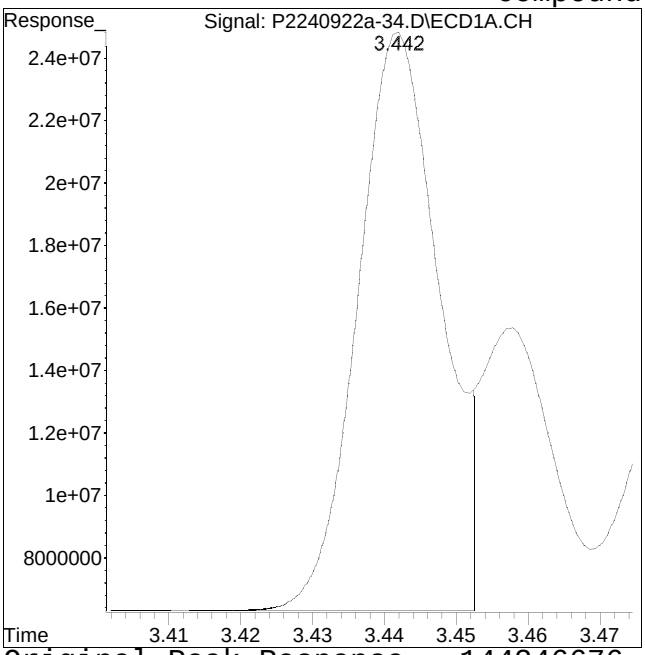



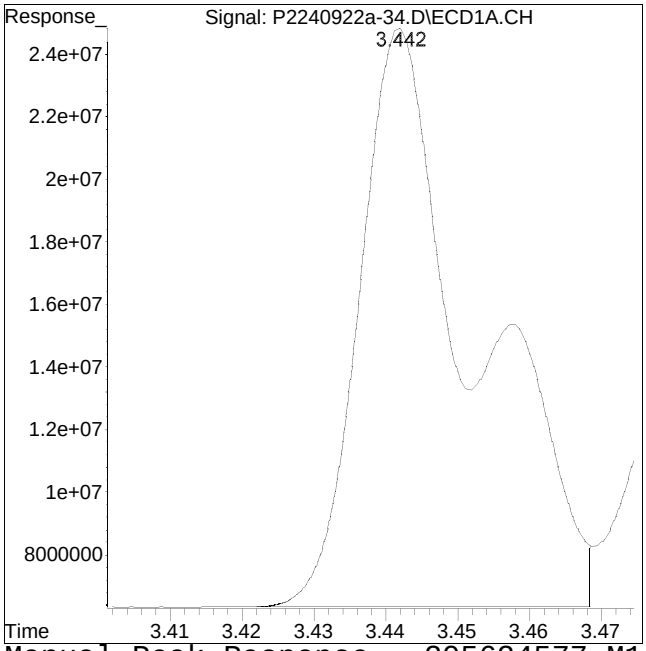

Original Peak Response = 112932480 Manual Peak Response = 106679580 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240922A\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240922a-34.D Operator : pest2:sdc
Date Inj'd : 9/22/2024 14:32 Instrument : Pest 2
Sample : WG1974231-3,42,, 233 lan Quant Date : 9/22/2024 3:56 pm

Compound #13: 1260-5




Original Peak Response = 144246676 Manual Peak Response = 205624577 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-54.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 16:53
Operator : Pest2:meo
Sample : WG1974231-4,42,, ms
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 54 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:20 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) i 1660_1br2nb | 1.184 | 1.252 | 224.3E6 | 279.0E6 | 25.000 | 25.000 |
| Standard Area 1 : #1 = 199763160 | | | | Recovery = | 112.29% | |
| Standard Area 1 : #2 = 308903176 | | | | Recovery = | 90.33% | |
| System Monitoring Compounds | | | | | | |
| 2) s 2,4,5,6-Tetr | 1.465 | 1.623 | 216.7E6 | 258.0E6 | 16.645 | 14.109 |
| Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 83.22% | 70.55% | |
| 3) s Decachlorobi | 4.025 | 4.541 | 165.5E6 | 188.6E6 | 15.985M4 | 15.348M4 |
| Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 79.92% | 76.74% | |
| Target Compounds | | | | | | |
| 4) l1 1016-1 | 1.602 | 1.822 | 46679830 | 59430313 | 192.352 | 176.393 |
| 5) l1 1016-2 | 1.742 | 1.992 | 111.8E6 | 132.6E6 | 211.498 | 181.816 |
| 6) l1 1016-3 | 1.929 | 2.193 | 210.1E6 | 258.0E6 | 200.638 | 176.553 |
| 7) l1 1016-4 | 1.984 | 2.253 | 88025166 | 99057461 | 199.495 | 168.040 |
| 8) l1 1016-5 | 2.152 | 2.463 | 95081143 | 88909416 | 195.660M4 | 189.066 |
| Sum 1016-1 | | | 551.7E6 | 637.9E6 | 999.642 | 891.870 |
| Average 1016-1 | | | | | 199.928 | 178.374 |
| 9) l2 1260-1 | 2.694 | 3.071 | 132.8E6 | 166.3E6 | 198.587 | 181.352 |
| 10) l2 1260-2 | 2.824 | 3.173 | 201.2E6 | 189.1E6 | 198.032 | 174.558 |
| 11) l2 1260-3 | 3.139 | 3.564 | 126.4E6 | 161.2E6 | 205.429 | 182.003 |
| 12) l2 1260-4 | 3.294 | 3.694 | 279.4E6 | 324.7E6 | 206.903 | 187.229 |
| 13) l2 1260-5 | 3.441 | 3.894 | 202.6E6 | 230.8E6 | 210.008M1 | 187.046 |
| Sum 1260-1 | | | 942.4E6 | 1072.3E6 | 1018.960 | 912.188 |
| Average 1260-1 | | | | | 203.792 | 182.438 |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-54.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 16:53
Operator : Pest2:meo
Sample : WG1974231-4,42,, ms
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 54 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:20 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

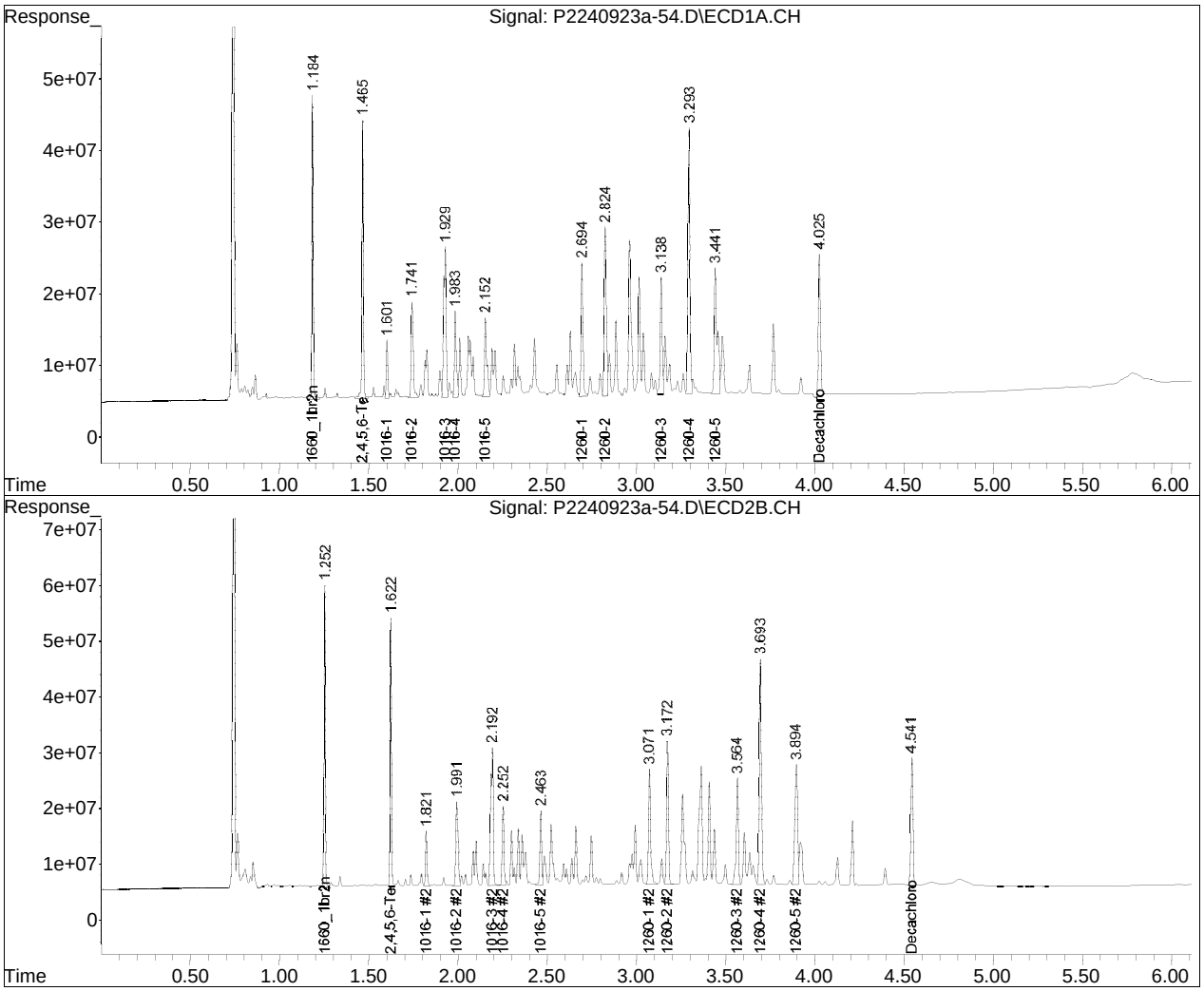
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2024\240923a\P2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-54.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  16:53
Operator : Pest2:meo
Sample : WG1974231-4,42,, ms
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 54 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:20 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

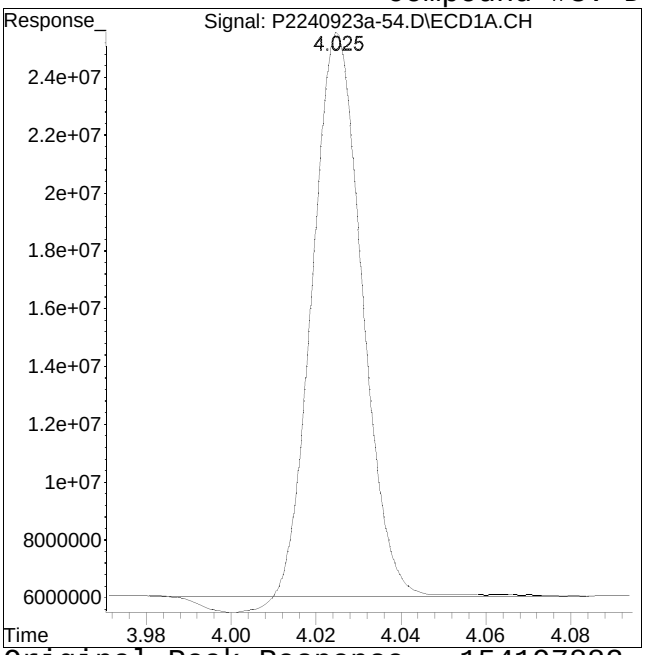
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



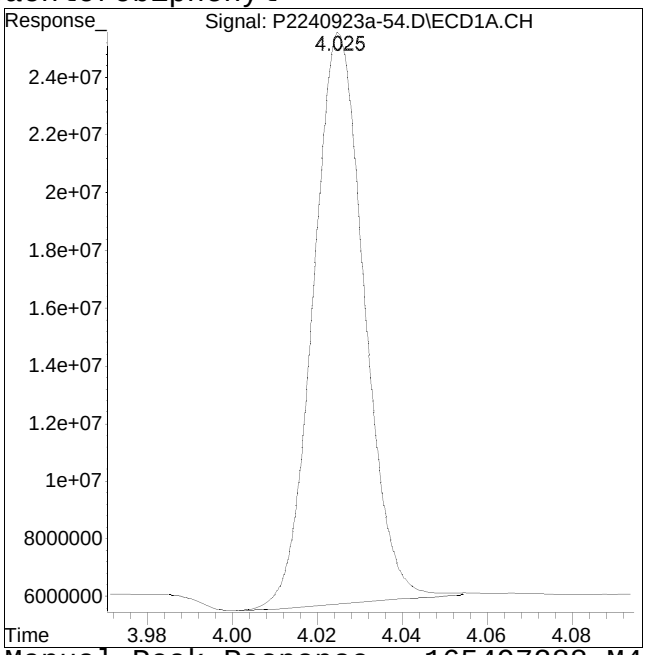
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-54.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:53 Instrument : Pest 2
Sample : WG1974231-4,42,, ms Quant Date : 9/24/2024 9:06 am

## Compound #3: Decachlorobiphenyl




Original Peak Response = 154197882



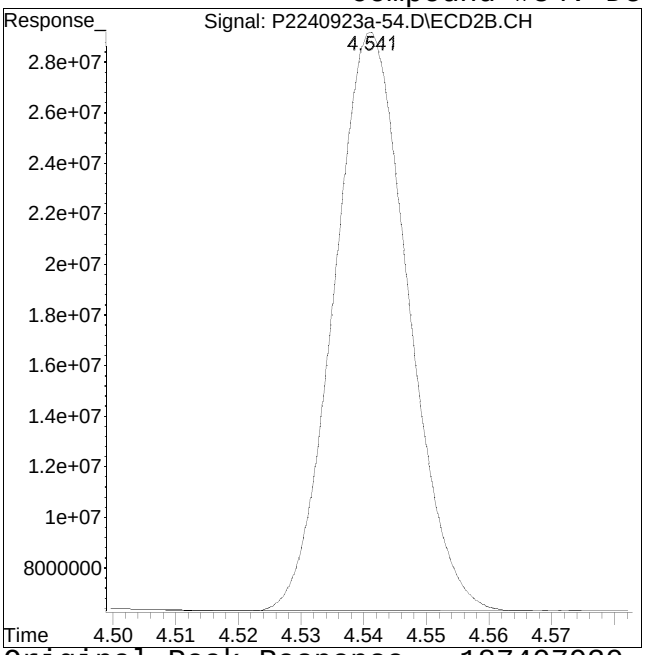

Manual Peak Response = 165497288 M4

M4 = Poor automated baseline construction.

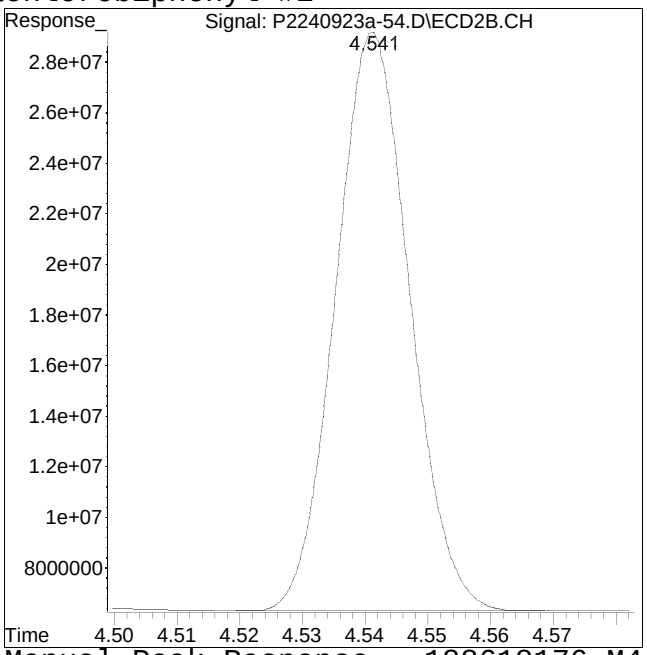
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-54.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:53 Instrument : Pest 2
Sample : WG1974231-4,42,, ms Quant Date : 9/24/2024 9:06 am

## Compound #54: Decachlorobiphenyl #2




Original Peak Response = 187407930



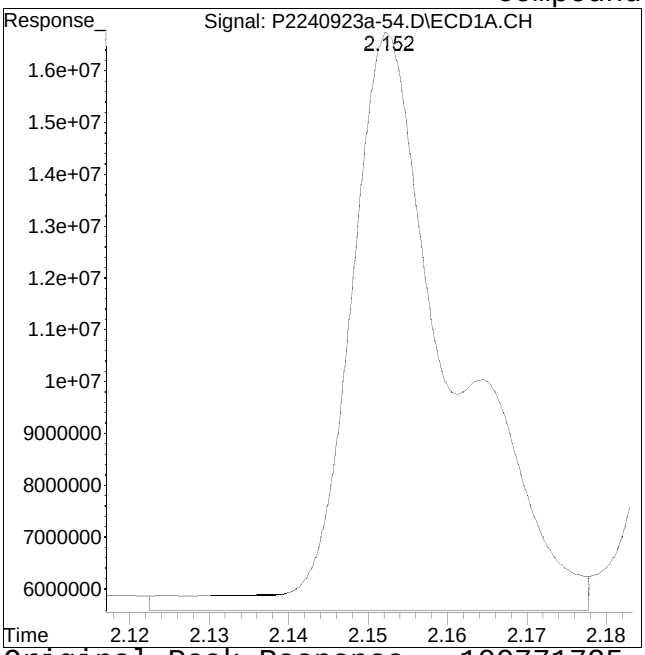

Manual Peak Response = 188618176 M4

M4 = Poor automated baseline construction.

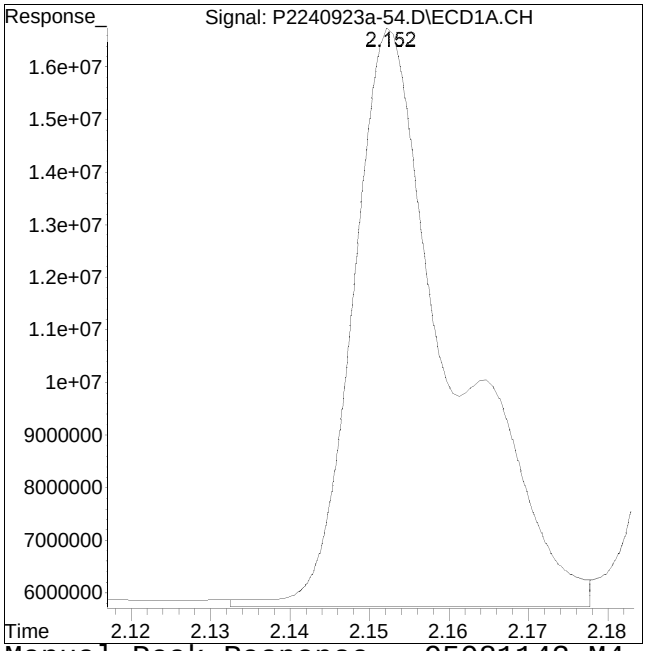
# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-54.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:53 Instrument : Pest 2
Sample : WG1974231-4,42,, ms Quant Date : 9/24/2024 9:06 am

Compound #8: 1016-5




Original Peak Response = 100771725



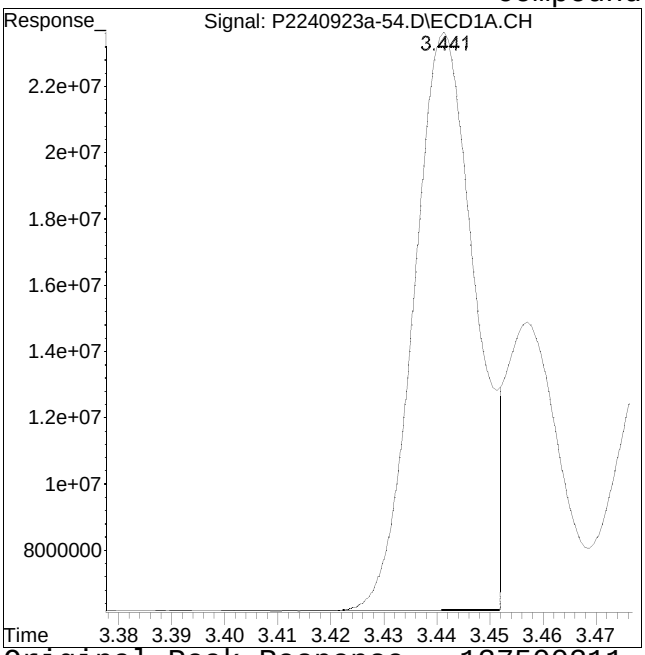

Manual Peak Response = 95081143 M4

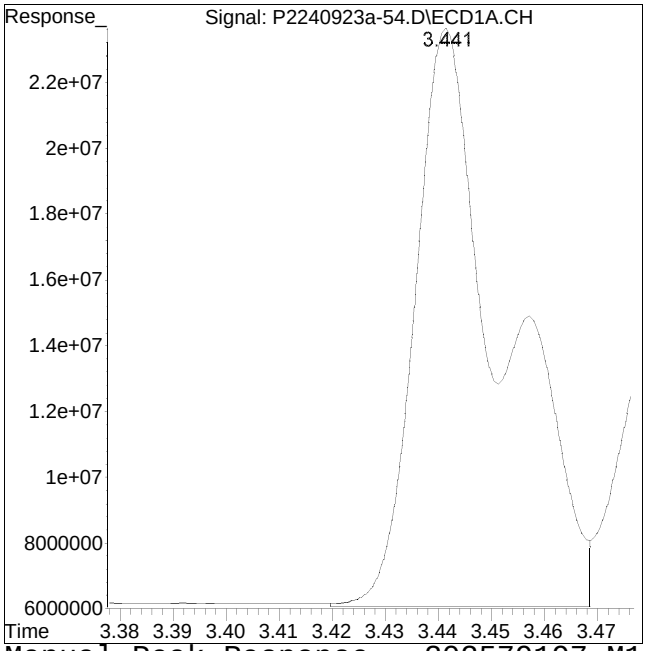
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-54.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 16:53 Instrument : Pest 2
Sample : WG1974231-4,42,, ms Quant Date : 9/24/2024 9:06 am

Compound #13: 1260-5




Original Peak Response = 137500311 Manual Peak Response = 202579197 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-55.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:02
Operator : Pest2:meo
Sample : WG1974231-5,42,, msd
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 55 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:24 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) i 1660_1br2nb | 1.184 | 1.253 | 235.1E6 | 295.2E6 | 25.000 | 25.000 |
| Standard Area 1 : #1 = 199763160 | | | | Recovery = | 117.70% | |
| Standard Area 1 : #2 = 308903176 | | | | Recovery = | 95.55% | |
| System Monitoring Compounds | | | | | | |
| 2) s 2,4,5,6-Tetr | 1.464 | 1.623 | 232.9E6 | 283.5E6 | 17.070 | 14.659 |
| Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 85.35% | 73.30% | |
| 3) s Decachlorobi | 4.023 | 4.541 | 183.9E6 | 188.5E6 | 16.944 | 14.502 |
| Spiked Amount 20.000 | Range 30 - 150 | | Recovery = | 84.72% | 72.51% | |
| Target Compounds | | | | | | |
| 4) l1 1016-1 | 1.601 | 1.822 | 51007587 | 69161980 | 200.516 | 194.078 |
| 5) l1 1016-2 | 1.740 | 1.992 | 121.9E6 | 148.9E6 | 220.108 | 193.083 |
| 6) l1 1016-3 | 1.927 | 2.193 | 241.9E6 | 294.1E6 | 220.326 | 190.277 |
| 7) l1 1016-4 | 1.982 | 2.252 | 104.7E6 | 116.2E6 | 226.432 | 186.311 |
| 8) l1 1016-5 | 2.151 | 2.463 | 111.1E6 | 98963487 | 218.120 | 198.965 |
| Sum 1016-1 | | | 630.6E6 | 727.3E6 | 1085.502 | 962.714 |
| Average 1016-1 | | | | | 217.100 | 192.543 |
| 9) l2 1260-1 | 2.692 | 3.071 | 151.8E6 | 182.7E6 | 216.490 | 188.298 |
| 10) l2 1260-2 | 2.822 | 3.172 | 231.0E6 | 209.5E6 | 216.894 | 182.813 |
| 11) l2 1260-3 | 3.137 | 3.564 | 144.0E6 | 179.1E6 | 223.395 | 191.139 |
| 12) l2 1260-4 | 3.292 | 3.693 | 313.7E6 | 349.9E6 | 221.603 | 190.784 |
| 13) l2 1260-5 | 3.440 | 3.894 | 229.6E6 | 248.7E6 | 227.080M1 | 190.533 |
| Sum 1260-1 | | | 1070.1E6 | 1170.0E6 | 1105.462 | 943.567 |
| Average 1260-1 | | | | | 221.092 | 188.713 |
| Sum 1221-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1221-1 | | | | | 0.000 | 0.000 |
| Sum 1254-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1254-1 | | | | | 0.000 | 0.000 |
| Sum 1242-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1242-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-55.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Sep 2024 17:02
Operator : Pest2:meo
Sample : WG1974231-5,42,, msd
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 55 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:24 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2024\240923a\P2240923a-43.D
Sub List : 1660 - 1660

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum 1268-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1268-1 | | | | | 0.000 | 0.000 |
| Sum 1248-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1248-1 | | | | | 0.000 | 0.000 |
| Sum 1232-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1232-1 | | | | | 0.000 | 0.000 |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum 1262-1 | | | 0 | 0 | N.D. | N.D. |
| Average 1262-1 | | | | | 0.000 | 0.000 |

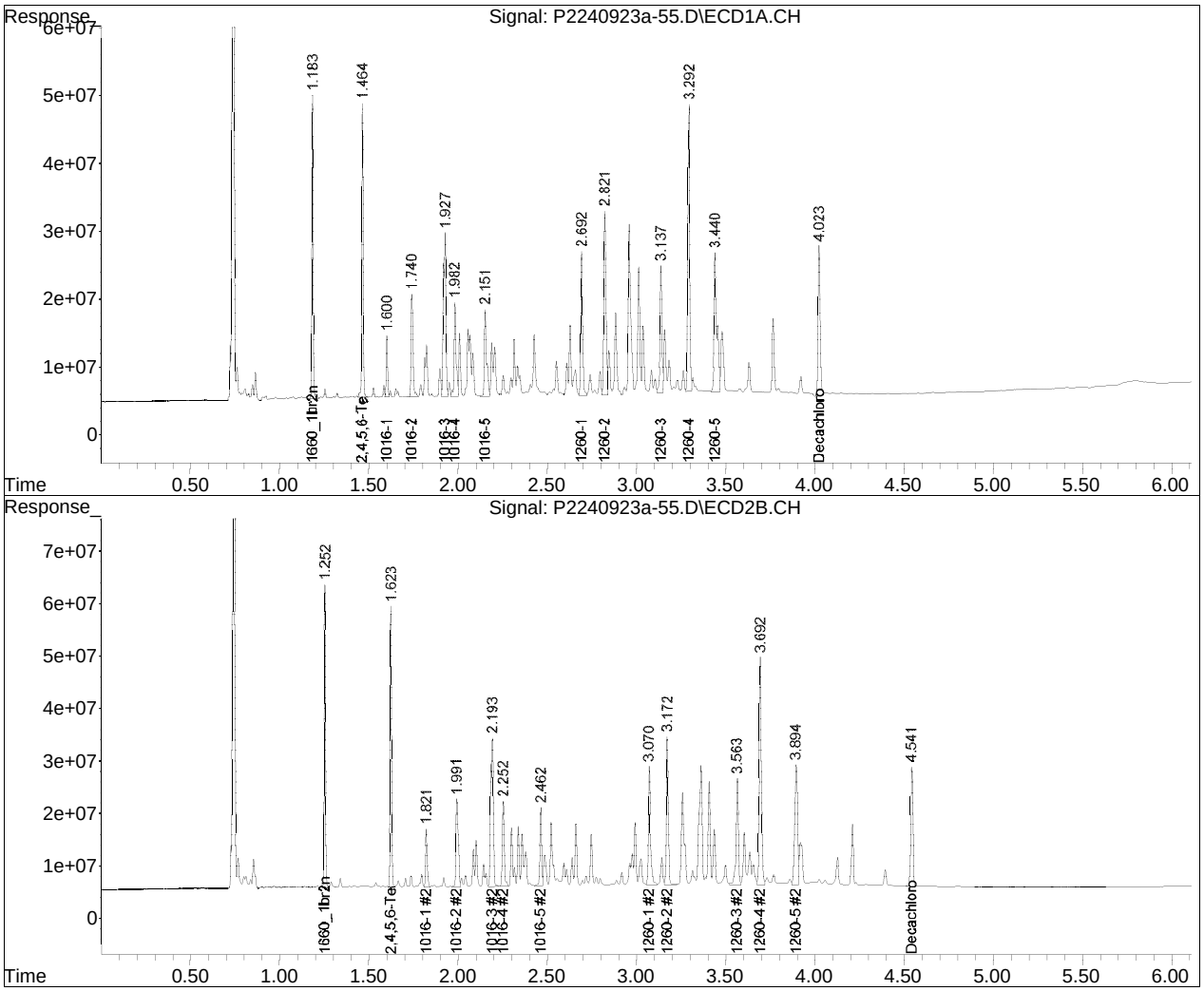
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2024\240923a\P2240923a-43.D•

Data Path : I:\PCB\Pest2\2024\240923a\
Data File : P2240923a-55.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 23 Sep 2024  17:02
Operator : Pest2:meo
Sample : WG1974231-5,42,, msd
Misc : WG1974934,WG1974231,ICAL21500
ALS Vial : 55 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: events1.e
Integration File signal 2: events2.e
Quant Time: Sep 24 09:06:24 2024
Quant Method : I:\PCB\Pest2\2024\240923A\P2_PCB_09_16_24_iRVT_ICAL21500.m
Quant Title : pcb
QLast Update : Tue Sep 17 11:03:22 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

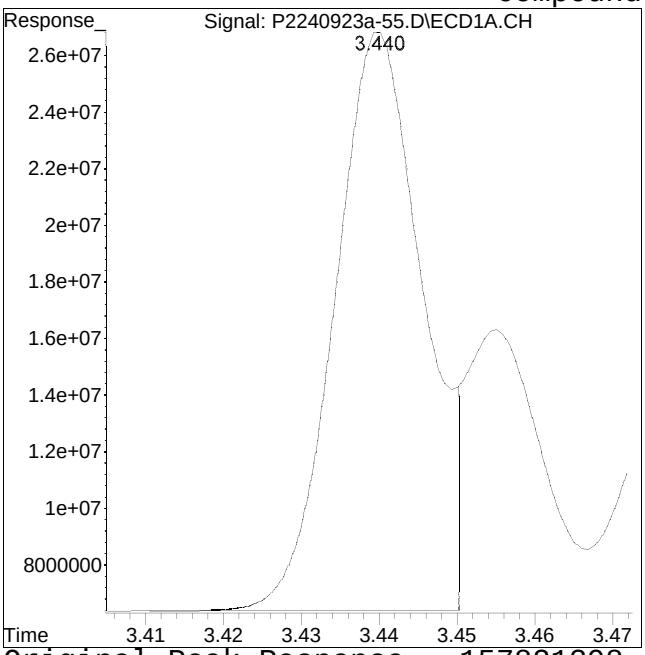
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

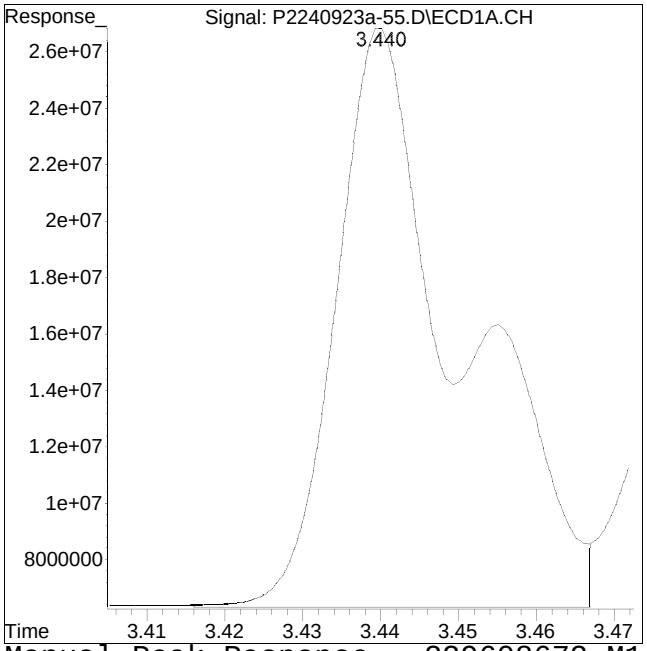


# Manual Integration Report

Data Path : I:\PCB\Pest2\2024\240923a\QMethod : P2_PCB_09_16_24_iRVT_ICA
Data File : P2240923a-55.D Operator : Pest2:meo
Date Inj'd : 9/23/2024 17:02 Instrument : Pest 2
Sample : WG1974231-5,42,, msd Quant Date : 9/24/2024 9:06 am

Compound #13: 1260-5




Original Peak Response = 157821398 Manual Peak Response = 229608672 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Calculation of PCB Aroclors & Pesticides

Aqueous Concentration Formula:
Amt * DF*(Vt/Vp)*(1000/Vo)*(Ve/1000)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Vo = Volume of Sample (mL)
Ve = Extraction Lab Final Volume (mL)

Soil Concentration Formula:
Amt * DF * (Vt/Vp)*(1000/Wt)*(Ve/1000)* (100/TS)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Wt = Weight of Sample (g)
Ve = Extraction Lab Final Volume (mL)
TS = Total Solids

Dep.: PCB
Inst: Pest_2
Date: **09/16/24**
Run: I

Method: 8082
GC: PCB RVT

Seq: ICAL21500
IS: pp11660
WG1972777

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | P2240916i-01 | blk | | | | |
| 1 | P2240916i-02 | blk | | | | |
| 1 | P2240916i-03 | blk | | | | |
| 1 | P2240916i-04 | blk | | | | |
| 1 | P2240916i-05 | blk | | | | |
| 2 | P2240916i-06 | il11660,42,,pp11790 4PPB | | | | kab/sdc 9/17 |
| 3 | P2240916i-07 | il21660,42,,pp11790 10PPB | | | | kab/sdc 9/17 |
| 4 | P2240916i-08 | il31660,42,,pp11790 20PPB | | | | kab/sdc 9/17 |
| 5 | P2240916i-09 | il41660,42,,pp11790 30PPB | | | | kab/sdc 9/17 |
| 6 | P2240916i-10 | il51660,42,,pp11790 40PPB | | | | kab/sdc 9/17 |
| 7 | P2240916i-11 | il61660,42,,pp11790 50PPB | | | | kab/sdc 9/17 |
| 8 | P2240916i-12 | il71660,42,,pp11790 100PPB | | | | kab/sdc 9/17 |
| 9 | P2240916i-13 | il81660,42,,pp11790 250PPB | | | | kab/sdc 9/17 |
| 10 | P2240916i-14 | il91660,42,,pp11790 500PPB | | | | kab/sdc 9/17 |
| 11 | P2240916i-15 | il101660,42,,pp11790 1000PPB | | | | kab/sdc 9/17 |
| 12 | P2240916i-16 | cicv1660,42,, ICV 250 pp11765 | | | | kab/sdc 9/17 |
| 1 | P2240916i-17 | instrument blank | | | | kab/sdc 9/17 |
| 31 | P2240916i-18 | L8 RVT 2154 250 pp11766 | | | | kab/sdc 9/17 |
| 32 | P2240916i-19 | L8 RVT 1248 250 pp11767 | | | | kab/sdc 9/17 |
| 33 | P2240916i-20 | L8 RVT 3262 250 pp11768 | | | | kab/sdc 9/17 |
| 34 | P2240916i-21 | L8 RVT 4268 250 pp11769 | | | | kab/sdc 9/17 |
| 41 | P2240916i-22 | 2154 ICV 250 pp11770 | | | | kab/sdc 9/17 |
| 42 | P2240916i-23 | 1248 ICV 250 pp11771 | | | | kab/sdc 9/17 |
| 43 | P2240916i-24 | 3262 ICV 250 pp11773 | | | | kab/sdc 9/17 |
| 44 | P2240916i-25 | 4268 ICV 250 pp11772 | | | | kab/sdc 9/17 |

Dep.: PCB
Inst: Pest_2
Date: **09/22/24**
Run: a

Method: 8082
GC: PCB RVT

Seq: WG1974776
IS: pp11660

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | P2240922a-01 | blk | | | | |
| 1 | P2240922a-02 | blk | | | | |
| 1 | P2240922a-03 | blk | | | | |
| 4 | P2240922a-04 | cicv1660,42,, lvi pp11776 | 20% 9:02 776-1 SDC | | | EMR 9/22 |
| 5 | P2240922a-05 | blank | | | | |
| 6 | P2240922a-06 | cicv2154,42,, lvi pp11761 | pass | | | |
| 7 | P2240922a-07 | cicv1248,42,, lvi pp11740 | pass | | | |
| 8 | P2240922a-08 | cicv4268,42,, lvi pp11775 | pass | | | sdc9/23 |
| 9 | P2240922a-09 | WG1974501-1,42,, | | EMR | | EMR 9/22 |
| 10 | P2240922a-10 | WG1974501-2,42,, | | | | EMR 9/22 |
| 11 | P2240922a-11 | WG1974501-3,42,, | | | | EMR 9/22 |
| 12 | P2240922a-12 | L2454090-01,42,,,R3A | | | | EMR 9/22 |
| 13 | P2240922a-13 | L2454090-02,42,,,R3A | | | | EMR 9/22 |
| 14 | P2240922a-14 | L2454090-03,42,,,R3A | | | | EMR 9/22 |
| 15 | P2240922a-15 | L2454090-05,42,,,R3A | | | | EMR 9/22 |
| 16 | P2240922a-16 | L2454090-04,42,,,R3A | | | | EMR 9/22 |
| 17 | P2240922a-17 | L2454090-06,42,,,R3A | re-ext tcmx failing | | | |
| 18 | P2240922a-18 | L2454090-10,42,,,R3A | | | | EMR 9/22 |
| 19 | P2240922a-19 | L2454090-11,42,,,R3A | | | | EMR 9/22 |
| 20 | P2240922a-20 | L2454090-12,42,,,R3A | | | | EMR 9/22 |
| 21 | P2240922a-21 | L2454090-13,42,,,R3A | | | | EMR 9/22 |
| 22 | P2240922a-22 | WG1974444-1,42,, | | | | sdc 9/23 |
| 23 | P2240922a-23 | WG1974444-2,42,, | | | | sdc 9/23 |
| 24 | P2240922a-24 | WG1974444-3,42,, | | | | sdc 9/23 |
| 25 | P2240922a-25 | L2452781-01,42,, | | | | sdc 9/23 |
| 26 | P2240922a-26 | L2453695-01,42,,,R3C | | | | sdc 9/23 |
| 27 | P2240922a-27 | L2453695-02,42,,,R3C | | | | sdc 9/23 |
| 28 | P2240922a-28 | L2453695-03,42,,,R3C | 42 | | | sdc 9/23 |
| 29 | P2240922a-29 | L2452901-01,42,, | 5x for 42 | | | |
| 30 | P2240922a-30 | L2452901-02,42,, | | | | sdc 9/23 |
| 31 | P2240922a-31 | L2452901-03,42,, | | | | sdc 9/23 |
| 32 | P2240922a-32 | WG1974233-1,42,, 231 lan | | | | sdc 9/23 |
| 33 | P2240922a-33 | WG1974233-2,42,, 231 lan | | | | sdc 9/23 |
| 34 | P2240922a-34 | WG1974233-3,42,, 231 lan | | | | sdc 9/23 |
| 35 | P2240922a-35 | L2452868-06,42,, lan | | | | sdc 9/23 |
| 36 | P2240922a-36 | L2452357-01,42,, | | | | sdc 9/23 |
| 37 | P2240922a-37 | L2452799-01,42,, | re-ext for 60 contamination | | | |
| 38 | P2240922a-38 | cicv1660,42,, lvi pp11776 | | | EMR | |
| | | | | | sv akm | |

Dep.: PCB
Inst: Pest_2
Date: **09/23/24**
Run: a

Method: 8082
GC: PCB RVT

Seq: WG1974934
IS: pp11660

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | P2240923a-01 | blk | | | | |
| 1 | P2240923a-02 | blk | | | | |
| 1 | P2240923a-03 | blk | | | | |
| 4 | P2240923a-04 | cicv1660,42,, lvi pp11776 | 20% 5:57 akm | | | mhg 9/23 |
| 5 | P2240923a-05 | cicv2154,42,, lvi pp11761 | | | | |
| 6 | P2240923a-06 | cicv1248,42,, lvi pp11740 | | | | mhg 9/23 |
| 7 | P2240923a-07 | cicv4268,42,, lvi pp11775 | | | | mhg 9/23 |
| 8 | P2240923a-08 | blk | | | | |
| 9 | P2240923a-09 | cicv2154,42,, lvi pp11761 rr | | | | mhg 9/23 |
| 10 | P2240923a-10 | WG1974795-1,42,, | | mhg | | mhg 9/23 |
| 11 | P2240923a-11 | WG1974795-2,42,, | | | | mhg 9/23 |
| 12 | P2240923a-12 | WG1974795-3,42,, | | | | mhg 9/23 |
| 13 | P2240923a-13 | L2454090-06,42,,,R3A re | | | | mhg 9/23 |
| 14 | P2240923a-14 | L2452909-14,42,, | | | | mhg 9/23 |
| 15 | P2240923a-15 | L2452904-02d,42,5,, | | | | mhg 9/23 |
| 16 | P2240923a-16 | L2452901-01d,42,5,, | | | | mhg 9/23 |
| 17 | P2240923a-17 | WG1974859-1,42,, | | | | mhg 9/23 |
| 18 | P2240923a-18 | WG1974859-2,42,, | | | | mhg 9/23 |
| 19 | P2240923a-19 | WG1974859-3,42,, | | | | mhg 9/23 |
| 20 | P2240923a-20 | L2452799-01,42,, re | | | | mhg 9/23 |
| 21 | P2240923a-21 | WG1974750-1,42,, | | | | mhg 9/23 |
| 22 | P2240923a-22 | WG1974750-2,42,, | | | | mhg 9/23 |
| 23 | P2240923a-23 | WG1974750-3,42,, | | | | mhg 9/23 |
| 24 | P2240923a-24 | L2453071-01,42,, | | | | mhg 9/23 |
| 25 | P2240923a-25 | WG1974385-1,42,, | | | | mhg 9/23 |
| 26 | P2240923a-26 | WG1974385-2,42,, | | | | mhg 9/23 |
| 27 | P2240923a-27 | WG1974385-3,42,, | | | | mhg 9/23 |
| 28 | P2240923a-28 | L2454343-39,42,,,R1A | 5x 48 | | | |
| 29 | P2240923a-29 | L2453071-02,42,, | | | | mhg 9/23 |
| 30 | P2240923a-30 | L2453071-03,42,, | | | | mhg 9/23 |
| 31 | P2240923a-31 | L2453084-01,42,, | | | | mhg 9/23 |
| 32 | P2240923a-32 | L2453084-02,42,, | | | | mhg 9/23 |
| 33 | P2240923a-33 | L2453084-03,42,, | | | | mhg 9/23 |
| 34 | P2240923a-34 | L2453084-04,42,, | | | | mhg 9/23 |
| 35 | P2240923a-35 | L2454343-39d,42,5,,,R1A | | | | mhg 9/23 |
| 36 | P2240923a-36 | L2453084-05,42,, | | | | mhg 9/23 |
| 37 | P2240923a-37 | L2453084-06,42,, | | | | mhg 9/23 |
| 38 | P2240923a-38 | L2453084-07,42,, | | | | mhg 9/23 |
| 39 | P2240923a-39 | L2453084-08,42,, | | | | mhg 9/23 |
| 40 | P2240923a-40 | L2453084-09,42,, | | | | mhg 9/23 |
| 41 | P2240923a-41 | L2453084-10,42,, | | | | mhg 9/23 |
| 42 | P2240923a-42 | cicv +1660 lvi pp11776 | low, bake | | mhg | |
| 43 | P2240923a-43 | cicv +1660 lvi pp11776 | ChA, ND only | | | kab 9/23 |
| 44 | P2240923a-44 | blank | | | | |
| 45 | P2240923a-45 | cicv2154,42,, lvi pp11761 | | | | |

Dep.: PCB
Inst: Pest_2
Date: **09/23/24**
Run: a

Method: 8082
GC: PCB RVT

Seq: WG1974934
IS: pp11660

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 46 | P2240923a-46 | cicv1248,42,, lvi pp11740 | | | | |
| 47 | P2240923a-47 | cicv4268,42,, lvi pp11775 | | | | |
| 48 | P2240923a-48 | L2453084-11,42,, | | meo | | meo 9/24 |
| 49 | P2240923a-49 | L2453084-12,42,, | | | | meo 9/24 |
| 50 | P2240923a-50 | L2453084-13,42,, | | | | meo 9/24 |
| 51 | P2240923a-51 | L2453084-16,42,, | | | | meo 9/24 |
| 52 | P2240923a-52 | L2453084-15,42,, | | | | meo 9/24 |
| 53 | P2240923a-53 | L2453053-01,42,, p | | | | meo 9/24 |
| 54 | P2240923a-54 | WG1974231-4,42,, ms | | | | meo 9/24 |
| 55 | P2240923a-55 | WG1974231-5,42,, msd | | | | meo 9/24 |
| 56 | P2240923a-56 | L2453053-02,42,, | | | | meo 9/24 |
| 57 | P2240923a-57 | L2453053-05,42,, | | | | meo 9/24 |
| 58 | P2240923a-58 | L2453053-04,42,, | | | | meo 9/24 |
| 59 | P2240923a-59 | L2453053-03,42,, | | | | meo 9/24 |
| 60 | P2240923a-60 | L2452833-11,42,, | | kab | | kab 9/23 |
| 61 | P2240923a-61 | L2453051-01,42,, | | meo | | meo 9/24 |
| 62 | P2240923a-62 | L2453051-02,42,, | | | | meo 9/24 |
| 63 | P2240923a-63 | L2453108-05,42,, p | | | | meo 9/24 |
| 64 | P2240923a-64 | WG1974385-4,42,, ms | | | | meo 9/24 |
| 65 | P2240923a-65 | WG1974385-5,42,, dup | | | | meo 9/24 |
| 66 | P2240923a-66 | L2453124-05,42,, | | | | meo 9/24 |
| 67 | P2240923a-67 | L2453887-01,42,,,R3C | | | | meo 9/24 |
| 68 | P2240923a-68 | L2453989-09,42,,,R1C | | | | meo 9/24 |
| 69 | P2240923a-69 | L2454463-01,42,,,R3A p | | | | meo 9/24 |
| 70 | P2240923a-70 | WG1974795-4,42,, ms | | | | meo 9/24 |
| 71 | P2240923a-71 | WG1974795-5,42,, msd | | | | meo 9/24 |
| 72 | P2240923a-72 | L2454463-02,42,,,R3A | | | | meo 9/24 |
| 73 | P2240923a-73 | L2454463-03,42,,,R3A | | | mhg | meo 9/24 |

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 24 2024, 12:25 pm

Work Group: WG1974231  for Department: 2 Organic Preparation

Created: 20-SEP-24  Due:  Operator: SJM/RET

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2452357-01 | DSW-2024.09.12 | S | NYTCL-8082-LVI | WATER | DONE | U | 0912 | 0920 | S0 | Amber-A.120 |
| L2453053-01 | MW-1SR | S | NYTCL-8082-LVI | WATER | DONE | U | 0916 | 0923 | S0 | Amber-A.120 |
| L2453053-02 | MW-1DR2 | S | NYTCL-8082-LVI | WATER | DONE | U | 0916 | 0923 | S0 | Amber-A.120 |
| L2453053-03 | MW-11S | S | NYTCL-8082-LVI | WATER | DONE | U | 0916 | 0923 | S0 | Amber-A.120 |
| L2453053-04 | MW-11D | S | NYTCL-8082-LVI | WATER | DONE | U | 0916 | 0923 | S0 | Amber-A.120 |
| L2453053-05 | DUP_091624 | S | NYTCL-8082-LVI | WATER | DONE | U | 0916 | 0923 | S0 | Amber-A.120 |
| WG1974231-1 | Laboratory Method Bl | S | NYTCL-8082-LVI | WATER | DONE | U | | | | |
| WG1974231-2 | Laboratory Control S | S | NYTCL-8082-LVI | WATER | DONE | U | | | | |
| WG1974231-3 | LCS Duplicate | S | NYTCL-8082-LVI | WATER | DONE | U | | | | |
| WG1974231-4 | Matrix Spike | S | NYTCL-8082-LVI | WATER | DONE | U | | | | |
| WG1974231-5 | Matrix Spike Duplica | S | NYTCL-8082-LVI | WATER | DONE | U | | | | |

Comments:

| | |
|---|---|
| WG1974231-3 | WG1974231-2 |
| WG1974231-4 | L2453053-01 |
| WG1974231-5 | L2453053-01 |

# ORGANIC ELN REPORT

**Workgroup: WG1974231**

**Prep Method:** EPA 3510C
**Solvent Type:** DCM **Lot #:** EJ049
**Surrogate Type:** Pesticide/PCB **Lot #:** PP11735ay,02/06/2025
**Spike Type:** PCB **Lot #:** PP11722ab,01/12/2025,6l,5,4
**Spike Verify by:** SJM
**Lims Spikelot:** PCB-LVI

**Additional Reagents/Stds**

| | |
|---|---|
| Na2SO4 | 241169 |

**Conc.Method:** S-EVAP/N-EVAP
**Solvent Type:** Hexane
**Lot #:** EI975

**Additional Reagents/Stds**

### *Cleanup 1*

**Cleanup Method 1:** EPA 3665A
**Cleanup Method 2:**
**Solvent Type:** Hexane **Lot #:** ei975

**Additional Reagents/Stds**

| | |
|---|---|
| H2SO4 | 024071607 |

### *Cleanup 2*

**Cleanup Method 1:** EPA 3660B
**Cleanup Method 2:**
**Solvent Type:** Hexane **Lot #:** EI975

**Additional Reagents/Stds**

| | |
|---|---|
| Copper | 2406cpg002 |

### *Cleanup 3*

**Cleanup Method 1:**
**Solvent Type:** **Lot #:**

**Additional Reagents/Stds**

### *Cleanup 4*

**Cleanup Method 1:**
**Solvent Type:** **Lot #:**

**Additional Reagents/Stds**

| Sample/ Type | Extraction: Extract Date | Analyst | Sample Vol ml | Ph | Surr Amt ml | Spike Amt ml | Concentration: Conc Date | Analyst | Final Vol ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| L2452357-01 SAMP | 09/20/24 10:41 | Nicholas Dunn | 140 | >5,<9 | .1 | | 09/20/24 14:47 | Kwame Mensah | 5 | H / K / #3 |
| L2452799-01 SAMP | 09/20/24 10:41 | Nicholas Dunn | 140 | >5,<9 | .1 | | 09/20/24 14:47 | Kwame Mensah | 5 | H / K / #3 |
| L2453053-01 SAMP | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |
| L2453053-02 SAMP | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |



Reported: 24-SEP-24 12:25 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974231**

| Sample/ Type | Extraction | | | | | | Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Extract Date | Analyst | Sample Vol **ml** | Ph | Surr Amt **ml** | Spike Amt **ml** | Conc Date | Analyst | Final Vol **ml** | Conc Unit |
| L2453053-03 SAMP | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |
| L2453053-04 SAMP | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |
| L2453053-05 SAMP | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | | 09/22/24 03:21 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |
| WG1974231-1 BLANK | 09/20/24 10:40 | Nicholas Dunn | 140 | >5,<9 | .1 | | 09/20/24 14:47 | Kwame Mensah | 5 | H / K / #3 |
| | **WG1974233** | | | | | | | | | |
| WG1974231-2 LCS | 09/20/24 10:40 | Nicholas Dunn | 140 | >5,<9 | .1 | .1 | 09/20/24 14:47 | Kwame Mensah | 5 | H / K / #3 |
| WG1974231-3 LCSD | 09/20/24 10:41 | Nicholas Dunn | 140 | >5,<9 | .1 | .1 | 09/20/24 14:47 | Kwame Mensah | 5 | H / K / #3 |
| WG1974231-4 MS | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | .1 | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |
| WG1974231-5 MSD | 09/21/24 10:19 | Ryan Trenholm | 140 | >5,<9 | .1 | .1 | 09/22/24 03:20 | Rabbi Kyei-Baffour | 5 | C / A / #1 |
| | **pp11735az,02/06/2025** | | | | | | | | | |

# ORGANIC ELN REPORT

**Workgroup: WG1974231**



Reported: 24-SEP-24 12:25 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974231**

| Sample/ Type | Cleanup 1 | | | | Cleanup 2 | |
|---|---|---|---|---|---|---|
| | Cleanup Date | Analyst | Pest Aliquot **ml** | Pest Final **ml** | Cleanup Date | Analyst |
| L2452357-01 SAMP | 09/20/24 14:57 | Rebecca Corbin | 5 | 1 | 09/21/24 11:48 | Priscilla Sarkodie |
| L2452799-01 SAMP | 09/20/24 14:57 | Rebecca Corbin | 5 | 1 | 09/21/24 11:48 | Priscilla Sarkodie |
| L2453053-01 SAMP | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |
| L2453053-02 SAMP | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |
| L2453053-03 SAMP | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |
| L2453053-04 SAMP | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |
| L2453053-05 SAMP | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |
| WG1974231-1 BLANK | 09/20/24 14:57 | Rebecca Corbin | 5 | 1 | 09/21/24 11:48 | Priscilla Sarkodie |
| WG1974231-2 LCS | 09/20/24 14:57 | Rebecca Corbin | 5 | 1 | 09/21/24 11:48 | Priscilla Sarkodie |
| WG1974231-3 LCSD | 09/20/24 14:57 | Rebecca Corbin | 5 | 1 | 09/21/24 11:48 | Priscilla Sarkodie |
| WG1974231-4 MS | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |

# ORGANIC ELN REPORT

**Workgroup: WG1974231**

| Sample/ Type | Cleanup 1 | | | | Cleanup 2 | |
|---|---|---|---|---|---|---|
| | Cleanup Date | Analyst | Pest Aliquot **ml** | Pest Final **ml** | Cleanup Date | Analyst |
| WG1974231-5 MSD | 09/22/24 05:45 | Alaina Ohara-Cruz | 5 | 1 | 09/22/24 08:34 | Grace Tran |



Reported: 24-SEP-24 12:25 PM

# GC Extractable Analysis
# Pesticides

# Pesticide QC Summary

# Surrogate Recovery Summary
# Form 2
# Pesticides

**Client: Roux Env. Eng. & Geology, DPC**
**Project Name: CORAM MATERIALS**

**Lab Number: L2453053**
**Project Number: 2232.0006Y005**
**Matrix: Water**

**GC Column 1: CLPPesticides**
**GC Column 2: CLPPesticidesII**

| CLIENT ID (LAB SAMPLE NO.) | TCX 1 %REC | TCX 2 %REC | DCB 1 %REC | DCB 2 %REC | OTHER (1) | OTHER (2) | TOT OUT |
|---|---|---|---|---|---|---|---|
| MW-1SR (L2453053-01) | 67 | 62 | 59 | 56 | | | 0 |
| MW-1DR2 (L2453053-02) | 64 | 59 | 54 | 52 | | | 0 |
| MW-11S (L2453053-03) | 70 | 65 | 60 | 57 | | | 0 |
| MW-11D (L2453053-04) | 76 | 63 | 66 | 72 | | | 0 |
| DUP_091624 (L2453053-05) | 70 | 58 | 56 | 69 | | | 0 |
| WG1974576-1BLANK | 68 | 62 | 56 | 52 | | | 0 |
| WG1974576-2LCS | 61 | 54 | 45 | 46 | | | 0 |
| WG1974576-3LCSD | 58 | 51 | 47 | 46 | | | 0 |
| MW-1SRMS | 58 | 54 | 50 | 48 | | | 0 |
| MW-1SRMSD | 60 | 57 | 53 | 51 | | | 0 |

**QC LIMITS**
**(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE**
**(30-150) DCBP = DECACHLOROBIPHENYL**

*** Values outside of QC limits**

# Laboratory Control Sample Summary
# Form 3
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix (Level)** | : WATER (LOW) | | |
| **LCS Sample ID** | : WG1974576-2 **Analysis Date** : 09/22/24 10:45 | **File ID** | : 11240922a-08 |
| **LCSD Sample ID** | : WG1974576-3 **Analysis Date** : 09/22/24 10:57 | **File ID** | : 11240922a-09 |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (ug/l) | Found (ug/l) | %R | True (ug/l) | Found (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Delta-BHC | 0.357 | 0.217 | 61 | 0.357 | 0.213 | 60 | 2 | 30-150 | 20 |
| Lindane | 0.357 | 0.225 | 63 | 0.357 | 0.229 | 64 | 2 | 30-150 | 20 |
| Alpha-BHC | 0.357 | 0.240 | 67 | 0.357 | 0.242 | 68 | 1 | 30-150 | 20 |
| Beta-BHC | 0.357 | 0.236 | 66 | 0.357 | 0.236 | 66 | 0 | 30-150 | 20 |
| Heptachlor | 0.357 | 0.238 | 67 | 0.357 | 0.238 | 67 | 0 | 30-150 | 20 |
| Aldrin | 0.357 | 0.222 | 62 | 0.357 | 0.221 | 62 | 0 | 30-150 | 20 |
| Heptachlor epoxide | 0.357 | 0.225 | 63 | 0.357 | 0.228 | 64 | 1 | 30-150 | 20 |
| Endrin | 0.357 | 0.233 | 65 | 0.357 | 0.235 | 66 | 1 | 30-150 | 20 |
| Endrin aldehyde | 0.357 | 0.196 | 55 | 0.357 | 0.196 | 55 | 0 | 30-150 | 20 |
| Endrin ketone | 0.357 | 0.235 | 66 | 0.357 | 0.234 | 66 | 0 | 30-150 | 20 |
| Dieldrin | 0.357 | 0.251 | 70 | 0.357 | 0.251 | 70 | 0 | 30-150 | 20 |
| 4,4'-DDE | 0.357 | 0.215 | 60 | 0.357 | 0.219 | 61 | 2 | 30-150 | 20 |
| 4,4'-DDD | 0.357 | 0.241 | 68 | 0.357 | 0.241 | 68 | 0 | 30-150 | 20 |
| 4,4'-DDT | 0.357 | 0.259 | 73 | 0.357 | 0.262 | 73 | 1 | 30-150 | 20 |
| Endosulfan I | 0.357 | 0.244 | 68 | 0.357 | 0.236 | 66 | 3 | 30-150 | 20 |
| Endosulfan II | 0.357 | 0.236 | 66 | 0.357 | 0.234 | 66 | 1 | 30-150 | 20 |
| Endosulfan sulfate | 0.357 | 0.238 | 67 | 0.357 | 0.235 | 66 | 1 | 30-150 | 20 |
| Methoxychlor | 0.357 | 0.254 | 71 | 0.357 | 0.249 | 70 | 2 | 30-150 | 20 |
| cis-Chlordane | 0.357 | 0.210 | 59 | 0.357 | 0.202 | 57 | 4 | 30-150 | 20 |
| trans-Chlordane | 0.357 | 0.252 | 71 | 0.357 | 0.255 | 71 | 1 | 30-150 | 20 |

# Matrix Spike Sample Summary
# Form 3
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix (Level)** | : WATER (LOW) |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/22/24 11:56 |
| **Matrix Spike** | : WG1974576-4 | **MS Analysis Date** | : 09/22/24 12:08 |
| **Matrix Spike Dup** | : WG1974576-5 | **MSD Analysis Date** | : 09/22/24 12:20 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (ug/l) | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | Spike Added (ug/l) | Spike Conc. (ug/l) | %R | RPD | Recovery Limits | RPD Limit |
| Delta-BHC | ND | 0.357 | 0.207 | 58 | 0.357 | 0.220 | 62 | 6 | 30-150 | 30 |
| Lindane | ND | 0.357 | 0.222 | 62 | 0.357 | 0.239 | 67 | 7 | 30-150 | 30 |
| Alpha-BHC | ND | 0.357 | 0.225 | 63 | 0.357 | 0.242 | 68 | 7 | 30-150 | 30 |
| Beta-BHC | ND | 0.357 | 0.218 | 61 | 0.357 | 0.237 | 66 | 8 | 30-150 | 30 |
| Heptachlor | ND | 0.357 | 0.233 | 65 | 0.357 | 0.253 | 71 | 8 | 30-150 | 30 |
| Aldrin | ND | 0.357 | 0.217 | 61 | 0.357 | 0.234 | 66 | 8 | 30-150 | 30 |
| Heptachlor epoxide | ND | 0.357 | 0.222 | 62 | 0.357 | 0.240 | 67 | 8 | 30-150 | 30 |
| Endrin | ND | 0.357 | 0.231 | 65 | 0.357 | 0.250 | 70 | 8 | 30-150 | 30 |
| Endrin aldehyde | ND | 0.357 | 0.184 | 52 | 0.357 | 0.191 | 54 | 4 | 30-150 | 30 |
| Endrin ketone | ND | 0.357 | 0.229 | 64 | 0.357 | 0.246 | 69 | 7 | 30-150 | 30 |
| Dieldrin | ND | 0.357 | 0.244 | 68 | 0.357 | 0.265 | 74 | 8 | 30-150 | 30 |
| 4,4'-DDE | ND | 0.357 | 0.220 | 62 | 0.357 | 0.235 | 66 | 7 | 30-150 | 30 |
| 4,4'-DDD | ND | 0.357 | 0.238 | 67 | 0.357 | 0.257 | 72 | 8 | 30-150 | 30 |
| 4,4'-DDT | 0.005J | 0.357 | 0.227 | 64 | 0.357 | 0.247 | 69 | 8 | 30-150 | 30 |
| Endosulfan I | ND | 0.357 | 0.222 | 62 | 0.357 | 0.236 | 66 | 6 | 30-150 | 30 |
| Endosulfan II | ND | 0.357 | 0.228 | 64 | 0.357 | 0.243 | 68 | 6 | 30-150 | 30 |
| Endosulfan sulfate | ND | 0.357 | 0.228 | 64 | 0.357 | 0.242 | 68 | 6 | 30-150 | 30 |
| Methoxychlor | ND | 0.357 | 0.243 | 68 | 0.357 | 0.255 | 71 | 5 | 30-150 | 30 |
| cis-Chlordane | ND | 0.357 | 0.210 | 59 | 0.357 | 0.226 | 63 | 7 | 30-150 | 30 |
| trans-Chlordane | ND | 0.357 | 0.250 | 70 | 0.357 | 0.271 | 76 | 8 | 30-150 | 30 |

# Method Blank Summary
# Form 4
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : WG1974576-1 | **Lab File ID** | : 11240922a-13 |
| **Matrix** | : WATER | **Extraction Date** | : 09/22/24 |
| **Analysis Date (1)** | : 09/22/24 11:44 | **Analysis Date (2)** | : 09/22/24 11:44 |
| **Instrument ID (1)** | : PEST11 | **Instrument ID (2)** | : PEST11 |

| Client Sample No. | Lab Sample ID | Analysis Date 1 | Analysis Date 2 |
|---|---|---|---|
| WG1974576-2LCS | WG1974576-2 | 09/22/24 10:45 | 09/22/24 10:45 |
| WG1974576-3LCSD | WG1974576-3 | 09/22/24 10:57 | 09/22/24 10:57 |
| MW-1SR | L2453053-01 | 09/22/24 11:56 | 09/22/24 11:56 |
| MW-1SRMS | WG1974576-4 | 09/22/24 12:08 | 09/22/24 12:08 |
| MW-1SRMSD | WG1974576-5 | 09/22/24 12:20 | 09/22/24 12:20 |
| MW-1DR2 | L2453053-02 | 09/22/24 12:32 | 09/22/24 12:32 |
| MW-11S | L2453053-03 | 09/22/24 12:44 | 09/22/24 12:44 |
| MW-11D | L2453053-04 | 09/22/24 16:53 | 09/22/24 16:53 |
| DUP_091624 | L2453053-05 | 09/22/24 17:06 | 09/22/24 17:06 |

# Analytical Sequence
# Form 8b
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST11 | **Initial Calib. Date(s)** | : 08/01/24 08/01/24 |

| Client ID | Lab ID | Date/Time Analyzed |
|---|---|---|
| R1860455-1 PEM | R1860455-1 | 08/01/24 18:25 |
| Pesticides L1 (0.5ug/L) | R1860455-2 | 08/01/24 18:37 |
| Pesticides L2 (1.0ug/L) | R1860455-3 | 08/01/24 18:49 |
| Pesticides L3 (2.0ug/L) | R1860455-4 | 08/01/24 19:01 |
| Pesticides L4 (3.0ug/L) | R1860455-5 | 08/01/24 19:13 |
| Pesticides L5 (4.0ug/L) | R1860455-6 | 08/01/24 19:25 |
| Pesticides L7 (10.0ug/L) | R1860455-7 | 08/01/24 19:37 |
| Pesticides L8 (50.0ug/L) | R1860455-8 | 08/01/24 19:49 |
| Pesticides L9 (100ug/L) | R1860455-9 | 08/01/24 20:01 |
| Pesticides L10 (200ug/L) | R1860455-10 | 08/01/24 20:12 |
| Pesticides L11 (400ug/L) | R1860455-11 | 08/01/24 20:25 |
| R1860455-12 ICV | R1860455-12 | 08/01/24 20:36 |
| Chlordane L3 (10ug/L) | R1860455-13 | 08/01/24 20:48 |
| Chlordane L4 (20ug/L) | R1860455-14 | 08/01/24 21:00 |
| Chlordane L5 (100ug/L) | R1860455-15 | 08/01/24 21:12 |
| Chlordane L7 (500ug/L) | R1860455-16 | 08/01/24 21:24 |
| Chlordane L8 (1000ug/L) | R1860455-18 | 08/01/24 21:36 |
| Chlordane L9 (2000ug/L) | R1860455-17 | 08/01/24 21:48 |
| Chlordane L10 (5000ug/L) | R1860455-19 | 08/01/24 22:00 |
| R1860455-20 ICV | R1860455-20 | 08/01/24 22:12 |
| Toxaphene L3 (20.0ug/L) | R1860455-21 | 08/01/24 22:24 |
| Toxaphene L4 (100ug/L) | R1860455-22 | 08/01/24 22:36 |
| Toxaphene L7 (1000ug/L) | R1860455-23 | 08/01/24 22:47 |
| Toxaphene L8 (2000ug/L) | R1860455-24 | 08/01/24 22:59 |
| Toxaphene L9 (5000ug/L) | R1860455-25 | 08/01/24 23:11 |
| R1860455-26 ICV | R1860455-26 | 08/01/24 23:23 |
| R1879103-1 PEM | R1879103-1 | 09/22/24 09:23 |
| WG1974788-1 CCAL | WG1974788-1 | 09/22/24 09:35 |
| WG1974788-2 CCAL | WG1974788-2 | 09/22/24 09:47 |
| WG1974788-3 CCAL | WG1974788-3 | 09/22/24 09:59 |
| WG1974576-2 LCS | WG1974576-2 | 09/22/24 10:45 |
| WG1974576-3 LCSD | WG1974576-3 | 09/22/24 10:57 |
| WG1974576-1 BLANK | WG1974576-1 | 09/22/24 11:44 |
| MW-1SR | L2453053-01 | 09/22/24 11:56 |
| MW-1SR MS | WG1974576-4 | 09/22/24 12:08 |
| MW-1SR MSD | WG1974576-5 | 09/22/24 12:20 |
| MW-1DR2 | L2453053-02 | 09/22/24 12:32 |
| MW-11S | L2453053-03 | 09/22/24 12:44 |

# Analytical Sequence
# Form 8b
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST20 | **Initial Calib. Date(s)** | : 07/22/24 07/22/24 |

| Client ID | Lab ID | Date/Time Analyzed |
|---|---|---|
| R1855973-8 PEM | R1855973-8 | 07/22/24 17:57 |
| Pesticides L1 (0.5ug/L) | R1855973-9 | 07/22/24 18:09 |
| Pesticides L2 (1.0ug/L) | R1855973-1 | 07/22/24 18:21 |
| Pesticides L3 (2.0ug/L) | R1855973-2 | 07/22/24 18:34 |
| Pesticides L4 (3.0ug/L) | R1855973-3 | 07/22/24 18:46 |
| Pesticides L5 (4.0ug/L) | R1855973-4 | 07/22/24 18:59 |
| Pesticides L7 (10.0ug/L) | R1855973-5 | 07/22/24 19:11 |
| Pesticides L8 (50.0ug/L) | R1855973-6 | 07/22/24 19:24 |
| Pesticides L9 (100ug/L) | R1855973-7 | 07/22/24 19:36 |
| Pesticides L10 (200ug/L) | R1855973-10 | 07/22/24 19:48 |
| Pesticides L11 (400ug/L) | R1855973-11 | 07/22/24 20:01 |
| R1855973-12 ICV | R1855973-12 | 07/22/24 20:13 |
| Chlordane L3 (10ug/L) | R1855973-13 | 07/22/24 20:26 |
| Chlordane L4 (20ug/L) | R1855973-14 | 07/22/24 20:38 |
| Chlordane L5 (100ug/L) | R1855973-16 | 07/22/24 20:51 |
| Chlordane L7 (500ug/L) | R1855973-15 | 07/22/24 21:03 |
| Chlordane L8 (1000ug/L) | R1855973-17 | 07/22/24 21:16 |
| Chlordane L9 (2000ug/L) | R1855973-18 | 07/22/24 21:28 |
| Chlordane L10 (5000ug/L) | R1855973-19 | 07/22/24 21:40 |
| R1855973-20 ICV | R1855973-20 | 07/22/24 21:53 |
| Toxaphene L3 (20.0ug/L) | R1855973-21 | 07/22/24 22:05 |
| Toxaphene L4 (100ug/L) | R1855973-22 | 07/22/24 22:18 |
| Toxaphene L7 (1000ug/L) | R1855973-23 | 07/22/24 22:30 |
| Toxaphene L8 (2000ug/L) | R1855973-24 | 07/22/24 22:42 |
| Toxaphene L9 (5000ug/L) | R1855973-26 | 07/22/24 22:55 |
| R1855973-25 ICV | R1855973-25 | 07/22/24 23:07 |
| R1879015-1 PEM | R1879015-1 | 09/22/24 09:24 |
| WG1974790-2 CCAL | WG1974790-2 | 09/22/24 09:49 |
| WG1974790-3 CCAL | WG1974790-3 | 09/22/24 10:24 |
| WG1974790-4 CCAL | WG1974790-4 | 09/22/24 16:03 |
| MW-11D | L2453053-04 | 09/22/24 16:53 |
| DUP_091624 | L2453053-05 | 09/22/24 17:06 |

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14022-1
**Page:** 1

## Pesticides - EPA 8081B (SOIL)

**Holding Time:** 14 days
**Container/Sample Preservation:** 1 - Glass 250ml/8oz unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Delta-BHC | 319-86-8 | 1.6008 | 0.31349 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Lindane | 58-89-9 | 0.667 | 0.298149 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Alpha-BHC | 319-84-6 | 0.667 | 0.189428 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Beta-BHC | 319-85-7 | 1.6008 | 0.60697 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Heptachlor | 76-44-8 | 0.8004 | 0.358846 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Aldrin | 309-00-2 | 1.6008 | 0.563615 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Heptachlor epoxide | 1024-57-3 | 3.0015 | 0.90045 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endrin | 72-20-8 | 0.667 | 0.27347 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endrin aldehyde | 7421-93-4 | 2.001 | 0.70035 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endrin ketone | 53494-70-5 | 1.6008 | 0.412206 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Dieldrin | 60-57-1 | 1.0005 | 0.50025 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| 4,4'-DDE | 72-55-9 | 1.6008 | 0.370185 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| 4,4'-DDD | 72-54-8 | 1.6008 | 0.570952 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| 4,4'-DDT | 50-29-3 | 3.0015 | 1.28731 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endosulfan I | 959-98-8 | 1.6008 | 0.378189 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endosulfan II | 33213-65-9 | 1.6008 | 0.534934 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Endosulfan sulfate | 1031-07-8 | 0.667 | 0.317492 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Methoxychlor | 72-43-5 | 3.0015 | 0.9338 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Toxaphene | 8001-35-2 | 30.015 | 8.4042 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| Chlordane | 57-74-9 | 13.34 | 5.30265 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| cis-Chlordane | 5103-71-9 | 2.001 | 0.557612 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| trans-Chlordane | 5103-74-2 | 2.001 | 0.528264 | ug/kg | 30-150 | 30 | 30-150 | 50 | 50 | | | |
| *2,4,5,6-Tetrachloro-m-xylene* | *877-09-8* | | | | | | | | | *30-150* | | |
| *Decachlorobiphenyl* | *2051-24-3* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 03/07/23
**Created By:** Jason Hebert
**File:** PM14021-1
**Page:** 1

## Pesticides - EPA 8081B (WATER)

**Holding Time:** 7 days
**Container/Sample Preservation:** 2 - Amber 120ml unpreserved

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Delta-BHC | 319-86-8 | 0.02 | 0.00467 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Lindane | 58-89-9 | 0.02 | 0.00434 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Alpha-BHC | 319-84-6 | 0.02 | 0.00439 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Beta-BHC | 319-85-7 | 0.02 | 0.0056 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Heptachlor | 76-44-8 | 0.02 | 0.0031 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Aldrin | 309-00-2 | 0.02 | 0.00216 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Heptachlor epoxide | 1024-57-3 | 0.02 | 0.00415 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endrin | 72-20-8 | 0.04 | 0.00429 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endrin aldehyde | 7421-93-4 | 0.04 | 0.0081 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endrin ketone | 53494-70-5 | 0.04 | 0.00477 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Dieldrin | 60-57-1 | 0.04 | 0.00429 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| 4,4'-DDE | 72-55-9 | 0.04 | 0.00381 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| 4,4'-DDD | 72-54-8 | 0.04 | 0.00464 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| 4,4'-DDT | 50-29-3 | 0.04 | 0.00432 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endosulfan I | 959-98-8 | 0.02 | 0.00345 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endosulfan II | 33213-65-9 | 0.04 | 0.00519 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Endosulfan sulfate | 1031-07-8 | 0.04 | 0.00481 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Methoxychlor | 72-43-5 | 0.2 | 0.00684 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Toxaphene | 8001-35-2 | 0.2 | 0.0627 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| Chlordane | 57-74-9 | 0.2 | 0.0463 | ug/l | 40-140 | 20 | 30-150 | 30 | 30 | | | |
| cis-Chlordane | 5103-71-9 | 0.02 | 0.00666 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| trans-Chlordane | 5103-74-2 | 0.02 | 0.00627 | ug/l | 30-150 | 20 | 30-150 | 30 | 30 | | | |
| *2,4,5,6-Tetrachloro-m-xylene* | *877-09-8* | | | | | | | | | *30-150* | | |
| *Decachlorobiphenyl* | *2051-24-3* | | | | | | | | | *30-150* | | |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Pesticide Sample Data

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 11:56 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 11240922a-14 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST11 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | 0.005 | 0.029 | 0.003 | J |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 12:32 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 11240922a-17 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST11 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | ND | 0.029 | 0.003 | U |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 12:44 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 11240922a-18 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST11 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | 0.007 | 0.029 | 0.003 | J |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 16:53 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 20240922a-36 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST20 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | ND | 0.029 | 0.003 | U |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 17:06 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/21/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 20240922a-37 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST20 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | ND | 0.029 | 0.003 | U |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

# Results Summary
# Form 1
# Organochlorine Pesticides by GC

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974576-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974576-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 11:44 |
| **Sample Matrix** | : WATER | **Date Extracted** | : 09/22/24 |
| **Analytical Method** | : 1,8081B | **Dilution Factor** | : 1 |
| **Lab File ID** | : 11240922a-13 | **Analyst** | : EMR |
| **Sample Amount** | : 140 ml | **Instrument ID** | : PEST11 |
| **Extraction Method** | : EPA 3510C | **GC Column** | : CLPPesticides |
| **Extract Volume** | : 1000 uL | **%Solids** | : N/A |
| **GPC Cleanup** | : N | **Injection Volume** | : 1 uL |
| **Sulfur Cleanup** | : N | | |

| | | ug/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 319-86-8 | Delta-BHC | ND | 0.014 | 0.003 | U |
| 58-89-9 | Lindane | ND | 0.014 | 0.003 | U |
| 319-84-6 | Alpha-BHC | ND | 0.014 | 0.003 | U |
| 319-85-7 | Beta-BHC | ND | 0.014 | 0.004 | U |
| 76-44-8 | Heptachlor | ND | 0.014 | 0.002 | U |
| 309-00-2 | Aldrin | ND | 0.014 | 0.002 | U |
| 1024-57-3 | Heptachlor epoxide | ND | 0.014 | 0.003 | U |
| 72-20-8 | Endrin | ND | 0.029 | 0.003 | U |
| 7421-93-4 | Endrin aldehyde | ND | 0.029 | 0.006 | U |
| 53494-70-5 | Endrin ketone | ND | 0.029 | 0.003 | U |
| 60-57-1 | Dieldrin | ND | 0.029 | 0.003 | U |
| 72-55-9 | 4,4'-DDE | ND | 0.029 | 0.003 | U |
| 72-54-8 | 4,4'-DDD | ND | 0.029 | 0.003 | U |
| 50-29-3 | 4,4'-DDT | ND | 0.029 | 0.003 | U |
| 959-98-8 | Endosulfan I | ND | 0.014 | 0.002 | U |
| 33213-65-9 | Endosulfan II | ND | 0.029 | 0.004 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 0.029 | 0.003 | U |
| 72-43-5 | Methoxychlor | ND | 0.143 | 0.005 | U |
| 8001-35-2 | Toxaphene | ND | 0.143 | 0.045 | U |
| 5103-71-9 | cis-Chlordane | ND | 0.014 | 0.005 | U |
| 5103-74-2 | trans-Chlordane | ND | 0.014 | 0.004 | U |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-36.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 16:53
Operator : pest20:emr
Sample : L2453053-04,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:56 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest20\2024\240922a\20240922a-32.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.910 | 1.965 | 67111494 | 115.5E6 | 25.000 | 25.000M4 |
| | Standard Area 1 : #1 = 64933398 | | | | Recovery = 103.35% | | |
| | Standard Area 1 : #2 = 113204660 | | | | Recovery = 102.03% | | |
| 28) i | 1-br-2-nb_Ch | 1.910 | 1.965 | 67111494 | 115.5E6 | 25.000 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 1.910 | 1.965 | 67111494 | 115.5E6 | 25.000 | 25.000M4 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.385 | 2.573 | 111.8E6 | 179.3E6 | 37.829 | 31.725M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 75.66% | | 63.45% |
| 27) s | Decachlorobi | 7.284 | 7.849 | 97031231 | 148.9E6 | 33.050M4 | 35.796M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 66.10% | | 71.59% |
| Target Compounds | | | | | | | |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-36.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 16:53
Operator : pest20:emr
Sample : L2453053-04,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:56 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest20\2024\240922a\20240922a-32.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |

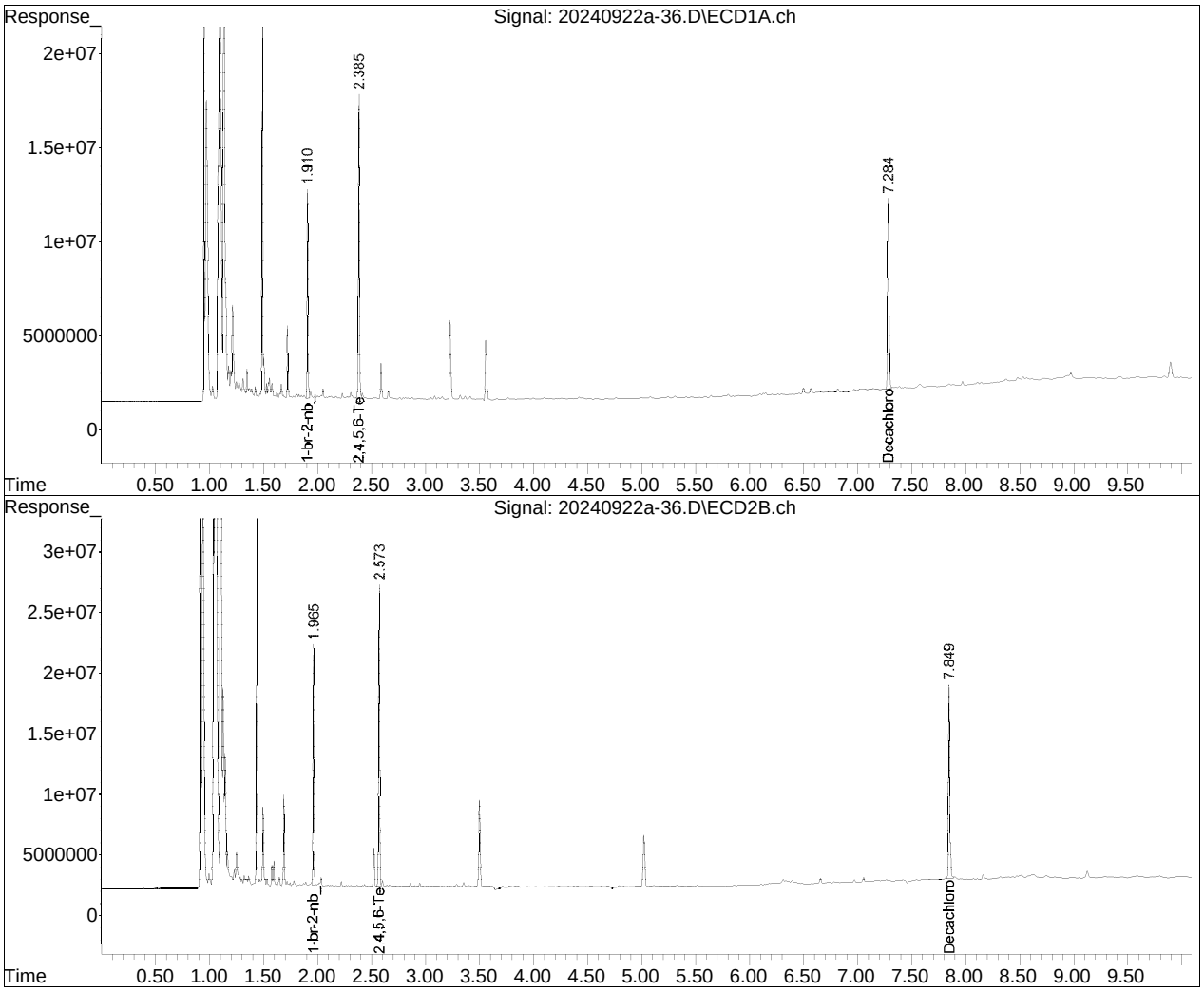
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\20240922a-32.D•

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-36.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Sep 2024  16:53
Operator : pest20:emr
Sample : L2453053-04,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 36  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:56 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

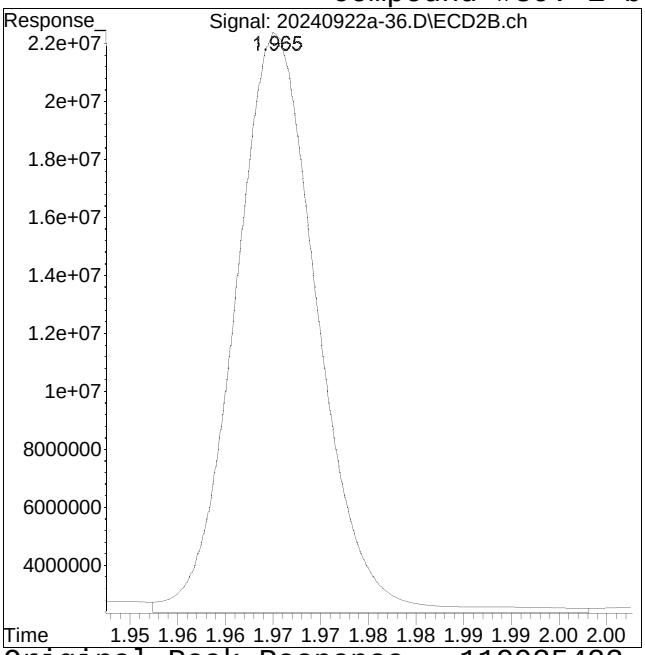
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

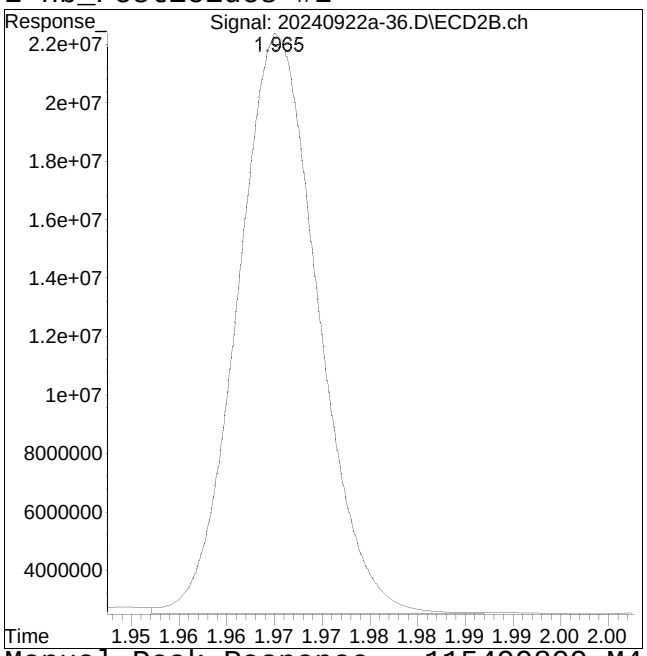


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #39: 1-br-2-nb_Pesticides #2



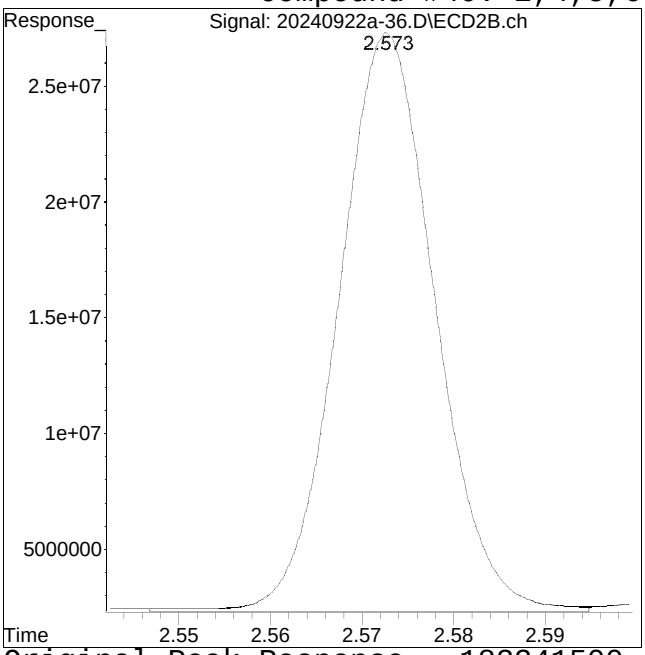



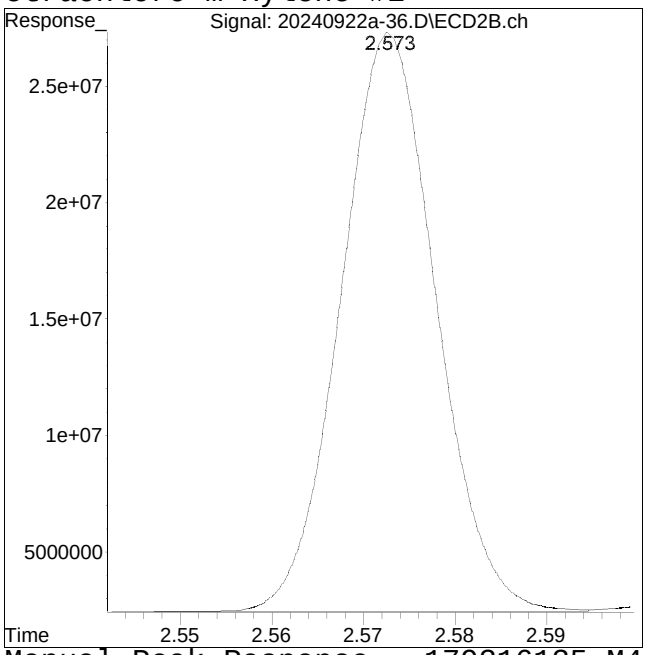

Original Peak Response = 119935423 Manual Peak Response = 115499899 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



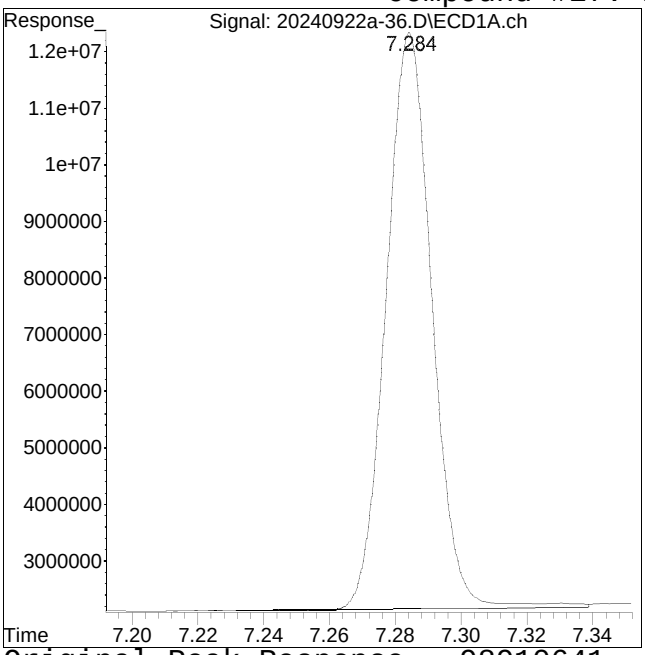




Original Peak Response = 183341500 Manual Peak Response = 179316135 M4
M4 = Poor automated baseline construction.

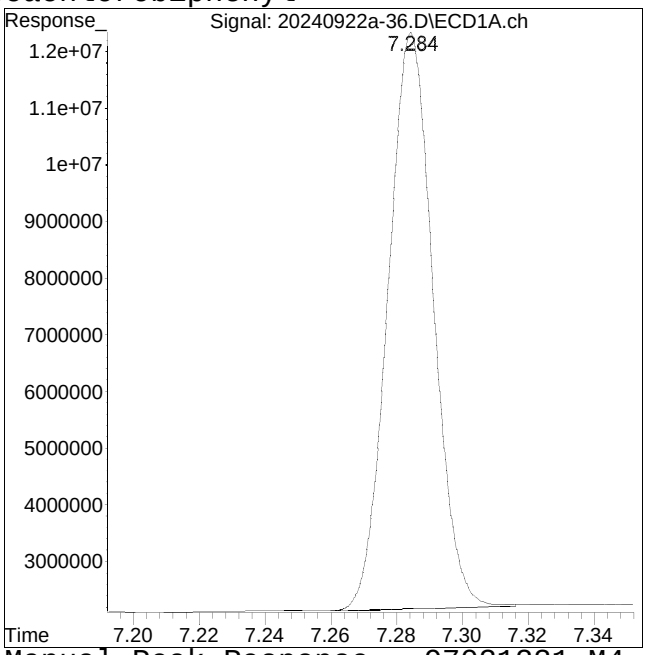
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

## Compound #27: Decachlorobiphenyl




Original Peak Response = 98910641



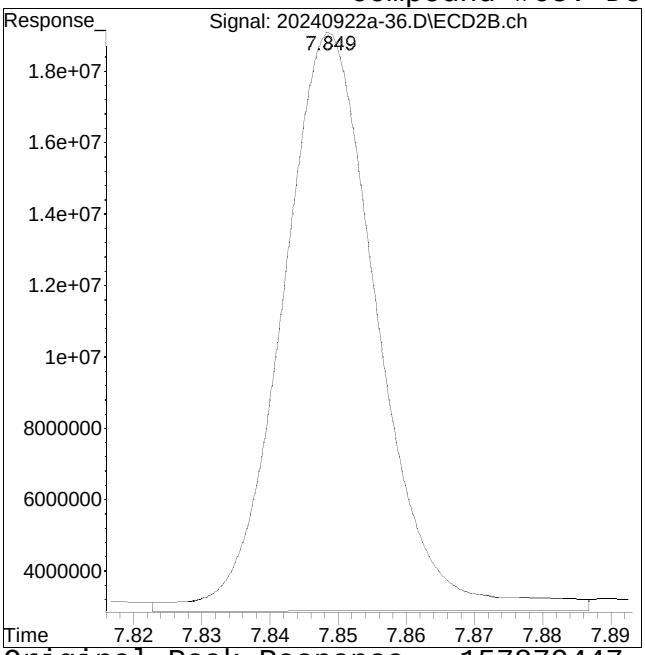

Manual Peak Response = 97031231 M4

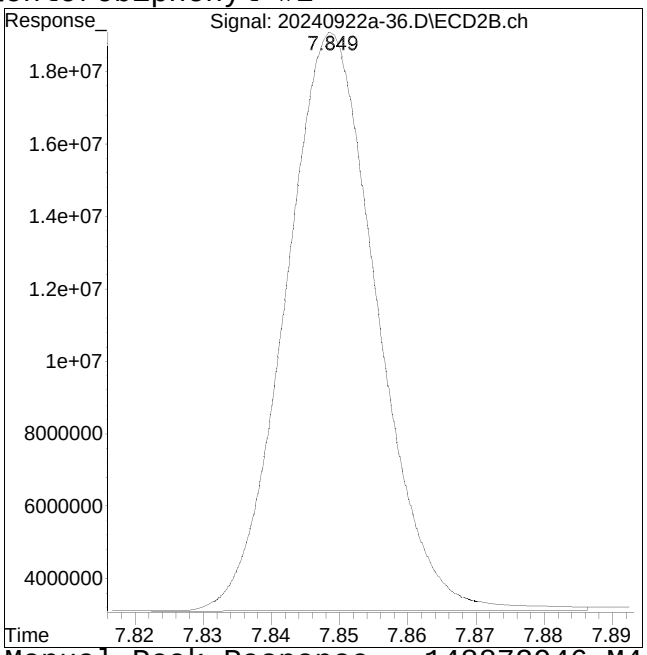
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #65: Decachlorobiphenyl #2



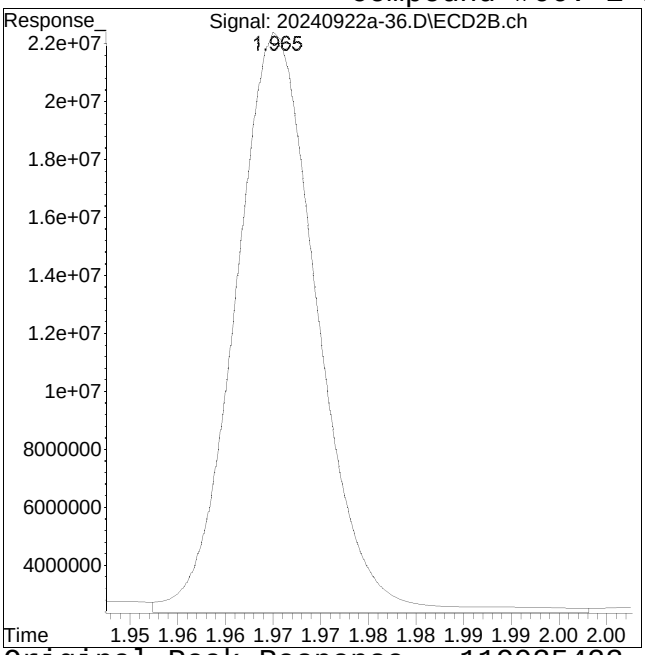



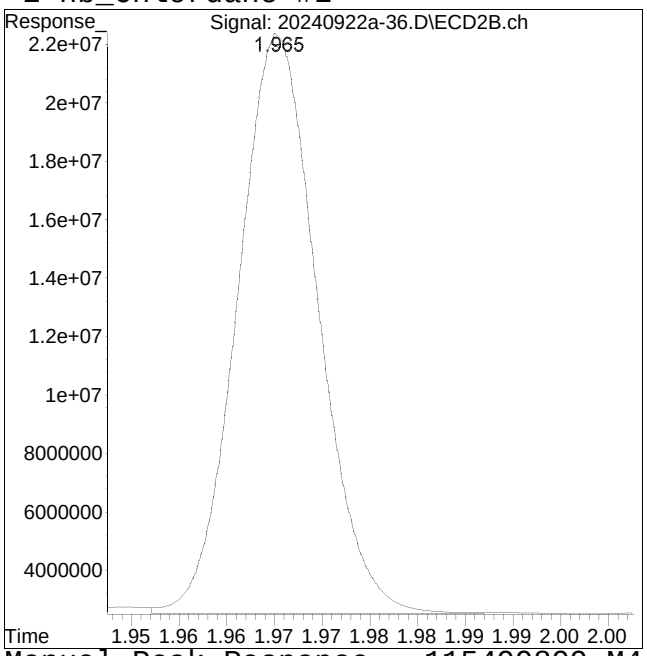

Original Peak Response = 157879447 Manual Peak Response = 148872946 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #66: 1-br-2-nb_Chlordane #2



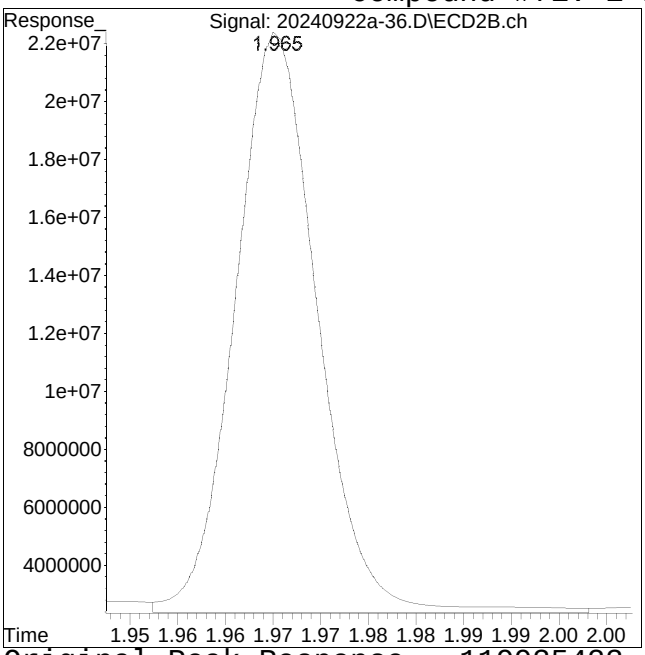



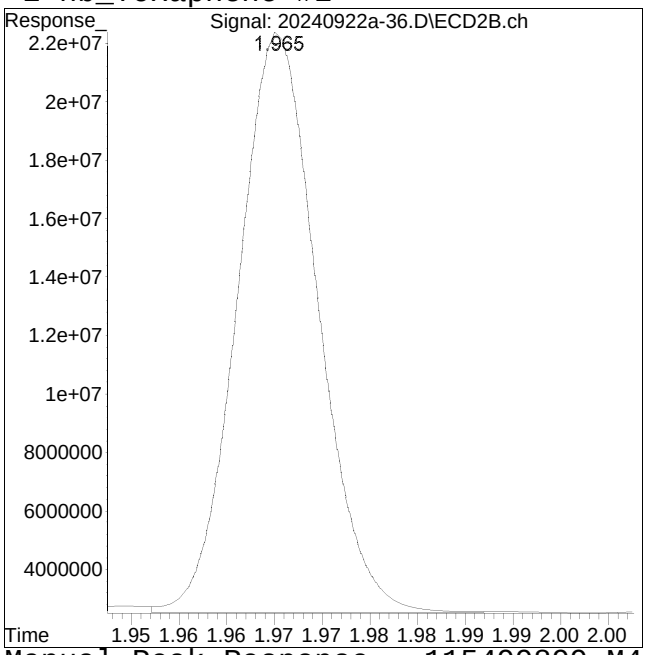

Original Peak Response = 119935423 Manual Peak Response = 115499899 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-36.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:53 Instrument : PEST 20
Sample : L2453053-04,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 119935423 Manual Peak Response = 115499899 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-37.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 17:06
Operator : pest20:emr
Sample : L2453053-05,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:58 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest20\2024\240922a\20240922a-32.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.910 | 1.965 | 71593864 | 124.0E6 | 25.000M4 | 25.000M4 |
| | Standard Area 1 : #1 = 64933398 | | | | Recovery = 110.26% | | |
| | Standard Area 1 : #2 = 113204660 | | | | Recovery = 109.56% | | |
| 28) i | 1-br-2-nb_Ch | 1.910 | 1.965 | 71593864 | 124.0E6 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 1.910 | 1.965 | 71593864 | 124.0E6 | 25.000M4 | 25.000M4 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.384 | 2.573 | 110.8E6 | 177.4E6 | 35.089M4 | 29.230M4 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 70.18% | 58.46% |
| 27) s | Decachlorobi | 7.285 | 7.849 | 87721171 | 155.1E6 | 27.781M4 | 34.684M4 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 55.56% | 69.37% |
| Target Compounds | | | | | | | |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-37.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 17:06
Operator : pest20:emr
Sample : L2453053-05,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:58 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest20\2024\240922a\20240922a-32.D
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |

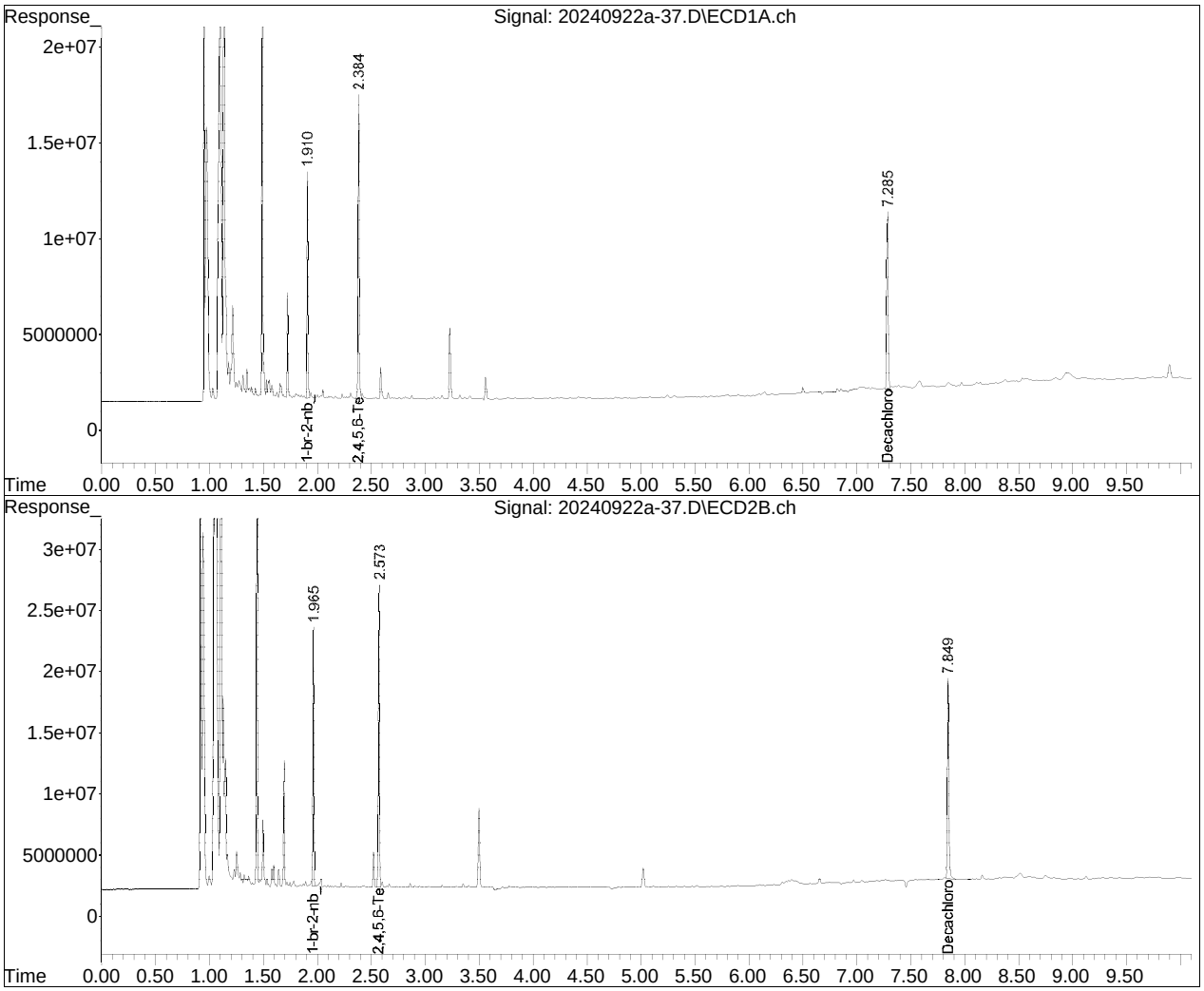
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\20240922a-32.D•

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-37.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 17:06
Operator : pest20:emr
Sample : L2453053-05,42,, rr
Misc : WG1974790,WG1974576,ical21322
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:12:58 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

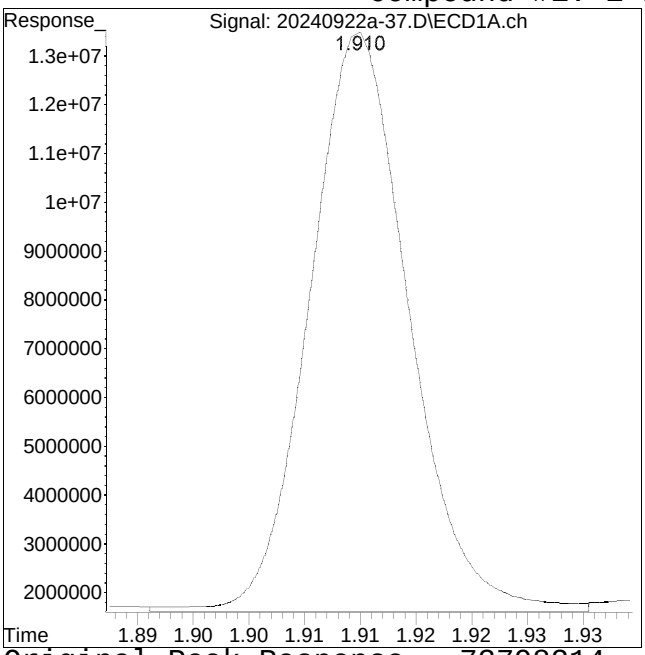
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



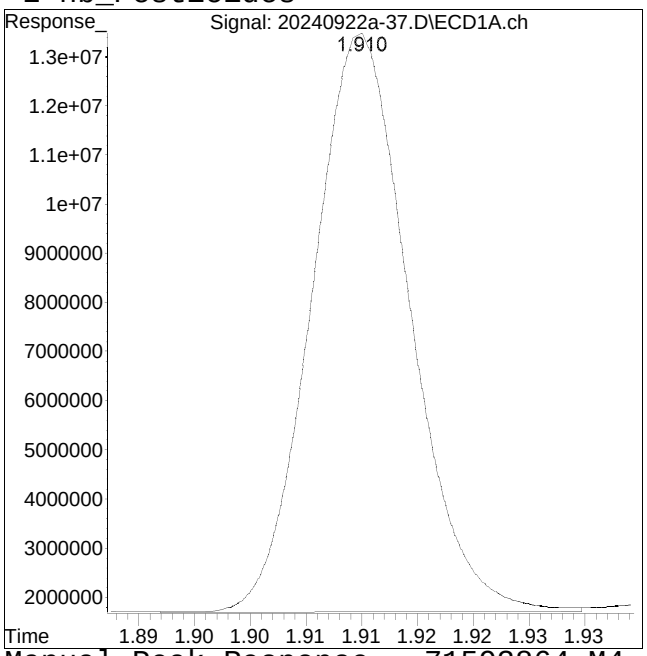
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 73798214



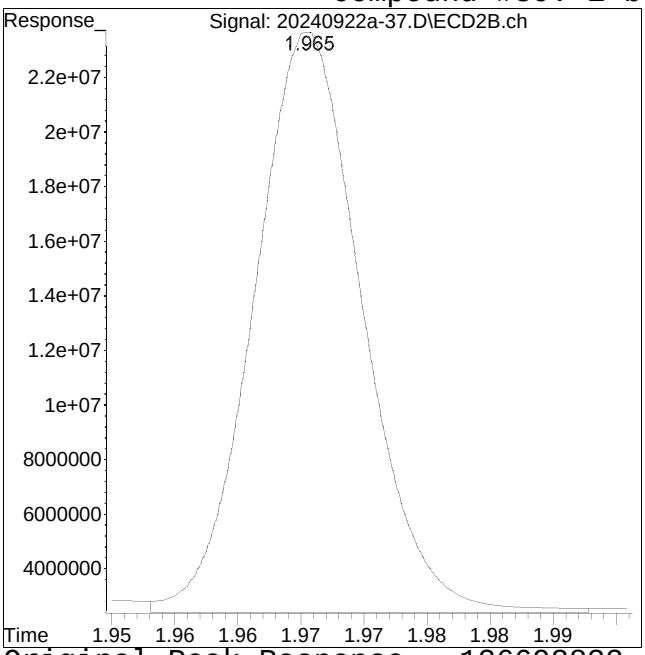

Manual Peak Response = 71593864 M4

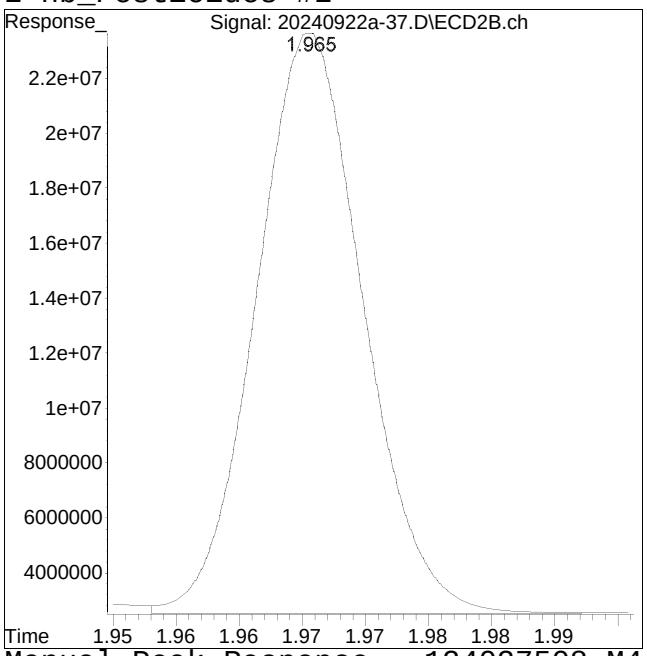
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #39: 1-br-2-nb_Pesticides #2



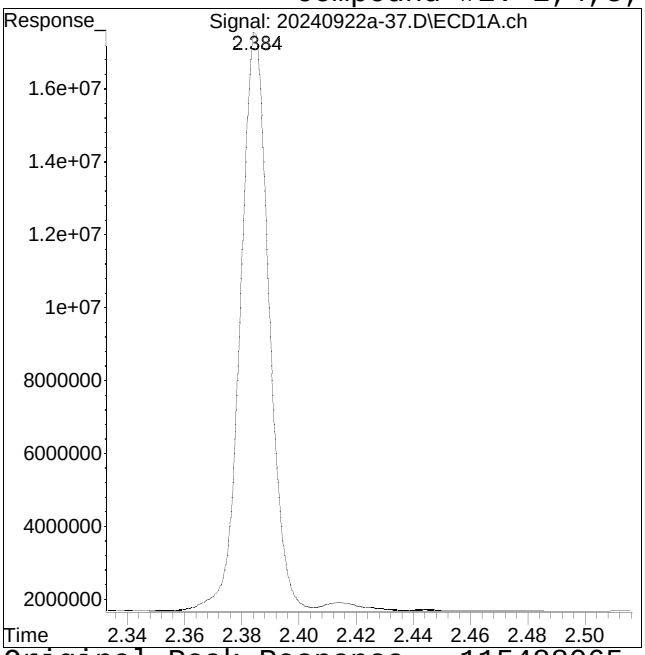




Original Peak Response = 126692832 Manual Peak Response = 124027508 M4
M4 = Poor automated baseline construction.

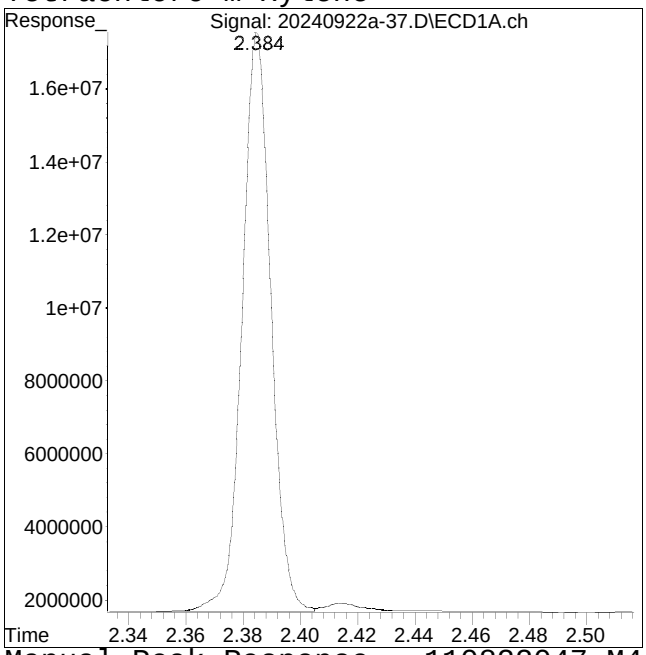
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 115488065



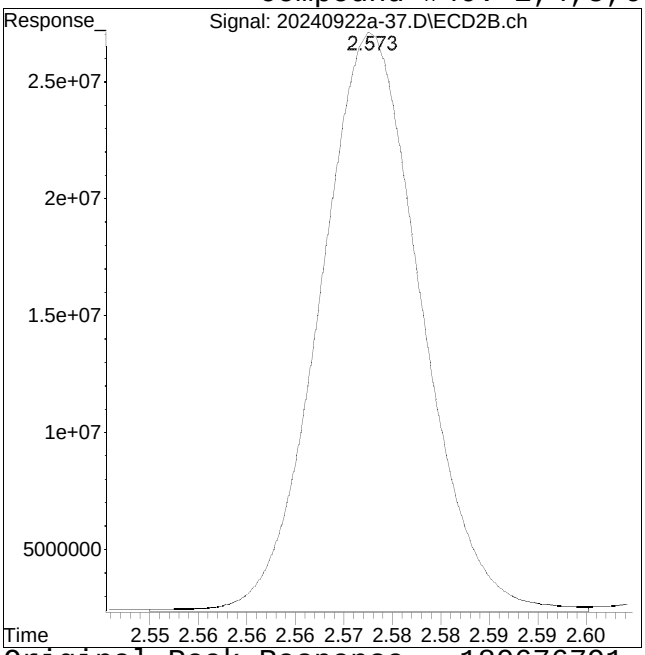

Manual Peak Response = 110822047 M4

M4 = Poor automated baseline construction.

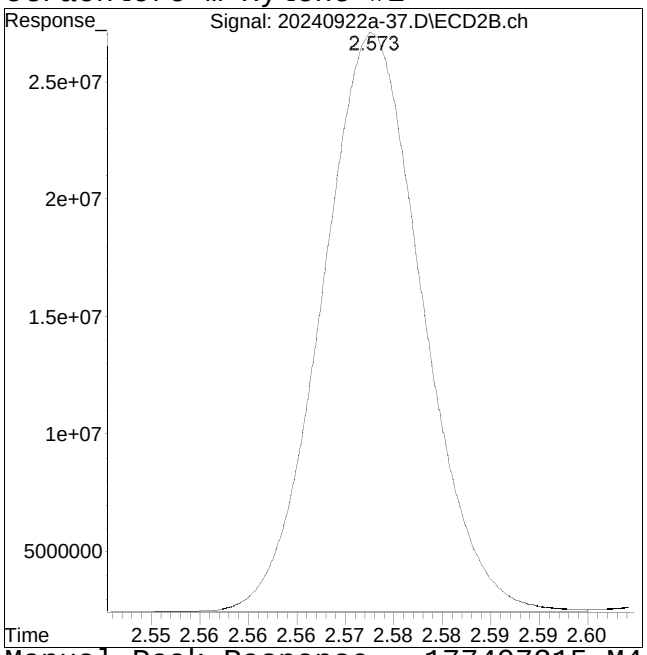
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 180676791



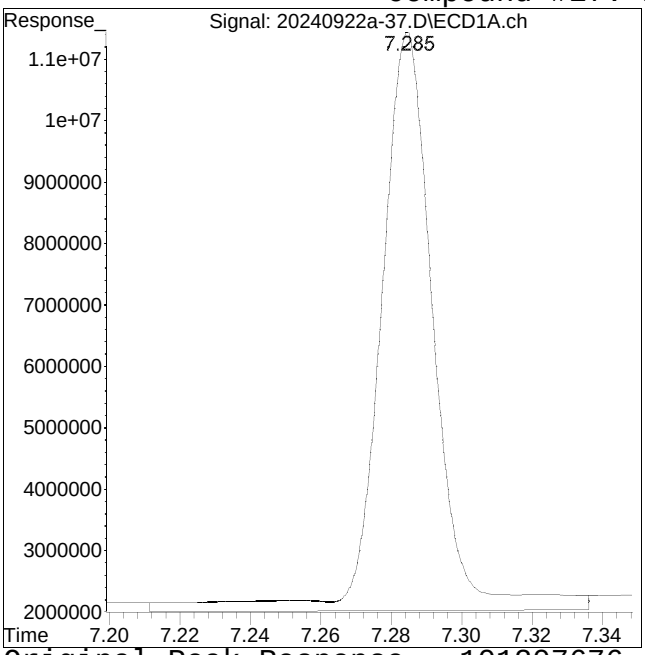

Manual Peak Response = 177407315 M4

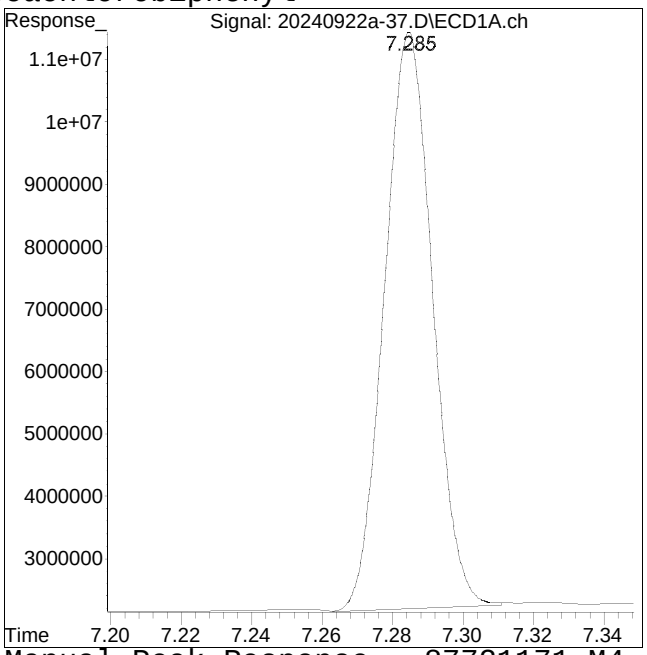
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #27: Decachlorobiphenyl



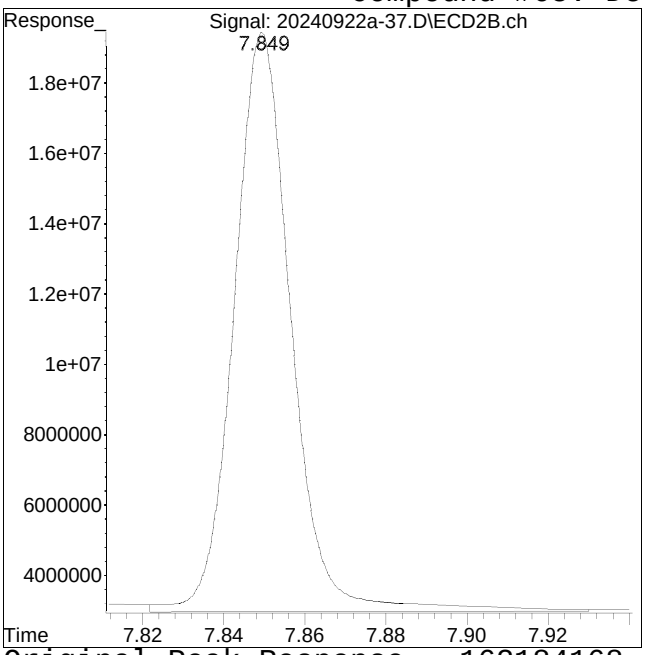




Original Peak Response = 101207676 Manual Peak Response = 87721171 M4
M4 = Poor automated baseline construction.

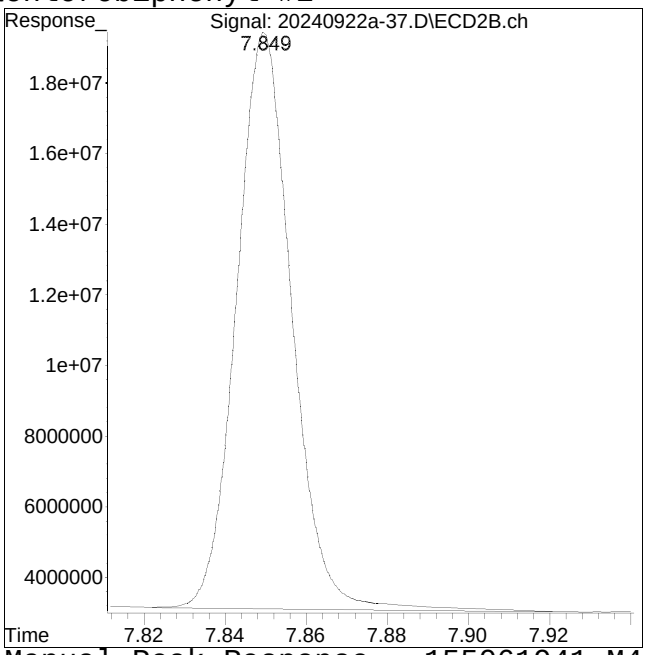
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 162184168



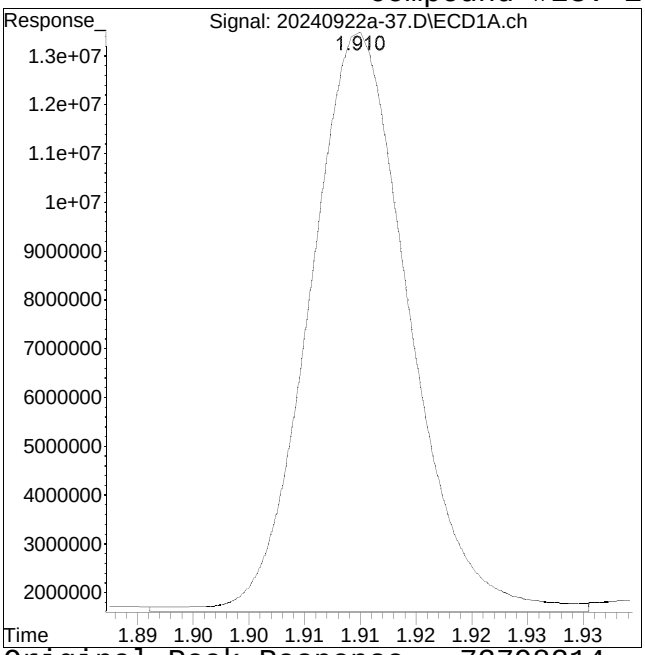

Manual Peak Response = 155061941 M4

M4 = Poor automated baseline construction.

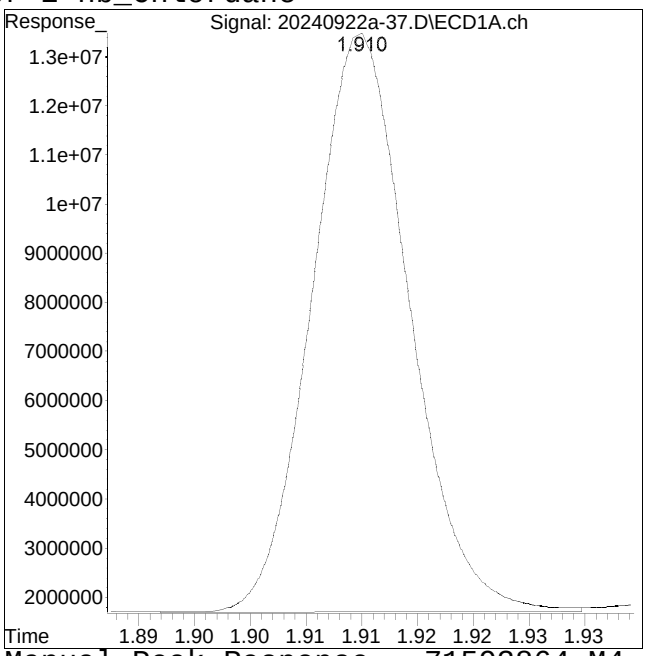
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

## Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 73798214



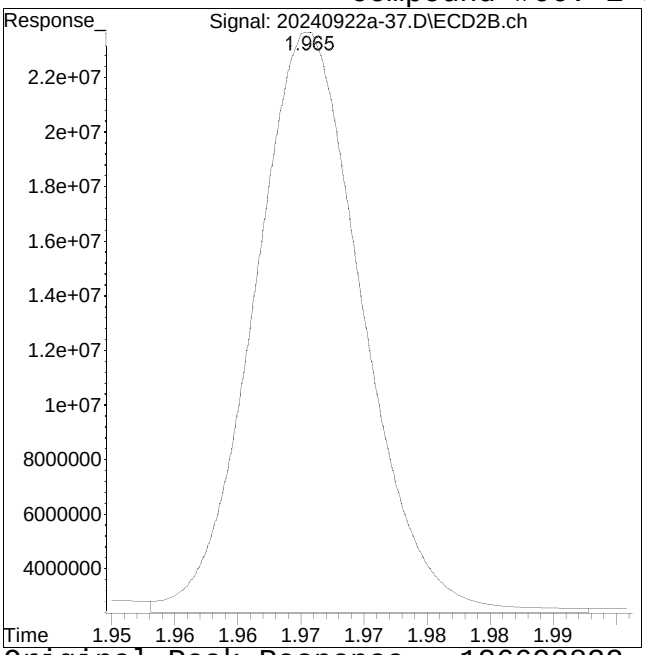

Manual Peak Response = 71593864 M4

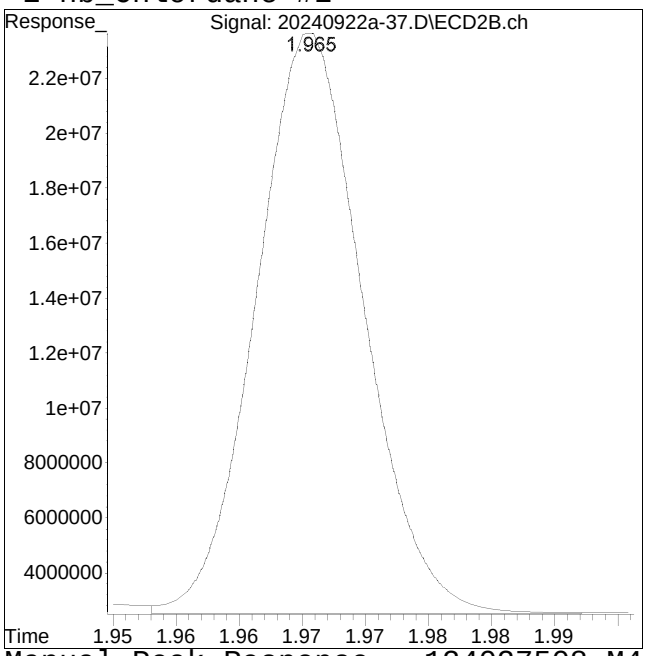
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #66: 1-br-2-nb_Chlordane #2



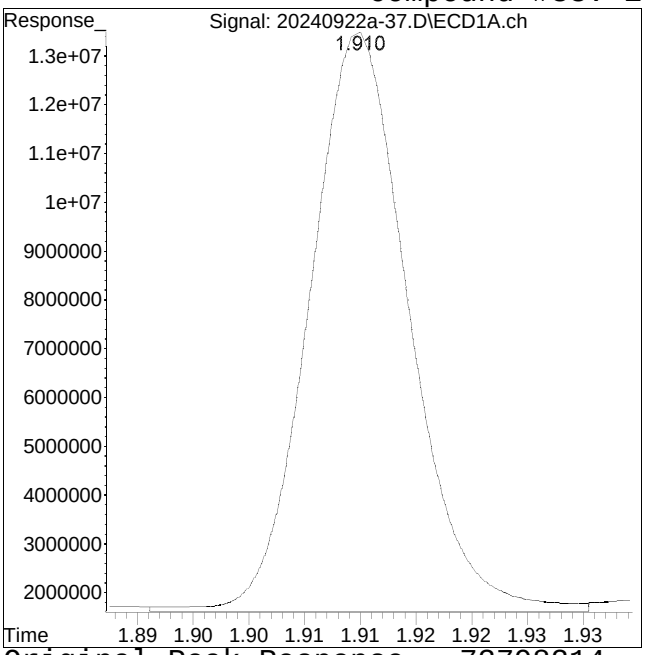




Original Peak Response = 126692832 Manual Peak Response = 124027508 M4
M4 = Poor automated baseline construction.

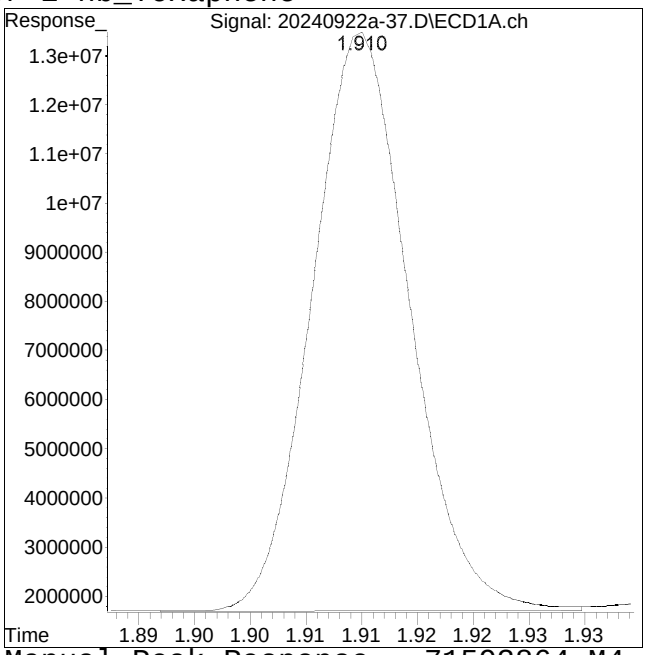
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 73798214



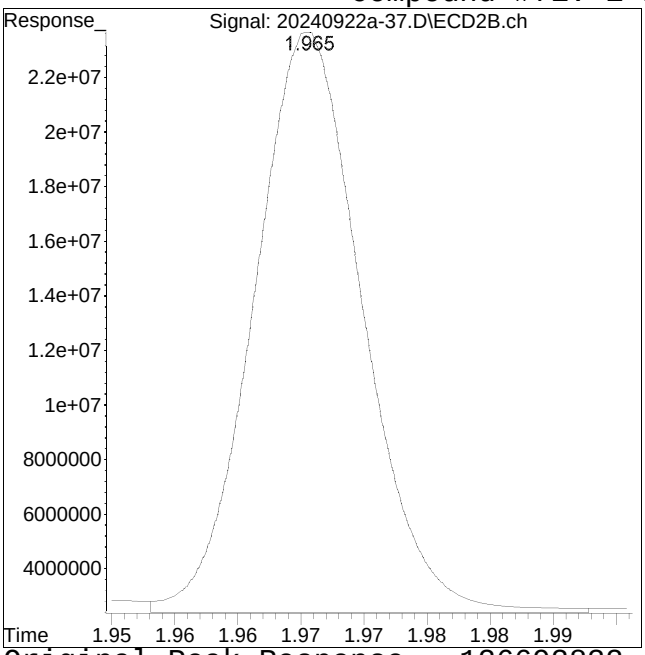

Manual Peak Response = 71593864 M4

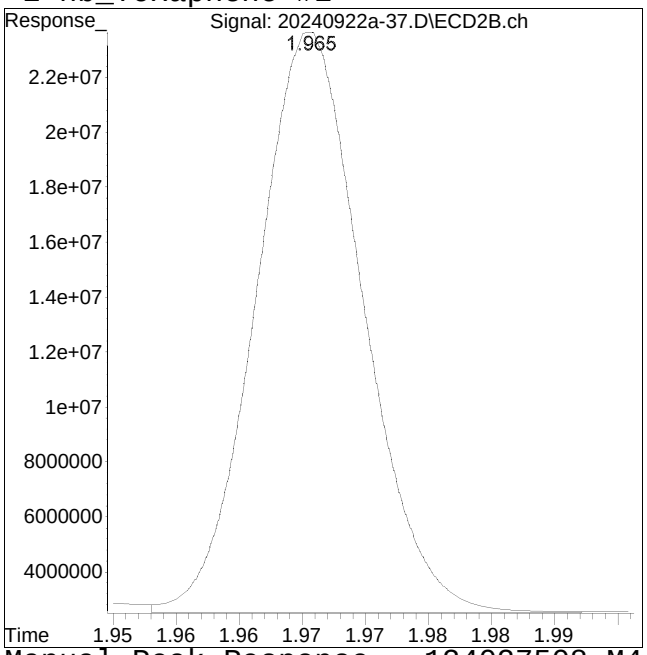
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-37.D Operator : pest20:emr
Date Inj'd : 9/22/2024 17:06 Instrument : PEST 20
Sample : L2453053-05,42,, rr Quant Date : 9/23/2024 9:12 am

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 126692832 Manual Peak Response = 124027508 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 11:56
Operator : PEST11:emr
Sample : L2453053-01,42,, p
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:27 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.202 | 1.275 | 337.4E6 | 202.4E6 | 25.000M4 | 25.000 |
| | Standard Area 1 : #1 = 280061320 | | | | Recovery = 120.47% | | |
| | Standard Area 1 : #2 = 198070219 | | | | Recovery = 102.21% | | |
| 28) i | 1-br-2-nb_Ch | 1.202 | 1.275 | 337.4E6 | 202.4E6 | 25.000M4 | 25.000 |
| 33) i | 1-br-2-nb_To | 1.202 | 1.275 | 337.4E6 | 202.4E6 | 25.000M4 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.531 | 1.724 | 470.6E6 | 281.2E6 | 33.561M4 | 31.182M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 67.12% | | 62.36% |
| 27) s | Decachlorobi | 6.136 | 6.767 | 461.5E6 | 240.4E6 | 29.402M4 | 28.008M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 58.80% | | 56.02% |
| Target Compounds | | | | | | | |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 11:56
Operator : PEST11:emr
Sample : L2453053-01,42,, p
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:27 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 18) t Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t 4,4'-DDT | 4.413 | 5.150 | 11018698 | 6983276 | 0.771M4 | 0.690M4 |
| 22) t Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) t Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |

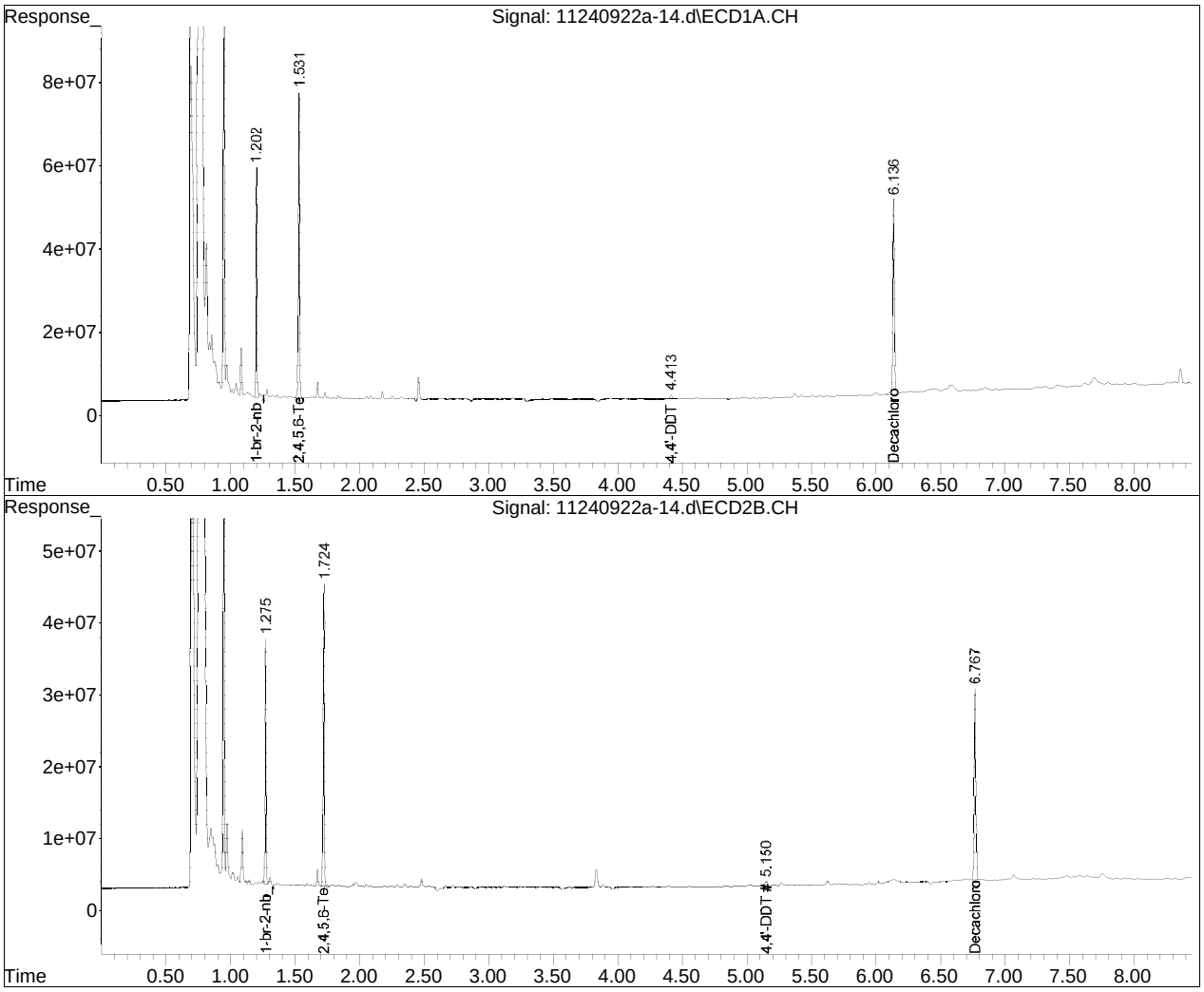
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-14.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  11:56
Operator : PEST11:emr
Sample : L2453053-01,42,, p
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 14 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:27 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

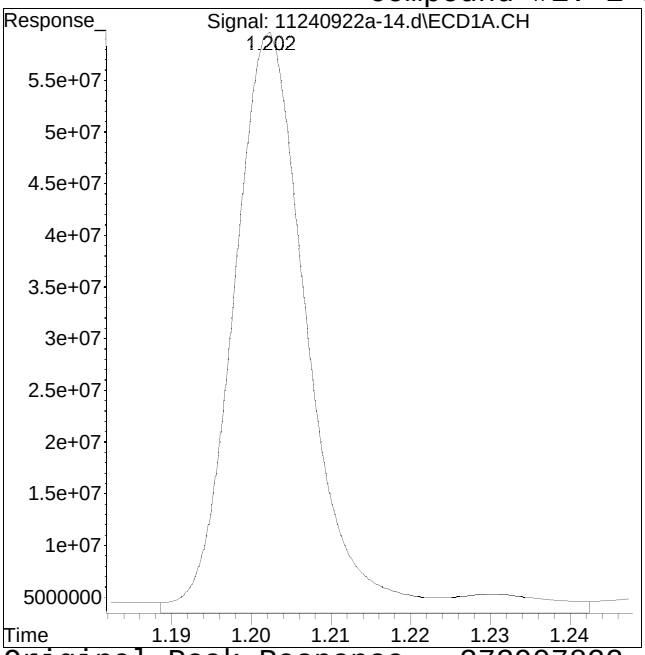
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

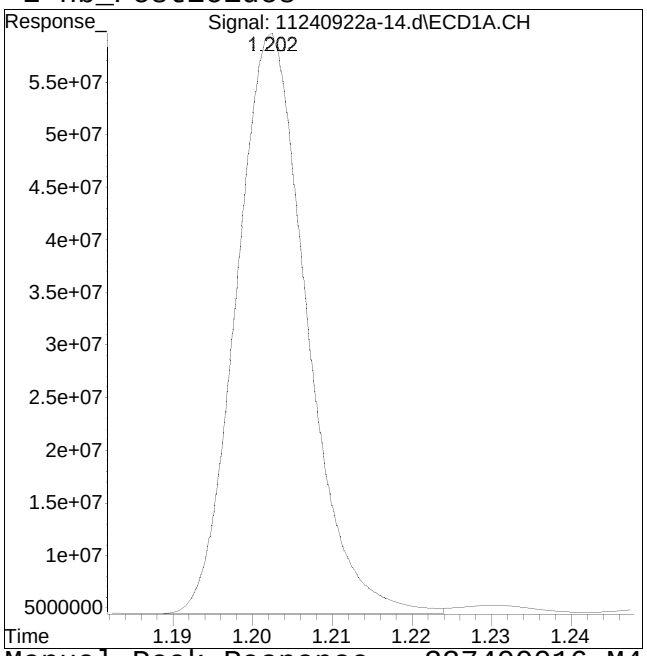


# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

## Compound #1: 1-br-2-nb_Pesticides



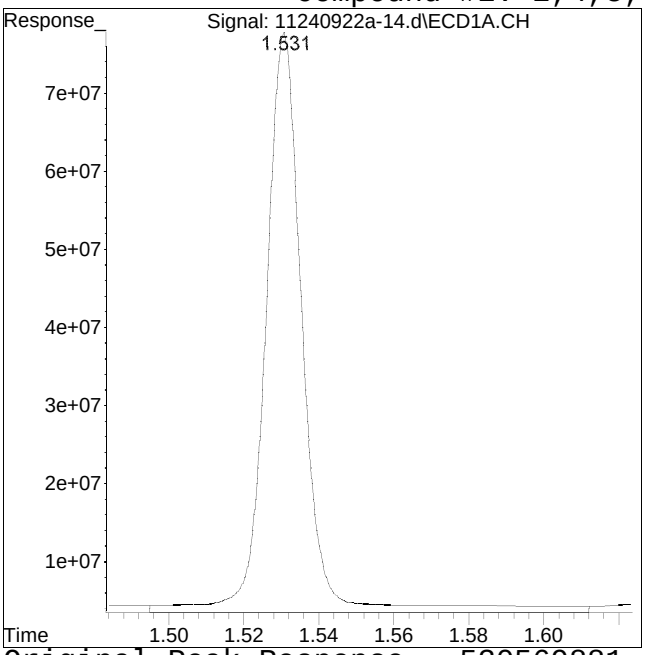




Original Peak Response = 373907822 Manual Peak Response = 337400016 M4
M4 = Poor automated baseline construction.

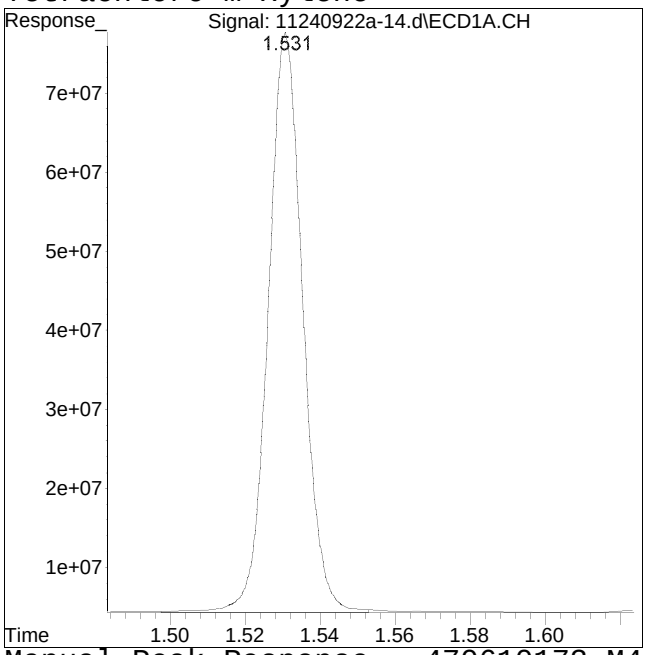
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 530569881



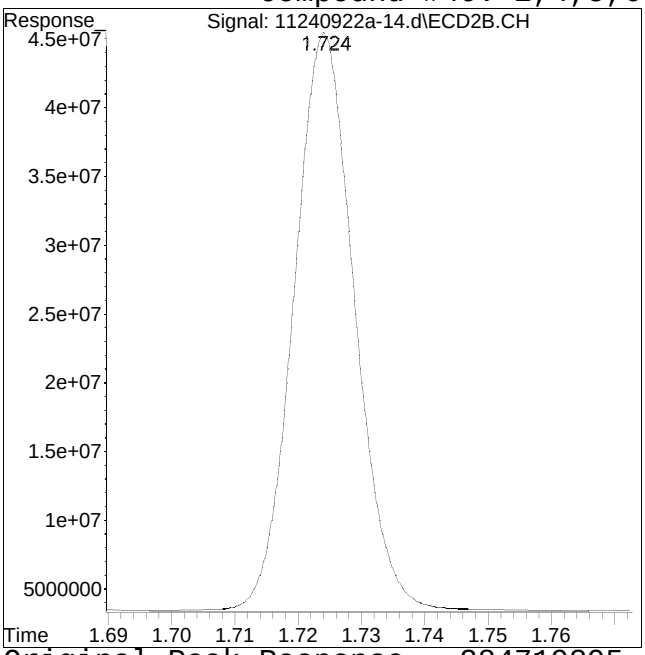

Manual Peak Response = 470610173 M4

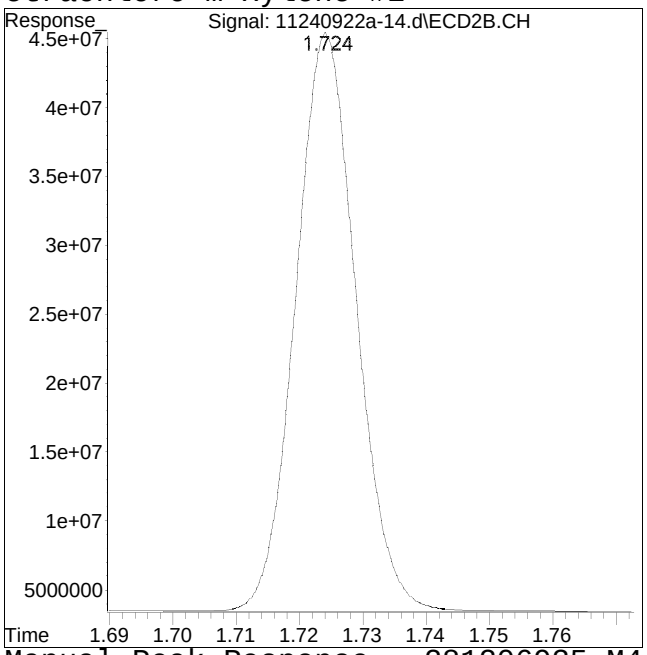
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



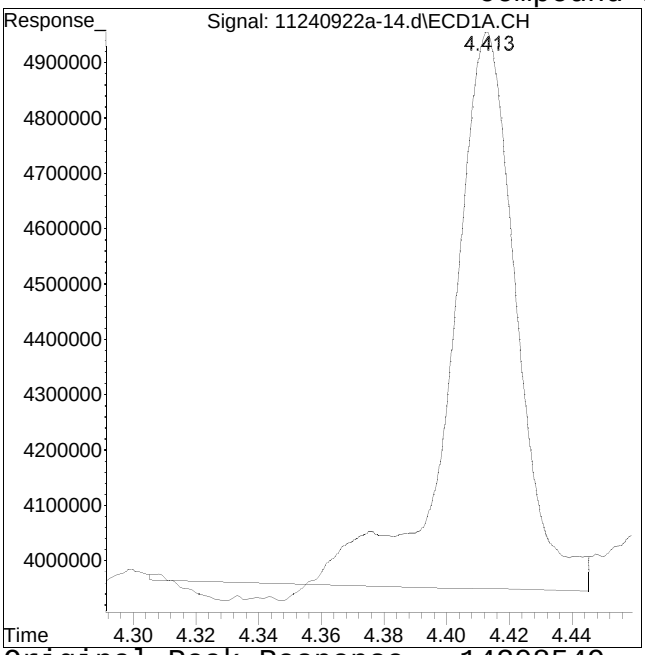




Original Peak Response = 284719395 Manual Peak Response = 281206935 M4
M4 = Poor automated baseline construction.

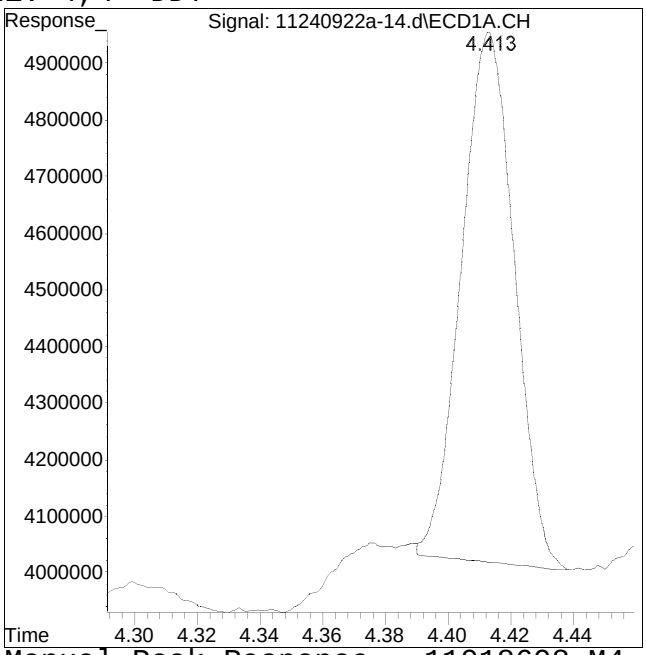
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT




Original Peak Response = 14208549



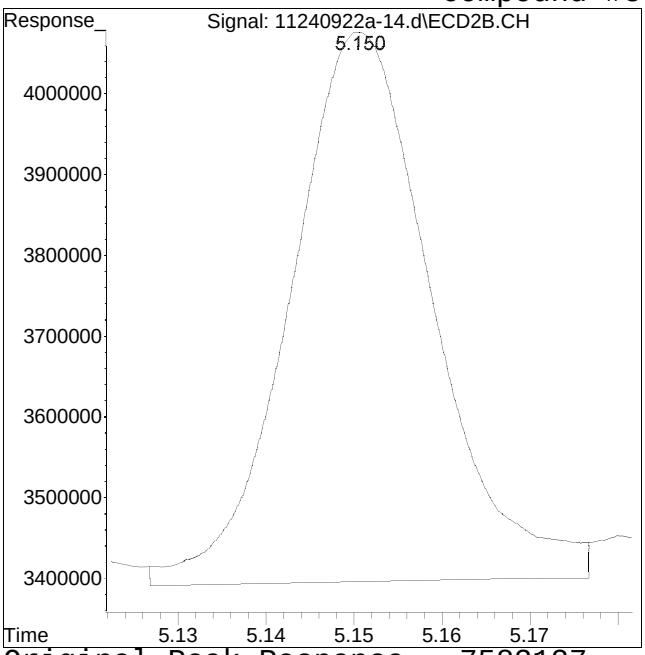

Manual Peak Response = 11018698 M4

M4 = Poor automated baseline construction.

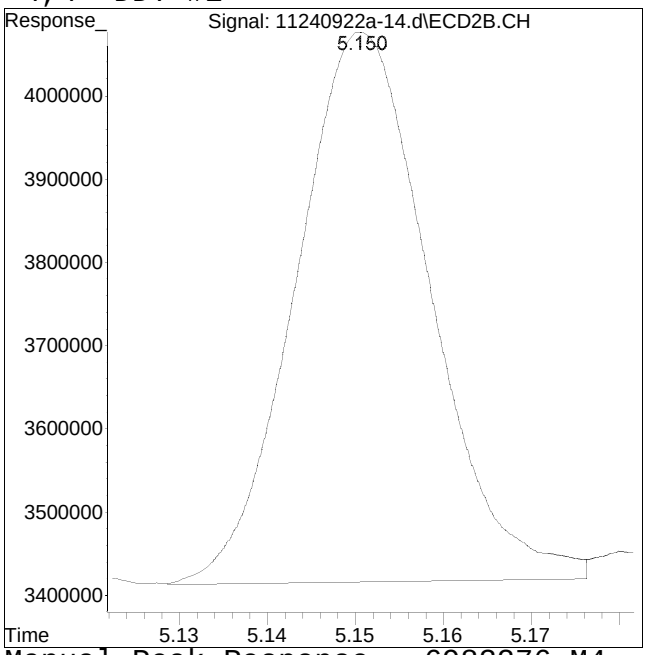
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

## Compound #59: 4,4'-DDT #2




Original Peak Response = 7583127



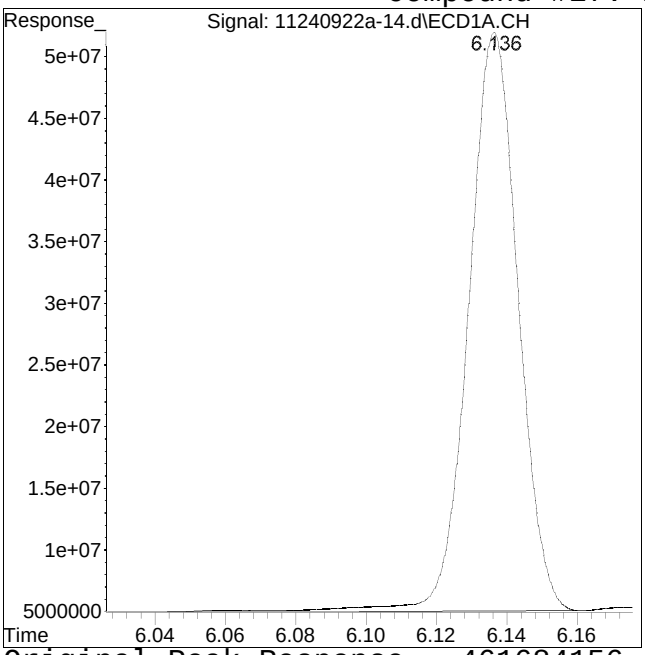

Manual Peak Response = 6983276 M4

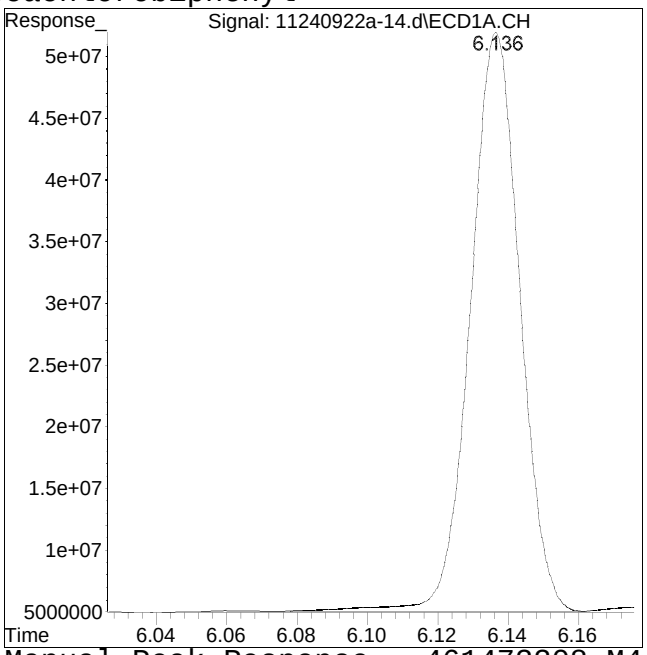
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



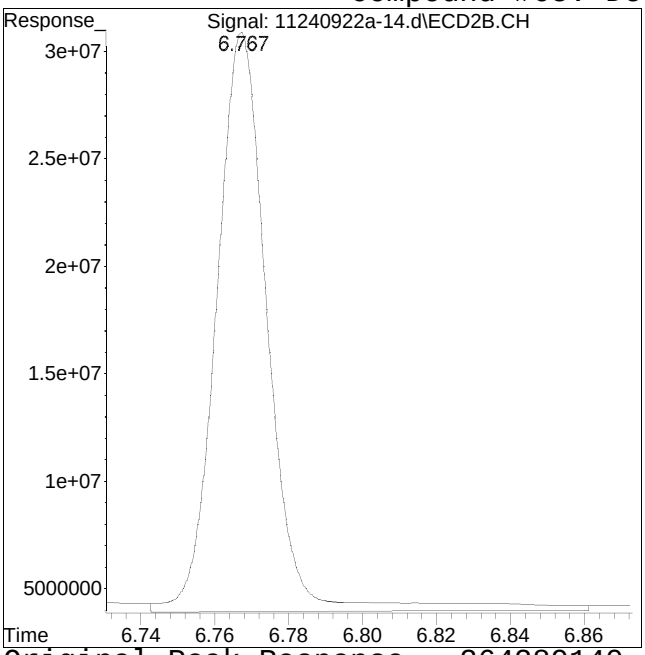




Original Peak Response = 461684156 Manual Peak Response = 461473308 M4
M4 = Poor automated baseline construction.

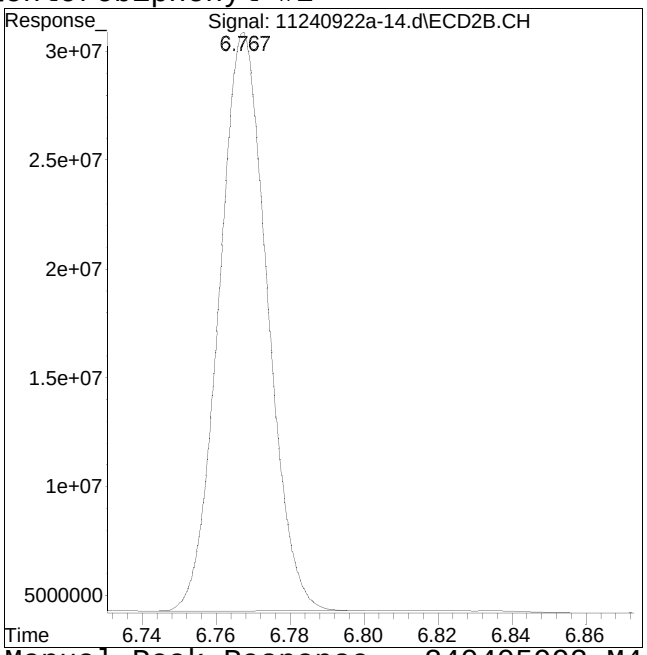
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 264289140



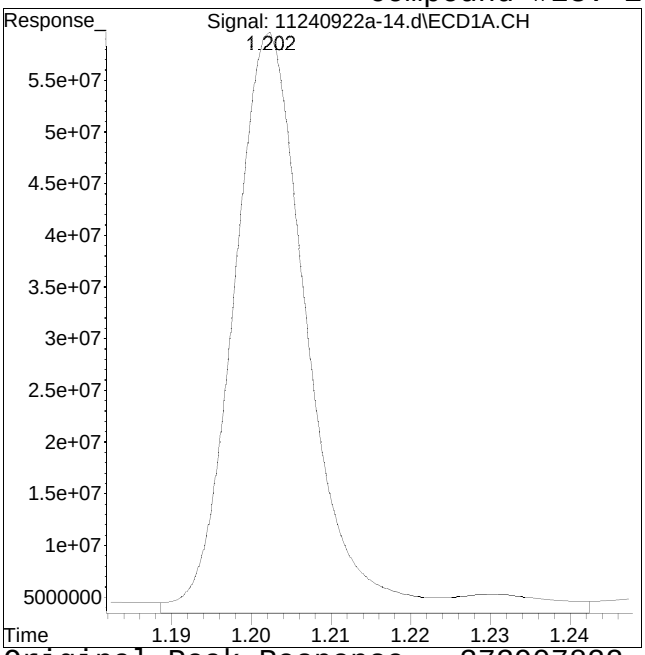

Manual Peak Response = 240405992 M4

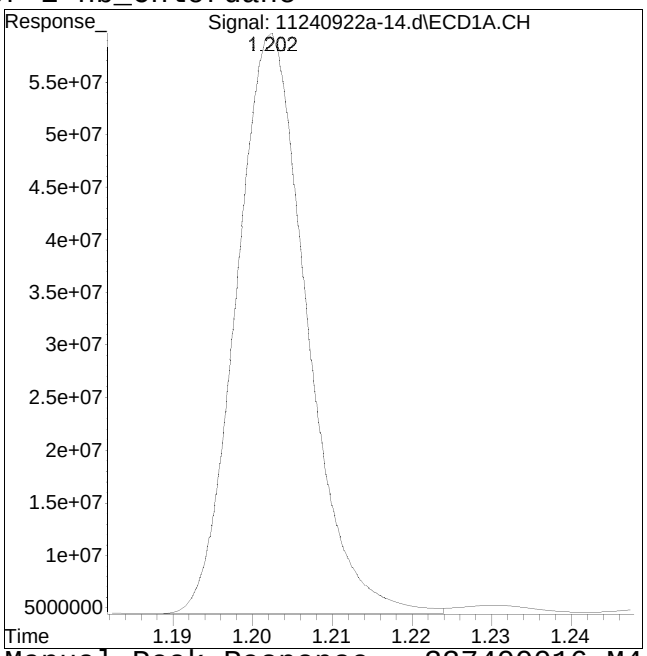
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #28: 1-br-2-nb_Chlordane



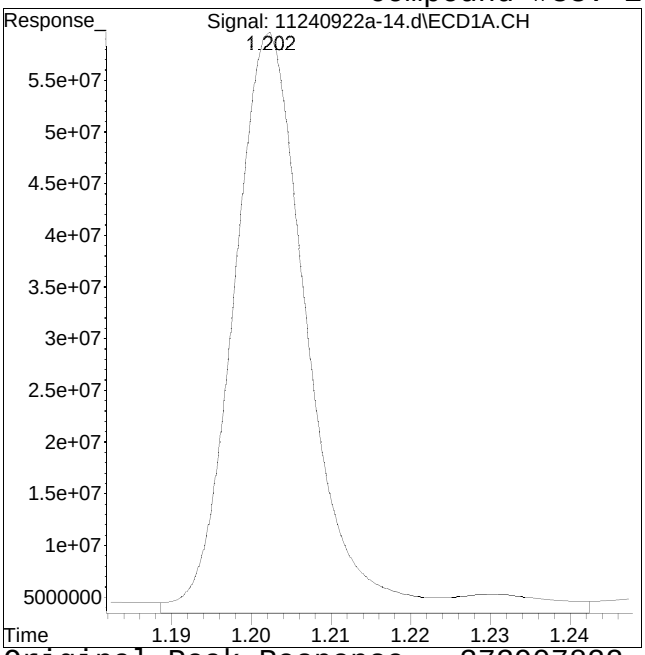



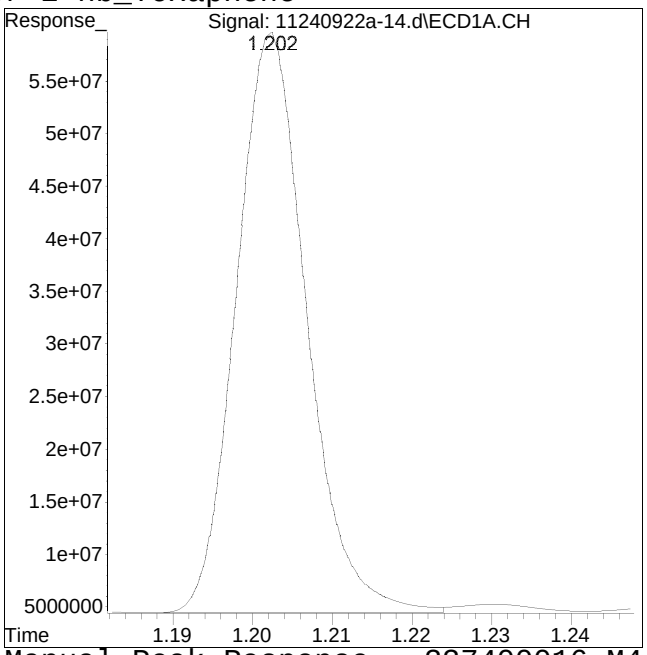

Original Peak Response = 373907822 Manual Peak Response = 337400016 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-14.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:56 Instrument : Pest 11
Sample : L2453053-01,42,, p Quant Date : 9/22/2024 3:27 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 373907822 Manual Peak Response = 337400016 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:32
Operator : PEST11:emr
Sample : L2453053-02,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:34 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.202 | 1.275 | 342.0E6 | 204.0E6 | 25.000M4 | 25.000M4 |
| | Standard Area 1 : #1 = 280061320 | | | | Recovery = 122.13% | | |
| | Standard Area 1 : #2 = 198070219 | | | | Recovery = 103.01% | | |
| 28) i | 1-br-2-nb_Ch | 1.202 | 1.275 | 342.0E6 | 204.0E6 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 1.202 | 1.275 | 342.0E6 | 204.0E6 | 25.000M4 | 25.000M4 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.531 | 1.725 | 454.8E6 | 268.6E6 | 31.995M4 | 29.549 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 63.99% | | 59.10% |
| 27) s | Decachlorobi | 6.137 | 6.768 | 426.9E6 | 224.0E6 | 26.830M4 | 25.895M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 53.66% | | 51.79% |
| Target Compounds | | | | | | | |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:32
Operator : PEST11:emr
Sample : L2453053-02,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:34 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |

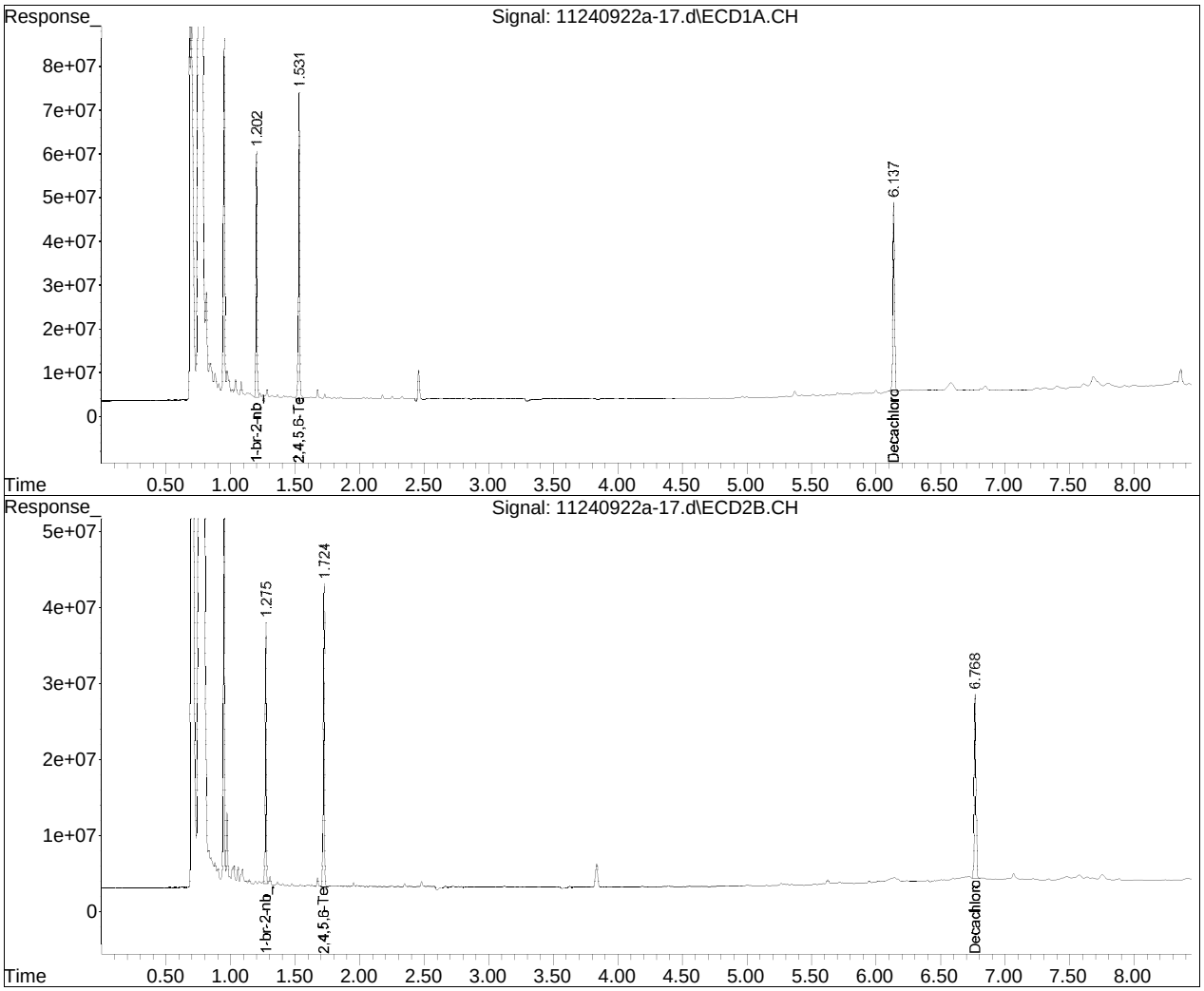
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-17.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  12:32
Operator : PEST11:emr
Sample : L2453053-02,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 17 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:34 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

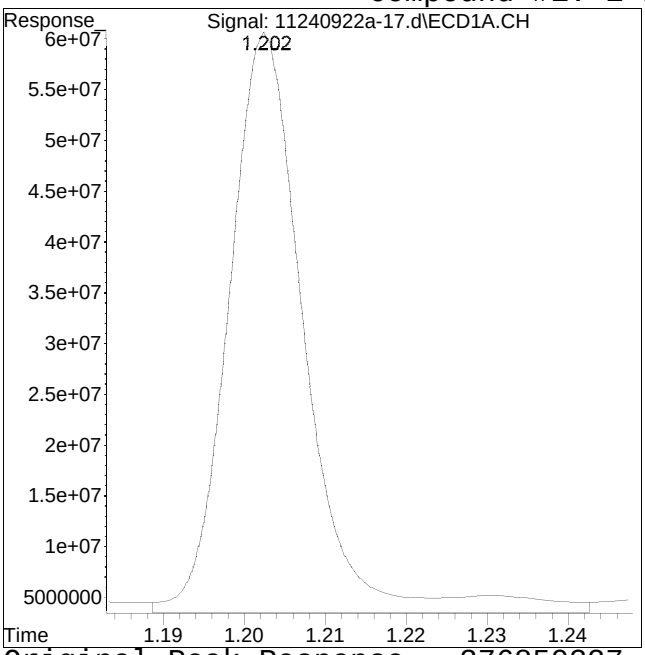
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



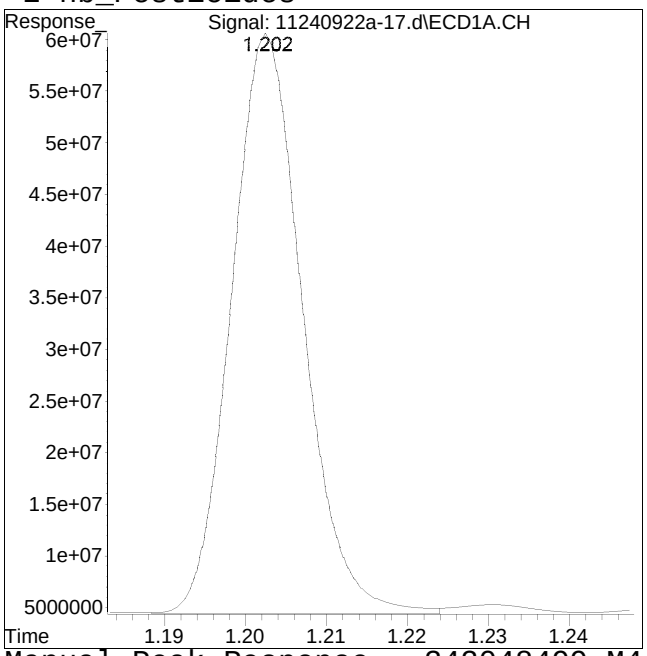
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 376850327



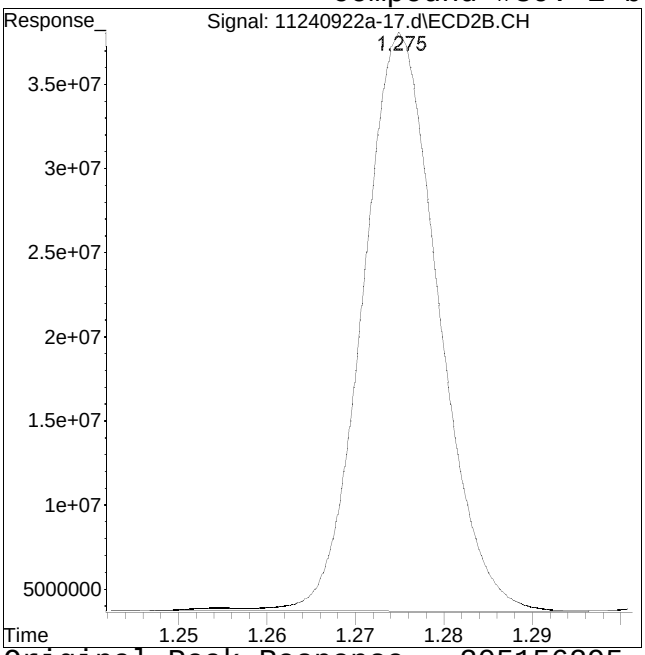

Manual Peak Response = 342048499 M4

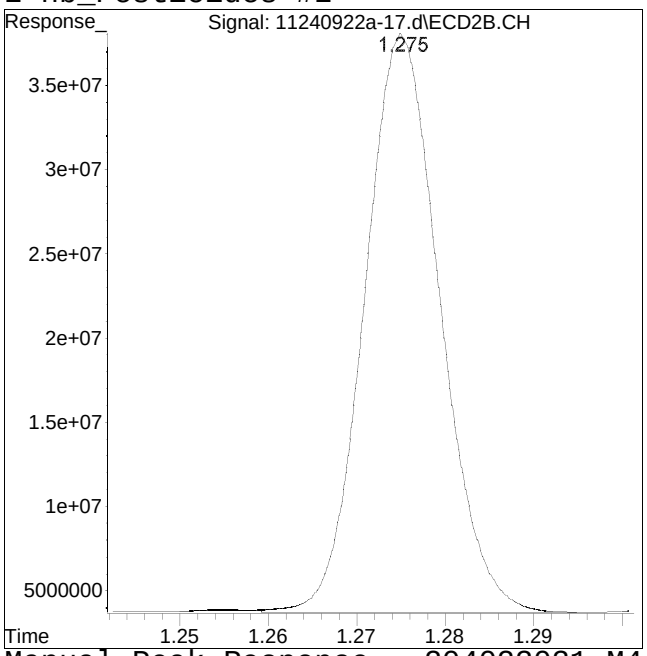
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #39: 1-br-2-nb_Pesticides #2



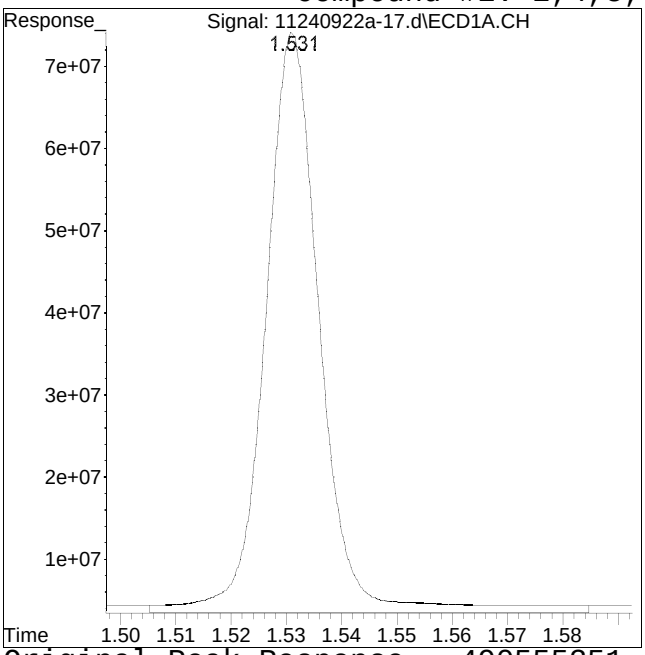




Original Peak Response = 205156295 Manual Peak Response = 204023031 M4
M4 = Poor automated baseline construction.

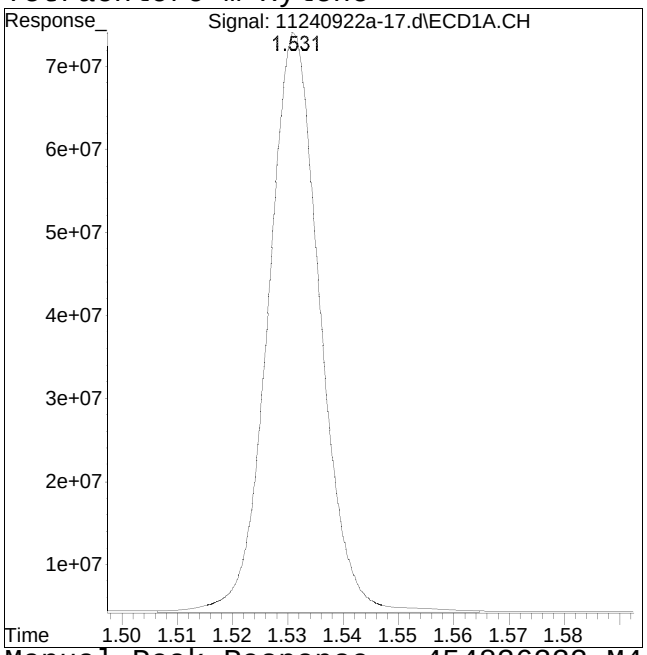
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 490555351



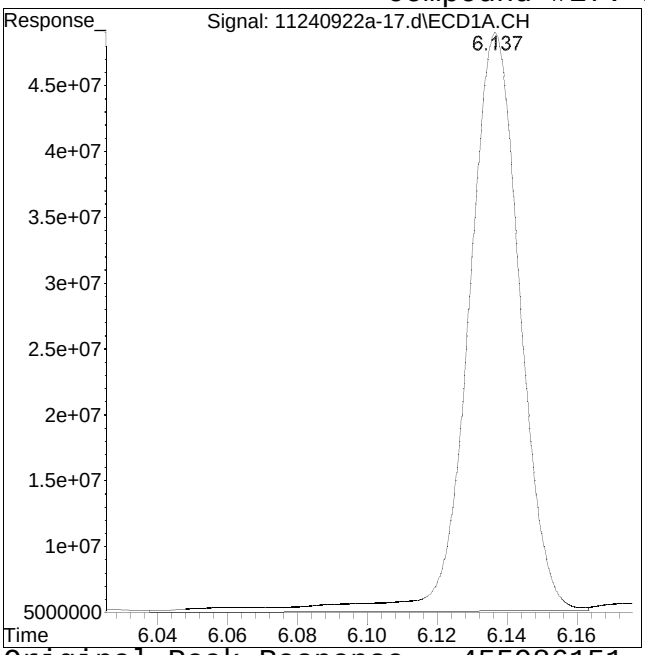

Manual Peak Response = 454836332 M4

M4 = Poor automated baseline construction.

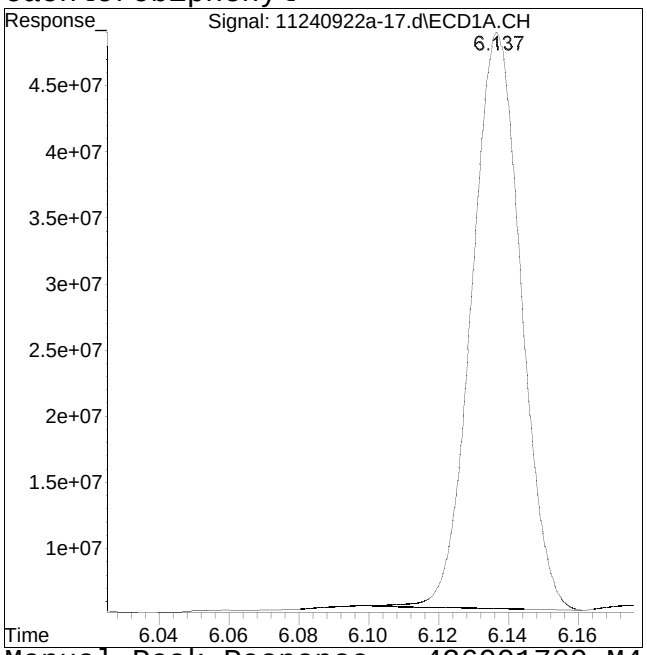
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl




Original Peak Response = 455986151



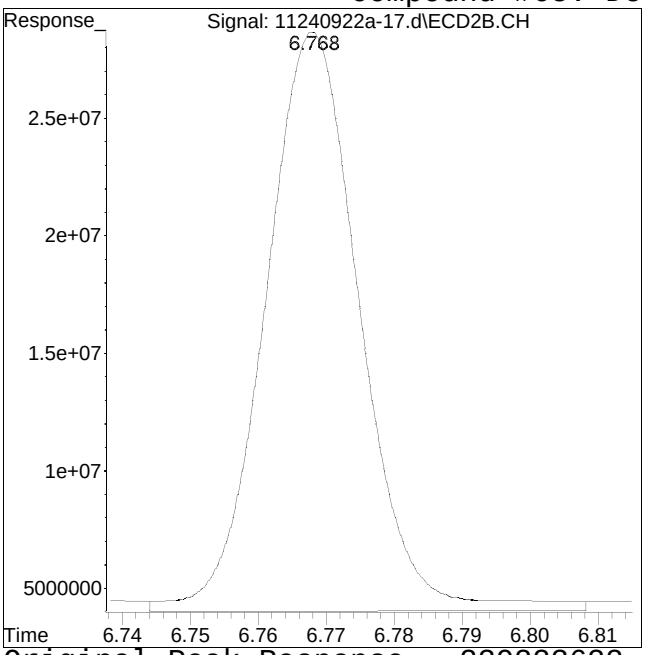

Manual Peak Response = 426901700 M4

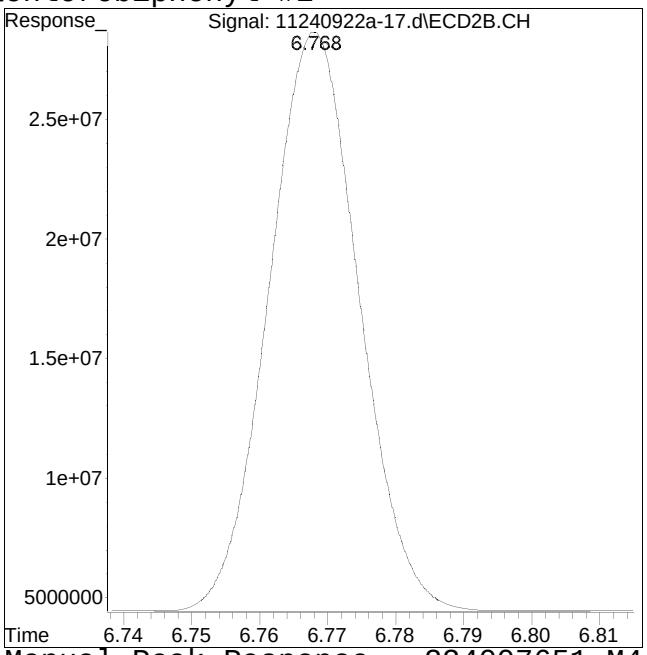
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2



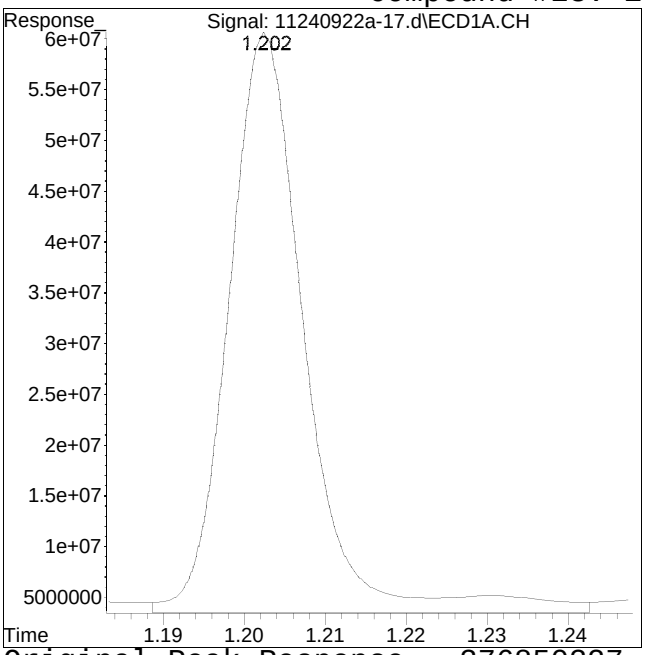



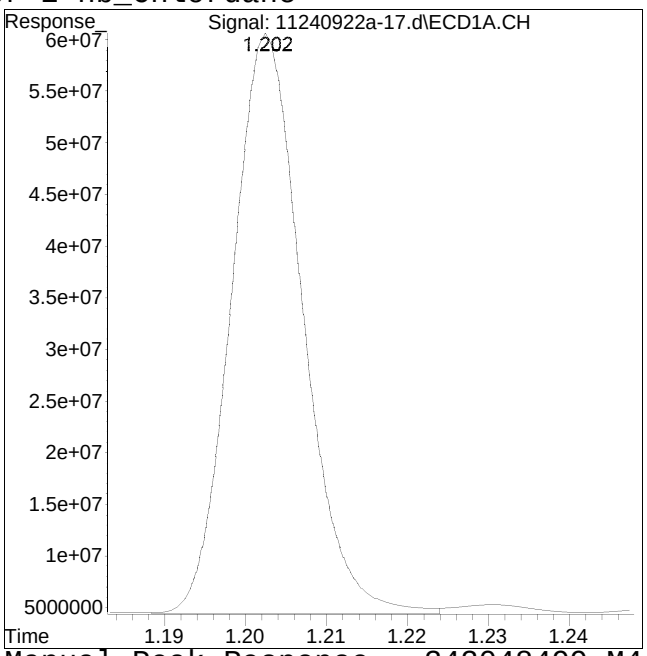

Original Peak Response = 239223622 Manual Peak Response = 224007651 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #28: 1-br-2-nb_Chlordane



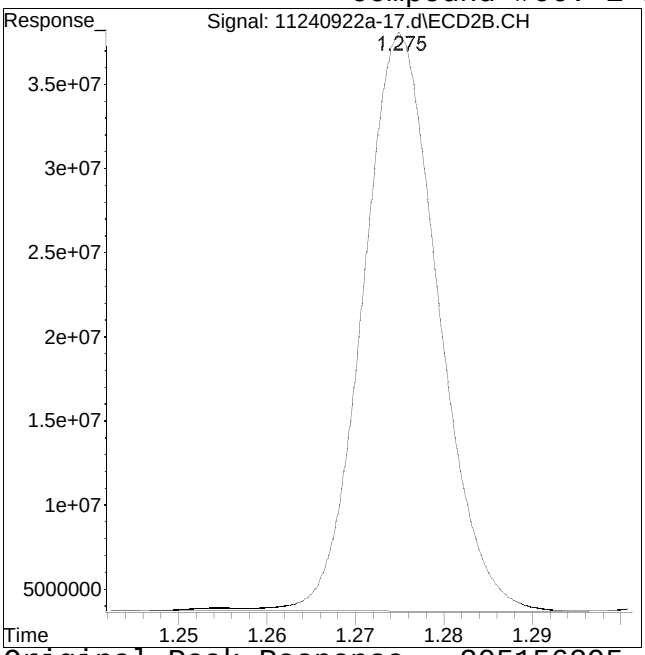




Original Peak Response = 376850327 Manual Peak Response = 342048499 M4
M4 = Poor automated baseline construction.

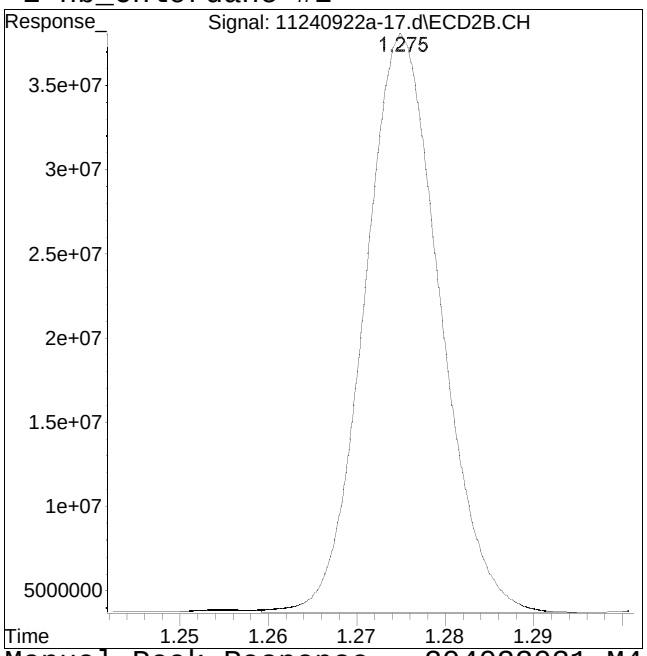
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 205156295



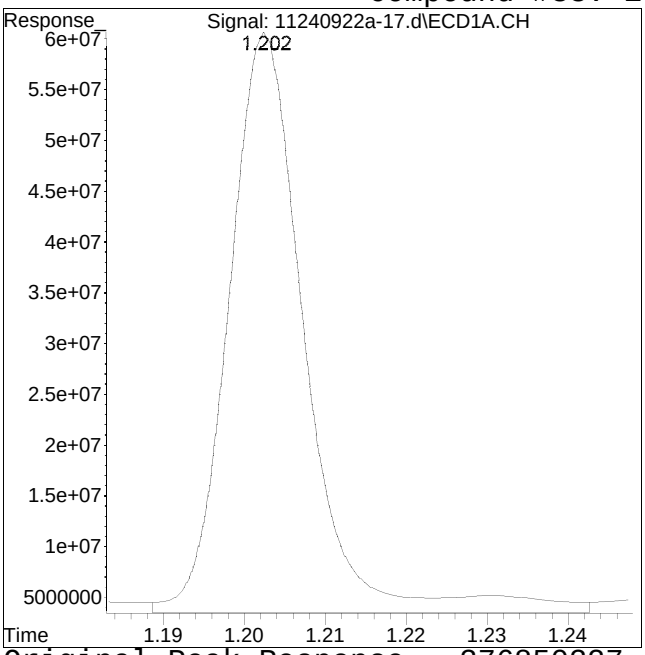

Manual Peak Response = 204023031 M4

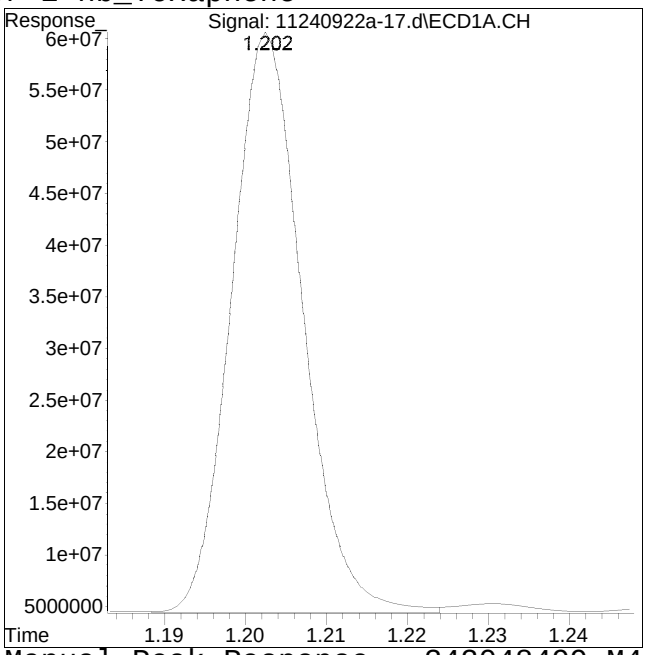
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #33: 1-br-2-nb_Toxaphene



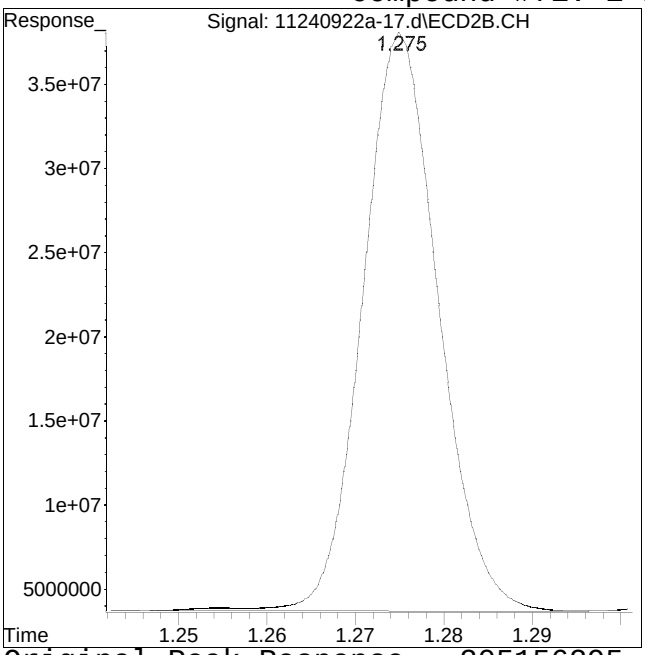




Original Peak Response = 376850327 Manual Peak Response = 342048499 M4
M4 = Poor automated baseline construction.

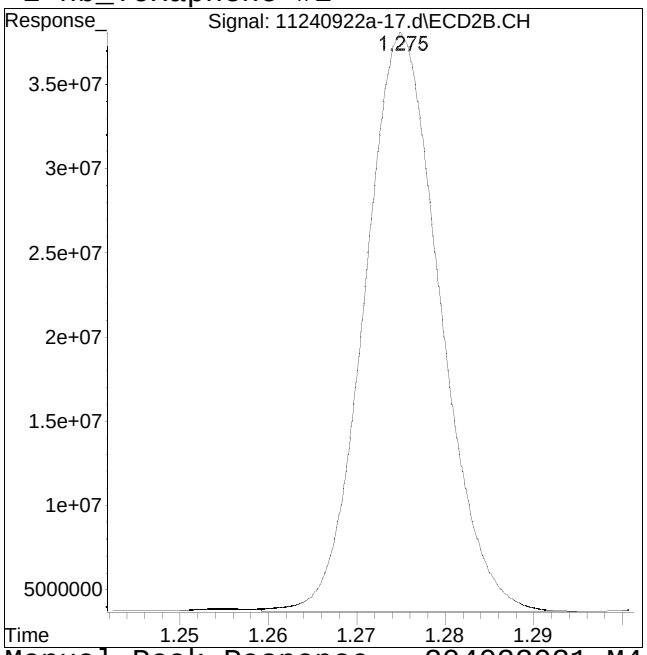
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-17.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:32 Instrument : Pest 11
Sample : L2453053-02,42,, Quant Date : 9/22/2024 3:27 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 205156295




Manual Peak Response = 204023031 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:44
Operator : PEST11:emr
Sample : L2453053-03,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:37 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.202 | 1.275 | 351.0E6 | 208.3E6 | 25.000M4 | 25.000 |
| | Standard Area 1 : #1 = 280061320 | | | | Recovery = 125.34% | | |
| | Standard Area 1 : #2 = 198070219 | | | | Recovery = 105.17% | | |
| 28) i | 1-br-2-nb_Ch | 1.202 | 1.275 | 351.0E6 | 208.3E6 | 25.000M4 | 25.000 |
| 33) i | 1-br-2-nb_To | 1.202 | 1.275 | 351.0E6 | 208.3E6 | 25.000M4 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.531 | 1.725 | 511.1E6 | 301.0E6 | 35.036M4 | 32.438 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 70.07% | | 64.88% |
| 27) s | Decachlorobi | 6.136 | 6.767 | 488.3E6 | 253.3E6 | 29.905M4 | 28.681M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 59.81% | | 57.36% |
| Target Compounds | | | | | | | |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:44
Operator : PEST11:emr
Sample : L2453053-03,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:37 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 4.413 | 5.151 | 15538722 | 9139407 | 1.046M4 | 0.877M4 |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |

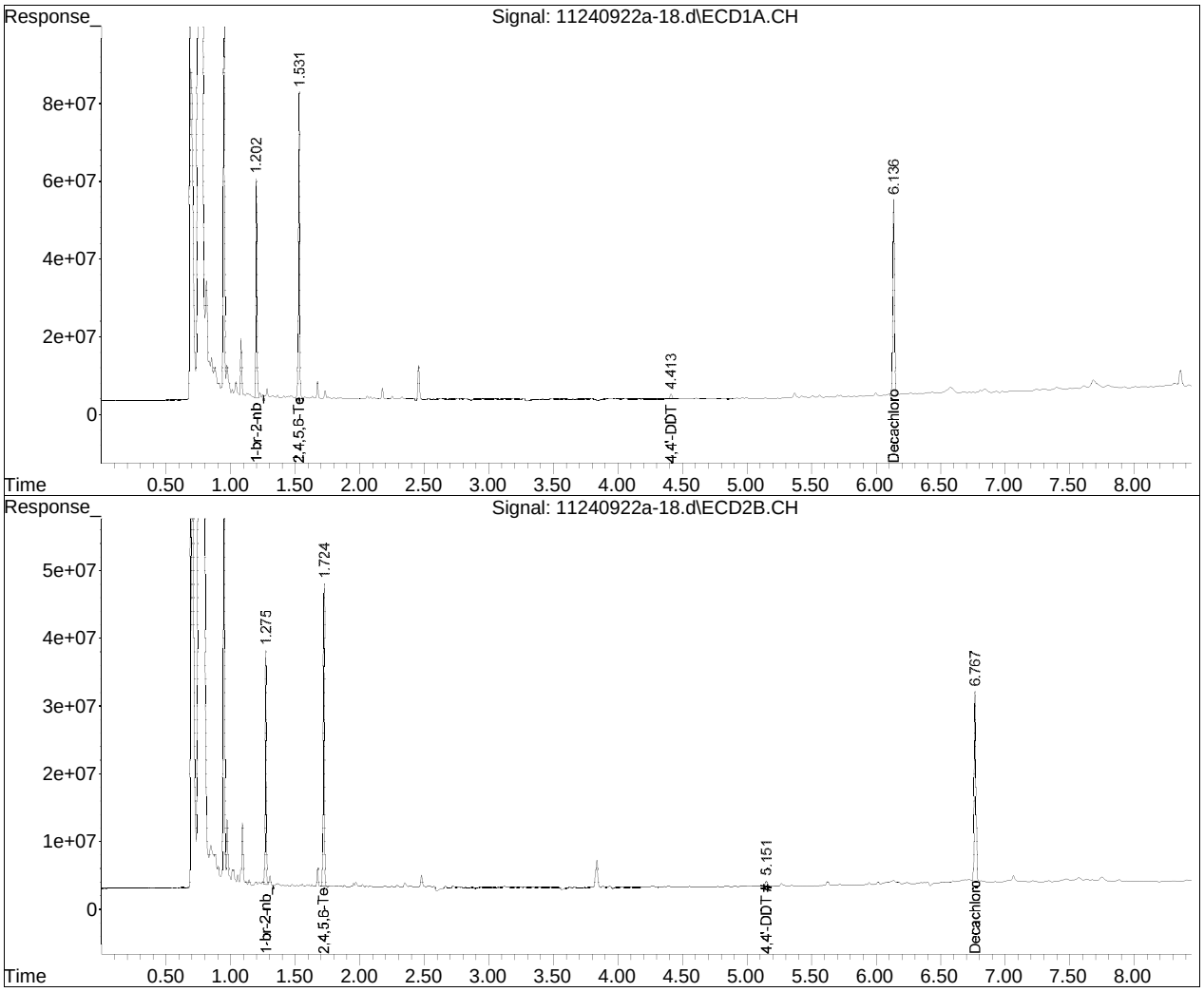
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-18.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  12:44
Operator : PEST11:emr
Sample : L2453053-03,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 18 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:37 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

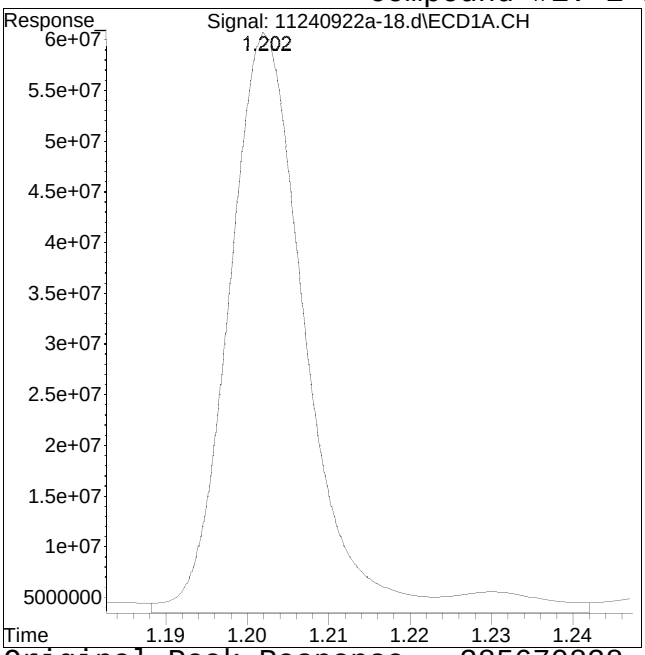
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

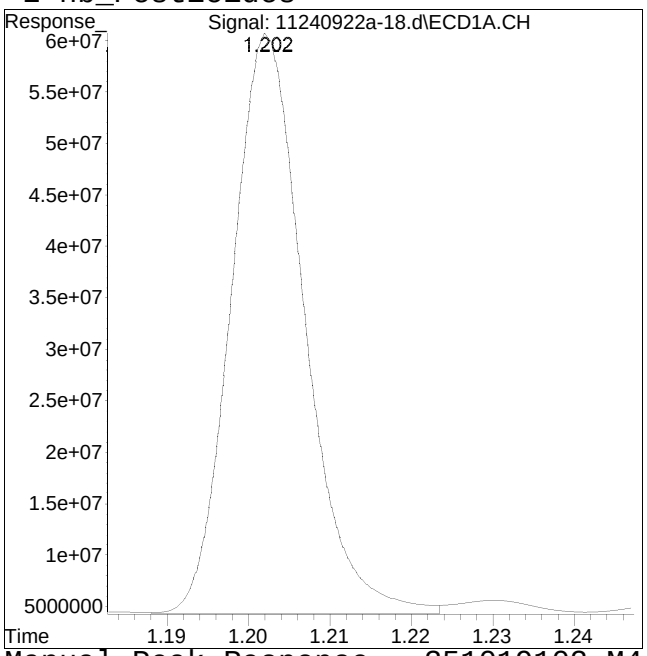


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #1: 1-br-2-nb_Pesticides



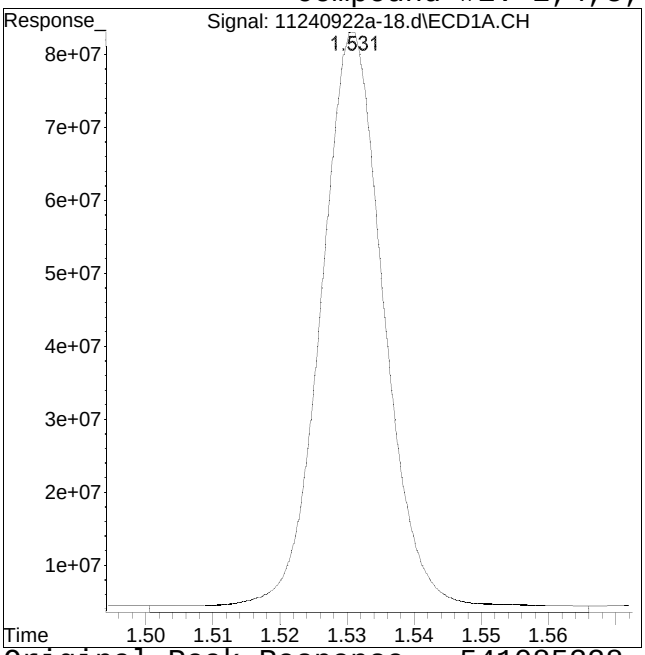




Original Peak Response = 385670838 Manual Peak Response = 351019102 M4
M4 = Poor automated baseline construction.

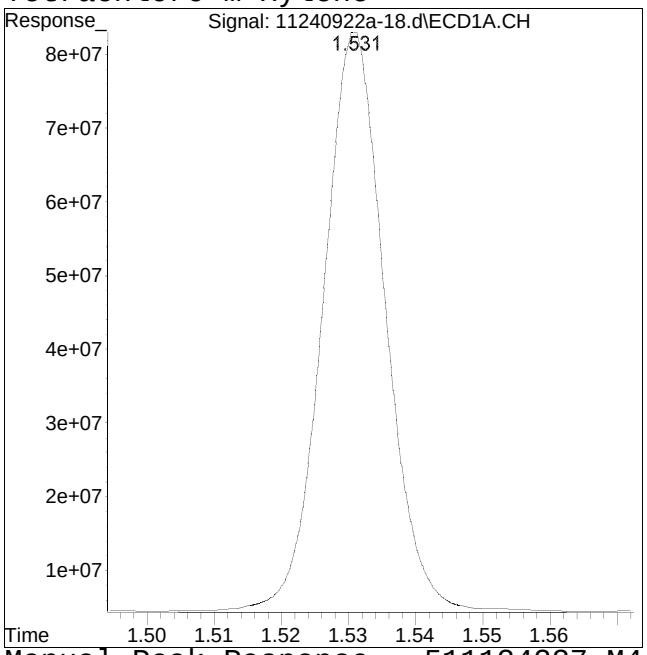
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 541085328



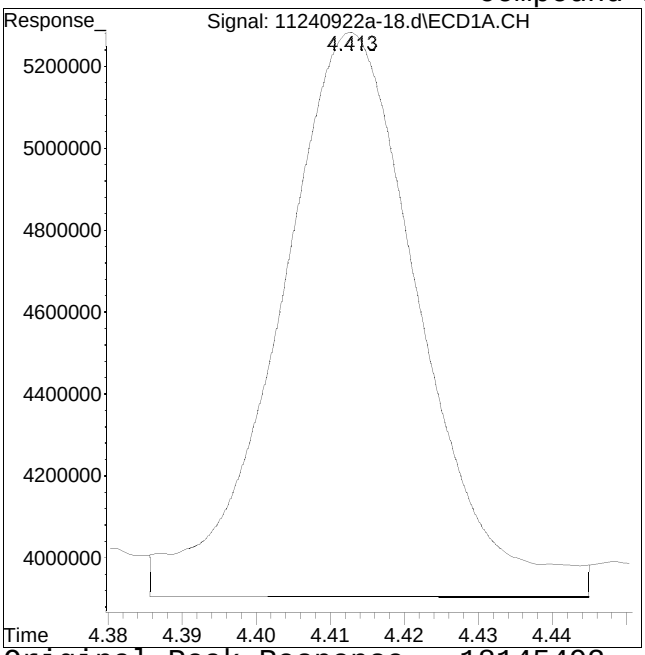

Manual Peak Response = 511124227 M4

M4 = Poor automated baseline construction.

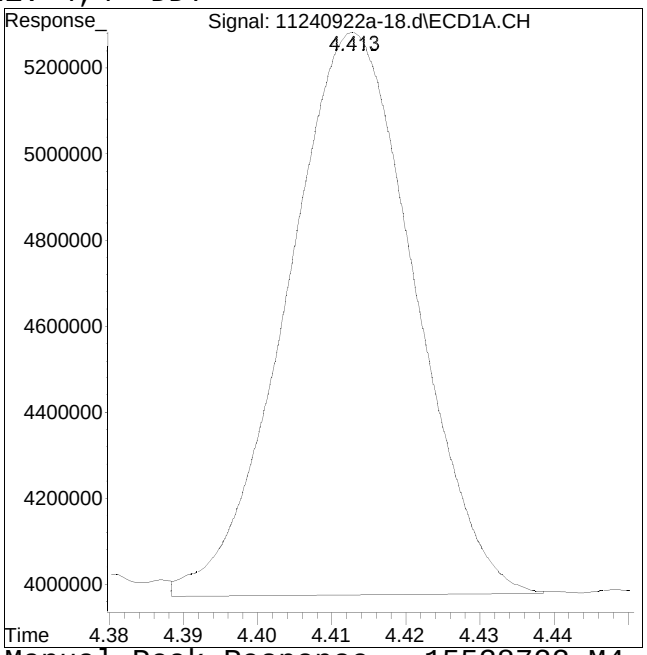
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT




Original Peak Response = 18145492



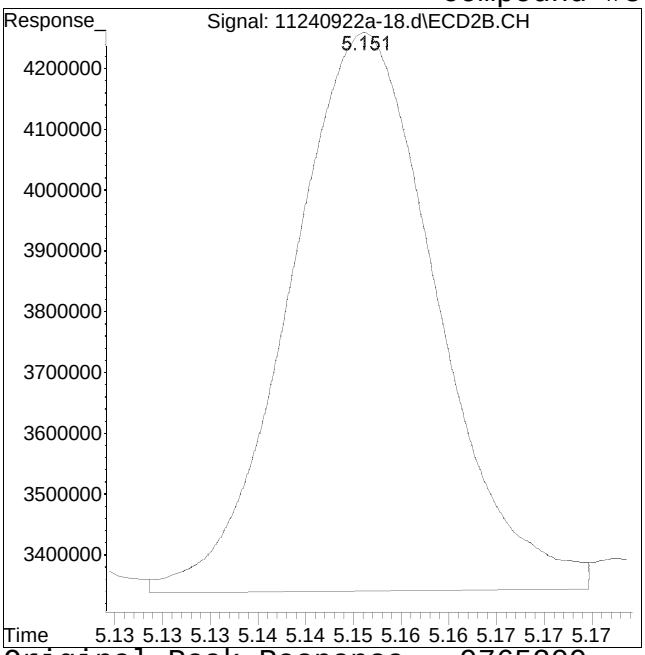

Manual Peak Response = 15538722 M4

M4 = Poor automated baseline construction.

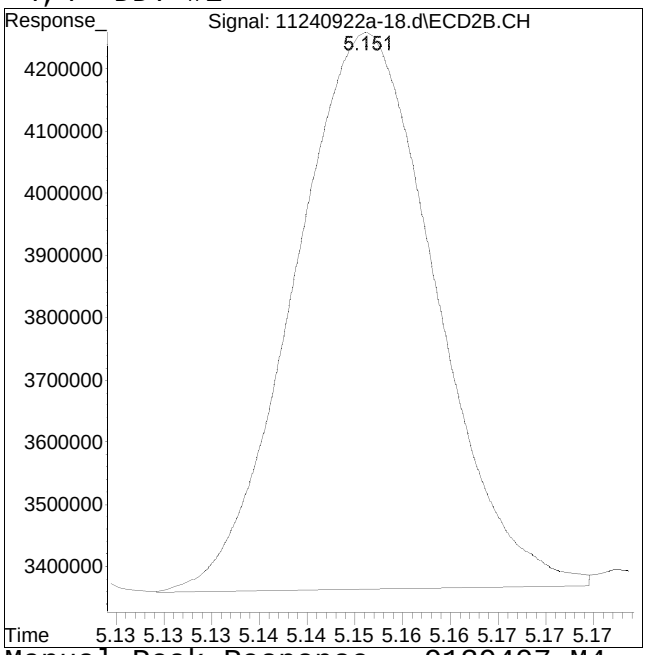
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #59: 4,4'-DDT #2




Original Peak Response = 9765209



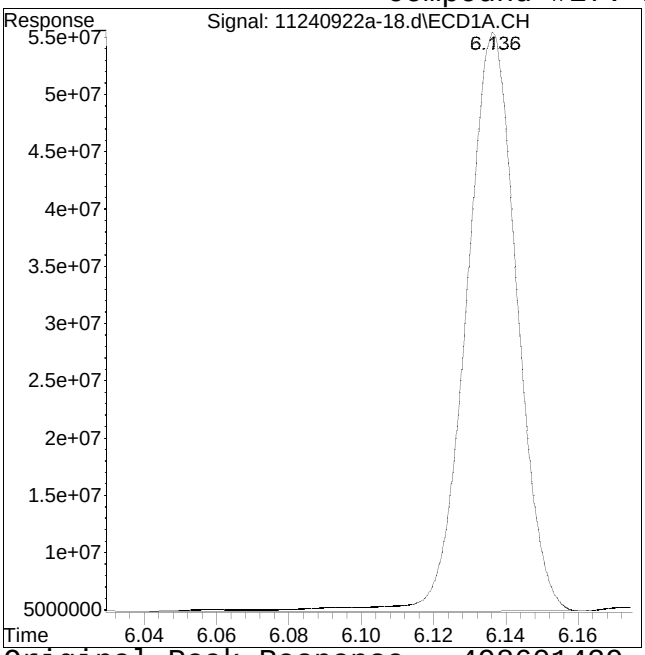

Manual Peak Response = 9139407 M4

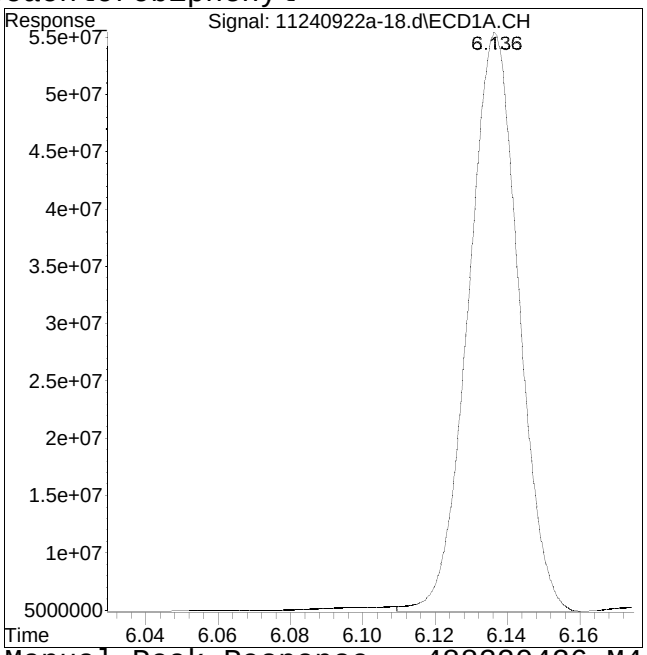
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



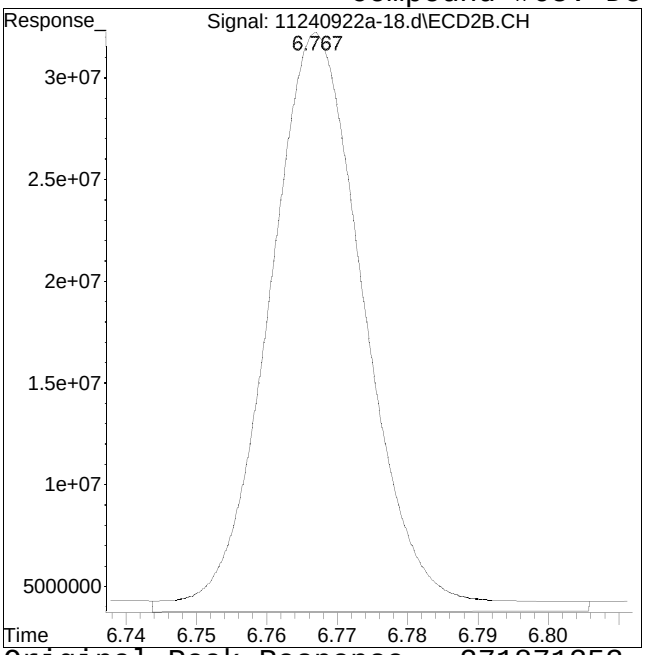




Original Peak Response = 498601429 Manual Peak Response = 488320426 M4
M4 = Poor automated baseline construction.

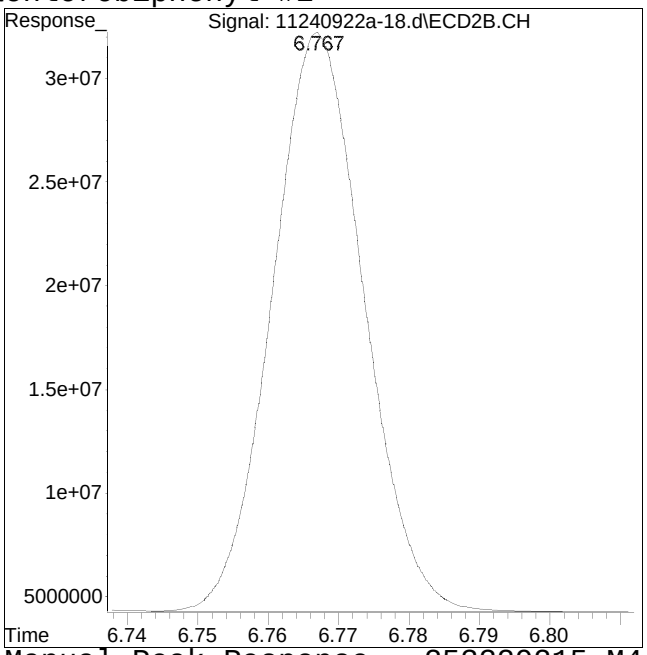
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 271871353



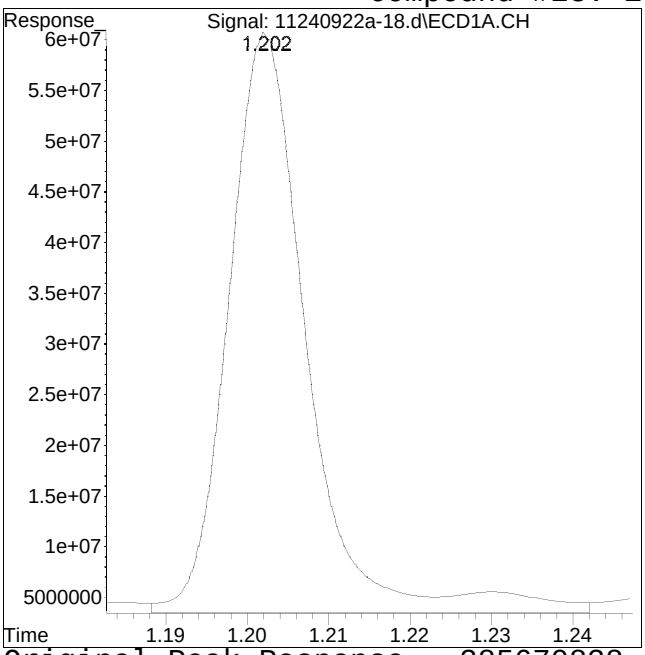

Manual Peak Response = 253329215 M4

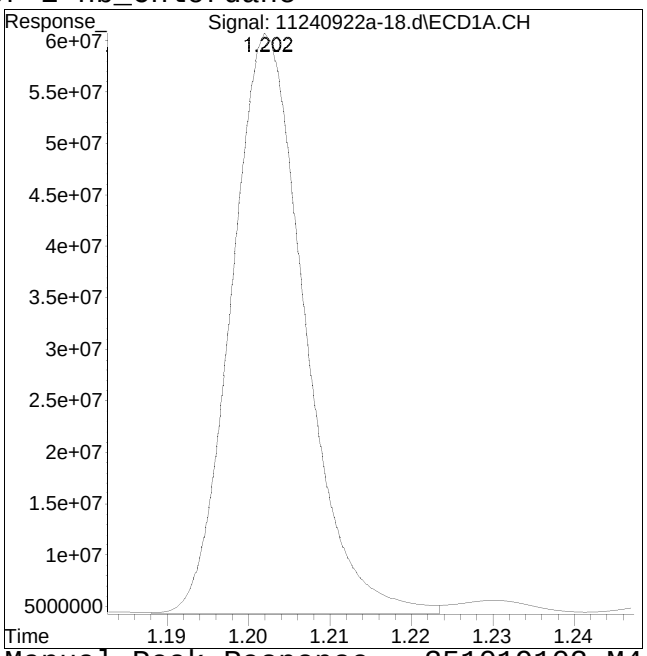
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #28: 1-br-2-nb_Chlordane



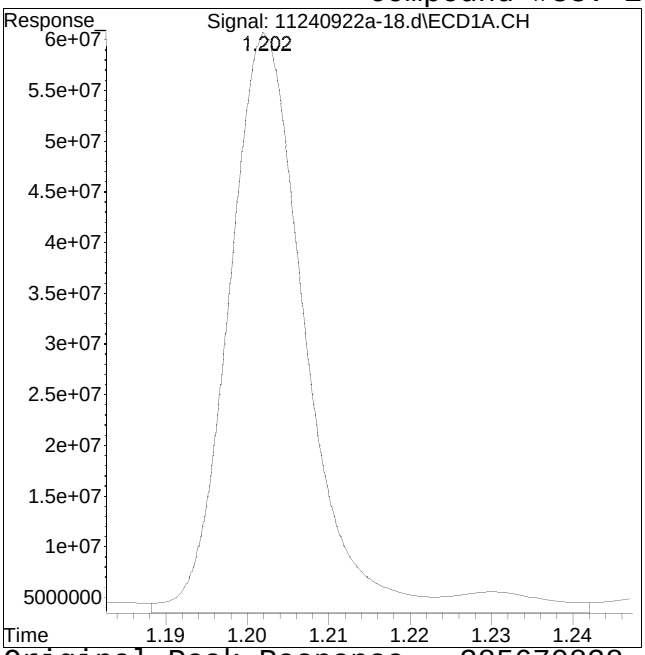



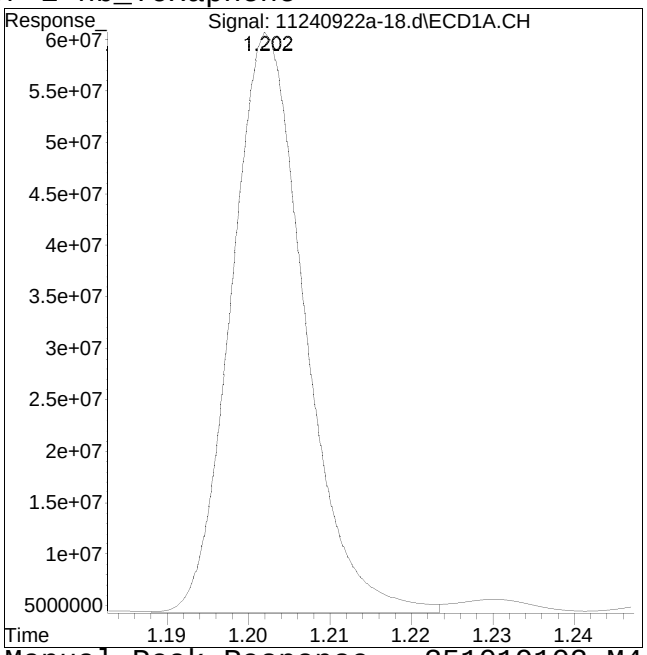

Original Peak Response = 385670838 Manual Peak Response = 351019102 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-18.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:44 Instrument : Pest 11
Sample : L2453053-03,42,, Quant Date : 9/22/2024 3:27 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 385670838 Manual Peak Response = 351019102 M4
M4 = Poor automated baseline construction.

# Pesticides Standards Data

# Initial Calibration

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST20** | **Ical Ref** | **: ICAL21322** |
| **Calibration dates** | **: 07/22/24 18:09 07/22/24 22:55** | | |

Calibration Files

1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ISTD | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetrachloro-m-xylene | 1.644 | 1.499 | 1.427 | 1.363 | 1.265 | 1.143 | 1.147 | 1.086 | 1.055 | *L | | 0.998 |
| 9) | | | | | | | | | | | | | | |
| 3) | | Hexachlorobenzene | 1.707 | 1.607 | 1.513 | 1.384 | 1.194 | 1.174 | 1.119 | 1.086 | | *L | | 0.999 |
| 0) | | | | | | | | | | | | | | |
| 4) | | alpha-BHC | 1.785 | 1.698 | 1.641 | 1.573 | 1.538 | 1.508 | 1.541 | 1.500 | 1.487 | | 1.586 | 6.42 |
| 5) | | gamma-BHC (li | 1.895 | 1.736 | 1.660 | 1.586 | 1.512 | 1.448 | 1.371 | 1.389 | 1.355 | 1.336 | 1.529 | 12.25 |
| 6) | | beta-BHC | 0.941 | 0.888 | 0.849 | 0.769 | 0.651 | 0.639 | 0.609 | 0.596 | | *L | | 0.999 |
| 1) | | | | | | | | | | | | | | |
| 7) | | delta-BHC | 1.696 | 1.612 | 1.549 | 1.490 | 1.425 | 1.376 | 1.403 | 1.380 | 1.374 | | 1.478 | 7.92 |
| 8) | | Heptachlor | 1.829 | 1.732 | 1.655 | 1.591 | 1.448 | 1.324 | 1.323 | 1.290 | 1.251 | | 1.494 | 14.30 |
| 9) | | Aldrin | 1.619 | 1.546 | 1.494 | 1.427 | 1.353 | 1.284 | 1.299 | 1.278 | 1.249 | | 1.394 | 9.56 |
| 10) | | Alachlor | 0.278 | 0.282 | 0.266 | 0.254 | 0.212 | 0.197 | 0.181 | | | *L | | 0.995 |
| 5) | | | | | | | | | | | | | | |
| 11) | | Chlorpyrifos | 0.976 | 0.933 | 0.886 | 0.783 | 0.625 | 0.587 | 0.549 | | | *L | | 0.996 |
| 8) | | | | | | | | | | | | | | |
| 12) | | Heptachlor Ep | 1.654 | 1.552 | 1.512 | 1.429 | 1.320 | 1.195 | 1.188 | 1.160 | 1.129 | | 1.349 | 14.41 |
| 13) | | gamma-Chlorda | 1.497 | 1.403 | 1.502 | 1.193 | 1.085 | 1.083 | 1.067 | 1.049 | | *L | | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 14) | | alpha-Chlorda | 1.706 | 1.615 | 1.553 | 1.477 | 1.352 | 1.227 | 1.220 | 1.198 | 1.173 | | *L | 0.999 |
| 6) | | | | | | | | | | | | | | |
| 15) | | 4,4'-DDE | 1.496 | 1.461 | 1.444 | 1.363 | 1.284 | 1.240 | 1.255 | 1.241 | 1.212 | | 1.333 | 8.22 |
| 16) | | Endosulfan I | 1.514 | 1.437 | 1.405 | 1.327 | 1.228 | 1.130 | 1.125 | 1.102 | 1.078 | | 1.261 | 13.01 |
| 17) | | Dieldrin | 1.575 | 1.491 | 1.423 | 1.431 | 1.241 | 1.175 | 1.182 | 1.172 | 1.143 | | 1.315 | 12.52 |
| 18) | | Endrin | 1.496 | 1.460 | 1.411 | 1.335 | 1.257 | 1.181 | 1.184 | 1.169 | 1.134 | | 1.292 | 10.64 |
| 19) | | 4,4'-DDD | 1.243 | 1.219 | 1.191 | 1.115 | 1.048 | 0.999 | 1.005 | 0.992 | 0.964 | | 1.086 | 9.96 |
| 20) | | Endosulfan II | 1.434 | 1.360 | 1.318 | 1.233 | 1.144 | 1.043 | 1.040 | 1.019 | 0.985 | | 1.175 | 14.19 |
| 21) | | 4,4'-DDT | 1.433 | 1.377 | 1.331 | 1.243 | 1.168 | 1.085 | 1.083 | 1.063 | 1.027 | | *L | 0.999 |
| 4) | | | | | | | | | | | | | | |
| 22) | | Endrin Aldehyde | 1.122 | 1.121 | 1.093 | 1.031 | 0.955 | 0.899 | 0.900 | 0.878 | 0.841 | | *L | 0.999 |
| 1) | | | | | | | | | | | | | | |
| 23) | | Methoxychlor | 0.899 | 0.858 | 0.804 | 0.745 | 0.620 | 0.597 | 0.564 | 0.529 | | | *L | 0.997 |
| 0) | | | | | | | | | | | | | | |
| 24) | | Mirex | 1.441 | 1.369 | 1.246 | 1.138 | 0.941 | 0.908 | 0.865 | 0.825 | | | *L | 0.998 |
| 2) | | | | | | | | | | | | | | |
| 25) | | Endosulfan Su | 1.493 | 1.383 | 1.352 | 1.238 | 1.128 | 0.990 | 0.982 | 0.951 | | | *L | 0.999 |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST20** | **Ical Ref** | **: ICAL21322** |
| **Calibration dates** | **: 07/22/24 18:09 07/22/24 22:55** | | |

Calibration Files

1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | | | | | | | | | | | | | | |
| 26) | | Endrin Ketone | 1.545 | 1.499 | 1.445 | 1.328 | 1.257 | 1.138 | 1.129 | 1.093 | 1.046 | | 1.275 | 14.69 |
| 27) | s | Decachlorobip | | | 1.662 | 1.558 | 1.442 | 1.334 | 1.117 | 1.085 | 1.028 | | *L | 0.998 |
| 6) | | | | | | | | | | | | | | |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.057 | 0.055 | 0.048 | 0.042 | 0.040 | 0.039 | | | *L | 0.998 |
| 4) | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | | 0.075 | 0.072 | 0.062 | 0.053 | 0.048 | 0.046 | | | *L | 0.996 |
| 4) | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | | 0.295 | 0.236 | 0.183 | 0.171 | 0.165 | 0.161 | | | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | | 0.358 | 0.335 | 0.280 | 0.264 | 0.255 | 0.248 | | | *L | 0.999 |
| 4) | | | | | | | | | | | | | | |
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) | l2 | toxaphene-1 | | | 0.043 | 0.049 | | 0.045 | 0.042 | 0.037 | | | *L | 0.992 |
| 4) | | | | | | | | | | | | | | |
| 35) | l2 | toxaphene-2 | | | 0.047 | 0.044 | | 0.044 | 0.041 | 0.037 | | | *L | 0.995 |
| 8) | | | | | | | | | | | | | | |
| 36) | l2 | toxaphene-4 | | | 0.038 | 0.031 | | 0.028 | 0.027 | 0.024 | | | *L | 0.995 |
| 7) | | | | | | | | | | | | | | |
| 37) | l2 | toxaphene-5 | | | 0.053 | 0.048 | | 0.043 | 0.041 | 0.037 | | | *L | 0.996 |
| 4) | | | | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST20** | **Ical Ref** | **: ICAL21322** |
| **Calibration dates** | **: 07/22/24 18:09 07/22/24 22:55** | | |

Signal #2 Calibration Files

1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ISTD | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra | | 1.450 | 1.362 | 1.318 | 1.260 | 1.198 | 1.124 | 1.131 | 1.094 | 1.074 | 1.223 | 10.77 |
| 3) | | Hexachloroben | | | 1.539 | 1.464 | 1.388 | 1.290 | 1.153 | 1.145 | 1.108 | 1.086 | *L | 0.999 |
| 6) | | | | | | | | | | | | | | |
| 4) | | alpha-BHC | | 1.634 | 1.553 | 1.526 | 1.475 | 1.468 | 1.505 | 1.556 | 1.539 | 1.546 | 1.533 | 3.23 |
| 5) | | gamma-BHC (li | 1.792 | 1.617 | 1.525 | 1.471 | 1.414 | 1.384 | 1.370 | 1.407 | 1.395 | 1.393 | 1.477 | 9.14 |
| 6) | | beta-BHC | | | 0.872 | 0.823 | 0.780 | 0.730 | 0.643 | 0.637 | 0.617 | 0.611 | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 7) | | delta-BHC | | 1.608 | 1.490 | 1.451 | 1.394 | 1.369 | 1.380 | 1.427 | 1.428 | 1.441 | 1.443 | 5.02 |
| 8) | | Heptachlor | | 1.675 | 1.555 | 1.505 | 1.433 | 1.351 | 1.278 | 1.299 | 1.280 | 1.249 | 1.403 | 10.58 |
| 9) | | Aldrin | | 1.432 | 1.352 | 1.311 | 1.253 | 1.210 | 1.199 | 1.228 | 1.226 | 1.205 | 1.268 | 6.32 |
| 10) | | Alachlor | | | 0.254 | 0.243 | 0.234 | 0.219 | 0.181 | 0.170 | 0.160 | | *L | 0.997 |
| 0) | | | | | | | | | | | | | | |
| 11) | | Chlorpyrifos | | | 0.921 | 0.889 | 0.834 | 0.752 | 0.624 | 0.595 | 0.565 | | *L | 0.998 |
| 1) | | | | | | | | | | | | | | |
| 12) | | Heptachlor Ep | | 1.532 | 1.419 | 1.363 | 1.305 | 1.219 | 1.149 | 1.157 | 1.147 | 1.123 | 1.268 | 11.39 |
| 13) | | gamma-Chlorda | | | 1.247 | 1.195 | 1.156 | 1.065 | 1.008 | 1.021 | 1.020 | 1.009 | 1.090 | 8.75 |
| 14) | | alpha-Chlorda | | 1.463 | 1.371 | 1.327 | 1.271 | 1.195 | 1.126 | 1.136 | 1.129 | 1.112 | 1.237 | 10.31 |
| 15) | | 4,4'-DDE | | 1.326 | 1.256 | 1.223 | 1.230 | 1.121 | 1.130 | 1.158 | 1.161 | 1.132 | 1.193 | 5.86 |
| 16) | | Endosulfan I | | 1.357 | 1.282 | 1.227 | 1.179 | 1.113 | 1.054 | 1.066 | 1.060 | 1.037 | 1.153 | 9.97 |
| 17) | | Dieldrin | | 1.316 | 1.244 | 1.210 | 1.152 | 1.103 | 1.089 | 1.115 | 1.120 | 1.099 | 1.161 | 6.78 |
| 18) | | Endrin | | 1.345 | 1.280 | 1.239 | 1.174 | 1.131 | 1.111 | 1.136 | 1.139 | 1.111 | 1.185 | 7.05 |
| 19) | | 4,4'-DDD | | 1.110 | 1.054 | 1.015 | 0.958 | 0.932 | 0.924 | 0.946 | 0.947 | 0.927 | 0.979 | 6.73 |
| 20) | | Endosulfan II | | 1.313 | 1.231 | 1.188 | 1.118 | 1.059 | 0.996 | 1.006 | 0.999 | 0.969 | 1.098 | 11.11 |
| 21) | | 4,4'-DDT | | 1.288 | 1.206 | 1.173 | 1.103 | 1.070 | 1.037 | 1.052 | 1.043 | 1.014 | 1.110 | 8.37 |
| 22) | | Endrin Aldehyde | | 1.027 | 0.993 | 0.959 | 0.910 | 0.859 | 0.848 | 0.861 | 0.853 | 0.824 | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 23) | | Methoxychlor | | | 0.820 | 0.775 | 0.708 | 0.661 | 0.573 | 0.560 | 0.538 | 0.506 | *L | 0.998 |
| 1) | | | | | | | | | | | | | | |
| 24) | | Mirex | | | 1.230 | 1.171 | 1.087 | 0.989 | 0.833 | 0.812 | 0.776 | 0.752 | *L | 0.998 |
| 9) | | | | | | | | | | | | | | |
| 25) | | Endosulfan Su | | 1.311 | 1.244 | 1.196 | 1.109 | 1.043 | 0.963 | 0.966 | 0.953 | | *L | 0.999 |
| 8) | | | | | | | | | | | | | | |
| 26) | | Endrin Ketone | | 1.393 | 1.333 | 1.297 | 1.209 | 1.171 | 1.097 | 1.101 | 1.082 | 1.042 | 1.192 | 10.45 |
| 27) | s | Decachlorobip | | | 1.277 | 1.205 | 1.140 | 1.071 | 0.916 | 0.898 | 0.859 | | *L | 0.999 |
| 1) | | | | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST20** | **Ical Ref** | **: ICAL21322** |
| **Calibration dates** | **: 07/22/24 18:09 07/22/24 22:55** | | |

Signal #2 Calibration Files

1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.050 | 0.049 | 0.043 | 0.037 | 0.035 | 0.032 | | | *L | 0.996 |
| 30) | l1 | chlordane-3 | | | 0.064 | 0.065 | 0.053 | 0.045 | 0.042 | 0.037 | | | *L | 0.992 |
| 31) | l1 | chlordane-4 | | | 0.189 | 0.175 | 0.150 | 0.141 | 0.137 | 0.126 | | | *L | 0.997 |
| 32) | l1 | chlordane-5 | | | 0.150 | 0.139 | 0.119 | 0.111 | 0.107 | 0.098 | | | *L | 0.997 |
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) | l2 | toxaphene-1 | | | 0.022 | 0.026 | | 0.022 | 0.022 | 0.021 | | | *L | 0.998 |
| 35) | l2 | toxaphene-2 | | | 0.035 | 0.038 | | 0.033 | 0.032 | 0.031 | | | *L | 0.999 |
| 36) | l2 | toxaphene-4 | | | 0.042 | 0.043 | | 0.038 | 0.037 | 0.036 | | | *L | 0.999 |
| 37) | l2 | toxaphene-5 | | | 0.045 | 0.042 | | 0.036 | 0.035 | 0.034 | | | *L | 0.999 |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST11** | **Ical Ref** | **: ICAL21365** |
| **Calibration dates** | **: 08/01/24 18:37 08/01/24 23:11** | | |

Calibration Files

1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetrachloro-m-xylene | | 1.070 | 1.052 | 1.075 | 1.017 | 1.028 | 1.042 | 1.068 | 1.019 | 0.980 | 1.039 | 3.00 |
| 3) | t | Hexachlorobenzene | | 1.537 | 1.511 | 1.518 | 1.421 | 1.398 | 1.344 | 1.370 | 1.302 | 1.253 | 1.406 | 7.13 |
| 4) | t | alpha-BHC | | 1.293 | 1.326 | 1.375 | 1.322 | 1.428 | 1.579 | 1.657 | 1.604 | 1.561 | 1.461 | 9.59 |
| 5) | t | gamma-BHC (li | 1.464 | 1.305 | 1.312 | 1.356 | 1.278 | 1.355 | 1.457 | 1.524 | 1.473 | 1.430 | 1.395 | 6.06 |
| 6) | t | beta-BHC | | 0.665 | 0.662 | 0.666 | 0.624 | 0.626 | 0.607 | 0.622 | 0.597 | 0.580 | 0.628 | 4.95 |
| 7) | t | delta-BHC | | 1.249 | 1.257 | 1.303 | 1.246 | 1.337 | 1.470 | 1.546 | 1.502 | 1.457 | 1.374 | 8.70 |
| 8) | t | Heptachlor | | 1.313 | 1.322 | 1.357 | 1.281 | 1.318 | 1.358 | 1.400 | 1.323 | 1.217 | 1.321 | 3.91 |
| 9) | t | Aldrin | | 1.175 | 1.189 | 1.221 | 1.154 | 1.205 | 1.287 | 1.348 | 1.300 | 1.220 | 1.233 | 5.24 |
| 10) | t | Alachlor | | | 0.247 | 0.248 | 0.233 | 0.238 | 0.226 | 0.221 | 0.199 | | 0.230 | 7.42 |
| 11) | t | Chlorpyrifos | | | 0.674 | 0.682 | 0.634 | 0.615 | 0.538 | 0.520 | 0.466 | | 0.590 | 14.01 |
| 12) | t | Heptachlor Epoxide | | 1.181 | 1.208 | 1.238 | 1.159 | 1.186 | 1.202 | 1.236 | 1.175 | 1.082 | 1.185 | 3.96 |
| 13) | t | gamma-Chlordane (trans) | | 1.079 | 1.070 | 1.097 | 1.026 | 1.044 | 1.078 | 1.133 | 1.110 | 1.057 | 1.077 | 3.07 |
| 14) | t | alpha-Chlordane (cis) | | 1.192 | 1.207 | 1.248 | 1.181 | 1.200 | 1.223 | 1.275 | 1.242 | 1.178 | 1.216 | 2.74 |
| 15) | t | 4,4'-DDE | | 1.107 | 1.137 | 1.186 | 1.119 | 1.167 | 1.226 | 1.298 | 1.275 | 1.207 | 1.192 | 5.61 |
| 16) | t | Endosulfan I | | 1.109 | 1.123 | 1.156 | 1.085 | 1.112 | 1.130 | 1.172 | 1.121 | 1.038 | 1.116 | 3.49 |
| 17) | t | Dieldrin | | 1.070 | 1.103 | 1.138 | 1.067 | 1.113 | 1.174 | 1.234 | 1.196 | 1.123 | 1.135 | 4.98 |
| 18) | t | Endrin | | 1.098 | 1.132 | 1.175 | 1.100 | 1.144 | 1.192 | 1.239 | 1.188 | 1.107 | 1.153 | 4.25 |
| 19) | t | 4,4'-DDD | | 0.857 | 0.879 | 0.918 | 0.859 | 0.900 | 0.956 | 1.015 | 1.002 | 0.960 | 0.927 | 6.36 |
| 20) | t | Endosulfan II | | 1.034 | 1.062 | 1.094 | 1.026 | 1.054 | 1.071 | 1.111 | 1.052 | 0.964 | 1.052 | 4.03 |
| 21) | t | 4,4'-DDT | | 0.969 | 1.034 | 1.071 | 0.998 | 1.036 | 1.083 | 1.139 | 1.124 | 1.071 | 1.058 | 5.22 |
| 22) | t | Endrin Aldehyde | | 0.906 | 0.889 | 0.917 | 0.869 | 0.878 | 0.877 | 0.913 | 0.888 | 0.841 | 0.886 | 2.70 |
| 23) | t | Methoxychlor | | 0.656 | 0.635 | 0.675 | 0.610 | 0.607 | 0.565 | 0.567 | 0.527 | 0.485 | 0.592 | 10.43 |
| 24) | t | Mirex | | | 1.027 | 1.066 | 0.980 | 0.964 | 0.880 | 0.899 | 0.864 | 0.822 | 0.938 | 9.06 |
| 25) | t | Endosulfan Sulfate | | 1.084 | 1.035 | 1.065 | 0.986 | 1.001 | 0.988 | 1.026 | 0.981 | 0.922 | 1.010 | 4.83 |
| 26) | t | Endrin Ketone | | 1.166 | 1.200 | 1.247 | 1.167 | 1.200 | 1.196 | 1.227 | 1.160 | 1.085 | 1.183 | 3.94 |
| 27) | s | Decachlorobiphenyl | | 1.355 | 1.316 | 1.321 | 1.208 | 1.146 | 1.036 | 1.055 | 1.020 | 1.010 | 1.163 | 12.13 |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.038 | 0.036 | 0.037 | 0.037 | 0.038 | 0.037 | 0.036 | | *L | 0.999 |
| 3) | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | | 0.049 | 0.052 | 0.049 | 0.046 | 0.045 | 0.044 | 0.040 | | *L | 0.997 |
| 4) | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | | 0.164 | 0.158 | 0.156 | 0.160 | 0.165 | 0.162 | 0.151 | | *L | 0.998 |
| 6) | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | | 0.243 | 0.244 | 0.245 | 0.250 | 0.255 | 0.249 | 0.230 | | *L | 0.998 |
| 2) | | | | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST11** | **Ical Ref** | **: ICAL21365** |
| **Calibration dates** | **: 08/01/24 18:37 08/01/24 23:11** | | |

Calibration Files

1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33) i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) l2 | toxaphene-2 | | | 0.038 | 0.046 | | 0.055 | 0.055 | 0.056 | | | *L | 0.999 |
| 8) | | | | | | | | | | | | | |
| 35) l2 | toxaphene-3 | | | 0.032 | 0.035 | | 0.042 | 0.043 | 0.044 | | | *L | 0.999 |
| 5) | | | | | | | | | | | | | |
| 36) l2 | toxaphene-4 | | | 0.041 | 0.040 | | 0.042 | 0.043 | 0.045 | | | *L | 0.999 |
| 2) | | | | | | | | | | | | | |
| 37) l2 | toxaphene-5 | | | 0.053 | 0.041 | | 0.039 | 0.039 | 0.040 | | | *L | 0.999 |
| 9) | | | | | | | | | | | | | |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST11** | **Ical Ref** | **: ICAL21365** |
| **Calibration dates** | **: 08/01/24 18:37 08/01/24 23:11** | | |

Signal #2 Calibration Files

1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra | | | 1.206 | 1.206 | 1.141 | 1.107 | 1.082 | 1.085 | 1.067 | 1.091 | 1.038 | 1.114 | 5.33 |
| 3) | t | Hexachloroben | | | 1.451 | 1.390 | 1.323 | 1.249 | 1.197 | 1.146 | 1.145 | 1.144 | 1.106 | 1.239 | 9.92 |
| 4) | t | alpha-BHC | | | 1.558 | 1.563 | 1.526 | 1.479 | 1.547 | 1.686 | 1.736 | 1.764 | 1.719 | 1.620 | 6.53 |
| 5) | t | gamma-BHC (li | | 1.777 | 1.551 | 1.516 | 1.480 | 1.413 | 1.442 | 1.525 | 1.563 | 1.584 | 1.540 | 1.539 | 6.46 |
| 6) | t | beta-BHC | | | 0.854 | 0.824 | 0.779 | 0.737 | 0.692 | 0.642 | 0.639 | 0.637 | 0.614 | *L | 0.999 |
| 6) | | | | | | | | | | | | | | | |
| 7) | t | delta-BHC | | | 1.529 | 1.507 | 1.460 | 1.411 | 1.443 | 1.548 | 1.598 | 1.627 | 1.582 | 1.523 | 4.86 |
| 8) | t | Heptachlor | | | 1.786 | 1.721 | 1.657 | 1.575 | 1.545 | 1.553 | 1.565 | 1.548 | 1.427 | 1.598 | 6.72 |
| 9) | t | Aldrin | | | 1.511 | 1.468 | 1.436 | 1.367 | 1.367 | 1.434 | 1.469 | 1.478 | 1.382 | 1.435 | 3.65 |
| 10) | t | Alachlor | | | 0.293 | 0.281 | 0.264 | 0.241 | 0.197 | 0.183 | 0.172 | | *L | 0.996 | |
| 7) | | | | | | | | | | | | | | | |
| 11) | t | Chlorpyrifos | | | 1.095 | 1.043 | 0.969 | 0.877 | 0.736 | 0.700 | 0.666 | | *L | 0.998 | |
| 3) | | | | | | | | | | | | | | | |
| 12) | t | Heptachlor Ep | | 1.616 | 1.577 | 1.520 | 1.425 | 1.372 | 1.353 | 1.362 | 1.352 | 1.252 | 1.425 | 8.44 | |
| 13) | t | gamma-Chlorda | | 1.483 | 1.457 | 1.376 | 1.298 | 1.234 | 1.224 | 1.252 | 1.275 | 1.205 | 1.312 | 7.85 | |
| 14) | t | alpha-Chlorda | | 1.641 | 1.577 | 1.521 | 1.435 | 1.382 | 1.359 | 1.381 | 1.400 | 1.318 | 1.446 | 7.54 | |
| 15) | t | 4,4'-DDE | | 1.377 | 1.359 | 1.330 | 1.263 | 1.272 | 1.348 | 1.390 | 1.418 | 1.327 | 1.343 | 3.82 | |
| 16) | t | Endosulfan I | | 1.515 | 1.476 | 1.419 | 1.334 | 1.284 | 1.260 | 1.269 | 1.263 | 1.167 | 1.332 | 8.59 | |
| 17) | t | Dieldrin | | 1.415 | 1.389 | 1.352 | 1.281 | 1.267 | 1.305 | 1.334 | 1.344 | 1.257 | 1.327 | 4.11 | |
| 18) | t | Endrin | | 1.442 | 1.411 | 1.375 | 1.305 | 1.290 | 1.326 | 1.350 | 1.356 | 1.265 | 1.347 | 4.25 | |
| 19) | t | 4,4'-DDD | | 1.118 | 1.104 | 1.084 | 1.022 | 1.026 | 1.071 | 1.106 | 1.134 | 1.088 | 1.084 | 3.57 | |
| 20) | t | Endosulfan II | | 1.364 | 1.341 | 1.298 | 1.220 | 1.180 | 1.154 | 1.164 | 1.150 | 1.053 | 1.214 | 8.39 | |
| 21) | t | 4,4'-DDT | | 1.293 | 1.294 | 1.271 | 1.196 | 1.196 | 1.227 | 1.262 | 1.290 | 1.222 | 1.250 | 3.26 | |
| 22) | t | Endrin Aldehyde | | 1.156 | 1.131 | 1.093 | 1.025 | 0.982 | 0.941 | 0.951 | 0.957 | 0.906 | *L | 0.999 | |
| 3) | | | | | | | | | | | | | | | |
| 23) | t | Methoxychlor | | 0.848 | 0.816 | 0.797 | 0.739 | 0.695 | 0.630 | 0.620 | 0.614 | 0.581 | 0.704 | 14.13 | |
| 24) | t | Mirex | | | 1.298 | 1.250 | 1.156 | 1.061 | 0.921 | 0.910 | 0.914 | 0.867 | *L | 0.999 | |
| 3) | | | | | | | | | | | | | | | |
| 25) | t | Endosulfan Su | | 1.382 | 1.336 | 1.302 | 1.218 | 1.159 | 1.107 | 1.116 | 1.118 | 1.054 | 1.199 | 9.68 | |
| 26) | t | Endrin Ketone | | 1.378 | 1.372 | 1.340 | 1.264 | 1.245 | 1.205 | 1.207 | 1.200 | 1.136 | 1.261 | 6.75 | |
| 27) | s | Decachlorobip | | 1.252 | 1.219 | 1.185 | 1.105 | 1.040 | 0.936 | 0.932 | 0.943 | 0.929 | 1.060 | 12.61 | |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.054 | 0.052 | 0.044 | 0.039 | 0.040 | 0.040 | 0.035 | | *L | 0.996 | |
| 3) | | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | | 0.070 | 0.064 | 0.055 | 0.047 | 0.046 | 0.044 | 0.037 | | *L | 0.991 | |

# Initial Calibration Summary
# Form 6
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | **: Roux Env. Eng. & Geology, DPC** | **Lab Number** | **: L2453053** |
| **Project Name** | **: CORAM MATERIALS** | **Project Number** | **: 2232.0006Y005** |
| **Instrument ID** | **: PEST11** | **Ical Ref** | **: ICAL21365** |
| **Calibration dates** | **: 08/01/24 18:37 08/01/24 23:11** | | |

Signal #2 Calibration Files

1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2) | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | | 0.208 | 0.191 | 0.166 | 0.163 | 0.167 | 0.169 | 0.147 | | *L | 0.995 |
| 9) | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | | 0.162 | 0.149 | 0.130 | 0.126 | 0.128 | 0.129 | 0.113 | | *L | 0.996 |
| 1) | | | | | | | | | | | | | | |
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) | l2 | toxaphene-2 | | | 0.028 | 0.028 | | 0.023 | 0.023 | 0.024 | | | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 35) | l2 | toxaphene-3 | | | 0.042 | 0.040 | | 0.035 | 0.035 | 0.035 | | | *L | 0.999 |
| 8) | | | | | | | | | | | | | | |
| 36) | l2 | toxaphene-4 | | | 0.049 | 0.047 | | 0.041 | 0.041 | 0.042 | | | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |
| 37) | l2 | toxaphene-5 | | | 0.050 | 0.045 | | 0.038 | 0.038 | 0.039 | | | *L | 0.999 |
| 7) | | | | | | | | | | | | | | |

# Response Factor Report PEST 20

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024
Response Via : Initial Calibration

Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra... | | 1.644 | 1.499 | 1.427 | 1.363 | 1.265 | 1.143 | 1.147 | 1.086 | 1.055 | *L | | 0.9989 |
| 3) | | Hexachloroben... | | | 1.707 | 1.607 | 1.513 | 1.384 | 1.194 | 1.174 | 1.119 | 1.086 | *L | | 0.9990 |
| 4) | | alpha-BHC | | 1.785 | 1.698 | 1.641 | 1.573 | 1.538 | 1.508 | 1.541 | 1.500 | 1.487 | 1.586 | | 6.42 |
| 5) | | gamma-BHC (li... | 1.895 | 1.736 | 1.660 | 1.586 | 1.512 | 1.448 | 1.371 | 1.389 | 1.355 | 1.336 | 1.529 | | 12.25 |
| 6) | | beta-BHC | | | 0.941 | 0.888 | 0.849 | 0.769 | 0.651 | 0.639 | 0.609 | 0.596 | *L | | 0.9991 |
| 7) | | delta-BHC | | 1.696 | 1.612 | 1.549 | 1.490 | 1.425 | 1.376 | 1.403 | 1.380 | 1.374 | 1.478 | | 7.92 |
| 8) | | Heptachlor | | 1.829 | 1.732 | 1.655 | 1.591 | 1.448 | 1.324 | 1.323 | 1.290 | 1.251 | 1.494 | | 14.30 |
| 9) | | Aldrin | | 1.619 | 1.546 | 1.494 | 1.427 | 1.353 | 1.284 | 1.299 | 1.278 | 1.249 | 1.394 | | 9.56 |
| 10) | | Alachlor | | | 0.278 | 0.282 | 0.266 | 0.254 | 0.212 | 0.197 | 0.181 | | *L | | 0.9955 |
| 11) | | Chlorpyrifos | | | 0.976 | 0.933 | 0.886 | 0.783 | 0.625 | 0.587 | 0.549 | | *L | | 0.9968 |
| 12) | | Heptachlor Ep... | | 1.654 | 1.552 | 1.512 | 1.429 | 1.320 | 1.195 | 1.188 | 1.160 | 1.129 | 1.349 | | 14.41 |
| 13) | | gamma-Chlorda... | | | 1.497 | 1.403 | 1.502 | 1.193 | 1.085 | 1.083 | 1.067 | 1.049 | *L | | 0.9997 |
| 14) | | alpha-Chlorda... | | 1.706 | 1.615 | 1.553 | 1.477 | 1.352 | 1.227 | 1.220 | 1.198 | 1.173 | *L | | 0.9996 |
| 15) | | 4,4'-DDE | | 1.496 | 1.461 | 1.444 | 1.363 | 1.284 | 1.240 | 1.255 | 1.241 | 1.212 | 1.333 | | 8.22 |
| 16) | | Endosulfan I | | 1.514 | 1.437 | 1.405 | 1.327 | 1.228 | 1.130 | 1.125 | 1.102 | 1.078 | 1.261 | | 13.01 |

# Response Factor Report PEST 20

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024
Response Via : Initial Calibration

Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17) | | Dieldrin | | 1.575 | 1.491 | 1.423 | 1.431 | 1.241 | 1.175 | 1.182 | 1.172 | 1.143 | 1.315 | 12.52 |
| 18) | | Endrin | | 1.496 | 1.460 | 1.411 | 1.335 | 1.257 | 1.181 | 1.184 | 1.169 | 1.134 | 1.292 | 10.64 |
| 19) | | 4,4'-DDD | | 1.243 | 1.219 | 1.191 | 1.115 | 1.048 | 0.999 | 1.005 | 0.992 | 0.964 | 1.086 | 9.96 |
| 20) | | Endosulfan II | | 1.434 | 1.360 | 1.318 | 1.233 | 1.144 | 1.043 | 1.040 | 1.019 | 0.985 | 1.175 | 14.19 |
| 21) | | 4,4'-DDT | | 1.433 | 1.377 | 1.331 | 1.243 | 1.168 | 1.085 | 1.083 | 1.063 | 1.027 | *L | 0.999 |
| 4 | | | | | | | | | | | | | | |
| 22) | | Endrin Aldehyde | | 1.122 | 1.121 | 1.093 | 1.031 | 0.955 | 0.899 | 0.900 | 0.878 | 0.841 | *L | 0.999 |
| 1 | | | | | | | | | | | | | | |
| 23) | | Methoxychlor | | | 0.899 | 0.858 | 0.804 | 0.745 | 0.620 | 0.597 | 0.564 | 0.529 | *L | 0.997 |
| 0 | | | | | | | | | | | | | | |
| 24) | | Mirex | | | 1.441 | 1.369 | 1.246 | 1.138 | 0.941 | 0.908 | 0.865 | 0.825 | *L | 0.998 |
| 2 | | | | | | | | | | | | | | |
| 25) | | Endosulfan Su... | | 1.493 | 1.383 | 1.352 | 1.238 | 1.128 | 0.990 | 0.982 | 0.951 | | *L | 0.999 |
| 1 | | | | | | | | | | | | | | |
| 26) | | Endrin Ketone | | 1.545 | 1.499 | 1.445 | 1.328 | 1.257 | 1.138 | 1.129 | 1.093 | 1.046 | 1.275 | 14.69 |
| 27) | s | Decachlorobip... | | | 1.662 | 1.558 | 1.442 | 1.334 | 1.117 | 1.085 | 1.028 | | *L | 0.998 |
| 6 | | | | | | | | | | | | | | |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.057 | 0.055 | 0.048 | 0.042 | 0.040 | 0.039 | | | *L | 0.998 |
| 4 | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | | 0.075 | 0.072 | 0.062 | 0.053 | 0.048 | 0.046 | | | *L | 0.996 |
| 4 | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | | 0.295 | 0.236 | 0.183 | 0.171 | 0.165 | 0.161 | | | *L | 0.999 |
| 7 | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | | 0.358 | 0.335 | 0.280 | 0.264 | 0.255 | 0.248 | | | *L | 0.999 |
| 4 | | | | | | | | | | | | | | |

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024
Response Via : Initial Calibration

Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) | l2 | toxaphene-1 | | | 0.043 | 0.049 | | 0.045 | 0.042 | 0.037 | | | *L | 0.9924 |
| 35) | l2 | toxaphene-2 | | | 0.047 | 0.044 | | 0.044 | 0.041 | 0.037 | | | *L | 0.9958 |
| 36) | l2 | toxaphene-4 | | | 0.038 | 0.031 | | 0.028 | 0.027 | 0.024 | | | *L | 0.9957 |
| 37) | l2 | toxaphene-5 | | | 0.053 | 0.048 | | 0.043 | 0.041 | 0.037 | | | *L | 0.9964 |

Signal #2 Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra... | | 1.450 | 1.362 | 1.318 | 1.260 | 1.198 | 1.124 | 1.131 | 1.094 | 1.074 | 1.223 | 10.77 |
| 3) | | Hexachloroben... | | | 1.539 | 1.464 | 1.388 | 1.290 | 1.153 | 1.145 | 1.108 | 1.086 | *L | 0.9996 |
| 4) | | alpha-BHC | | 1.634 | 1.553 | 1.526 | 1.475 | 1.468 | 1.505 | 1.556 | 1.539 | 1.546 | 1.533 | 3.23 |
| 5) | | gamma-BHC (li... | 1.792 | 1.617 | 1.525 | 1.471 | 1.414 | 1.384 | 1.370 | 1.407 | 1.395 | 1.393 | 1.477 | 9.14 |
| 6) | | beta-BHC | | | 0.872 | 0.823 | 0.780 | 0.730 | 0.643 | 0.637 | 0.617 | 0.611 | *L | 0.9997 |
| 7) | | delta-BHC | | 1.608 | 1.490 | 1.451 | 1.394 | 1.369 | 1.380 | 1.427 | 1.428 | 1.441 | 1.443 | 5.02 |
| 8) | | Heptachlor | | 1.675 | 1.555 | 1.505 | 1.433 | 1.351 | 1.278 | 1.299 | 1.280 | 1.249 | 1.403 | 10.58 |
| 9) | | Aldrin | | 1.432 | 1.352 | 1.311 | 1.253 | 1.210 | 1.199 | 1.228 | 1.226 | 1.205 | 1.268 | 6.32 |

# Response Factor Report PEST 20

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024
Response Via : Initial Calibration

Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10) | Alachlor | | | 0.254 | 0.243 | 0.234 | 0.219 | 0.181 | 0.170 | 0.160 | | *L | 0.997 |
| 11) | Chlorpyrifos | | | 0.921 | 0.889 | 0.834 | 0.752 | 0.624 | 0.595 | 0.565 | | *L | 0.998 |
| 12) | Heptachlor Ep... | | 1.532 | 1.419 | 1.363 | 1.305 | 1.219 | 1.149 | 1.157 | 1.147 | 1.123 | 1.268 | 11.39 |
| 13) | gamma-Chlorda... | | | 1.247 | 1.195 | 1.156 | 1.065 | 1.008 | 1.021 | 1.020 | 1.009 | 1.090 | 8.75 |
| 14) | alpha-Chlorda... | | 1.463 | 1.371 | 1.327 | 1.271 | 1.195 | 1.126 | 1.136 | 1.129 | 1.112 | 1.237 | 10.31 |
| 15) | 4,4'-DDE | | 1.326 | 1.256 | 1.223 | 1.230 | 1.121 | 1.130 | 1.158 | 1.161 | 1.132 | 1.193 | 5.86 |
| 16) | Endosulfan I | | 1.357 | 1.282 | 1.227 | 1.179 | 1.113 | 1.054 | 1.066 | 1.060 | 1.037 | 1.153 | 9.97 |
| 17) | Dieldrin | | 1.316 | 1.244 | 1.210 | 1.152 | 1.103 | 1.089 | 1.115 | 1.120 | 1.099 | 1.161 | 6.78 |
| 18) | Endrin | | 1.345 | 1.280 | 1.239 | 1.174 | 1.131 | 1.111 | 1.136 | 1.139 | 1.111 | 1.185 | 7.05 |
| 19) | 4,4'-DDD | | 1.110 | 1.054 | 1.015 | 0.958 | 0.932 | 0.924 | 0.946 | 0.947 | 0.927 | 0.979 | 6.73 |
| 20) | Endosulfan II | | 1.313 | 1.231 | 1.188 | 1.118 | 1.059 | 0.996 | 1.006 | 0.999 | 0.969 | 1.098 | 11.11 |
| 21) | 4,4'-DDT | | 1.288 | 1.206 | 1.173 | 1.103 | 1.070 | 1.037 | 1.052 | 1.043 | 1.014 | 1.110 | 8.37 |
| 22) | Endrin Aldehyde | | 1.027 | 0.993 | 0.959 | 0.910 | 0.859 | 0.848 | 0.861 | 0.853 | 0.824 | *L | 0.999 |
| 23) | Methoxychlor | | | 0.820 | 0.775 | 0.708 | 0.661 | 0.573 | 0.560 | 0.538 | 0.506 | *L | 0.998 |
| 24) | Mirex | | | 1.230 | 1.171 | 1.087 | 0.989 | 0.833 | 0.812 | 0.776 | 0.752 | *L | 0.998 |
| 25) | Endosulfan Su... | | 1.311 | 1.244 | 1.196 | 1.109 | 1.043 | 0.963 | 0.966 | 0.953 | | *L | 0.999 |

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024
Response Via : Initial Calibration

Calibration Files
1 =20240722i-03.D 2 =20240722i-04.D 3 =20240722i-22.D 4 =20240722i-23.D 5 =20240722i-16.D
7 =20240722i-24.D 8 =20240722i-25.D 9 =20240722i-26.D 10 =20240722i-20.D 11 =20240722i-12.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26) | | Endrin Ketone | 1.393 | 1.333 | 1.297 | 1.209 | 1.171 | 1.097 | 1.101 | 1.082 | 1.042 | | 1.192 | | 10.45 |
| 27) | s | Decachlorobip... | | 1.277 | 1.205 | 1.140 | 1.071 | 0.916 | 0.898 | 0.859 | | | *L | | 0.999 |
| 1 | | | | | | | | | | | | | | | |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | 0.050 | 0.049 | 0.043 | 0.037 | 0.035 | 0.032 | | | | *L | | 0.996 |
| 3 | | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | 0.064 | 0.065 | 0.053 | 0.045 | 0.042 | 0.037 | | | | *L | | 0.992 |
| 9 | | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | 0.189 | 0.175 | 0.150 | 0.141 | 0.137 | 0.126 | | | | *L | | 0.997 |
| 6 | | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | 0.150 | 0.139 | 0.119 | 0.111 | 0.107 | 0.098 | | | | *L | | 0.997 |
| 2 | | | | | | | | | | | | | | | |
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | | |
| 34) | l2 | toxaphene-1 | | 0.022 | 0.026 | | 0.022 | 0.022 | 0.021 | | | | *L | | 0.998 |
| 7 | | | | | | | | | | | | | | | |
| 35) | l2 | toxaphene-2 | | 0.035 | 0.038 | | 0.033 | 0.032 | 0.031 | | | | *L | | 0.999 |
| 1 | | | | | | | | | | | | | | | |
| 36) | l2 | toxaphene-4 | | 0.042 | 0.043 | | 0.038 | 0.037 | 0.036 | | | | *L | | 0.999 |
| 4 | | | | | | | | | | | | | | | |
| 37) | l2 | toxaphene-5 | | 0.045 | 0.042 | | 0.036 | 0.035 | 0.034 | | | | *L | | 0.999 |
| 5 | | | | | | | | | | | | | | | |

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 17:57
Operator : pest20:ejl
Sample : pem20240722i-01,42e,,pp 11667 - (Sig #1); pem-01,42e,,pp 11667 - (Sig #2)
Misc : WG1950439,
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:37:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.009 | 2.064 | 51188141 | 81824613 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | |
| 15) | 4,4'-DDE | 4.804 | 5.475 | 370747 | 550393 | 0.136 | 0.141 |
| 18) | Endrin | 5.353 | 5.913 | 110.2E6 | 171.9E6 | 41.654 | 44.313 |
| 19) | 4,4'-DDD | 5.444 | 6.020 | 466697 | 574327 | 0.210 | 0.179 |
| 21) | 4,4'-DDT | 5.712 | 6.288 | 196.4E6 | 316.8E6 | 91.145 | 87.225 |
| 22) | Endrin Aldeh | 5.966 | 6.390 | 287216 | 248230 | N.D. | N.D. |
| 26) | Endrin Keton | 6.566 | 7.031 | 1458392 | 2156015 | 0.559 | 0.553 |
| | Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |
| | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

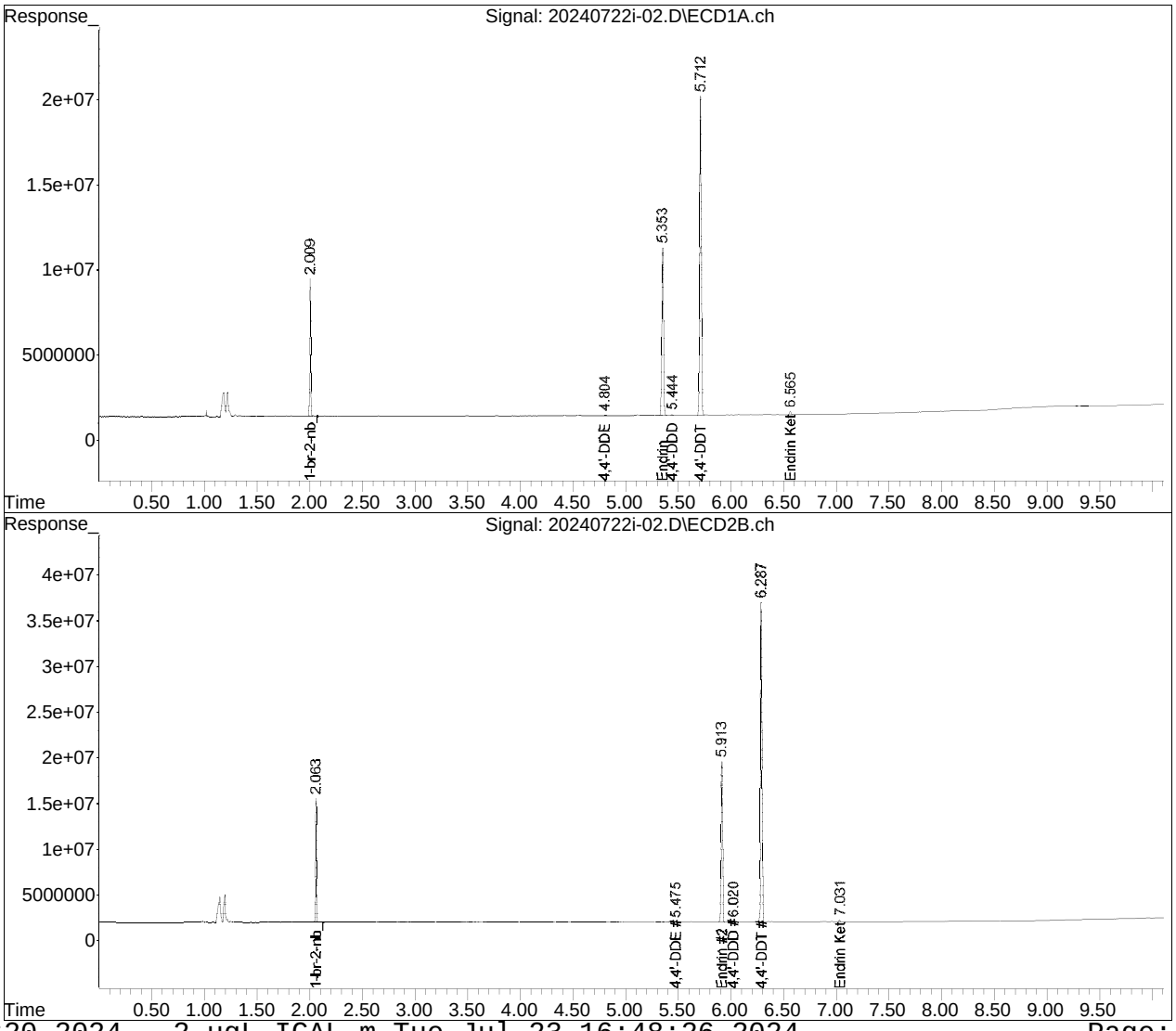
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 17:57
Operator : pest20:ejl
Sample : pem20240722i-01,42e,,pp 11667 - (Sig #1); pem-01,42e,,pp 11667 - (
Misc : WG1950439,
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:37:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

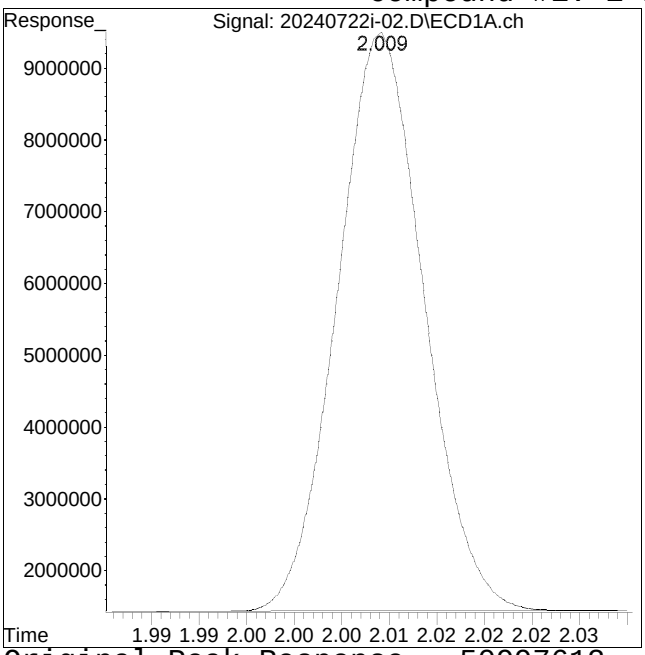
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



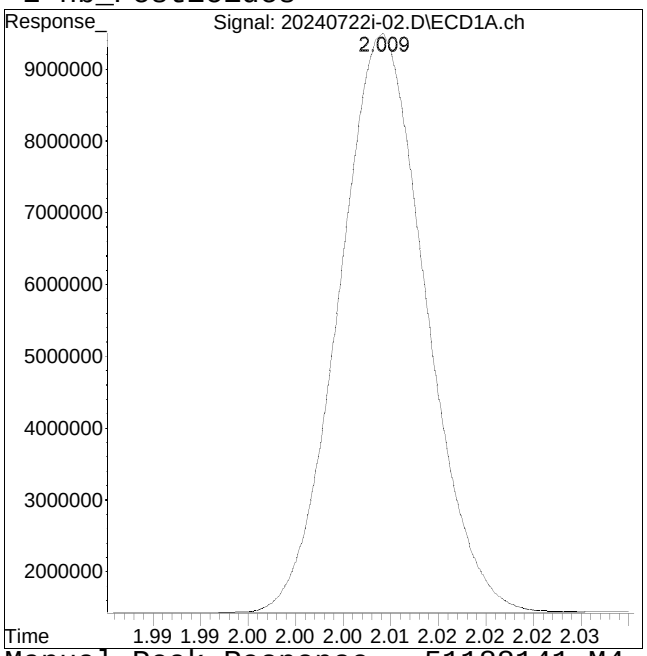
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-02.D
Date Inj'd : 7/22/2024 17:57
Sample : pem20240722i-01,42e,,pp 11
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:37 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 50997612




Manual Peak Response = 51188141 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-03.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:09
Operator : pest20:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:53:09 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:52:59 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.006 | 2.062 | 52058251 | 82759009 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 3.107 | 3.476 | 1972592 | 2965760 | 0.637M3 | 0.621M4 |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-03.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:09
Operator : pest20:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:53:09 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:52:59 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

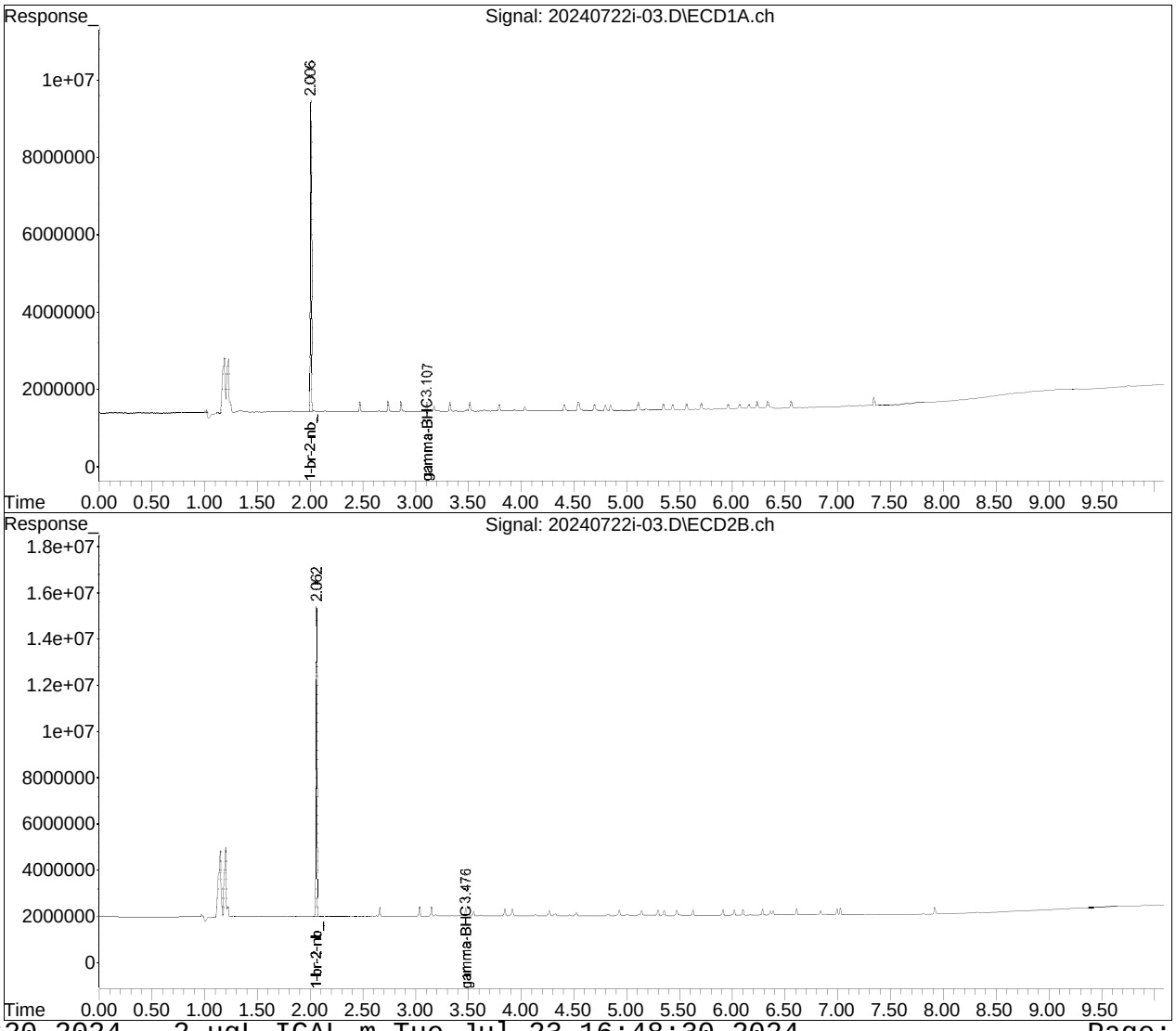
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-03.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  18:09
Operator : pest20:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 3  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:53:09 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:52:59 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

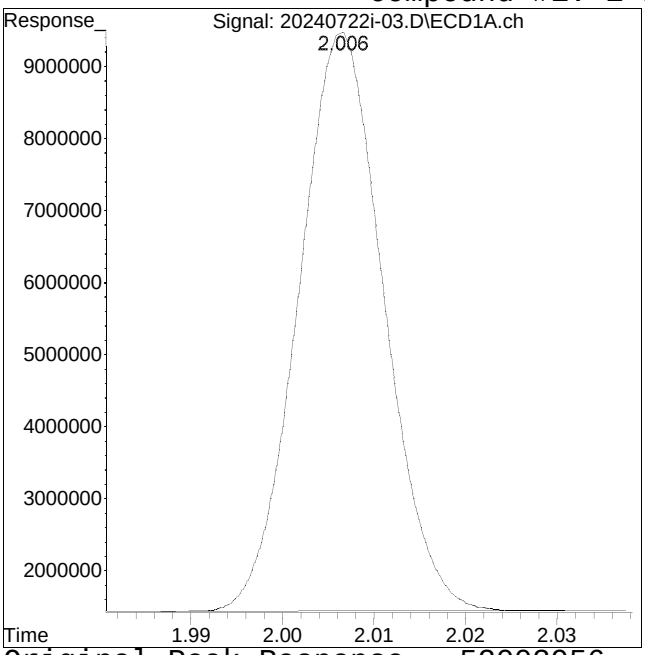


# Manual Integration Report

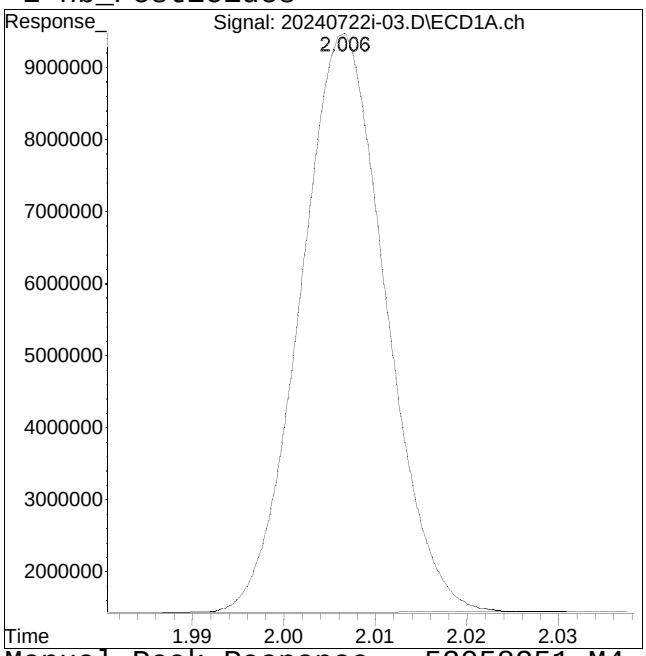
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-03.D
Date Inj'd : 7/22/2024 18:09
Sample : il1pest,42e,,pp 11687 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:53 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 52003956



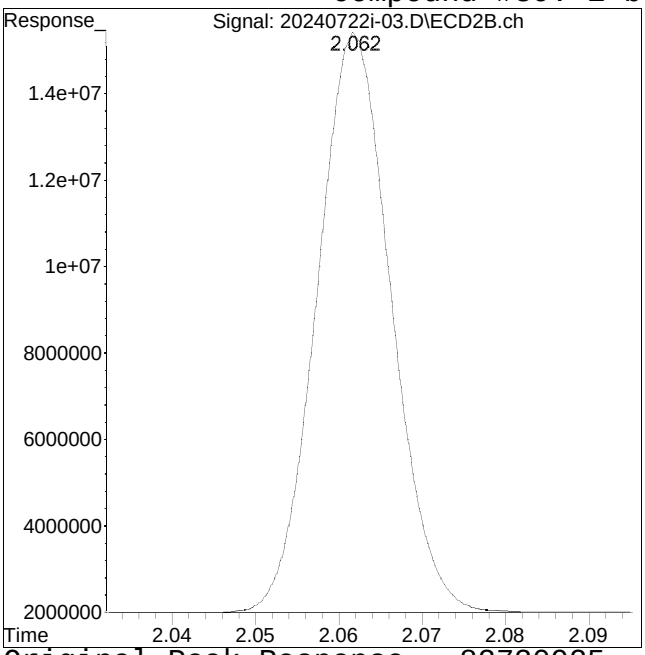

Manual Peak Response = 52058251 M4

M4 = Poor automated baseline construction.

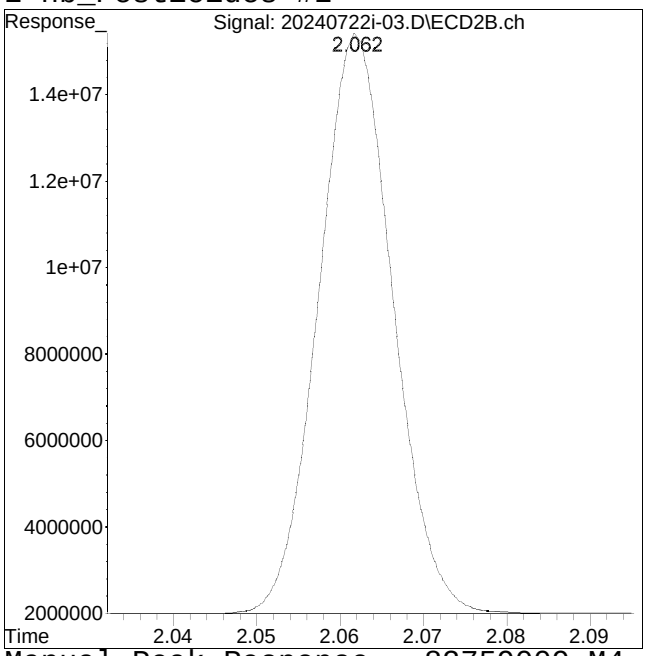
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-03.D
Date Inj'd : 7/22/2024 18:09
Sample : il1pest,42e,,pp 11687 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:53 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 82730925



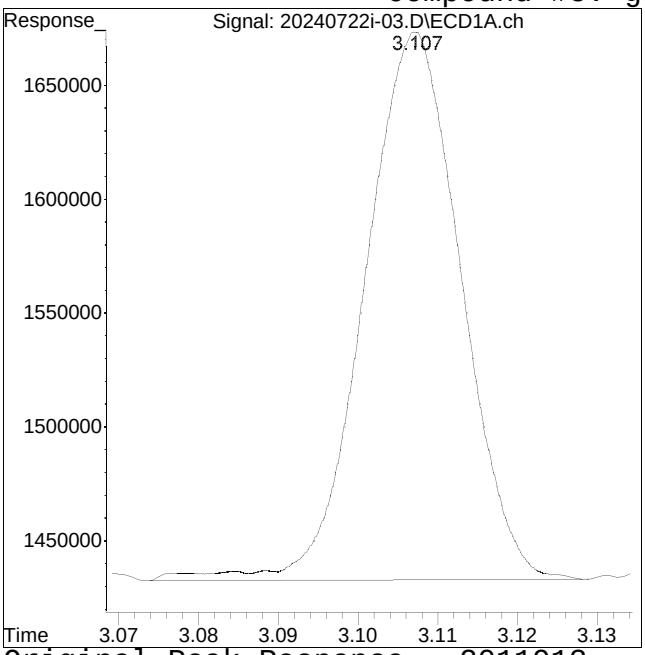

Manual Peak Response = 82759009 M4

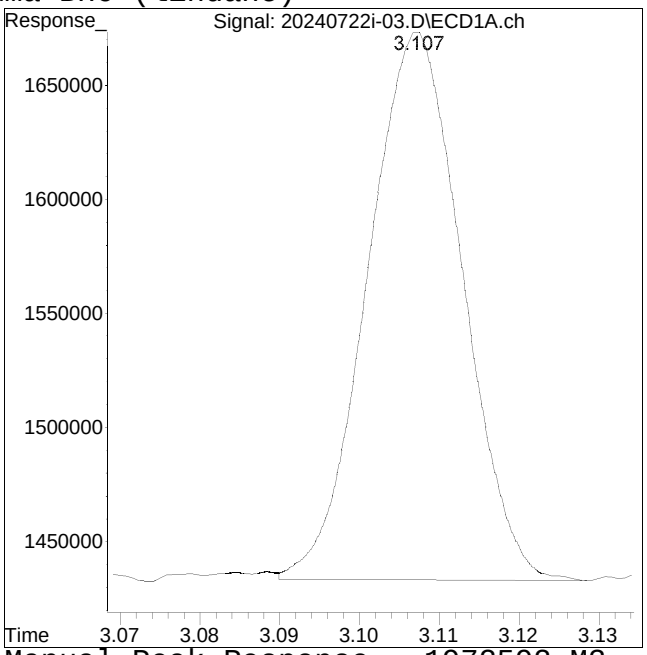
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-03.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:09 Instrument : PEST 20
Sample : il1pest,42e,,pp 11687 L0.0Quant Date : 7/23/2024 1:53 pm

Compound #5: gamma-BHC (lindane)



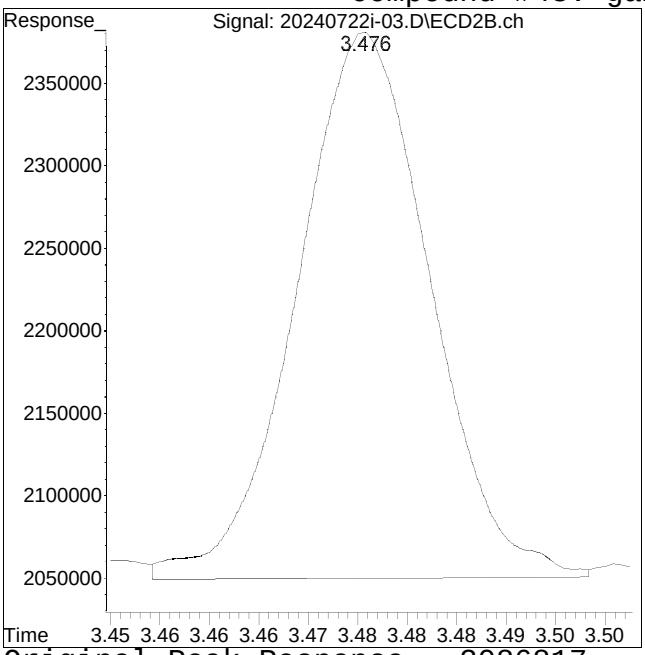

Original Peak Response = 2011913 Manual Peak Response = 1972592 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

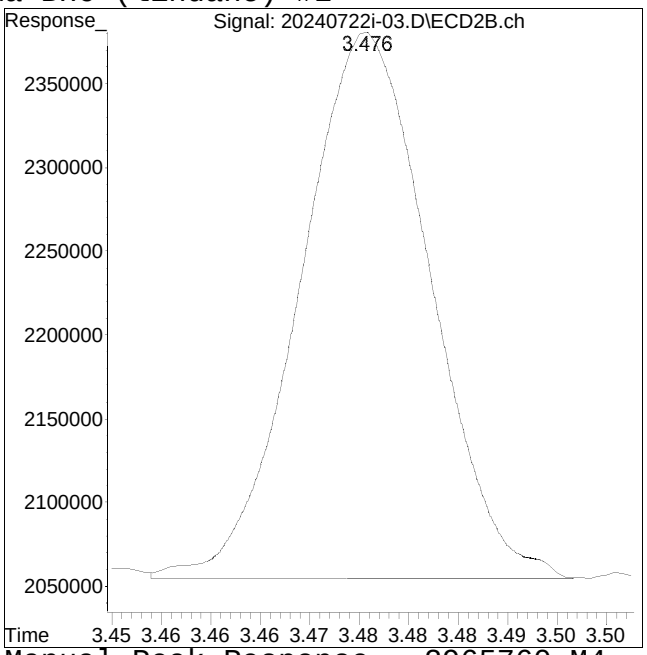
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-03.D
Date Inj'd : 7/22/2024 18:09
Sample : il1pest,42e,,pp 11687 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:53 pm

## Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 3086817




Manual Peak Response = 2965760 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:21
Operator : pest20:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:37:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:34:52 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 2.007 | 2.063 | 52121802 | 83371117 | 25.000M4 | 25.000 |
| 28) | i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) | i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | System Monitoring Compounds | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 2.473 | 2.663 | 3428155 | 4836518 | 1.317 | 1.214M4 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 2.63%# | 2.43%# |
| 27) | s | Decachlorobi | 7.340 | 7.912 | 3509553 | 4320496 | 1.320 | 1.266 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 2.64%# | 2.53%# |
| | | Target Compounds | | | | | | |
| 3) | | Hexachlorobe | 2.740 | 3.040 | 3838035 | 5553450 | 1.366 | 1.310 |
| 4) | | alpha-BHC | 2.863 | 3.152 | 3721675 | 5447511 | 1.144 | 1.074 |
| 5) | | gamma-BHC (l | 3.107 | 3.476 | 3620042 | 5392963 | 1.192 | 1.139 |
| 6) | | beta-BHC | 3.175 | 3.551 | 2064185 | 3101821 | 1.333 | 1.303 |
| 7) | | delta-BHC | 3.325 | 3.848 | 3535125 | 5363108 | 1.169 | 1.131 |
| 8) | | Heptachlor | 3.513 | 3.917 | 3812261 | 5585182 | 1.260 | 1.224M4 |
| 9) | | Aldrin | 3.792 | 4.267 | 3375781 | 4775686 | 1.185 | 1.148 |
| 10) | | Alachlor | 3.934 | 4.141 | 563696 | 844073 | 1.134M3 | 1.212M4 |
| 11) | | Chlorpyrifos | 4.035 | 4.524 | 2202614 | 3333449 | 1.385 | 1.351 |
| 12) | | Heptachlor E | 4.408 | 4.929 | 3448784 | 5108150 | 1.262M4 | 1.240M4 |
| 13) | | gamma-Chlord | 4.544 | 5.141 | 3405851 | 4467567 | 1.323 | 1.229M4 |
| 14) | | alpha-Chlord | 4.694 | 5.296 | 3557567 | 4880439 | 1.262 | 1.211M4 |
| 15) | | 4,4'-DDE | 4.795 | 5.474 | 3118656 | 4422257 | 1.140 | 1.127 |
| 16) | | Endosulfan I | 4.846 | 5.354 | 3156206 | 4525446 | 1.232 | 1.204 |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:21
Operator : pest20:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:37:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:34:52 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 17) | Dieldrin | 5.109 | 5.627 | 3284413 | 4389875 | 1.228 | 1.153 |
| 18) | Endrin | 5.346 | 5.911 | 3119178 | 4484121 | 1.181 | 1.154M3 |
| 19) | 4,4'-DDD | 5.434 | 6.018 | 2592078 | 3702948 | 1.166 | 1.153M4 |
| 20) | Endosulfan I | 5.566 | 6.100 | 2990654 | 4377543 | 1.255M4 | 1.226M4 |
| 21) | 4,4'-DDT | 5.705 | 6.286 | 2987173 | 4295916 | 1.222M4 | 1.185M4 |
| 22) | Endrin Aldeh | 5.959 | 6.386 | 2338904 | 3425673 | 1.163M4 | 1.157M4 |
| 23) | Methoxychlor | 6.155 | 6.833 | 1954955 | 2812414 | 1.336M4 | 1.312M4 |
| 24) | Mirex | 6.235 | 6.990 | 3110523 | 4422850 | 1.367 | 1.387 |
| 25) | Endosulfan S | 6.334 | 6.608 | 3112962 | 4372639 | 1.336M3 | 1.249 |
| 26) | Endrin Keton | 6.557 | 7.022 | 3220376 | 4644190 | 1.244M4 | 1.194 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:21
Operator : pest20:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:37:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:34:52 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

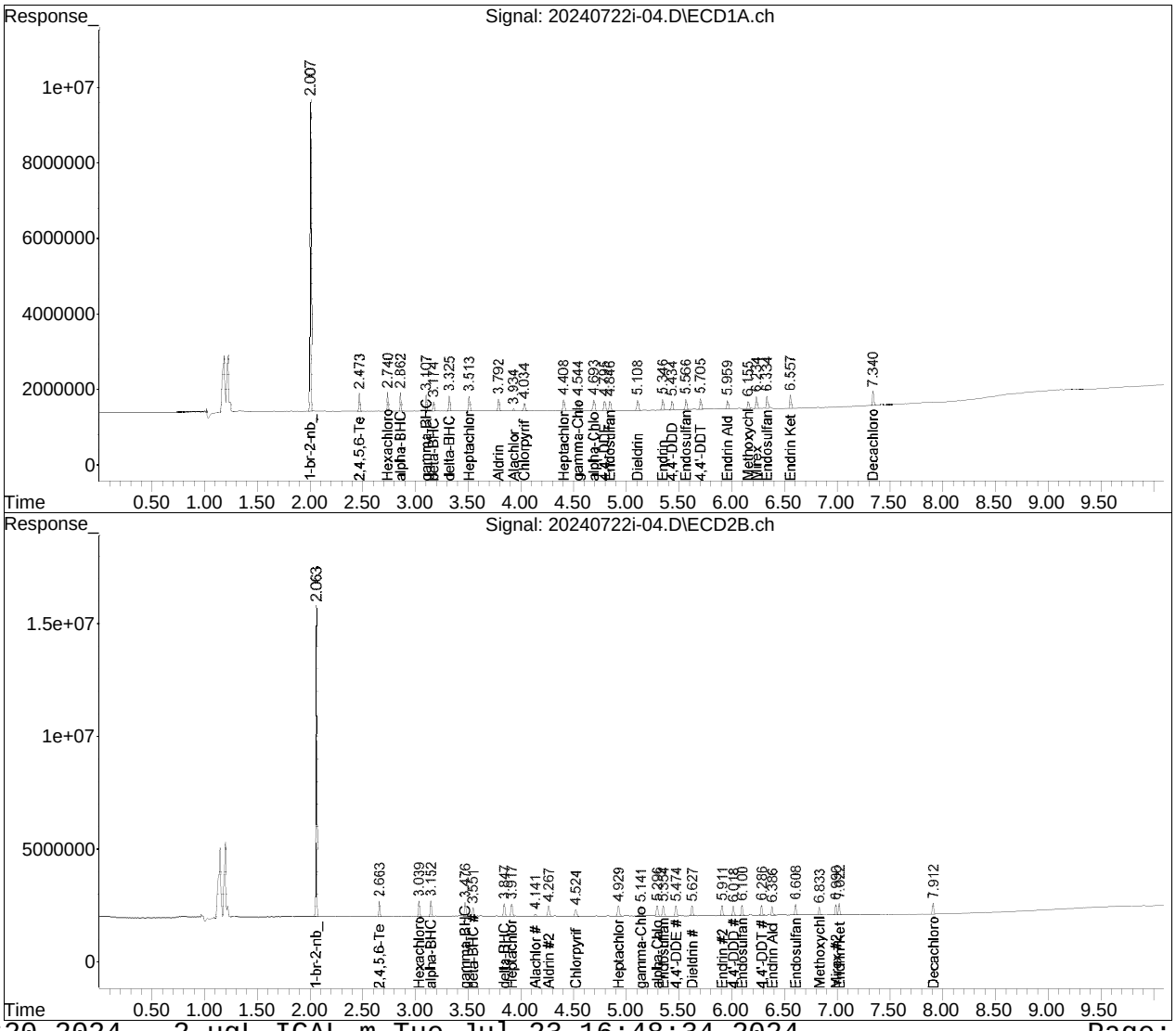
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:21
Operator : pest20:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:37:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:34:52 2024
Response via : Initial Calibration
Integrator: ChemStation

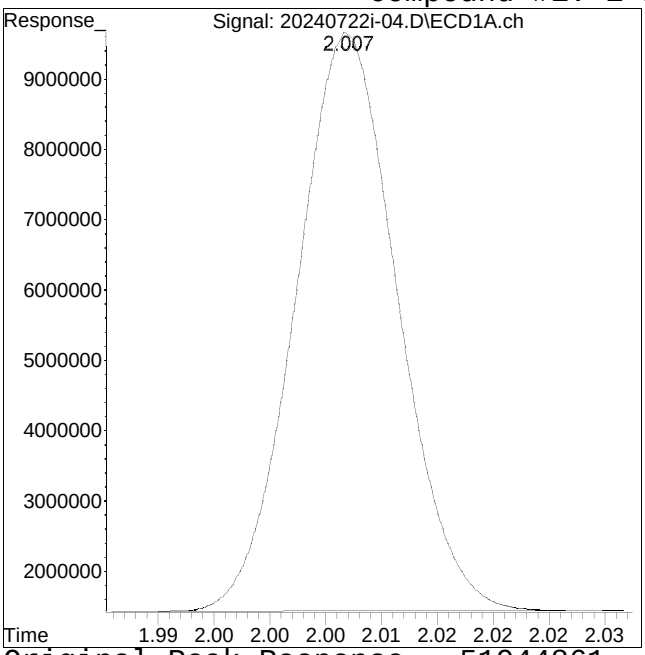
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



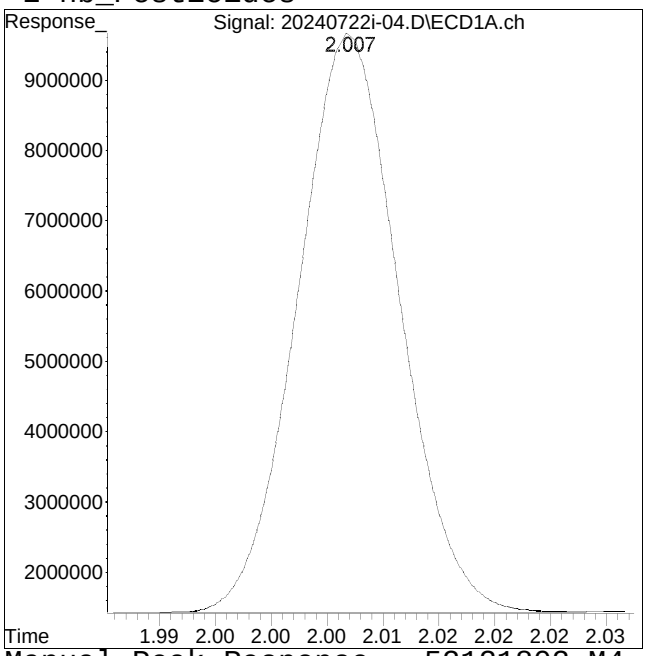
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 51944861



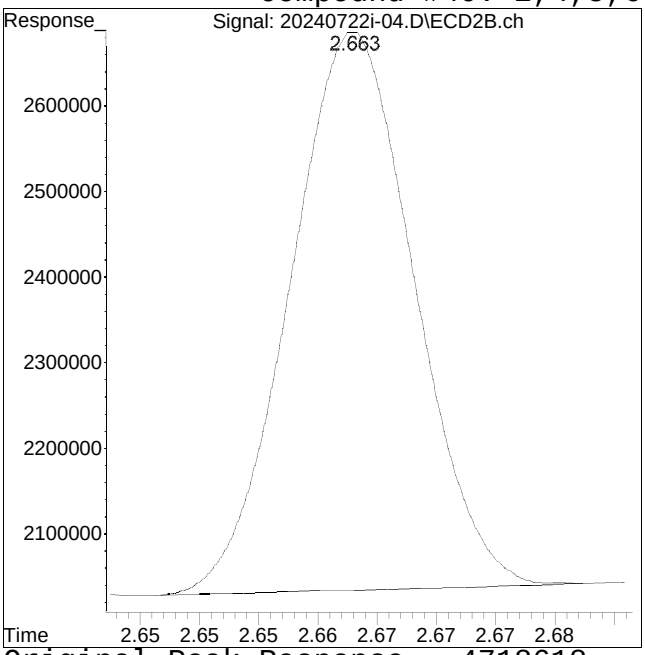

Manual Peak Response = 52121802 M4

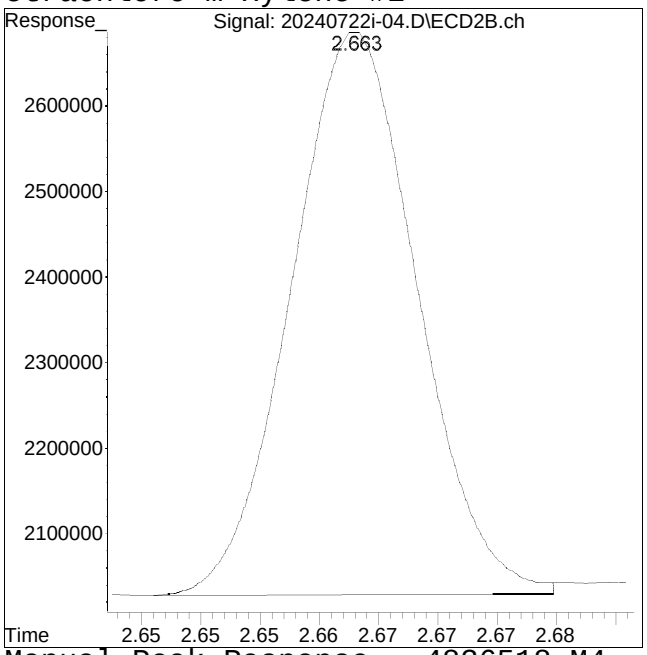
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



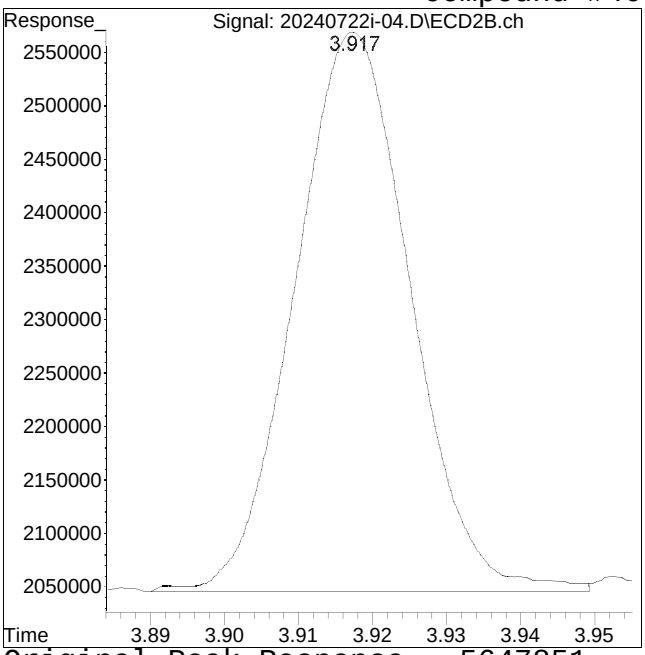




Original Peak Response = 4718618 Manual Peak Response = 4836518 M4
M4 = Poor automated baseline construction.

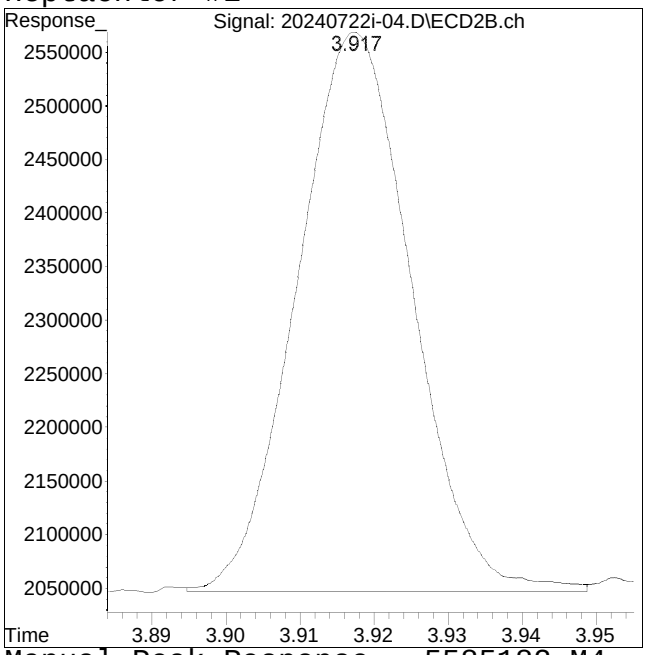
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #46: Heptachlor #2




Original Peak Response = 5647851



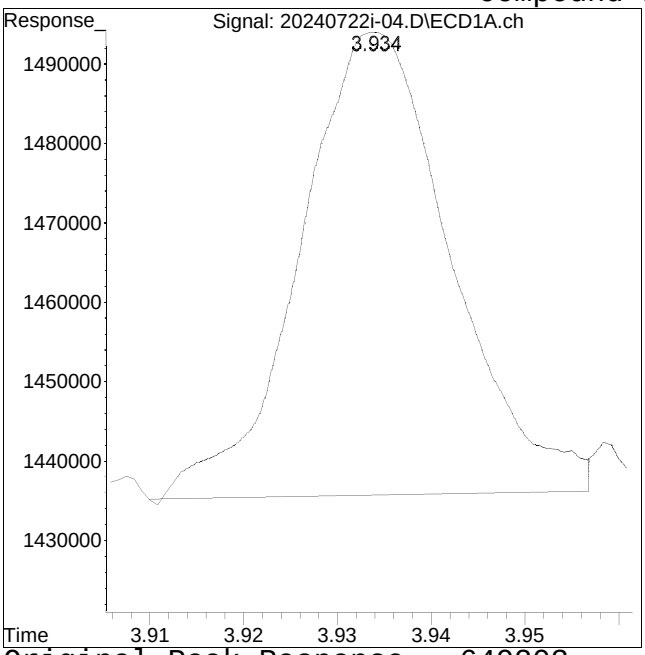

Manual Peak Response = 5585182 M4

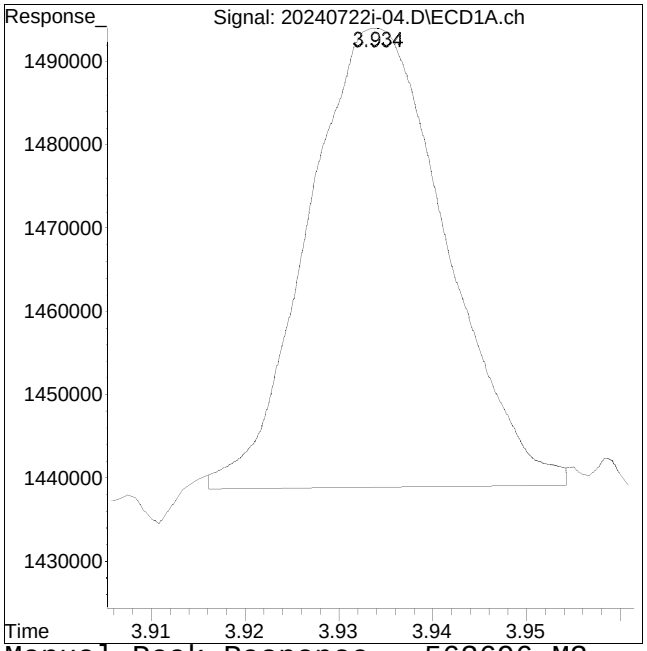
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #10: Alachlor




Original Peak Response = 649203 Manual Peak Response = 563696 M3

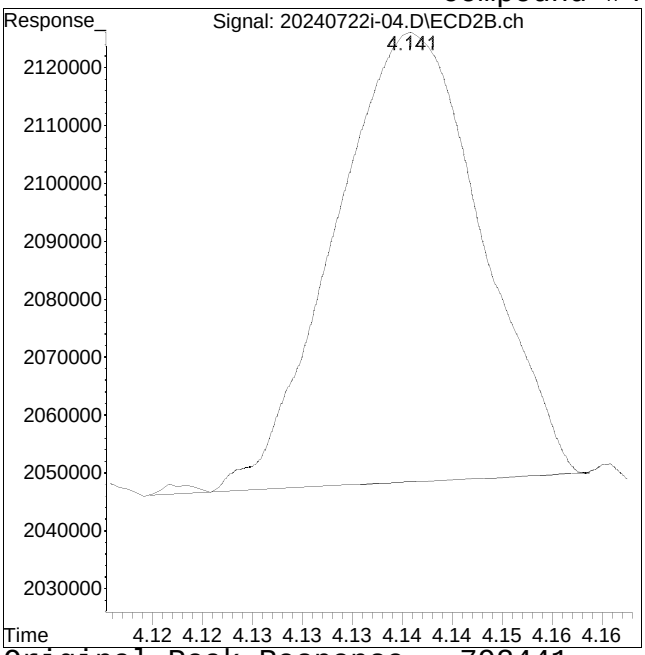
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

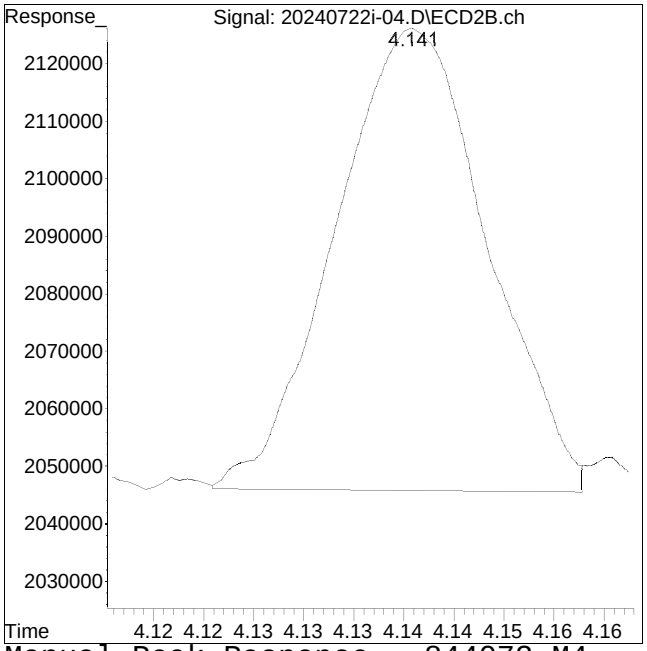
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #48: Alachlor #2




Original Peak Response = 792441




Manual Peak Response = 844073 M4

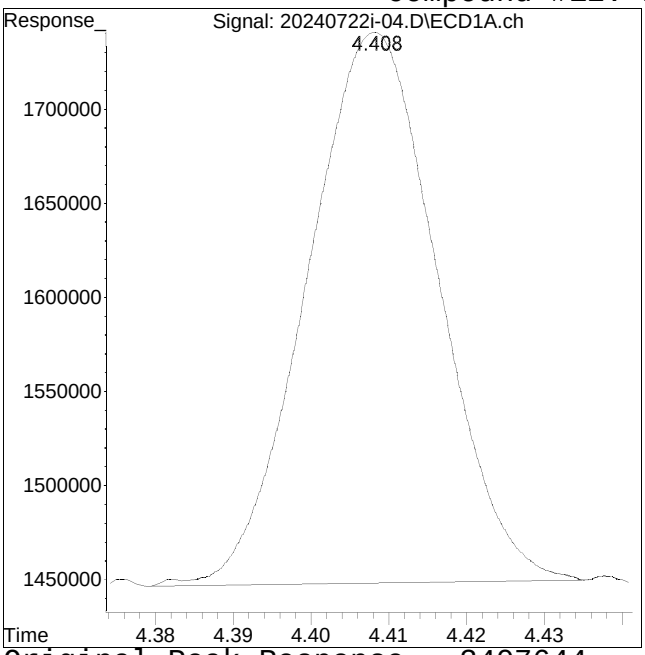
M4 = Poor automated baseline construction.

# Manual Integration Report

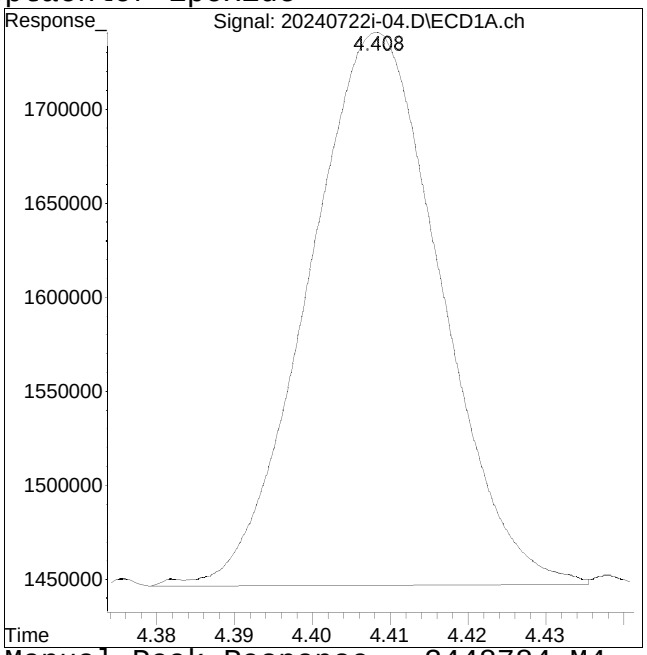
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #12: Heptachlor Epoxide




Original Peak Response = 3407644



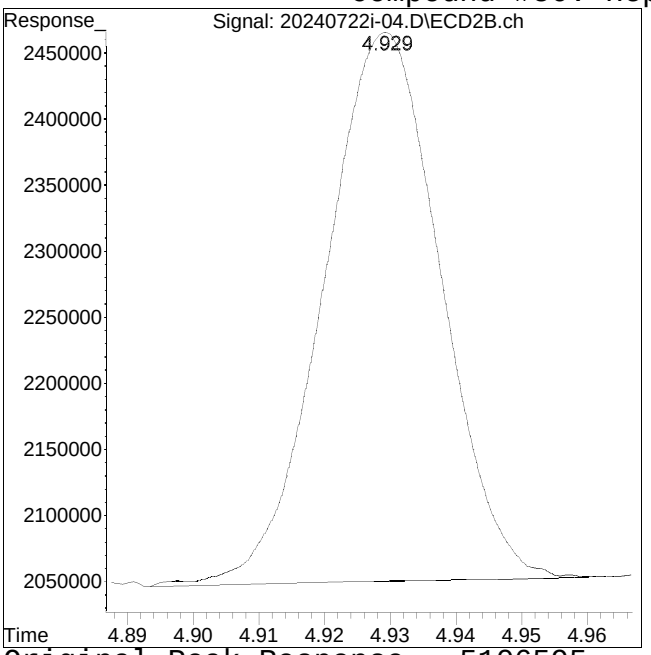

Manual Peak Response = 3448784 M4

M4 = Poor automated baseline construction.

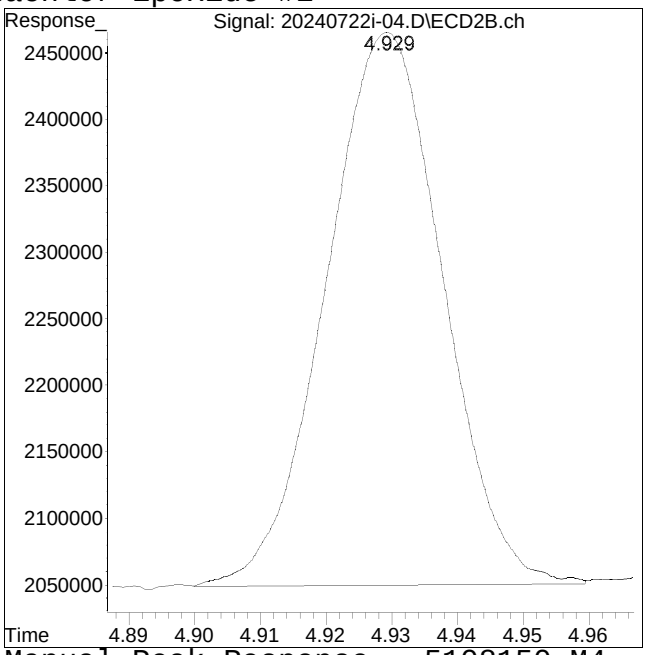
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 5106595



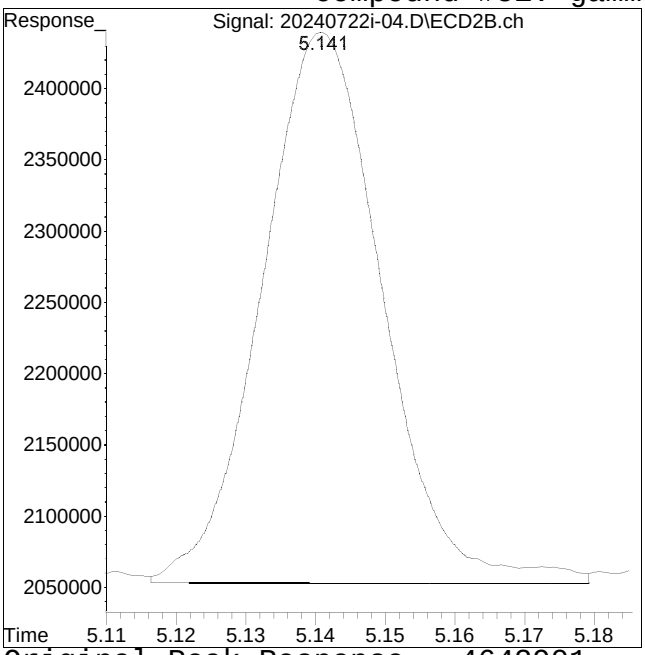

Manual Peak Response = 5108150 M4

M4 = Poor automated baseline construction.

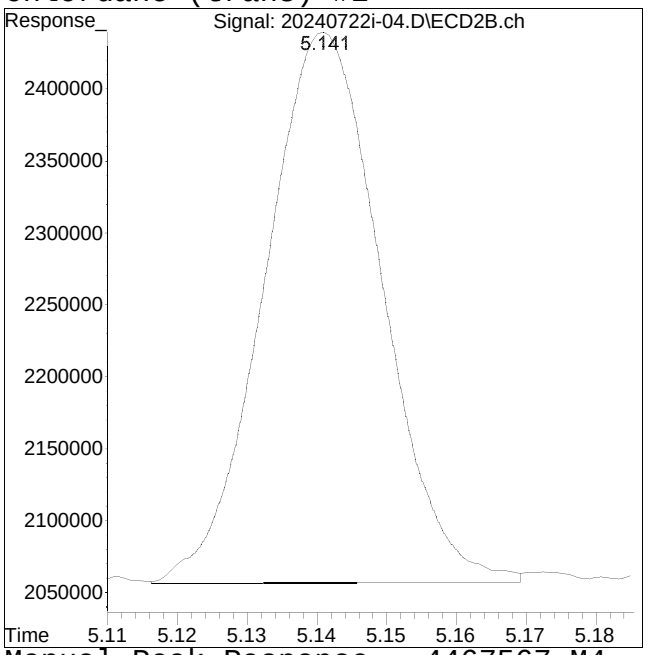
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 4642901



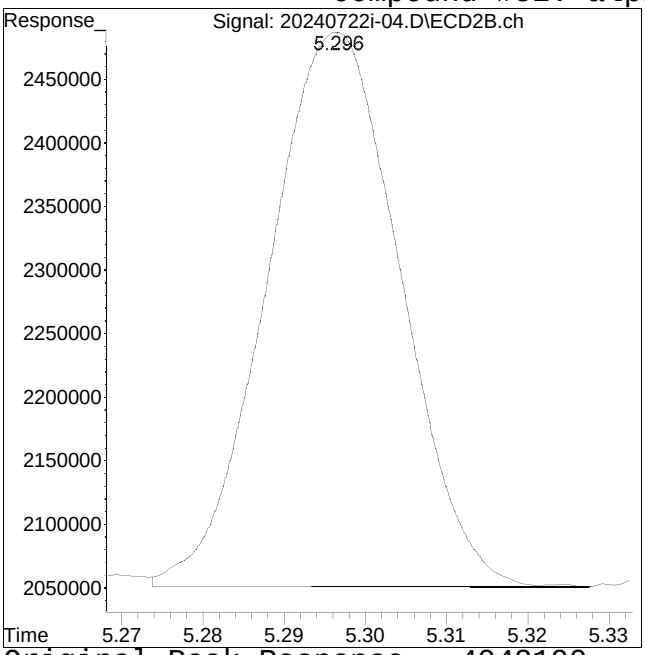

Manual Peak Response = 4467567 M4

M4 = Poor automated baseline construction.

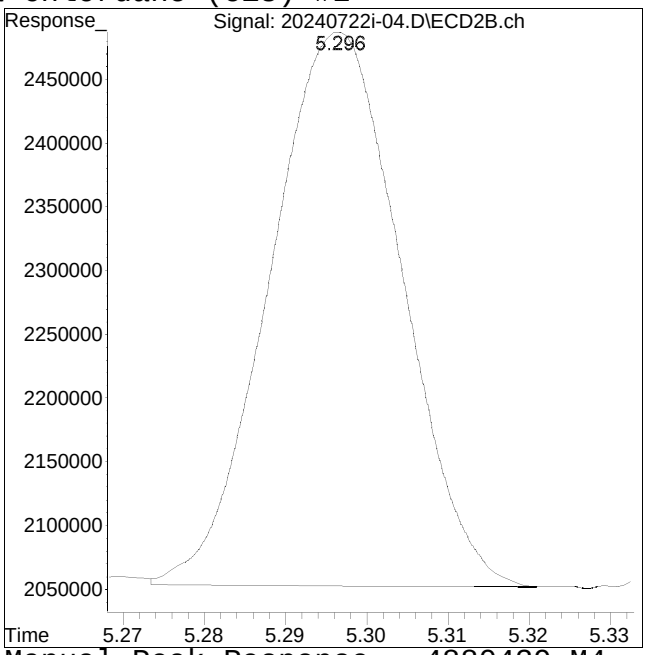
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

## Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 4942190



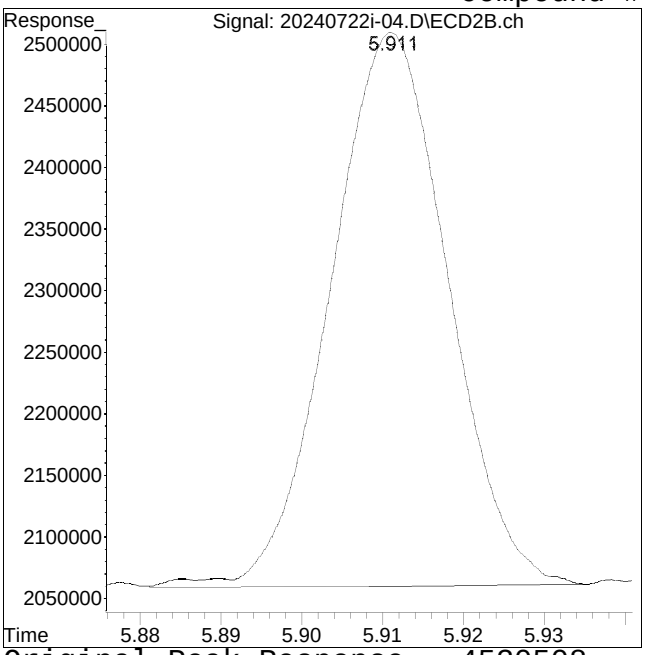

Manual Peak Response = 4880439 M4

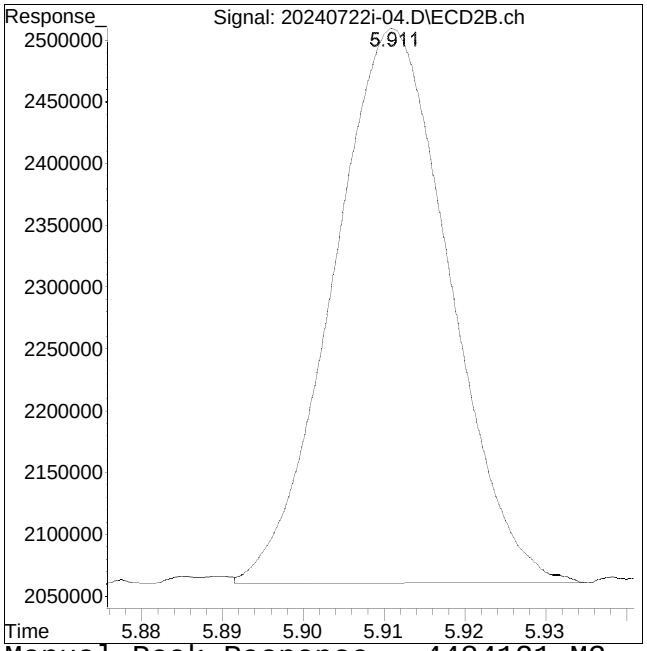
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #56: Endrin #2



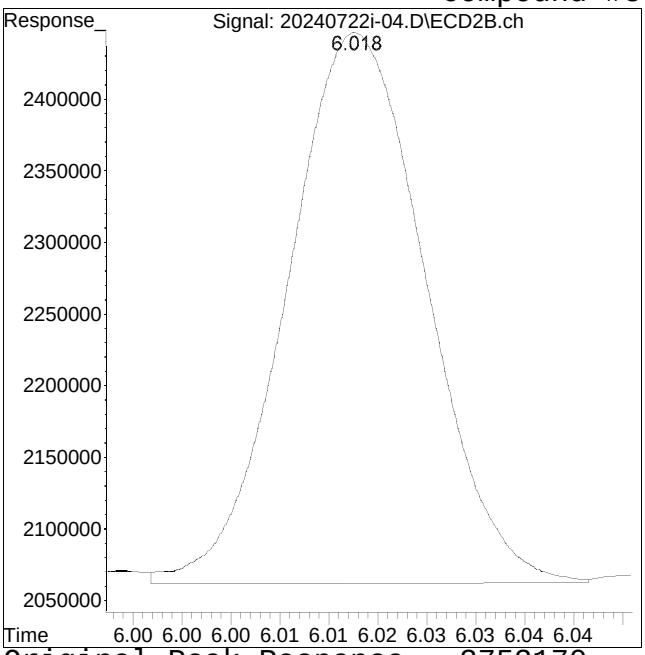



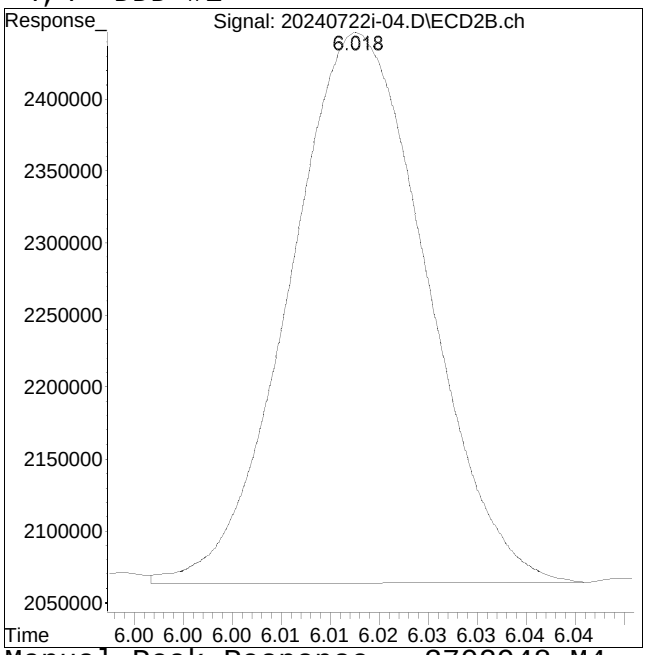

Original Peak Response = 4530508 Manual Peak Response = 4484121 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #57: 4,4'-DDD #2



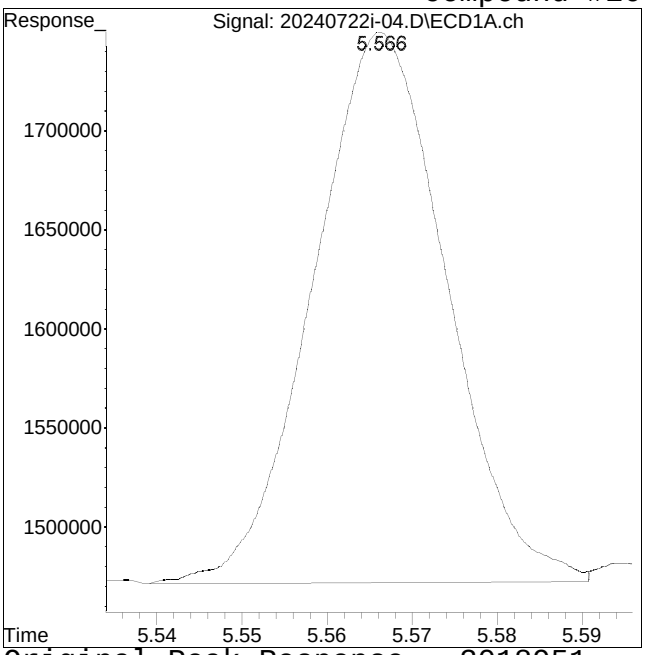




Original Peak Response = 3753170 Manual Peak Response = 3702948 M4
M4 = Poor automated baseline construction.

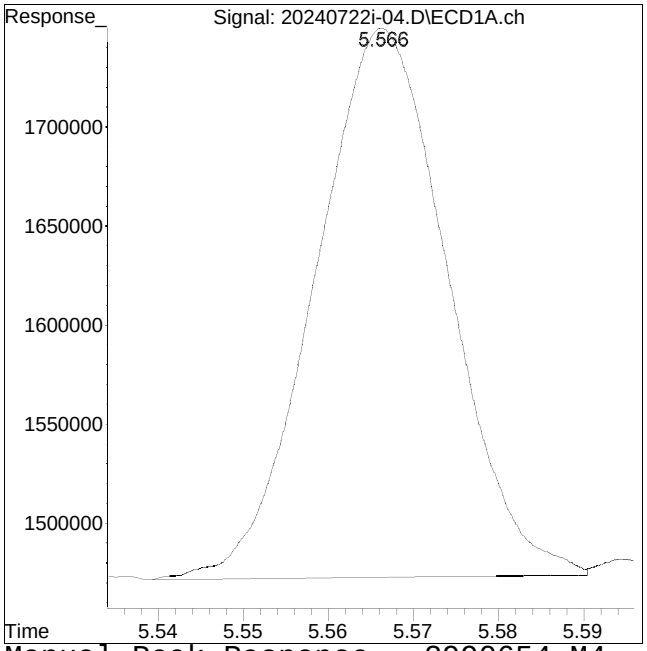
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #20: Endosulfan II




Original Peak Response = 3018951



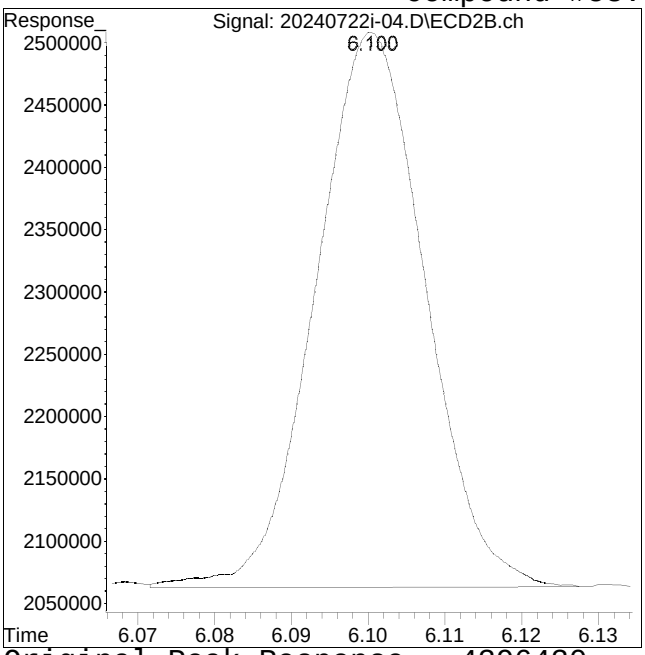

Manual Peak Response = 2990654 M4

M4 = Poor automated baseline construction.

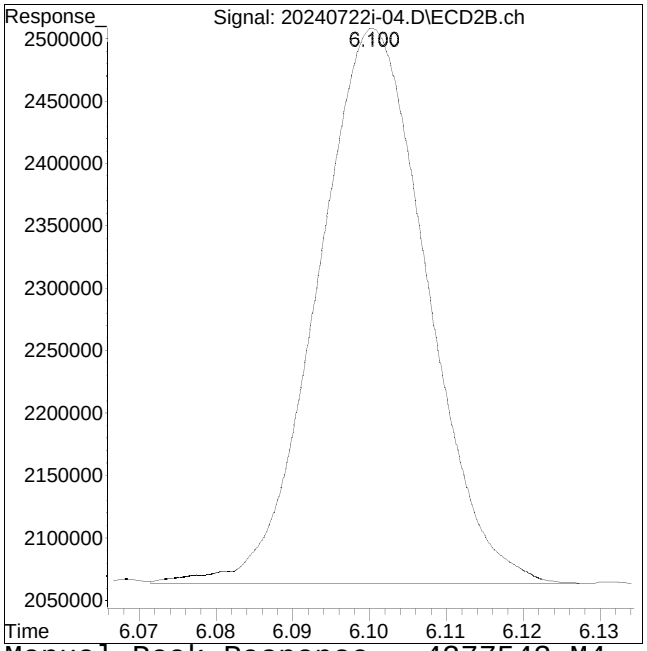
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #58: Endosulfan II #2




Original Peak Response = 4396430



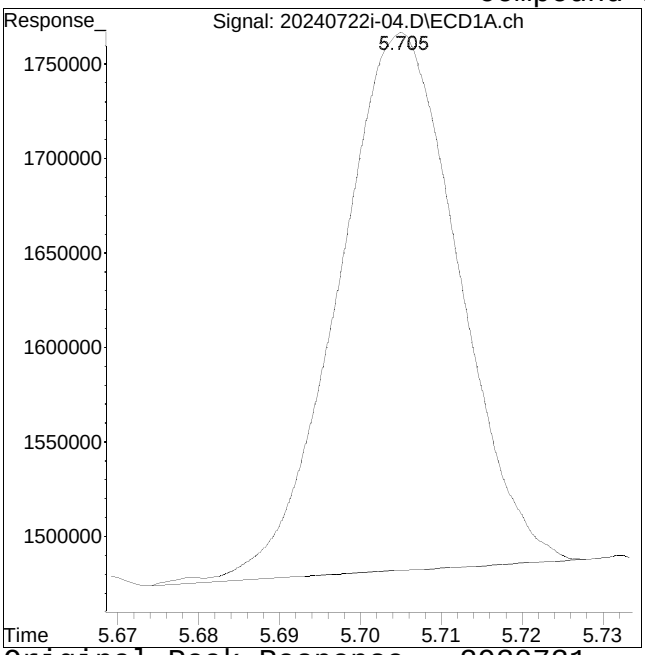

Manual Peak Response = 4377543 M4

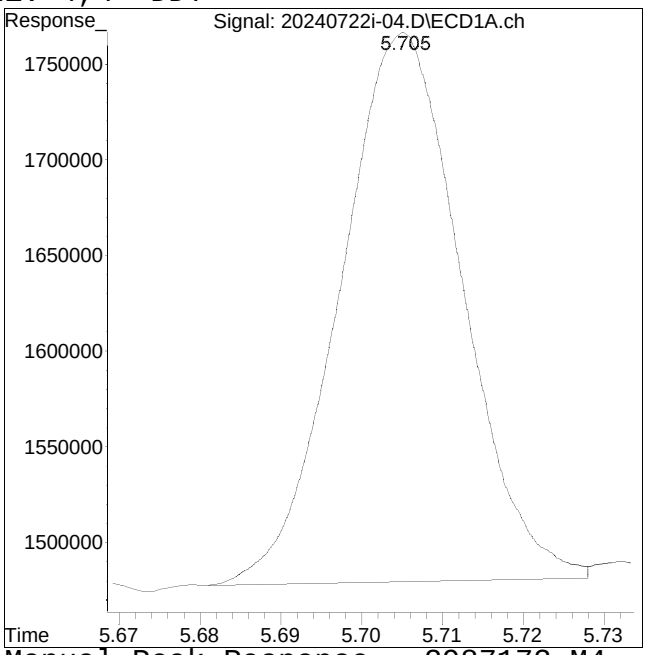
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

Compound #21: 4,4'-DDT



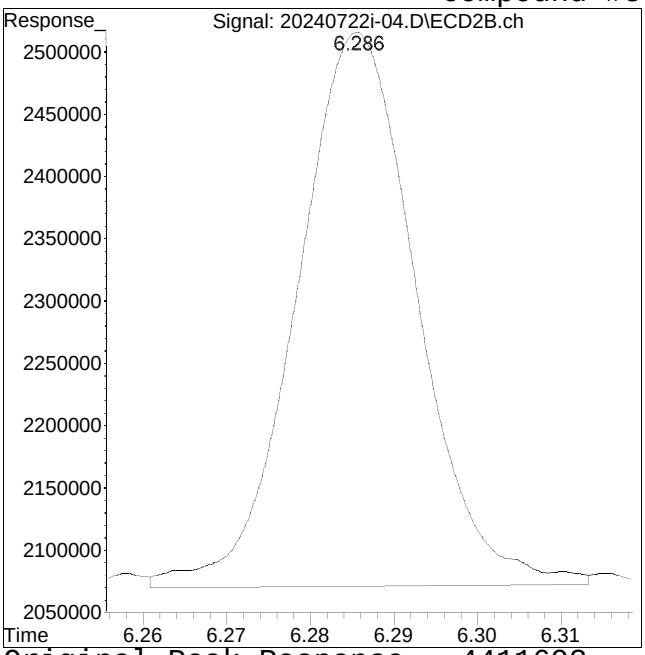



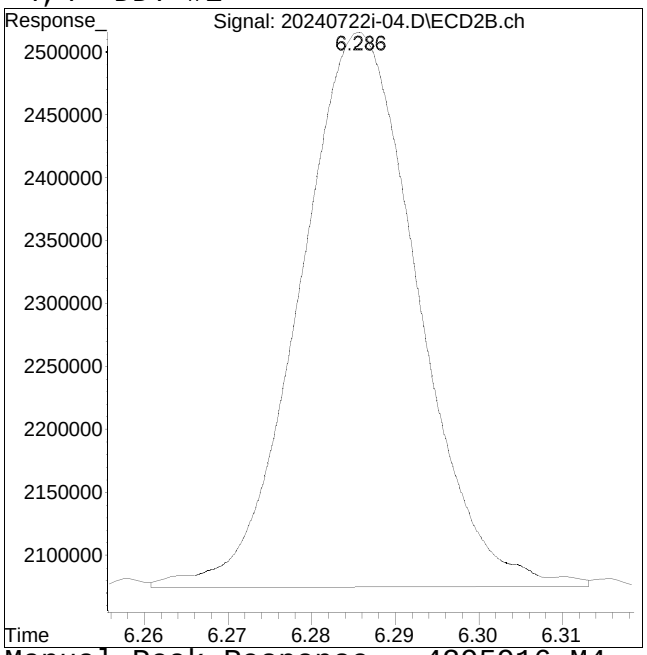

Original Peak Response = 2930731 Manual Peak Response = 2987173 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #59: 4,4'-DDT #2



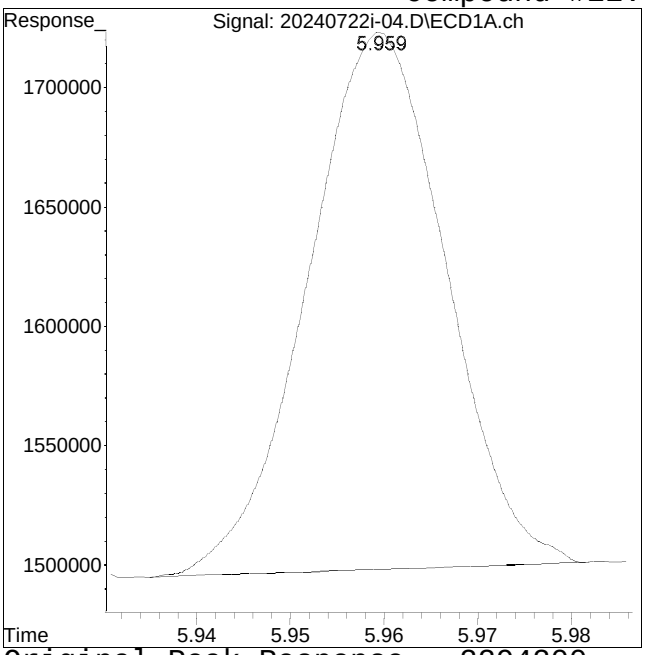




Original Peak Response = 4411693 Manual Peak Response = 4295916 M4
M4 = Poor automated baseline construction.

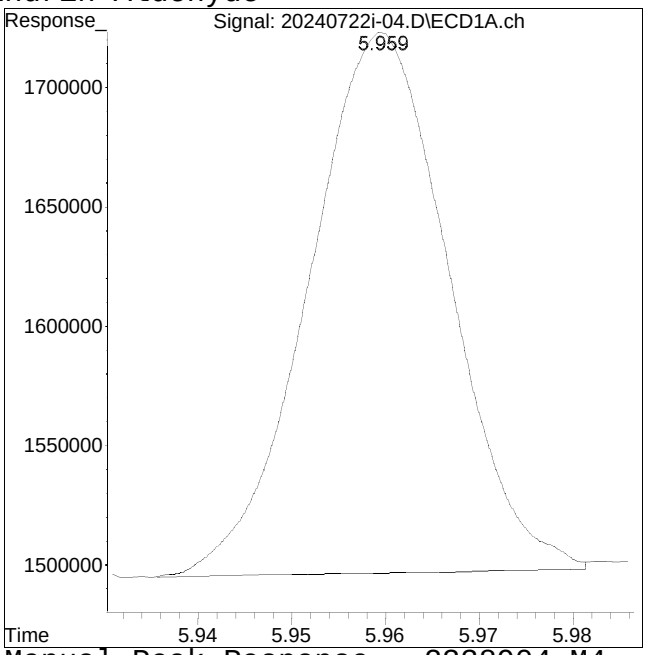
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #22: Endrin Aldehyde




Original Peak Response = 2294200



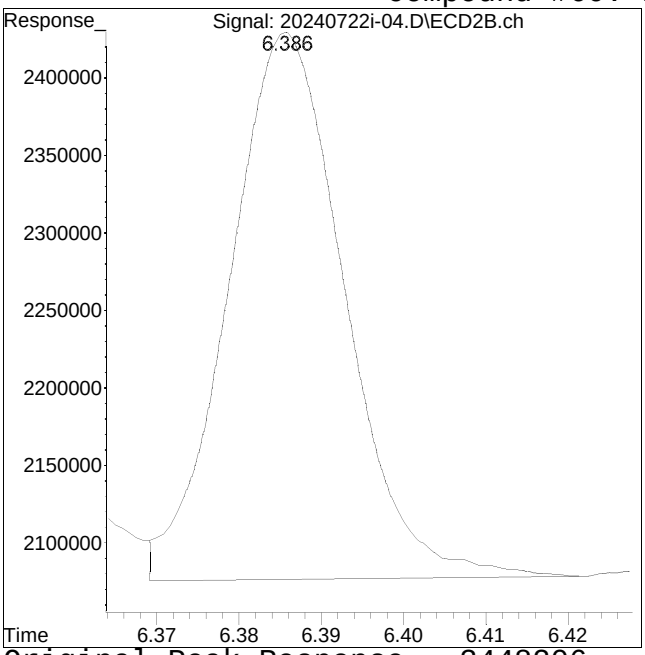

Manual Peak Response = 2338904 M4

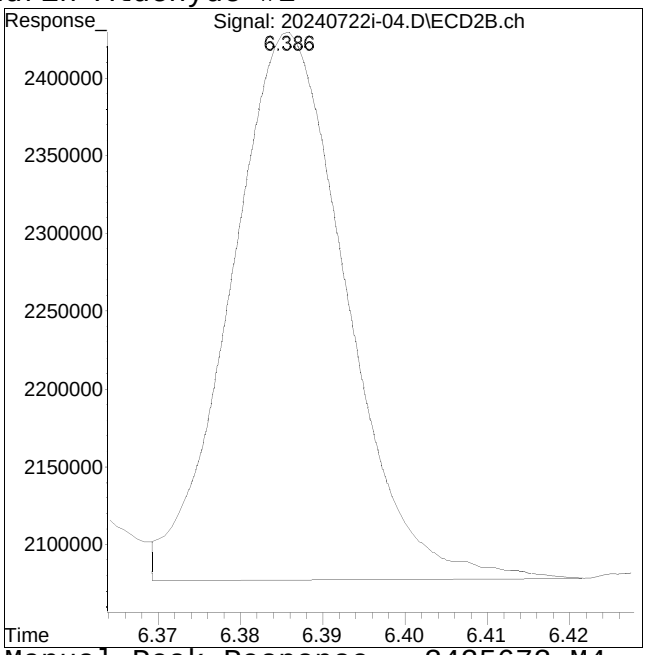
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #60: Endrin Aldehyde #2



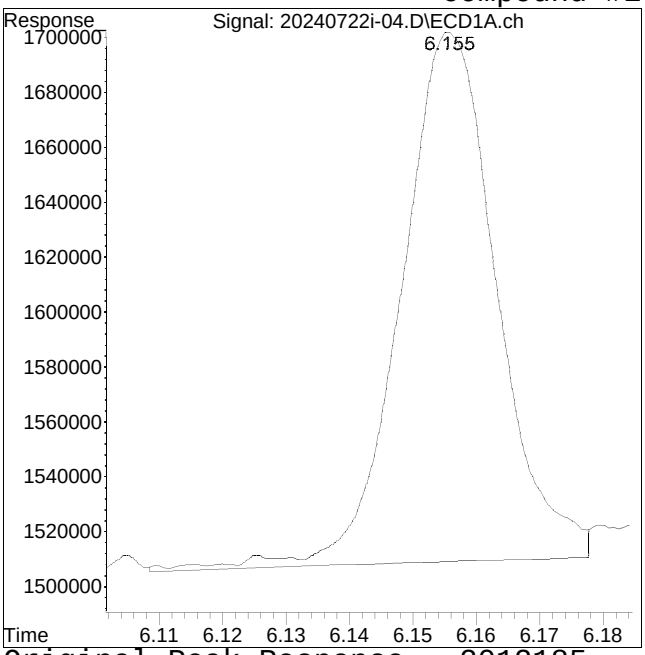

Original Peak Response = 3448206 Manual Peak Response = 3425673 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

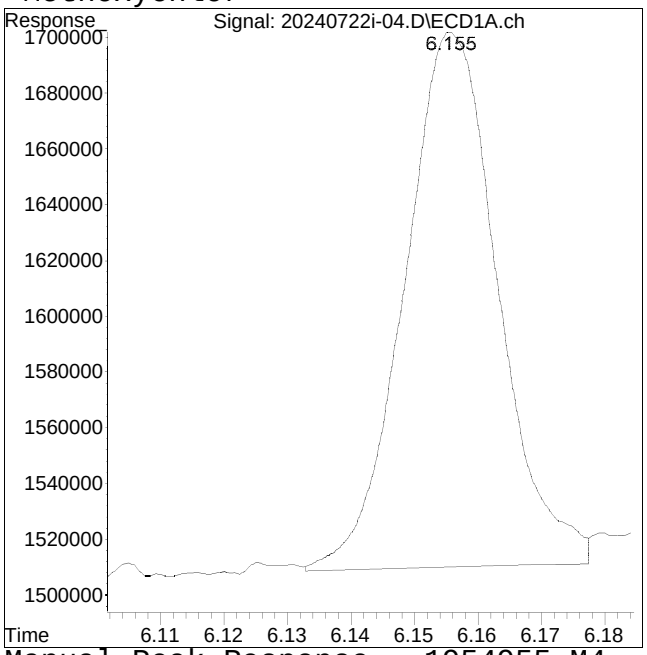
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-04.D
Date Inj'd : 7/22/2024 18:21
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:37 pm

## Compound #23: Methoxychlor




Original Peak Response = 2012185



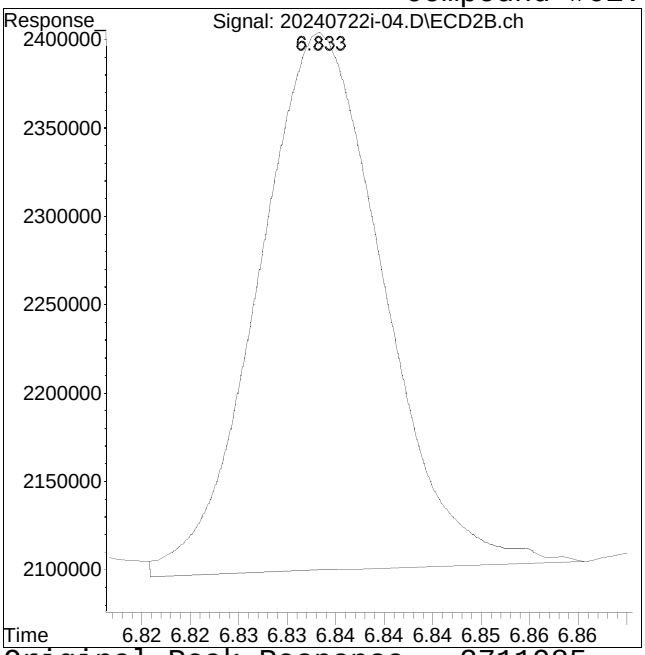

Manual Peak Response = 1954955 M4

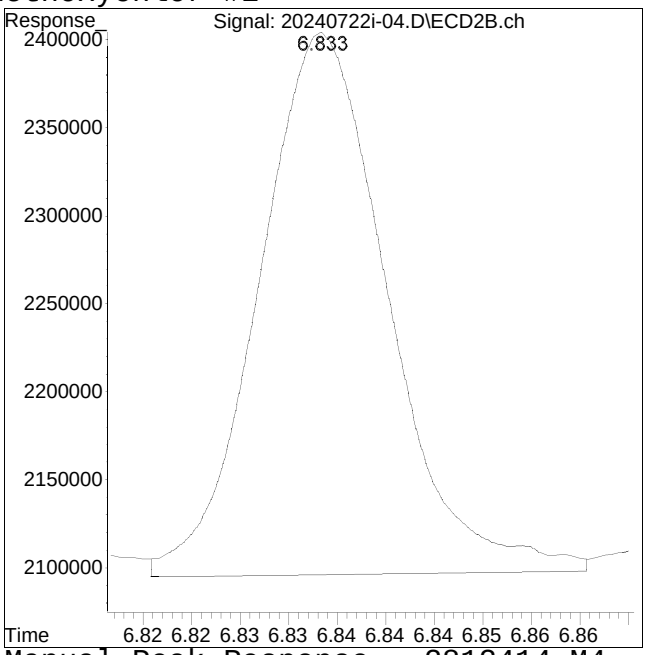
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #61: Methoxychlor #2



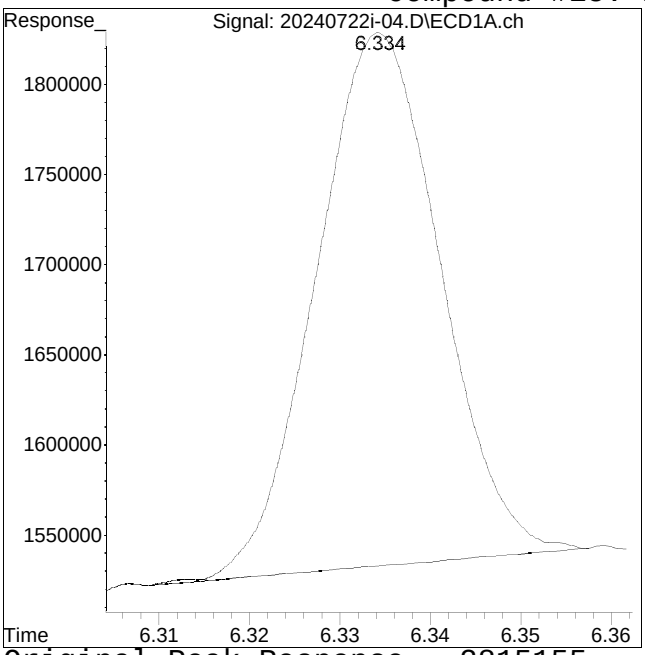



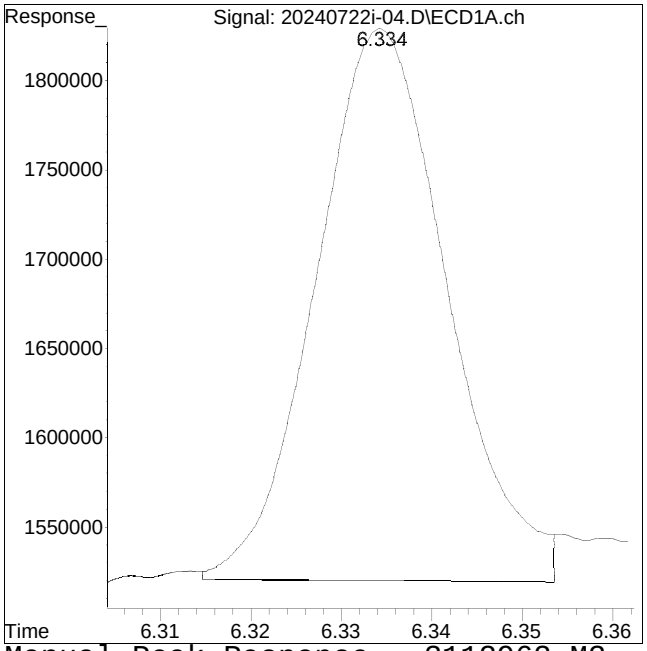

Original Peak Response = 2711985 Manual Peak Response = 2812414 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

Compound #25: Endosulfan Sulfate



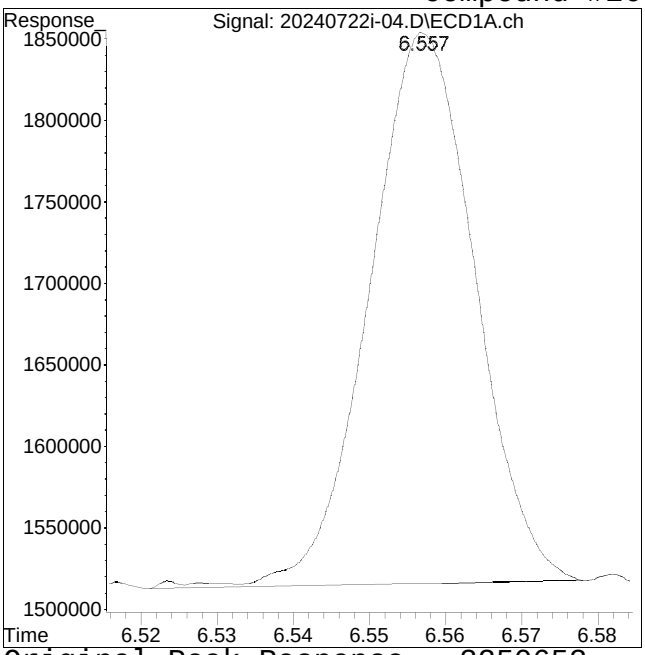



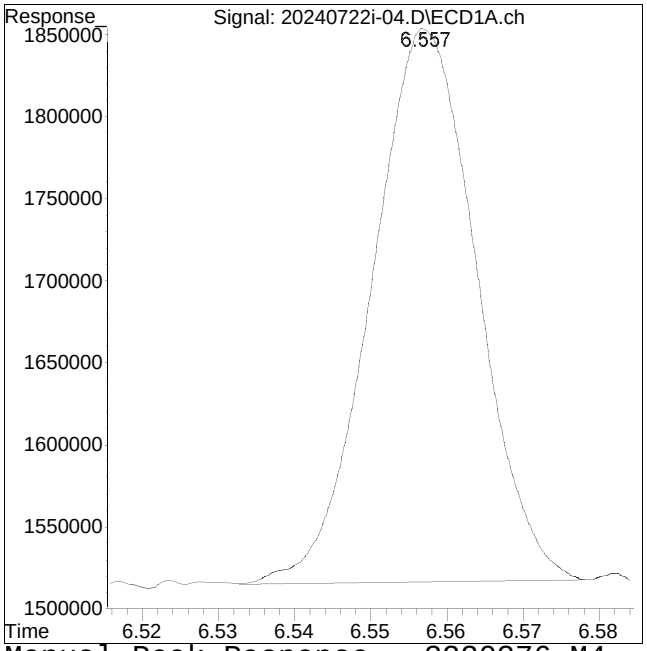

Original Peak Response = 2815155 Manual Peak Response = 3112962 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-04.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:21 Instrument : PEST 20
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 7/23/2024 1:37 pm

## Compound #26: Endrin Ketone




Original Peak Response = 3250653 Manual Peak Response = 3220376 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:34
Operator : pest20:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:27:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:25:14 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.005 | 2.062 | 48735044 | 76957213 | 25.000M3 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.472 | 2.662 | 5844317 | 8382939 | 2.473M4 | 2.325M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 4.95%# | 4.65%# |
| 27) s | Decachlorobi | 7.338 | 7.908 | 6481426 | 7862368 | 2.725M4 | 2.588M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 5.45%# | 5.18%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.740 | 3.039 | 6654660 | 9475395 | 2.633 | 2.496 |
| 4) | alpha-BHC | 2.862 | 3.152 | 6621036 | 9558533 | 2.204 | 2.048 |
| 5) | gamma-BHC (l | 3.106 | 3.476 | 6471039 | 9388924 | 2.324M4 | 2.171M4 |
| 6) | beta-BHC | 3.174 | 3.551 | 3669214 | 5366541 | 2.635M4 | 2.521 |
| 7) | delta-BHC | 3.325 | 3.847 | 6284417 | 9171184 | 2.257 | 2.109 |
| 8) | Heptachlor | 3.512 | 3.917 | 6751099 | 9575269 | 2.453M4 | 2.318M4 |
| 9) | Aldrin | 3.791 | 4.267 | 6025953 | 8321220 | 2.306 | 2.192 |
| 10) | Alachlor | 3.933 | 4.141 | 1082527 | 1563529 | 2.394M4 | 2.524 |
| 11) | Chlorpyrifos | 4.034 | 4.524 | 3806182 | 5668465 | 2.686 | 2.595 |
| 12) | Heptachlor E | 4.408 | 4.930 | 6052397 | 8733768 | 2.433 | 2.347 |
| 13) | gamma-Chlord | 4.543 | 5.141 | 5835288 | 7677533 | 2.500M4 | 2.336M4 |
| 14) | alpha-Chlord | 4.693 | 5.296 | 6295575 | 8438766 | 2.458M4 | 2.313M4 |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:34
Operator : pest20:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:27:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:25:14 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 15) | 4,4'-DDE | 4.795 | 5.474 | 5694960 | 7733237 | 2.262 | 2.156M4 |
| 16) | Endosulfan I | 4.846 | 5.354 | 5601683 | 7892738 | 2.396 | 2.320 |
| 17) | Dieldrin | 5.108 | 5.627 | 5814648 | 7656818 | 2.381M4 | 2.207M4 |
| 18) | Endrin | 5.345 | 5.911 | 5693177 | 7879108 | 2.357M4 | 2.228 |
| 19) | 4,4'-DDD | 5.434 | 6.018 | 4752942 | 6488630 | 2.333 | 2.219 |
| 20) | Endosulfan I | 5.565 | 6.100 | 5300800 | 7578215 | 2.446M4 | 2.349M4 |
| 21) | 4,4'-DDT | 5.704 | 6.285 | 5368584 | 7423759 | 2.410 | 2.253M4 |
| 22) | Endrin Aldeh | 5.959 | 6.386 | 4371536 | 6111741 | 2.380 | 2.274M3 |
| 23) | Methoxychlor | 6.155 | 6.833 | 3504721 | 5050153 | 2.668M4 | 2.658M4 |
| 24) | Mirex | 6.234 | 6.990 | 5619624 | 7574288 | 2.768 | 2.683 |
| 25) | Endosulfan S | 6.333 | 6.609 | 5390130 | 7658485 | 2.561M3 | 2.434 |
| 26) | Endrin Keton | 6.556 | 7.021 | 5843067 | 8209384 | 2.488M4 | 2.334 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:34
Operator : pest20:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:27:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:25:14 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Average toxaphene-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

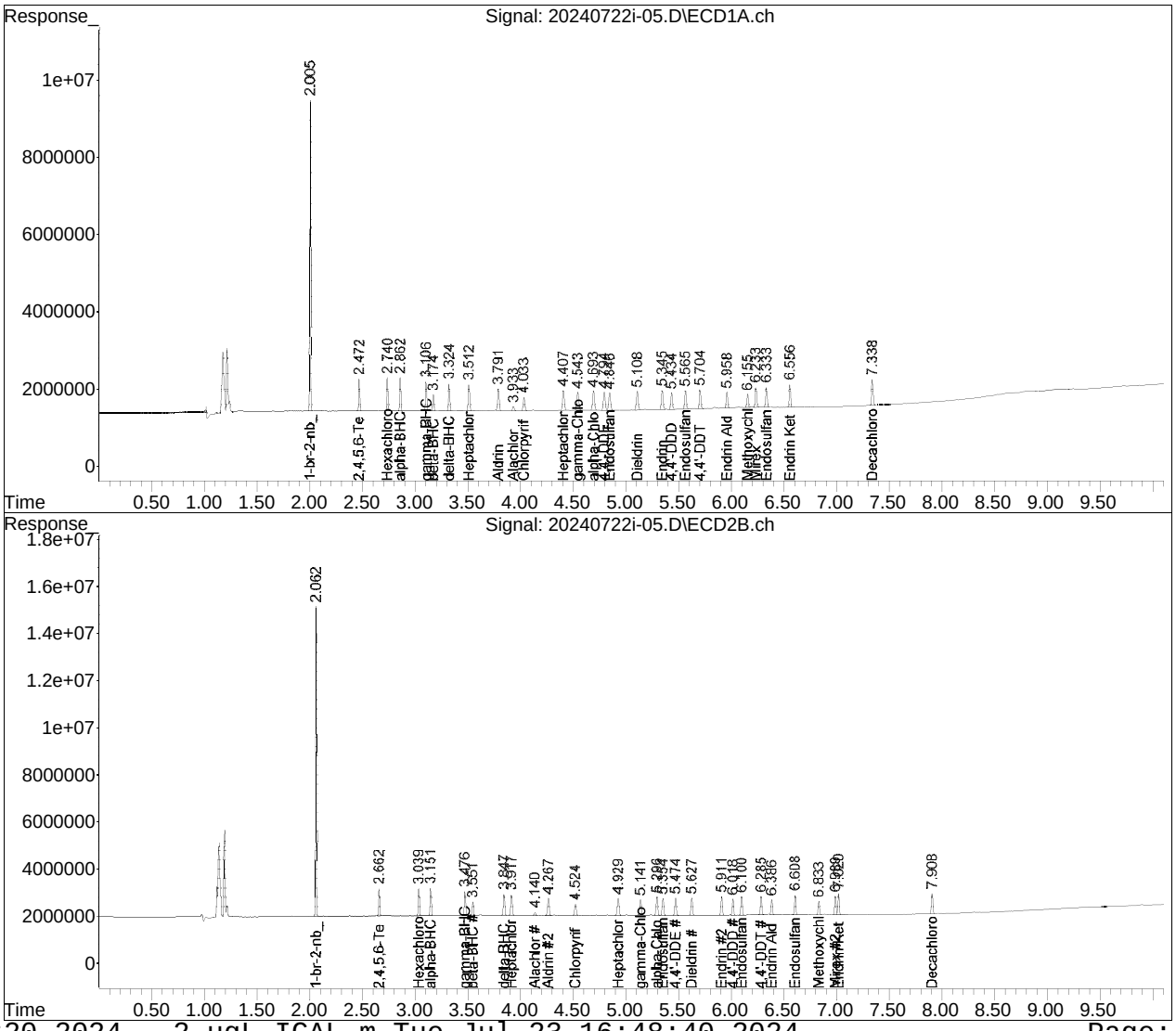
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:34
Operator : pest20:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:27:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:25:14 2024
Response via : Initial Calibration
Integrator: ChemStation

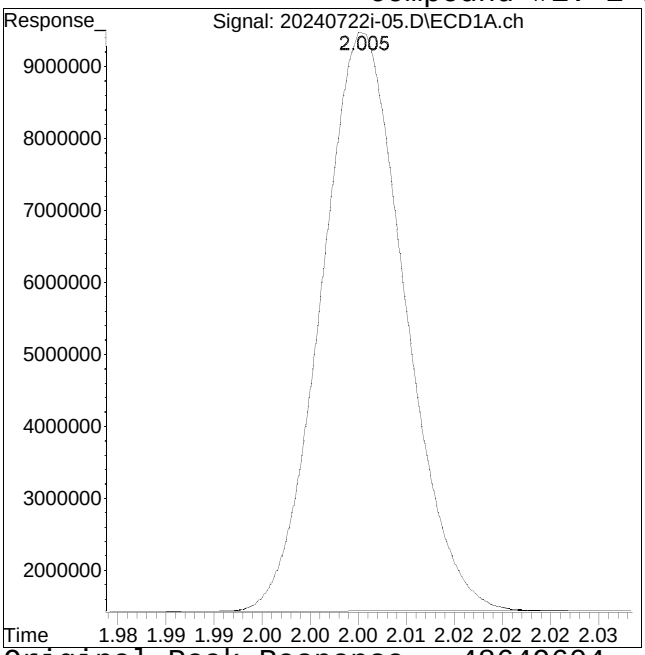
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



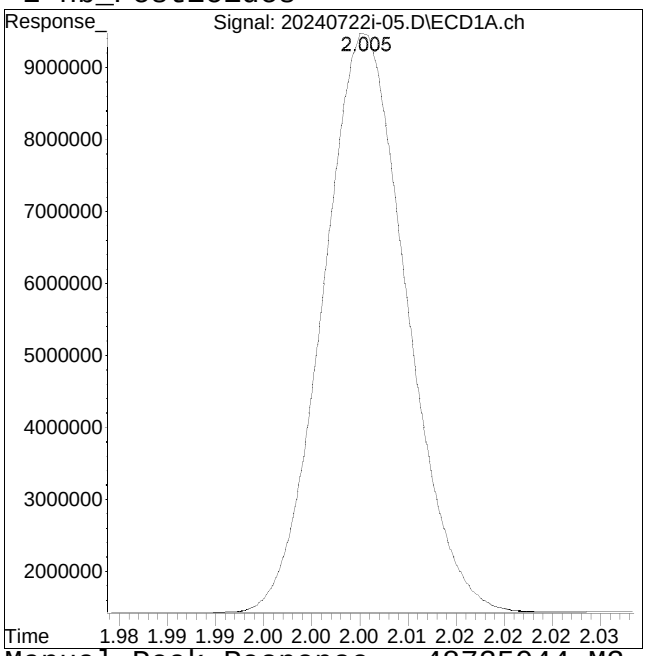
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 48649604




Manual Peak Response = 48735044 M3

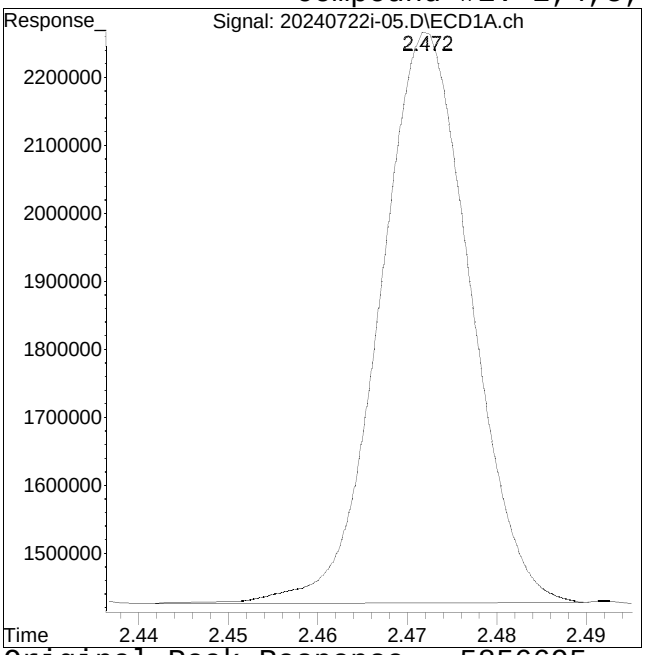
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

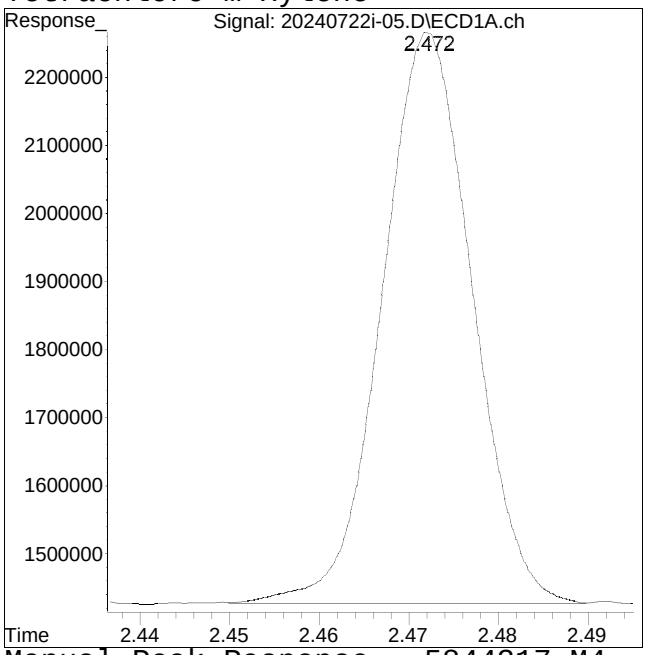
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 5856695



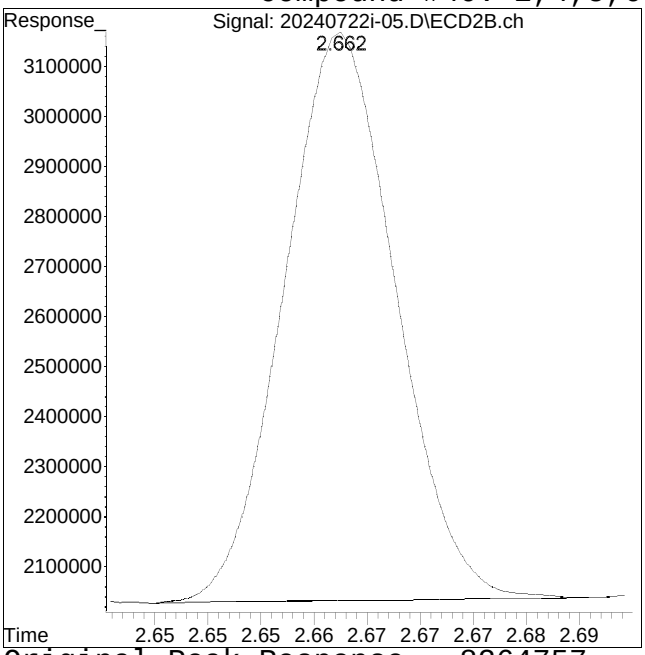

Manual Peak Response = 5844317 M4

M4 = Poor automated baseline construction.

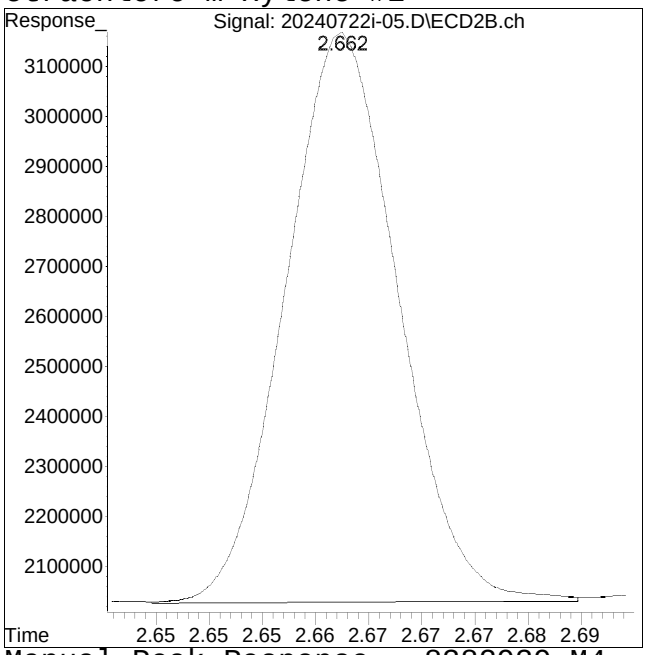
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 8264757



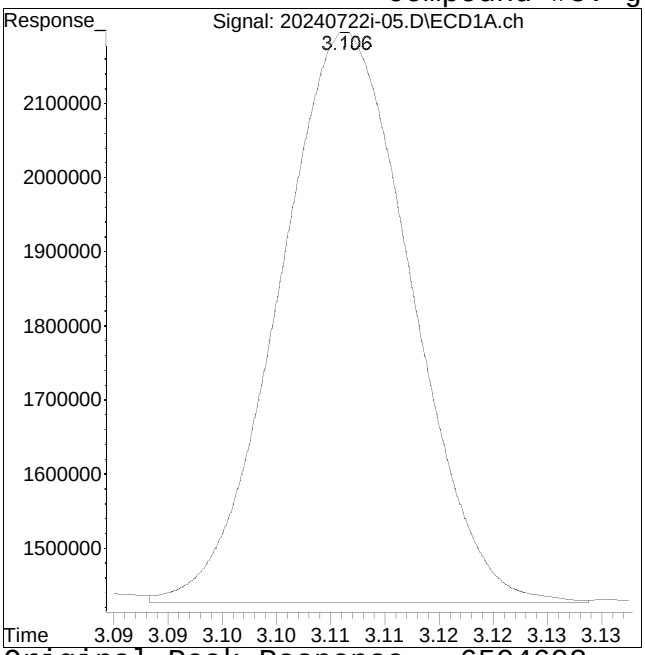

Manual Peak Response = 8382939 M4

M4 = Poor automated baseline construction.

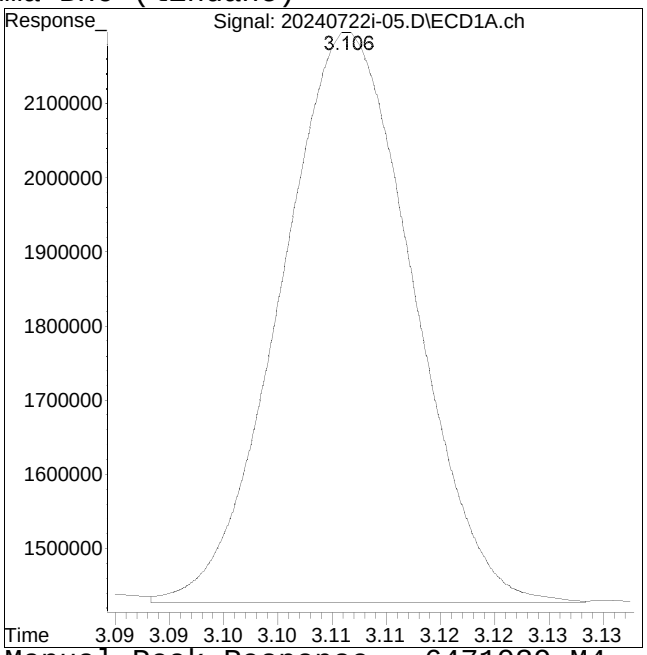
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #5: gamma-BHC (lindane)




Original Peak Response = 6504692



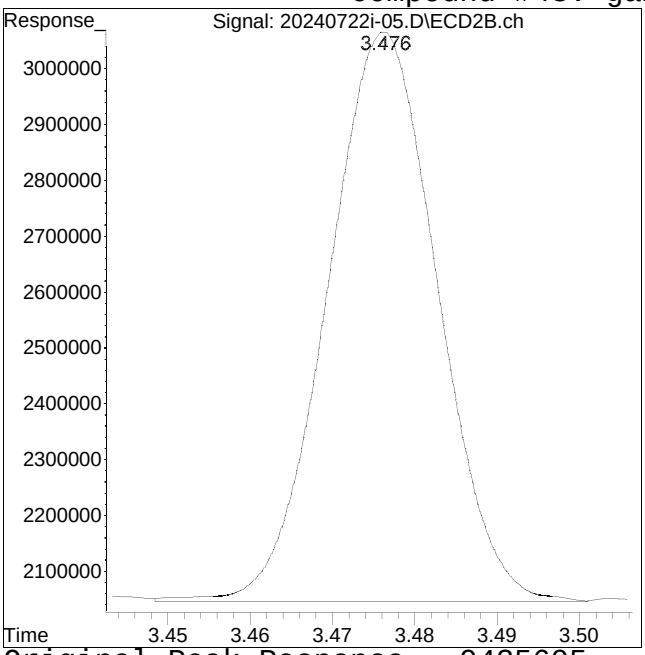

Manual Peak Response = 6471039 M4

M4 = Poor automated baseline construction.

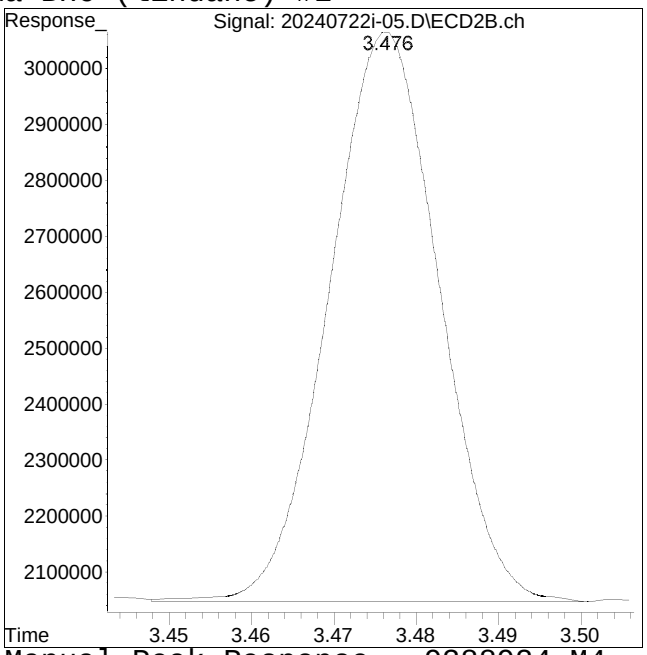
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 9435605



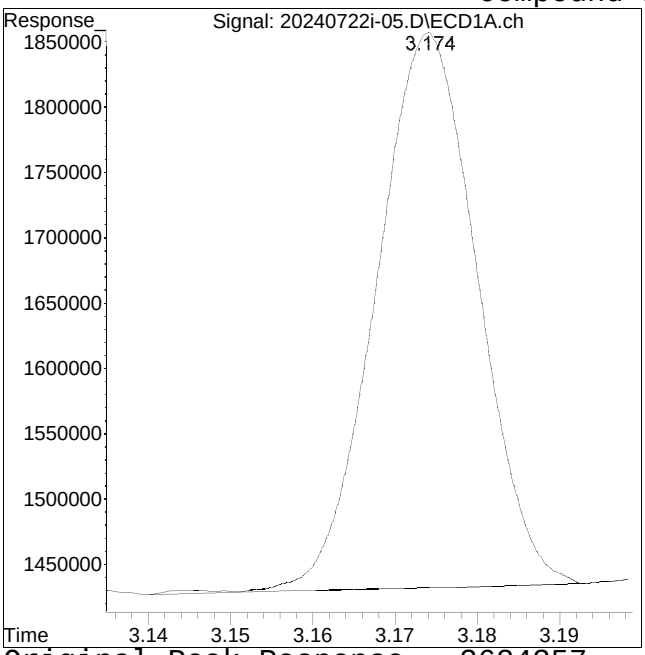

Manual Peak Response = 9388924 M4

M4 = Poor automated baseline construction.

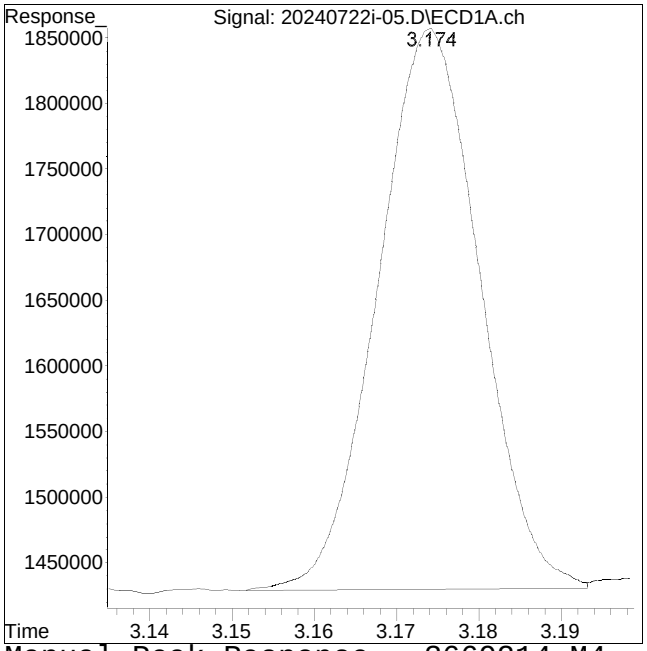
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #6: beta-BHC




Original Peak Response = 3624357




Manual Peak Response = 3669214 M4

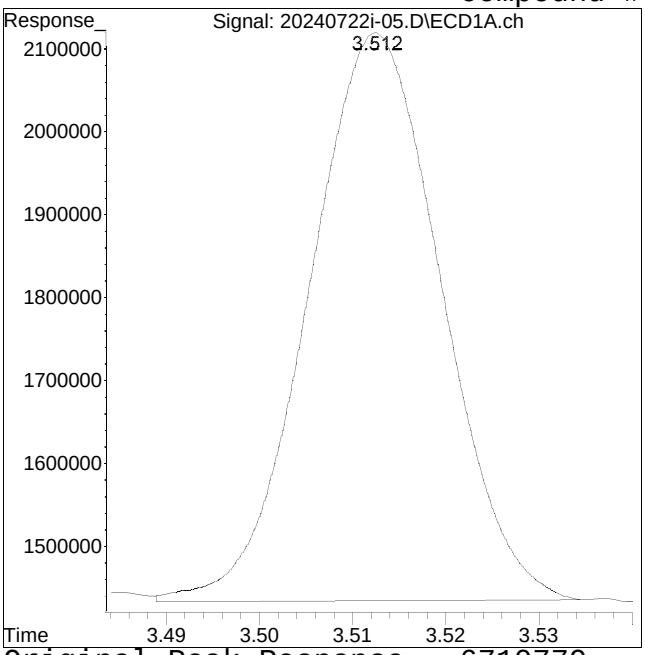
M4 = Poor automated baseline construction.

# Manual Integration Report

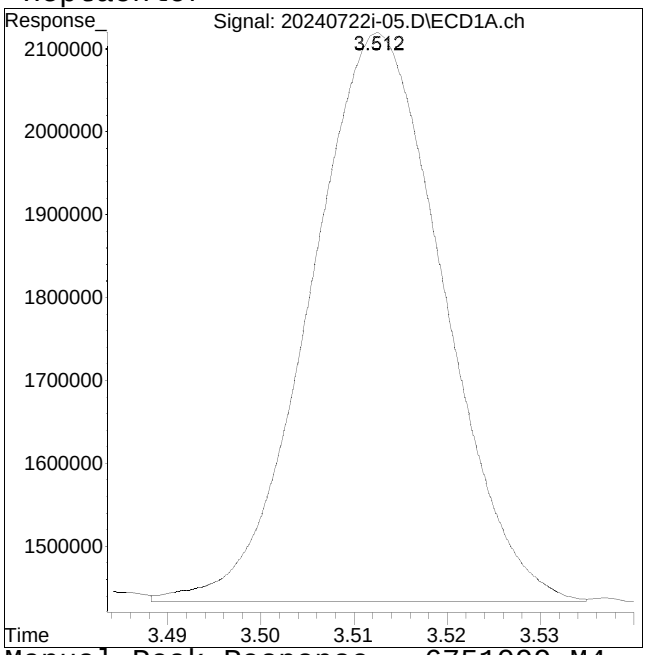
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

## Compound #8: Heptachlor




Original Peak Response = 6710779



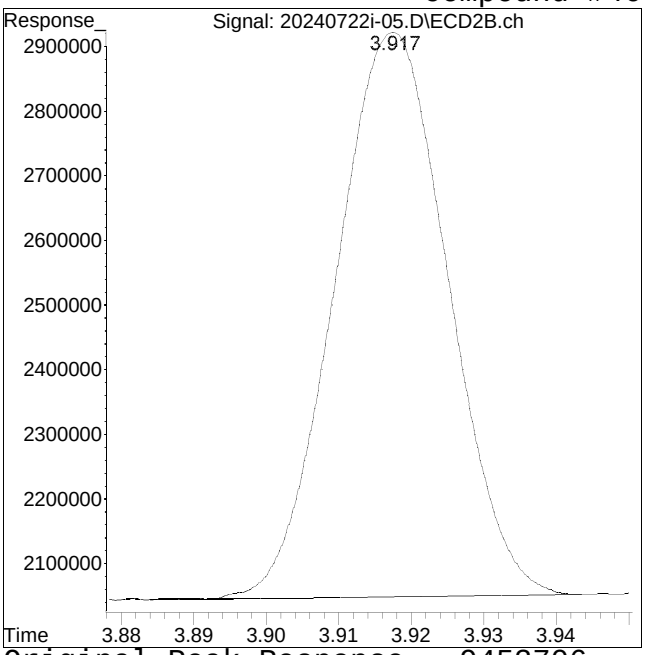

Manual Peak Response = 6751099 M4

M4 = Poor automated baseline construction.

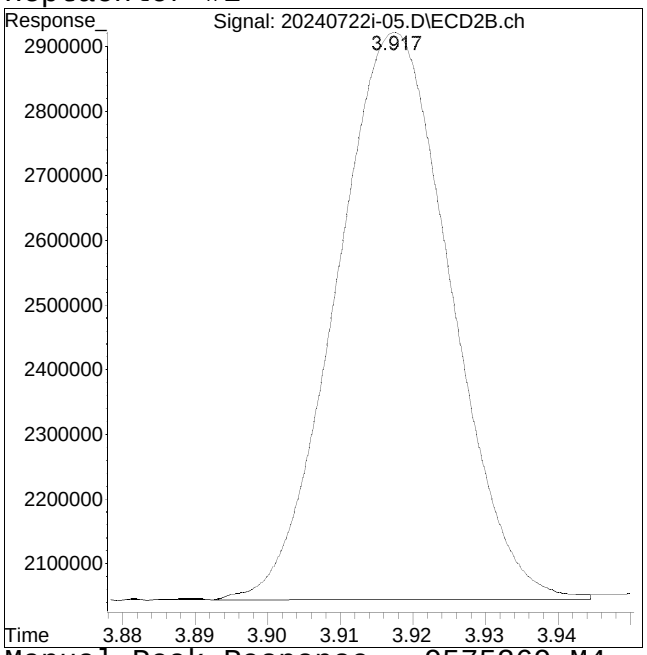
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #46: Heptachlor #2




Original Peak Response = 9453706



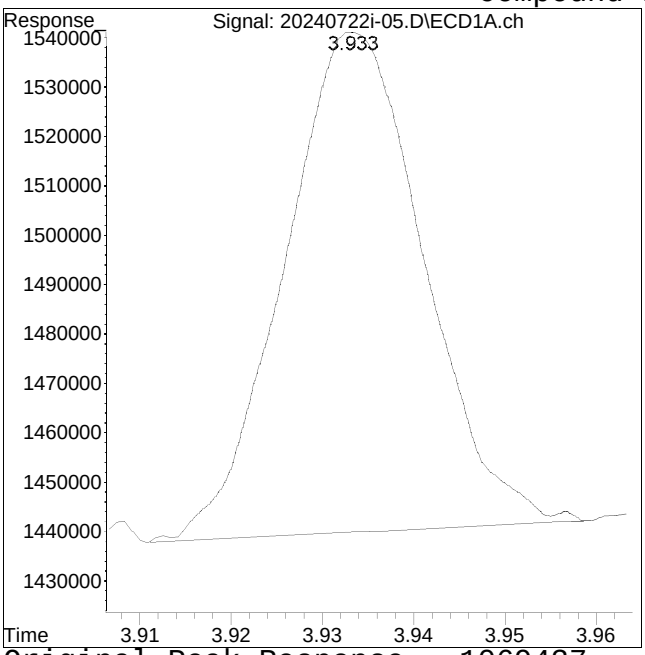

Manual Peak Response = 9575269 M4

M4 = Poor automated baseline construction.

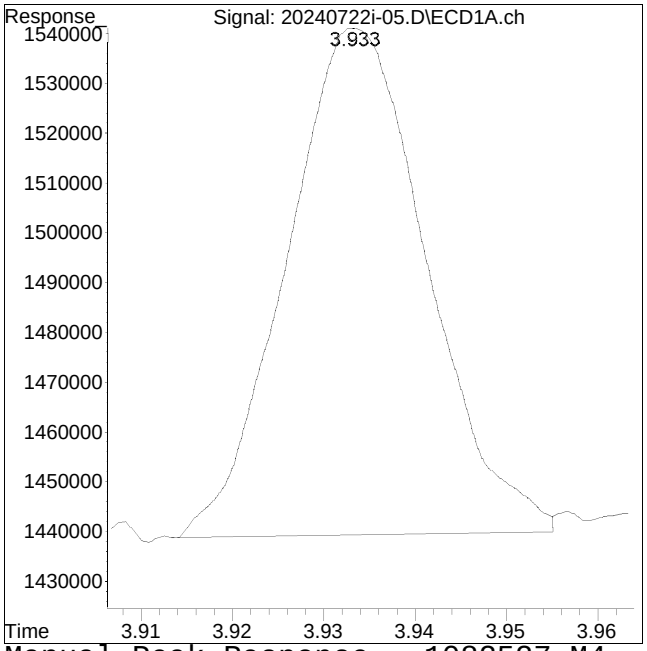
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #10: Alachlor




Original Peak Response = 1069437



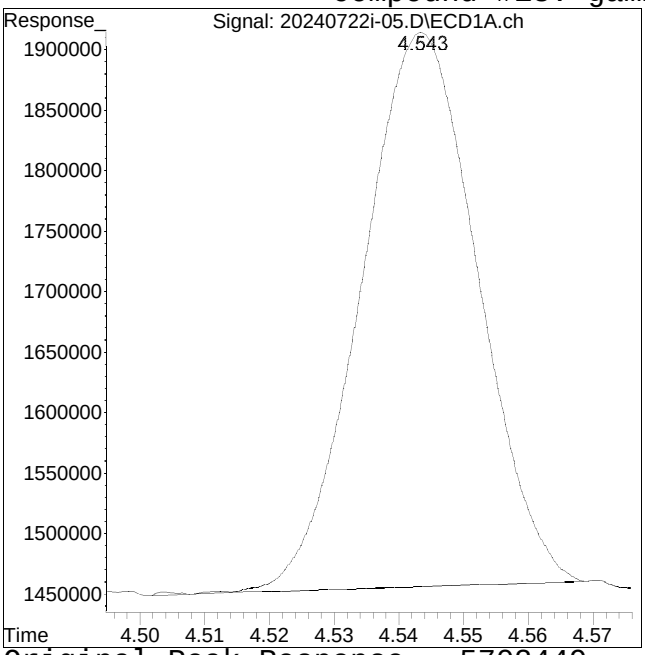

Manual Peak Response = 1082527 M4

M4 = Poor automated baseline construction.

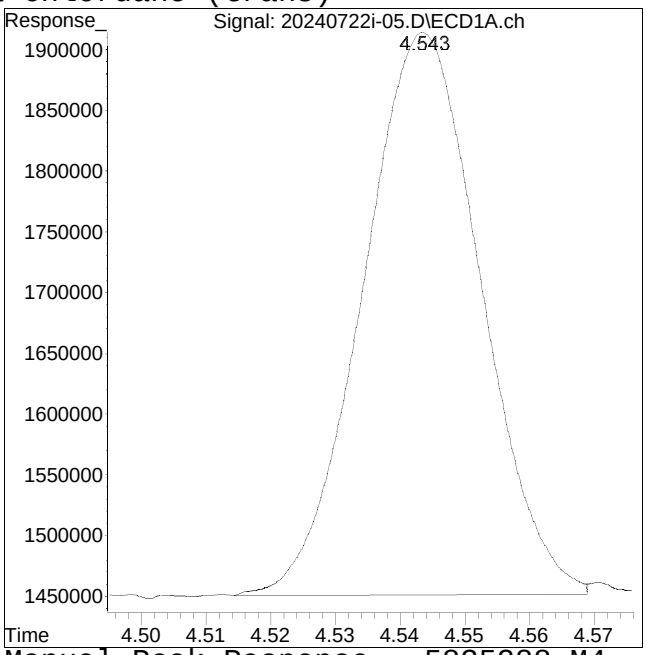
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #13: gamma-Chlordane (trans)




Original Peak Response = 5702449



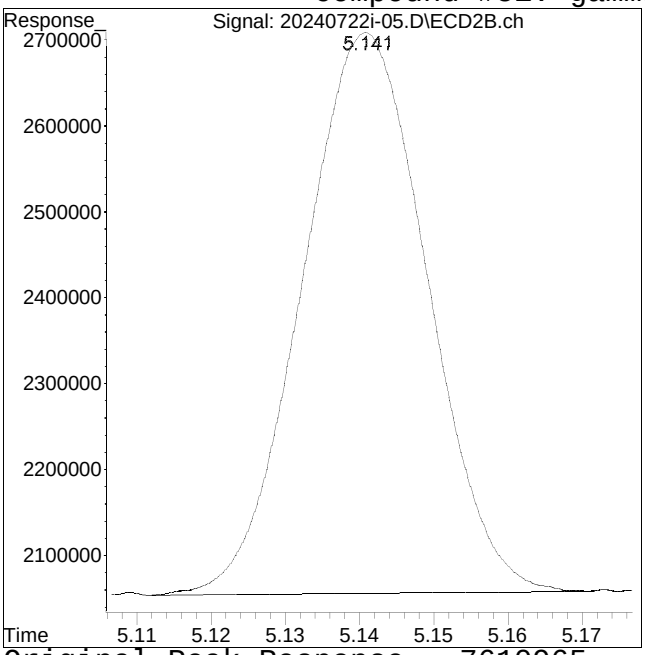

Manual Peak Response = 5835288 M4

M4 = Poor automated baseline construction.

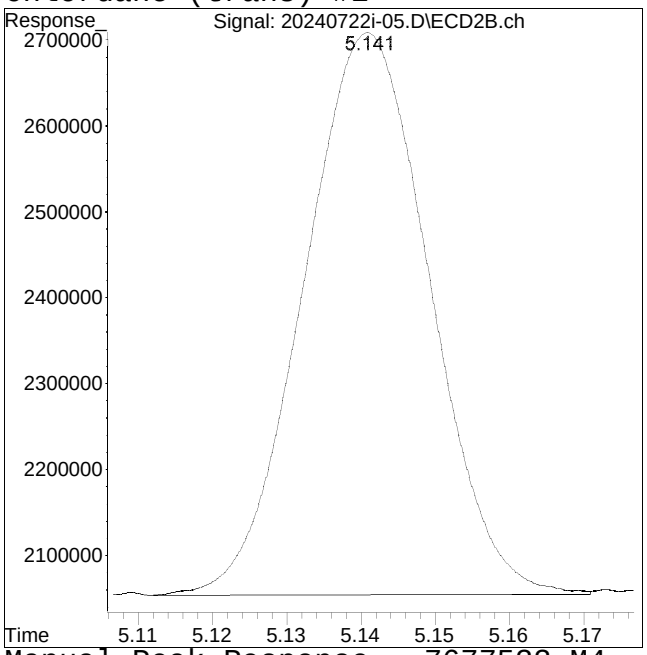
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 7610965



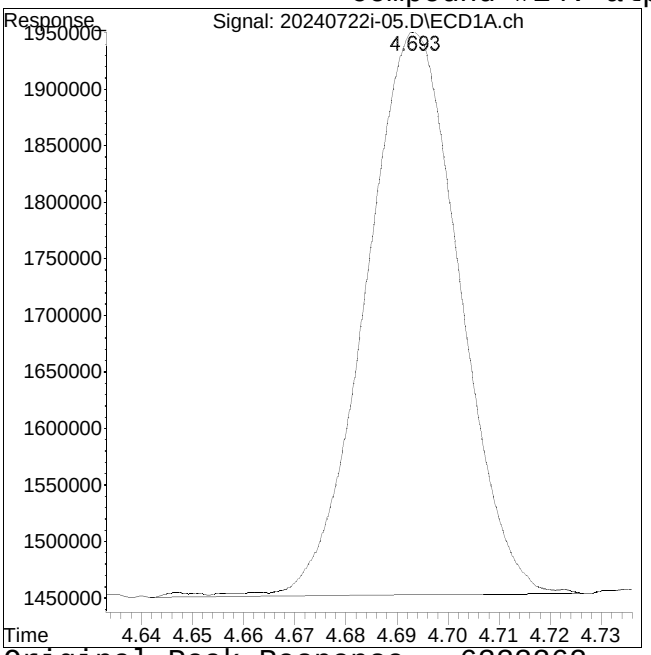

Manual Peak Response = 7677533 M4

M4 = Poor automated baseline construction.

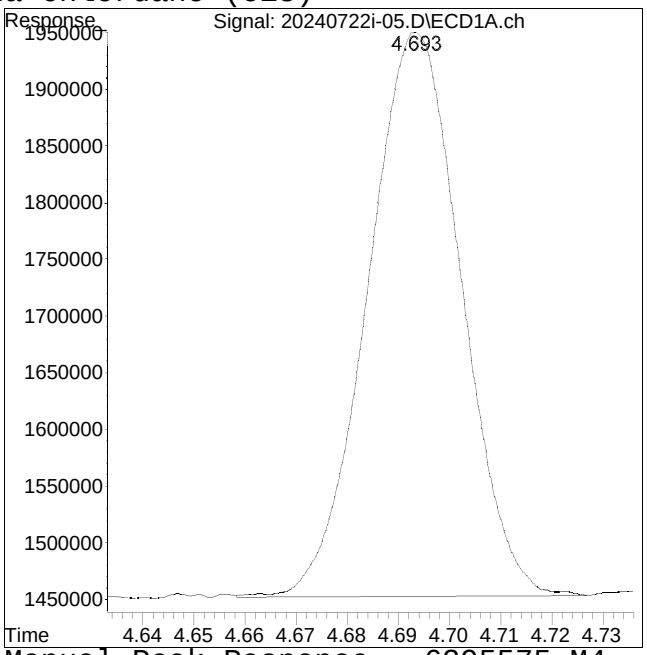
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

Compound #14: alpha-Chlordane (cis)




Original Peak Response = 6333262



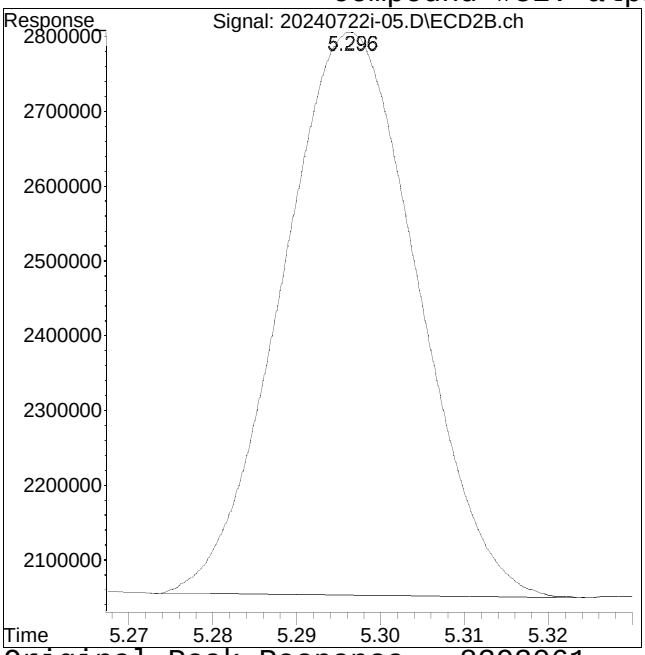

Manual Peak Response = 6295575 M4

M4 = Poor automated baseline construction.

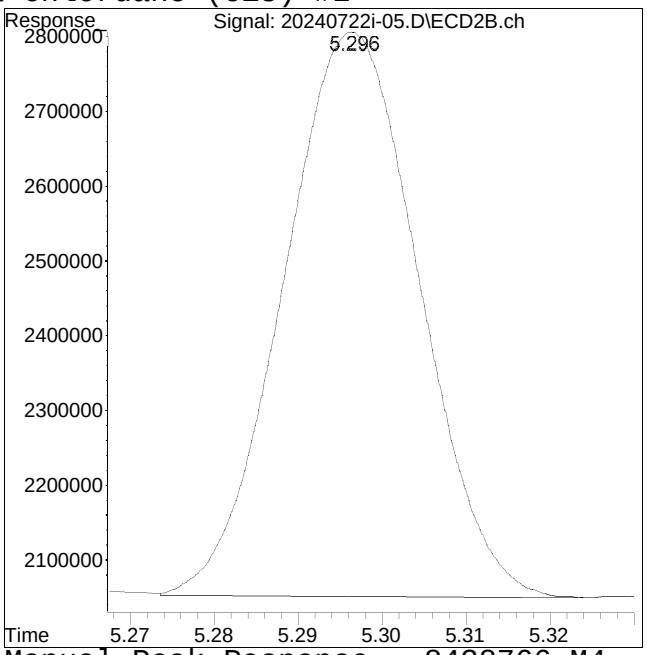
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 8393061



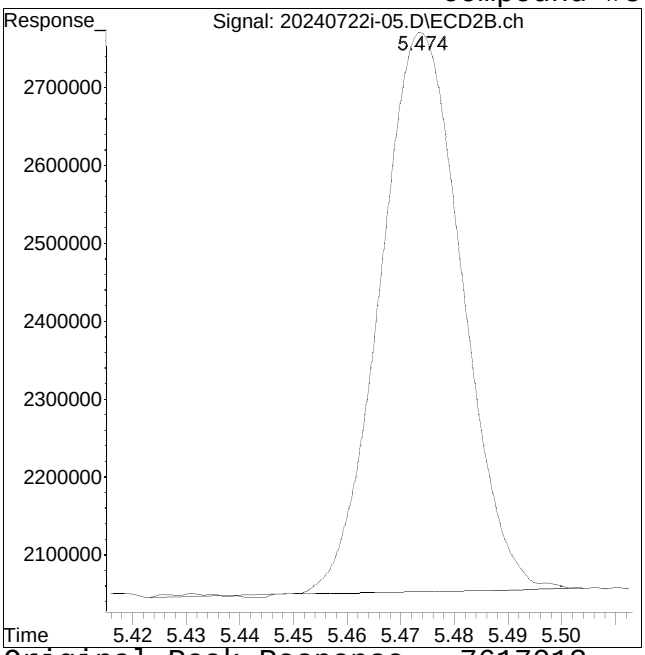

Manual Peak Response = 8438766 M4

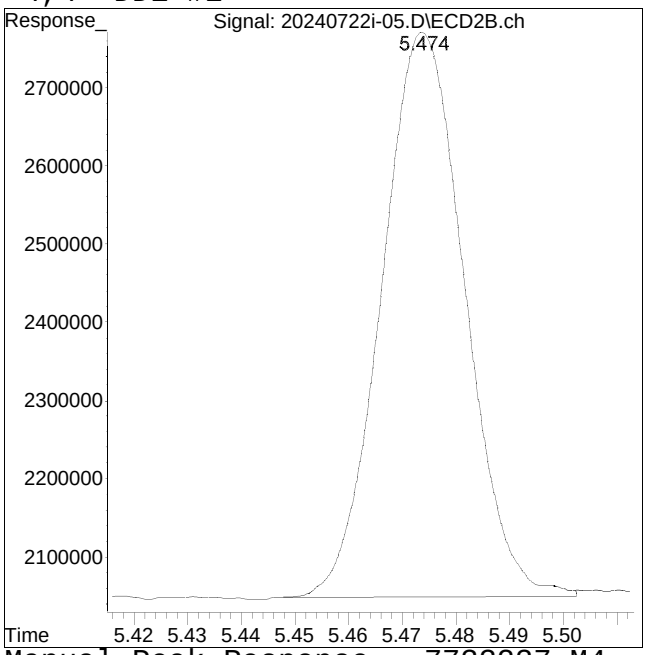
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

Compound #53: 4,4'-DDE #2



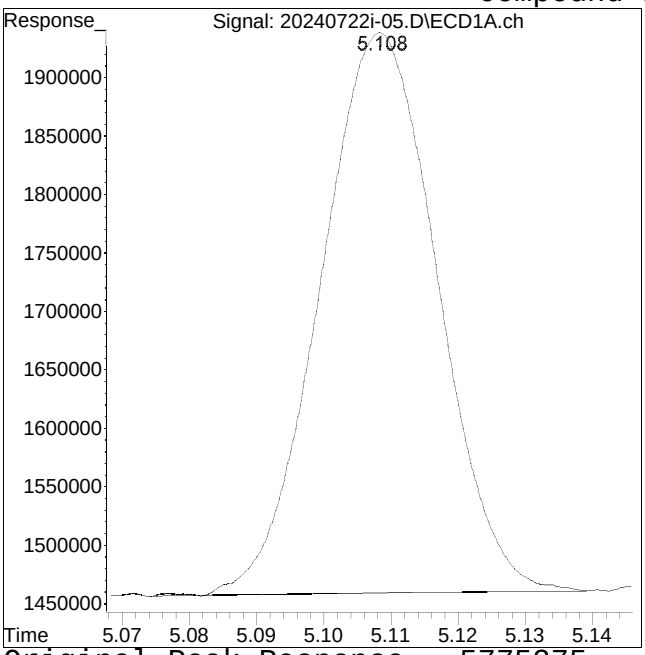




Original Peak Response = 7617013 Manual Peak Response = 7733237 M4
M4 = Poor automated baseline construction.

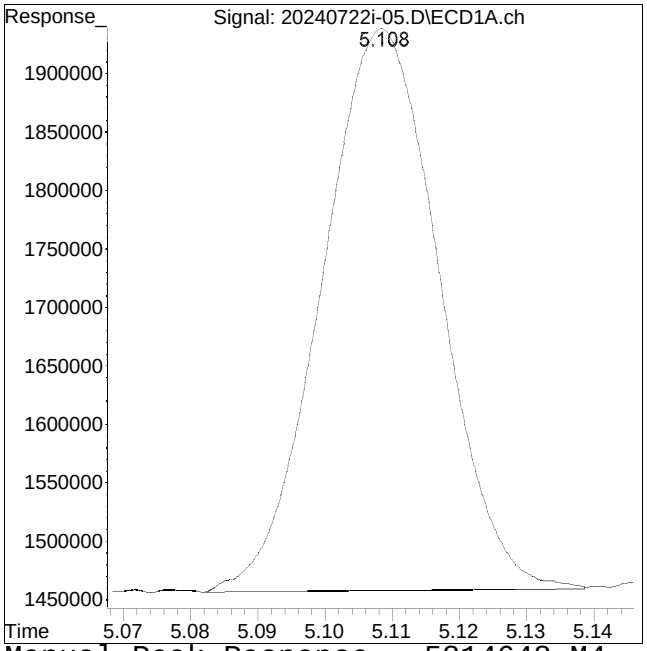
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #17: Dieldrin




Original Peak Response = 5775275




Manual Peak Response = 5814648 M4

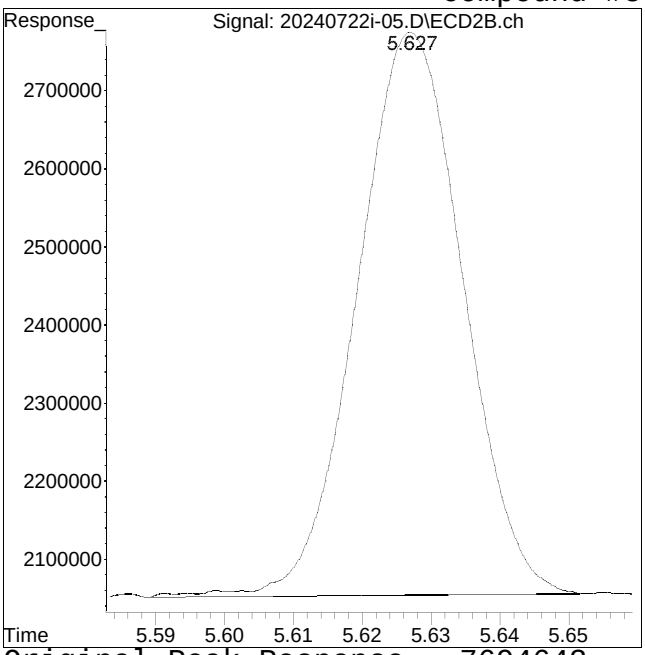
M4 = Poor automated baseline construction.

# Manual Integration Report

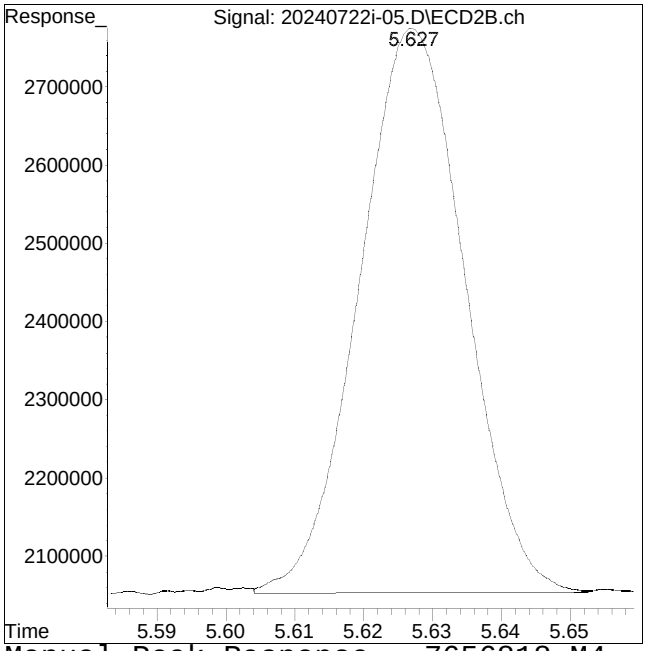
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

## Compound #55: Dieldrin #2




Original Peak Response = 7694643



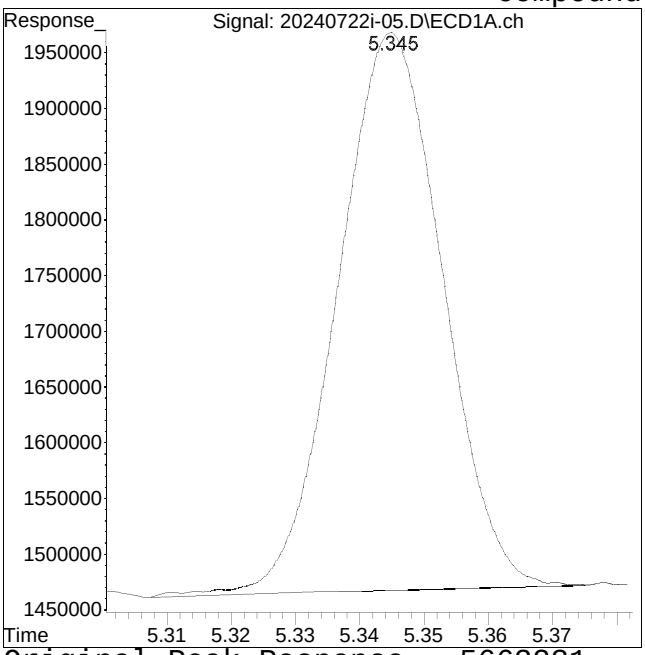

Manual Peak Response = 7656818 M4

M4 = Poor automated baseline construction.

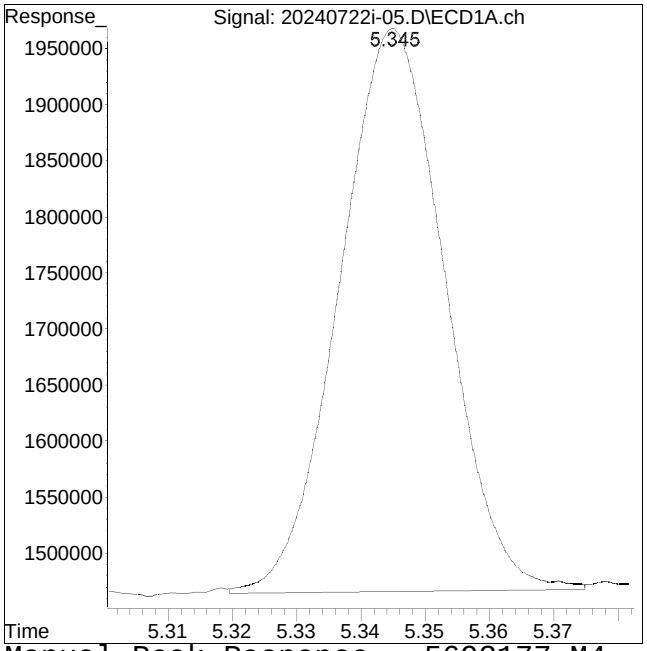
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #18: Endrin




Original Peak Response = 5663231




Manual Peak Response = 5693177 M4

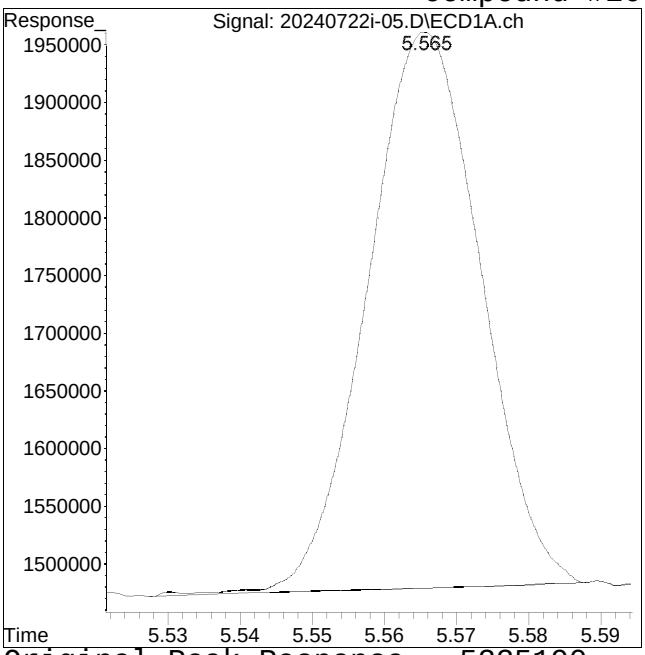
M4 = Poor automated baseline construction.

# Manual Integration Report

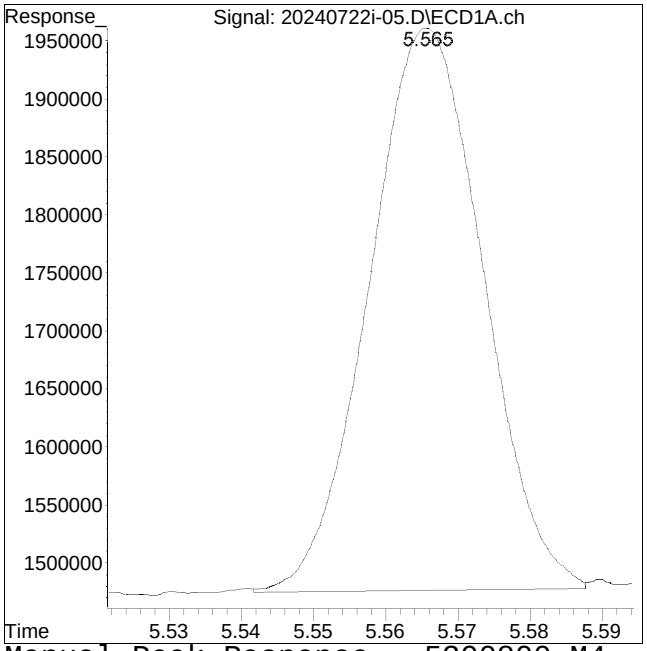
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

## Compound #20: Endosulfan II




Original Peak Response = 5235190



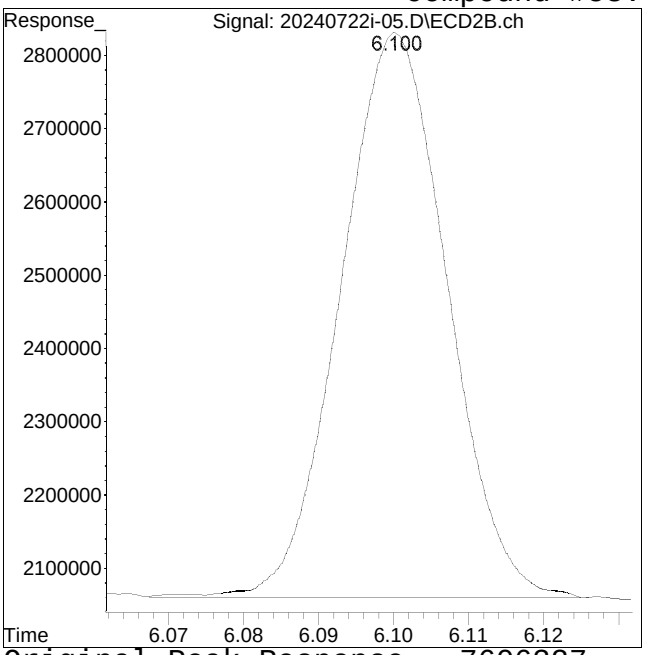

Manual Peak Response = 5300800 M4

M4 = Poor automated baseline construction.

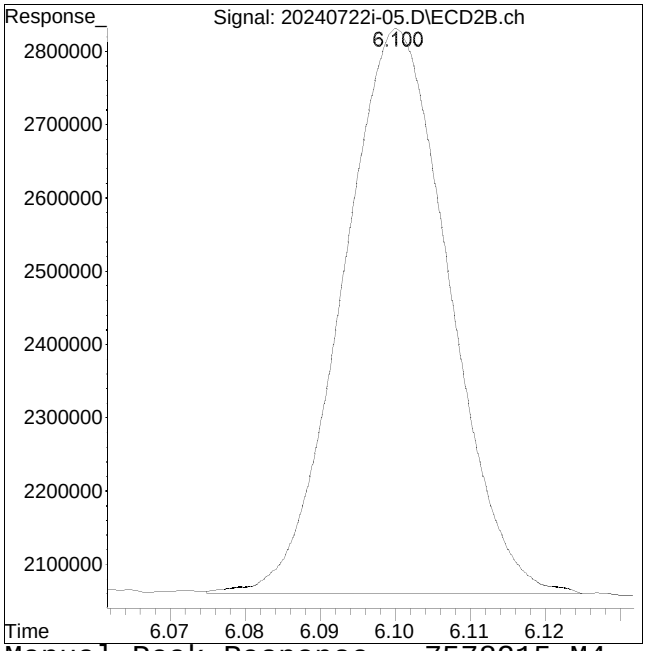
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-05.D
Date Inj'd : 7/22/2024 18:34
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:27 pm

Compound #58: Endosulfan II #2




Original Peak Response = 7606327



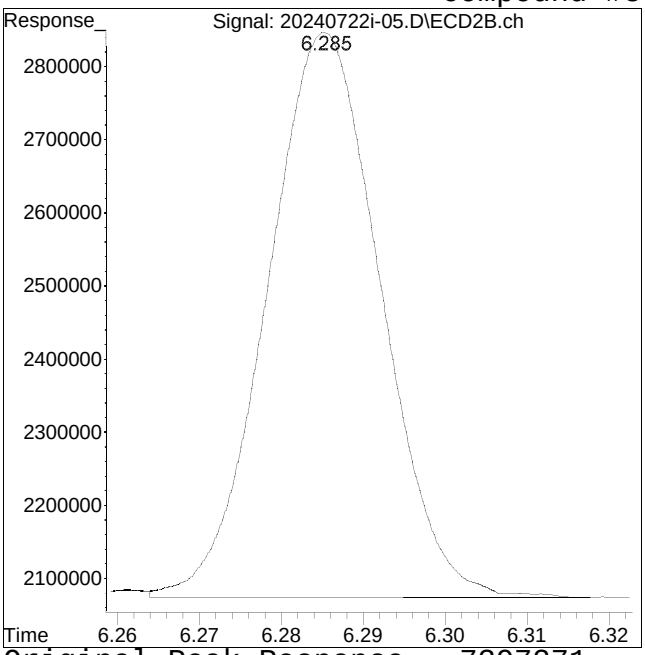

Manual Peak Response = 7578215 M4

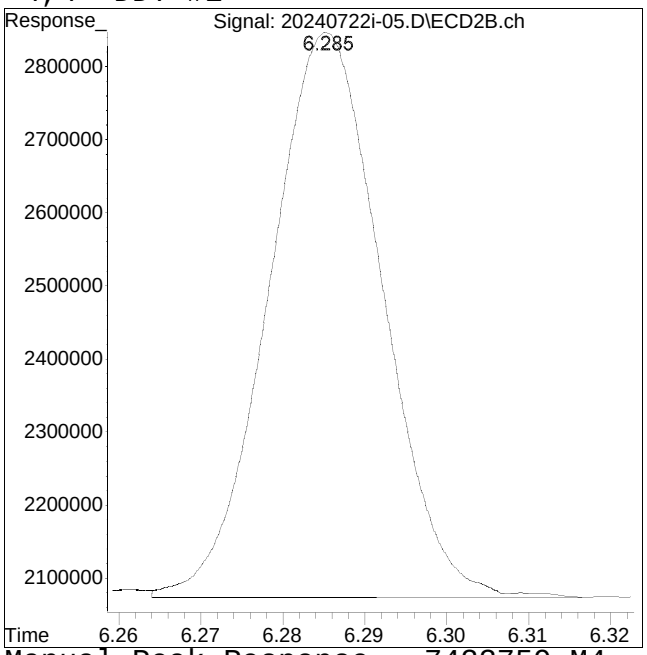
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #59: 4,4'-DDT #2



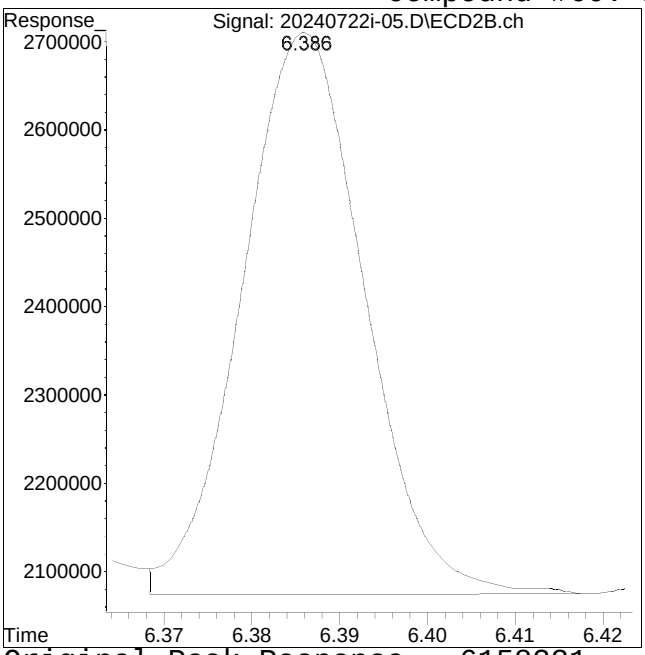



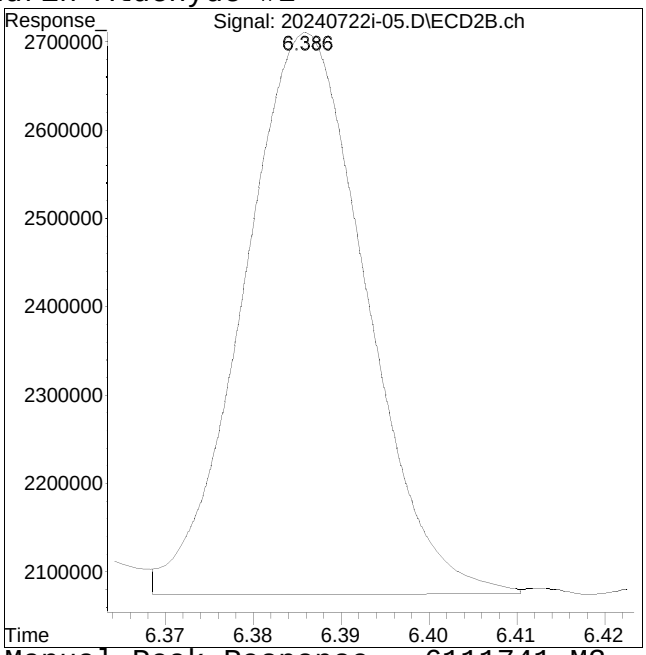

Original Peak Response = 7397271 Manual Peak Response = 7423759 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #60: Endrin Aldehyde #2



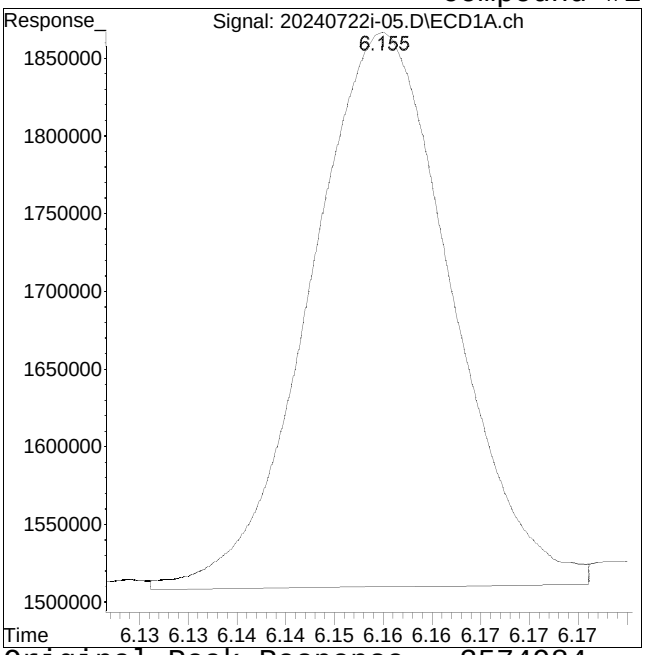




Original Peak Response = 6158221 Manual Peak Response = 6111741 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

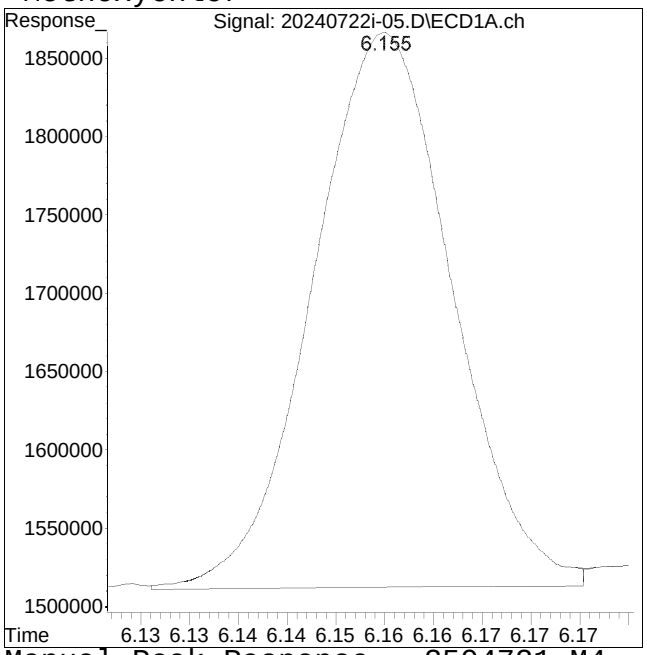
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #23: Methoxychlor




Original Peak Response = 3574984



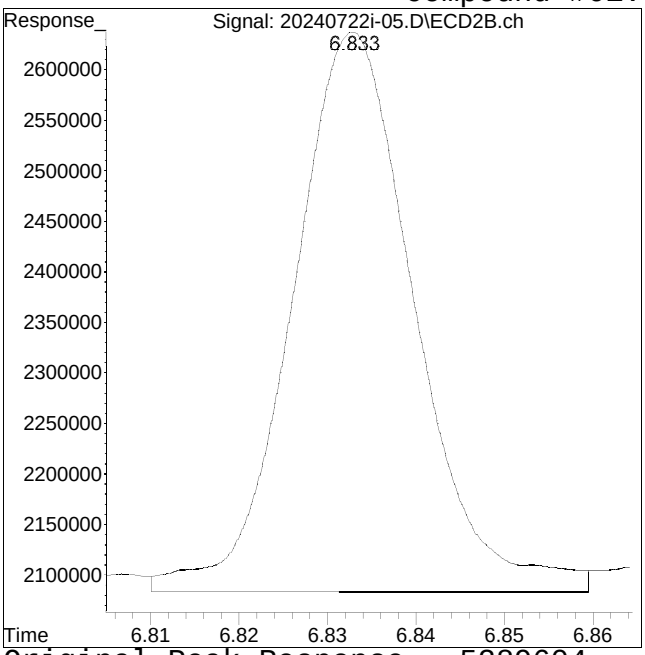

Manual Peak Response = 3504721 M4

M4 = Poor automated baseline construction.

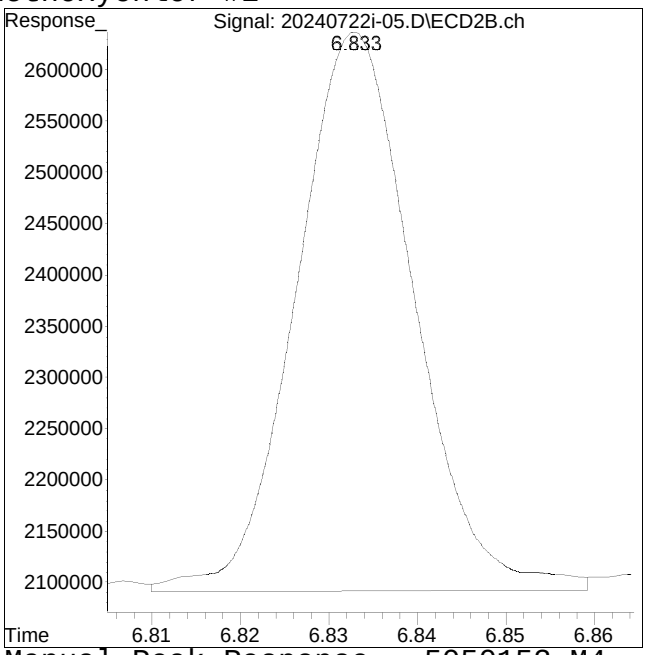
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #61: Methoxychlor #2




Original Peak Response = 5289604



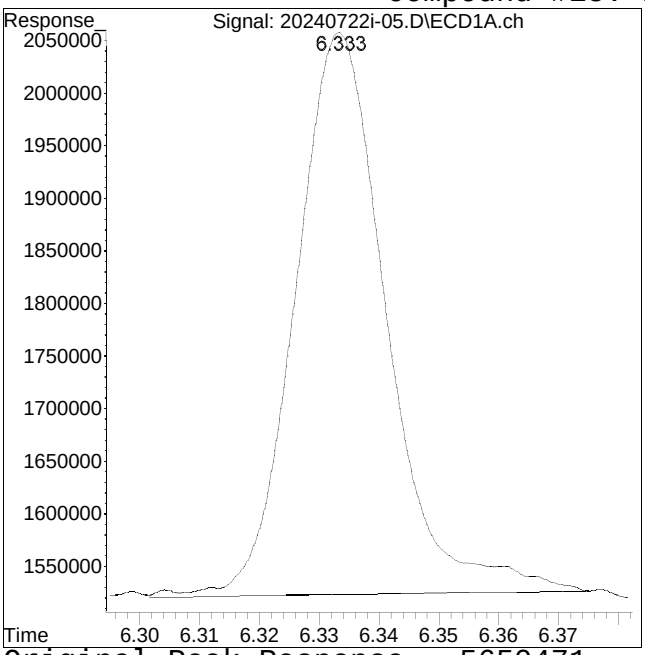

Manual Peak Response = 5050153 M4

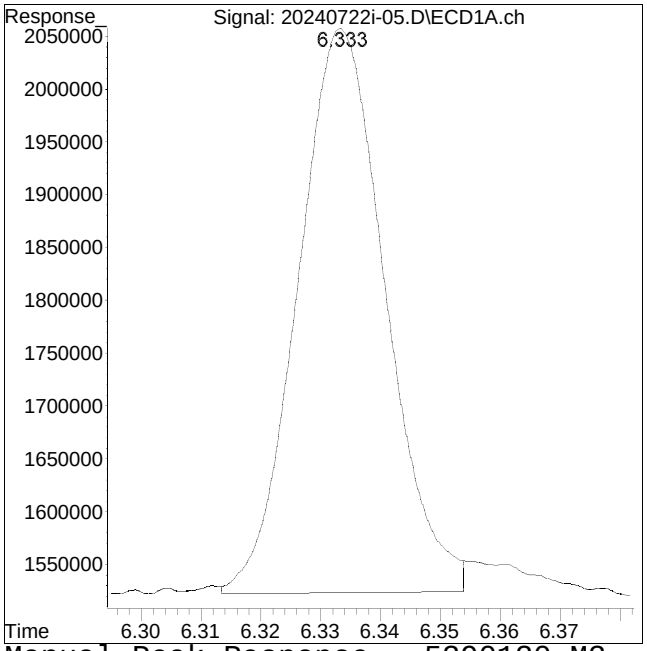
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #25: Endosulfan Sulfate



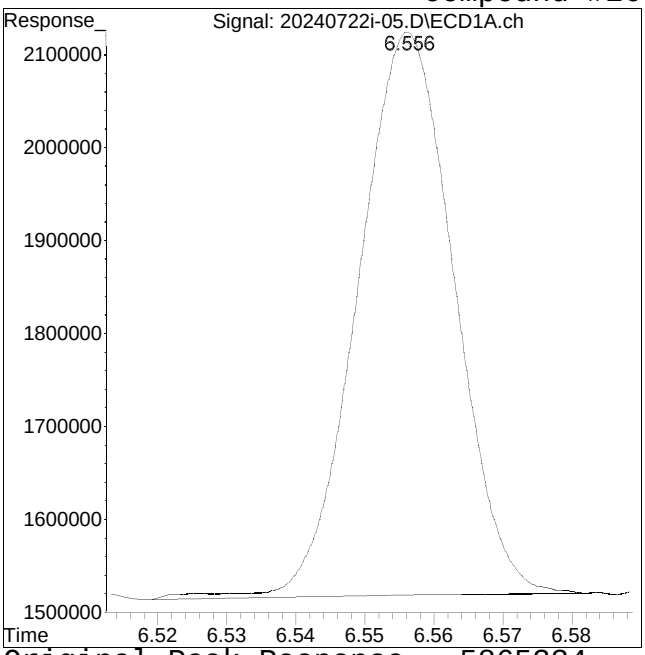



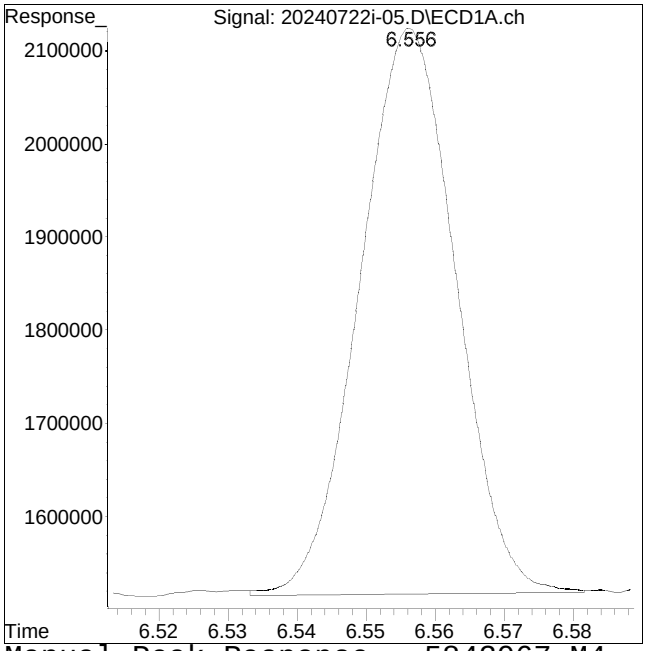

Original Peak Response = 5650471 Manual Peak Response = 5390130 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #26: Endrin Ketone



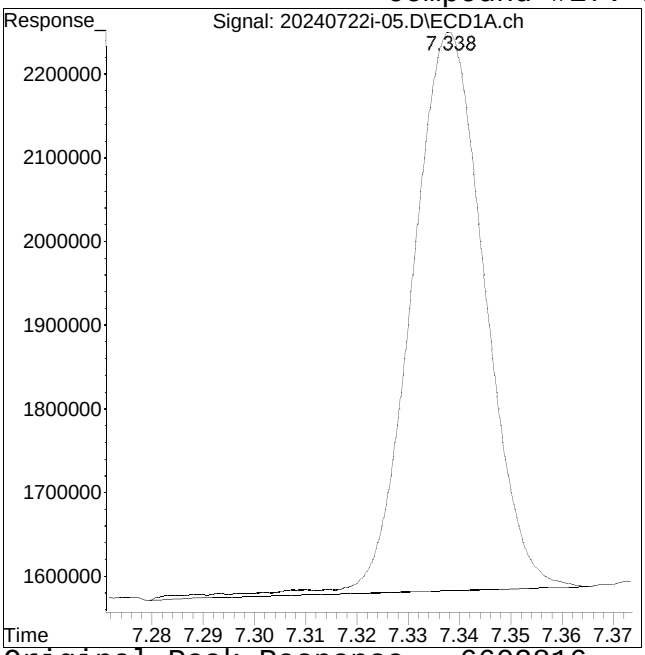




Original Peak Response = 5865334 Manual Peak Response = 5843067 M4
M4 = Poor automated baseline construction.

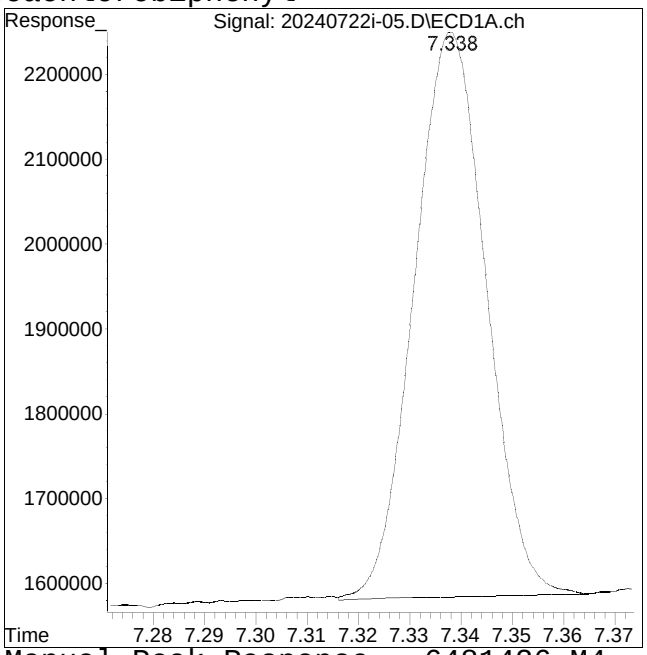
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

## Compound #27: Decachlorobiphenyl




Original Peak Response = 6602816



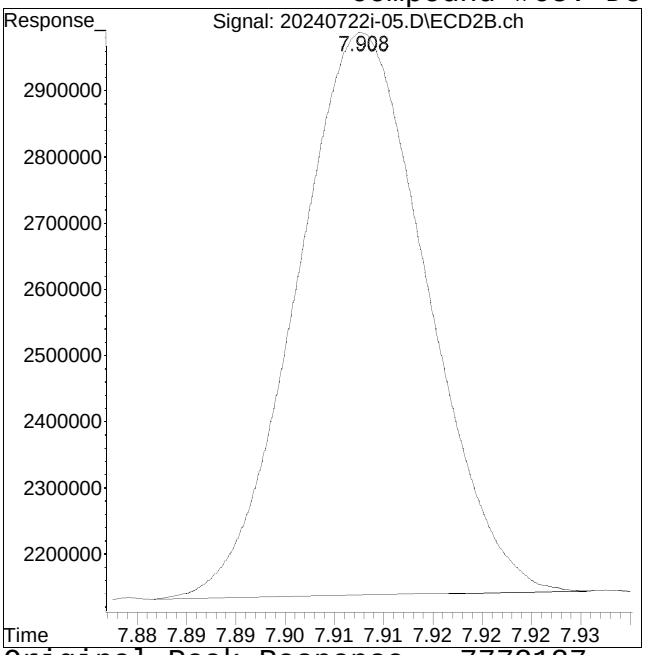

Manual Peak Response = 6481426 M4

M4 = Poor automated baseline construction.

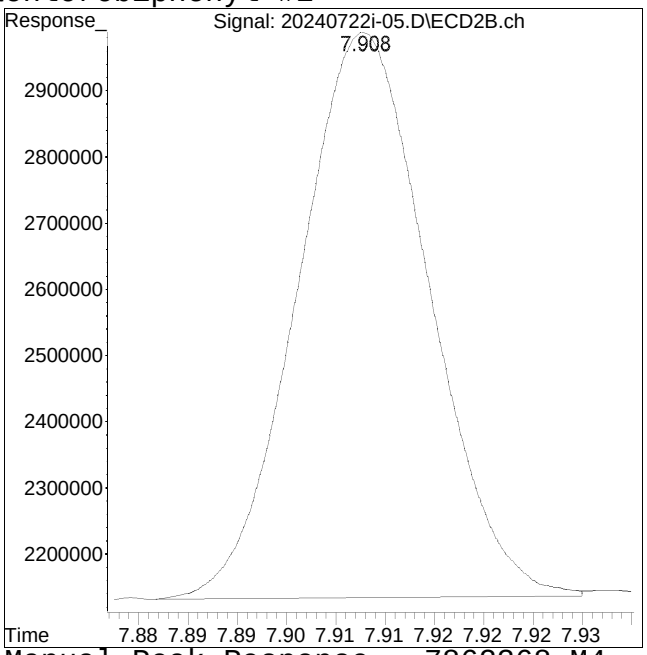
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-05.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:34 Instrument : PEST 20
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 7/23/2024 1:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 7772127




Manual Peak Response = 7862368 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:46
Operator : pest20:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:18:10 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:17:53 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.007 | 2.063 | 49390504 | 78959739 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.474 | 2.663 | 8456317 | 12483650 | 3.638 | 3.446M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 7.28%# | 6.89%# |
| 27) s | Decachlorobi | 7.337 | 7.907 | 9233593 | 11420554 | 4.016 | 3.804 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 8.03%# | 7.61%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.741 | 3.040 | 9524208 | 13867870 | 3.872 | 3.675 |
| 4) | alpha-BHC | 2.863 | 3.153 | 9725492 | 14456151 | 3.229M4 | 3.021 |
| 5) | gamma-BHC (l | 3.108 | 3.476 | 9402467 | 13934950 | 3.395 | 3.166M4 |
| 6) | beta-BHC | 3.175 | 3.551 | 5262309 | 7802199 | 3.886M4 | 3.690 |
| 7) | delta-BHC | 3.325 | 3.848 | 9178361 | 13747417 | 3.300 | 3.095 |
| 8) | Heptachlor | 3.514 | 3.917 | 9810871 | 14258781 | 3.622 | 3.433M4 |
| 9) | Aldrin | 3.792 | 4.268 | 8855656 | 12418920 | 3.409M3 | 3.222 |
| 10) | Alachlor | 3.935 | 4.141 | 1670048 | 2306503 | 3.808 | 3.788 |
| 11) | Chlorpyrifos | 4.035 | 4.524 | 5528761 | 8419290 | 4.080 | 3.956 |
| 12) | Heptachlor E | 4.409 | 4.930 | 8961689 | 12911569 | 3.667 | 3.455 |
| 13) | gamma-Chlord | 4.545 | 5.141 | 8315352 | 11325732 | 3.618 | 3.427 |
| 14) | alpha-Chlord | 4.693 | 5.296 | 9204061 | 12572631 | 3.656M4 | 3.427M4 |
| 15) | 4,4'-DDE | 4.796 | 5.474 | 8555843 | 11586920 | 3.421 | 3.175 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:46
Operator : pest20:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:18:10 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:17:53 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 16) | Endosulfan I | 4.846 | 5.354 | 8324557 | 11627310 | 3.616 | 3.394 |
| 17) | Dieldrin | 5.109 | 5.628 | 8435508 | 11462946 | 3.488 | 3.261 |
| 18) | Endrin | 5.345 | 5.911 | 8364604 | 11741874 | 3.499M4 | 3.279 |
| 19) | 4,4'-DDD | 5.434 | 6.018 | 7058784 | 9621818 | 3.501M4 | 3.244M4 |
| 20) | Endosulfan I | 5.566 | 6.100 | 7811600 | 11255247 | 3.671M4 | 3.478M4 |
| 21) | 4,4'-DDT | 5.705 | 6.286 | 7890076 | 11119080 | 3.594 | 3.343 |
| 22) | Endrin Aldeh | 5.959 | 6.386 | 6479770 | 9085647 | 3.576M4 | 3.349 |
| 23) | Methoxychlor | 6.155 | 6.833 | 5084848 | 7343011 | 4.002M4 | 3.934M4 |
| 24) | Mirex | 6.234 | 6.989 | 8111981 | 11096327 | 4.160 | 4.016 |
| 25) | Endosulfan S | 6.333 | 6.608 | 8013717 | 11328623 | 3.922M3 | 3.611 |
| 26) | Endrin Keton | 6.556 | 7.021 | 8563791 | 12288592 | 3.721 | 3.483 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:46
Operator : pest20:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:18:10 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:17:53 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

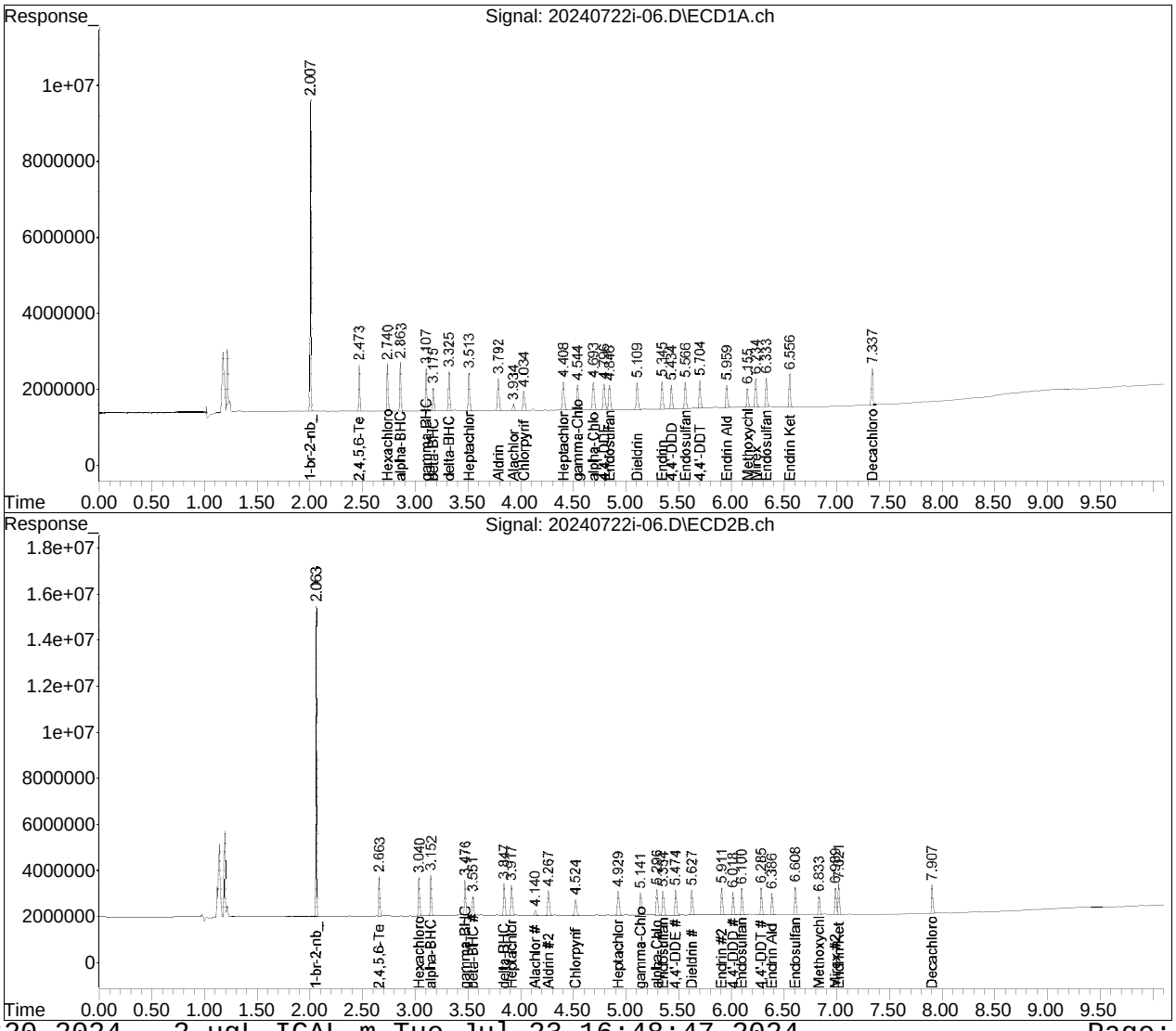
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-06.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:46
Operator : pest20:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:18:10 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:17:53 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

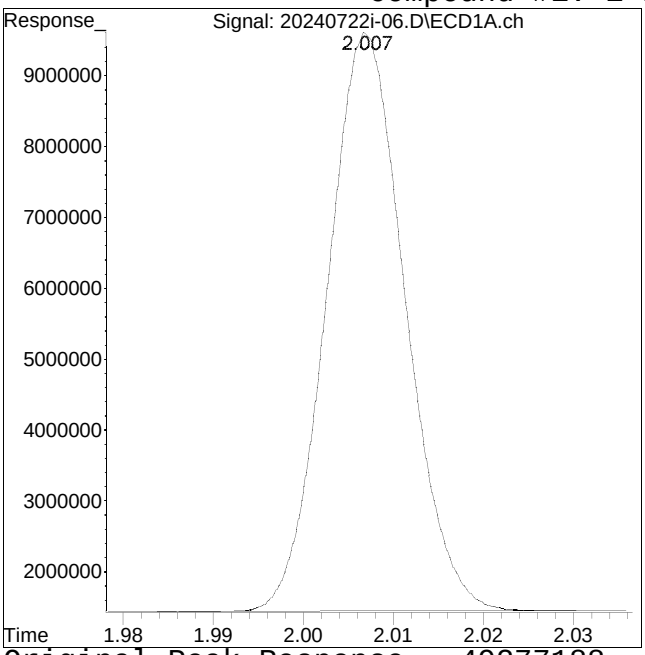


# Manual Integration Report

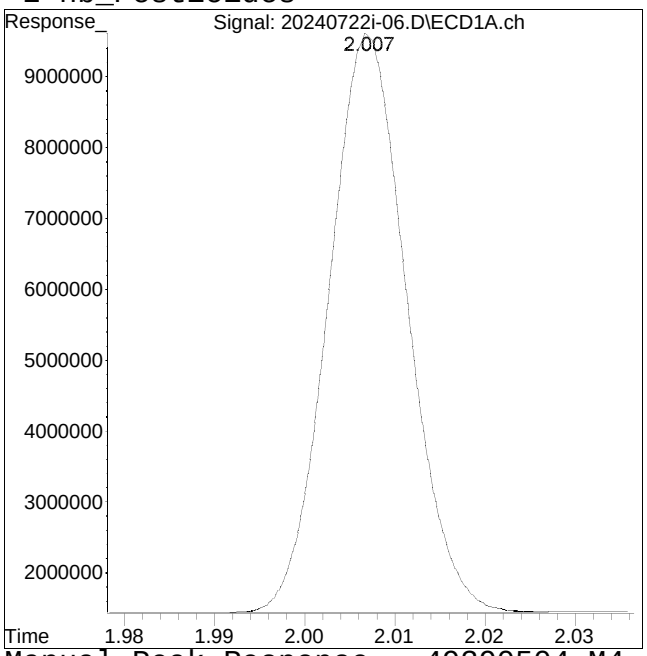
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 49277188



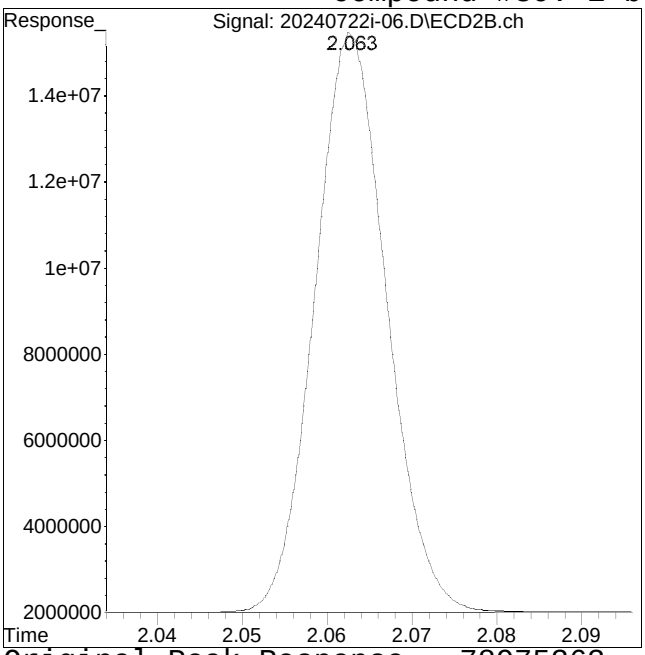

Manual Peak Response = 49390504 M4

M4 = Poor automated baseline construction.

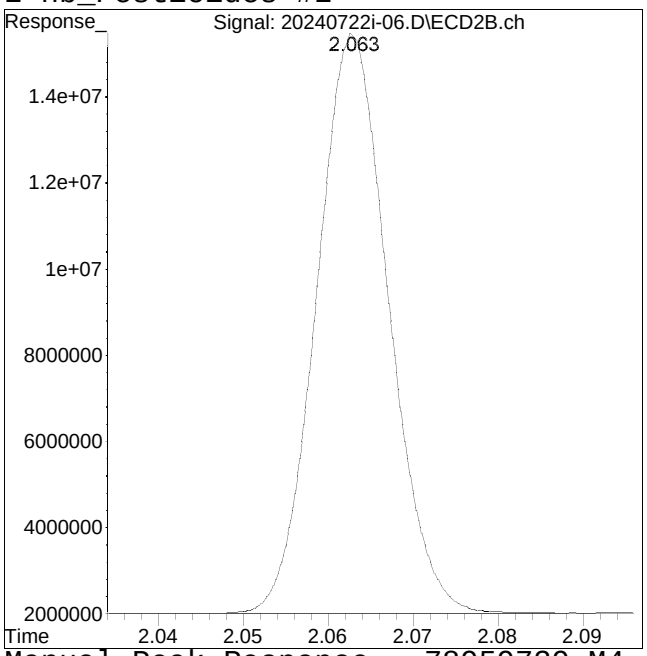
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 78975363



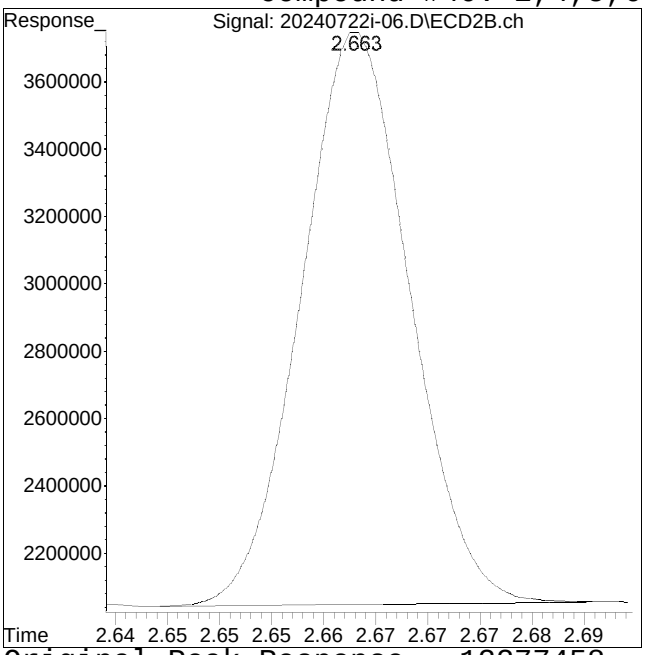

Manual Peak Response = 78959739 M4

M4 = Poor automated baseline construction.

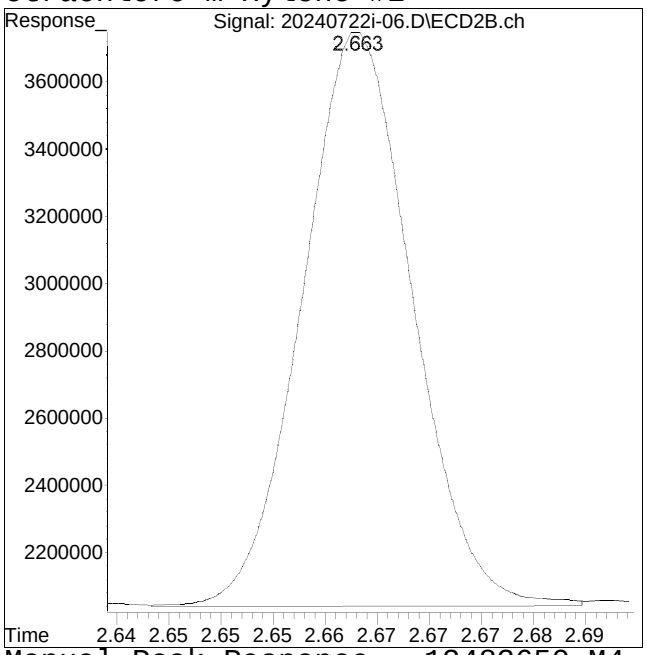
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 12277458



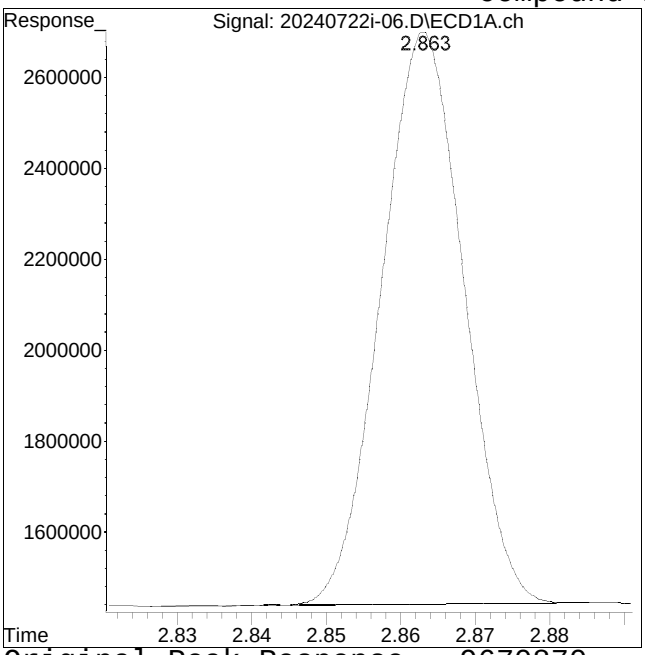

Manual Peak Response = 12483650 M4

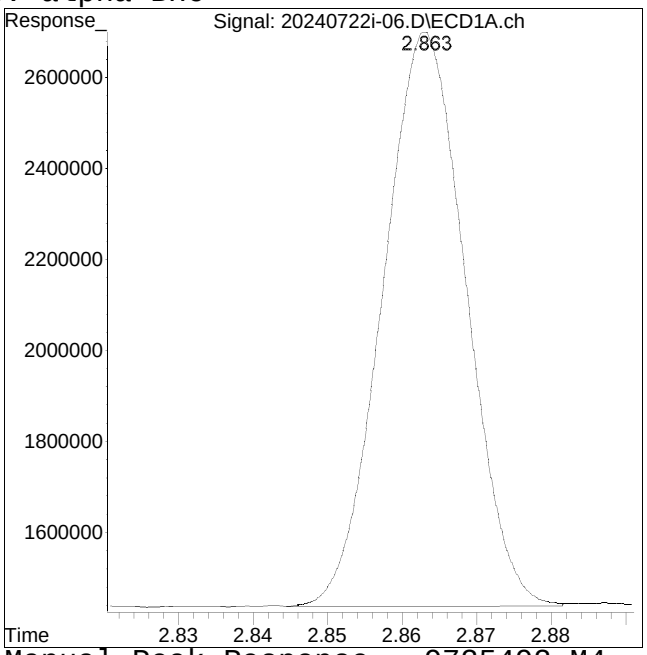
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #4: alpha-BHC



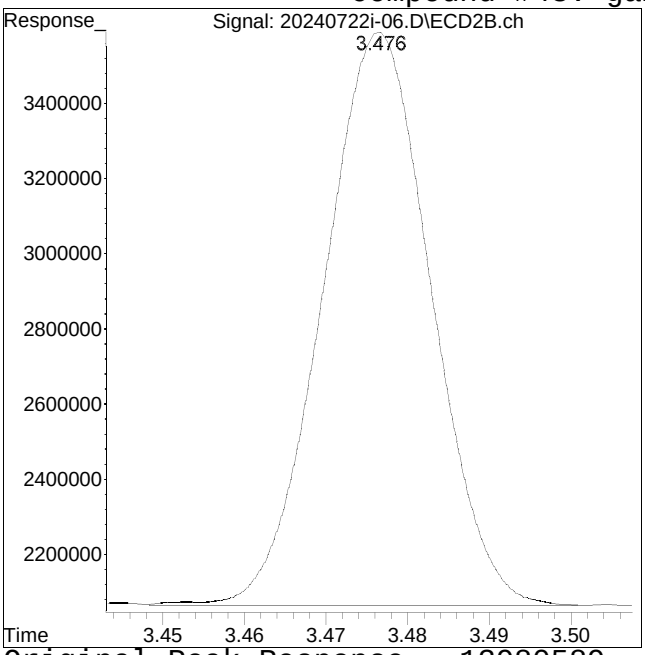




Original Peak Response = 9670870 Manual Peak Response = 9725492 M4
M4 = Poor automated baseline construction.

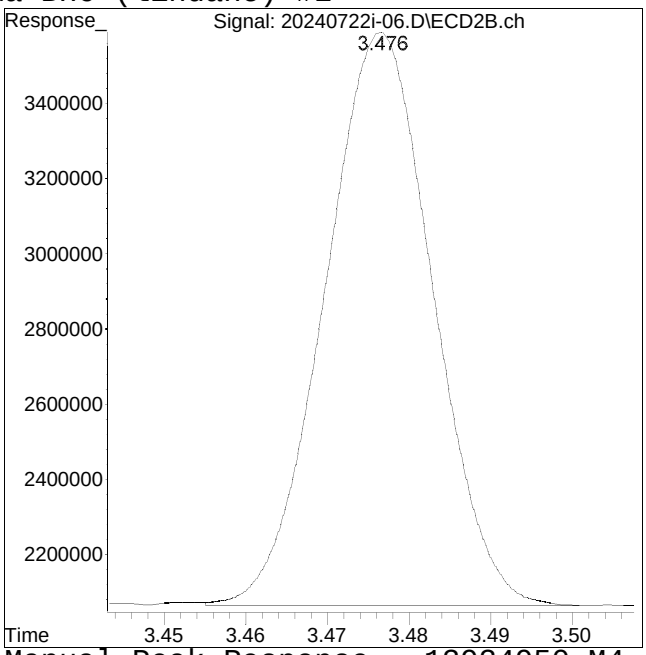
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 13980589



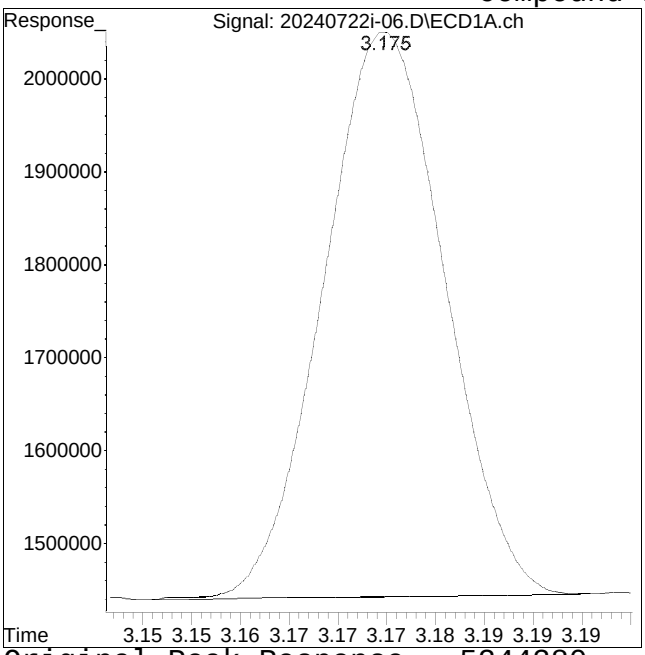

Manual Peak Response = 13934950 M4

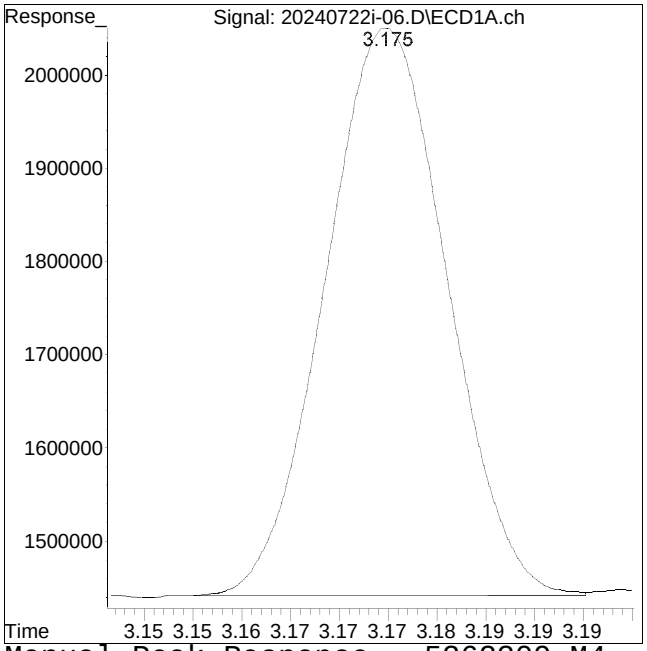
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #6: beta-BHC



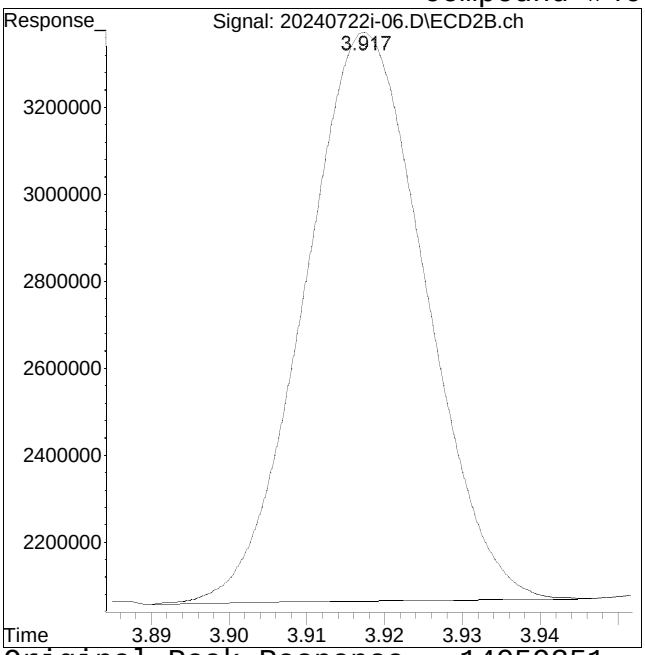




Original Peak Response = 5244380 Manual Peak Response = 5262309 M4
M4 = Poor automated baseline construction.

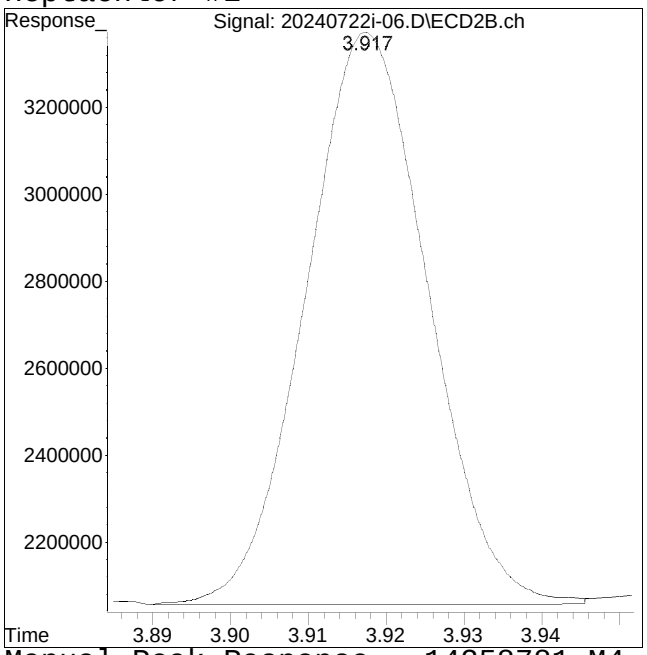
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

## Compound #46: Heptachlor #2




Original Peak Response = 14059351



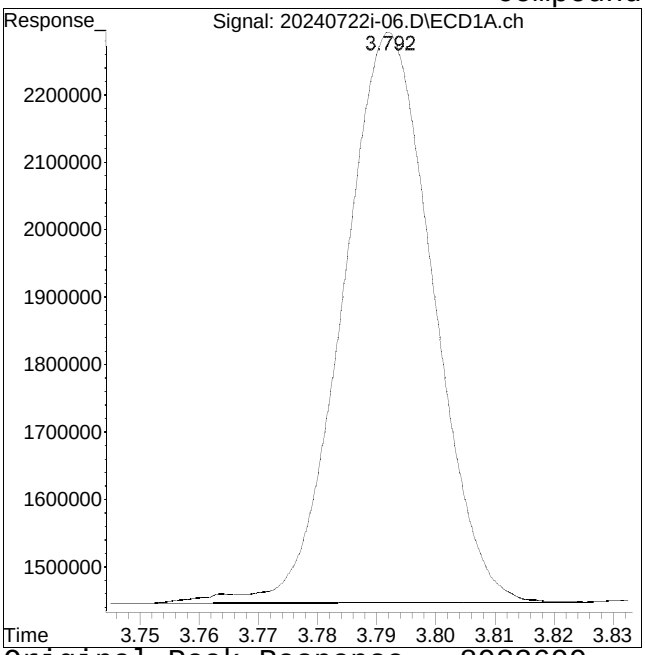

Manual Peak Response = 14258781 M4

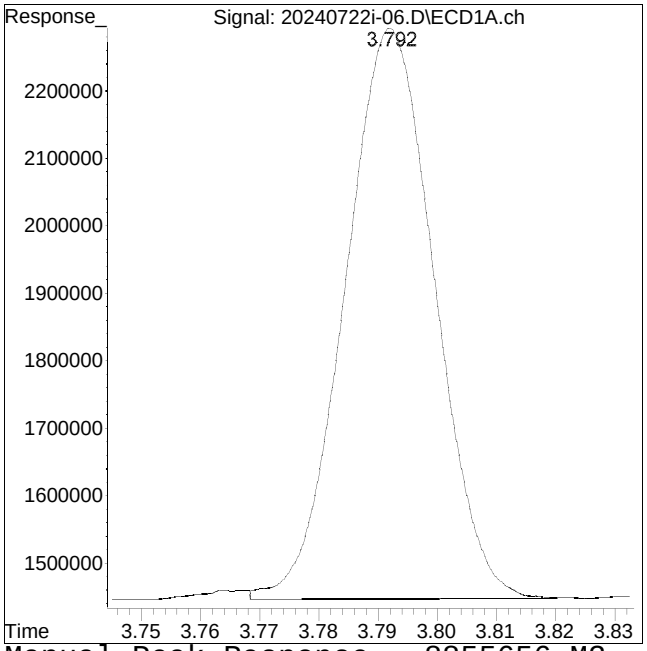
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #9: Aldrin



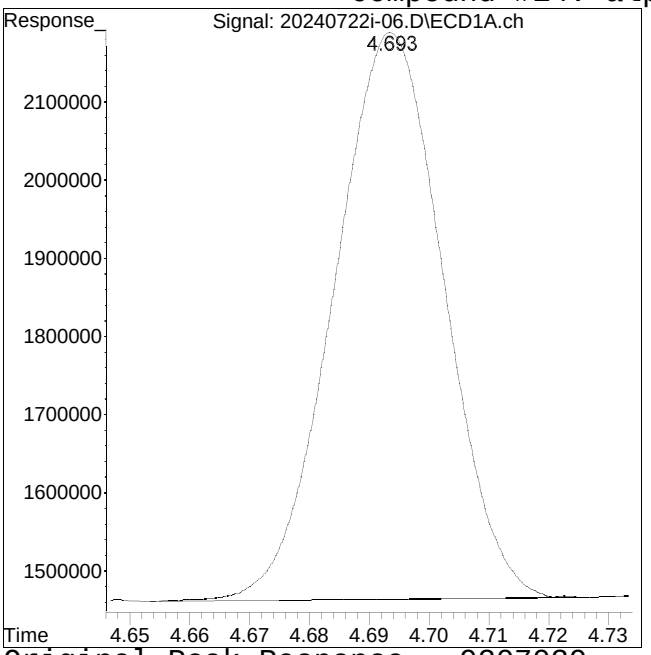




Original Peak Response = 8933699 Manual Peak Response = 8855656 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

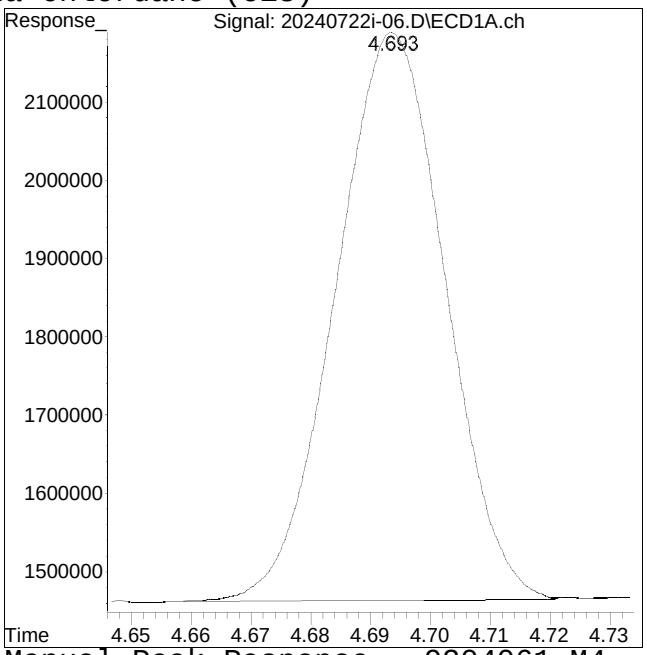
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #14: alpha-Chlordane (cis)




Original Peak Response = 9207039




Manual Peak Response = 9204061 M4

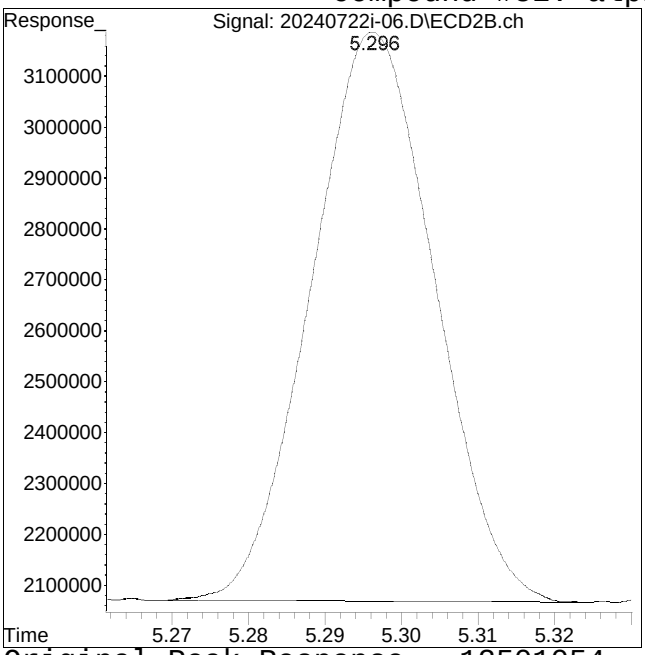
M4 = Poor automated baseline construction.

# Manual Integration Report

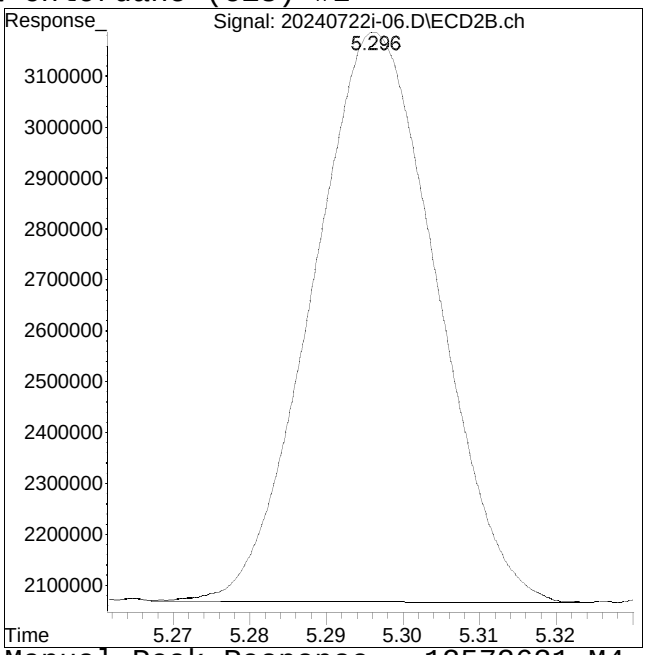
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

## Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 12501054




Manual Peak Response = 12572631 M4

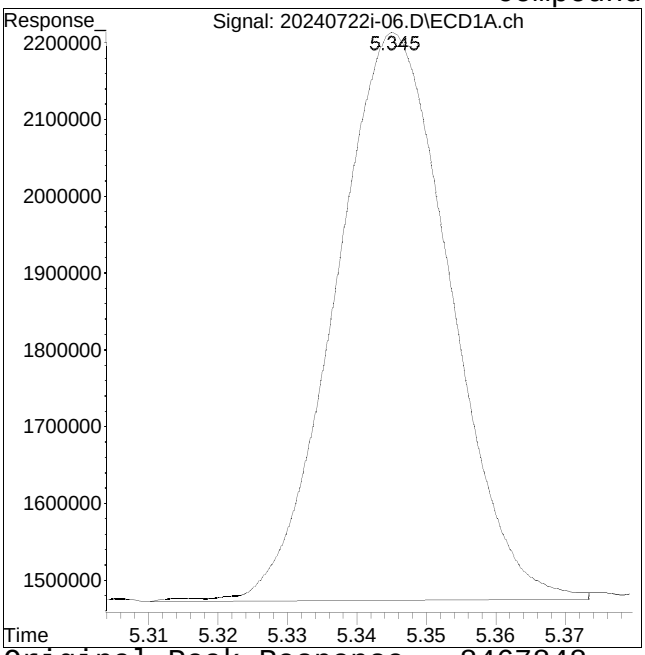
M4 = Poor automated baseline construction.

# Manual Integration Report

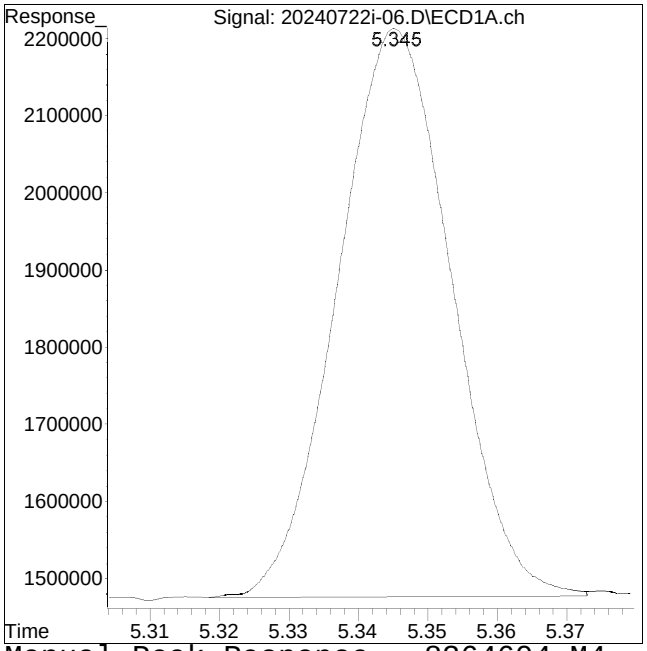
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

Compound #18: Endrin




Original Peak Response = 8467848



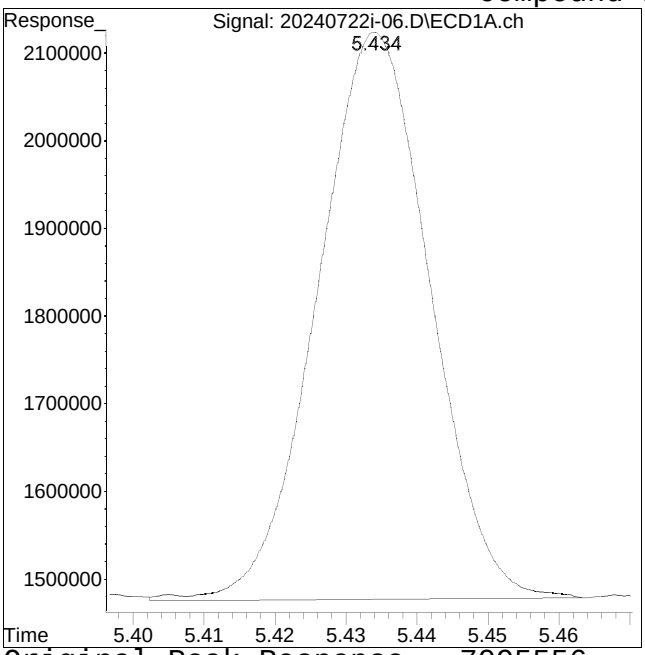

Manual Peak Response = 8364604 M4

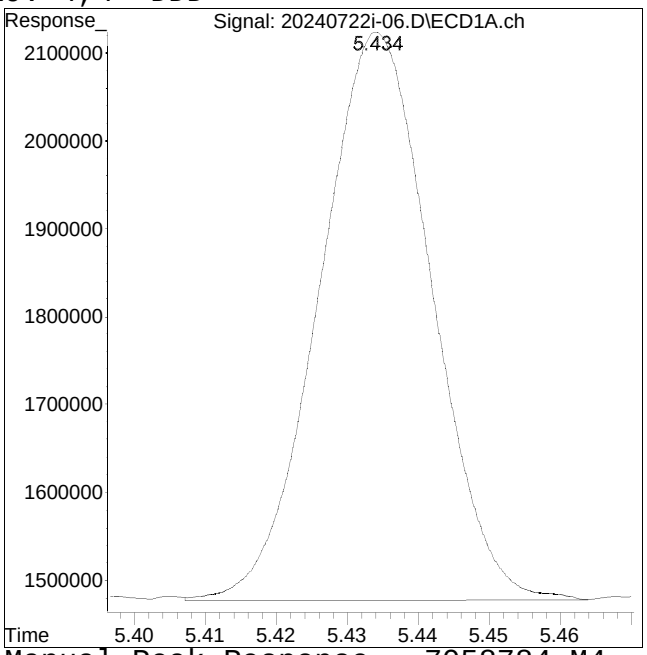
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #19: 4,4'-DDD



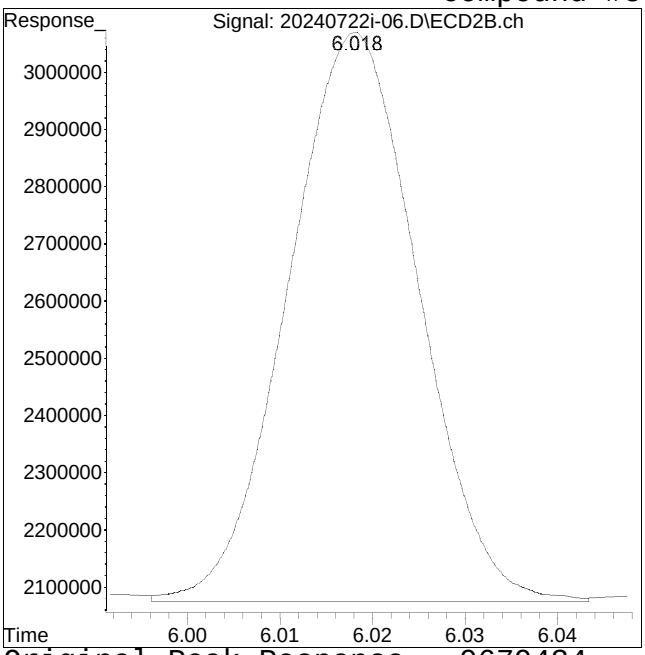




Original Peak Response = 7095556 Manual Peak Response = 7058784 M4
M4 = Poor automated baseline construction.

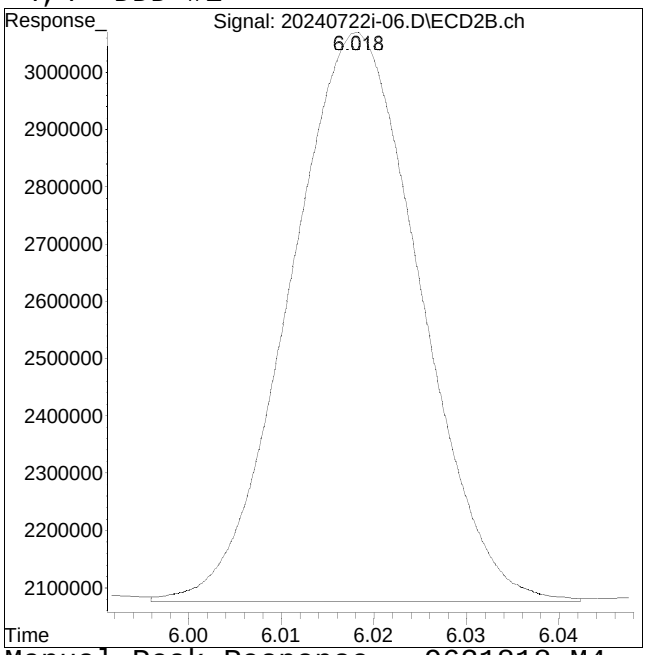
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #57: 4,4'-DDD #2




Original Peak Response = 9679434




Manual Peak Response = 9621818 M4

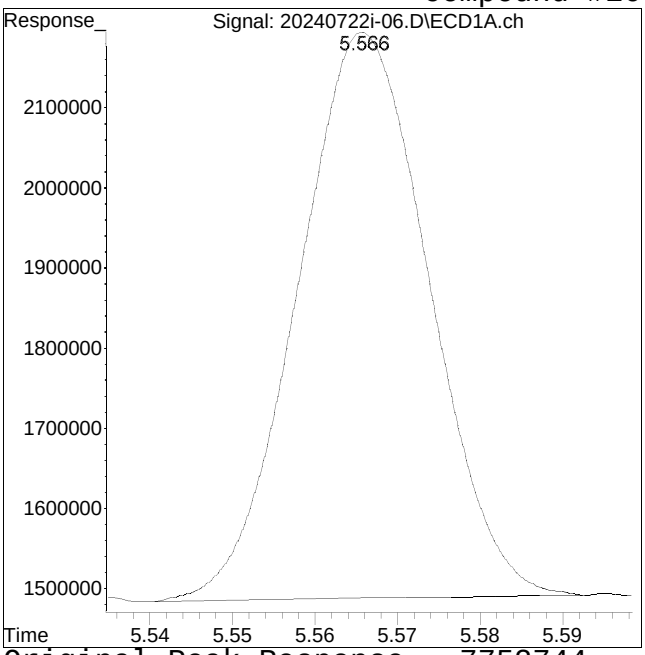
M4 = Poor automated baseline construction.

# Manual Integration Report

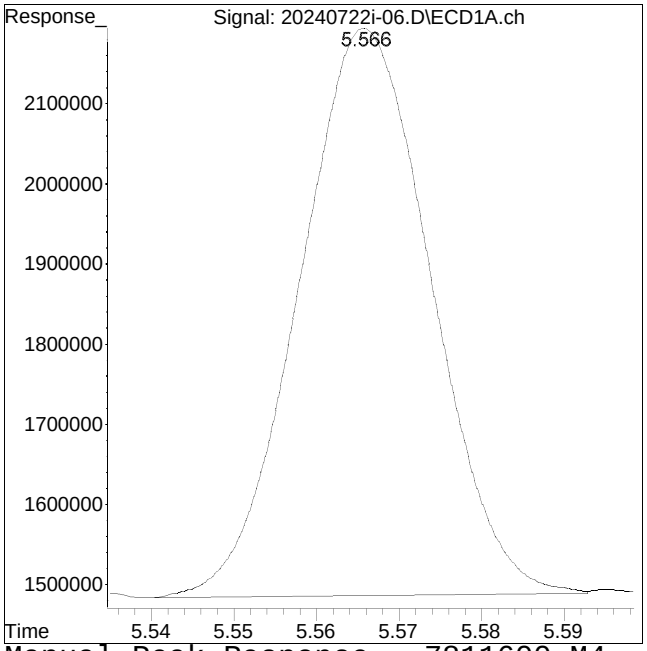
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

## Compound #20: Endosulfan II




Original Peak Response = 7752744



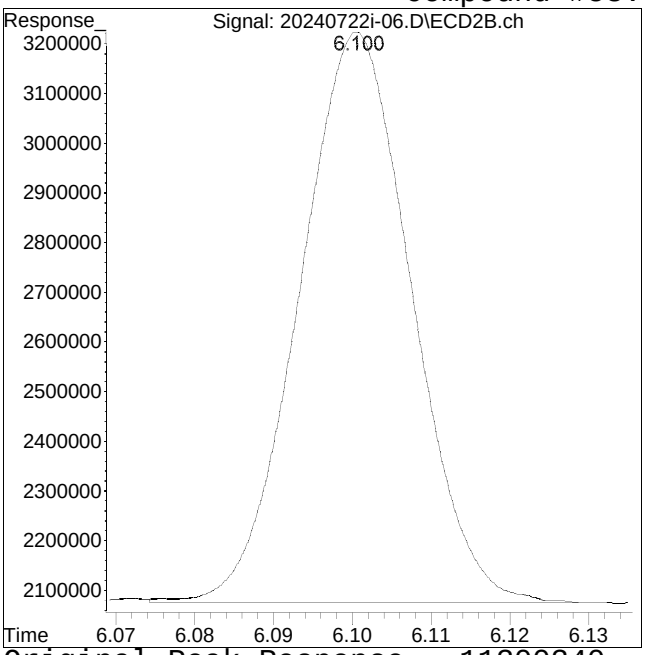

Manual Peak Response = 7811600 M4

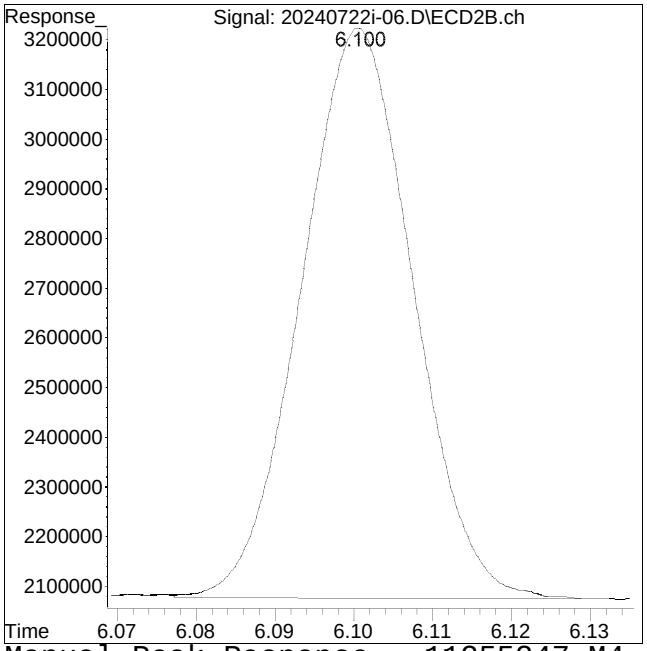
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

## Compound #58: Endosulfan II #2



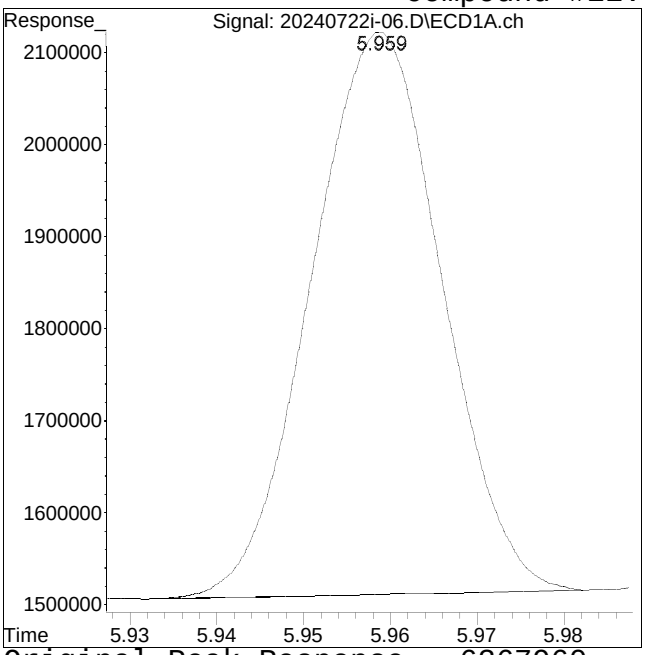

Original Peak Response = 11300340 Manual Peak Response = 11255247 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

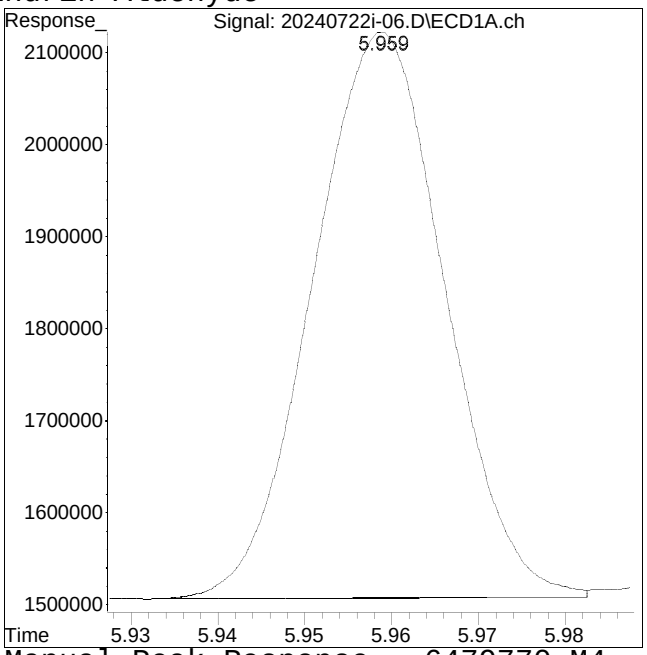
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

## Compound #22: Endrin Aldehyde




Original Peak Response = 6367960



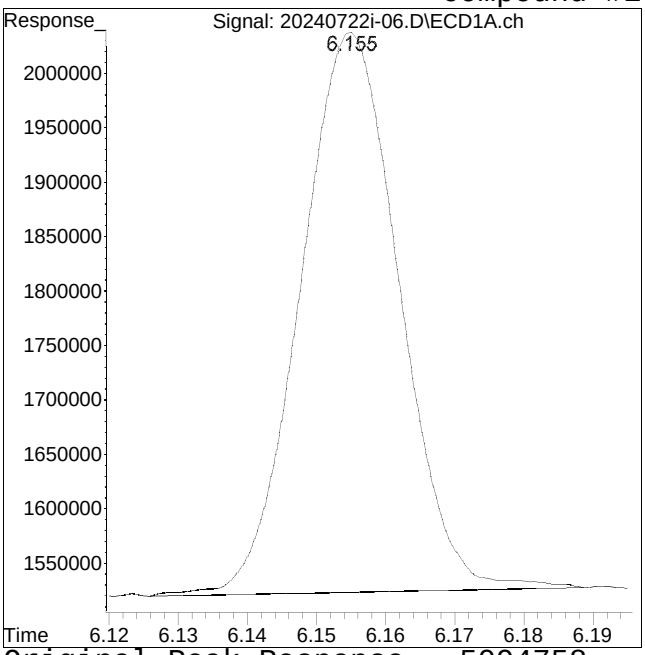

Manual Peak Response = 6479770 M4

M4 = Poor automated baseline construction.

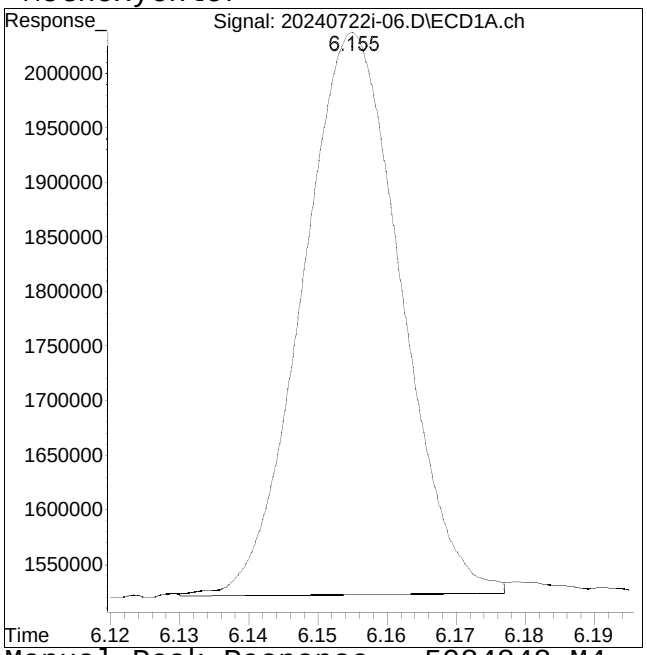
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #23: Methoxychlor




Original Peak Response = 5094758



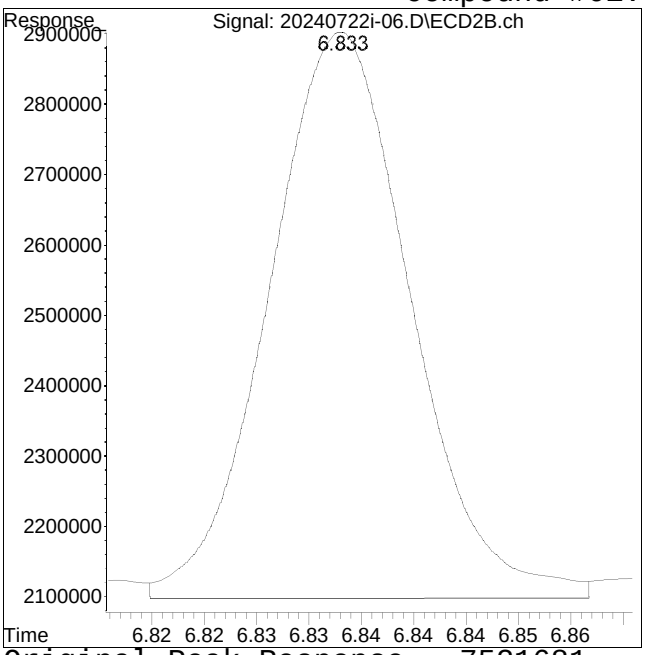

Manual Peak Response = 5084848 M4

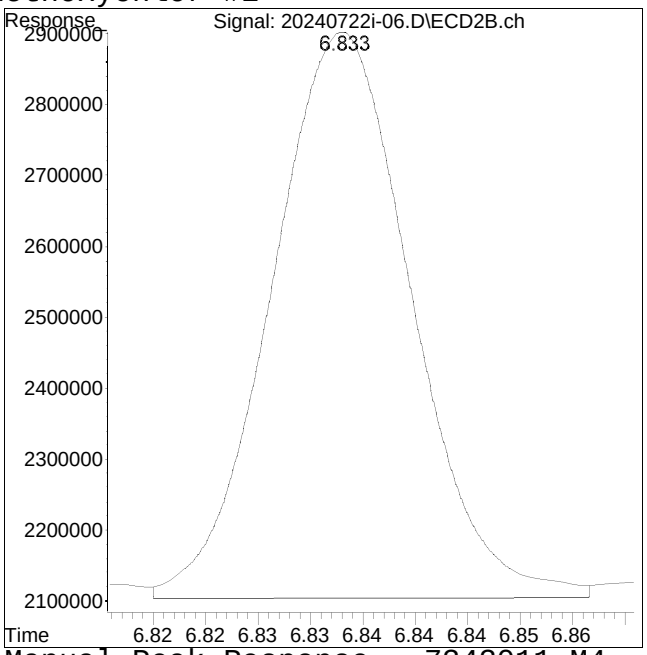
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-06.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:46 Instrument : PEST 20
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 7/23/2024 1:18 pm

Compound #61: Methoxychlor #2



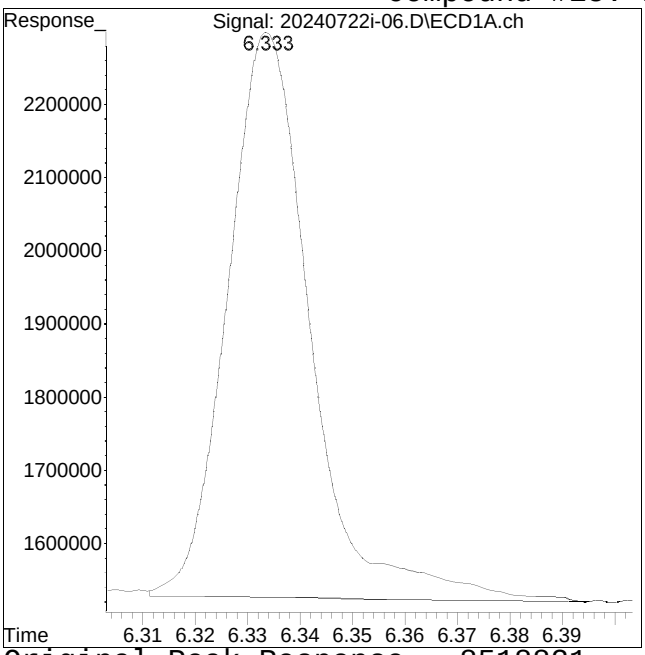



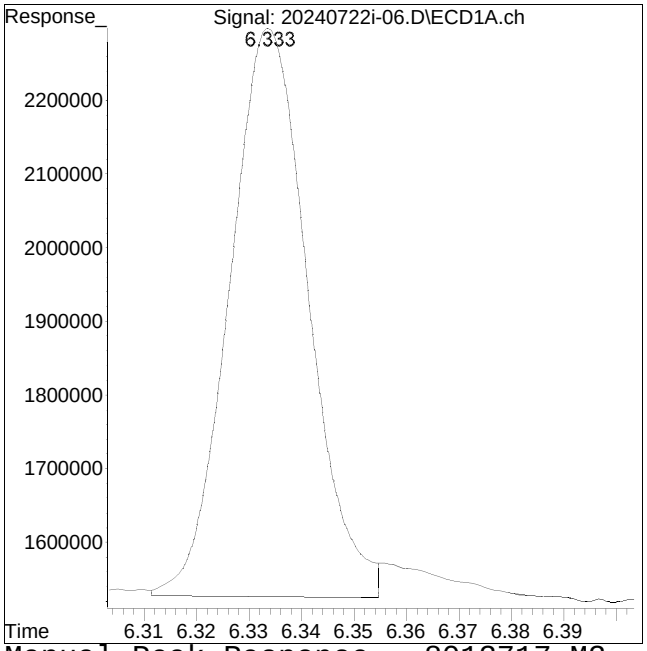

Original Peak Response = 7521681 Manual Peak Response = 7343011 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-06.D
Date Inj'd : 7/22/2024 18:46
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:18 pm

Compound #25: Endosulfan Sulfate




Original Peak Response = 8518821 Manual Peak Response = 8013717 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:59
Operator : pest20:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:11:32 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:11:22 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.006 | 2.062 | 53029471 | 84333663 | 25.000M4 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.472 | 2.662 | 11561163 | 17005155 | 4.784 | 4.484 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 9.57%# | 8.97%# |
| 27) s | Decachlorobi | 7.336 | 7.906 | 12231060 | 15385400 | 5.203 | 4.997M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 10.41%# | 9.99%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.738 | 3.039 | 12841006 | 18722181 | 5.082M3 | 4.800 |
| 4) | alpha-BHC | 2.861 | 3.152 | 13345439 | 19906753 | 4.153 | 3.875 |
| 5) | gamma-BHC (l | 3.106 | 3.476 | 12828849 | 19074756 | 4.383 | 4.069 |
| 6) | beta-BHC | 3.173 | 3.551 | 7203976 | 10528668 | 5.203M4 | 4.821 |
| 7) | delta-BHC | 3.323 | 3.847 | 12643763 | 18808707 | 4.284M4 | 3.957 |
| 8) | Heptachlor | 3.512 | 3.917 | 13498657 | 19333567 | 4.795 | 4.438M4 |
| 9) | Aldrin | 3.790 | 4.267 | 12105241 | 16903923 | 4.415 | 4.129 |
| 10) | Alachlor | 3.933 | 4.141 | 2261030 | 3161970 | 5.054 | 5.138M4 |
| 11) | Chlorpyrifos | 4.032 | 4.524 | 7516464 | 11253848 | 5.573M4 | 5.263M4 |
| 12) | Heptachlor E | 4.406 | 4.929 | 12128743 | 17604106 | 4.771M4 | 4.502 |
| 13) | gamma-Chlord | 4.543 | 5.140 | 12741725 | 15596731 | 5.483 | 4.513M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:59
Operator : pest20:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:11:32 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:11:22 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 14) | | alpha-Chlord | 4.692 | 5.296 | 12528355 | 17148296 | 4.787M4 | 4.461M4 |
| 15) | | 4,4'-DDE | 4.794 | 5.474 | 11560886 | 16601241 | 4.372 | 4.316 |
| 16) | | Endosulfan I | 4.845 | 5.353 | 11262302 | 15906066 | 4.688 | 4.424M4 |
| 17) | | Dieldrin | 5.107 | 5.627 | 12144093 | 15543343 | 4.841M4 | 4.169 |
| 18) | | Endrin | 5.344 | 5.911 | 11330449 | 15846400 | 4.507M4 | 4.173 |
| 19) | | 4,4'-DDD | 5.433 | 6.018 | 9463969 | 12923296 | 4.455 | 4.096 |
| 20) | | Endosulfan I | 5.565 | 6.100 | 10457935 | 15083678 | 4.713M4 | 4.446 |
| 21) | | 4,4'-DDT | 5.703 | 6.285 | 10547186 | 14885199 | 4.583M4 | 4.230M4 |
| 22) | | Endrin Aldeh | 5.958 | 6.386 | 8749548 | 12278704 | 4.612 | 4.289 |
| 23) | | Methoxychlor | 6.154 | 6.832 | 6820701 | 9549003 | 5.264M4 | 4.987M3 |
| 24) | | Mirex | 6.233 | 6.988 | 10572599 | 14669134 | 5.329 | 5.224M4 |
| 25) | | Endosulfan S | 6.332 | 6.608 | 10500074 | 14961719 | 4.983M3 | 4.571 |
| 26) | | Endrin Keton | 6.556 | 7.020 | 11264559 | 16316077 | 4.690 | 4.403 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:59
Operator : pest20:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:11:32 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:11:22 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | |
|---|---|---|---|---|---|---|
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

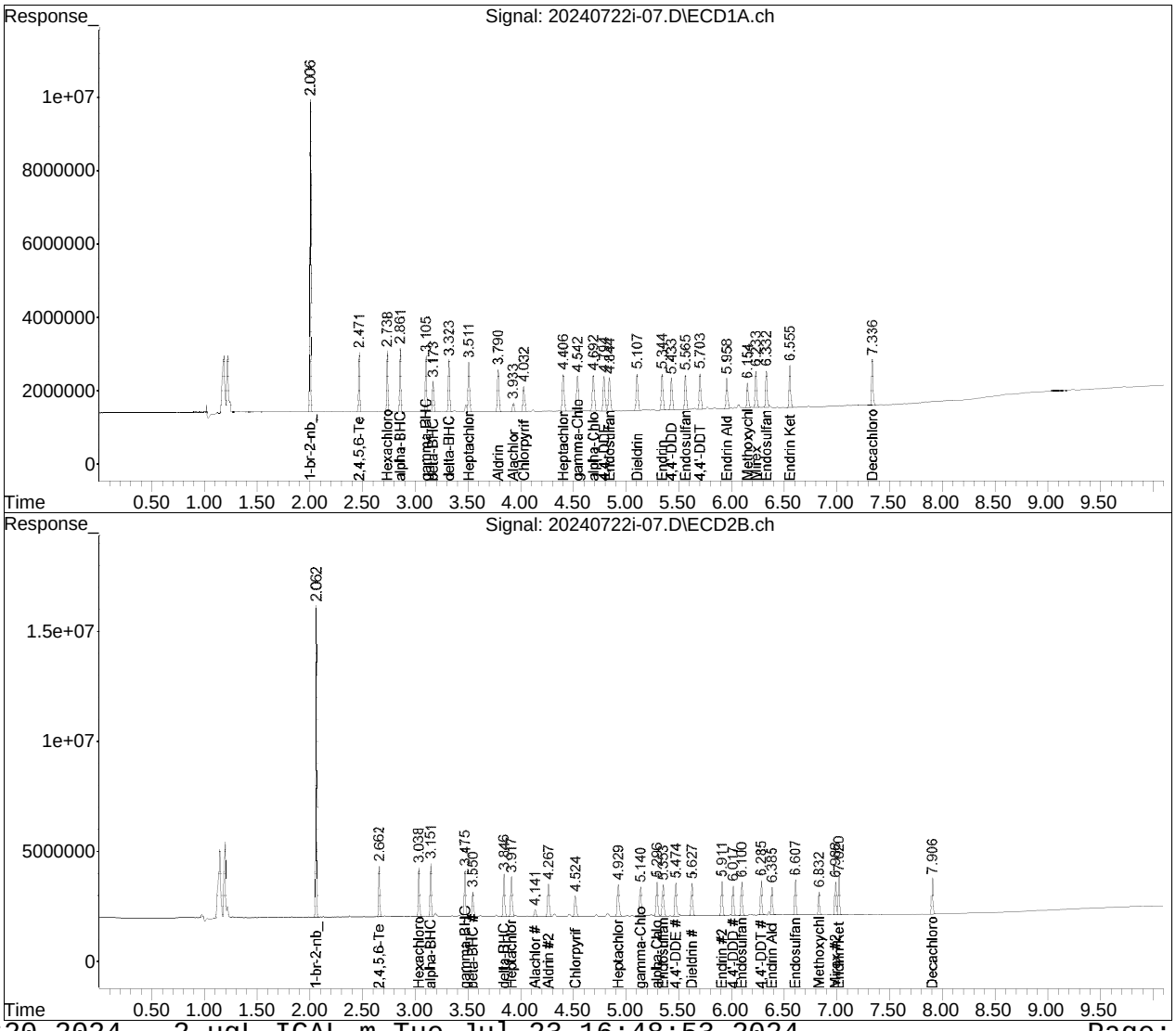
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-07.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 18:59
Operator : pest20:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:11:32 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:11:22 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

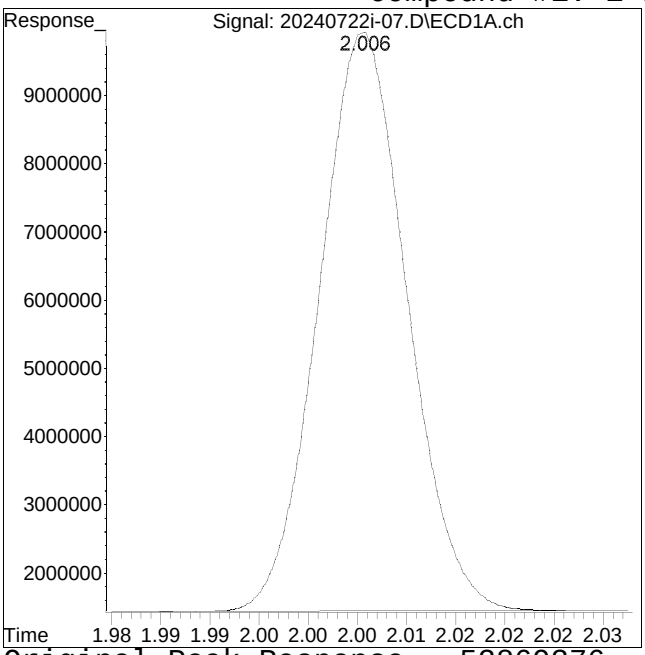


# Manual Integration Report

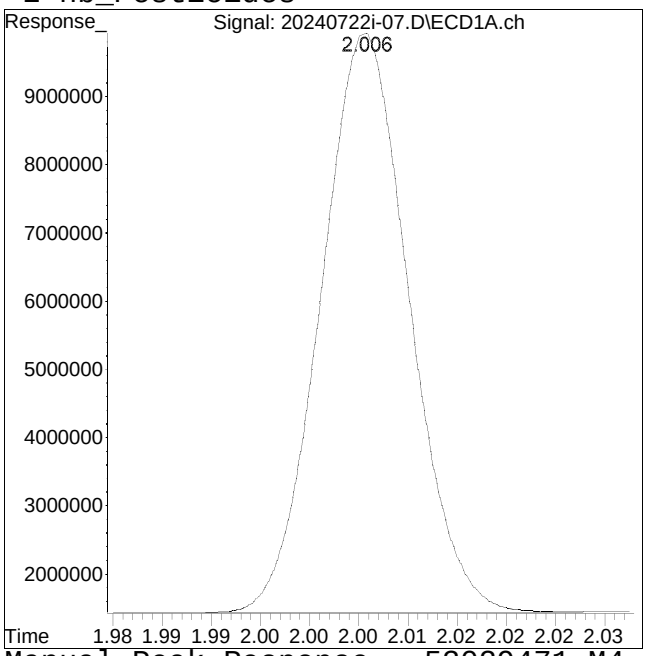
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 52869376



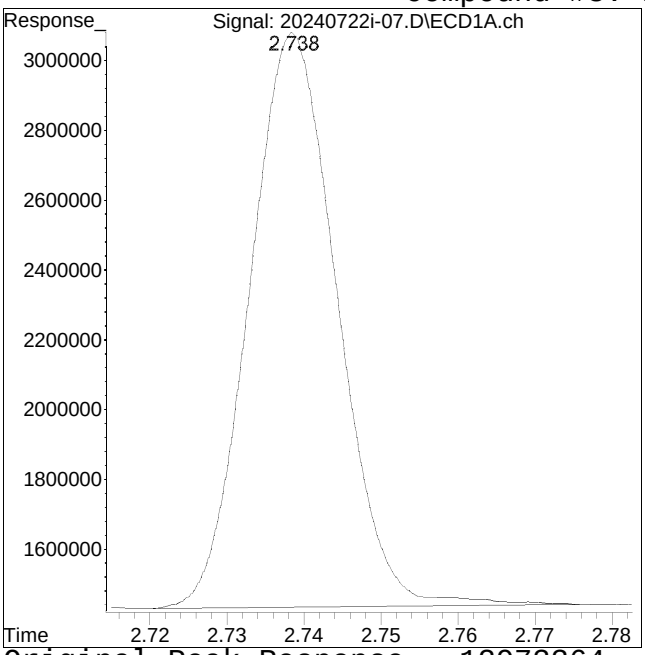

Manual Peak Response = 53029471 M4

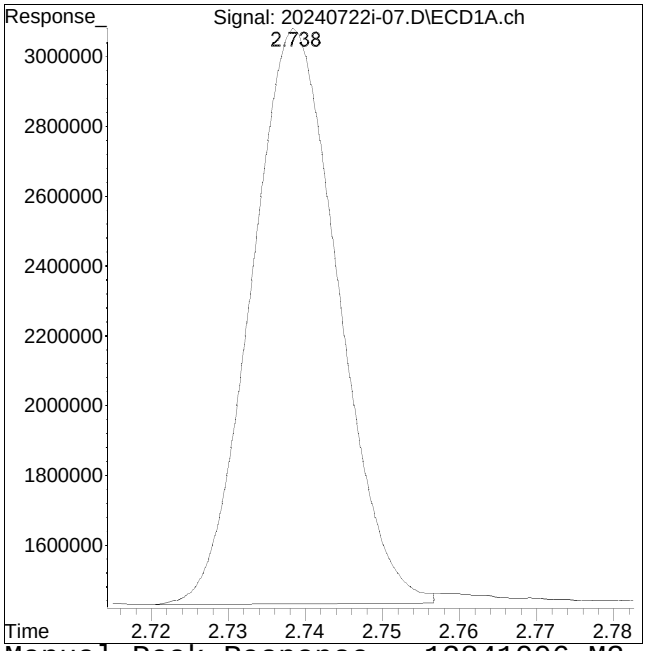
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #3: Hexachlorobenzene



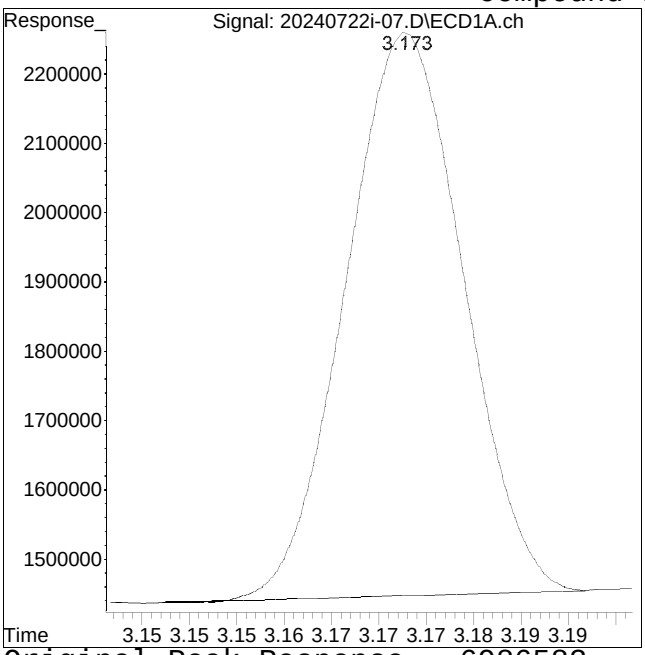




Original Peak Response = 12973364 Manual Peak Response = 12841006 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

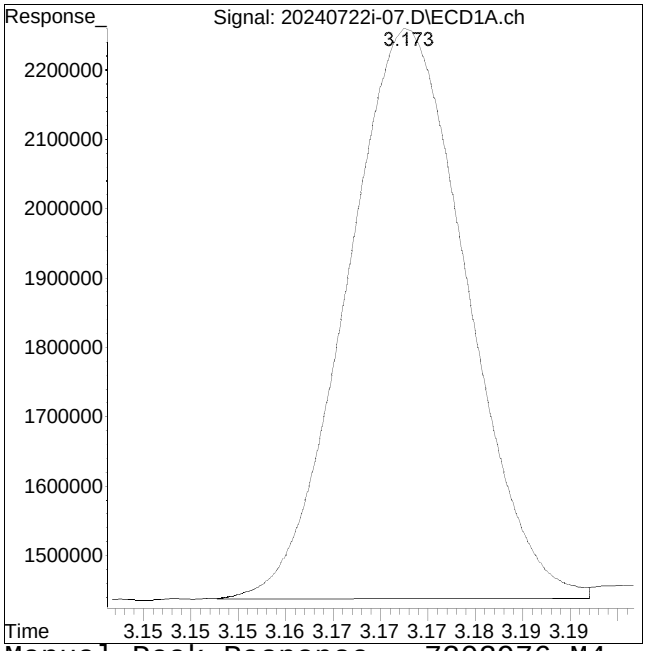
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #6: beta-BHC




Original Peak Response = 6986583



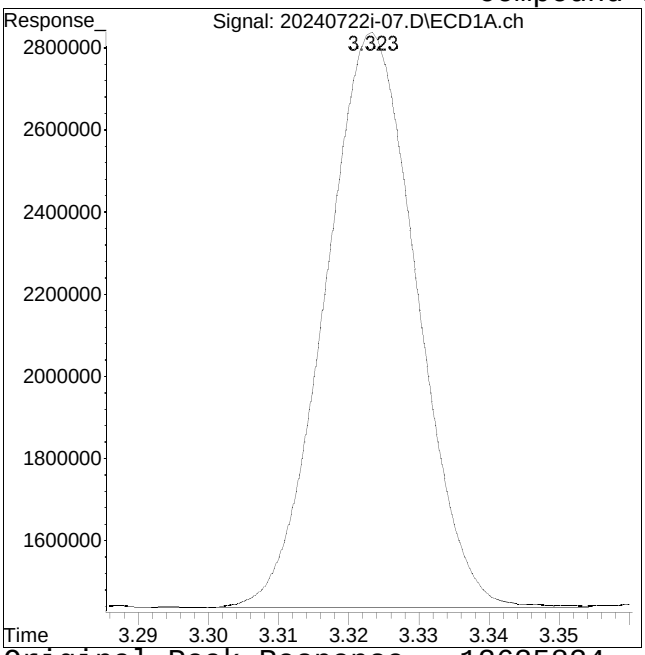

Manual Peak Response = 7203976 M4

M4 = Poor automated baseline construction.

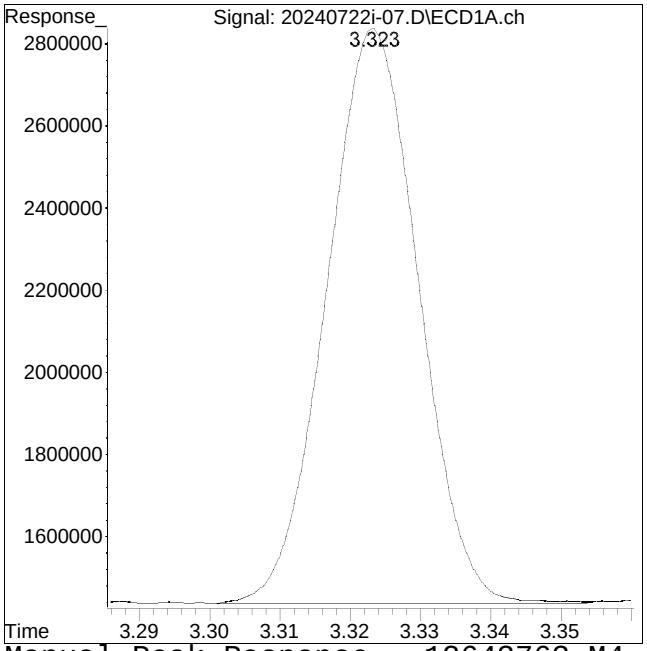
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #7: delta-BHC




Original Peak Response = 12635834




Manual Peak Response = 12643763 M4

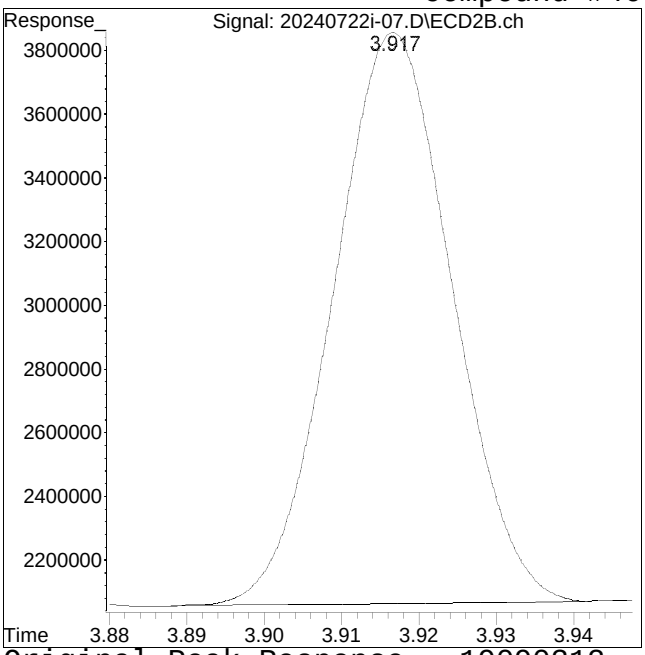
M4 = Poor automated baseline construction.

# Manual Integration Report

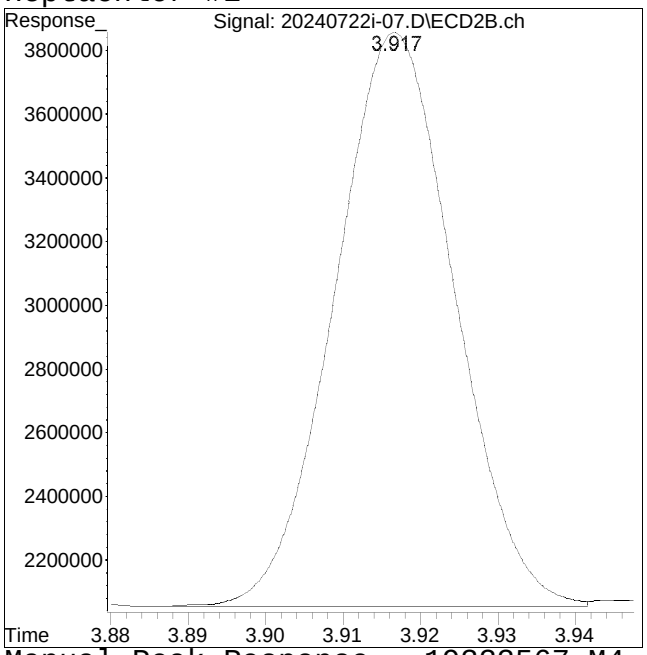
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #46: Heptachlor #2




Original Peak Response = 19090312




Manual Peak Response = 19333567 M4

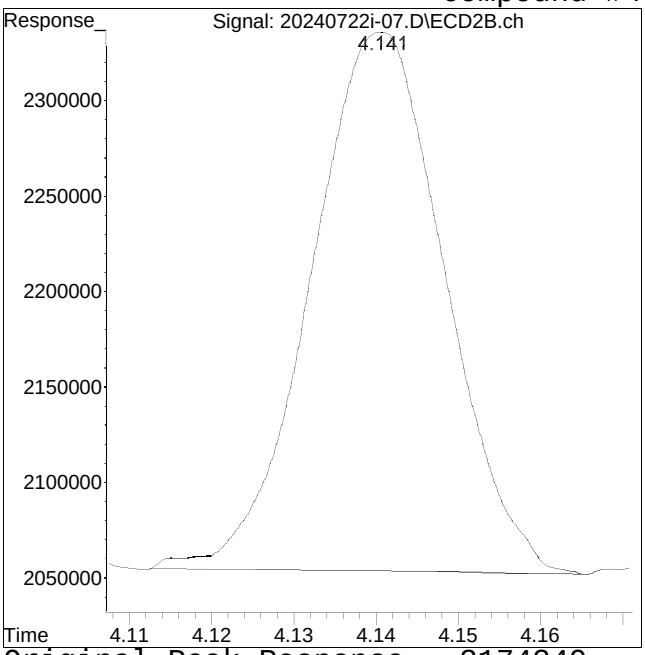
M4 = Poor automated baseline construction.

# Manual Integration Report

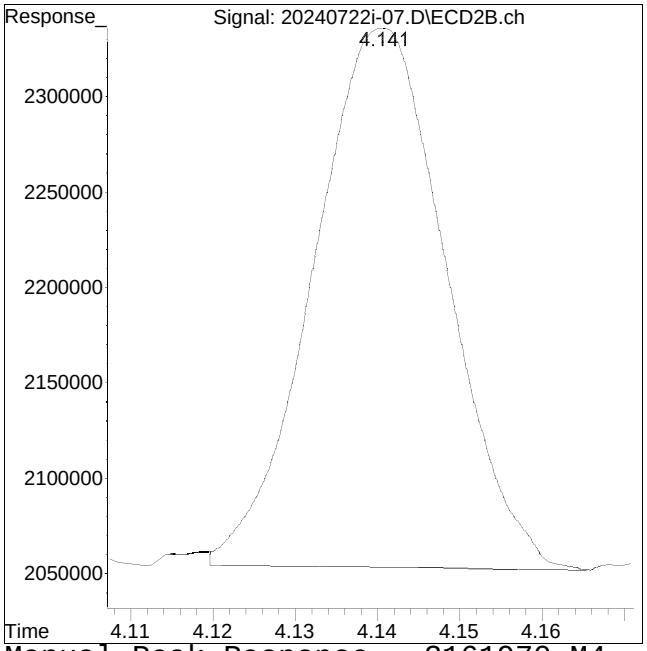
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #48: Alachlor #2




Original Peak Response = 3174349




Manual Peak Response = 3161970 M4

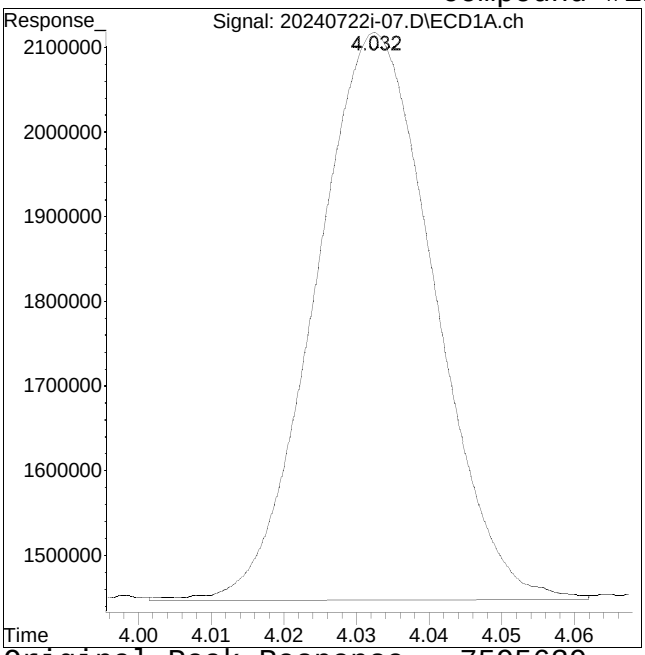
M4 = Poor automated baseline construction.

# Manual Integration Report

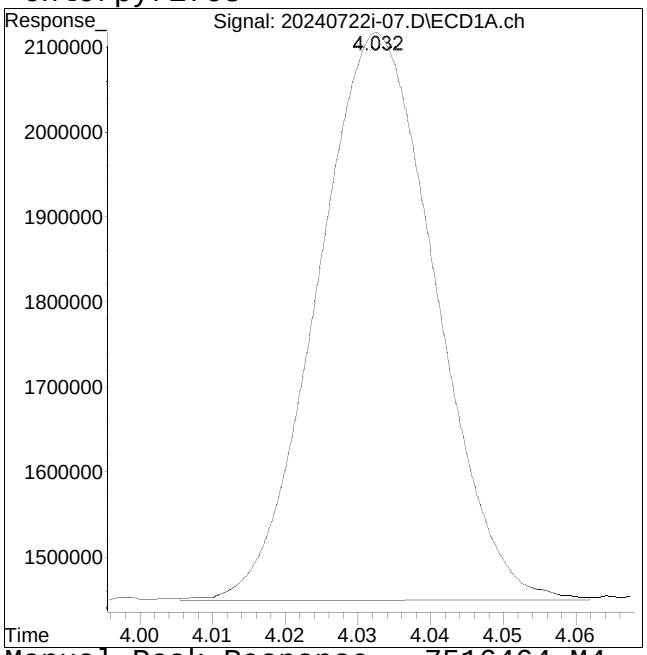
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #11: Chlorpyrifos




Original Peak Response = 7595639




Manual Peak Response = 7516464 M4

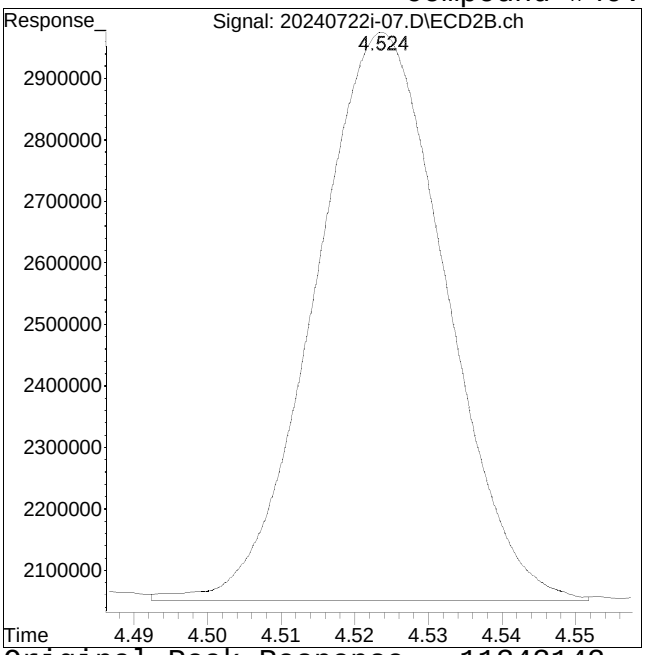
M4 = Poor automated baseline construction.

# Manual Integration Report

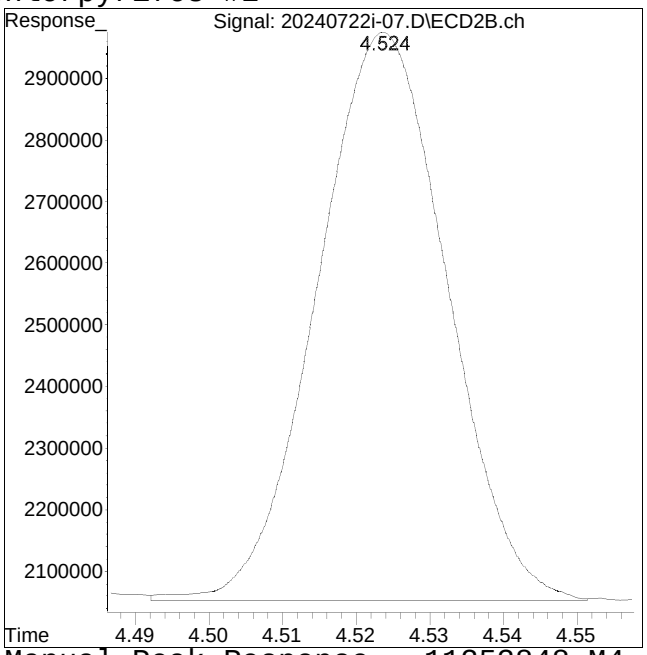
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #49: Chlorpyrifos #2




Original Peak Response = 11343142




Manual Peak Response = 11253848 M4

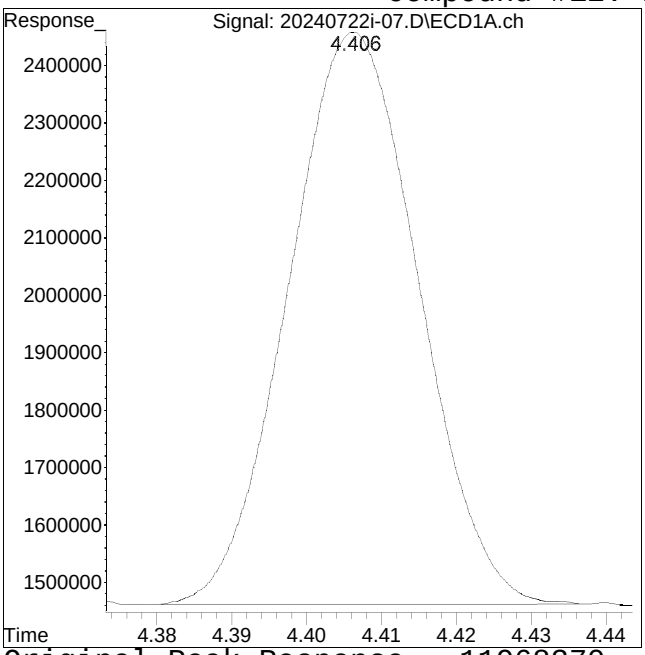
M4 = Poor automated baseline construction.

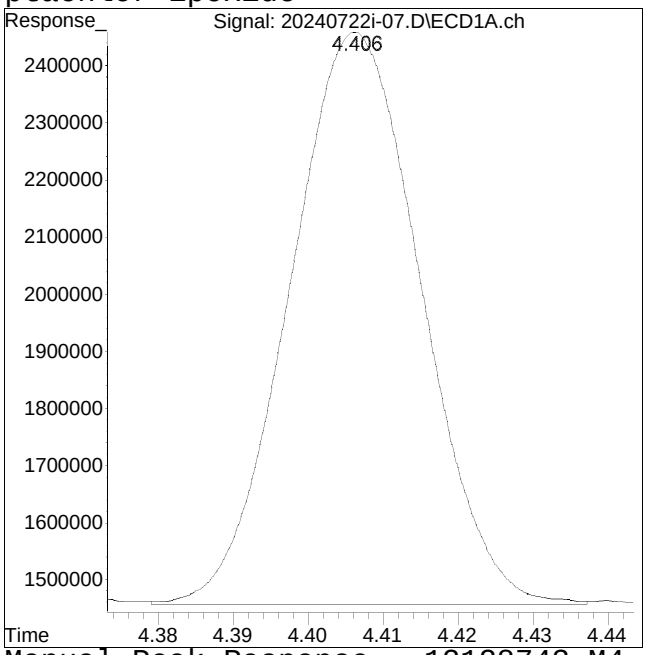
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #12: Heptachlor Epoxide



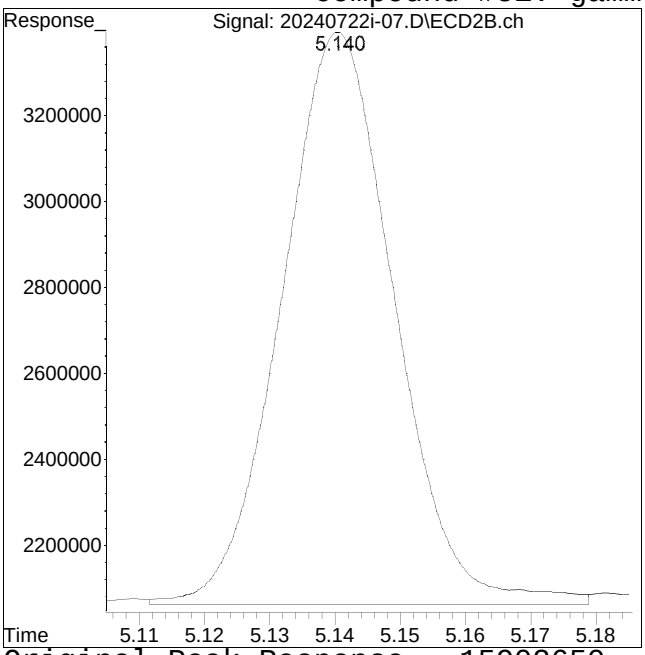

Original Peak Response = 11968370 Manual Peak Response = 12128743 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

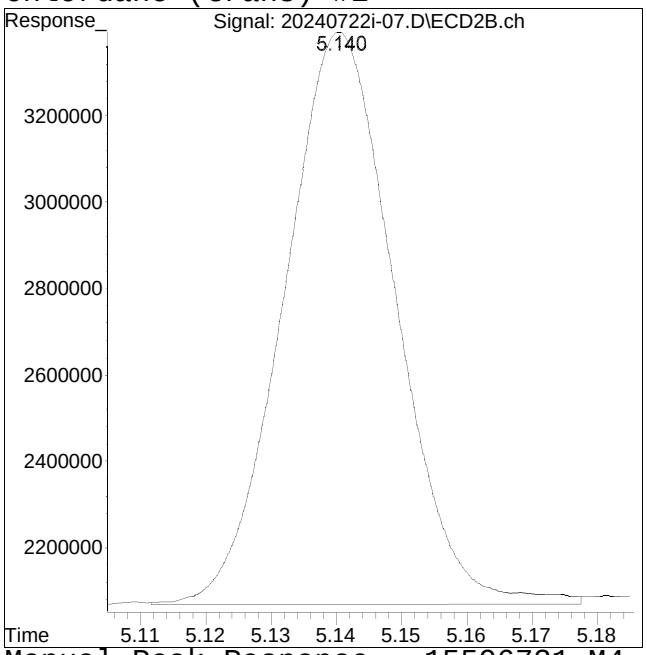
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 15902650



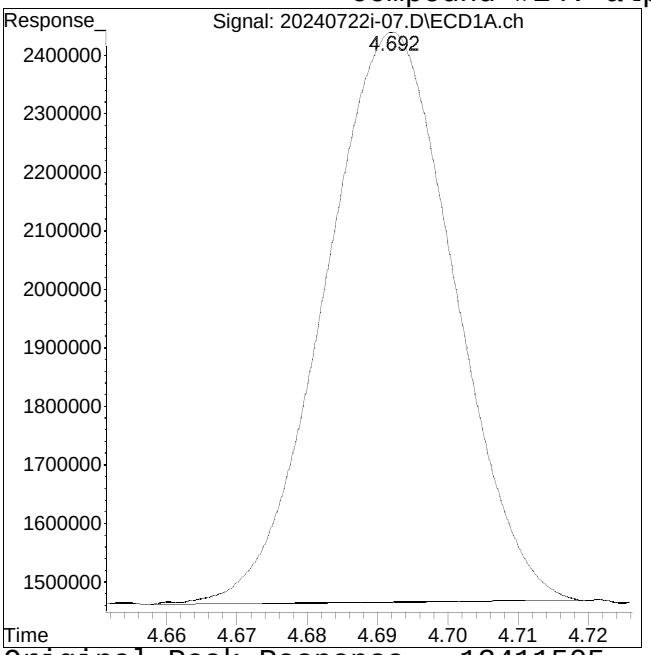

Manual Peak Response = 15596731 M4

M4 = Poor automated baseline construction.

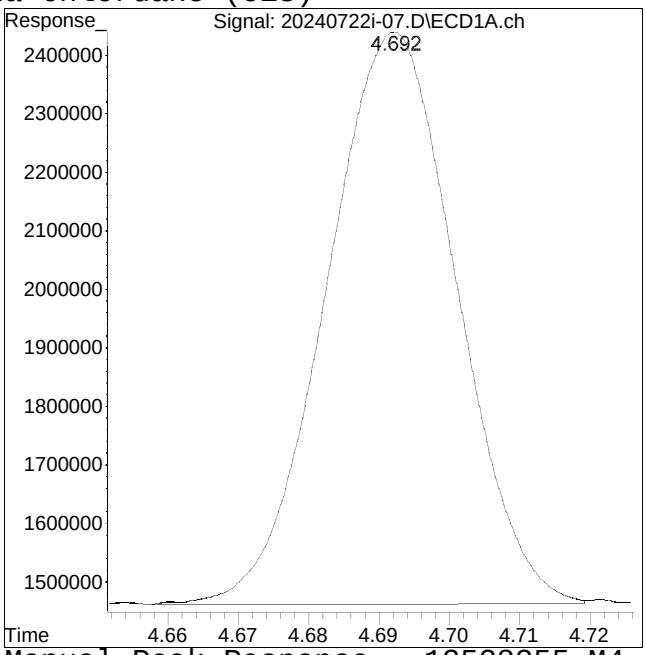
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

## Compound #14: alpha-Chlordane (cis)




Original Peak Response = 12411505



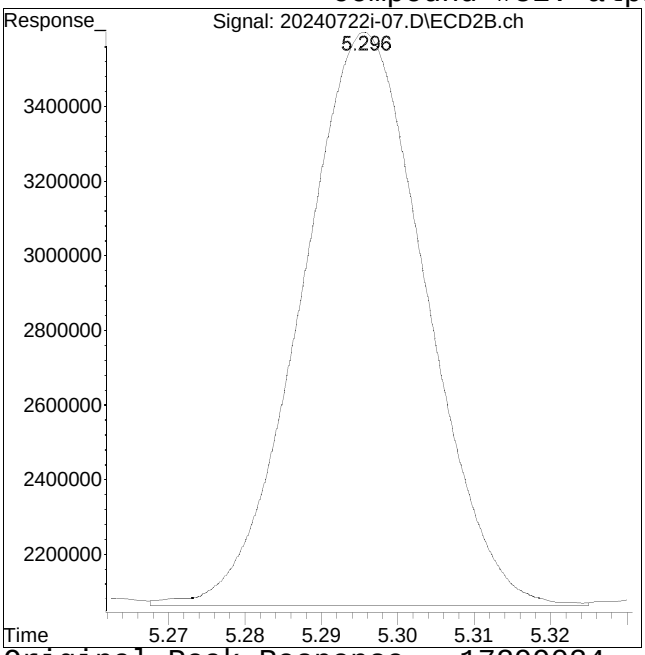

Manual Peak Response = 12528355 M4

M4 = Poor automated baseline construction.

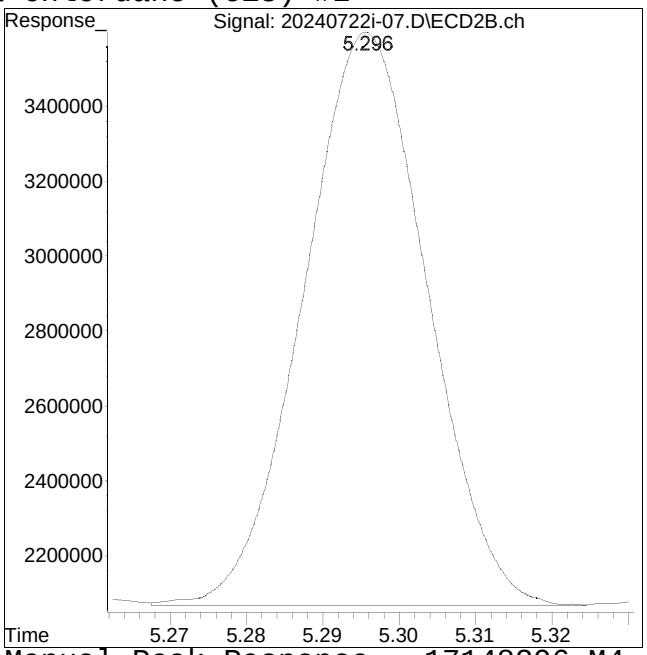
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 17299034



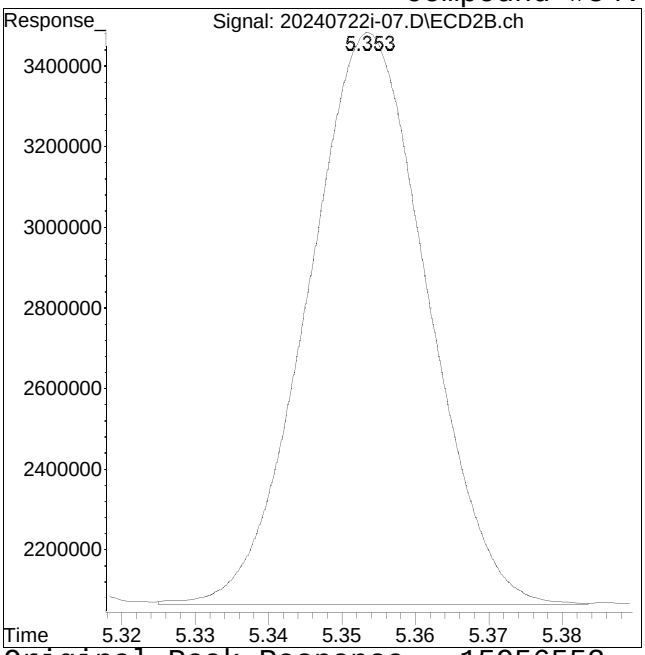

Manual Peak Response = 17148296 M4

M4 = Poor automated baseline construction.

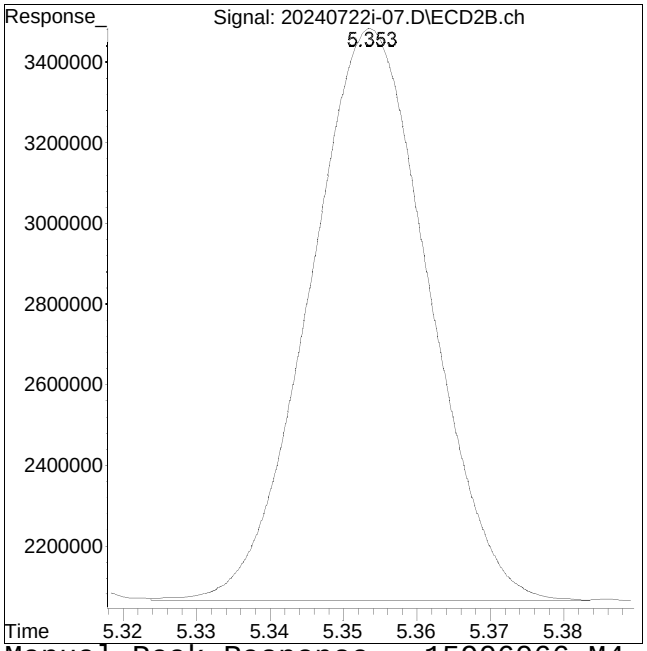
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #54: Endosulfan I #2




Original Peak Response = 15956552




Manual Peak Response = 15906066 M4

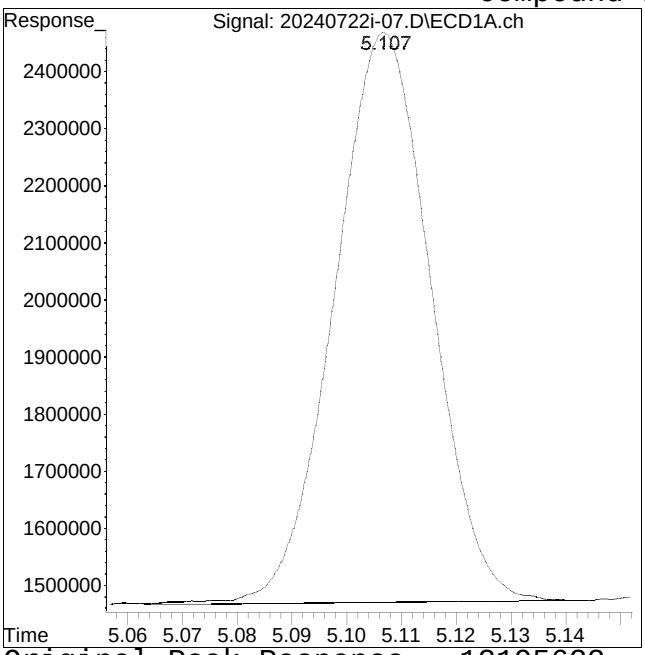
M4 = Poor automated baseline construction.

# Manual Integration Report

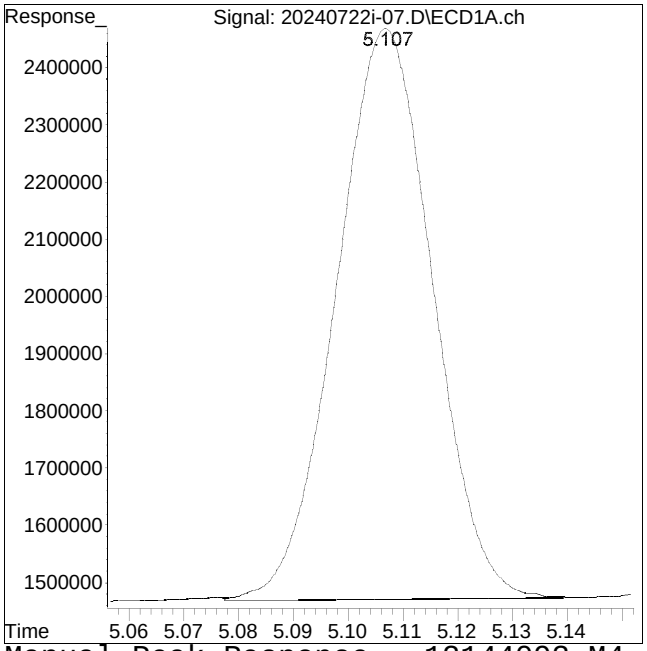
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #17: Dieldrin




Original Peak Response = 12195622



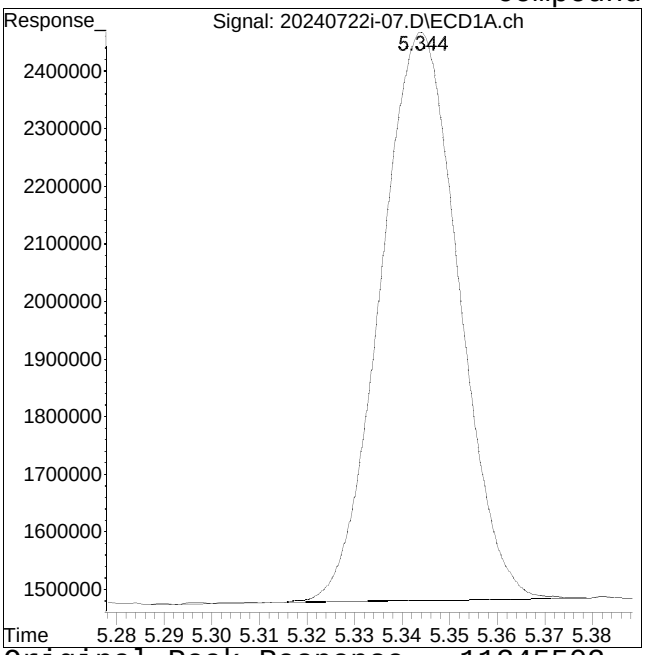

Manual Peak Response = 12144093 M4

M4 = Poor automated baseline construction.

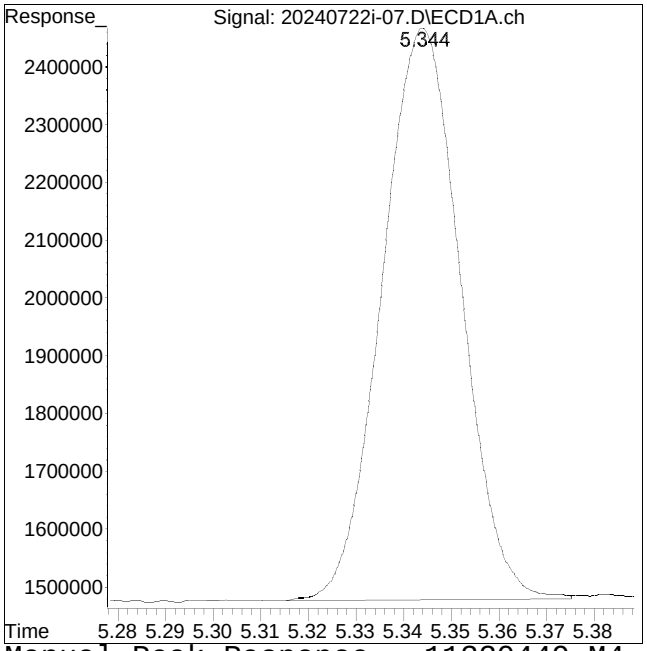
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #18: Endrin




Original Peak Response = 11245502



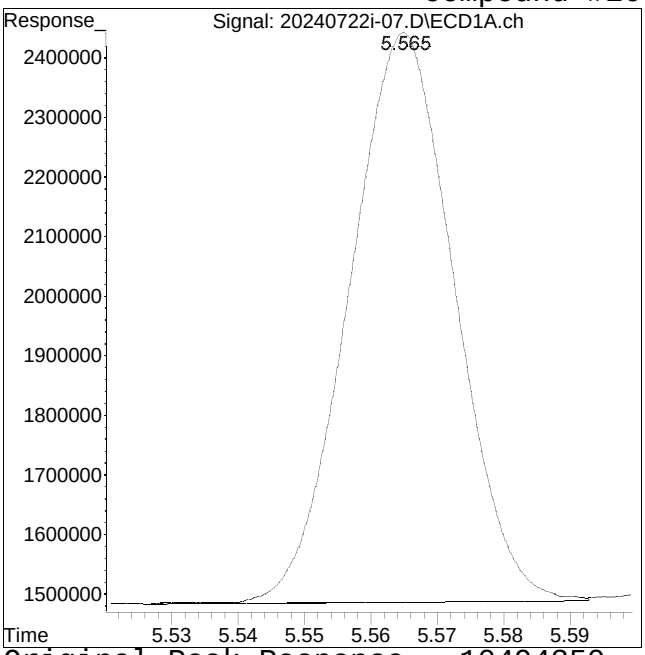

Manual Peak Response = 11330449 M4

M4 = Poor automated baseline construction.

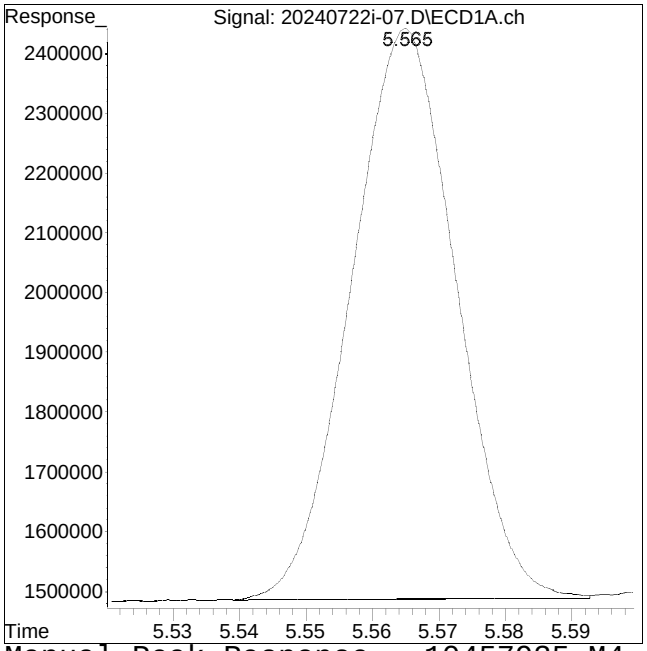
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

## Compound #20: Endosulfan II




Original Peak Response = 10494350



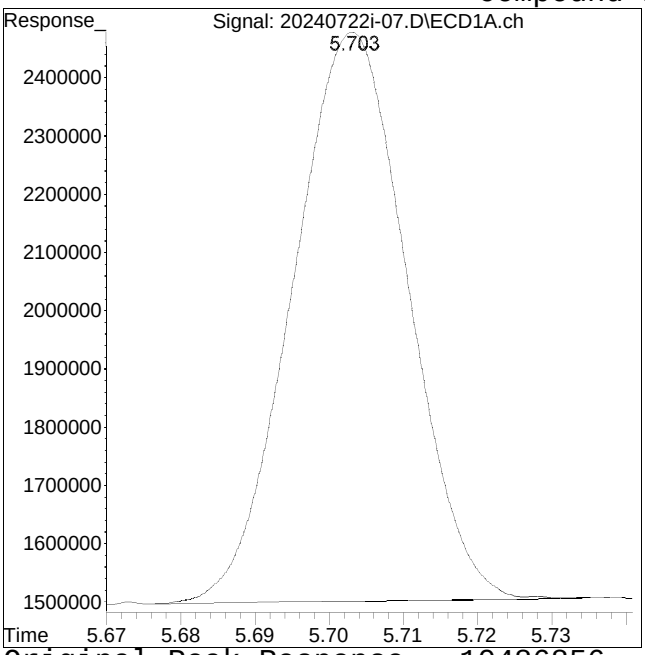

Manual Peak Response = 10457935 M4

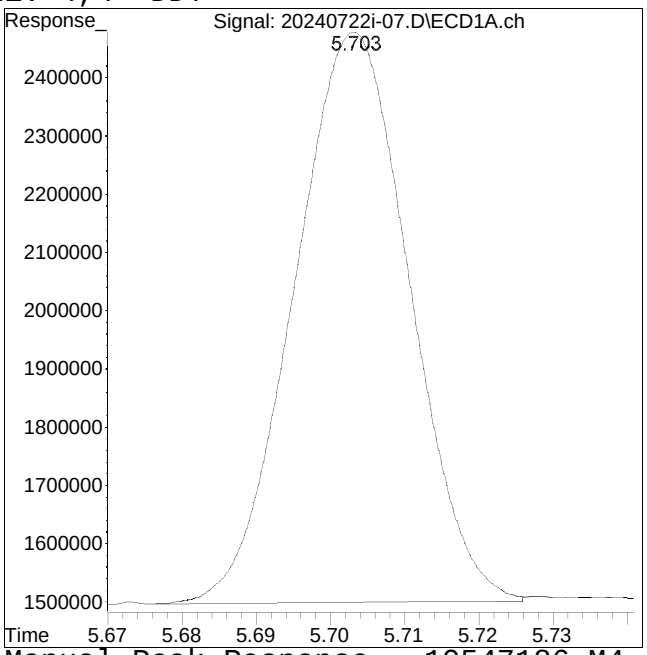
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #21: 4,4'-DDT



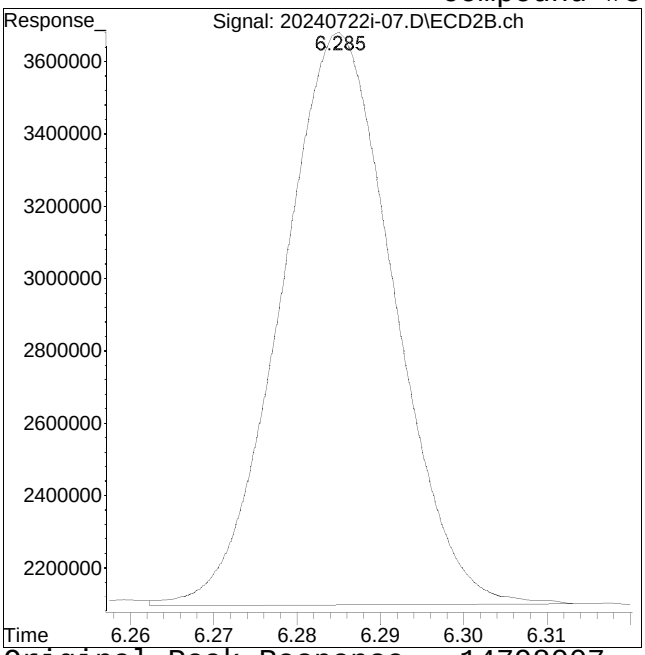

Original Peak Response = 10486856 Manual Peak Response = 10547186 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

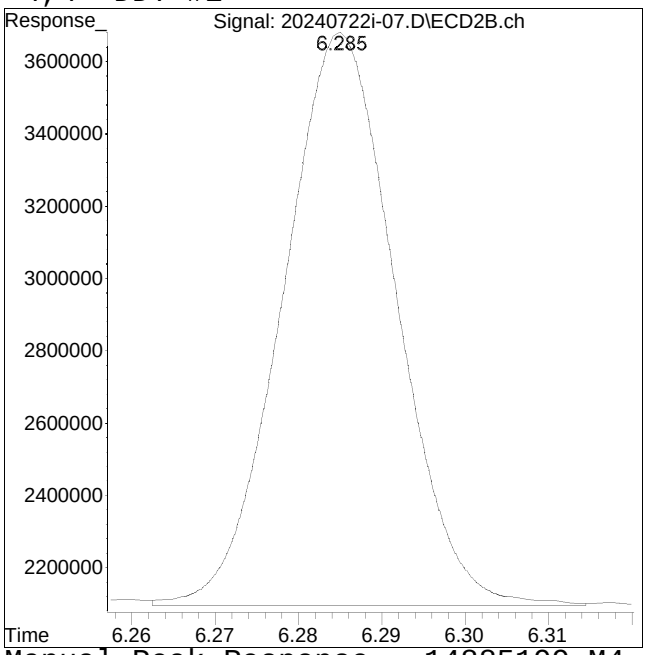
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-07.D
Date Inj'd : 7/22/2024 18:59
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:11 pm

## Compound #59: 4,4'-DDT #2




Original Peak Response = 14798007



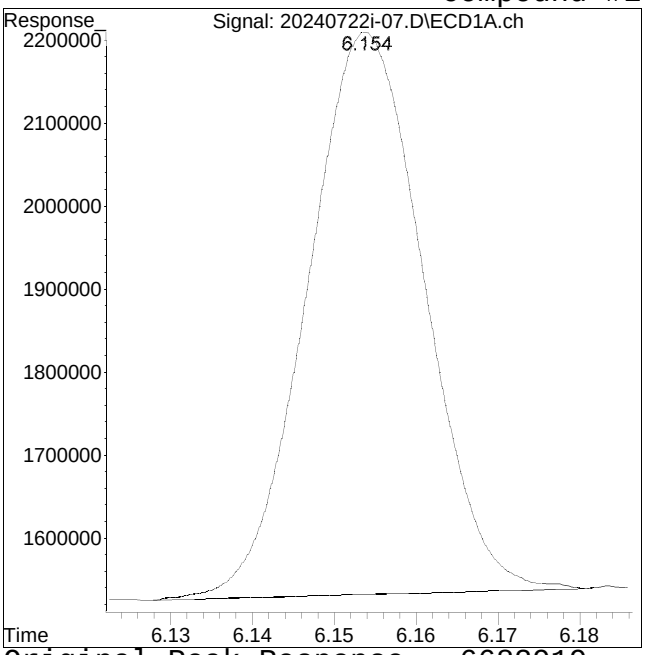

Manual Peak Response = 14885199 M4

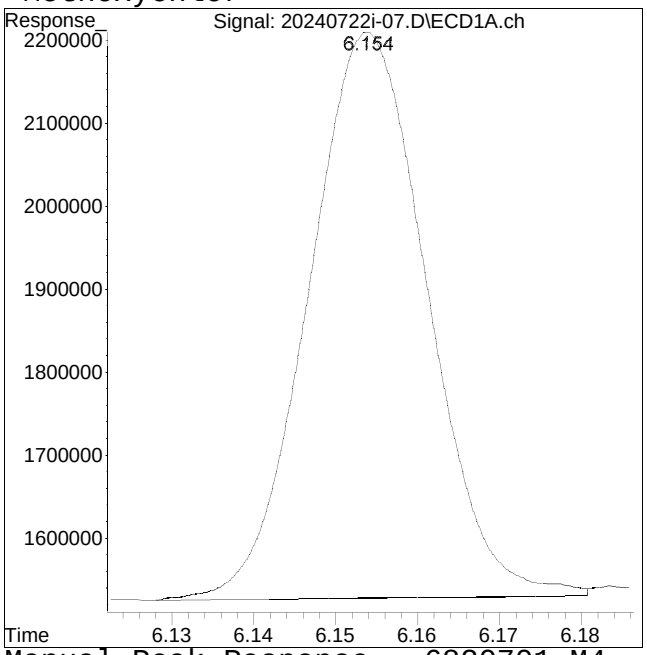
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

## Compound #23: Methoxychlor



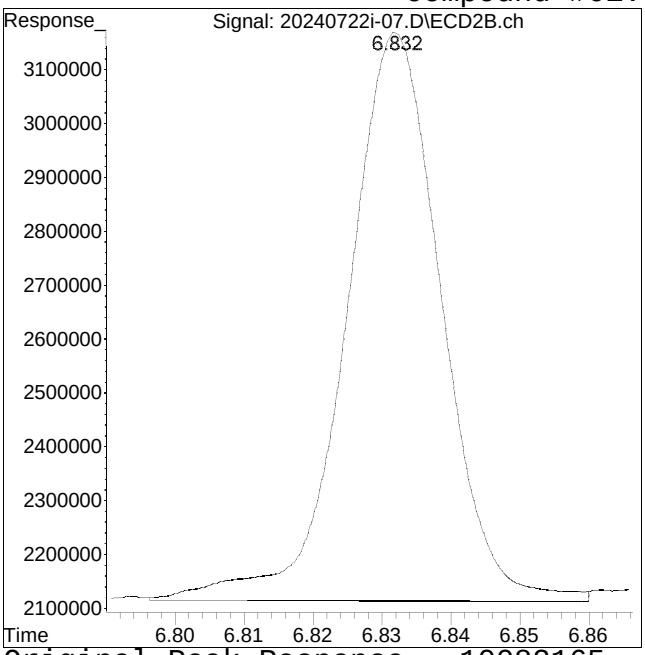



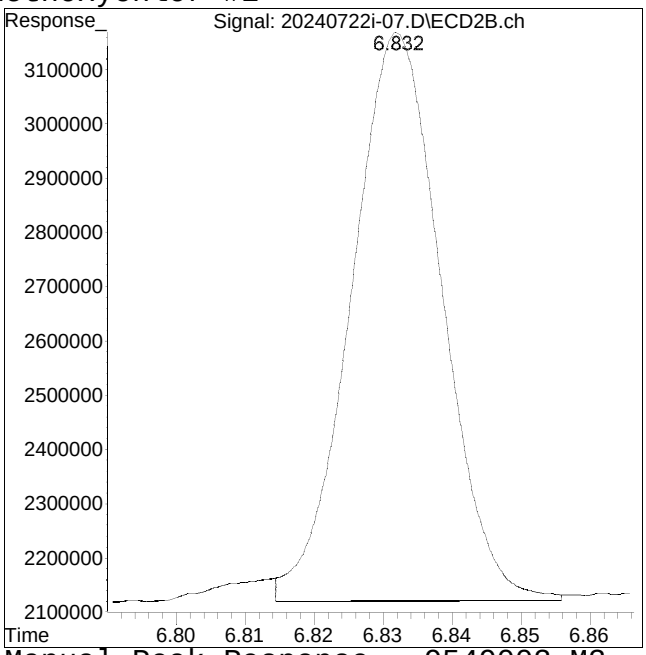

Original Peak Response = 6682919 Manual Peak Response = 6820701 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #61: Methoxychlor #2



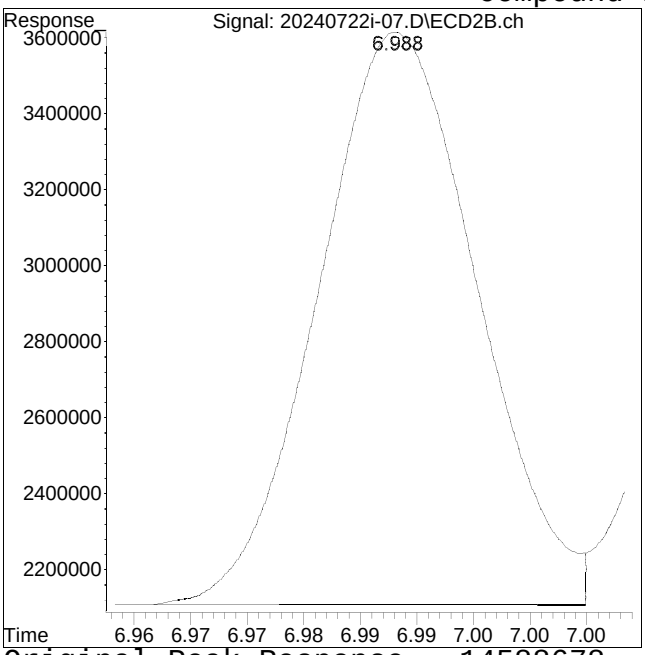




Original Peak Response = 10082165 Manual Peak Response = 9549003 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

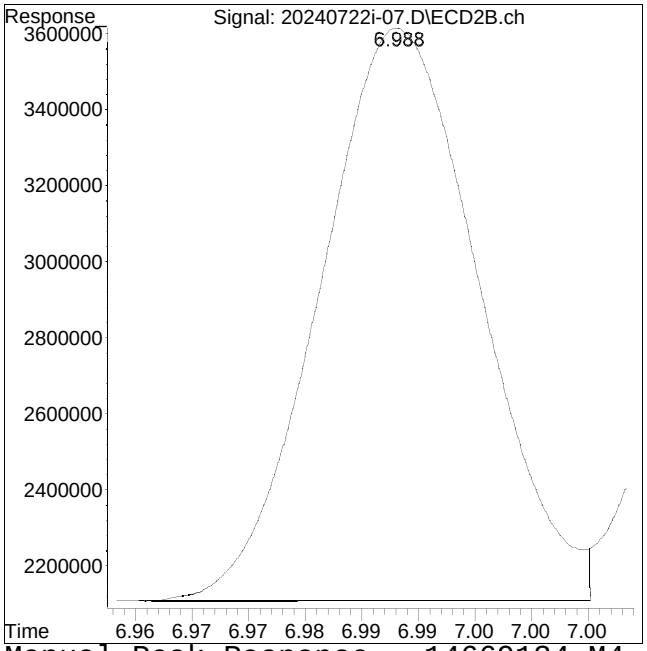
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #62: Mirex #2




Original Peak Response = 14588678



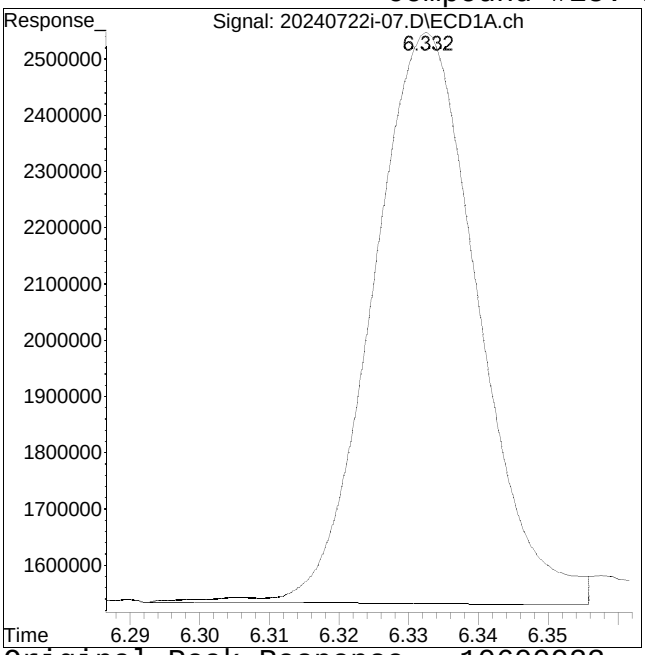

Manual Peak Response = 14669134 M4

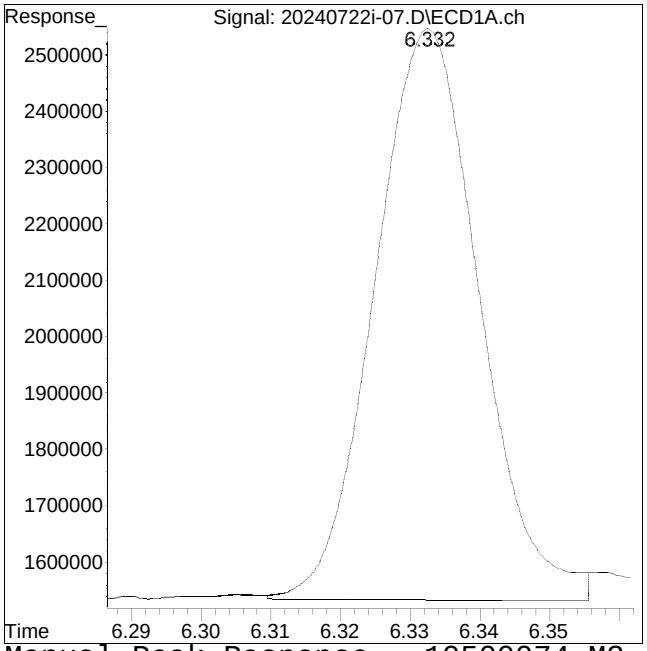
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

Compound #25: Endosulfan Sulfate



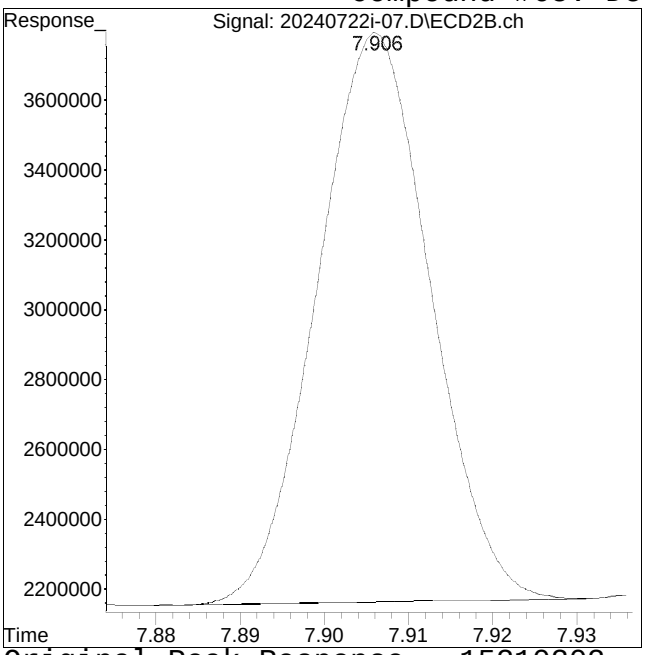




Original Peak Response = 10600933 Manual Peak Response = 10500074 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

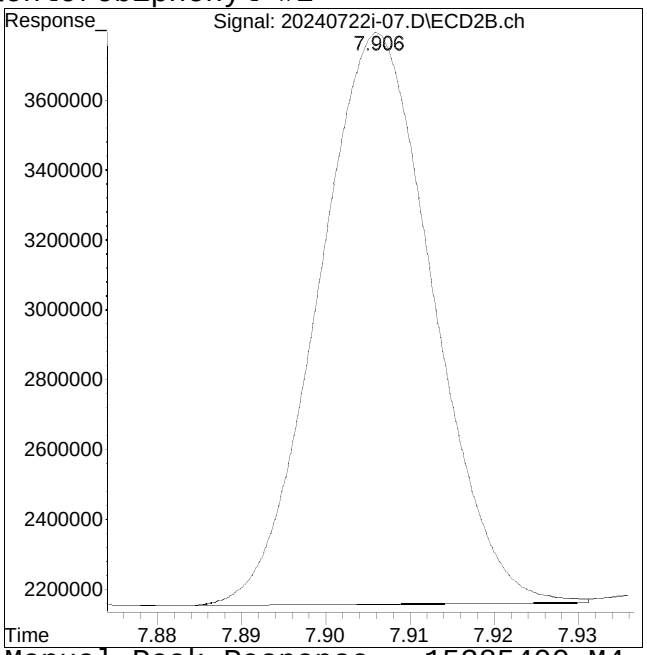
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-07.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 18:59 Instrument : PEST 20
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 7/23/2024 1:11 pm

## Compound #65: Decachlorobiphenyl #2




Original Peak Response = 15210202




Manual Peak Response = 15385400 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:11
Operator : pest20:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:02:24 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:02:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 2.005 | 2.062 | 48786962 | 76741585 | 25.000M4 | 25.000M4 |
| 28) | i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) | i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | System Monitoring Compounds | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 2.472 | 2.662 | 24694394 | 36772857 | 11.424 | 10.834M4 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 22.85%# | 21.67%# |
| 27) | s | Decachlorobi | 7.337 | 7.907 | 26041112 | 32865956 | 12.690M4 | 12.260M4 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 25.38%# | 24.52%# |
| | | Target Compounds | | | | | | |
| 3) | | Hexachlorobe | 2.739 | 3.039 | 27008934 | 39611118 | 12.108M4 | 11.492 |
| 4) | | alpha-BHC | 2.861 | 3.152 | 30022530 | 45071680 | 10.195M4 | 9.557 |
| 5) | | gamma-BHC (l | 3.106 | 3.476 | 28263580 | 42486596 | 10.628 | 9.949M4 |
| 6) | | beta-BHC | 3.173 | 3.551 | 15009997 | 22393317 | 12.333M4 | 11.637 |
| 7) | | delta-BHC | 3.324 | 3.847 | 27799775 | 42012795 | 10.299 | 9.645 |
| 8) | | Heptachlor | 3.512 | 3.917 | 28265041 | 41484359 | 11.168 | 10.588M4 |
| 9) | | Aldrin | 3.791 | 4.267 | 26401420 | 37145313 | 10.590M4 | 9.962 |
| 10) | | Alachlor | 3.932 | 4.140 | 4955148 | 6717674 | 12.919M4 | 12.852M4 |
| 11) | | Chlorpyrifos | 4.033 | 4.524 | 15282265 | 23077469 | 13.347 | 12.645M4 |
| 12) | | Heptachlor E | 4.407 | 4.929 | 25758022 | 37416168 | 11.301M4 | 10.653 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:11
Operator : pest20:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:02:24 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:02:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 13) | gamma-Chlord | 4.543 | 5.141 | 23285869 | 32694392 | 11.140M4 | 10.499M4 |
| 14) | alpha-Chlord | 4.692 | 5.296 | 26388764 | 36679227 | 11.229M4 | 10.615M4 |
| 15) | 4,4'-DDE | 4.794 | 5.474 | 25065714 | 34411493 | 10.383 | 9.789M4 |
| 16) | Endosulfan I | 4.845 | 5.354 | 23960252 | 34157846 | 11.072 | 10.558 |
| 17) | Dieldrin | 5.108 | 5.628 | 24222469 | 33857722 | 10.627 | 9.974 |
| 18) | Endrin | 5.345 | 5.911 | 24529704 | 34715121 | 10.769M4 | 10.058 |
| 19) | 4,4'-DDD | 5.433 | 6.018 | 20451006 | 28621369 | 10.586 | 9.962 |
| 20) | Endosulfan I | 5.565 | 6.101 | 22322122 | 32514886 | 11.196 | 10.673 |
| 21) | 4,4'-DDT | 5.704 | 6.285 | 22791539 | 32834290 | 10.974M4 | 10.319M3 |
| 22) | Endrin Aldeh | 5.958 | 6.386 | 18630561 | 26354975 | 10.857 | 10.146 |
| 23) | Methoxychlor | 6.154 | 6.833 | 14534734 | 20302742 | 12.899M4 | 12.154M4 |
| 24) | Mirex | 6.233 | 6.989 | 22210758 | 30346624 | 12.867M4 | 12.461 |
| 25) | Endosulfan S | 6.333 | 6.608 | 22003821 | 32025477 | 11.746M3 | 10.957 |
| 26) | Endrin Keton | 6.556 | 7.021 | 24527602 | 35956084 | 11.413 | 10.842 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:11
Operator : pest20:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:02:24 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:02:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

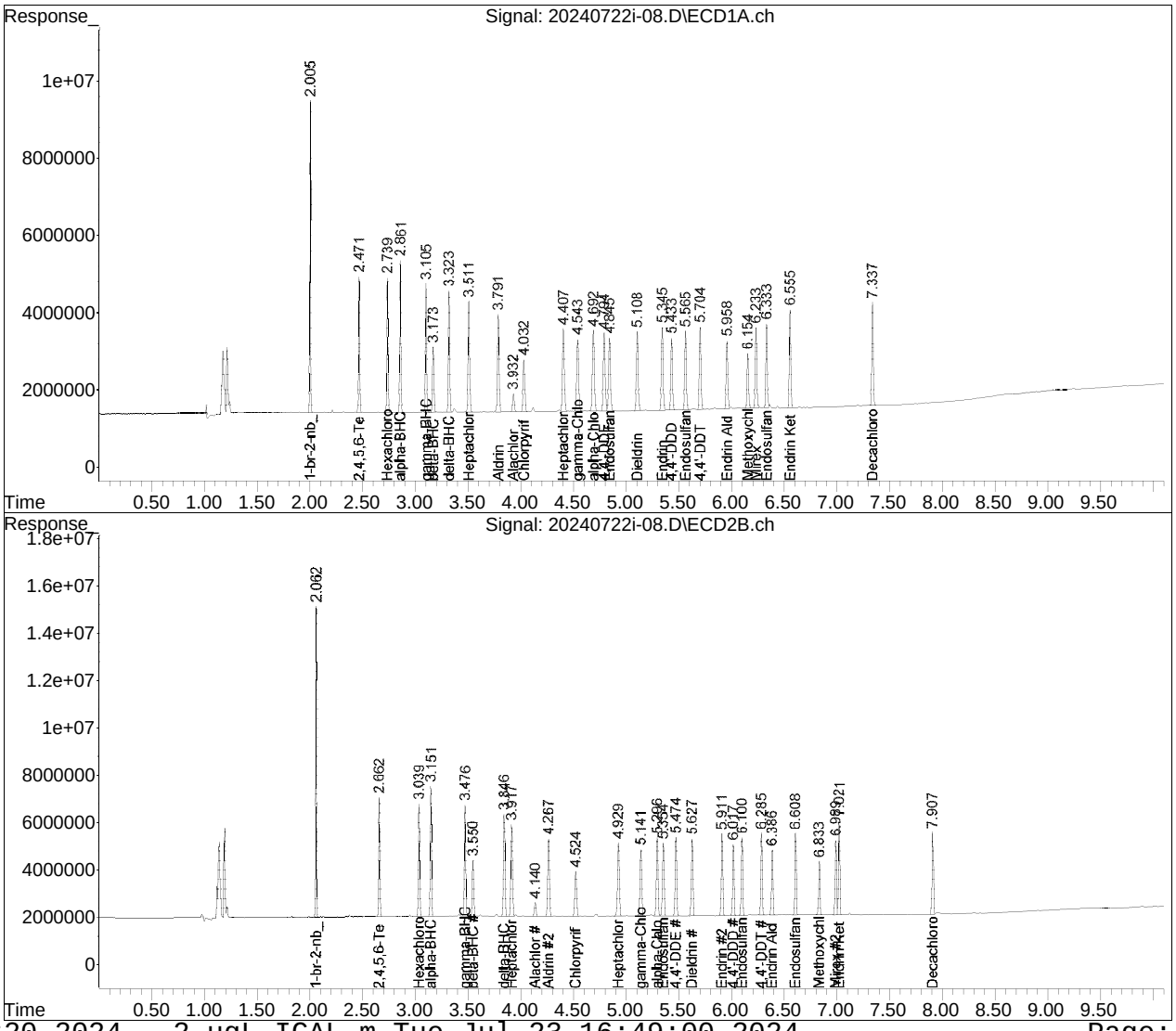
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-08.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:11
Operator : pest20:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 13:02:24 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 13:02:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

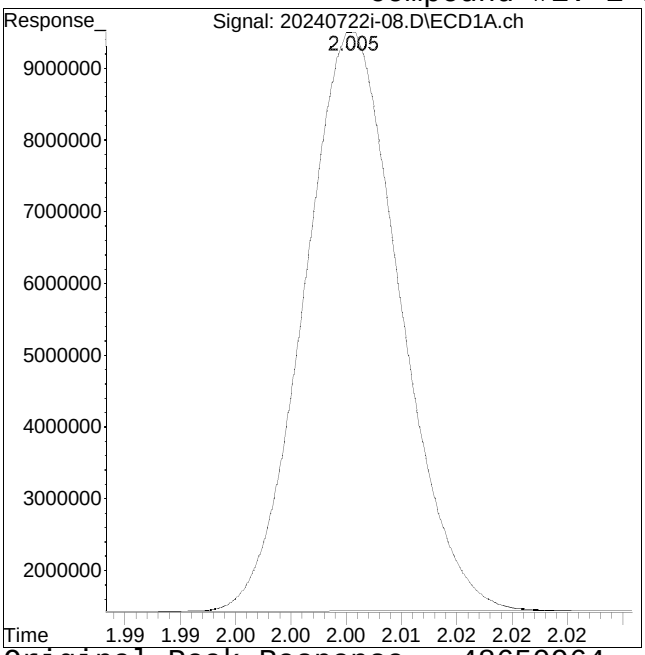


# Manual Integration Report

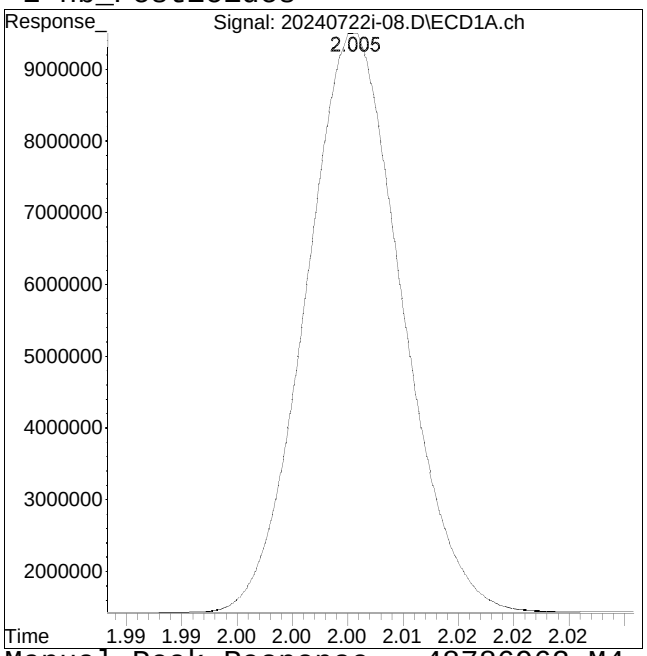
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 48650964



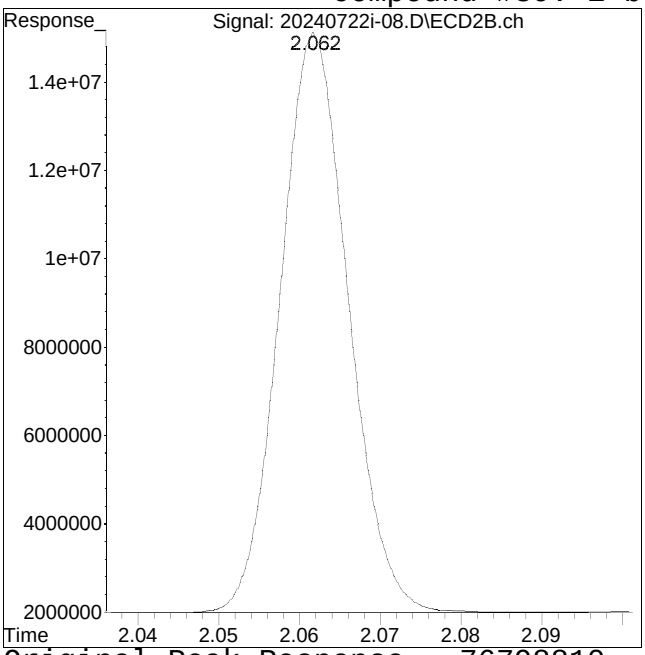

Manual Peak Response = 48786962 M4

M4 = Poor automated baseline construction.

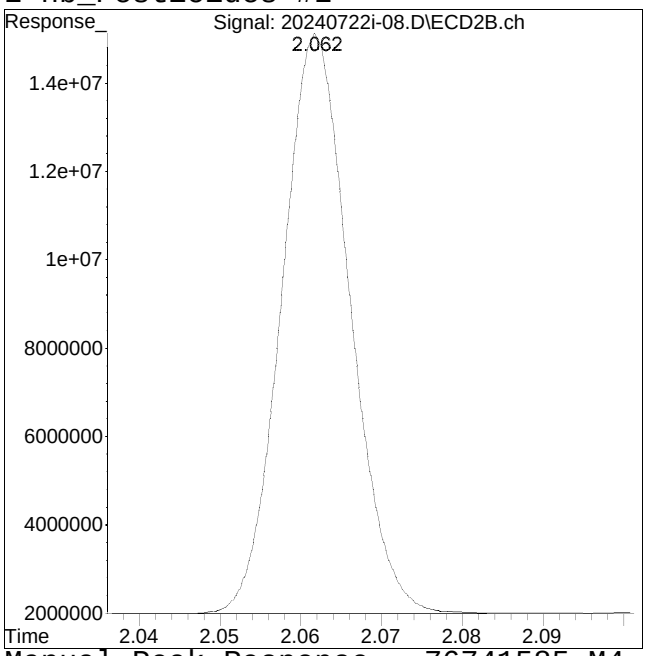
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 76798810




Manual Peak Response = 76741585 M4

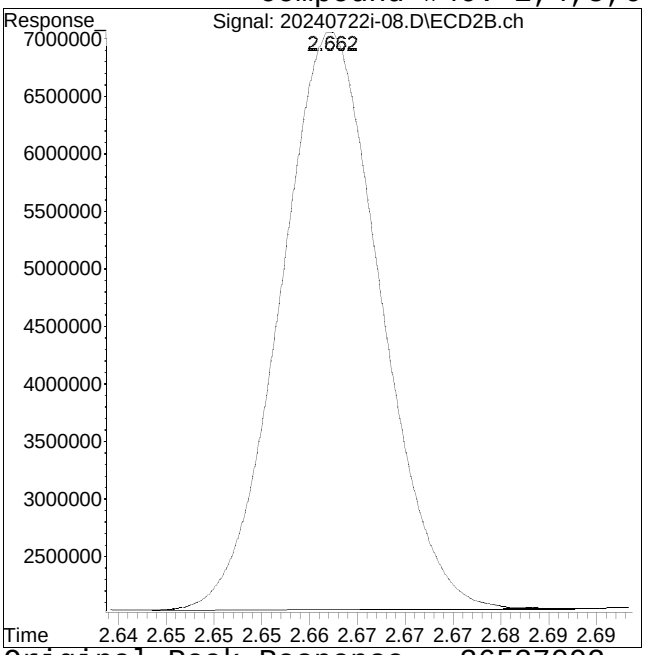
M4 = Poor automated baseline construction.

# Manual Integration Report

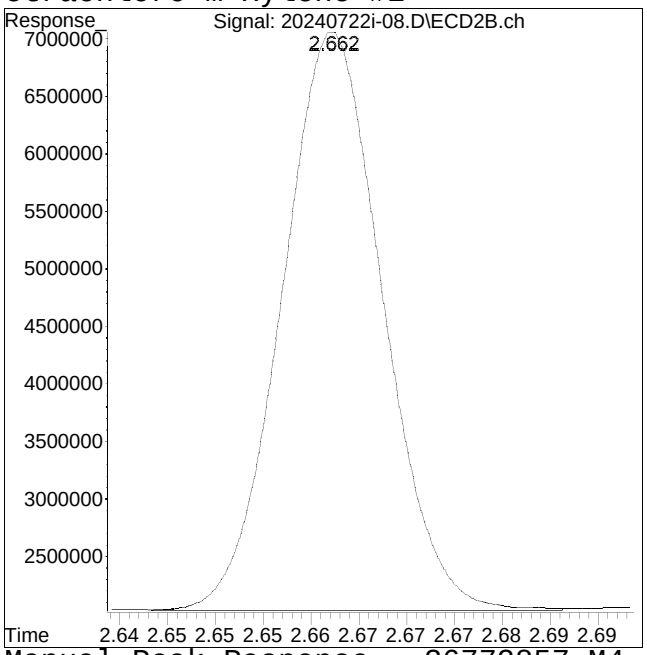
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 36537092



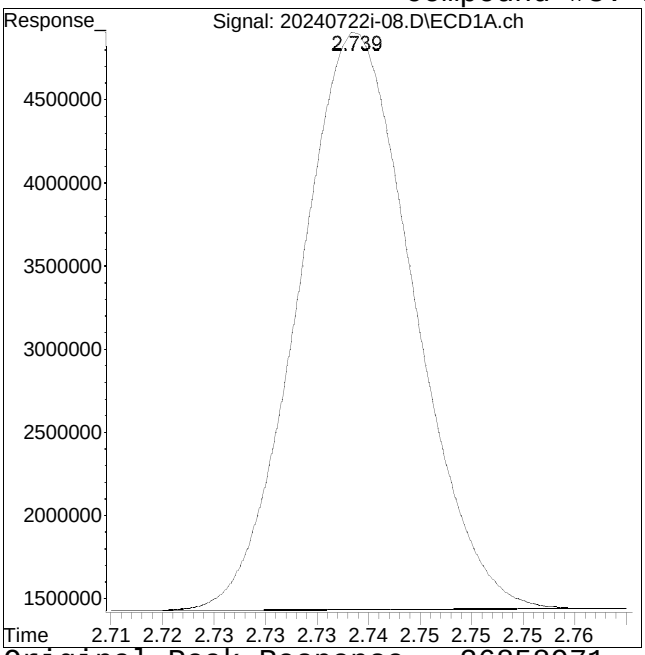

Manual Peak Response = 36772857 M4

M4 = Poor automated baseline construction.

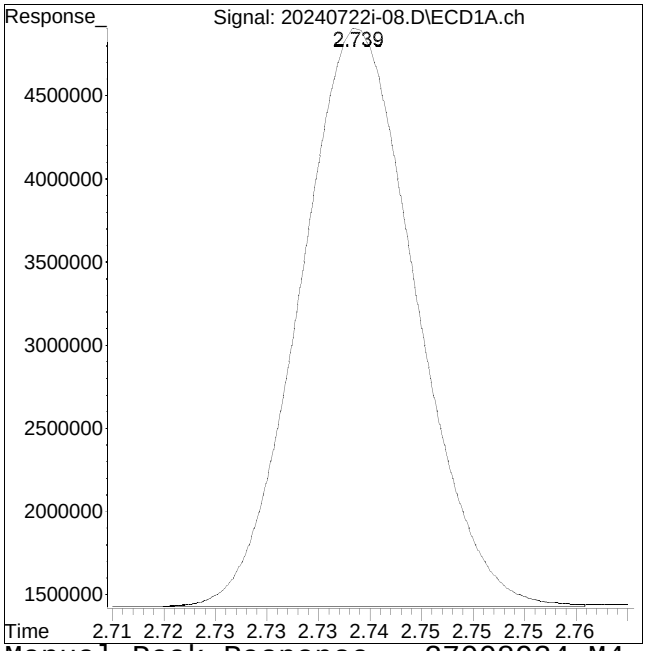
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #3: Hexachlorobenzene




Original Peak Response = 26858971




Manual Peak Response = 27008934 M4

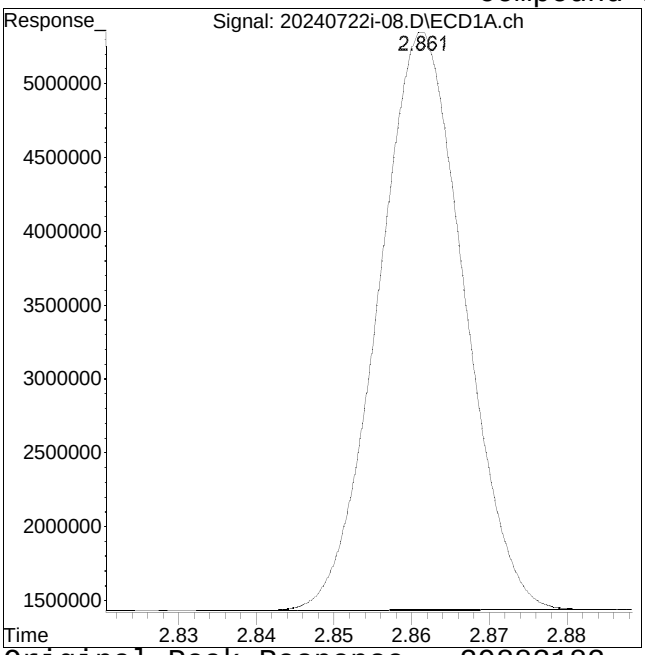
M4 = Poor automated baseline construction.

# Manual Integration Report

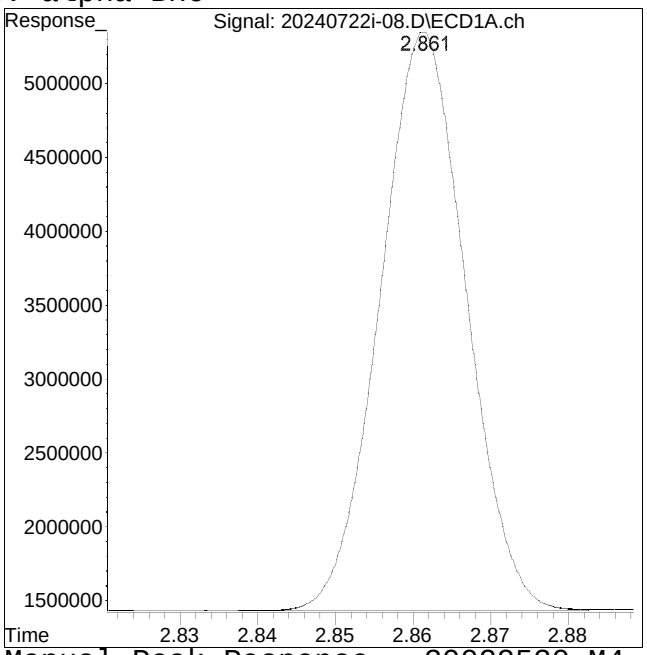
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

Compound #4: alpha-BHC




Original Peak Response = 29883182



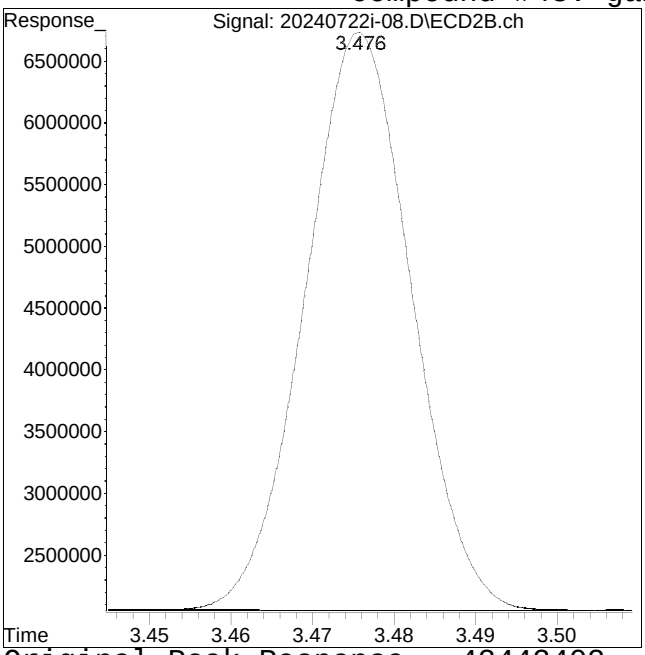

Manual Peak Response = 30022530 M4

M4 = Poor automated baseline construction.

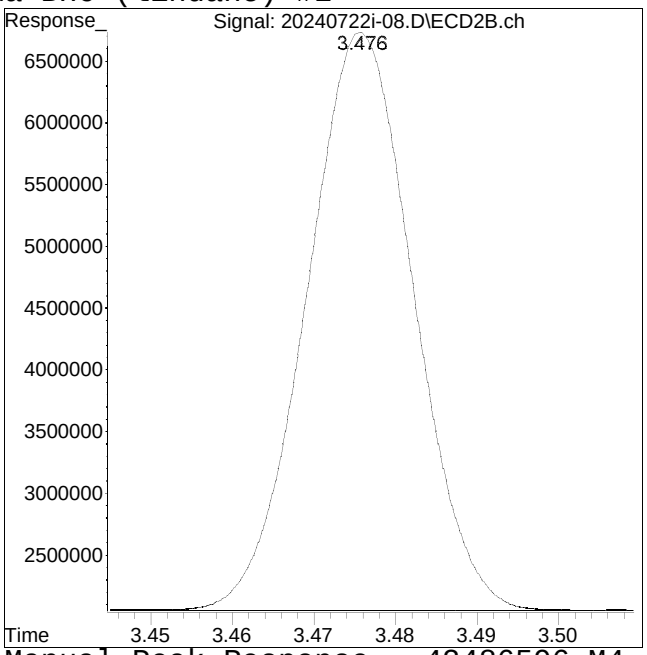
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 42442402



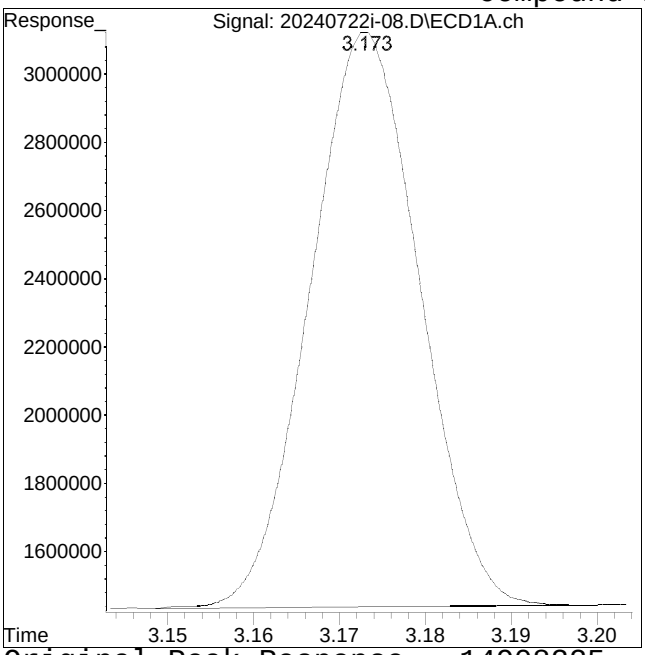

Manual Peak Response = 42486596 M4

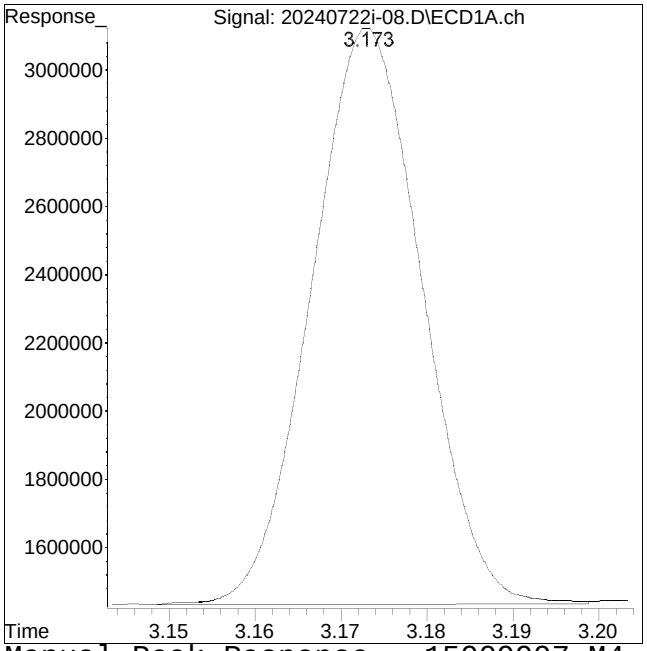
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #6: beta-BHC



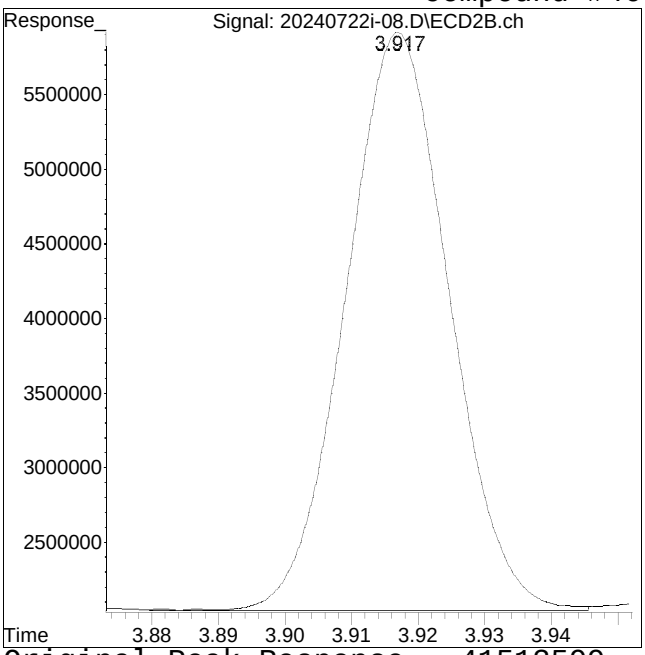

Original Peak Response = 14908225 Manual Peak Response = 15009997 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

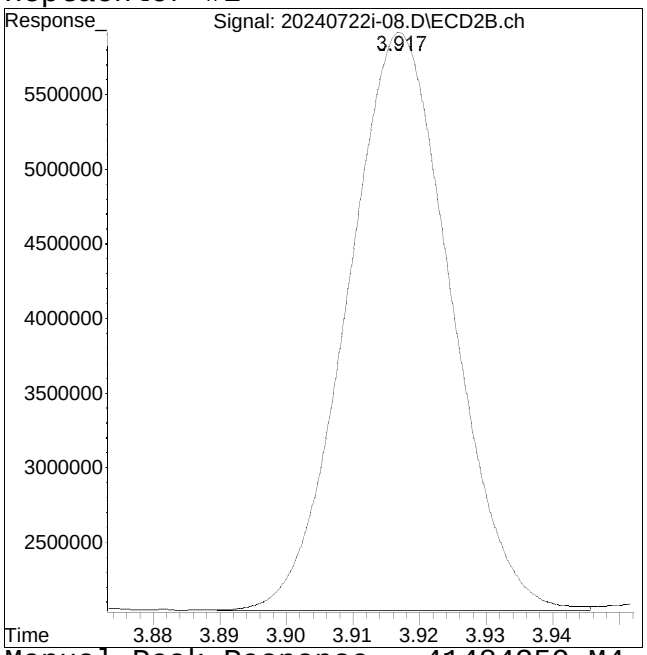
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #46: Heptachlor #2




Original Peak Response = 41513599




Manual Peak Response = 41484359 M4

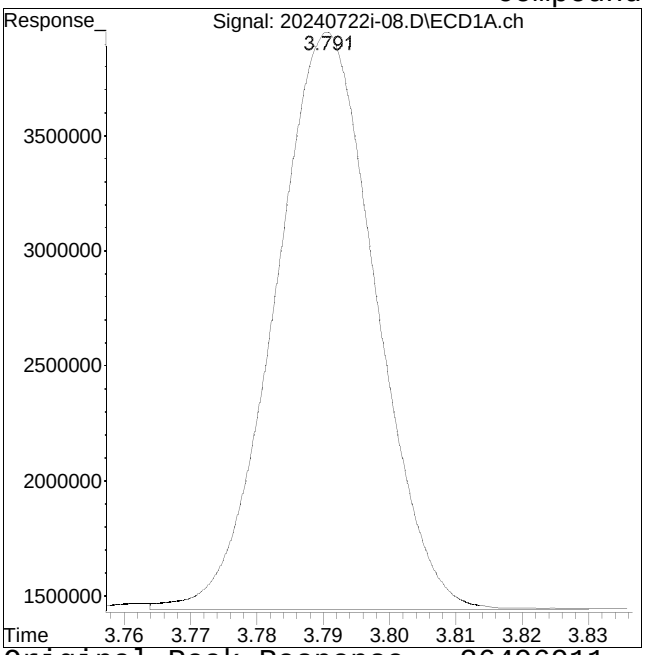
M4 = Poor automated baseline construction.

# Manual Integration Report

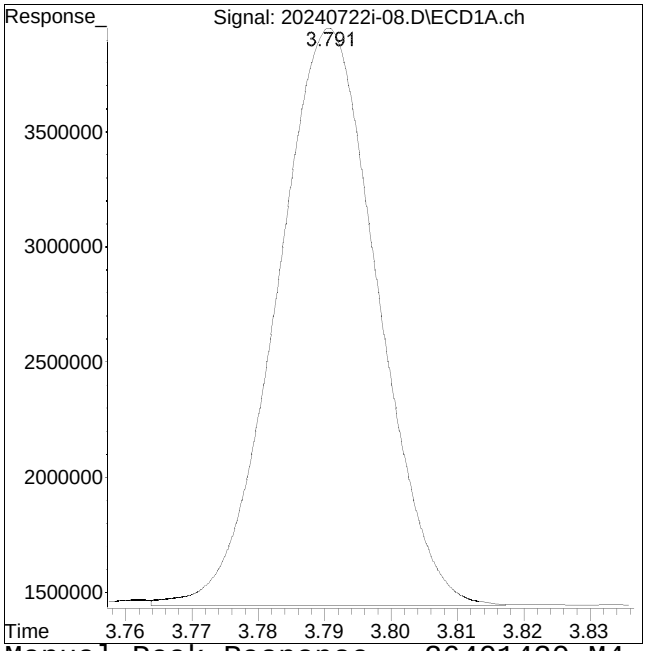
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

Compound #9: Aldrin




Original Peak Response = 26496911



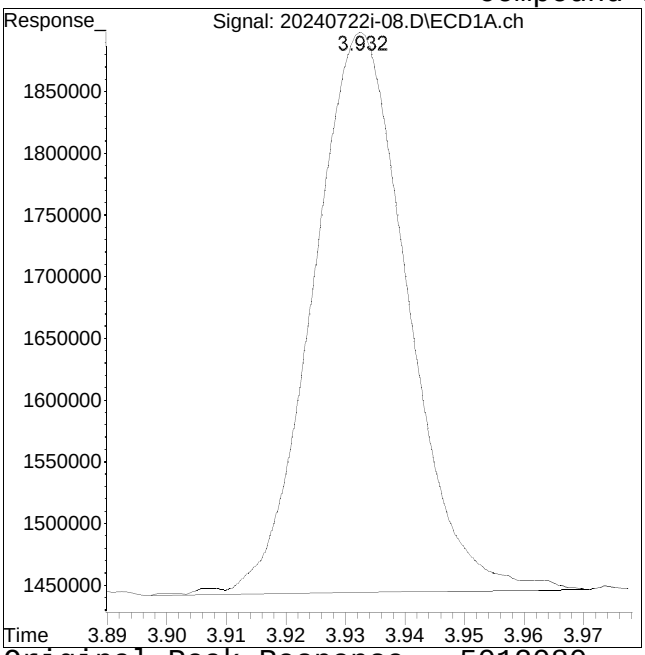

Manual Peak Response = 26401420 M4

M4 = Poor automated baseline construction.

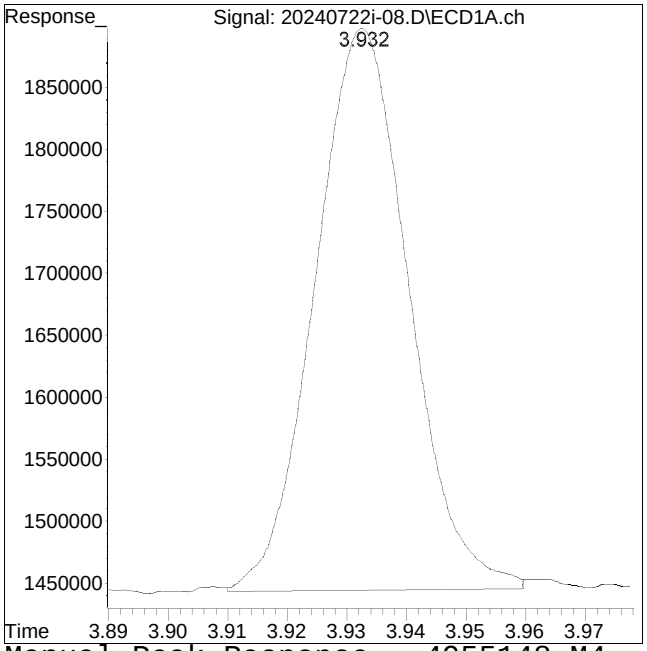
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #10: Alachlor




Original Peak Response = 5012080



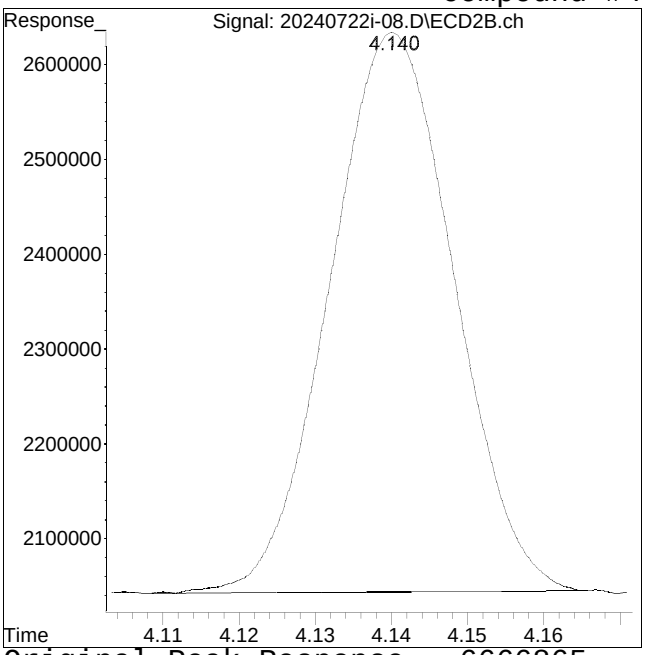

Manual Peak Response = 4955148 M4

M4 = Poor automated baseline construction.

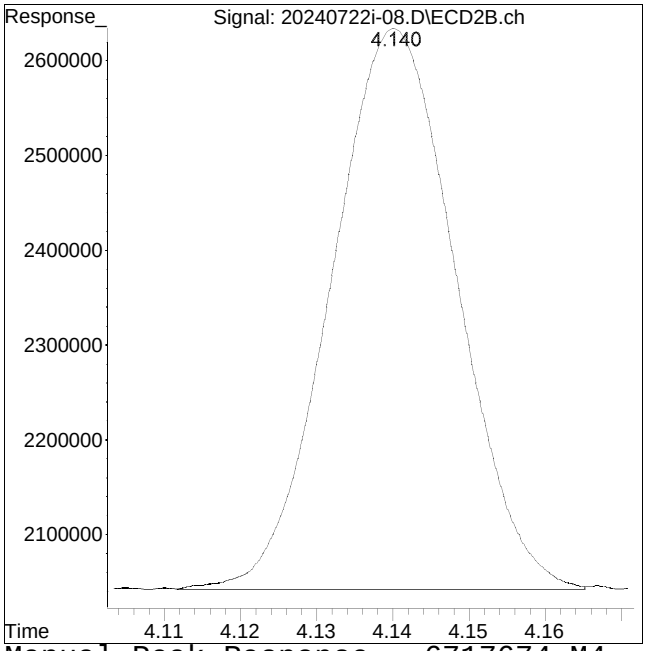
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #48: Alachlor #2




Original Peak Response = 6666865




Manual Peak Response = 6717674 M4

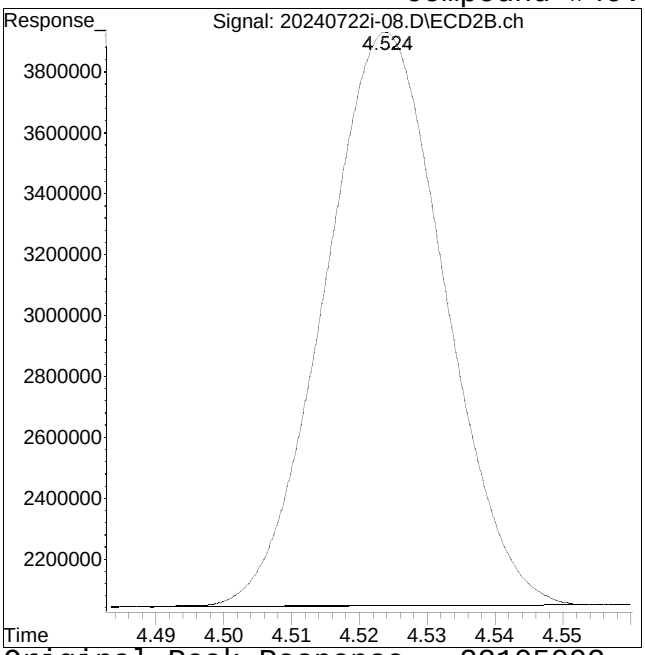
M4 = Poor automated baseline construction.

# Manual Integration Report

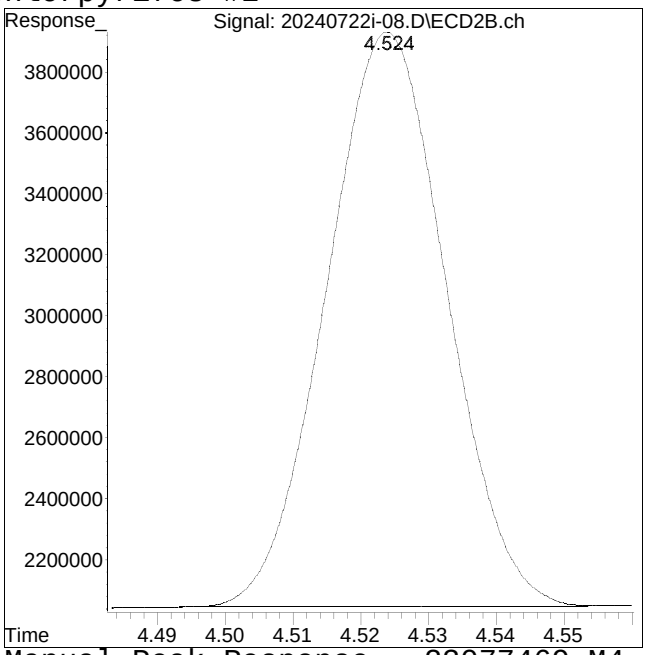
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #49: Chlorpyrifos #2




Original Peak Response = 23105092



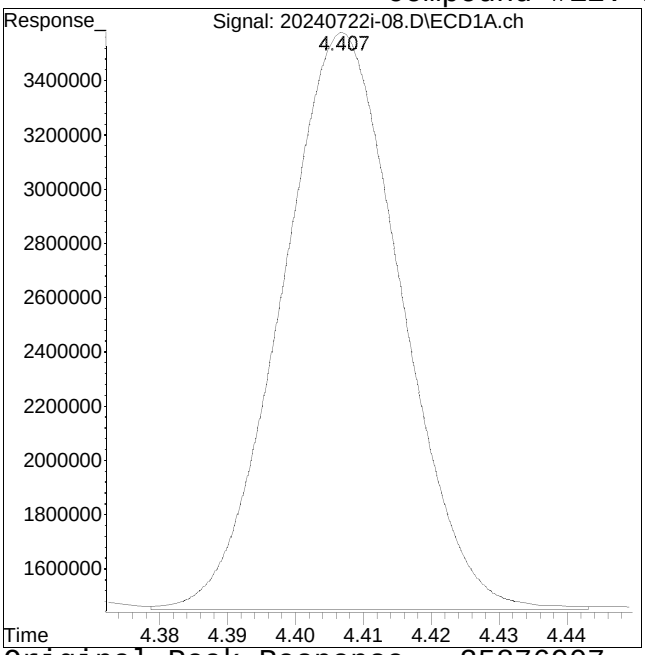

Manual Peak Response = 23077469 M4

M4 = Poor automated baseline construction.

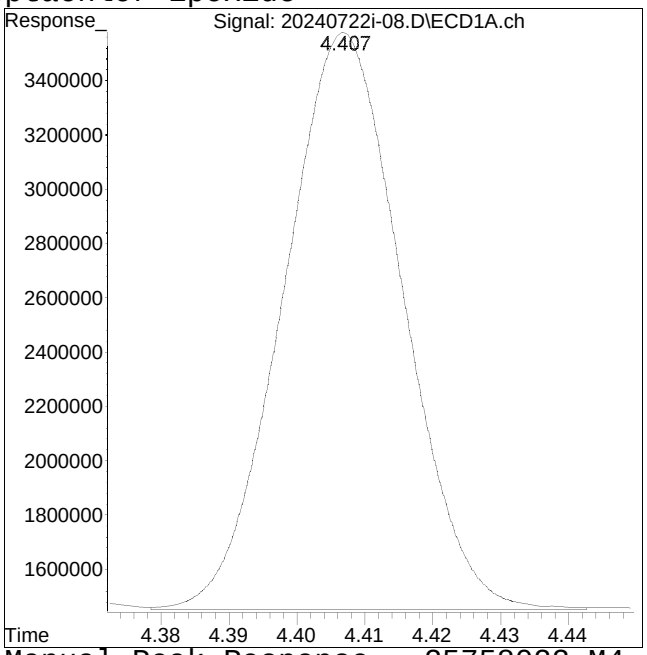
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #12: Heptachlor Epoxide




Original Peak Response = 25876907



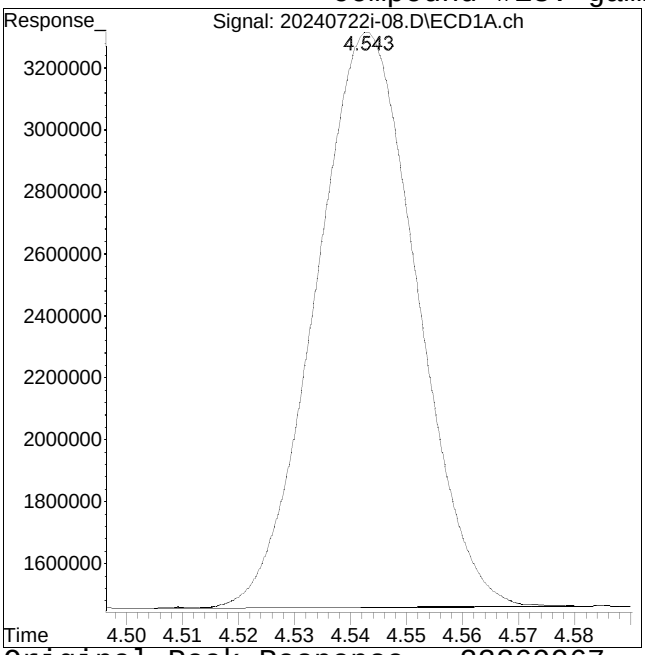

Manual Peak Response = 25758022 M4

M4 = Poor automated baseline construction.

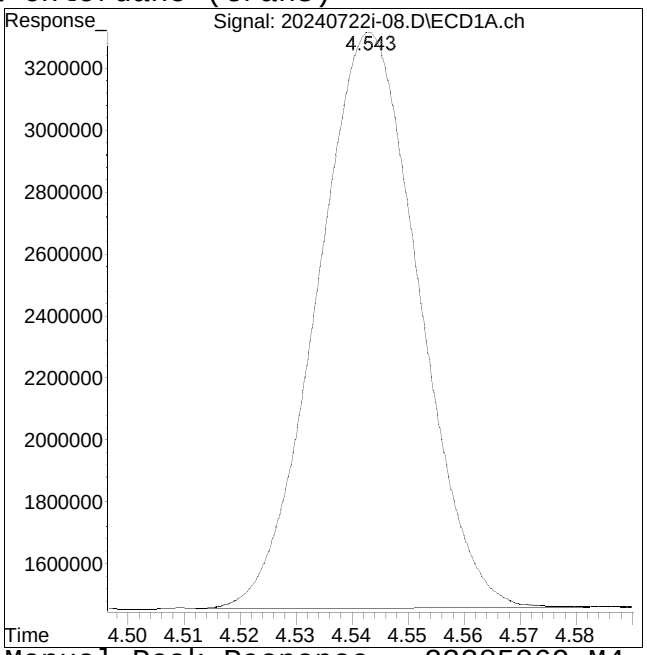
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #13: gamma-Chlordane (trans)




Original Peak Response = 23269967



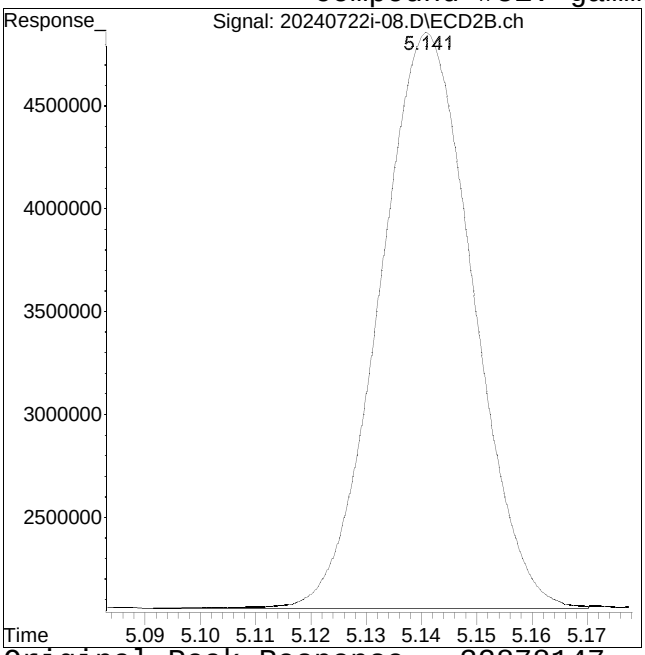

Manual Peak Response = 23285869 M4

M4 = Poor automated baseline construction.

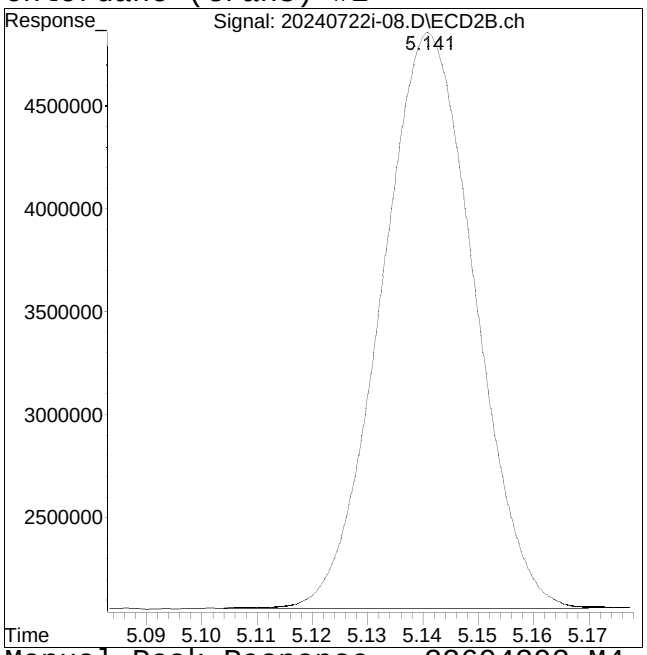
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 32878147



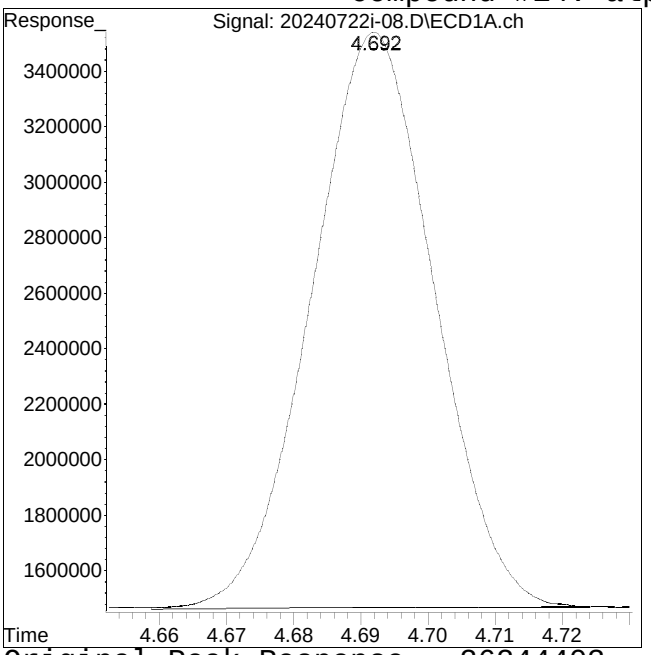

Manual Peak Response = 32694392 M4

M4 = Poor automated baseline construction.

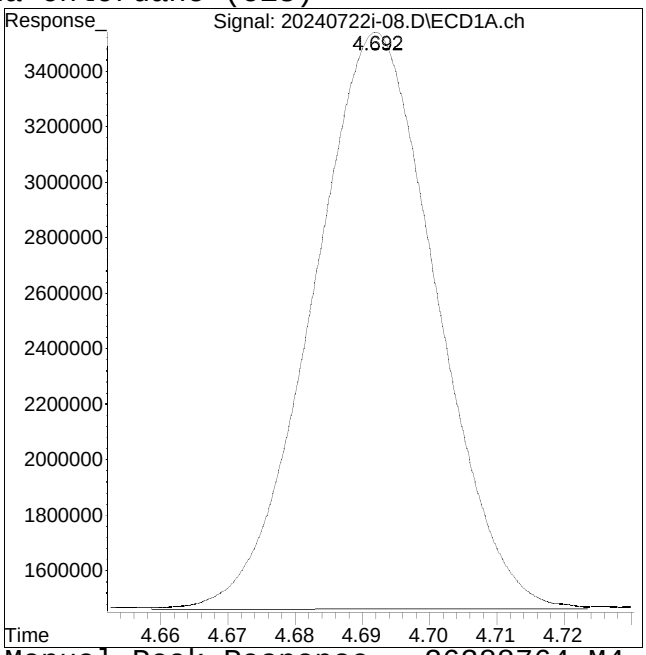
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #14: alpha-Chlordane (cis)




Original Peak Response = 26244403




Manual Peak Response = 26388764 M4

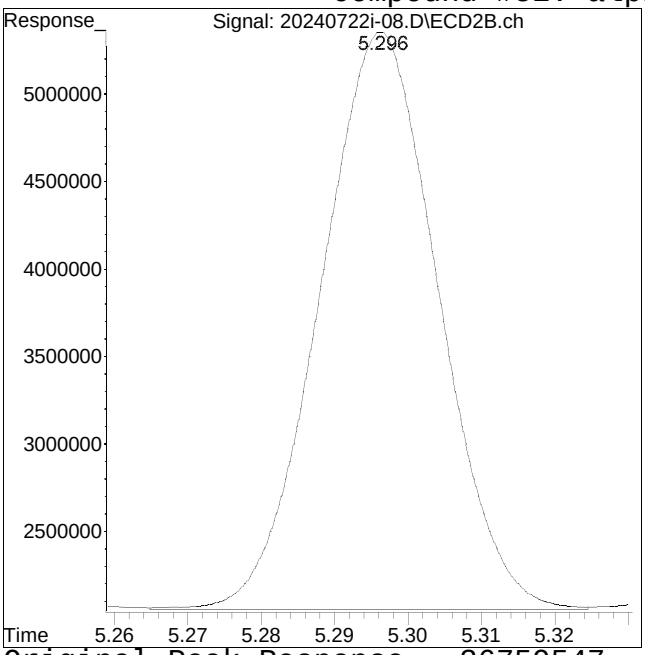
M4 = Poor automated baseline construction.

# Manual Integration Report

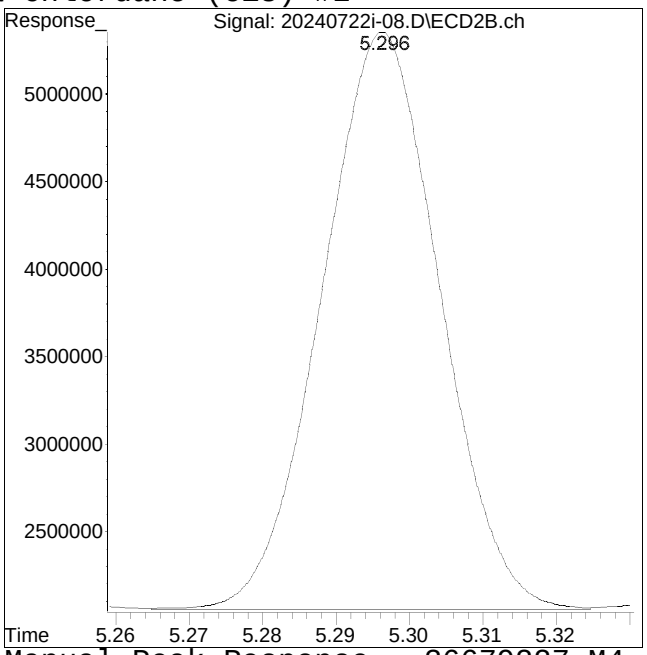
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 36759547




Manual Peak Response = 36679227 M4

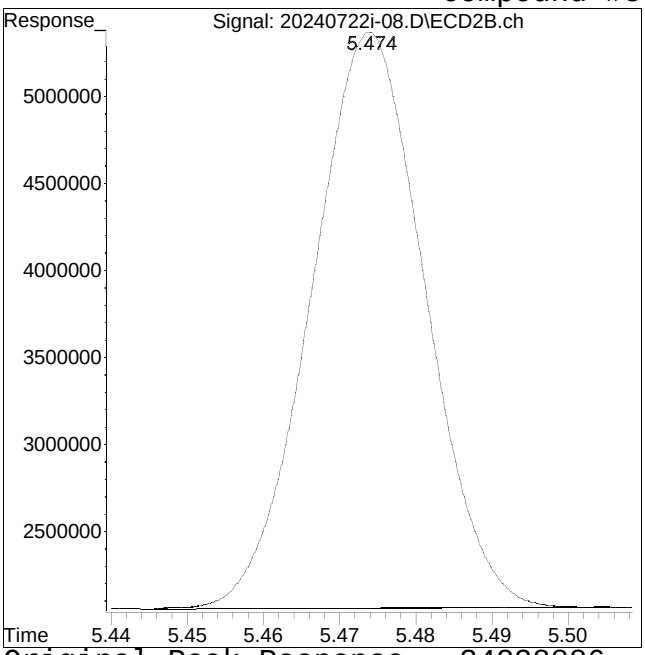
M4 = Poor automated baseline construction.

# Manual Integration Report

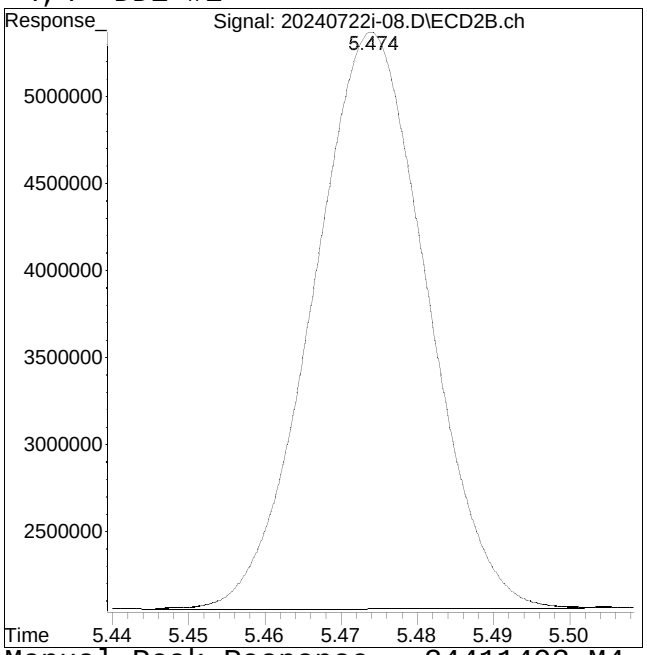
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

## Compound #53: 4,4'-DDE #2




Original Peak Response = 34238886



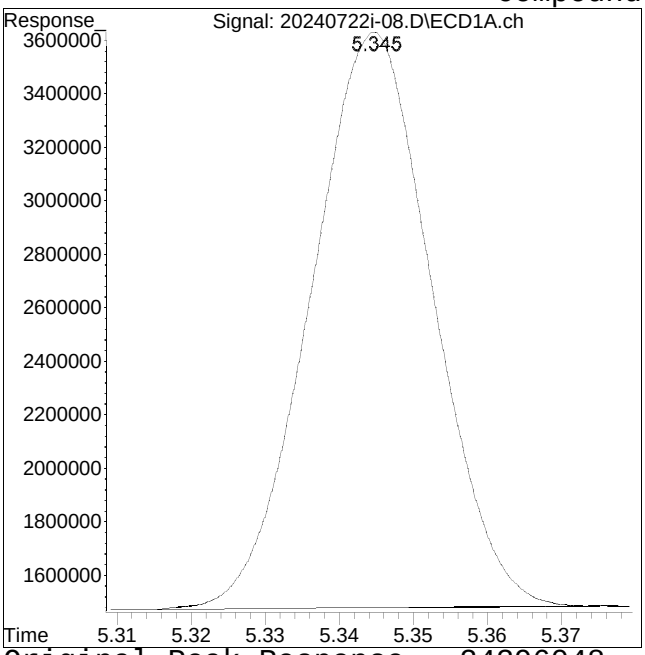

Manual Peak Response = 34411493 M4

M4 = Poor automated baseline construction.

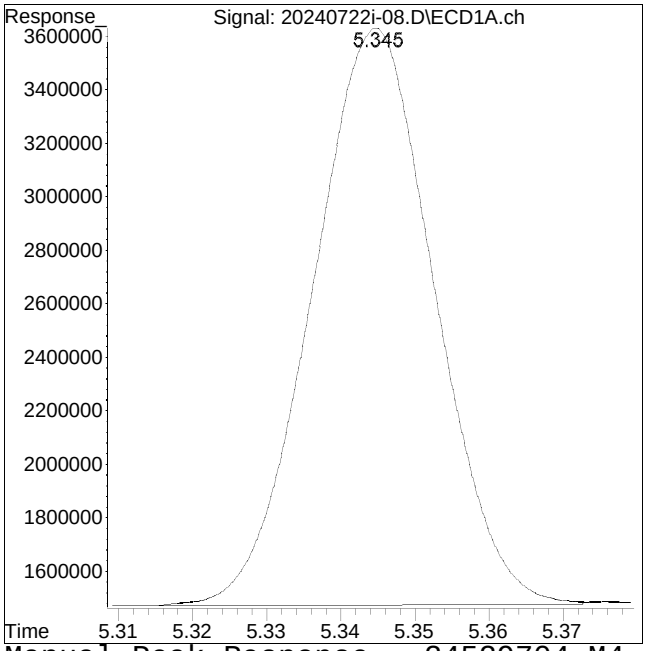
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #18: Endrin




Original Peak Response = 24396048




Manual Peak Response = 24529704 M4

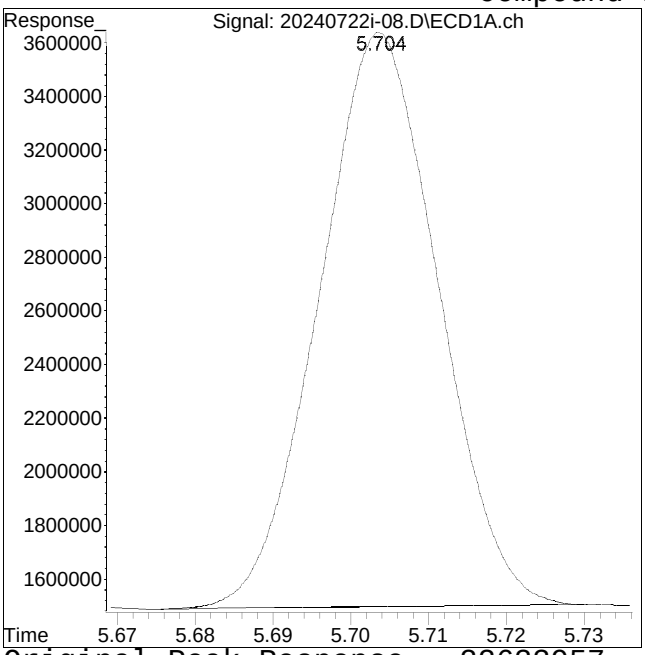
M4 = Poor automated baseline construction.

# Manual Integration Report

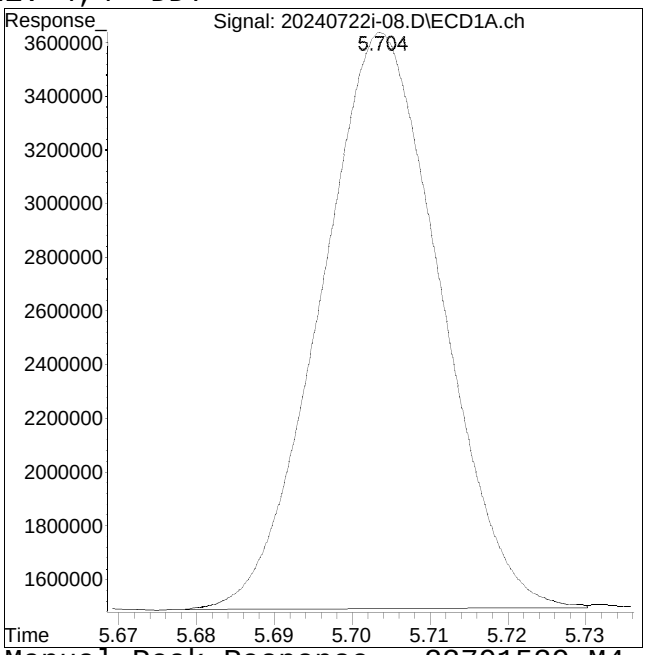
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-08.D
Date Inj'd : 7/22/2024 19:11
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 1:02 pm

Compound #21: 4,4'-DDT




Original Peak Response = 22633957



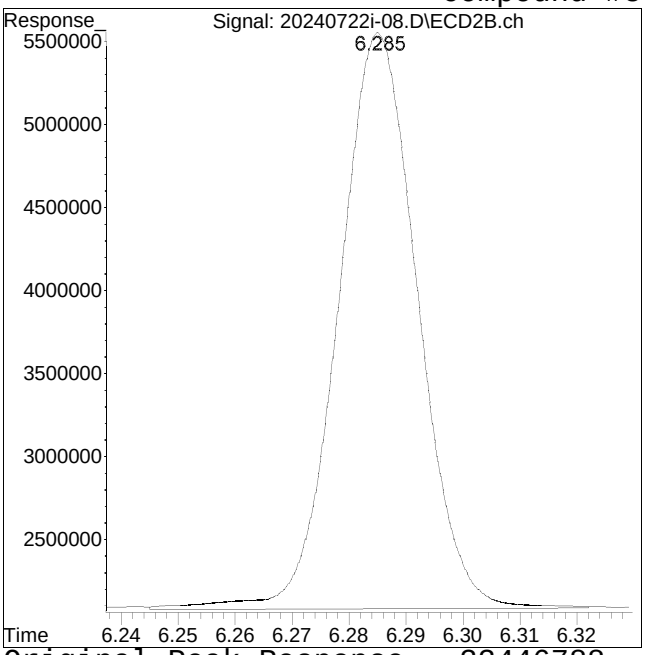

Manual Peak Response = 22791539 M4

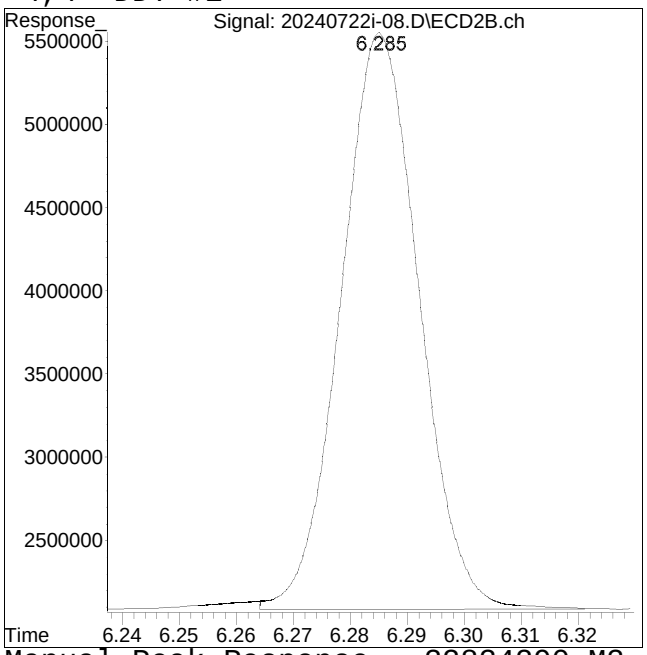
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #59: 4,4'-DDT #2



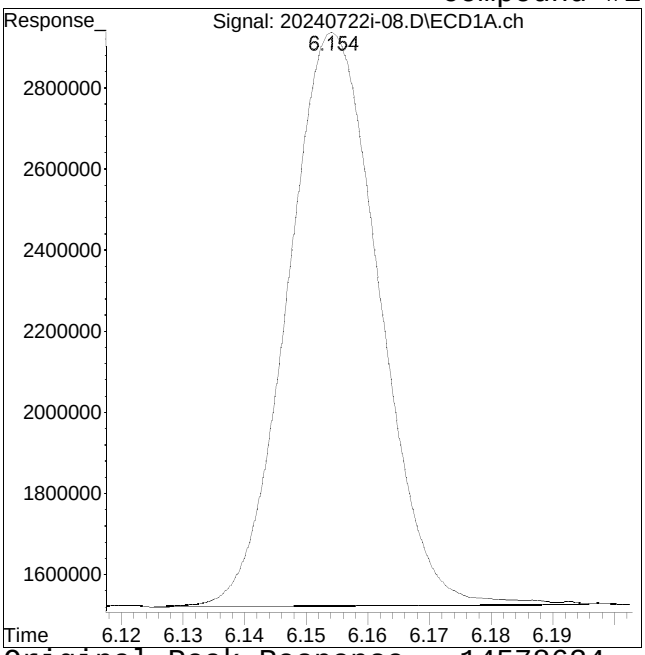




Original Peak Response = 33446788 Manual Peak Response = 32834290 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

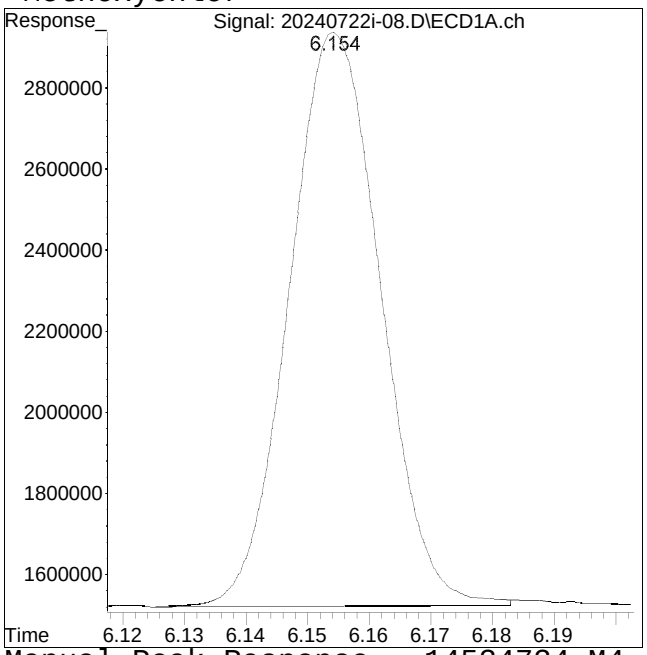
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #23: Methoxychlor




Original Peak Response = 14578634



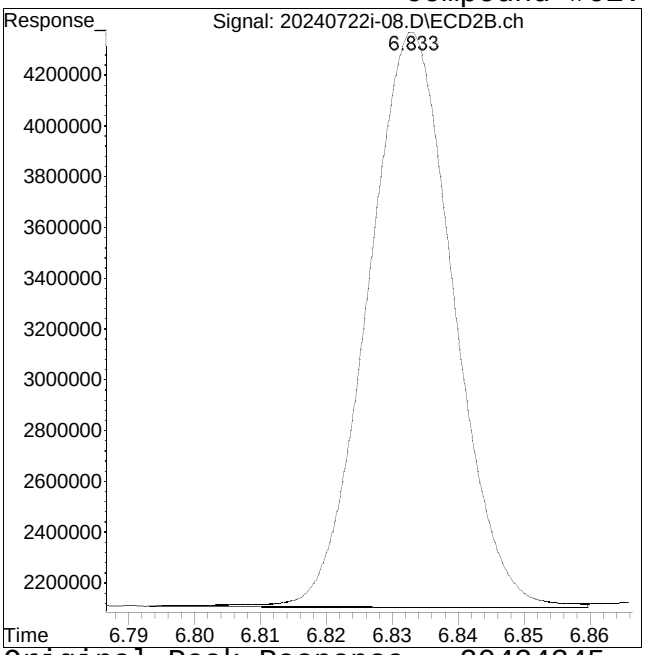

Manual Peak Response = 14534734 M4

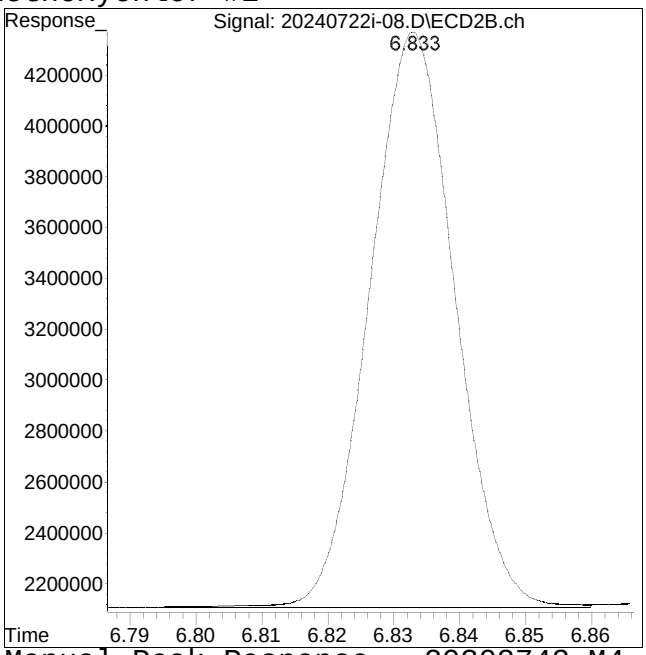
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #61: Methoxychlor #2



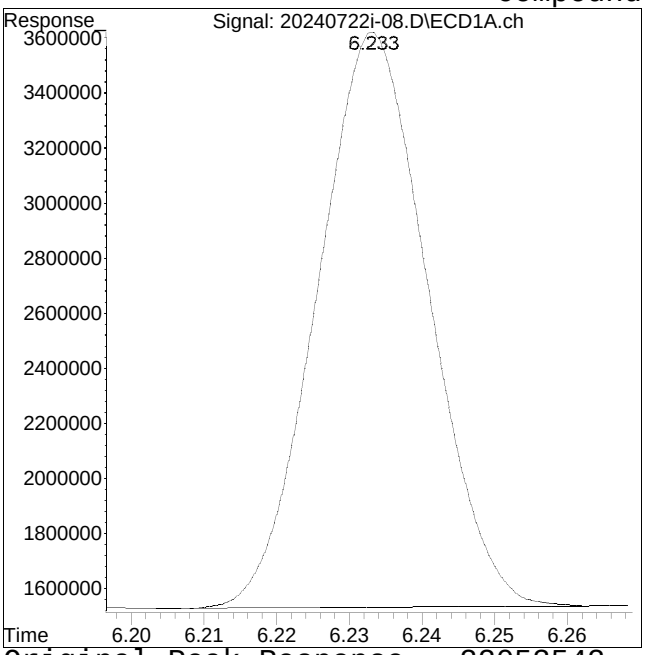




Original Peak Response = 20424345 Manual Peak Response = 20302742 M4
M4 = Poor automated baseline construction.

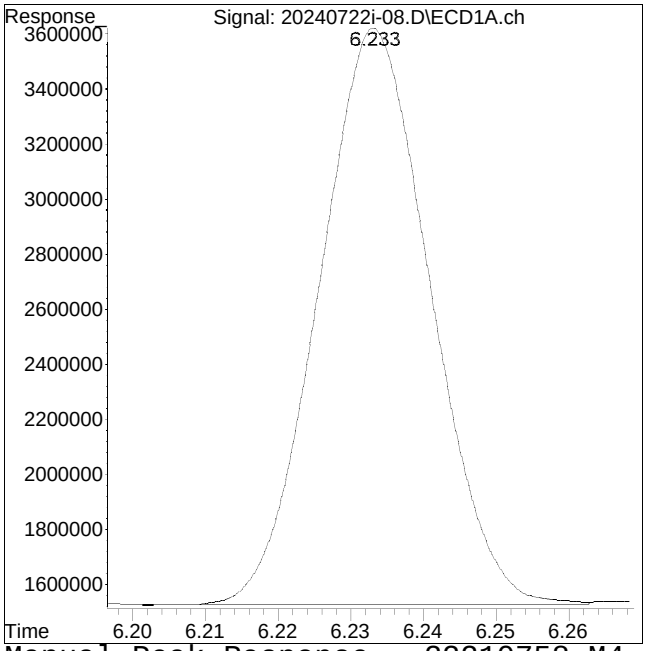
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #24: Mirex




Original Peak Response = 22053542



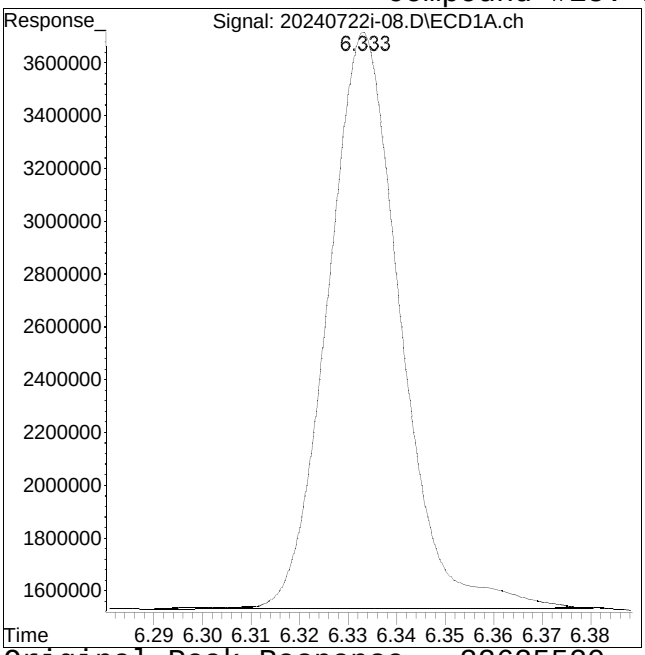

Manual Peak Response = 22210758 M4

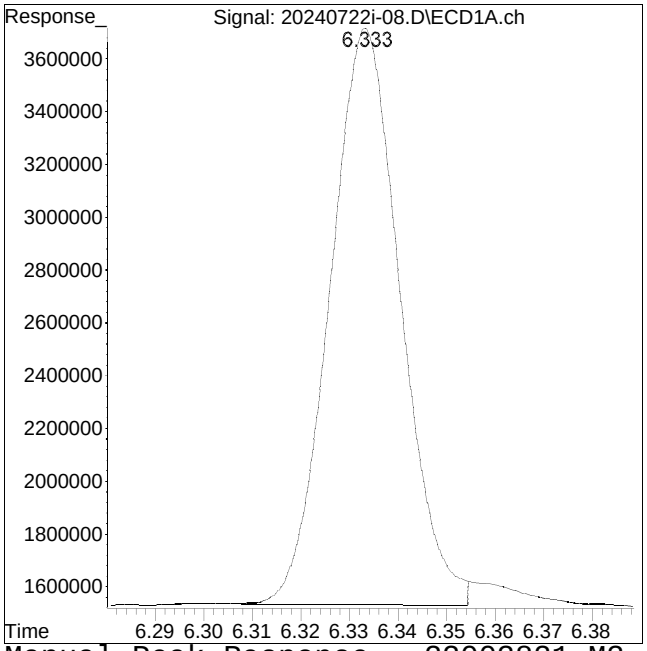
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #25: Endosulfan Sulfate



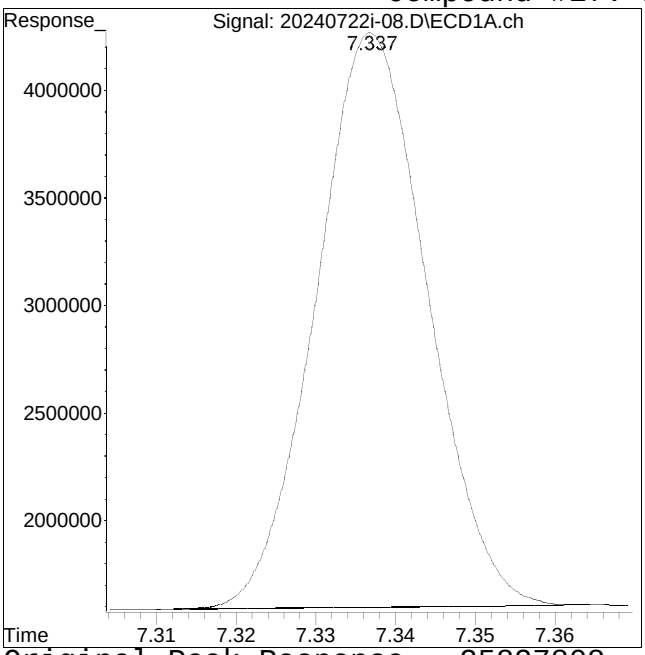

Original Peak Response = 22625520 Manual Peak Response = 22003821 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

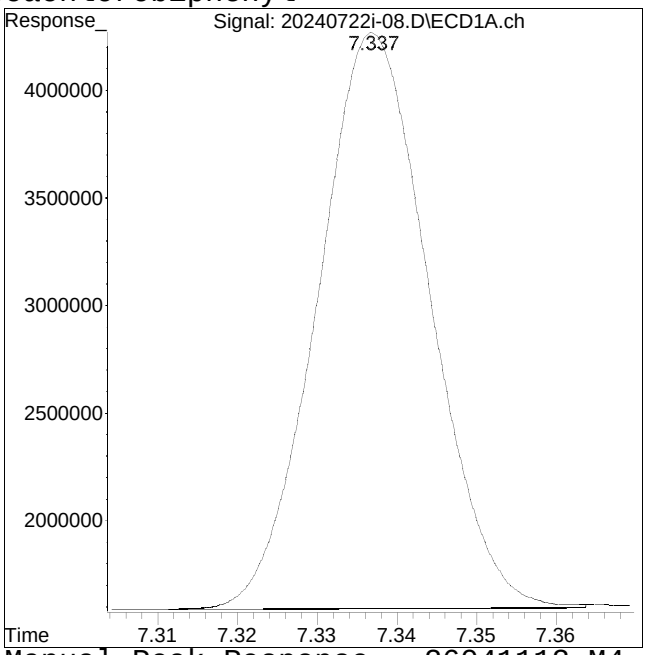
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

## Compound #27: Decachlorobiphenyl




Original Peak Response = 25827808



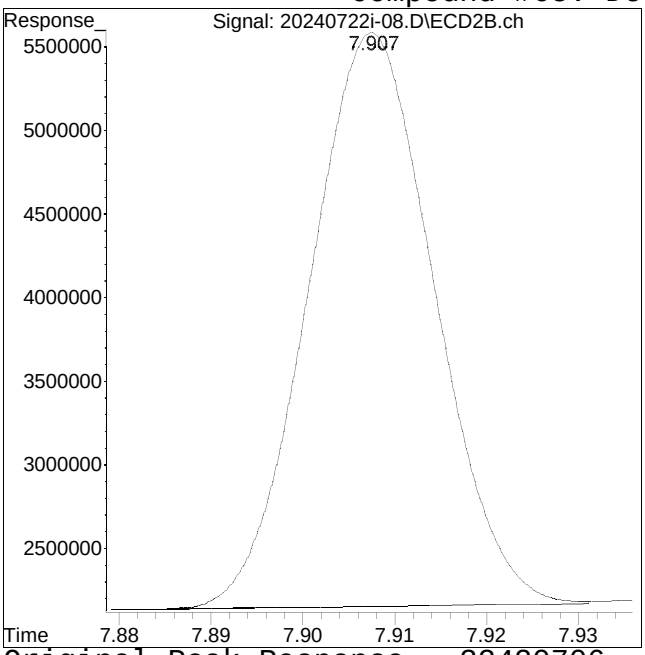

Manual Peak Response = 26041112 M4

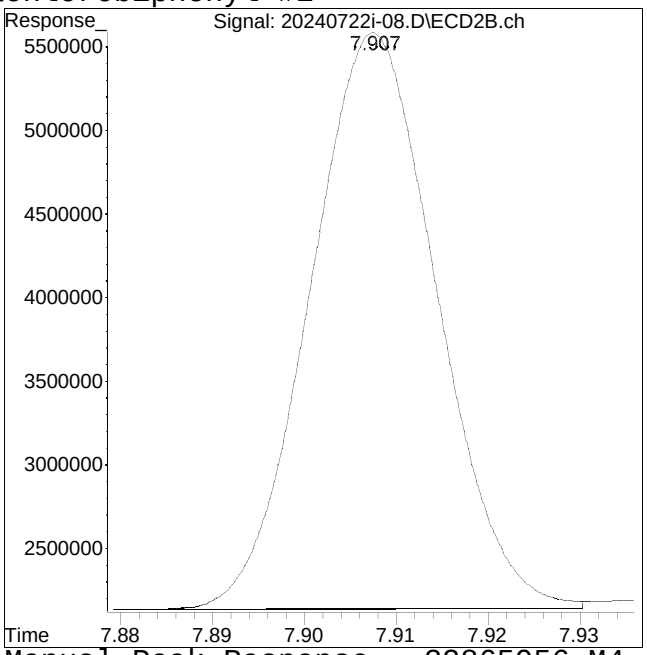
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-08.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:11 Instrument : PEST 20
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 7/23/2024 1:02 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 32420706 Manual Peak Response = 32865956 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-09.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:24
Operator : pest20:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:21:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:21:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.006 | 2.062 | 52130218 | 82072879 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.472 | 2.662 | 119.2E6 | 184.6E6 | NoCal M4 | NoCal M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 7.334 | 7.904 | 116.5E6 | 150.4E6 | NoCal M4 | NoCal |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.739 | 3.038 | 124.5E6 | 189.2E6 | NoCal | NoCal M4 |
| 4) | alpha-BHC | 2.862 | 3.151 | 157.2E6 | 247.0E6 | NoCal M3 | NoCal |
| 5) | gamma-BHC (l | 3.106 | 3.476 | 142.9E6 | 224.9E6 | NoCal | NoCal |
| 6) | beta-BHC | 3.173 | 3.550 | 67868100 | 105.5E6 | NoCal M4 | NoCal M4 |
| 7) | delta-BHC | 3.324 | 3.847 | 143.4E6 | 226.5E6 | NoCal | NoCal |
| 8) | Heptachlor | 3.512 | 3.917 | 138.0E6 | 209.8E6 | NoCal | NoCal |
| 9) | Aldrin | 3.791 | 4.267 | 133.8E6 | 196.8E6 | NoCal | NoCal |
| 10) | Alachlor | 3.932 | 4.140 | 22067386 | 29728031 | NoCal M4 | NoCal |
| 11) | Chlorpyrifos | 4.033 | 4.524 | 65139554 | 102.5E6 | NoCal | NoCal |
| 12) | Heptachlor E | 4.406 | 4.928 | 124.6E6 | 188.7E6 | NoCal M4 | NoCal M4 |
| 13) | gamma-Chlord | 4.543 | 5.141 | 113.1E6 | 165.5E6 | NoCal M4 | NoCal |
| 14) | alpha-Chlord | 4.692 | 5.296 | 127.9E6 | 184.8E6 | NoCal M3 | NoCal |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-09.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:24
Operator : pest20:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:21:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:21:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 15) | | 4,4'-DDE | 4.794 | 5.473 | 129.3E6 | 185.4E6 | NoCal | NoCal M4 |
| 16) | | Endosulfan I | 4.844 | 5.354 | 117.8E6 | 172.9E6 | NoCal M4 | NoCal |
| 17) | | Dieldrin | 5.107 | 5.627 | 122.5E6 | 178.7E6 | NoCal M4 | NoCal M4 |
| 18) | | Endrin | 5.344 | 5.910 | 123.1E6 | 182.4E6 | NoCal | NoCal M4 |
| 19) | | 4,4'-DDD | 5.433 | 6.018 | 104.1E6 | 151.7E6 | NoCal | NoCal |
| 20) | | Endosulfan I | 5.565 | 6.100 | 108.8E6 | 163.4E6 | NoCal | NoCal |
| 21) | | 4,4'-DDT | 5.703 | 6.285 | 113.1E6 | 170.2E6 | NoCal M4 | NoCal M4 |
| 22) | | Endrin Aldeh | 5.957 | 6.385 | 93719042 | 139.1E6 | NoCal | NoCal M4 |
| 23) | | Methoxychlor | 6.154 | 6.832 | 64627347 | 94053597 | NoCal | NoCal |
| 24) | | Mirex | 6.233 | 6.988 | 98077096 | 136.8E6 | NoCal M3 | NoCal |
| 25) | | Endosulfan S | 6.333 | 6.607 | 103.2E6 | 158.1E6 | NoCal M3 | NoCal M4 |
| 26) | | Endrin Keton | 6.556 | 7.019 | 118.7E6 | 180.1E6 | NoCal | NoCal |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-09.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:24
Operator : pest20:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:21:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:21:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| Average toxaphene-1 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-1 | | | | | 0.000 | 0.000 |

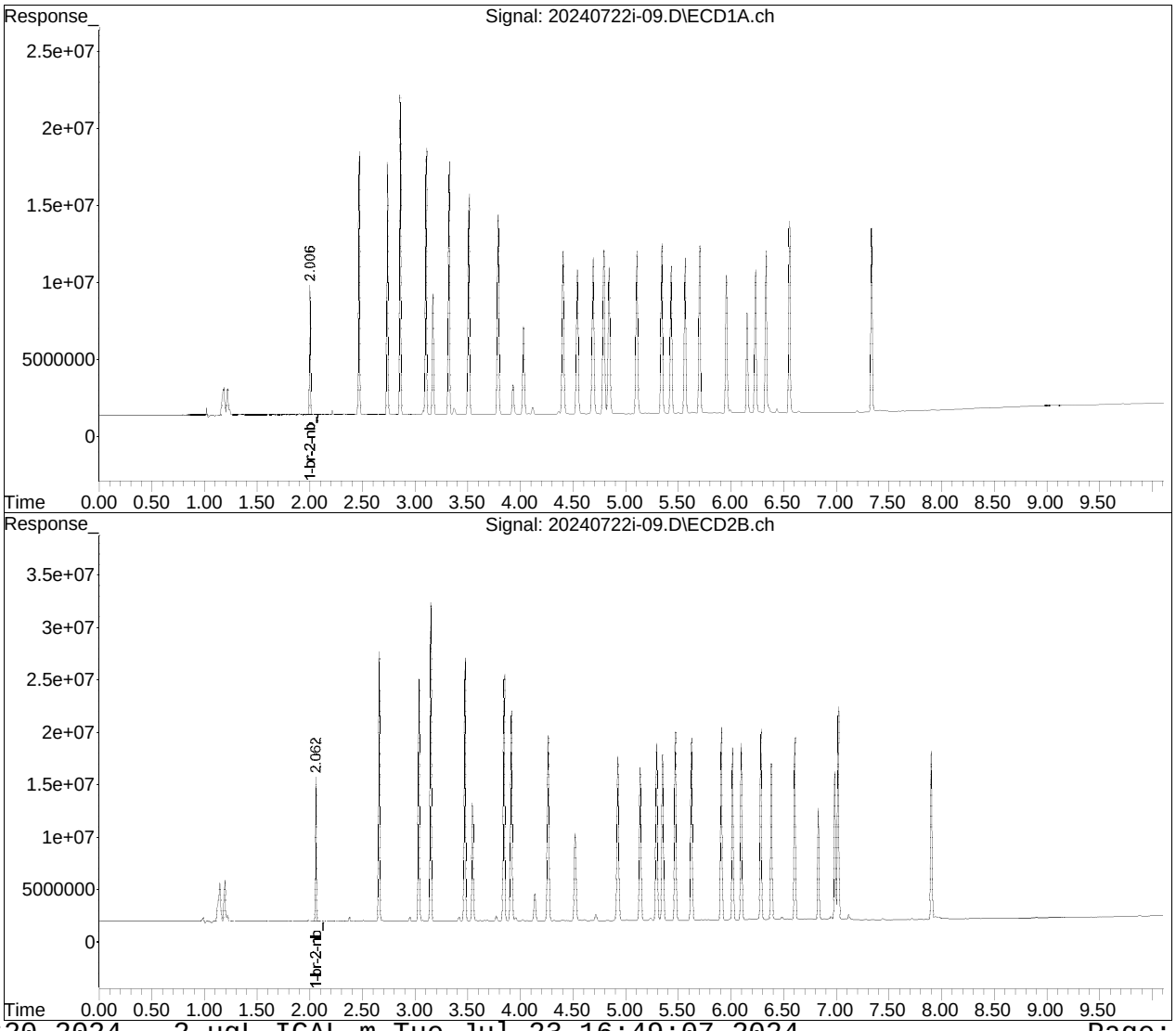
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-09.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  19:24
Operator : pest20:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 9  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:21:40 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:21:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

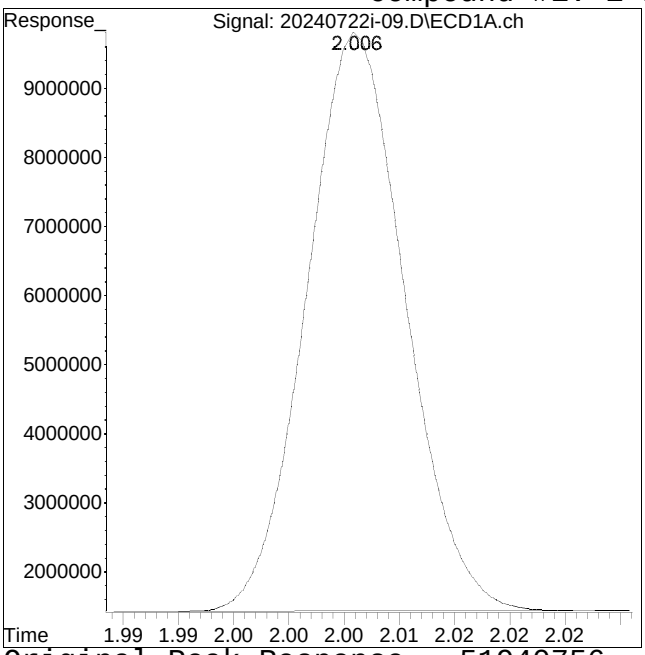


# Manual Integration Report

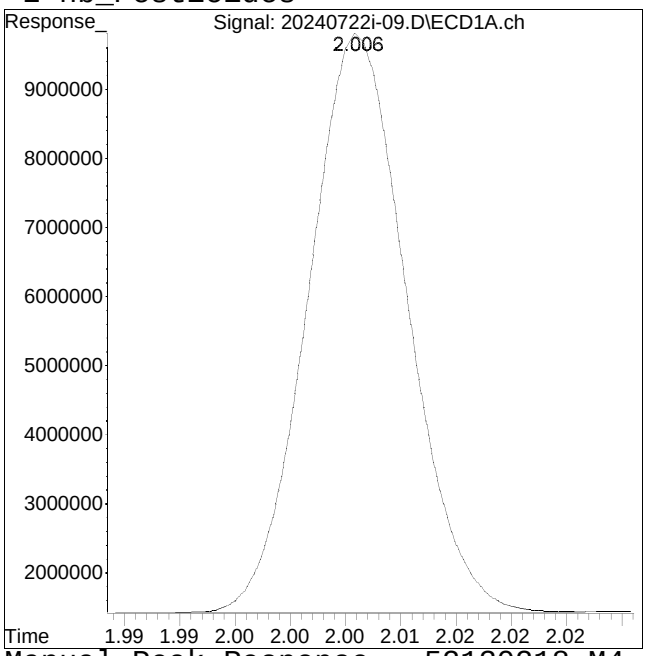
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 51940756




Manual Peak Response = 52130218 M4

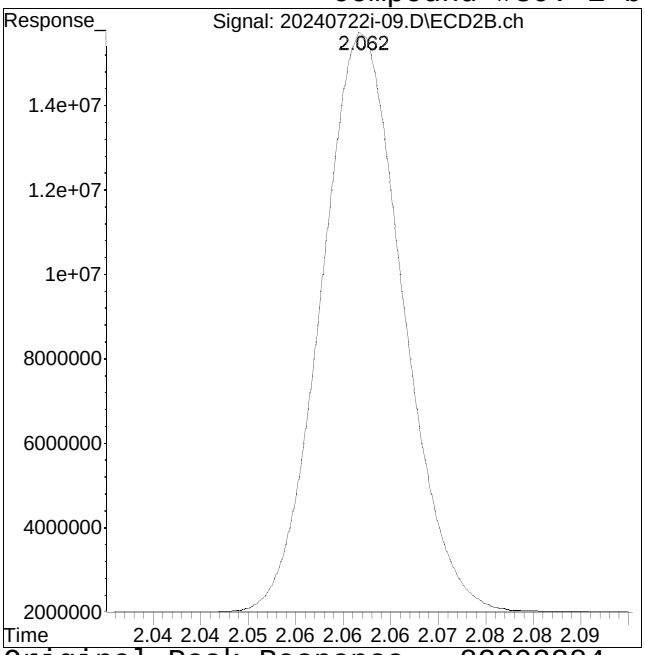
M4 = Poor automated baseline construction.

# Manual Integration Report

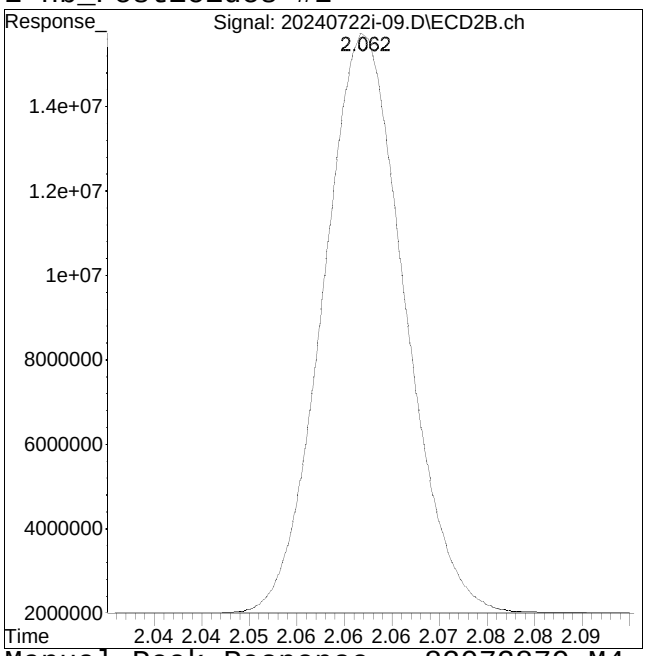
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 82092284



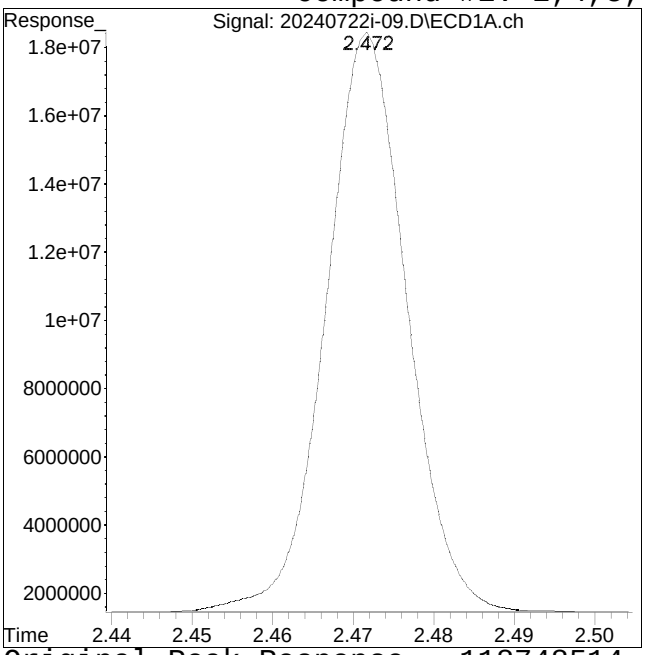

Manual Peak Response = 82072879 M4

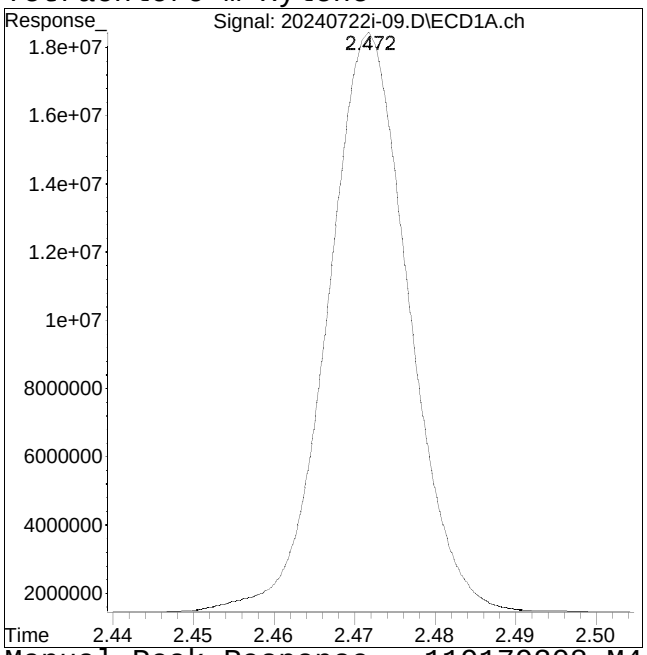
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



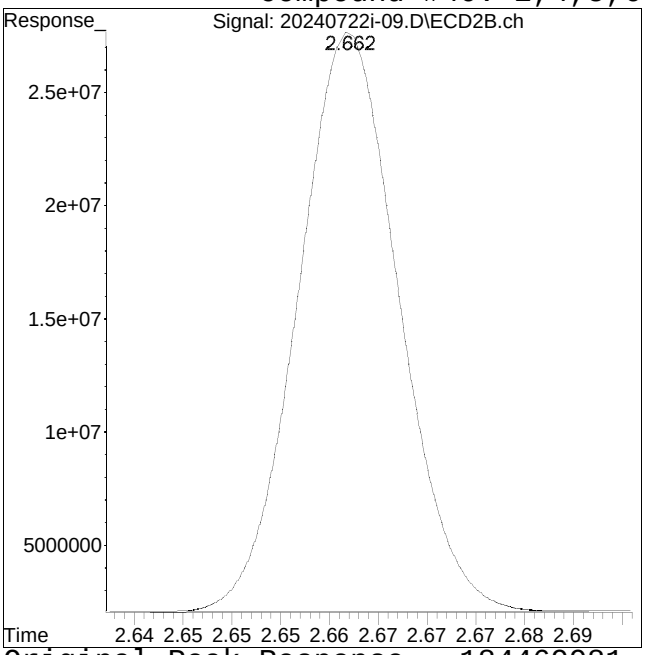



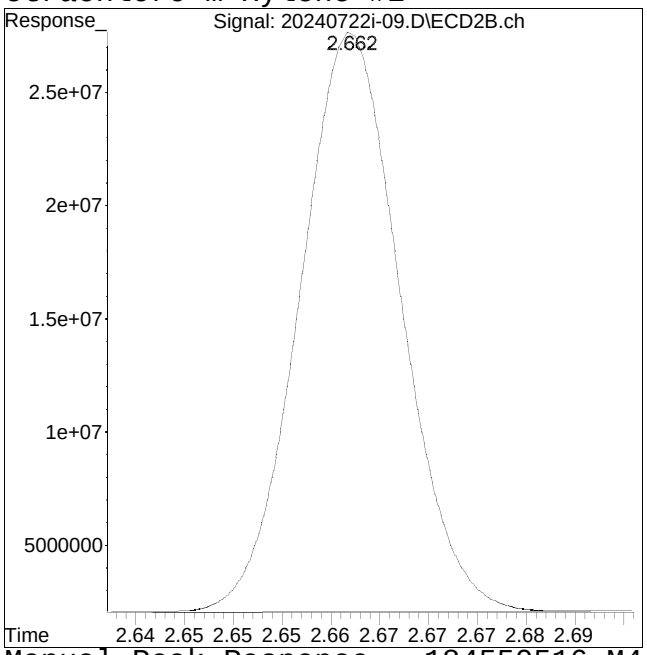

Original Peak Response = 118748514 Manual Peak Response = 119179308 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



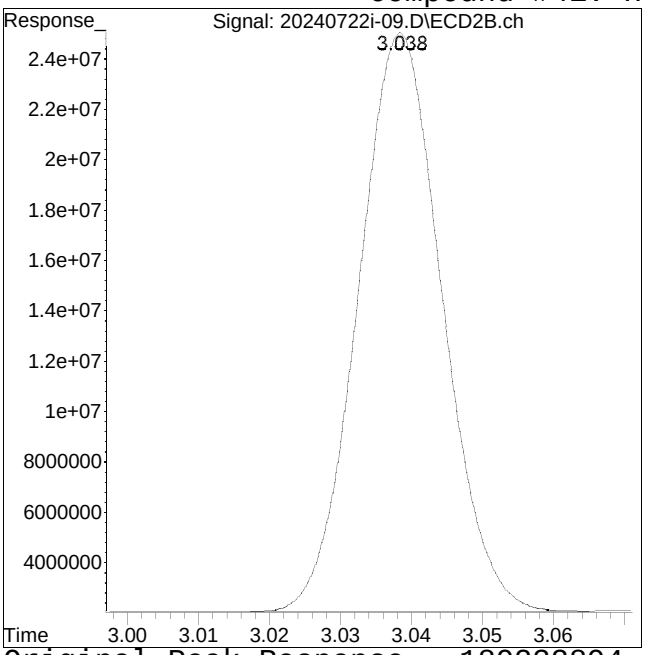

Original Peak Response = 184469981 Manual Peak Response = 184550516 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

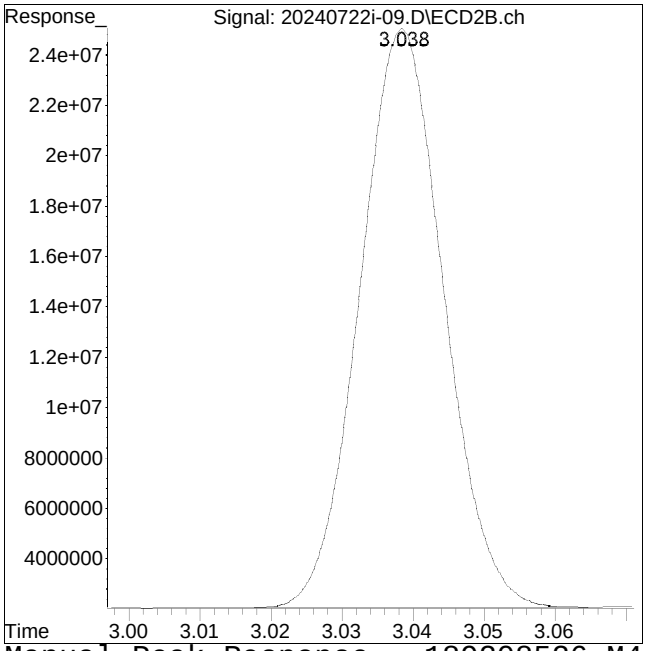
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #41: Hexachlorobenzene #2




Original Peak Response = 189232894



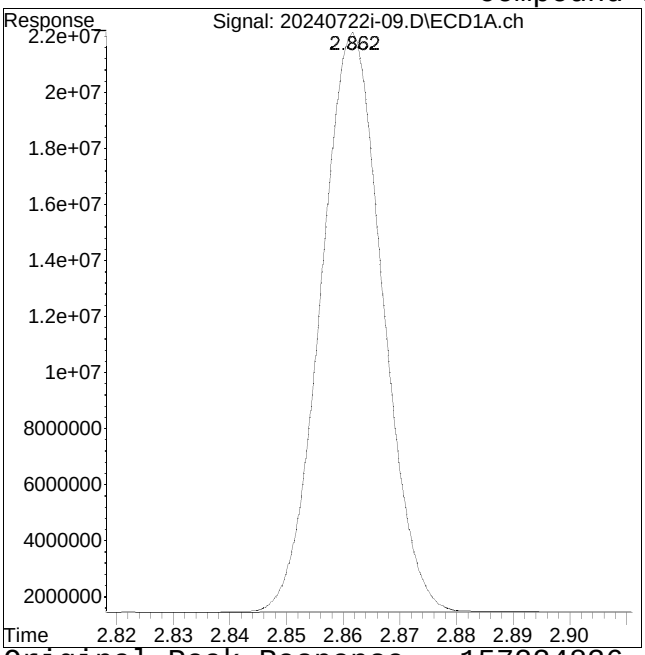

Manual Peak Response = 189208526 M4

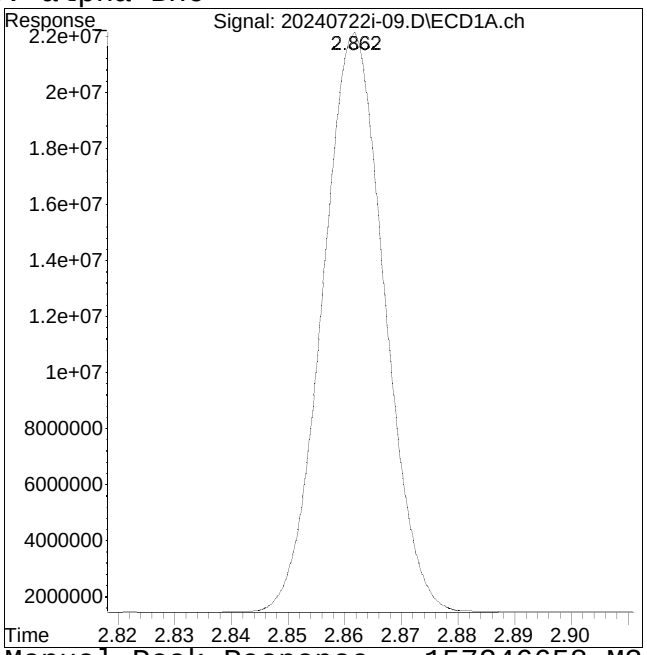
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #4: alpha-BHC



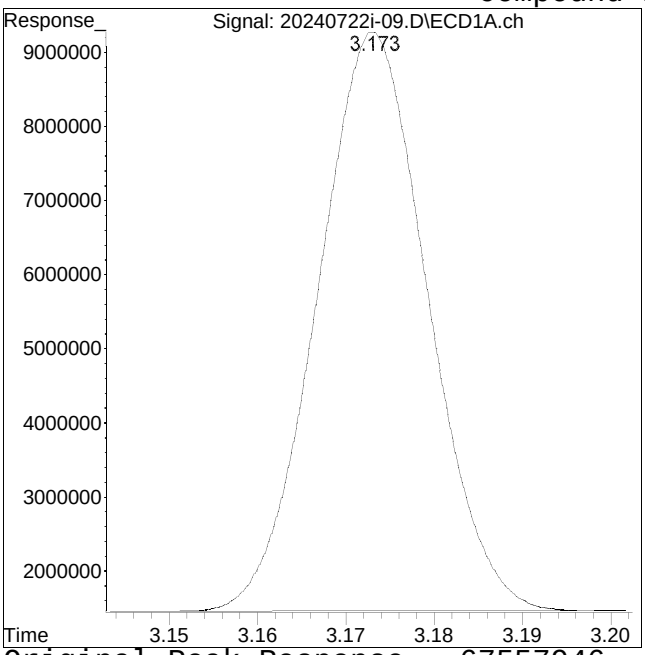

Original Peak Response = 157224836 Manual Peak Response = 157246658 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

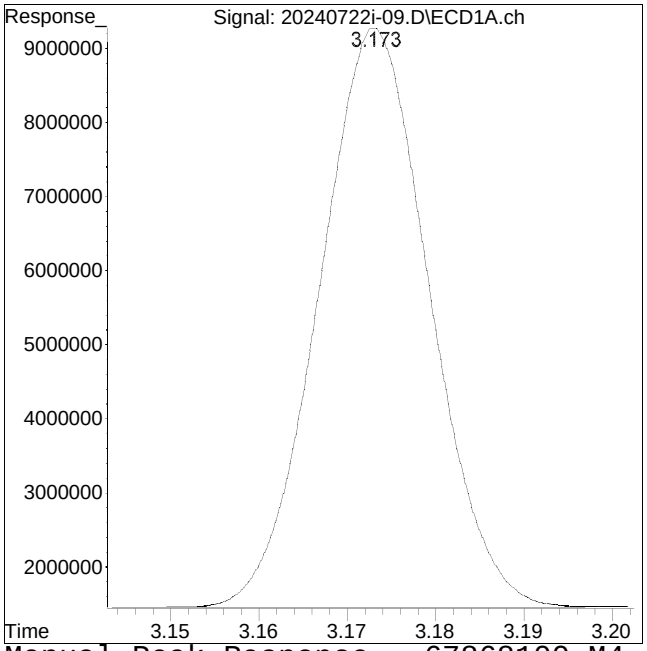
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #6: beta-BHC




Original Peak Response = 67557946




Manual Peak Response = 67868100 M4

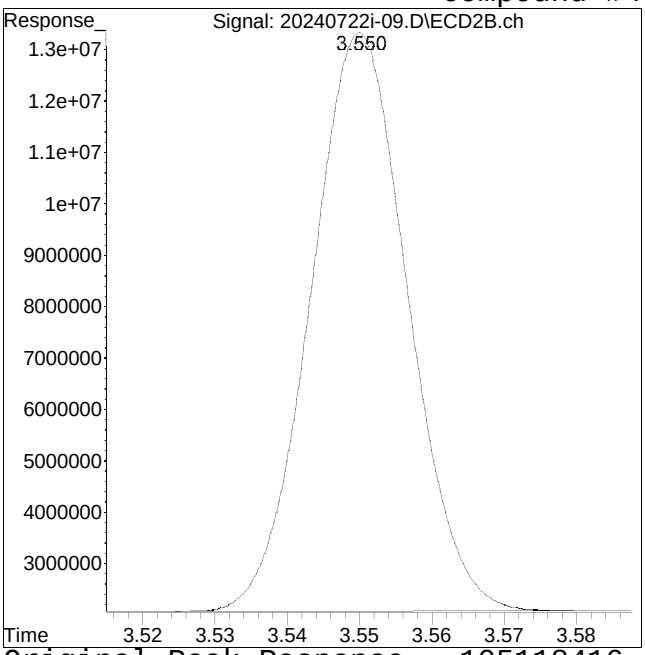
M4 = Poor automated baseline construction.

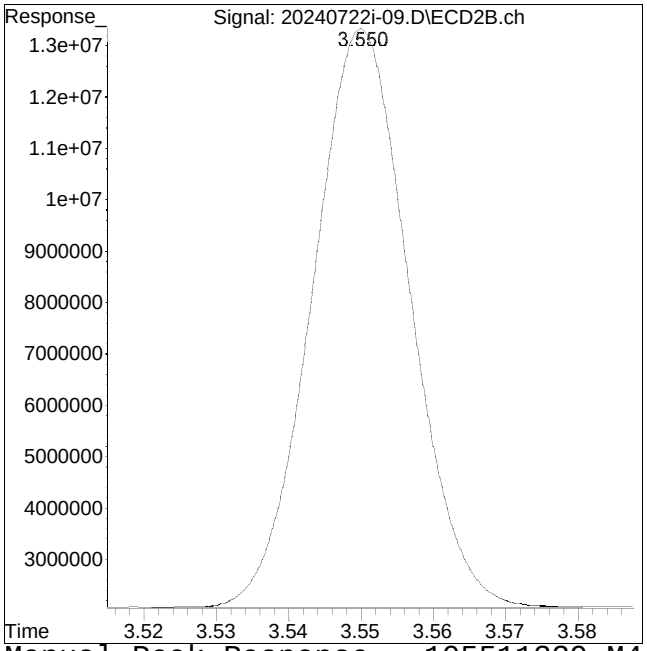
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #44: beta-BHC #2



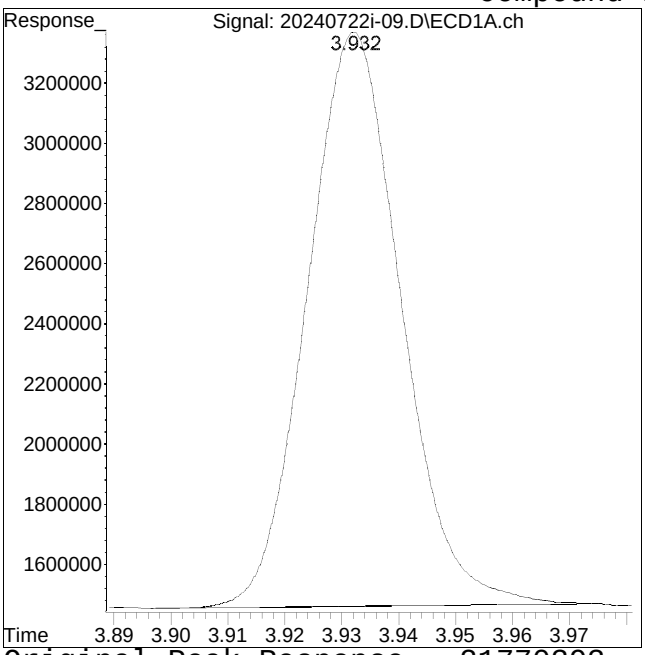

Original Peak Response = 105118416 Manual Peak Response = 105511339 M4
M4 = Poor automated baseline construction.

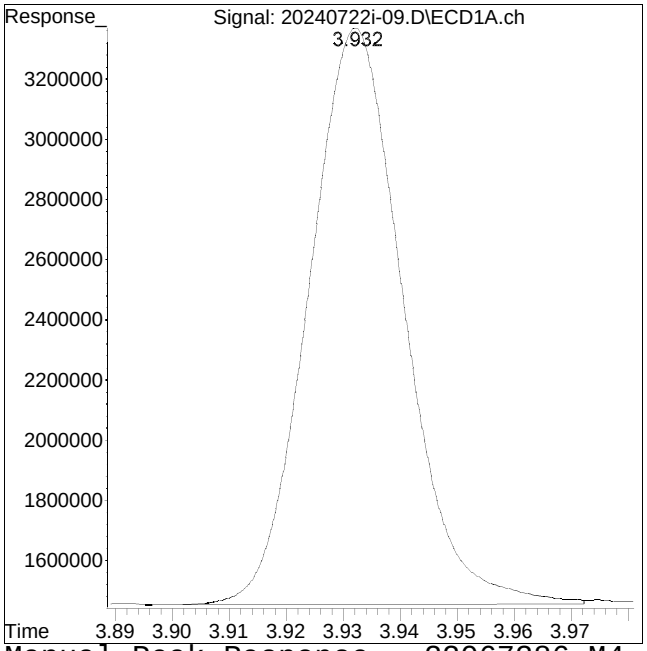
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #10: Alachlor



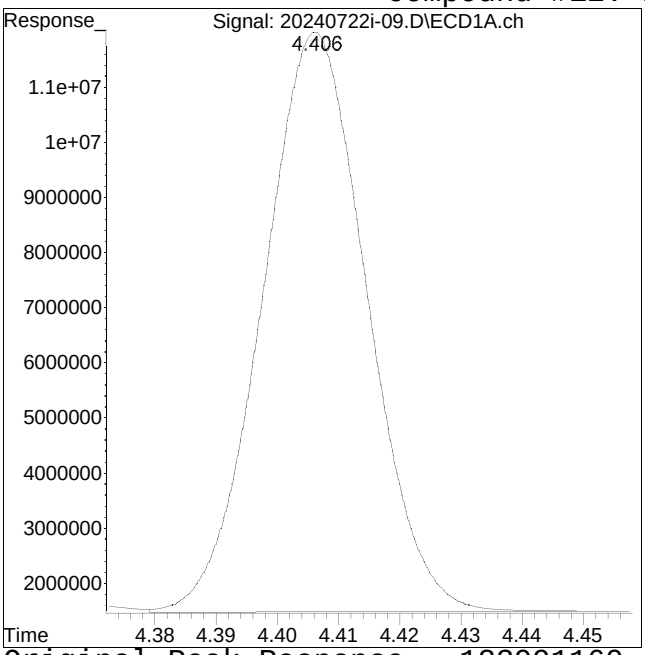




Original Peak Response = 21770393 Manual Peak Response = 22067386 M4
M4 = Poor automated baseline construction.

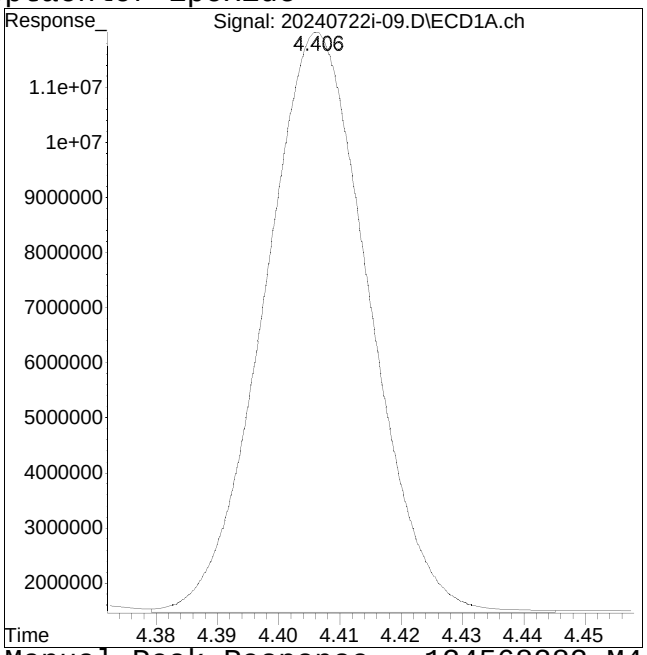
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #12: Heptachlor Epoxide




Original Peak Response = 123991160



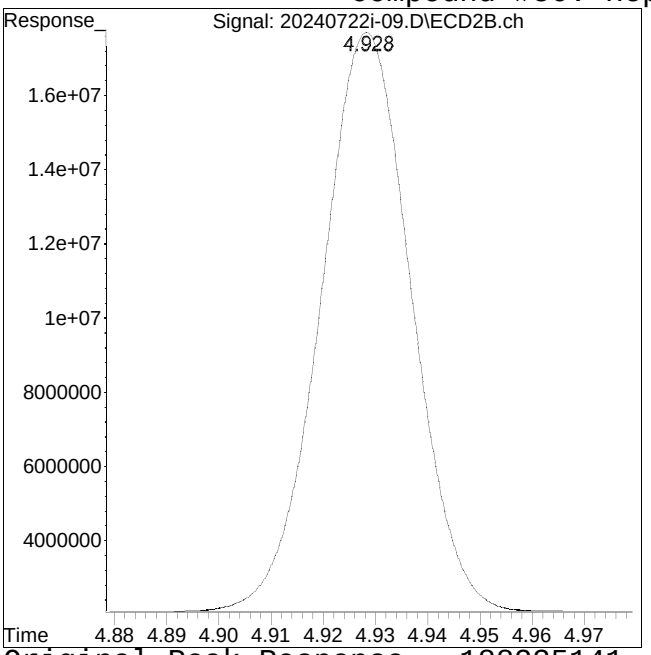

Manual Peak Response = 124568282 M4

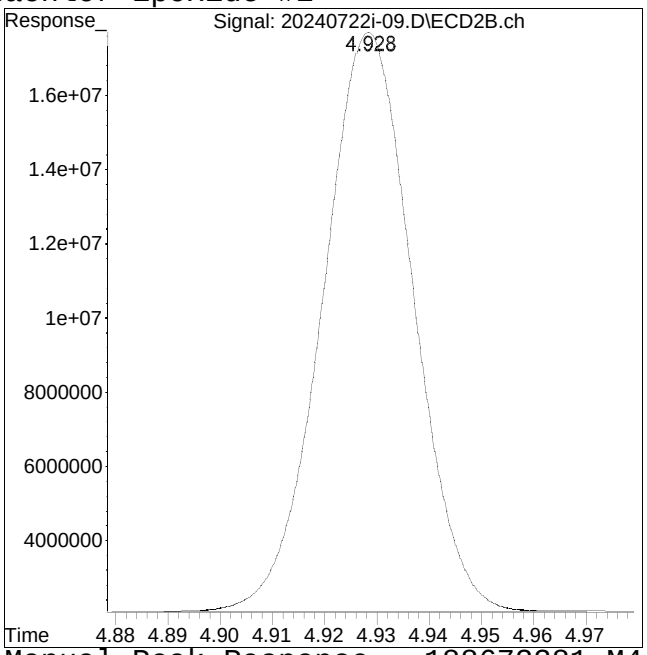
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #50: Heptachlor Epoxide #2



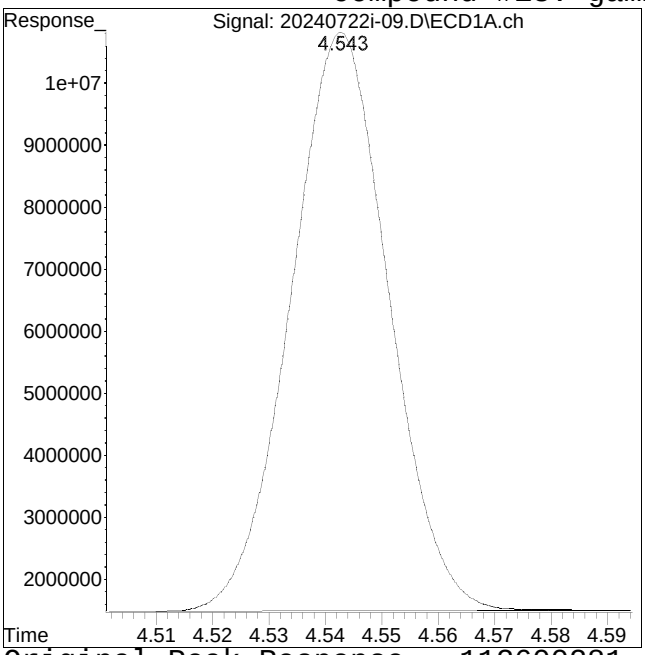

Original Peak Response = 188235141 Manual Peak Response = 188673381 M4
M4 = Poor automated baseline construction.

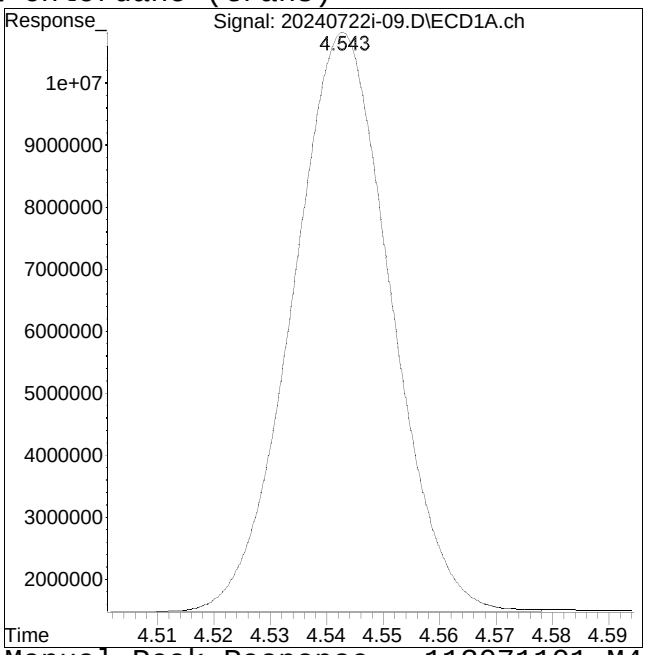
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #13: gamma-Chlordane (trans)



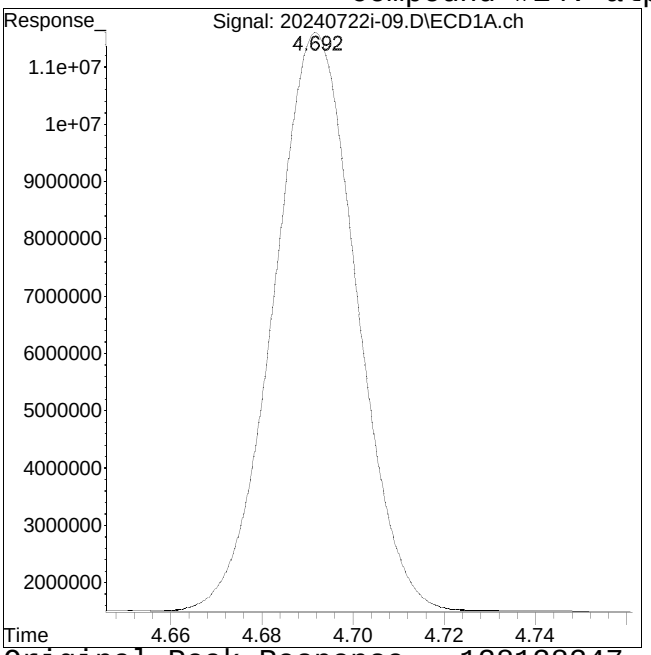



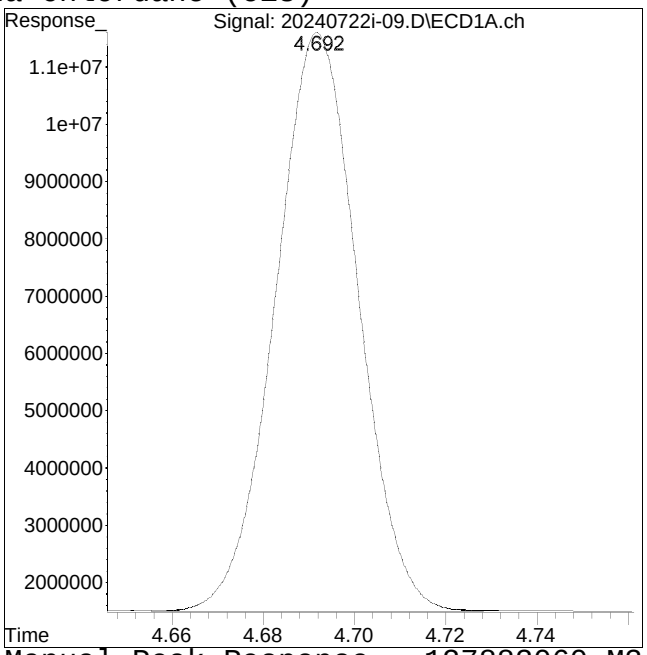

Original Peak Response = 112600281 Manual Peak Response = 113071101 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q Method : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0 Quant Date : 7/23/2024 12:21 pm

Compound #14: alpha-Chlordane (cis)



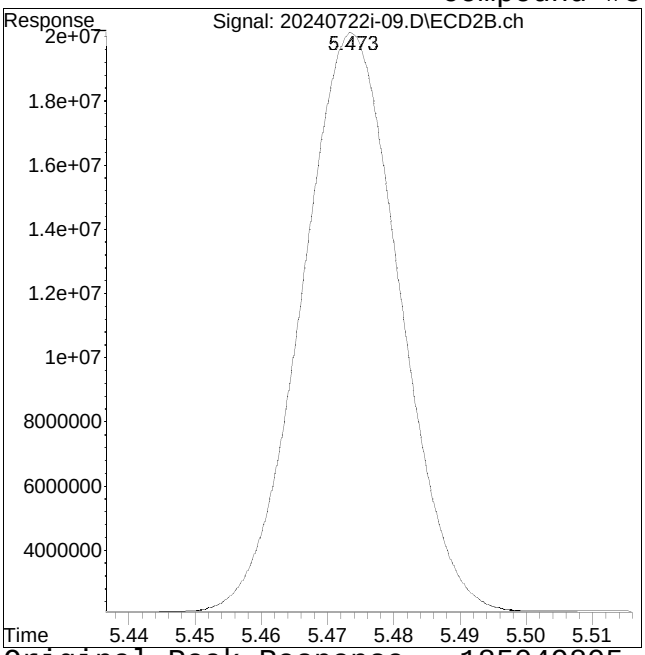

Original Peak Response = 128138347 Manual Peak Response = 127883060 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

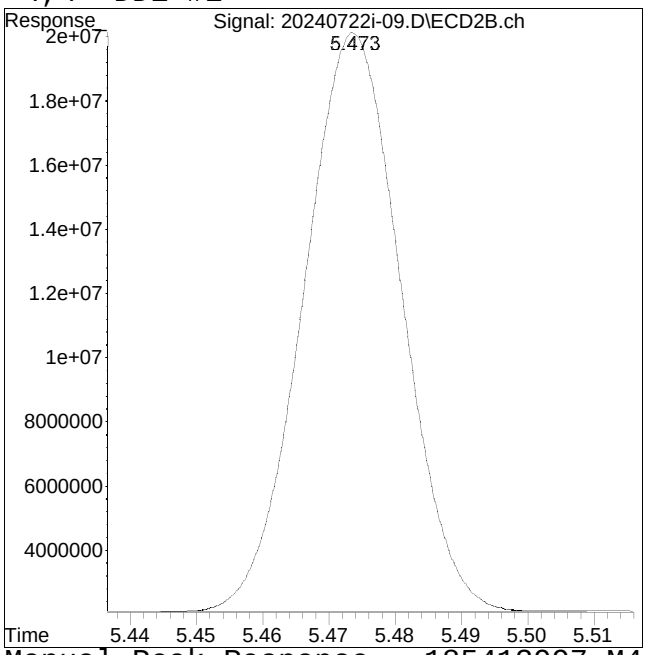
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

Compound #53: 4,4'-DDE #2




Original Peak Response = 185049805




Manual Peak Response = 185413997 M4

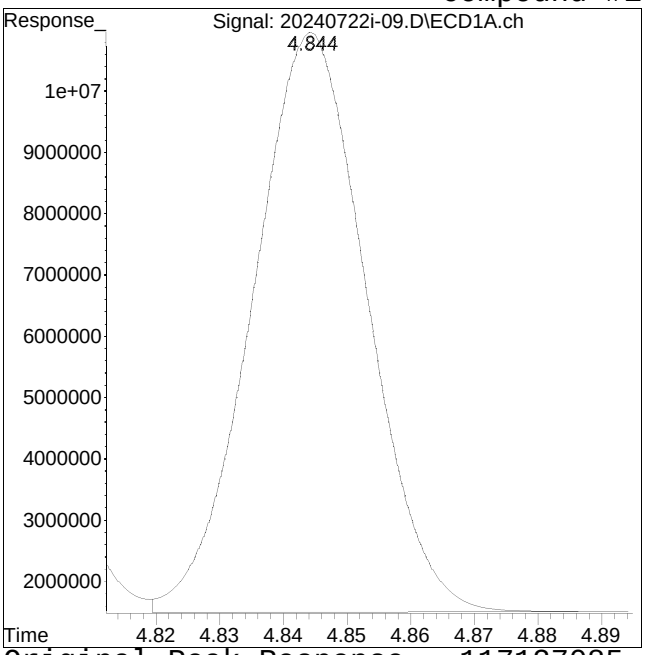
M4 = Poor automated baseline construction.

# Manual Integration Report

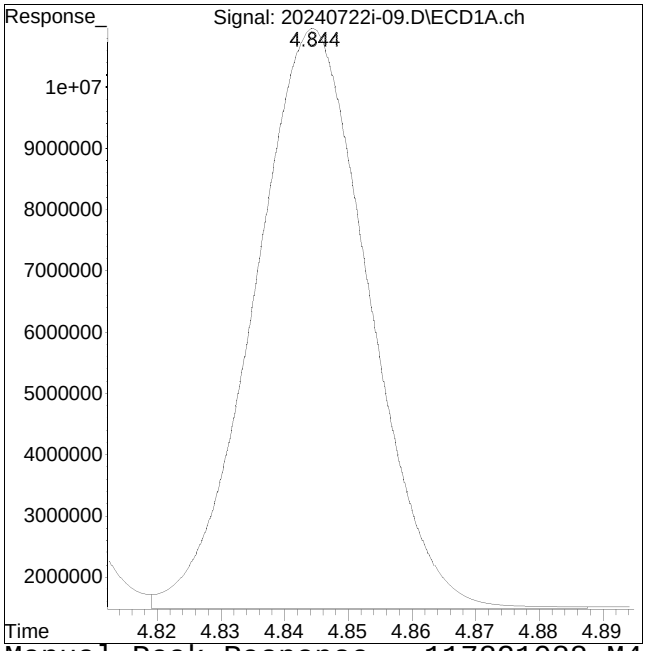
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #16: Endosulfan I




Original Peak Response = 117127085



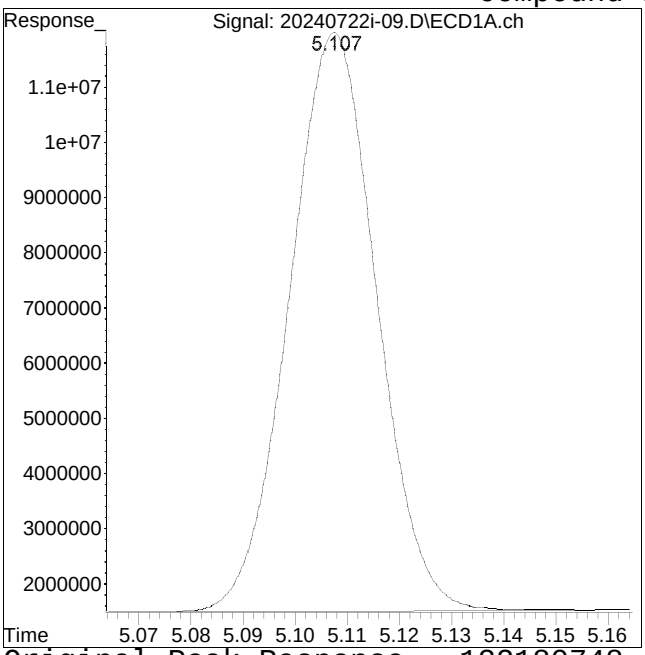

Manual Peak Response = 117821088 M4

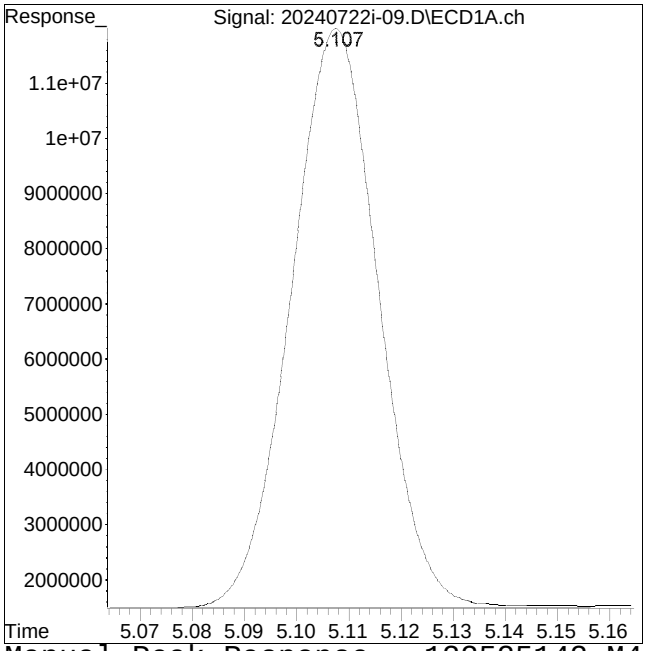
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

Compound #17: Dieldrin



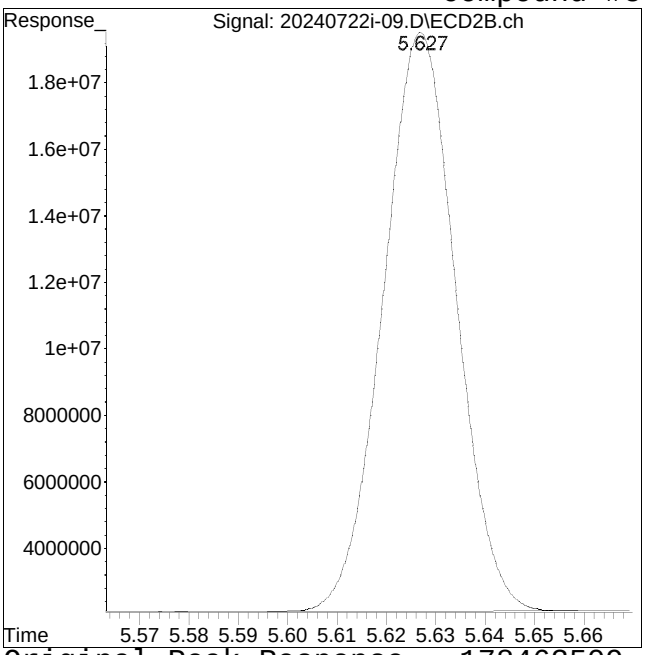




Original Peak Response = 122180748 Manual Peak Response = 122525142 M4
M4 = Poor automated baseline construction.

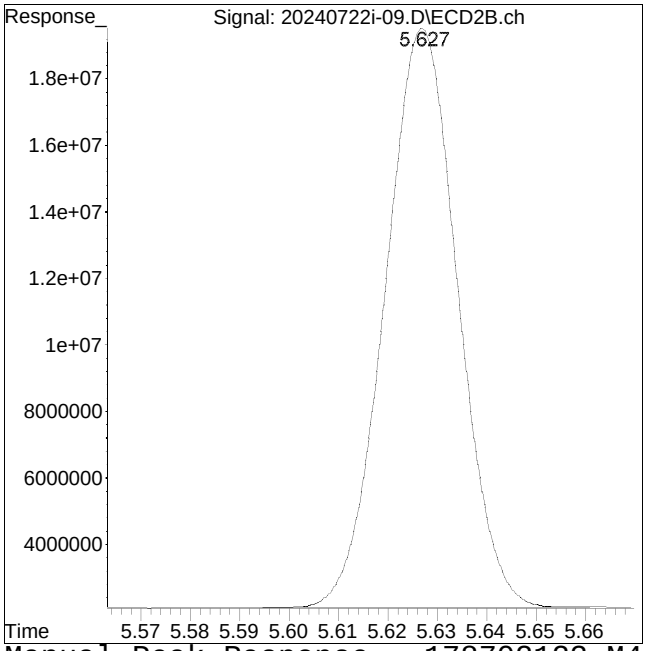
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q Method : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0 Quant Date : 7/23/2024 12:21 pm

Compound #55: Dieldrin #2




Original Peak Response = 178463509



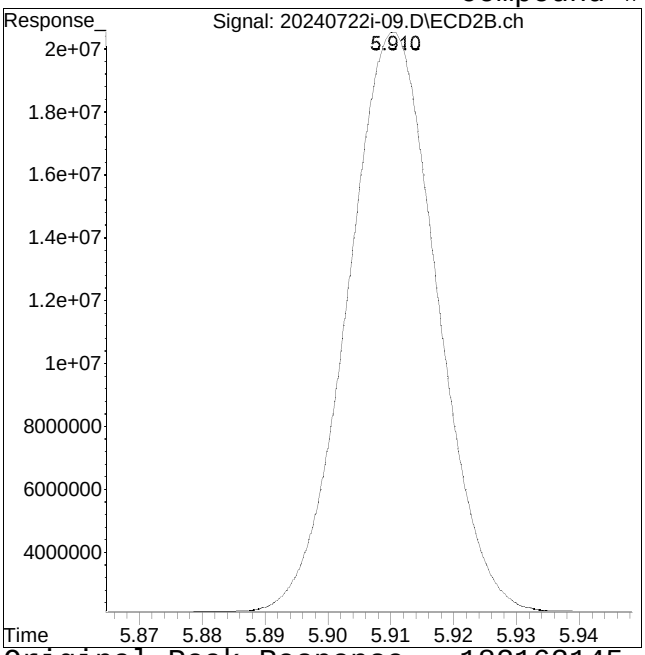

Manual Peak Response = 178702123 M4

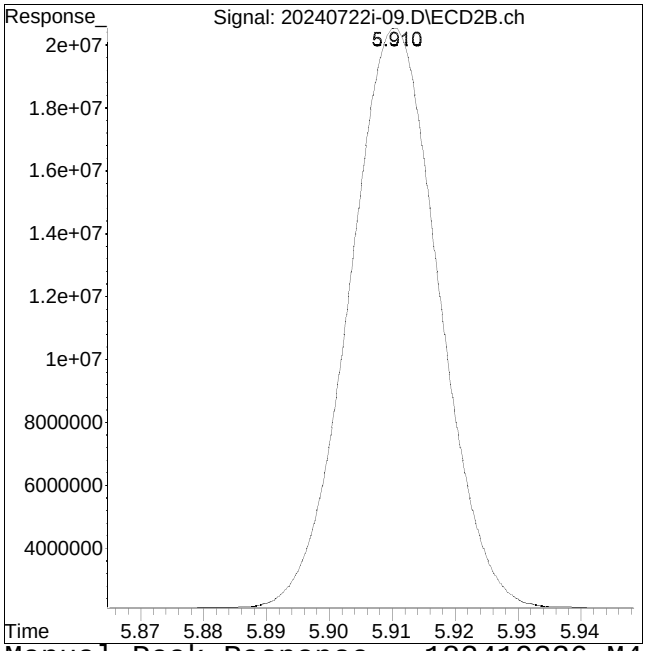
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #56: Endrin #2



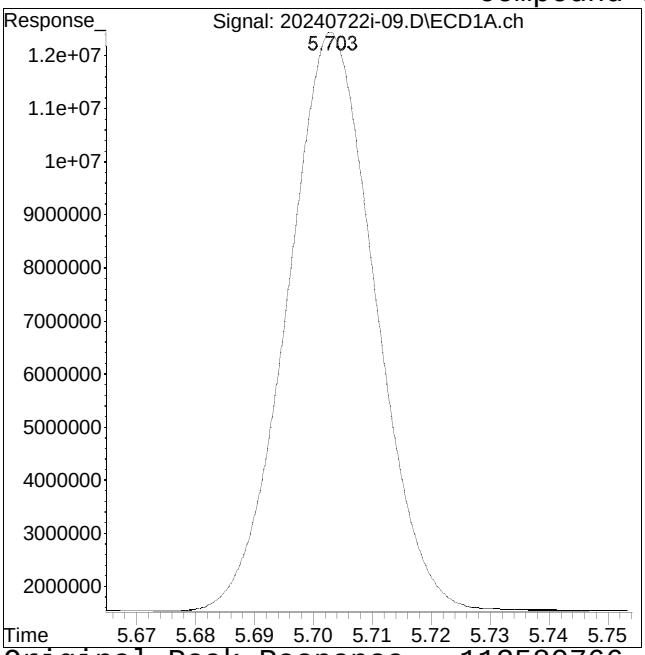




Original Peak Response = 182162145 Manual Peak Response = 182419236 M4
M4 = Poor automated baseline construction.

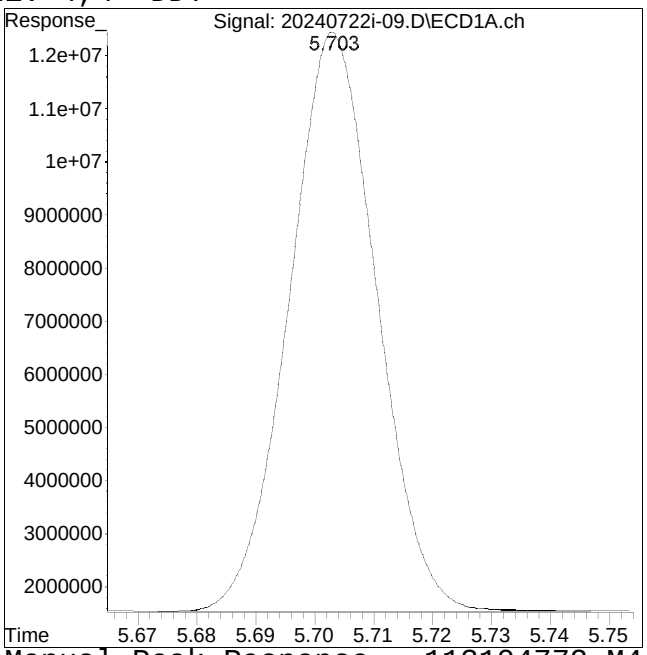
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q Method : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0 Quant Date : 7/23/2024 12:21 pm

Compound #21: 4,4'-DDT




Original Peak Response = 113580766




Manual Peak Response = 113104772 M4

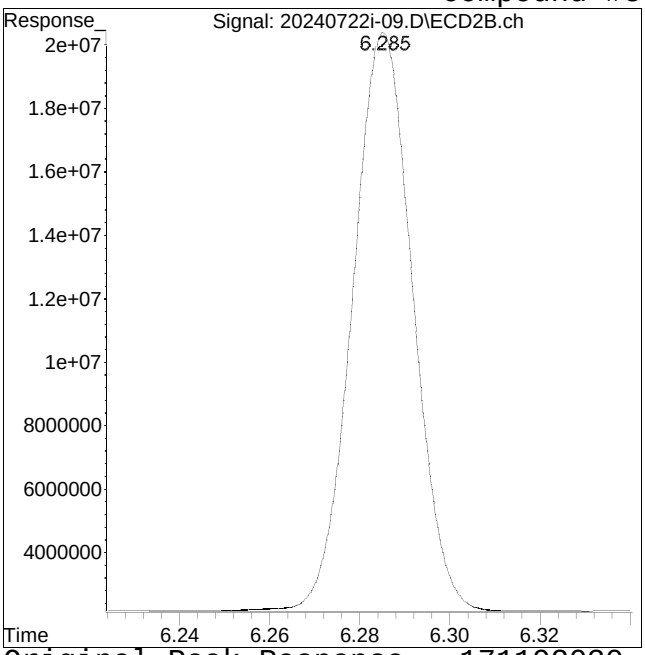
M4 = Poor automated baseline construction.

# Manual Integration Report

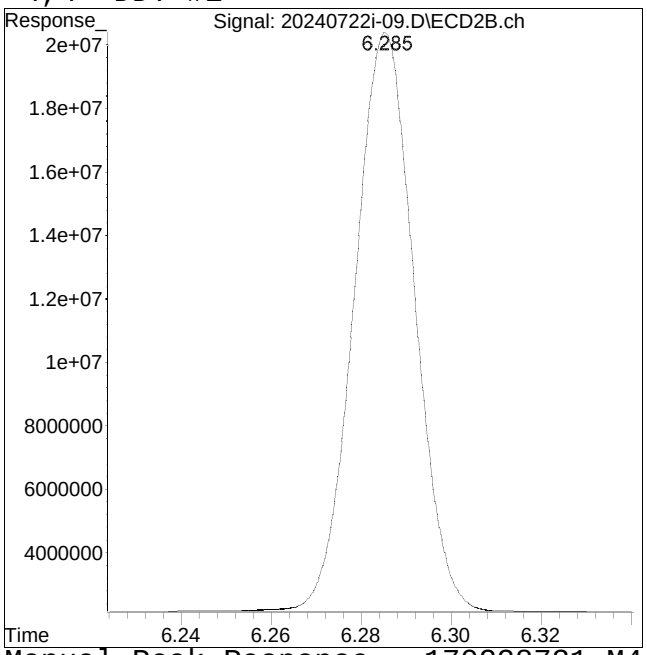
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

Compound #59: 4,4'-DDT #2




Original Peak Response = 171192030




Manual Peak Response = 170228731 M4

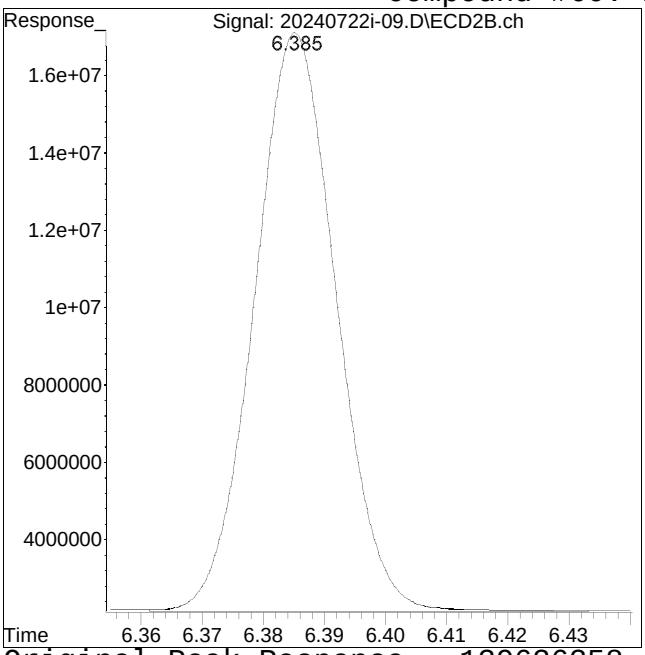
M4 = Poor automated baseline construction.

# Manual Integration Report

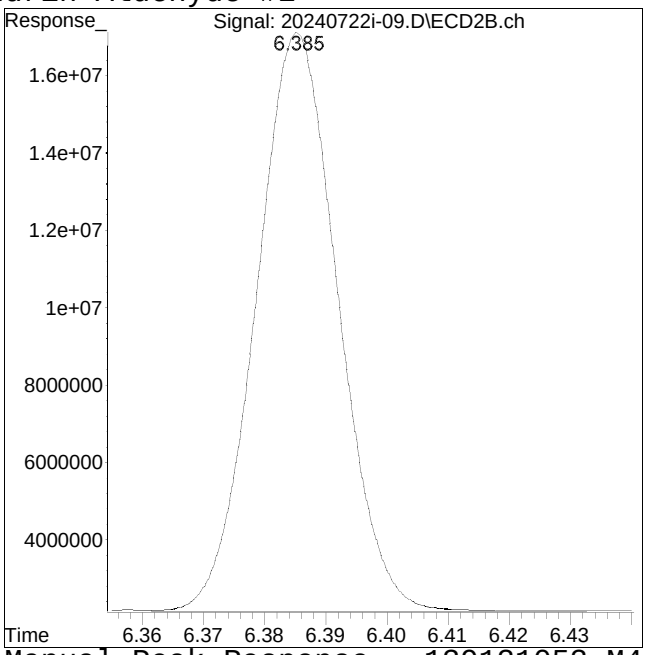
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #60: Endrin Aldehyde #2




Original Peak Response = 139636358



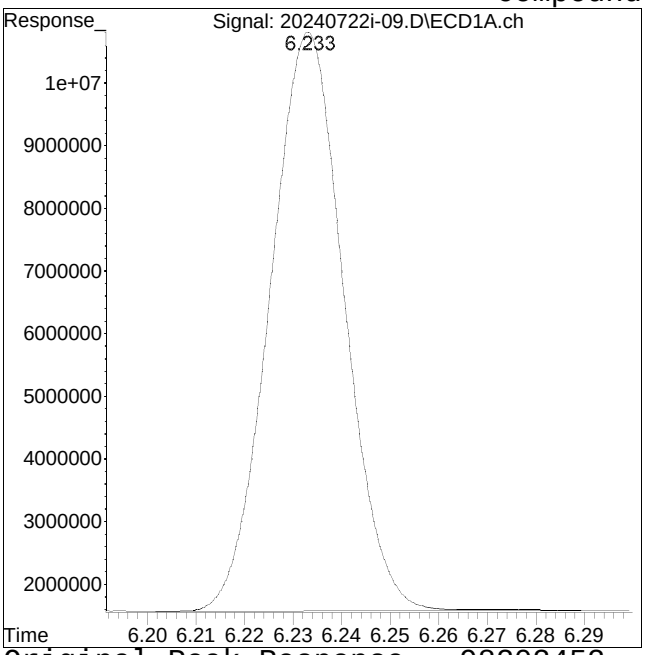

Manual Peak Response = 139131053 M4

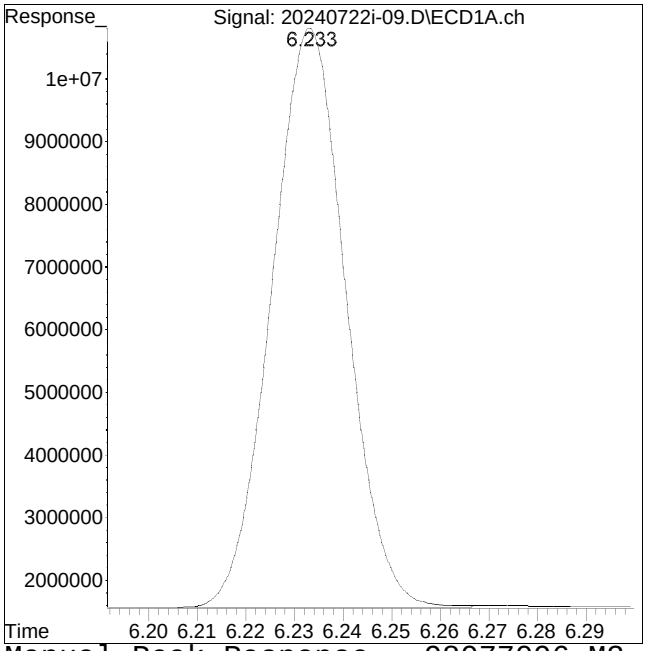
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #24: Mirex



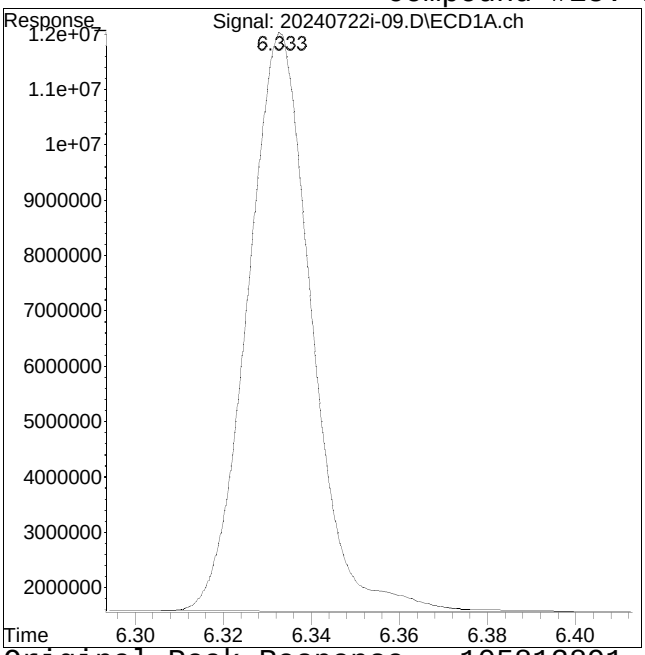



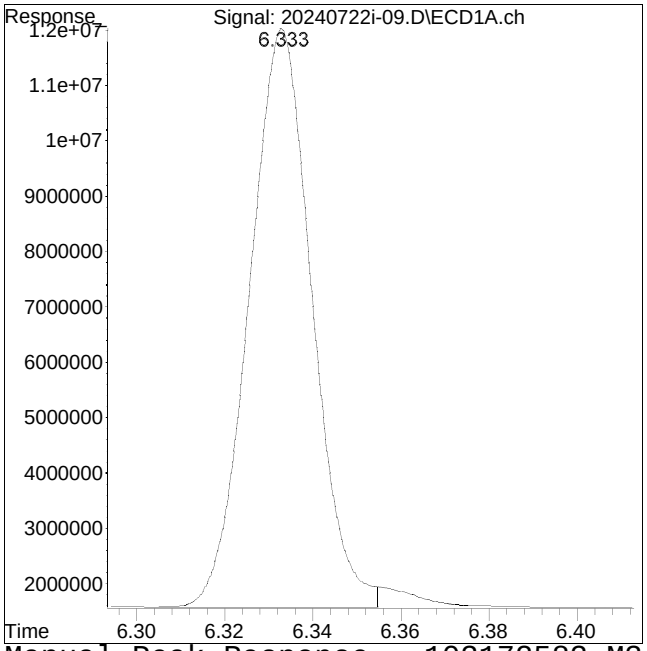

Original Peak Response = 98202452 Manual Peak Response = 98077096 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

Compound #25: Endosulfan Sulfate




Original Peak Response = 105812891 Manual Peak Response = 103172583 M3

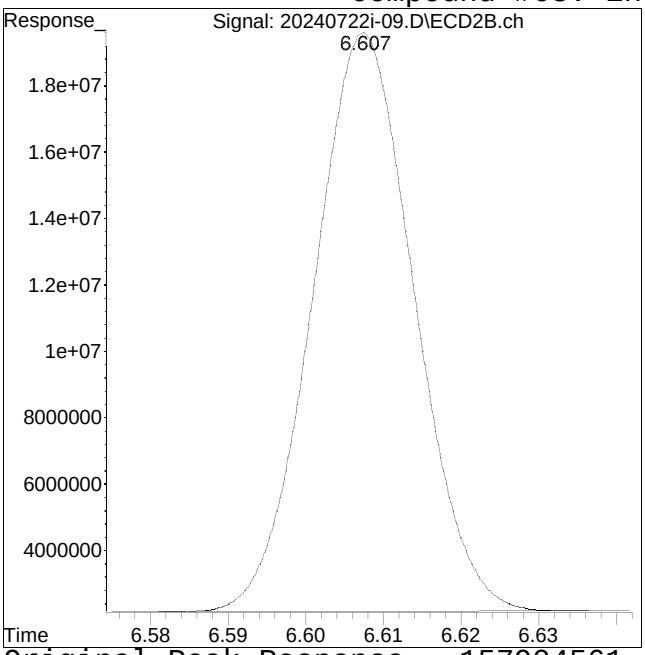
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

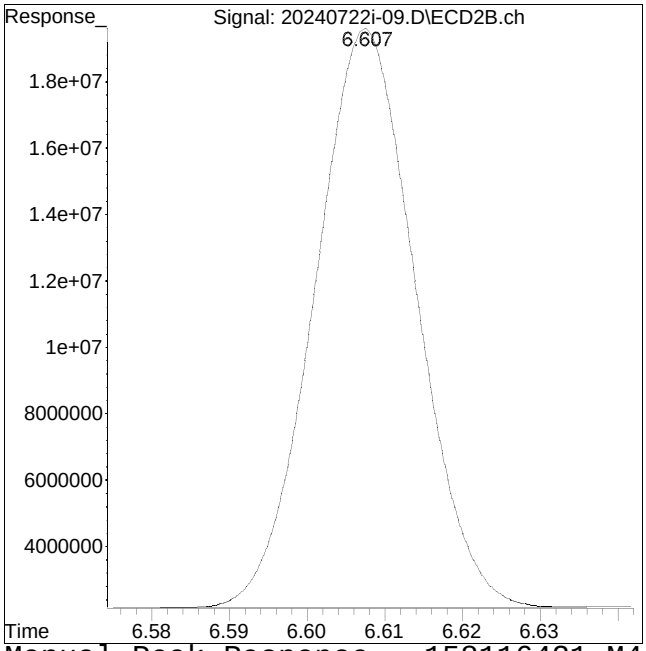
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-09.D
Date Inj'd : 7/22/2024 19:24
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:21 pm

## Compound #63: Endosulfan Sulfate #2




Original Peak Response = 157904561



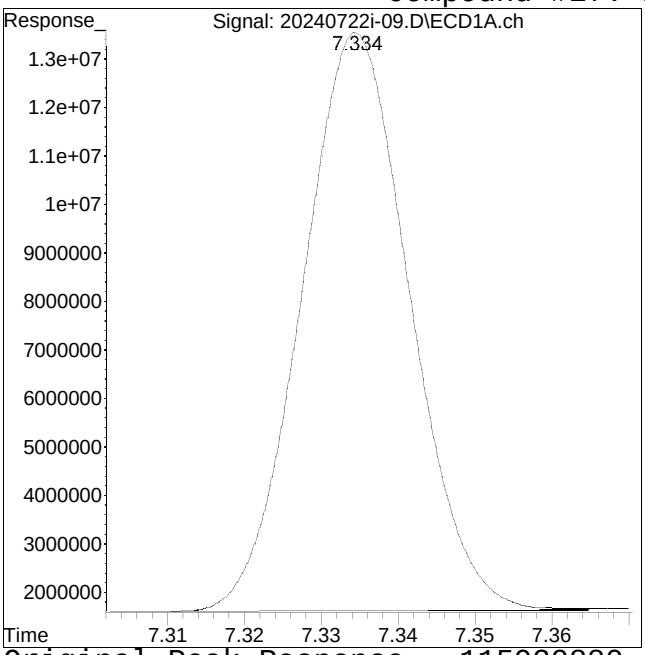

Manual Peak Response = 158116421 M4

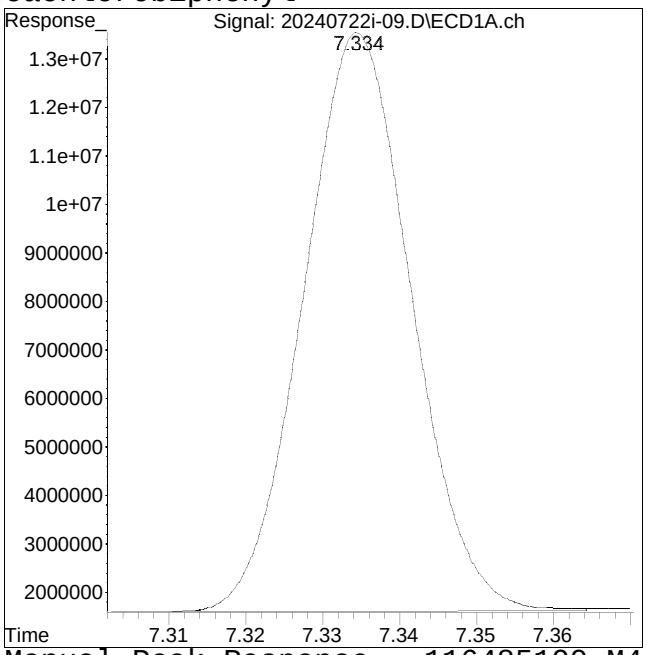
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-09.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:24 Instrument : PEST 20
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 7/23/2024 12:21 pm

Compound #27: Decachlorobiphenyl




Original Peak Response = 115920880 Manual Peak Response = 116485190 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-10.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:36
Operator : pest20:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:31:11 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:27:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.007 | 2.063 | 50847371 | 80468304 | 25.000 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.472 | 2.663 | 233.3E6 | 364.2E6 | 100.335M4 | 100.627 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 200.67%# | 201.25%# |
| 27) s | Decachlorobi | 7.336 | 7.904 | 220.6E6 | 288.9E6 | 97.089 | 97.941M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 194.18%# | 195.88%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.740 | 3.039 | 238.7E6 | 368.5E6 | 98.281 | 99.309 |
| 4) | alpha-BHC | 2.863 | 3.152 | 313.5E6 | 500.7E6 | 102.188 | 103.376M4 |
| 5) | gamma-BHC (l | 3.107 | 3.476 | 282.6E6 | 452.7E6 | 101.358 | 102.659M4 |
| 6) | beta-BHC | 3.173 | 3.550 | 130.0E6 | 204.9E6 | 98.220M4 | 99.043M3 |
| 7) | delta-BHC | 3.324 | 3.847 | 285.4E6 | 459.3E6 | 101.992 | 103.406M4 |
| 8) | Heptachlor | 3.512 | 3.917 | 269.0E6 | 418.0E6 | 99.893M3 | 101.587M4 |
| 9) | Aldrin | 3.791 | 4.267 | 264.1E6 | 395.2E6 | 101.155M4 | 102.410 |
| 10) | Alachlor | 3.933 | 4.140 | 40021571 | 54767498 | 92.968M4 | 93.951 |
| 11) | Chlorpyrifos | 4.033 | 4.524 | 119.3E6 | 191.4E6 | 93.891 | 95.221 |
| 12) | Heptachlor E | 4.407 | 4.929 | 241.7E6 | 372.3E6 | 99.443M4 | 100.642M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-10.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:36
Operator : pest20:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:31:11 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:27:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 13) | gamma-Chlord | 4.543 | 5.140 | 220.4E6 | 328.7E6 | 99.899M4 | 101.259M4 |
| 14) | alpha-Chlord | 4.693 | 5.296 | 248.2E6 | 365.6E6 | 99.478 | 100.917 |
| 15) | 4,4'-DDE | 4.794 | 5.474 | 255.2E6 | 372.8E6 | 101.196M4 | 102.525M4 |
| 16) | Endosulfan I | 4.845 | 5.354 | 228.8E6 | 343.0E6 | 99.563M4 | 101.147 |
| 17) | Dieldrin | 5.108 | 5.628 | 240.4E6 | 359.0E6 | 100.574 | 102.449 |
| 18) | Endrin | 5.344 | 5.911 | 240.9E6 | 365.8E6 | 100.297M4 | 102.251 |
| 19) | 4,4'-DDD | 5.433 | 6.017 | 204.4E6 | 304.5E6 | 100.632M4 | 102.361M4 |
| 20) | Endosulfan I | 5.566 | 6.100 | 211.5E6 | 323.8E6 | 99.681 | 101.026M4 |
| 21) | 4,4'-DDT | 5.704 | 6.285 | 220.2E6 | 338.5E6 | 99.800M4 | 101.418M4 |
| 22) | Endrin Aldeh | 5.958 | 6.385 | 183.0E6 | 277.0E6 | 100.092 | 101.531M4 |
| 23) | Methoxychlor | 6.154 | 6.832 | 121.4E6 | 180.4E6 | 96.323 | 97.812M4 |
| 24) | Mirex | 6.233 | 6.988 | 184.6E6 | 261.3E6 | 96.482M3 | 97.413M4 |
| 25) | Endosulfan S | 6.333 | 6.607 | 199.7E6 | 311.0E6 | 99.228M3 | 100.305M4 |
| 26) | Endrin Keton | 6.556 | 7.019 | 229.5E6 | 354.3E6 | 99.160 | 100.312M4 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-10.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:36
Operator : pest20:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:31:11 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:27:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

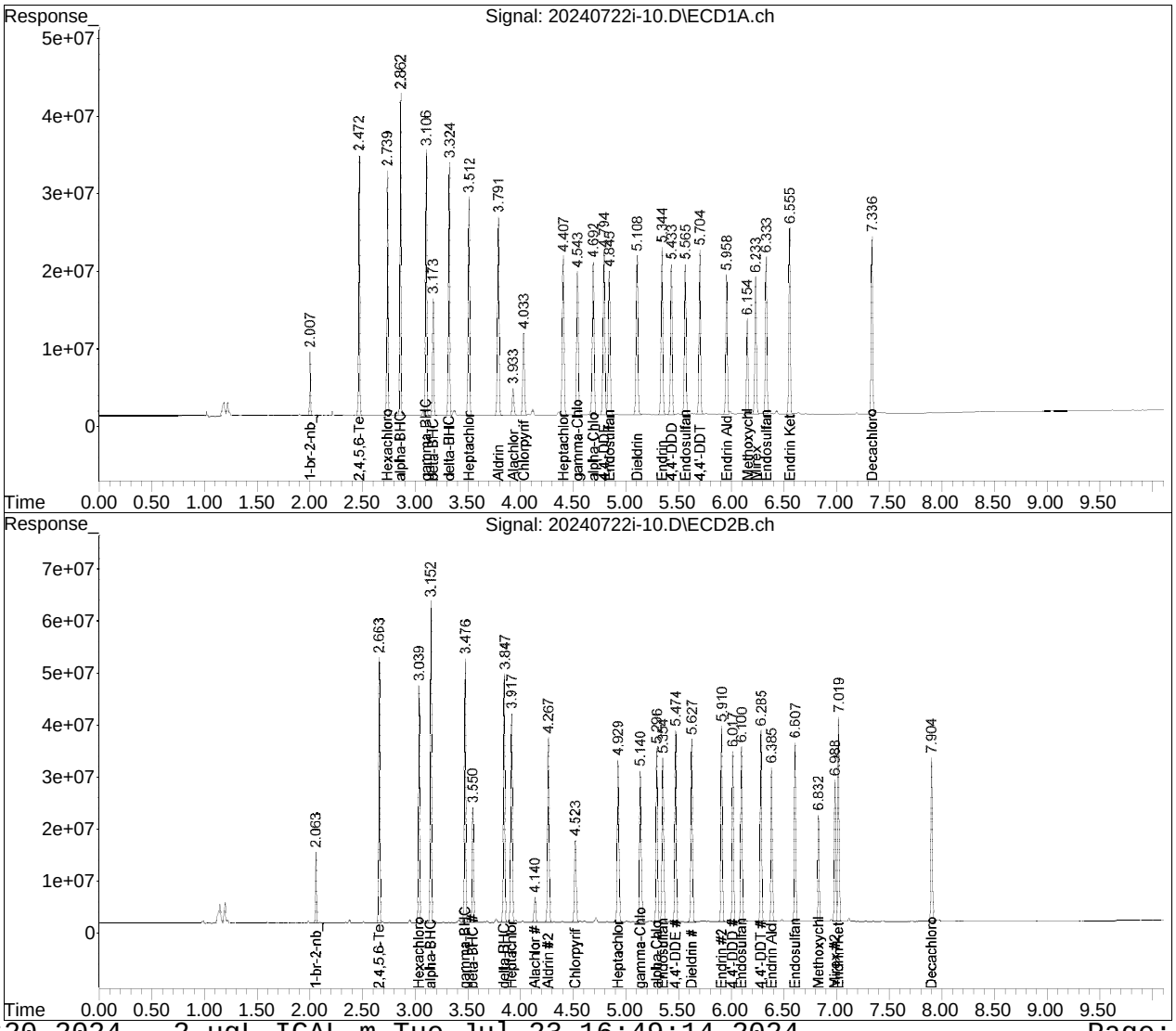
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-10.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:36
Operator : pest20:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:31:11 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:27:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

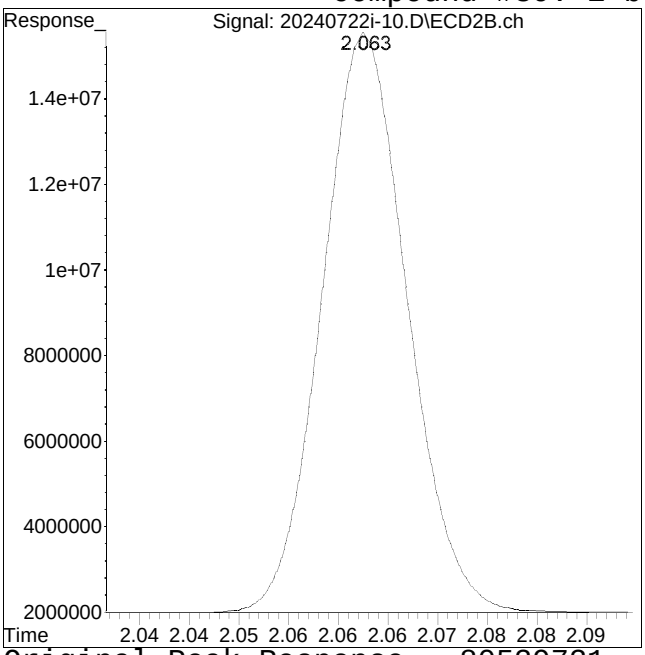


# Manual Integration Report

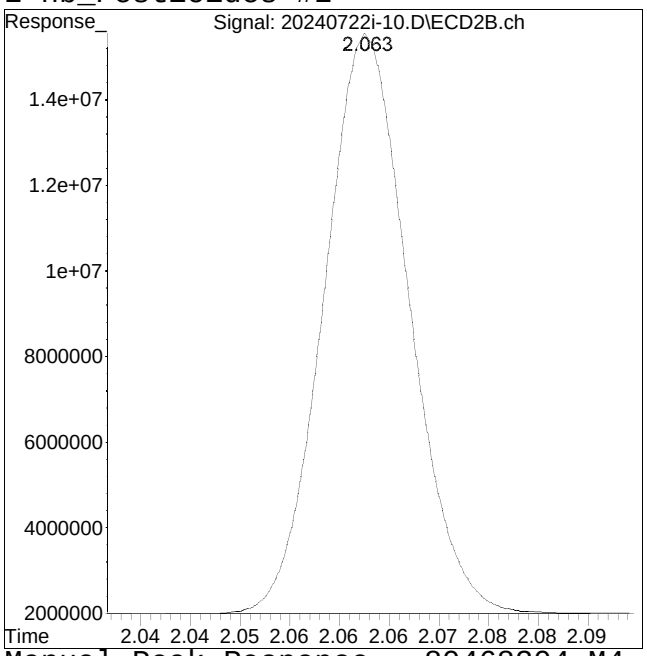
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 80539731



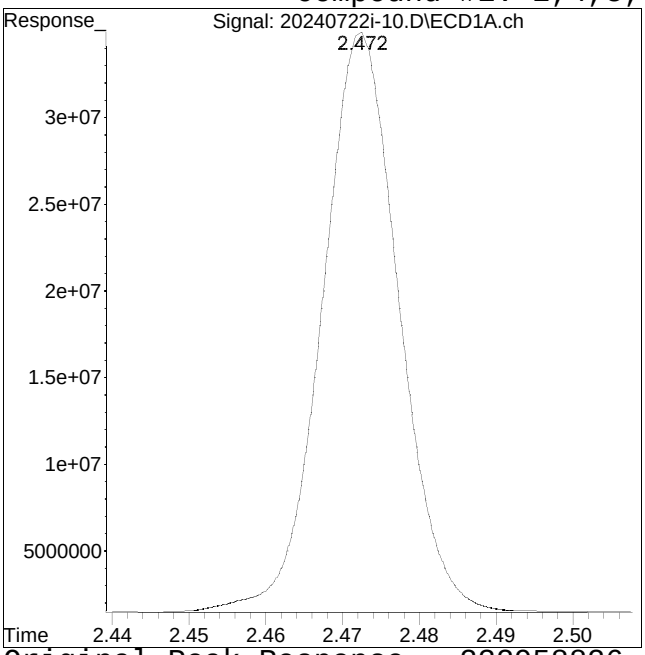

Manual Peak Response = 80468304 M4

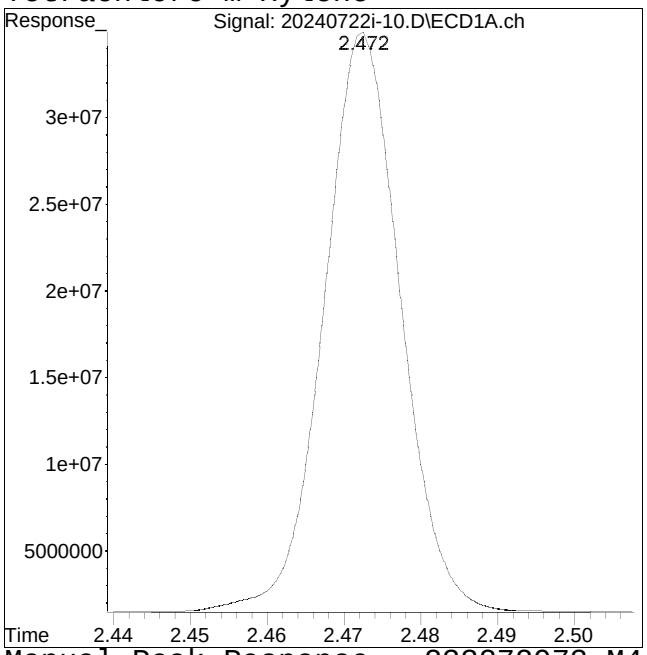
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene



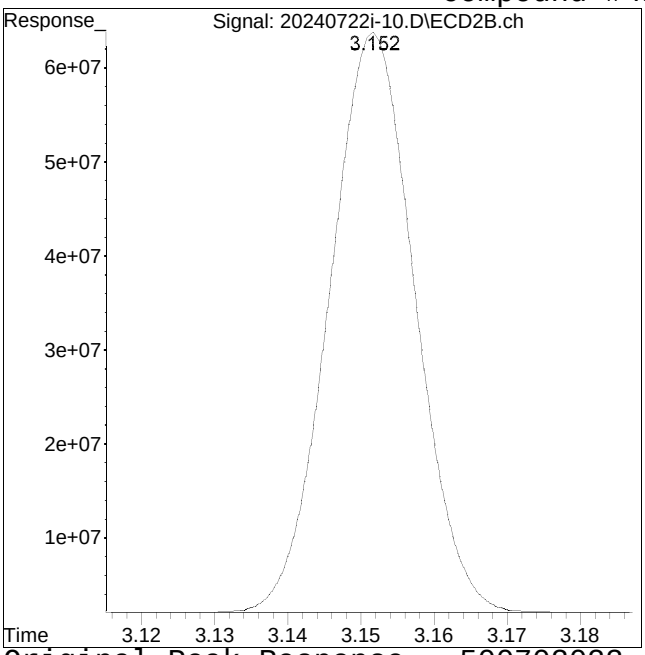

Original Peak Response = 232958826 Manual Peak Response = 233272973 M4
M4 = Poor automated baseline construction.

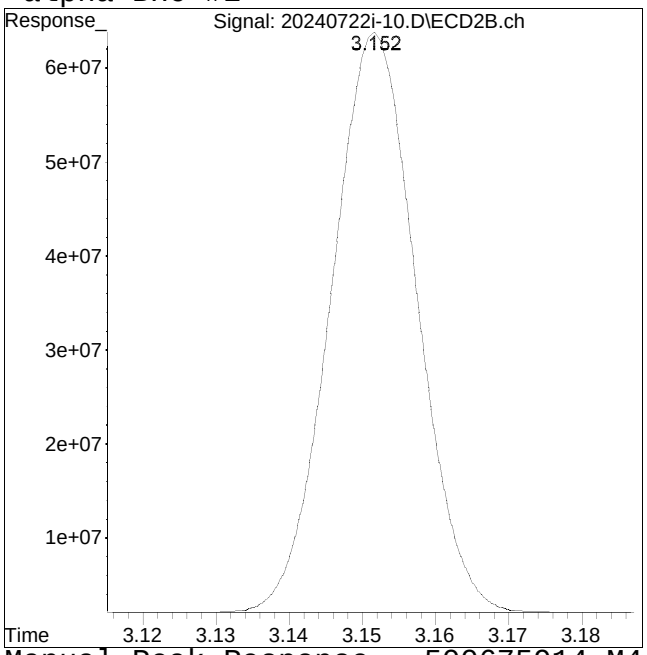
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #42: alpha-BHC #2



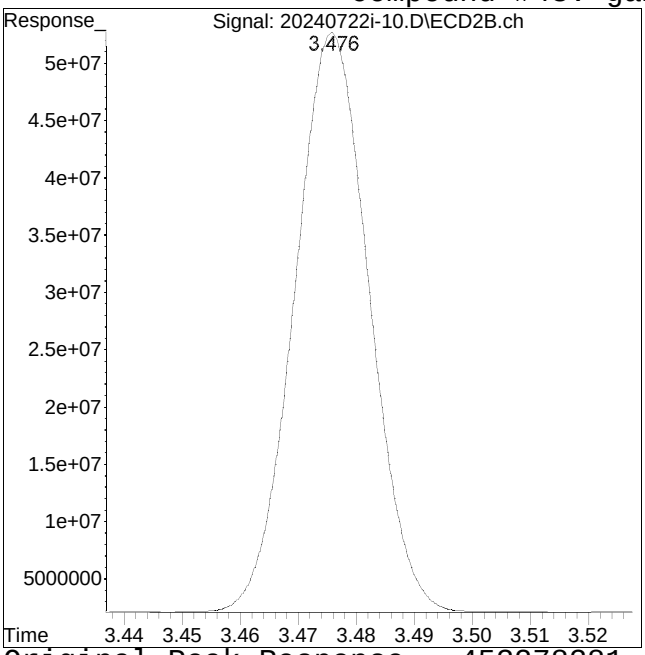




Original Peak Response = 500702023 Manual Peak Response = 500675914 M4
M4 = Poor automated baseline construction.

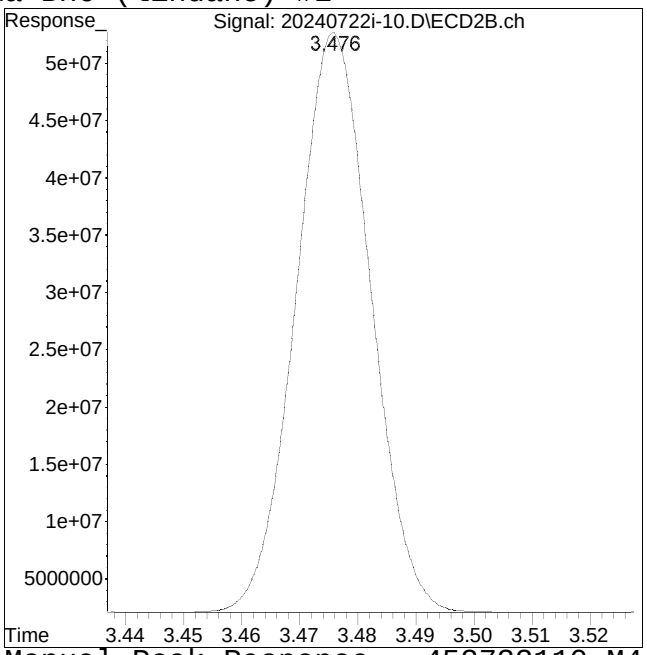
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 453278381



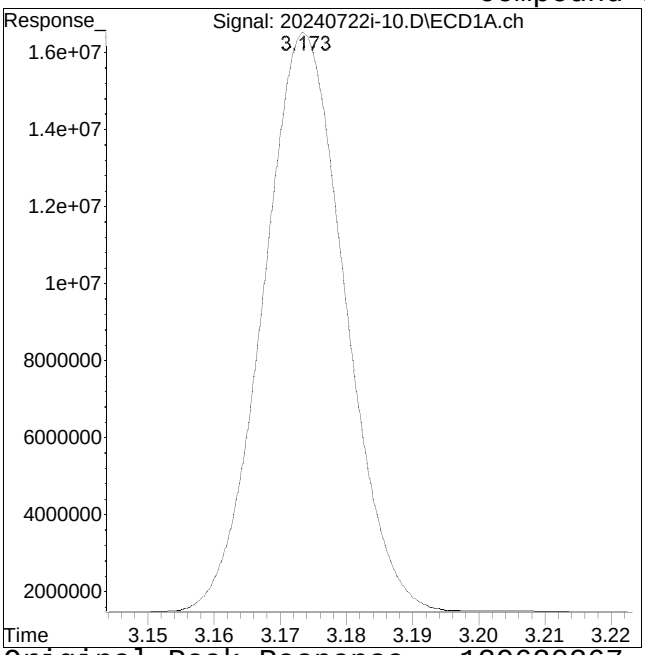

Manual Peak Response = 452733110 M4

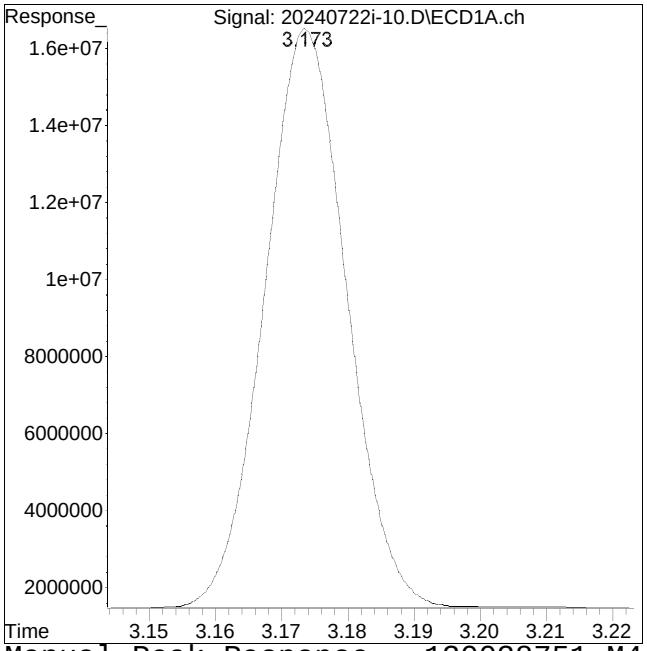
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #6: beta-BHC



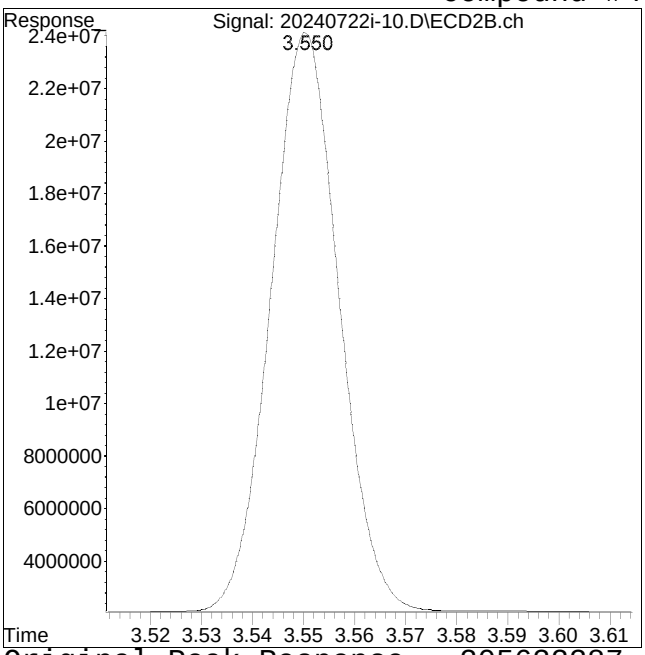

Original Peak Response = 129620367 Manual Peak Response = 130038751 M4
M4 = Poor automated baseline construction.

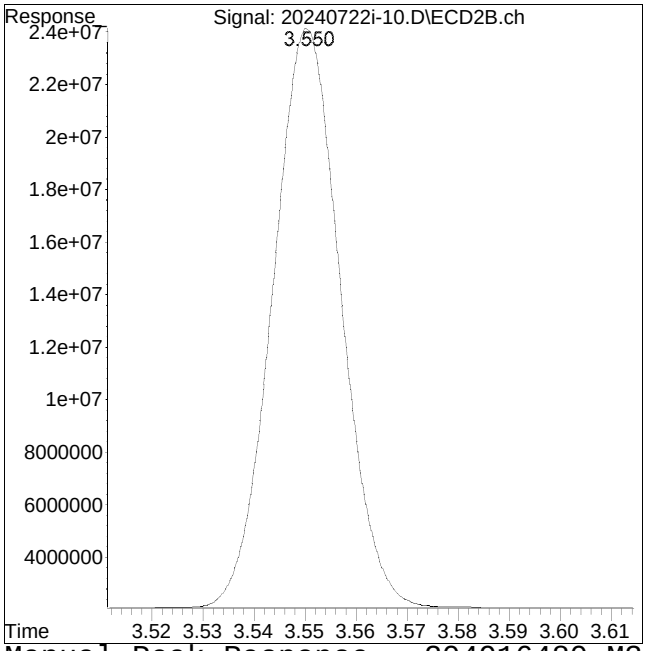
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #44: beta-BHC #2



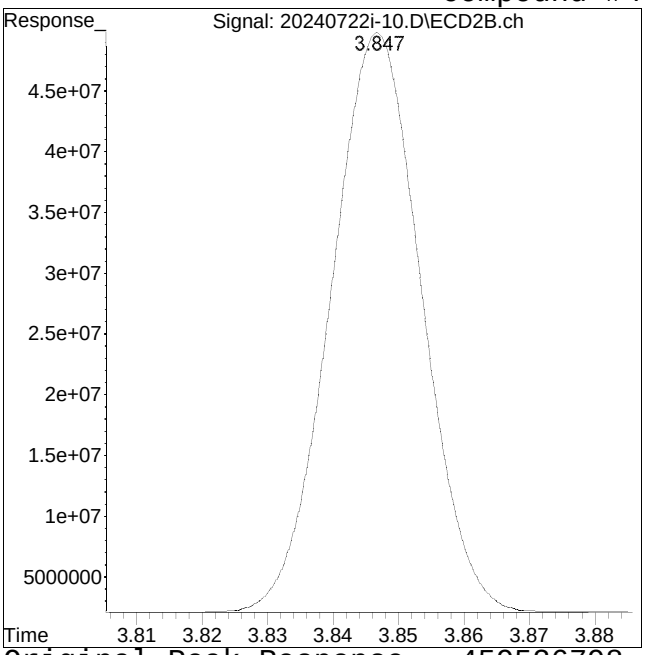

Original Peak Response = 205632387 Manual Peak Response = 204916480 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

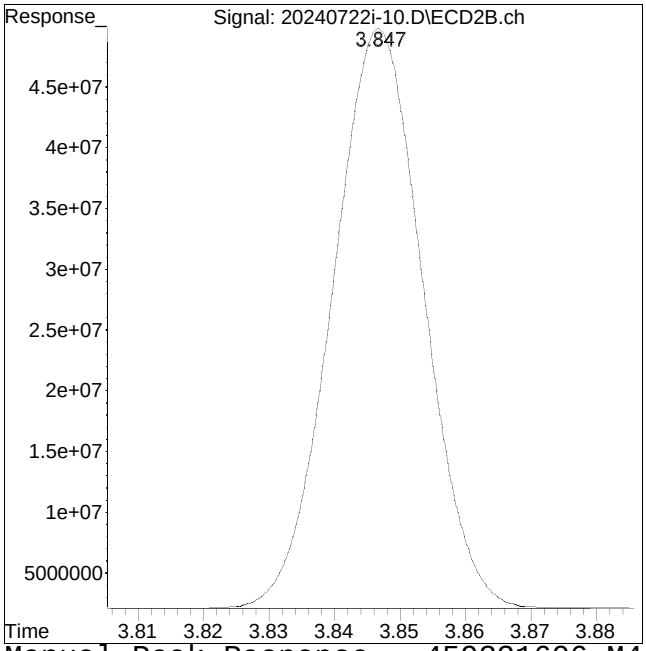
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #45: delta-BHC #2



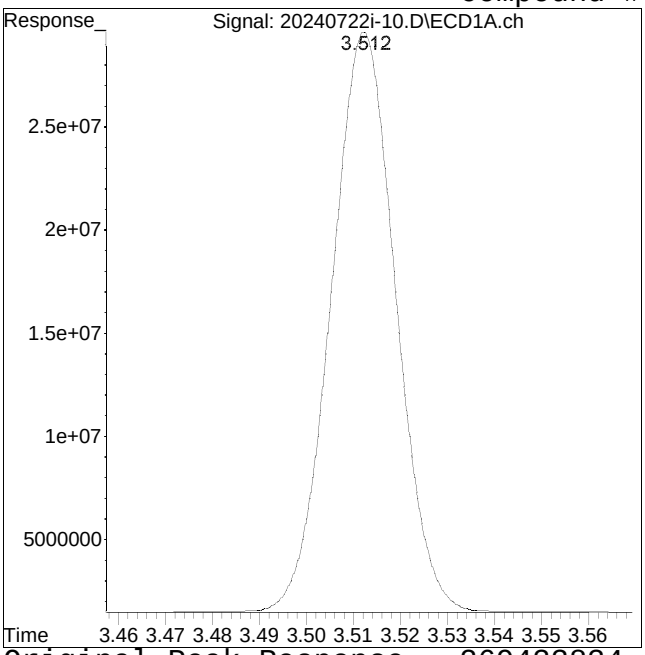



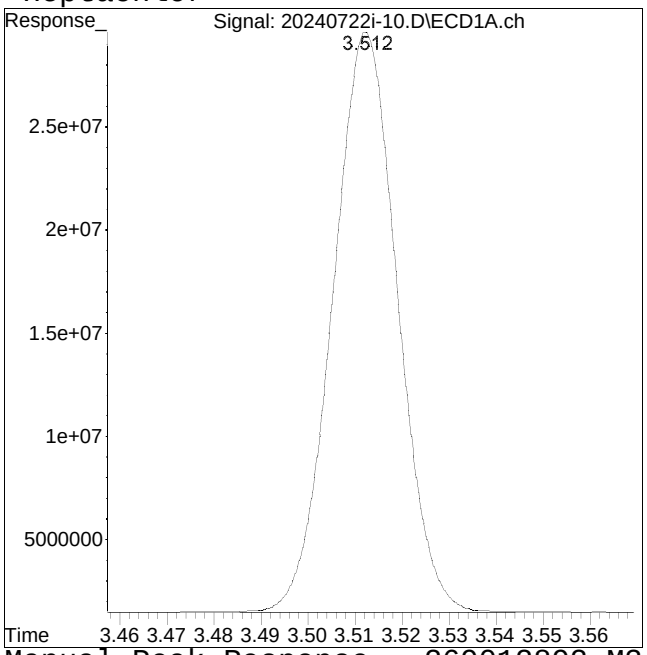

Original Peak Response = 459526798 Manual Peak Response = 459331606 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #8: Heptachlor



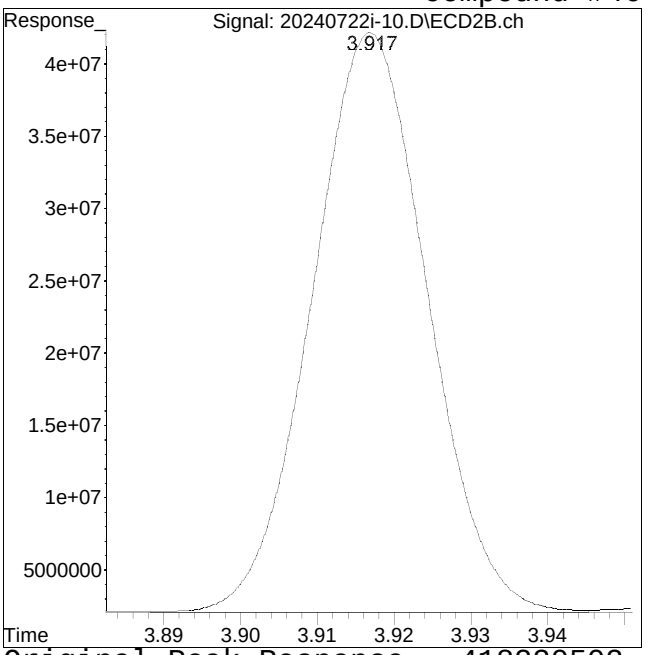



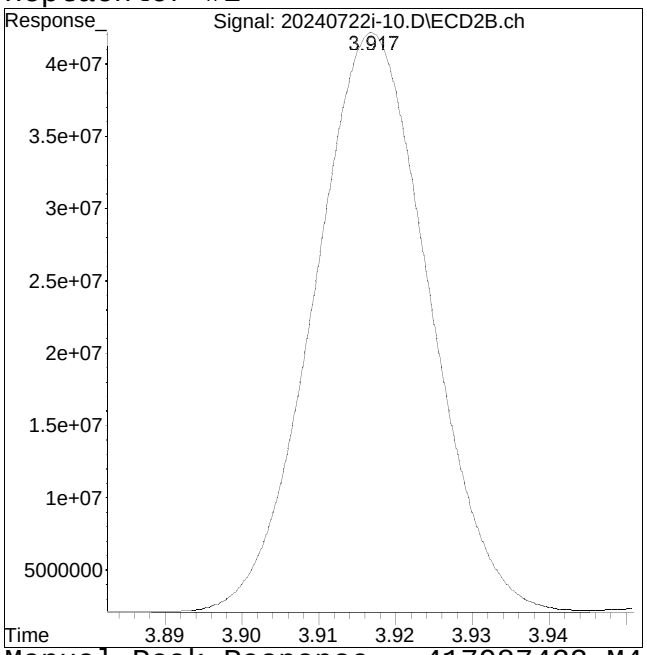

Original Peak Response = 269433834 Manual Peak Response = 269012892 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #46: Heptachlor #2



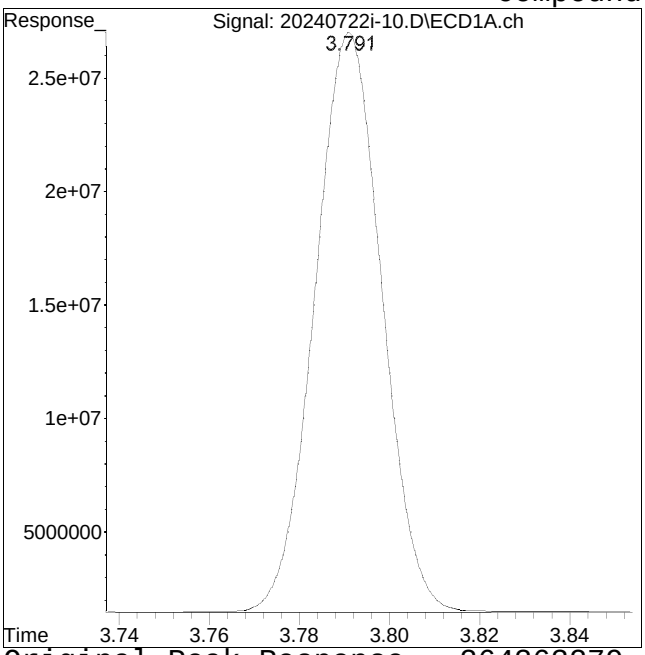

Original Peak Response = 418220502 Manual Peak Response = 417987422 M4
M4 = Poor automated baseline construction.

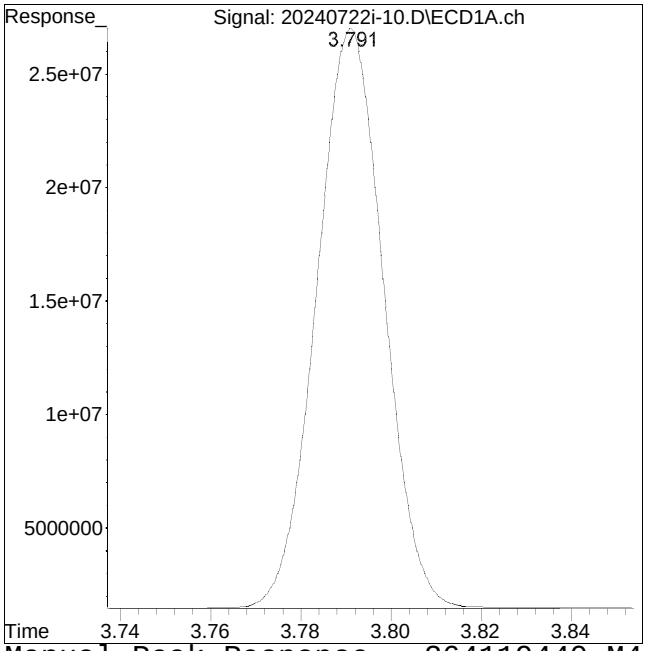
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #9: Aldrin



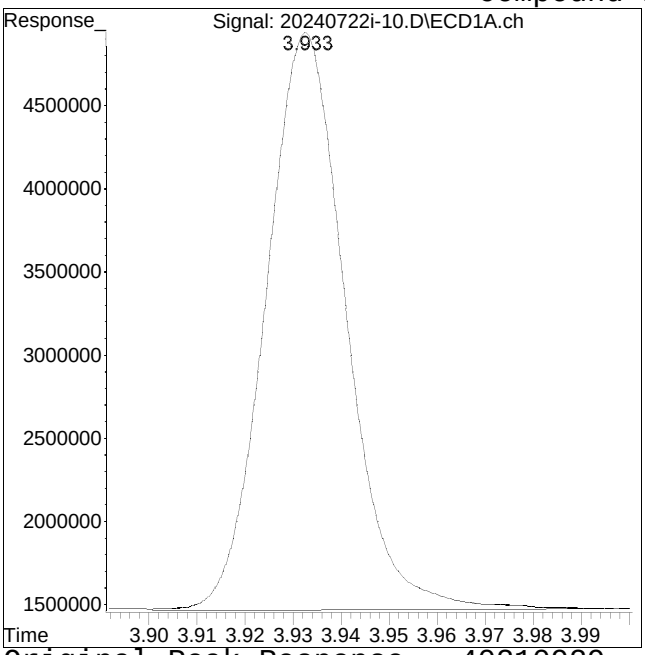

Original Peak Response = 264363279 Manual Peak Response = 264119440 M4
M4 = Poor automated baseline construction.

Manual Integration Report

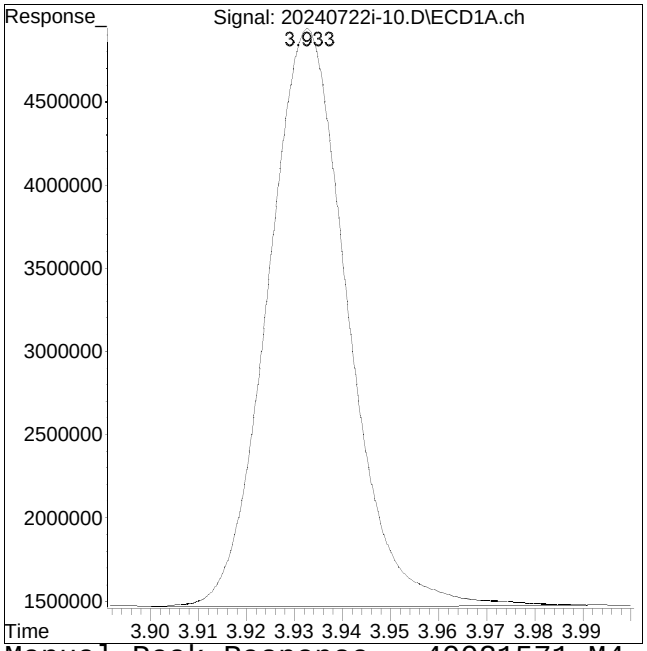
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #10: Alachlor




Original Peak Response = 40210929




Manual Peak Response = 40021571 M4

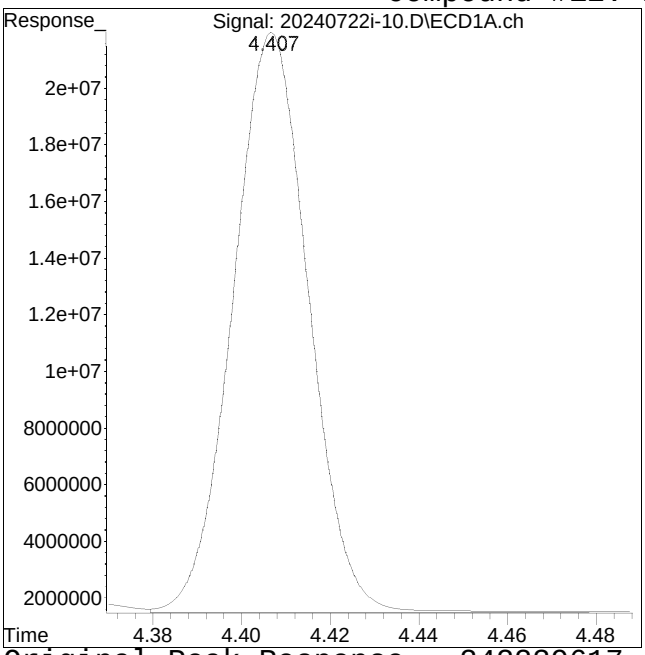
M4 = Poor automated baseline construction.

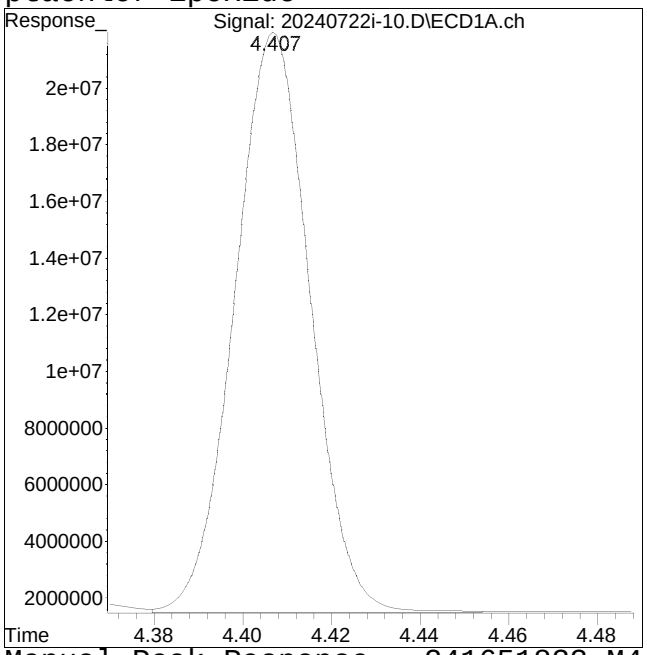
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #12: Heptachlor Epoxide



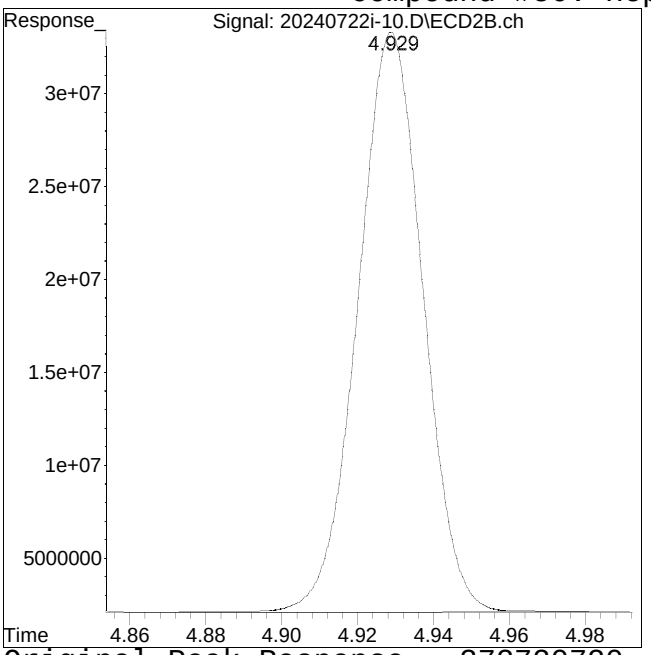




Original Peak Response = 242239617 Manual Peak Response = 241651833 M4
M4 = Poor automated baseline construction.

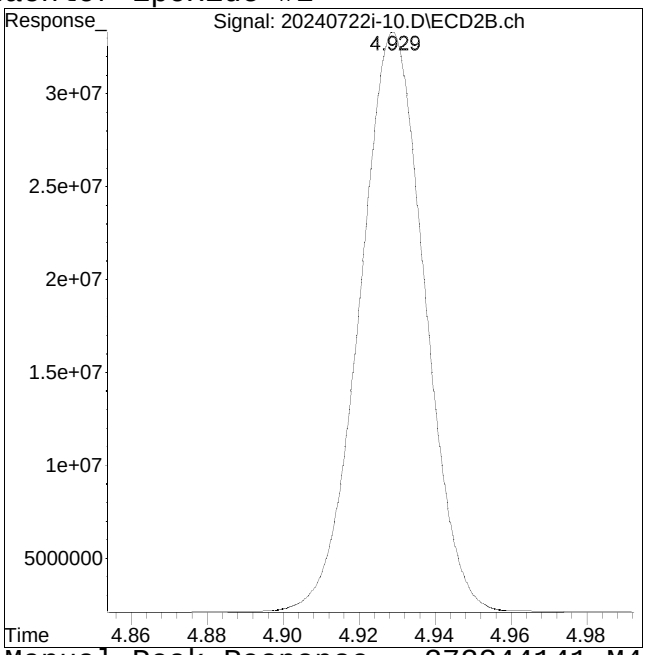
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

## Compound #50: Heptachlor Epoxide #2




Original Peak Response = 372720720




Manual Peak Response = 372344141 M4

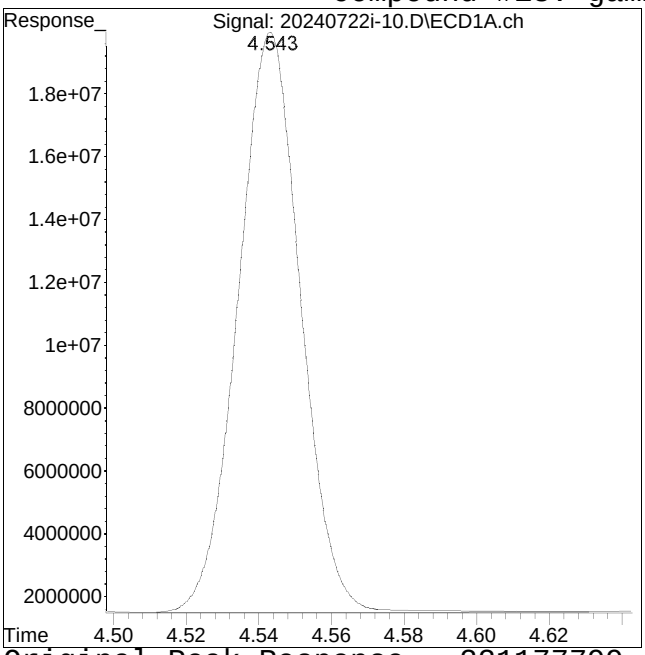
M4 = Poor automated baseline construction.

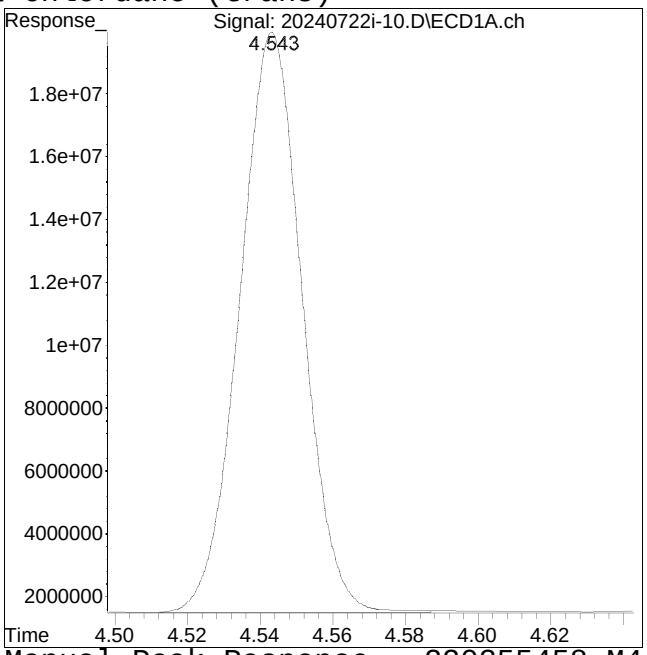
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #13: gamma-Chlordane (trans)



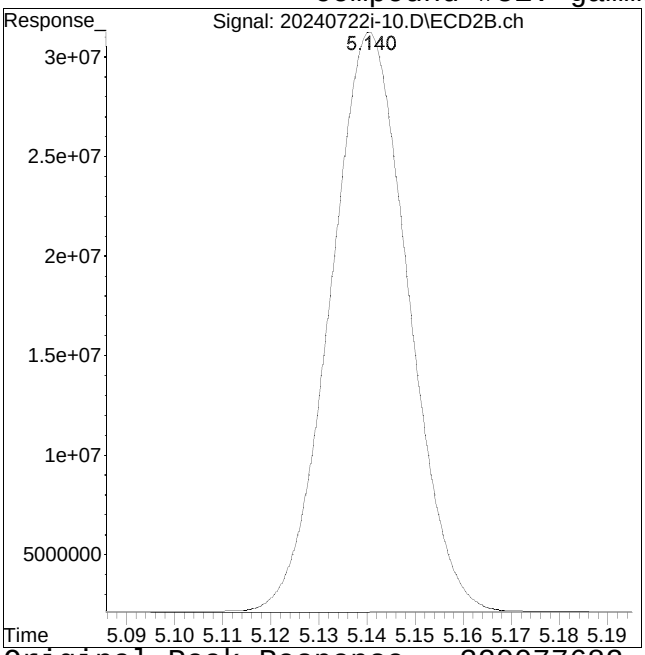

Original Peak Response = 221177799 Manual Peak Response = 220355458 M4
M4 = Poor automated baseline construction.

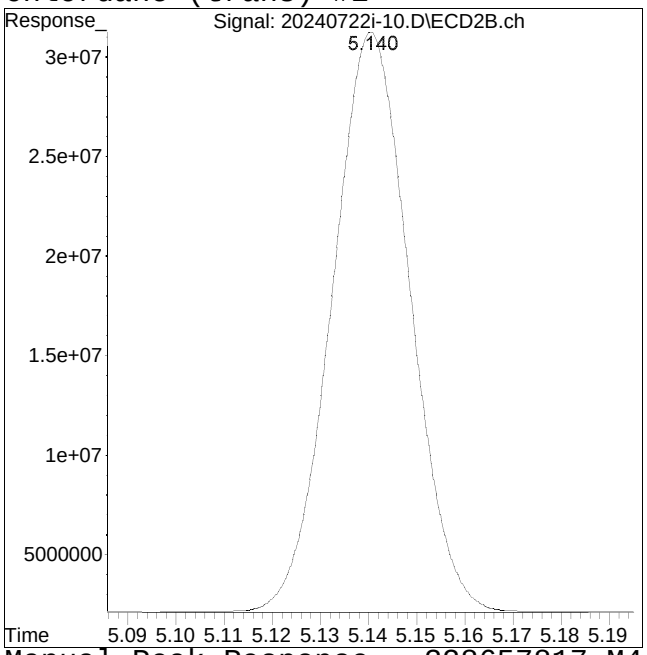
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #51: gamma-Chlordane (trans) #2



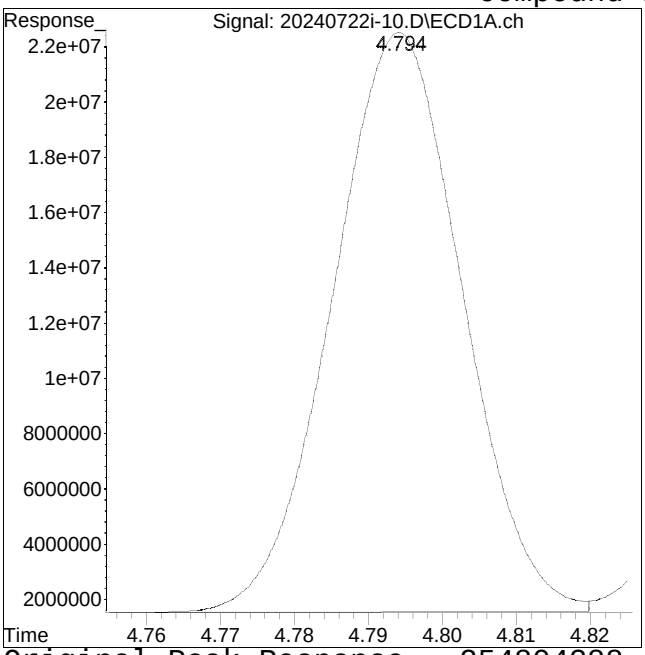

Original Peak Response = 329077682 Manual Peak Response = 328657817 M4
M4 = Poor automated baseline construction.

Manual Integration Report

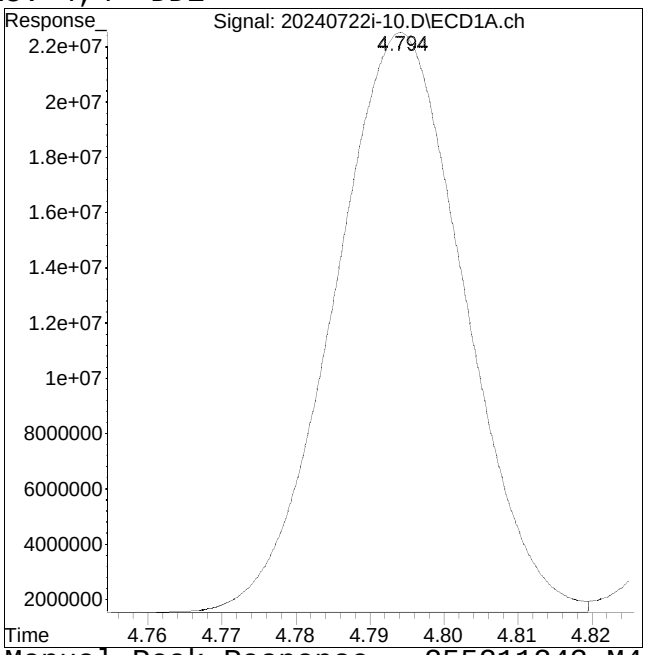
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #15: 4,4'-DDE




Original Peak Response = 254804388




Manual Peak Response = 255211243 M4

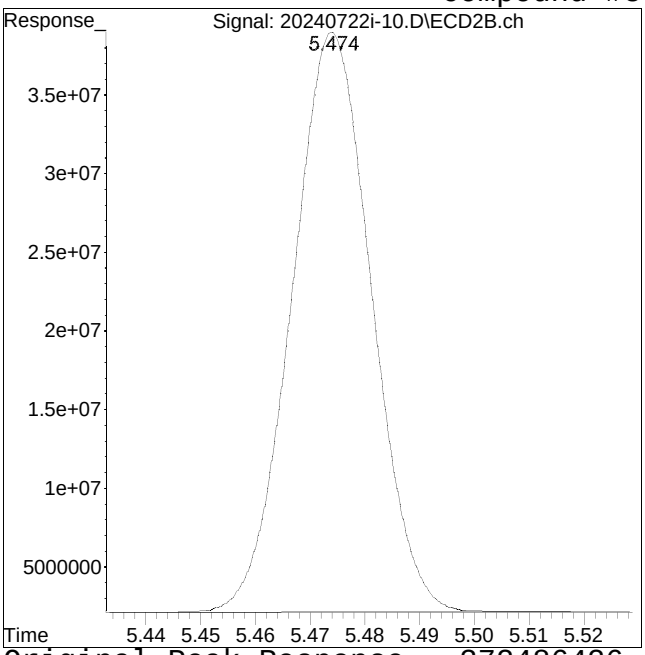
M4 = Poor automated baseline construction.

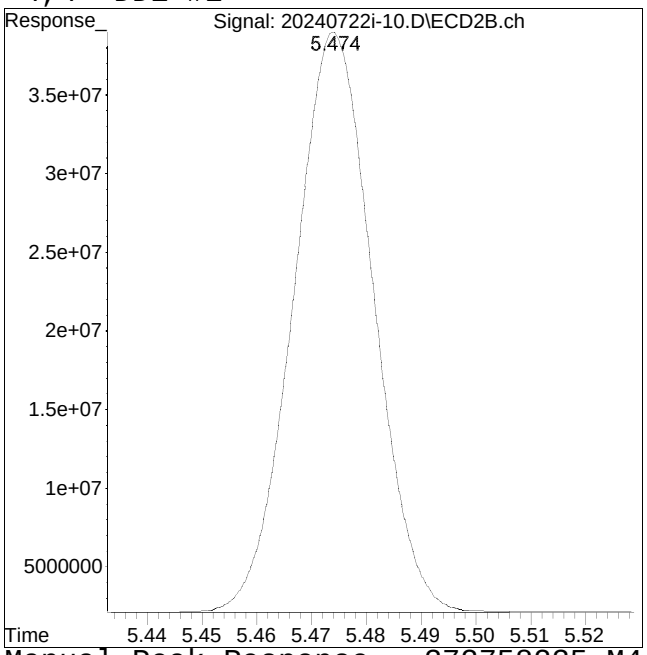
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #53: 4,4'-DDE #2



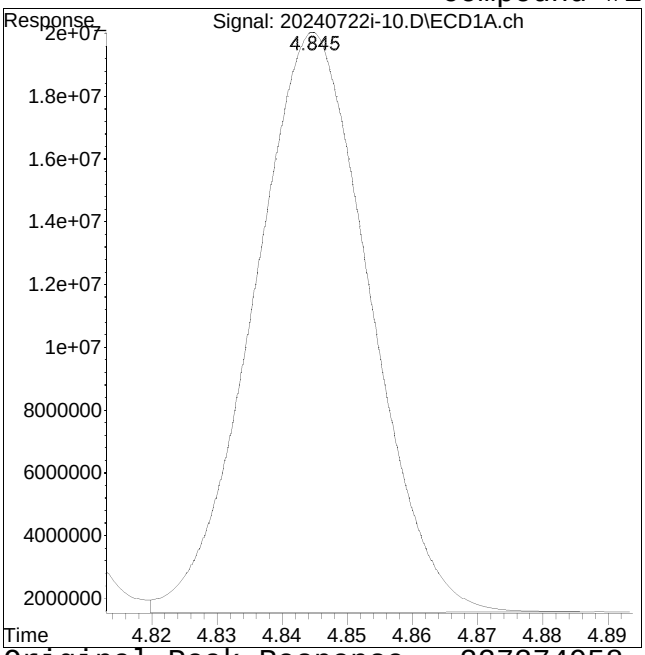




Original Peak Response = 372486426 Manual Peak Response = 372758235 M4
M4 = Poor automated baseline construction.

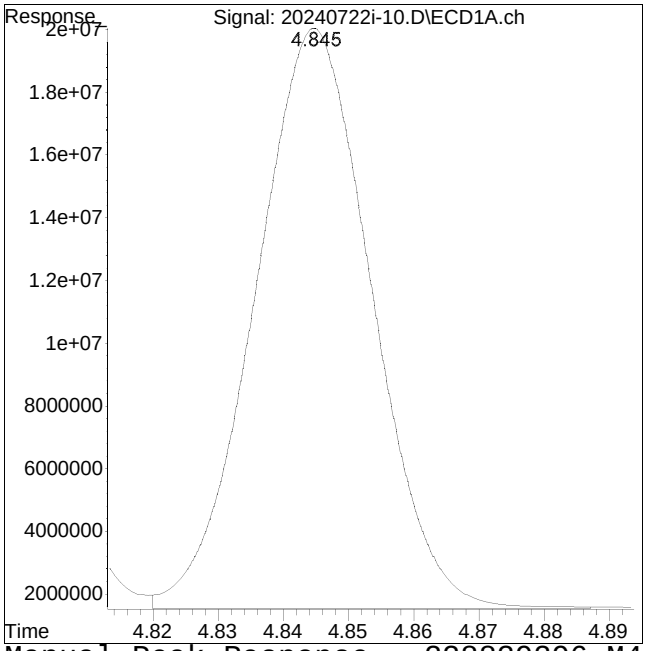
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #16: Endosulfan I




Original Peak Response = 227374958

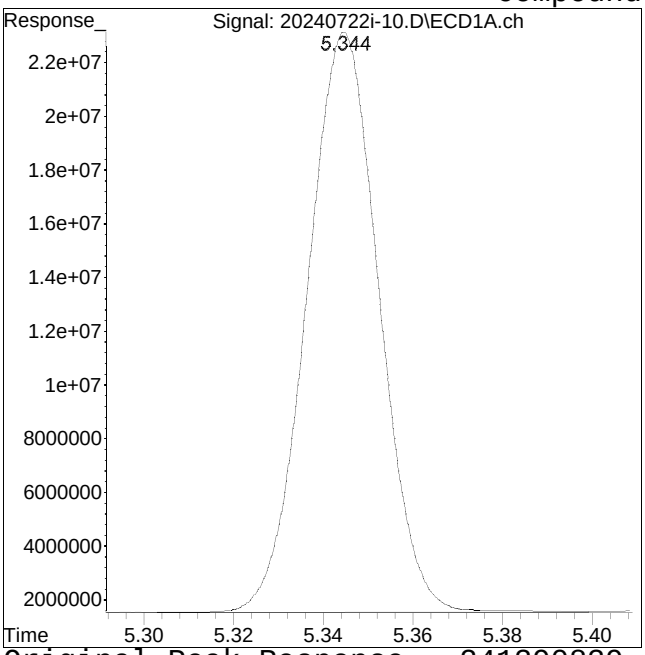


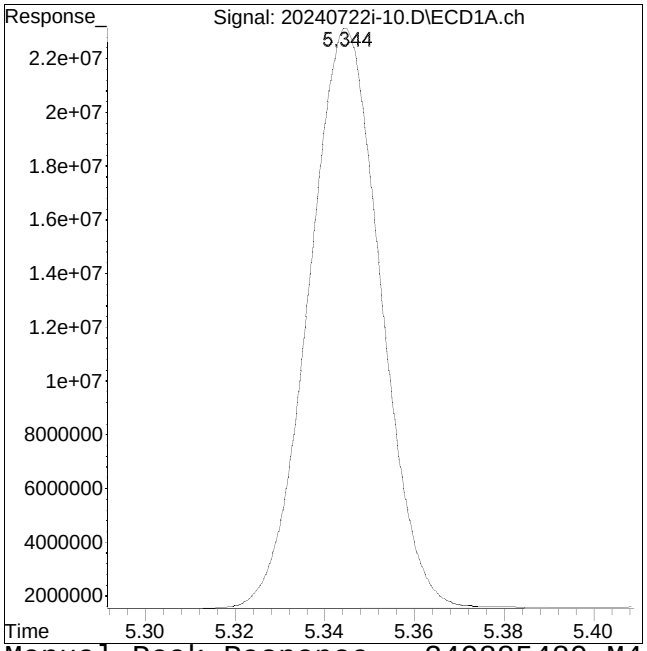

Manual Peak Response = 228839296 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #18: Endrin



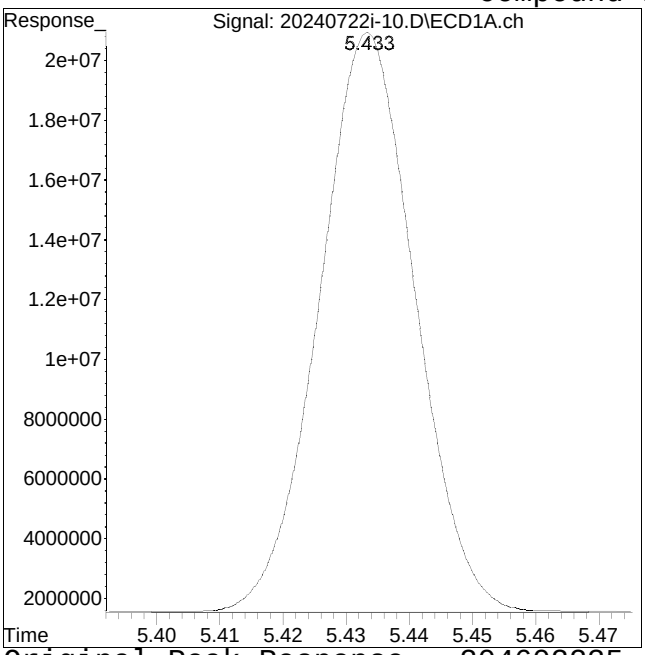

Original Peak Response = 241390839 Manual Peak Response = 240885480 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

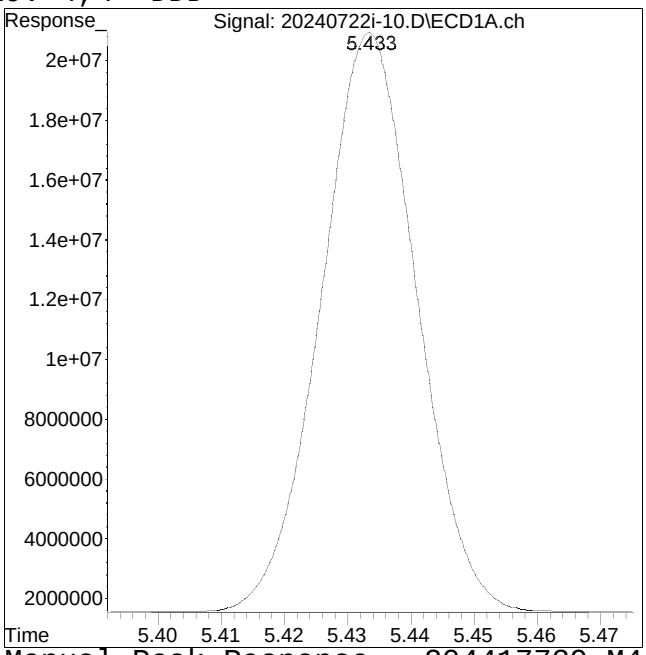
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #19: 4,4'-DDD




Original Peak Response = 204602235



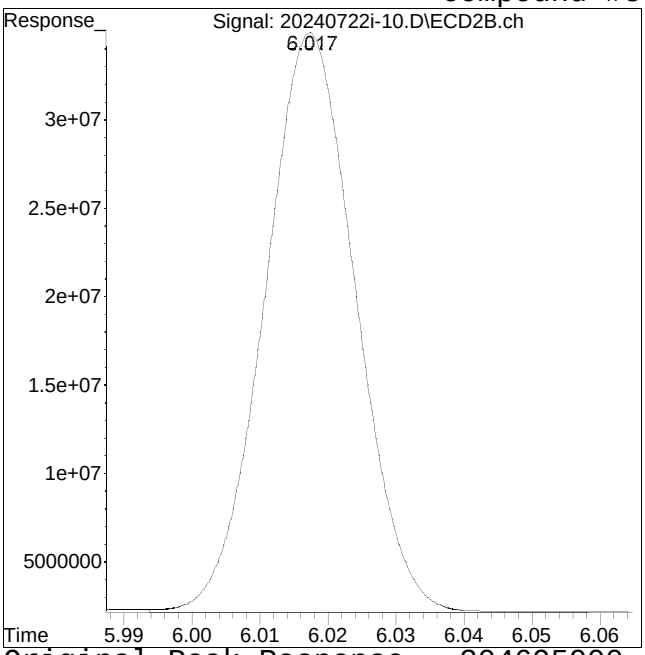

Manual Peak Response = 204417729 M4

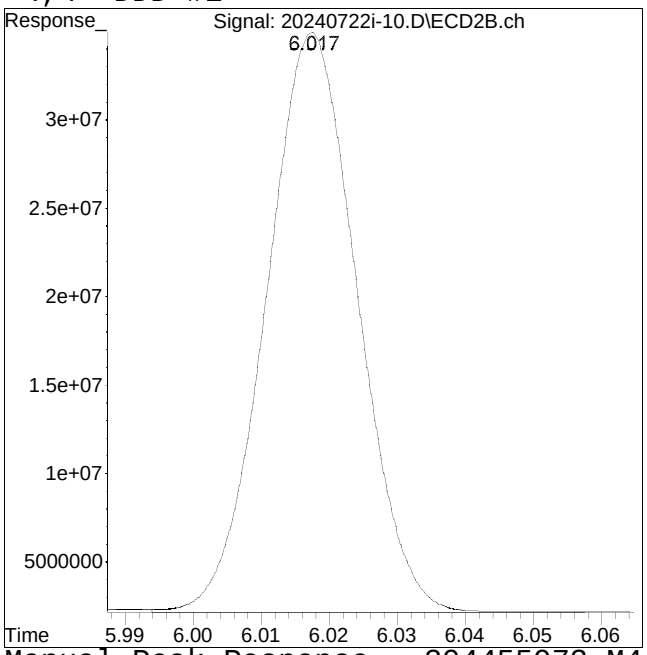
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #57: 4,4'-DDD #2



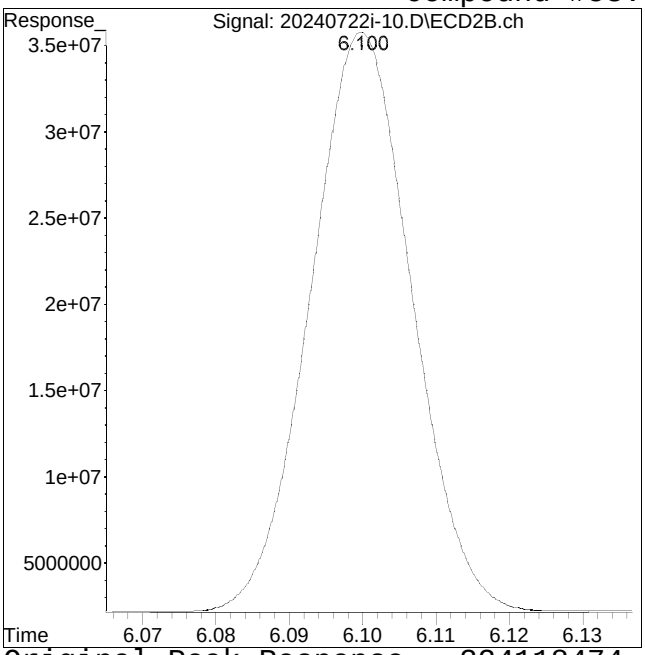



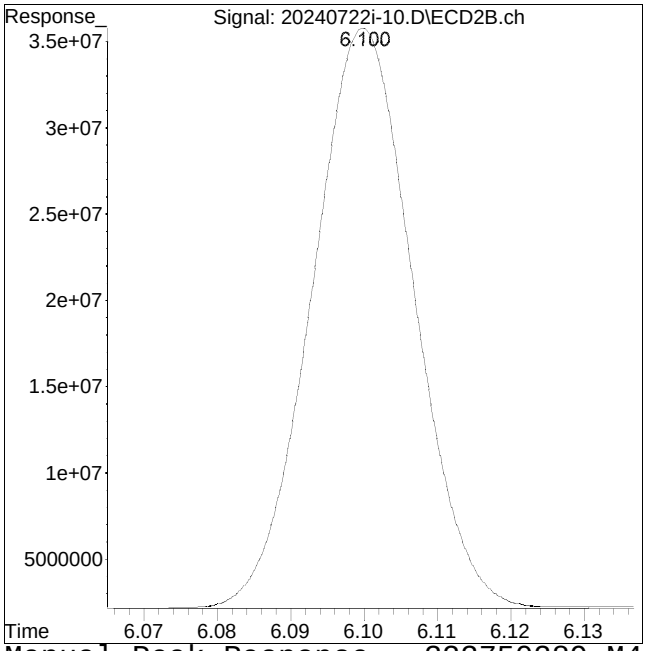

Original Peak Response = 304695900 Manual Peak Response = 304455973 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

## Compound #58: Endosulfan II #2



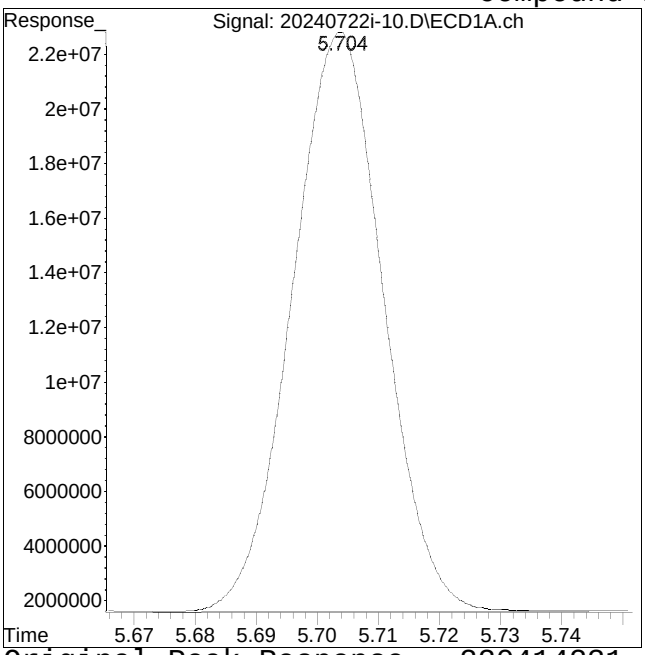

Original Peak Response = 324118474 Manual Peak Response = 323750289 M4
M4 = Poor automated baseline construction.

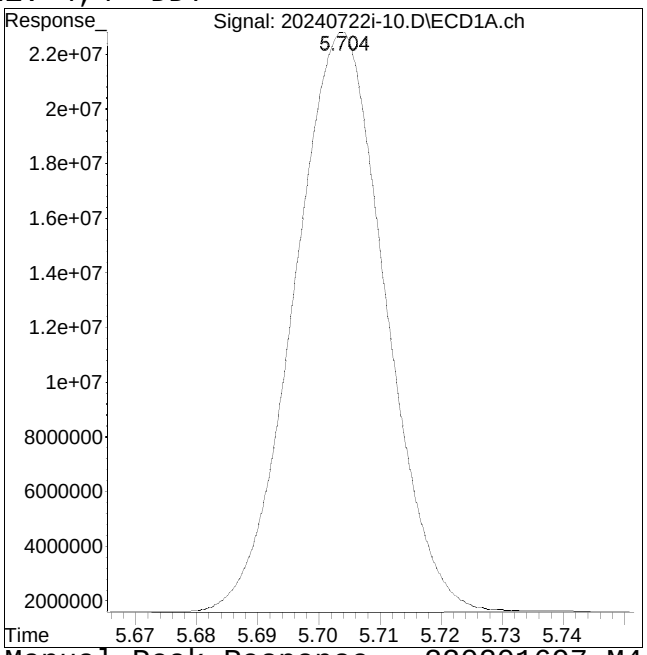
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #21: 4,4'-DDT



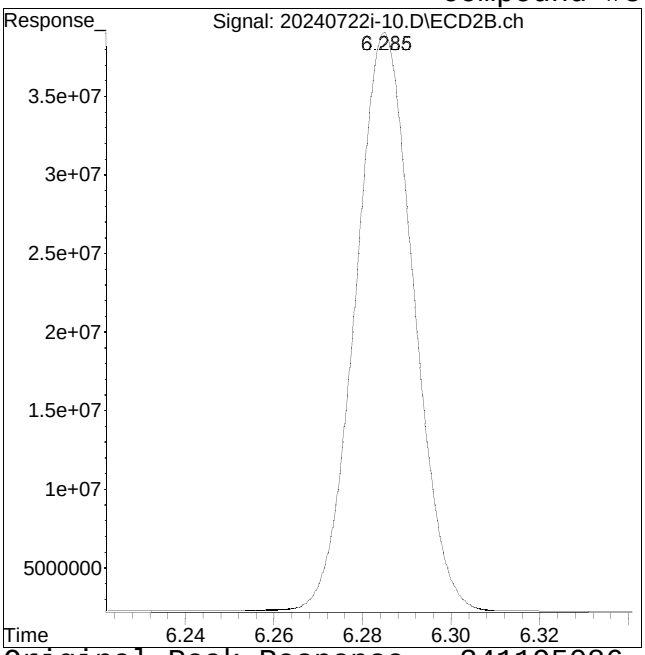




Original Peak Response = 220414231 Manual Peak Response = 220201697 M4
M4 = Poor automated baseline construction.

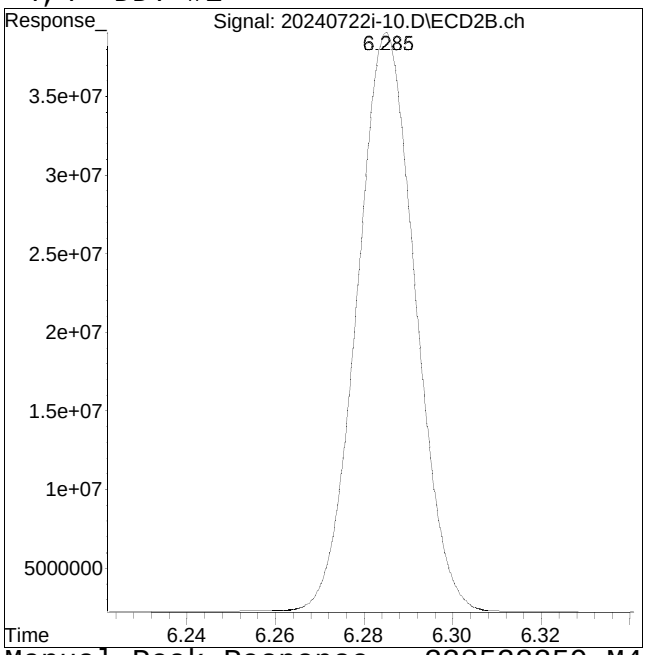
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #59: 4,4'-DDT #2




Original Peak Response = 341195086




Manual Peak Response = 338533359 M4

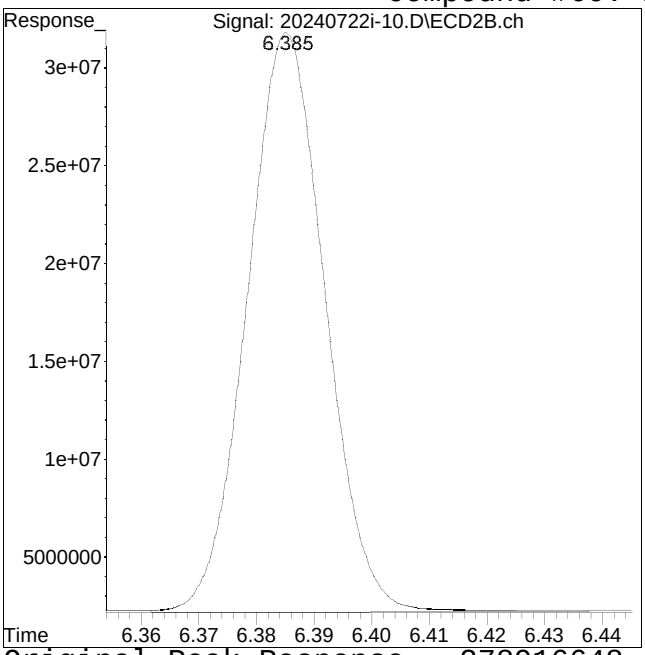
M4 = Poor automated baseline construction.

Manual Integration Report

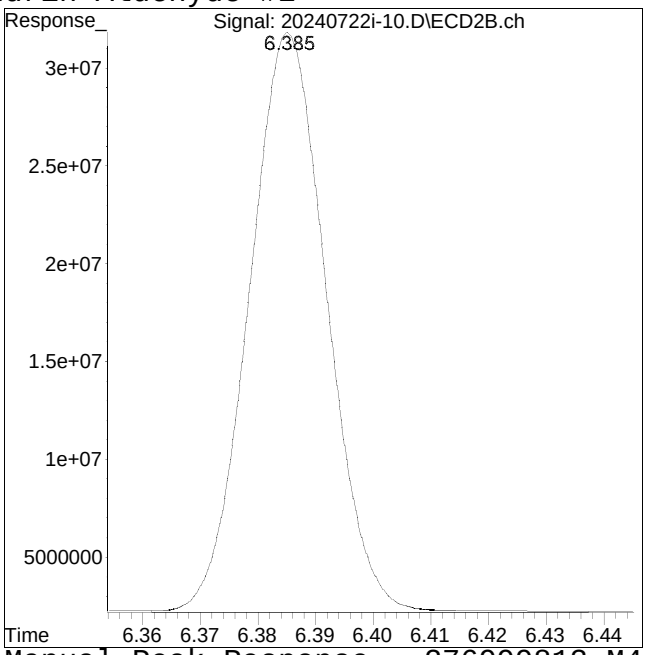
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #60: Endrin Aldehyde #2




Original Peak Response = 278916648




Manual Peak Response = 276999813 M4

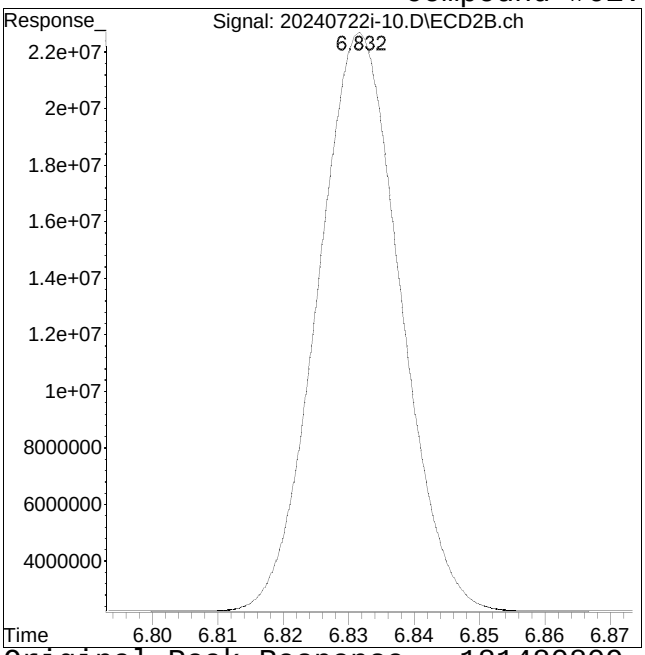
M4 = Poor automated baseline construction.

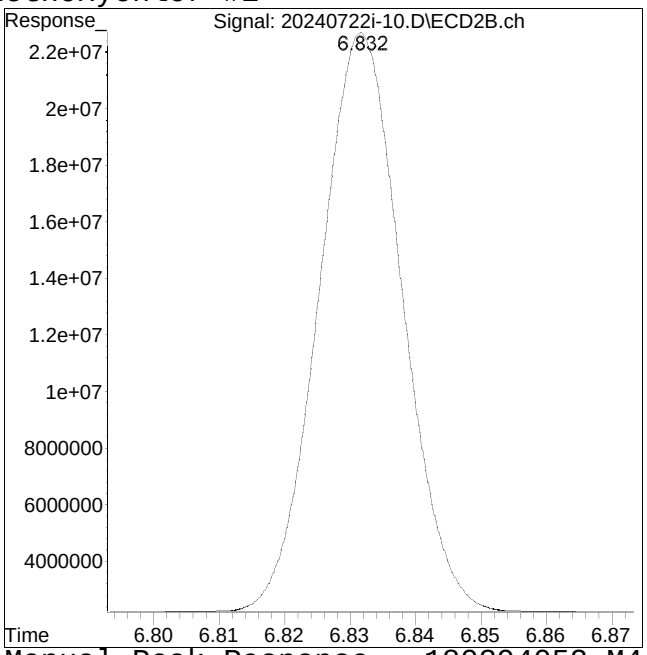
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #61: Methoxychlor #2



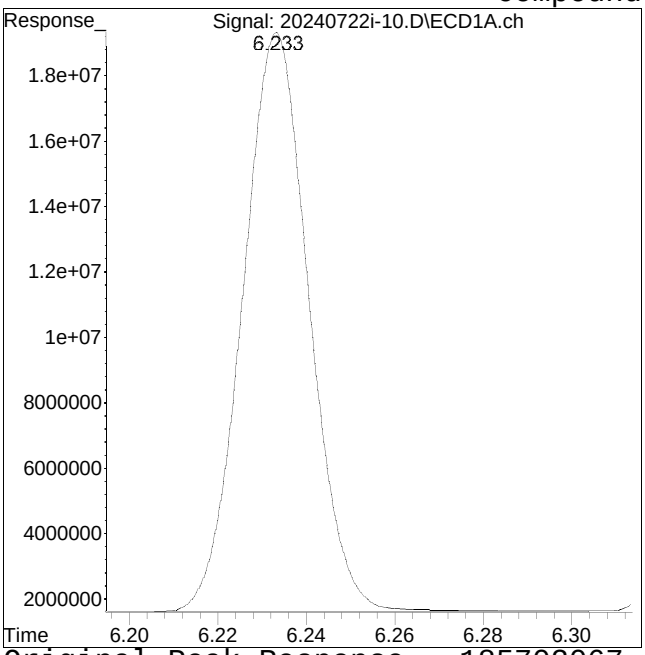

Original Peak Response = 181480809 Manual Peak Response = 180394052 M4
M4 = Poor automated baseline construction.

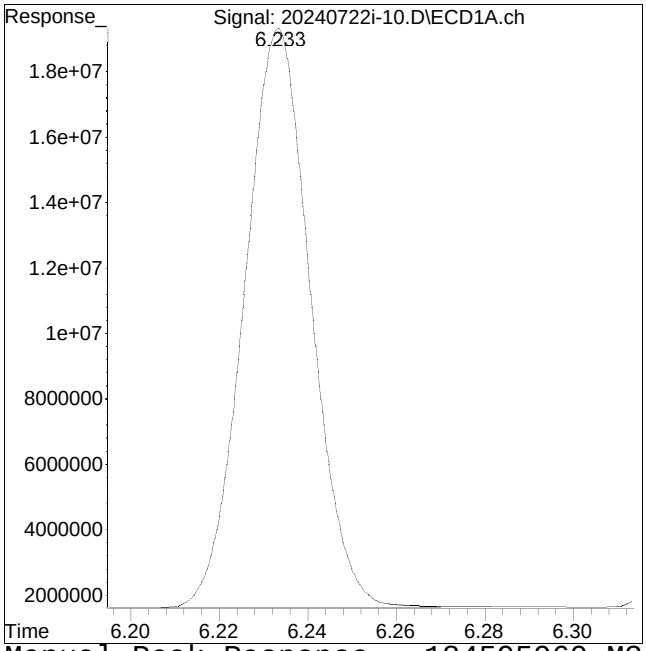
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #24: Mirex




Original Peak Response = 185702067 Manual Peak Response = 184595960 M3

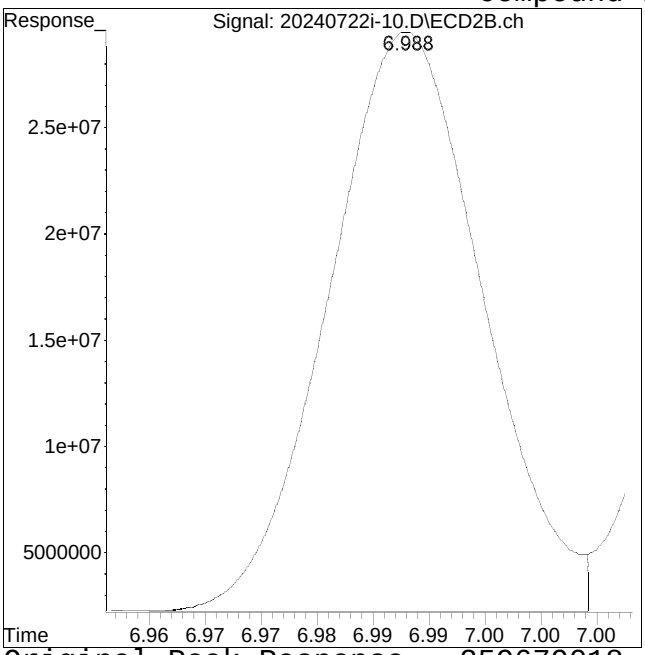
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

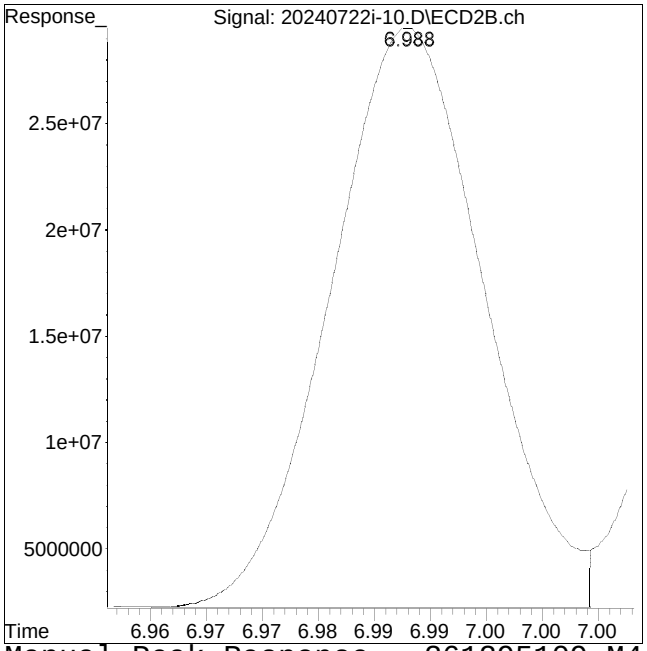
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #62: Mirex #2



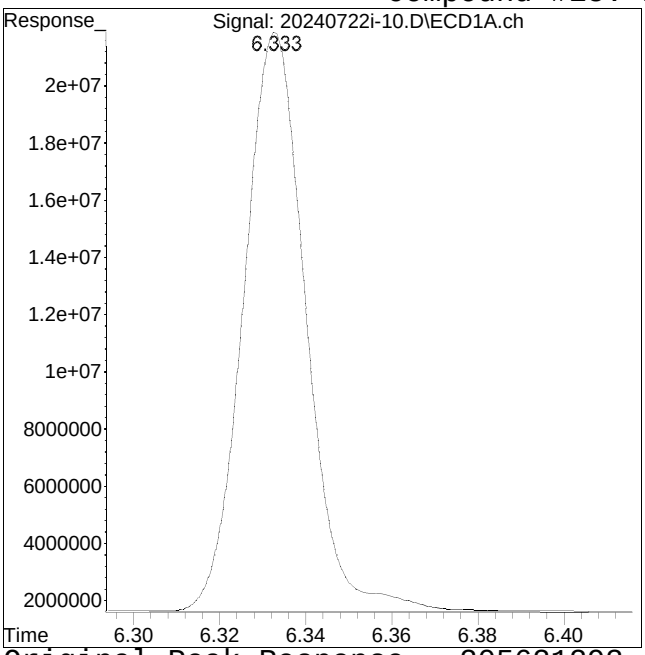



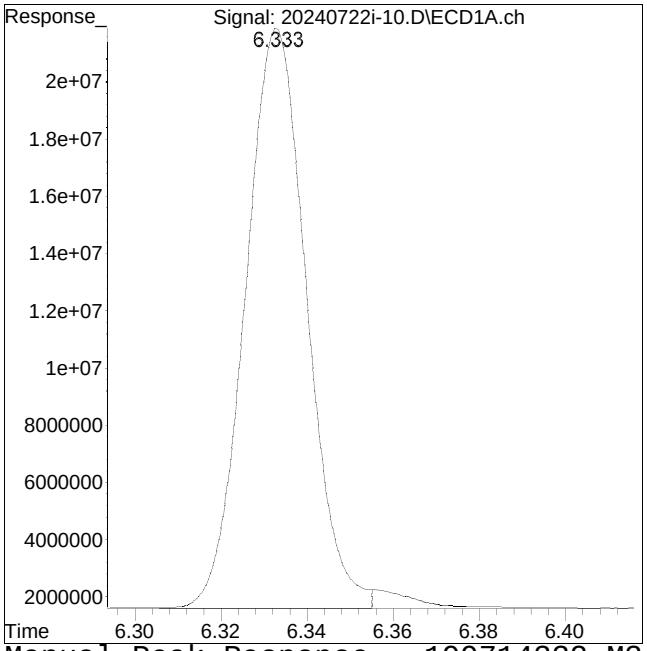

Original Peak Response = 259679018 Manual Peak Response = 261295109 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #25: Endosulfan Sulfate



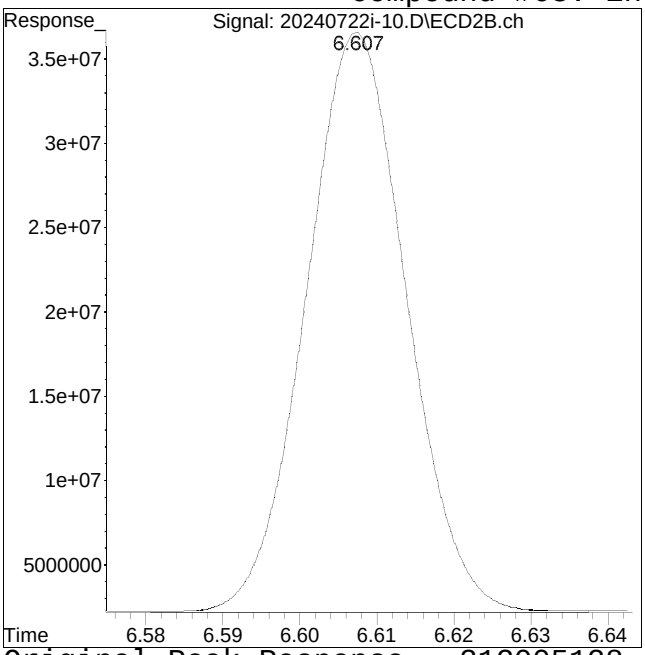

Original Peak Response = 205621293 Manual Peak Response = 199714332 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

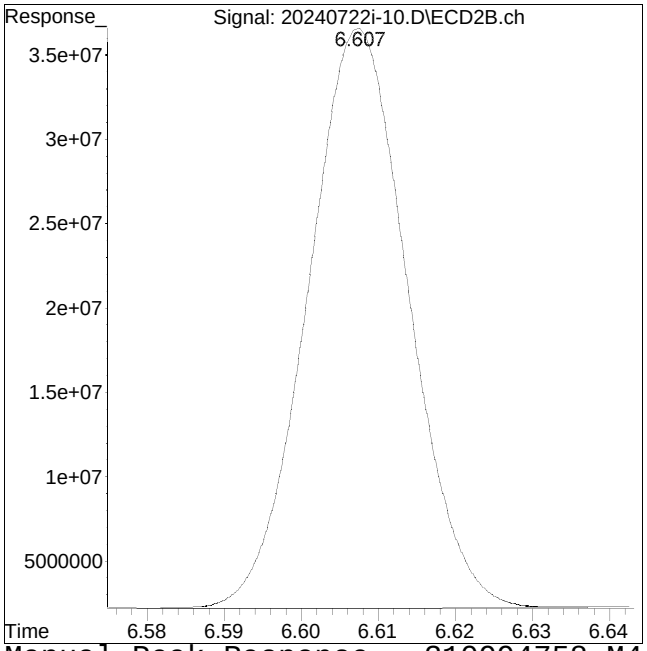
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

## Compound #63: Endosulfan Sulfate #2




Original Peak Response = 312005128




Manual Peak Response = 310994758 M4

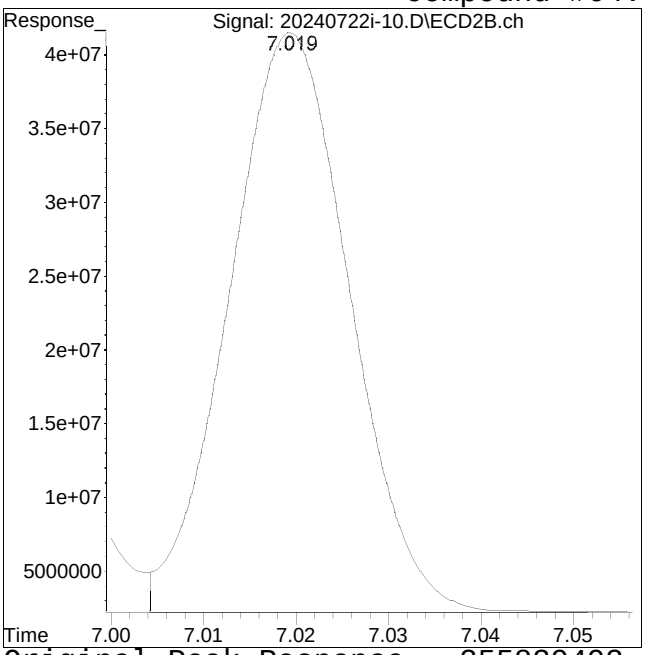
M4 = Poor automated baseline construction.

Manual Integration Report

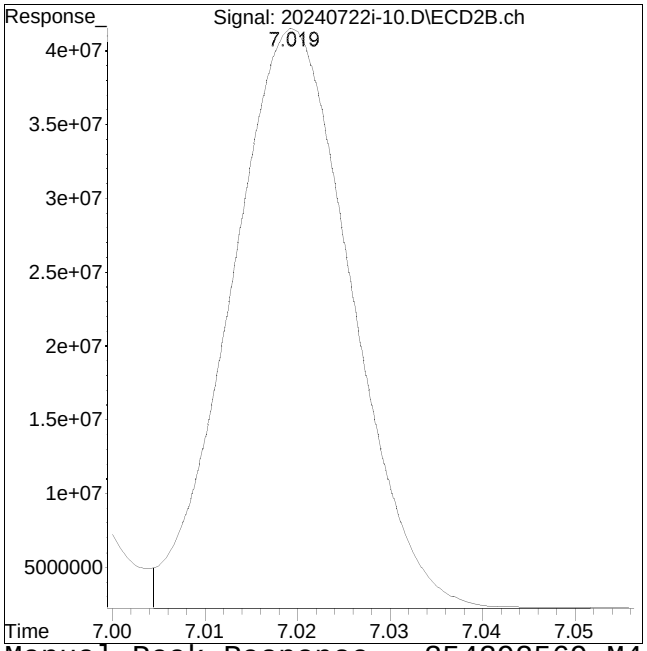
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-10.D
Date Inj'd : 7/22/2024 19:36
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:31 pm

Compound #64: Endrin Ketone #2




Original Peak Response = 355839493



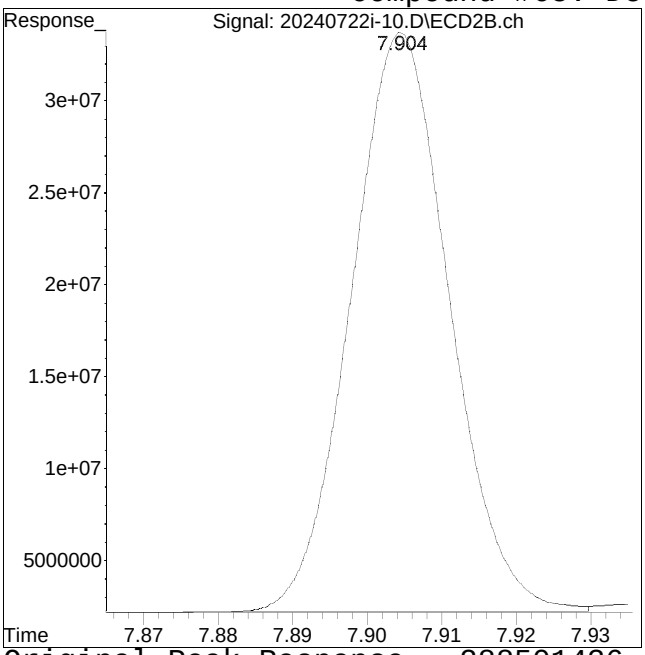

Manual Peak Response = 354292569 M4

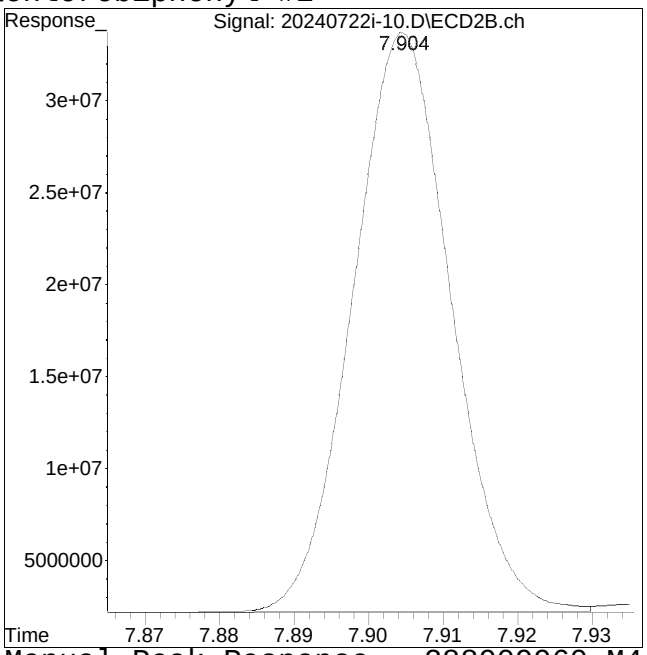
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-10.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:36 Instrument : PEST 20
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 7/23/2024 12:31 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 288501436 Manual Peak Response = 288909960 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-11.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:48
Operator : pest20:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:50:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:40:20 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.008 | 2.064 | 49661545 | 78133057 | 25.000 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.474 | 2.664 | 431.4E6 | 683.7E6 | 189.662M4 | 193.962M4 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 379.32%# | 387.92%# |
| 27) s | Decachlorobi | 7.336 | 7.903 | 408.4E6 | 536.7E6 | 186.754 | 189.318 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 373.51%# | 378.64%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.742 | 3.041 | 444.4E6 | 692.4E6 | 188.971 | 192.858 |
| 4) | alpha-BHC | 2.864 | 3.153 | 596.1E6 | 962.3E6 | 196.799 | 201.225 |
| 5) | gamma-BHC (l | 3.109 | 3.477 | 538.3E6 | 871.7E6 | 196.339 | 200.897M4 |
| 6) | beta-BHC | 3.176 | 3.551 | 241.8E6 | 386.0E6 | 188.690 | 193.046M3 |
| 7) | delta-BHC | 3.326 | 3.848 | 548.3E6 | 892.8E6 | 198.664 | 203.525M4 |
| 8) | Heptachlor | 3.514 | 3.918 | 512.4E6 | 799.9E6 | 194.928 | 198.646M4 |
| 9) | Aldrin | 3.793 | 4.268 | 507.9E6 | 766.6E6 | 198.023 | 202.142 |
| 10) | Alachlor | 3.935 | 4.141 | 71996203 | 99751040 | 177.477 | 181.729 |
| 11) | Chlorpyrifos | 4.035 | 4.524 | 218.1E6 | 352.9E6 | 181.240 | 185.224M4 |
| 12) | Heptachlor E | 4.409 | 4.930 | 460.8E6 | 717.1E6 | 194.677M3 | 198.972 |
| 13) | gamma-Chlord | 4.545 | 5.141 | 424.0E6 | 637.3E6 | 196.904M4 | 200.958M4 |
| 14) | alpha-Chlord | 4.695 | 5.297 | 475.8E6 | 705.9E6 | 195.783 | 199.741 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-11.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:48
Operator : pest20:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:50:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:40:20 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 15) | 4,4'-DDE | 4.796 | 5.474 | 493.2E6 | 726.0E6 | 199.032 | 203.083M4 |
| 16) | Endosulfan I | 4.847 | 5.354 | 438.0E6 | 662.4E6 | 195.548M3 | 200.015M4 |
| 17) | Dieldrin | 5.110 | 5.628 | 465.5E6 | 700.0E6 | 198.819 | 203.245 |
| 18) | Endrin | 5.346 | 5.911 | 464.6E6 | 711.7E6 | 197.762M4 | 202.627M3 |
| 19) | 4,4'-DDD | 5.434 | 6.018 | 394.3E6 | 591.9E6 | 198.099M4 | 202.575M4 |
| 20) | Endosulfan I | 5.566 | 6.100 | 404.7E6 | 624.5E6 | 195.586M4 | 199.676M4 |
| 21) | 4,4'-DDT | 5.705 | 6.285 | 422.1E6 | 652.0E6 | 196.082M4 | 199.745M4 |
| 22) | Endrin Aldeh | 5.959 | 6.385 | 348.7E6 | 533.2E6 | 195.186M4 | 199.753M4 |
| 23) | Methoxychlor | 6.155 | 6.832 | 224.1E6 | 336.0E6 | 185.408 | 189.692M4 |
| 24) | Mirex | 6.234 | 6.987 | 343.8E6 | 484.9E6 | 187.290M3 | 188.620M3 |
| 25) | Endosulfan S | 6.334 | 6.608 | 377.9E6 | 595.4E6 | 192.977M3 | 197.486M3 |
| 26) | Endrin Keton | 6.556 | 7.019 | 434.3E6 | 676.2E6 | 192.902M4 | 196.858M4 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-11.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:48
Operator : pest20:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:50:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:40:20 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

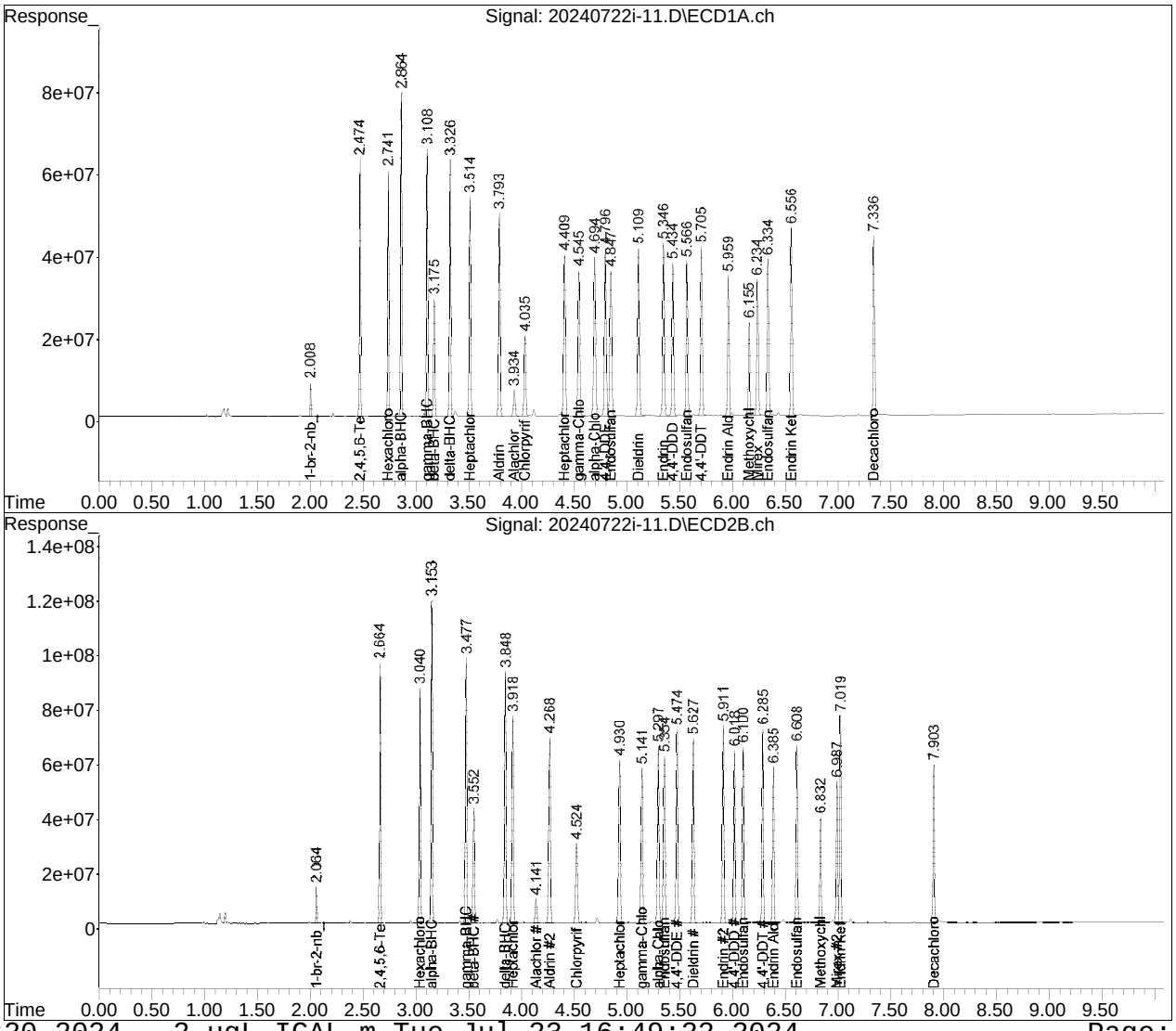
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-11.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 19:48
Operator : pest20:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:50:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:40:20 2024
Response via : Initial Calibration
Integrator: ChemStation

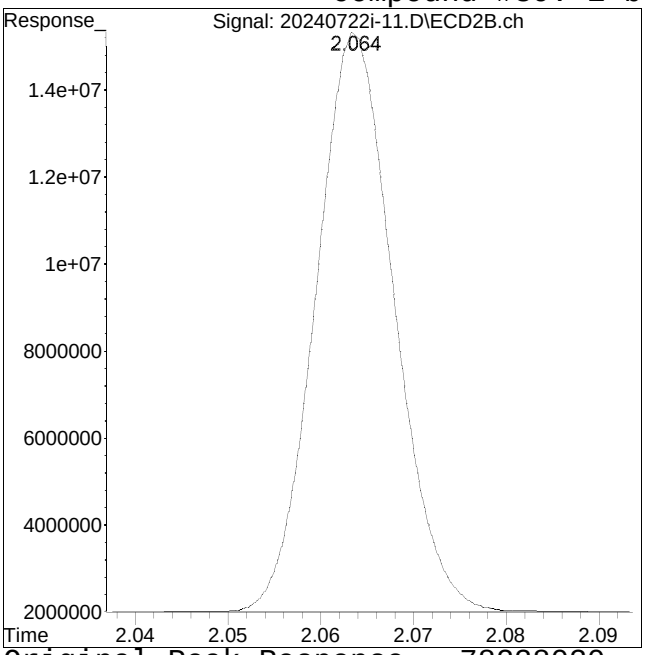
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



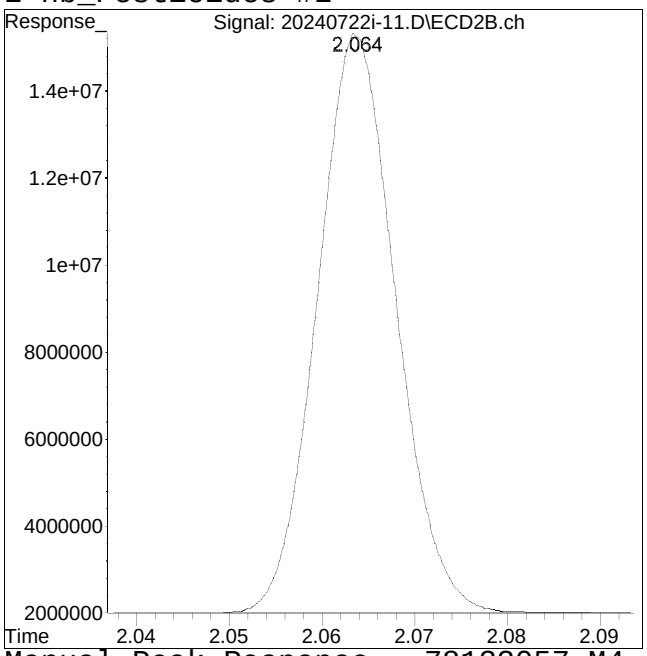
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 78238030



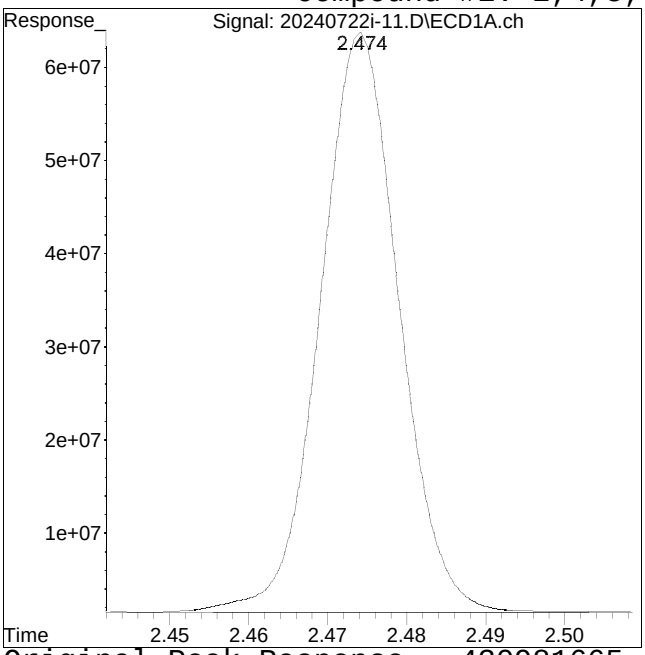

Manual Peak Response = 78133057 M4

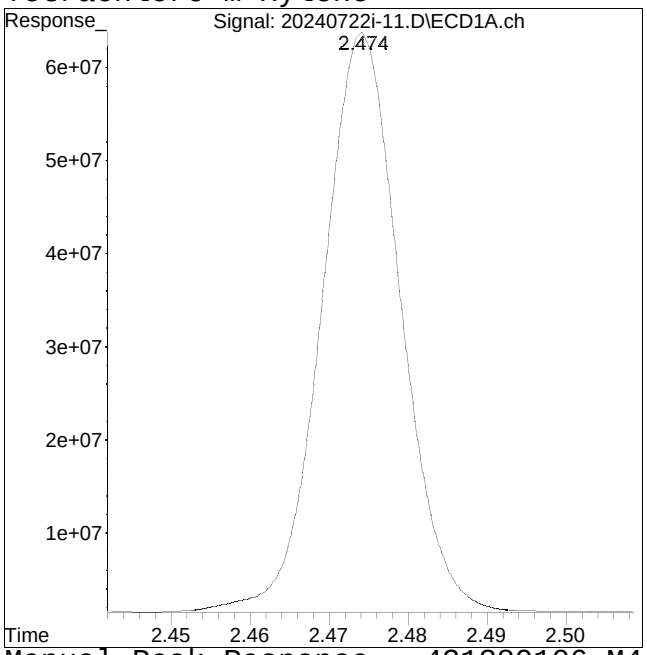
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



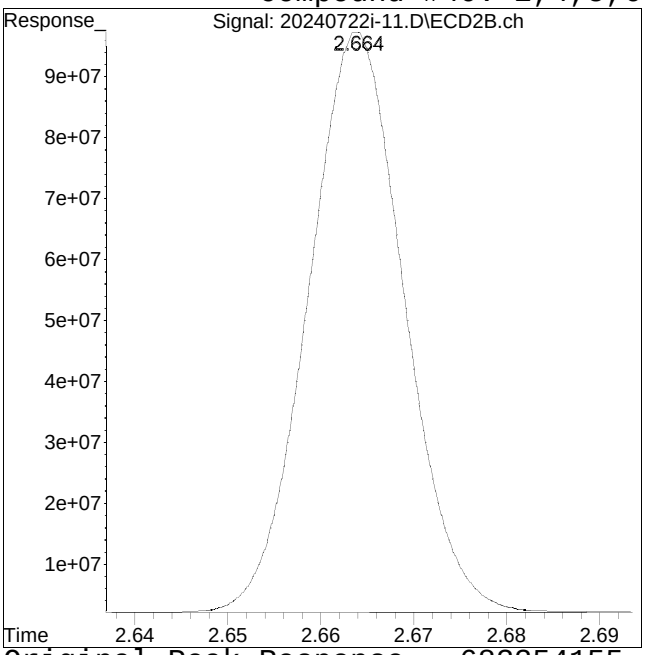

Original Peak Response = 430981665 Manual Peak Response = 431389106 M4
M4 = Poor automated baseline construction.

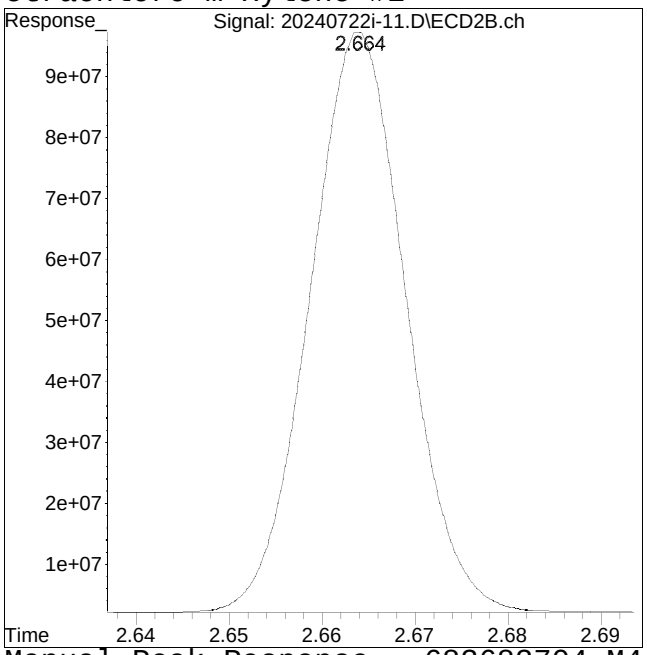
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



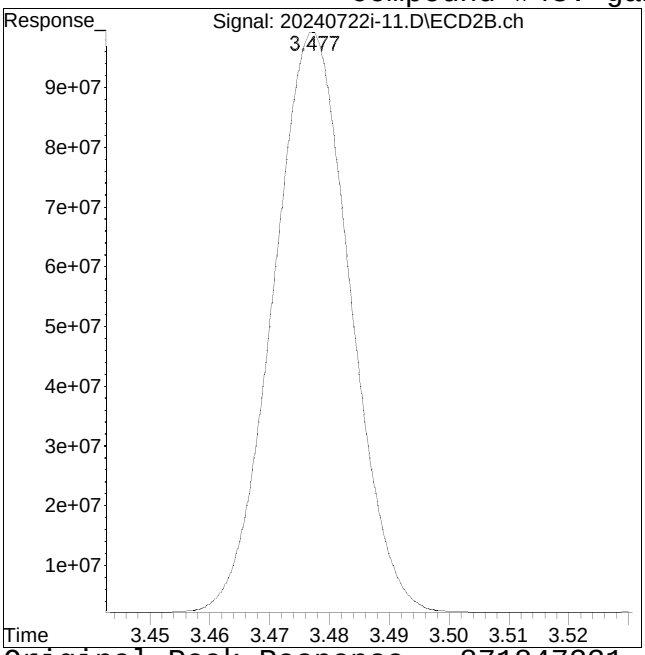



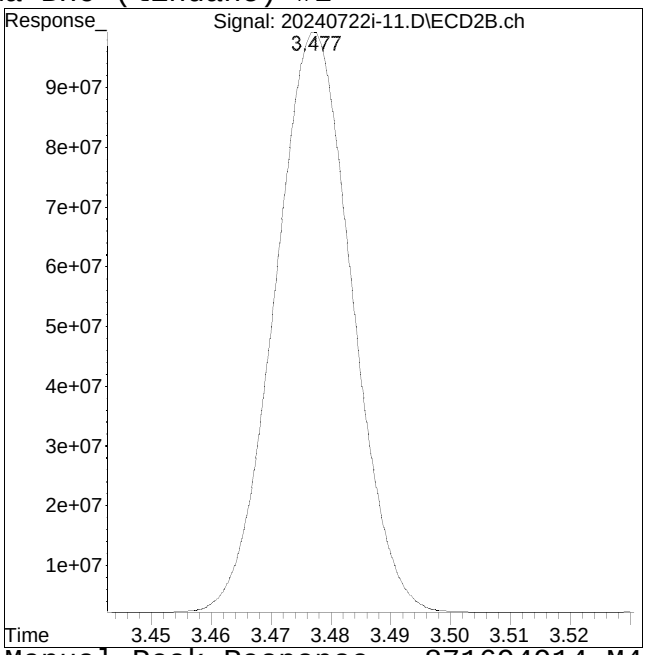

Original Peak Response = 683354155 Manual Peak Response = 683683704 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #43: gamma-BHC (lindane) #2



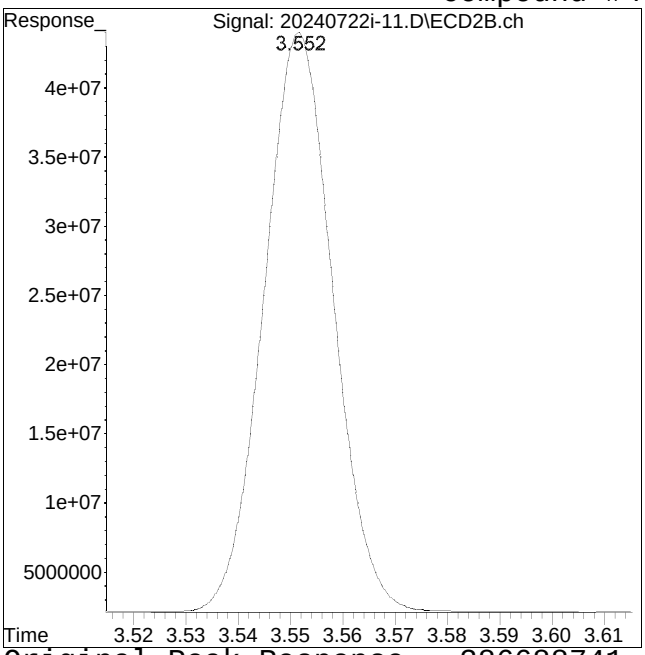



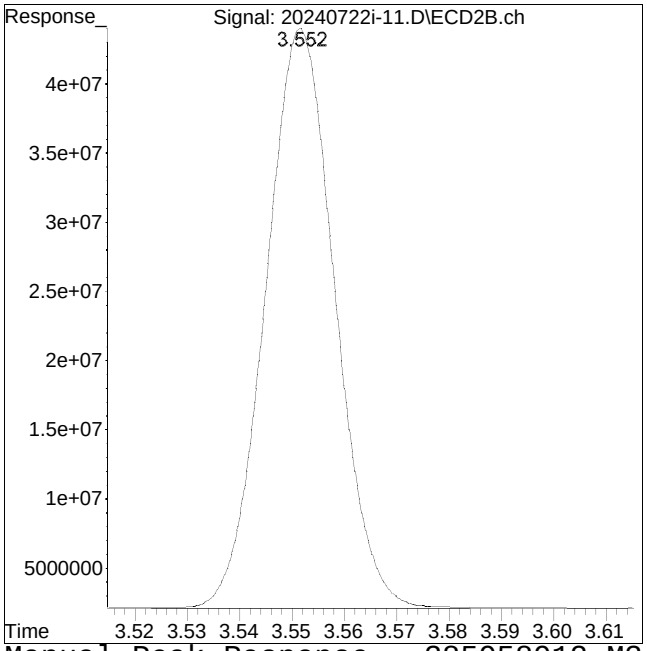

Original Peak Response = 871847331 Manual Peak Response = 871694914 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #44: beta-BHC #2



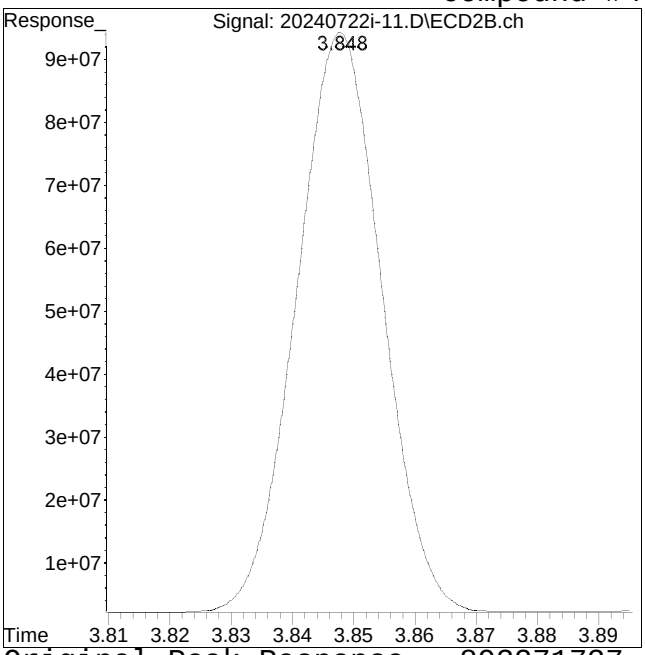

Original Peak Response = 386688741 Manual Peak Response = 385958912 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

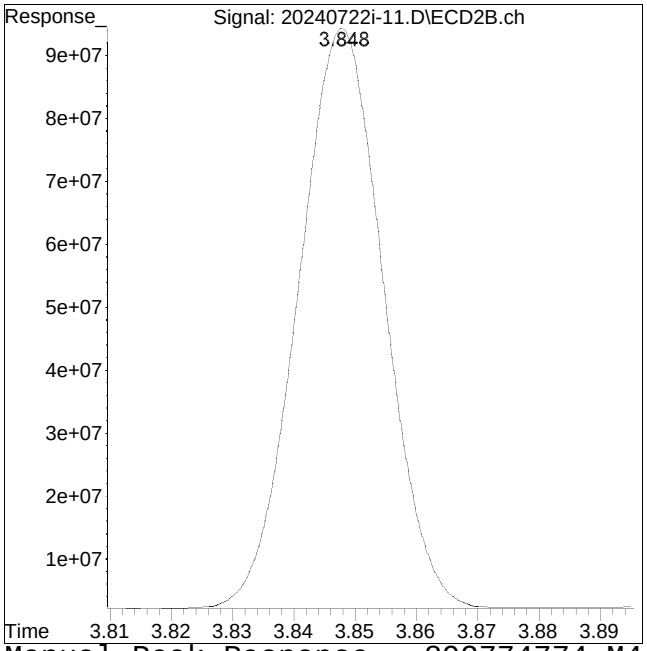
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #45: delta-BHC #2




Original Peak Response = 893271737



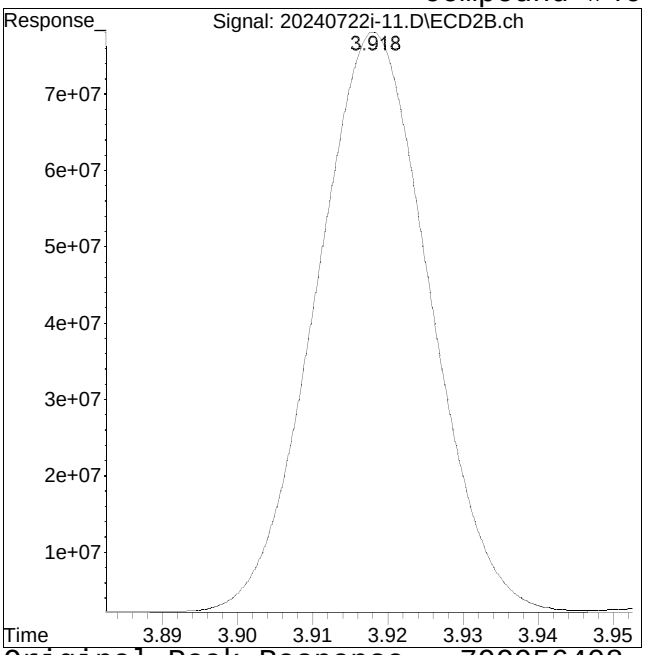

Manual Peak Response = 892774774 M4

M4 = Poor automated baseline construction.

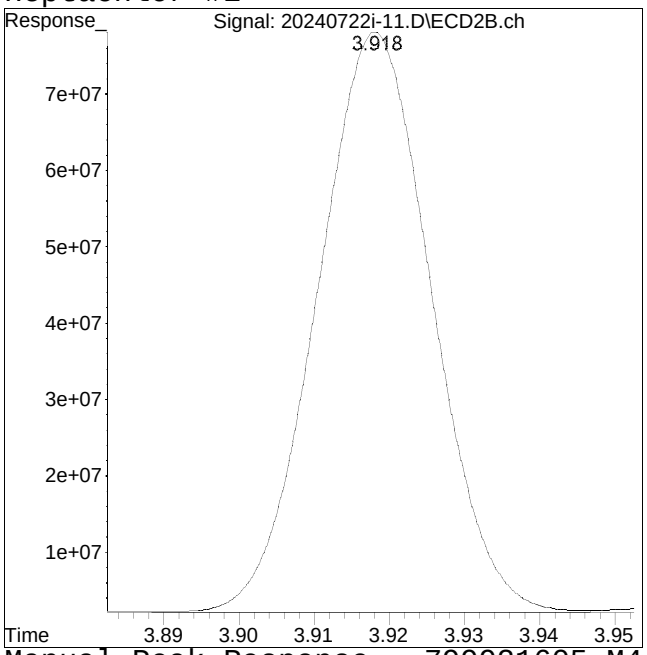
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

## Compound #46: Heptachlor #2




Original Peak Response = 799956408



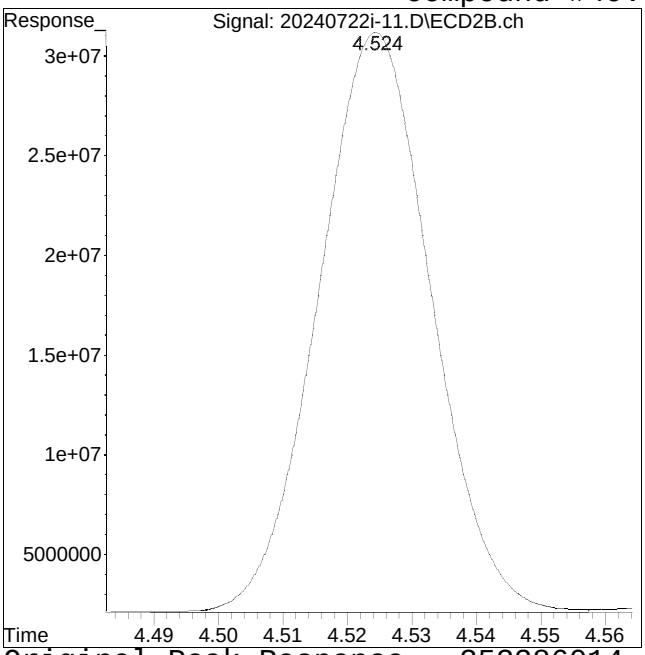

Manual Peak Response = 799921605 M4

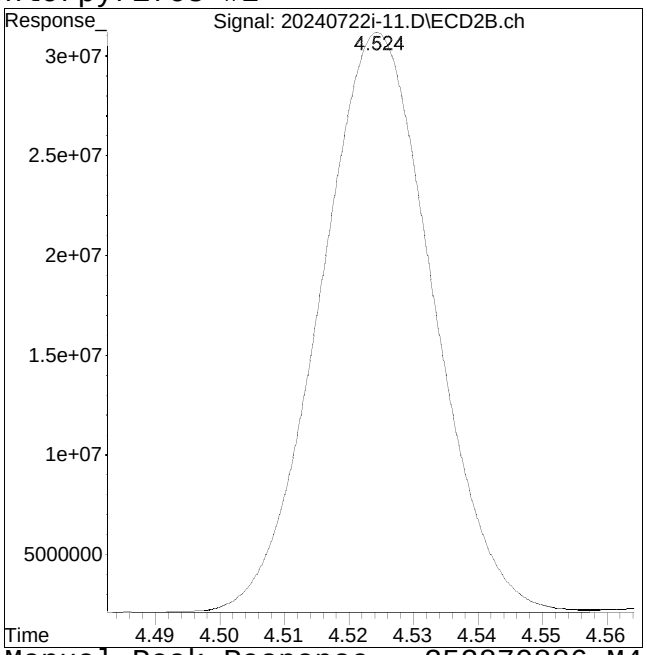
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #49: Chlorpyrifos #2



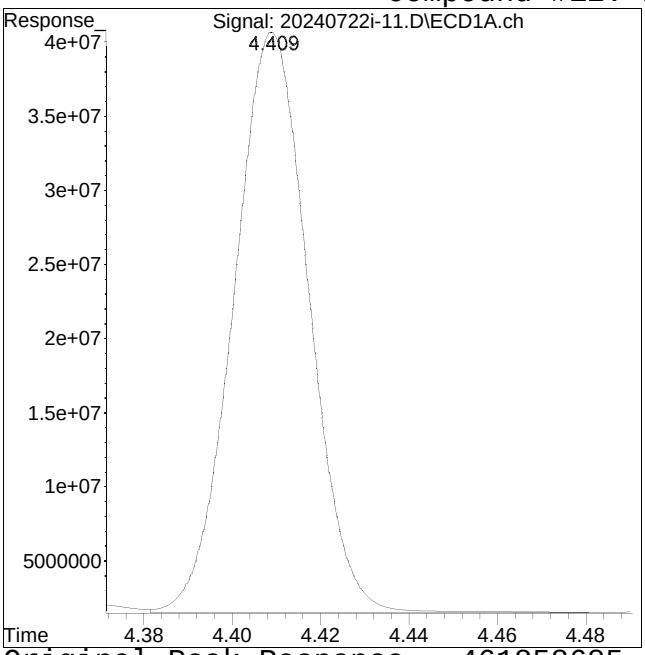



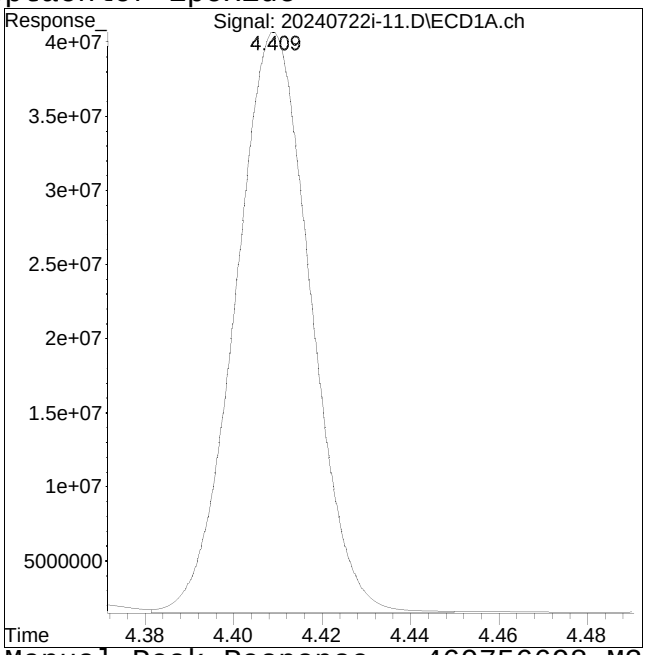

Original Peak Response = 353386014 Manual Peak Response = 352870886 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

Compound #12: Heptachlor Epoxide



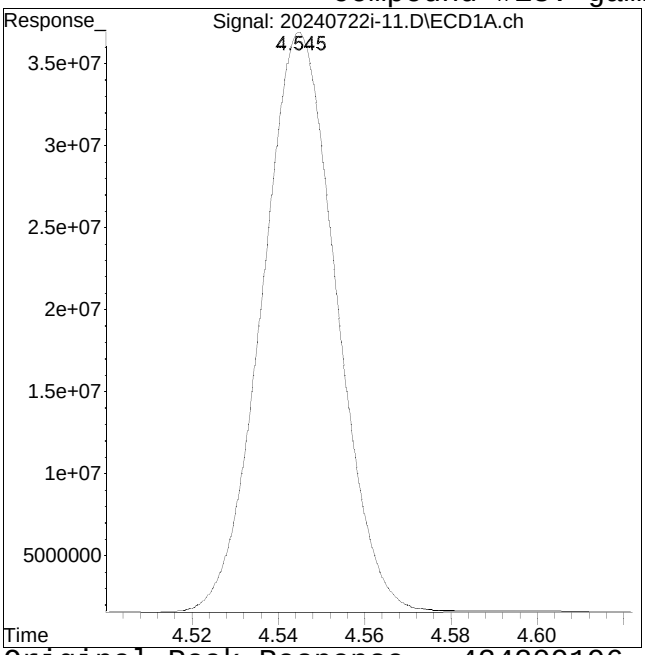



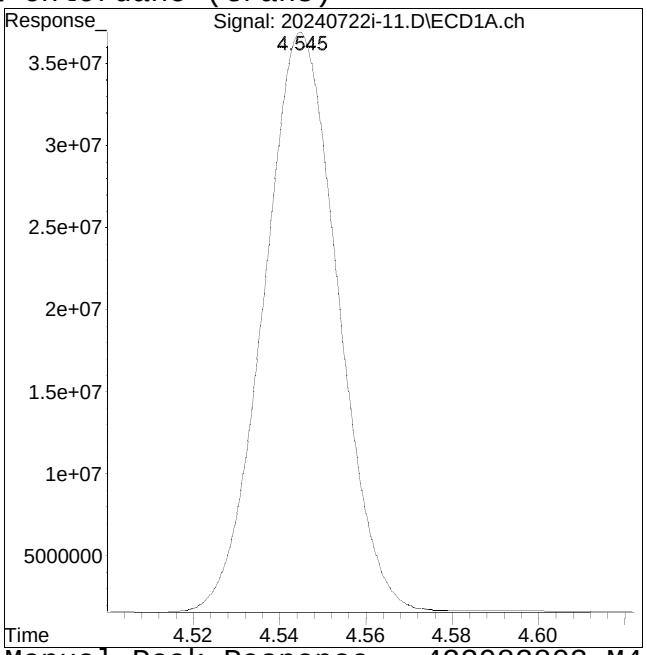

Original Peak Response = 461858685 Manual Peak Response = 460756698 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #13: gamma-Chlordane (trans)



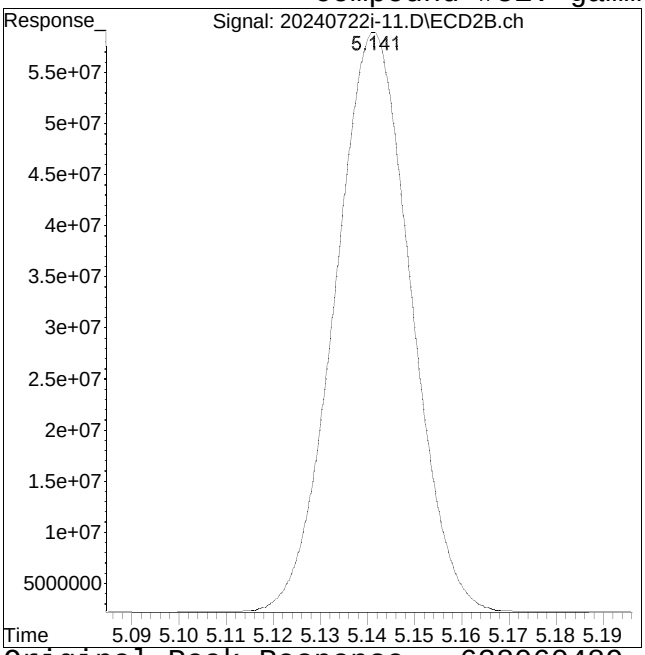



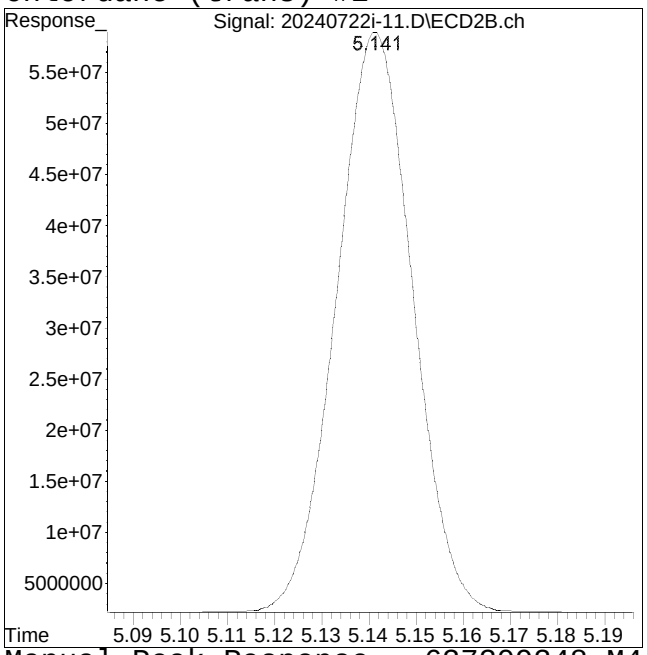

Original Peak Response = 424209196 Manual Peak Response = 423983803 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #51: gamma-Chlordane (trans) #2



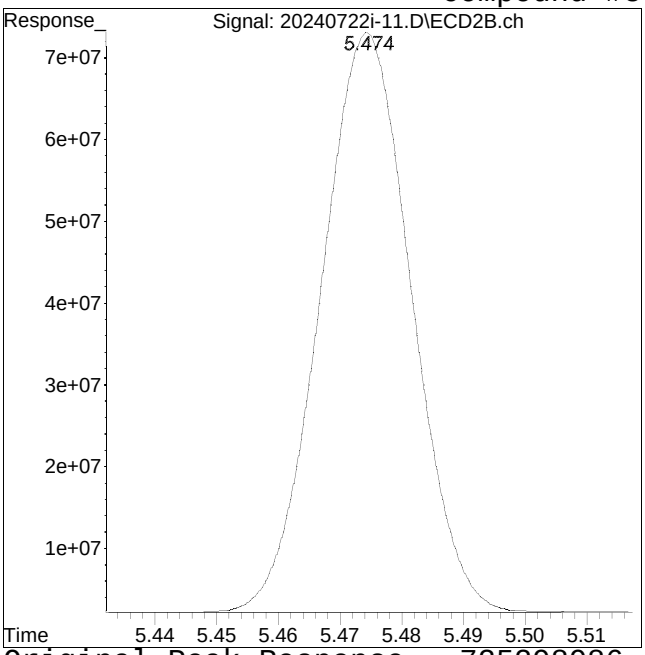



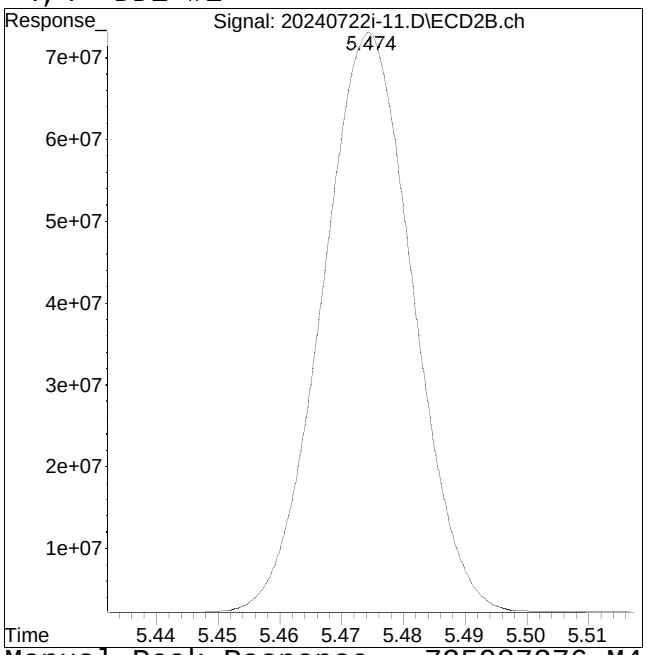

Original Peak Response = 638060489 Manual Peak Response = 637309348 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #53: 4,4'-DDE #2



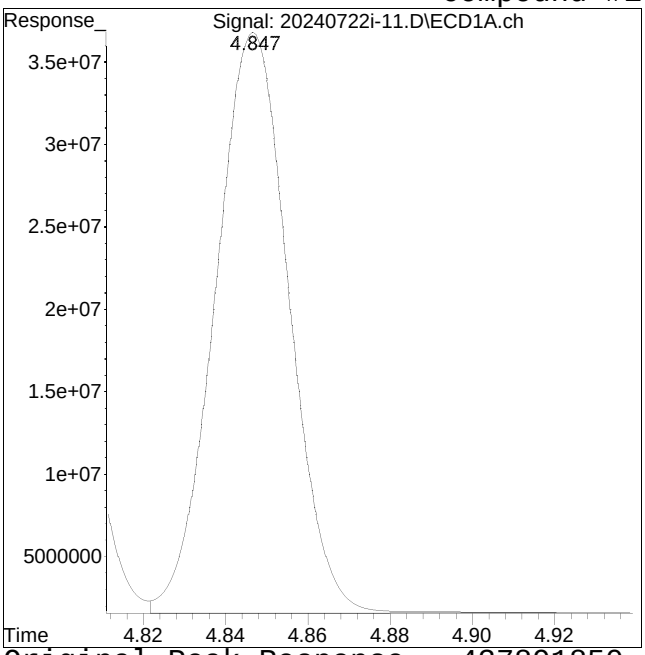



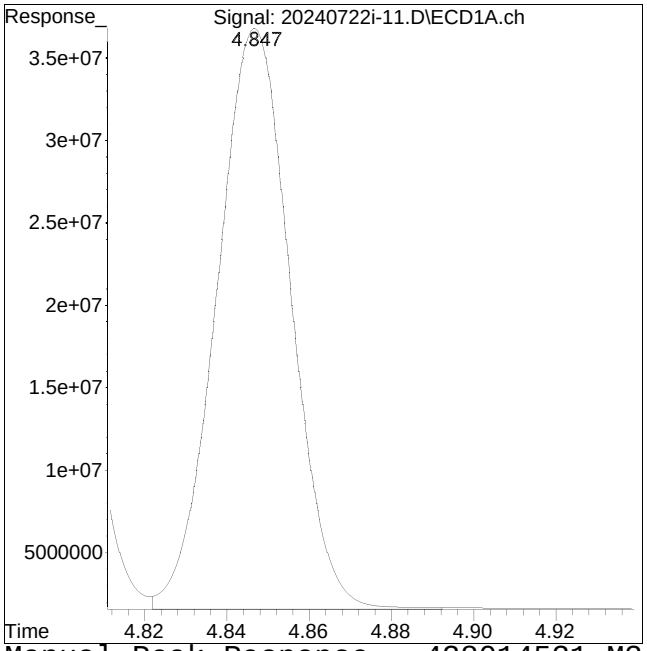

Original Peak Response = 725298986 Manual Peak Response = 725987376 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

Compound #16: Endosulfan I



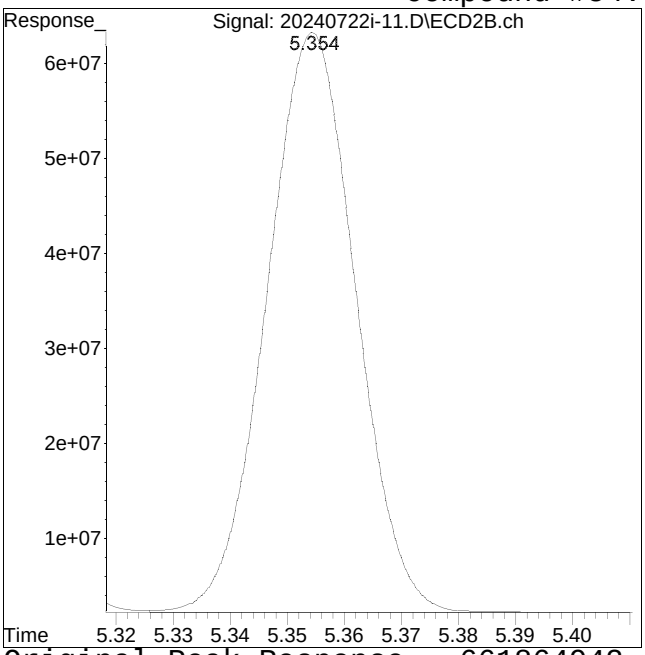

Original Peak Response = 437891850 Manual Peak Response = 438014531 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

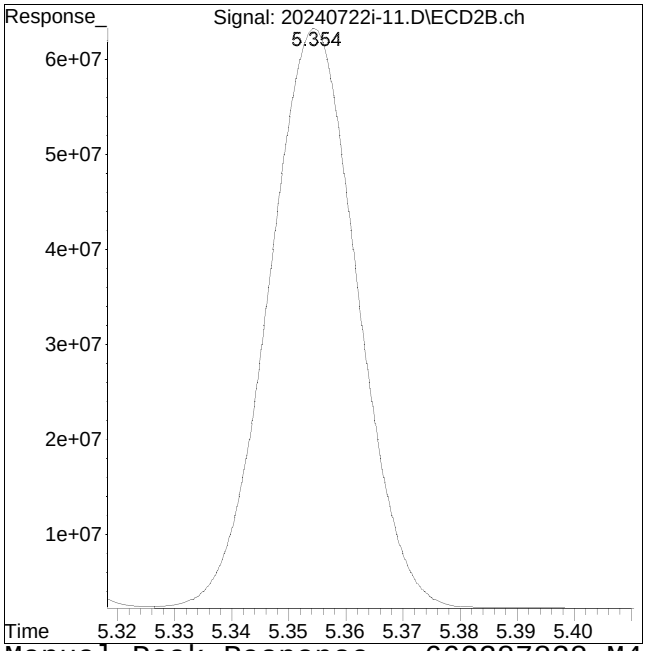
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #54: Endosulfan I #2




Original Peak Response = 661864942



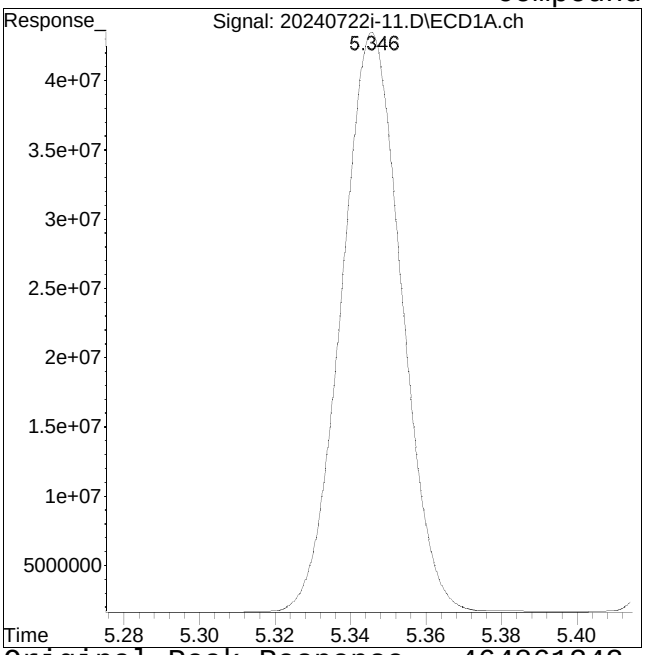

Manual Peak Response = 662387838 M4

M4 = Poor automated baseline construction.

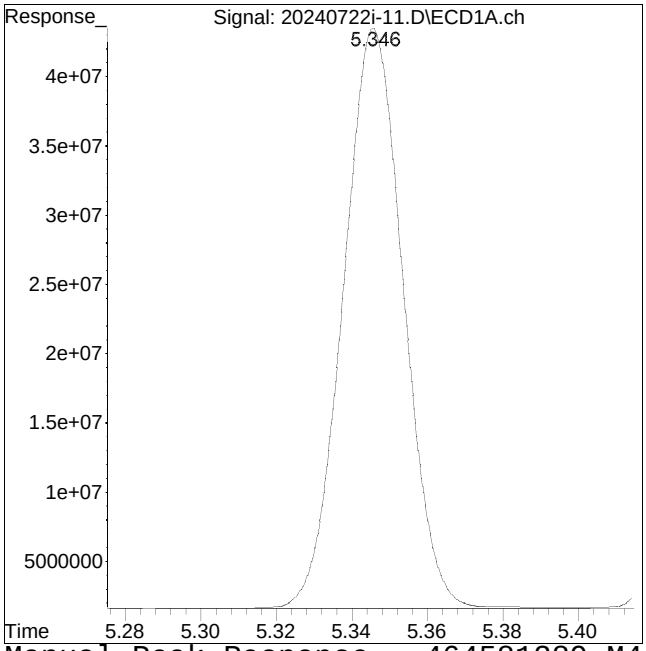
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #18: Endrin




Original Peak Response = 464861342



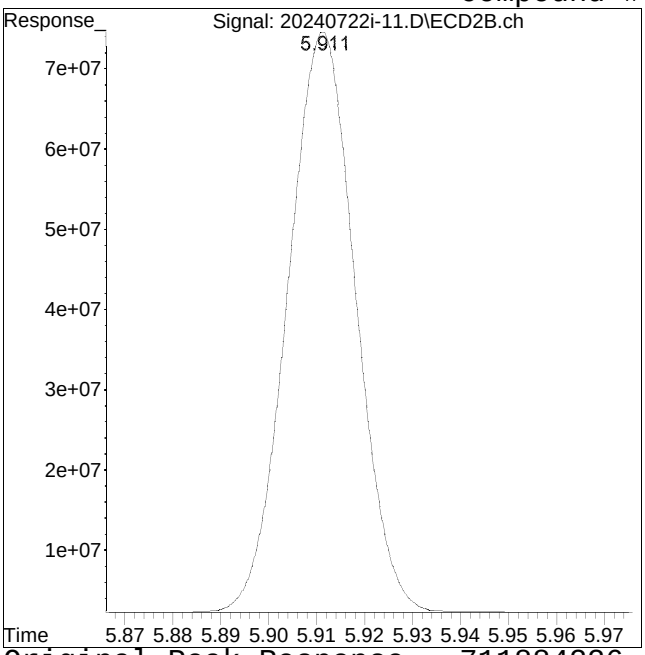

Manual Peak Response = 464581289 M4

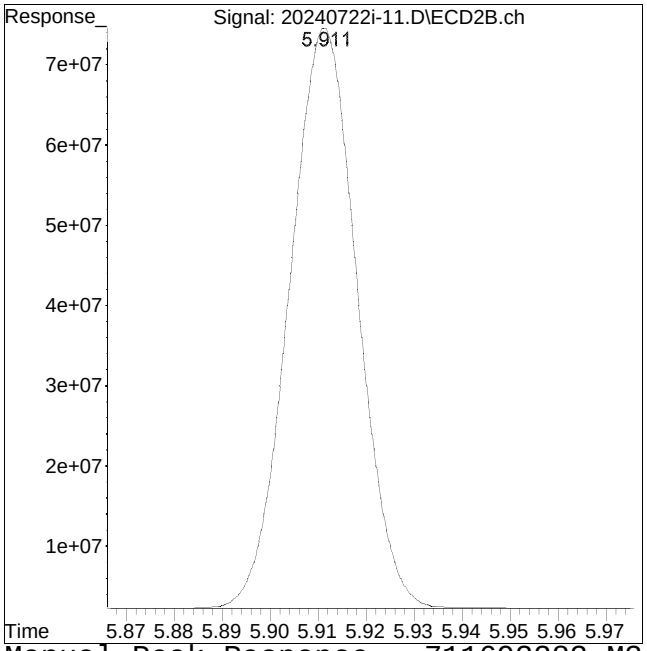
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #56: Endrin #2



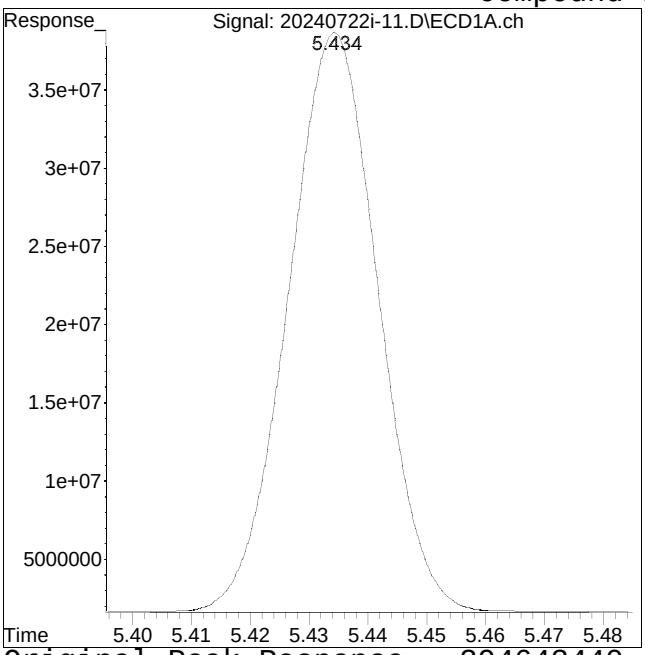




Original Peak Response = 711884226 Manual Peak Response = 711693283 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

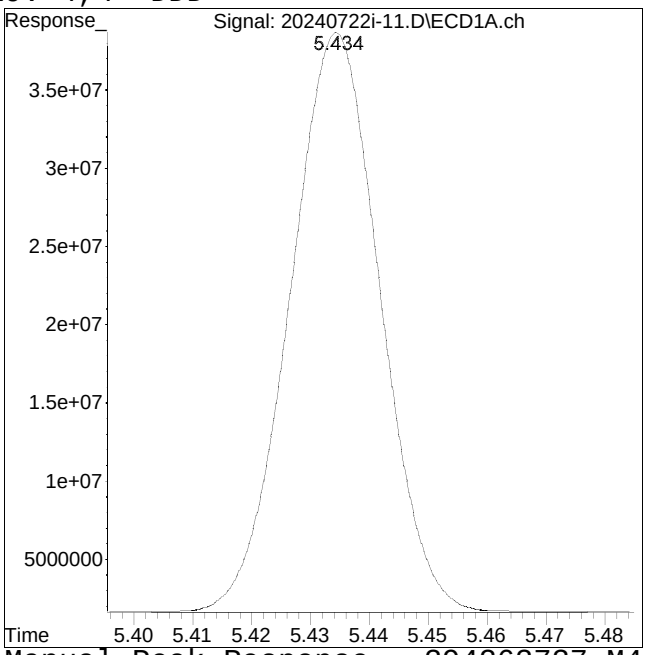
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #19: 4,4'-DDD




Original Peak Response = 394643440



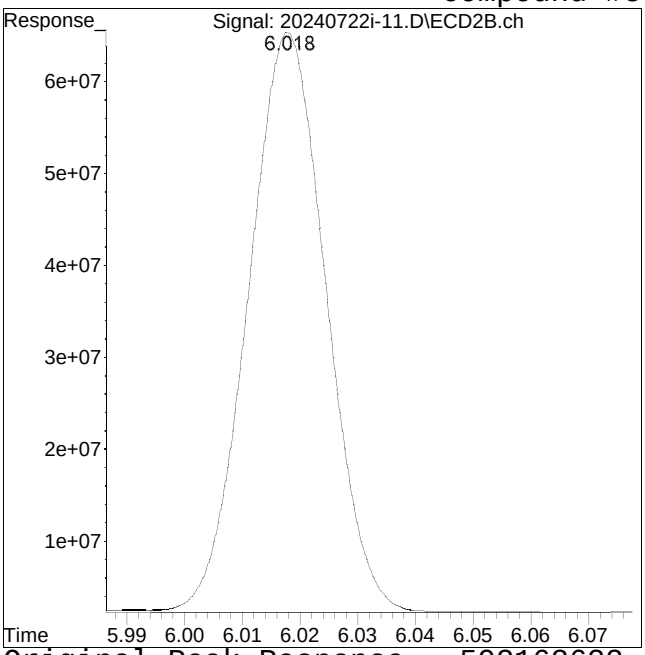

Manual Peak Response = 394263737 M4

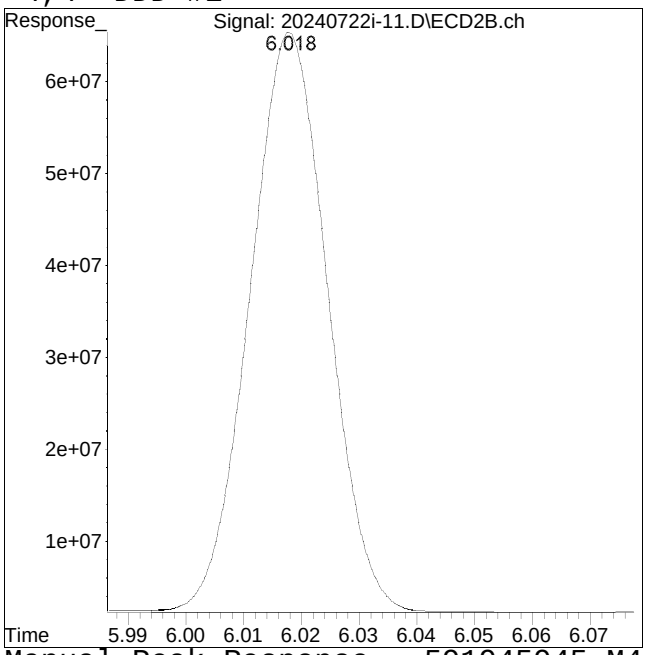
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #57: 4,4'-DDD #2



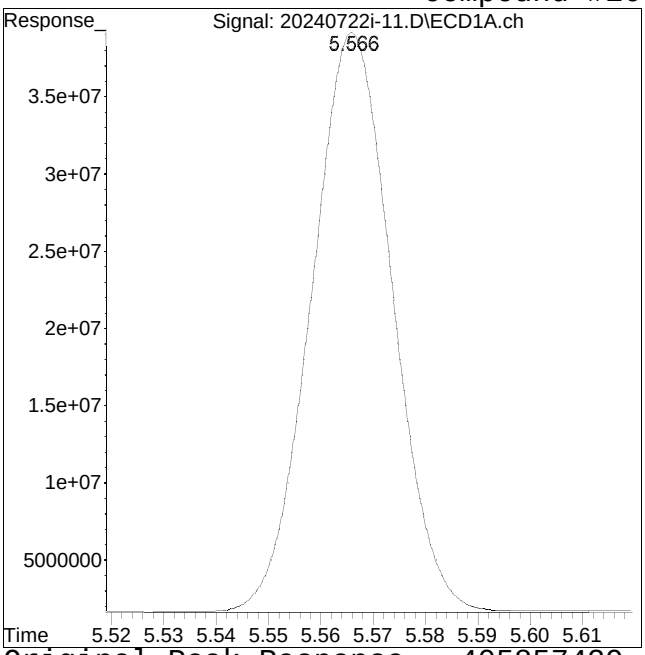




Original Peak Response = 592162622 Manual Peak Response = 591945945 M4
M4 = Poor automated baseline construction.

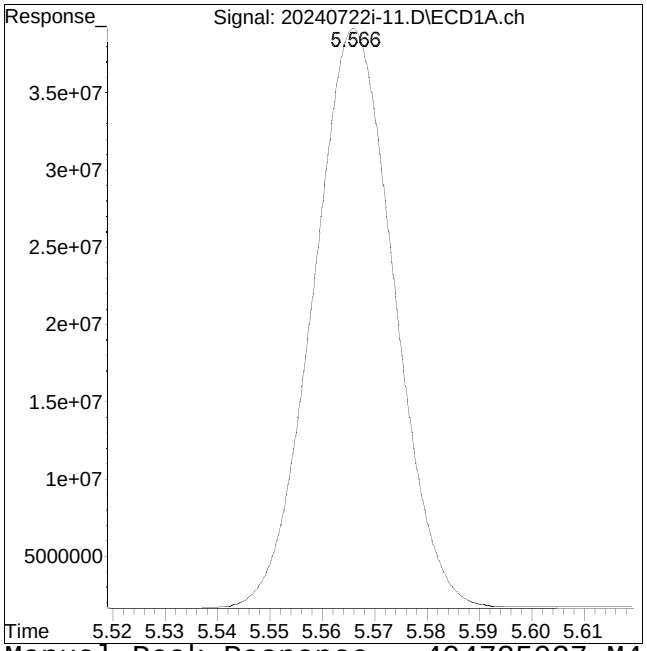
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #20: Endosulfan II




Original Peak Response = 405857429




Manual Peak Response = 404735037 M4

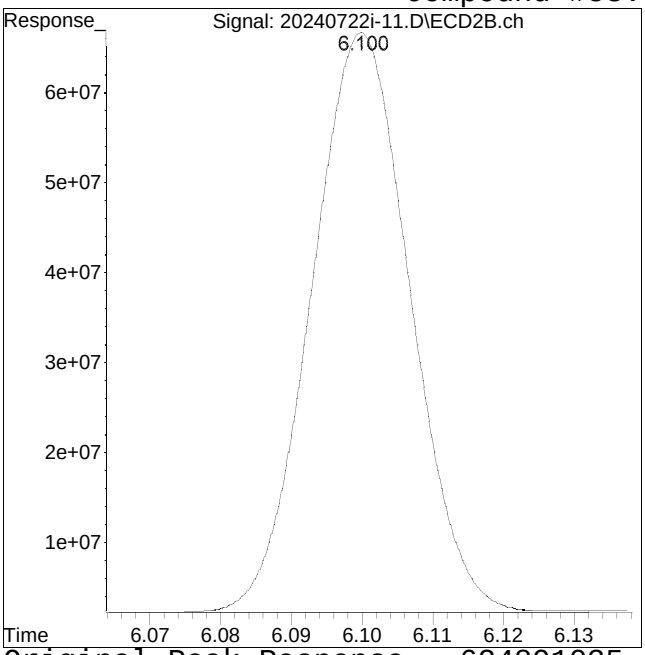
M4 = Poor automated baseline construction.

# Manual Integration Report

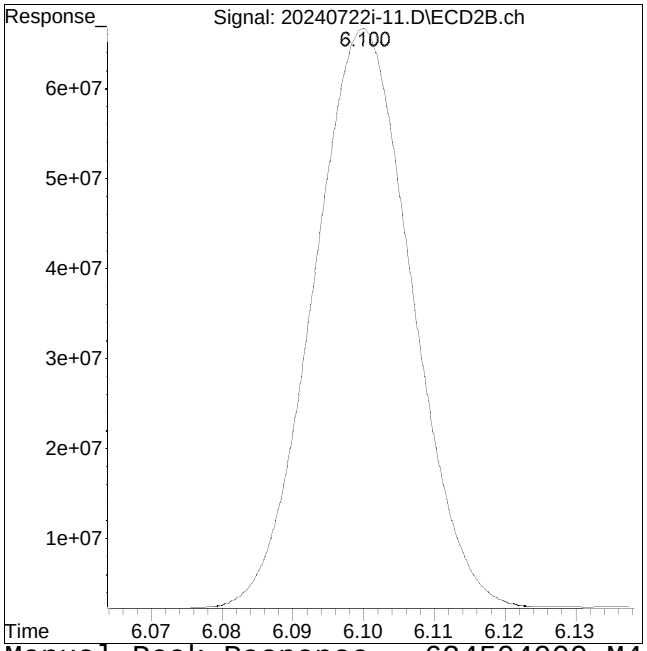
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #58: Endosulfan II #2




Original Peak Response = 624891035



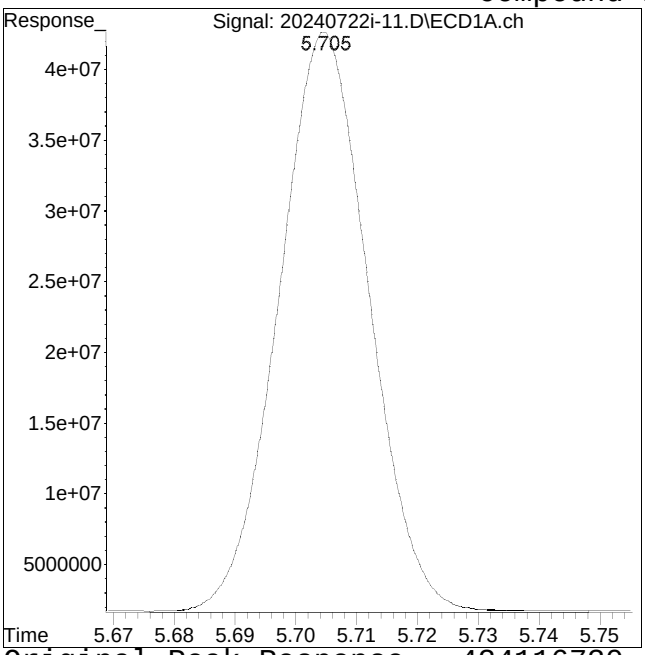

Manual Peak Response = 624504000 M4

M4 = Poor automated baseline construction.

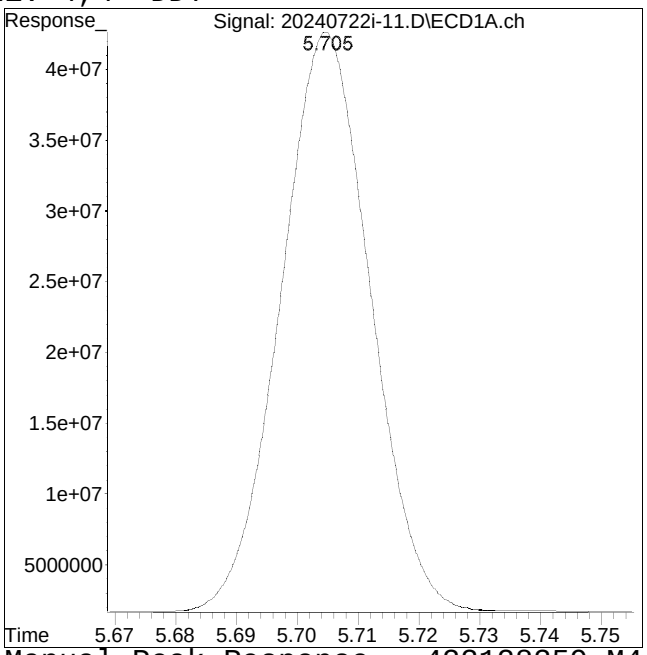
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #21: 4,4'-DDT




Original Peak Response = 424116730



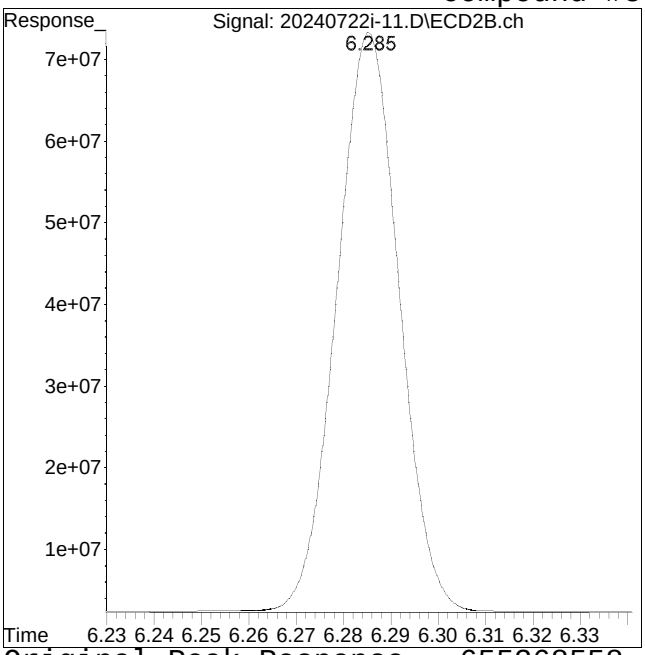

Manual Peak Response = 422128359 M4

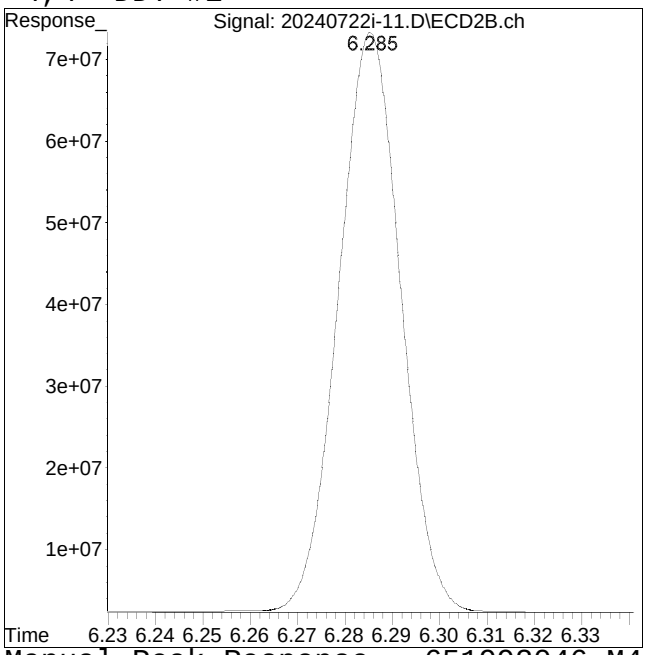
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #59: 4,4'-DDT #2



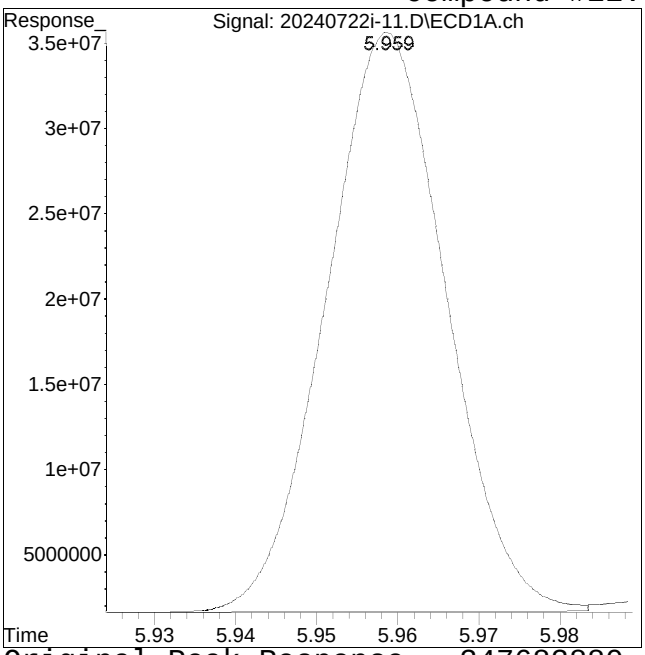



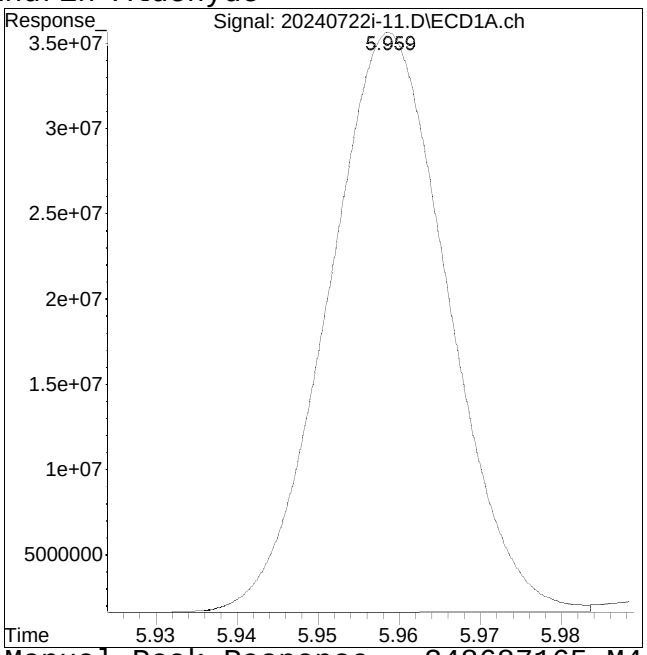

Original Peak Response = 655368558 Manual Peak Response = 651992046 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #22: Endrin Aldehyde



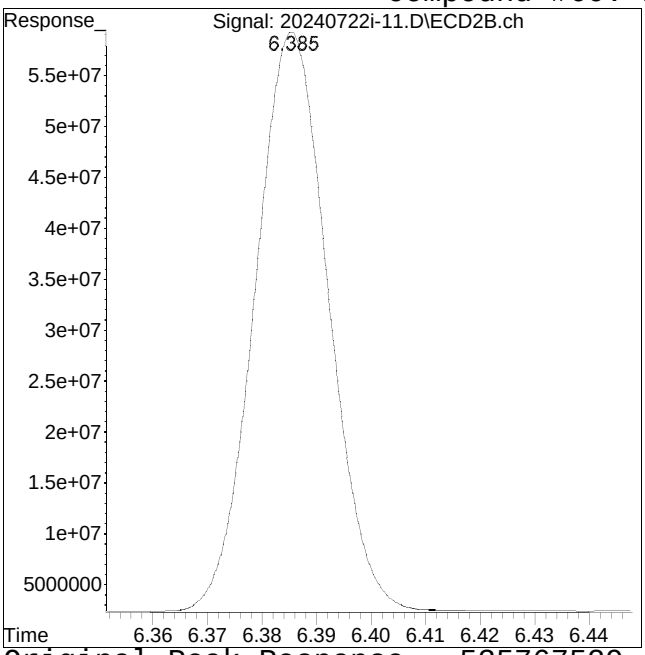

Original Peak Response = 347683880 Manual Peak Response = 348687165 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

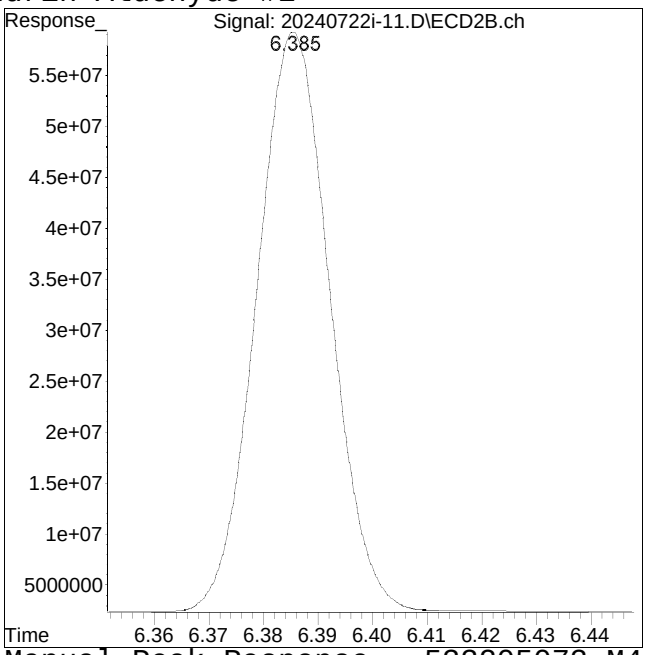
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #60: Endrin Aldehyde #2




Original Peak Response = 535767529



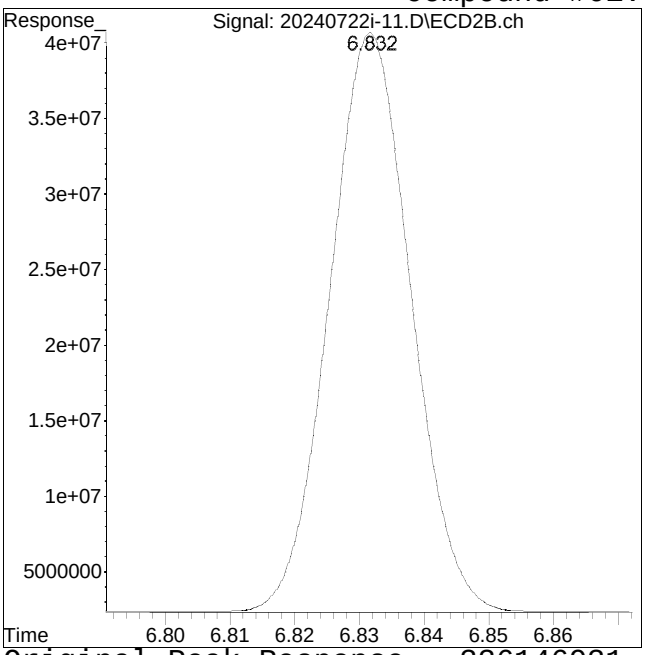

Manual Peak Response = 533205073 M4

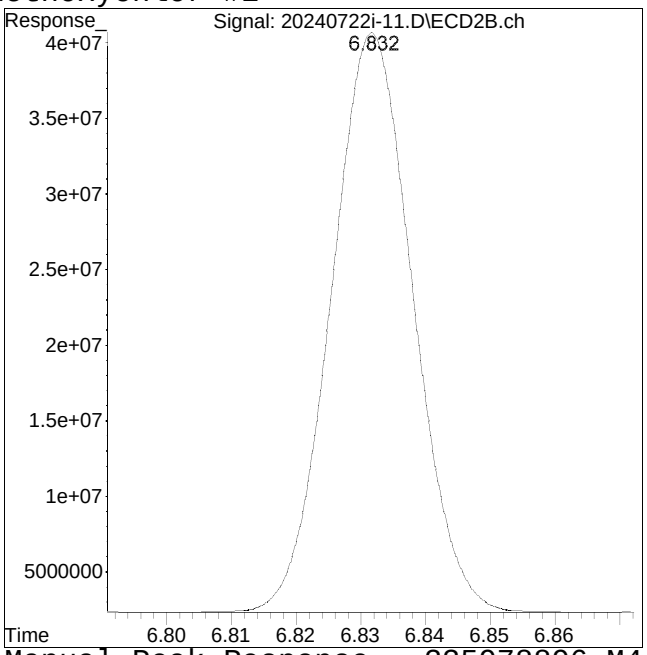
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #61: Methoxychlor #2



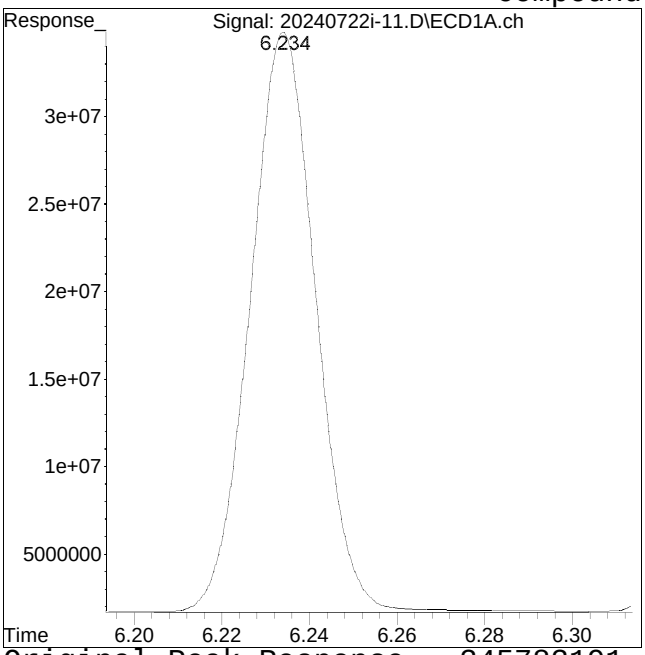



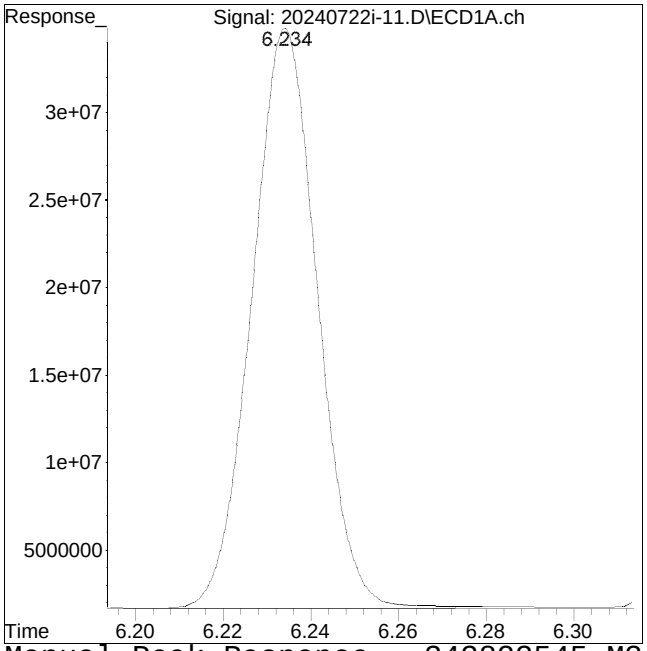

Original Peak Response = 336146931 Manual Peak Response = 335978896 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #24: Mirex



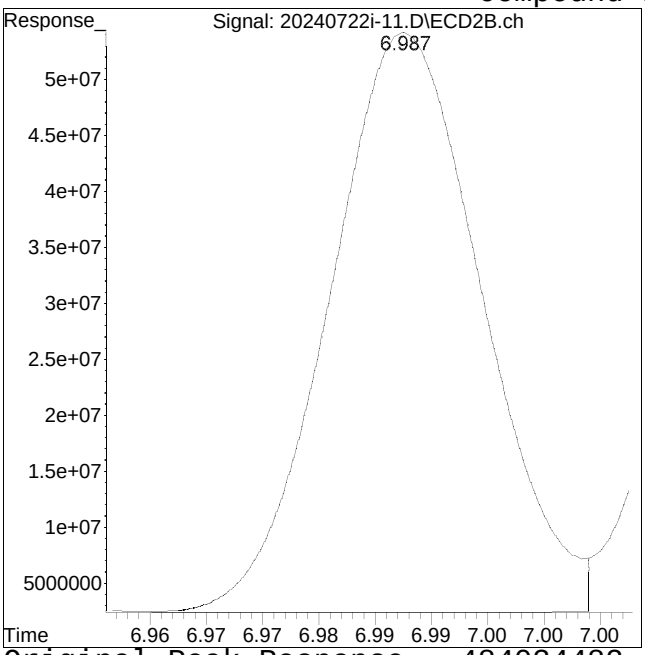



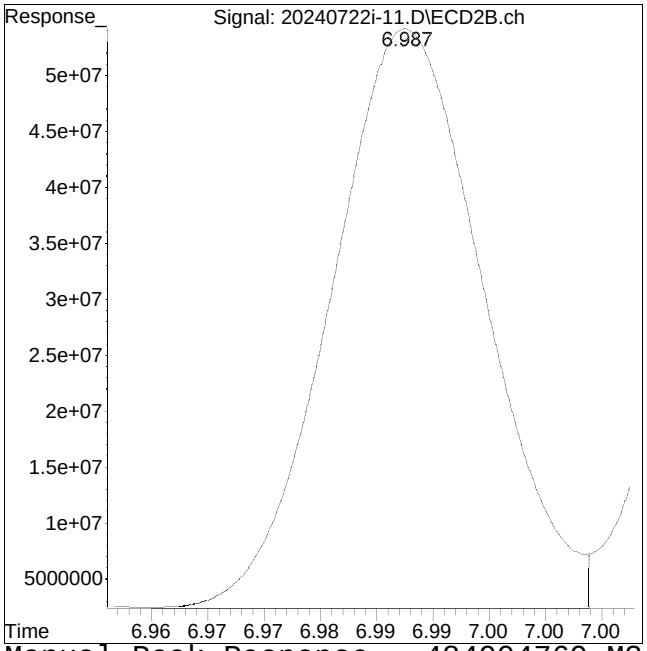

Original Peak Response = 345783191 Manual Peak Response = 343823545 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #62: Mirex #2



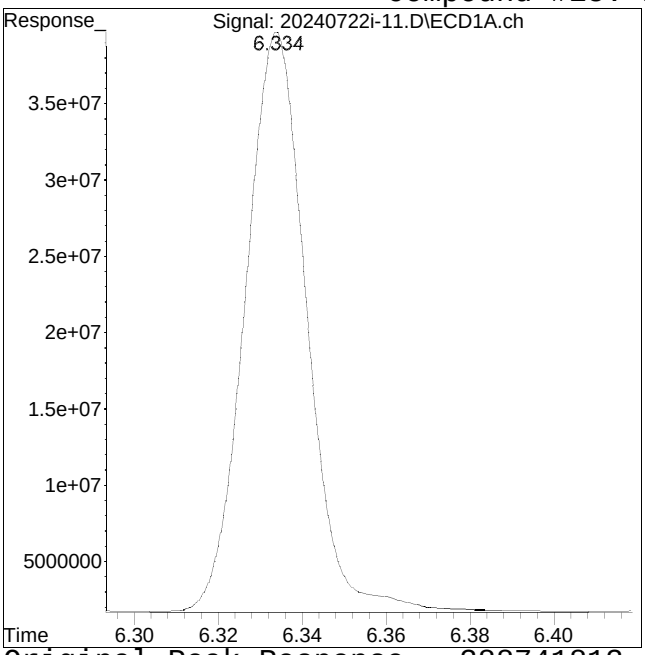



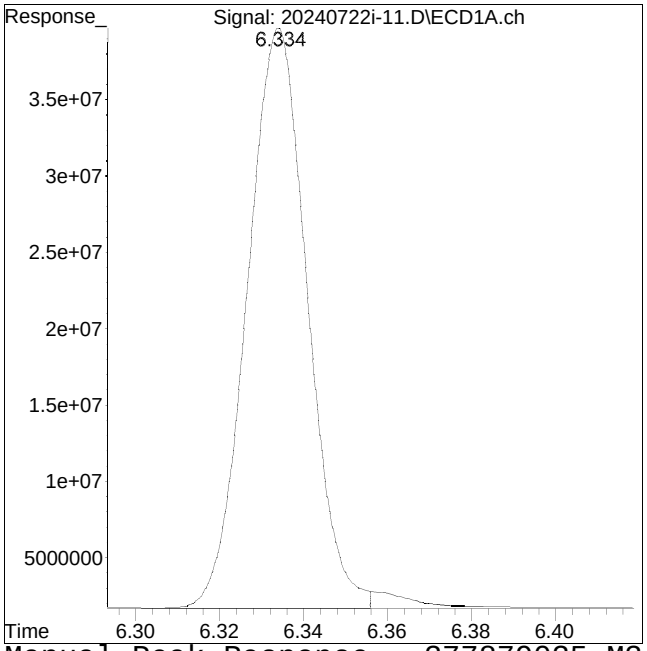

Original Peak Response = 484034482 Manual Peak Response = 484904769 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #25: Endosulfan Sulfate



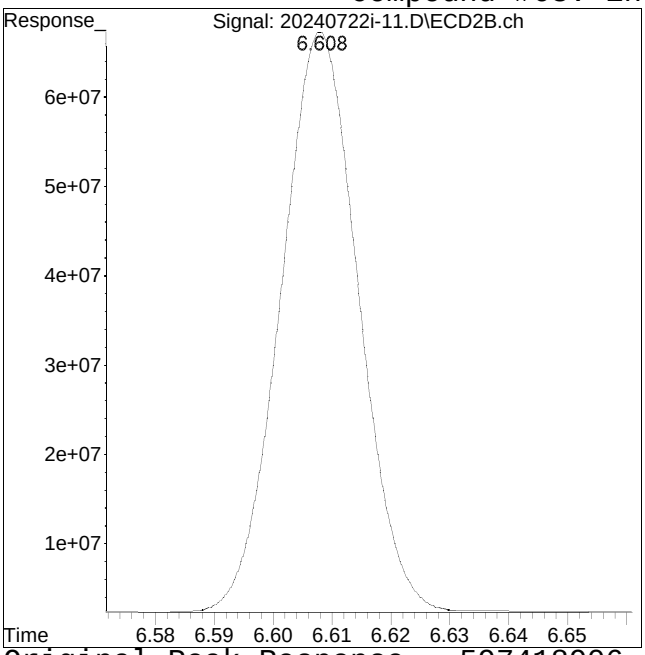

Original Peak Response = 388741813 Manual Peak Response = 377879035 M3

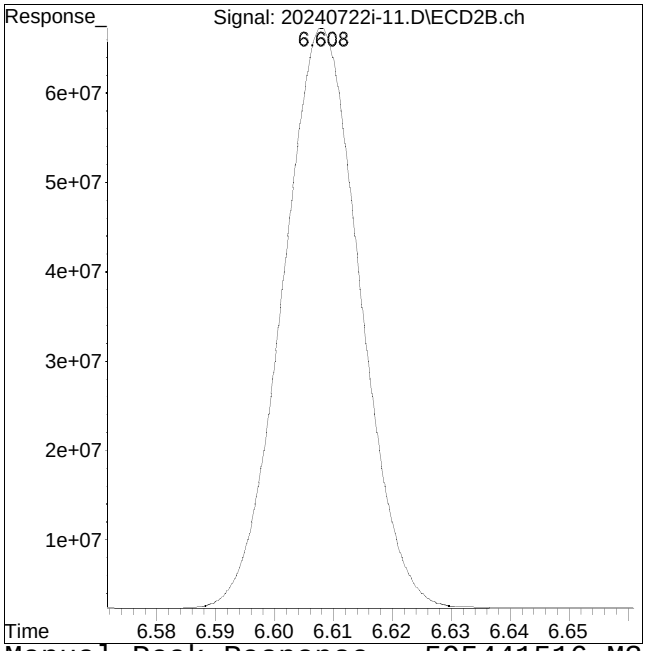
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

Compound #63: Endosulfan Sulfate #2



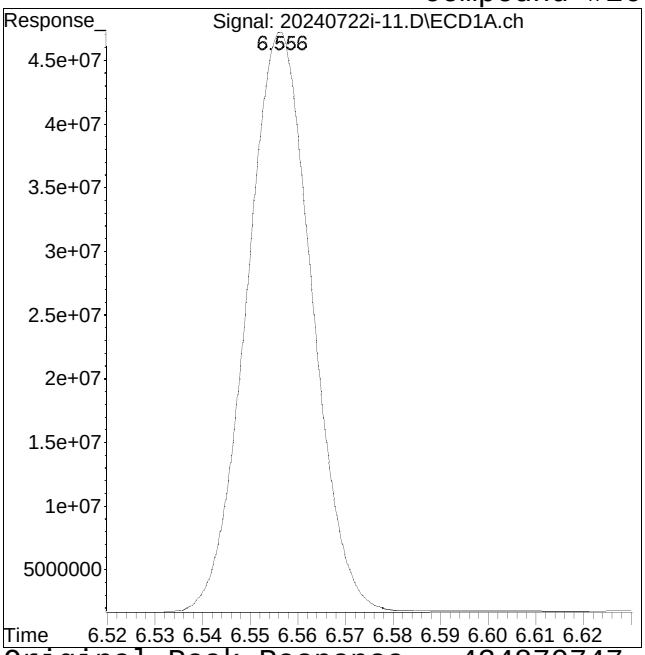




Original Peak Response = 597418906 Manual Peak Response = 595441516 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

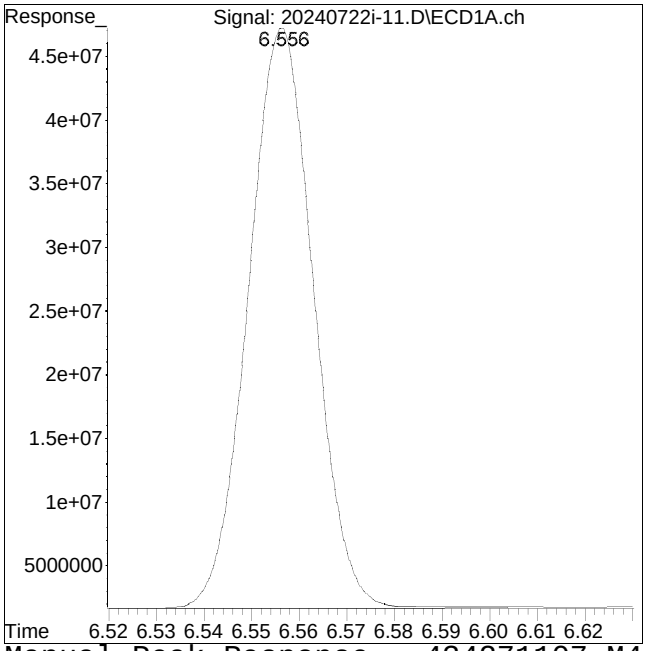
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-11.D
Date Inj'd : 7/22/2024 19:48
Sample : il10pest,42e,,pp 11679 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:50 pm

## Compound #26: Endrin Ketone




Original Peak Response = 434870747



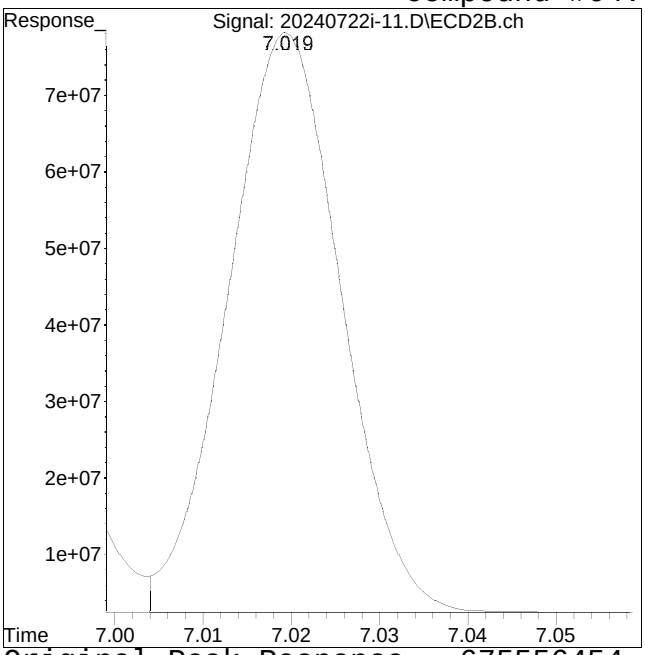

Manual Peak Response = 434271107 M4

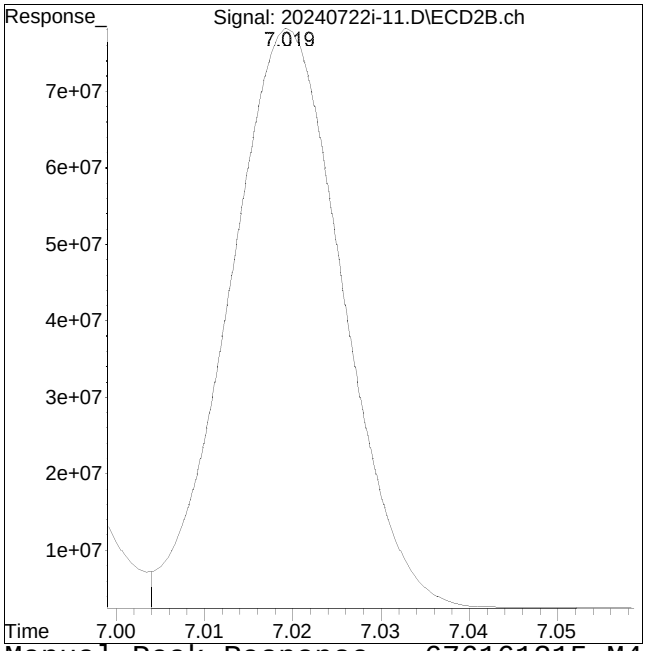
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-11.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 19:48 Instrument : PEST 20
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 7/23/2024 12:50 pm

## Compound #64: Endrin Ketone #2




Original Peak Response = 675556454 Manual Peak Response = 676161215 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-12.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:01
Operator : pest20:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:56:03 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:55:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 2.007 | 2.063 | 51778957 | 80973288 | 25.000M4 | 25.000 |
| 28) | i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) | i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | System Monitoring Compounds | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 2.473 | 2.663 | 873.9E6 | 1390.8E6 | 374.961M3 | 384.614 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 749.92%# | 769.23%# |
| 27) | s | Decachlorobi | 7.337 | 7.907 | 808.7E6 | 1063.0E6 | 362.667M4 | 368.387 |
| | | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 725.33%# | 736.77%# |
| | | Target Compounds | | | | | | |
| 3) | | Hexachlorobe | 2.740 | 3.040 | 899.9E6 | 1407.3E6 | 373.883 | 382.812 |
| 4) | | alpha-BHC | 2.863 | 3.152 | 1231.6E6 | 2002.8E6 | 392.092M4 | 403.295 |
| 5) | | gamma-BHC (l | 3.107 | 3.477 | 1106.8E6 | 1805.3E6 | 389.551M4 | 400.878 |
| 6) | | beta-BHC | 3.174 | 3.550 | 493.4E6 | 791.1E6 | 376.377M3 | 386.283M3 |
| 7) | | delta-BHC | 3.325 | 3.847 | 1138.1E6 | 1866.3E6 | 396.357 | 408.132M4 |
| 8) | | Heptachlor | 3.513 | 3.917 | 1036.6E6 | 1618.1E6 | 381.418M4 | 388.613M4 |
| 9) | | Aldrin | 3.792 | 4.267 | 1035.0E6 | 1561.6E6 | 388.288 | 395.919 |
| 10) | | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | | Heptachlor E | 4.407 | 4.929 | 935.5E6 | 1455.1E6 | 382.512M3 | 390.278 |
| 13) | | gamma-Chlord | 4.544 | 5.140 | 869.4E6 | 1306.9E6 | 389.255M4 | 397.011M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-12.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:01
Operator : pest20:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:56:03 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:55:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 14) | | alpha-Chlord | 4.693 | 5.296 | 971.5E6 | 1440.5E6 | 386.129M4 | 393.469M4 |
| 15) | | 4,4'-DDE | 4.794 | 5.474 | 1004.1E6 | 1466.3E6 | 389.272M4 | 393.749 |
| 16) | | Endosulfan I | 4.845 | 5.354 | 893.0E6 | 1343.3E6 | 385.208M3 | 391.400M4 |
| 17) | | Dieldrin | 5.108 | 5.627 | 947.1E6 | 1424.3E6 | 388.755M4 | 396.897M4 |
| 18) | | Endrin | 5.345 | 5.911 | 939.7E6 | 1439.9E6 | 385.086M4 | 393.853M4 |
| 19) | | 4,4'-DDD | 5.434 | 6.018 | 798.3E6 | 1200.6E6 | 385.939M4 | 394.753M4 |
| 20) | | Endosulfan I | 5.565 | 6.100 | 815.7E6 | 1255.7E6 | 380.859M4 | 387.626M4 |
| 21) | | 4,4'-DDT | 5.704 | 6.285 | 850.8E6 | 1314.3E6 | 381.523M4 | 388.703M4 |
| 22) | | Endrin Aldeh | 5.958 | 6.385 | 696.8E6 | 1067.1E6 | 377.112M4 | 385.885M3 |
| 23) | | Methoxychlor | 6.154 | 6.833 | 437.9E6 | 655.2E6 | 356.151M4 | 363.188M4 |
| 24) | | Mirex | 6.234 | 6.989 | 683.1E6 | 974.8E6 | 364.608M3 | 372.961M4 |
| 25) | | Endosulfan S | 6.333 | 6.608 | 759.8E6 | 1200.3E6 | 376.557M3 | 385.739M3 |
| 26) | | Endrin Keton | 6.556 | 7.021 | 866.2E6 | 1349.7E6 | 373.431M4 | 381.166M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | chlordane-1 | | | | | 0.000 | 0.000 |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-12.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:01
Operator : pest20:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:56:03 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:55:55 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

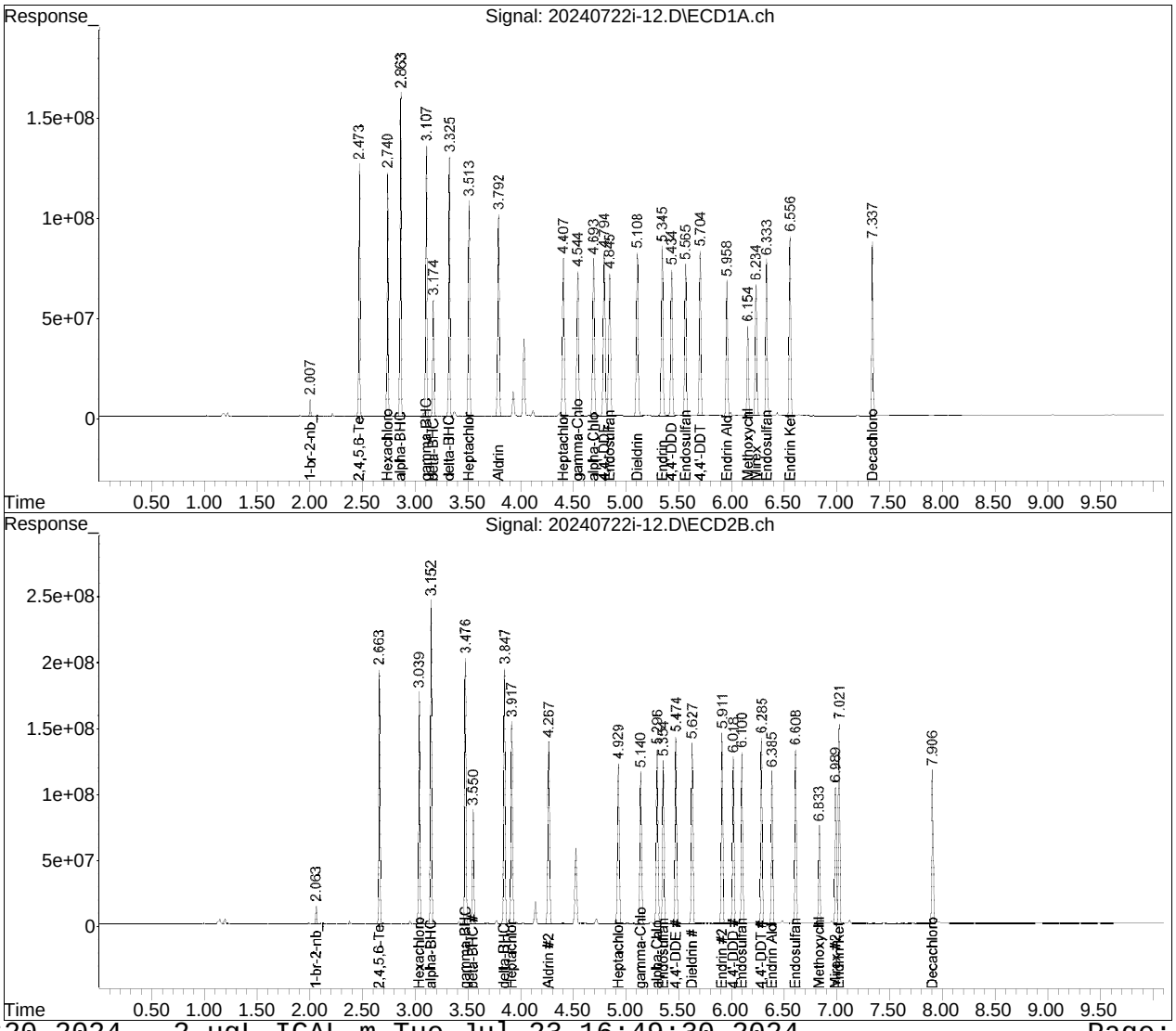
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-12.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:01
Operator : pest20:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 12:56:03 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 12:55:55 2024
Response via : Initial Calibration
Integrator: ChemStation

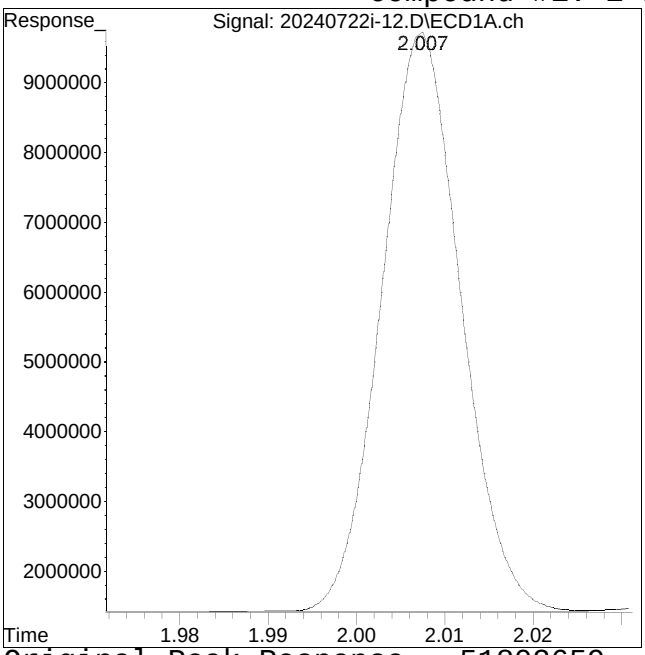
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



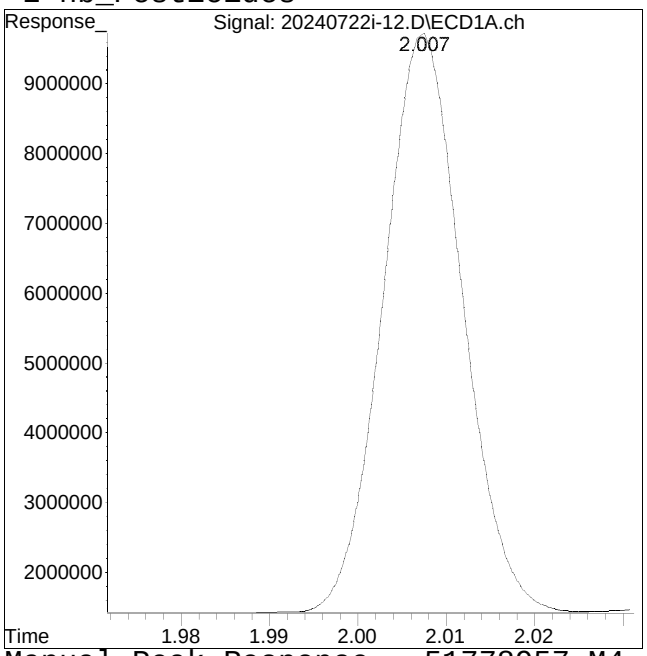
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 51802659



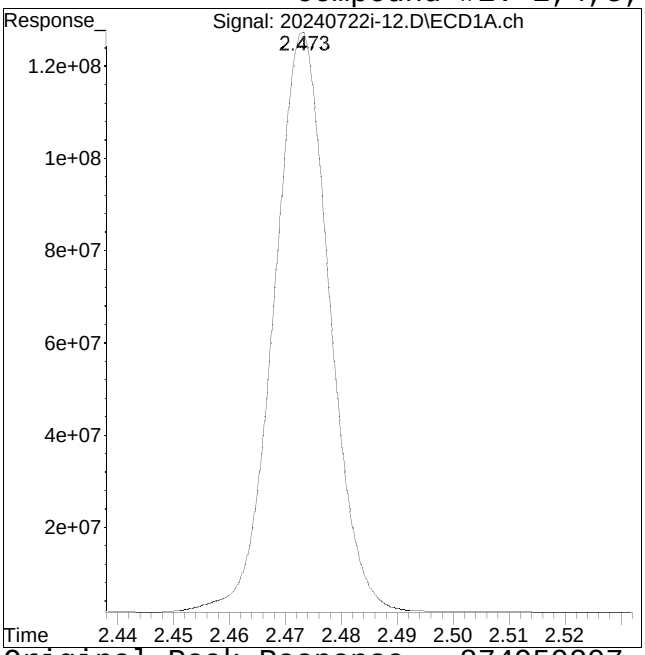

Manual Peak Response = 51778957 M4

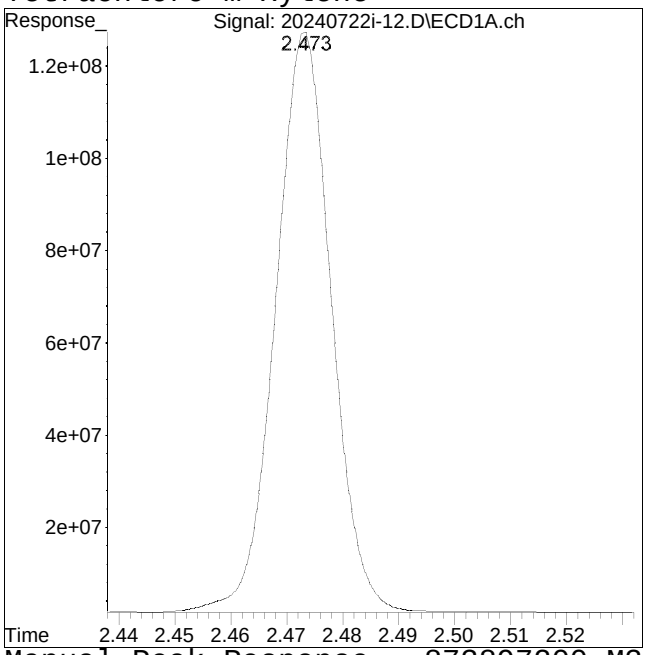
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



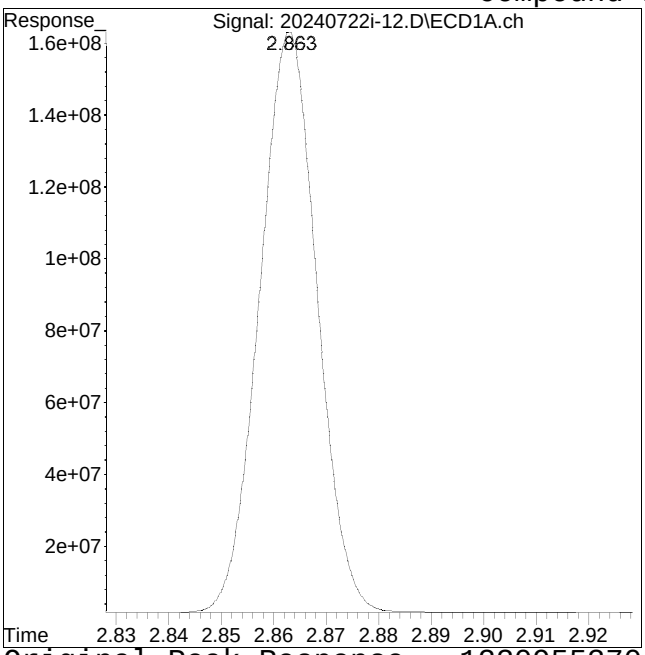




Original Peak Response = 874959207 Manual Peak Response = 873897200 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

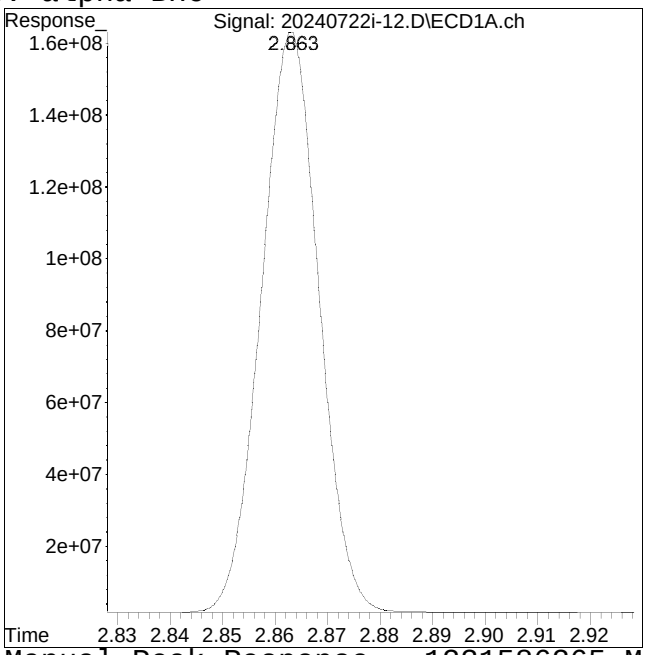
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #4: alpha-BHC




Original Peak Response = 1230955370




Manual Peak Response = 1231586265 M4

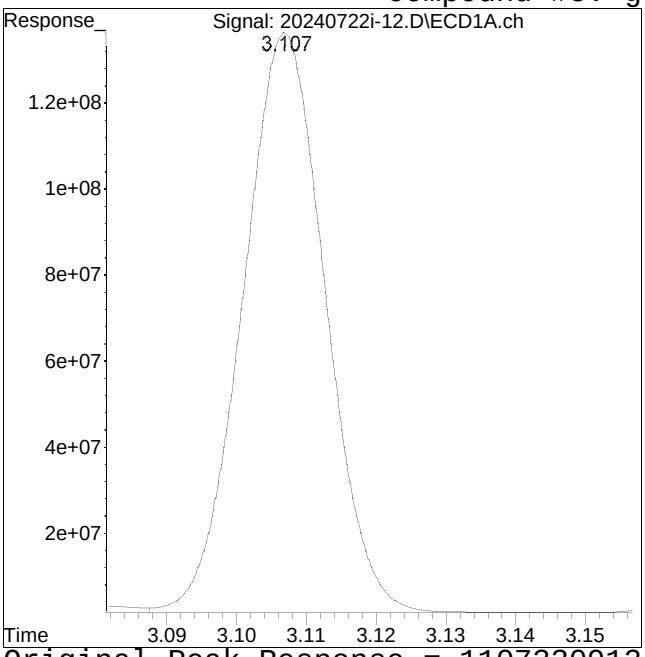
M4 = Poor automated baseline construction.

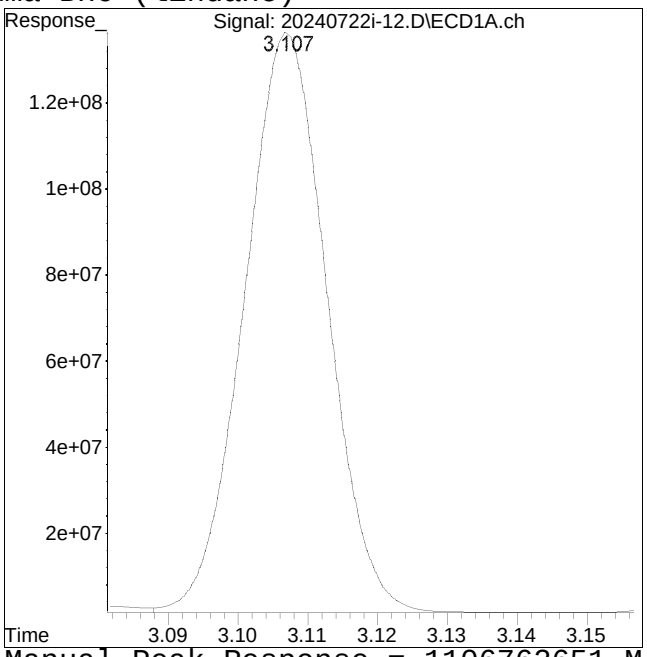
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #5: gamma-BHC (lindane)



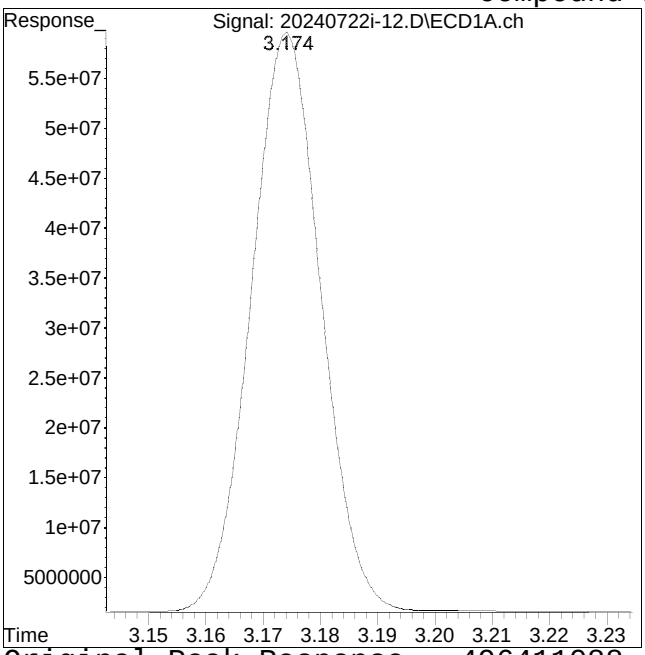



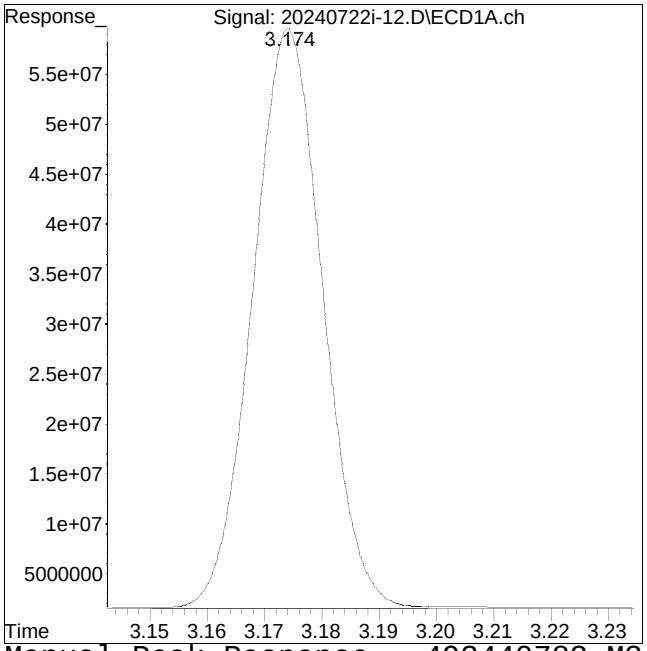

Original Peak Response = 1107330913 Manual Peak Response = 1106762651 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #6: beta-BHC



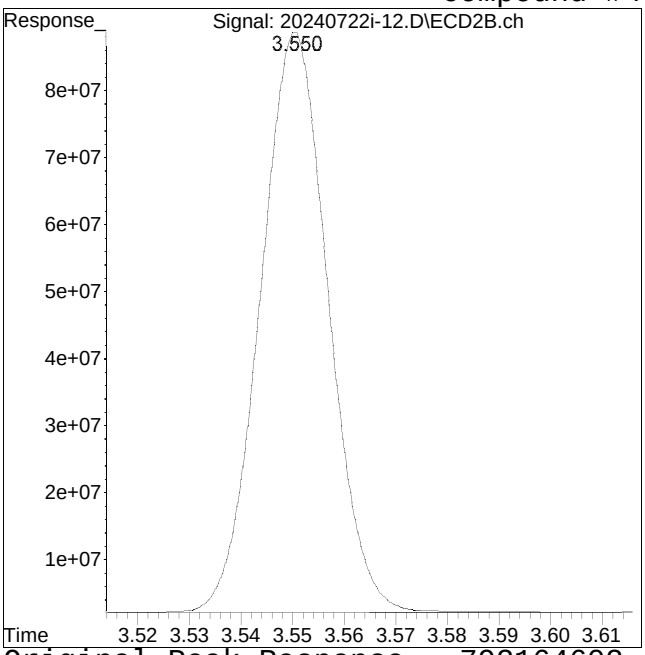



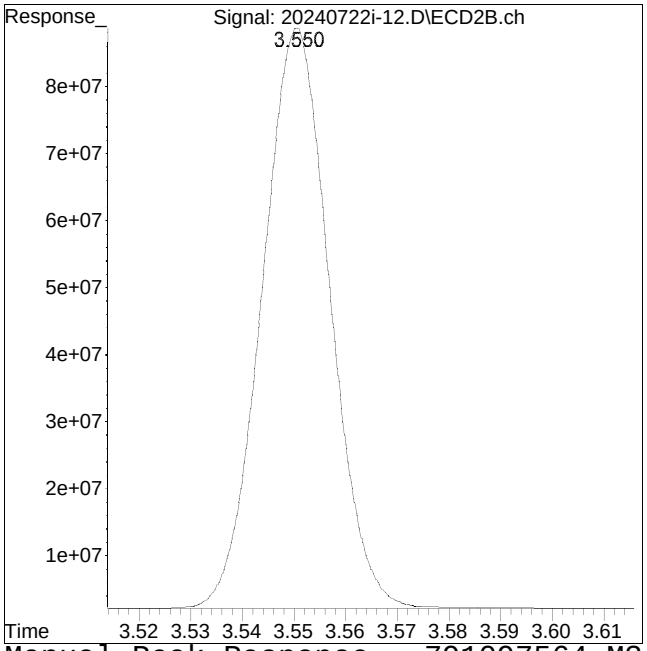

Original Peak Response = 496411088 Manual Peak Response = 493440783 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #44: beta-BHC #2



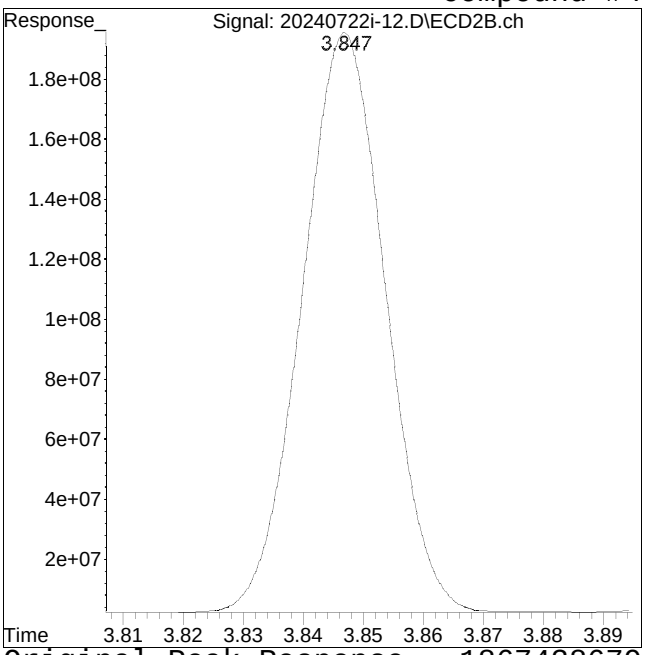



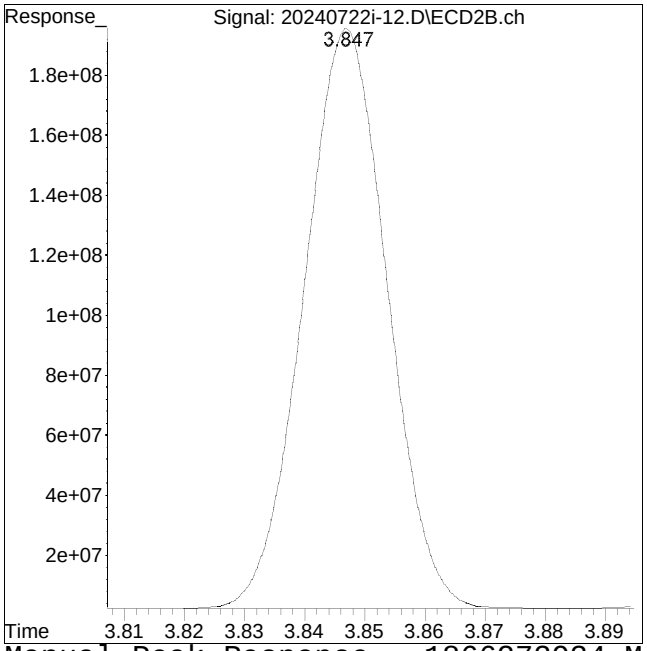

Original Peak Response = 792164602 Manual Peak Response = 791097564 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #45: delta-BHC #2



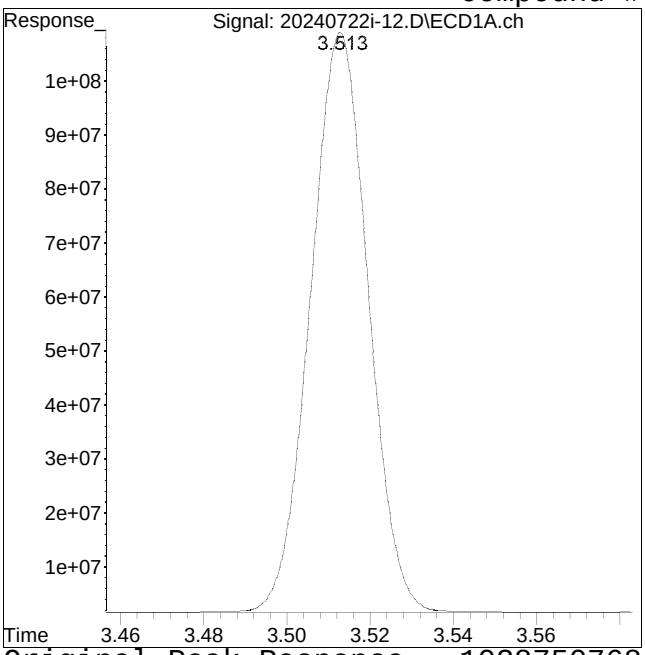



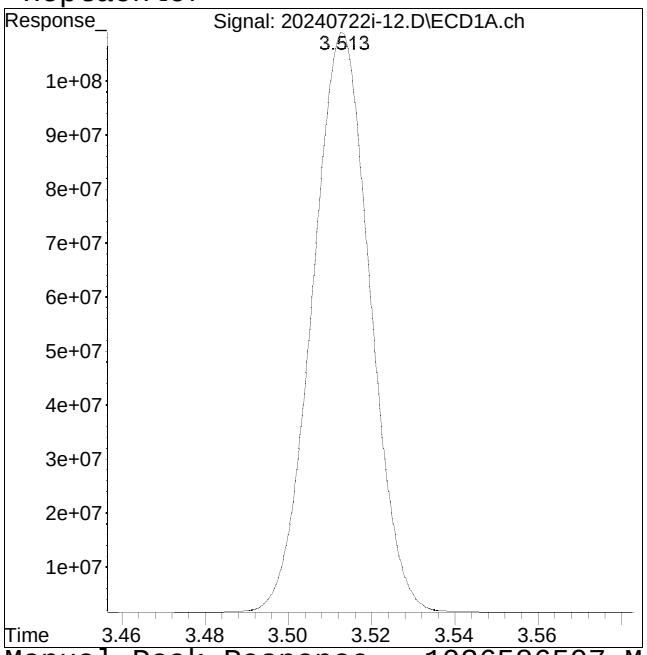

Original Peak Response = 1867438679 Manual Peak Response = 1866272934 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #8: Heptachlor



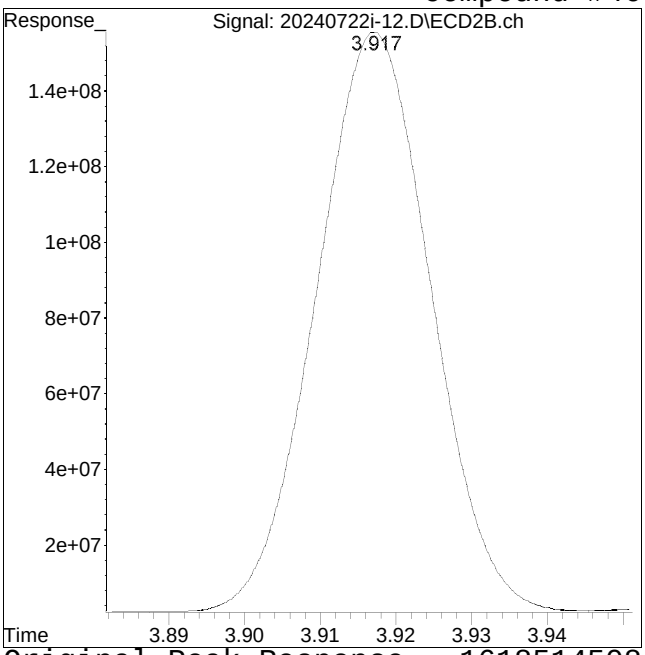



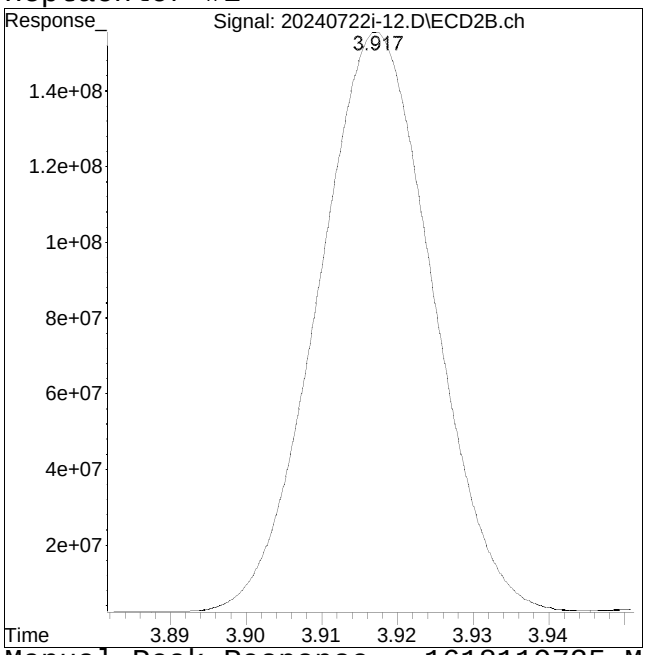

Original Peak Response = 1038750768 Manual Peak Response = 1036586507 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #46: Heptachlor #2



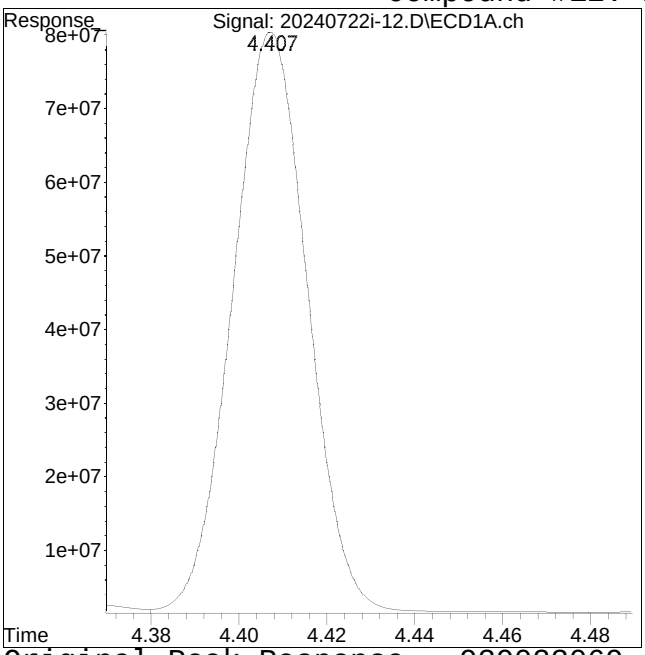



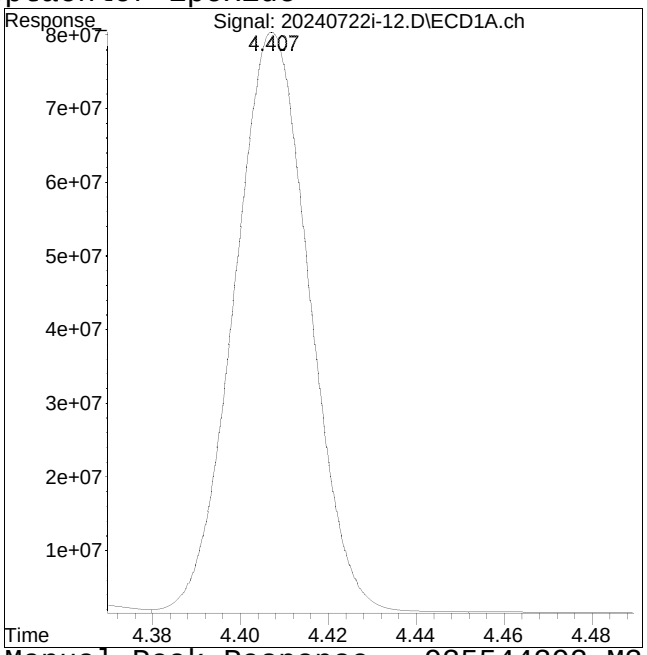

Original Peak Response = 1618514508 Manual Peak Response = 1618119725 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #12: Heptachlor Epoxide



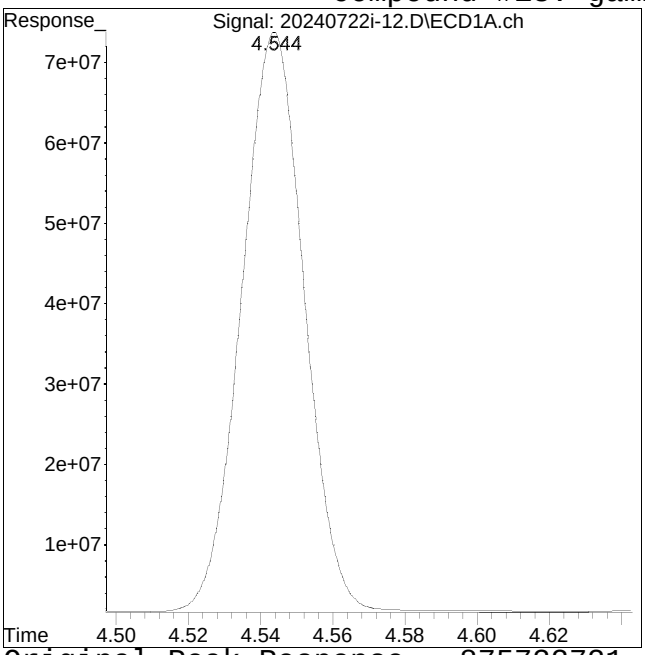



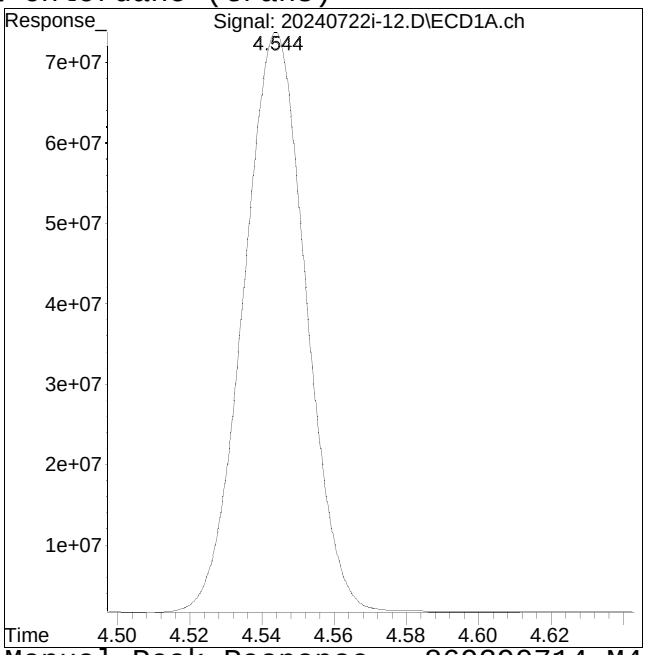

Original Peak Response = 939023069 Manual Peak Response = 935544392 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

## Compound #13: gamma-Chlordane (trans)



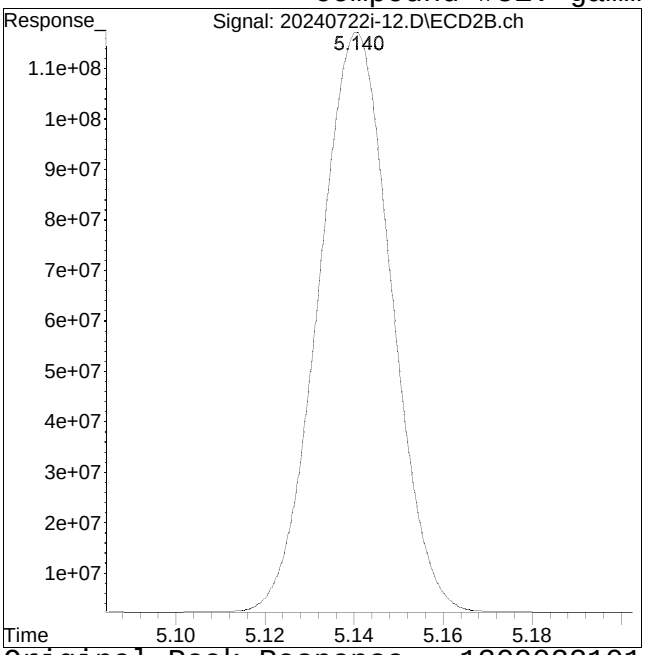



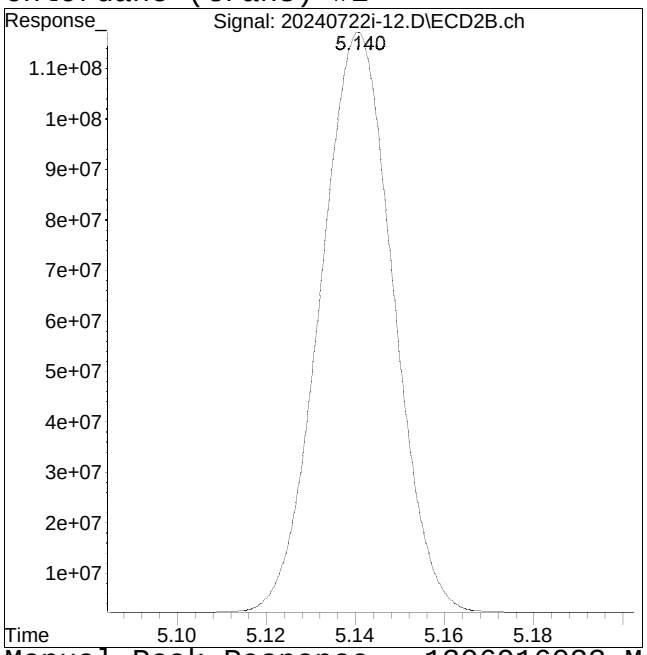

Original Peak Response = 875732721 Manual Peak Response = 869390714 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #51: gamma-Chlordane (trans) #2



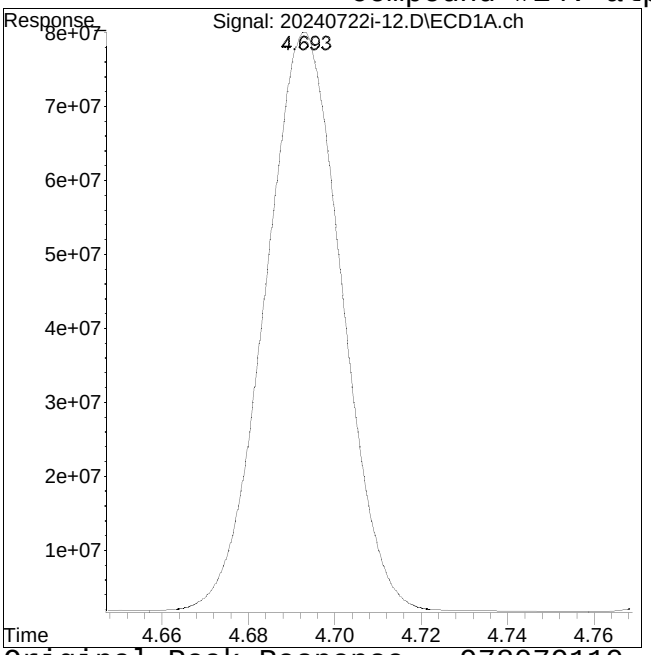



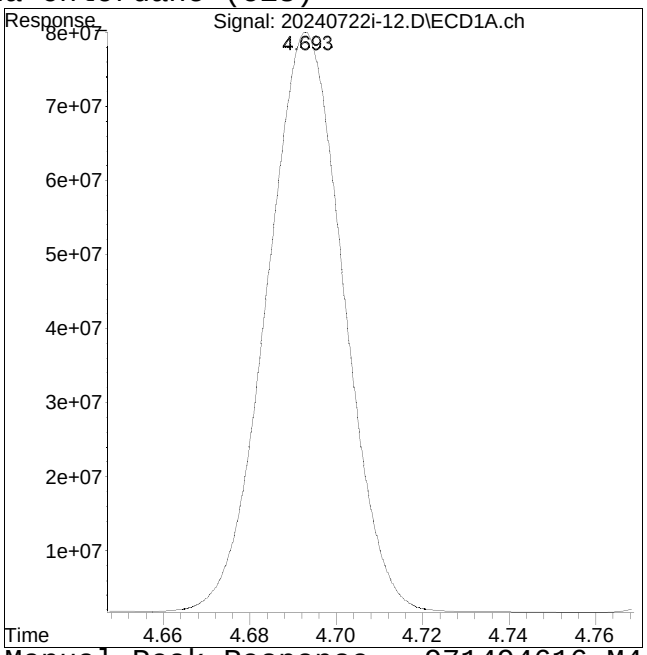

Original Peak Response = 1309023101 Manual Peak Response = 1306916023 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #14: alpha-Chlordane (cis)



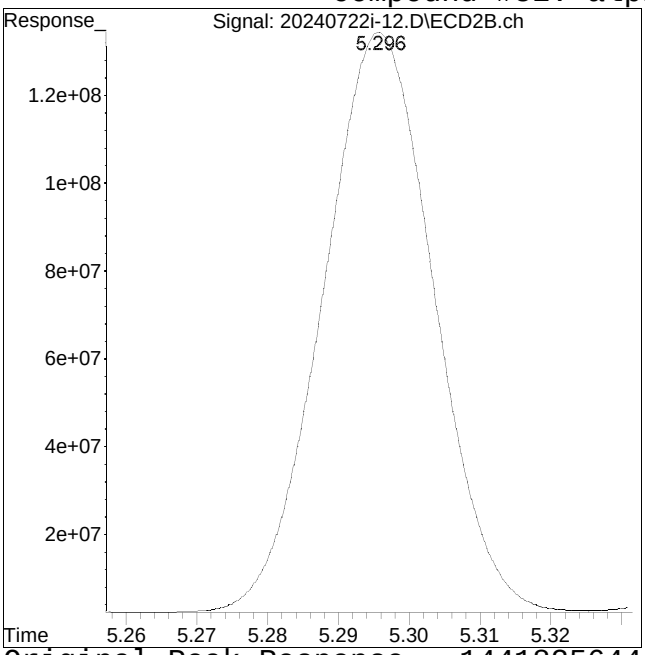



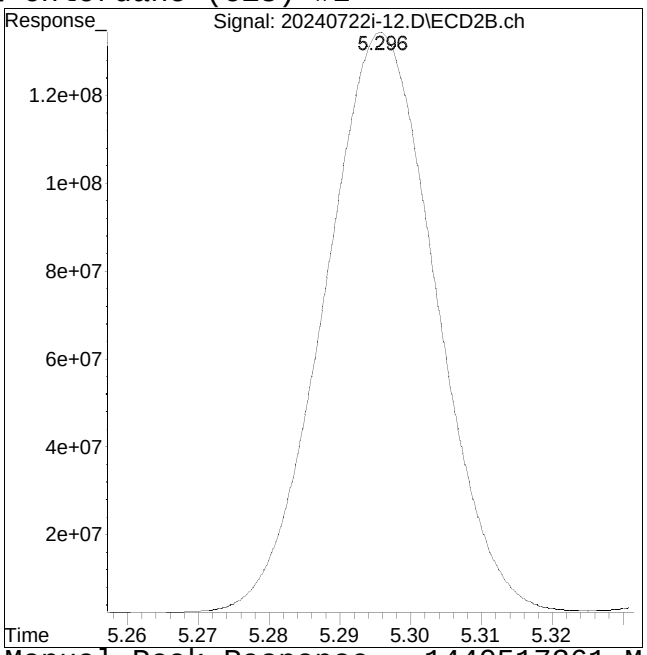

Original Peak Response = 978079110 Manual Peak Response = 971494616 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #52: alpha-Chlordane (cis) #2



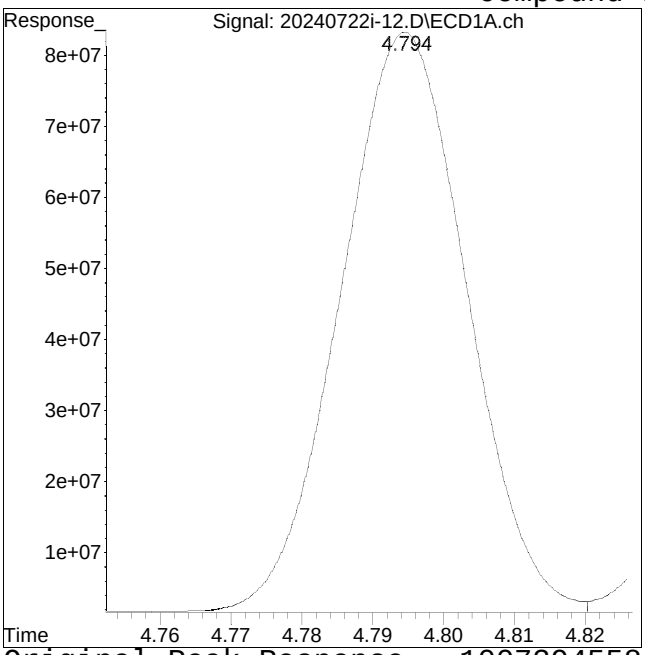



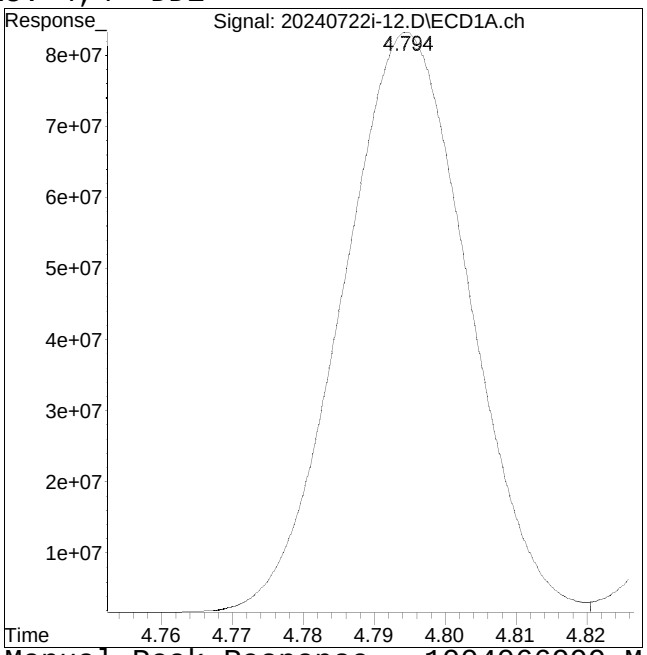

Original Peak Response = 1441825644 Manual Peak Response = 1440517361 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #15: 4,4'-DDE



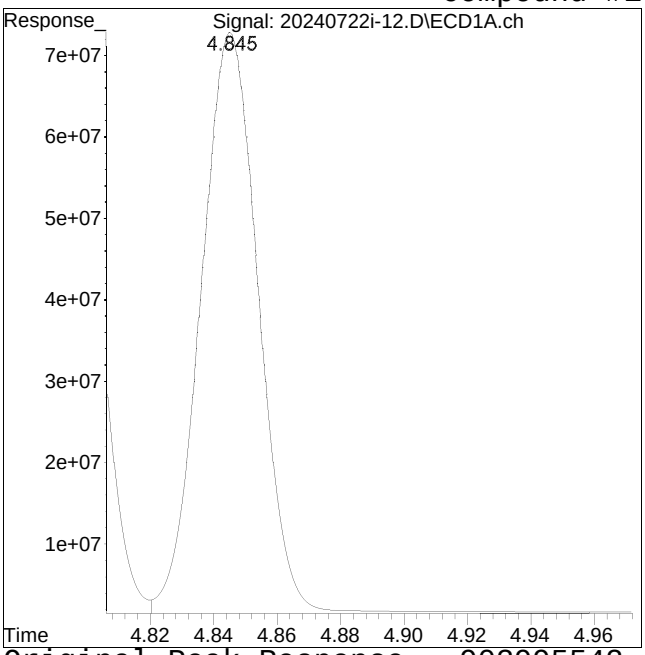



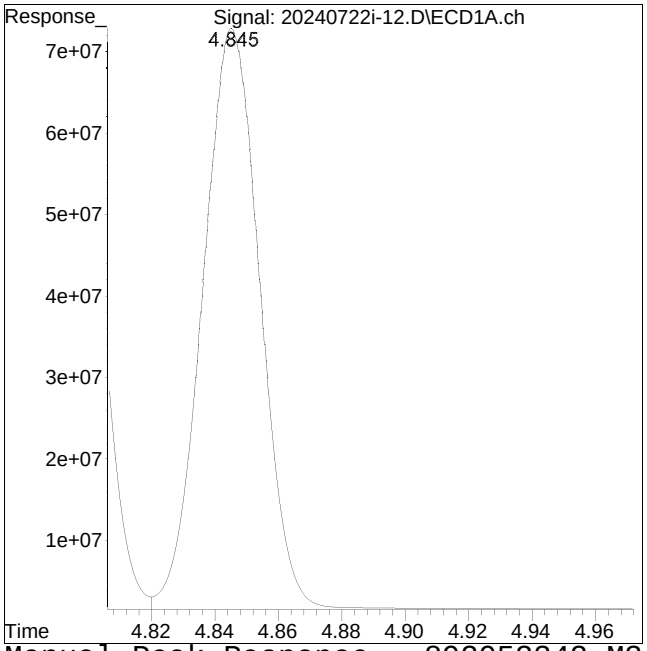

Original Peak Response = 1007394558 Manual Peak Response = 1004066999 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #16: Endosulfan I



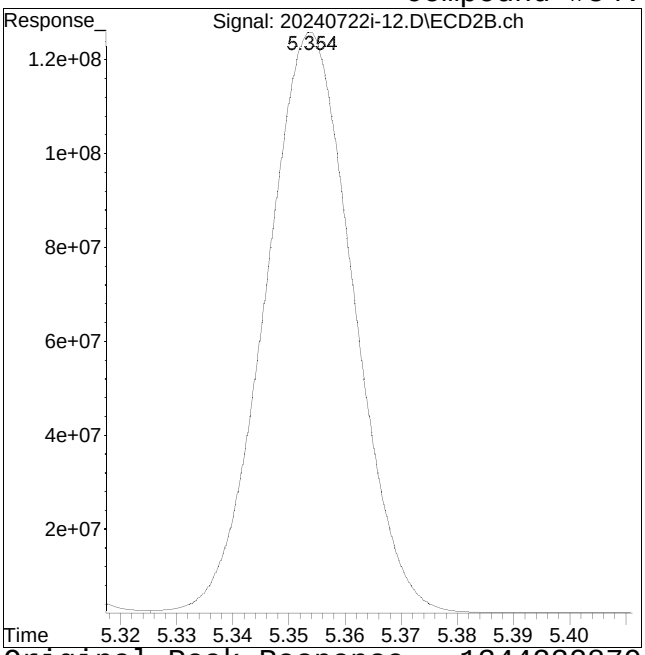



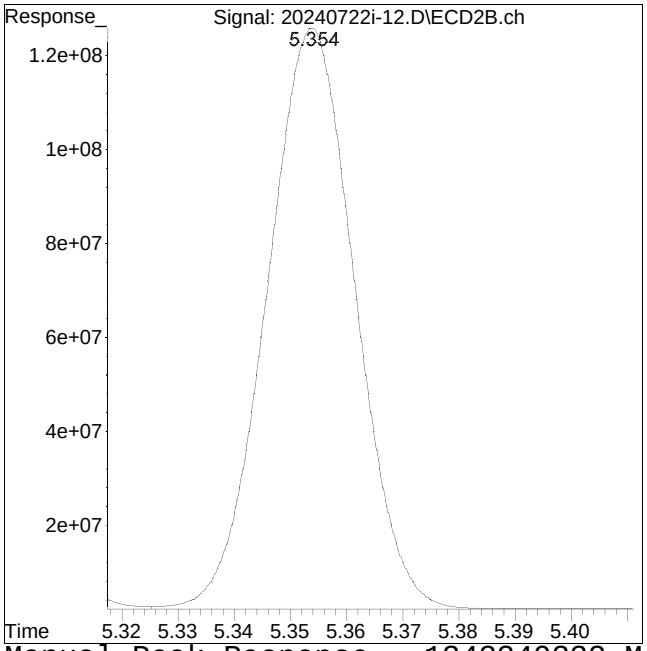

Original Peak Response = 903995542 Manual Peak Response = 892953342 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #54: Endosulfan I #2



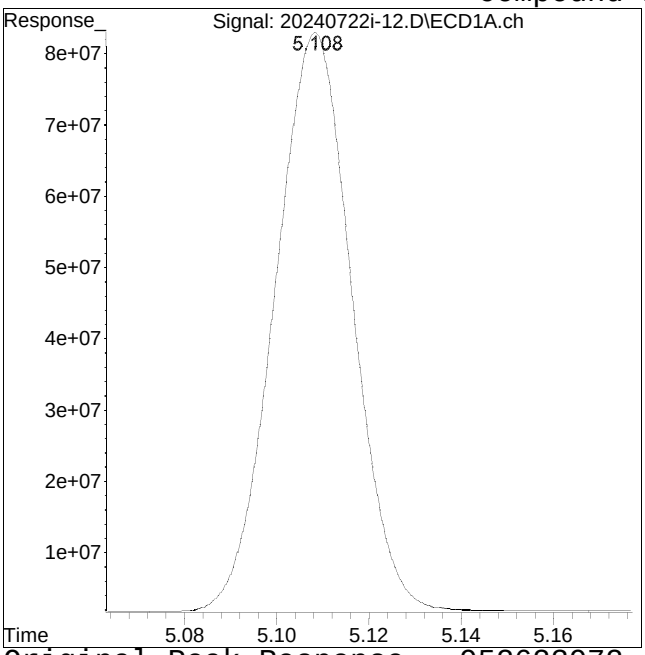




Original Peak Response = 1344232879 Manual Peak Response = 1343349333 M4
M4 = Poor automated baseline construction.

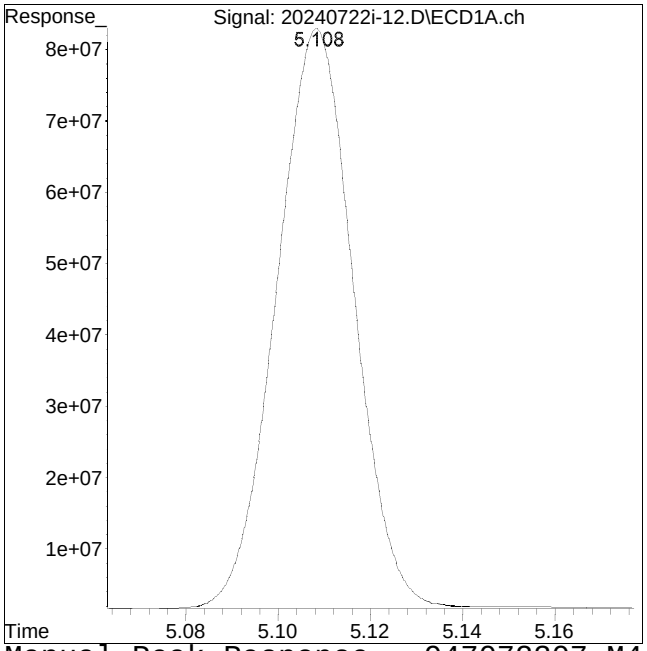
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #17: Dieldrin




Original Peak Response = 952623972



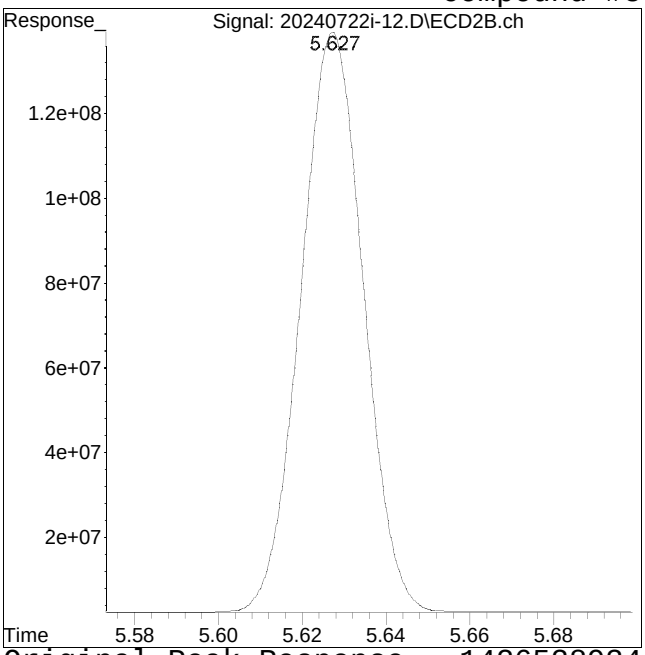

Manual Peak Response = 947072307 M4

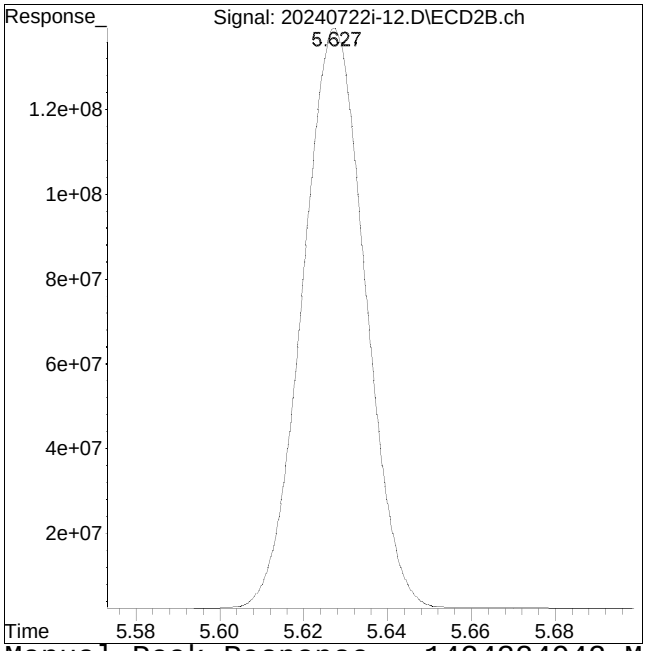
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #55: Dieldrin #2



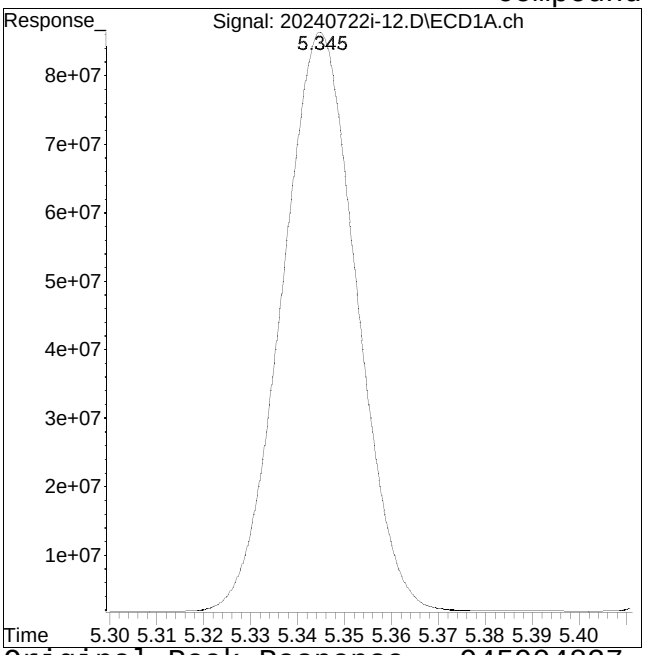




Original Peak Response = 1426528934 Manual Peak Response = 1424324942 M4
M4 = Poor automated baseline construction.

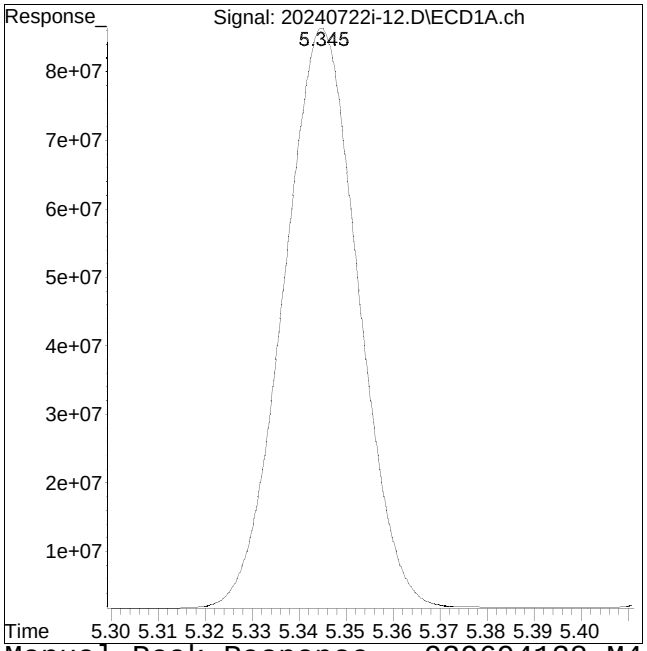
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #18: Endrin




Original Peak Response = 945904837



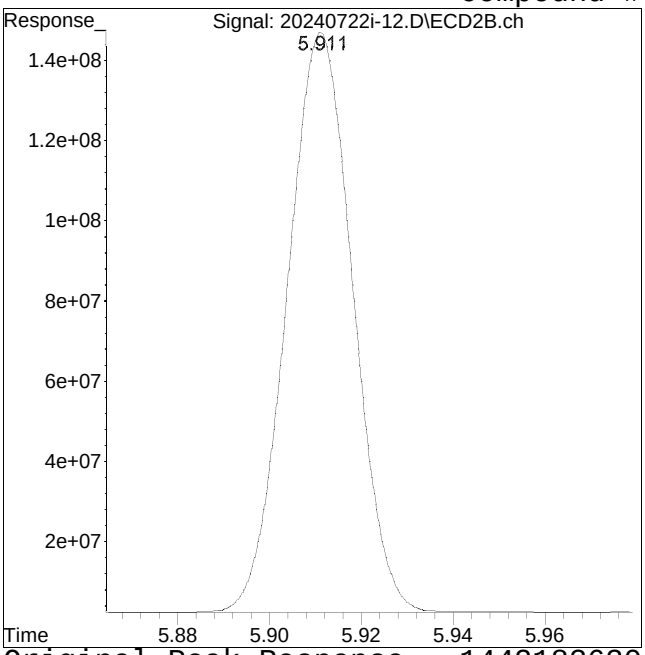

Manual Peak Response = 939694138 M4

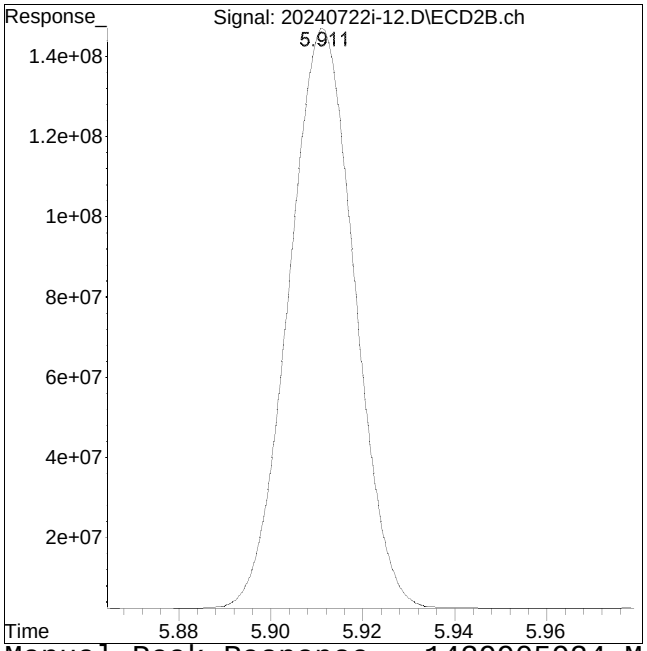
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #56: Endrin #2



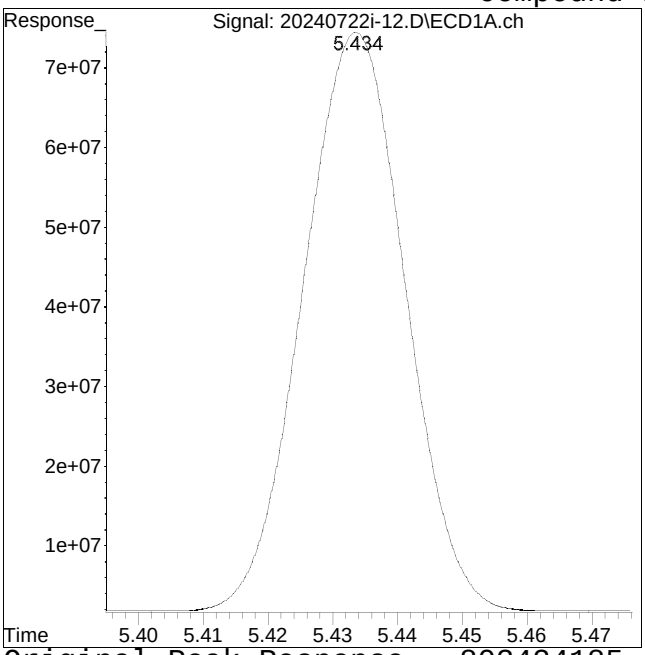



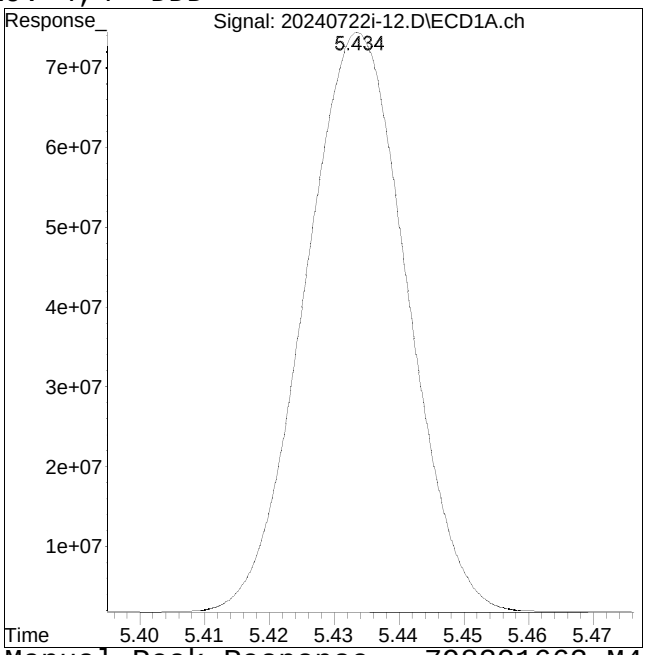

Original Peak Response = 1442183630 Manual Peak Response = 1439905924 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #19: 4,4'-DDD



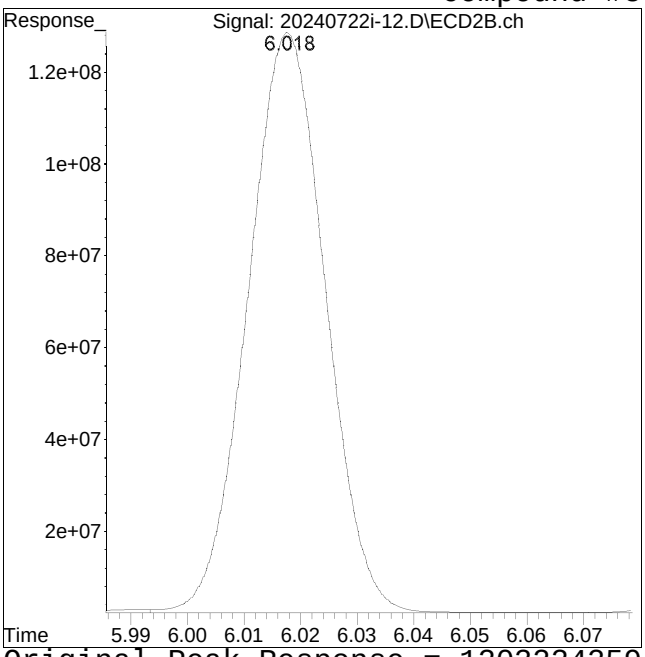



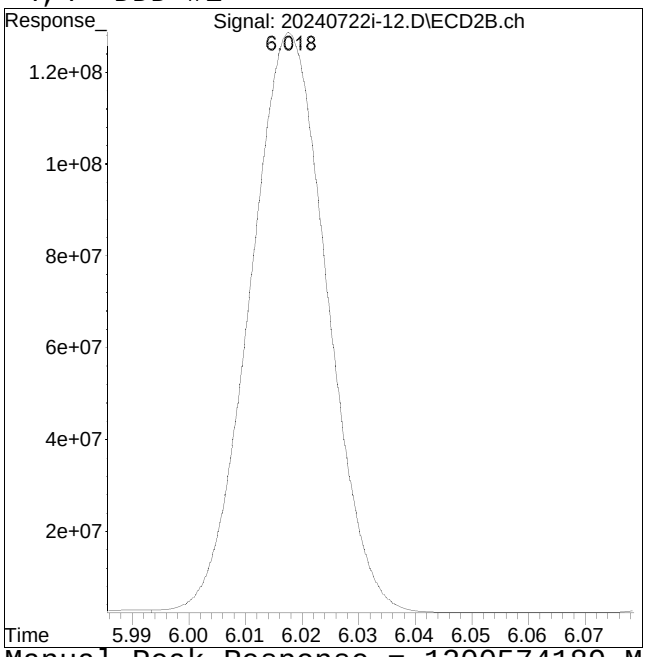

Original Peak Response = 803424185 Manual Peak Response = 798321663 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #57: 4,4'-DDD #2



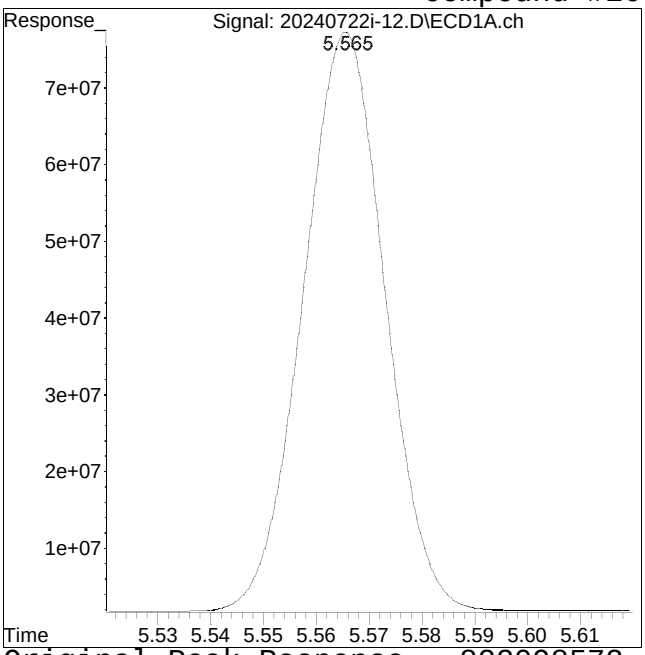

Original Peak Response = 1203224259 Manual Peak Response = 1200574189 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

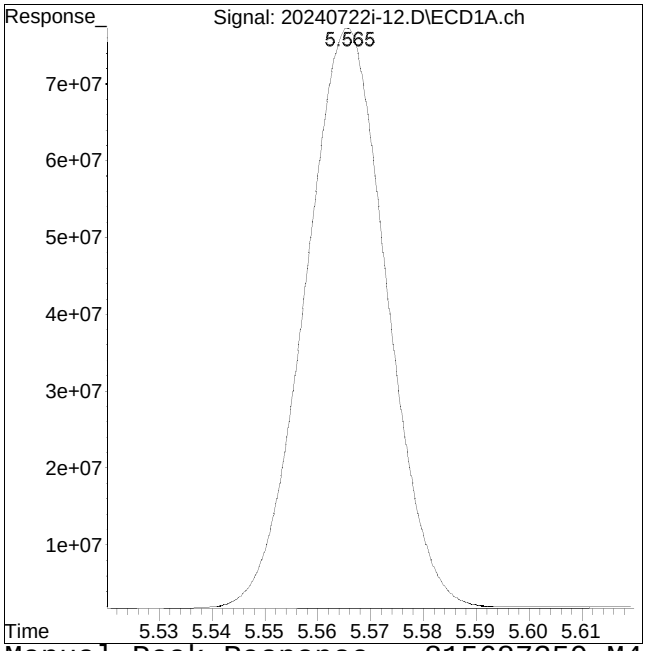
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #20: Endosulfan II




Original Peak Response = 822098572



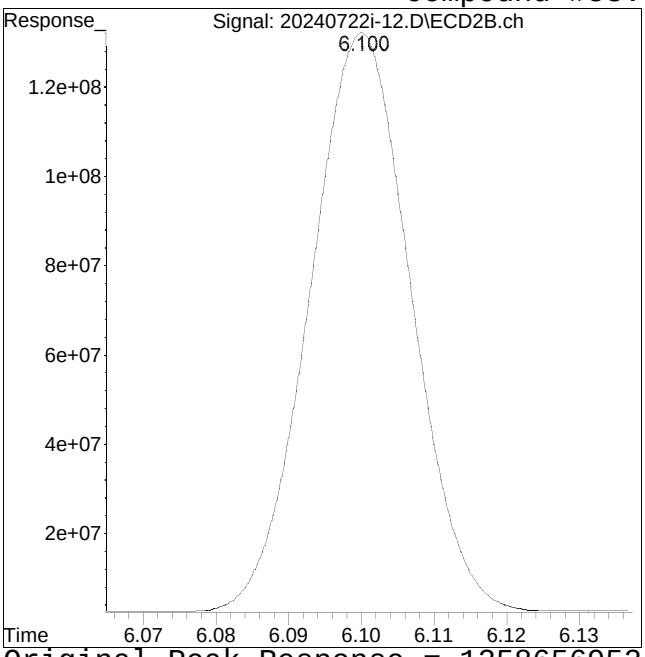

Manual Peak Response = 815687350 M4

M4 = Poor automated baseline construction.

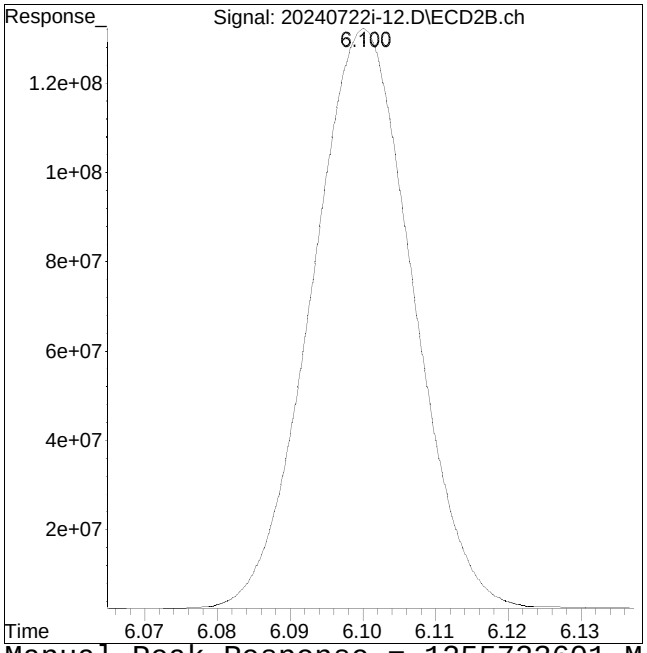
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #58: Endosulfan II #2




Original Peak Response = 1258656952



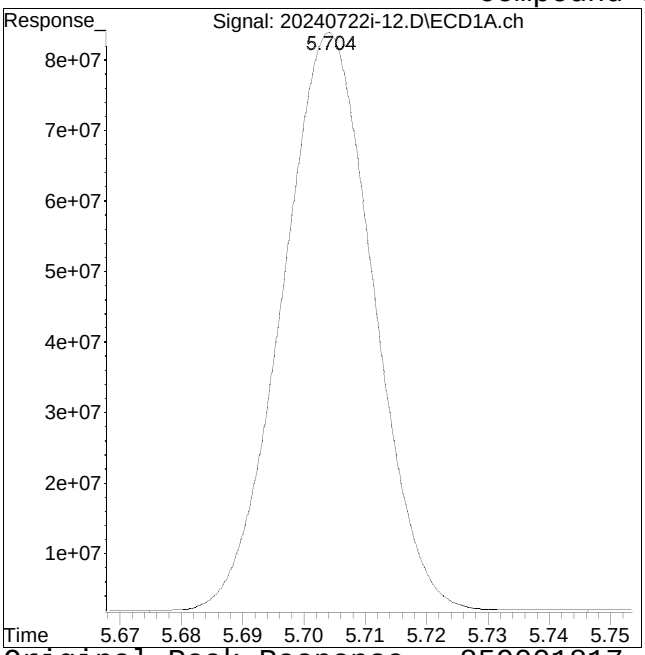

Manual Peak Response = 1255723601 M4

M4 = Poor automated baseline construction.

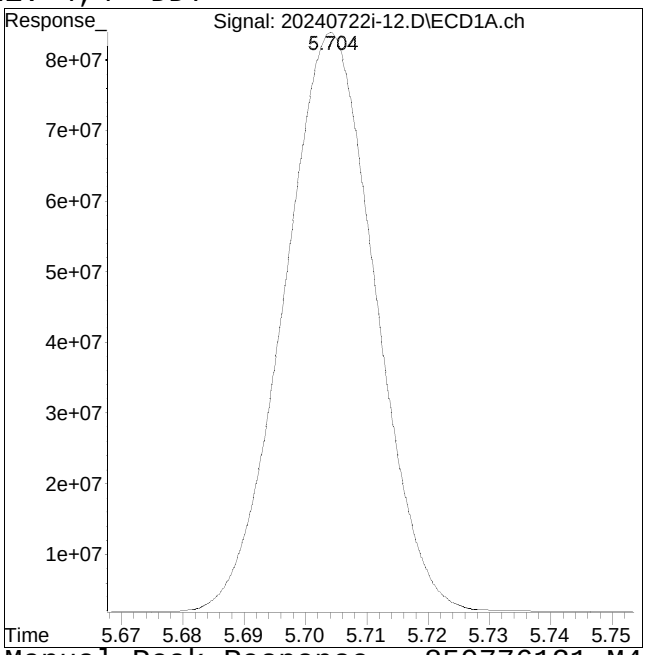
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #21: 4,4'-DDT




Original Peak Response = 859001817



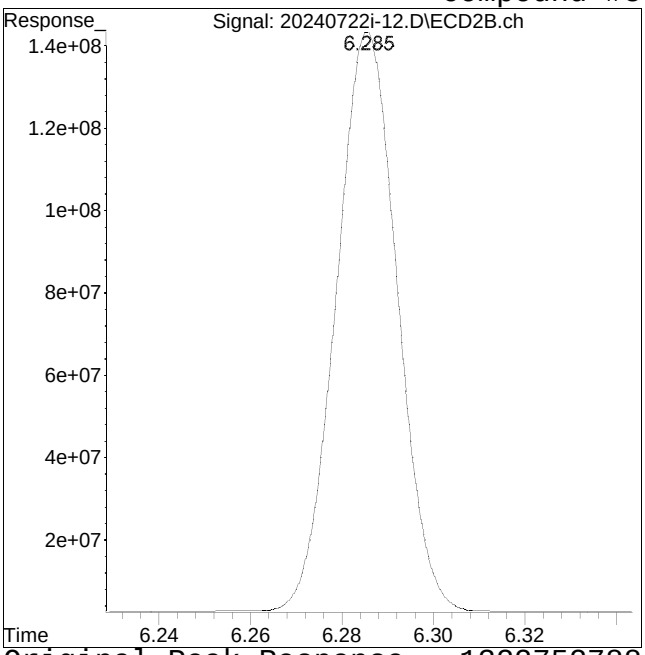

Manual Peak Response = 850776121 M4

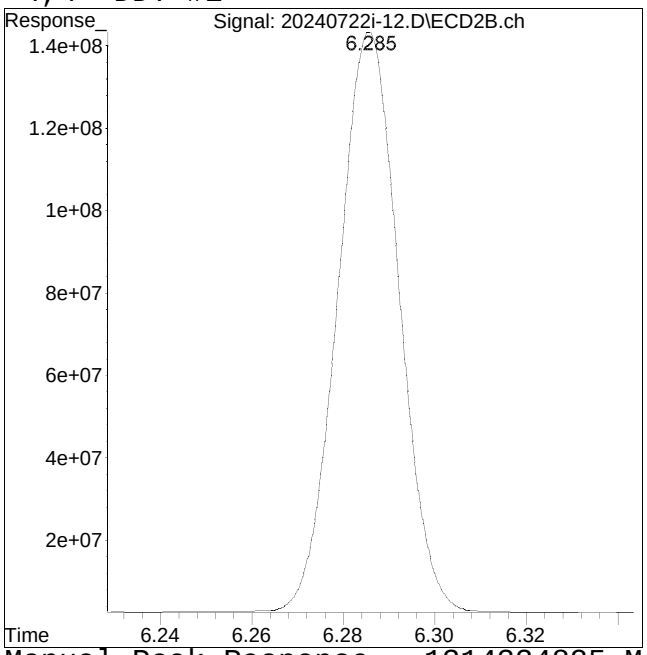
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #59: 4,4'-DDT #2



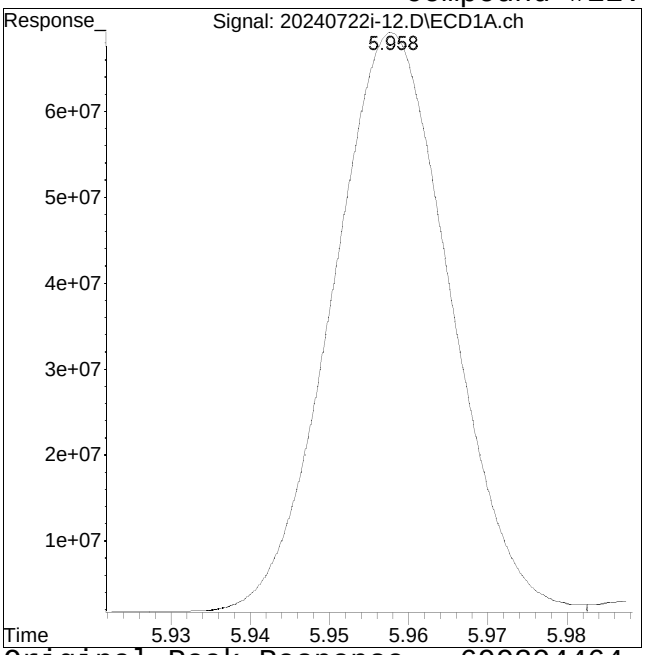




Original Peak Response = 1322752788 Manual Peak Response = 1314334825 M4
M4 = Poor automated baseline construction.

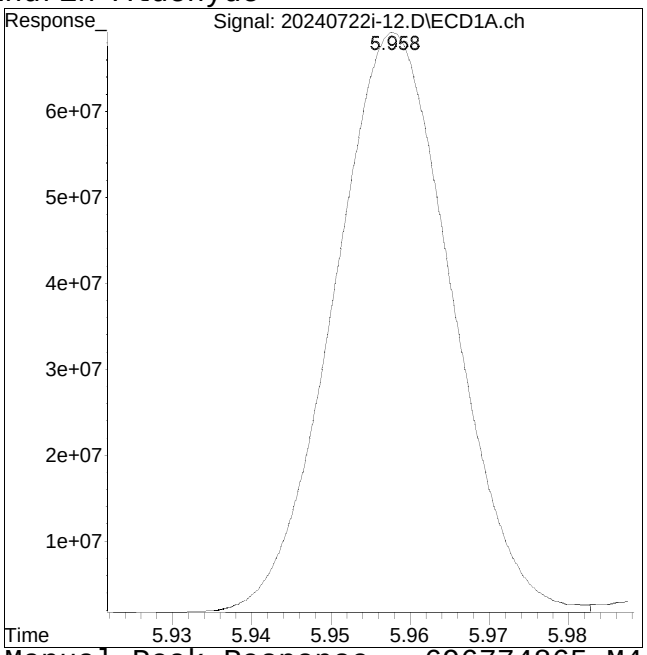
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #22: Endrin Aldehyde




Original Peak Response = 699394464



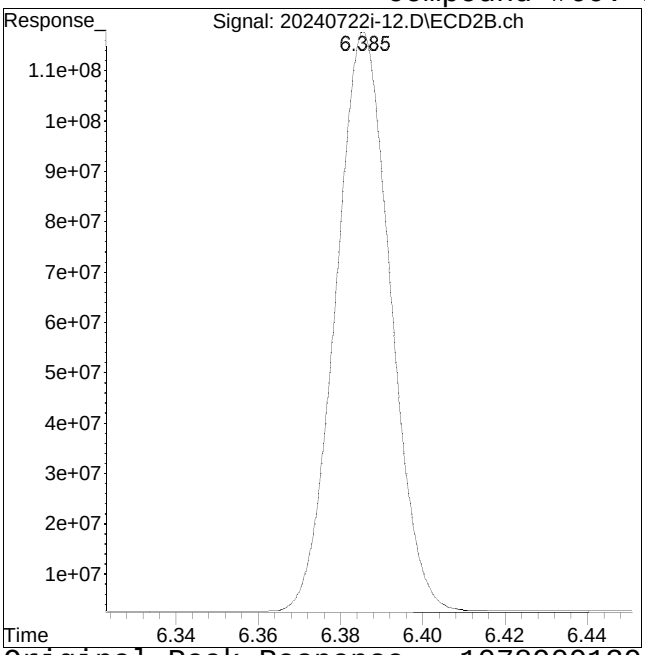

Manual Peak Response = 696774865 M4

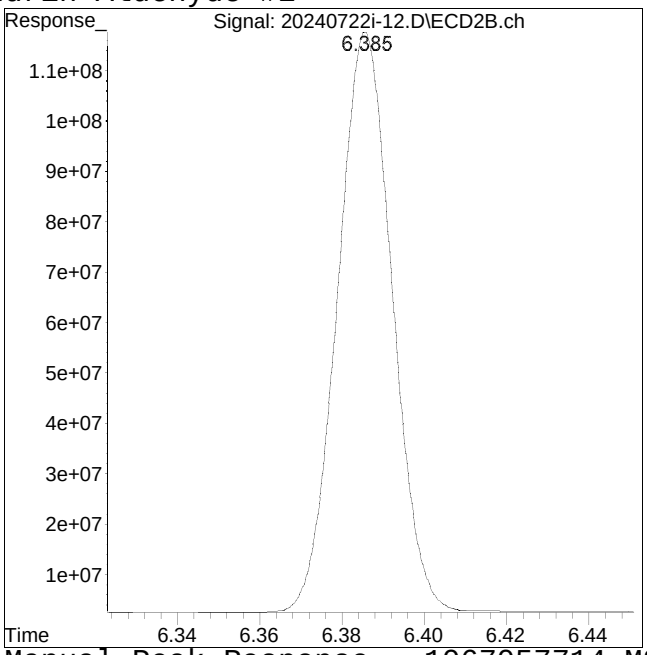
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #60: Endrin Aldehyde #2



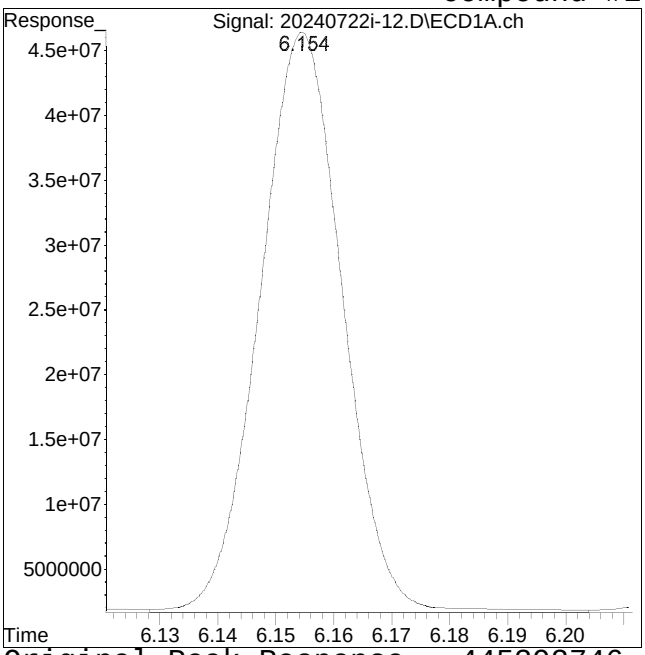



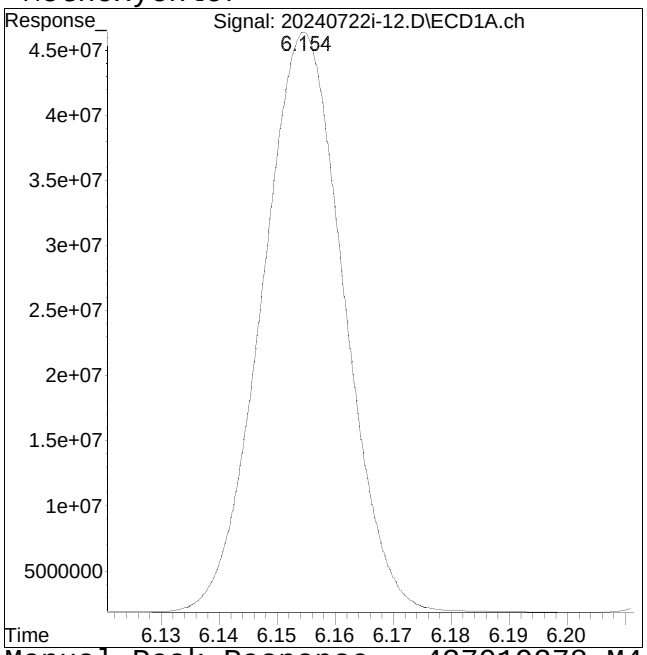

Original Peak Response = 1078909139 Manual Peak Response = 1067057714 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #23: Methoxychlor



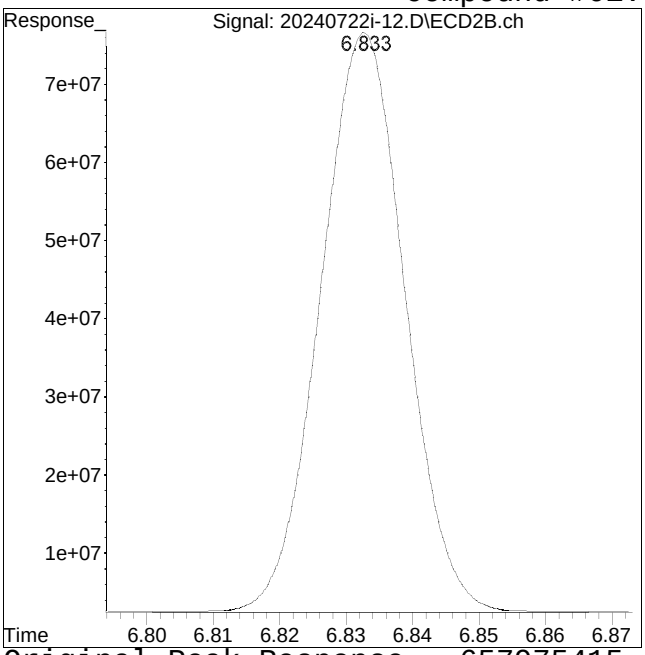



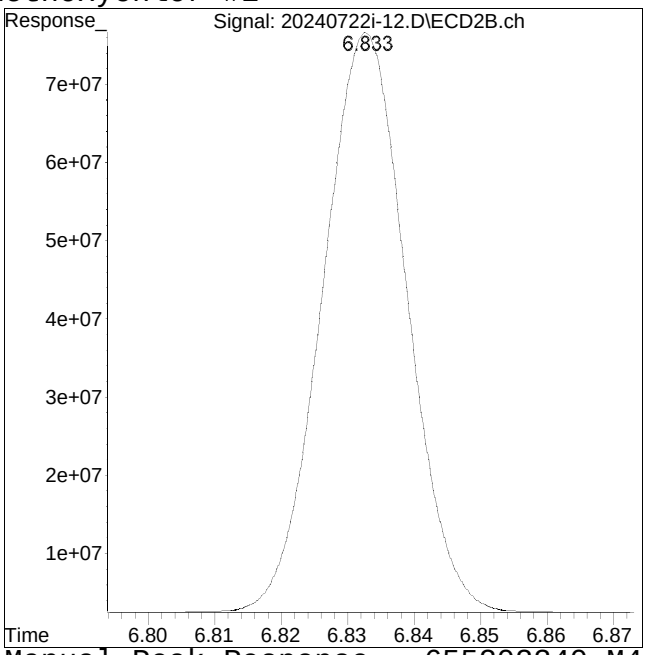

Original Peak Response = 445392746 Manual Peak Response = 437919278 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

## Compound #61: Methoxychlor #2



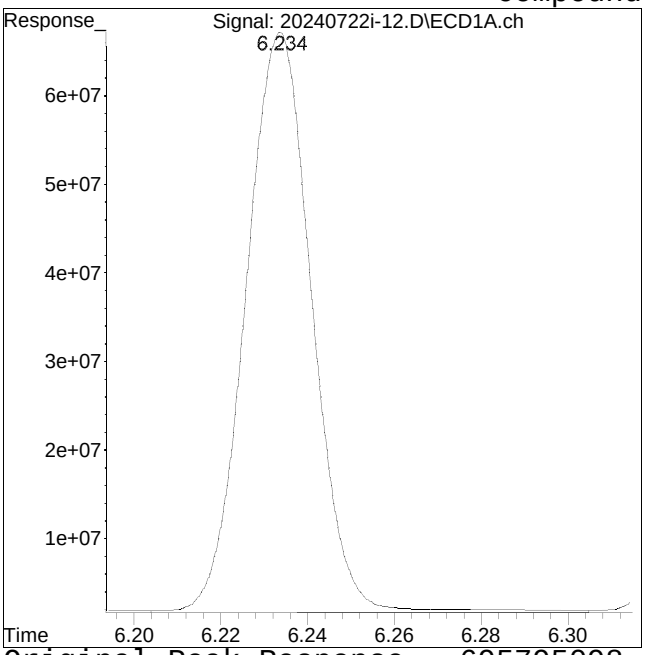



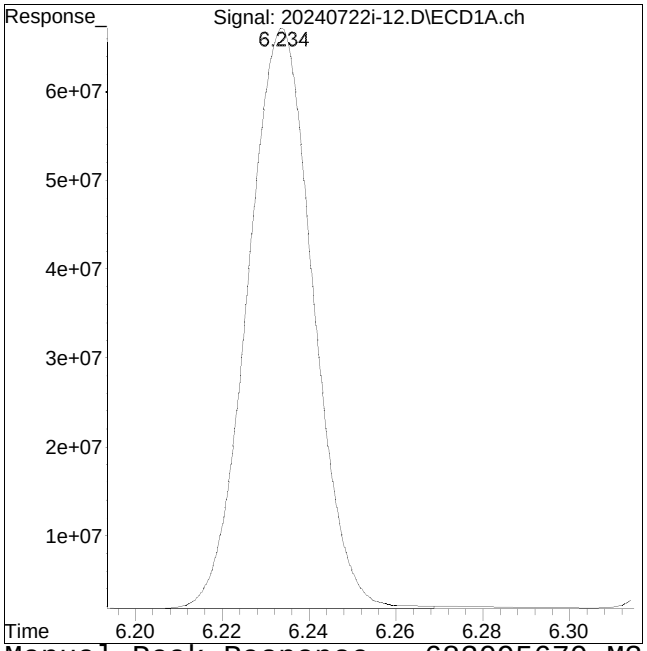

Original Peak Response = 657975415 Manual Peak Response = 655202340 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #24: Mirex



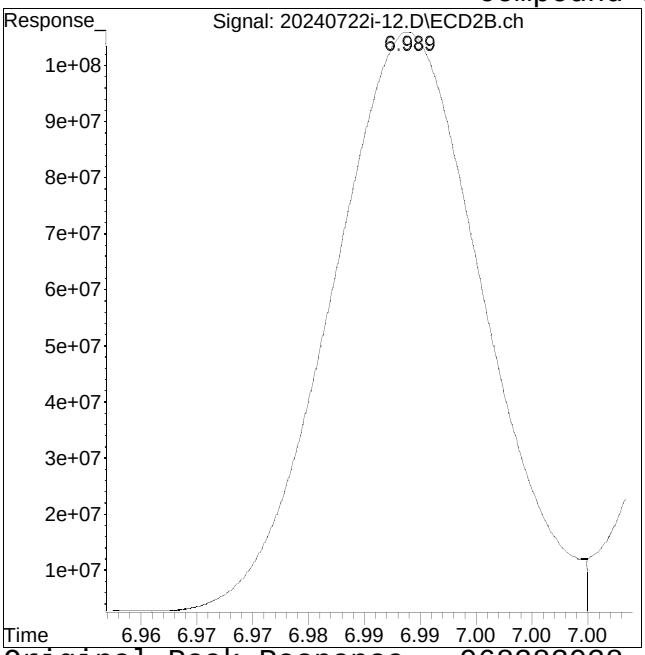




Original Peak Response = 695795098 Manual Peak Response = 683095670 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

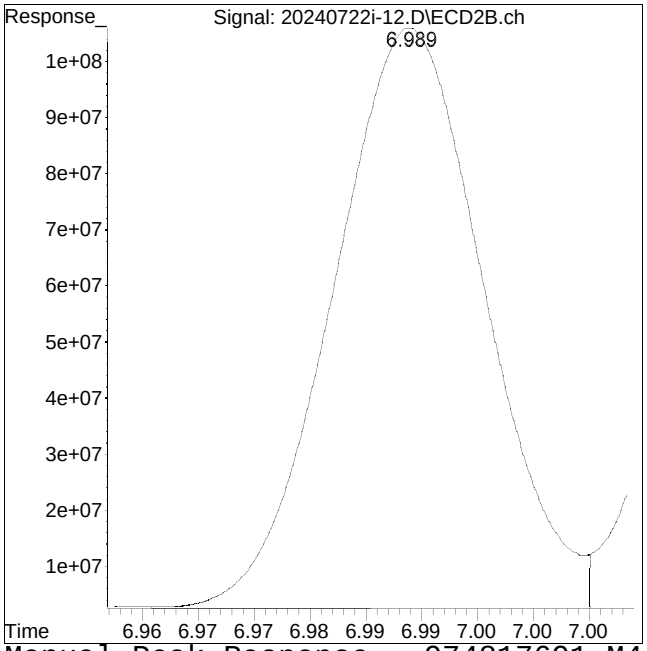
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #62: Mirex #2




Original Peak Response = 968383938



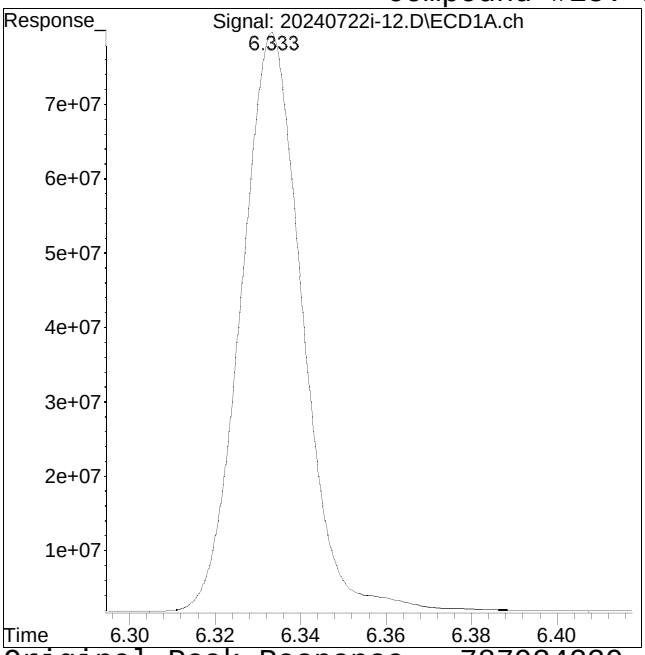

Manual Peak Response = 974817691 M4

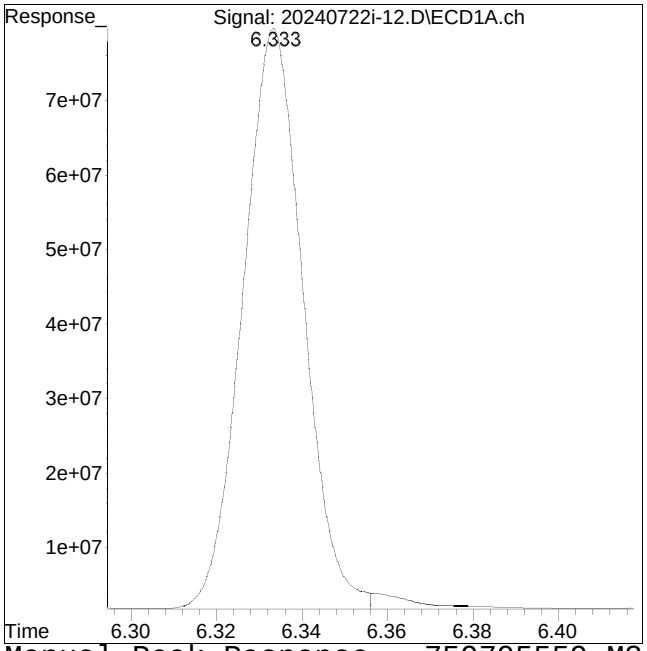
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #25: Endosulfan Sulfate



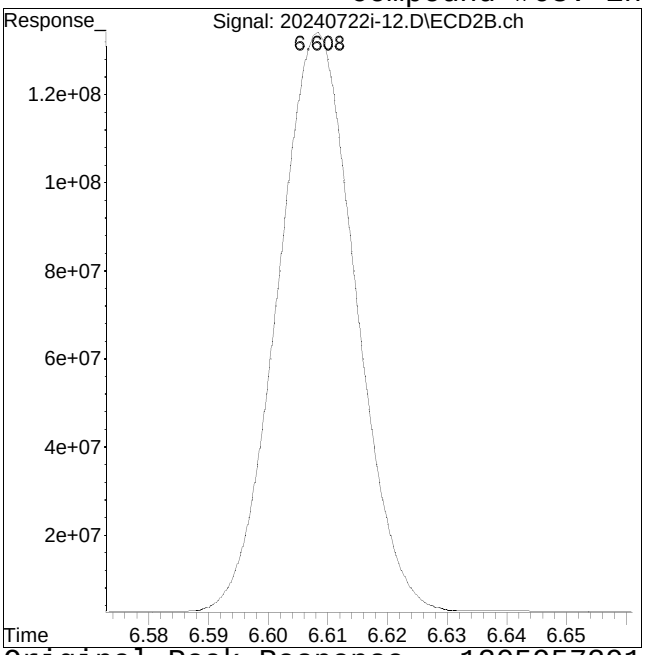



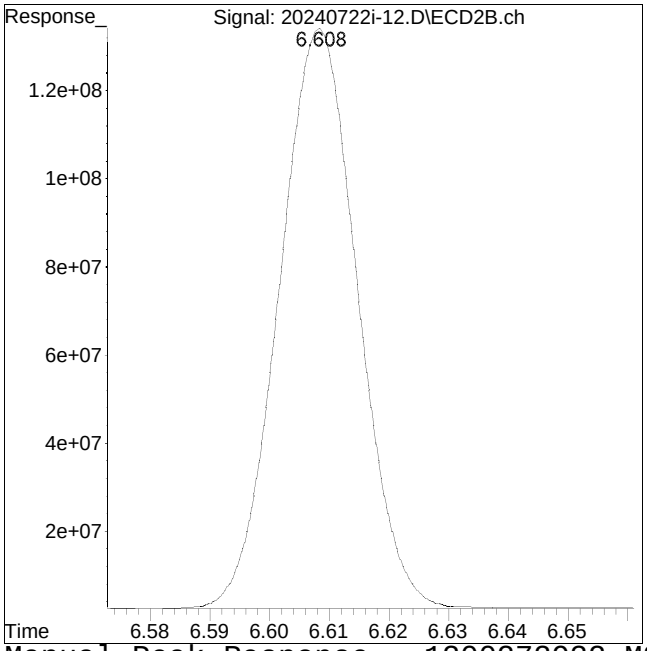

Original Peak Response = 787934239 Manual Peak Response = 759795559 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #63: Endosulfan Sulfate #2



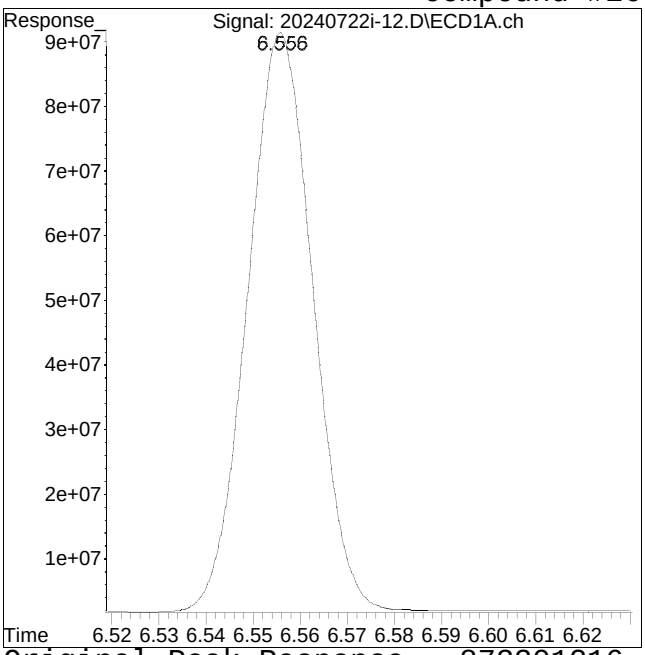




Original Peak Response = 1205957291 Manual Peak Response = 1200272932 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

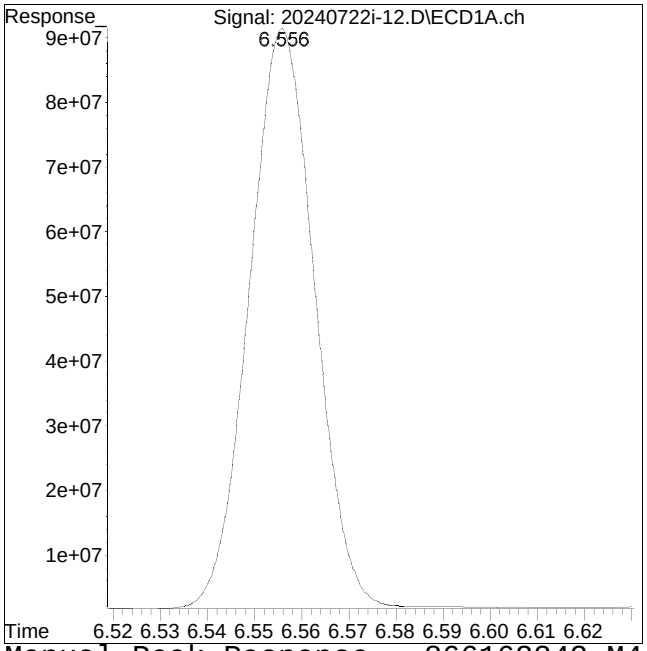
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

## Compound #26: Endrin Ketone




Original Peak Response = 873301216



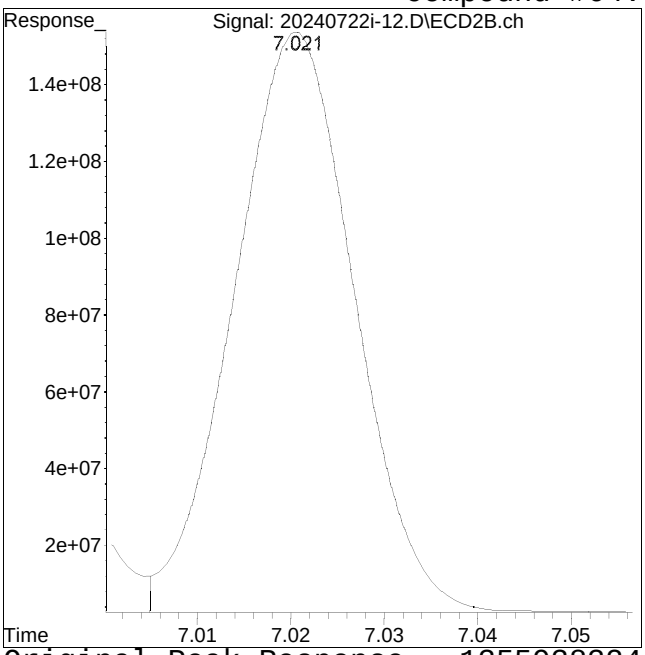

Manual Peak Response = 866162242 M4

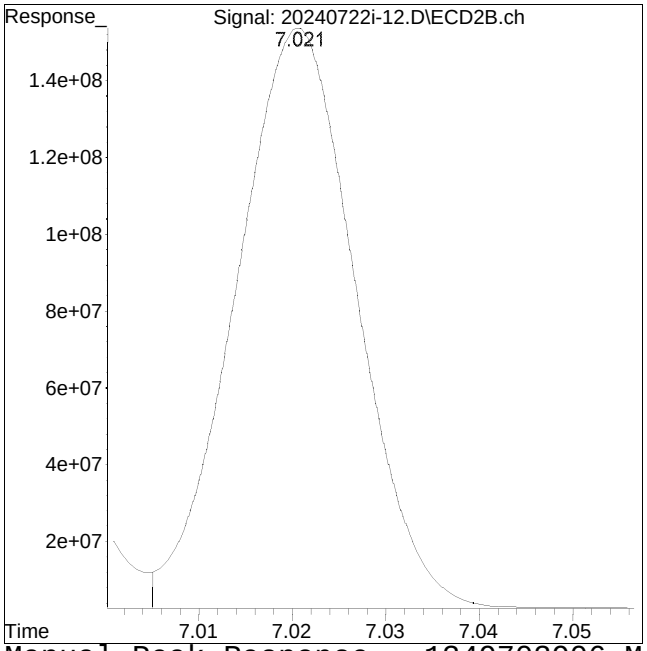
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-12.D
Date Inj'd : 7/22/2024 20:01
Sample : il11pest,42e,,pp 11678 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 12:56 pm

Compound #64: Endrin Ketone #2



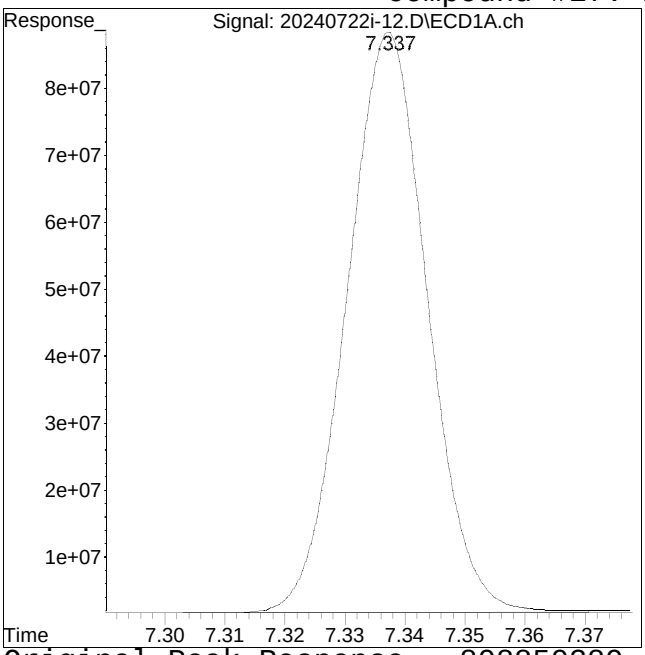




Original Peak Response = 1355938324 Manual Peak Response = 1349703906 M4
M4 = Poor automated baseline construction.

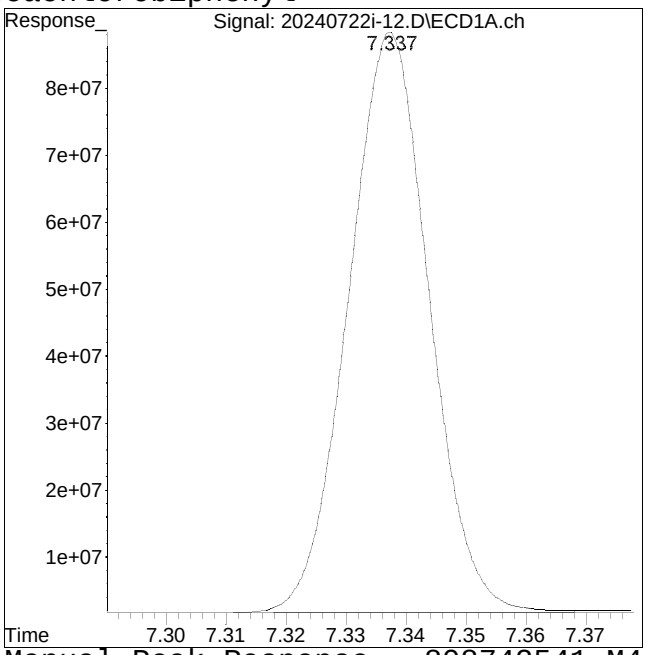
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-12.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:01 Instrument : PEST 20
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 7/23/2024 12:56 pm

Compound #27: Decachlorobiphenyl




Original Peak Response = 808850389




Manual Peak Response = 808742541 M4

M4 = Poor automated baseline construction.

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  20:13
Operator  : pest20:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1950439,
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.02 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 52.890 | -5.8 | 97 | 0.02 |
| 3 | | Hexachlorobenzene | * | 50.000 | 53.212 | -6.4 | 97 | 0.02 |
| 4 | | alpha-BHC | | 1.586 | 1.508 | 4.9 | 95 | 0.02 |
| 5 | | gamma-BHC (lindane) | | 1.529 | 1.351 | 11.6 | 94 | 0.02 |
| 6 | | beta-BHC | * | 50.000 | 52.317 | -4.6 | 95 | 0.02 |
| 7 | | delta-BHC | | 1.478 | 1.321 | 10.6 | 92 | 0.02 |
| 8 | | Heptachlor | | 1.494 | 1.335 | 10.6 | 96 | 0.02 |
| 9 | | Aldrin | | 1.394 | 1.301 | 6.7 | 97 | 0.02 |
| 10 | | Alachlor | * | 50.000 | 55.202 | -10.4 | 96 | 0.02 |
| 11 | | Chlorpyrifos | * | 50.000 | 53.969 | -7.9 | 96 | 0.02 |
| 12 | | Heptachlor Epoxide | | 1.349 | 1.183 | 12.3 | 95 | 0.02 |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 56.188 | -12.4 | 106 | 0.02 |
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 49.714 | 0.6 | 93 | 0.02 |
| 15 | | 4,4'-DDE | | 1.333 | 1.196 | 10.3 | 92 | 0.02 |
| 16 | | Endosulfan I | | 1.261 | 1.101 | 12.7 | 93 | 0.02 |
| 17 | | Dieldrin | | 1.315 | 1.228 | 6.6 | 100 | 0.02 |
| 18 | | Endrin | | 1.292 | 1.136 | 12.1 | 92 | 0.02 |
| 19 | | 4,4'-DDD | | 1.086 | 1.011 | 6.9 | 97 | 0.02 |
| 20 | | Endosulfan II | | 1.175 | 1.033 | 12.1 | 94 | 0.02 |
| 21 | | 4,4'-DDT | * | 50.000 | 49.061 | 1.9 | 91 | 0.02 |
| 22 | | Endrin Aldehyde | * | 50.000 | 45.620 | 8.8 | 84 | 0.02 |
| 23 | | Methoxychlor | * | 50.000 | 53.417 | -6.8 | 93 | 0.02 |
| 24 | | Mirex | * | 50.000 | 52.753 | -5.5 | 94 | 0.02 |
| 25 | | Endosulfan Sulfate | * | 50.000 | 49.954 | 0.1 | 94 | 0.02 |
| 26 | | Endrin Ketone | | 1.275 | 1.154 | 9.5 | 97 | 0.02 |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 50.862 | -1.7 | 94 | 0.02 |

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  20:13
Operator  : pest20:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1950439,
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 1.132 | 7.4 | 96 | 0.00 |
| 3 | | Hexachlorobenzene | * | 50.000 | 52.175 | -4.3 | 97 | 0.00 |
| 4 | | alpha-BHC | | 1.533 | 1.482 | 3.3 | 94 | 0.00 |
| 5 | | gamma-BHC (lindane) | | 1.477 | 1.334 | 9.7 | 93 | 0.00 |
| 6 | | beta-BHC | * | 50.000 | 50.212 | -0.4 | 94 | 0.00 |
| 7 | | delta-BHC | | 1.443 | 1.308 | 9.4 | 91 | 0.00 |
| 8 | | Heptachlor | | 1.403 | 1.269 | 9.6 | 95 | 0.00 |
| 9 | | Aldrin | | 1.268 | 1.195 | 5.8 | 95 | 0.00 |
| 10 | | Alachlor | * | 50.000 | 54.281 | -8.6 | 97 | 0.00 |
| 11 | | Chlorpyrifos | * | 50.000 | 52.365 | -4.7 | 95 | 0.00 |
| 12 | | Heptachlor Epoxide | | 1.268 | 1.115 | 12.1 | 93 | 0.00 |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 1.119 | -2.7 | 106 | 0.00 |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 1.098 | 11.2 | 93 | 0.00 |
| 15 | | 4,4'-DDE | | 1.193 | 1.074 | 10.0 | 91 | 0.00 |
| 16 | | Endosulfan I | | 1.153 | 1.020 | 11.5 | 93 | 0.00 |
| 17 | | Dieldrin | | 1.161 | 1.132 | 2.5 | 100 | 0.00 |
| 18 | | Endrin | | 1.185 | 1.054 | 11.1 | 91 | 0.00 |
| 19 | | 4,4'-DDD | | 0.979 | 0.918 | 6.2 | 95 | 0.00 |
| 20 | | Endosulfan II | | 1.098 | 0.974 | 11.3 | 94 | 0.00 |
| 21 | | 4,4'-DDT | | 1.110 | 0.971 | 12.5 | 90 | 0.00 |
| 22 | | Endrin Aldehyde | * | 50.000 | 43.461 | 13.1 | 83 | 0.00 |
| 23 | | Methoxychlor | * | 50.000 | 51.227 | -2.5 | 92 | 0.00 |
| 24 | | Mirex | * | 50.000 | 51.370 | -2.7 | 93 | 0.00 |
| 25 | | Endosulfan Sulfate | * | 50.000 | 48.446 | 3.1 | 93 | 0.00 |
| 26 | | Endrin Ketone | | 1.192 | 1.109 | 7.0 | 97 | 0.00 |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 49.665 | 0.7 | 93 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  20:13
Operator  : pest20:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1950439,
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 29 | l1 | chlordane-1 | * | 0.047 | 0.000 | 100.0# | 0# | -3.44# |
| 30 | l1 | chlordane-3 | * | 0.059 | 0.000 | 100.0# | 0# | -3.92# |
| 31 | l1 | chlordane-4 | * | 0.202 | 0.000 | 100.0# | 0# | -4.54# |
| 32 | l1 | chlordane-5 | * | 0.290 | 0.000 | 100.0# | 0# | -4.68# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 34 | l2 | toxaphene-1 | * | 0.043 | 0.000 | 100.0# | 0# | -5.56# |
| 35 | l2 | toxaphene-2 | * | 0.043 | 0.000 | 100.0# | 0# | -6.07# |
| 36 | l2 | toxaphene-4 | * | 0.030 | 0.000 | 100.0# | 0# | -6.16# |
| 37 | l2 | toxaphene-5 | * | 0.044 | 0.000 | 100.0# | 0# | -6.24# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 29 | l1 | chlordane-1 | * | 0.041 | 0.000 | 100.0# | 0# | -3.77# |
| 30 | l1 | chlordane-3 | * | 0.051 | 0.000 | 100.0# | 0# | -4.43# |
| 31 | l1 | chlordane-4 | * | 0.153 | 0.000 | 100.0# | 0# | -5.14# |
| 32 | l1 | chlordane-5 | * | 0.121 | 0.000 | 100.0# | 0# | -5.30# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 34 | l2 | toxaphene-1 | * | 0.023 | 0.000 | 100.0# | 0# | -6.06# |
| 35 | l2 | toxaphene-2 | * | 0.034 | 0.000 | 100.0# | 0# | -6.09# |
| 36 | l2 | toxaphene-4 | * | 0.039 | 0.000 | 100.0# | 0# | -6.39# |
| 37 | l2 | toxaphene-5 | * | 0.038 | 0.000 | 100.0# | 0# | -6.79# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:13
Operator : pest20:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1950439,
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 2.028f | 2.063 | 49755444 | 78622282 | 25.000 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.494f | 2.663 | 115.2E6 | 178.1E6 | 52.890 | 46.279 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 105.78% | 92.56% |
| 27) s | Decachlorobi | 7.357f | 7.906 | 109.0E6 | 139.3E6 | 50.862 | 49.665 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 101.72% | 99.33% |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.761f | 3.039 | 120.3E6 | 183.9E6 | 53.212 | 52.175 |
| 4) | alpha-BHC | 2.883f | 3.152 | 150.1E6 | 233.1E6 | 47.561 | 48.329 |
| 5) | gamma-BHC (l | 3.127f | 3.476 | 134.5E6 | 209.8E6 | 44.189 | 45.183 |
| 6) | beta-BHC | 3.195f | 3.551 | 64742861 | 99164577 | 52.317 | 50.212 |
| 7) | delta-BHC | 3.345f | 3.847 | 131.5E6 | 205.7E6 | 44.695 | 45.319 |
| 8) | Heptachlor | 3.533f | 3.917 | 132.8E6 | 199.5E6 | 44.677 | 45.227 |
| 9) | Aldrin | 3.812f | 4.268 | 129.5E6 | 187.9E6 | 46.650 | 47.116 |
| 10) | Alachlor | 3.954f | 4.141 | 21263587 | 28821121 | 55.202 | 54.281 |
| 11) | Chlorpyrifos | 4.054f | 4.524 | 62761635 | 97738918 | 53.969 | 52.365 |
| 12) | Heptachlor E | 4.428f | 4.929 | 117.7E6 | 175.3E6 | 43.862 | 43.948 |
| 13) | gamma-Chlord | 4.565f | 5.141 | 120.3E6 | 176.0E6 | 56.188 | 51.325 |
| 14) | alpha-Chlord | 4.713f | 5.296 | 119.0E6 | 172.7E6 | 49.714M3 | 44.399 |
| 15) | 4,4'-DDE | 4.816f | 5.474 | 119.0E6 | 168.9E6 | 44.859 | 45.030 |
| 16) | Endosulfan I | 4.866f | 5.354 | 109.5E6 | 160.4E6 | 43.655 | 44.239 |
| 17) | Dieldrin | 5.129f | 5.627 | 122.2E6 | 177.9E6 | 46.683 | 48.736 |
| 18) | Endrin | 5.366f | 5.910 | 113.0E6 | 165.7E6 | 43.954 | 44.465M3 |
| 19) | 4,4'-DDD | 5.454f | 6.018 | 100.6E6 | 144.4E6 | 46.537 | 46.890 |
| 20) | Endosulfan I | 5.586f | 6.100 | 102.8E6 | 153.1E6 | 43.938M3 | 44.364 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:13
Operator : pest20:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1950439,
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 21) | 4,4'-DDT | 5.725f | 6.285 | 103.3E6 | 152.6E6 | 49.061 | 43.742M3 |
| 22) | Endrin Aldeh | 5.979f | 6.386 | 79127084 | 115.2E6 | 45.620 | 43.461 |
| 23) | Methoxychlor | 6.175f | 6.832 | 60331442 | 86612800 | 53.417M3 | 51.227 |
| 24) | Mirex | 6.254f | 6.989 | 92100105 | 127.7E6 | 52.753 | 51.370 |
| 25) | Endosulfan S | 6.354f | 6.608 | 97255778 | 147.2E6 | 49.954 | 48.446M4 |
| 26) | Endrin Keton | 6.577f | 7.020 | 114.8E6 | 174.3E6 | 45.224 | 46.513 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

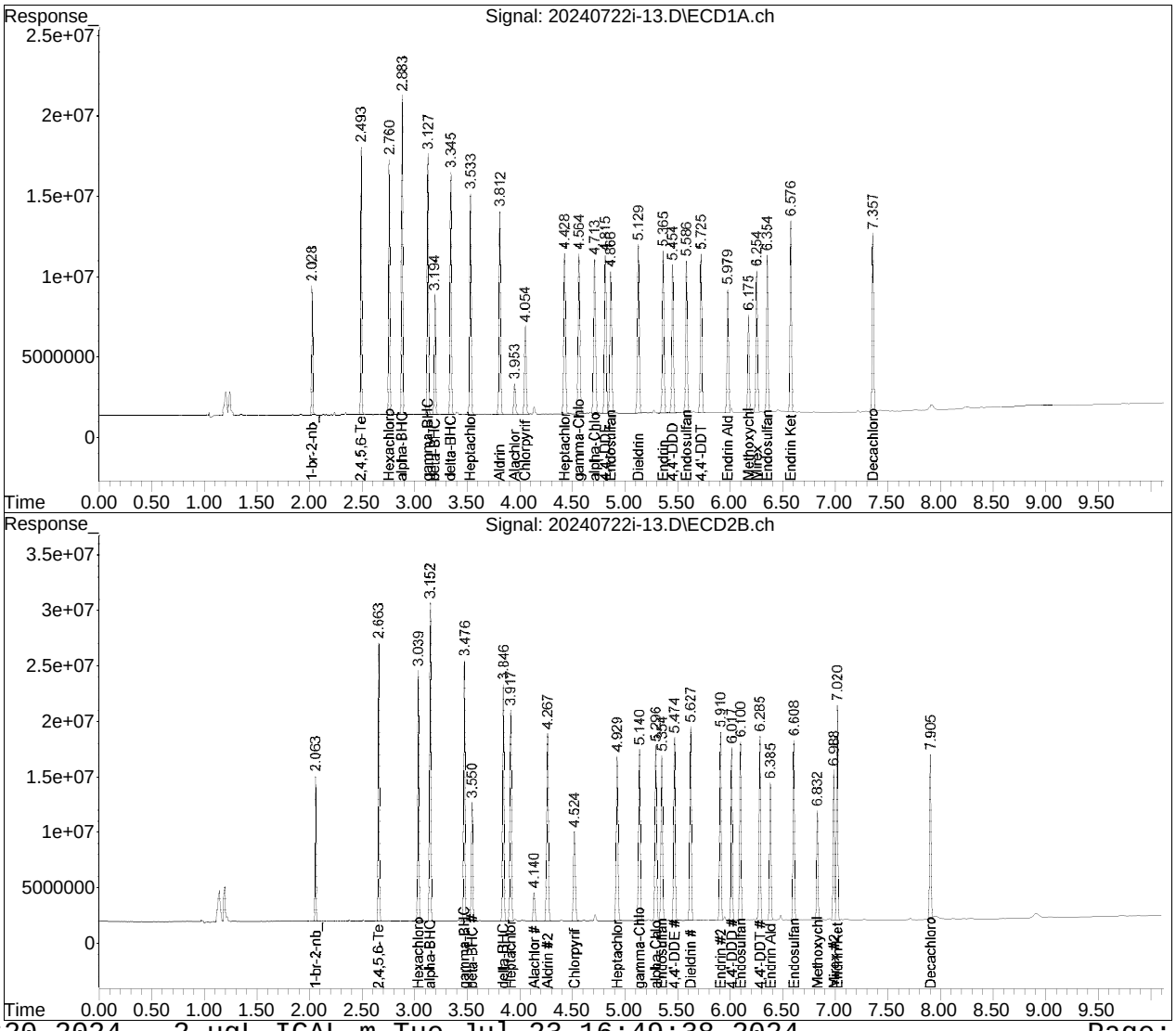
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-13.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:13
Operator : pest20:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1950439,
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:12:29 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:12:29 2024
Response via : Initial Calibration
Integrator: ChemStation

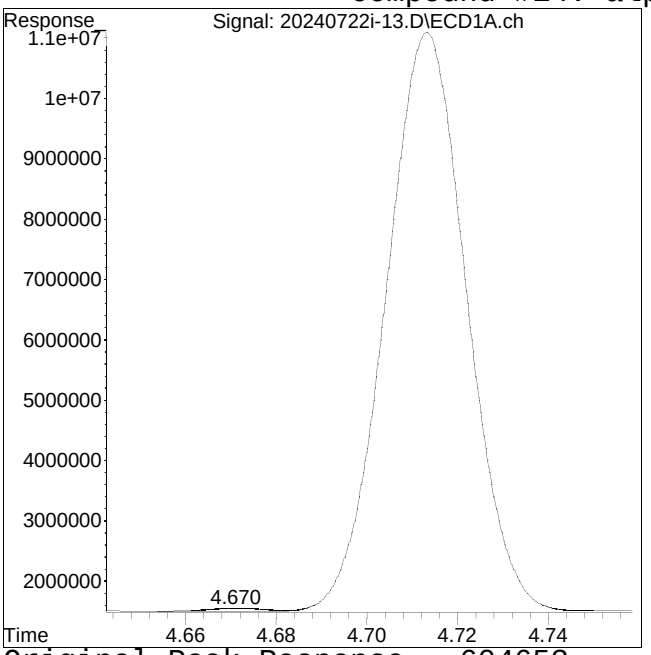
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

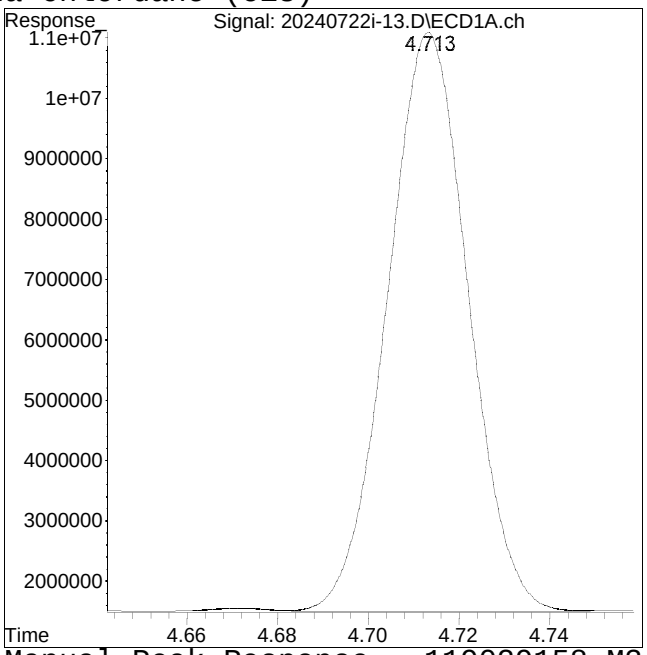


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-13.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:13 Instrument : PEST 20
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 7/23/2024 2:12 pm

Compound #14: alpha-Chlordane (cis)



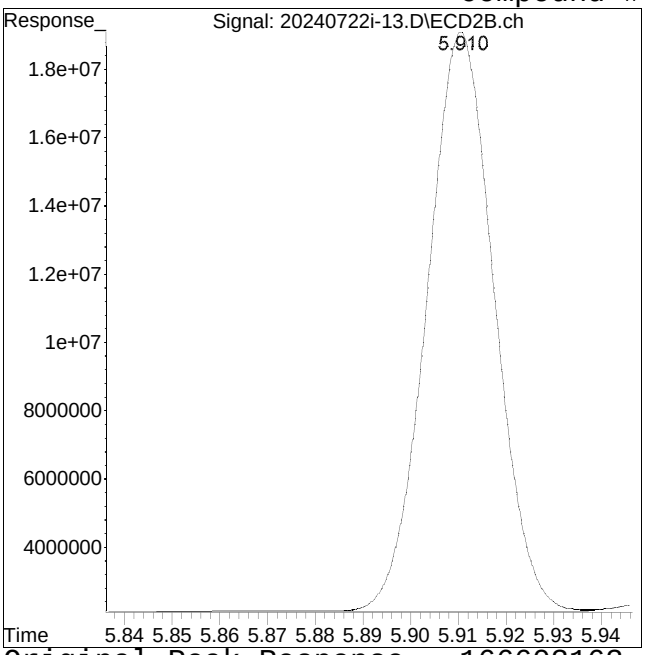



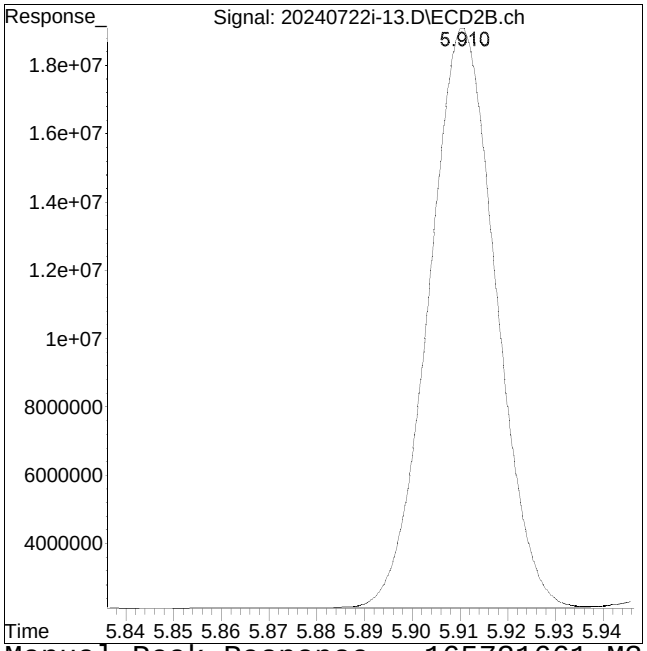

Original Peak Response = 604653 Manual Peak Response = 119029158 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-13.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:13 Instrument : PEST 20
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 7/23/2024 2:12 pm

Compound #56: Endrin #2



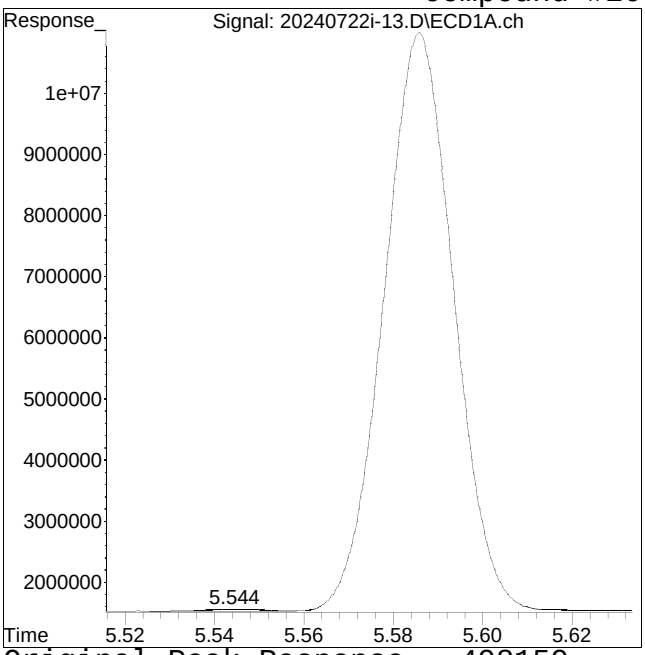



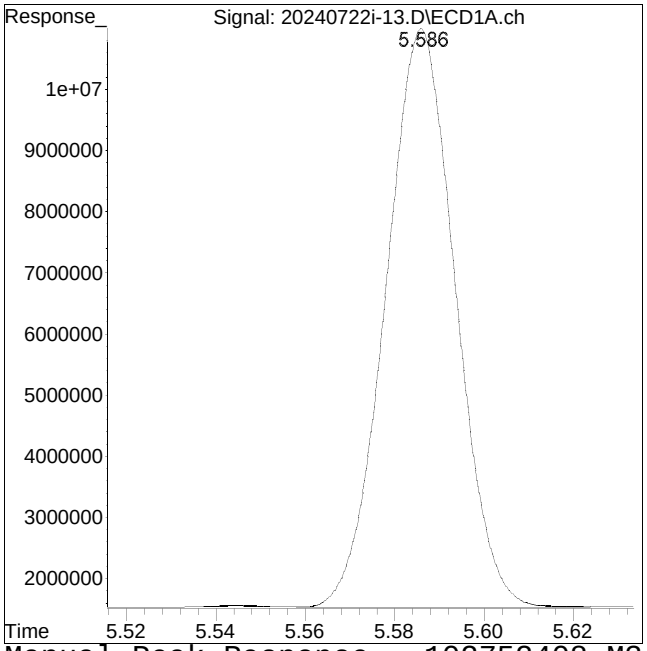

Original Peak Response = 166603163 Manual Peak Response = 165731661 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-13.D
Date Inj'd : 7/22/2024 20:13
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:12 pm

Compound #20: Endosulfan II



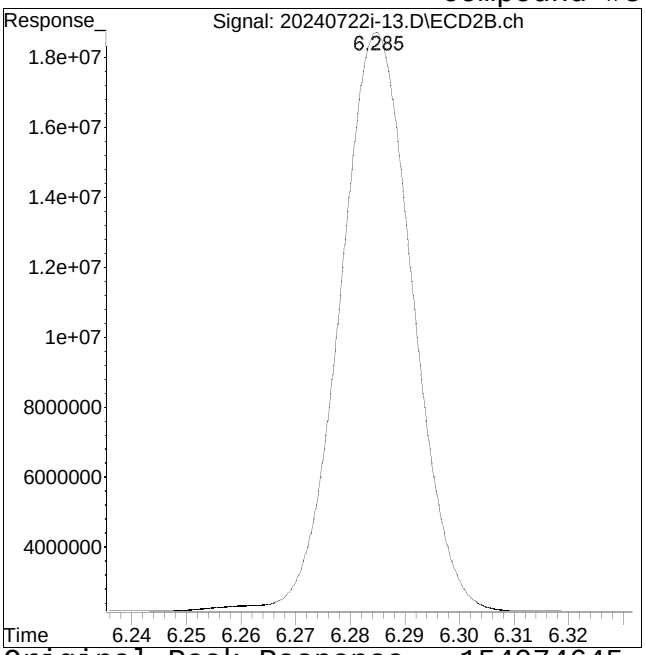

Original Peak Response = 498159 Manual Peak Response = 102752408 M3

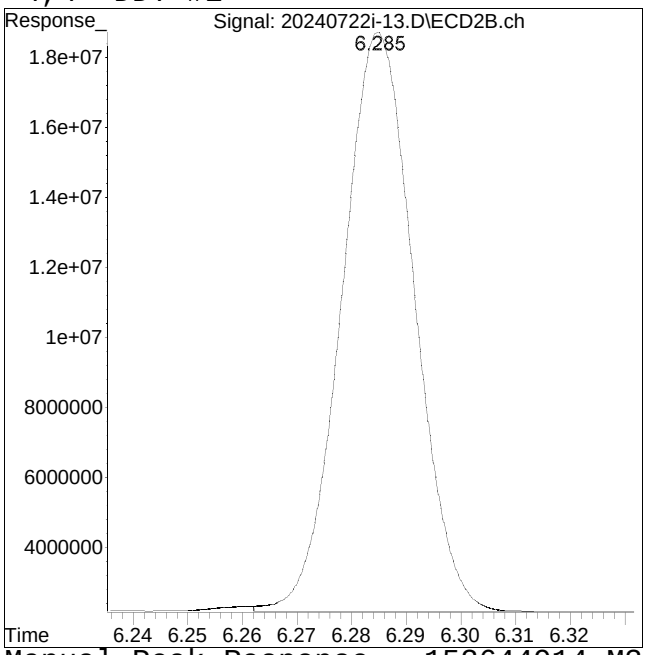
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-13.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:13 Instrument : PEST 20
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 7/23/2024 2:12 pm

Compound #59: 4,4'-DDT #2



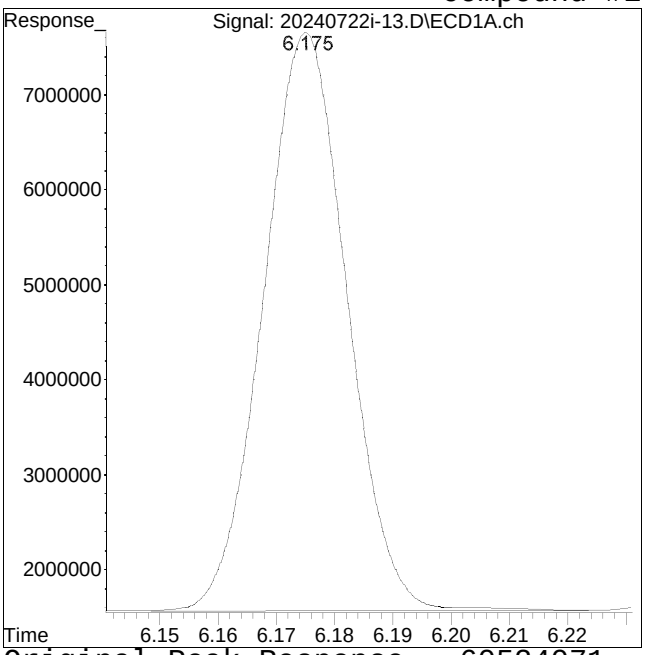



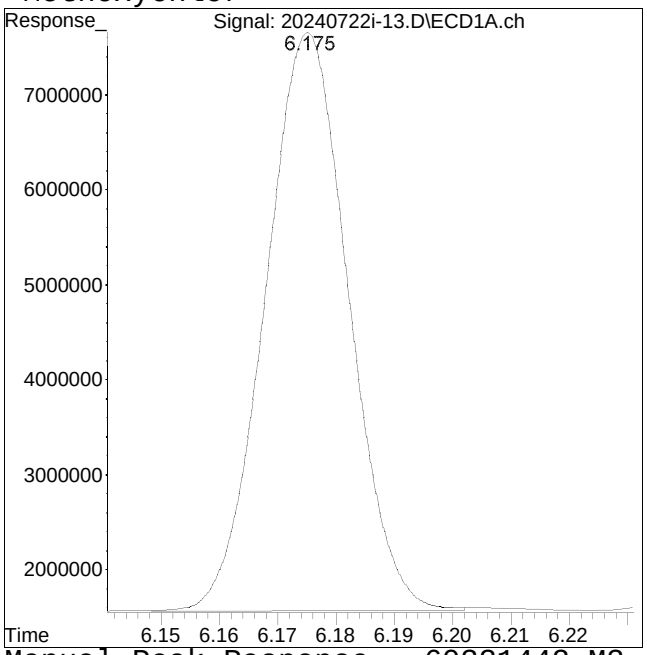

Original Peak Response = 154074645 Manual Peak Response = 152644914 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-13.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:13 Instrument : PEST 20
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 7/23/2024 2:12 pm

Compound #23: Methoxychlor



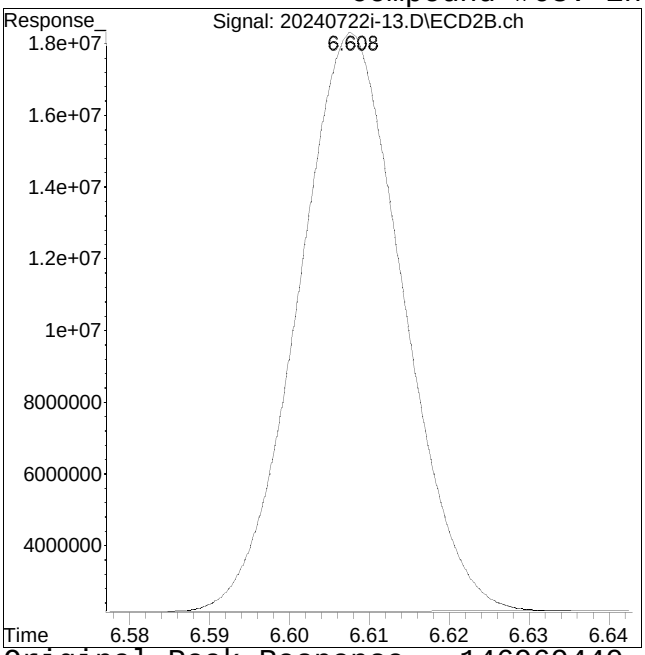



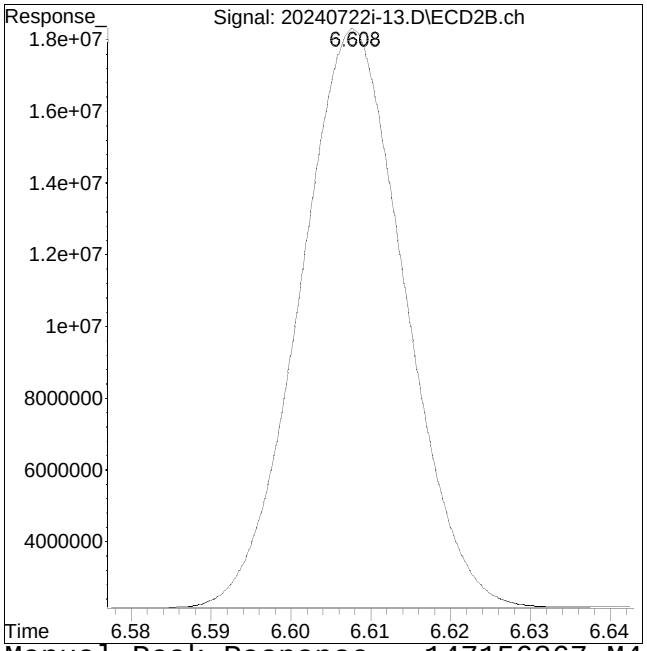

Original Peak Response = 60524071 Manual Peak Response = 60331442 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-13.D
Date Inj'd : 7/22/2024 20:13
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:12 pm

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 146969440 Manual Peak Response = 147156867 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-14.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:26
Operator : pest20:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:21:55 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:21:46 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.007 | 2.063 | 51466490 | 81338537 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-14.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:26
Operator : pest20:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:21:55 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:21:46 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 29) l1 | chlordane-1 | 3.441 | 3.768 | 1168509 | 1632123 | 13.114 | 13.475 |
| 30) l1 | chlordane-3 | 3.921 | 4.433 | 1540373 | 2072270 | 13.895 | 14.028M4 |
| 31) l1 | chlordane-4 | 4.542 | 5.141 | 6075511 | 6164982 | 16.599 | 13.653 |
| 32) l1 | chlordane-5 | 4.679 | 5.296 | 7377194 | 4884542 | 13.303 | 13.738 |
| Sum | chlordane-1 | | | 16161587 | 14753918 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 14.228 | 13.723 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

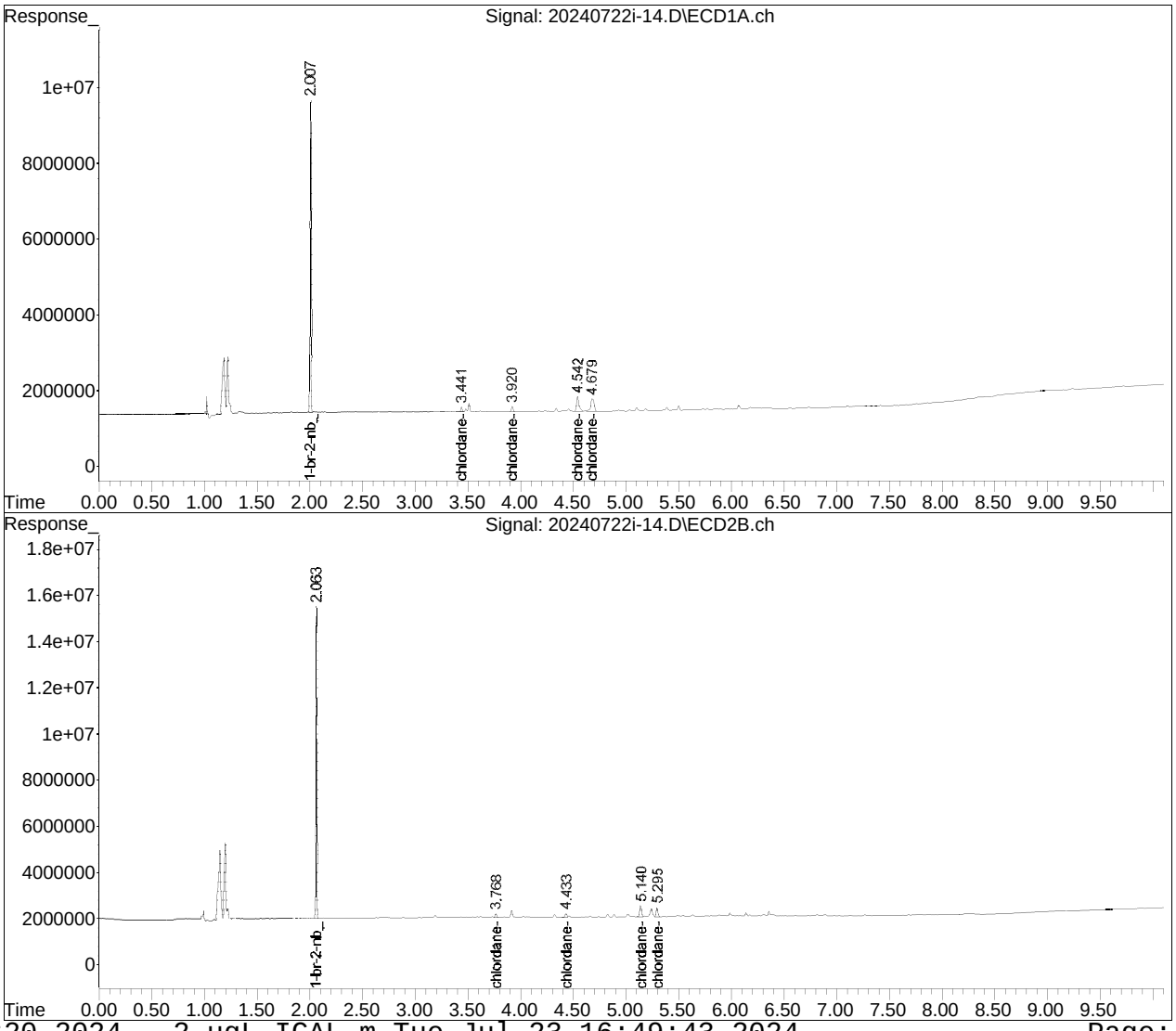
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-14.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  20:26
Operator : pest20:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 14  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:21:55 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:21:46 2024
Response via : Initial Calibration
Integrator: ChemStation

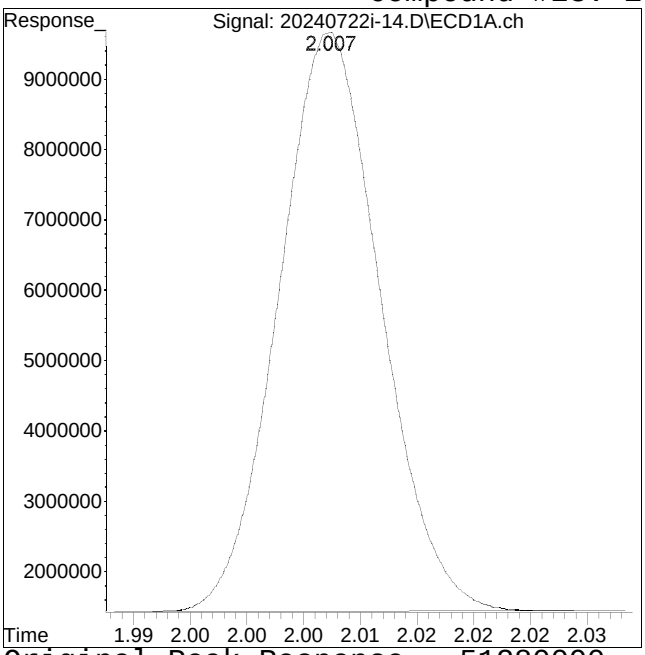
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



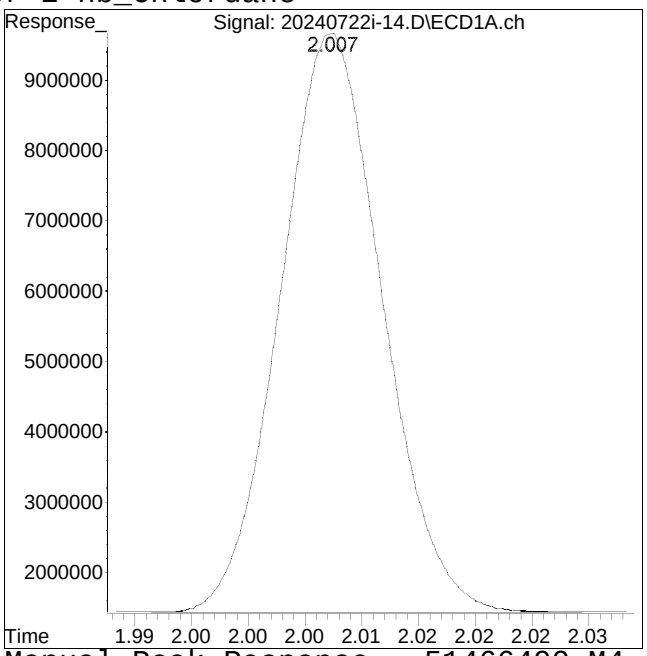
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-14.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:26 Instrument : PEST 20
Sample : il3chlor,42e,,pp 11694 L0.Quant Date : 7/23/2024 2:21 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 51280090



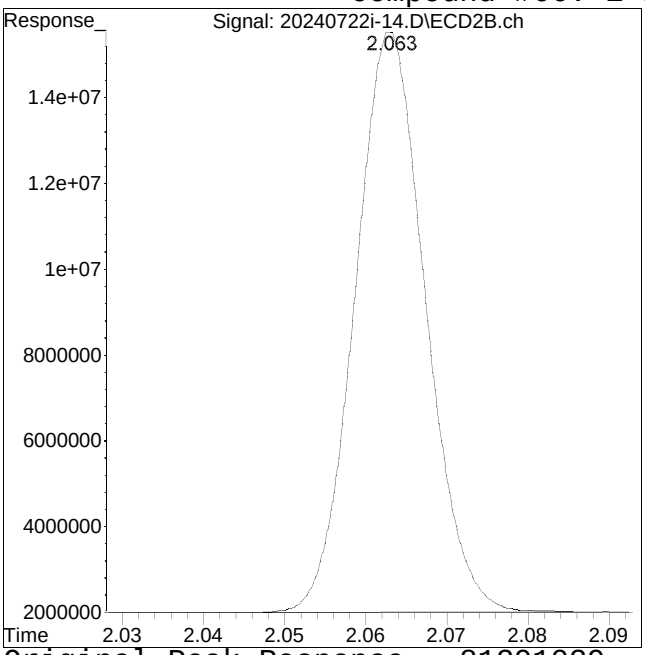

Manual Peak Response = 51466490 M4

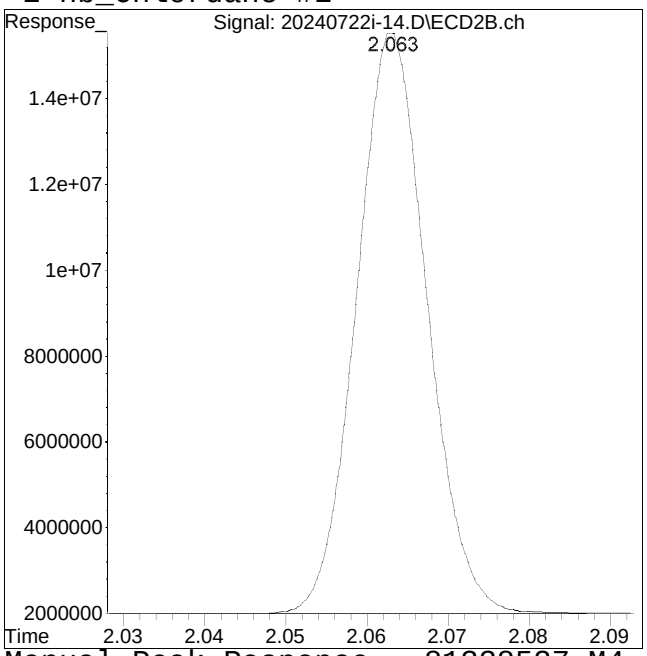
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-14.D
Date Inj'd : 7/22/2024 20:26
Sample : il3chlor,42e,,pp 11694 L0.
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:21 pm

Compound #66: 1-br-2-nb_Chlordane #2



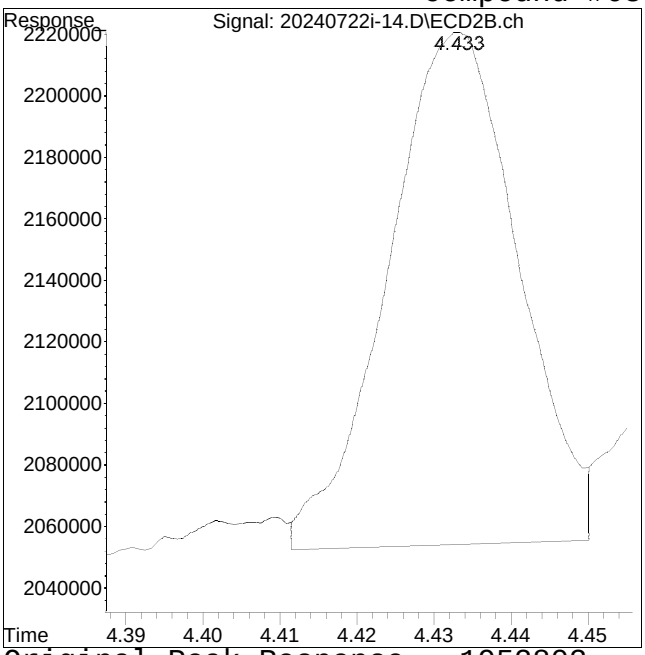

Original Peak Response = 81291039 Manual Peak Response = 81338537 M4
M4 = Poor automated baseline construction.

Manual Integration Report

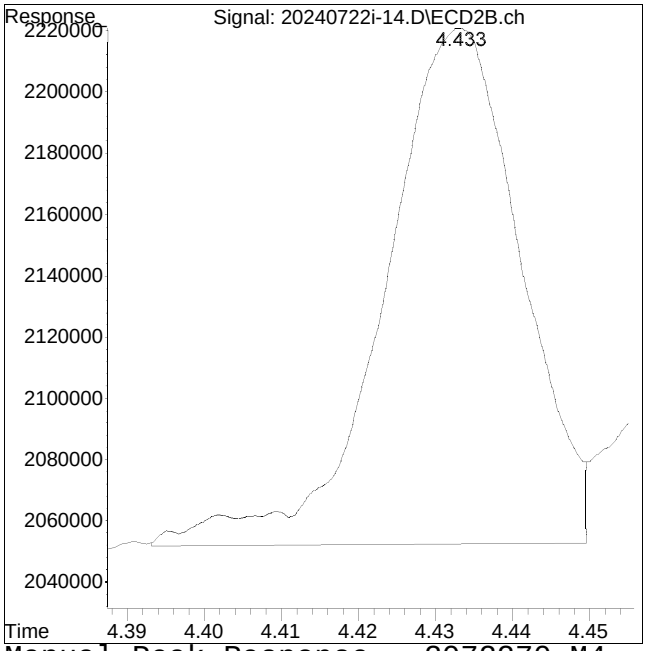
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-14.D
Date Inj'd : 7/22/2024 20:26
Sample : il3chlor,42e,,pp 11694 L0.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:21 pm

Compound #68: chlordane-3 #2




Original Peak Response = 1952803




Manual Peak Response = 2072270 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-15.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:38
Operator : pest20:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:20:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:20:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.007 | 2.062 | 50285949 | 79236110 | 25.000M4 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-15.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:38
Operator : pest20:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:20:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:20:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 29) | l1 | chlordane-1 | 3.441 | 3.768 | 2227662 | 3104416 | 27.101 | 28.083 |
| 30) | l1 | chlordane-3 | 3.922 | 4.433 | 2901092 | 4124008 | 28.733 | 31.374 |
| 31) | l1 | chlordane-4 | 4.543 | 5.140 | 9506821 | 11074077 | 28.456 | 26.549M3 |
| 32) | l1 | chlordane-5 | 4.679 | 5.295 | 13476530 | 8814752 | 26.146M3 | 26.916M4 |
| Sum | | chlordane-1 | | | 28112105 | 27117252 | NoCal | NoCal D |
| Average | | chlordane-1 | | | | | 27.609 | 28.231 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sum | | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

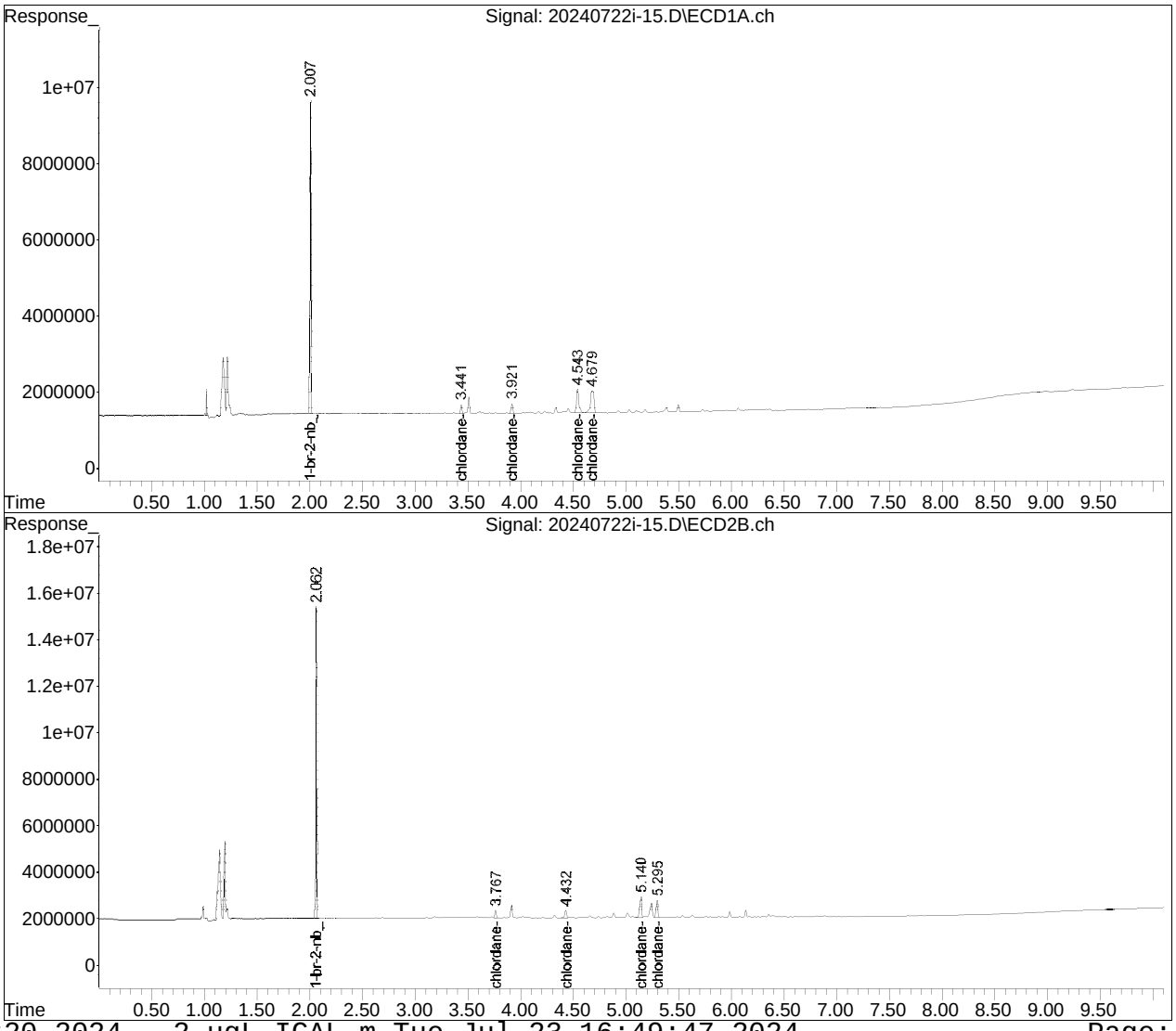
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-15.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:38
Operator : pest20:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:20:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:20:35 2024
Response via : Initial Calibration
Integrator: ChemStation

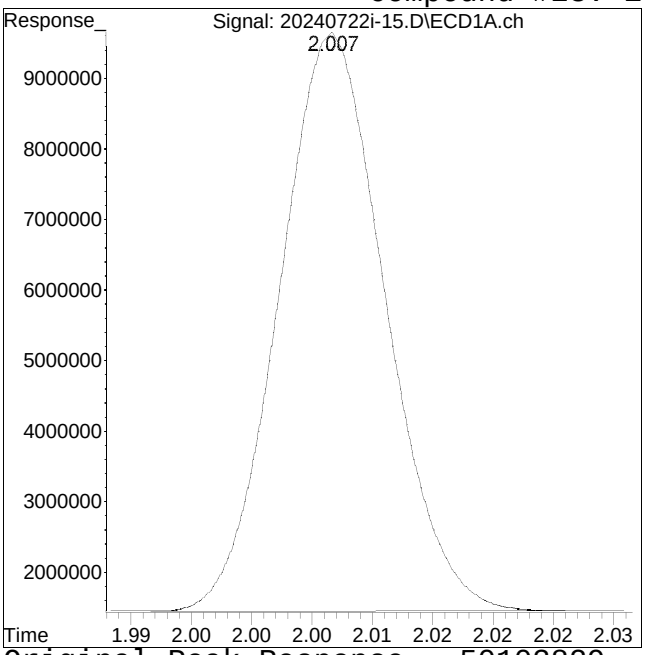
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



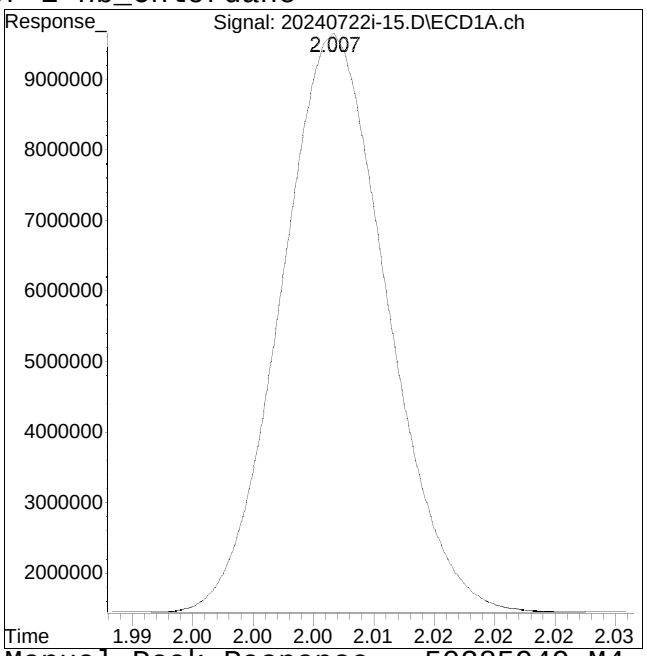
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-15.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:38 Instrument : PEST 20
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 7/23/2024 2:20 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 50103829



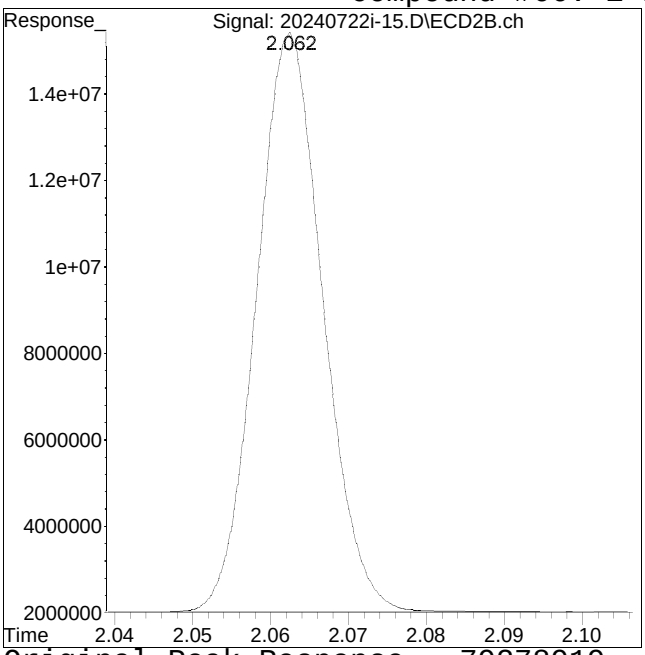

Manual Peak Response = 50285949 M4

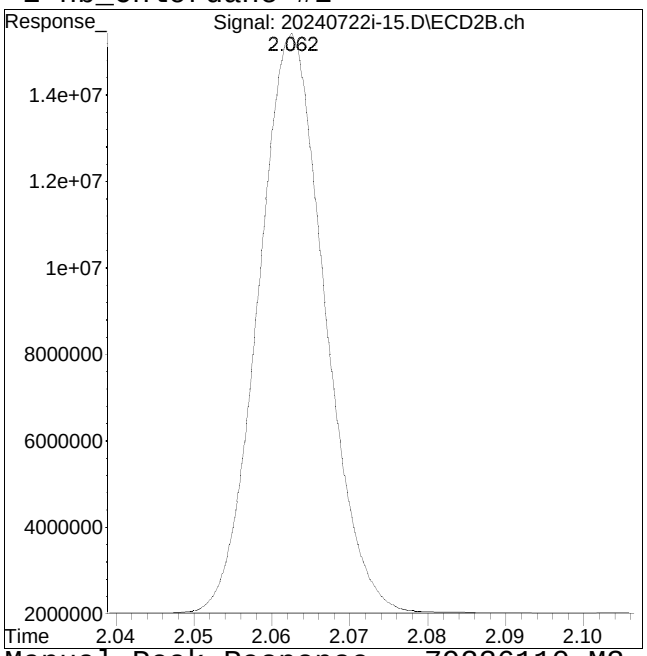
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-15.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:38 Instrument : PEST 20
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 7/23/2024 2:20 pm

Compound #66: 1-br-2-nb_Chlordane #2



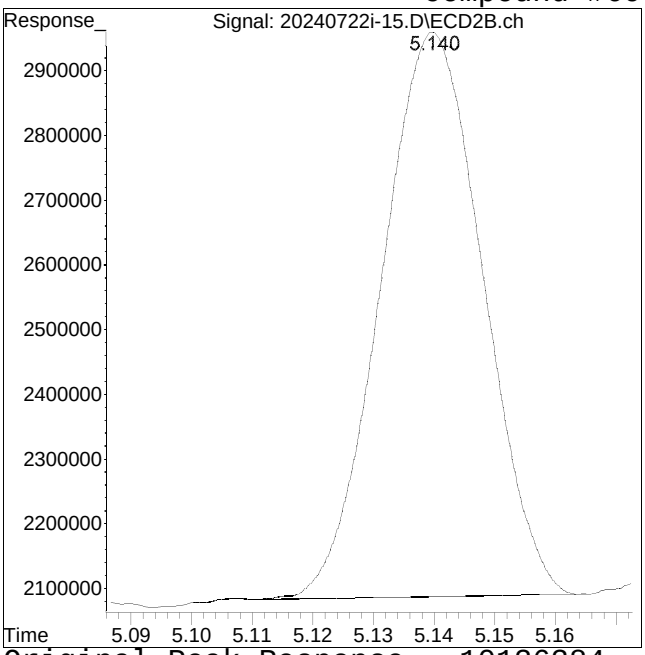



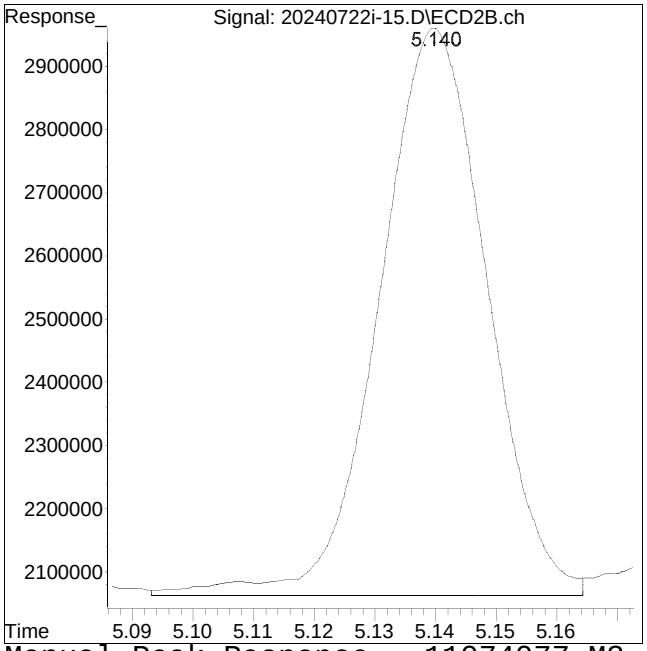

Original Peak Response = 79278919 Manual Peak Response = 79236110 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-15.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:38 Instrument : PEST 20
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 7/23/2024 2:20 pm

Compound #69: chlordane-4 #2



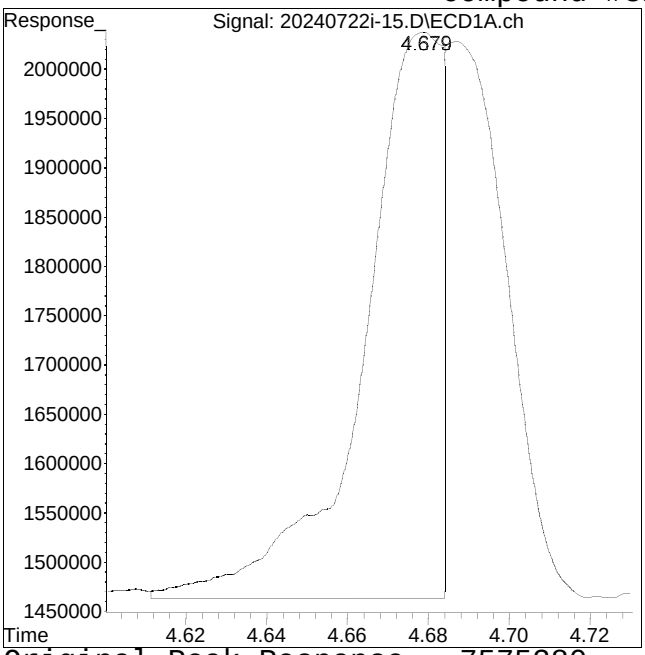



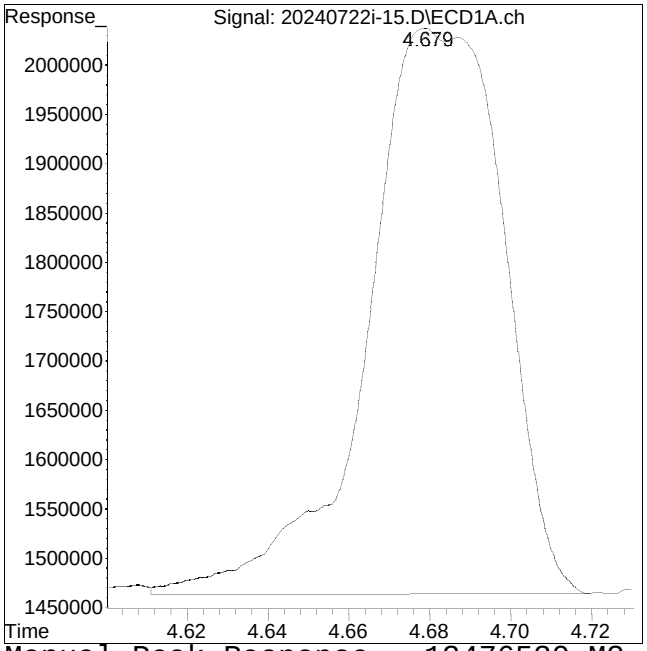

Original Peak Response = 10136384 Manual Peak Response = 11074077 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-15.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:38 Instrument : PEST 20
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 7/23/2024 2:20 pm

Compound #32: chlordane-5



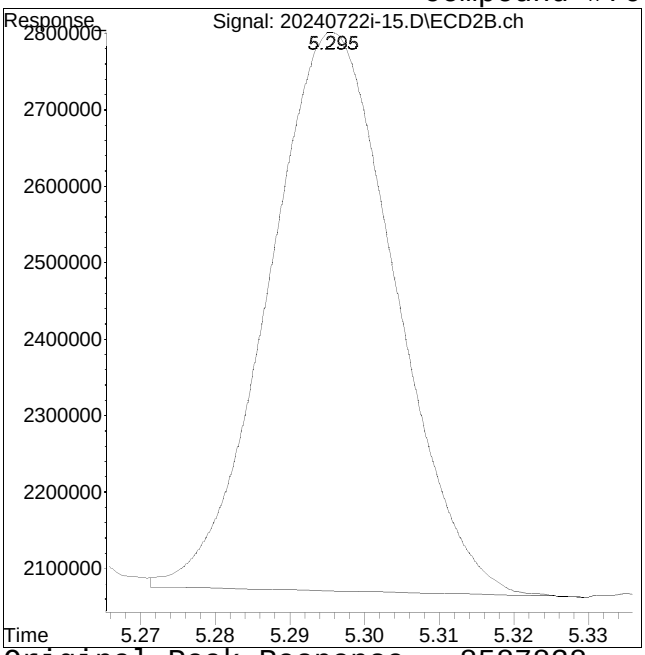



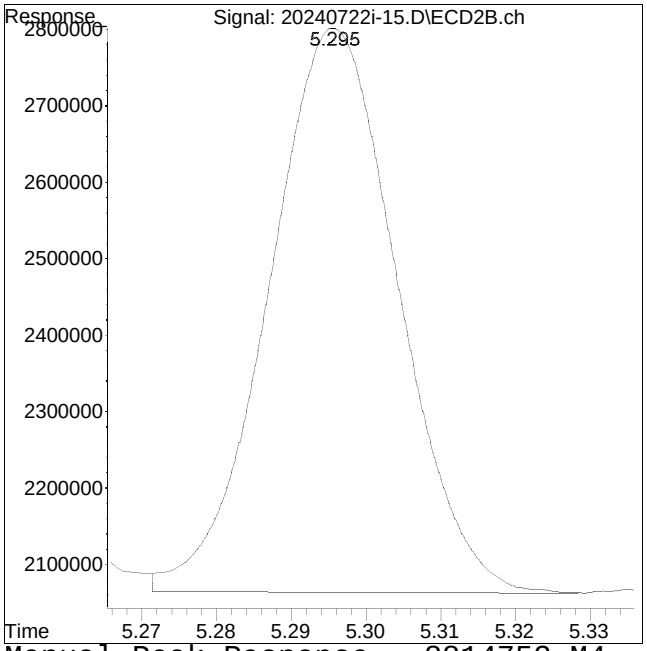

Original Peak Response = 7575380 Manual Peak Response = 13476530 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-15.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:38 Instrument : PEST 20
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 7/23/2024 2:20 pm

Compound #70: chlordane-5 #2




Original Peak Response = 8587838 Manual Peak Response = 8814752 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-16.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:51
Operator : pest20:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:19:19 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:19:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.014 | 2.068 | 53065082 | 84184890 | 25.000M4 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-16.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 20:51
Operator : pest20:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:19:19 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:19:13 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.446 | 3.770 | 10188218 | 14403222 | 122.816 | 129.991 |
| 30) | l1 | chlordane-3 | 3.926 | 4.435 | 13137100 | 17758446 | 130.923 | 136.418M3 |
| 31) | l1 | chlordane-4 | 4.548 | 5.142 | 38766440 | 50490607 | 112.768 | 118.044 |
| 32) | l1 | chlordane-5 | 4.682 | 5.297 | 59498854 | 40178741 | 112.018M3 | 120.124 |
| | | Sum chlordane-1 | | | 121.6E6 | 122.8E6 | NoCal | NoCal D |
| | | Average chlordane-1 | | | | | 119.632 | 126.144 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | | Average toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | | Average toxaphene-1 | | | | | 0.000 | 0.000 |

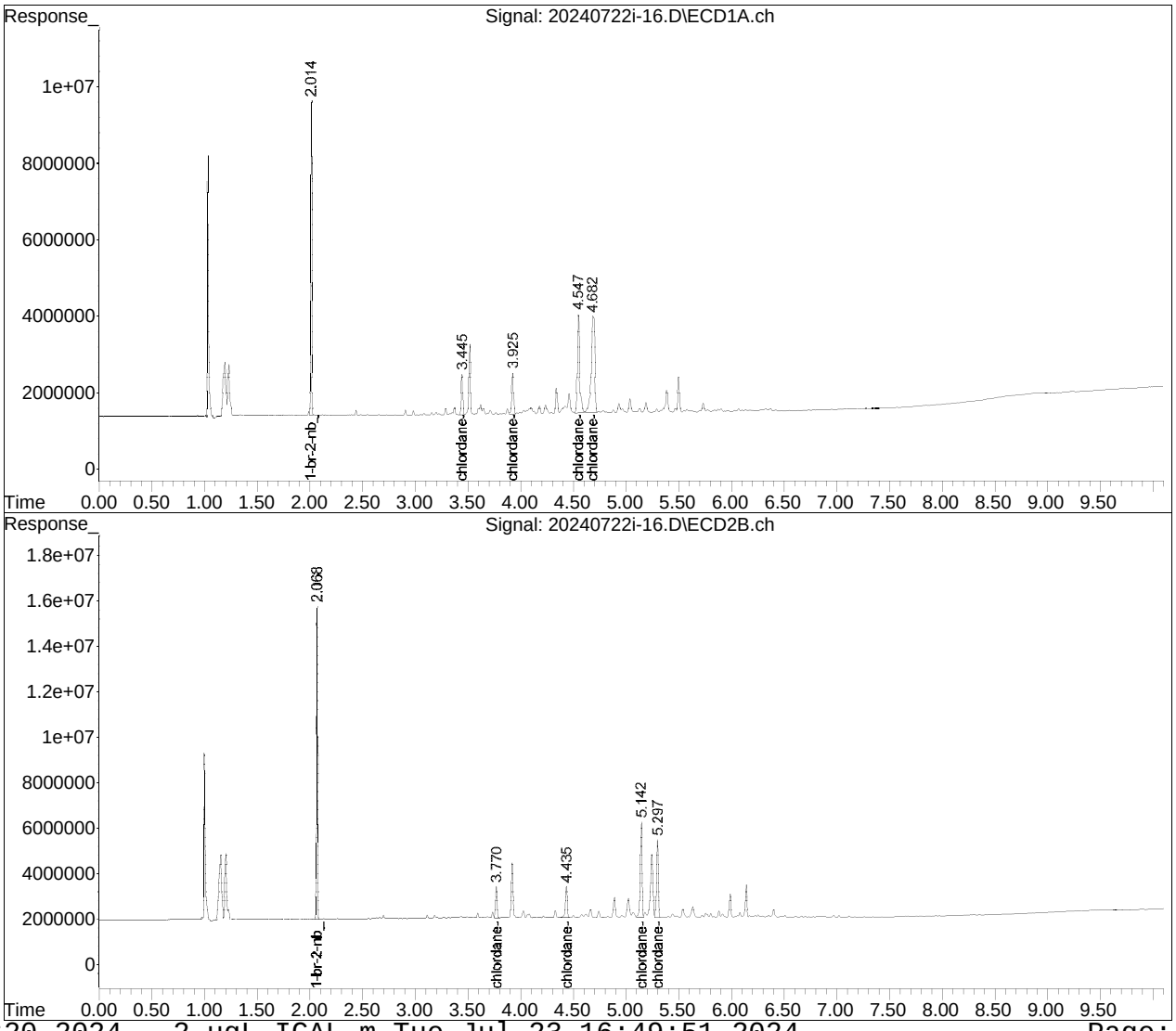
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-16.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  20:51
Operator : pest20:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 16  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:19:19 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:19:13 2024
Response via : Initial Calibration
Integrator: ChemStation

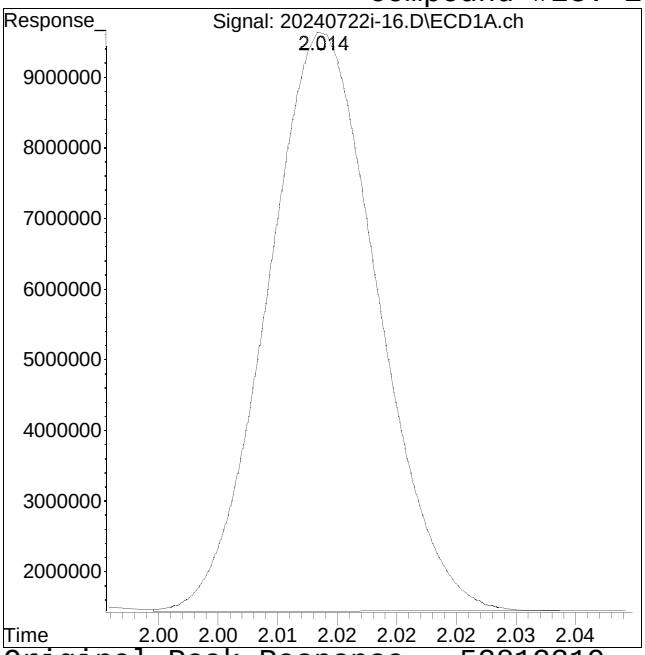
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

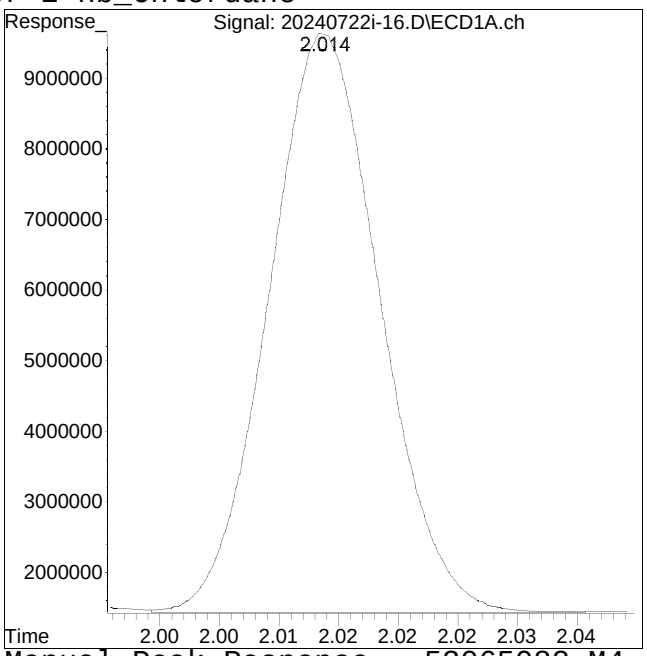


# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-16.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:51 Instrument : PEST 20
Sample : il5chlor,42e,,pp 11692 L0.Quant Date : 7/23/2024 2:19 pm

## Compound #28: 1-br-2-nb_Chlordane



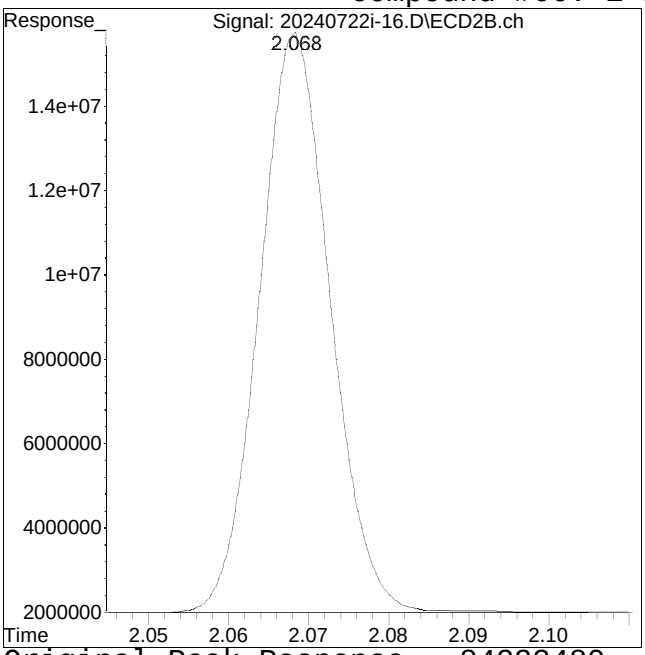



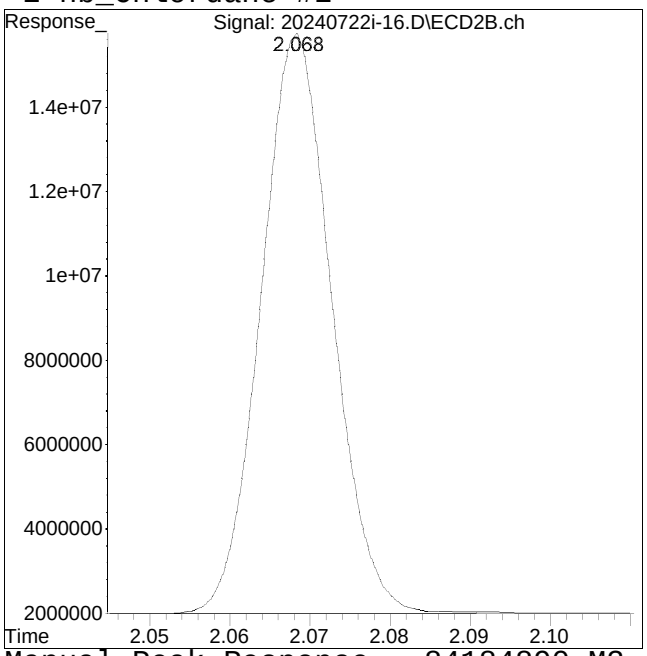

Original Peak Response = 52812319 Manual Peak Response = 53065082 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-16.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:51 Instrument : PEST 20
Sample : il5chlor,42e,,pp 11692 L0.Quant Date : 7/23/2024 2:19 pm

Compound #66: 1-br-2-nb_Chlordane #2



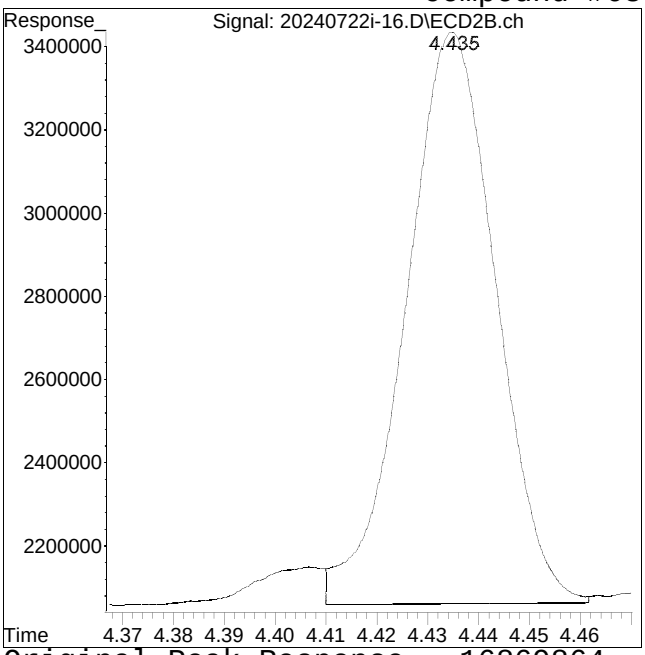



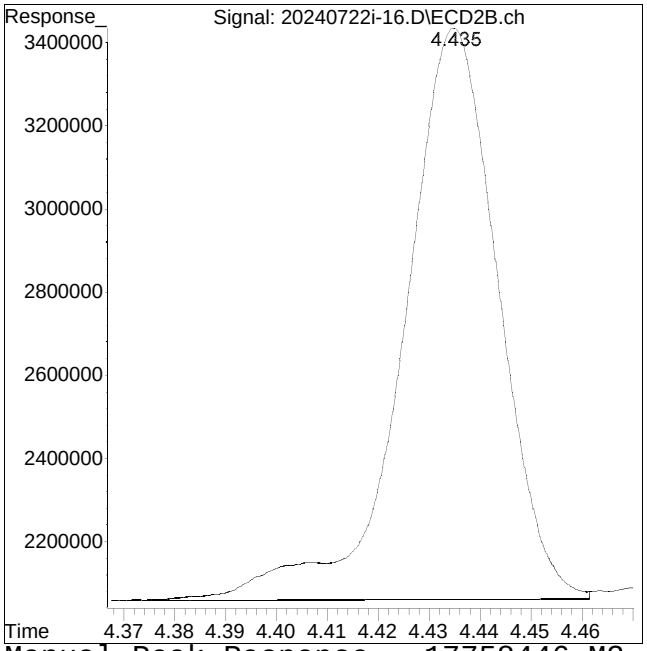

Original Peak Response = 84233480 Manual Peak Response = 84184890 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-16.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:51 Instrument : PEST 20
Sample : il5chlor,42e,,pp 11692 L0.Quant Date : 7/23/2024 2:19 pm

Compound #68: chlordane-3 #2



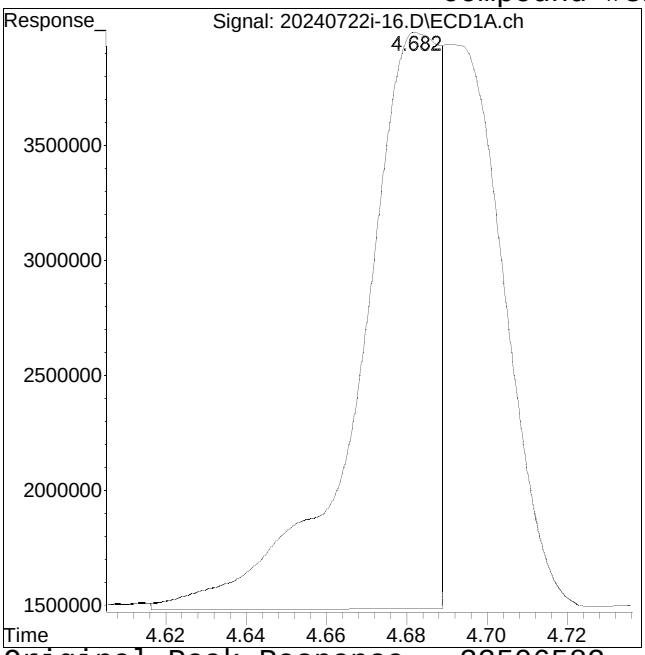



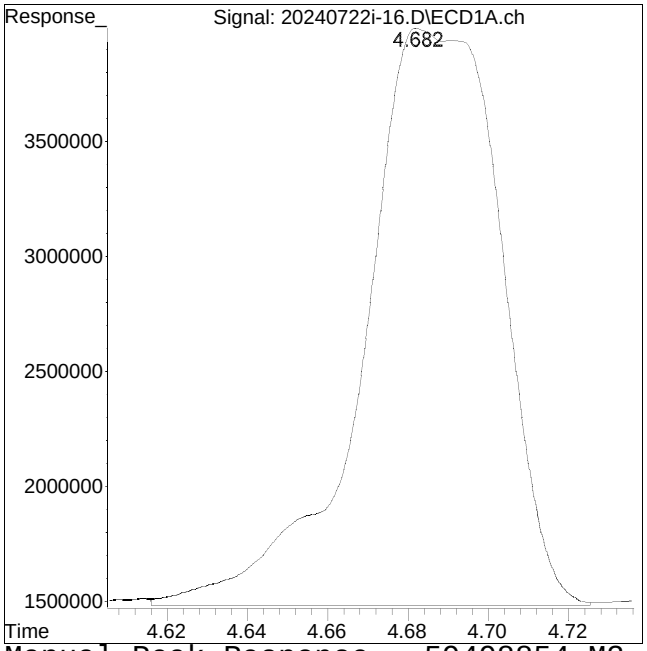

Original Peak Response = 16869864 Manual Peak Response = 17758446 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-16.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 20:51 Instrument : PEST 20
Sample : il5chlor,42e,,pp 11692 L0.Quant Date : 7/23/2024 2:19 pm

Compound #32: chlordane-5




Original Peak Response = 33506582 Manual Peak Response = 59498854 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-17.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:03
Operator : pest20:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:18:15 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:18:09 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.009 | 2.065 | 52196079 | 84894463 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-17.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:03
Operator : pest20:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:18:15 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:18:09 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.442 | 3.768 | 43836436 | 62893386 | 550.910 | 587.502 |
| 30) | l1 | chlordane-3 | 3.923 | 4.433 | 55017278 | 76935807 | 579.616 | 621.749 |
| 31) | l1 | chlordane-4 | 4.545 | 5.140 | 178.1E6 | 238.7E6 | 536.090 | 573.948M3 |
| 32) | l1 | chlordane-5 | 4.680 | 5.296 | 275.6E6 | 187.9E6 | 537.387 | 579.048 |
| | Sum | chlordane-1 | | | 552.5E6 | 566.4E6 | NoCal | NoCal D |
| Average | | chlordane-1 | | | | | 551.001 | 590.562 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

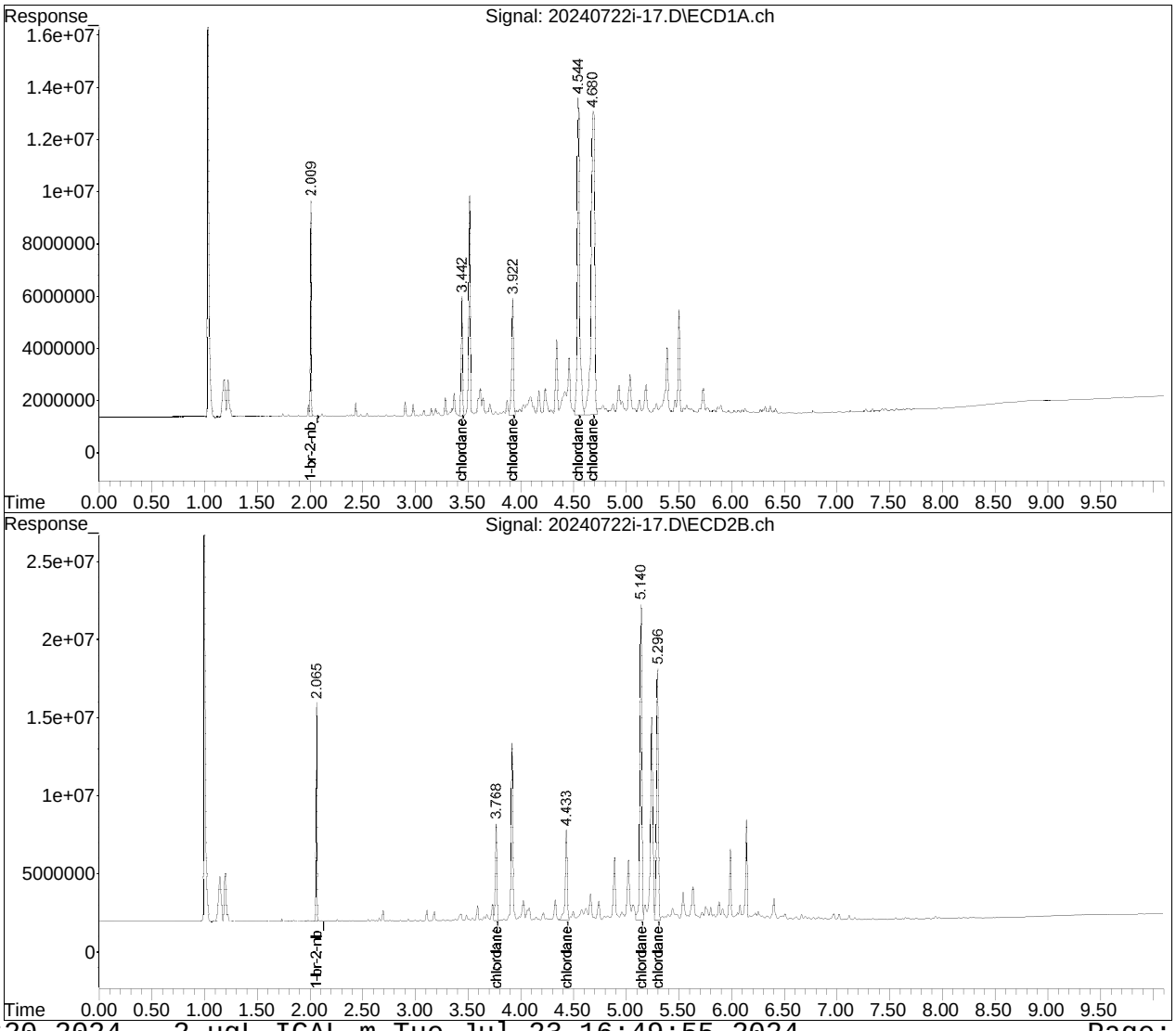
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-17.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  21:03
Operator : pest20:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 17  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:18:15 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:18:09 2024
Response via : Initial Calibration
Integrator: ChemStation

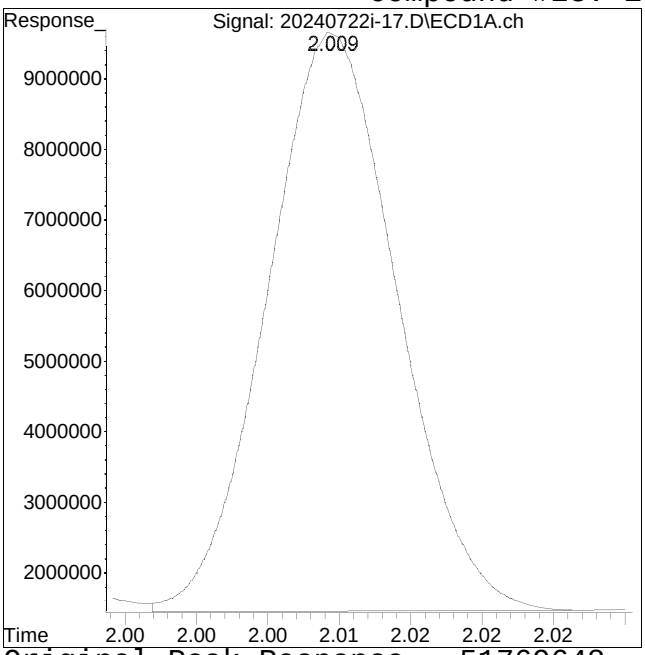
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

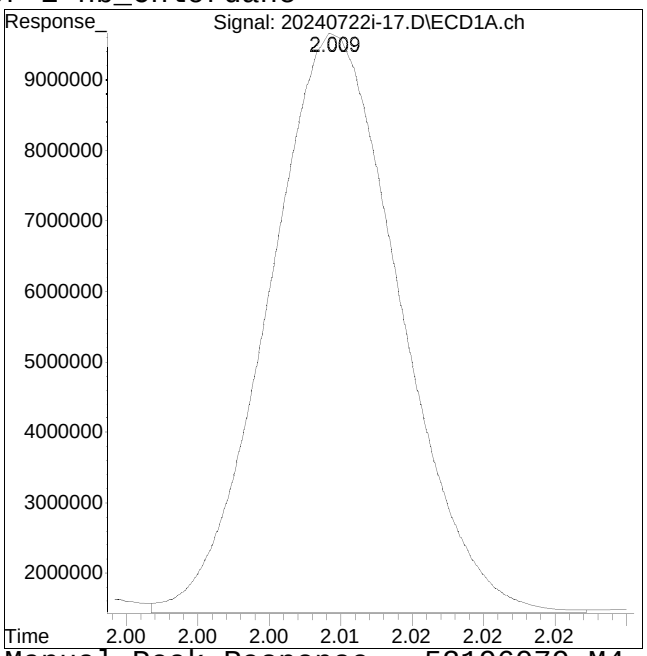


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-17.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:03 Instrument : PEST 20
Sample : il7chlor,42e,,pp 11691 L0.Quant Date : 7/23/2024 2:18 pm

Compound #28: 1-br-2-nb_Chlordane



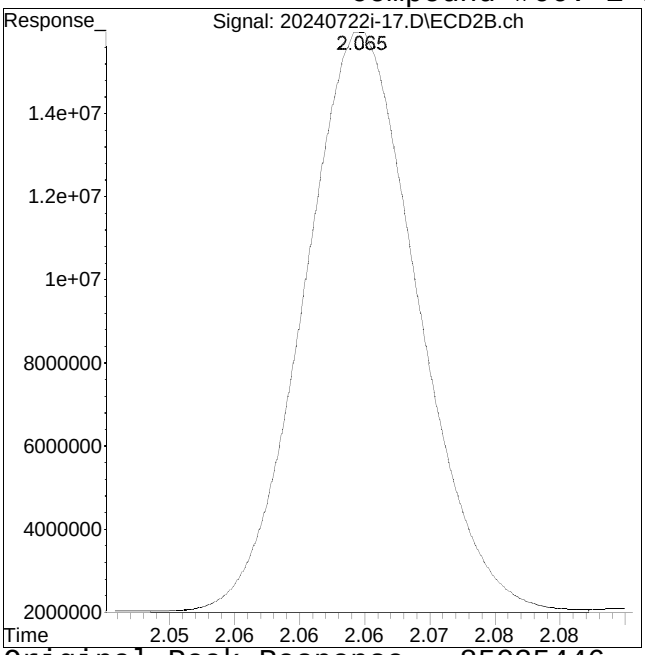




Original Peak Response = 51769648 Manual Peak Response = 52196079 M4
M4 = Poor automated baseline construction.

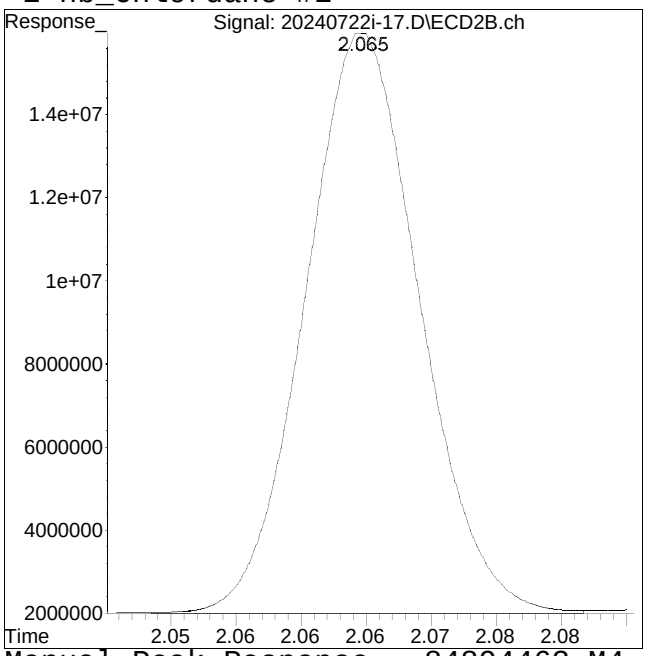
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-17.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:03 Instrument : PEST 20
Sample : il7chlor,42e,,pp 11691 L0.Quant Date : 7/23/2024 2:18 pm

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 85035446



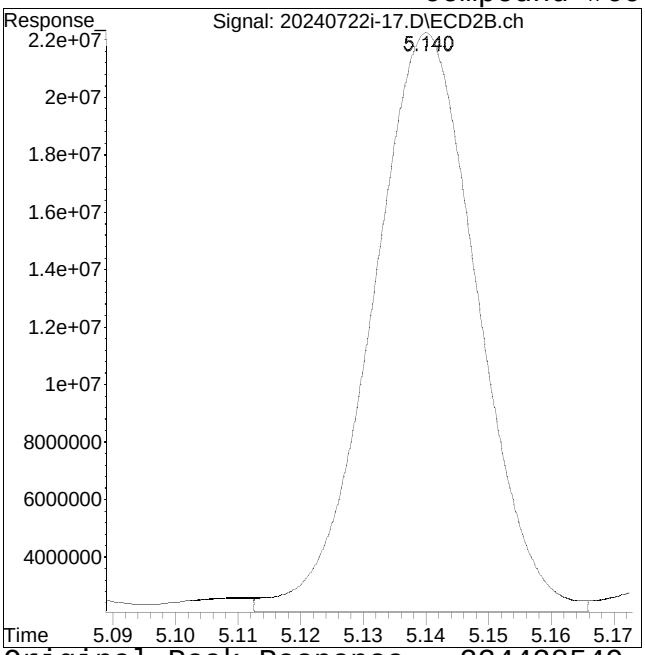

Manual Peak Response = 84894463 M4

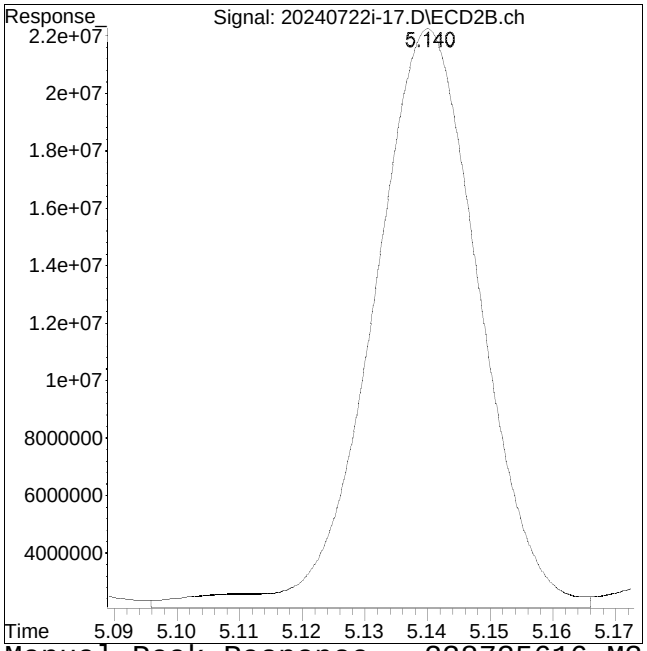
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-17.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:03 Instrument : PEST 20
Sample : il7chlor,42e,,pp 11691 L0.Quant Date : 7/23/2024 2:18 pm

Compound #69: chlordane-4 #2




Original Peak Response = 234428549 Manual Peak Response = 238735616 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-18.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:16
Operator : pest20:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:14:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:14:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.008 | 2.064 | 54071095 | 89744916 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-18.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:16
Operator : pest20:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:14:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:14:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 3.441 | 3.768 | 85480740 | 126.1E6 | NoCal | NoCal |
| 30) l1 | chlordane-3 | 3.922 | 4.433 | 104.1E6 | 150.2E6 | NoCal | NoCal |
| 31) l1 | chlordane-4 | 4.544 | 5.140 | 356.2E6 | 490.3E6 | NoCal | NoCal |
| 32) l1 | chlordane-5 | 4.679 | 5.296 | 552.1E6 | 383.8E6 | NoCal M3 | NoCal |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

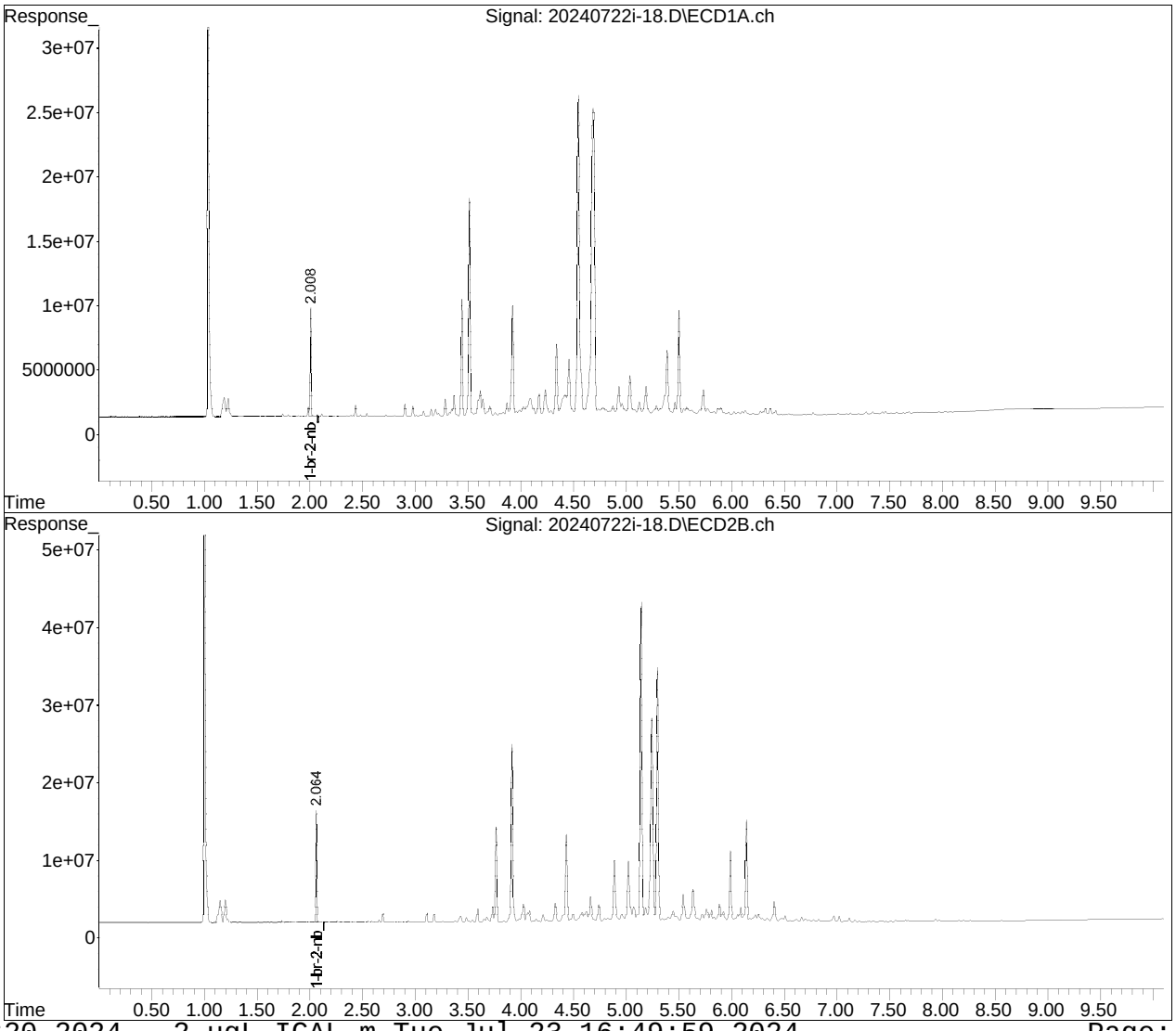
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-18.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  21:16
Operator : pest20:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 18  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:14:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:14:34 2024
Response via : Initial Calibration
Integrator: ChemStation

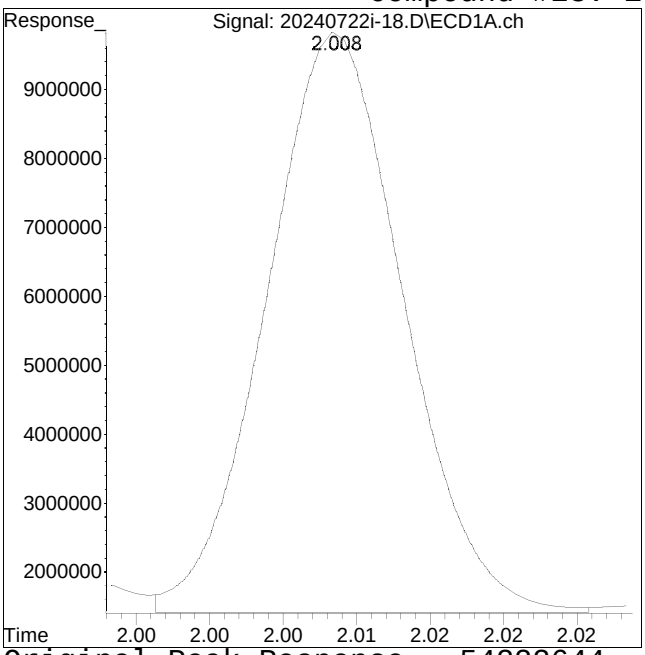
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



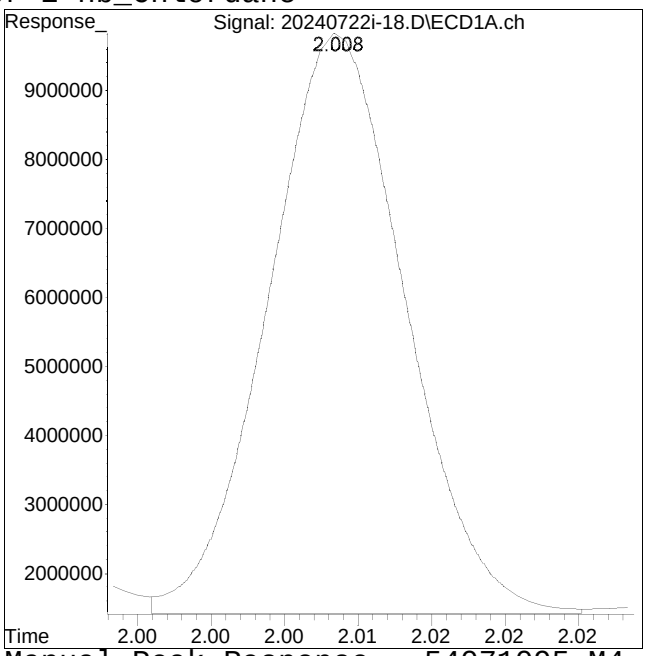
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-18.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:16 Instrument : PEST 20
Sample : il8chlor,42e,,pp 11690 L1.Quant Date : 7/23/2024 2:14 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 54222644



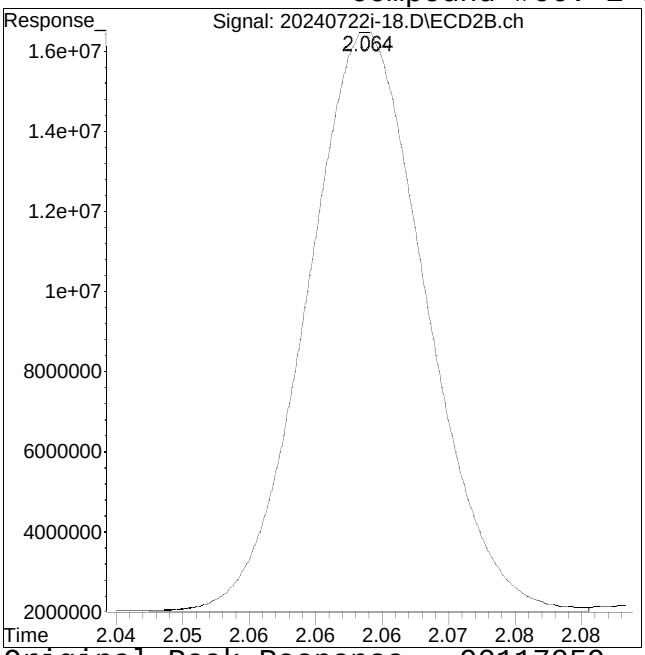

Manual Peak Response = 54071095 M4

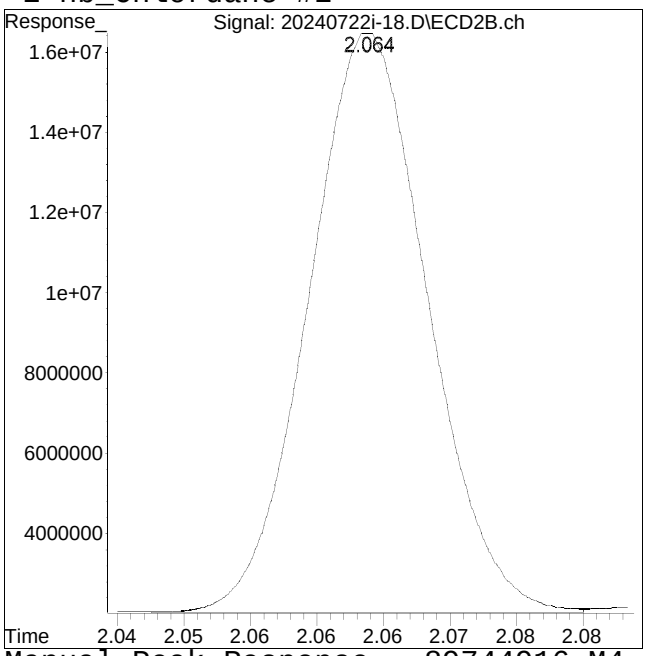
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-18.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:16 Instrument : PEST 20
Sample : il8chlor,42e,,pp 11690 L1.Quant Date : 7/23/2024 2:14 pm

Compound #66: 1-br-2-nb_Chlordane #2



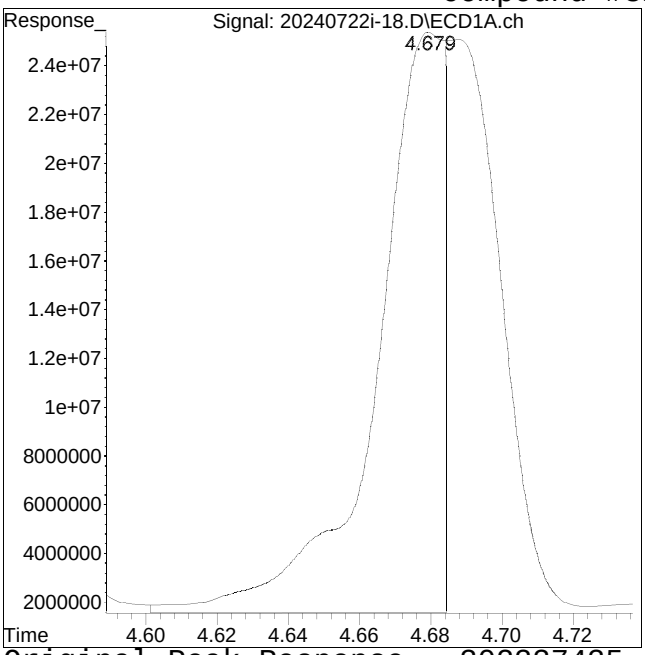



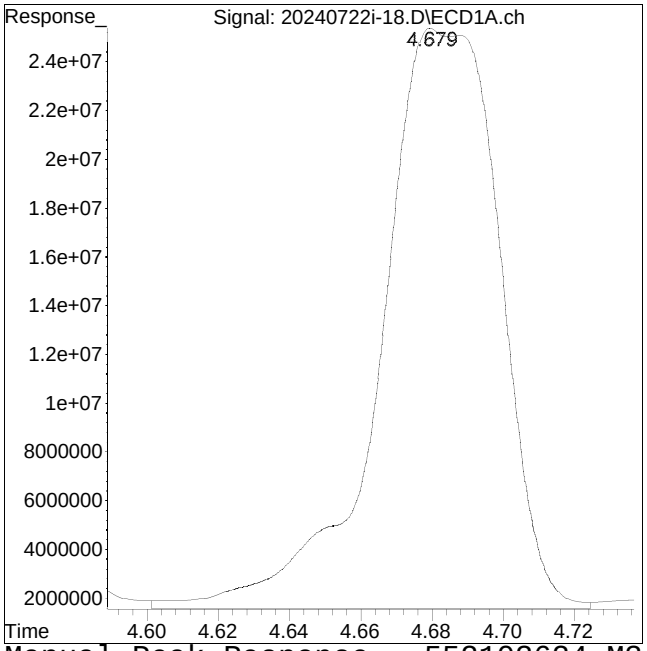

Original Peak Response = 90117059 Manual Peak Response = 89744916 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-18.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:16 Instrument : PEST 20
Sample : il8chlor,42e,,pp 11690 L1.Quant Date : 7/23/2024 2:14 pm

Compound #32: chlordane-5




Original Peak Response = 302337435 Manual Peak Response = 552103624 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-19.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:28
Operator : pest20:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:15:52 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:15:44 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.008 | 2.063 | 53813832 | 93943731 | 25.000M4 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-19.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:28
Operator : pest20:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:15:52 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:15:44 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.441 | 3.768 | 166.0E6 | 243.6E6 | 1951.302 | 1845.417 |
| 30) | l1 | chlordane-3 | 3.921 | 4.433 | 198.5E6 | 281.1E6 | 1915.964 | 1788.015 |
| 31) | l1 | chlordane-4 | 4.544 | 5.140 | 693.4E6 | 944.1E6 | 1956.079 | 1839.611 |
| 32) | l1 | chlordane-5 | 4.680 | 5.296 | 1067.1E6 | 736.1E6 | 1941.986M3 | 1832.469 |
| | | Sum chlordane-1 | | | 2125.0E6 | 2205.0E6 | NoCal | NoCal D |
| | | Average chlordane-1 | | | | | 1941.333 | 1826.378 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | | Average toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | | Average toxaphene-1 | | | | | 0.000 | 0.000 |

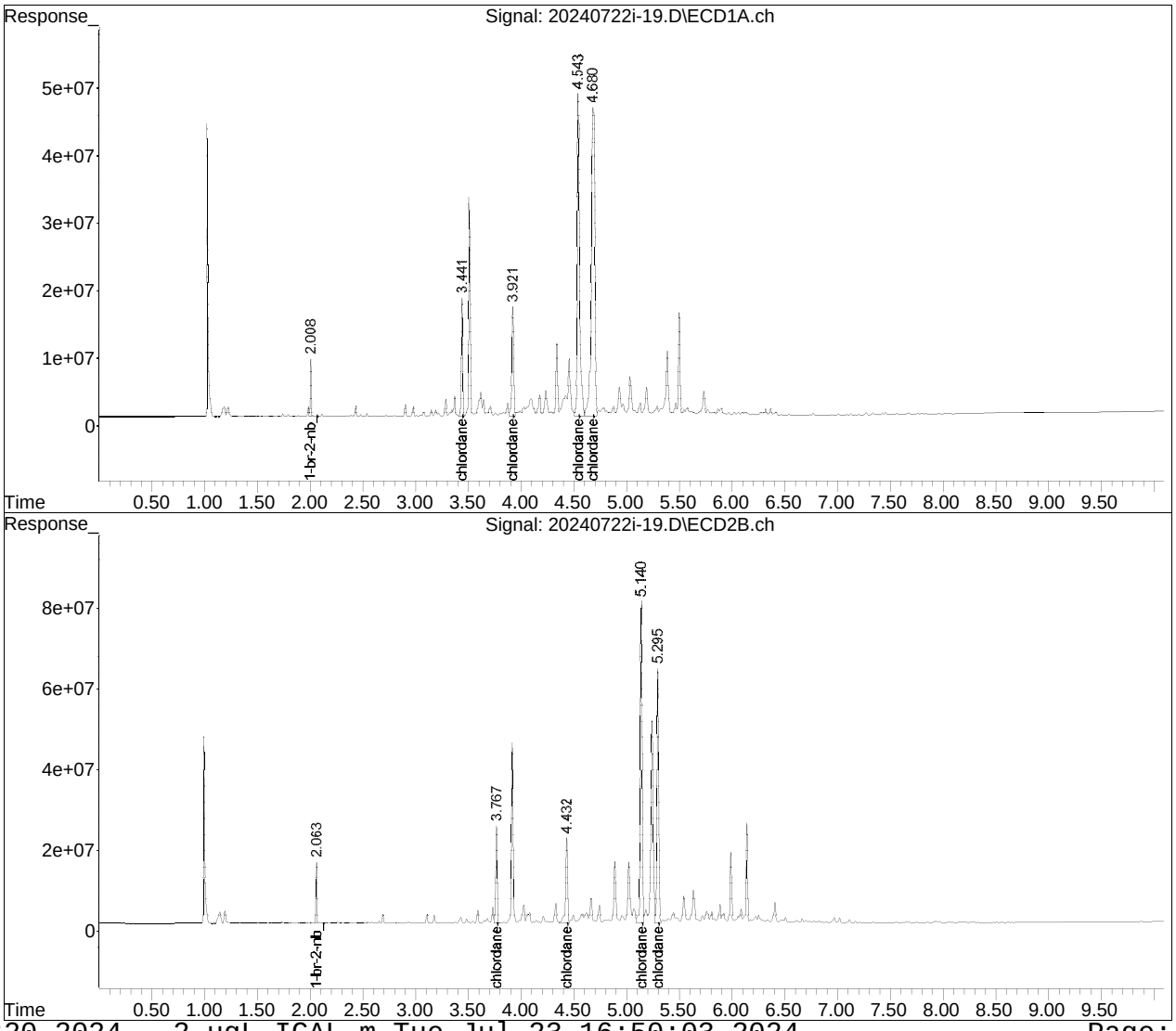
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-19.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  21:28
Operator : pest20:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 19  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:15:52 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:15:44 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

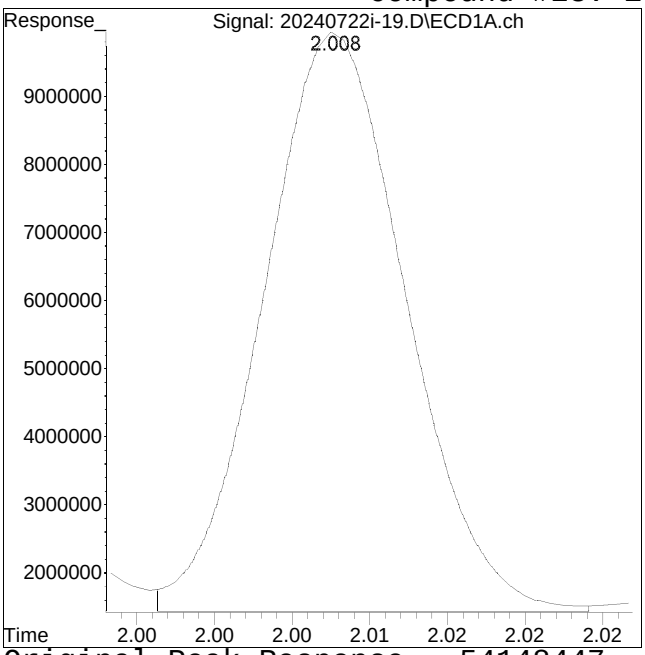


# Manual Integration Report

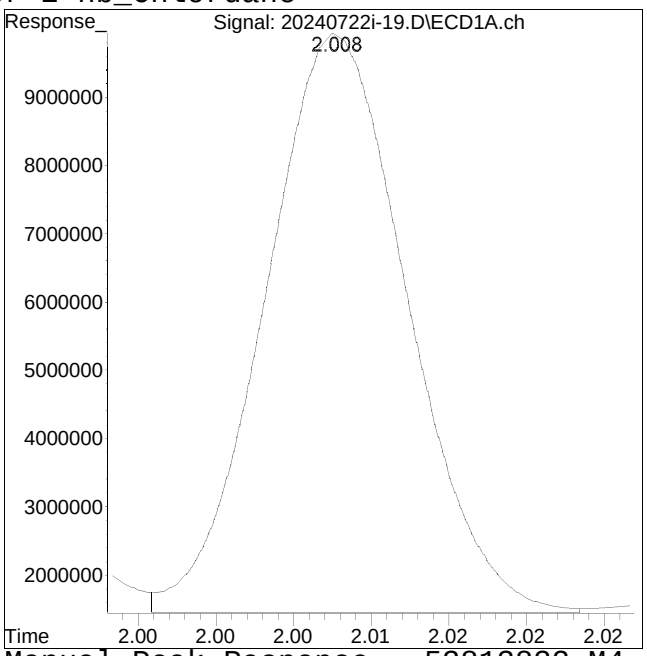
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-19.D
Date Inj'd : 7/22/2024 21:28
Sample : il9chlor,42e,,pp 11689 L2.

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:15 pm

## Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 54148447



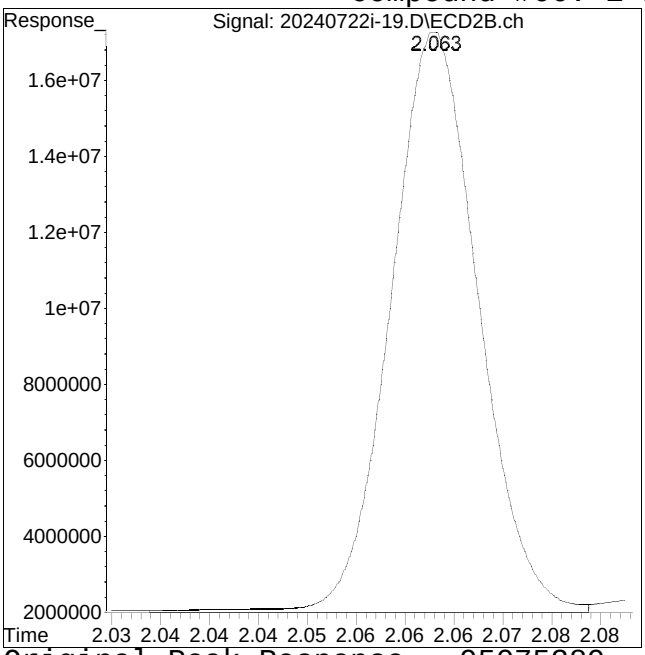

Manual Peak Response = 53813832 M4

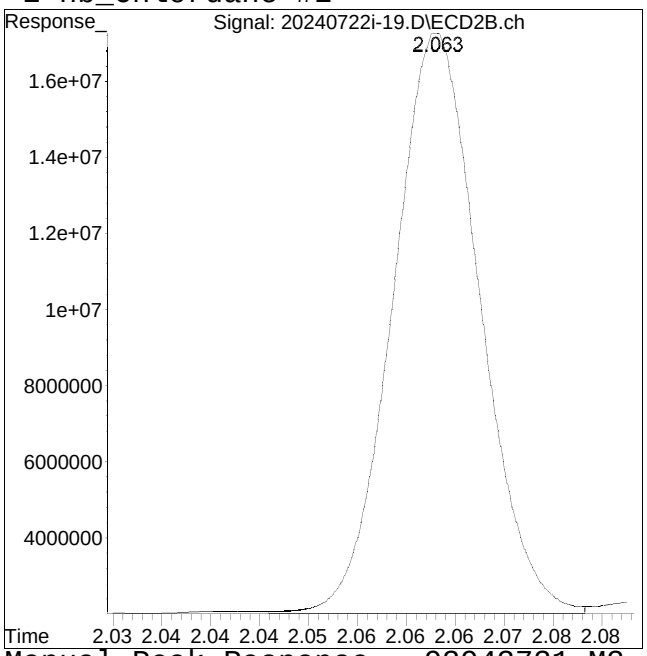
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-19.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:28 Instrument : PEST 20
Sample : il9chlor,42e,,pp 11689 L2.Quant Date : 7/23/2024 2:15 pm

Compound #66: 1-br-2-nb_Chlordane #2



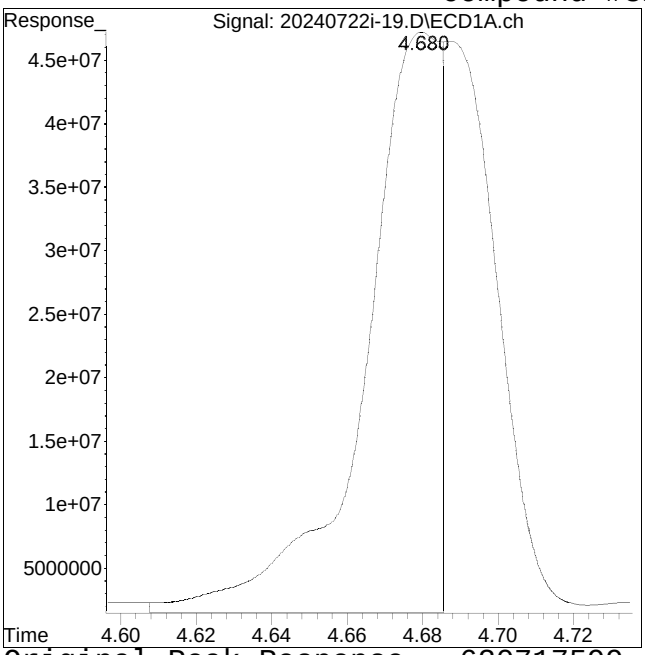



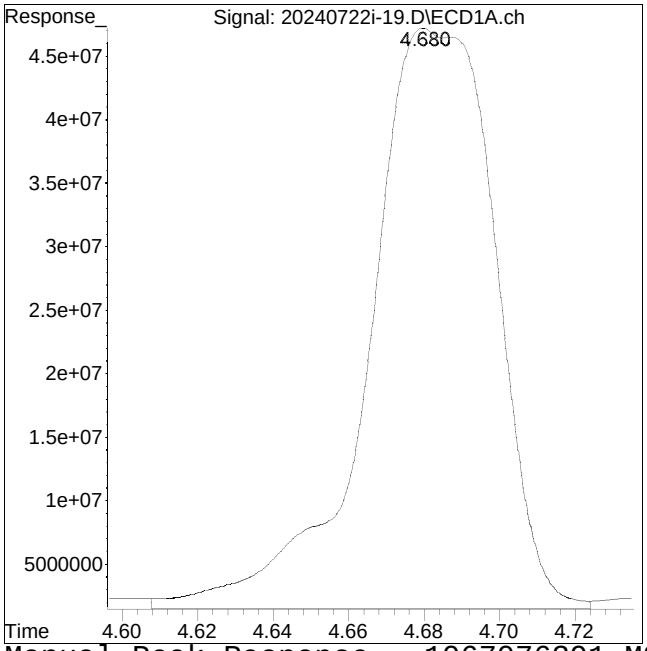

Original Peak Response = 95075389 Manual Peak Response = 93943731 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-19.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:28 Instrument : PEST 20
Sample : il9chlor,42e,,pp 11689 L2.Quant Date : 7/23/2024 2:15 pm

Compound #32: chlordane-5




Original Peak Response = 620717599 Manual Peak Response = 1067076391 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-20.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:40
Operator : pest20:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:16:54 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:16:47 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.009 | 2.064 | 55809863 | 110.6E6 | 25.000M4 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-20.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:40
Operator : pest20:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:16:54 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:16:47 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.442 | 3.768 | 404.6E6 | 597.8E6 | 4642.822 | 4001.095 |
| 30) | l1 | chlordane-3 | 3.922 | 4.433 | 470.4E6 | 665.2E6 | 4471.299 | 3795.501 |
| 31) | l1 | chlordane-4 | 4.544 | 5.140 | 1691.1E6 | 2328.6E6 | 4650.862 | 4015.476M3 |
| 32) | l1 | chlordane-5 | 4.679 | 5.296 | 2609.7E6 | 1809.2E6 | 4646.971M3 | 3993.051 |
| Sum | | chlordane-1 | | | 5175.8E6 | 5400.7E6 | NoCal | NoCal D |
| Average | | chlordane-1 | | | | | 4602.989 | 3951.281 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sum | | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

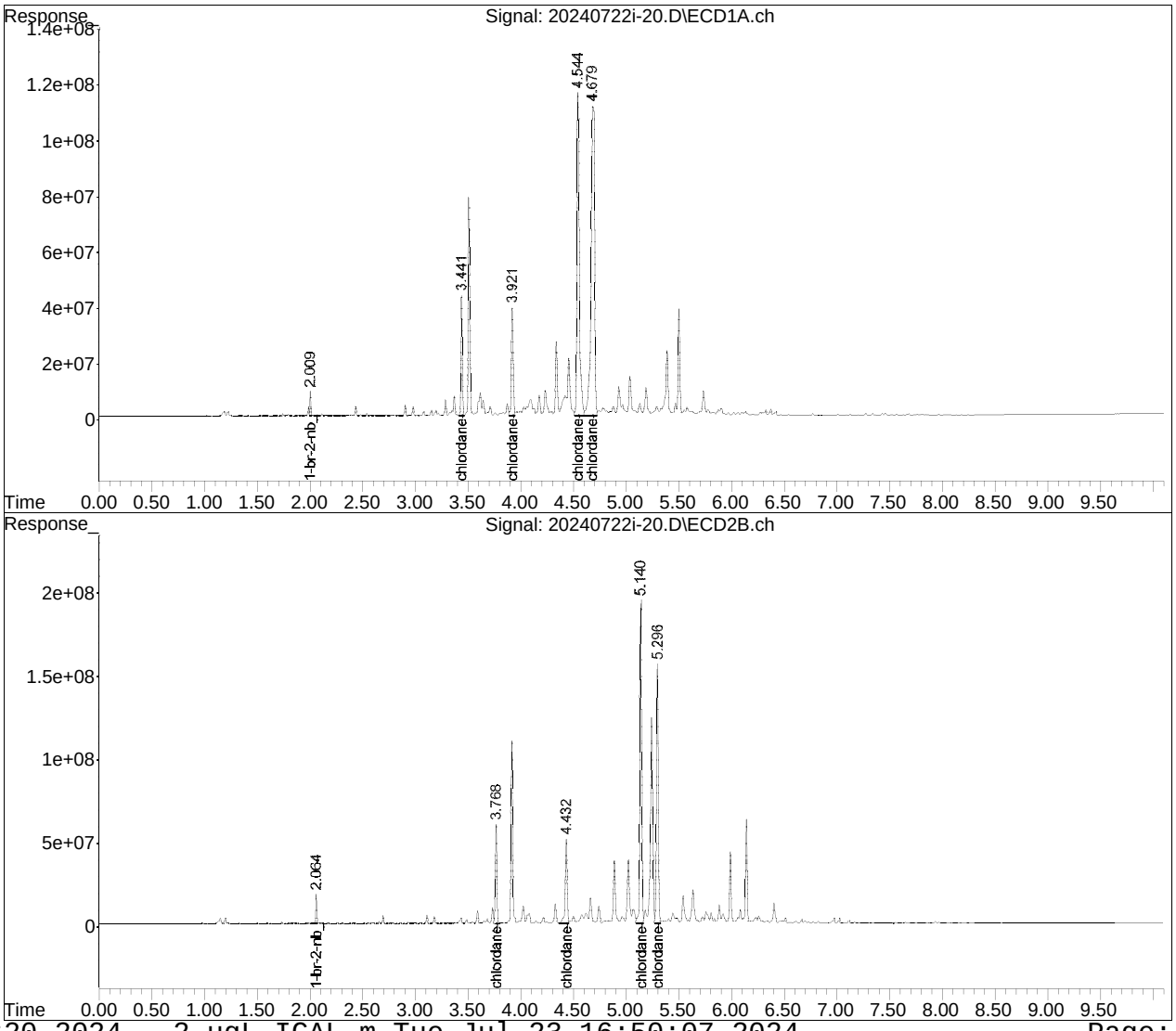
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-20.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:40
Operator : pest20:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:16:54 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:16:47 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

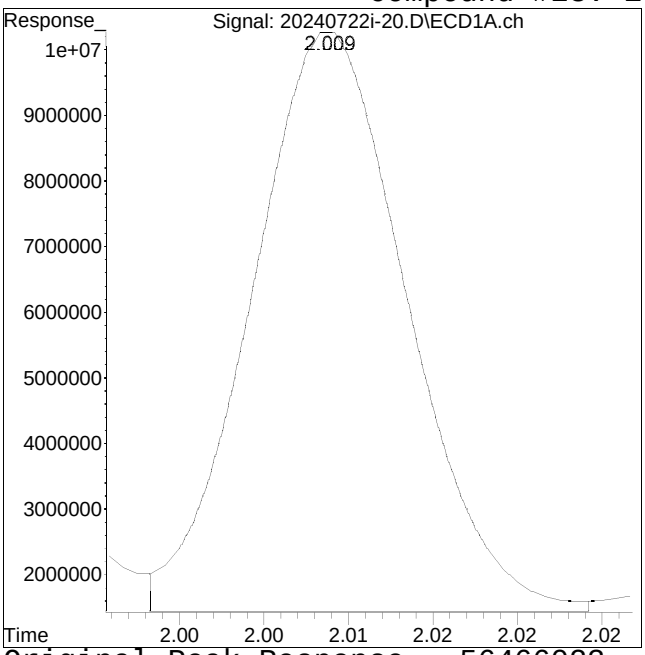


Manual Integration Report

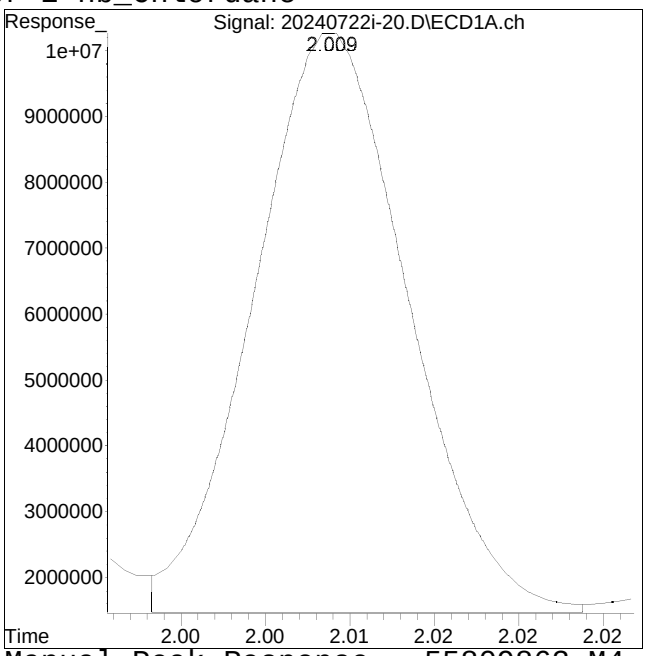
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-20.D
Date Inj'd : 7/22/2024 21:40
Sample : il10chlor,42e,,pp 11688 L5

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:16 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 56466023



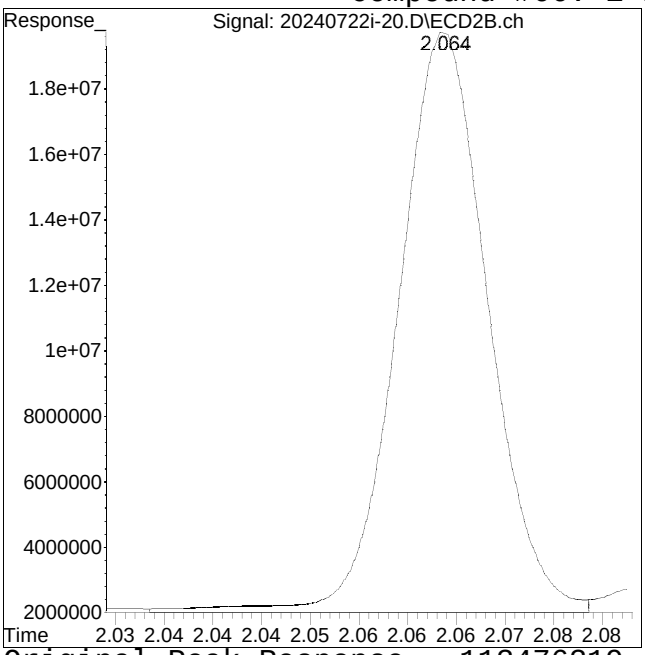

Manual Peak Response = 55809863 M4

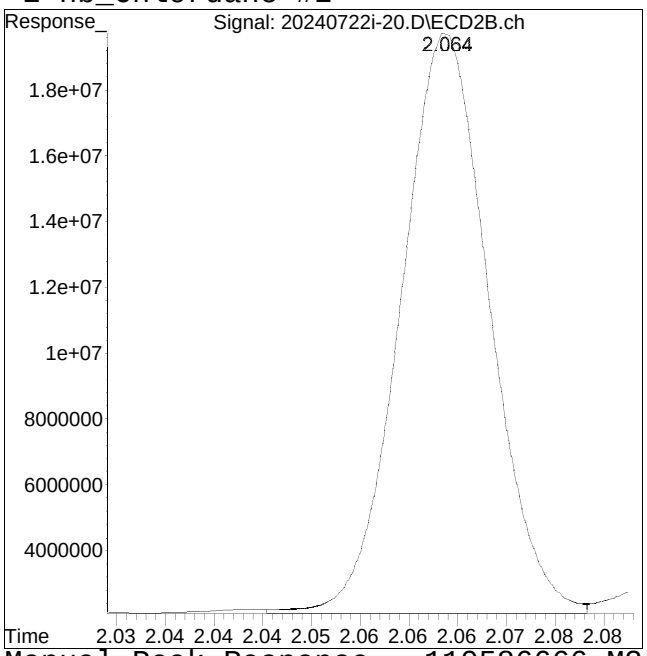
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-20.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:40 Instrument : PEST 20
Sample : il10chlor,42e,,pp 11688 L5Quant Date : 7/23/2024 2:16 pm

Compound #66: 1-br-2-nb_Chlordane #2



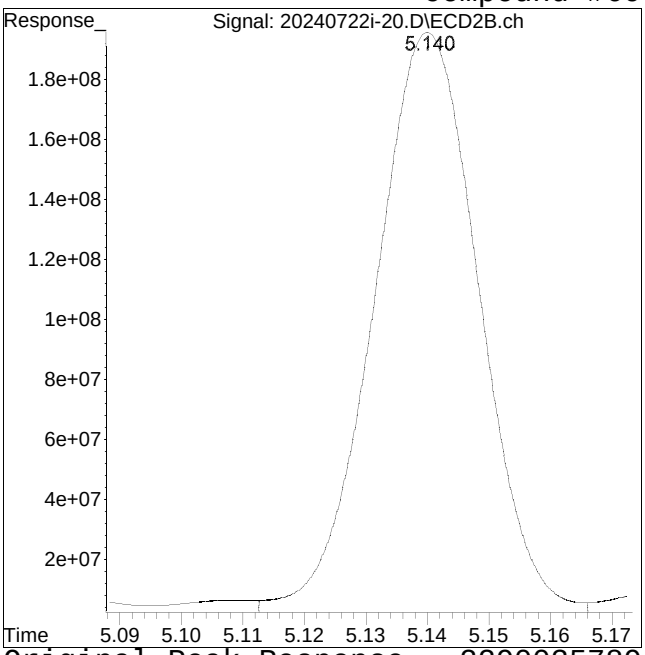



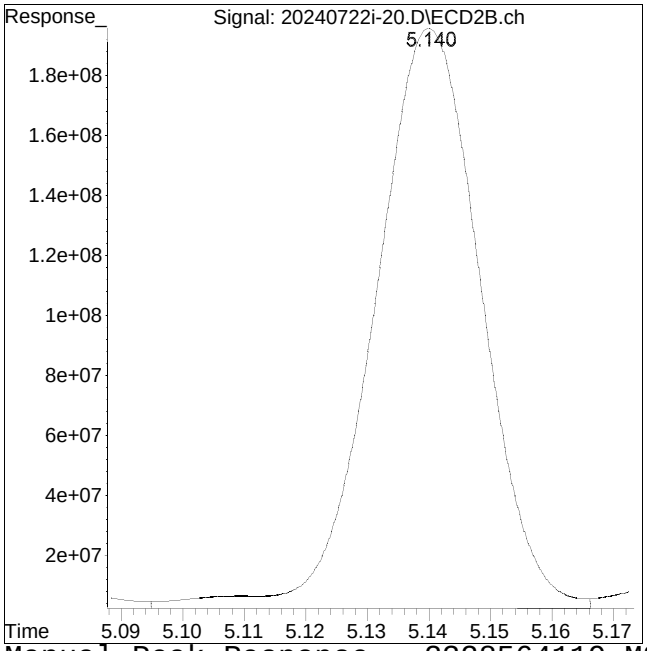

Original Peak Response = 113476319 Manual Peak Response = 110586666 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-20.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:40 Instrument : PEST 20
Sample : il10chlor,42e,,pp 11688 L5Quant Date : 7/23/2024 2:16 pm

Compound #69: chlordane-4 #2



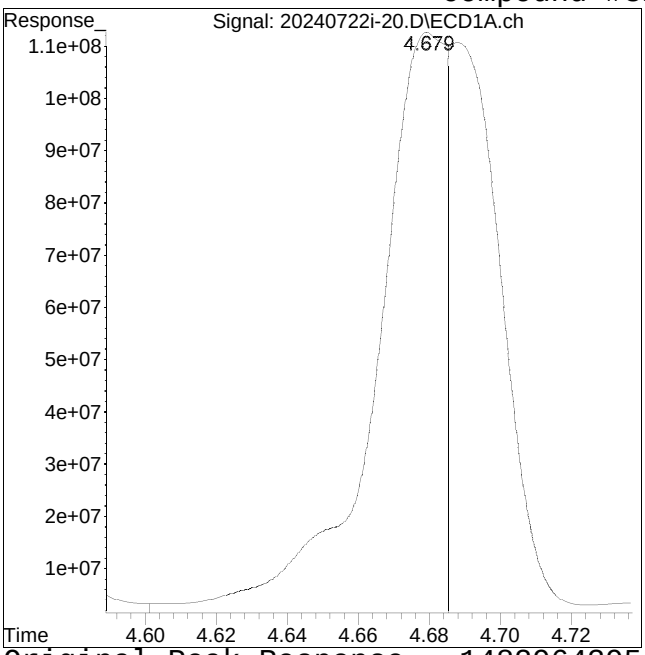



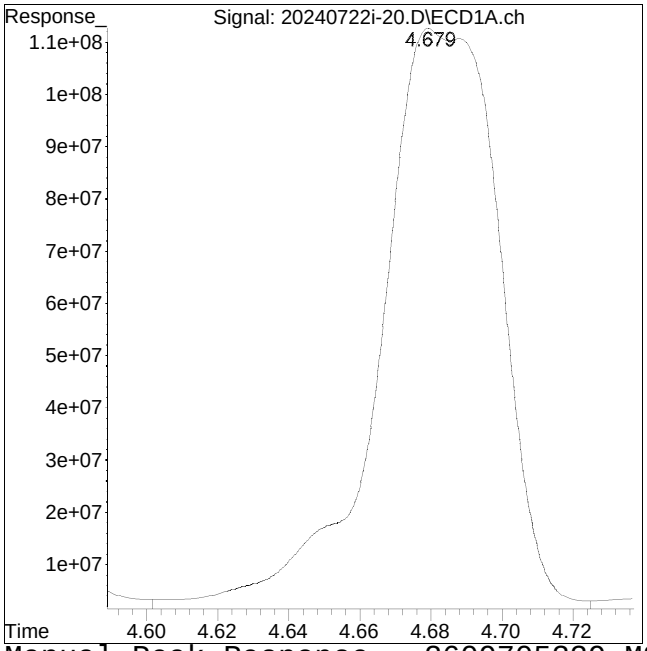

Original Peak Response = 2290035789 Manual Peak Response = 2328564119 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-20.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:40 Instrument : PEST 20
Sample : il10chlor,42e,,pp 11688 L5Quant Date : 7/23/2024 2:16 pm

Compound #32: chlordane-5




Original Peak Response = 1482964395 Manual Peak Response = 2609705339 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  21:53
Operator  : pest20:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 21   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 874.631 | 12.5 | 86 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 874.303 | 12.6 | 86 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 851.331 | 14.9 | 84 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 942.704 | 5.7 | 92 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 954.598 | 4.5 | 85 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 952.183 | 4.8 | 83 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 908.193 | 9.2 | 80 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 894.940 | 10.5 | 79 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 0.000 | 100.0# | 0 | -2.47# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.74# |
| 4 | | alpha-BHC | | 1.586 | 0.000 | 100.0# | 0# | -2.86# |
| 5 | | gamma-BHC (lindane) | | 1.529 | 0.000 | 100.0# | 0# | -3.11# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.17# |
| 7 | | delta-BHC | | 1.478 | 0.000 | 100.0# | 0# | -3.32# |
| 8 | | Heptachlor | | 1.494 | 0.000 | 100.0# | 0# | -3.51# |
| 9 | | Aldrin | | 1.394 | 0.000 | 100.0# | 0# | -3.79# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.93# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.03# |
| 12 | | Heptachlor Epoxide | | 1.349 | 0.000 | 100.0# | 0# | -4.41# |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 0.000 | 100.0# | 0 | -4.54# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  21:53
Operator  : pest20:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 21   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 0.000 | 100.0# | 0 | -4.69# |
| 15 | | 4,4'-DDE | | 1.333 | 0.000 | 100.0# | 0# | -4.79# |
| 16 | | Endosulfan I | | 1.261 | 0.000 | 100.0# | 0# | -4.84# |
| 17 | | Dieldrin | | 1.315 | 0.000 | 100.0# | 0# | -5.11# |
| 18 | | Endrin | | 1.292 | 0.000 | 100.0# | 0# | -5.34# |
| 19 | | 4,4'-DDD | | 1.086 | 0.000 | 100.0# | 0# | -5.43# |
| 20 | | Endosulfan II | | 1.175 | 0.000 | 100.0# | 0# | -5.57# |
| 21 | | 4,4'-DDT | * | 50.000 | 0.000 | 100.0# | 0 | -5.70# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.96# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.15# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.23# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.33# |
| 26 | | Endrin Ketone | | 1.275 | 0.000 | 100.0# | 0# | -6.56# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.33# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 34 | l2 | toxaphene-1 | * | 0.043 | 0.000 | 100.0# | 0# | -5.56# |
| 35 | l2 | toxaphene-2 | * | 0.043 | 0.000 | 100.0# | 0# | -6.07# |
| 36 | l2 | toxaphene-4 | * | 0.030 | 0.000 | 100.0# | 0# | -6.16# |
| 37 | l2 | toxaphene-5 | * | 0.044 | 0.000 | 100.0# | 0# | -6.24# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 0.000 | 100.0# | 0# | -2.66# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -3.04# |
| 4 | | alpha-BHC | | 1.533 | 0.000 | 100.0# | 0# | -3.15# |
| 5 | | gamma-BHC (lindane) | | 1.477 | 0.000 | 100.0# | 0# | -3.48# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.55# |
| 7 | | delta-BHC | | 1.443 | 0.000 | 100.0# | 0# | -3.85# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  21:53
Operator  : pest20:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 21   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | | Heptachlor | | 1.403 | 0.000 | 100.0# | 0# | -3.92# |
| 9 | | Aldrin | | 1.268 | 0.000 | 100.0# | 0# | -4.27# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -4.14# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.52# |
| 12 | | Heptachlor Epoxide | | 1.268 | 0.000 | 100.0# | 0# | -4.93# |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 0.000 | 100.0# | 0# | -5.14# |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 0.000 | 100.0# | 0# | -5.30# |
| 15 | | 4,4'-DDE | | 1.193 | 0.000 | 100.0# | 0# | -5.47# |
| 16 | | Endosulfan I | | 1.153 | 0.000 | 100.0# | 0# | -5.35# |
| 17 | | Dieldrin | | 1.161 | 0.000 | 100.0# | 0# | -5.63# |
| 18 | | Endrin | | 1.185 | 0.000 | 100.0# | 0# | -5.91# |
| 19 | | 4,4'-DDD | | 0.979 | 0.000 | 100.0# | 0# | -6.02# |
| 20 | | Endosulfan II | | 1.098 | 0.000 | 100.0# | 0# | -6.10# |
| 21 | | 4,4'-DDT | | 1.110 | 0.000 | 100.0# | 0# | -6.29# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -6.38# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.83# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.99# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.61# |
| 26 | | Endrin Ketone | | 1.192 | 0.000 | 100.0# | 0# | -7.02# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.90# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 34 | l2 | toxaphene-1 | * | 0.023 | 0.000 | 100.0# | 0# | -6.06# |
| 35 | l2 | toxaphene-2 | * | 0.034 | 0.000 | 100.0# | 0# | -6.09# |
| 36 | l2 | toxaphene-4 | * | 0.039 | 0.000 | 100.0# | 0# | -6.39# |
| 37 | l2 | toxaphene-5 | * | 0.038 | 0.000 | 100.0# | 0# | -6.79# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:53
Operator : pest20:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 2.010 | 2.065 | 53282302 | 81942988 | 25.000M3 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 21:53
Operator : pest20:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.443 | 3.768 | 73746032 | 106.6E6 | 874.631 | 954.598 |
| 30) | l1 | chlordane-3 | 3.923 | 4.433 | 89470488 | 125.2E6 | 874.303 | 952.183M3 |
| 31) | l1 | chlordane-4 | 4.545 | 5.140 | 297.7E6 | 391.0E6 | 851.331 | 908.193M3 |
| 32) | l1 | chlordane-5 | 4.679 | 5.296 | 508.3E6 | 301.4E6 | 942.704 | 894.940 |
| | Sum | chlordane-1 | | | 969.1E6 | 924.2E6 | NoCal | NoCal D |
| Average | | chlordane-1 | | | | | 885.742 | 927.479 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

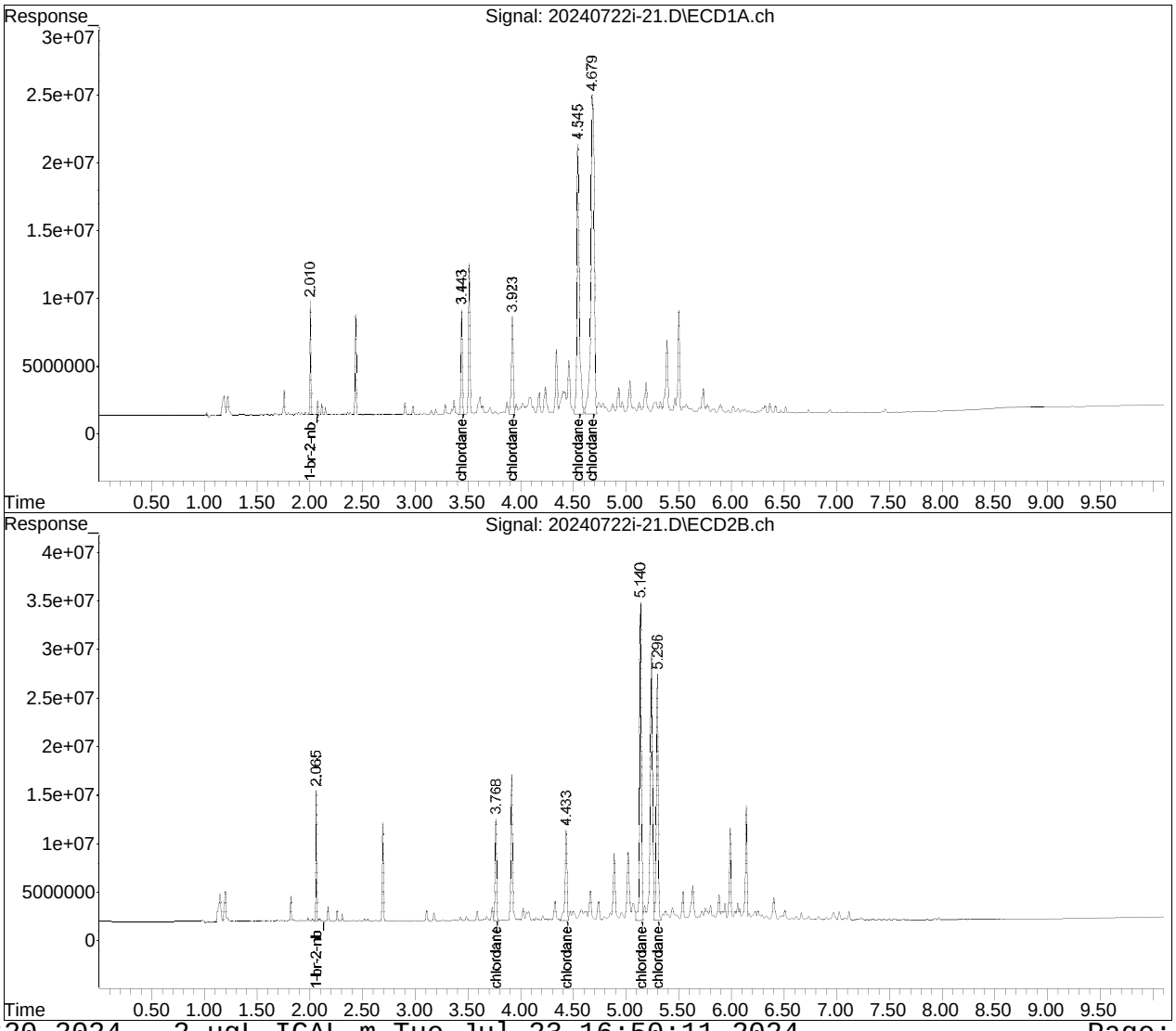
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-21.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  21:53
Operator : pest20:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 21  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:24:30 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:23:58 2024
Response via : Initial Calibration
Integrator: ChemStation

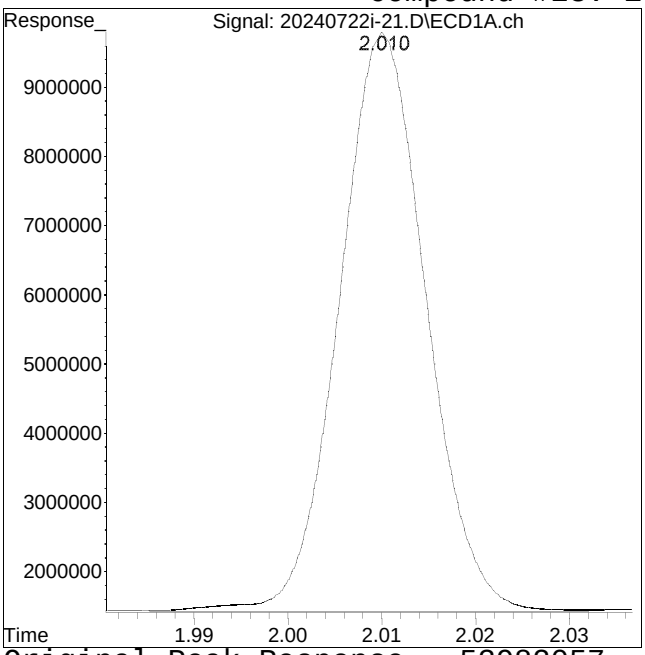
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

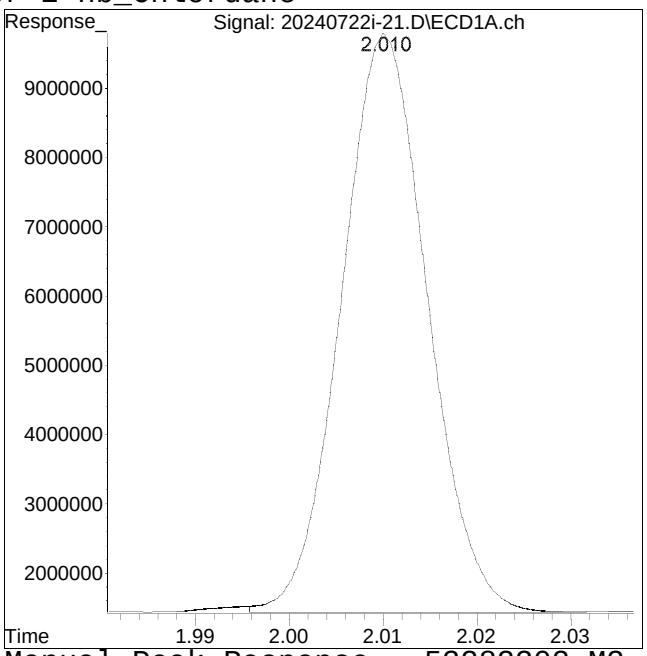


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-21.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:53 Instrument : PEST 20
Sample : cicvchlor,42e,,pp 11670 L1Quant Date : 7/23/2024 2:24 pm

Compound #28: 1-br-2-nb_Chlordane



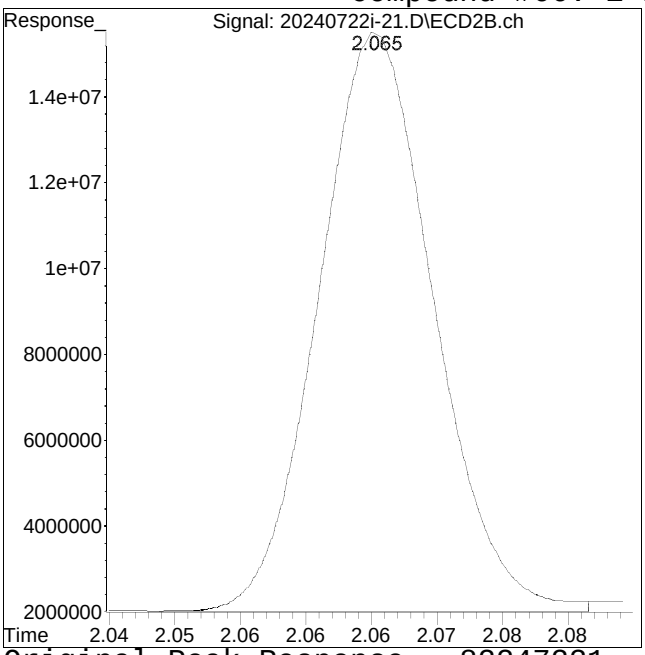



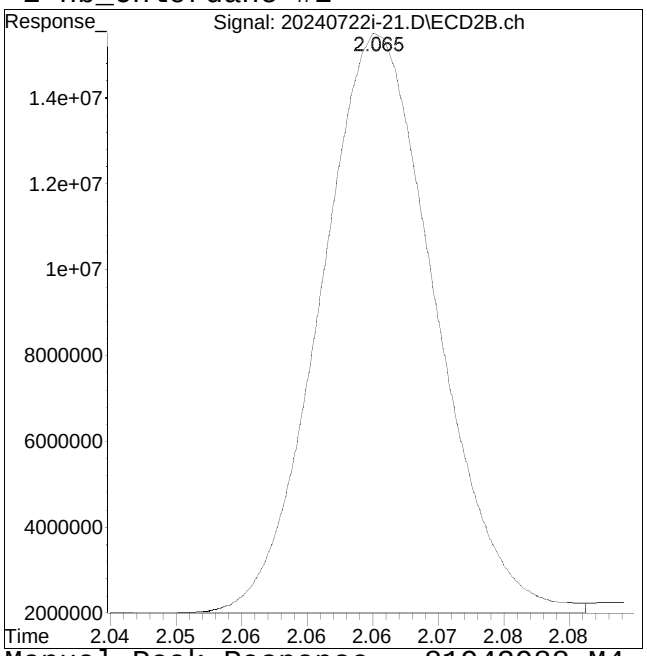

Original Peak Response = 53982057 Manual Peak Response = 53282302 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-21.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:53 Instrument : PEST 20
Sample : cicvchlor,42e,,pp 11670 L1Quant Date : 7/23/2024 2:24 pm

## Compound #66: 1-br-2-nb_Chlordane #2



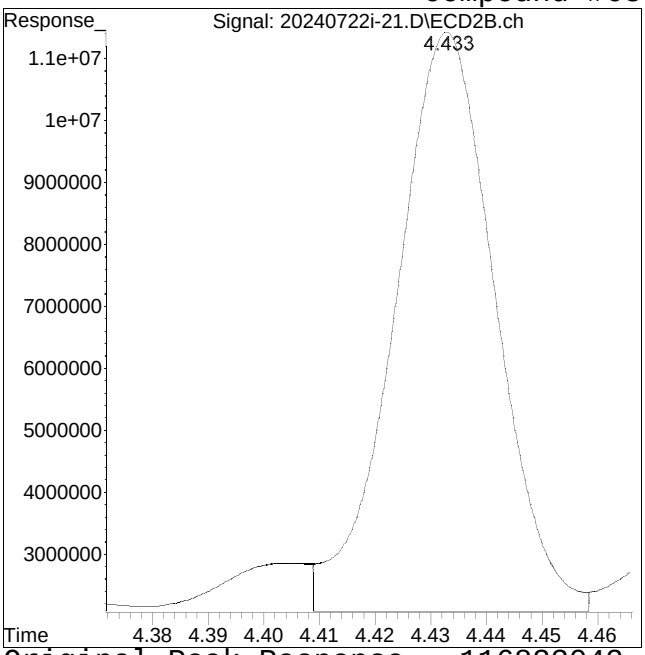



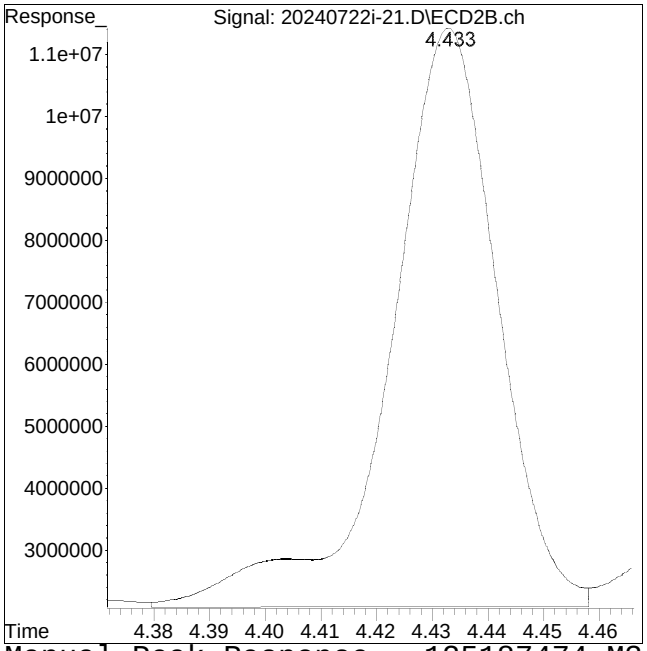

Original Peak Response = 82247231 Manual Peak Response = 81942988 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-21.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:53 Instrument : PEST 20
Sample : cicvchlor,42e,,pp 11670 L1Quant Date : 7/23/2024 2:24 pm

Compound #68: chlordane-3 #2



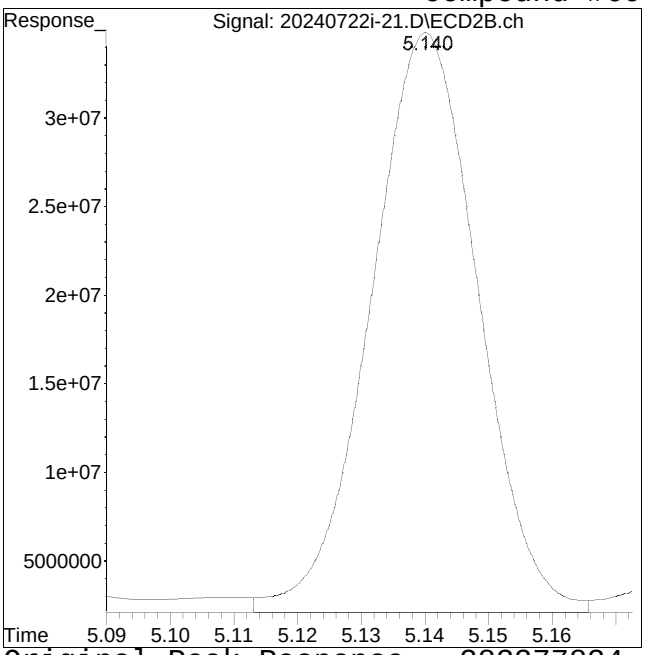



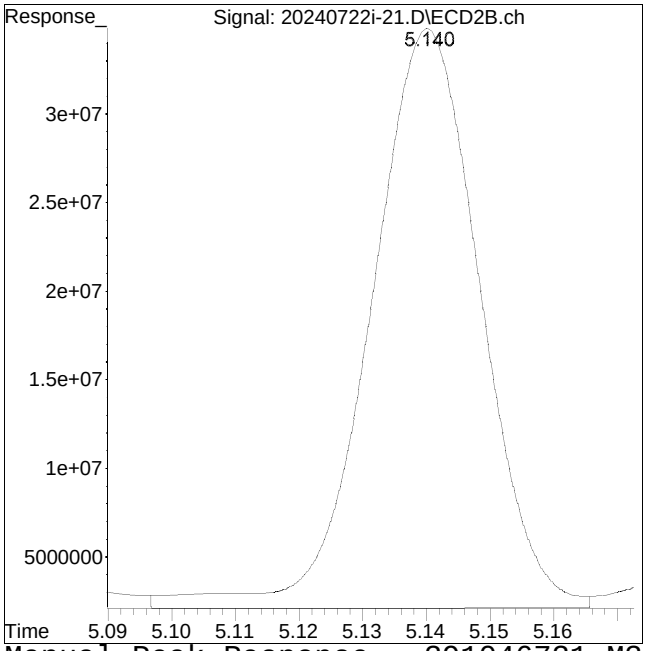

Original Peak Response = 116833042 Manual Peak Response = 125187474 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-21.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 21:53 Instrument : PEST 20
Sample : cicvchlor,42e,,pp 11670 L1Quant Date : 7/23/2024 2:24 pm

Compound #69: chlordane-4 #2




Original Peak Response = 383377834 Manual Peak Response = 391046731 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-22.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:05
Operator : pest20:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:31:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:31:06 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.009 | 2.065 | 52522268 | 82768638 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-22.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:05
Operator : pest20:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:31:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:31:06 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.557 | 6.058 | 1801980 | 1449965 | 19.779 | 19.319M4 |
| 35) l2 | toxaphene-2 | 6.067 | 6.087 | 1994294 | 2343061 | 22.947M4 | 21.155M4 |
| 36) l2 | toxaphene-4 | 6.162 | 6.389 | 1602672 | 2790765 | 27.696M4 | 21.904M4 |
| 37) l2 | toxaphene-5 | 6.244 | 6.794 | 2228060 | 2948500 | 25.207M4 | 24.191M4 |
| Sum | toxaphene-1 | | | 7627007 | 9532291 | 95.628 | 86.569 |
| Average | toxaphene-1 | | | | | 23.907 | 21.642 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 7627007 | 9532291 | 95.628 | 86.569 |
| Average | toxaphene-1 | | | | | 23.907 | 21.642 |

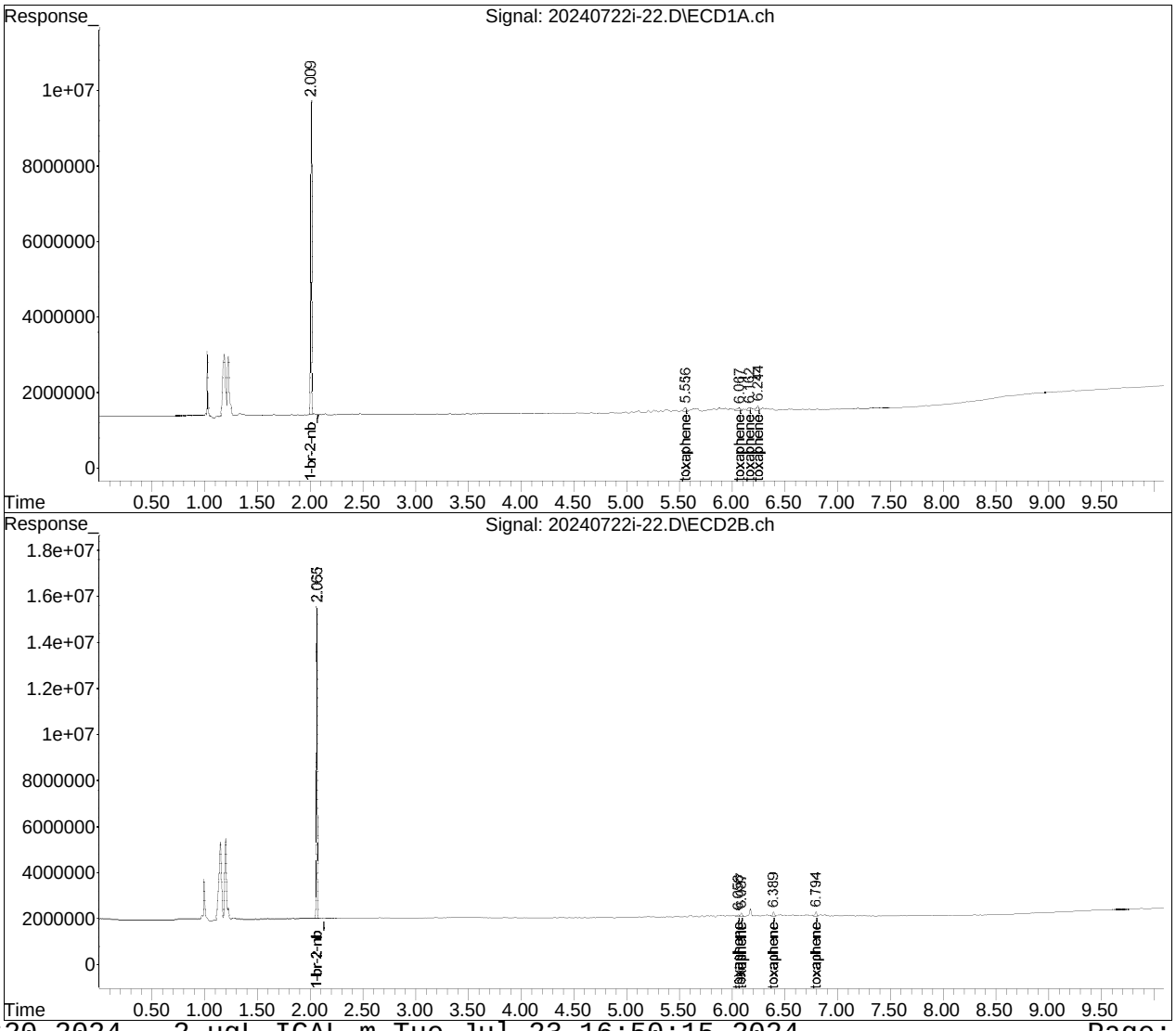
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-22.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:05
Operator : pest20:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:31:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:31:06 2024
Response via : Initial Calibration
Integrator: ChemStation

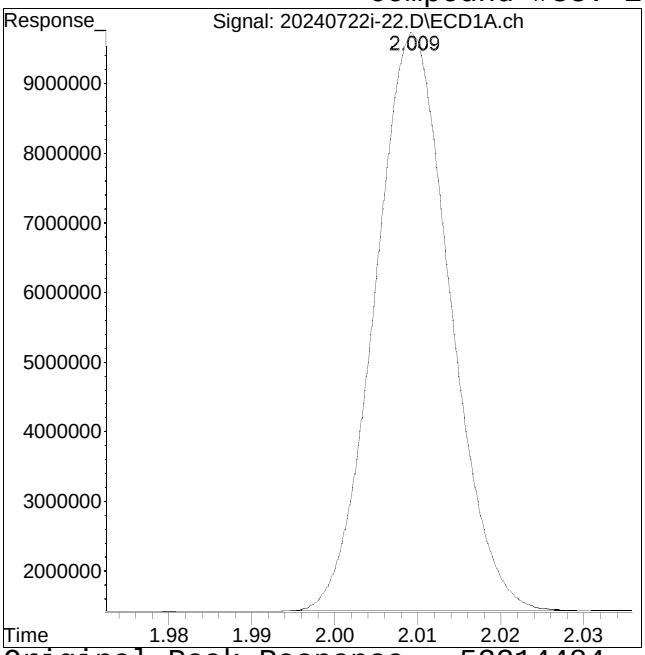
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



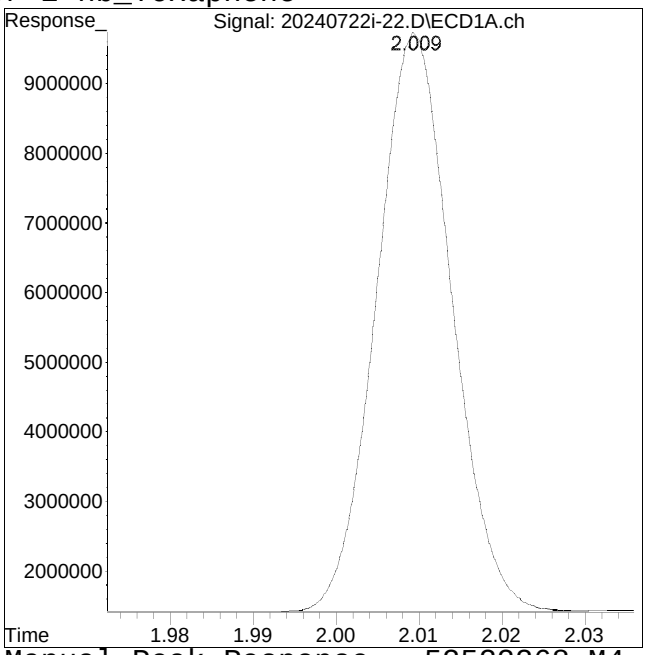
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-22.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:05 Instrument : PEST 20
Sample : il3tox,42e,,pp 11703 L0.02Quant Date : 7/23/2024 2:31 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 52314484



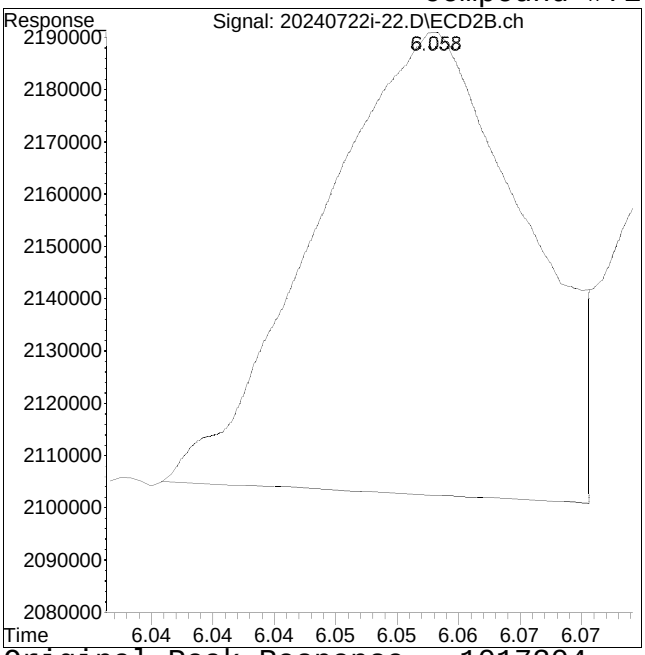

Manual Peak Response = 52522268 M4
M4 = Poor automated baseline construction.

Manual Integration Report

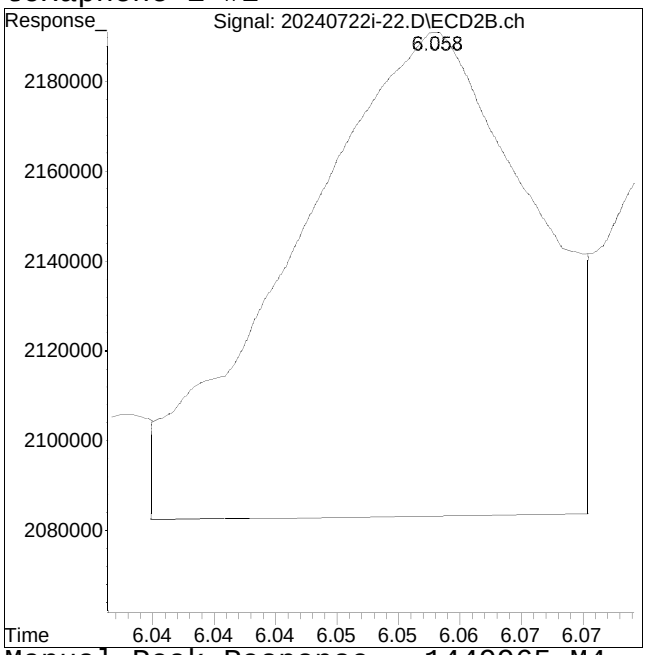
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-22.D
Date Inj'd : 7/22/2024 22:05
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:31 pm

Compound #72: toxaphene-1 #2




Original Peak Response = 1017304




Manual Peak Response = 1449965 M4

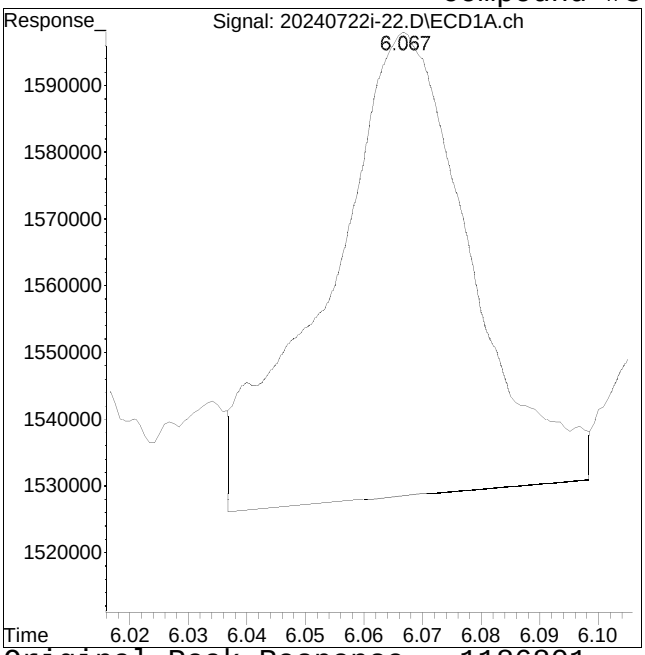
M4 = Poor automated baseline construction.

Manual Integration Report

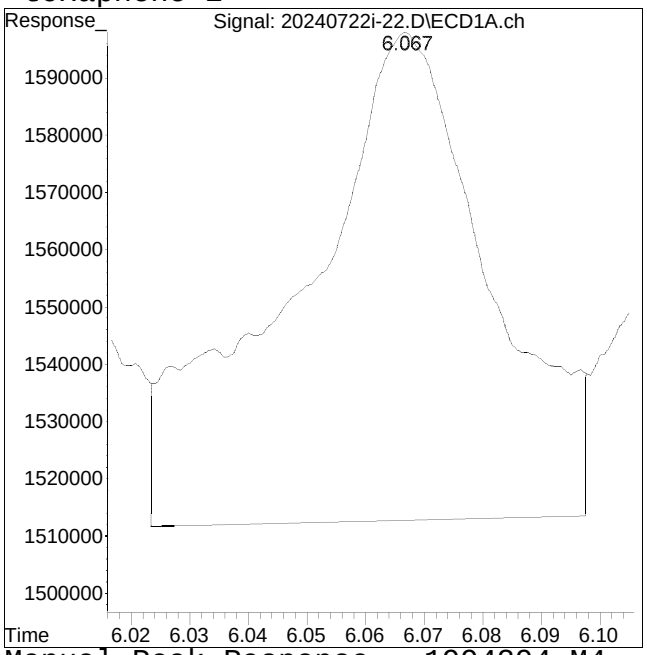
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-22.D
Date Inj'd : 7/22/2024 22:05
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:31 pm

Compound #35: toxaphene-2




Original Peak Response = 1186801




Manual Peak Response = 1994294 M4

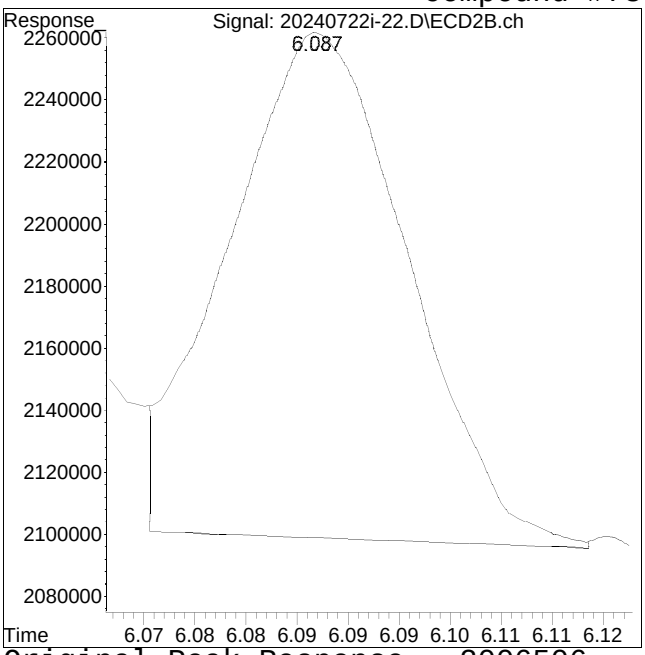
M4 = Poor automated baseline construction.

Manual Integration Report

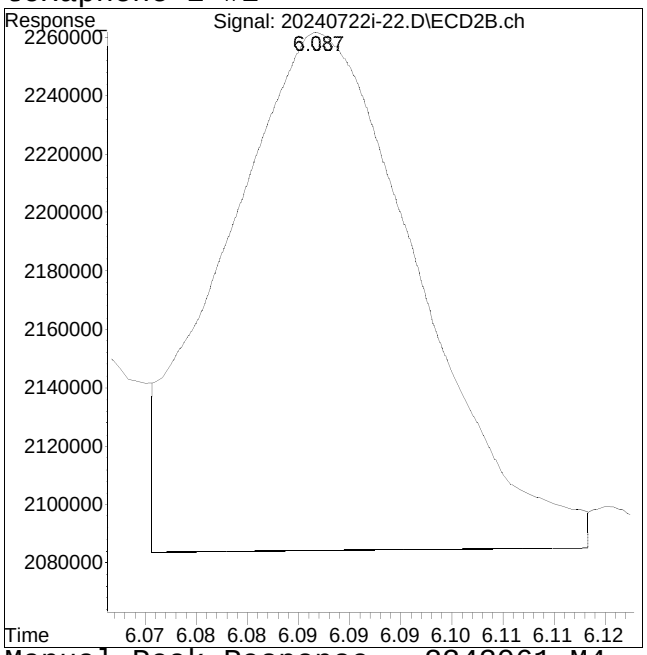
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-22.D
Date Inj'd : 7/22/2024 22:05
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:31 pm

Compound #73: toxaphene-2 #2




Original Peak Response = 2006506



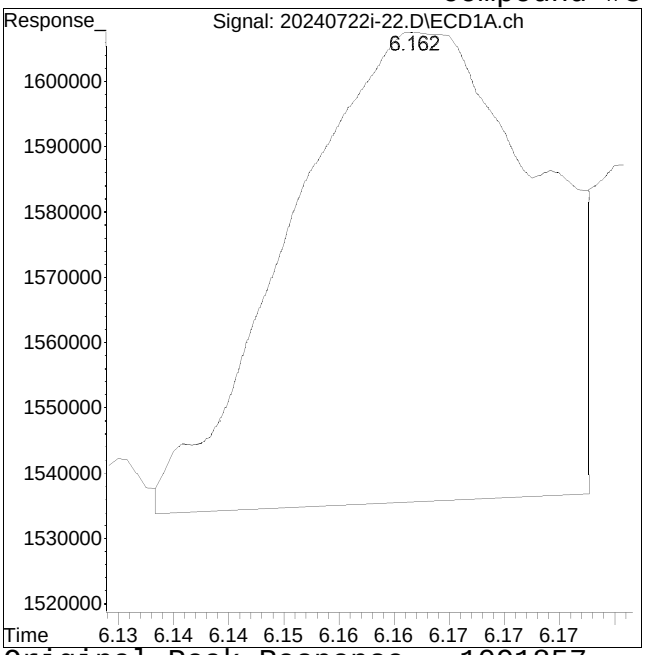

Manual Peak Response = 2343061 M4

M4 = Poor automated baseline construction.

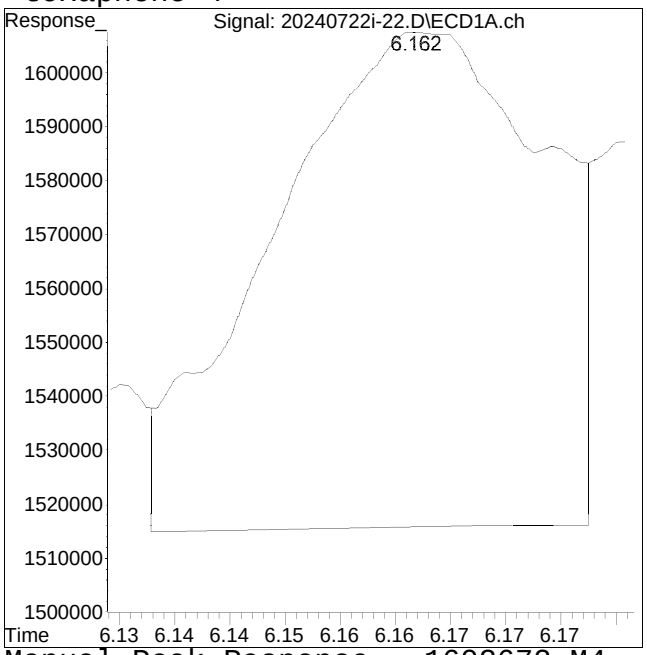
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-22.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:05 Instrument : PEST 20
Sample : il3tox,42e,,pp 11703 L0.02Quant Date : 7/23/2024 2:31 pm

Compound #36: toxaphene-4




Original Peak Response = 1091857



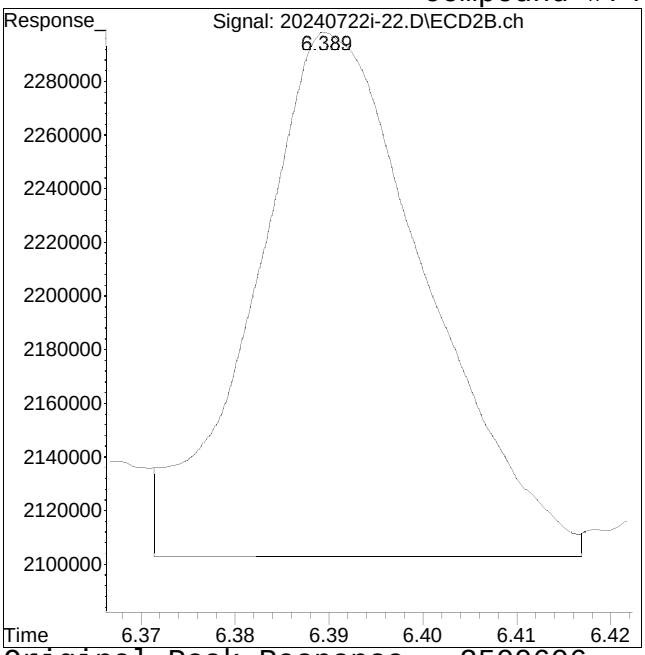

Manual Peak Response = 1602672 M4

M4 = Poor automated baseline construction.

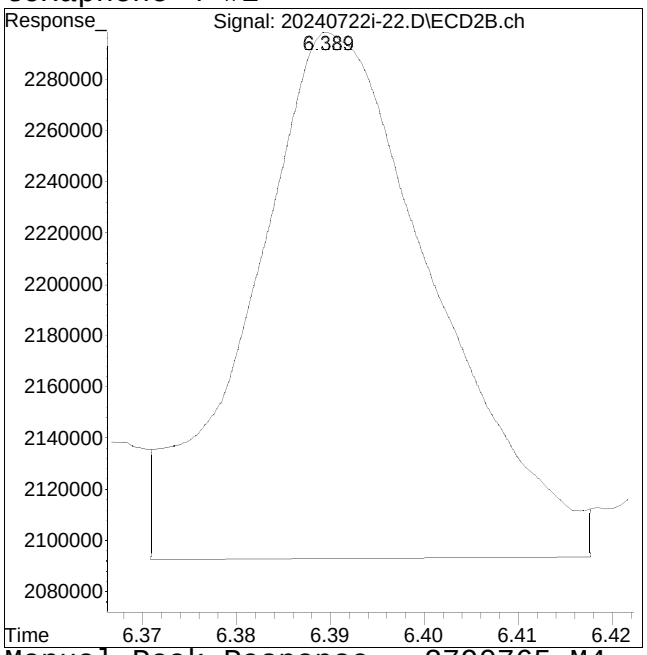
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-22.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:05 Instrument : PEST 20
Sample : il3tox,42e,,pp 11703 L0.02Quant Date : 7/23/2024 2:31 pm

Compound #74: toxaphene-4 #2




Original Peak Response = 2500606




Manual Peak Response = 2790765 M4

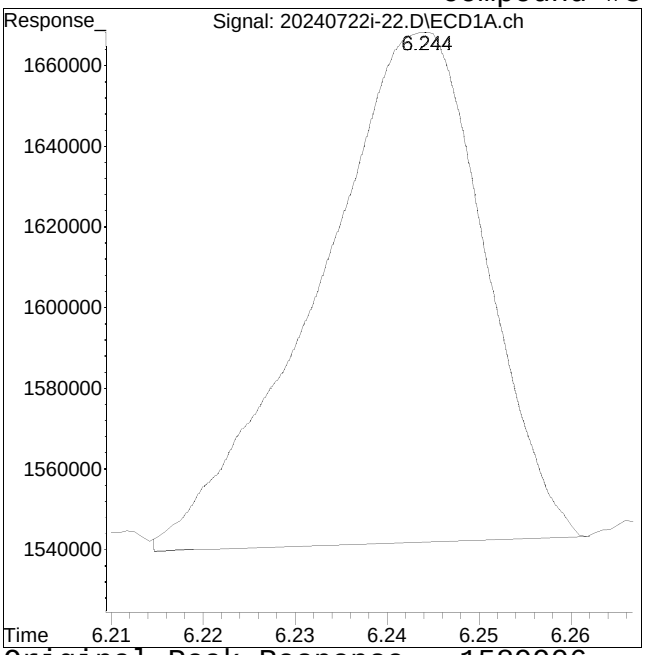
M4 = Poor automated baseline construction.

# Manual Integration Report

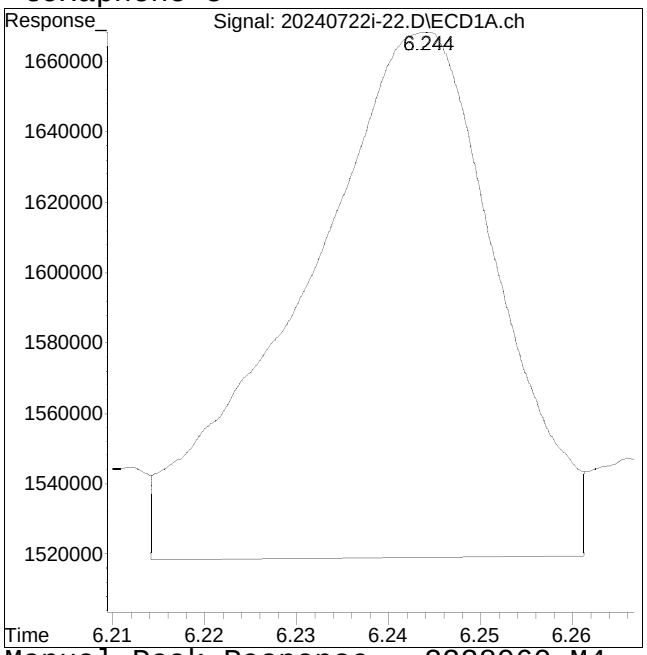
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-22.D
Date Inj'd : 7/22/2024 22:05
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:31 pm

## Compound #37: toxaphene-5




Original Peak Response = 1589906




Manual Peak Response = 2228060 M4

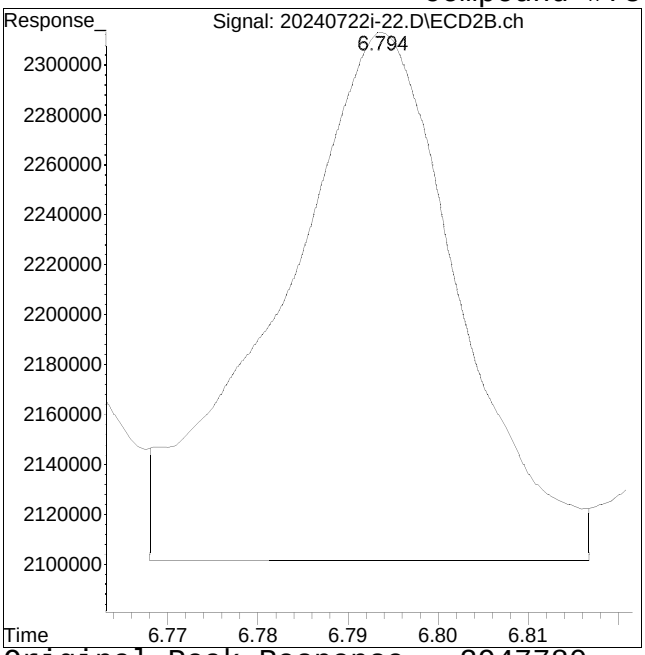
M4 = Poor automated baseline construction.

# Manual Integration Report

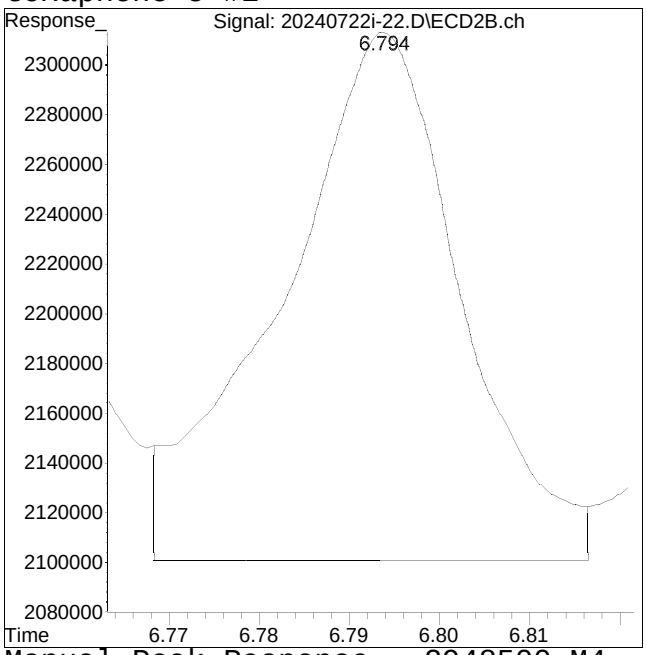
Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-22.D
Date Inj'd : 7/22/2024 22:05
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:31 pm

## Compound #75: toxaphene-5 #2




Original Peak Response = 2947780




Manual Peak Response = 2948500 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-23.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:18
Operator : pest20:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:29:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:29:03 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.009 | 2.064 | 51810590 | 81156173 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-23.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:18
Operator : pest20:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:29:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:29:03 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.556 | 6.057 | 10211438 | 8450116 | 119.030M4 | 120.793 |
| 35) l2 | toxaphene-2 | 6.065 | 6.087 | 9022017 | 12273629 | 107.103M3 | 118.141 |
| 36) l2 | toxaphene-4 | 6.163 | 6.391 | 6461388 | 13952728 | 118.399M4 | 116.217 |
| 37) l2 | toxaphene-5 | 6.244 | 6.794 | 9890411 | 13600372 | 118.746M4 | 119.290 |
| Sum | toxaphene-1 | | | 35585254 | 48276844 | 463.279 | 474.442 |
| Average | toxaphene-1 | | | | | 115.820 | 118.610 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 35585254 | 48276844 | 463.279 | 474.442 |
| Average | toxaphene-1 | | | | | 115.820 | 118.610 |

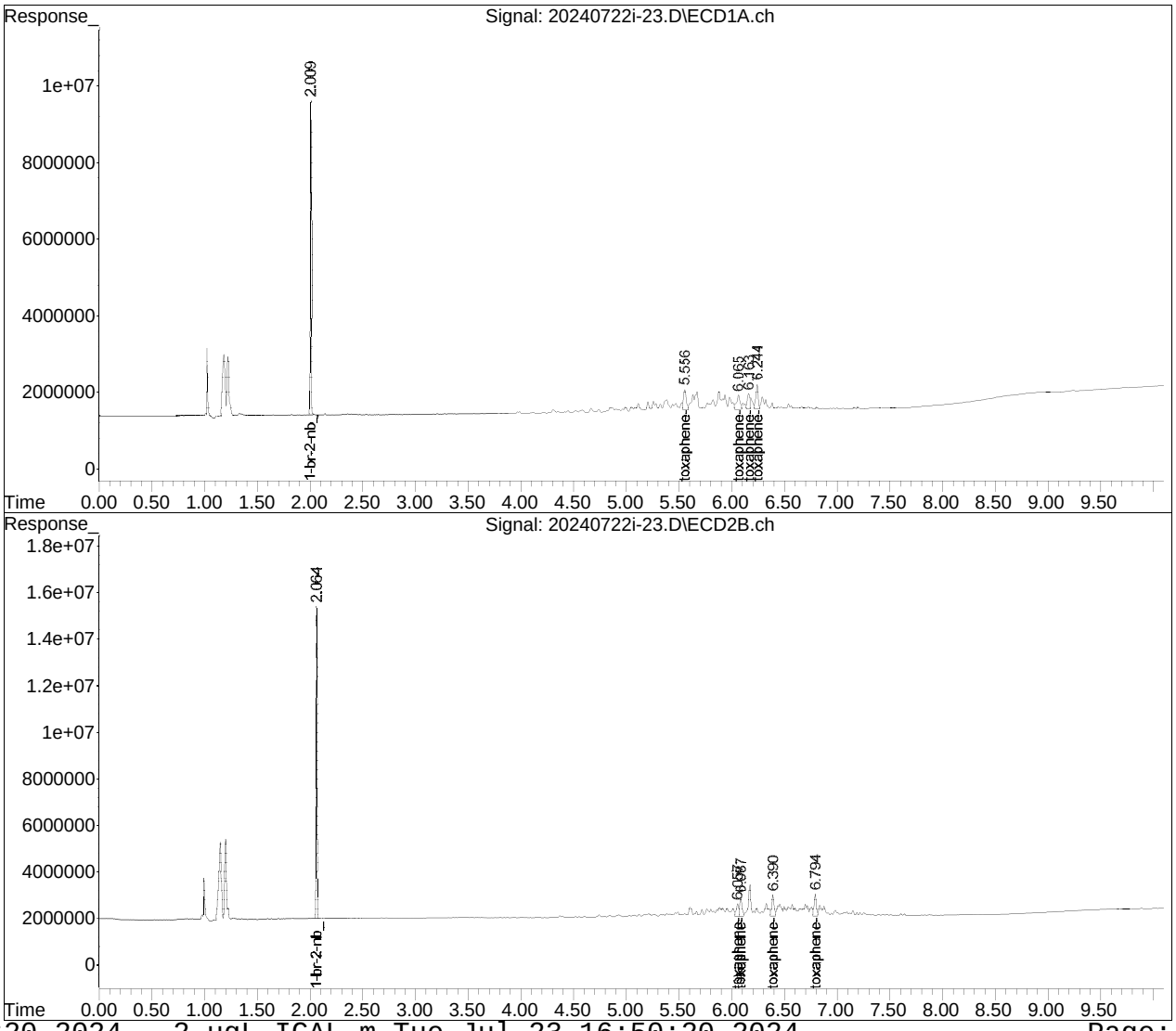
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-23.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:18
Operator : pest20:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:29:13 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:29:03 2024
Response via : Initial Calibration
Integrator: ChemStation

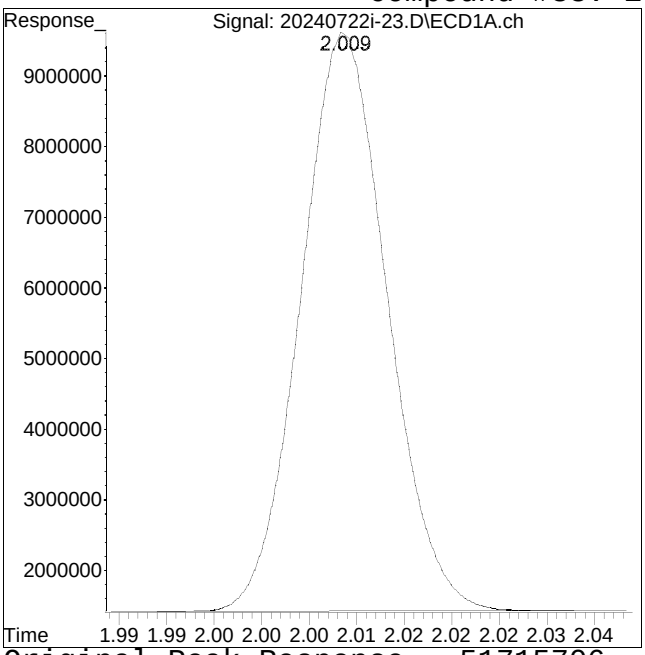
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



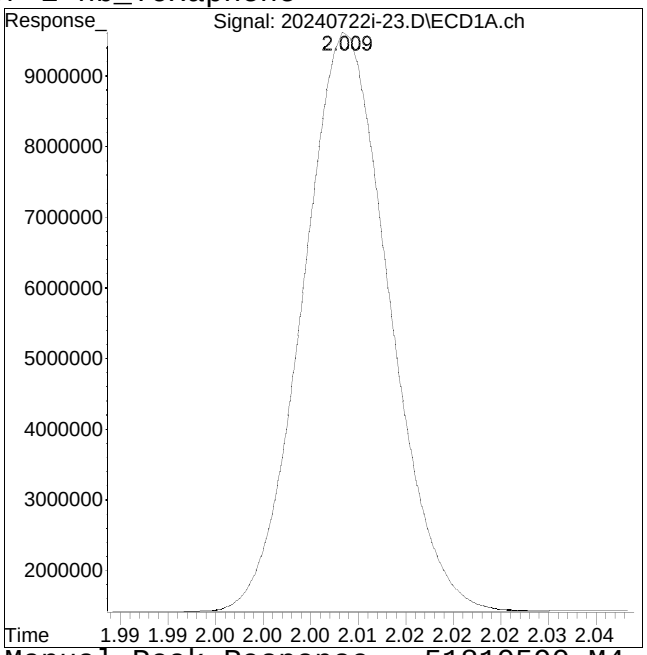
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-23.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:18 Instrument : PEST 20
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 7/23/2024 2:29 pm

## Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 51715706



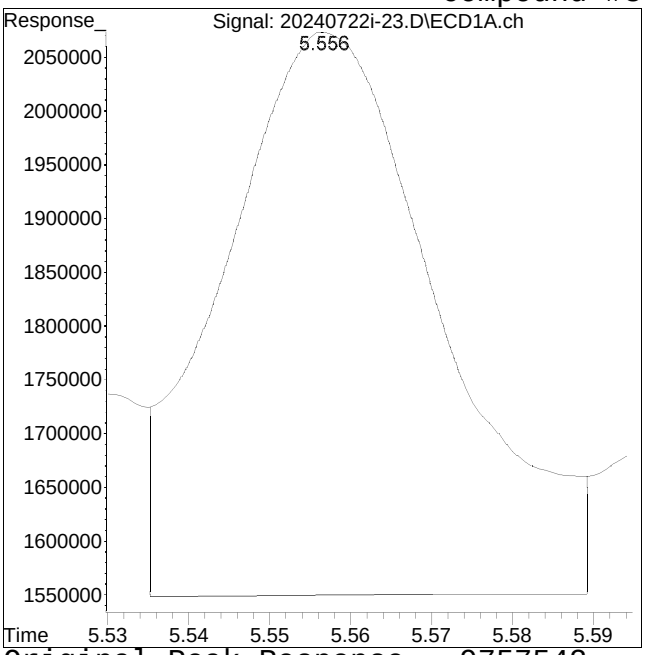

Manual Peak Response = 51810590 M4

M4 = Poor automated baseline construction.

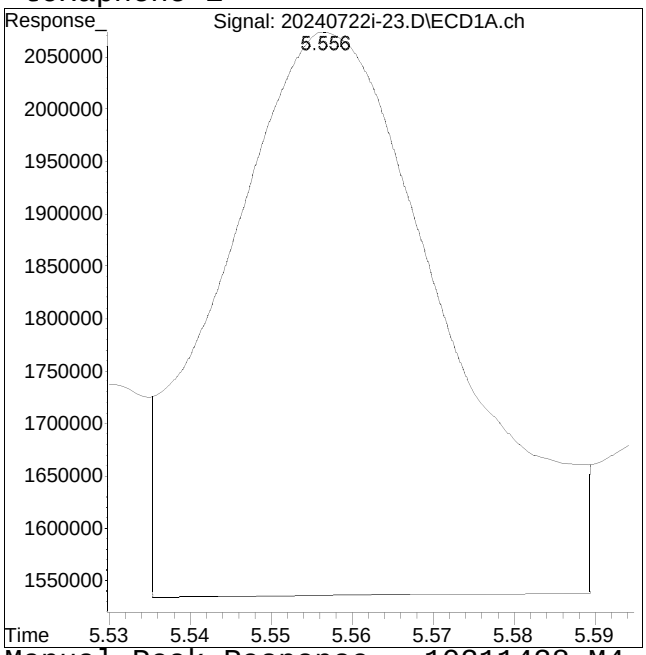
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-23.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:18 Instrument : PEST 20
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 7/23/2024 2:29 pm

Compound #34: toxaphene-1




Original Peak Response = 9757542



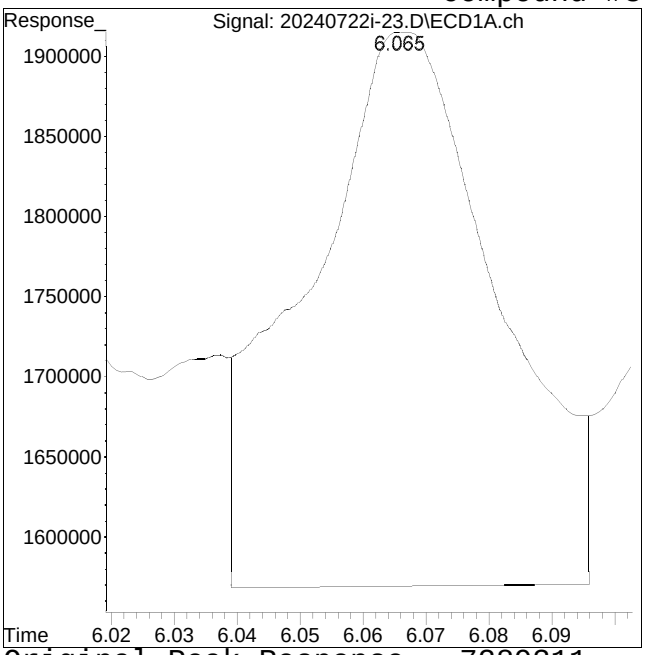

Manual Peak Response = 10211438 M4

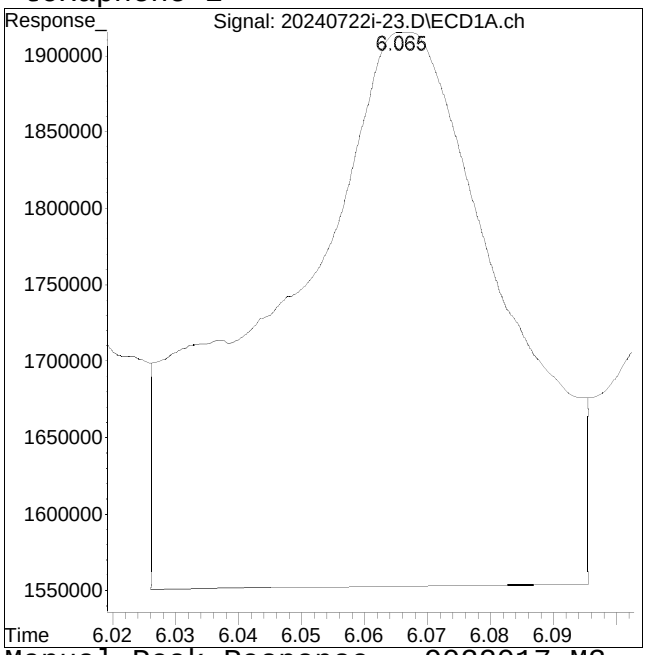
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-23.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:18 Instrument : PEST 20
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 7/23/2024 2:29 pm

Compound #35: toxaphene-2



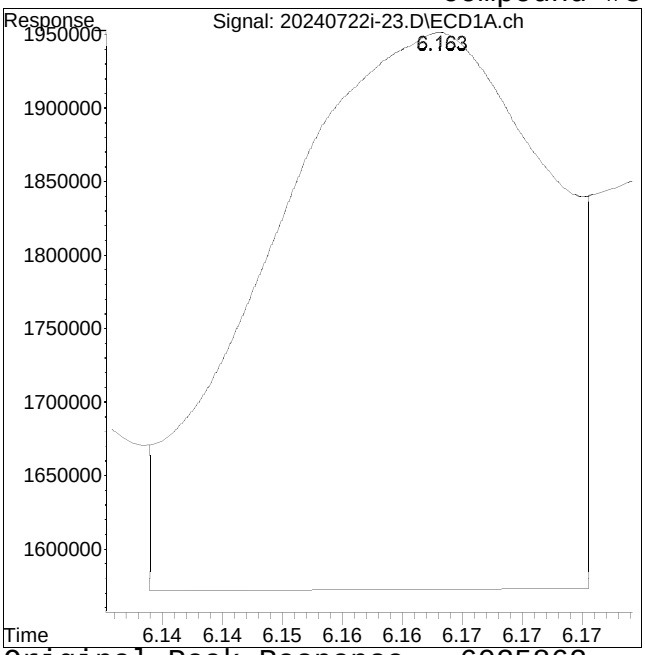




Original Peak Response = 7289311 Manual Peak Response = 9022017 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

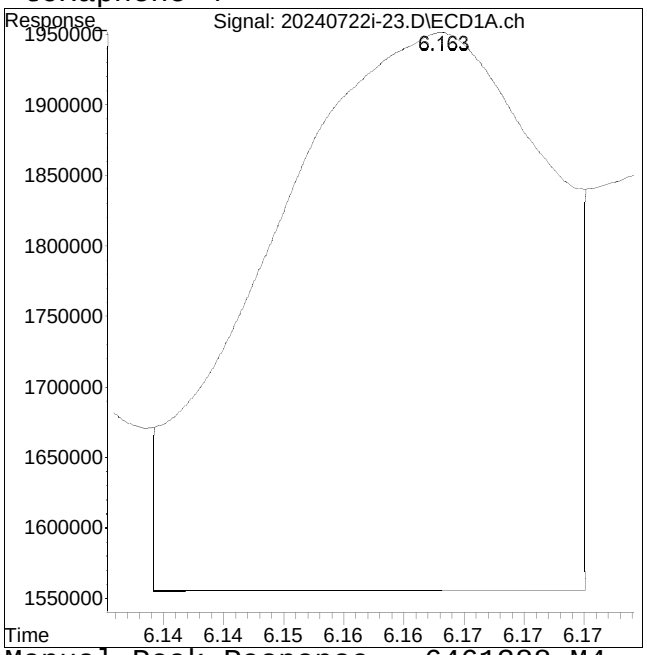
# Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-23.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:18 Instrument : PEST 20
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 7/23/2024 2:29 pm

## Compound #36: toxaphene-4




Original Peak Response = 6025862



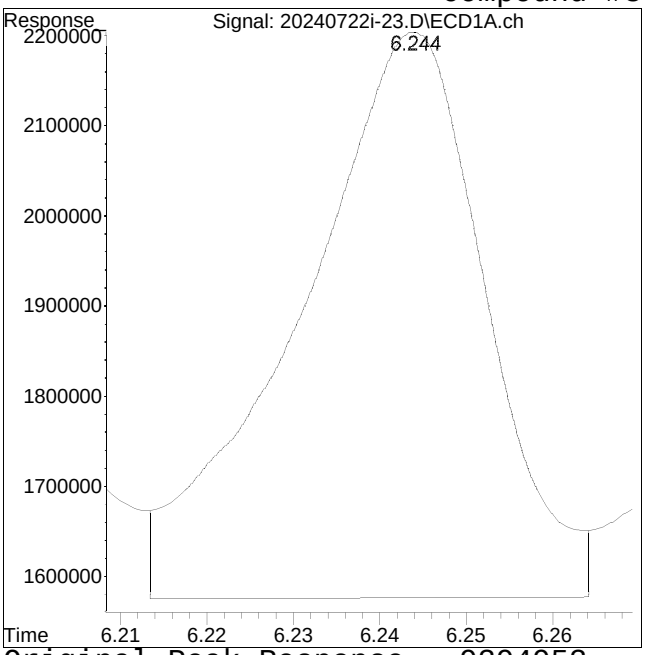

Manual Peak Response = 6461388 M4

M4 = Poor automated baseline construction.

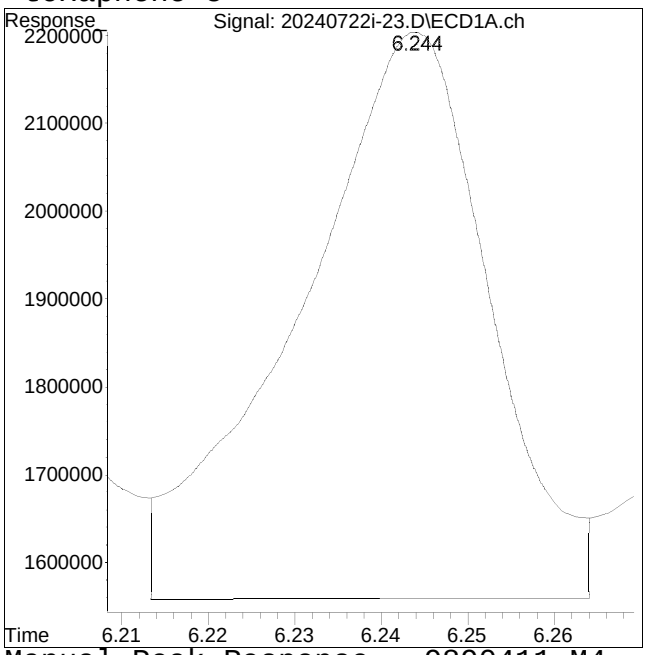
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-23.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:18 Instrument : PEST 20
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 7/23/2024 2:29 pm

Compound #37: toxaphene-5




Original Peak Response = 9394953




Manual Peak Response = 9890411 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-24.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:30
Operator : pest20:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:28:23 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:28:17 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.009 | 2.064 | 53328589 | 82924599 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-24.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:30
Operator : pest20:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:28:23 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:28:17 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.558 | 6.058 | 96639621 | 73444227 | 1148.651 | 1041.805 |
| 35) l2 | toxaphene-2 | 6.067 | 6.087 | 92883487 | 109.8E6 | 1110.846 | 1052.147 |
| 36) l2 | toxaphene-4 | 6.162 | 6.391 | 60400151 | 125.8E6 | 1117.328 | 1039.152 |
| 37) l2 | toxaphene-5 | 6.244 | 6.795 | 91901899 | 119.8E6 | 1112.005 | 1043.284 |
| Sum | toxaphene-1 | | | 341.8E6 | 428.9E6 | 4488.829 | 4176.388 |
| Average | toxaphene-1 | | | | | 1122.207 | 1044.097 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 341.8E6 | 428.9E6 | 4488.829 | 4176.388 |
| Average | toxaphene-1 | | | | | 1122.207 | 1044.097 |

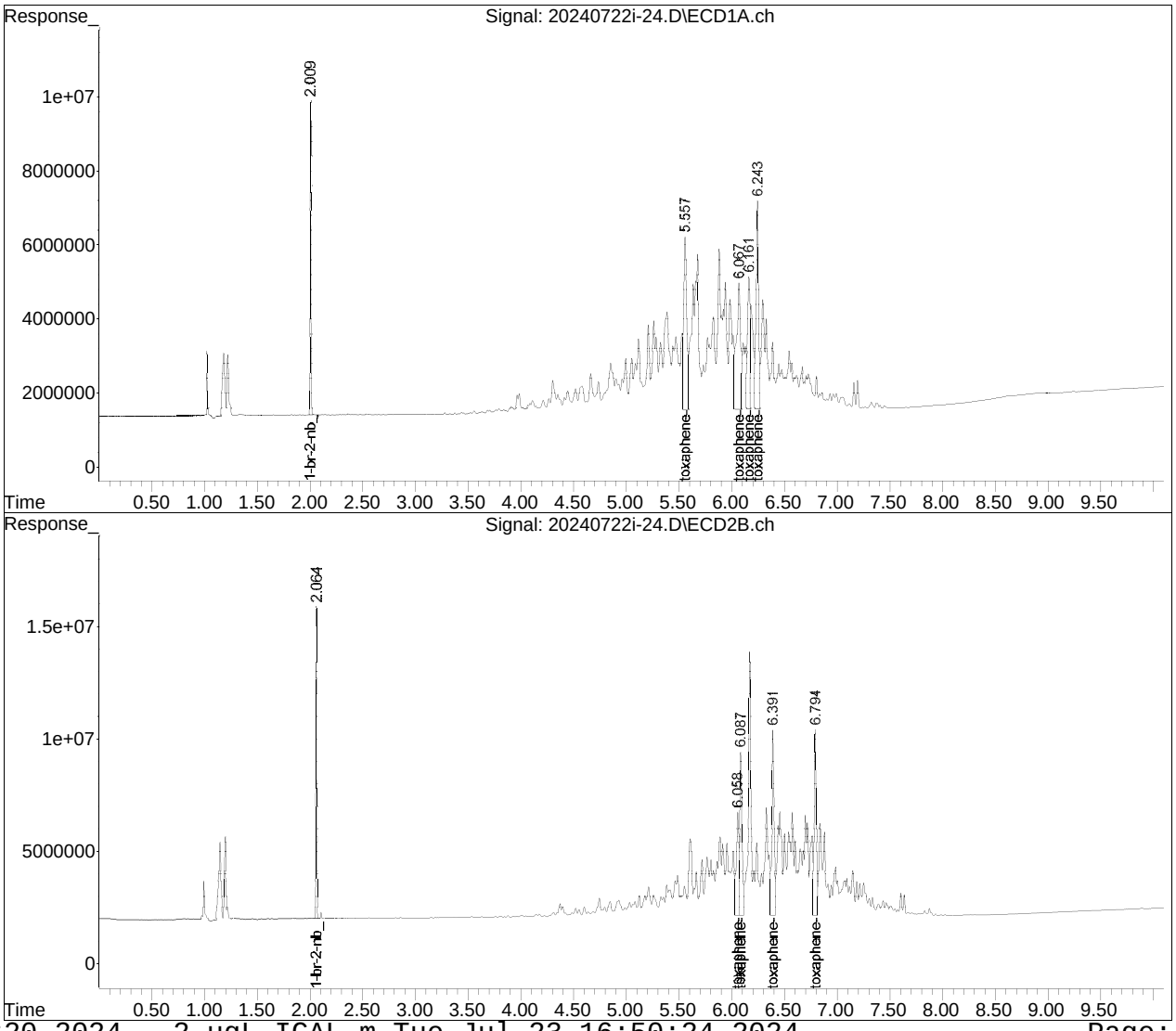
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-24.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:30
Operator : pest20:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:28:23 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:28:17 2024
Response via : Initial Calibration
Integrator: ChemStation

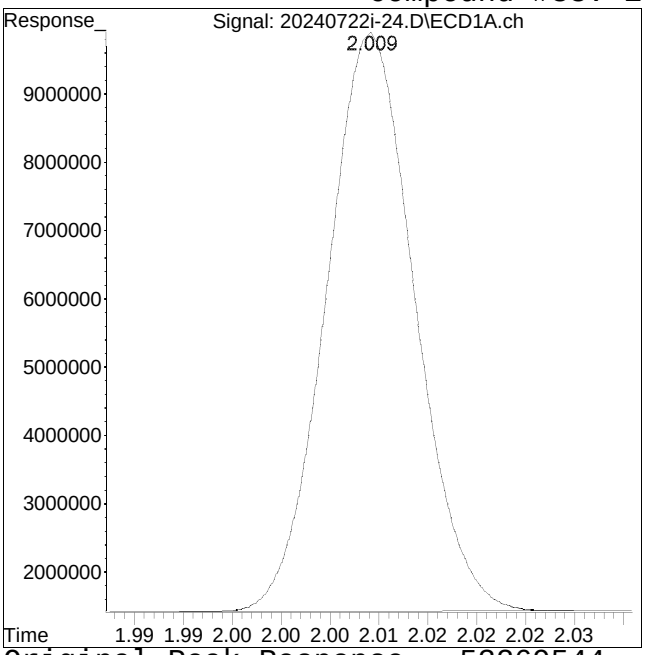
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



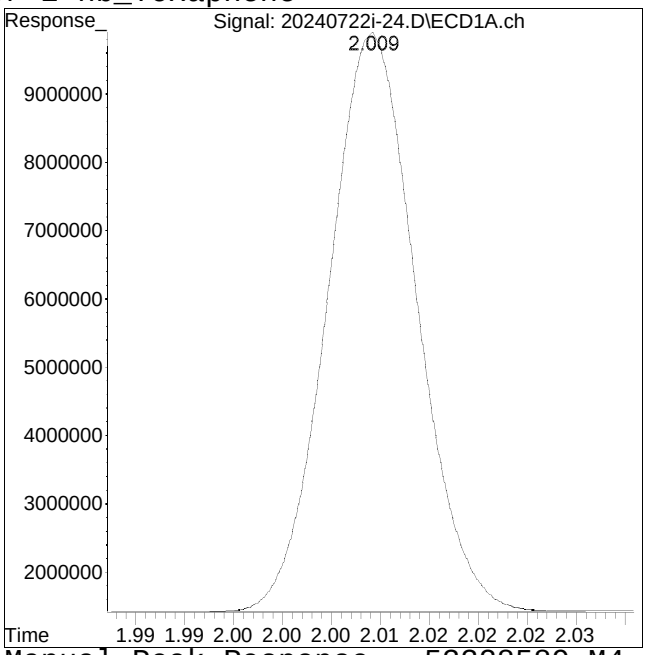
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-24.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:30 Instrument : PEST 20
Sample : il7tox,42e,,pp 11701 L1.0 Quant Date : 7/23/2024 2:28 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 53269544



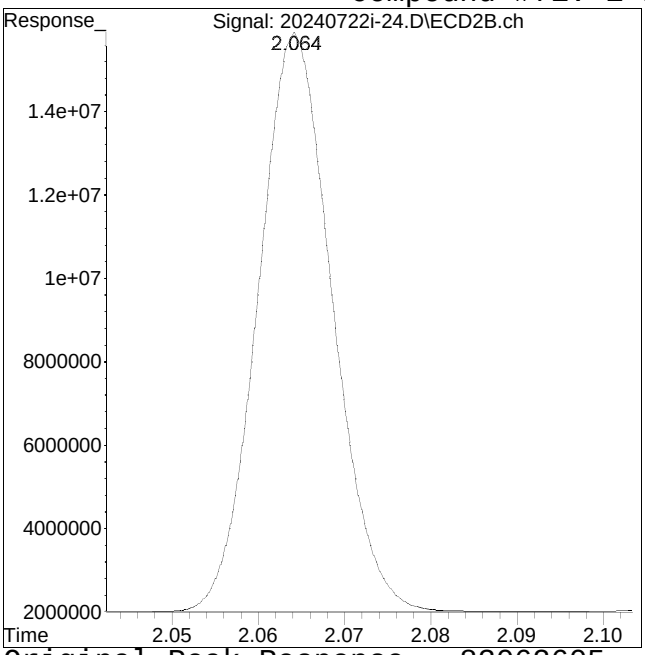

Manual Peak Response = 53328589 M4

M4 = Poor automated baseline construction.

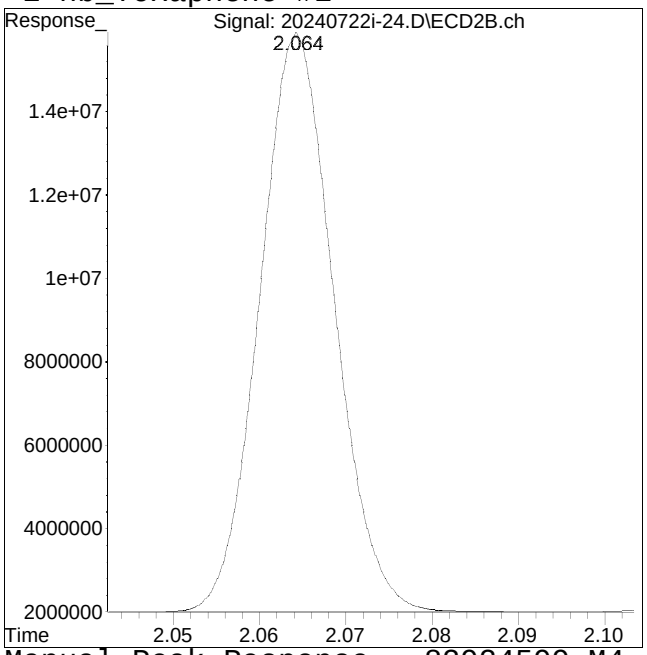
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-24.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:30 Instrument : PEST 20
Sample : il7tox,42e,,pp 11701 L1.0 Quant Date : 7/23/2024 2:28 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 83062605




Manual Peak Response = 82924599 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-25.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:42
Operator : pest20:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:26:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:26:48 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.009 | 2.065 | 54460607 | 83405814 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-25.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:42
Operator : pest20:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:26:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:26:48 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.558 | 6.058 | 183.8E6 | 145.6E6 | NoCal | NoCal |
| 35) l2 | toxaphene-2 | 6.068 | 6.087 | 180.2E6 | 213.4E6 | NoCal | NoCal |
| 36) l2 | toxaphene-4 | 6.163 | 6.391 | 116.4E6 | 247.7E6 | NoCal | NoCal |
| 37) l2 | toxaphene-5 | 6.244 | 6.794 | 176.6E6 | 233.8E6 | NoCal | NoCal |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

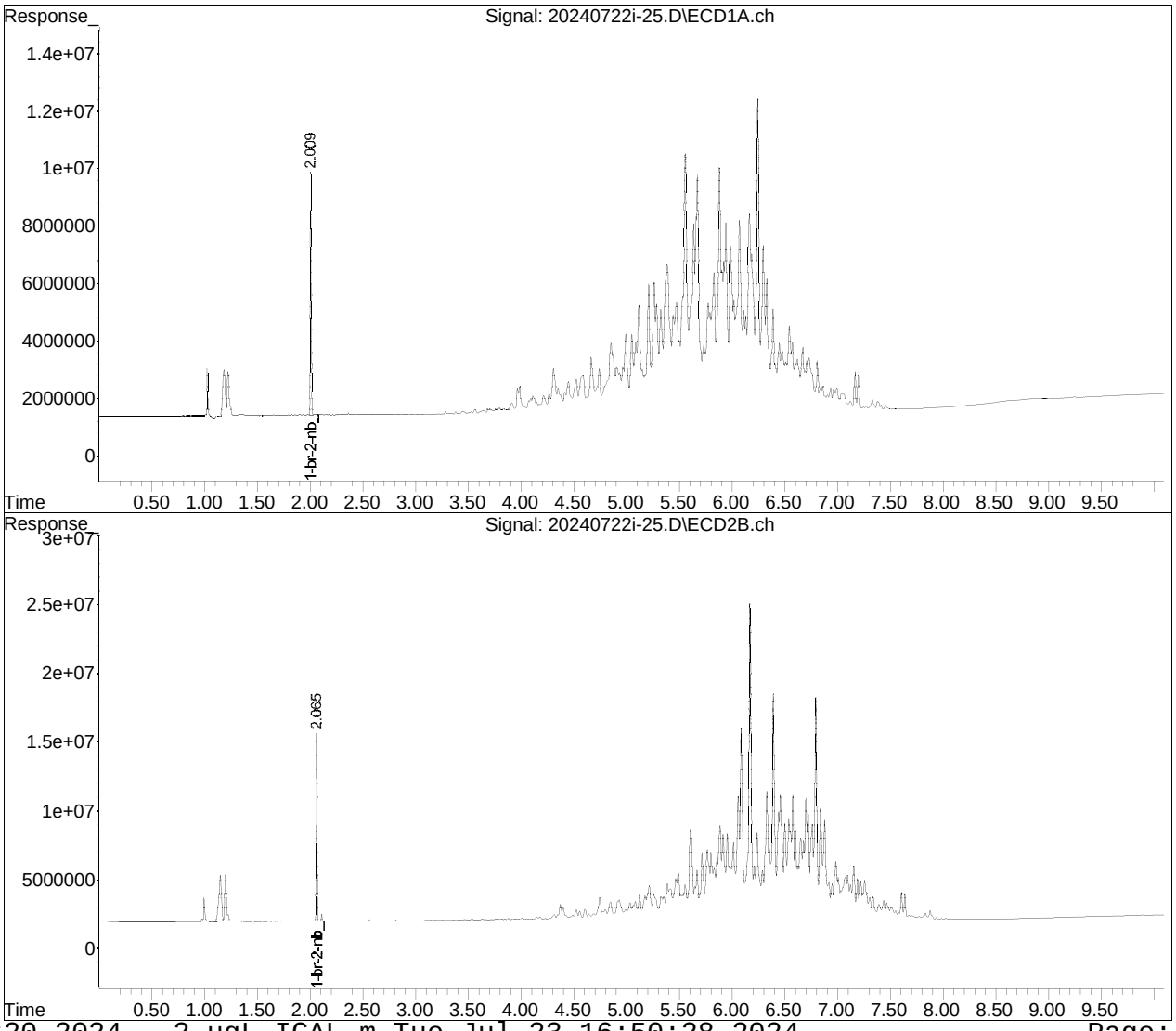
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-25.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On : 22 Jul 2024  22:42
Operator : pest20:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 25  Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:26:56 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:26:48 2024
Response via : Initial Calibration
Integrator: ChemStation

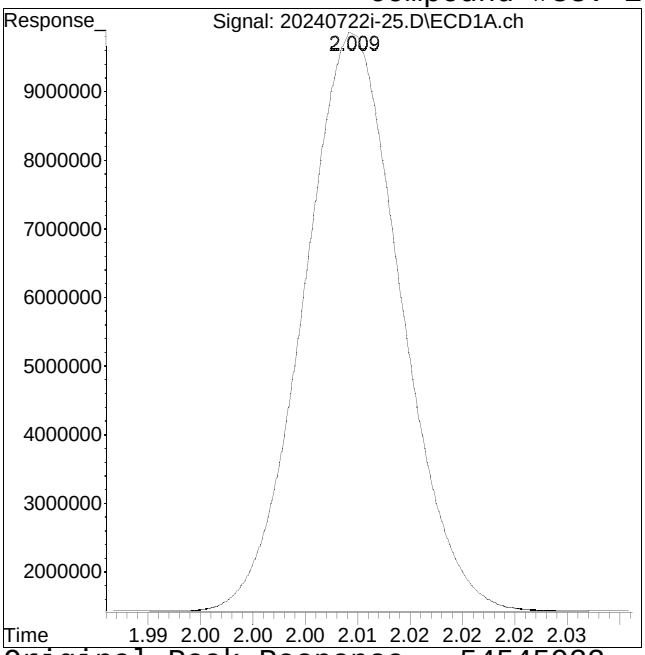
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



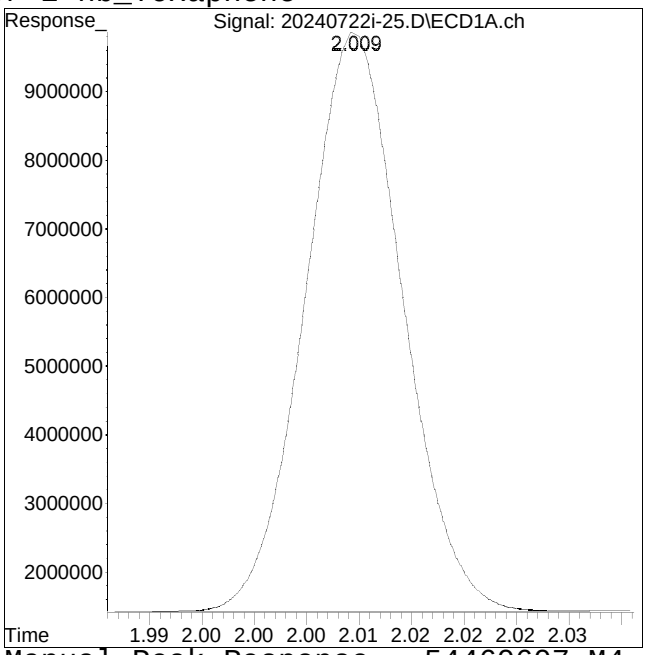
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-25.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:42 Instrument : PEST 20
Sample : il8tox,42e,,pp 11700 L2.0 Quant Date : 7/23/2024 2:26 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 54545932




Manual Peak Response = 54460607 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-26.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:55
Operator : pest20:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:27:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:27:33 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.011 | 2.066 | 56883381 | 83929231 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-26.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:55
Operator : pest20:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:27:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:27:33 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.558 | 6.058 | 417.4E6 | 347.1E6 | 4348.186 | 4736.796 |
| 35) l2 | toxaphene-2 | 6.069 | 6.087 | 421.3E6 | 519.2E6 | 4475.735 | 4834.833 |
| 36) l2 | toxaphene-4 | 6.163 | 6.391 | 272.6E6 | 602.5E6 | 4483.989 | 4834.037 |
| 37) l2 | toxaphene-5 | 6.245 | 6.795 | 420.3E6 | 574.2E6 | 4556.462 | 4881.238 |
| Sum | toxaphene-1 | | | 1531.6E6 | 2042.9E6 | 17864.372 | 19286.904 |
| Average | toxaphene-1 | | | | | 4466.093 | 4821.726 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 1531.6E6 | 2042.9E6 | 17864.372 | 19286.904 |
| Average | toxaphene-1 | | | | | 4466.093 | 4821.726 |

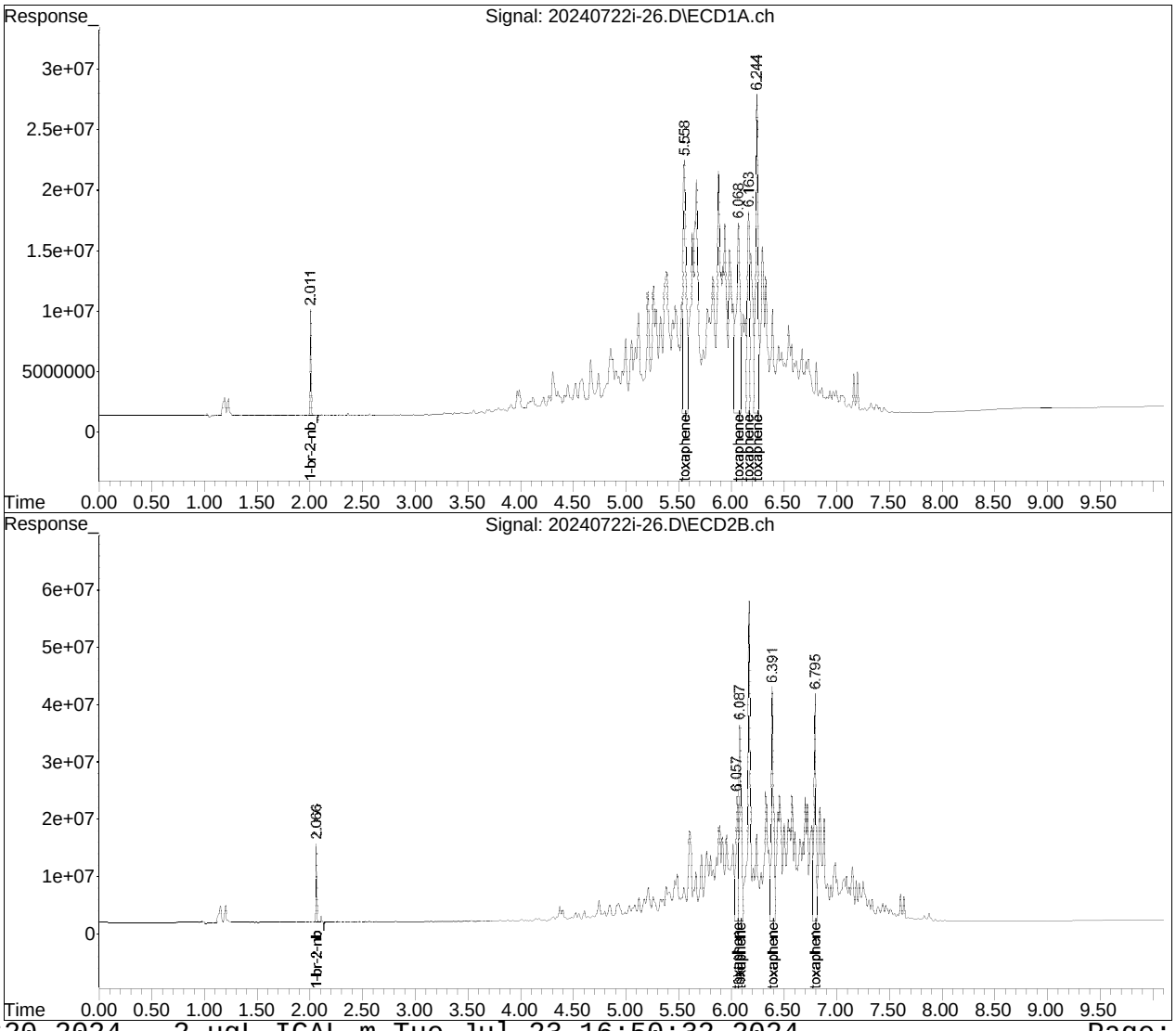
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-26.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 22:55
Operator : pest20:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:27:41 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:27:33 2024
Response via : Initial Calibration
Integrator: ChemStation

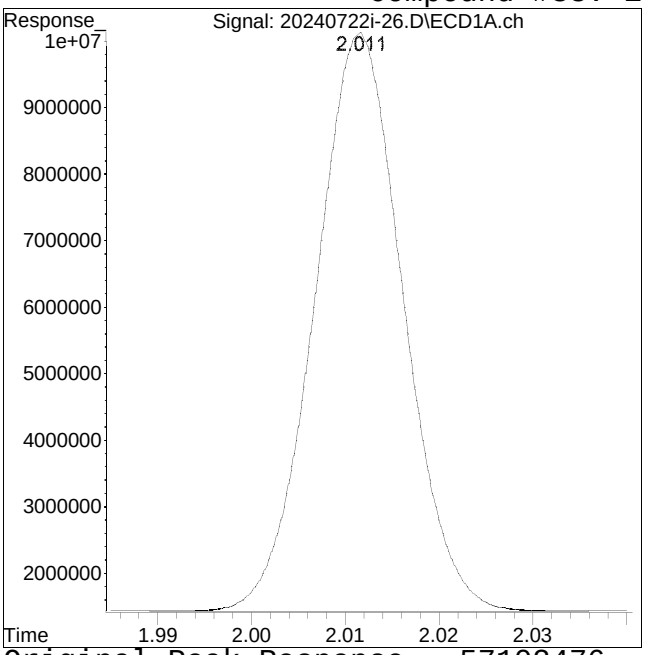
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



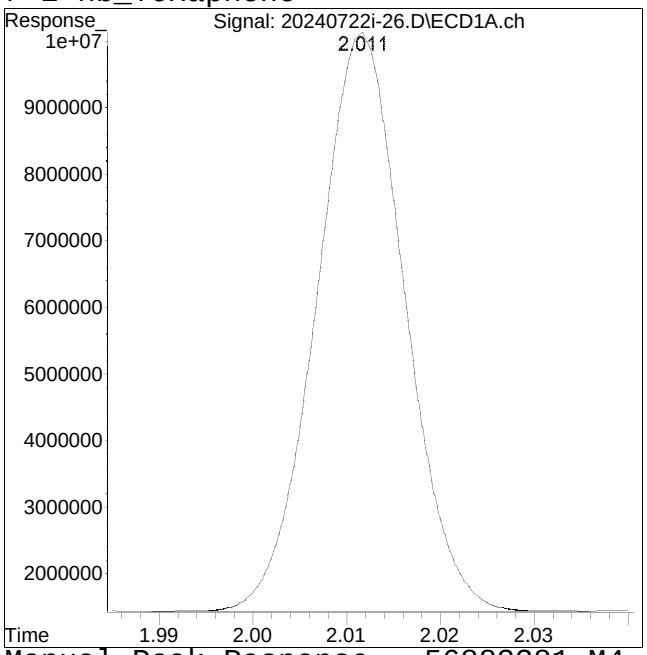
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-26.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:55 Instrument : PEST 20
Sample : il9tox,42e,,pp 11695 L5.0 Quant Date : 7/23/2024 2:27 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 57102476



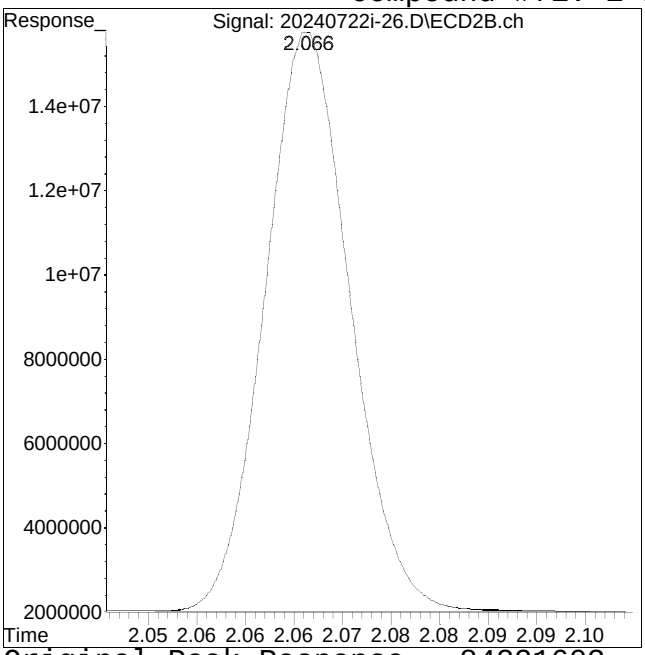

Manual Peak Response = 56883381 M4

M4 = Poor automated baseline construction.

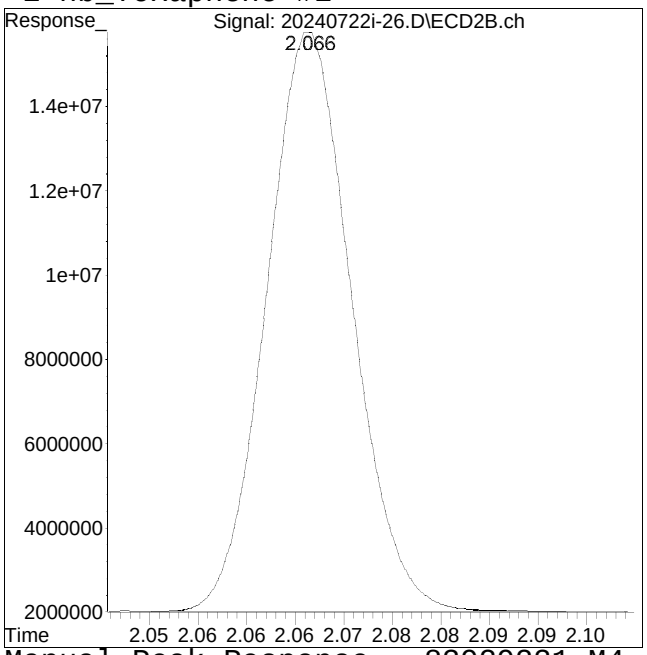
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240722i-26.D Operator : pest20:ejl
Date Inj'd : 7/22/2024 22:55 Instrument : PEST 20
Sample : il9tox,42e,,pp 11695 L5.0 Quant Date : 7/23/2024 2:27 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 84221603




Manual Peak Response = 83929231 M4

M4 = Poor automated baseline construction.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  23:07
Operator  : pest20:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 27   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 34 | l2 | toxaphene-1 | * | 2000.000 | 1910.430 | 4.5 | 89 | 0.00 |
| 35 | l2 | toxaphene-2 | * | 2000.000 | 2020.455 | -1.0 | 96 | 0.00 |
| 36 | l2 | toxaphene-4 | * | 2000.000 | 1769.029 | 11.5 | 84 | 0.00 |
| 37 | l2 | toxaphene-5 | * | 2000.000 | 1906.387 | 4.7 | 92 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 34 | l2 | toxaphene-1 | * | 2000.000 | 2006.136 | -0.3 | 97 | 0.00 |
| 35 | l2 | toxaphene-2 | * | 2000.000 | 1913.492 | 4.3 | 93 | 0.00 |
| 36 | l2 | toxaphene-4 | * | 2000.000 | 1782.047 | 10.9 | 87 | 0.00 |
| 37 | l2 | toxaphene-5 | * | 2000.000 | 1904.999 | 4.8 | 94 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 0.000 | 100.0# | 0 | -2.47# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.74# |
| 4 | | alpha-BHC | | 1.586 | 0.000 | 100.0# | 0# | -2.86# |
| 5 | | gamma-BHC (lindane) | | 1.529 | 0.000 | 100.0# | 0# | -3.11# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.17# |
| 7 | | delta-BHC | | 1.478 | 0.000 | 100.0# | 0# | -3.32# |
| 8 | | Heptachlor | | 1.494 | 0.000 | 100.0# | 0# | -3.51# |
| 9 | | Aldrin | | 1.394 | 0.000 | 100.0# | 0# | -3.79# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.93# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.03# |
| 12 | | Heptachlor Epoxide | | 1.349 | 0.000 | 100.0# | 0# | -4.41# |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 0.000 | 100.0# | 0 | -4.54# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  23:07
Operator  : pest20:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 27   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 0.000 | 100.0# | 0 | -4.69# |
| 15 | | 4,4'-DDE | | 1.333 | 0.000 | 100.0# | 0# | -4.79# |
| 16 | | Endosulfan I | | 1.261 | 0.000 | 100.0# | 0# | -4.84# |
| 17 | | Dieldrin | | 1.315 | 0.000 | 100.0# | 0# | -5.11# |
| 18 | | Endrin | | 1.292 | 0.000 | 100.0# | 0# | -5.34# |
| 19 | | 4,4'-DDD | | 1.086 | 0.000 | 100.0# | 0# | -5.43# |
| 20 | | Endosulfan II | | 1.175 | 0.000 | 100.0# | 0# | -5.57# |
| 21 | | 4,4'-DDT | * | 50.000 | 0.000 | 100.0# | 0 | -5.70# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.96# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.15# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.23# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.33# |
| 26 | | Endrin Ketone | | 1.275 | 0.000 | 100.0# | 0# | -6.56# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.33# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.01# |
| 29 | l1 | chlordane-1 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.44# |
| 30 | l1 | chlordane-3 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.92# |
| 31 | l1 | chlordane-4 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.54# |
| 32 | l1 | chlordane-5 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.68# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 0.000 | 100.0# | 0# | -2.66# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -3.04# |
| 4 | | alpha-BHC | | 1.533 | 0.000 | 100.0# | 0# | -3.15# |
| 5 | | gamma-BHC (lindane) | | 1.477 | 0.000 | 100.0# | 0# | -3.48# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.55# |
| 7 | | delta-BHC | | 1.443 | 0.000 | 100.0# | 0# | -3.85# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Jul 2024  23:07
Operator  : pest20:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial  : 27   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title  : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | | Heptachlor | | 1.403 | 0.000 | 100.0# | 0# | -3.92# |
| 9 | | Aldrin | | 1.268 | 0.000 | 100.0# | 0# | -4.27# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -4.14# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.52# |
| 12 | | Heptachlor Epoxide | | 1.268 | 0.000 | 100.0# | 0# | -4.93# |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 0.000 | 100.0# | 0# | -5.14# |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 0.000 | 100.0# | 0# | -5.30# |
| 15 | | 4,4'-DDE | | 1.193 | 0.000 | 100.0# | 0# | -5.47# |
| 16 | | Endosulfan I | | 1.153 | 0.000 | 100.0# | 0# | -5.35# |
| 17 | | Dieldrin | | 1.161 | 0.000 | 100.0# | 0# | -5.63# |
| 18 | | Endrin | | 1.185 | 0.000 | 100.0# | 0# | -5.91# |
| 19 | | 4,4'-DDD | | 0.979 | 0.000 | 100.0# | 0# | -6.02# |
| 20 | | Endosulfan II | | 1.098 | 0.000 | 100.0# | 0# | -6.10# |
| 21 | | 4,4'-DDT | | 1.110 | 0.000 | 100.0# | 0# | -6.29# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -6.38# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.83# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.99# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.61# |
| 26 | | Endrin Ketone | | 1.192 | 0.000 | 100.0# | 0# | -7.02# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.90# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -2.06# |
| 29 | l1 | chlordane-1 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.77# |
| 30 | l1 | chlordane-3 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.43# |
| 31 | l1 | chlordane-4 | * | 1000.000 | 0.000 | 100.0# | 0 | -5.14# |
| 32 | l1 | chlordane-5 | * | 1000.000 | 0.000 | 100.0# | 0 | -5.30# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 23:07
Operator : pest20:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 2.009 | 2.064 | 54779274 | 82658598 | 25.000 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 23:07
Operator : pest20:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.557 | 6.057 | 164.3E6 | 140.6E6 | 1910.430 | 2006.136 |
| 35) l2 | toxaphene-2 | 6.067 | 6.087 | 172.5E6 | 199.5E6 | 2020.455 | 1913.492 |
| 36) l2 | toxaphene-4 | 6.163 | 6.391 | 98003799 | 215.3E6 | 1769.029 | 1782.047 |
| 37) l2 | toxaphene-5 | 6.244 | 6.795 | 161.7E6 | 218.8E6 | 1906.387 | 1904.999 |
| Sum | toxaphene-1 | | | 596.5E6 | 774.2E6 | 7606.302 | 7606.674 |
| Average | toxaphene-1 | | | | | 1901.576 | 1901.668 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 596.5E6 | 774.2E6 | 7606.302 | 7606.674 |
| Average | toxaphene-1 | | | | | 1901.576 | 1901.668 |

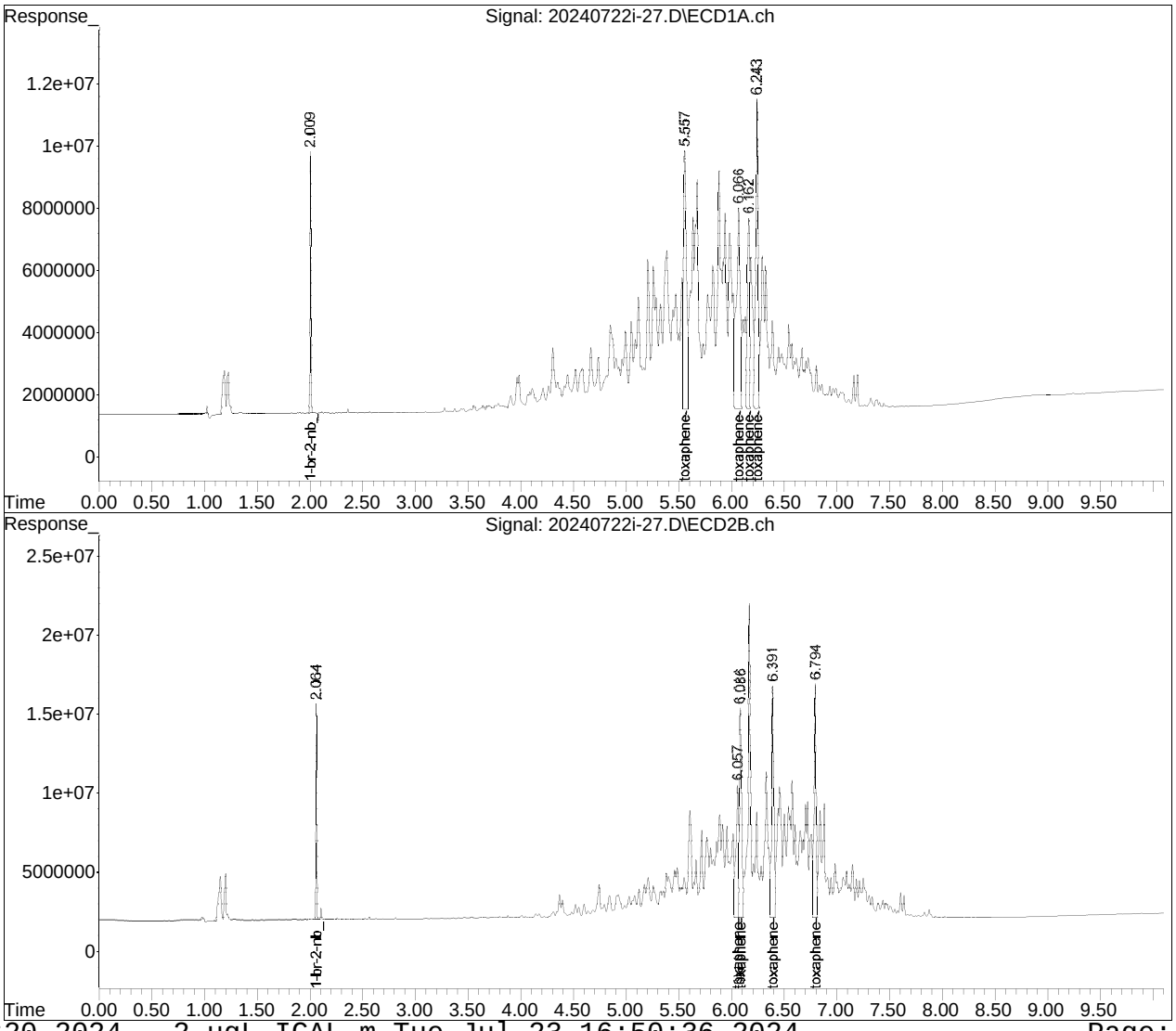
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240722ical\
Data File : 20240722i-27.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Jul 2024 23:07
Operator : pest20:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1950439, (Sig #1); ical (Sig #2)
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jul 23 14:35:01 2024
Quant Method : I:\PEST\Pest20\2024\240722ical\pest20_2024_07_22_ugL_ICAL.m
Quant Title : pest
QLast Update : Tue Jul 23 14:34:40 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240722Q
Data File : 20240722i-27.D
Date Inj'd : 7/22/2024 23:07
Sample : cicvtox,42e,,pp 11668 L2.0
Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 7/23/2024 2:35 pm

There are no manual integrations or false positives in this file.

# Evaluate Relative Error Report PEST 20

Method Path : I:\PEST\Pest20\2024\240722ical\
Method File : pest20_2024_07_22_ugL_ICAL.m
Title : pest
Last Update : Tue Jul 23 14:34:40 2024

| | | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | S | 2,4,5,6-Tetrachloro-m-xylen | L | ug/l | 50.0 | 52.208 | 4.4 | 1.00 | 0.721 | -27.9 |
| 3 | | Hexachlorobenzene | L | ug/l | 50.0 | 52.539 | 5.1 | 2.00 | 1.654 | -17.3 |
| 6 | | beta-BHC | L | ug/l | 50.0 | 52.345 | 4.7 | 2.00 | 1.615 | -19.3 |
| 10 | | Alachlor | L | ug/l | 50.0 | 54.664 | 9.3 | 2.00 | 1.418 | -29.1 |
| 11 | | Chlorpyrifos | L | ug/l | 50.0 | 53.443 | 6.9 | 2.00 | 1.431 | -28.4 |
| 13 | | gamma-Chlordane (trans) | L | ug/l | 50.0 | 50.271 | 0.5 | 2.00 | 1.721 | -13.9 |
| 14 | | alpha-Chlordane (cis) | L | ug/l | 50.0 | 50.997 | 2.0 | 1.00 | 0.739 | -26.1 |
| 21 | | 4,4'-DDT | L | ug/l | 50.0 | 51.284 | 2.6 | 1.00 | 0.767 | -23.3 |
| 22 | | Endrin Aldehyde | L | ug/l | 50.0 | 51.646 | 3.3 | 1.00 | 0.732 | -26.8 |
| 23 | | Methoxychlor | L | ug/l | 50.0 | 54.654 | 9.3 | 2.00 | 1.447 | -27.6 |
| 24 | | Mirex | L | ug/l | 50.0 | 53.648 | 7.3 | 2.00 | 1.510 | -24.5 |
| 25 | | Endosulfan Sulfate | L | ug/l | 50.0 | 50.589 | 1.2 | 1.00 | 0.699 | -30.1 |
| 27 | S | Decachlorobiphenyl | L | ug/l | 50.0 | 51.892 | 3.8 | 2.00 | 1.686 | -15.7 |
| 29 | L1 | chlordane-1 | L | ug/l | 1000.0 | 1000.007 | 0.0 | 10.00 | 7.493 | -25.1 |
| 30 | L1 | chlordane-3 | L | ug/l | 1000.0 | 1003.848 | 0.4 | 10.00 | 6.651 | -33.5 |
| 31 | L1 | chlordane-4 | L | ug/l | 1000.0 | 1005.401 | 0.5 | 10.00 | 9.278 | -7.2 |
| 32 | L1 | chlordane-5 | L | ug/l | 1000.0 | 1009.499 | 0.9 | 10.00 | 8.607 | -13.9 |
| 34 | L2 | toxaphene-1 | L | ug/l | 2000.0 | 2151.224 | 7.6 | 20.00 | 13.239 | -33.8 |
| 35 | L2 | toxaphene-2 | L | ug/l | 2000.0 | 2123.474 | 6.2 | 20.00 | 16.585 | -17.1 |
| 36 | L2 | toxaphene-4 | L | ug/l | 2000.0 | 2116.598 | 5.8 | 20.00 | 15.587 | -22.1 |
| 37 | L2 | toxaphene-5 | L | ug/l | 2000.0 | 2095.486 | 4.8 | 20.00 | 15.363 | -23.2 |
| 41 | | Hexachlorobenzene #2 | L | ug/l | 50.0 | 51.420 | 2.8 | 2.00 | 1.772 | -11.4 |
| 44 | | beta-BHC #2 | L | ug/l | 50.0 | 51.199 | 2.4 | 2.00 | 1.780 | -11.0 |
| 48 | | Alachlor #2 | L | ug/l | 50.0 | 53.616 | 7.2 | 2.00 | 1.531 | -23.5 |
| 49 | | Chlorpyrifos #2 | L | ug/l | 50.0 | 52.619 | 5.2 | 2.00 | 1.559 | -22.1 |
| 60 | | Endrin Aldehyde #2 | L | ug/l | 50.0 | 50.335 | 0.7 | 1.00 | 0.903 | -9.7 |
| 61 | | Methoxychlor #2 | L | ug/l | 50.0 | 53.350 | 6.7 | 2.00 | 1.631 | -18.4 |
| 62 | | Mirex #2 | L | ug/l | 50.0 | 52.756 | 5.5 | 2.00 | 1.586 | -20.7 |
| 63 | | Endosulfan Sulfate #2 | L | ug/l | 50.0 | 49.881 | -0.2 | 1.00 | 0.833 | -16.7 |
| 65 | S | Decachlorobiphenyl #2 | L | ug/l | 50.0 | 51.406 | 2.8 | 2.00 | 1.737 | -13.1 |
| 67 | L1 | chlordane-1 #2 | L | ug/l | 1000.0 | 1031.959 | 3.2 | 10.00 | 6.920 | -30.8 |
| 68 | L1 | chlordane-3 #2 | L | ug/l | 1000.0 | 1044.056 | 4.4 | 10.00 | 5.572 | -44.3 |
| 69 | L1 | chlordane-4 #2 | L | ug/l | 1000.0 | 1040.549 | 4.1 | 10.00 | 8.235 | -17.7 |
| 70 | L1 | chlordane-5 #2 | L | ug/l | 1000.0 | 1041.436 | 4.1 | 10.00 | 8.000 | -20.0 |
| 72 | L2 | toxaphene-1 #2 | L | ug/l | 2000.0 | 2059.579 | 3.0 | 20.00 | 15.452 | -22.7 |
| 73 | L2 | toxaphene-2 #2 | L | ug/l | 2000.0 | 2029.025 | 1.5 | 20.00 | 16.303 | -18.5 |
| 74 | L2 | toxaphene-4 #2 | L | ug/l | 2000.0 | 2032.982 | 1.6 | 20.00 | 16.905 | -15.5 |
| 75 | L2 | toxaphene-5 #2 | L | ug/l | 2000.0 | 2017.744 | 0.9 | 20.00 | 16.897 | -15.5 |

# Calibration Correlation Report

| | | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|---|
| 2 | S | 2,4,5,6-Tetrachloro-m-xylen | Linear | 0.998878 | 0.000000 | 1.07815 | 0.0346799 |
| 3 | | Hexachlorobenzene | Linear | 0.999002 | 0.000000 | 1.10624 | 0.0633567 |
| 6 | | beta-BHC | Linear | 0.999081 | 0.000000 | 0.604484 | 0.0362348 |
| 10 | | Alachlor | Linear | 0.995489 | 0.000000 | 0.188324 | 0.011531 |
| 11 | | Chlorpyrifos | Linear | 0.996776 | 0.000000 | 0.563077 | 0.0458591 |
| 13 | | gamma-Chlordane (trans) | Linear | 0.999733 | 0.000000 | 1.05525 | 0.0470874 |
| 14 | | alpha-Chlordane (cis) | Linear | 0.999594 | 0.000000 | 1.18633 | 0.0331924 |
| 21 | | 4,4'-DDT | Linear | 0.999439 | 0.000000 | 1.04538 | 0.0252257 |
| 22 | | Endrin Aldehyde | Linear | 0.999136 | 0.000000 | 0.860717 | 0.019689 |
| 23 | | Methoxychlor | Linear | 0.997028 | 0.000000 | 0.54871 | 0.040152 |
| 24 | | Mirex | Linear | 0.998159 | 0.000000 | 0.846835 | 0.0641476 |
| 25 | | Endosulfan Sulfate | Linear | 0.999117 | 0.000000 | 0.961816 | 0.0328339 |
| 27 | S | Decachlorobiphenyl | Linear | 0.998626 | 0.000000 | 1.04644 | 0.0624231 |
| 29 | L1 | chlordane-1 | Linear | 0.998388 | 0.000000 | 0.0392486 | 0.0109399 |
| 30 | L1 | chlordane-3 | Linear | 0.996450 | 0.000000 | 0.0475205 | 0.0172865 |
| 31 | L1 | chlordane-4 | Linear | 0.999690 | 0.000000 | 0.162364 | 0.0577897 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 32 | L1 chlordane-5 | Linear | 0.999412 | 0.000000 | 0.25146 | 0.0567687 |
| 34 | L2 toxaphene-1 | Linear | 0.992398 | 0.000000 | 0.0390668 | 0.0136212 |
| 35 | L2 toxaphene-2 | Linear | 0.995779 | 0.000000 | 0.0388176 | 0.0122192 |
| 36 | L2 toxaphene-4 | Linear | 0.995749 | 0.000000 | 0.0250729 | 0.0148817 |
| 37 | L2 toxaphene-5 | Linear | 0.996449 | 0.000000 | 0.0384701 | 0.0187809 |
| 41 | Hexachlorobenzene #2 | Linear | 0.999585 | 0.000000 | 1.09885 | 0.0452509 |
| 44 | beta-BHC #2 | Linear | 0.999696 | 0.000000 | 0.615064 | 0.0259462 |
| 48 | Alachlor #2 | Linear | 0.996997 | 0.000000 | 0.164106 | 0.0102653 |
| 49 | Chlorpyrifos #2 | Linear | 0.998119 | 0.000000 | 0.575466 | 0.0377732 |
| 60 | Endrin Aldehyde #2 | Linear | 0.999654 | 0.000000 | 0.836579 | 0.0108613 |
| 61 | Methoxychlor #2 | Linear | 0.998104 | 0.000000 | 0.522216 | 0.0315616 |
| 62 | Mirex #2 | Linear | 0.998903 | 0.000000 | 0.766206 | 0.0498281 |
| 63 | Endosulfan Sulfate #2 | Linear | 0.999787 | 0.000000 | 0.955236 | 0.0206112 |
| 65 | S Decachlorobiphenyl #2 | Linear | 0.999051 | 0.000000 | 0.871139 | 0.041628 |
| 67 | L1 chlordane-1 #2 | Linear | 0.996286 | 0.000000 | 0.0337844 | 0.0107145 |
| 68 | L1 chlordane-3 #2 | Linear | 0.992910 | 0.000000 | 0.0396747 | 0.0166348 |
| 69 | L1 chlordane-4 #2 | Linear | 0.997636 | 0.000000 | 0.130461 | 0.0328213 |
| 70 | L1 chlordane-5 #2 | Linear | 0.997239 | 0.000000 | 0.101993 | 0.0274149 |
| 72 | L2 toxaphene-1 #2 | Linear | 0.998653 | 0.000000 | 0.0211424 | 0.00445037 |
| 73 | L2 toxaphene-2 #2 | Linear | 0.999124 | 0.000000 | 0.0314307 | 0.00781184 |
| 74 | L2 toxaphene-4 #2 | Linear | 0.999367 | 0.000000 | 0.036409 | 0.00909794 |
| 75 | L2 toxaphene-5 #2 | Linear | 0.999454 | 0.000000 | 0.0345774 | 0.0122529 |

# Response Factor Report Pest 11

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024
Response Via : Initial Calibration

Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra... | | 1.070 | 1.052 | 1.075 | 1.017 | 1.028 | 1.042 | 1.068 | 1.019 | 0.980 | 1.039 | 3.00 |
| 3) | t | Hexachloroben... | | 1.537 | 1.511 | 1.518 | 1.421 | 1.398 | 1.344 | 1.370 | 1.302 | 1.253 | 1.406 | 7.13 |
| 4) | t | alpha-BHC | | 1.293 | 1.326 | 1.375 | 1.322 | 1.428 | 1.579 | 1.657 | 1.604 | 1.561 | 1.461 | 9.59 |
| 5) | t | gamma-BHC (li... | 1.464 | 1.305 | 1.312 | 1.356 | 1.278 | 1.355 | 1.457 | 1.524 | 1.473 | 1.430 | 1.395 | 6.06 |
| 6) | t | beta-BHC | | 0.665 | 0.662 | 0.666 | 0.624 | 0.626 | 0.607 | 0.622 | 0.597 | 0.580 | 0.628 | 4.95 |
| 7) | t | delta-BHC | | 1.249 | 1.257 | 1.303 | 1.246 | 1.337 | 1.470 | 1.546 | 1.502 | 1.457 | 1.374 | 8.70 |
| 8) | t | Heptachlor | | 1.313 | 1.322 | 1.357 | 1.281 | 1.318 | 1.358 | 1.400 | 1.323 | 1.217 | 1.321 | 3.91 |
| 9) | t | Aldrin | | 1.175 | 1.189 | 1.221 | 1.154 | 1.205 | 1.287 | 1.348 | 1.300 | 1.220 | 1.233 | 5.24 |
| 10) | t | Alachlor | | | 0.247 | 0.248 | 0.233 | 0.238 | 0.226 | 0.221 | 0.199 | | 0.230 | 7.42 |
| 11) | t | Chlorpyrifos | | | 0.674 | 0.682 | 0.634 | 0.615 | 0.538 | 0.520 | 0.466 | | 0.590 | 14.01 |
| 12) | t | Heptachlor Ep... | | 1.181 | 1.208 | 1.238 | 1.159 | 1.186 | 1.202 | 1.236 | 1.175 | 1.082 | 1.185 | 3.96 |
| 13) | t | gamma-Chlorda... | | 1.079 | 1.070 | 1.097 | 1.026 | 1.044 | 1.078 | 1.133 | 1.110 | 1.057 | 1.077 | 3.07 |
| 14) | t | alpha-Chlorda... | | 1.192 | 1.207 | 1.248 | 1.181 | 1.200 | 1.223 | 1.275 | 1.242 | 1.178 | 1.216 | 2.74 |
| 15) | t | 4,4'-DDE | | 1.107 | 1.137 | 1.186 | 1.119 | 1.167 | 1.226 | 1.298 | 1.275 | 1.207 | 1.192 | 5.61 |
| 16) | t | Endosulfan I | | 1.109 | 1.123 | 1.156 | 1.085 | 1.112 | 1.130 | 1.172 | 1.121 | 1.038 | 1.116 | 3.49 |

# Response Factor Report Pest 11

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024
Response Via : Initial Calibration

Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17) | t | Dieldrin | | 1.070 | 1.103 | 1.138 | 1.067 | 1.113 | 1.174 | 1.234 | 1.196 | 1.123 | 1.135 | 4.98 |
| 18) | t | Endrin | | 1.098 | 1.132 | 1.175 | 1.100 | 1.144 | 1.192 | 1.239 | 1.188 | 1.107 | 1.153 | 4.25 |
| 19) | t | 4,4'-DDD | | 0.857 | 0.879 | 0.918 | 0.859 | 0.900 | 0.956 | 1.015 | 1.002 | 0.960 | 0.927 | 6.36 |
| 20) | t | Endosulfan II | | 1.034 | 1.062 | 1.094 | 1.026 | 1.054 | 1.071 | 1.111 | 1.052 | 0.964 | 1.052 | 4.03 |
| 21) | t | 4,4'-DDT | | 0.969 | 1.034 | 1.071 | 0.998 | 1.036 | 1.083 | 1.139 | 1.124 | 1.071 | 1.058 | 5.22 |
| 22) | t | Endrin Aldehyde | | 0.906 | 0.889 | 0.917 | 0.869 | 0.878 | 0.877 | 0.913 | 0.888 | 0.841 | 0.886 | 2.70 |
| 23) | t | Methoxychlor | | 0.656 | 0.635 | 0.675 | 0.610 | 0.607 | 0.565 | 0.567 | 0.527 | 0.485 | 0.592 | 10.43 |
| 24) | t | Mirex | | | 1.027 | 1.066 | 0.980 | 0.964 | 0.880 | 0.899 | 0.864 | 0.822 | 0.938 | 9.06 |
| 25) | t | Endosulfan Su... | | 1.084 | 1.035 | 1.065 | 0.986 | 1.001 | 0.988 | 1.026 | 0.981 | 0.922 | 1.010 | 4.83 |
| 26) | t | Endrin Ketone | | 1.166 | 1.200 | 1.247 | 1.167 | 1.200 | 1.196 | 1.227 | 1.160 | 1.085 | 1.183 | 3.94 |
| 27) | s | Decachlorobip... | | 1.355 | 1.316 | 1.321 | 1.208 | 1.146 | 1.036 | 1.055 | 1.020 | 1.010 | 1.163 | 12.13 |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | | | 0.038 | 0.036 | 0.037 | 0.037 | 0.038 | 0.037 | 0.036 | | *L | 0.999 |
| 3 | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | | | 0.049 | 0.052 | 0.049 | 0.046 | 0.045 | 0.044 | 0.040 | | *L | 0.997 |
| 4 | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | | | 0.164 | 0.158 | 0.156 | 0.160 | 0.165 | 0.162 | 0.151 | | *L | 0.998 |
| 6 | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | | | 0.243 | 0.244 | 0.245 | 0.250 | 0.255 | 0.249 | 0.230 | | *L | 0.998 |
| 2 | | | | | | | | | | | | | | |

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024
Response Via : Initial Calibration

Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | |
| 34) | l2 | toxaphene-2 | | | 0.038 | 0.046 | | 0.055 | 0.055 | 0.056 | | | *L | 0.9998 |
| 35) | l2 | toxaphene-3 | | | 0.032 | 0.035 | | 0.042 | 0.043 | 0.044 | | | *L | 0.9995 |
| 36) | l2 | toxaphene-4 | | | 0.041 | 0.040 | | 0.042 | 0.043 | 0.045 | | | *L | 0.9992 |
| 37) | l2 | toxaphene-5 | | | 0.053 | 0.041 | | 0.039 | 0.039 | 0.040 | | | *L | 0.9999 |

Signal #2 Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | i | 1-br-2-nb_Pesticides | ----------ISTD---------- | | | | | | | | | | | |
| 2) | s | 2,4,5,6-Tetra... | | | 1.206 | 1.206 | 1.141 | 1.107 | 1.082 | 1.085 | 1.067 | 1.091 | 1.038 | 1.114 | 5.33 |
| 3) | t | Hexachloroben... | | | 1.451 | 1.390 | 1.323 | 1.249 | 1.197 | 1.146 | 1.145 | 1.144 | 1.106 | 1.239 | 9.92 |
| 4) | t | alpha-BHC | | | 1.558 | 1.563 | 1.526 | 1.479 | 1.547 | 1.686 | 1.736 | 1.764 | 1.719 | 1.620 | 6.53 |
| 5) | t | gamma-BHC (li... | | 1.777 | 1.551 | 1.516 | 1.480 | 1.413 | 1.442 | 1.525 | 1.563 | 1.584 | 1.540 | 1.539 | 6.46 |
| 6) | t | beta-BHC | | | 0.854 | 0.824 | 0.779 | 0.737 | 0.692 | 0.642 | 0.639 | 0.637 | 0.614 | *L | 0.9996 |
| 7) | t | delta-BHC | | | 1.529 | 1.507 | 1.460 | 1.411 | 1.443 | 1.548 | 1.598 | 1.627 | 1.582 | 1.523 | 4.86 |
| 8) | t | Heptachlor | | | 1.786 | 1.721 | 1.657 | 1.575 | 1.545 | 1.553 | 1.565 | 1.548 | 1.427 | 1.598 | 6.72 |
| 9) | t | Aldrin | | | 1.511 | 1.468 | 1.436 | 1.367 | 1.367 | 1.434 | 1.469 | 1.478 | 1.382 | 1.435 | 3.65 |

# Response Factor Report Pest 11

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024
Response Via : Initial Calibration

Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10) t | Alachlor | | | 0.293 | 0.281 | 0.264 | 0.241 | 0.197 | 0.183 | 0.172 | | *L | 0.996 |
| 7 | | | | | | | | | | | | | |
| 11) t | Chlorpyrifos | | | 1.095 | 1.043 | 0.969 | 0.877 | 0.736 | 0.700 | 0.666 | | *L | 0.998 |
| 3 | | | | | | | | | | | | | |
| 12) t | Heptachlor Ep... | | 1.616 | 1.577 | 1.520 | 1.425 | 1.372 | 1.353 | 1.362 | 1.352 | 1.252 | 1.425 | 8.44 |
| 13) t | gamma-Chlorda... | | 1.483 | 1.457 | 1.376 | 1.298 | 1.234 | 1.224 | 1.252 | 1.275 | 1.205 | 1.312 | 7.85 |
| 14) t | alpha-Chlorda... | | 1.641 | 1.577 | 1.521 | 1.435 | 1.382 | 1.359 | 1.381 | 1.400 | 1.318 | 1.446 | 7.54 |
| 15) t | 4,4'-DDE | | 1.377 | 1.359 | 1.330 | 1.263 | 1.272 | 1.348 | 1.390 | 1.418 | 1.327 | 1.343 | 3.82 |
| 16) t | Endosulfan I | | 1.515 | 1.476 | 1.419 | 1.334 | 1.284 | 1.260 | 1.269 | 1.263 | 1.167 | 1.332 | 8.59 |
| 17) t | Dieldrin | | 1.415 | 1.389 | 1.352 | 1.281 | 1.267 | 1.305 | 1.334 | 1.344 | 1.257 | 1.327 | 4.11 |
| 18) t | Endrin | | 1.442 | 1.411 | 1.375 | 1.305 | 1.290 | 1.326 | 1.350 | 1.356 | 1.265 | 1.347 | 4.25 |
| 19) t | 4,4'-DDD | | 1.118 | 1.104 | 1.084 | 1.022 | 1.026 | 1.071 | 1.106 | 1.134 | 1.088 | 1.084 | 3.57 |
| 20) t | Endosulfan II | | 1.364 | 1.341 | 1.298 | 1.220 | 1.180 | 1.154 | 1.164 | 1.150 | 1.053 | 1.214 | 8.39 |
| 21) t | 4,4'-DDT | | 1.293 | 1.294 | 1.271 | 1.196 | 1.196 | 1.227 | 1.262 | 1.290 | 1.222 | 1.250 | 3.26 |
| 22) t | Endrin Aldehyde | | 1.156 | 1.131 | 1.093 | 1.025 | 0.982 | 0.941 | 0.951 | 0.957 | 0.906 | *L | 0.999 |
| 3 | | | | | | | | | | | | | |
| 23) t | Methoxychlor | | 0.848 | 0.816 | 0.797 | 0.739 | 0.695 | 0.630 | 0.620 | 0.614 | 0.581 | 0.704 | 14.13 |
| 24) t | Mirex | | | 1.298 | 1.250 | 1.156 | 1.061 | 0.921 | 0.910 | 0.914 | 0.867 | *L | 0.999 |
| 3 | | | | | | | | | | | | | |
| 25) t | Endosulfan Su... | | 1.382 | 1.336 | 1.302 | 1.218 | 1.159 | 1.107 | 1.116 | 1.118 | 1.054 | 1.199 | 9.68 |

# Response Factor Report Pest 11

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024
Response Via : Initial Calibration

Calibration Files
1 =11240801i-03.d 2 =11240801i-04.d 3 =11240801i-22.d 4 =11240801i-23.d 5 =11240801i-16.d
7 =11240801i-24.d 8 =11240801i-25.d 9 =11240801i-26.d 10 =11240801i-20.d 11 =11240801i-12.d

| | | Compound | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | Avg | | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26) | t | Endrin Ketone | 1.378 | 1.372 | 1.340 | 1.264 | 1.245 | 1.205 | 1.207 | 1.200 | 1.136 | | 1.261 | | 6.75 |
| 27) | s | Decachlorobip... | 1.252 | 1.219 | 1.185 | 1.105 | 1.040 | 0.936 | 0.932 | 0.943 | 0.929 | | 1.060 | | 12.61 |
| 28) | i | 1-br-2-nb_Chlordane | ----------ISTD---------- | | | | | | | | | | | | |
| 29) | l1 | chlordane-1 | 0.054 | 0.052 | 0.044 | 0.039 | 0.040 | 0.040 | 0.035 | | | | *L | | 0.996 |
| 3 | | | | | | | | | | | | | | | |
| 30) | l1 | chlordane-3 | 0.070 | 0.064 | 0.055 | 0.047 | 0.046 | 0.044 | 0.037 | | | | *L | | 0.991 |
| 2 | | | | | | | | | | | | | | | |
| 31) | l1 | chlordane-4 | 0.208 | 0.191 | 0.166 | 0.163 | 0.167 | 0.169 | 0.147 | | | | *L | | 0.995 |
| 9 | | | | | | | | | | | | | | | |
| 32) | l1 | chlordane-5 | 0.162 | 0.149 | 0.130 | 0.126 | 0.128 | 0.129 | 0.113 | | | | *L | | 0.996 |
| 1 | | | | | | | | | | | | | | | |
| 33) | i | 1-br-2-nb_Toxaphene | ----------ISTD---------- | | | | | | | | | | | | |
| 34) | l2 | toxaphene-2 | 0.028 | 0.028 | 0.023 | 0.023 | 0.024 | | | | | | *L | | 0.999 |
| 7 | | | | | | | | | | | | | | | |
| 35) | l2 | toxaphene-3 | 0.042 | 0.040 | 0.035 | 0.035 | 0.035 | | | | | | *L | | 0.999 |
| 8 | | | | | | | | | | | | | | | |
| 36) | l2 | toxaphene-4 | 0.049 | 0.047 | 0.041 | 0.041 | 0.042 | | | | | | *L | | 0.999 |
| 7 | | | | | | | | | | | | | | | |
| 37) | l2 | toxaphene-5 | 0.050 | 0.045 | 0.038 | 0.038 | 0.039 | | | | | | *L | | 0.999 |
| 7 | | | | | | | | | | | | | | | |

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:25
Operator : PEST11:ejl
Sample : pem11240801i-01,42e,,pp 11667 - (Sig #1); pem-01,42e,,pp 11667 - (Sig #2)
Misc : WG1955254,ical
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:30:39 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:15 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 226.2E6 | 184.7E6 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | |
| 15) t | 4,4'-DDE | 3.659 | 4.472 | 862871 | 1055459 | 0.080M2 | 0.106M4 |
| 18) t | Endrin | 4.211 | 4.925 | 519.0E6 | 456.6E6 | 49.762M4 | 45.902M3 |
| 19) t | 4,4'-DDD | 4.325 | 5.050 | 1951195 | 2046326 | 0.233M4 | 0.256M3 |
| 21) t | 4,4'-DDT | 4.616 | 5.325 | 974.6E6 | 872.9E6 | 101.766M4 | 94.533M4 |
| 22) t | Endrin Aldeh D | 4.869 | 5.421 | 1022766 | 1047335 | 0.128M3 | N.D. M4 |
| 26) t | Endrin Keton | 5.487 | 6.059 | 4628888 | 4774072 | 0.432M4 | 0.513M4 |
| | Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| | Average chlordane-1 | | | | | 0.000 | 0.000 |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |
| | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:25
Operator : PEST11:ejl
Sample : pem11240801i-01,42e,,pp 11667 - (Sig #1); pem-01,42e,,pp 11667 - (Sig #2)
Misc : WG1955254,ical
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:30:39 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:15 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

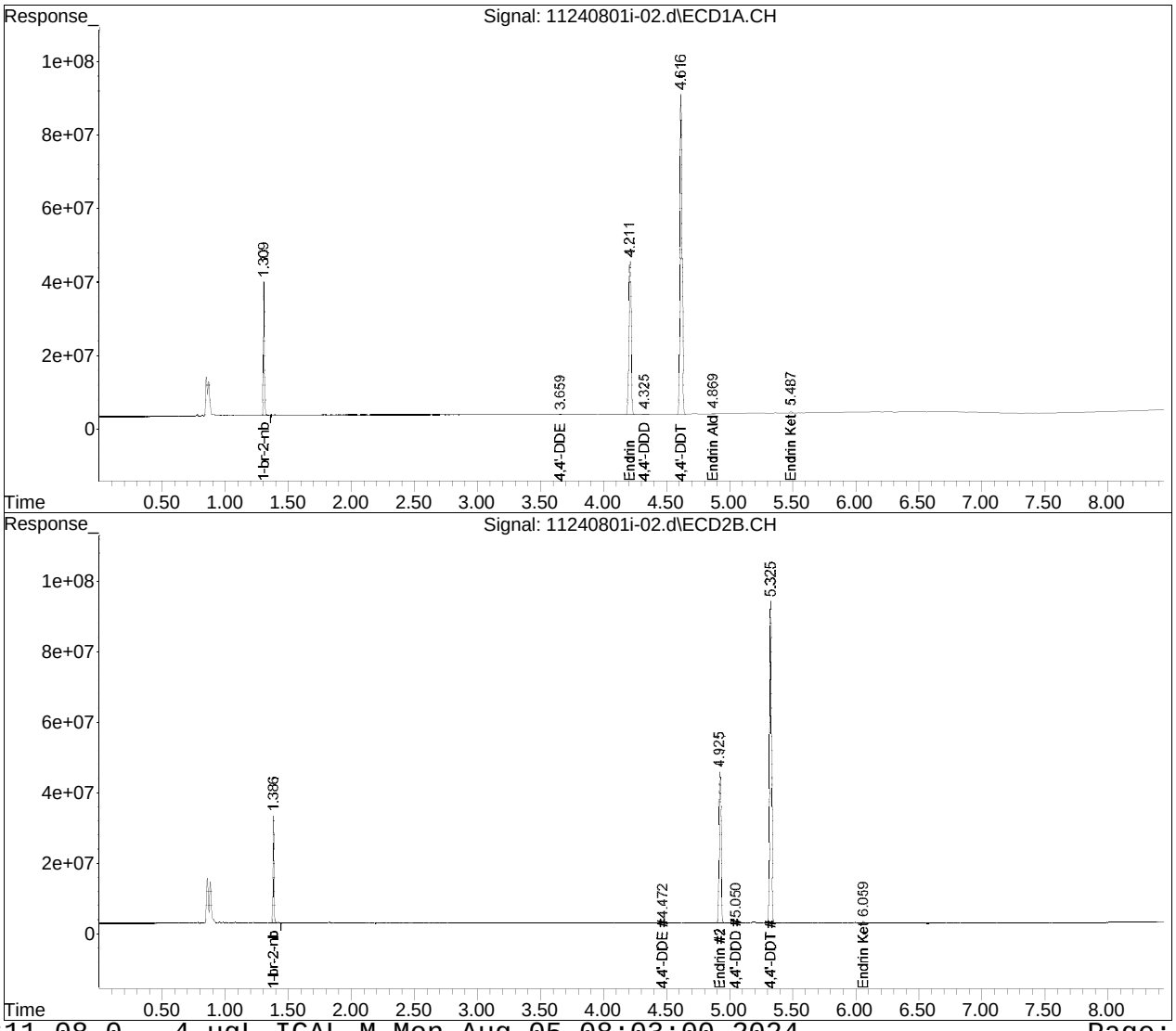
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-02.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  18:25
Operator : PEST11:ejl
Sample : pem11240801i-01,42e,,pp 11667 - (Sig #1); pem-01,42e,,pp 11667 - (
Misc : WG1955254,ical
ALS Vial : 2 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:30:39 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:15 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

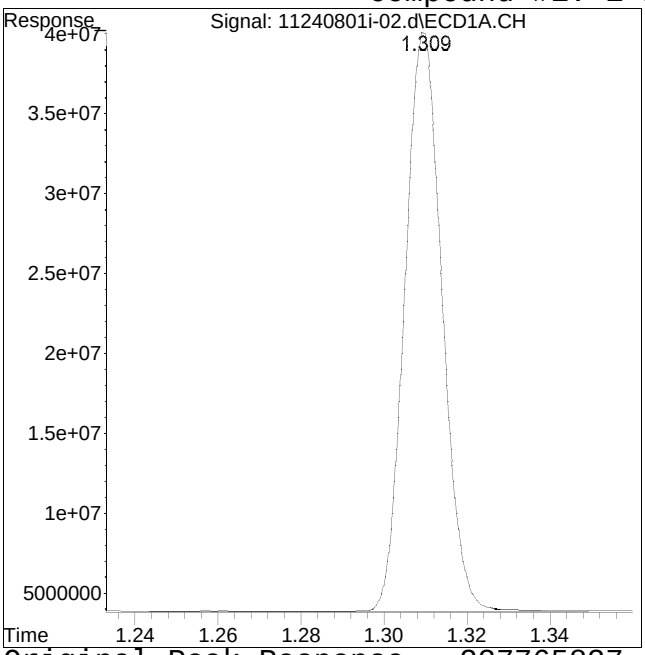


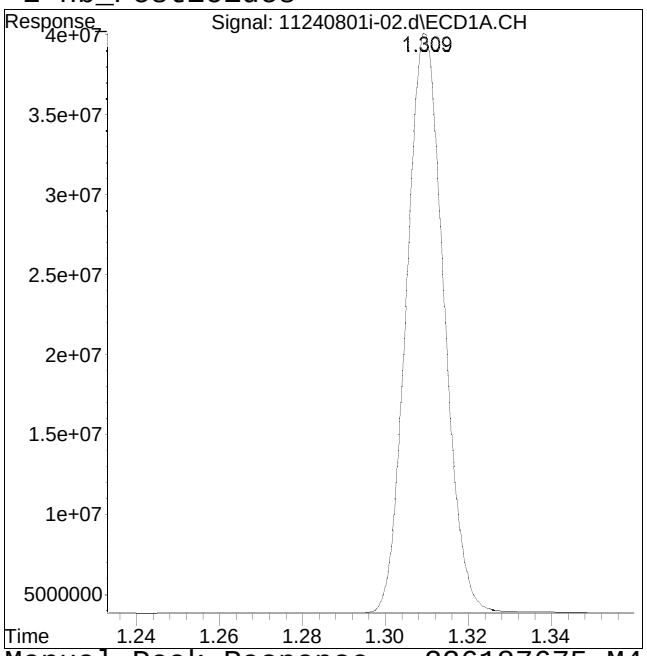
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #1: 1-br-2-nb_Pesticides



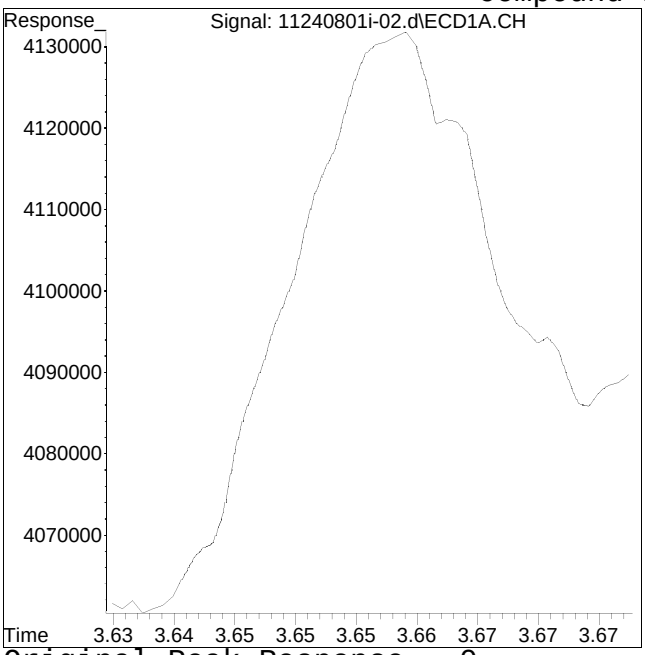

Original Peak Response = 227765837 Manual Peak Response = 226187675 M4
M4 = Poor automated baseline construction.

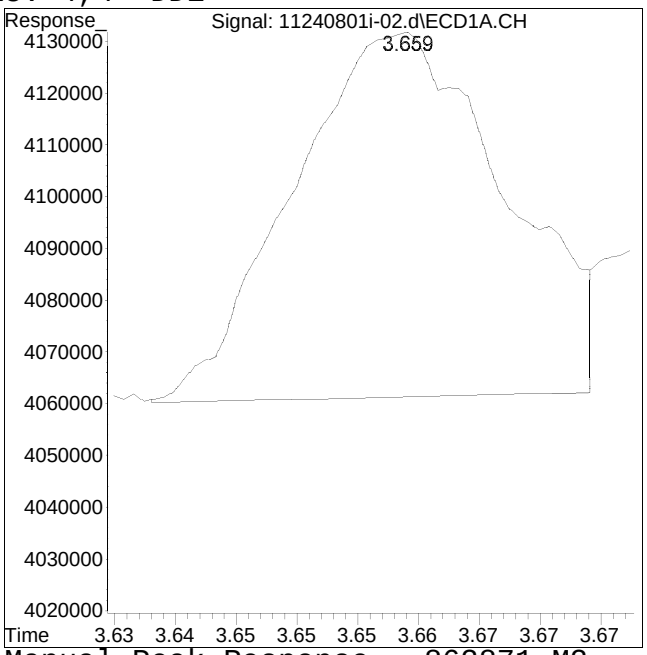
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #15: 4,4'-DDE



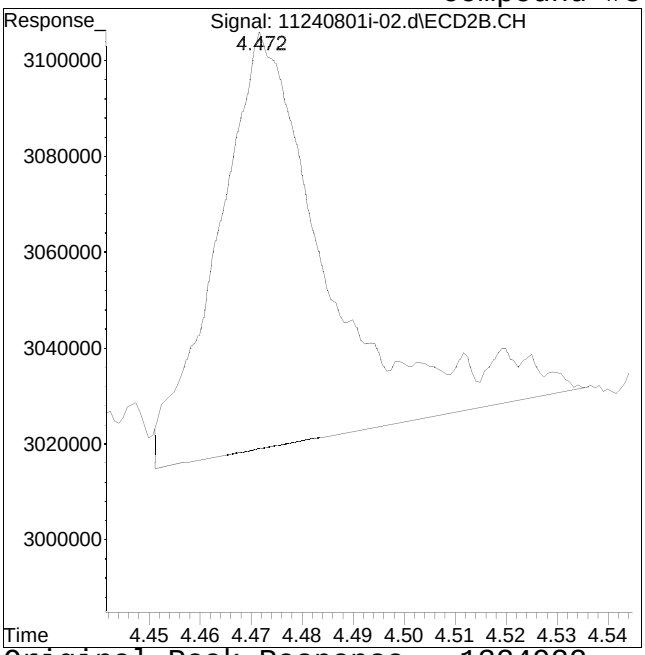




Original Peak Response = 0
Manual Peak Response = 862871 M2
M2 = Peak not found by automatic integration algorithm.

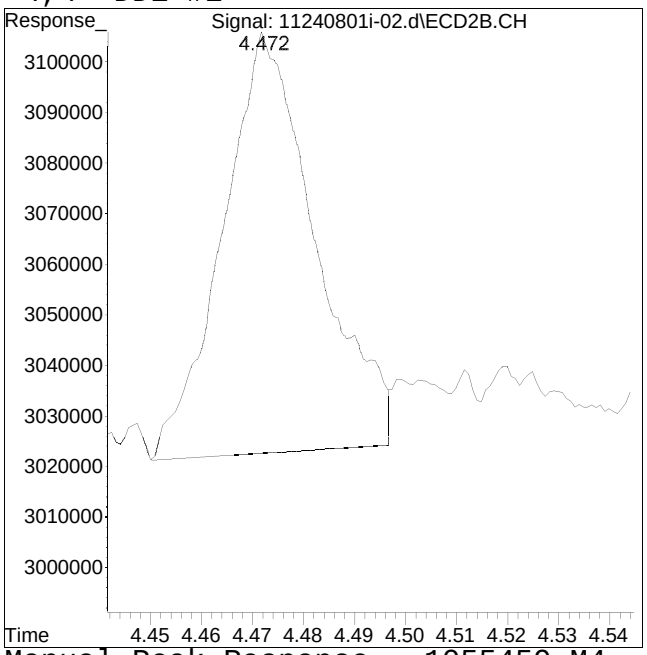
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #53: 4,4'-DDE #2




Original Peak Response = 1324922



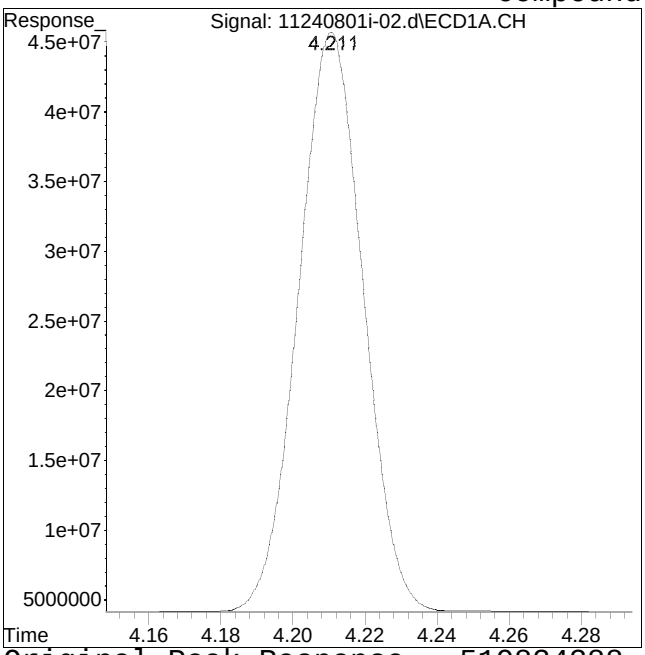

Manual Peak Response = 1055459 M4

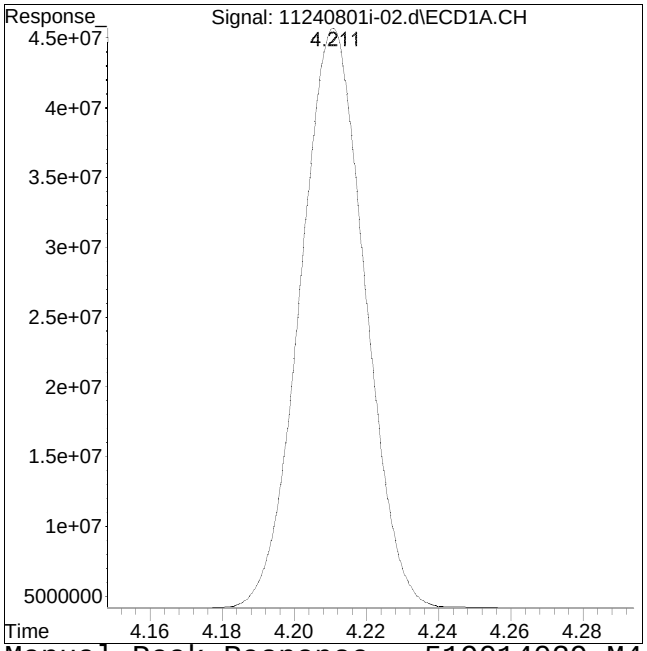
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #18: Endrin



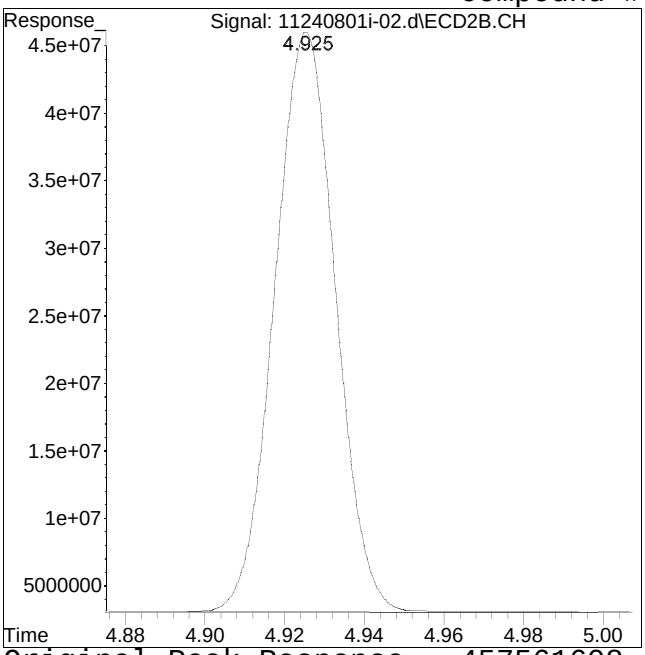

Original Peak Response = 519834388 Manual Peak Response = 519014029 M4
M4 = Poor automated baseline construction.

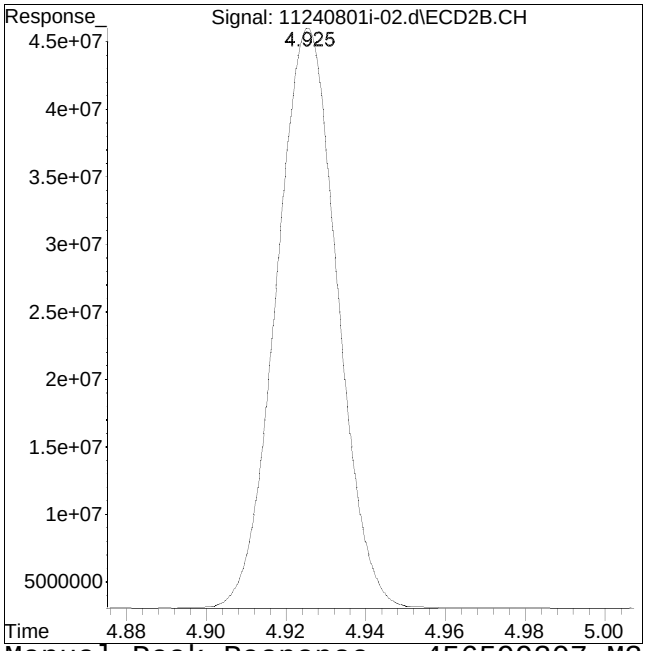
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #56: Endrin #2



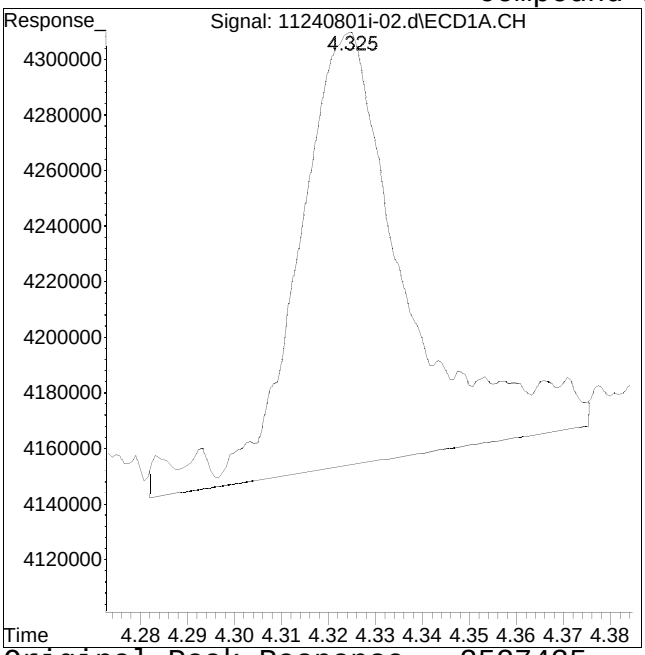

Original Peak Response = 457561608 Manual Peak Response = 456599307 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

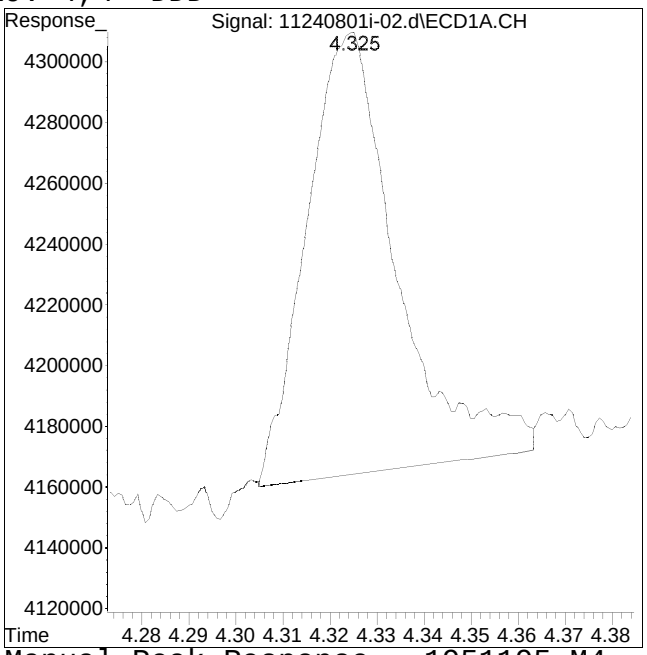
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #19: 4,4'-DDD




Original Peak Response = 2527435



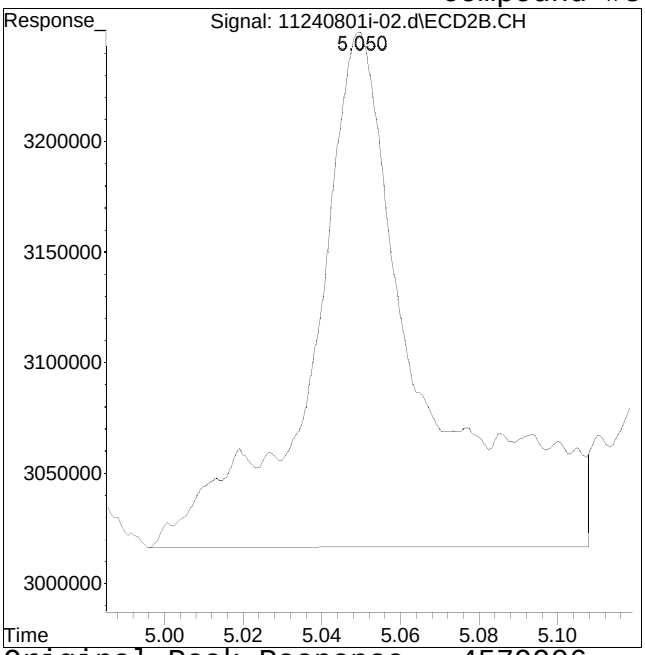

Manual Peak Response = 1951195 M4

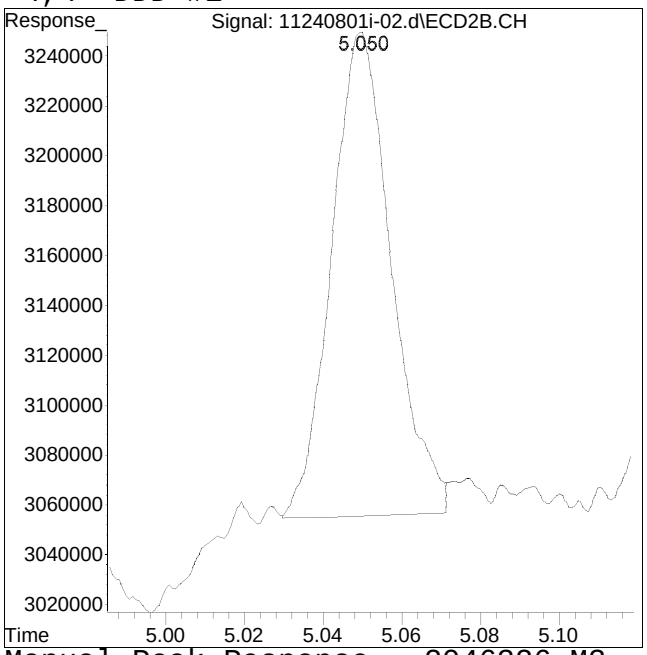
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #57: 4,4'-DDD #2



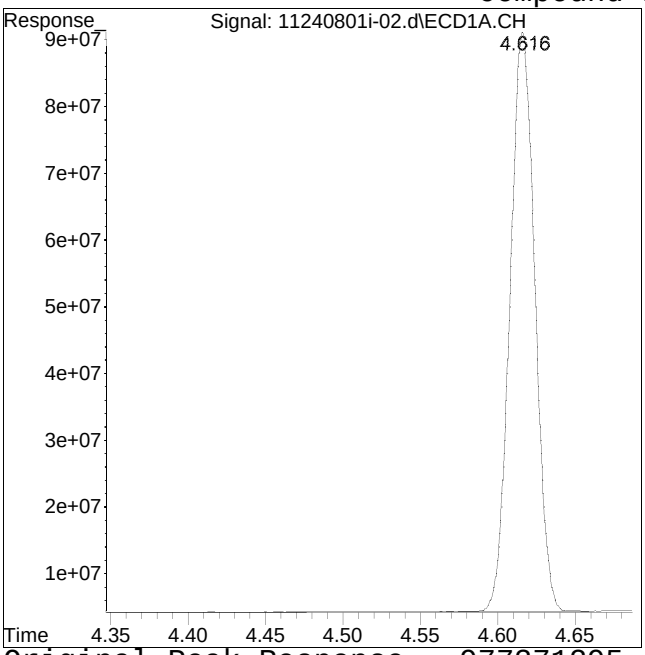



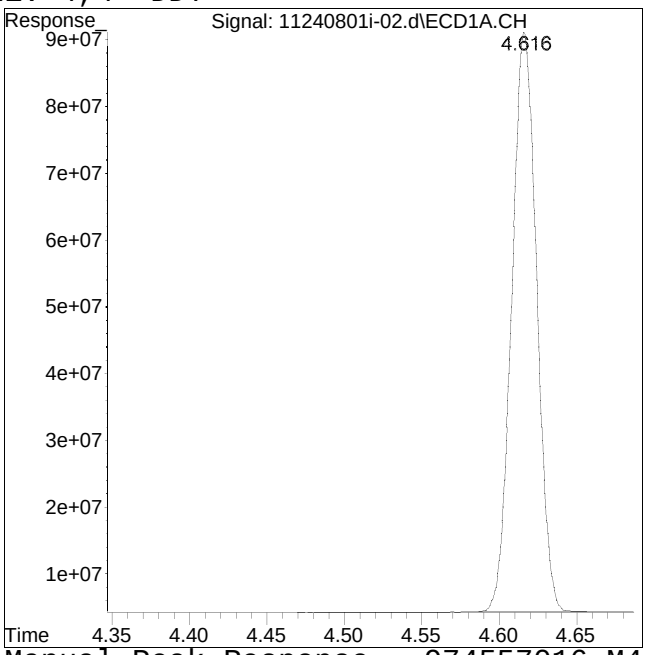

Original Peak Response = 4579906 Manual Peak Response = 2046326 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #21: 4,4'-DDT



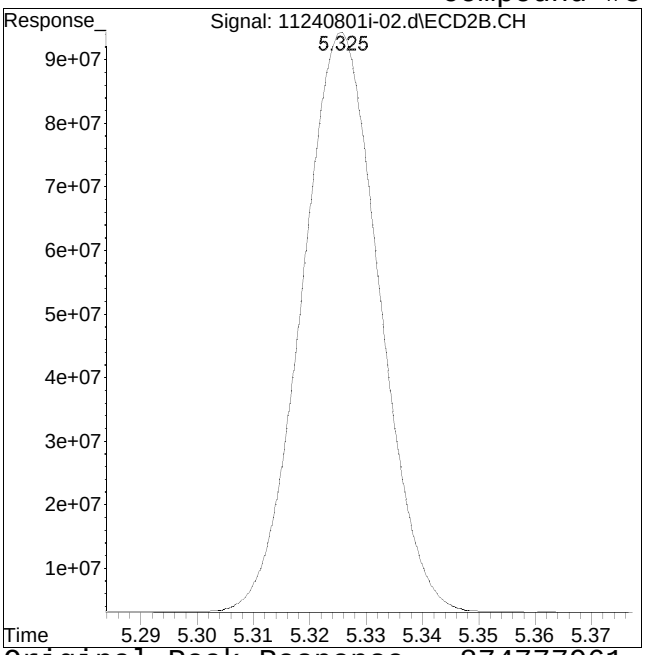

Original Peak Response = 977371295 Manual Peak Response = 974557016 M4
M4 = Poor automated baseline construction.

Manual Integration Report

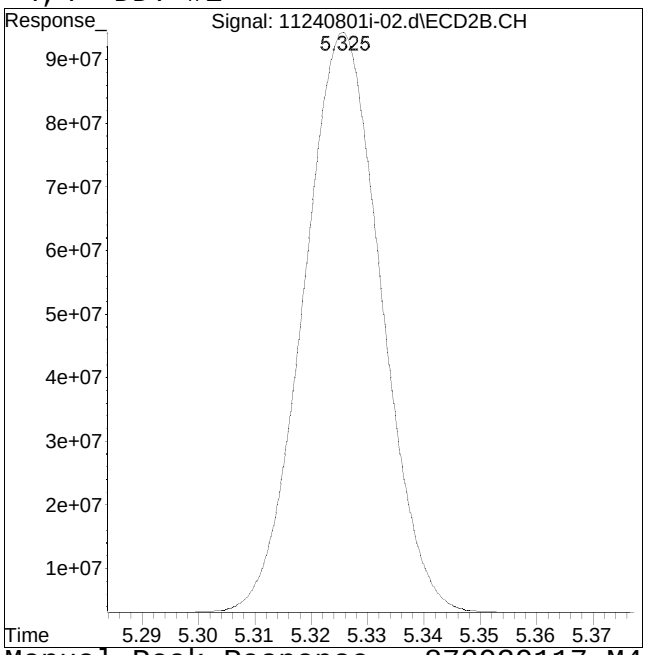
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #59: 4,4'-DDT #2




Original Peak Response = 874777961




Manual Peak Response = 872939117 M4

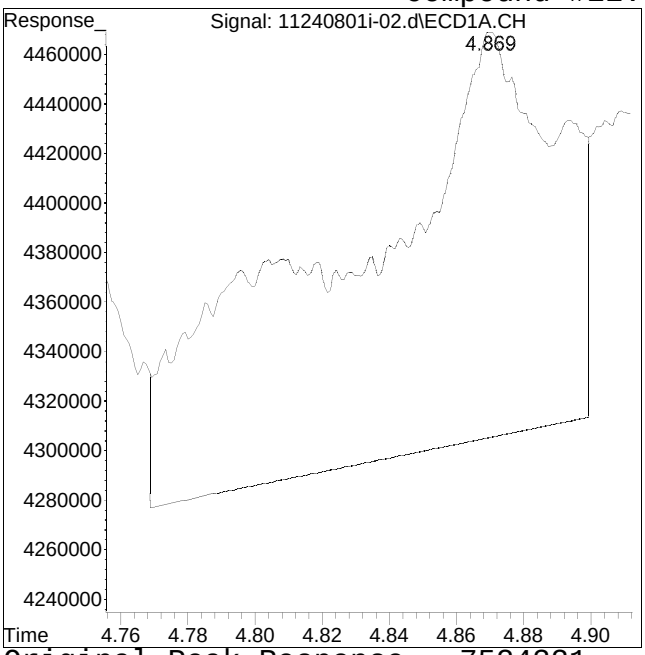
M4 = Poor automated baseline construction.

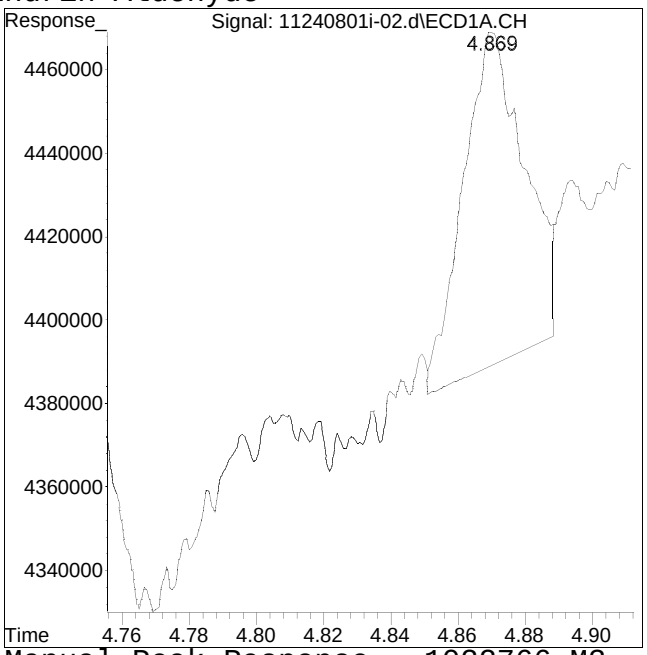
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #22: Endrin Aldehyde



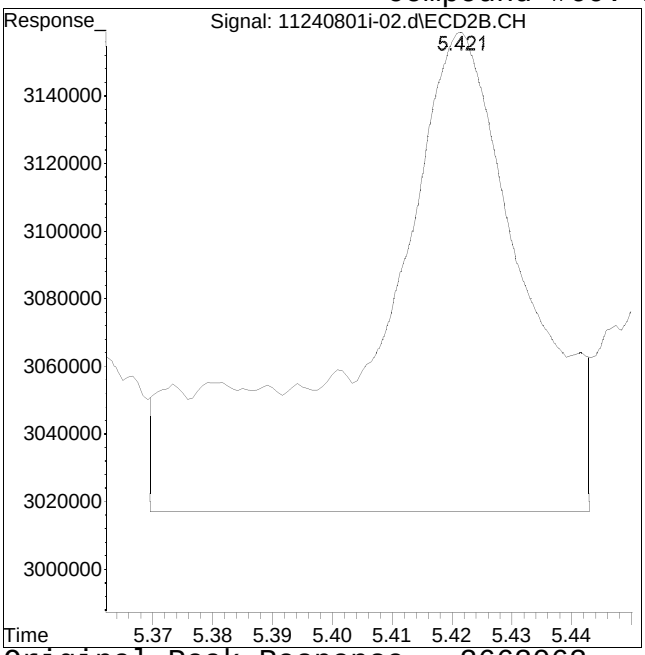

Original Peak Response = 7524321 Manual Peak Response = 1022766 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

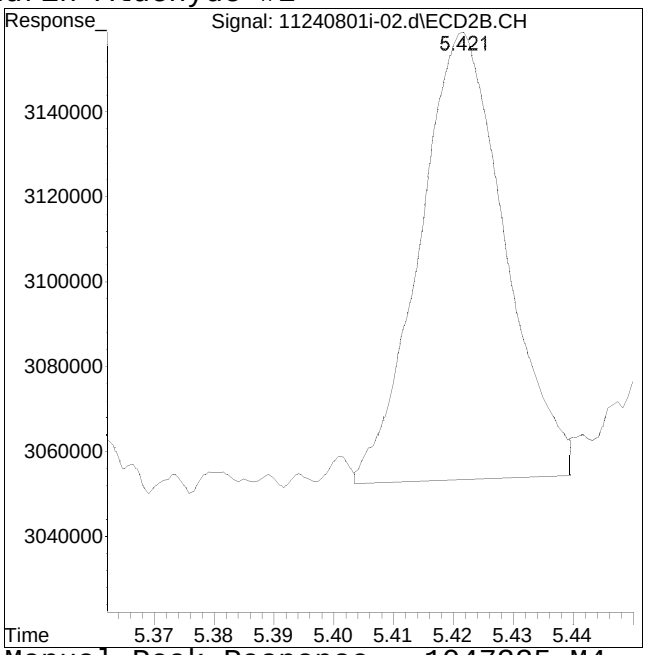
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #60: Endrin Aldehyde #2




Original Peak Response = 2663063



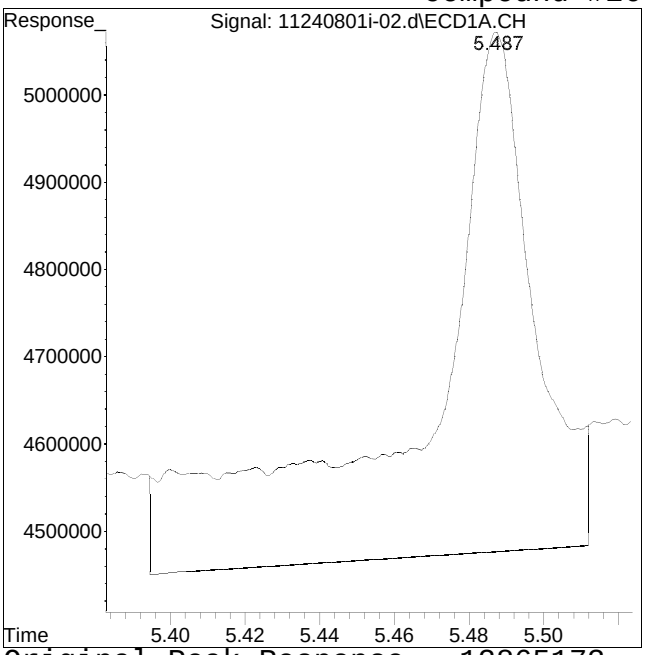

Manual Peak Response = 1047335 M4

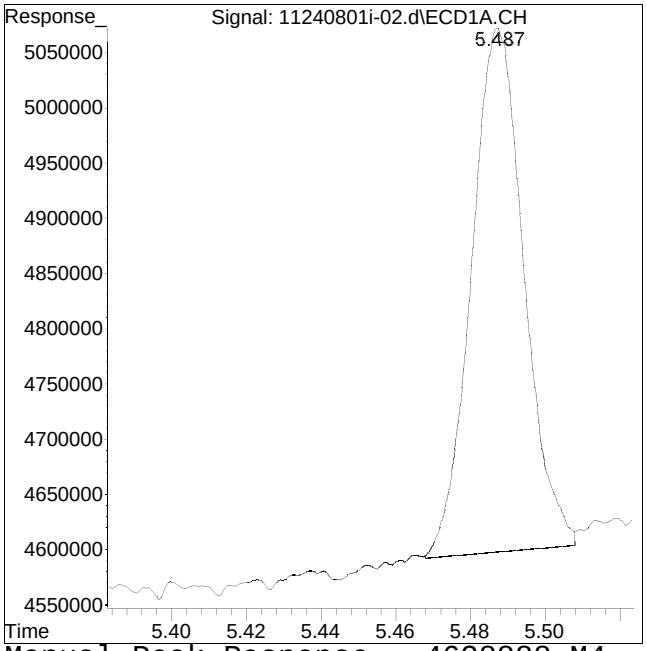
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-02.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:25 Instrument : Pest 11
Sample : pem11240801i-01,42e,,pp 11Quant Date : 8/2/2024 12:30 pm

Compound #26: Endrin Ketone



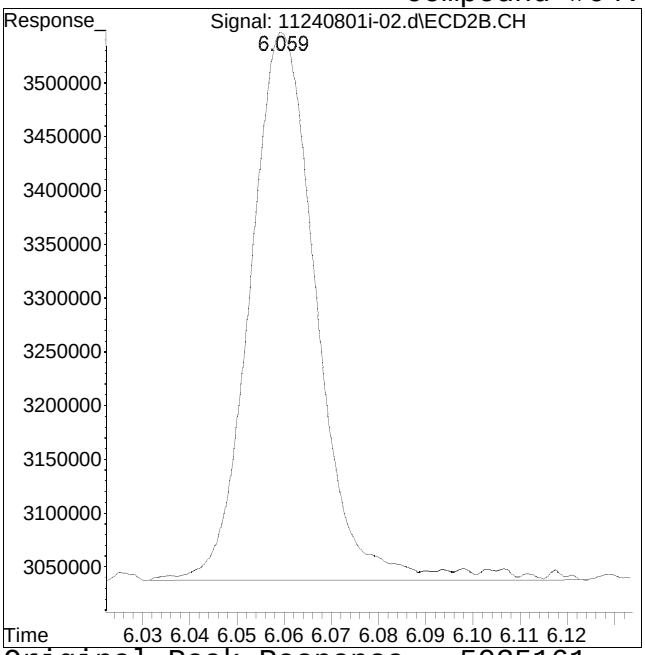

Original Peak Response = 12865173 Manual Peak Response = 4628888 M4
M4 = Poor automated baseline construction.

Manual Integration Report

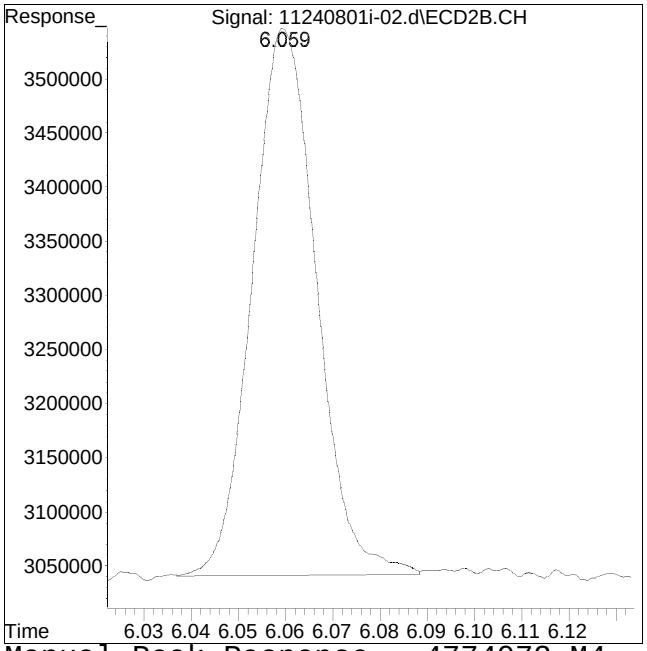
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-02.d
Date Inj'd : 8/1/2024 18:25
Sample : pem11240801i-01,42e,,pp 11

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:30 pm

Compound #64: Endrin Ketone #2




Original Peak Response = 5035161




Manual Peak Response = 4774072 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:37
Operator : PEST11:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:37:46 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:37:32 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 220.8E6 | 175.5E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 6465041 | 6237465 | 0.527M4 | 0.587M4 |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:37
Operator : PEST11:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:37:46 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:37:32 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

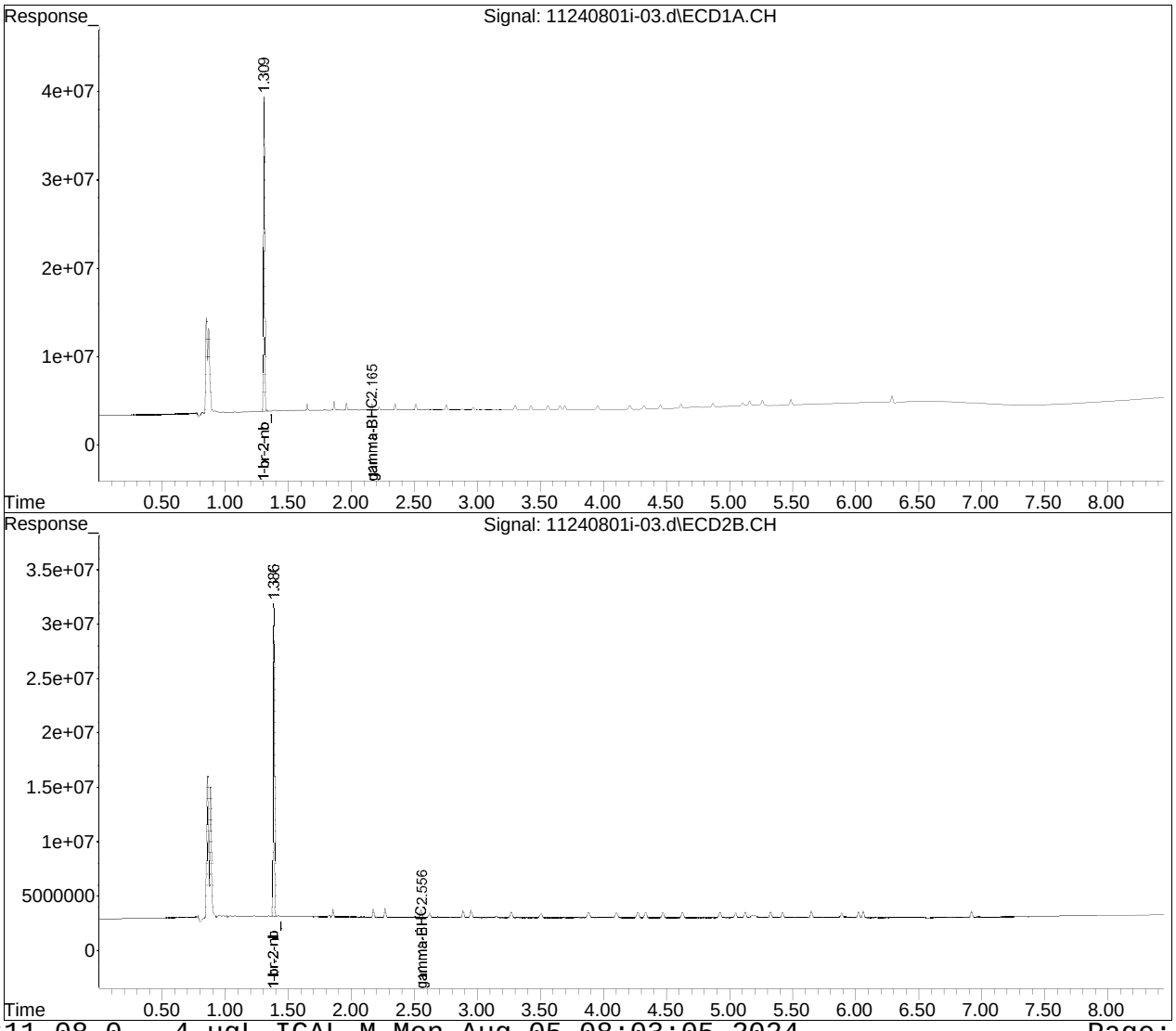
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:37
Operator : PEST11:ejl
Sample : il1pest,42e,,pp 11687 L0.0005
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:37:46 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:37:32 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

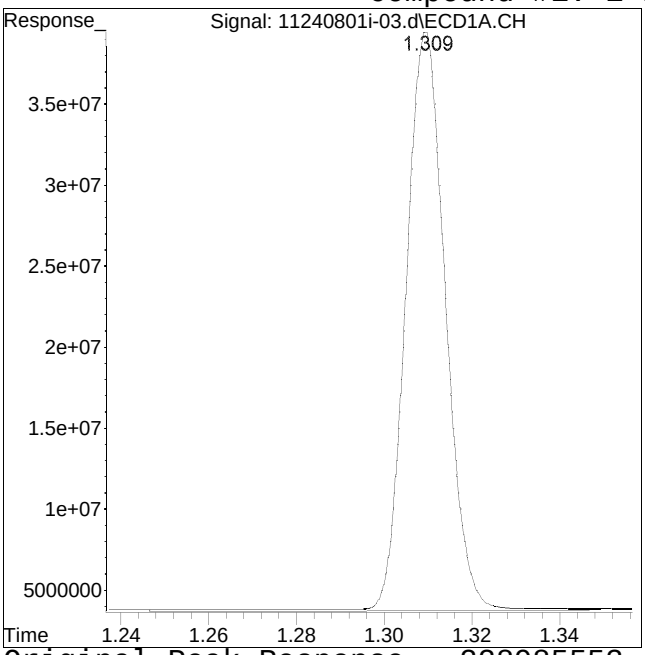


# Manual Integration Report

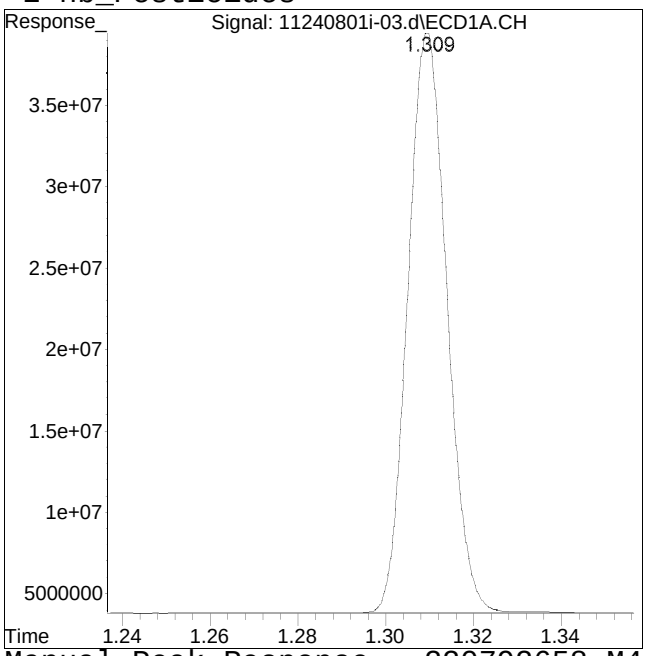
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-03.d
Date Inj'd : 8/1/2024 18:37
Sample : il1pest,42e,,pp 11687 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:37 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 228985553




Manual Peak Response = 220792658 M4

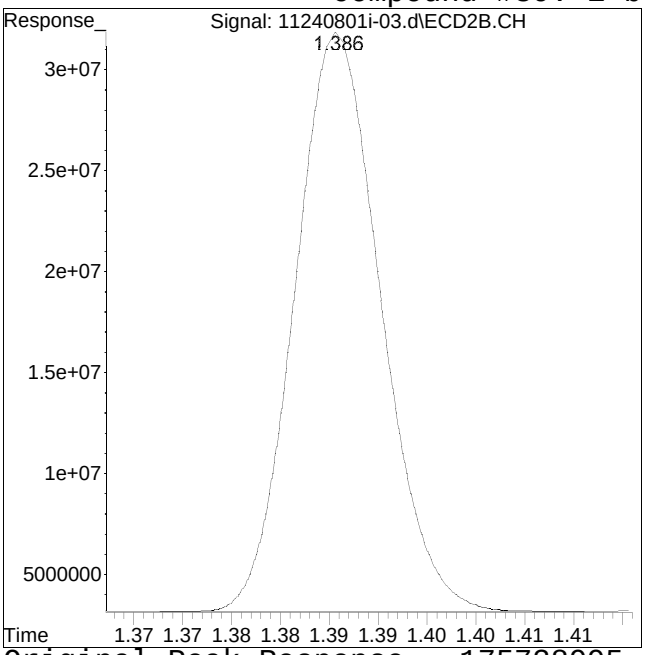
M4 = Poor automated baseline construction.

# Manual Integration Report

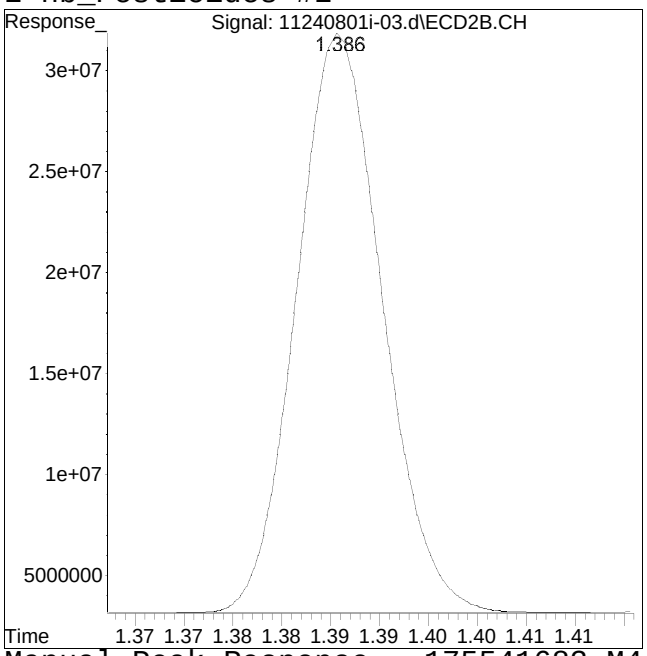
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-03.d
Date Inj'd : 8/1/2024 18:37
Sample : il1pest,42e,,pp 11687 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:37 am

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 175738995



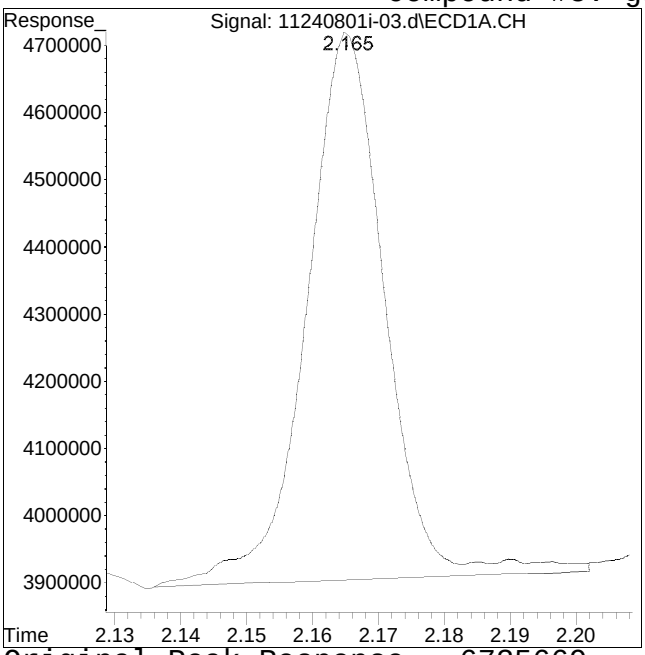

Manual Peak Response = 175541683 M4

M4 = Poor automated baseline construction.

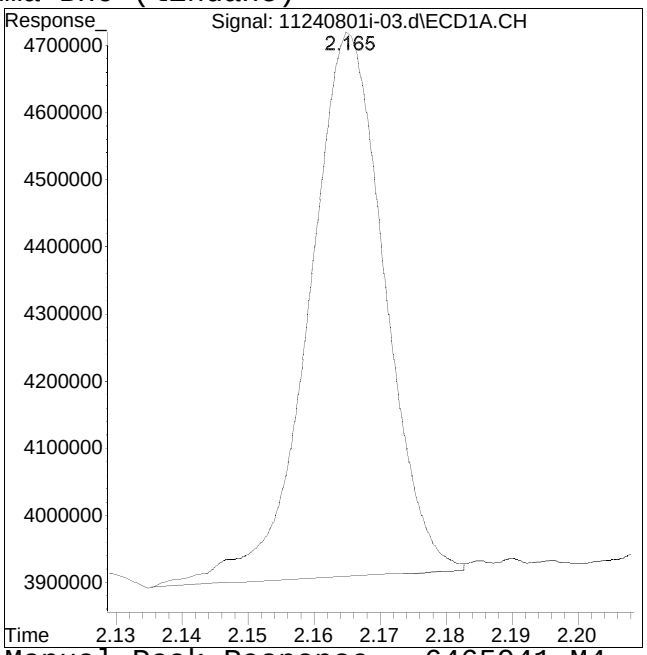
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-03.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:37 Instrument : Pest 11
Sample : il1pest,42e,,pp 11687 L0.0Quant Date : 8/2/2024 11:37 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 6735669



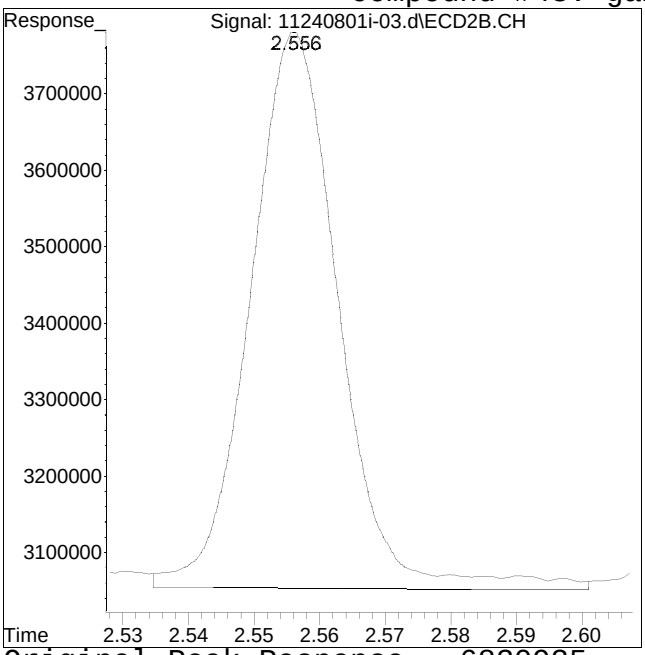

Manual Peak Response = 6465041 M4

M4 = Poor automated baseline construction.

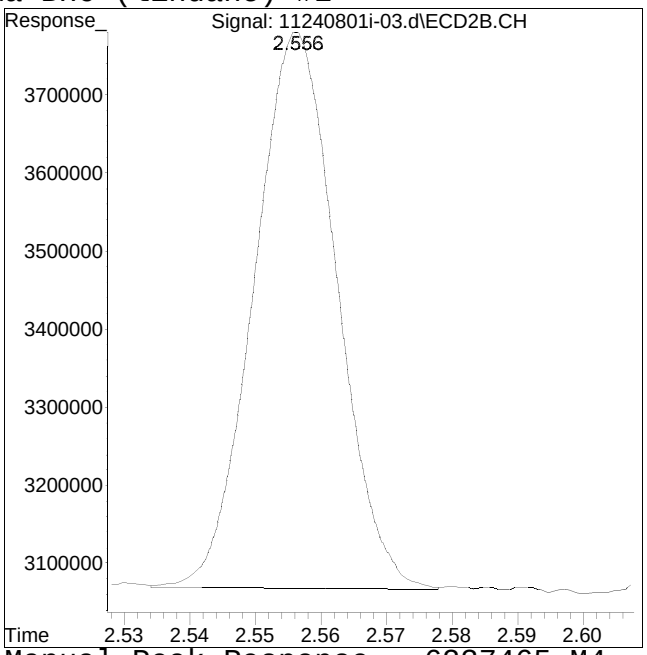
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-03.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:37 Instrument : Pest 11
Sample : il1pest,42e,,pp 11687 L0.0 Quant Date : 8/2/2024 11:37 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 6830935




Manual Peak Response = 6237465 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:49
Operator : PEST11:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:23:45 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:23:36 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.385 | 236.2E6 | 189.9E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.651 | 1.857 | 10103750 | 9166304 | 1.033M4 | 1.095M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 2.07%# | 2.19%# |
| 27) s | Decachlorobi | 6.287 | 6.916 | 12797286 | 9509129 | 1.189M4 | 1.208M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 2.38%# | 2.42%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.864 | 2.177 | 14522616 | 11025327 | 1.106M4 | 1.197M3 |
| 4) t | alpha-BHC | 1.963 | 2.270 | 12213270 | 11833439 | 0.873M3 | 0.957M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.555 | 12327860 | 11786896 | 0.933M4 | 1.029M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 6284813 | 6484776 | 1.068M4 | 1.227 |
| 7) t | delta-BHC | 2.349 | 2.888 | 11794485 | 11613870 | 0.898M4 | 1.004M4 |
| 8) t | Heptachlor | 2.512 | 2.951 | 12406198 | 13569126 | 0.994M4 | 1.135M4 |
| 9) t | Aldrin | 2.755 | 3.270 | 11094967 | 11481671 | 0.947M3 | 1.060M4 |
| 10) t | Alachlor | 2.875 | 3.152 | 2283039 | 2193840 | 1.050M4 | 1.239M3 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 6350609 | 8645243 | 1.140M4 | 1.309M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:49
Operator : PEST11:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:23:45 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:23:36 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.883 | 11159206 | 12274465 | 0.996M4 | 1.153M4 |
| 13) | t | gamma-Chlord | 3.424 | 4.104 | 10188540 | 11268731 | 1.002M4 | 1.150M3 |
| 14) | t | alpha-Chlord | 3.558 | 4.274 | 11264127 | 12463945 | 0.978M4 | 1.154M4 |
| 15) | t | 4,4'-DDE | 3.655 | 4.472 | 10456227 | 10459964 | 0.921M4 | 1.029M4 |
| 16) | t | Endosulfan I | 3.694 | 4.335 | 10476077 | 11507441 | 0.993M4 | 1.157M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 10104411 | 10753372 | 0.936M4 | 1.075M4 |
| 18) | t | Endrin | 4.208 | 4.925 | 10369621 | 10955743 | 0.947M4 | 1.080M3 |
| 19) | t | 4,4'-DDD | 4.320 | 5.049 | 8095840 | 8492171 | 0.916M4 | 1.035M3 |
| 20) | t | Endosulfan I | 4.450 | 5.125 | 9763069 | 10359858 | 0.980M4 | 1.141M4 |
| 21) | t | 4,4'-DDT | 4.615 | 5.326 | 9158338 | 9826532 | 0.906M4 | 1.039M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 8559160 | 8781210 | 1.025M3 | 1.158M4 |
| 23) | t | Methoxychlor | 5.103 | 5.890 | 6198489 | 6445389 | 1.124M3 | 1.236M4 |
| 24) | t | Mirex | 5.159 | 6.023 | 10519898 | 10310168 | 1.188M3 | 1.296M4 |
| 25) | t | Endosulfan S | 5.260 | 5.649 | 10237086 | 10496074 | 1.083M3 | 1.175M4 |
| 26) | t | Endrin Keton | 5.486 | 6.060 | 11019089 | 10468738 | 0.984M4 | 1.106M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 18:49
Operator : PEST11:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:23:45 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:23:36 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

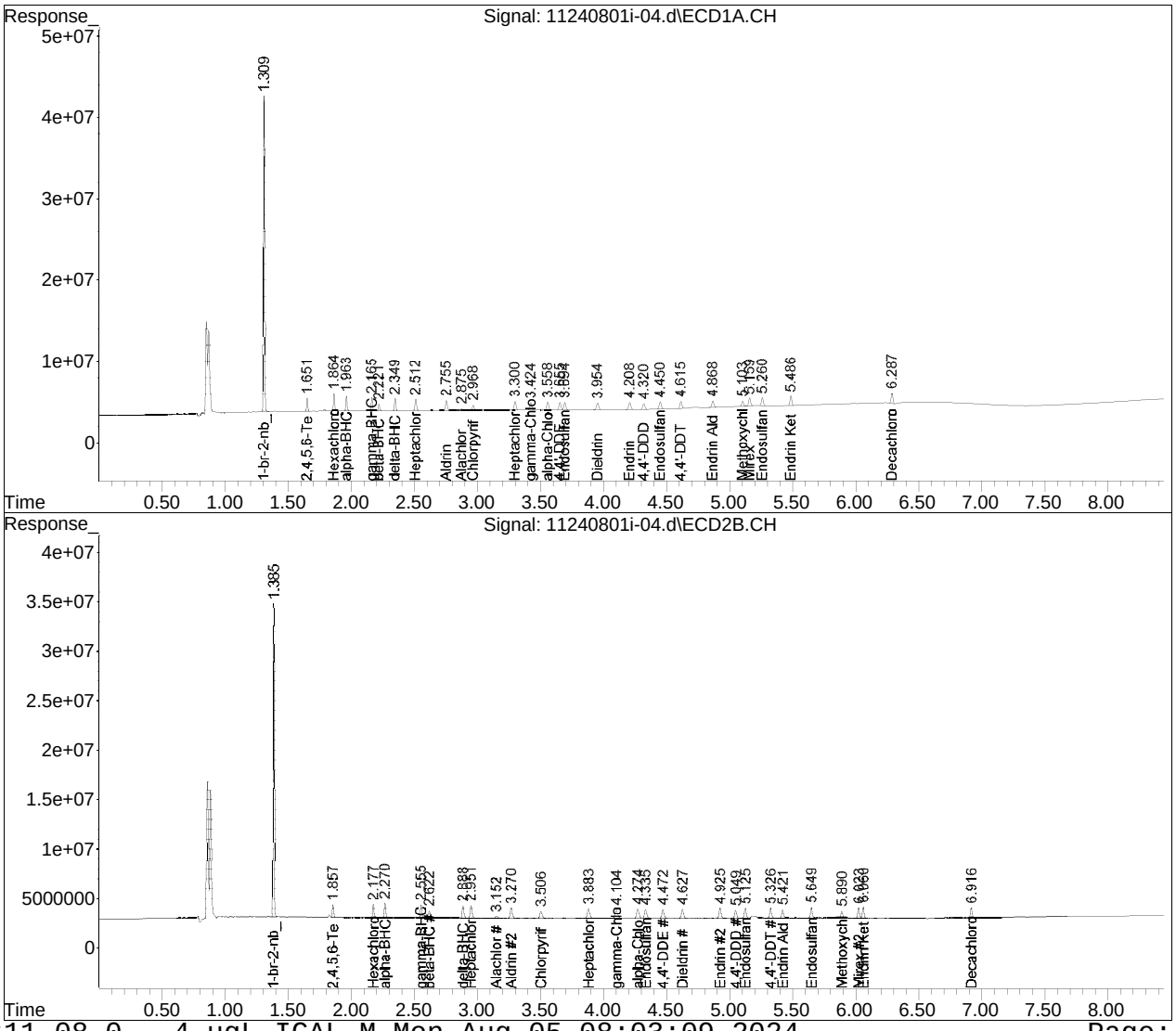
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-04.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  18:49
Operator : PEST11:ejl
Sample : il2pest,42e,,pp 11686 L0.001
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:23:45 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:23:36 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

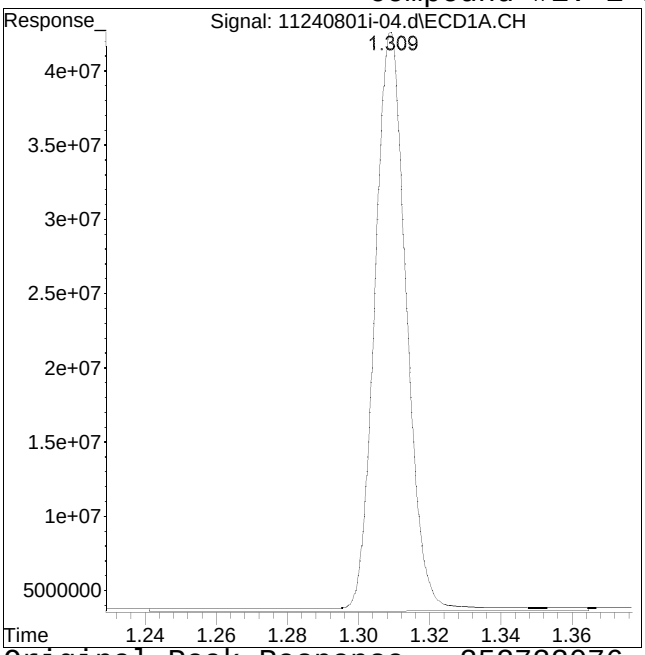


# Manual Integration Report

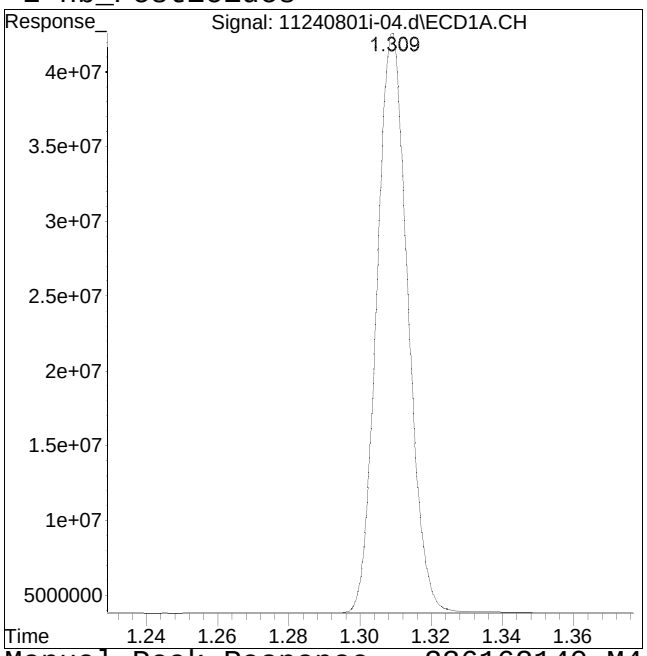
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 252732076




Manual Peak Response = 236162140 M4

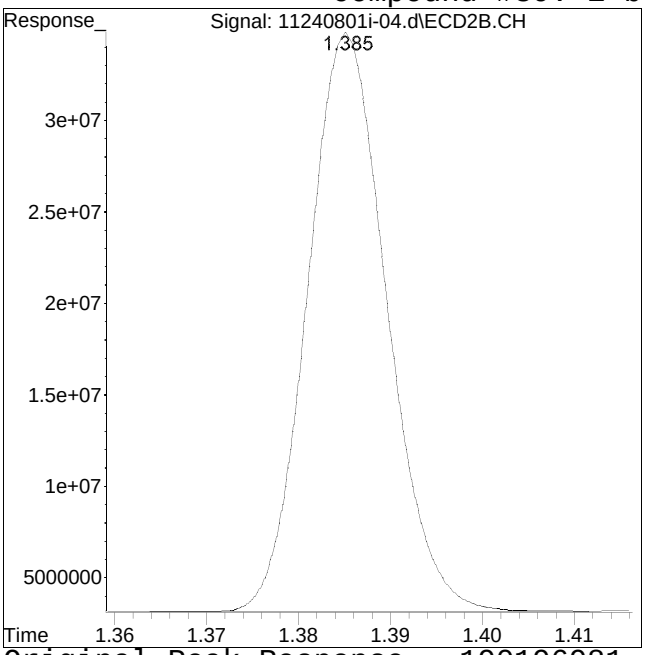
M4 = Poor automated baseline construction.

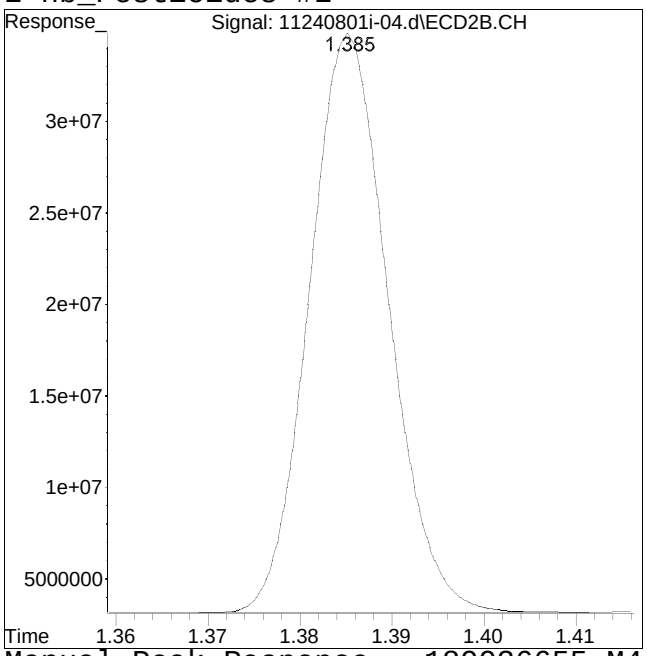
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #39: 1-br-2-nb_Pesticides #2



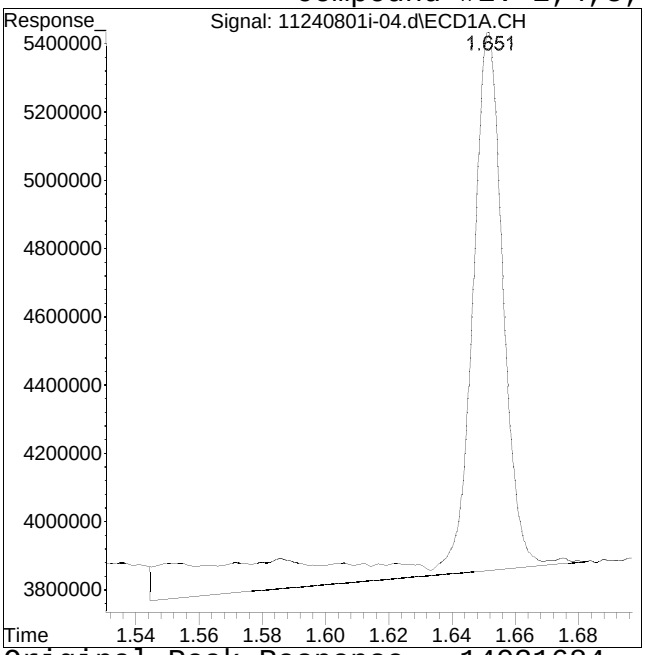




Original Peak Response = 190196981 Manual Peak Response = 189936655 M4
M4 = Poor automated baseline construction.

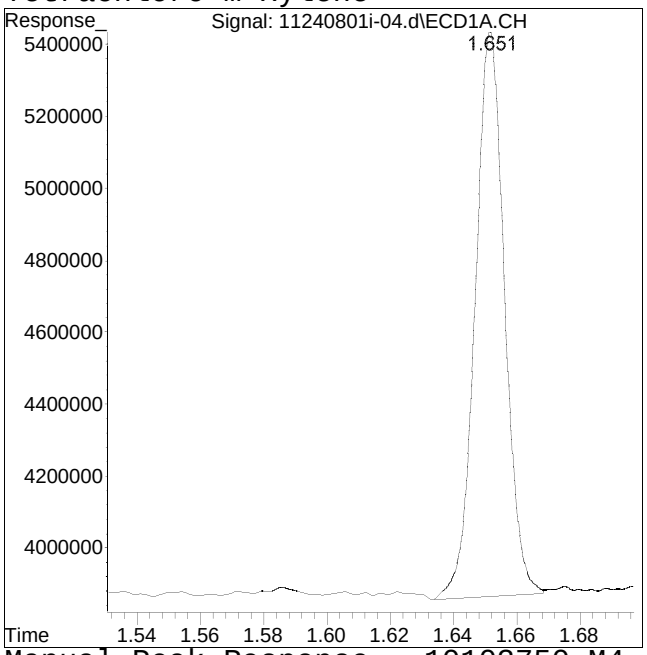
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 14031684




Manual Peak Response = 10103750 M4

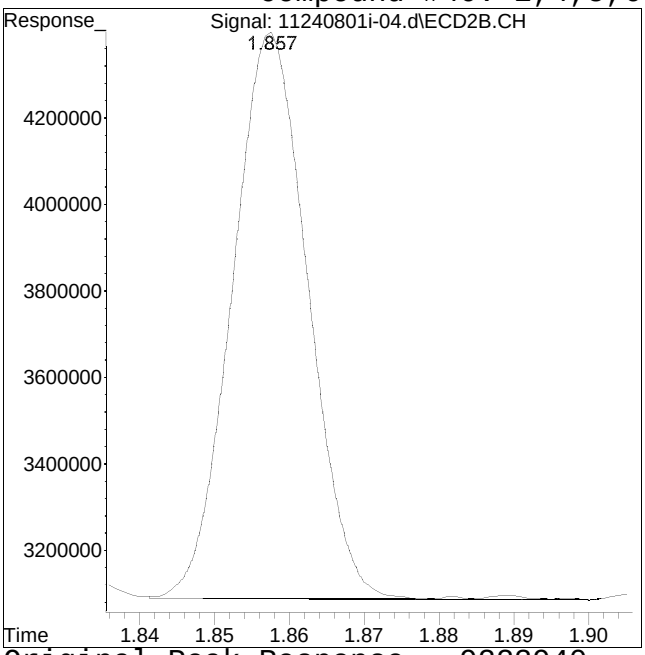
M4 = Poor automated baseline construction.

# Manual Integration Report

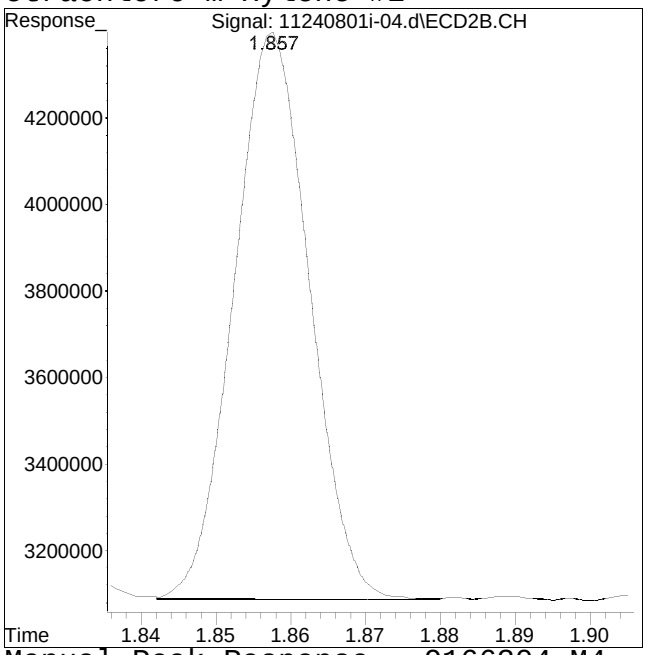
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 9223940




Manual Peak Response = 9166304 M4

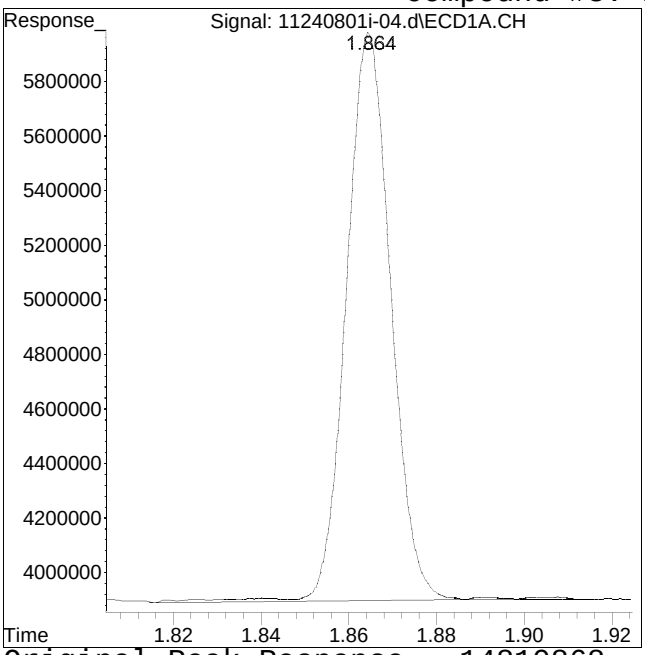
M4 = Poor automated baseline construction.

Manual Integration Report

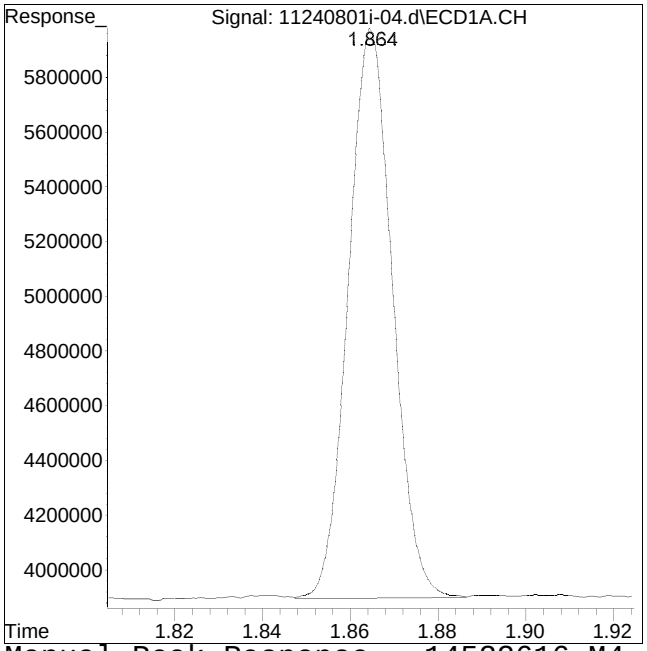
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #3: Hexachlorobenzene




Original Peak Response = 14810868




Manual Peak Response = 14522616 M4

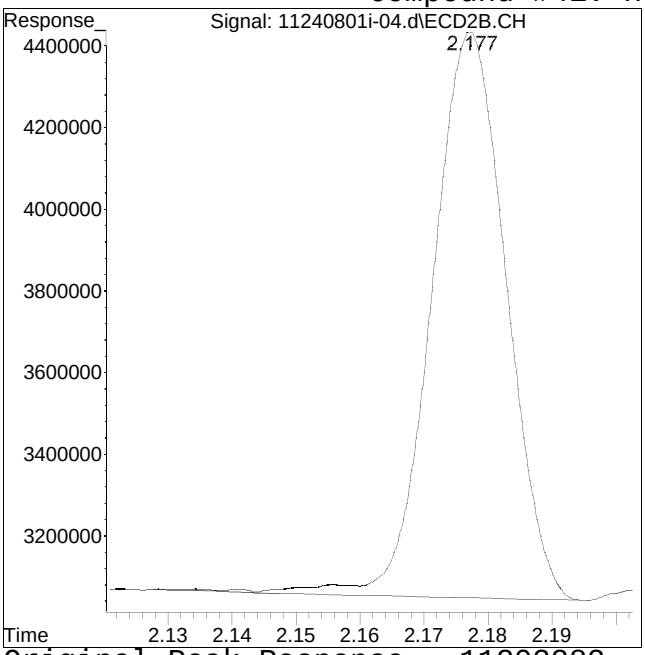
M4 = Poor automated baseline construction.

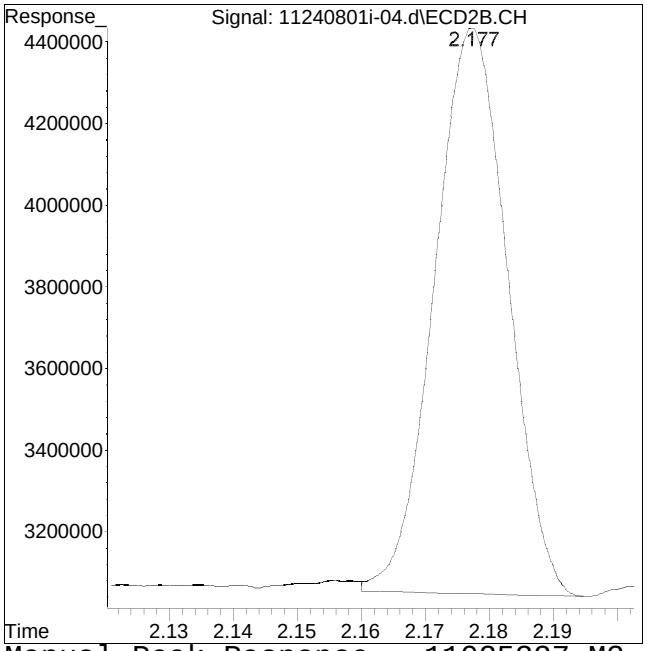
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #41: Hexachlorobenzene #2



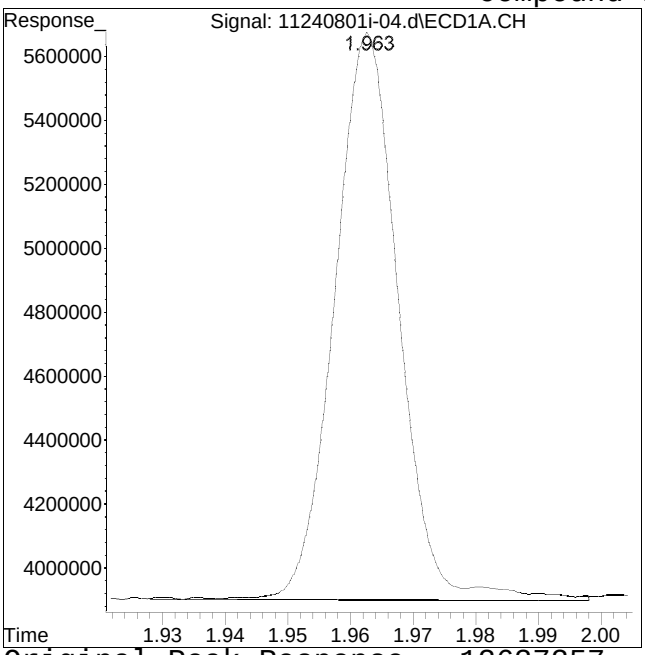

Original Peak Response = 11202282 Manual Peak Response = 11025327 M3

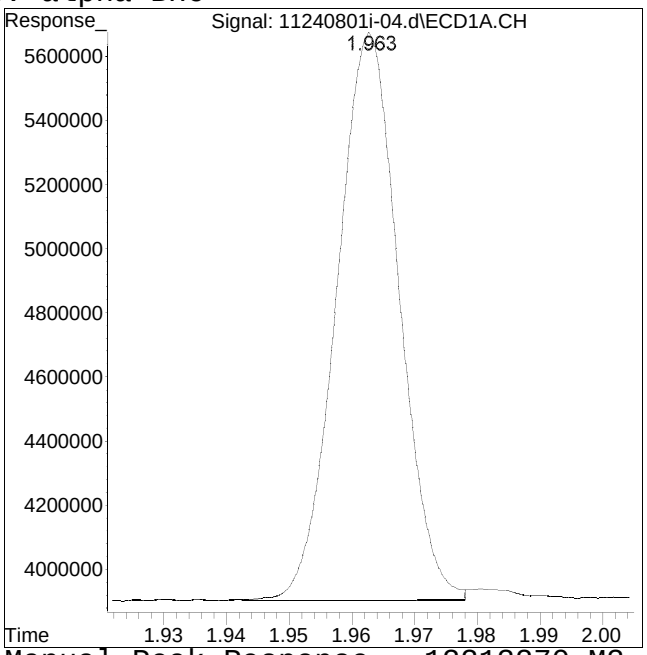
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #4: alpha-BHC



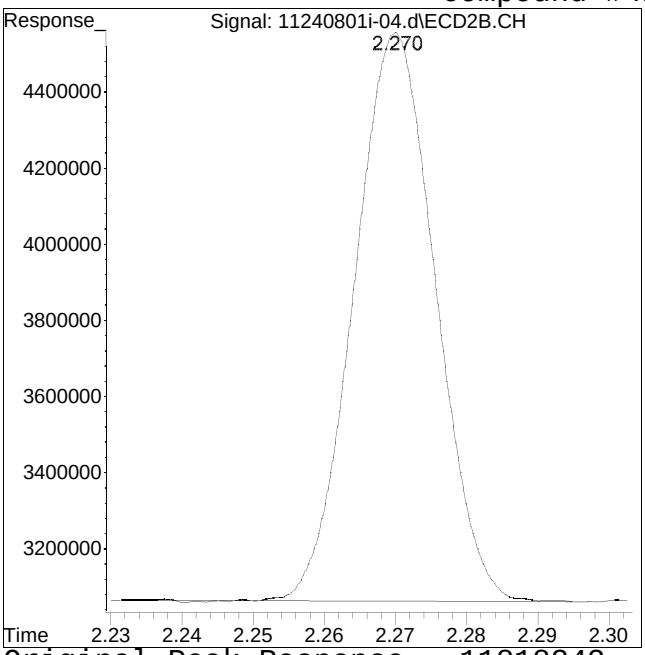




Original Peak Response = 12637257 Manual Peak Response = 12213270 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

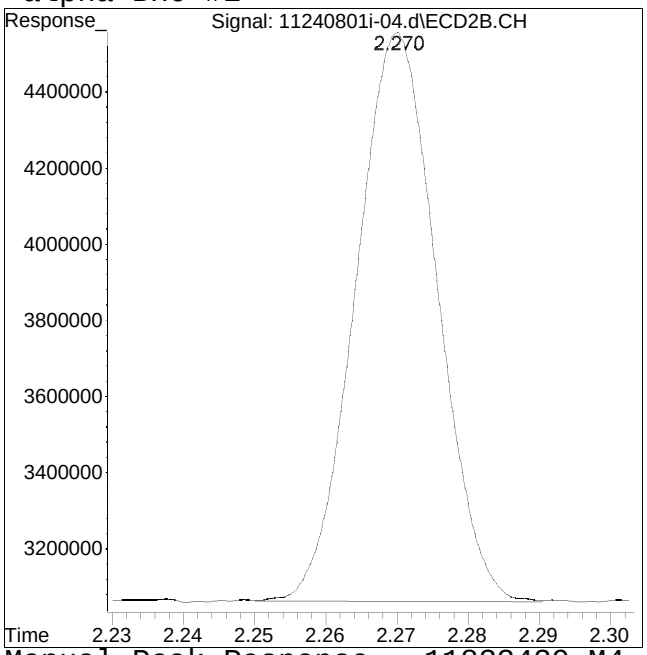
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0 Quant Date : 8/2/2024 11:23 am

Compound #42: alpha-BHC #2




Original Peak Response = 11818242



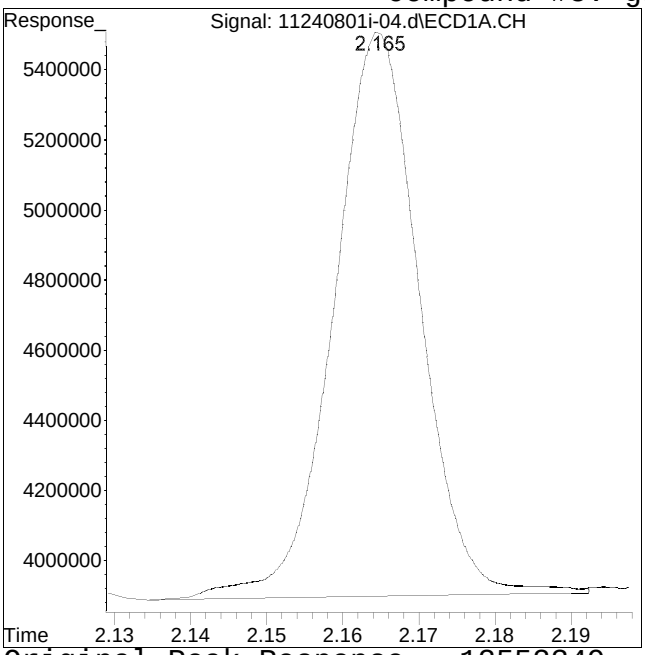

Manual Peak Response = 11833439 M4

M4 = Poor automated baseline construction.

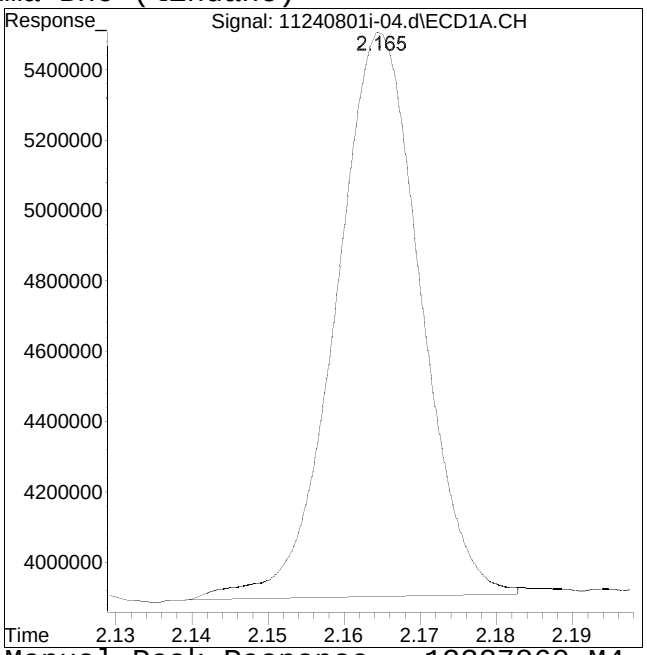
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 12552349



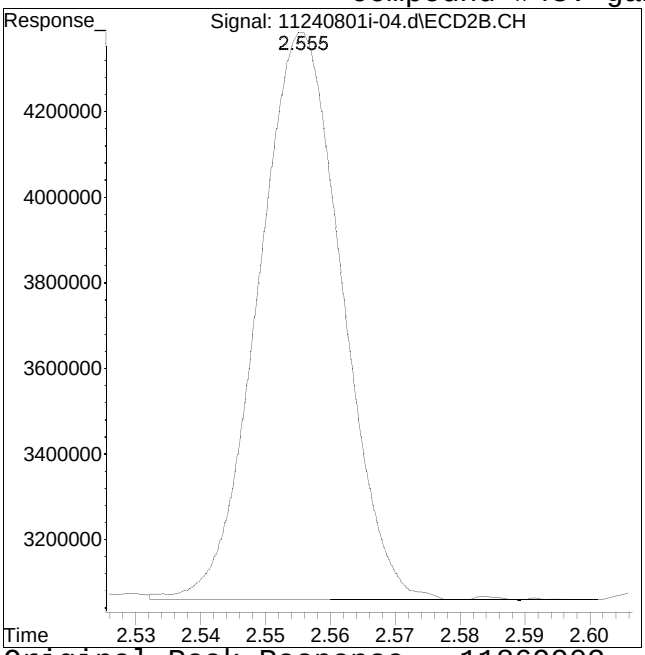

Manual Peak Response = 12327860 M4
M4 = Poor automated baseline construction.

Manual Integration Report

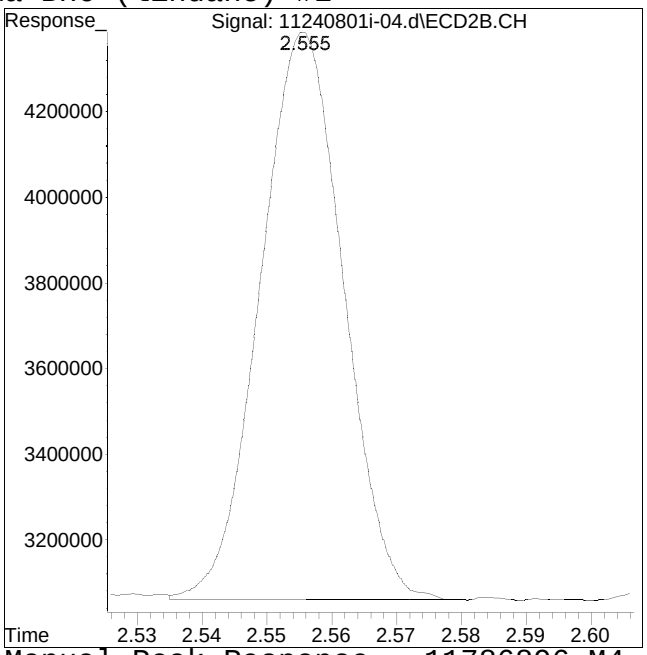
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 11869902




Manual Peak Response = 11786896 M4

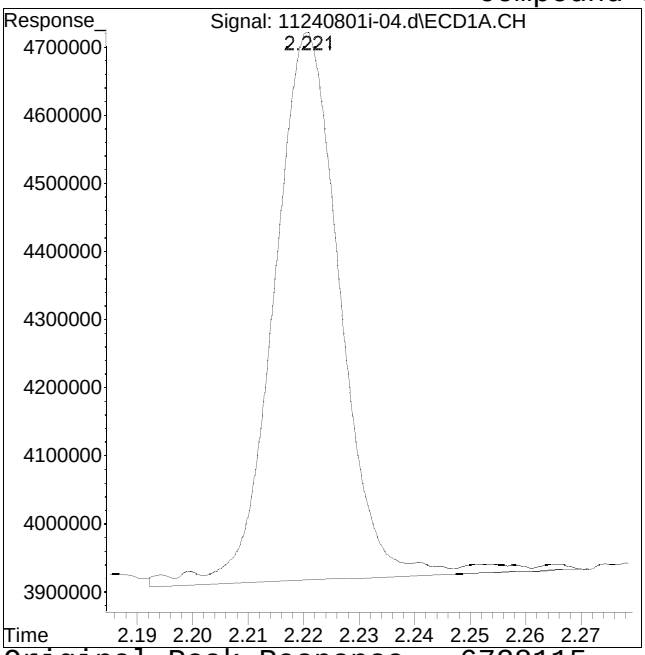
M4 = Poor automated baseline construction.

Manual Integration Report

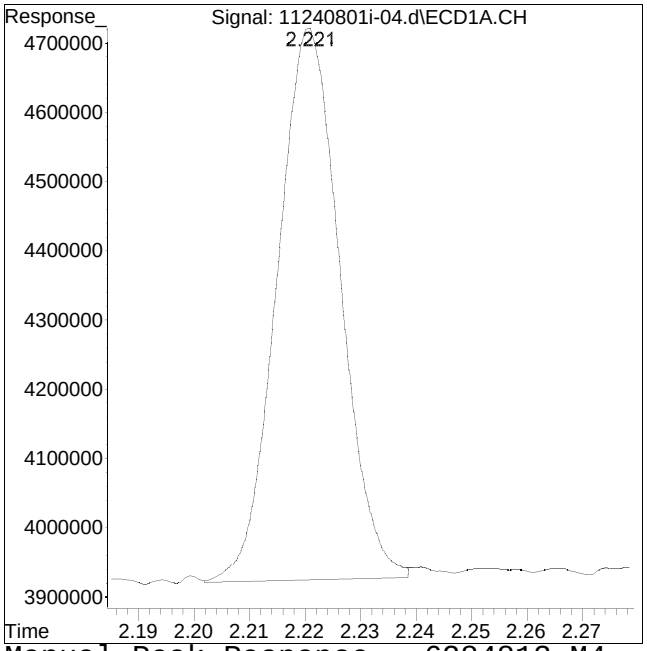
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #6: beta-BHC




Original Peak Response = 6728115




Manual Peak Response = 6284813 M4

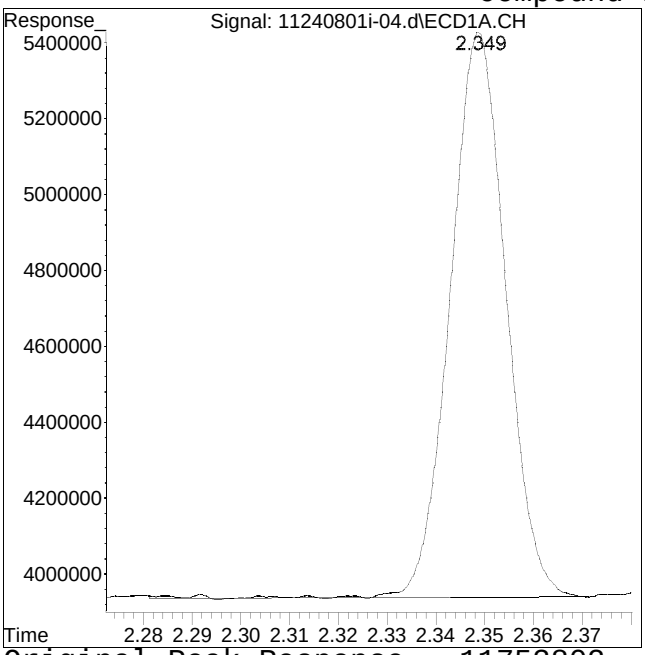
M4 = Poor automated baseline construction.

Manual Integration Report

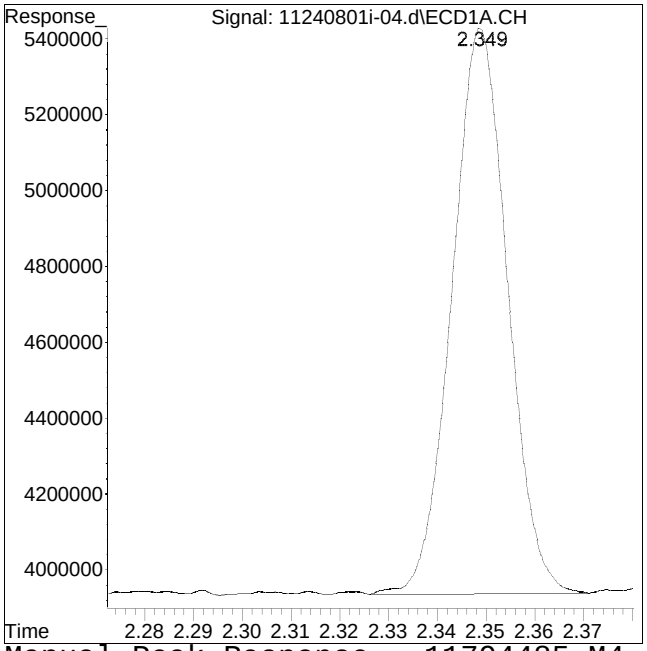
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #7: delta-BHC




Original Peak Response = 11753802



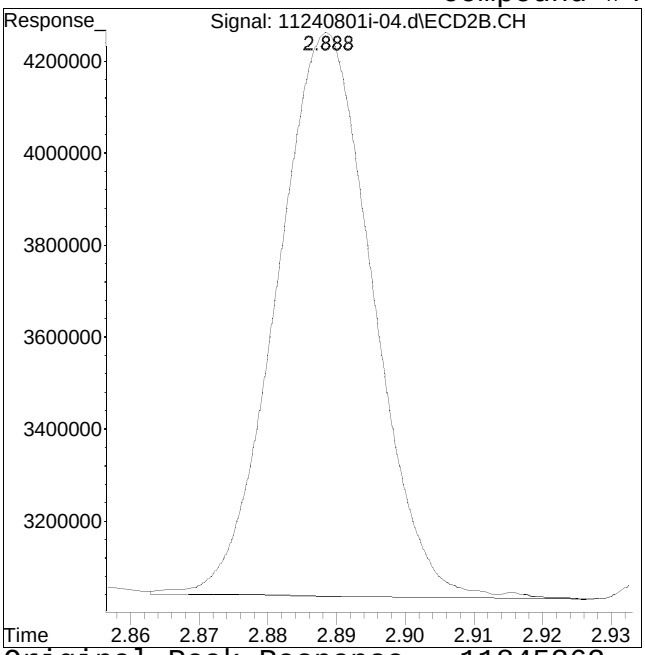

Manual Peak Response = 11794485 M4

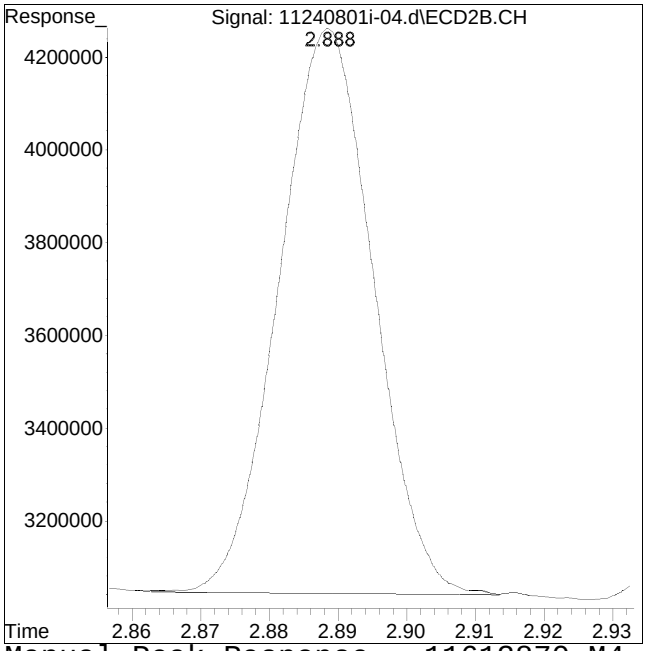
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #45: delta-BHC #2



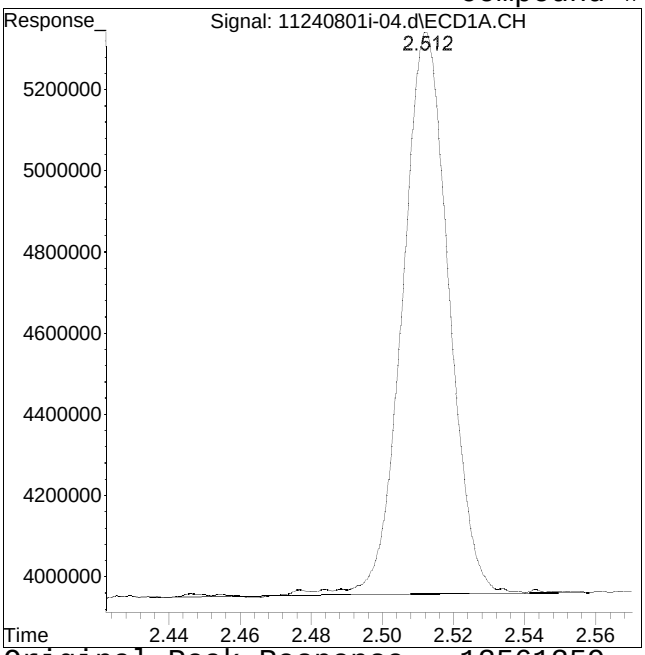




Original Peak Response = 11845362 Manual Peak Response = 11613870 M4
M4 = Poor automated baseline construction.

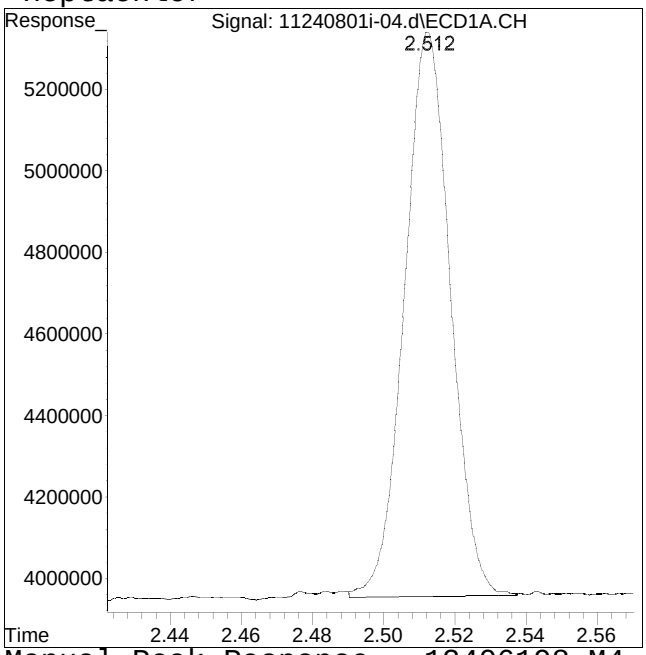
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #8: Heptachlor




Original Peak Response = 12561259

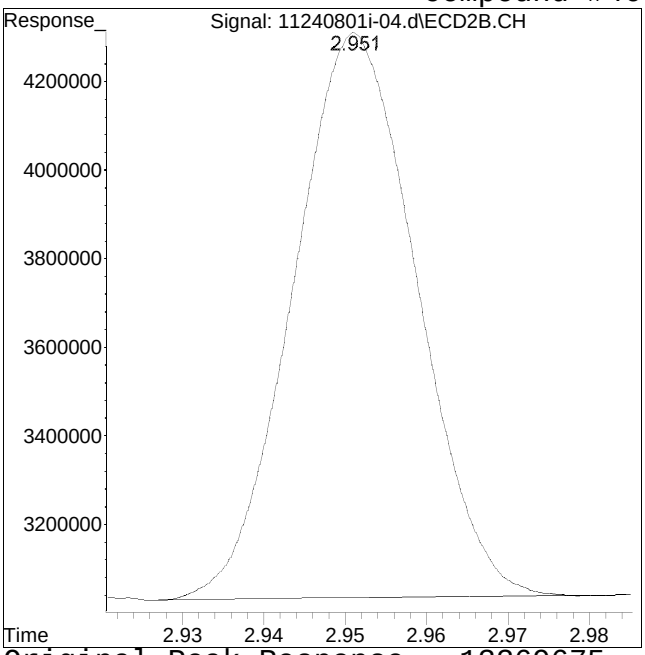


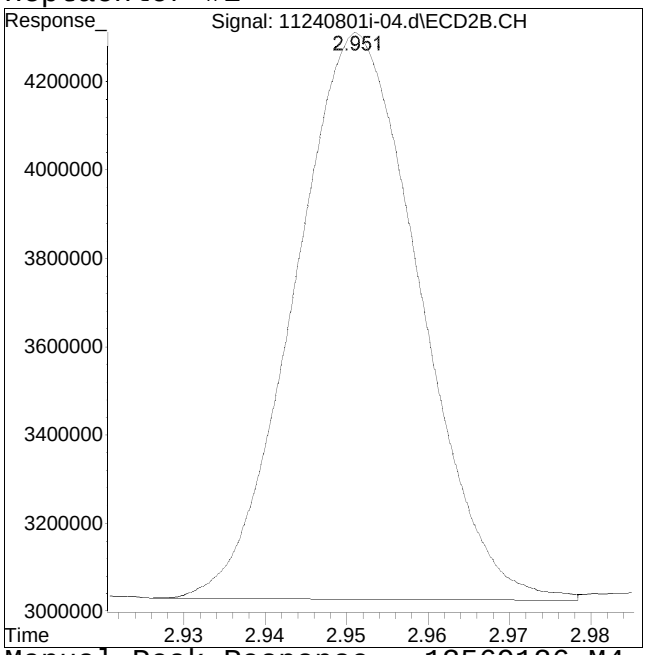

Manual Peak Response = 12406198 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #46: Heptachlor #2



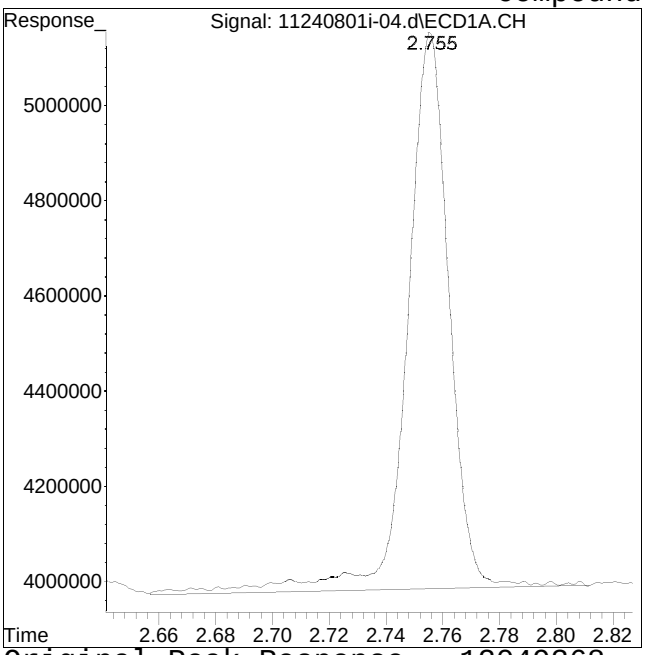

Original Peak Response = 13369675 Manual Peak Response = 13569126 M4
M4 = Poor automated baseline construction.

Manual Integration Report

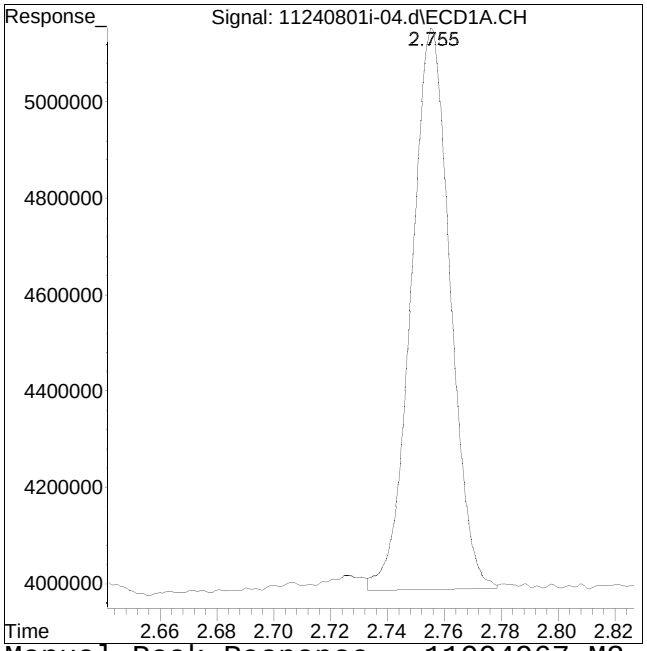
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #9: Aldrin




Original Peak Response = 12049368




Manual Peak Response = 11094967 M3

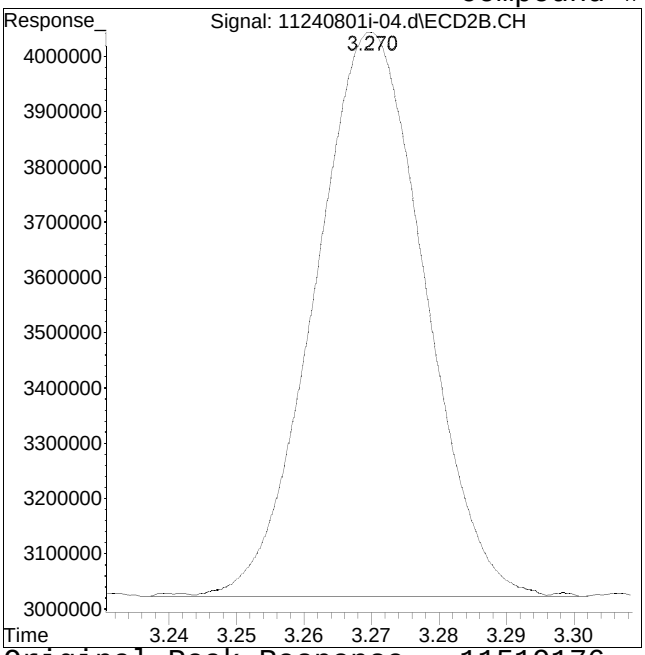
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

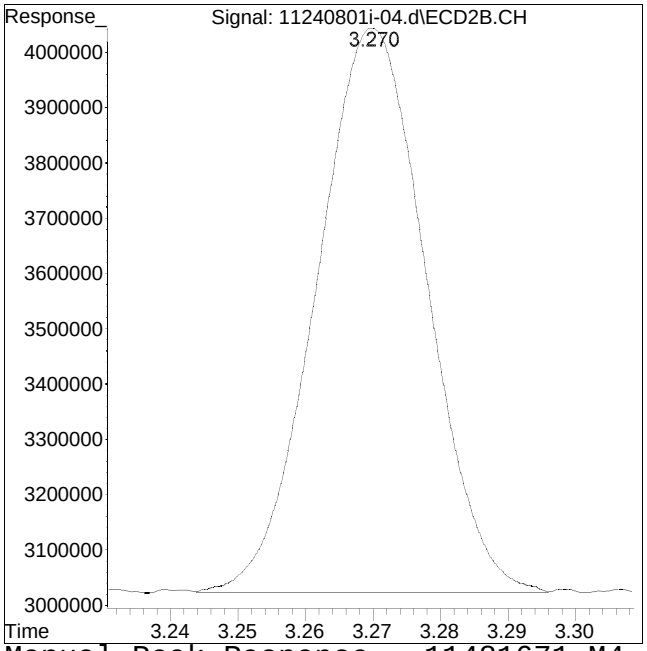
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #47: Aldrin #2



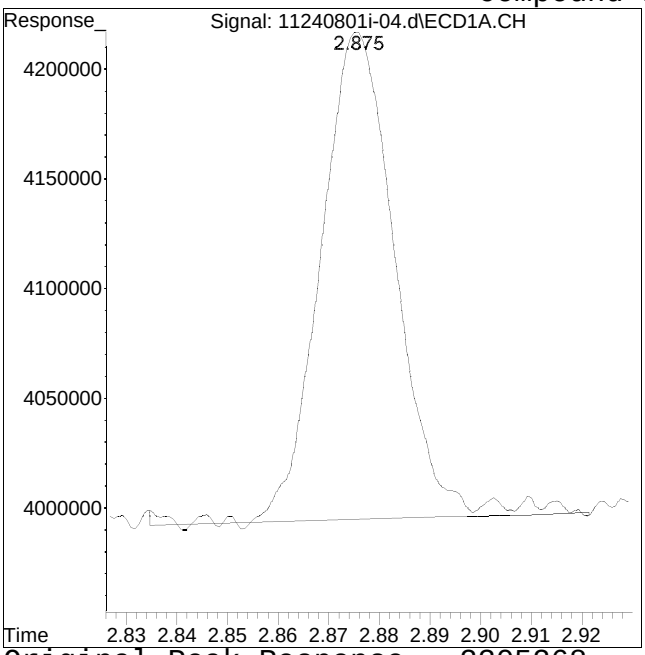

Original Peak Response = 11519176 Manual Peak Response = 11481671 M4
M4 = Poor automated baseline construction.

Manual Integration Report

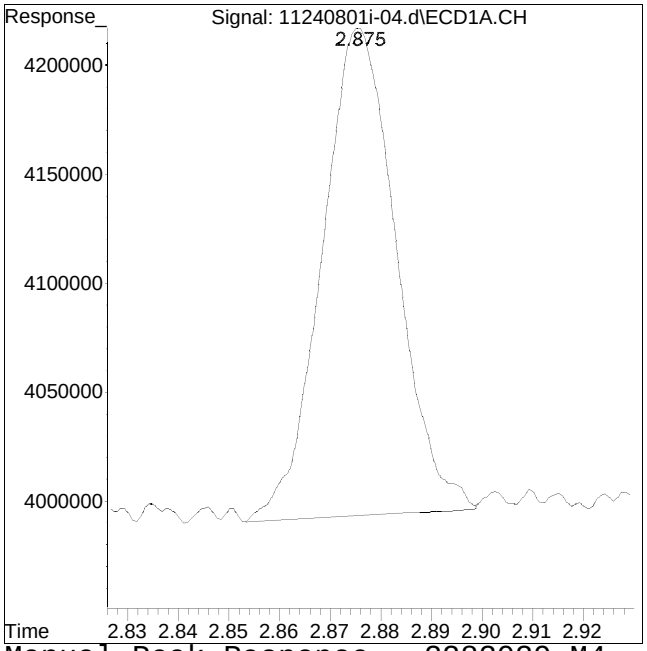
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #10: Alachlor




Original Peak Response = 2305268



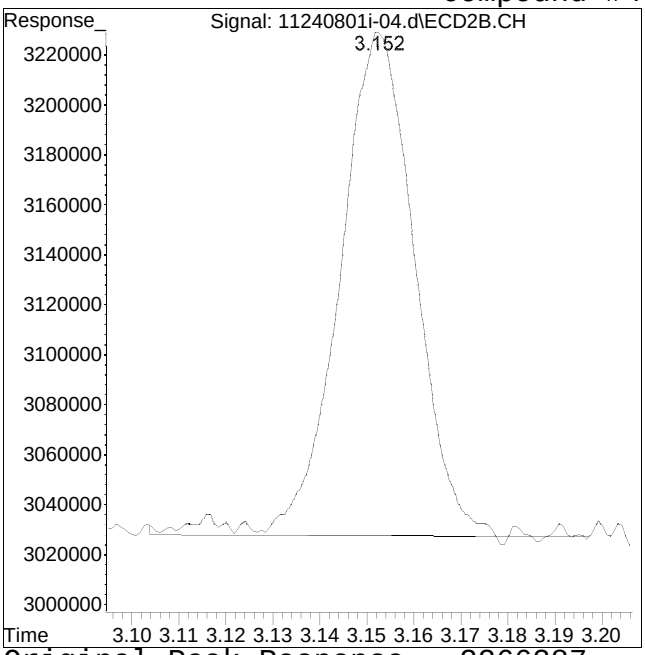

Manual Peak Response = 2283039 M4

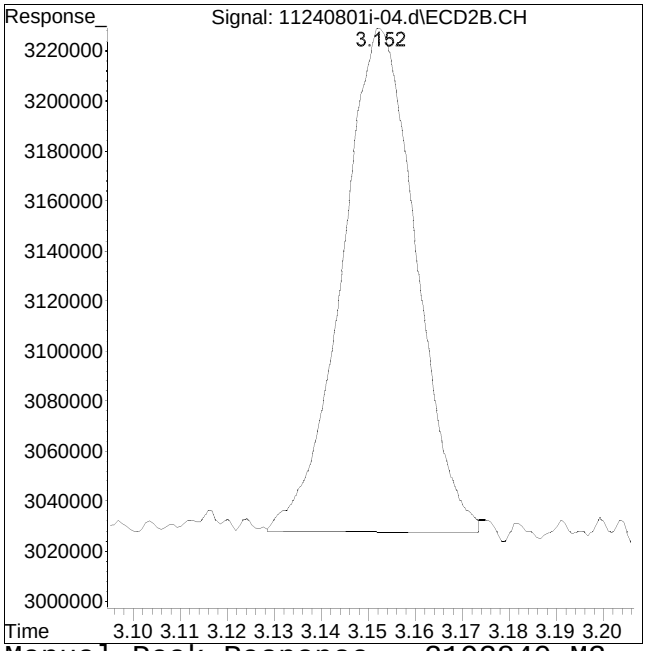
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #48: Alachlor #2



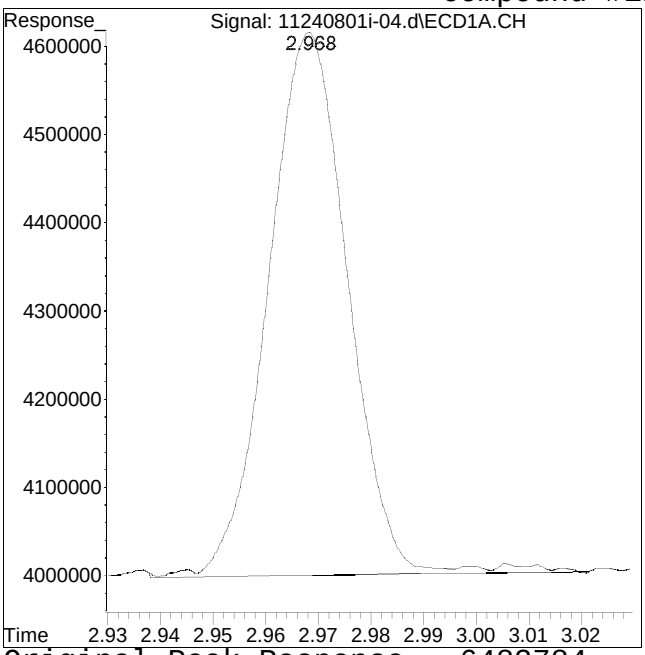

Original Peak Response = 2266287 Manual Peak Response = 2193840 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

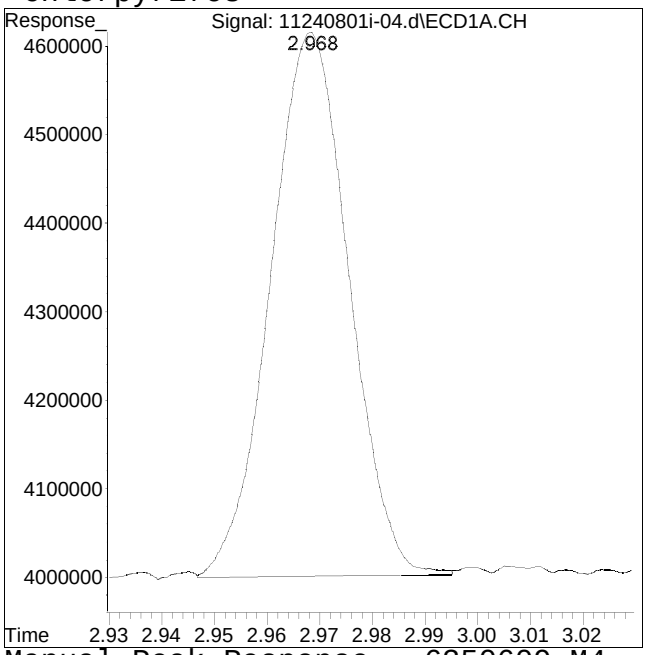
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #11: Chlorpyrifos




Original Peak Response = 6483784




Manual Peak Response = 6350609 M4

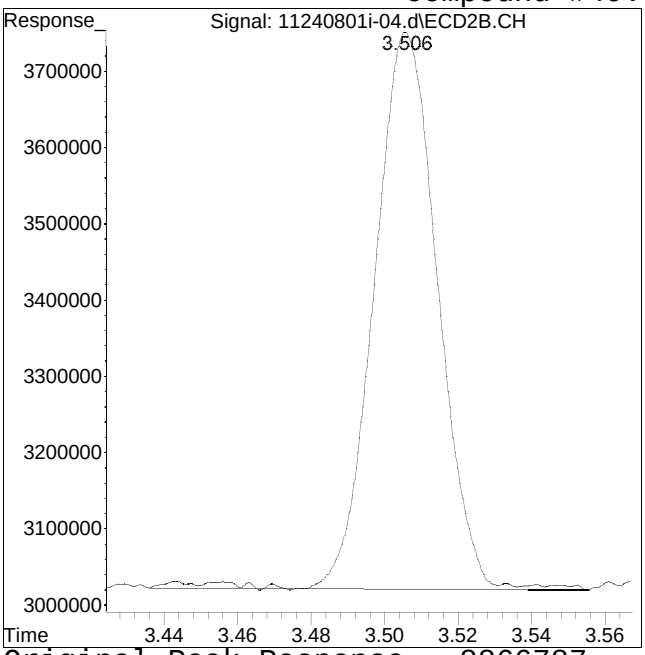
M4 = Poor automated baseline construction.

Manual Integration Report

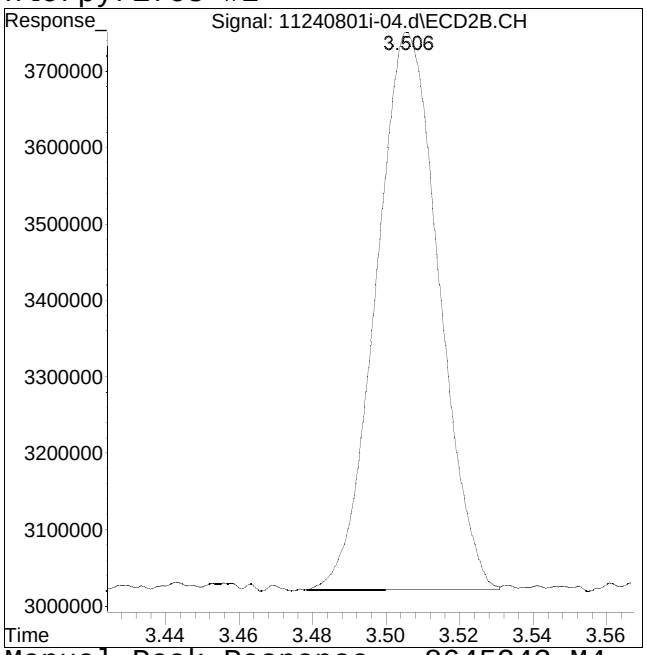
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 8866787



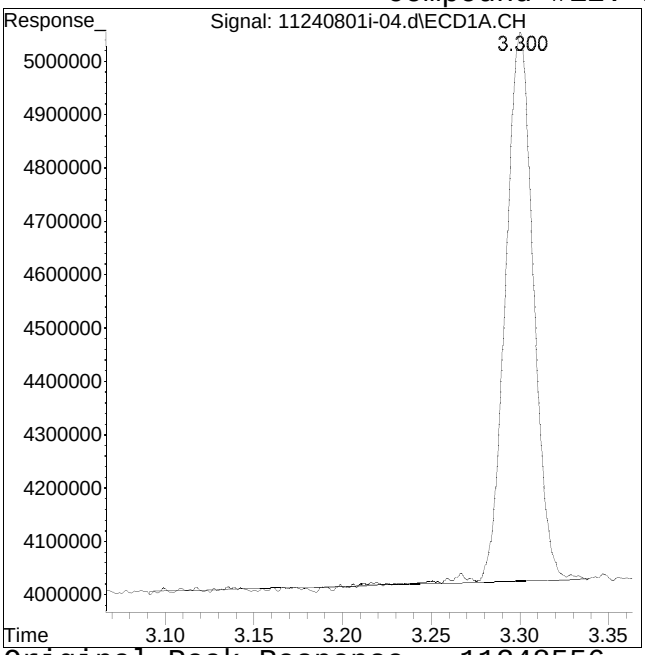

Manual Peak Response = 8645243 M4

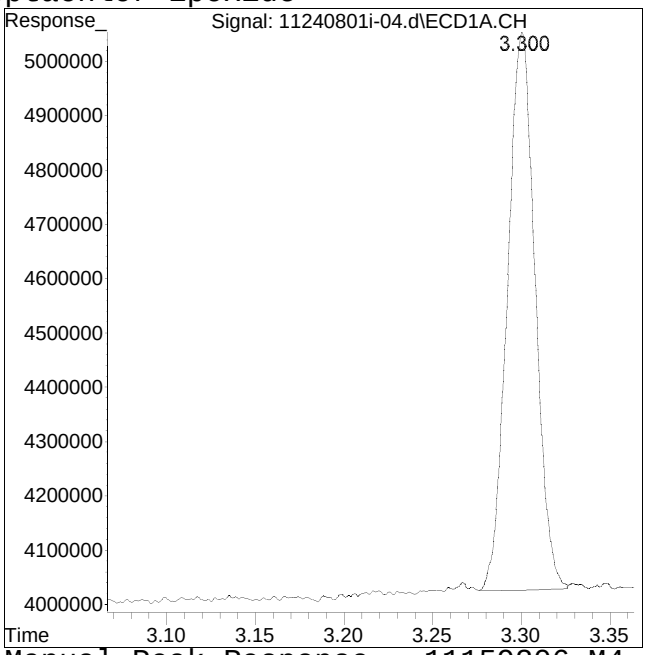
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #12: Heptachlor Epoxide



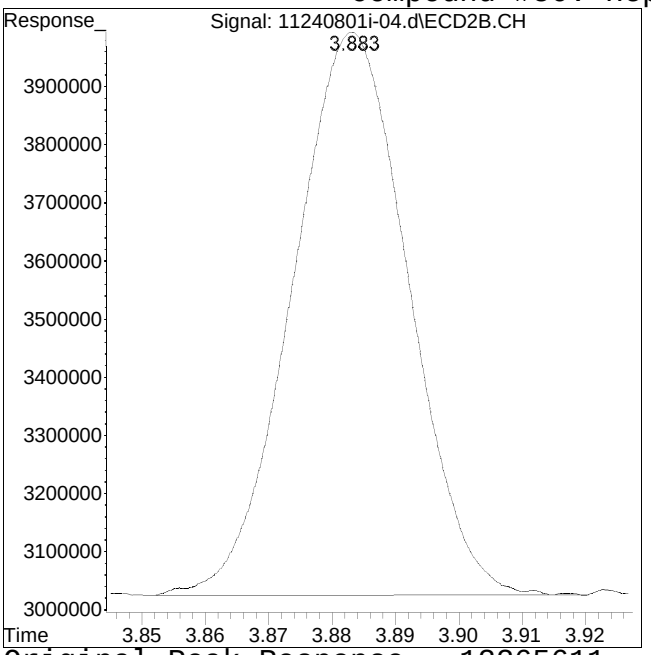




Original Peak Response = 11248556 Manual Peak Response = 11159206 M4
M4 = Poor automated baseline construction.

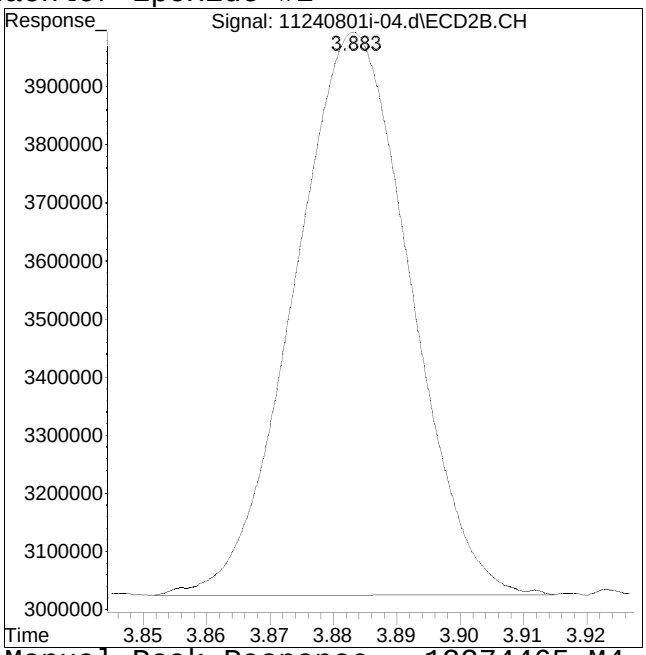
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 12265611



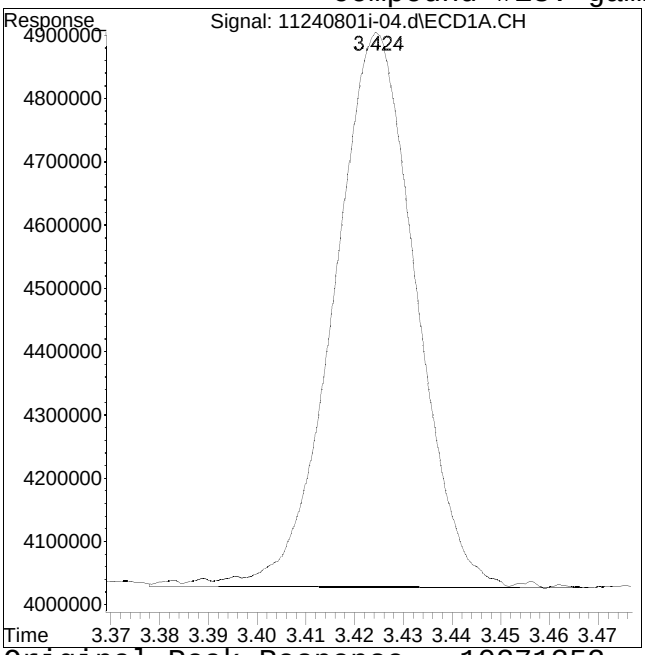

Manual Peak Response = 12274465 M4

M4 = Poor automated baseline construction.

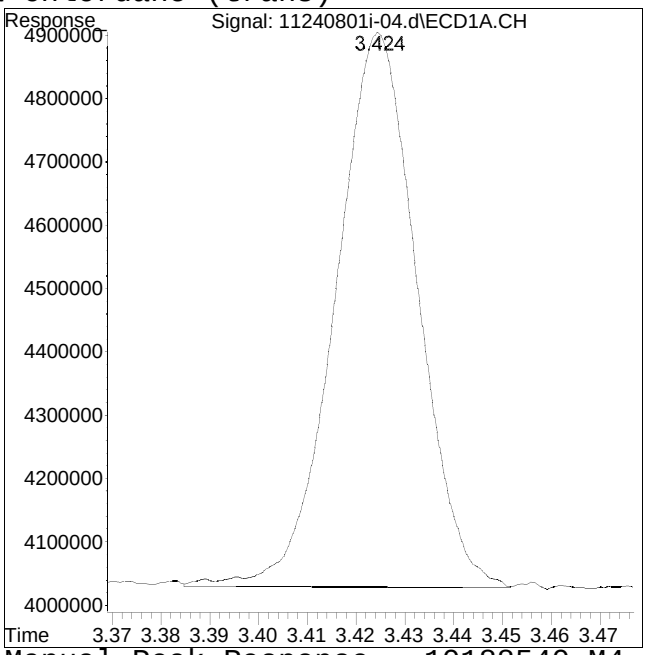
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #13: gamma-Chlordane (trans)




Original Peak Response = 10271352




Manual Peak Response = 10188540 M4

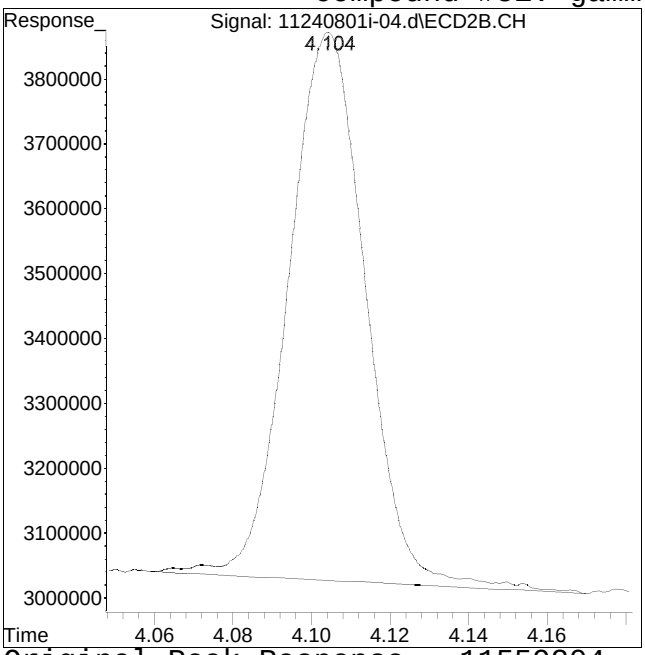
M4 = Poor automated baseline construction.

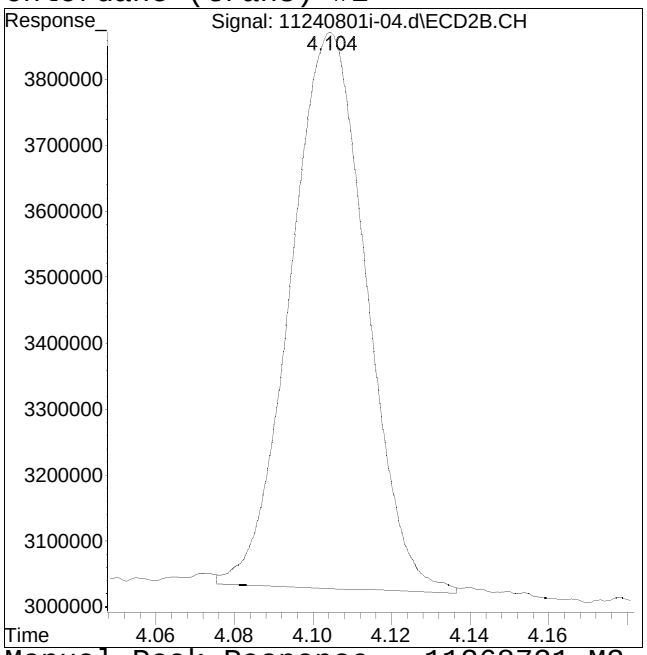
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 11559204 Manual Peak Response = 11268731 M3

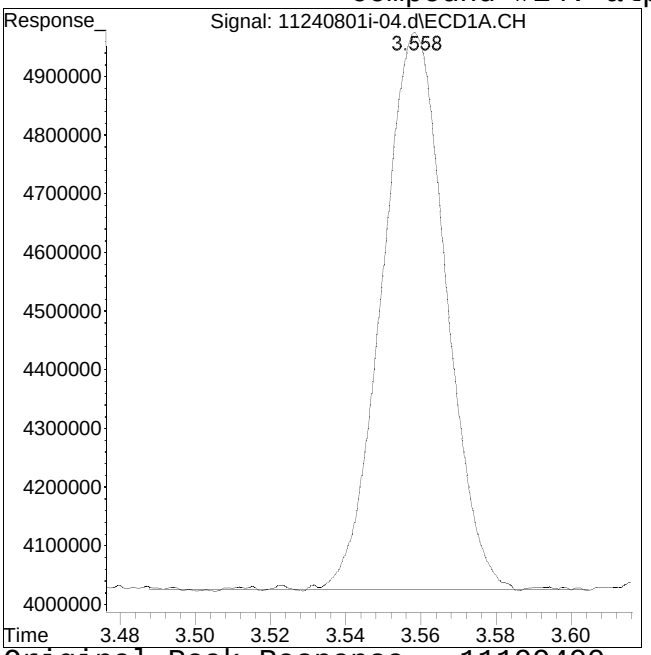
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

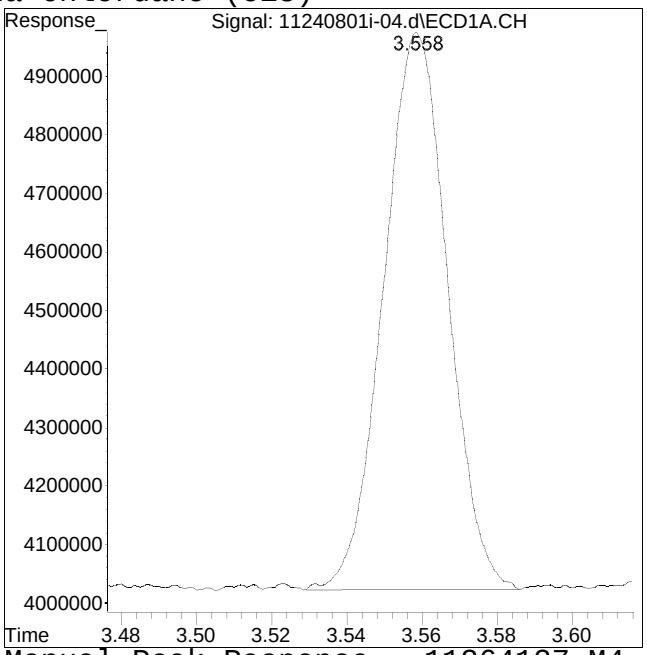
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #14: alpha-Chlordane (cis)




Original Peak Response = 11199490



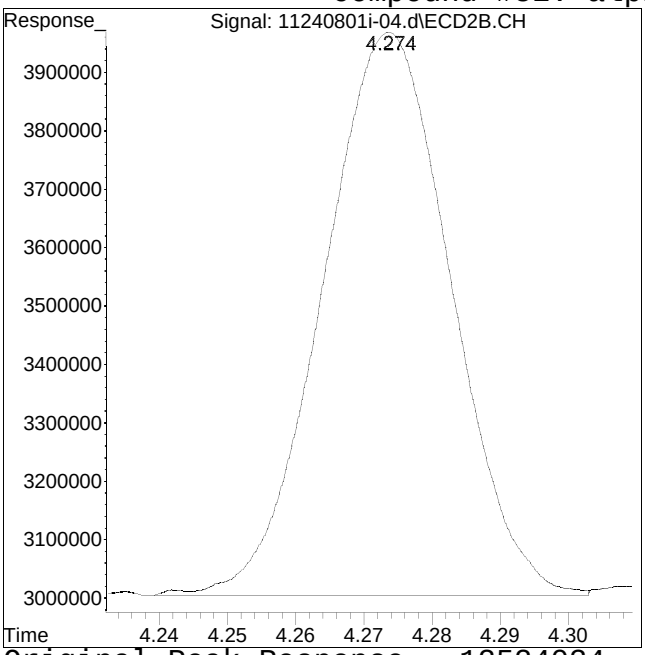

Manual Peak Response = 11264127 M4

M4 = Poor automated baseline construction.

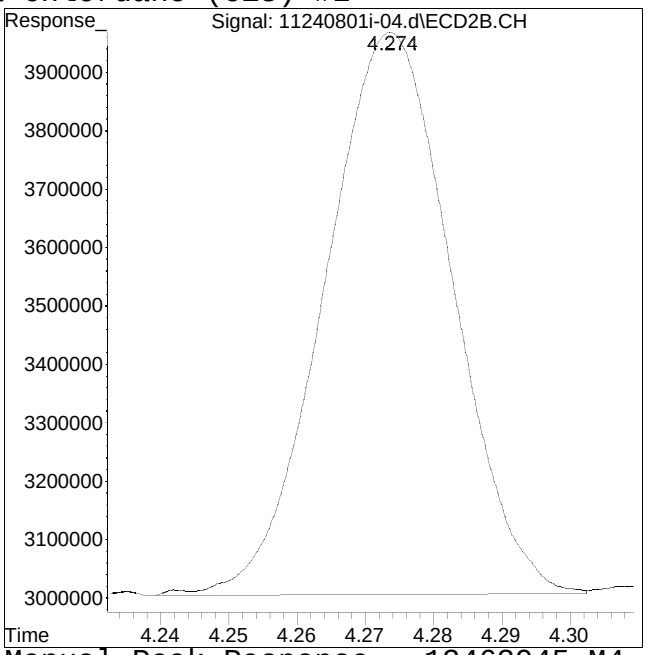
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 12524034




Manual Peak Response = 12463945 M4

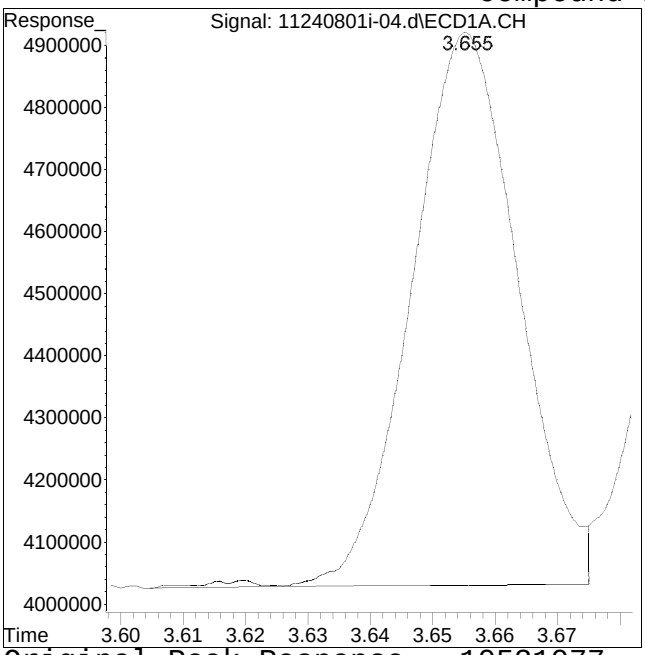
M4 = Poor automated baseline construction.

Manual Integration Report

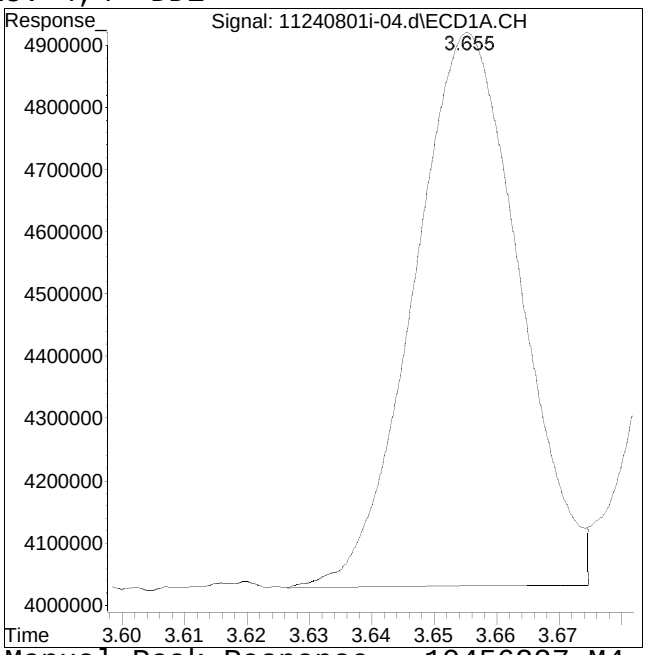
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #15: 4,4'-DDE




Original Peak Response = 10531077



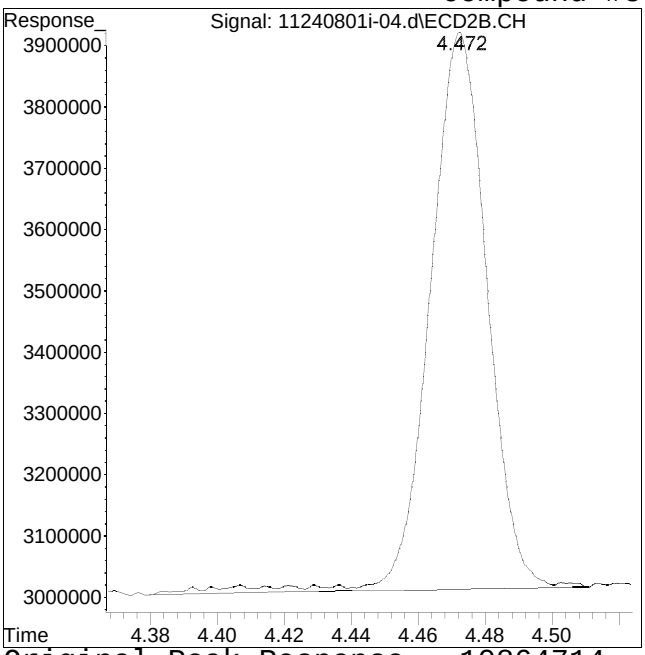

Manual Peak Response = 10456227 M4

M4 = Poor automated baseline construction.

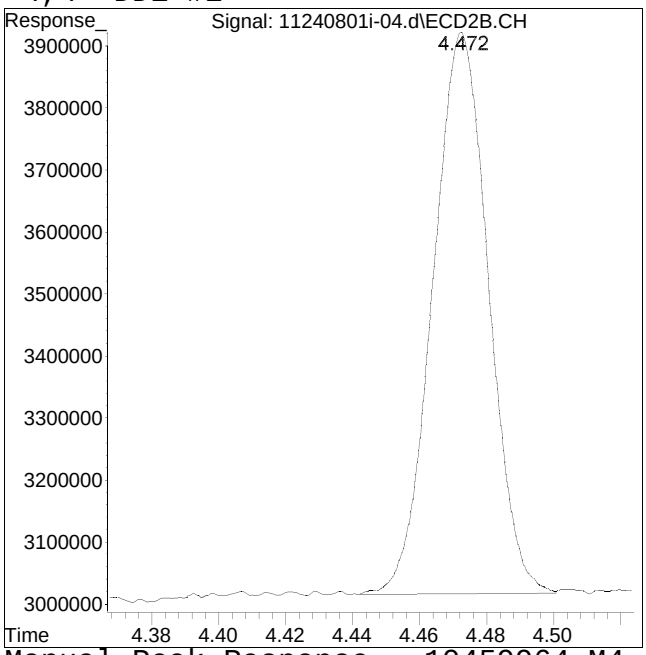
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 10864714



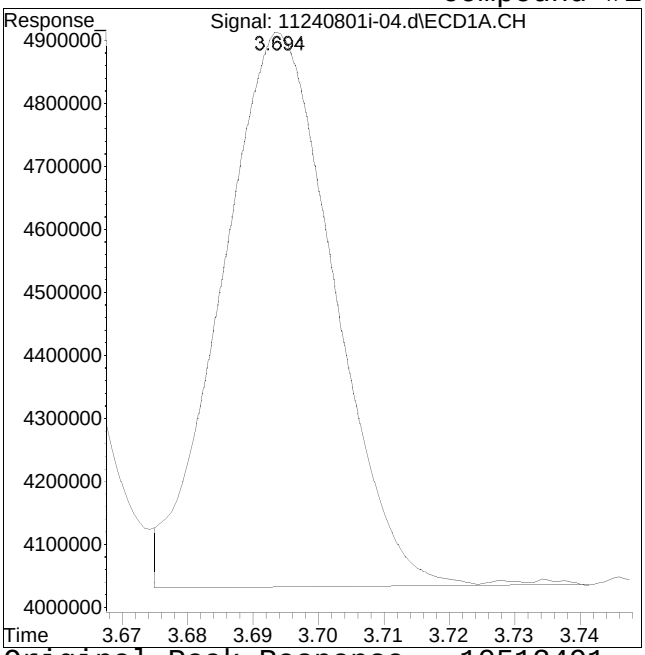

Manual Peak Response = 10459964 M4

M4 = Poor automated baseline construction.

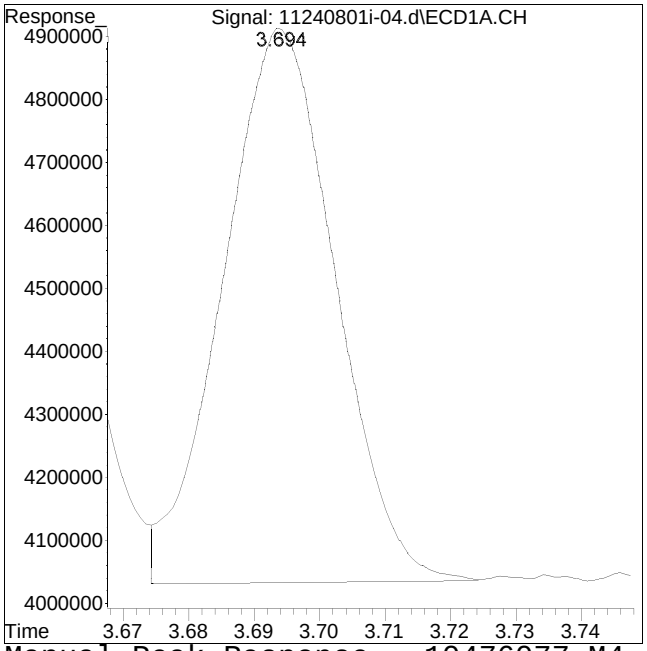
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #16: Endosulfan I




Original Peak Response = 10512491



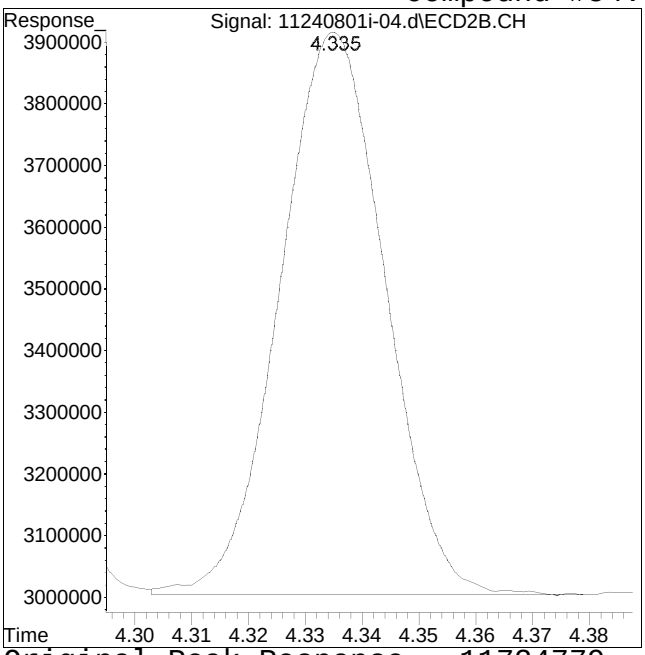

Manual Peak Response = 10476077 M4

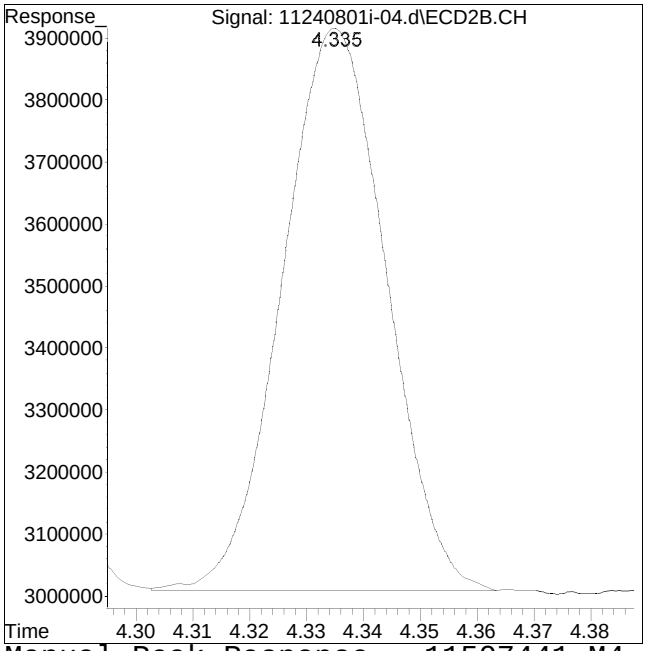
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #54: Endosulfan I #2



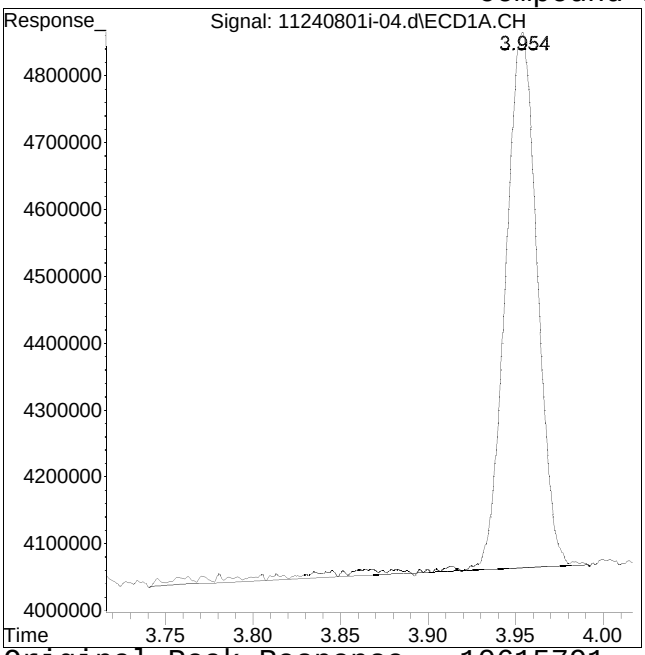

Original Peak Response = 11724779 Manual Peak Response = 11507441 M4
M4 = Poor automated baseline construction.

Manual Integration Report

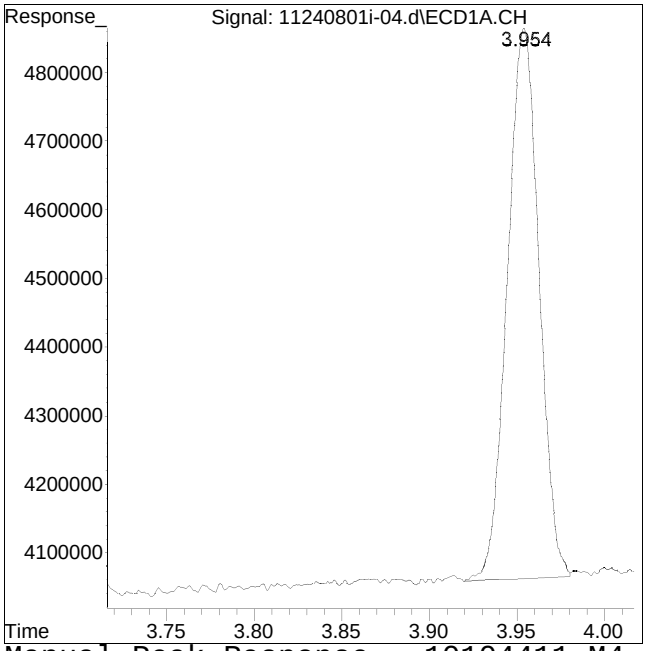
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #17: Dieldrin




Original Peak Response = 10615791



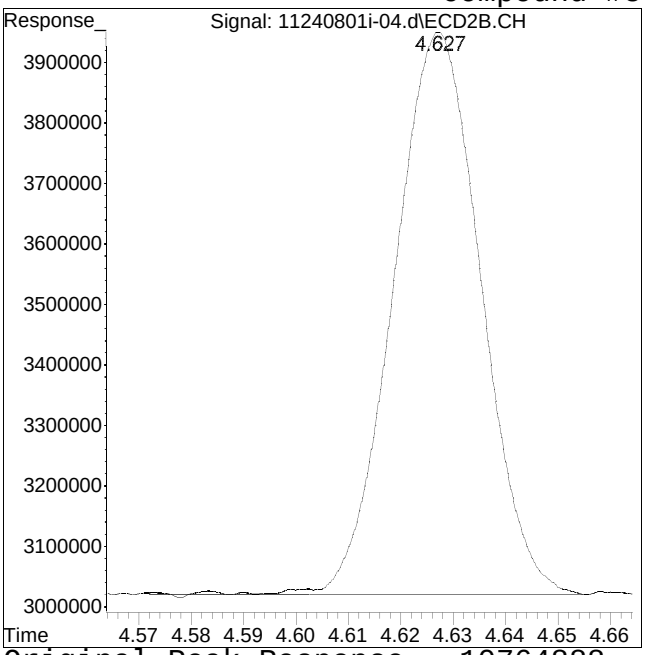

Manual Peak Response = 10104411 M4

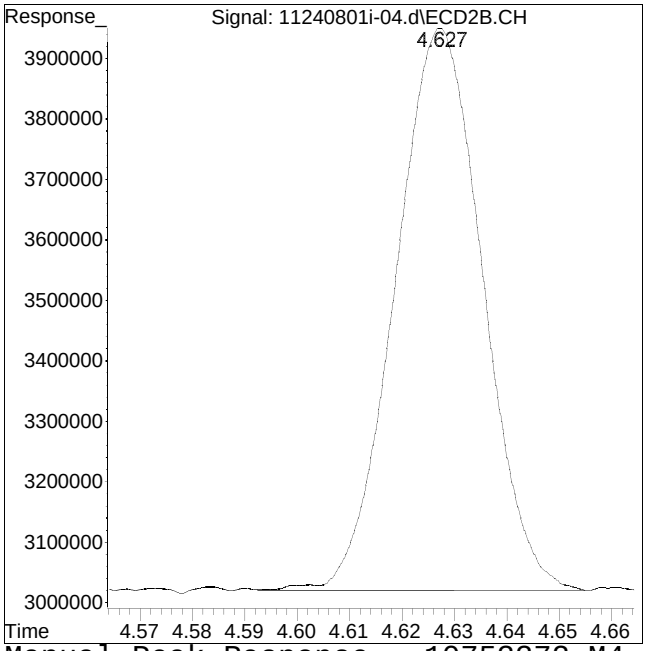
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #55: Dieldrin #2



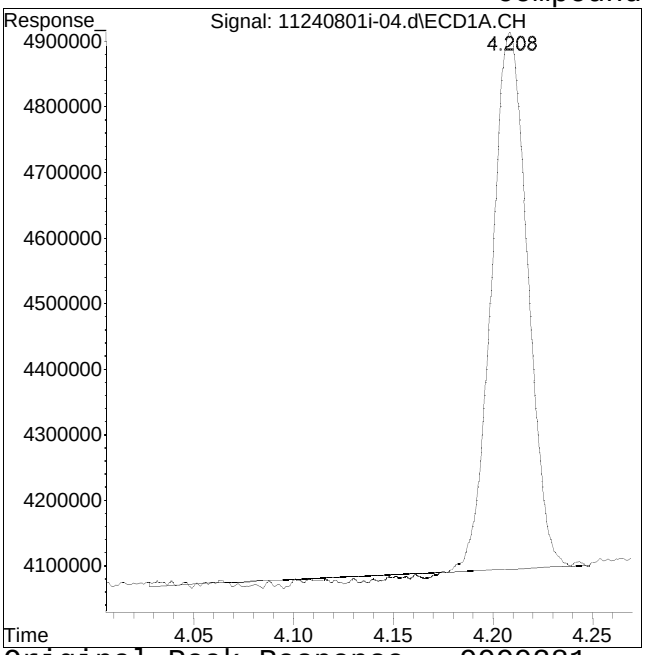

Original Peak Response = 10764888 Manual Peak Response = 10753372 M4
M4 = Poor automated baseline construction.

Manual Integration Report

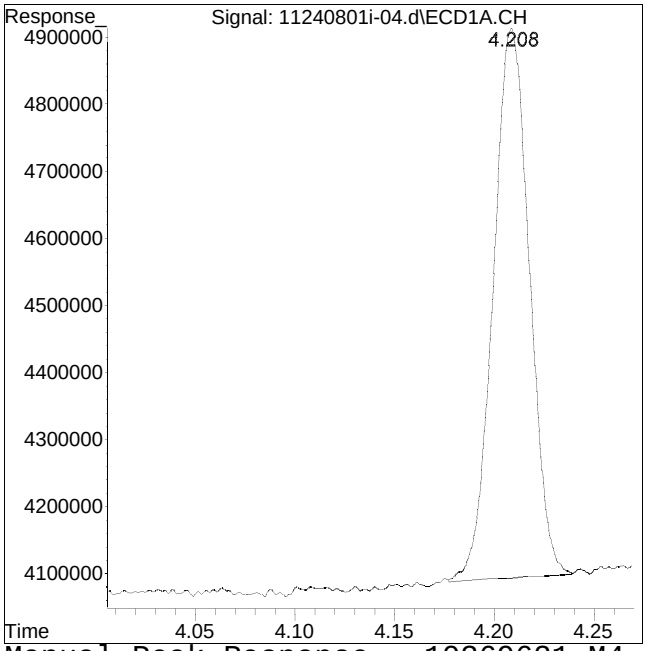
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #18: Endrin




Original Peak Response = 9999281



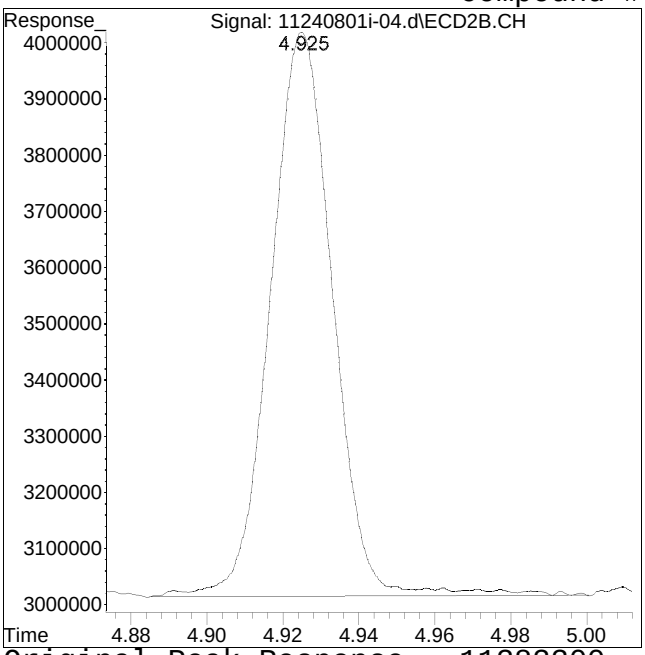

Manual Peak Response = 10369621 M4

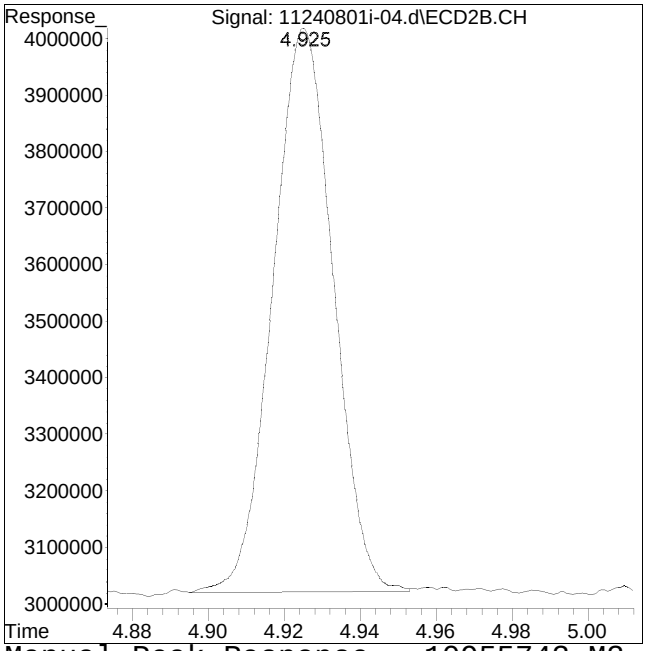
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0 Quant Date : 8/2/2024 11:23 am

Compound #56: Endrin #2



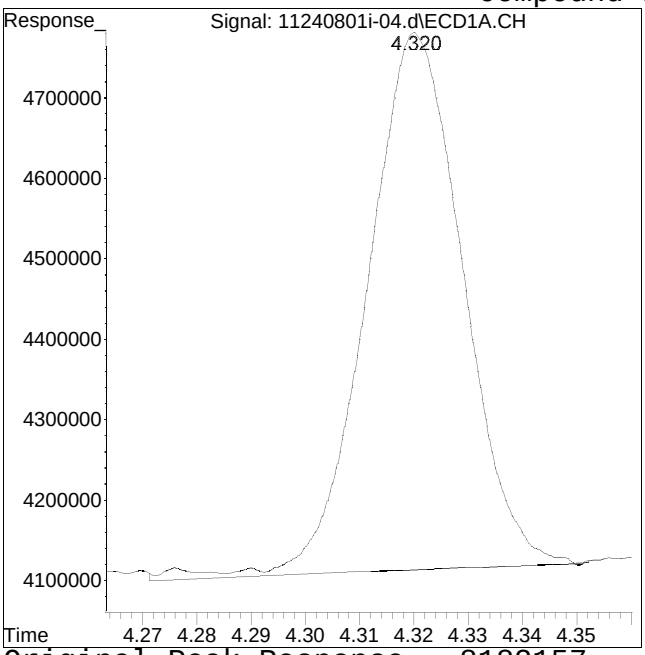

Original Peak Response = 11383300 Manual Peak Response = 10955743 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

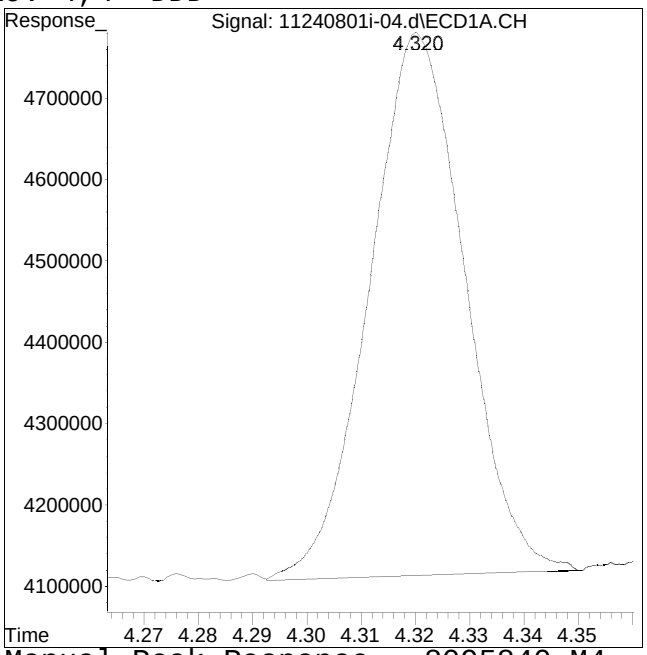
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #19: 4,4'-DDD




Original Peak Response = 8182157




Manual Peak Response = 8095840 M4

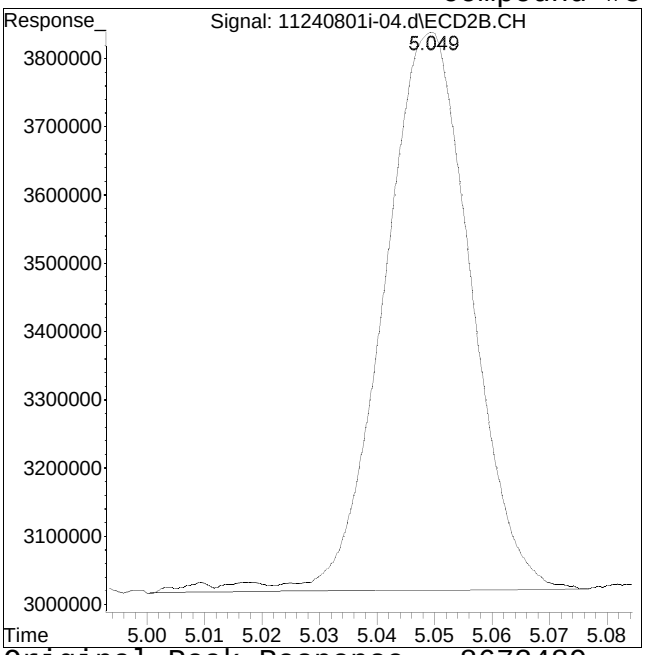
M4 = Poor automated baseline construction.

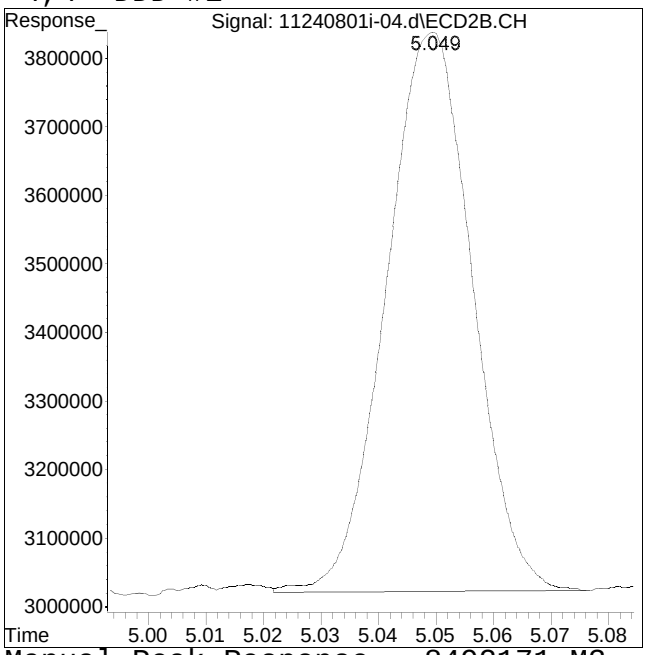
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #57: 4,4'-DDD #2



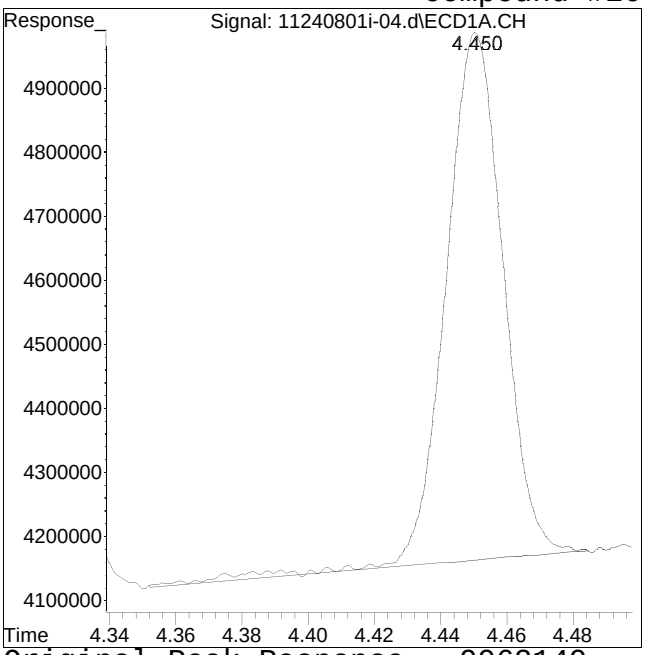

Original Peak Response = 8672489 Manual Peak Response = 8492171 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

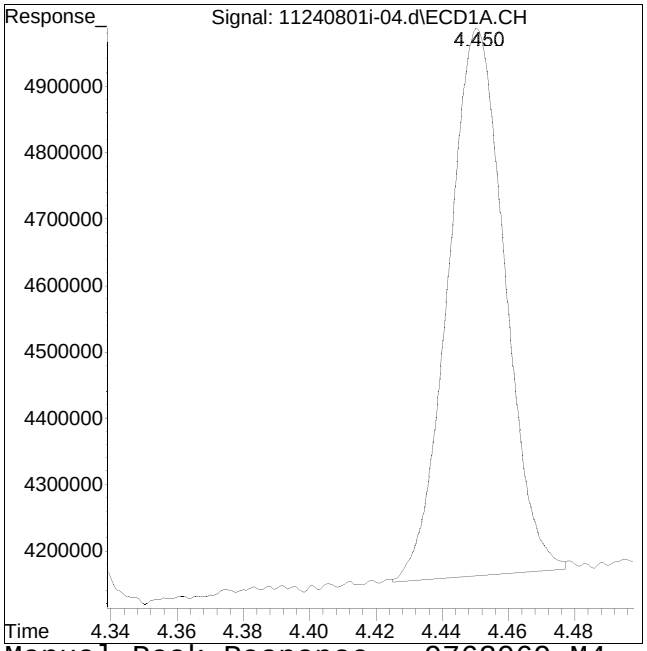
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

## Compound #20: Endosulfan II




Original Peak Response = 9962149



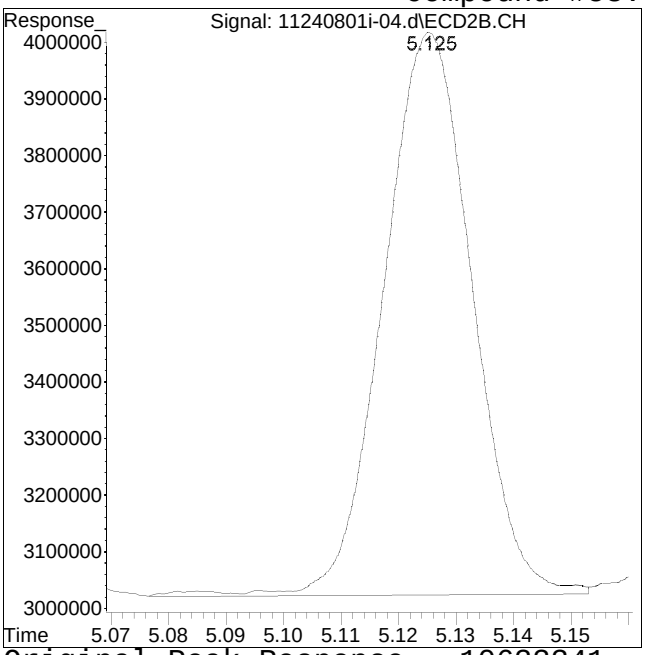

Manual Peak Response = 9763069 M4

M4 = Poor automated baseline construction.

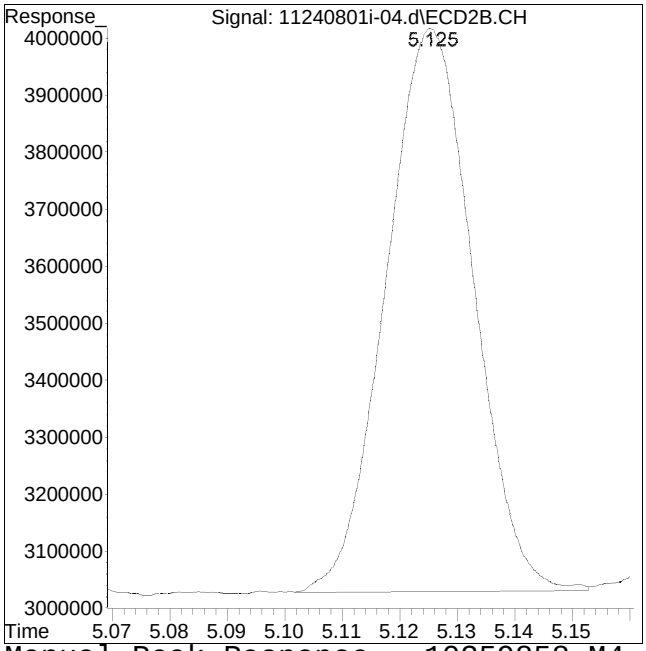
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #58: Endosulfan II #2




Original Peak Response = 10633341




Manual Peak Response = 10359858 M4

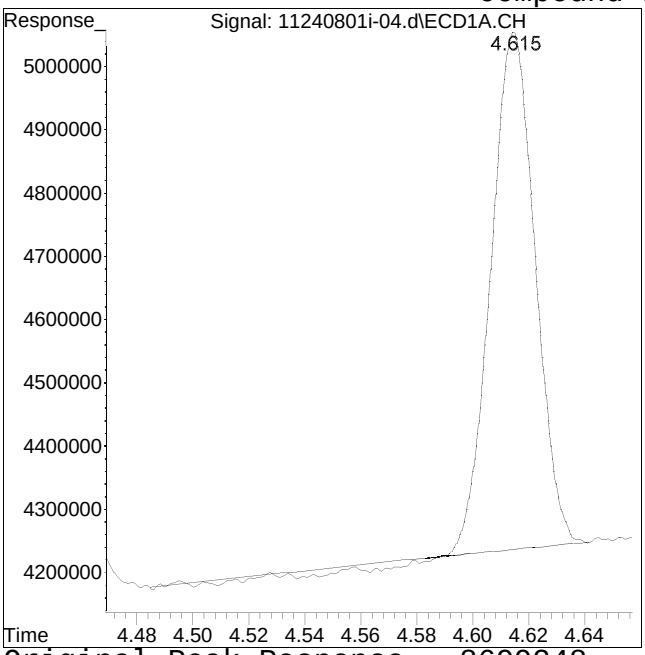
M4 = Poor automated baseline construction.

Manual Integration Report

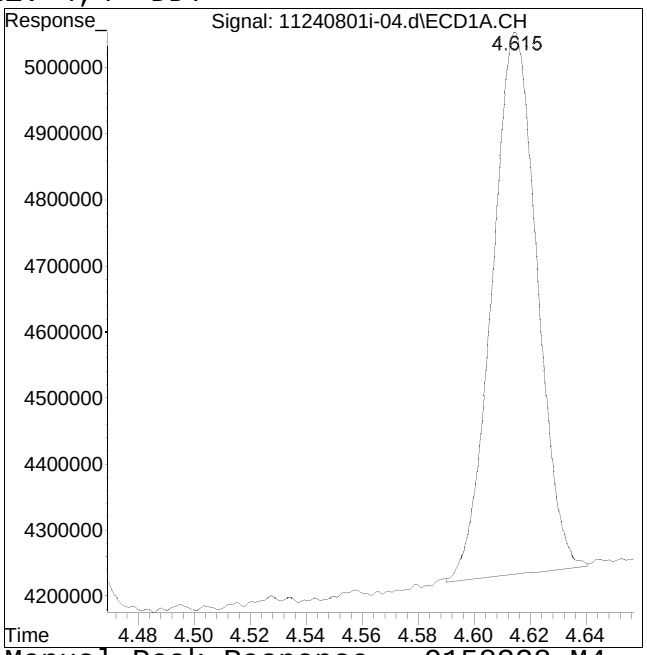
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #21: 4,4'-DDT




Original Peak Response = 8699248



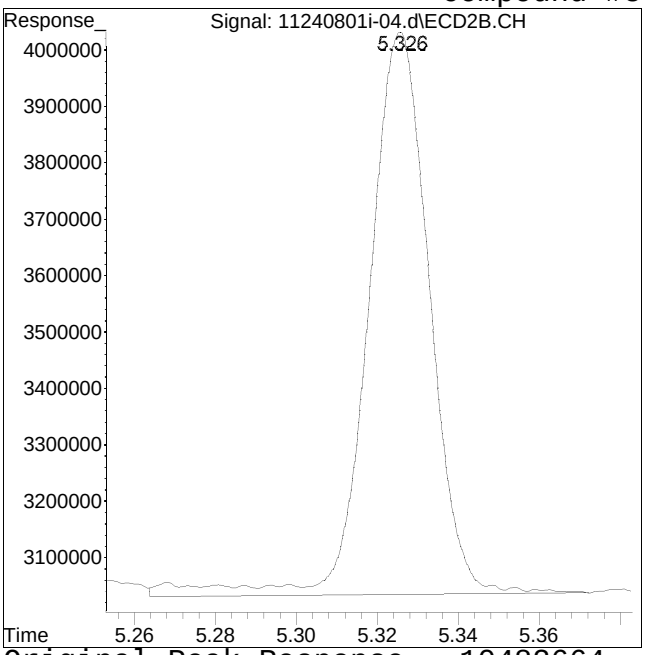

Manual Peak Response = 9158338 M4

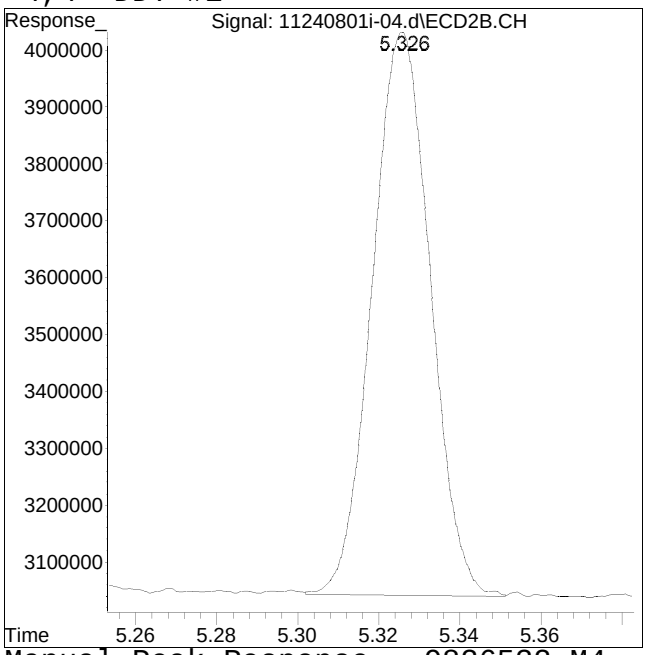
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #59: 4,4'-DDT #2



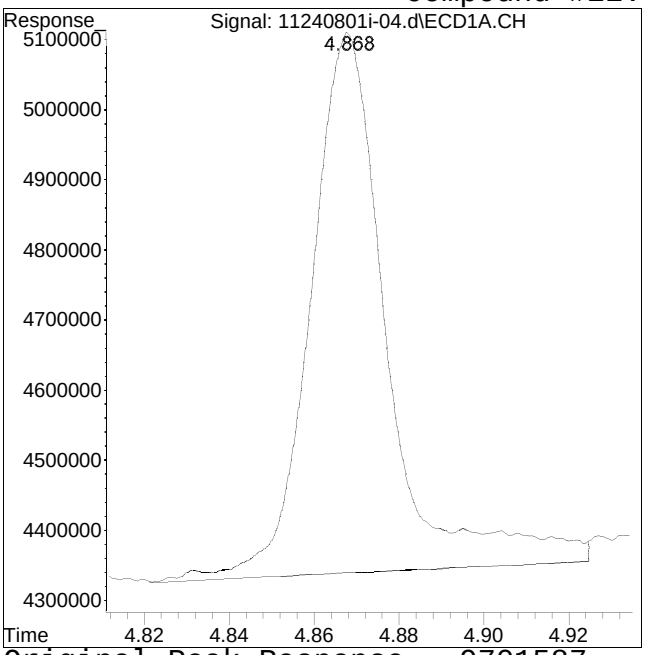

Original Peak Response = 10482664 Manual Peak Response = 9826532 M4
M4 = Poor automated baseline construction.

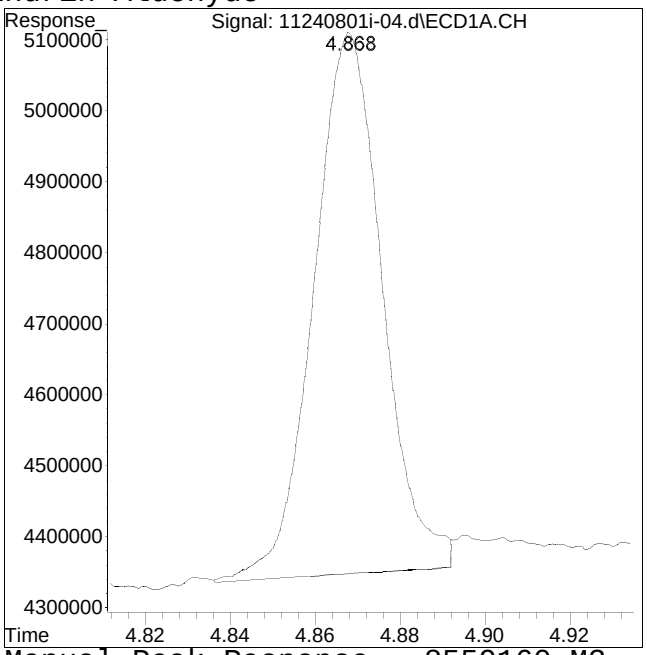
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #22: Endrin Aldehyde



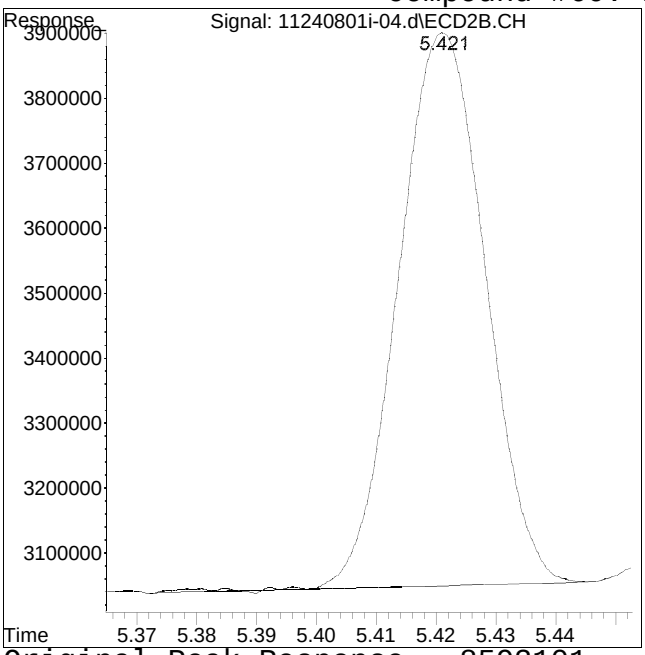

Original Peak Response = 9701587 Manual Peak Response = 8559160 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

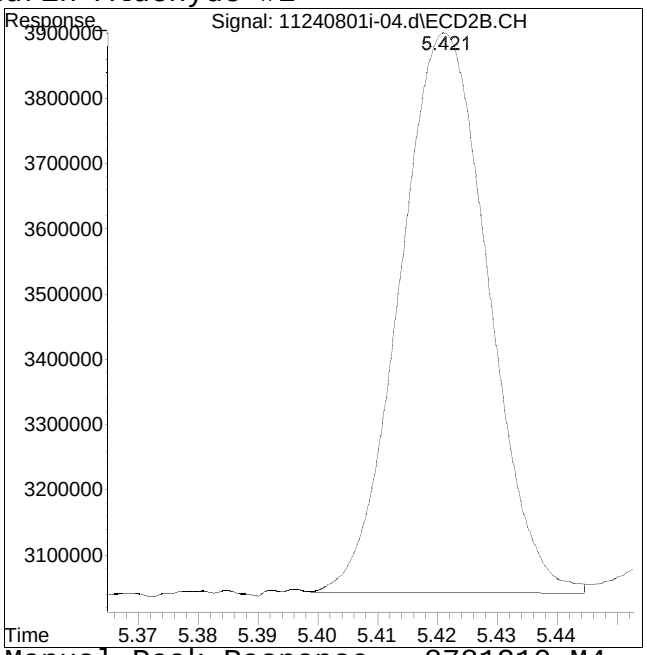
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 8593101




Manual Peak Response = 8781210 M4

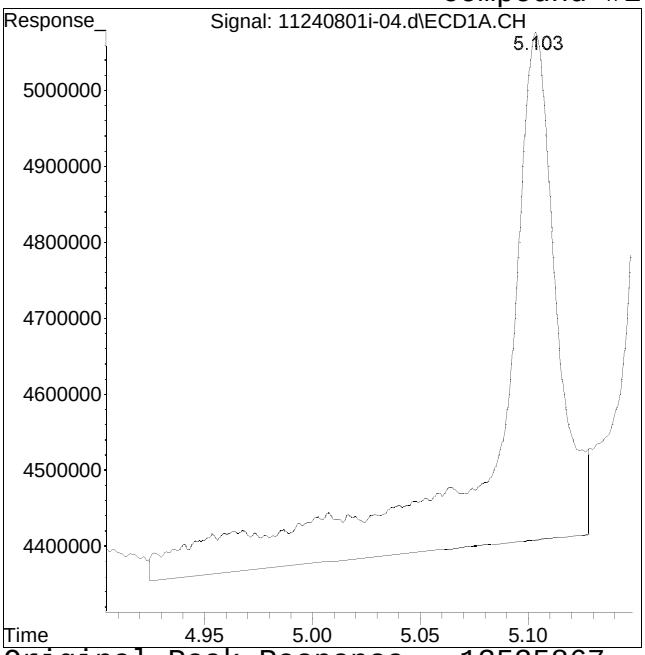
M4 = Poor automated baseline construction.

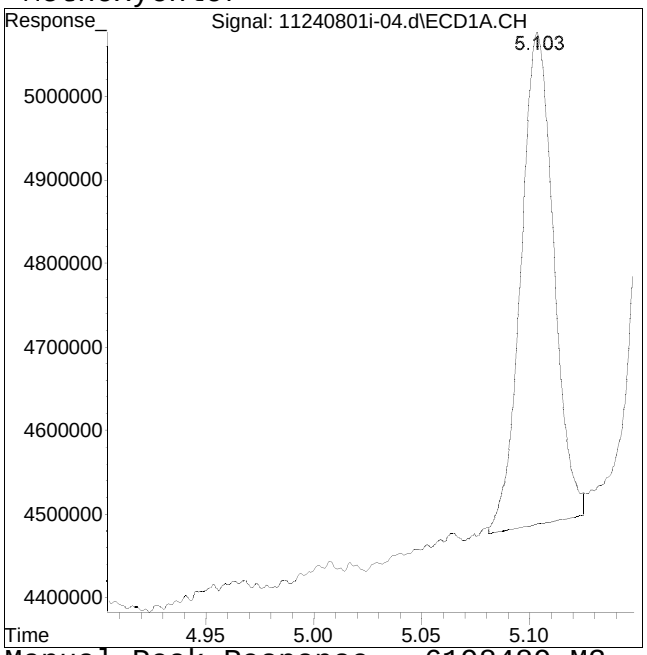
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #23: Methoxychlor




Original Peak Response = 13535867 Manual Peak Response = 6198489 M3

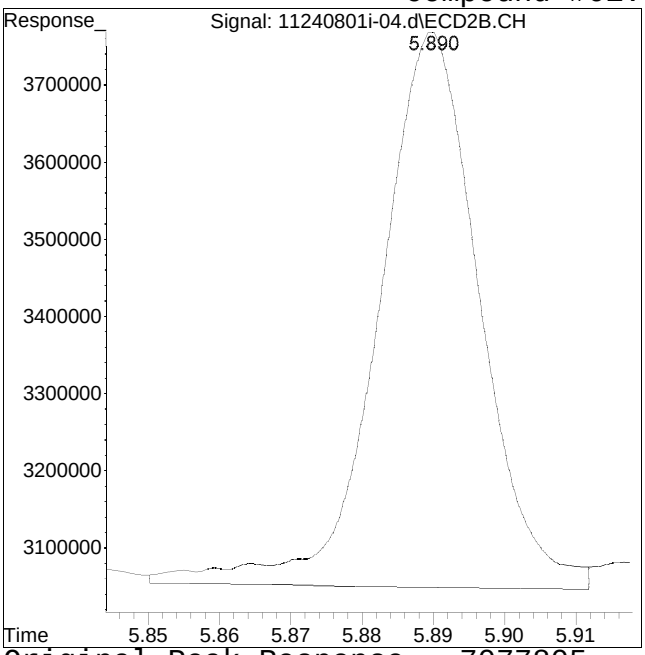
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

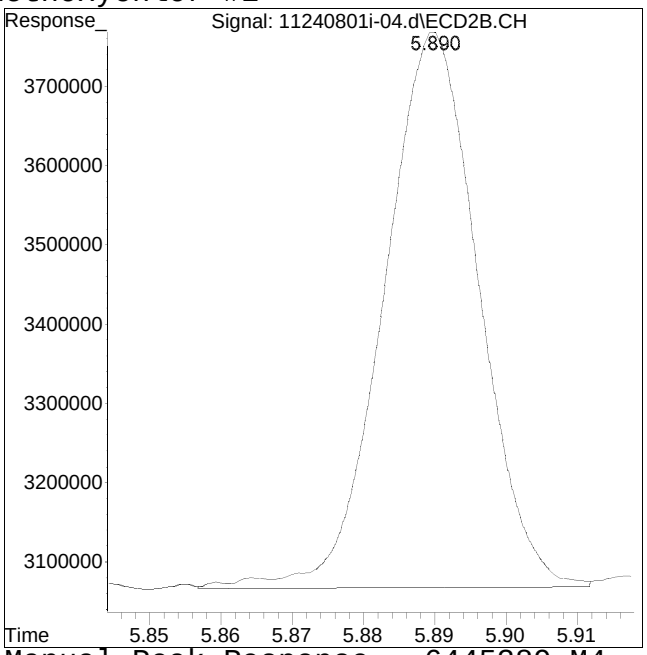
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

## Compound #61: Methoxychlor #2




Original Peak Response = 7077805



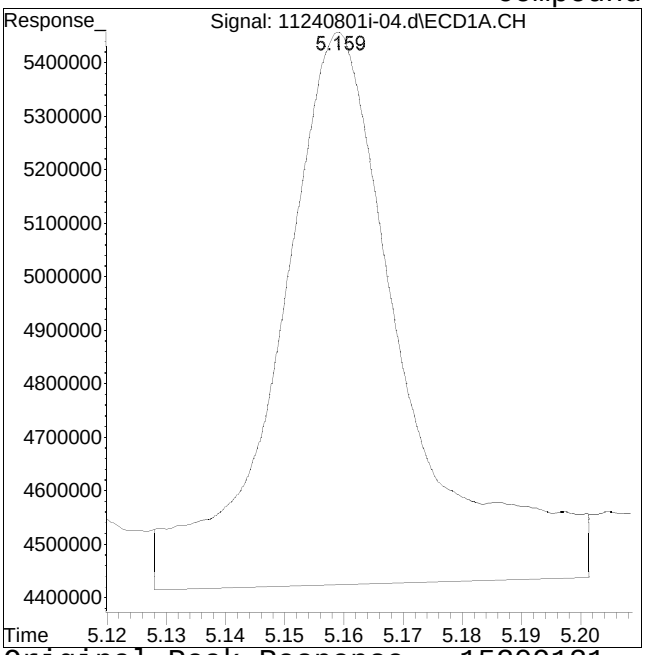

Manual Peak Response = 6445389 M4

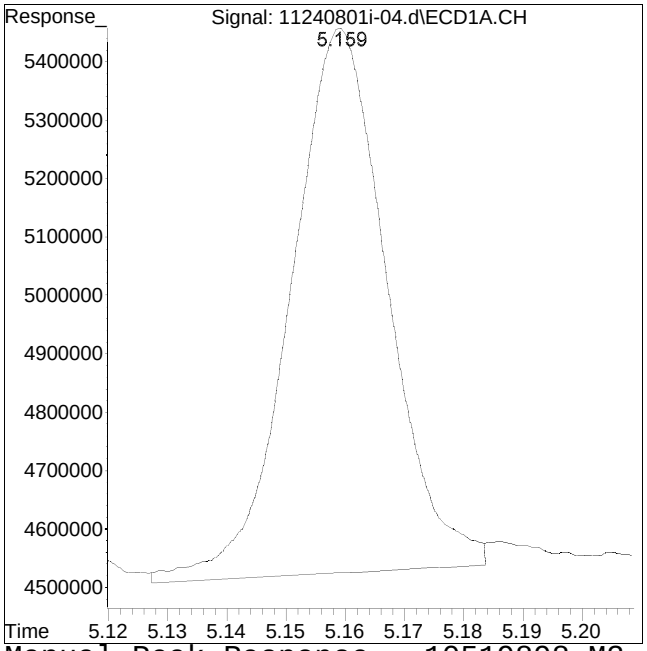
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #24: Mirex



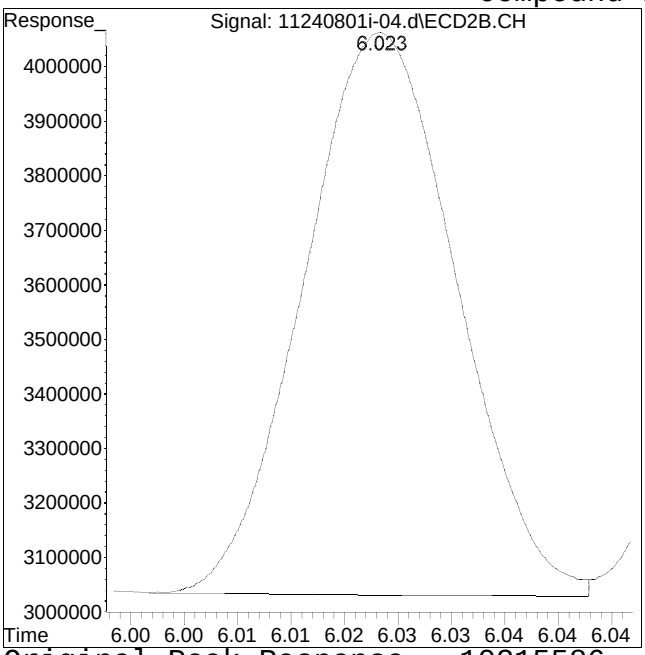

Original Peak Response = 15209131 Manual Peak Response = 10519898 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

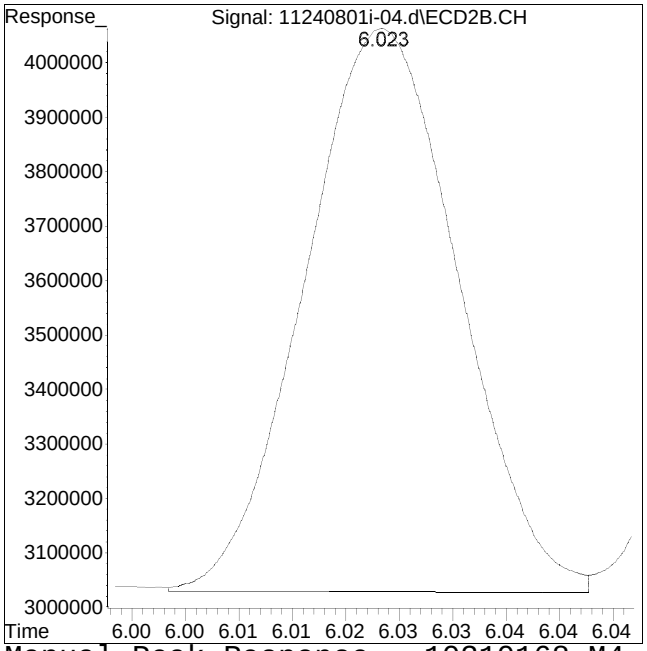
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #62: Mirex #2




Original Peak Response = 10215586



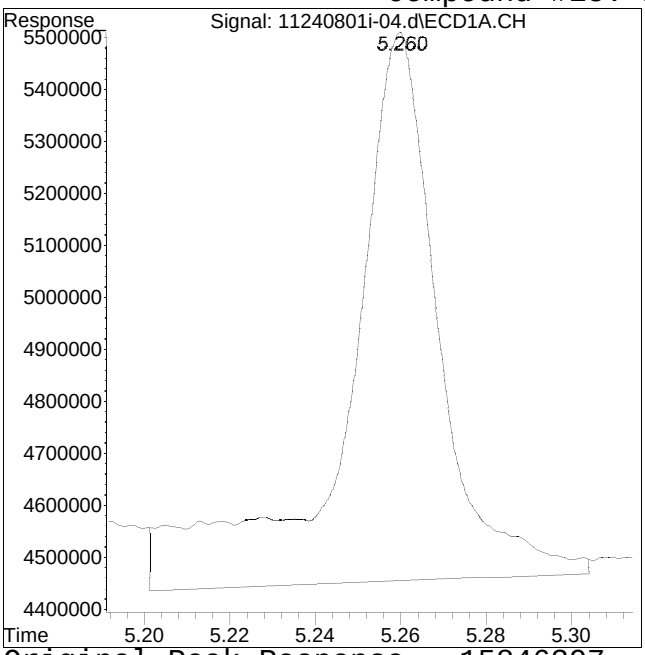

Manual Peak Response = 10310168 M4

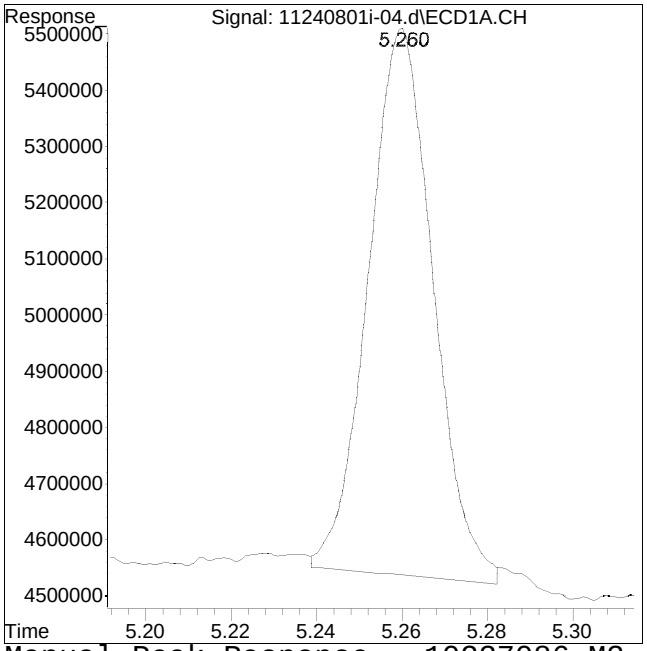
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #25: Endosulfan Sulfate




Original Peak Response = 15846397 Manual Peak Response = 10237086 M3

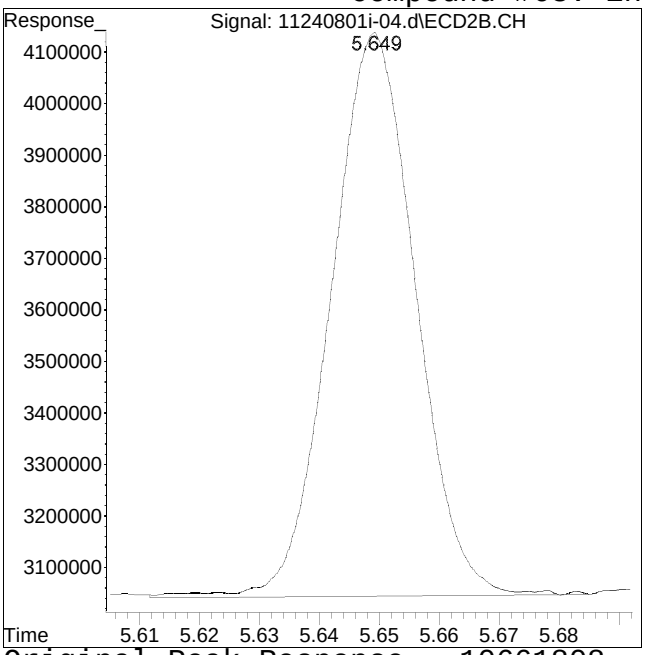
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

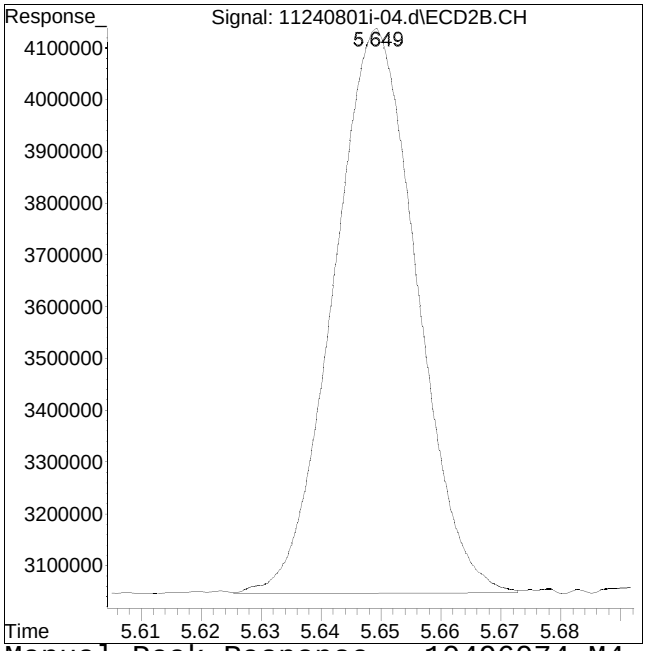
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

## Compound #63: Endosulfan Sulfate #2




Original Peak Response = 10661808




Manual Peak Response = 10496074 M4

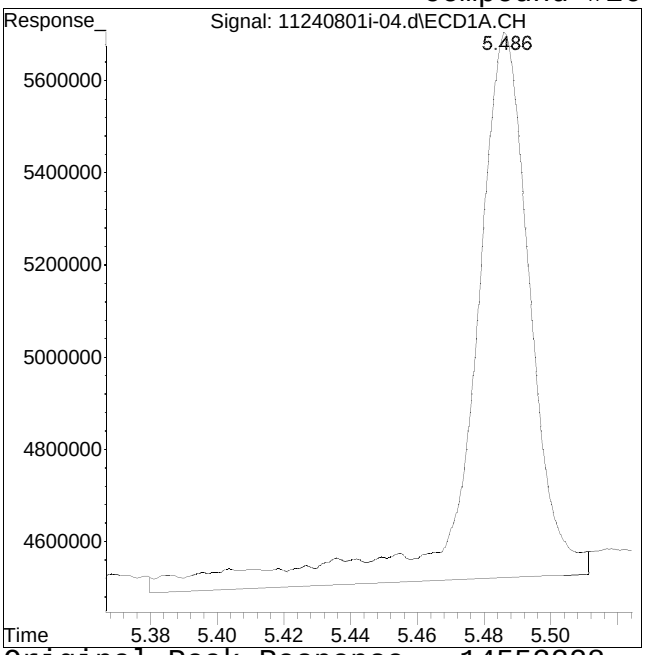
M4 = Poor automated baseline construction.

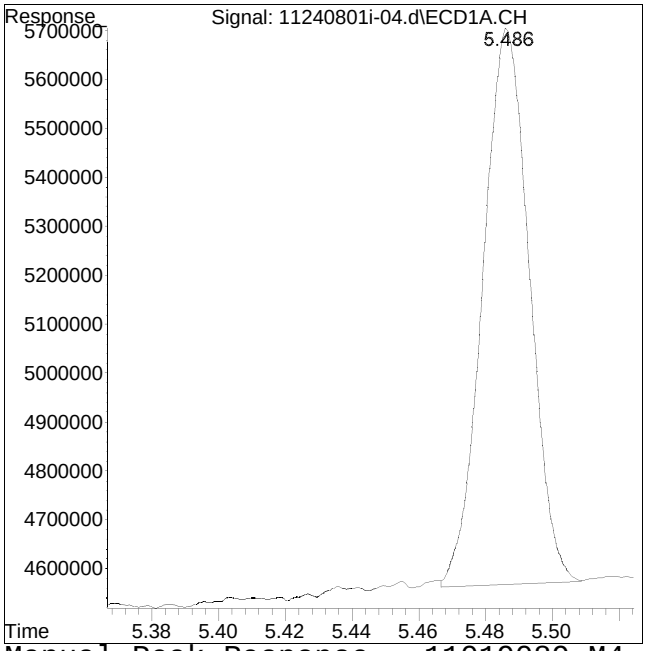
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #26: Endrin Ketone



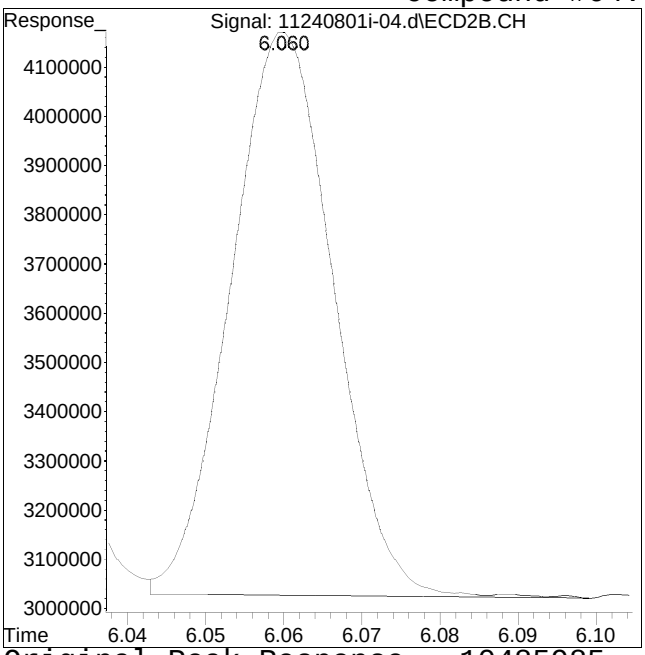

Original Peak Response = 14553228 Manual Peak Response = 11019089 M4
M4 = Poor automated baseline construction.

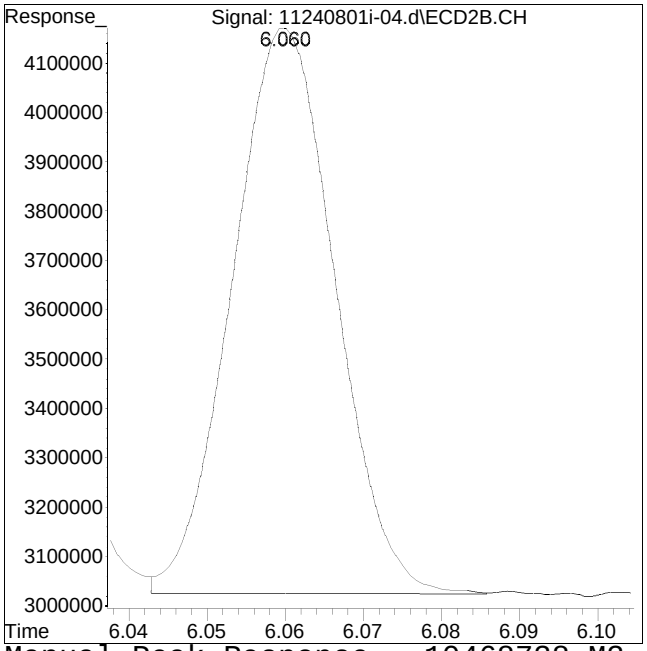
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #64: Endrin Ketone #2



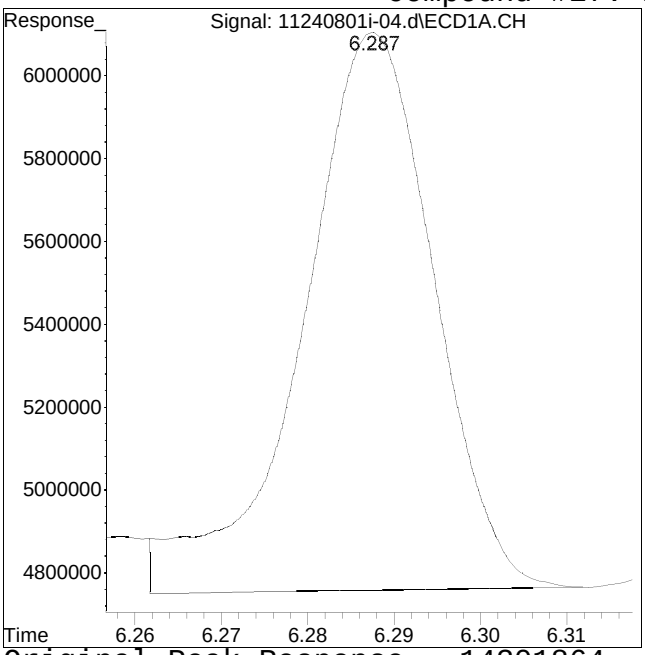

Original Peak Response = 10485985 Manual Peak Response = 10468738 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

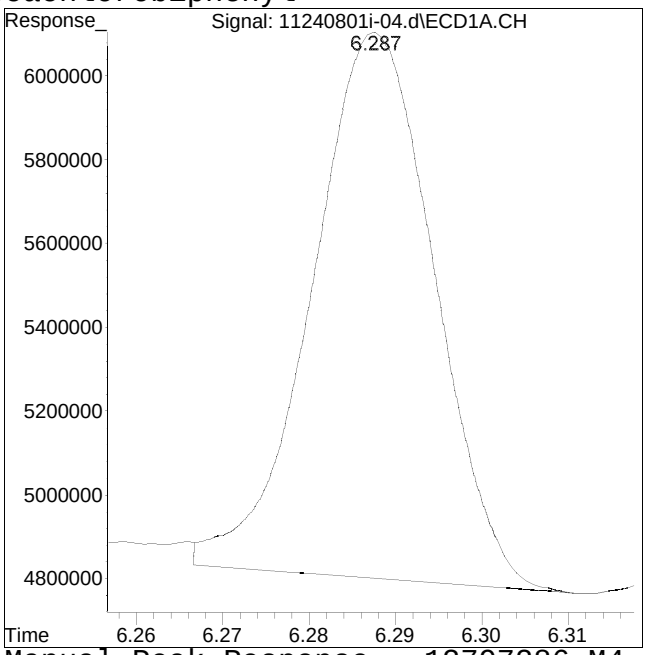
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-04.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 18:49 Instrument : Pest 11
Sample : il2pest,42e,,pp 11686 L0.0Quant Date : 8/2/2024 11:23 am

Compound #27: Decachlorobiphenyl




Original Peak Response = 14301864



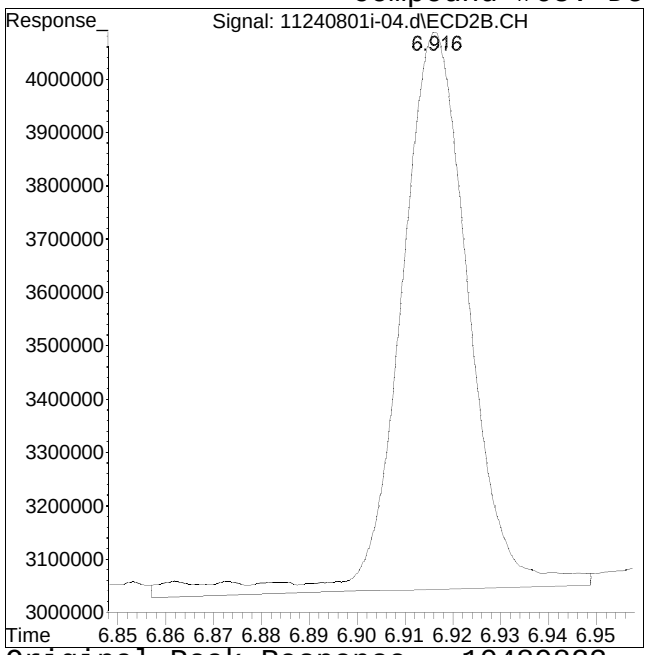

Manual Peak Response = 12797286 M4

M4 = Poor automated baseline construction.

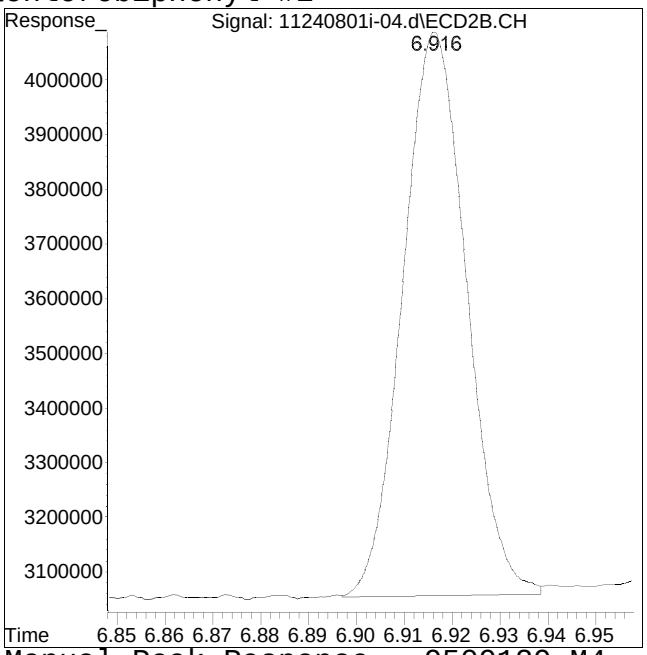
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-04.d
Date Inj'd : 8/1/2024 18:49
Sample : il2pest,42e,,pp 11686 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:23 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 10489823




Manual Peak Response = 9509129 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:01
Operator : PEST11:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:14:19 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:14:10 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.385 | 233.6E6 | 183.3E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 19656914 | 17683979 | 2.037M4 | 2.218M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 4.07%# | 4.44%# |
| 27) s | Decachlorobi | 6.288 | 6.921 | 24597164 | 17880278 | 2.363M4 | 2.415M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 4.73%# | 4.83%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.177 | 28232919 | 20378901 | 2.202M4 | 2.341M4 |
| 4) t | alpha-BHC | 1.963 | 2.270 | 24776337 | 22916880 | 1.763M3 | 1.910M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 24518590 | 22225331 | 1.860M4 | 2.012M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 12371613 | 12076597 | 2.144M4 | 2.433M4 |
| 7) t | delta-BHC | 2.349 | 2.889 | 23489321 | 22105919 | 1.784M4 | 1.978 |
| 8) t | Heptachlor | 2.513 | 2.951 | 24704645 | 25240850 | 2.000M3 | 2.217M4 |
| 9) t | Aldrin | 2.755 | 3.270 | 22221712 | 21532475 | 1.906M3 | 2.069M4 |
| 10) t | Alachlor | 2.876 | 3.153 | 4616058 | 4291521 | 2.172M4 | 2.624M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 12587779 | 16060949 | 2.339M4 | 2.633M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:01
Operator : PEST11:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:14:19 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:14:10 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.883 | 22577234 | 23119137 | 2.042M3 | 2.290M4 |
| 13) | t | gamma-Chlord | 3.425 | 4.104 | 20000923 | 21362303 | 1.986M3 | 2.301M3 |
| 14) | t | alpha-Chlord | 3.559 | 4.274 | 22560782 | 23123524 | 1.977M4 | 2.254M4 |
| 15) | t | 4,4'-DDE | 3.656 | 4.472 | 21256749 | 19930567 | 1.878 | 2.035M4 |
| 16) | t | Endosulfan I | 3.695 | 4.335 | 20979786 | 21644513 | 2.011 | 2.297M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 20608823 | 20372093 | 1.919M4 | 2.128M4 |
| 18) | t | Endrin | 4.209 | 4.926 | 21154040 | 20698754 | 1.945M4 | 2.132 |
| 19) | t | 4,4'-DDD | 4.321 | 5.049 | 16433727 | 16195802 | 1.862M4 | 2.053M4 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 19856372 | 19658239 | 2.017M4 | 2.284M4 |
| 21) | t | 4,4'-DDT | 4.615 | 5.325 | 19330578 | 18980554 | 1.925M4 | 2.092M3 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 16609803 | 16584125 | 2.012M4 | 2.309M4 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 11871688 | 11964320 | 2.204M4 | 2.443M3 |
| 24) | t | Mirex | 5.159 | 6.024 | 19186744 | 19029253 | 2.220M4 | 2.566M4 |
| 25) | t | Endosulfan S | 5.259 | 5.649 | 19345504 | 19598268 | 2.080M3 | 2.317M4 |
| 26) | t | Endrin Keton | 5.487 | 6.060 | 22428996 | 20121740 | 2.028M4 | 2.235M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:01
Operator : PEST11:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:14:19 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:14:10 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

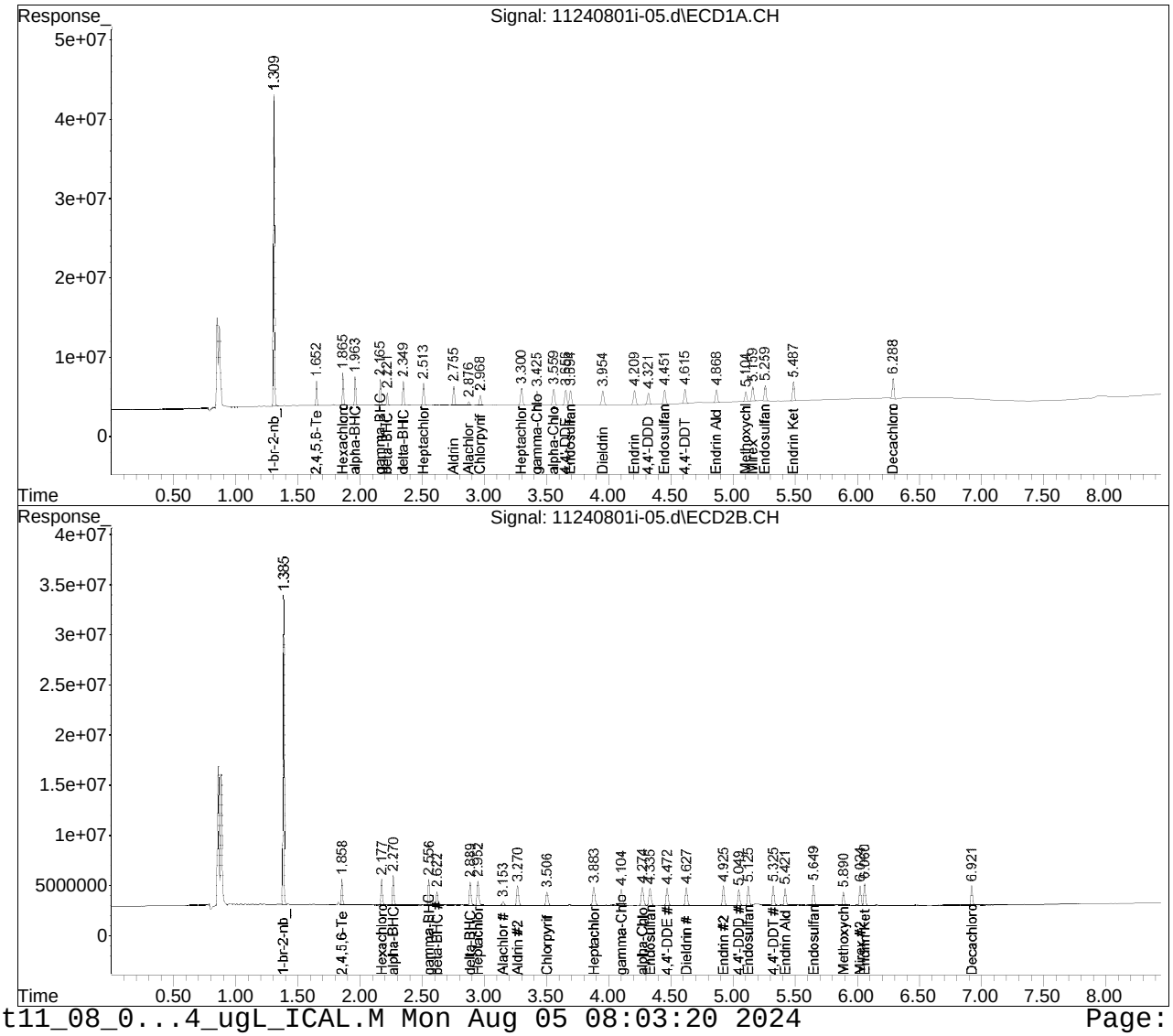
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:01
Operator : PEST11:ejl
Sample : il3pest,42e,,pp 11685 L0.002
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:14:19 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:14:10 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

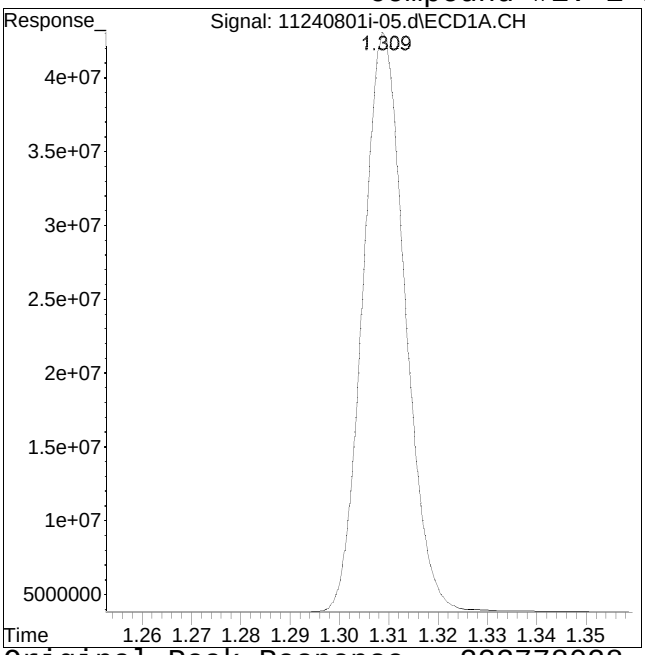


# Manual Integration Report

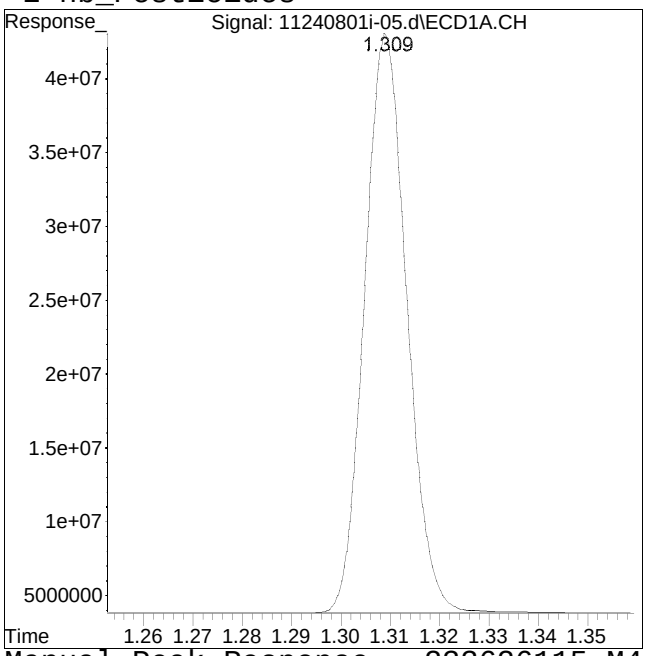
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 233778028




Manual Peak Response = 233626115 M4

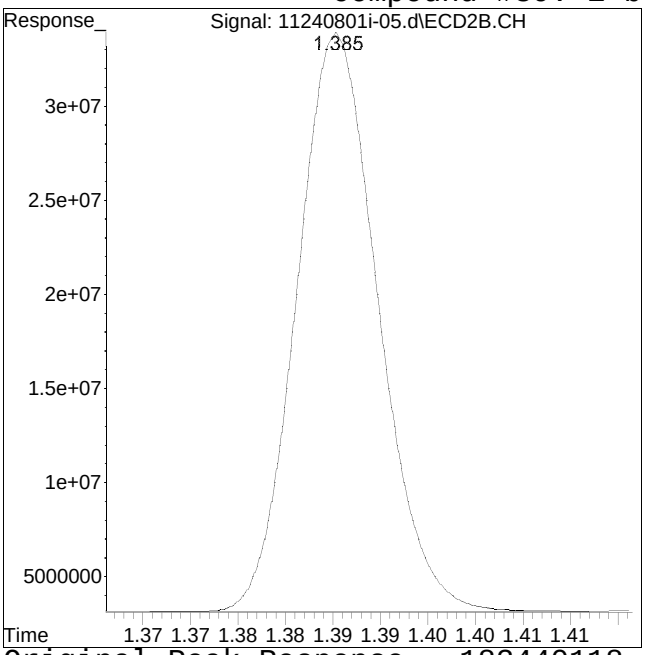
M4 = Poor automated baseline construction.

# Manual Integration Report

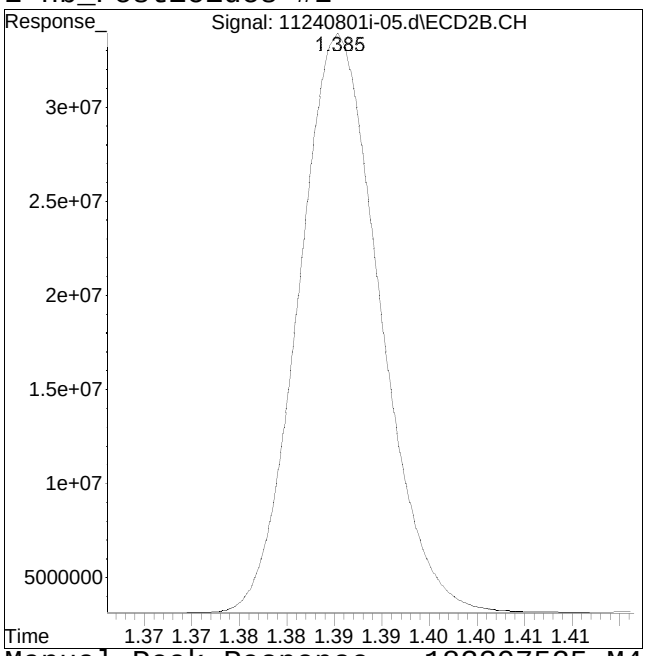
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 183440118



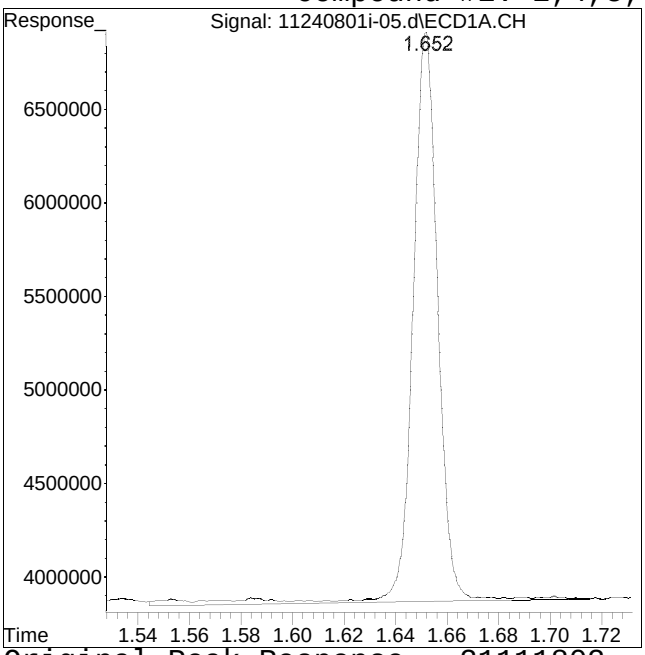

Manual Peak Response = 183307525 M4

M4 = Poor automated baseline construction.

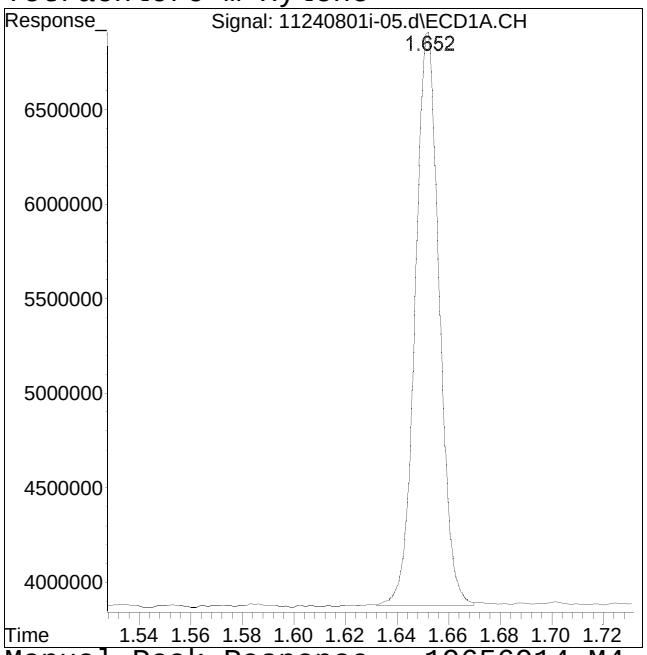
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 21111802



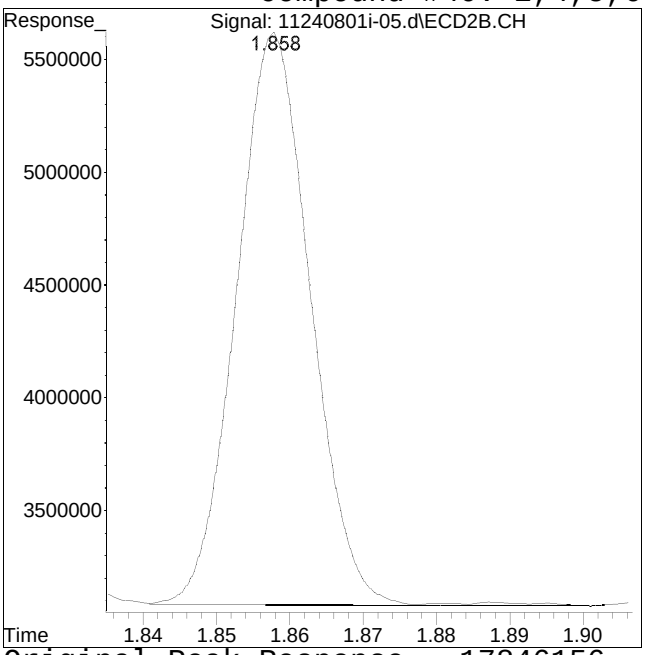

Manual Peak Response = 19656914 M4

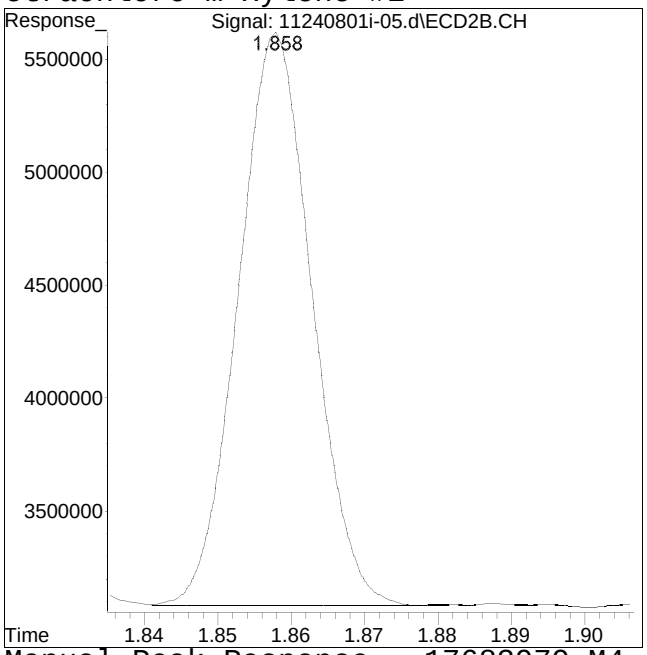
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



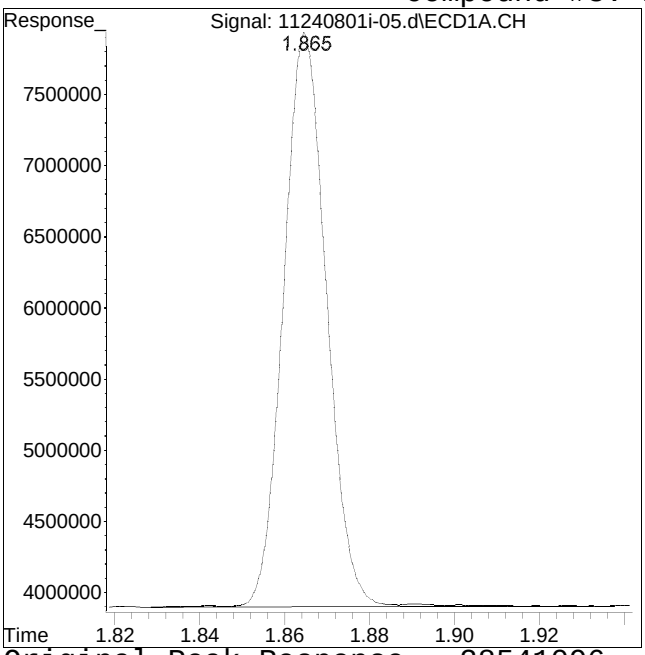




Original Peak Response = 17846156 Manual Peak Response = 17683979 M4
M4 = Poor automated baseline construction.

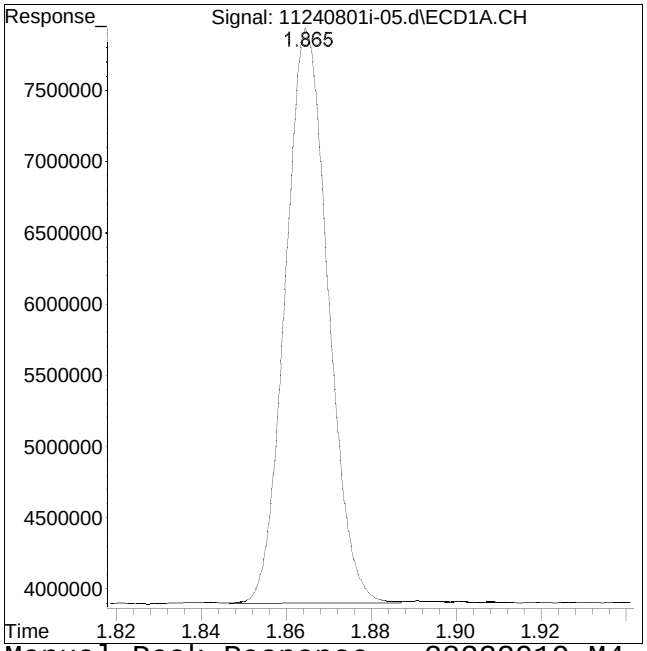
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #3: Hexachlorobenzene




Original Peak Response = 28541096




Manual Peak Response = 28232919 M4

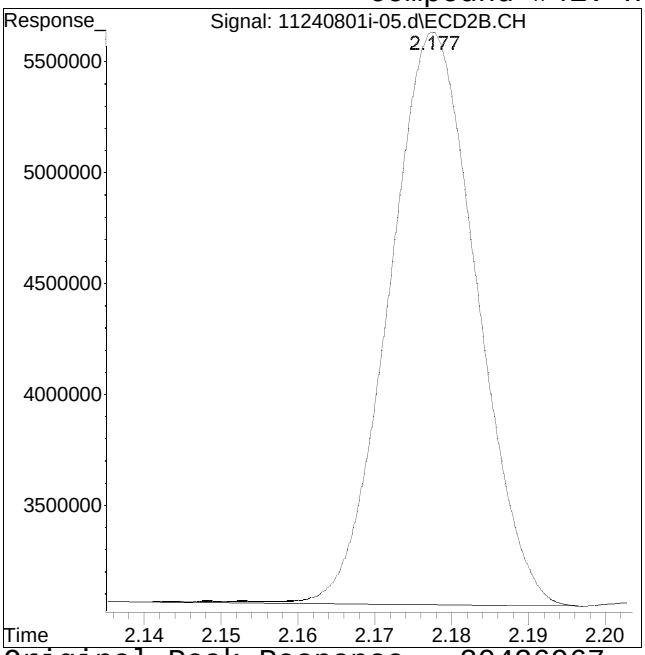
M4 = Poor automated baseline construction.

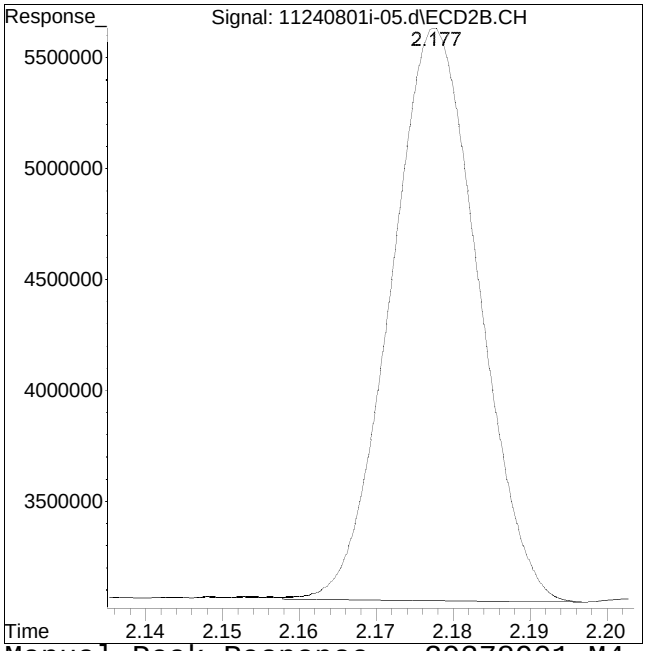
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #41: Hexachlorobenzene #2



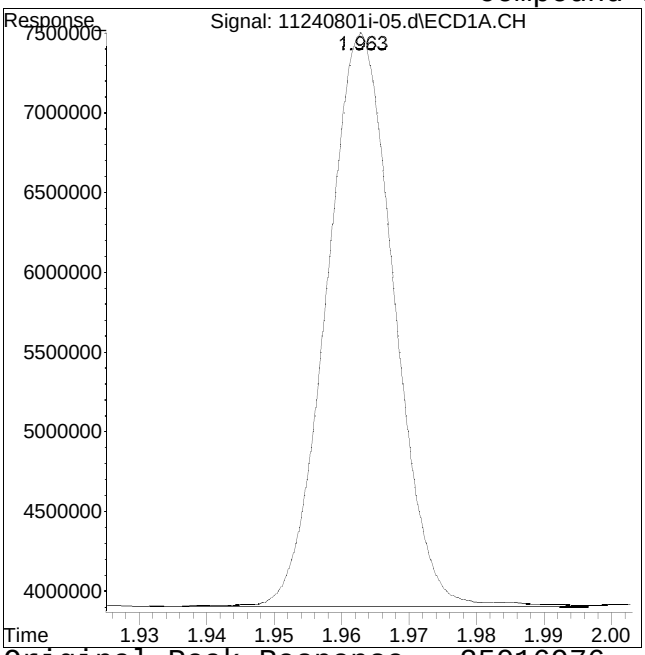



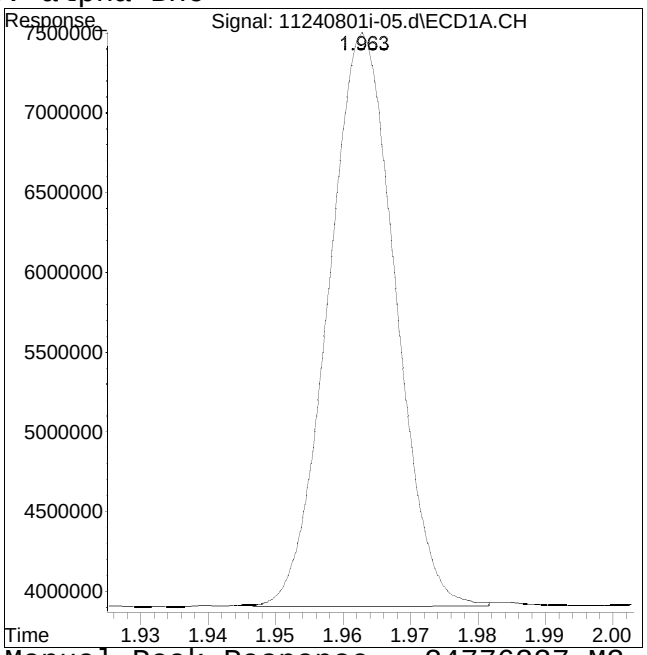

Original Peak Response = 20436967 Manual Peak Response = 20378901 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0 Quant Date : 8/2/2024 11:14 am

Compound #4: alpha-BHC



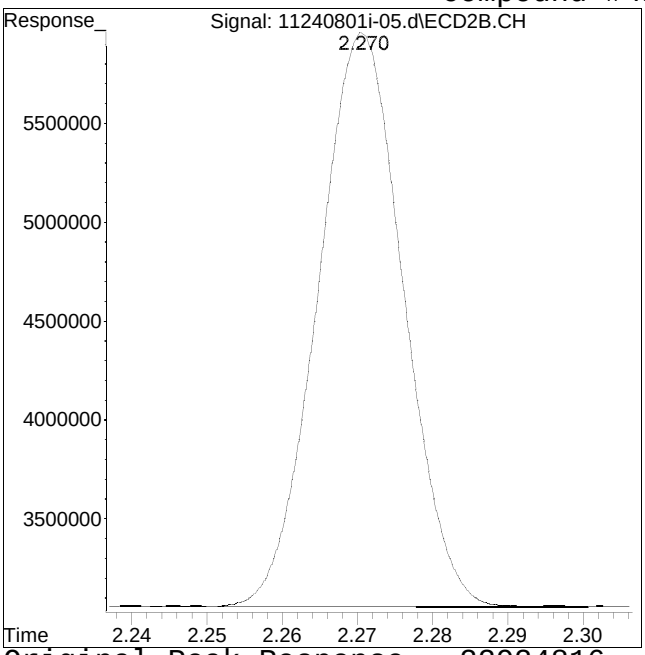




Original Peak Response = 25016976 Manual Peak Response = 24776337 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

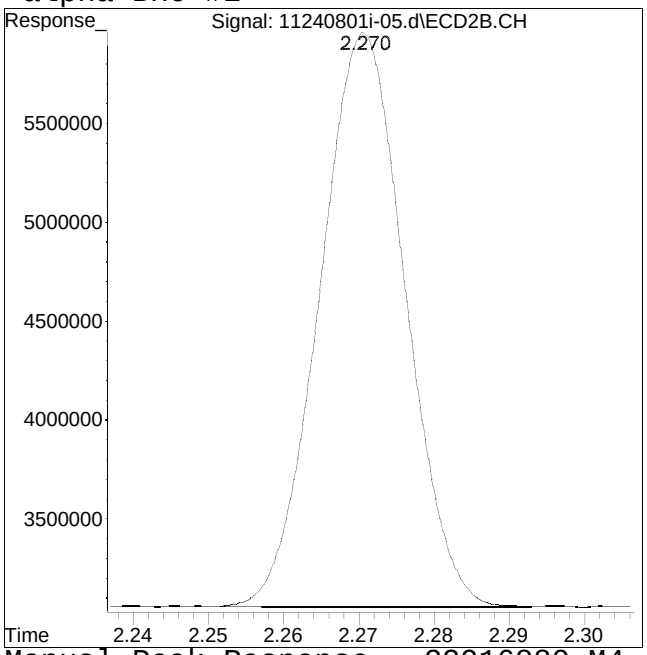
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #42: alpha-BHC #2




Original Peak Response = 22924816




Manual Peak Response = 22916880 M4

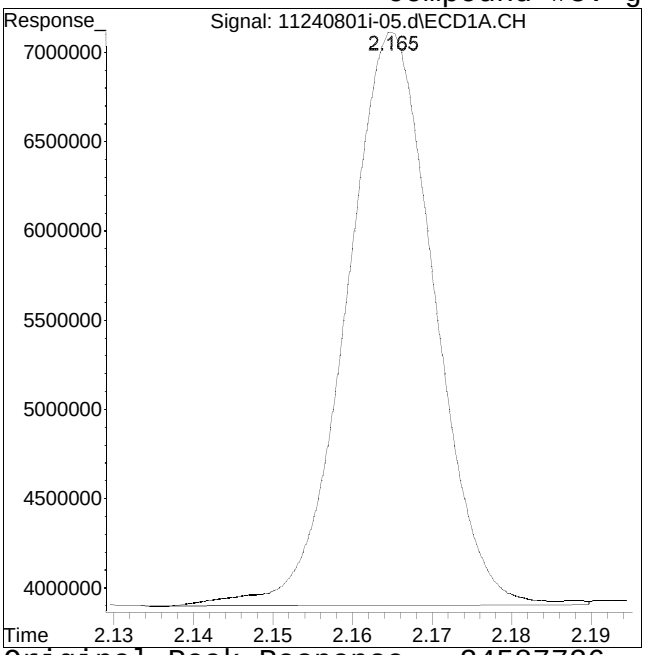
M4 = Poor automated baseline construction.

Manual Integration Report

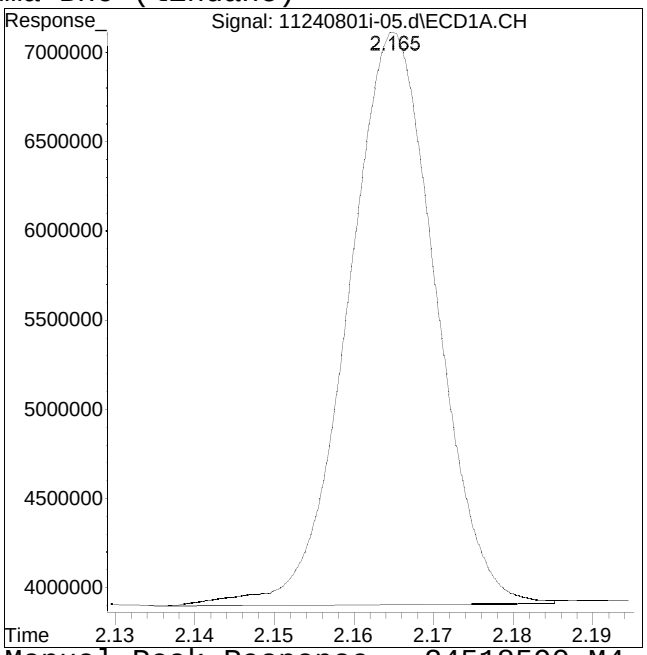
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 24587736



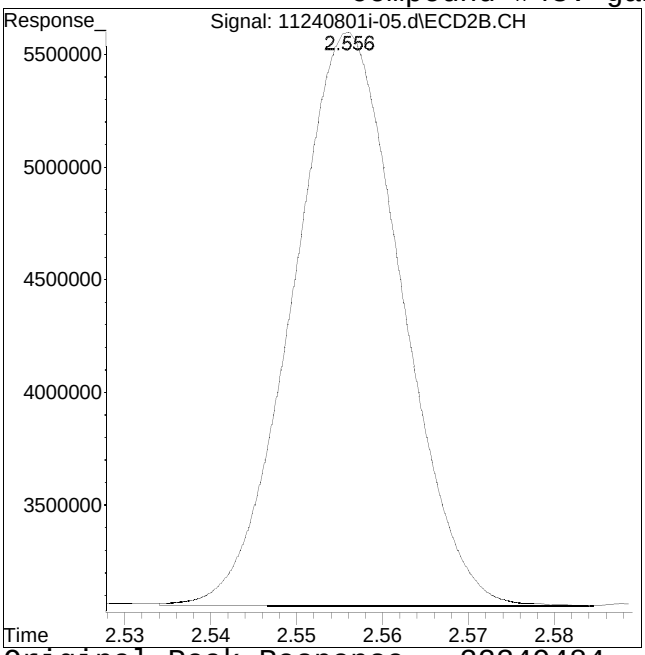

Manual Peak Response = 24518590 M4

M4 = Poor automated baseline construction.

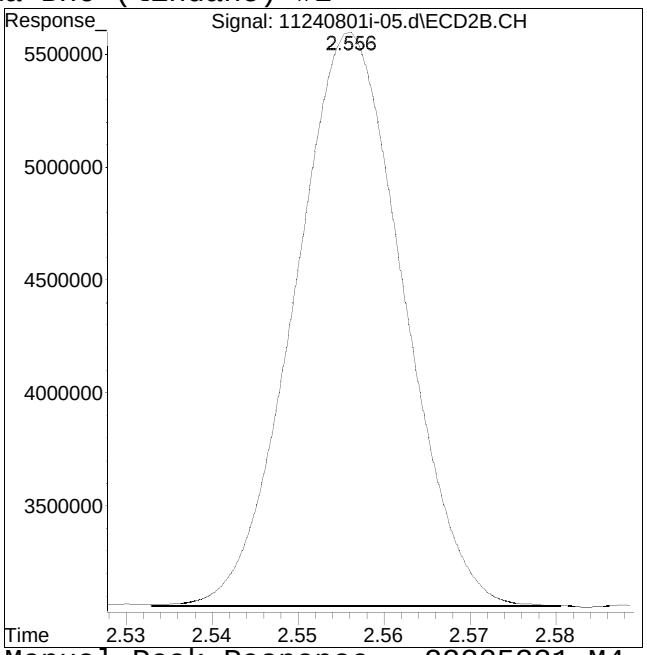
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 22349484



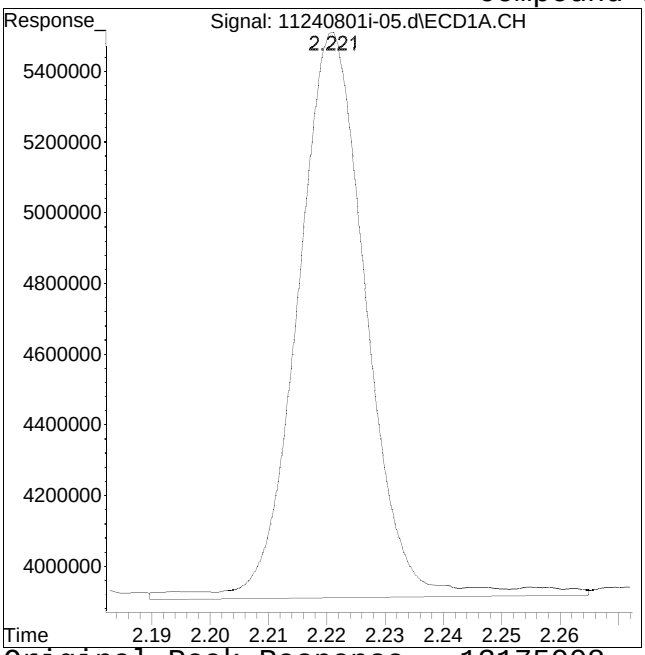

Manual Peak Response = 22225331 M4

M4 = Poor automated baseline construction.

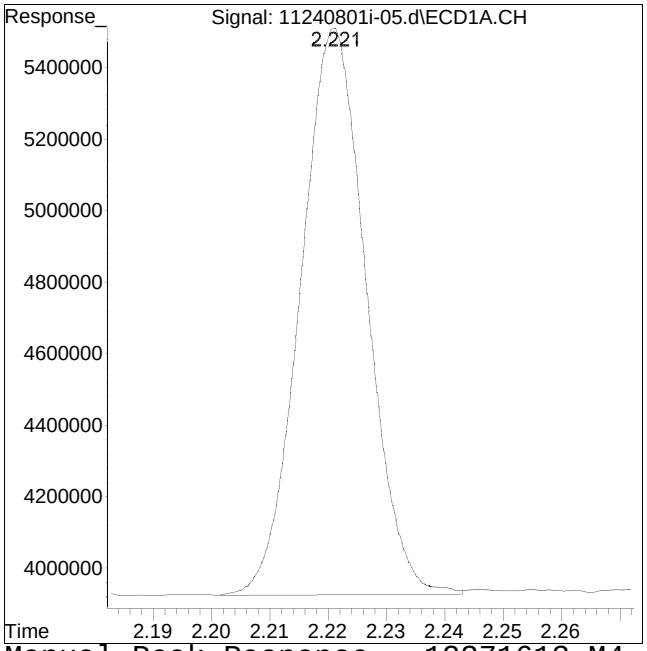
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #6: beta-BHC




Original Peak Response = 13175008



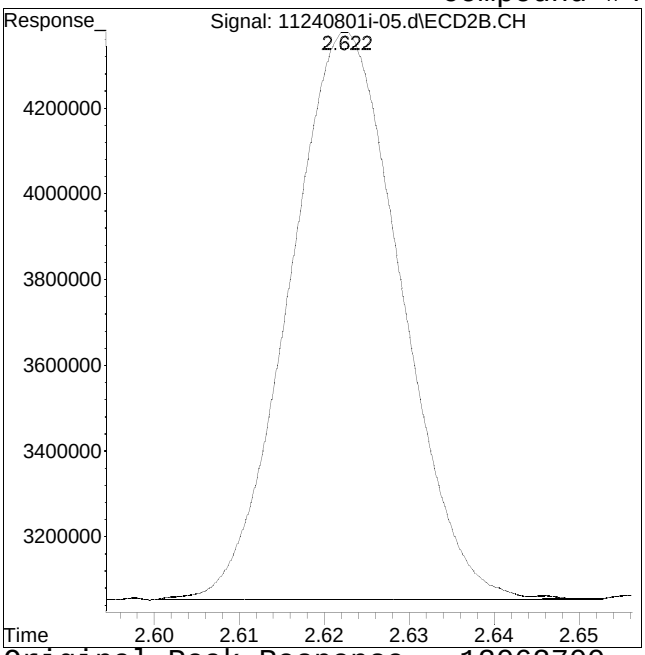

Manual Peak Response = 12371613 M4

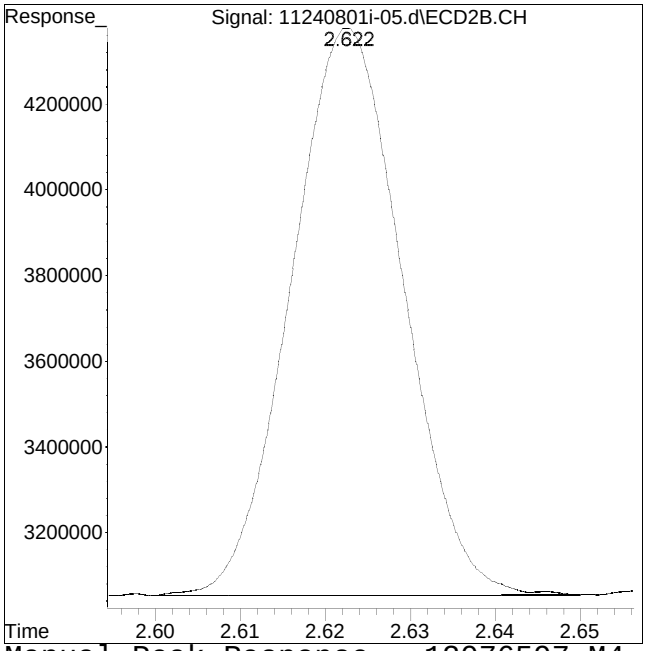
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #44: beta-BHC #2



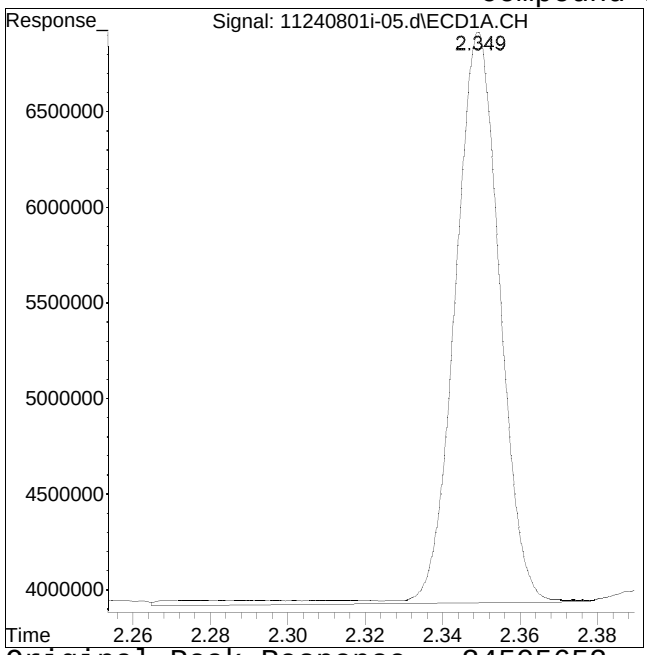

Original Peak Response = 12062700 Manual Peak Response = 12076597 M4
M4 = Poor automated baseline construction.

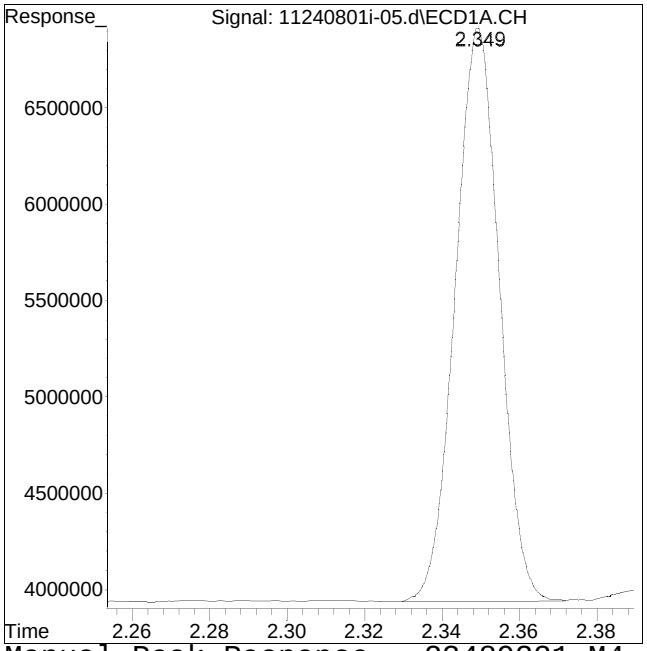
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #7: delta-BHC



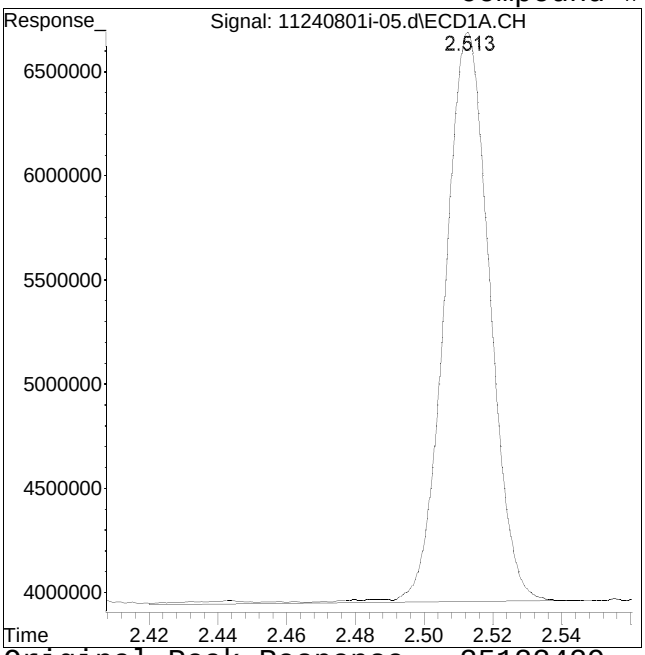



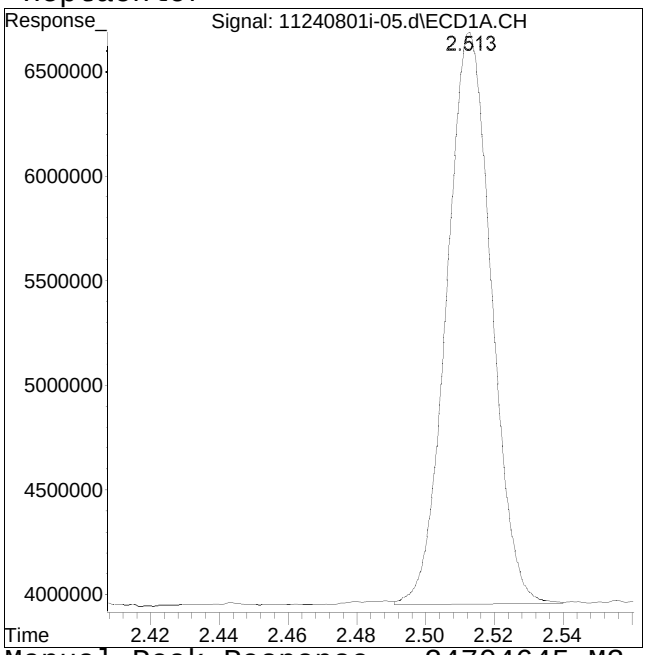

Original Peak Response = 24505652 Manual Peak Response = 23489321 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #8: Heptachlor



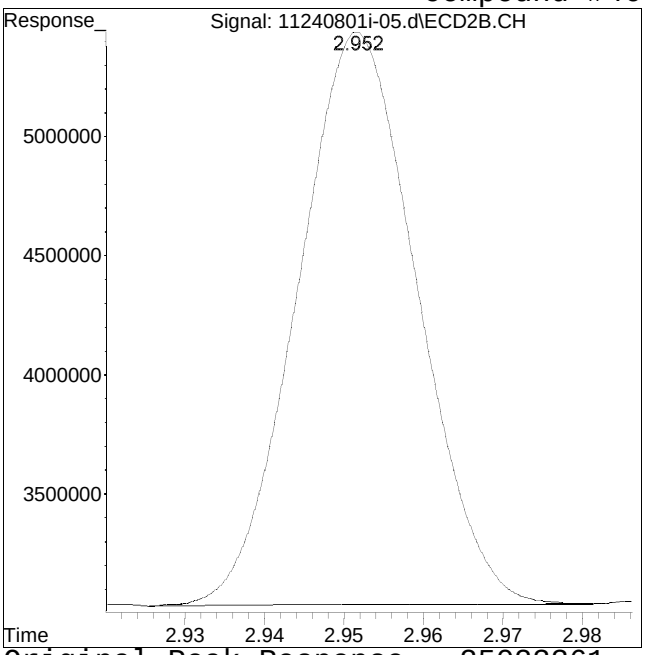



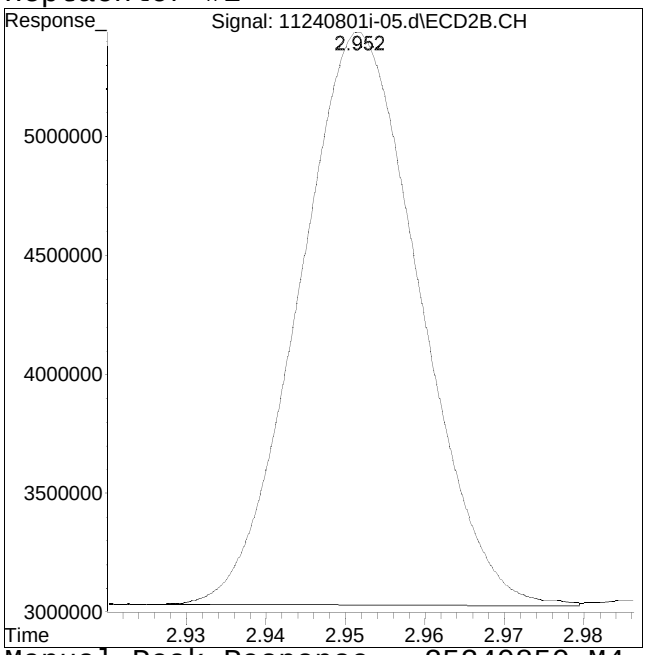

Original Peak Response = 25122429 Manual Peak Response = 24704645 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #46: Heptachlor #2



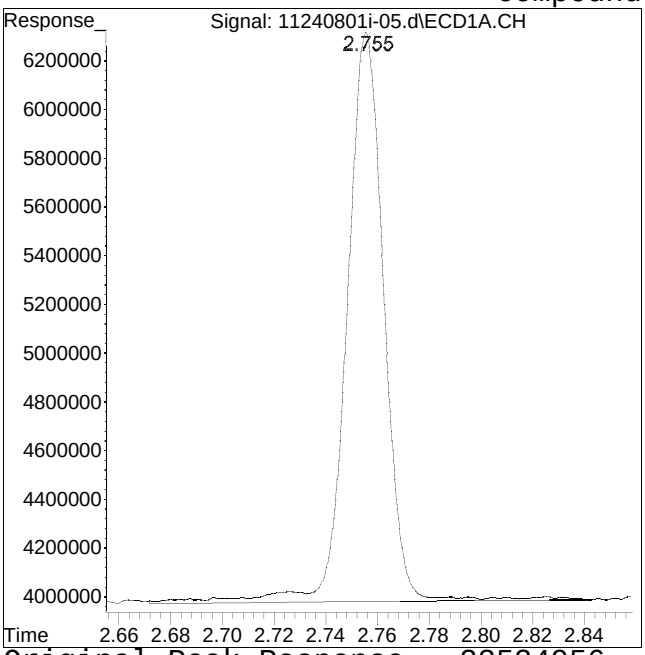



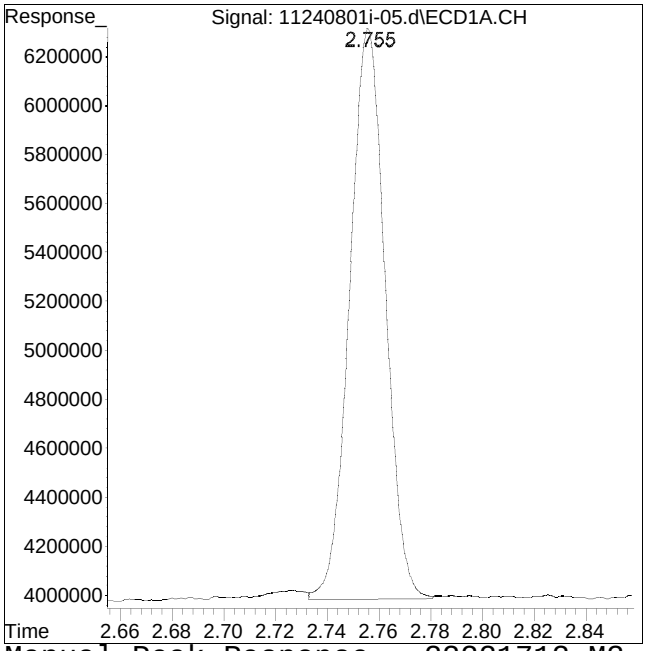

Original Peak Response = 25023361 Manual Peak Response = 25240850 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #9: Aldrin



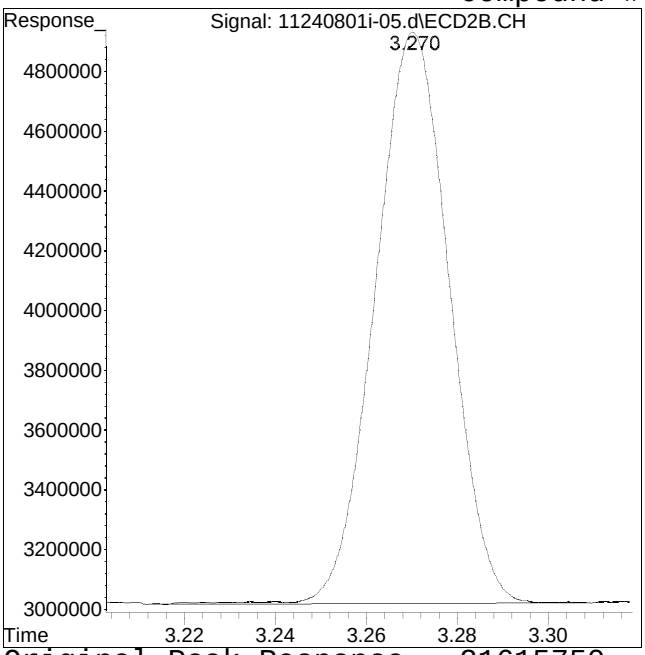

Original Peak Response = 23534956 Manual Peak Response = 22221712 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

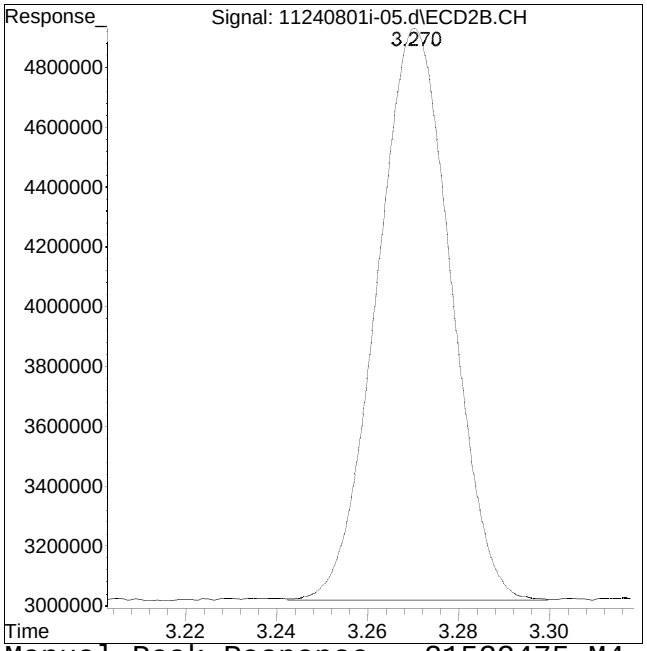
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #47: Aldrin #2




Original Peak Response = 21615750



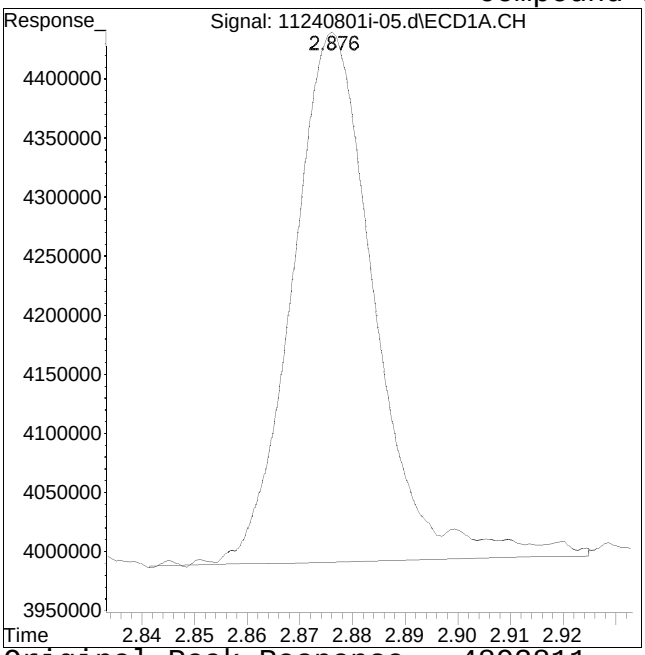

Manual Peak Response = 21532475 M4

M4 = Poor automated baseline construction.

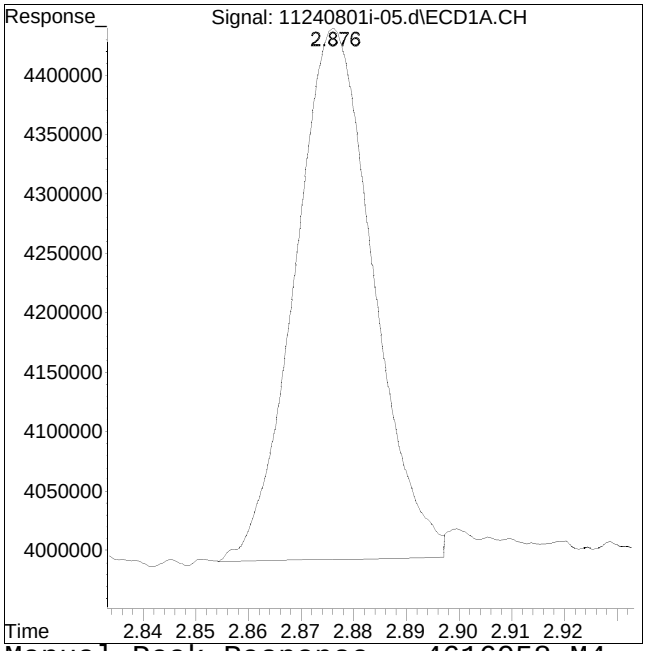
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #10: Alachlor




Original Peak Response = 4893811




Manual Peak Response = 4616058 M4

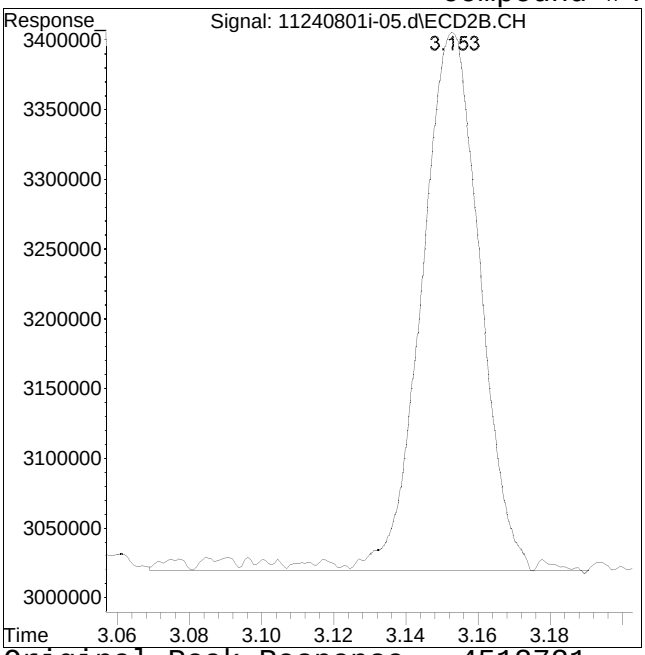
M4 = Poor automated baseline construction.

Manual Integration Report

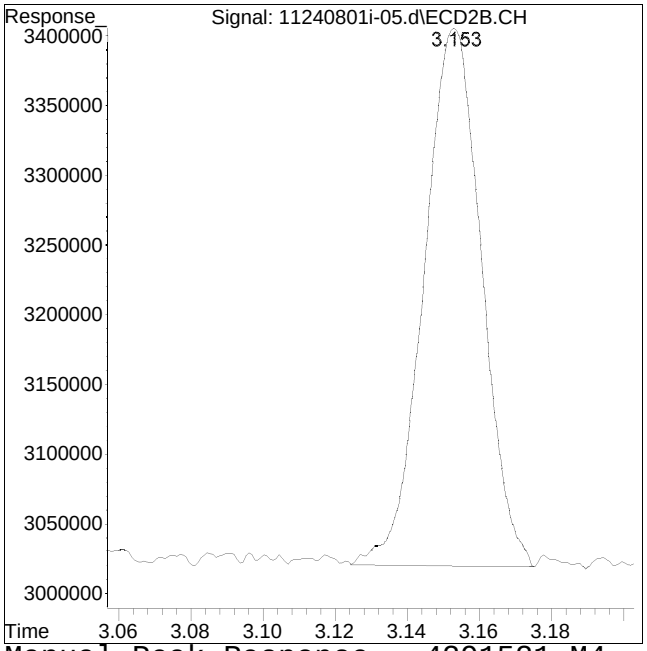
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #48: Alachlor #2




Original Peak Response = 4512721




Manual Peak Response = 4291521 M4

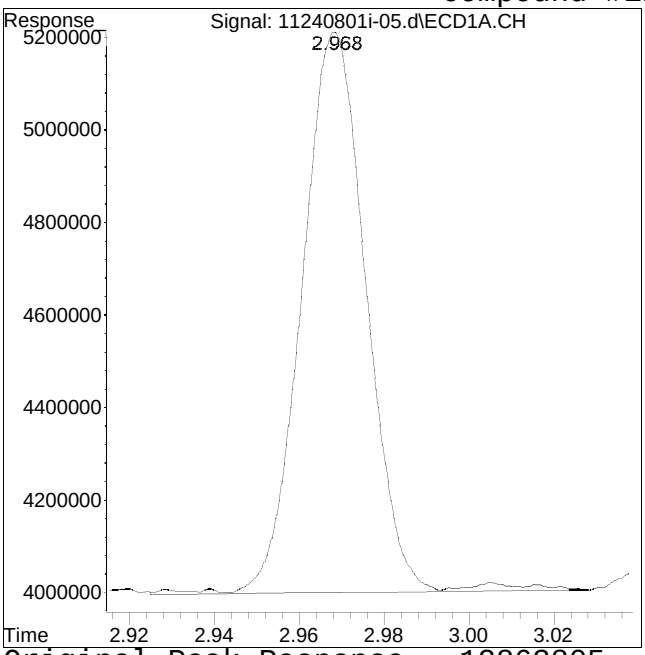
M4 = Poor automated baseline construction.

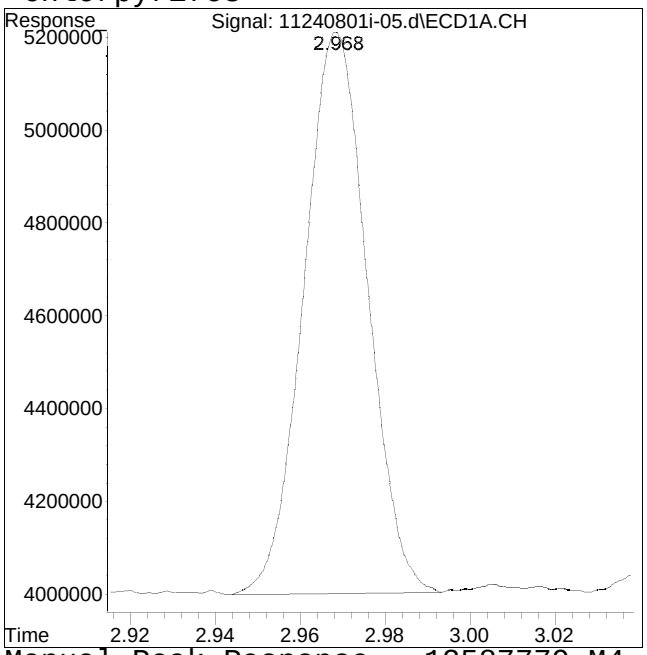
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #11: Chlorpyrifos



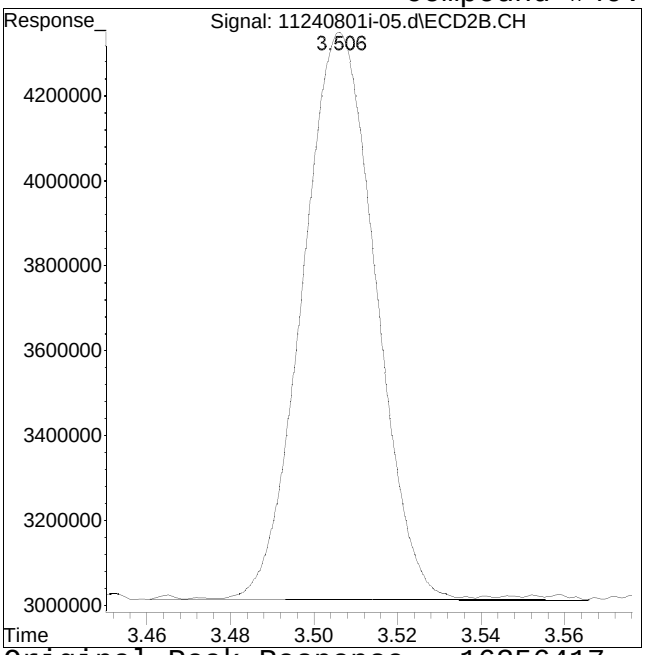




Original Peak Response = 12863805 Manual Peak Response = 12587779 M4
M4 = Poor automated baseline construction.

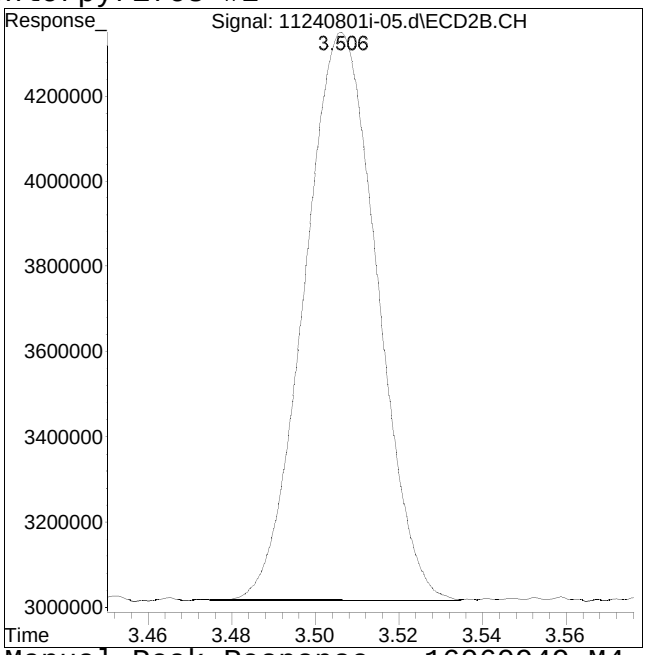
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 16356417




Manual Peak Response = 16060949 M4

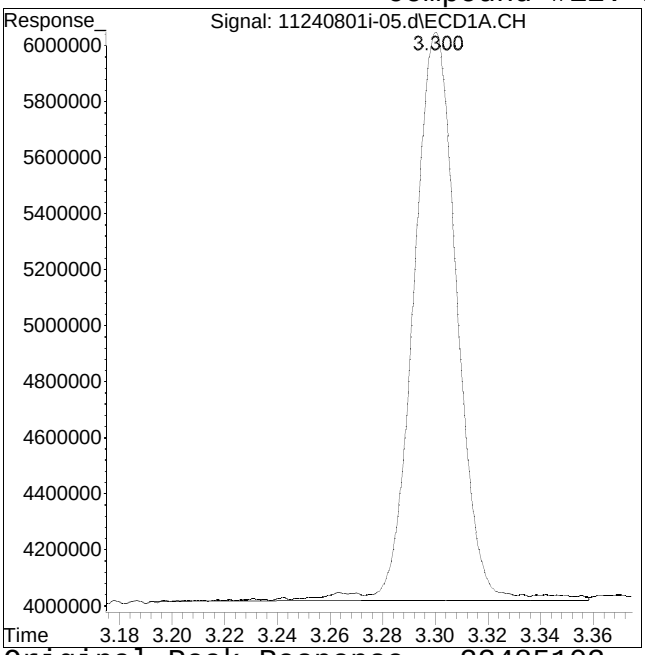
M4 = Poor automated baseline construction.

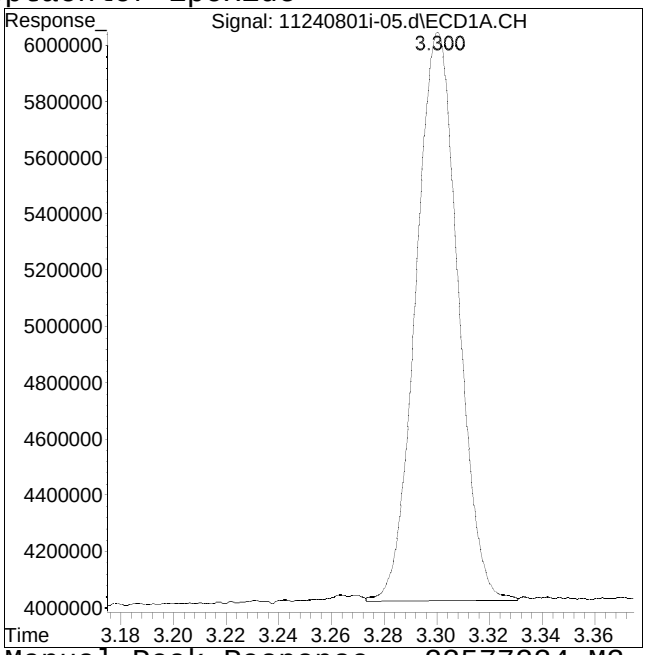
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #12: Heptachlor Epoxide



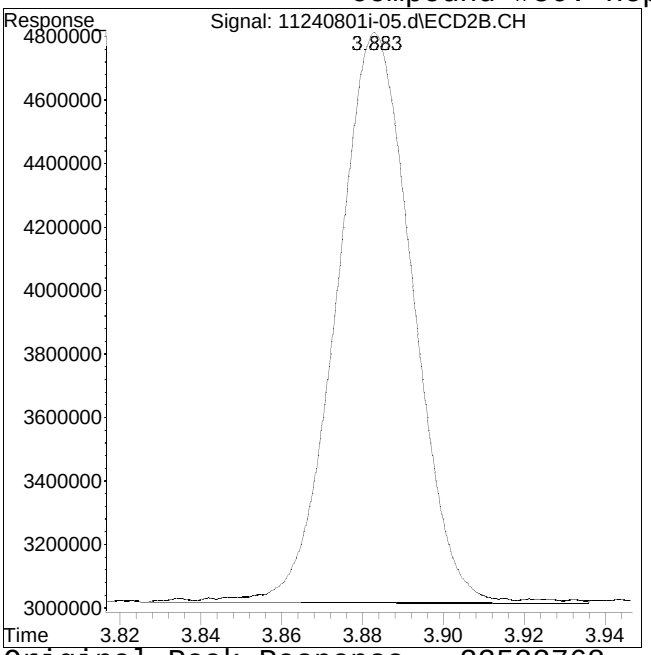

Original Peak Response = 23485103 Manual Peak Response = 22577234 M3

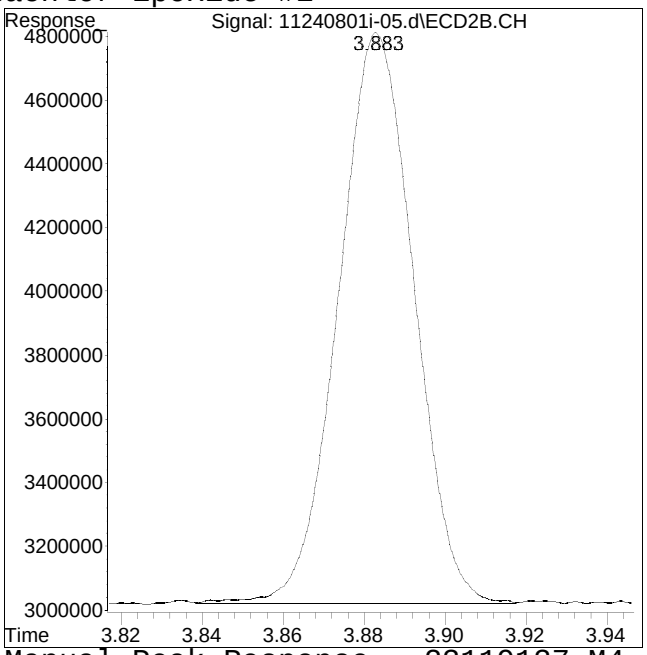
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #50: Heptachlor Epoxide #2



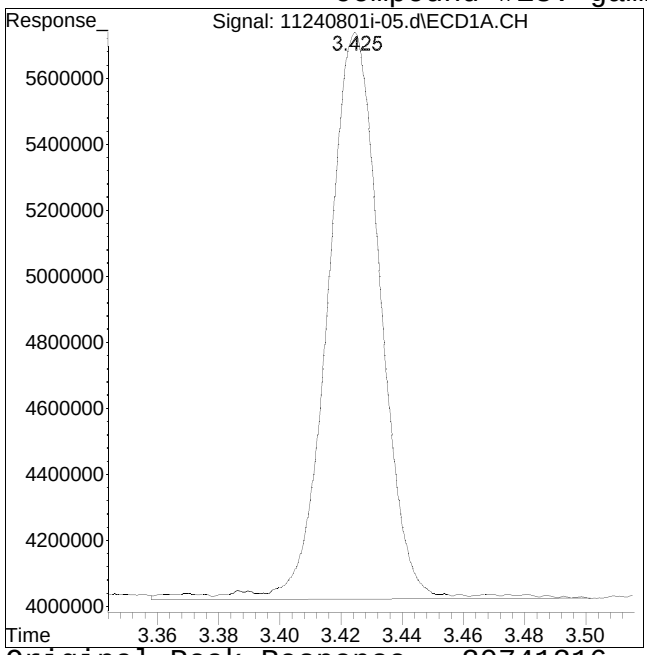

Original Peak Response = 23522768 Manual Peak Response = 23119137 M4
M4 = Poor automated baseline construction.

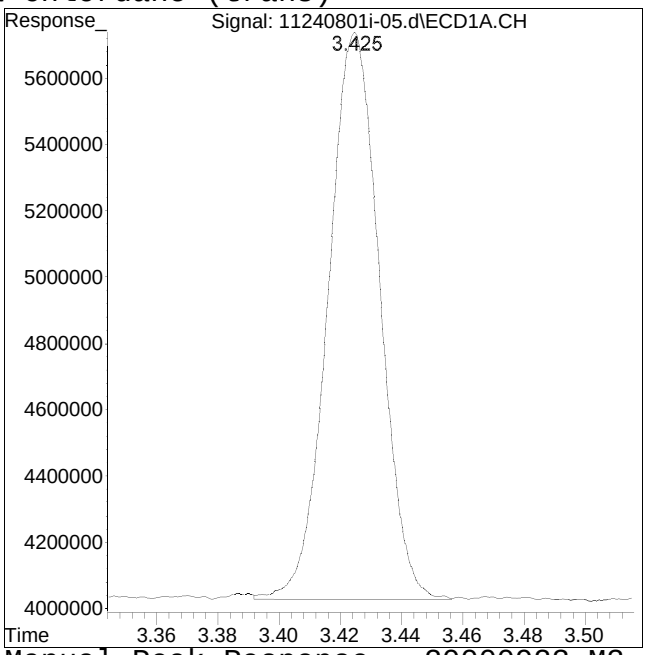
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #13: gamma-Chlordane (trans)



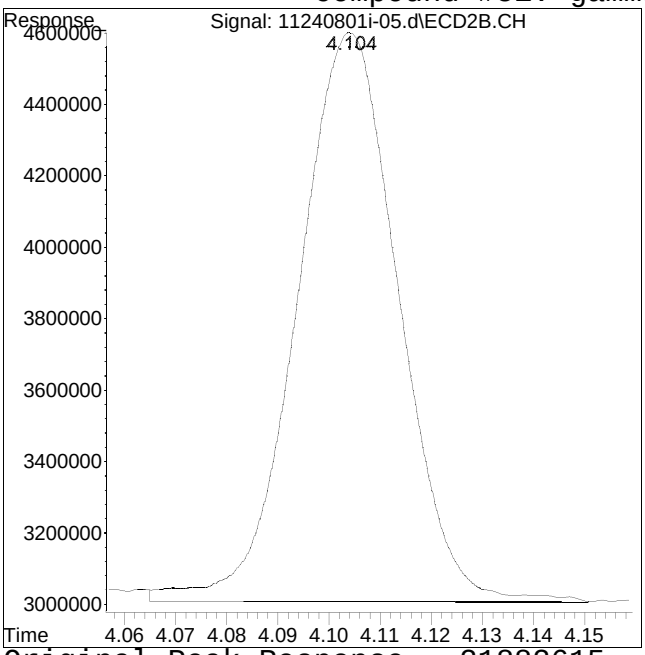



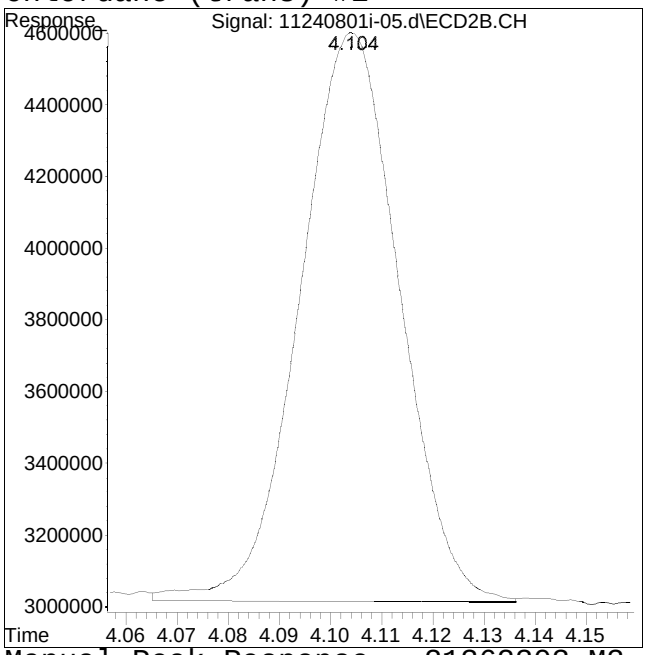

Original Peak Response = 20741216 Manual Peak Response = 20000923 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #51: gamma-Chlordane (trans) #2



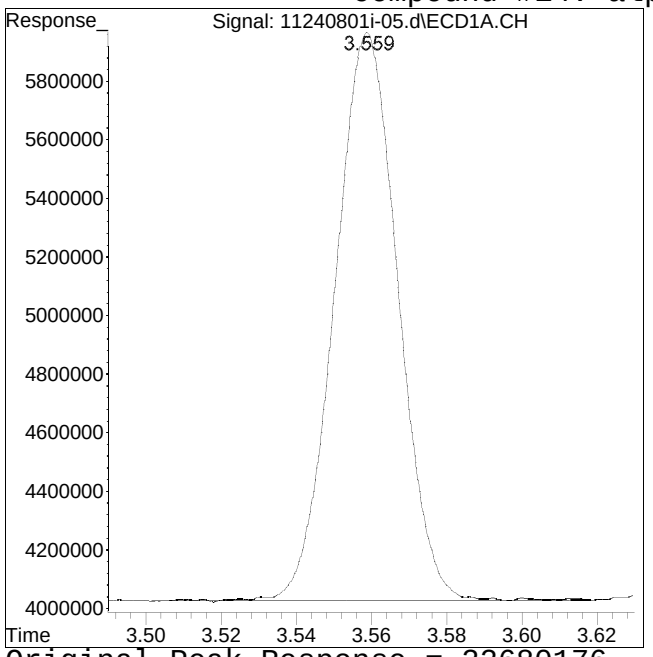




Original Peak Response = 21882615 Manual Peak Response = 21362303 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

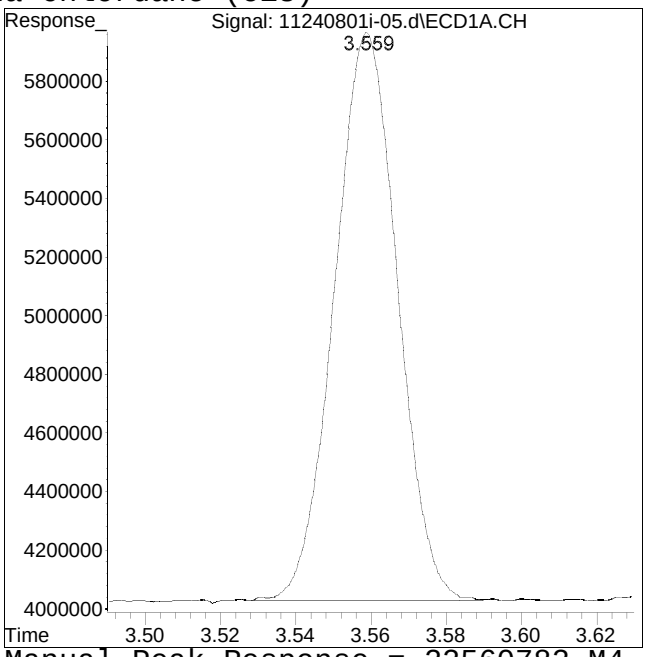
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #14: alpha-Chlordane (cis)




Original Peak Response = 22680176

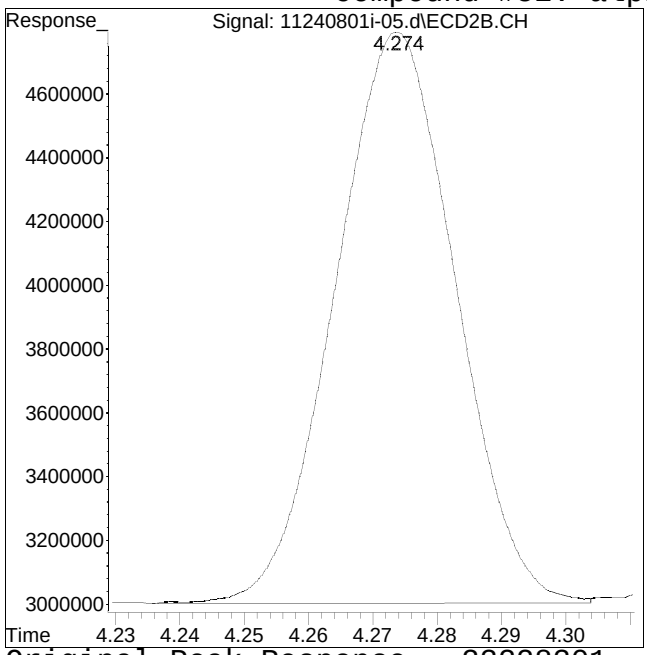



Manual Peak Response = 22560782 M4
M4 = Poor automated baseline construction.

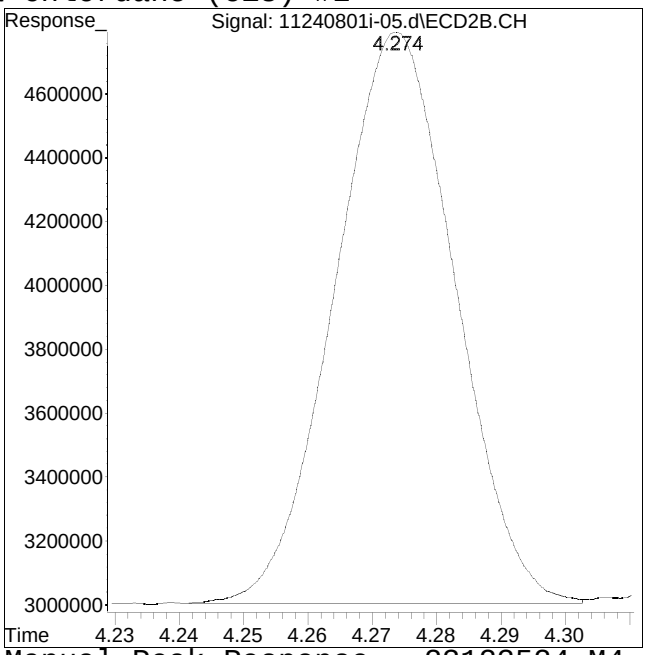
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 23228301



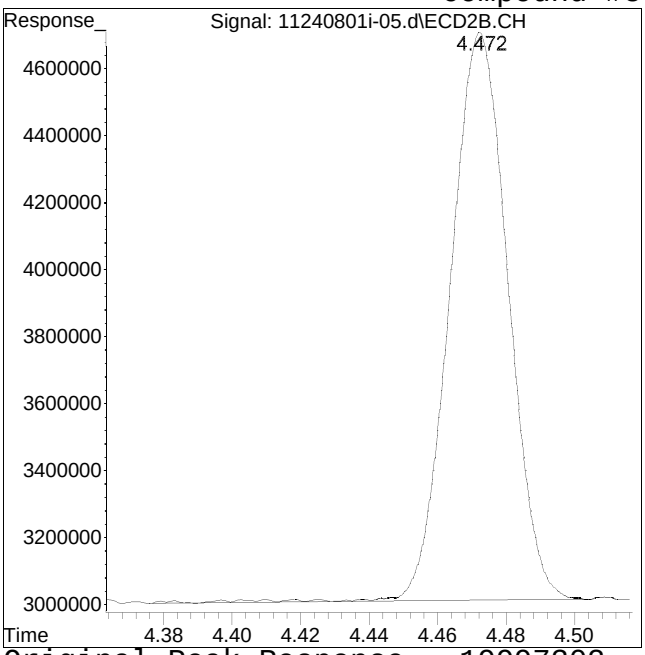

Manual Peak Response = 23123524 M4

M4 = Poor automated baseline construction.

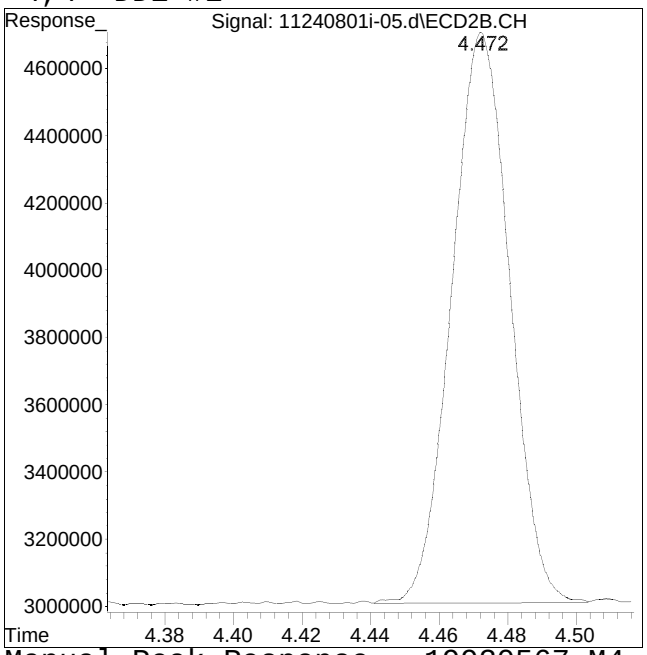
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 19997302

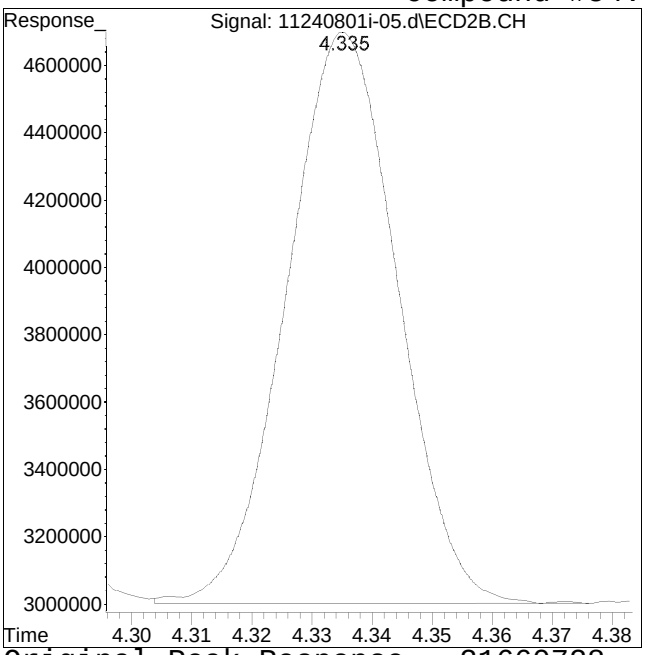



Manual Peak Response = 19930567 M4
M4 = Poor automated baseline construction.

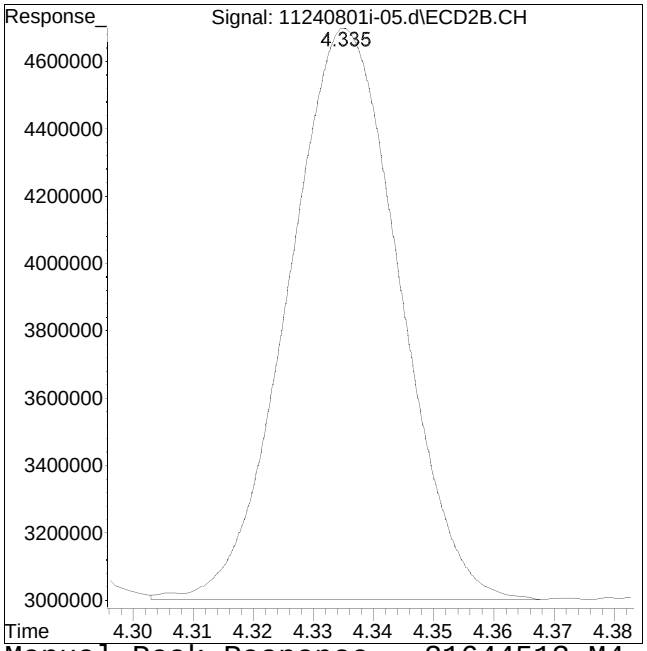
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #54: Endosulfan I #2




Original Peak Response = 21660728




Manual Peak Response = 21644513 M4

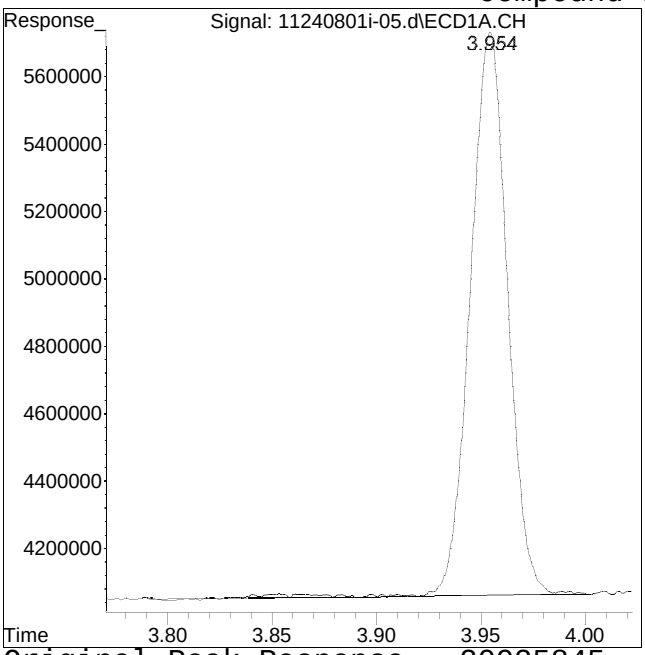
M4 = Poor automated baseline construction.

Manual Integration Report

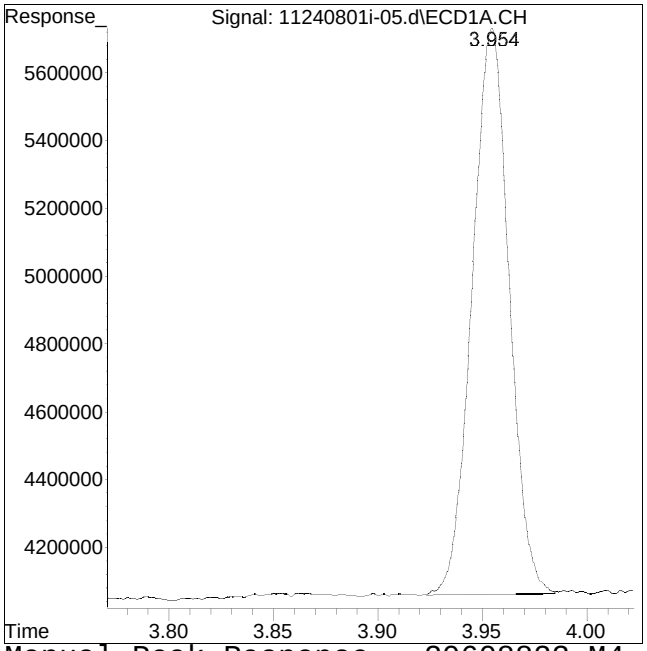
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #17: Dieldrin




Original Peak Response = 20925845




Manual Peak Response = 20608823 M4

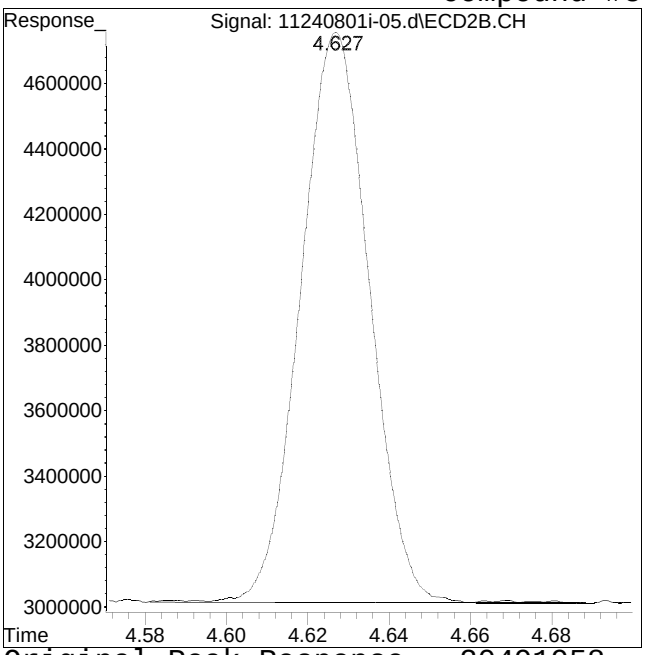
M4 = Poor automated baseline construction.

# Manual Integration Report

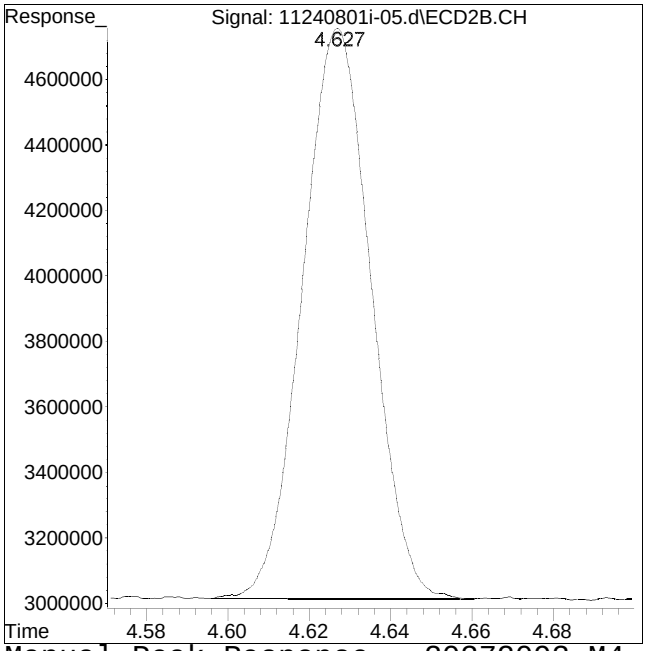
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #55: Dieldrin #2




Original Peak Response = 20491958




Manual Peak Response = 20372093 M4

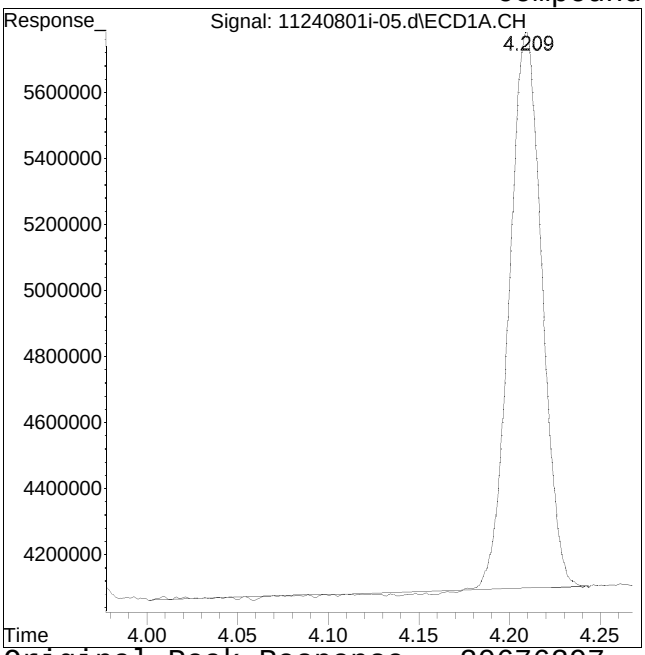
M4 = Poor automated baseline construction.

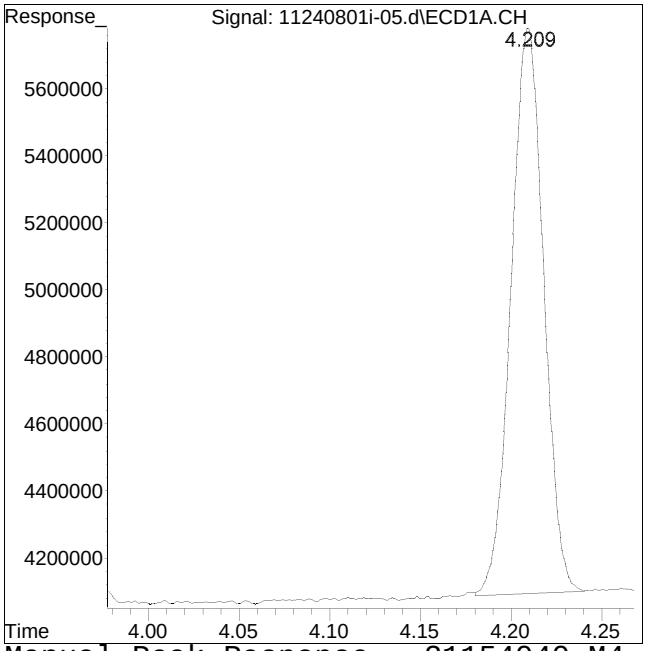
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #18: Endrin



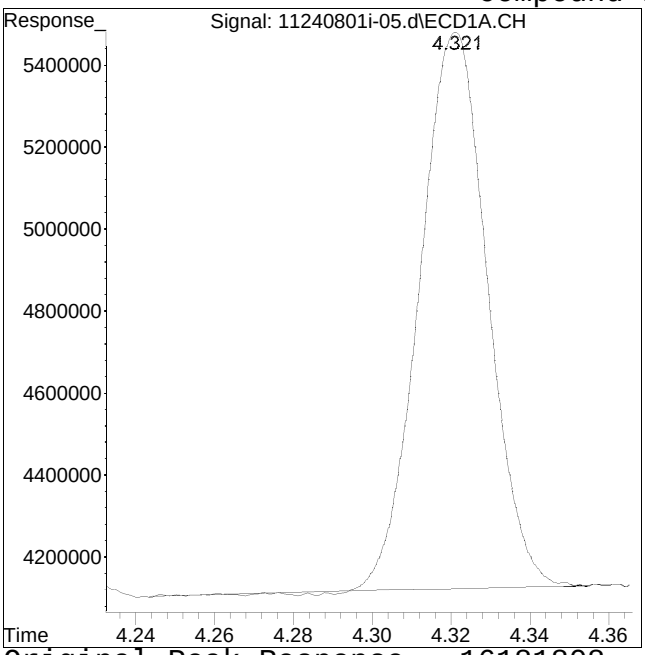

Original Peak Response = 20676297 Manual Peak Response = 21154040 M4
M4 = Poor automated baseline construction.

Manual Integration Report

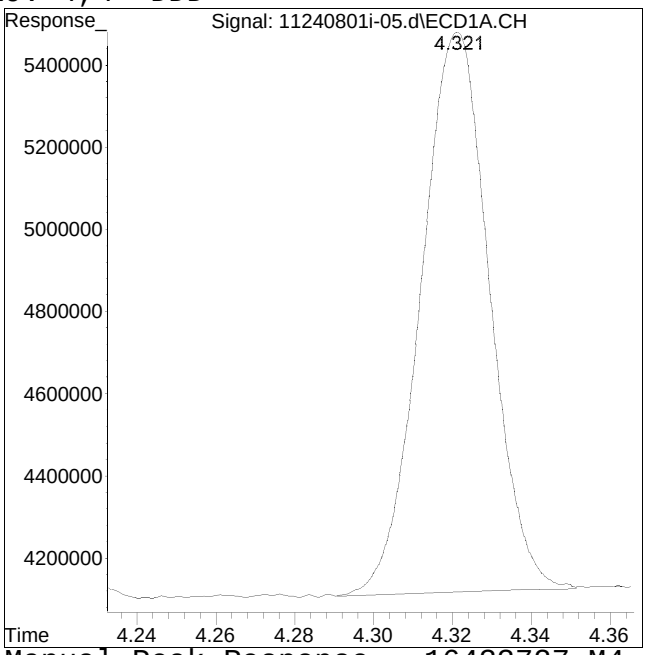
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #19: 4,4'-DDD




Original Peak Response = 16181808



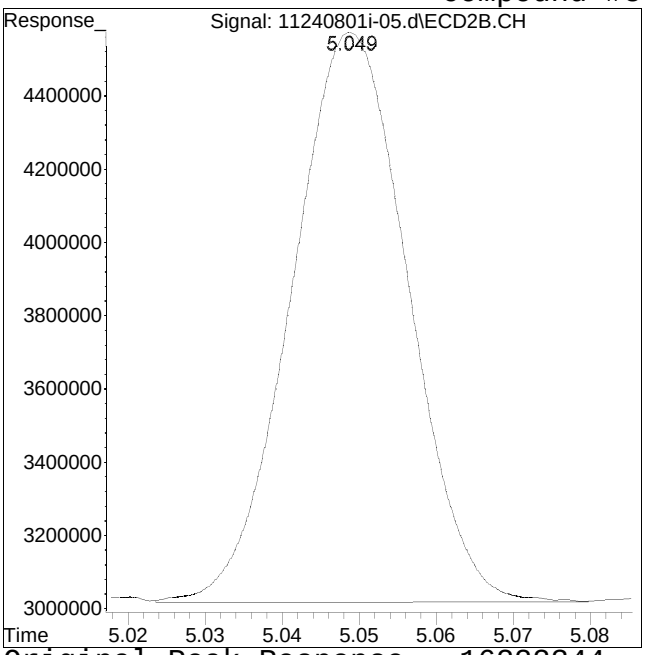

Manual Peak Response = 16433727 M4

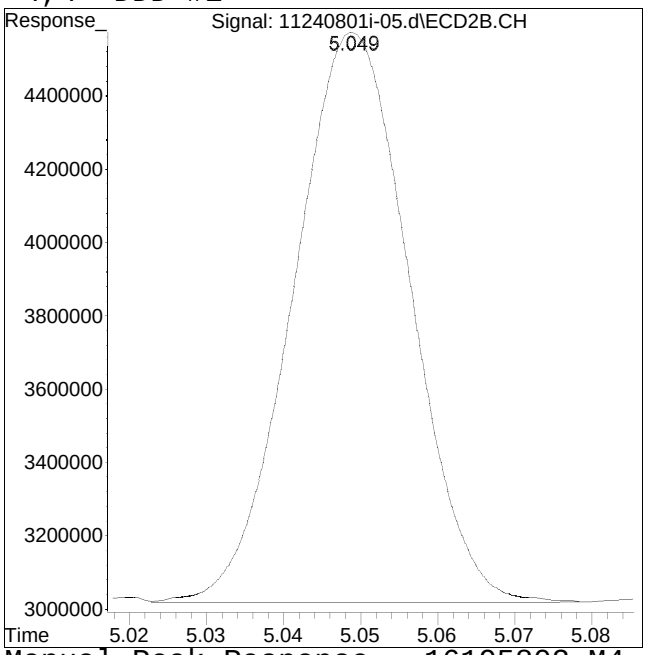
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #57: 4,4'-DDD #2



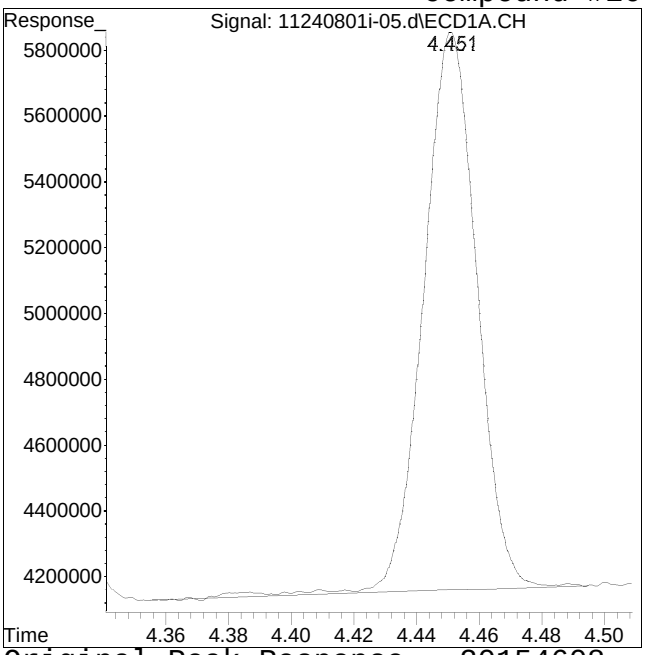

Original Peak Response = 16222344 Manual Peak Response = 16195802 M4
M4 = Poor automated baseline construction.

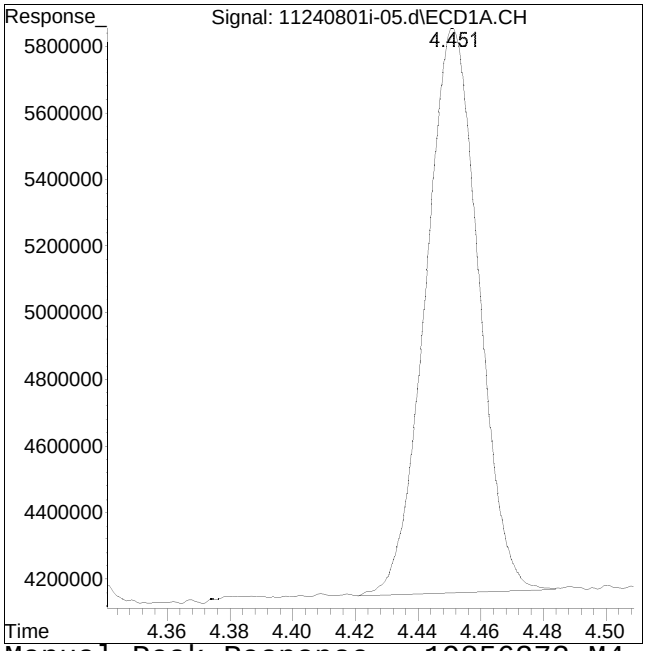
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #20: Endosulfan II



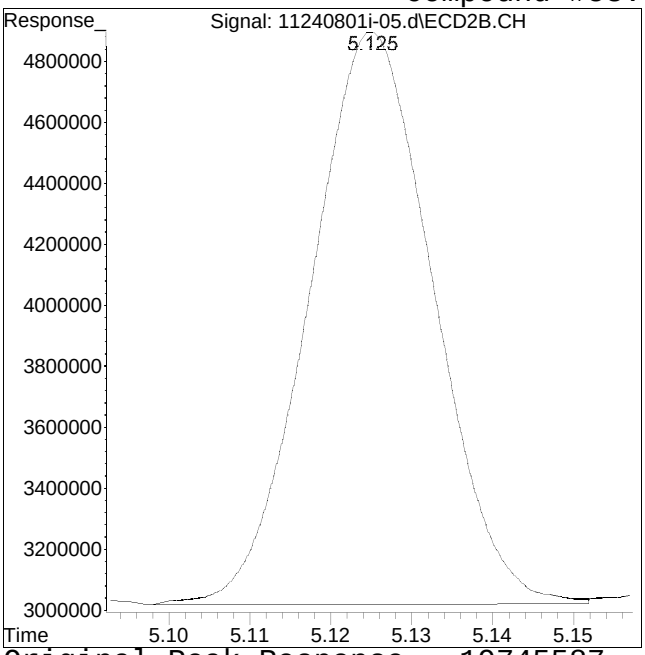




Original Peak Response = 20154608 Manual Peak Response = 19856372 M4
M4 = Poor automated baseline construction.

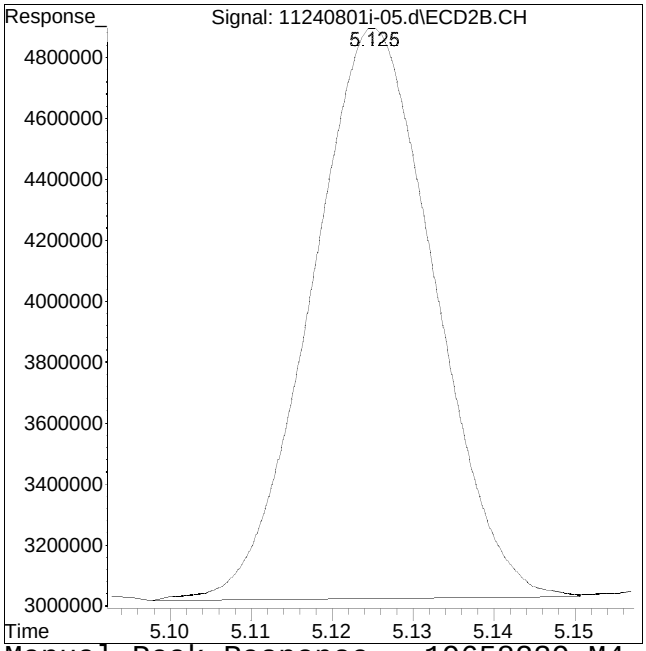
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #58: Endosulfan II #2




Original Peak Response = 19745587




Manual Peak Response = 19658239 M4

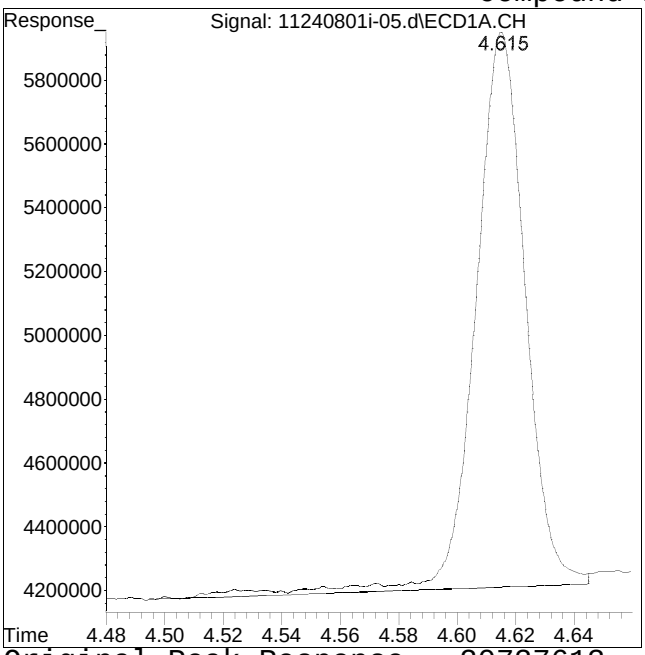
M4 = Poor automated baseline construction.

# Manual Integration Report

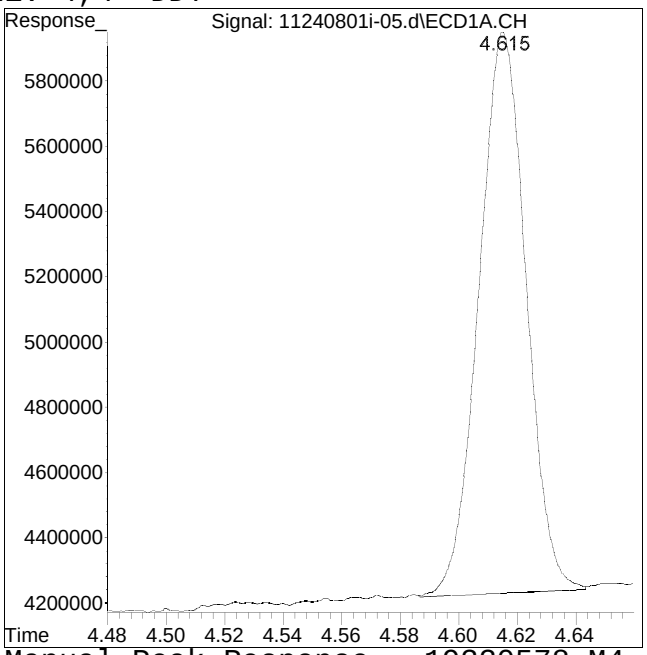
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #21: 4,4'-DDT




Original Peak Response = 20737613



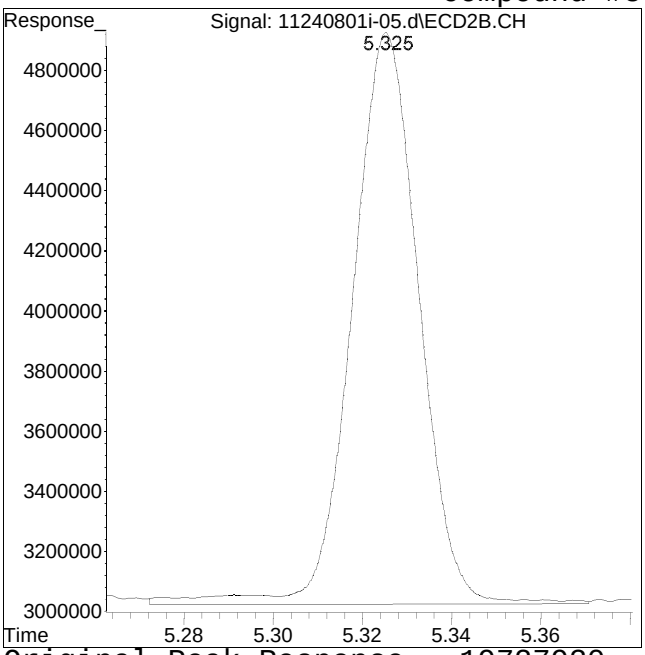

Manual Peak Response = 19330578 M4

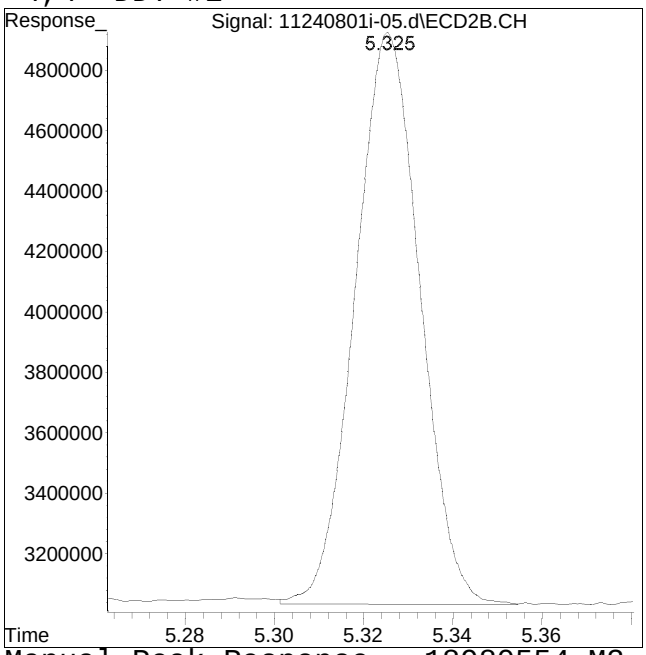
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #59: 4,4'-DDT #2



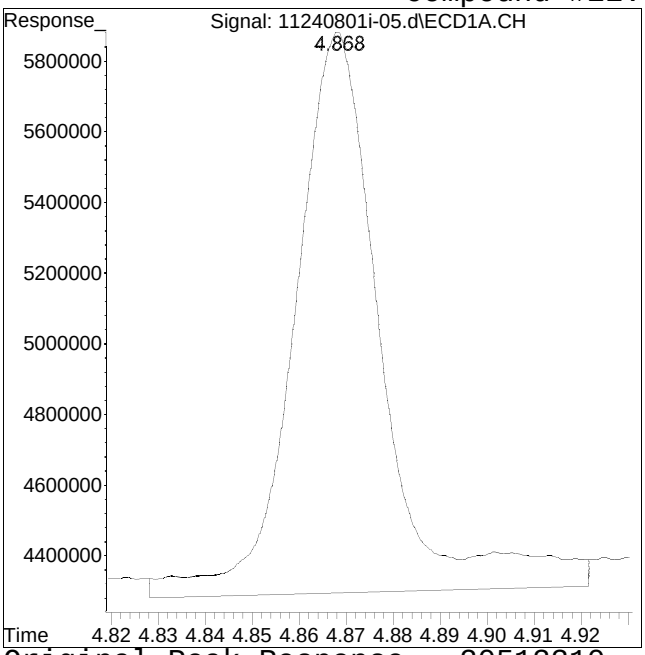

Original Peak Response = 19727930 Manual Peak Response = 18980554 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

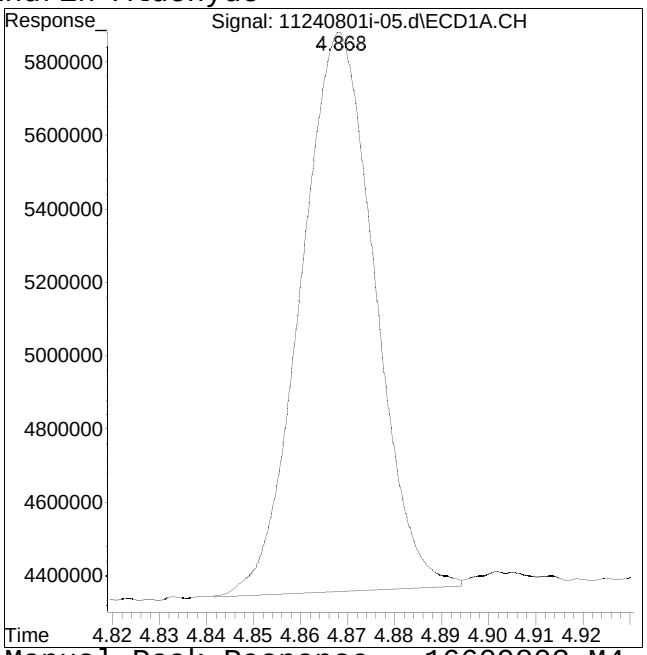
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #22: Endrin Aldehyde




Original Peak Response = 20513310




Manual Peak Response = 16609803 M4

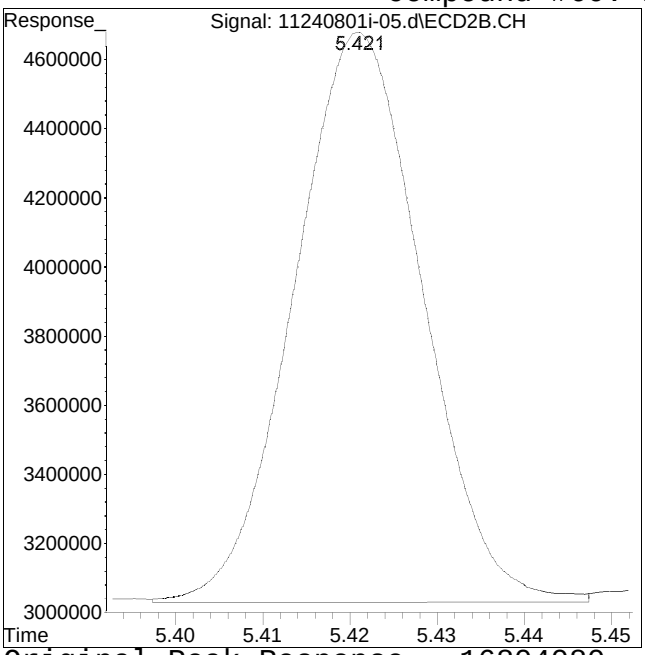
M4 = Poor automated baseline construction.

# Manual Integration Report

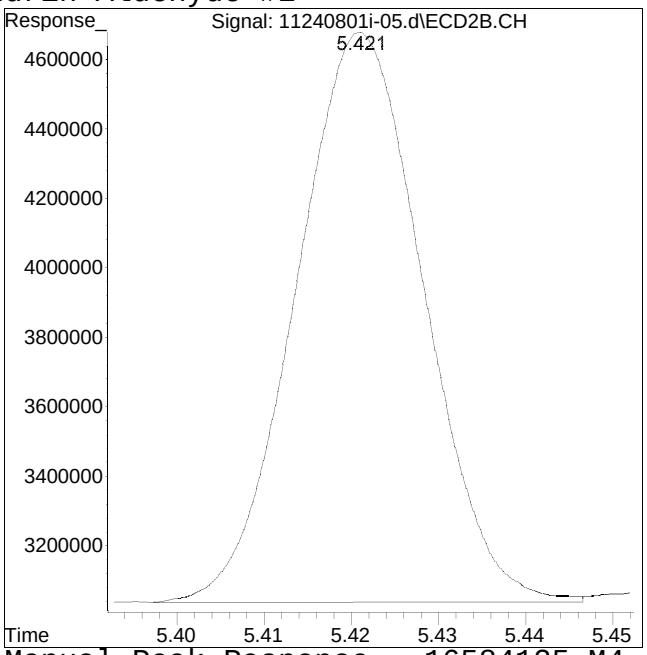
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #60: Endrin Aldehyde #2




Original Peak Response = 16804080




Manual Peak Response = 16584125 M4

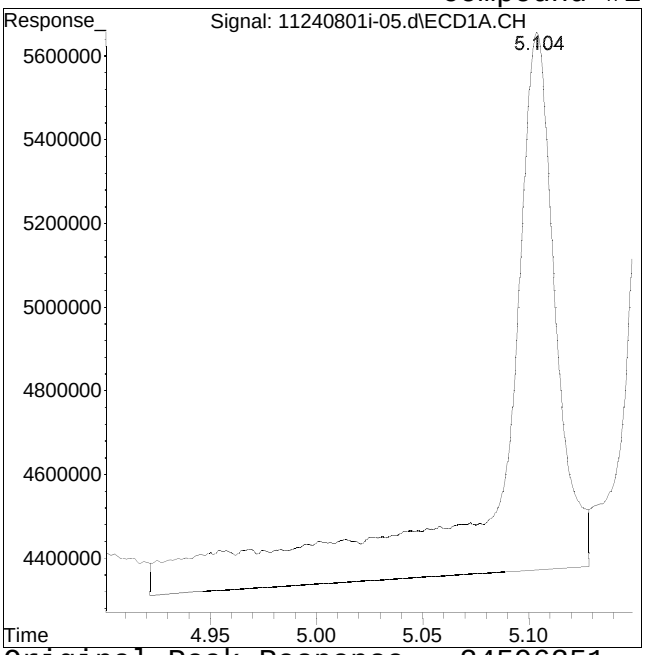
M4 = Poor automated baseline construction.

Manual Integration Report

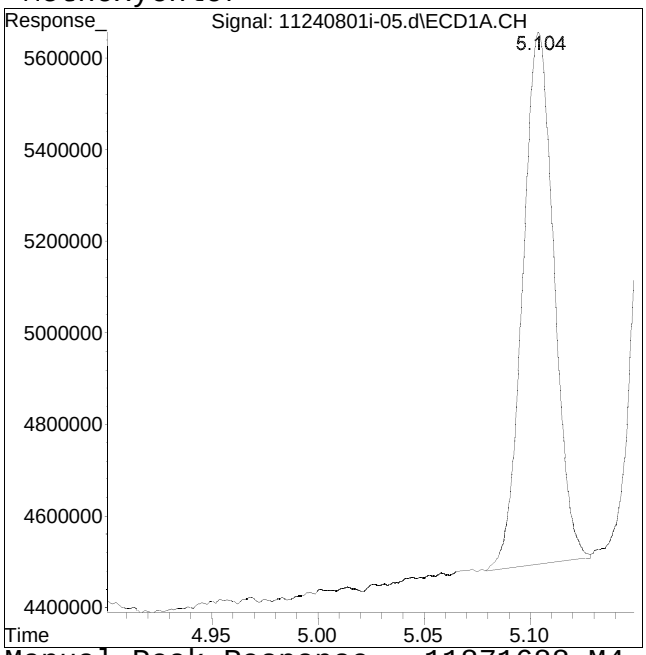
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #23: Methoxychlor




Original Peak Response = 24596251




Manual Peak Response = 11871688 M4

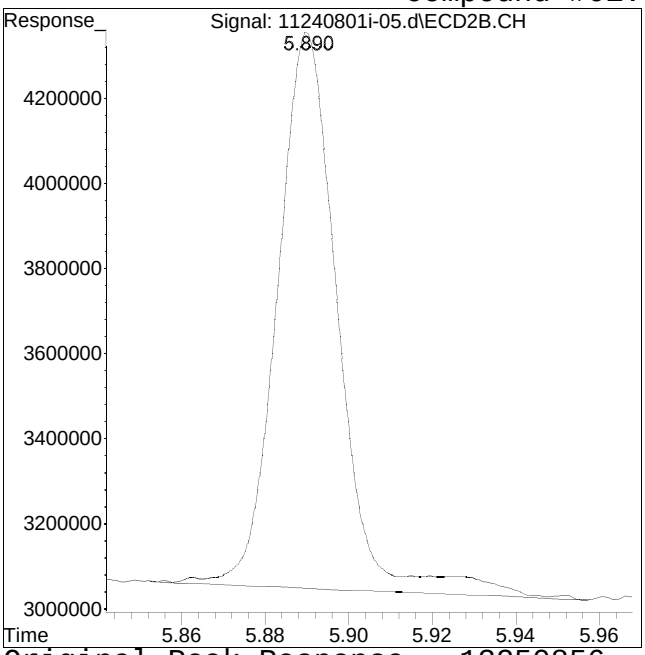
M4 = Poor automated baseline construction.

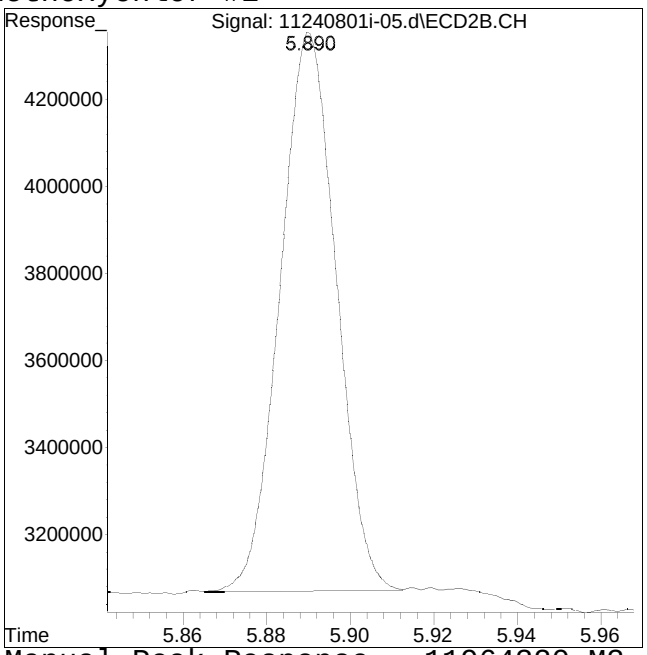
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #61: Methoxychlor #2




Original Peak Response = 13250856 Manual Peak Response = 11964320 M3

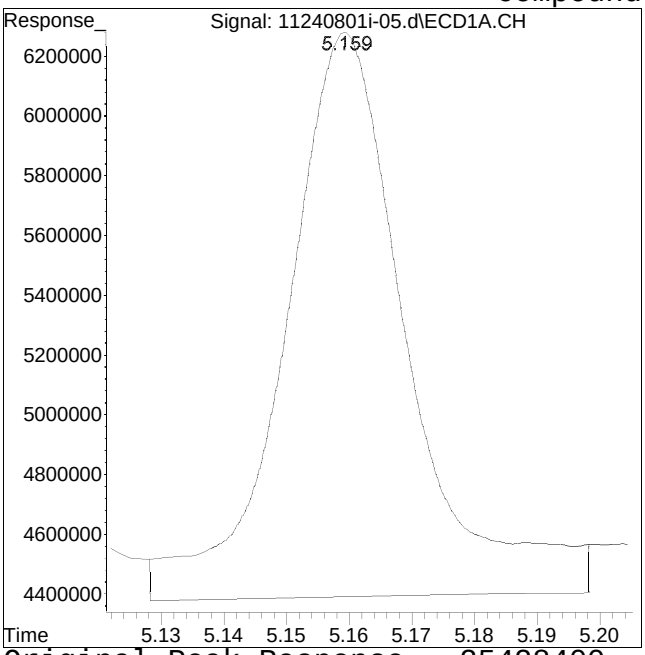
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

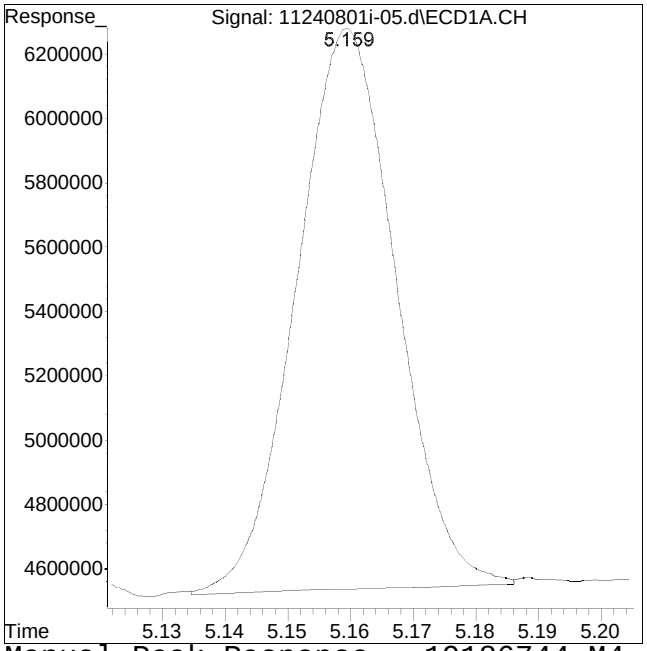
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #24: Mirex




Original Peak Response = 25428400




Manual Peak Response = 19186744 M4

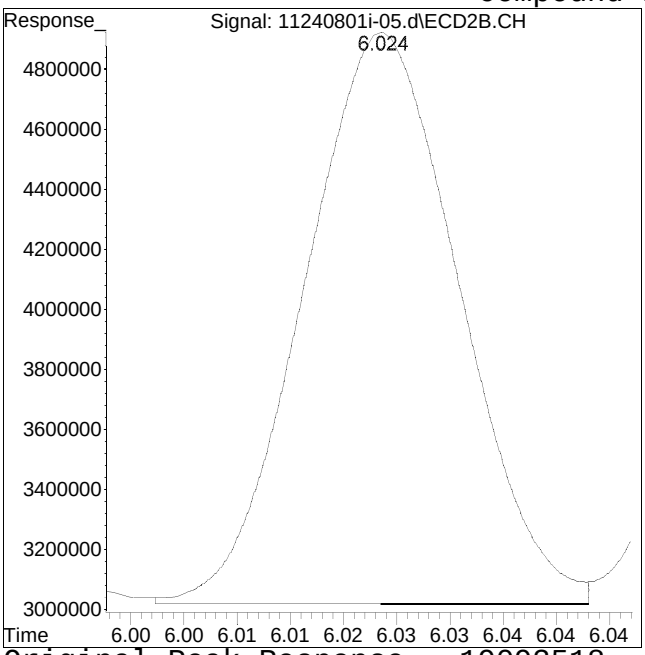
M4 = Poor automated baseline construction.

Manual Integration Report

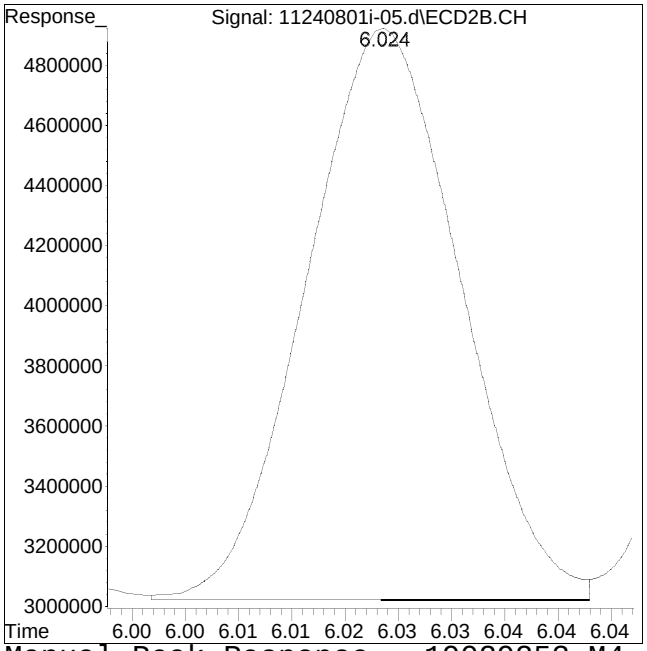
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #62: Mirex #2




Original Peak Response = 19093518



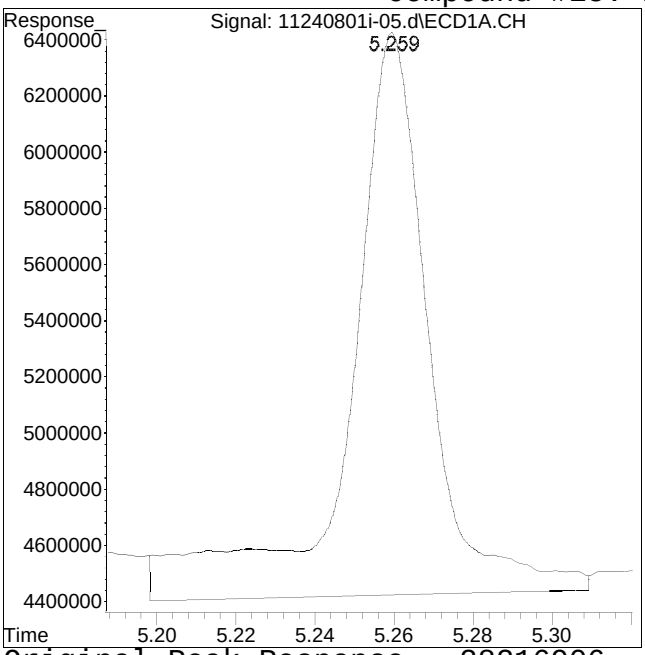

Manual Peak Response = 19029253 M4

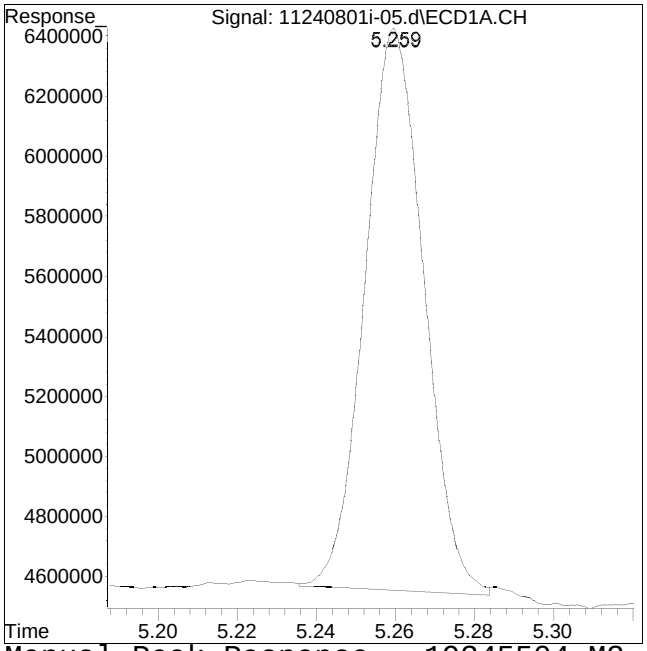
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #25: Endosulfan Sulfate



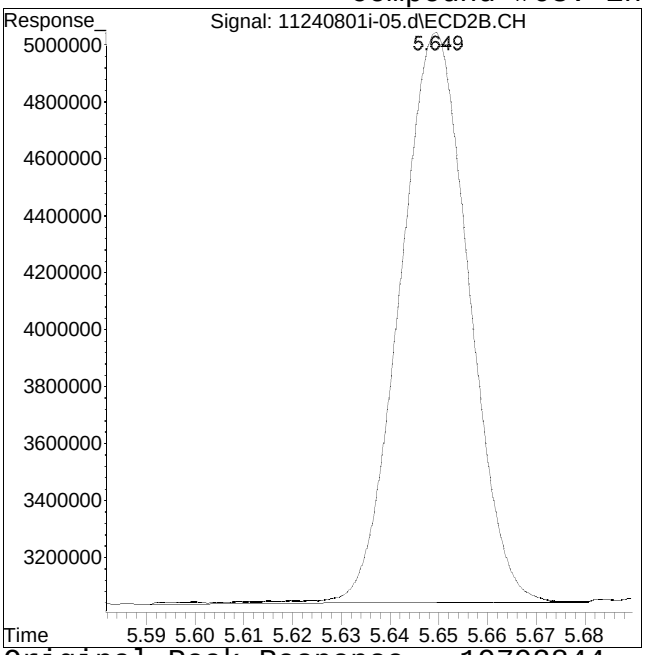

Original Peak Response = 28216906 Manual Peak Response = 19345504 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

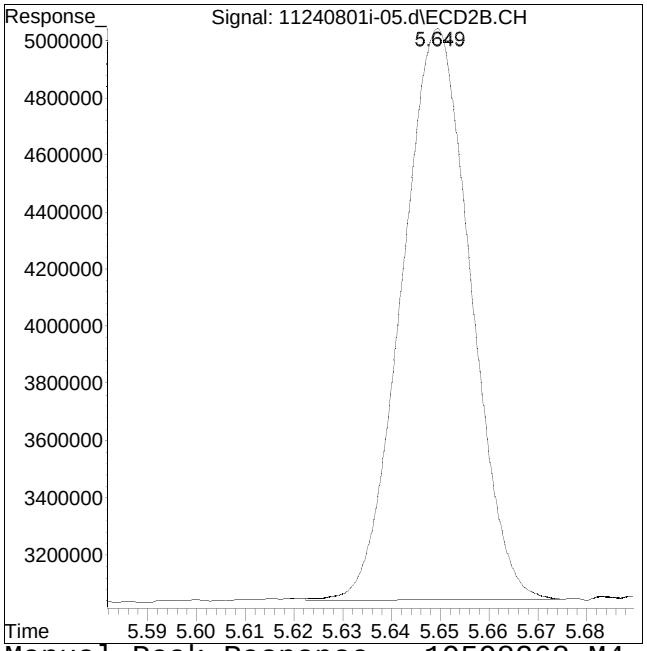
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 19792844




Manual Peak Response = 19598268 M4

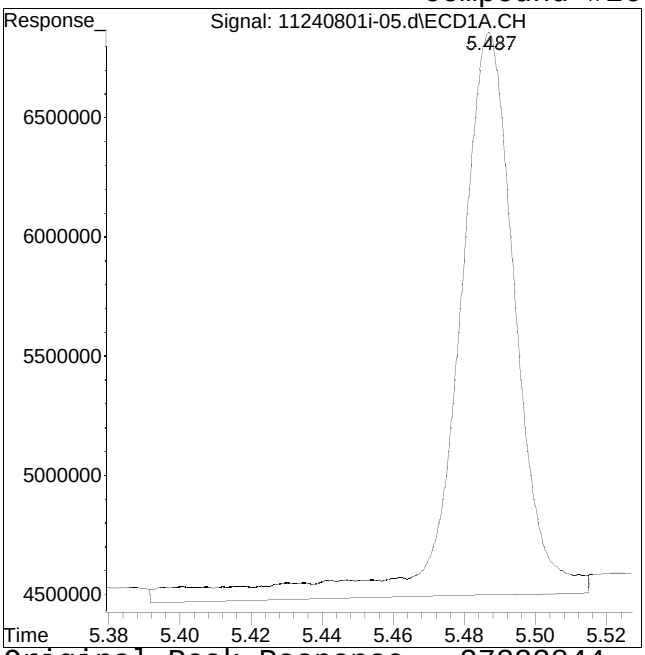
M4 = Poor automated baseline construction.

Manual Integration Report

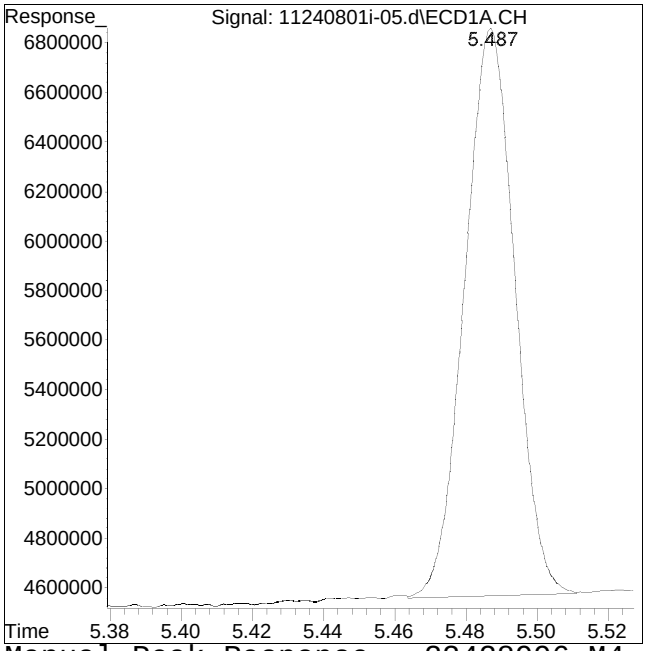
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #26: Endrin Ketone




Original Peak Response = 27333844



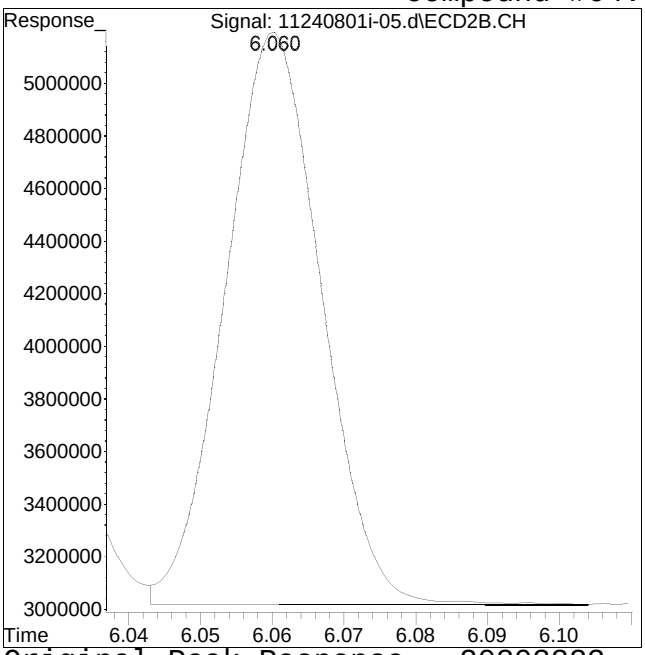

Manual Peak Response = 22428996 M4

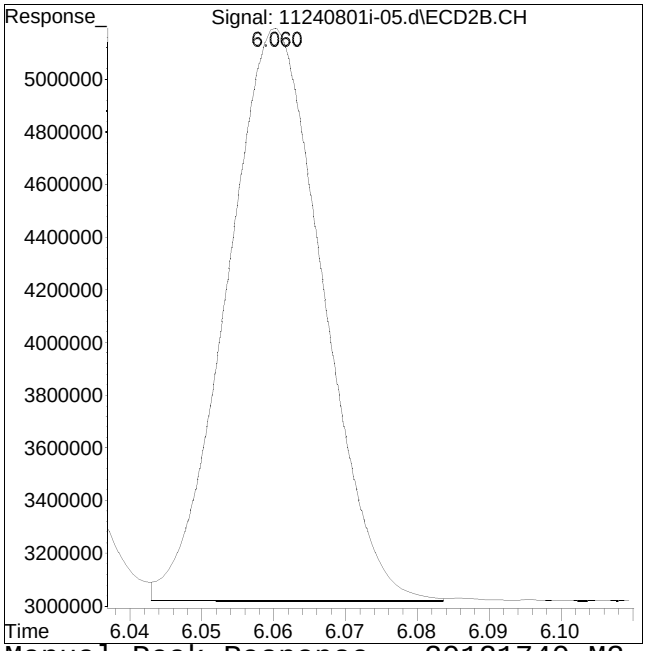
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-05.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:01 Instrument : Pest 11
Sample : il3pest,42e,,pp 11685 L0.0Quant Date : 8/2/2024 11:14 am

Compound #64: Endrin Ketone #2



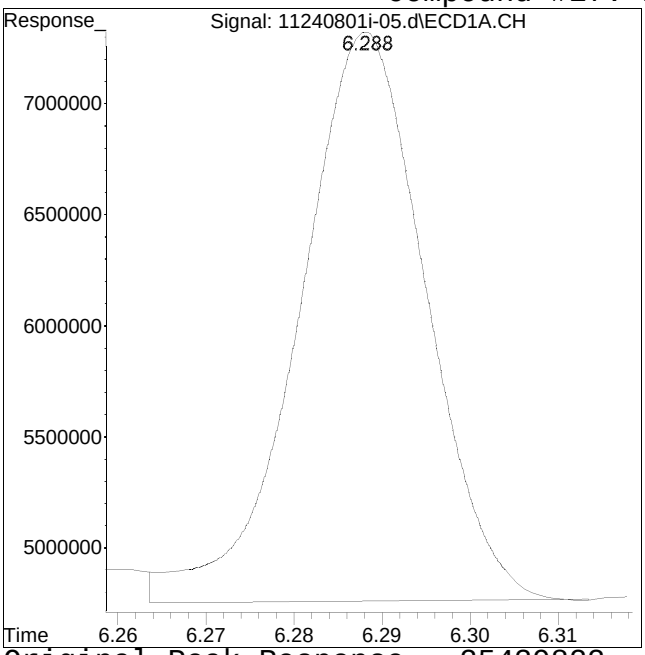

Original Peak Response = 20303223 Manual Peak Response = 20121740 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

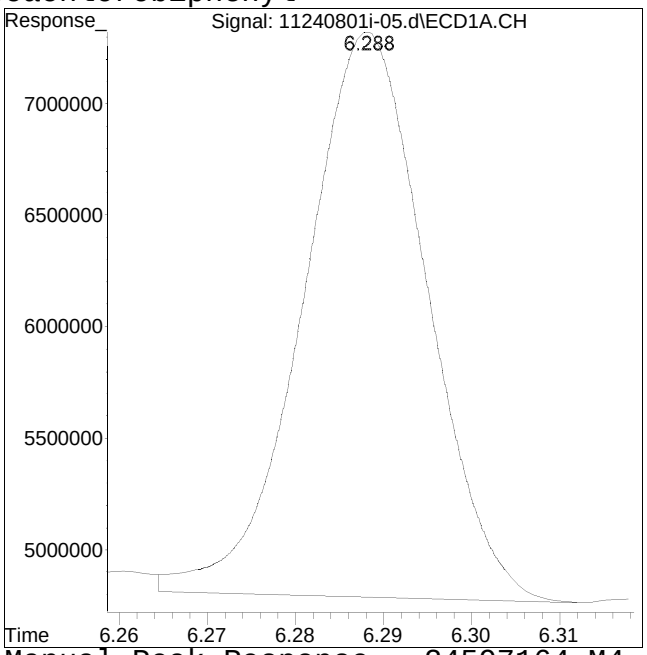
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

## Compound #27: Decachlorobiphenyl




Original Peak Response = 25439822




Manual Peak Response = 24597164 M4

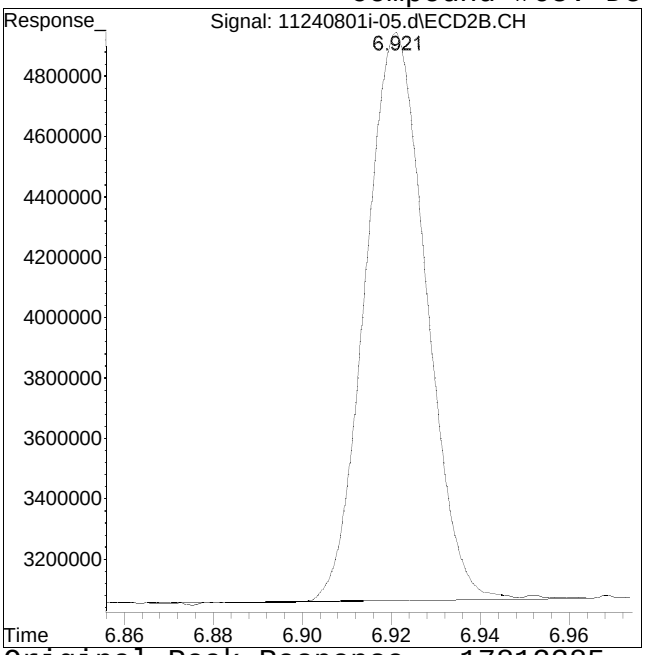
M4 = Poor automated baseline construction.

Manual Integration Report

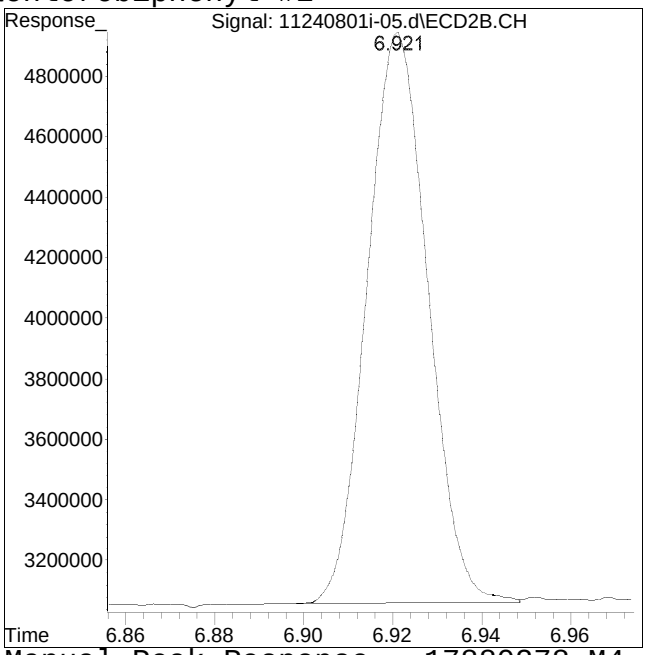
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-05.d
Date Inj'd : 8/1/2024 19:01
Sample : il3pest,42e,,pp 11685 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:14 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 17812385




Manual Peak Response = 17880278 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:13
Operator : PEST11:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:00:58 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:00:35 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.385 | 225.3E6 | 182.6E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 29080990 | 25002980 | 3.146M4 | 3.174M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 6.29%# | 6.35%# |
| 27) s | Decachlorobi | 6.288 | 6.920 | 35723670 | 25963491 | 3.673M3 | 3.623 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 7.35%# | 7.25%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.177 | 41044675 | 28990626 | 3.378M4 | 3.407M4 |
| 4) t | alpha-BHC | 1.963 | 2.270 | 37177271 | 33446228 | 2.704M4 | 2.766M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 36664929 | 32438962 | 2.866 | 2.938M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 18018371 | 17068674 | 3.280M4 | 3.539M4 |
| 7) t | delta-BHC | 2.349 | 2.889 | 35236787 | 32007816 | 2.741M4 | 2.855M4 |
| 8) t | Heptachlor | 2.513 | 2.951 | 36683442 | 36318635 | 3.092M4 | 3.237M4 |
| 9) t | Aldrin | 2.755 | 3.270 | 33013771 | 31469739 | 2.925M3 | 3.041M4 |
| 10) t | Alachlor | 2.876 | 3.153 | 6704352 | 6156990 | 3.330M4 | 3.985M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 18438577 | 22860352 | 3.688M4 | 3.962M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:13
Operator : PEST11:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:00:58 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:00:35 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.884 | 33482006 | 33318329 | 3.165M3 | 3.371 |
| 13) | t | gamma-Chlord | 3.424 | 4.104 | 29652579 | 30160649 | 3.062M3 | 3.308M4 |
| 14) | t | alpha-Chlord | 3.558 | 4.274 | 33742908 | 33326776 | 3.077M4 | 3.307M4 |
| 15) | t | 4,4'-DDE | 3.656 | 4.472 | 32070400 | 29145586 | 2.927M4 | 2.985M4 |
| 16) | t | Endosulfan I | 3.695 | 4.335 | 31252215 | 31096714 | 3.125 | 3.370M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 30771717 | 29641213 | 2.966M4 | 3.125M4 |
| 18) | t | Endrin | 4.209 | 4.925 | 31764584 | 30138830 | 3.033M4 | 3.136M4 |
| 19) | t | 4,4'-DDD | 4.321 | 5.049 | 24810460 | 23764919 | 2.902M4 | 3.027M3 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 29573503 | 28438999 | 3.135M4 | 3.375M4 |
| 21) | t | 4,4'-DDT | 4.614 | 5.325 | 28950153 | 27857323 | 2.987M4 | 3.095M4 |
| 22) | t | Endrin Aldeh | 4.867 | 5.420 | 24805991 | 23963315 | 3.136M3 | 3.415M4 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 18239522 | 17467129 | 3.612M4 | 3.699M4 |
| 24) | t | Mirex | 5.159 | 6.023 | 28822274 | 27405414 | 3.547M3 | 3.862M4 |
| 25) | t | Endosulfan S | 5.259 | 5.649 | 28795336 | 28540412 | 3.247M3 | 3.461 |
| 26) | t | Endrin Keton | 5.486 | 6.060 | 33725466 | 29365808 | 3.191M4 | 3.323M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:13
Operator : PEST11:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:00:58 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:00:35 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

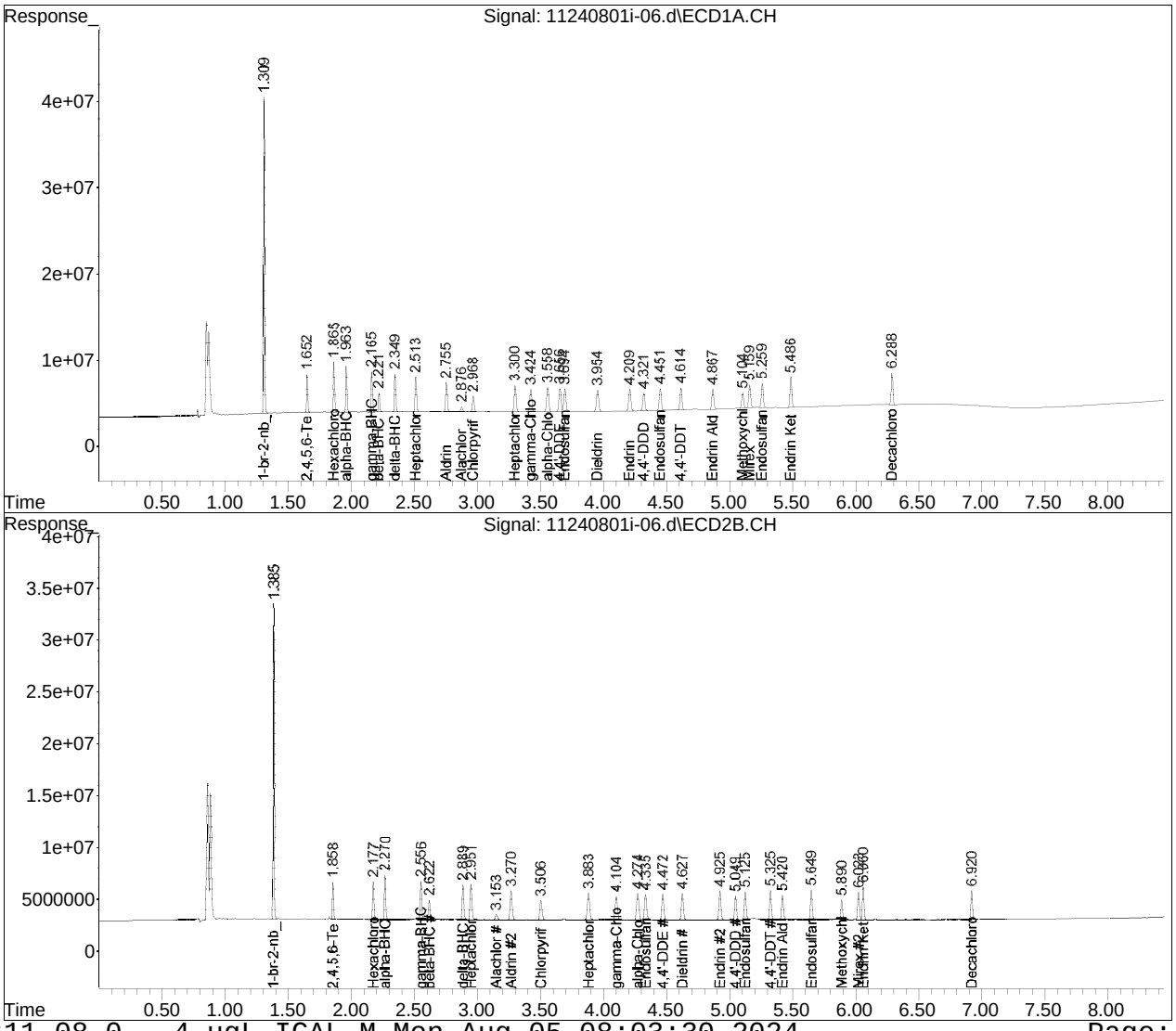
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-06.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  19:13
Operator : PEST11:ejl
Sample : il4pest,42e,,pp 11684 L0.003
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:00:58 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:00:35 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

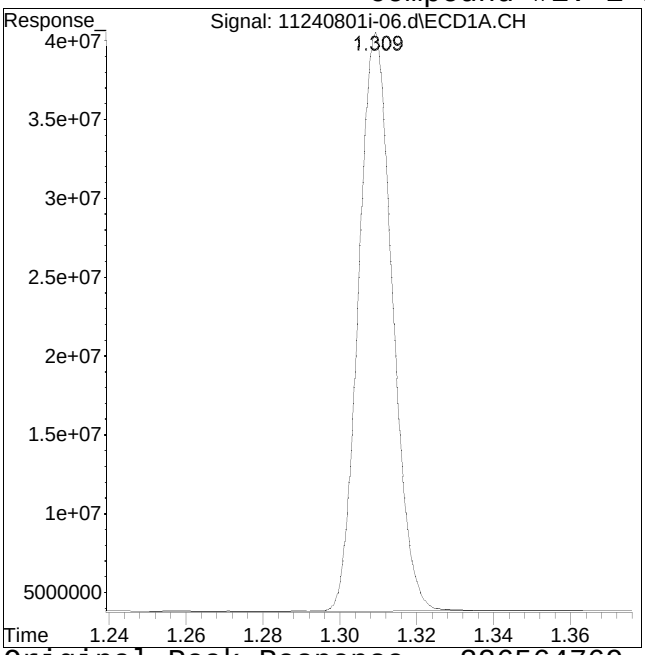
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

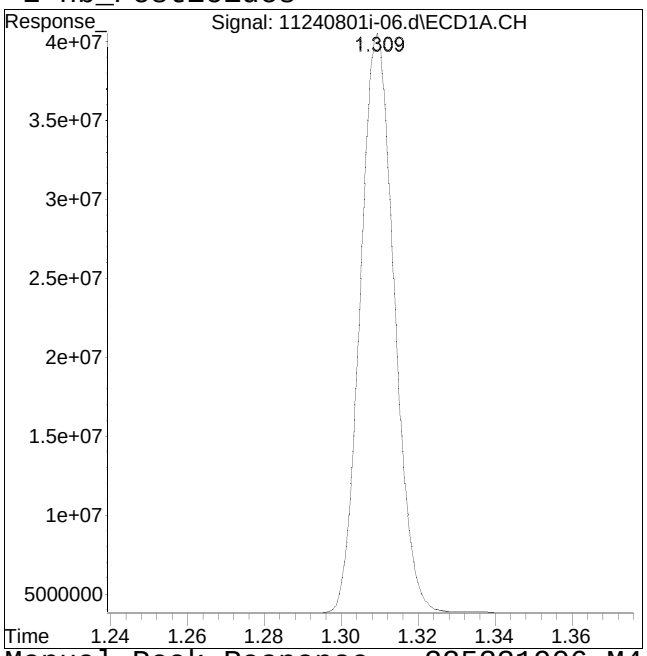


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #1: 1-br-2-nb_Pesticides



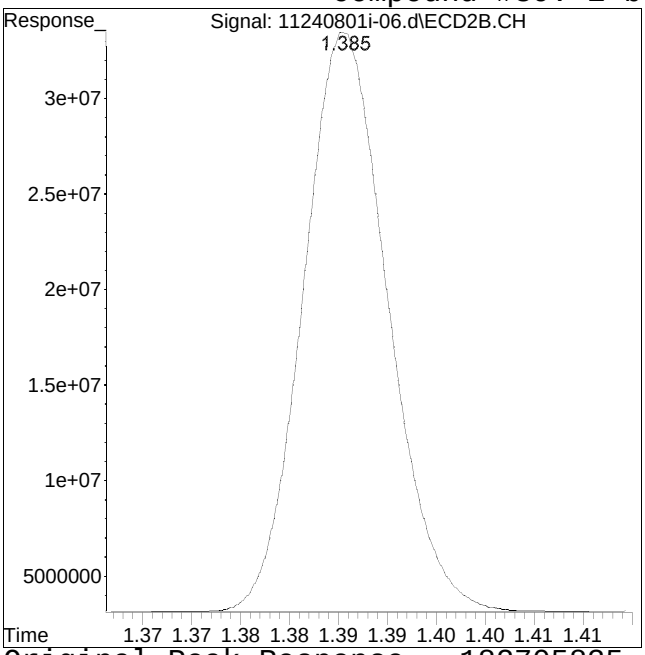

Original Peak Response = 226564769 Manual Peak Response = 225331906 M4
M4 = Poor automated baseline construction.

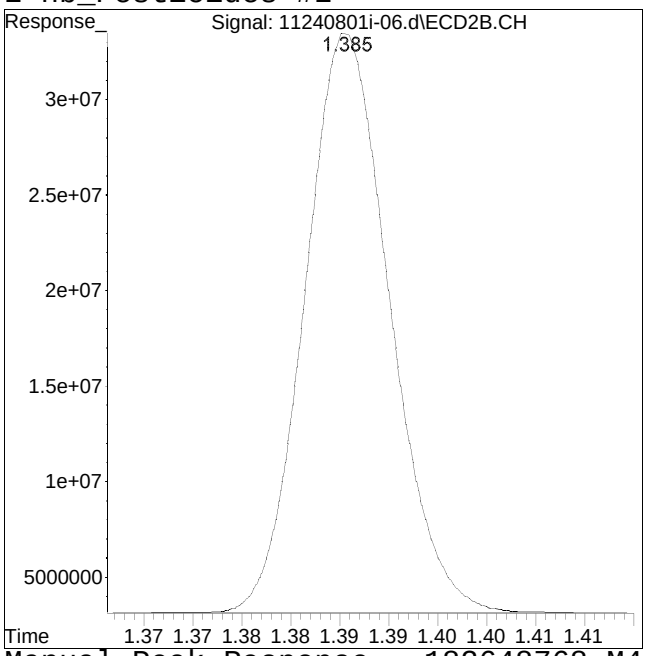
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #39: 1-br-2-nb_Pesticides #2



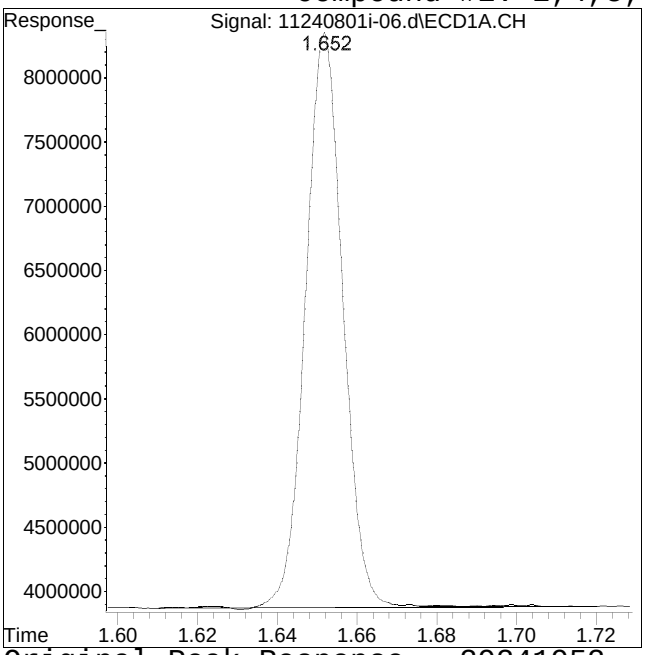



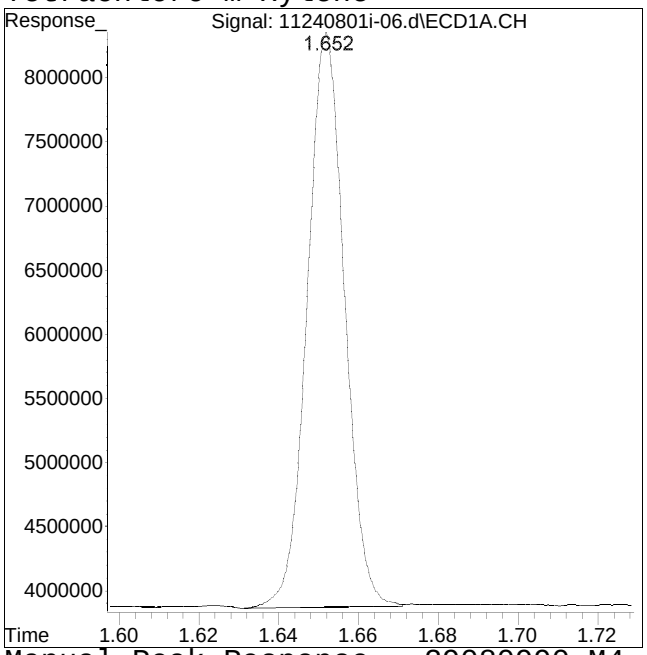

Original Peak Response = 182705835 Manual Peak Response = 182648768 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



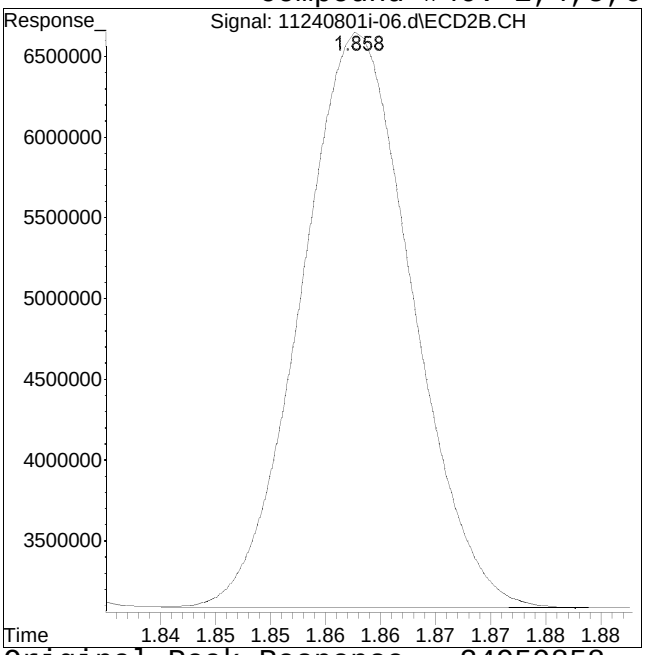

Original Peak Response = 29241952 Manual Peak Response = 29080990 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

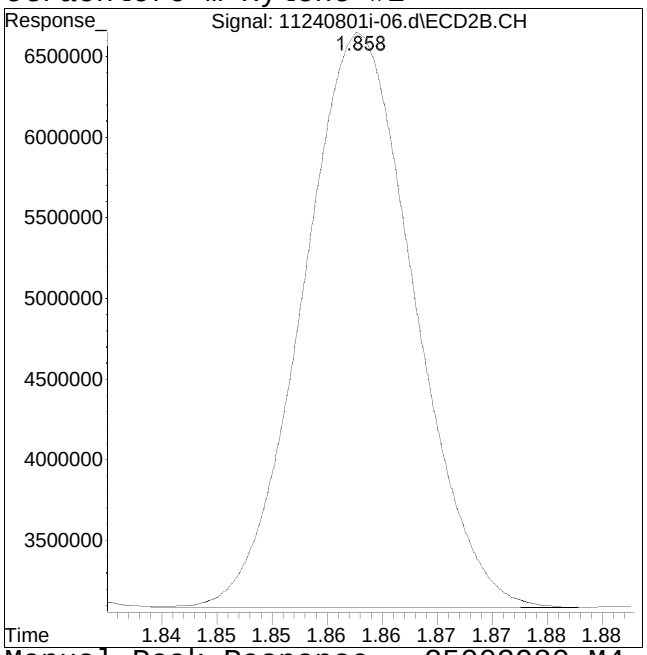
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 24959858



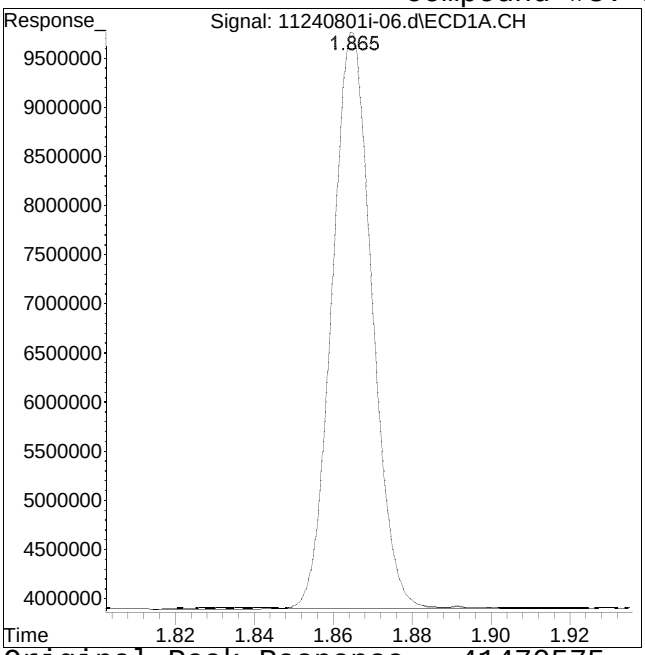

Manual Peak Response = 25002980 M4

M4 = Poor automated baseline construction.

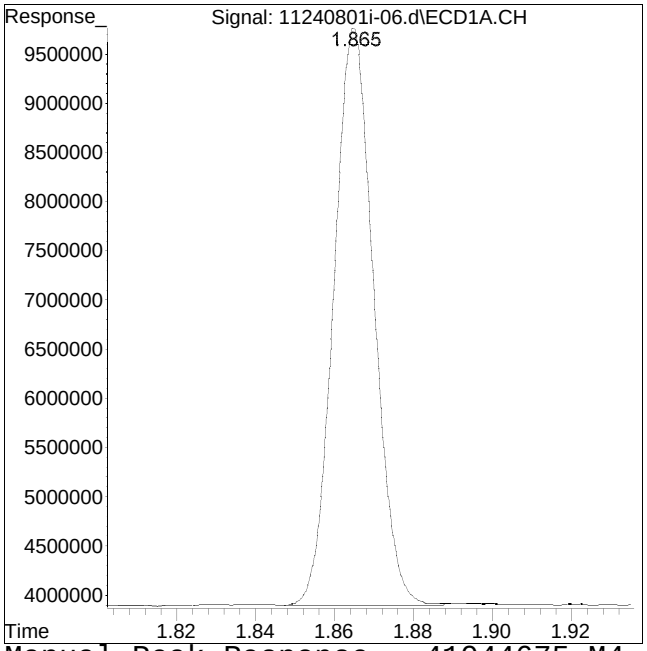
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #3: Hexachlorobenzene




Original Peak Response = 41470575



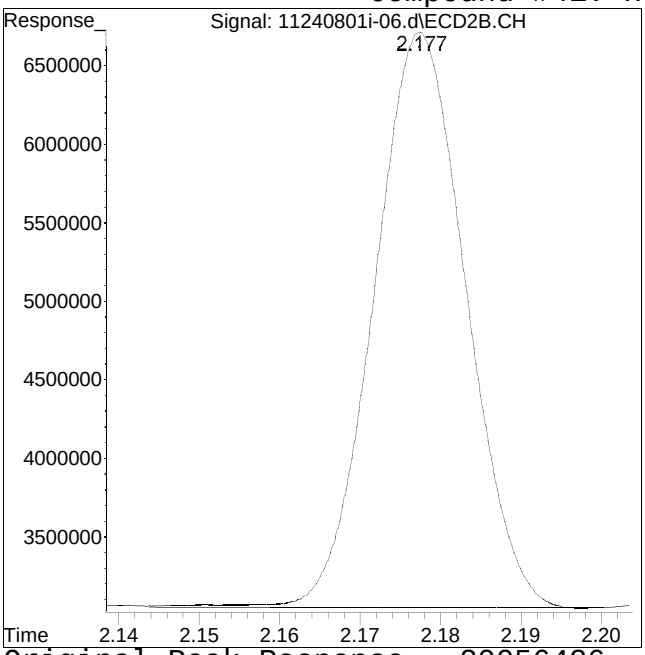

Manual Peak Response = 41044675 M4

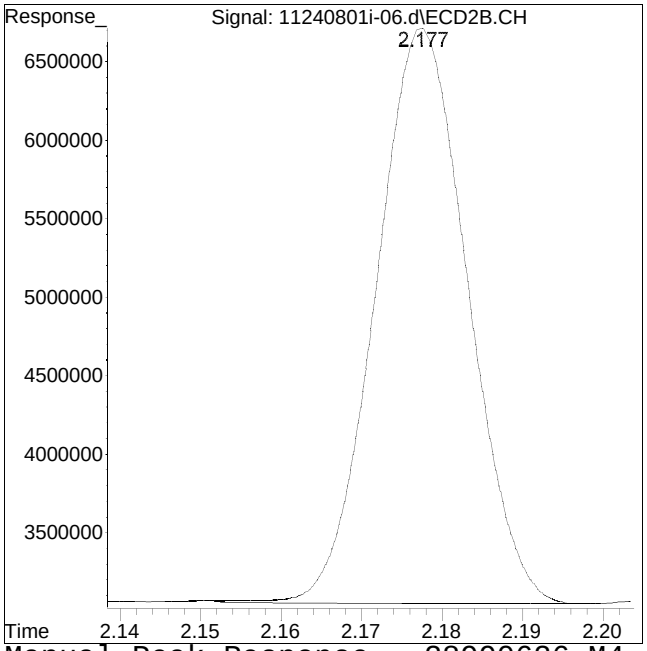
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #41: Hexachlorobenzene #2



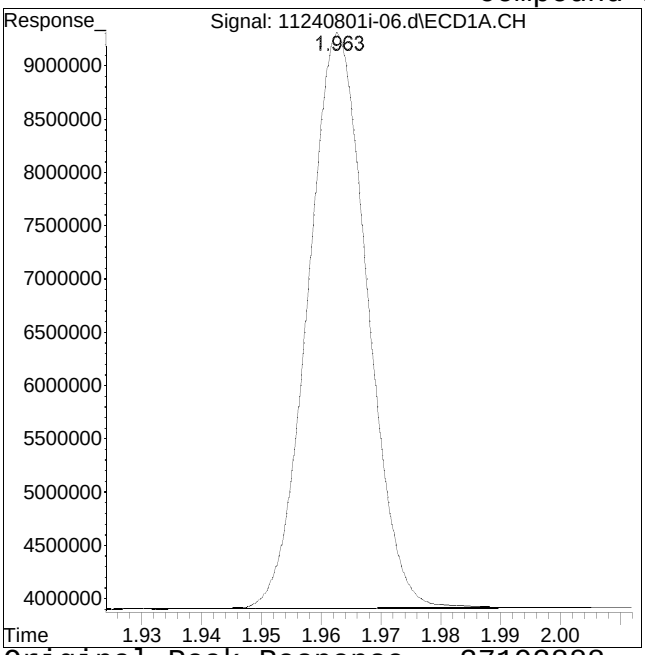



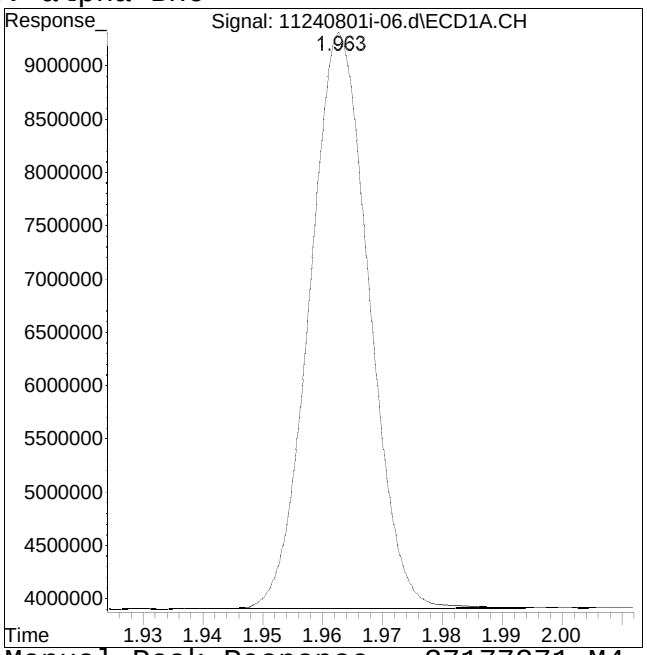

Original Peak Response = 29056426 Manual Peak Response = 28990626 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #4: alpha-BHC



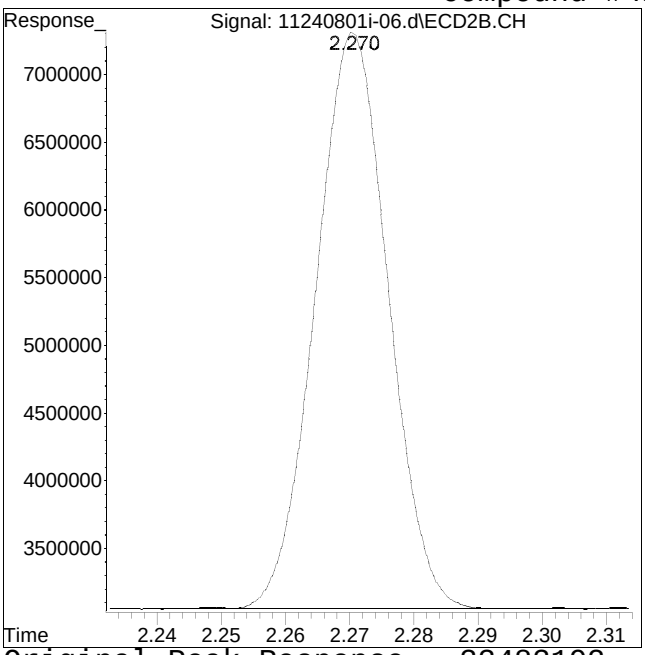




Original Peak Response = 37193888 Manual Peak Response = 37177271 M4
M4 = Poor automated baseline construction.

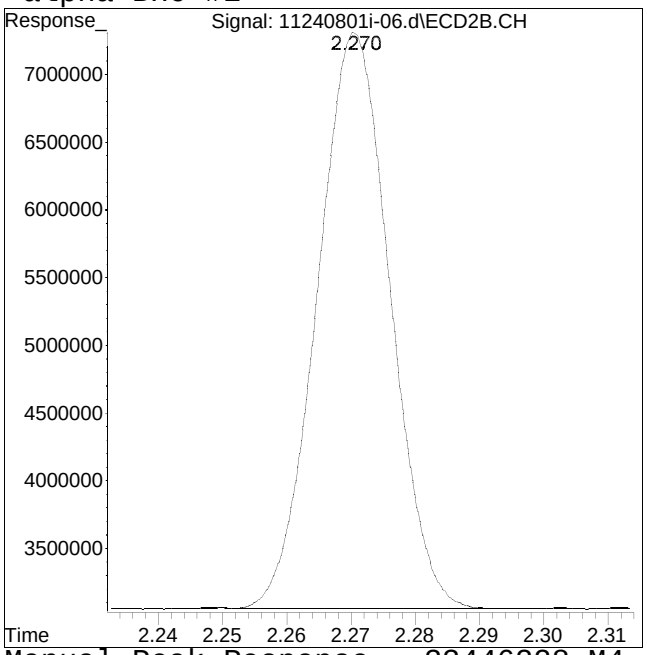
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #42: alpha-BHC #2




Original Peak Response = 33483192



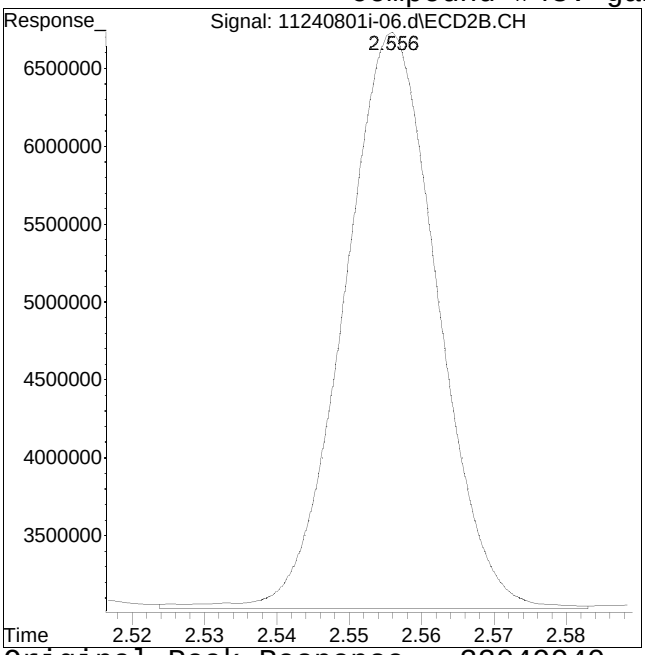

Manual Peak Response = 33446228 M4

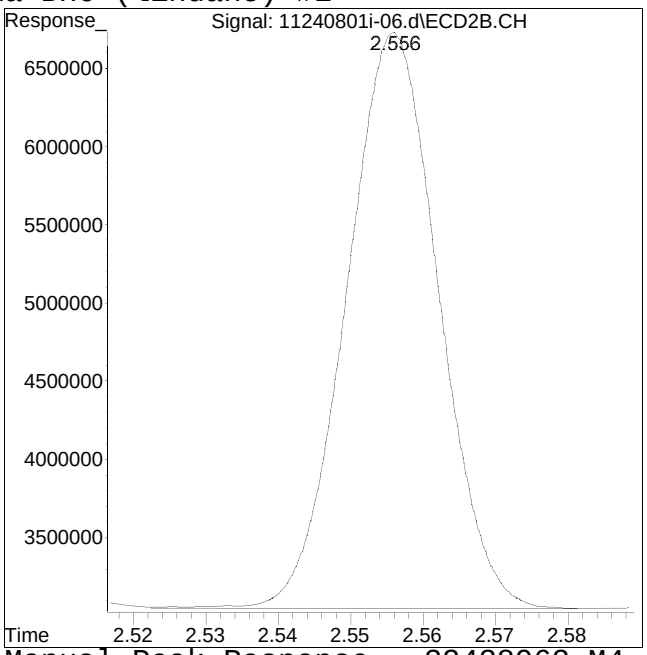
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #43: gamma-BHC (lindane) #2



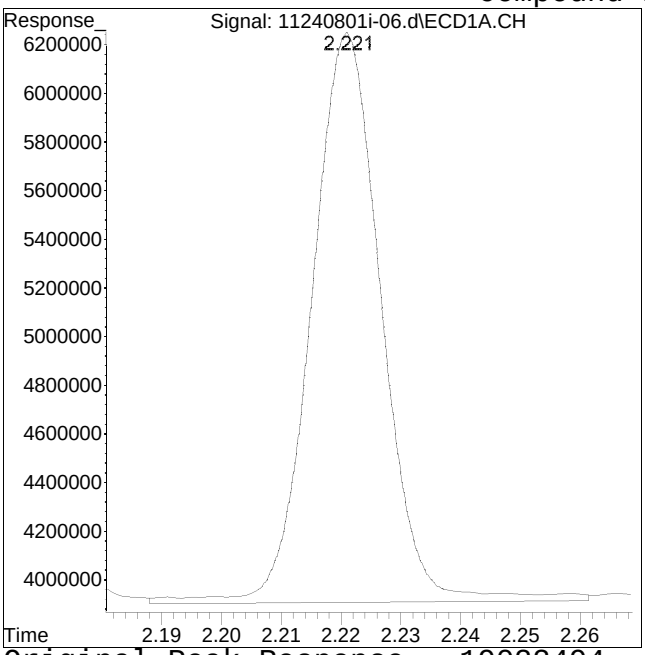




Original Peak Response = 33049940 Manual Peak Response = 32438962 M4
M4 = Poor automated baseline construction.

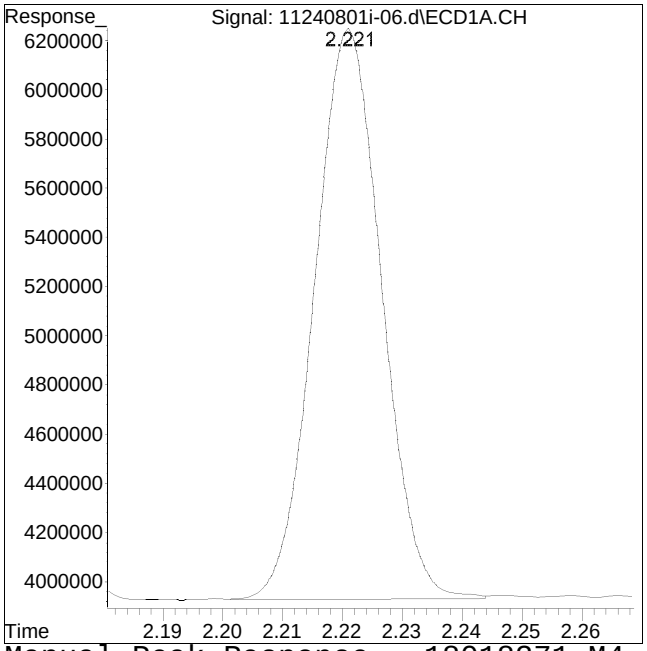
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #6: beta-BHC




Original Peak Response = 19022494



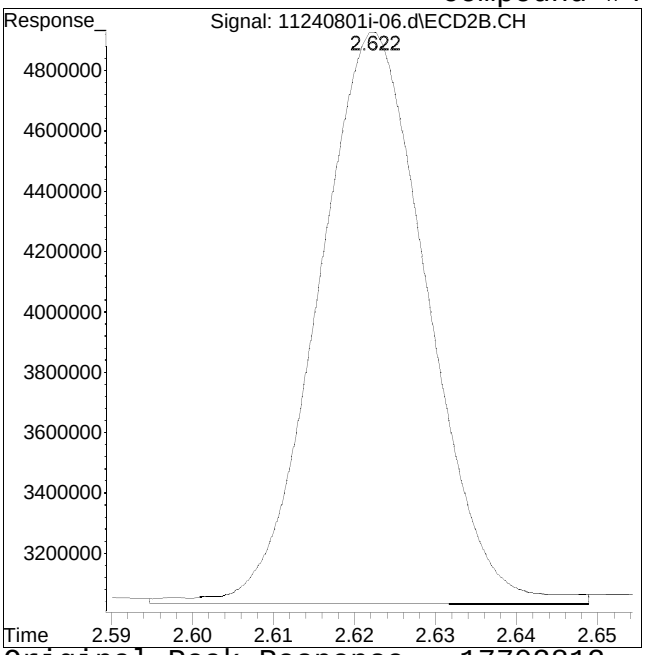

Manual Peak Response = 18018371 M4

M4 = Poor automated baseline construction.

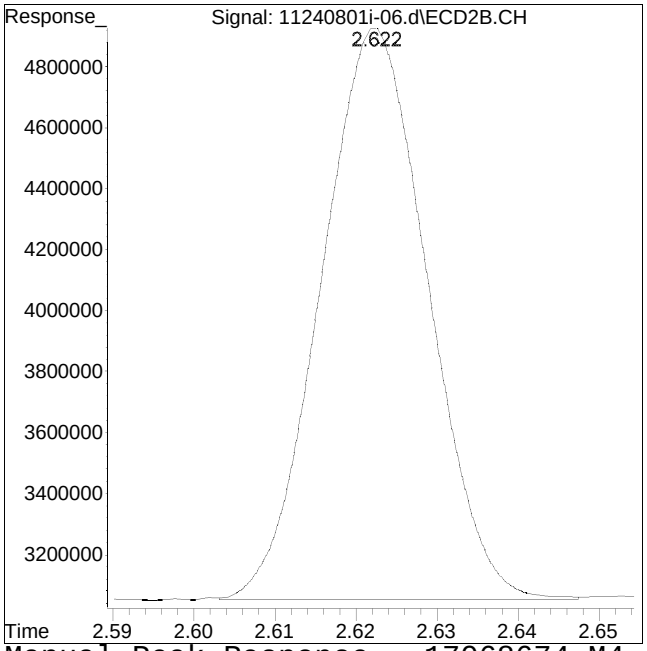
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #44: beta-BHC #2




Original Peak Response = 17702812

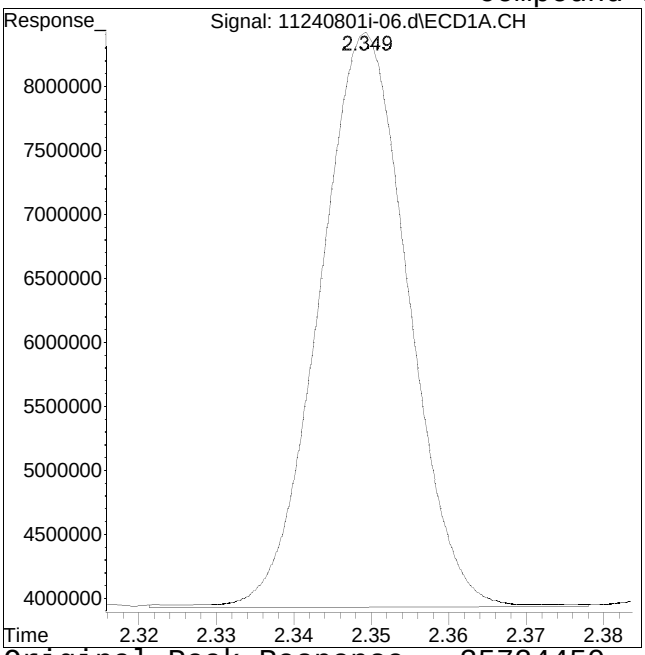



Manual Peak Response = 17068674 M4
M4 = Poor automated baseline construction.

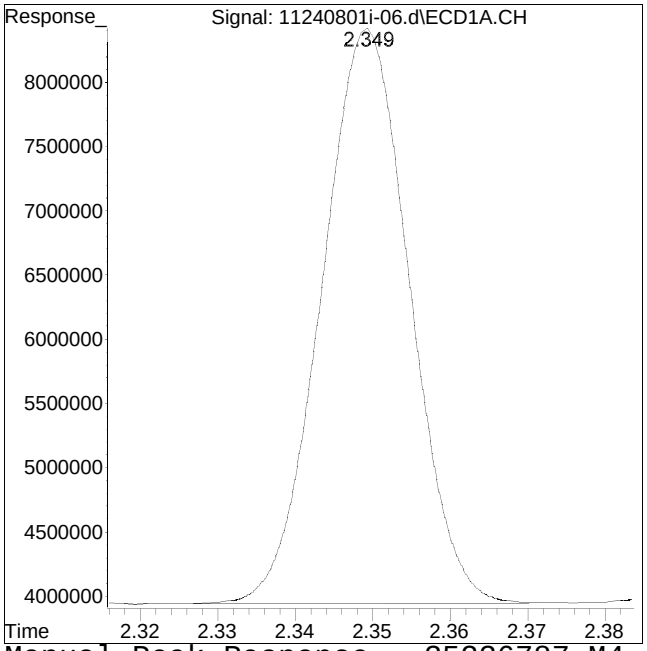
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #7: delta-BHC




Original Peak Response = 35724450



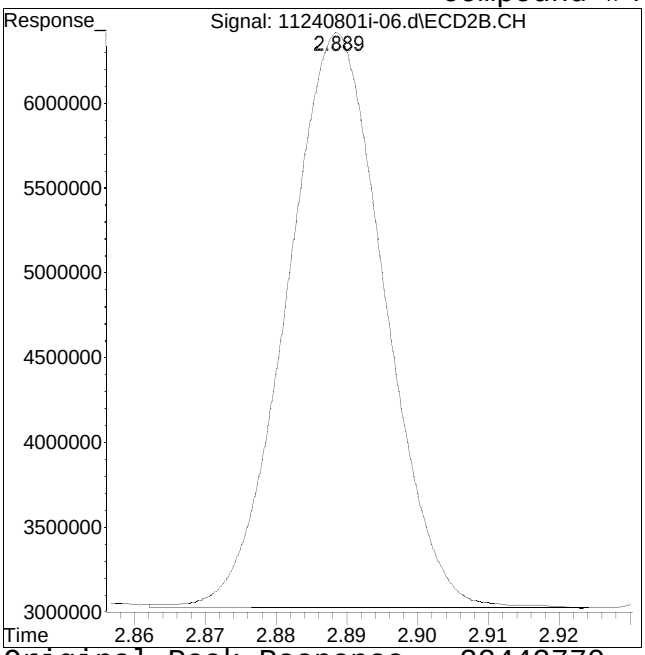

Manual Peak Response = 35236787 M4

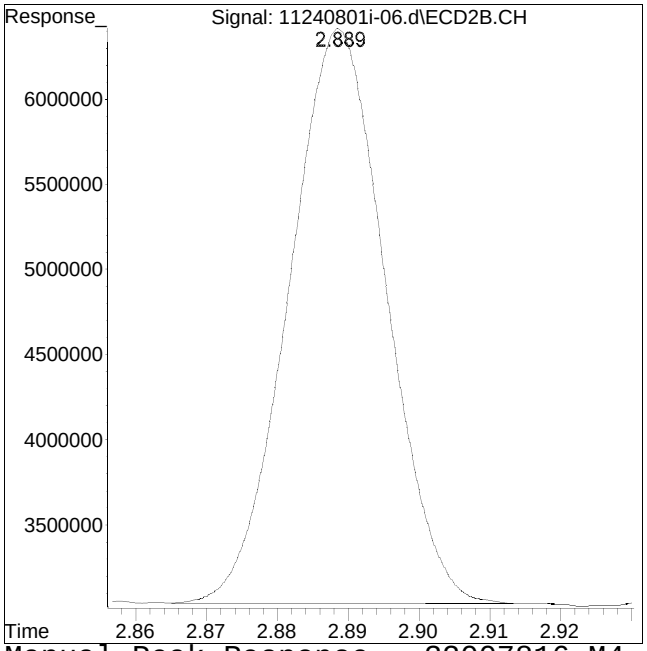
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #45: delta-BHC #2



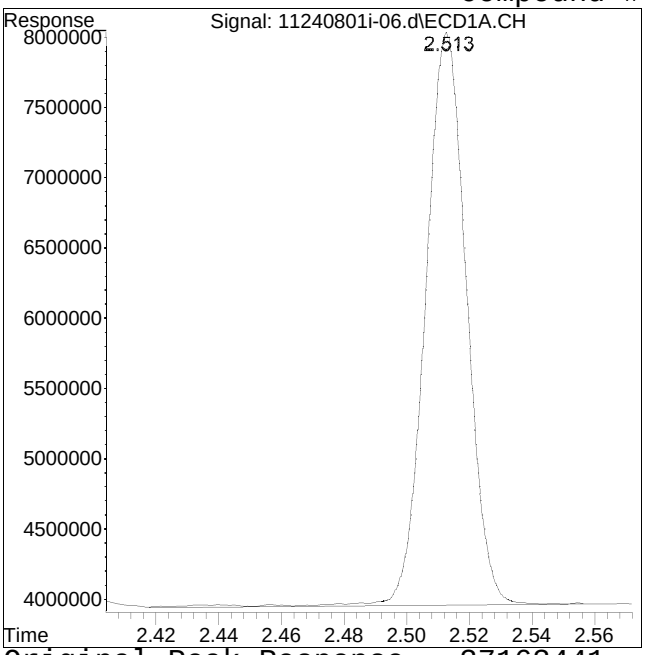

Original Peak Response = 32442770 Manual Peak Response = 32007816 M4
M4 = Poor automated baseline construction.

Manual Integration Report

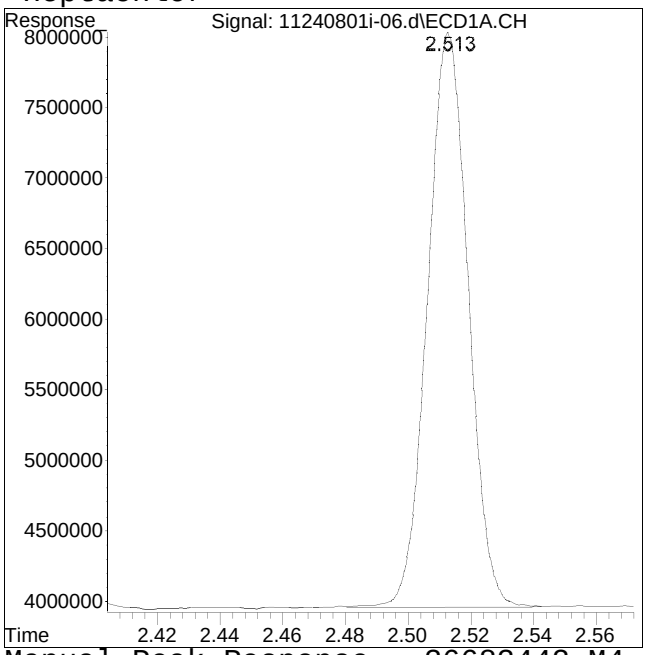
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #8: Heptachlor




Original Peak Response = 37163441



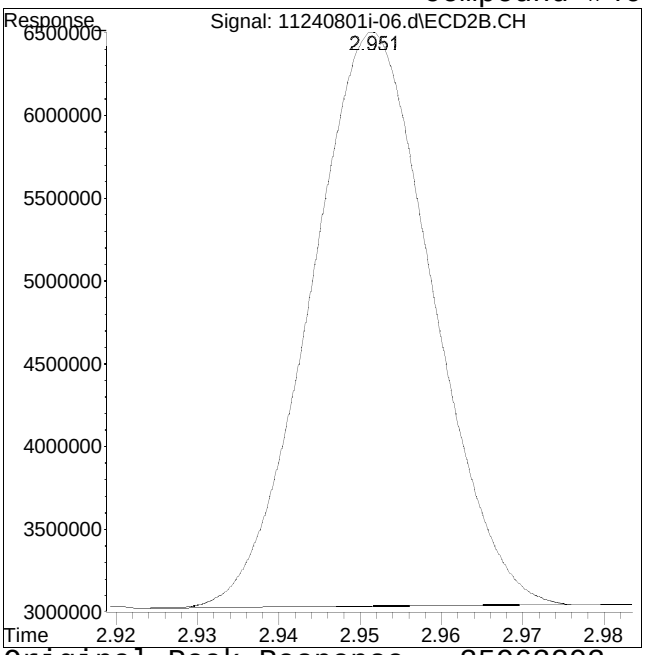

Manual Peak Response = 36683442 M4

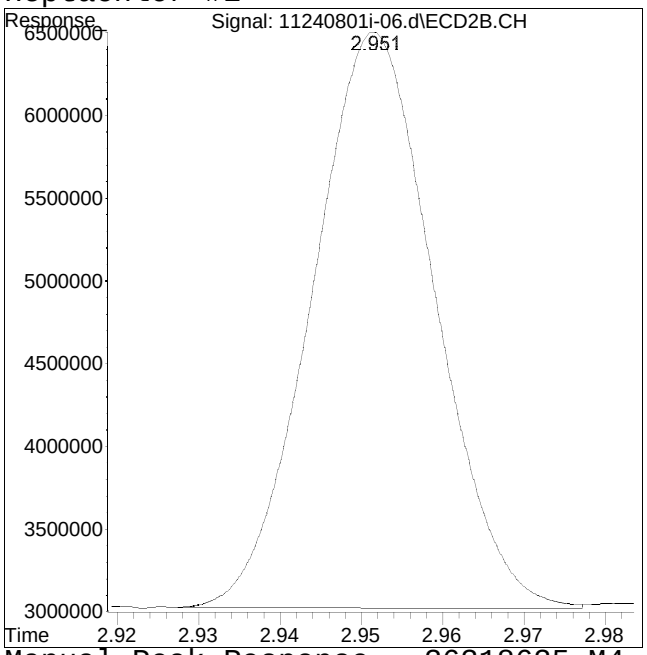
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #46: Heptachlor #2



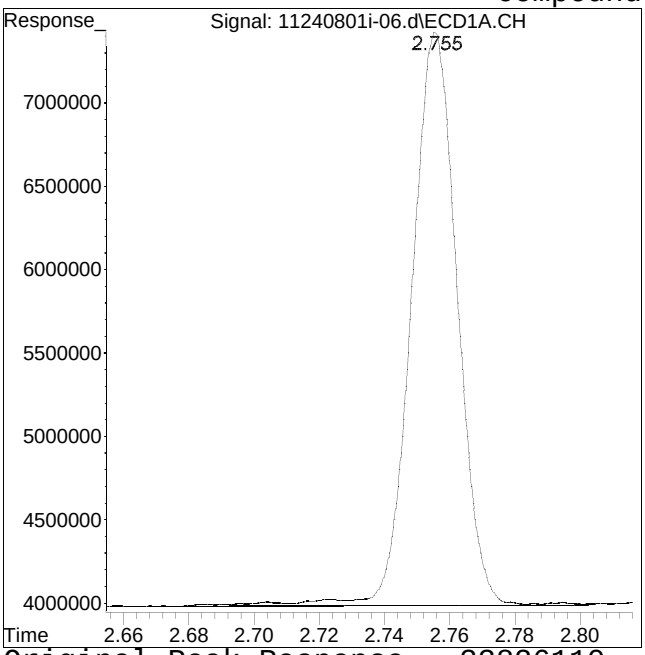



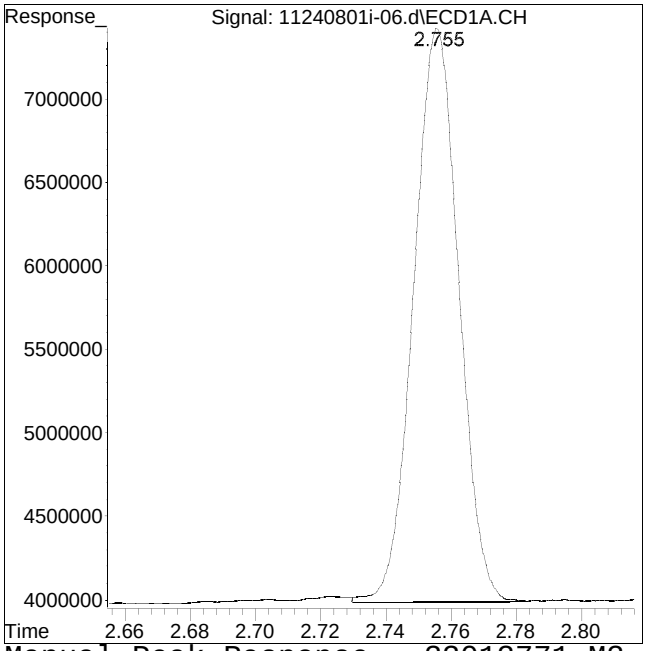

Original Peak Response = 35963293 Manual Peak Response = 36318635 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #9: Aldrin



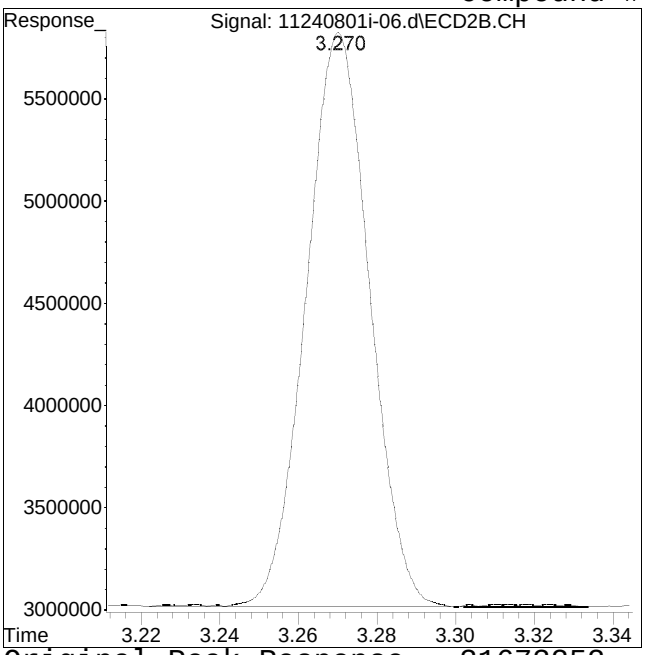

Original Peak Response = 33826110 Manual Peak Response = 33013771 M3

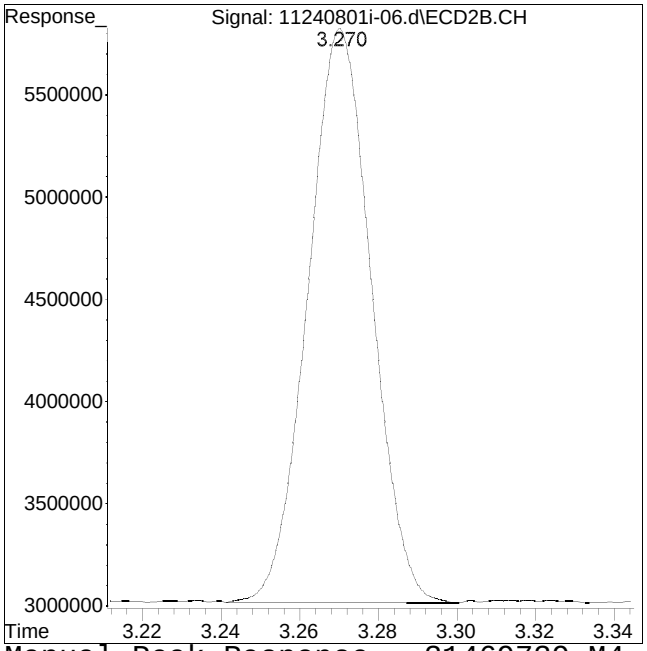
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #47: Aldrin #2



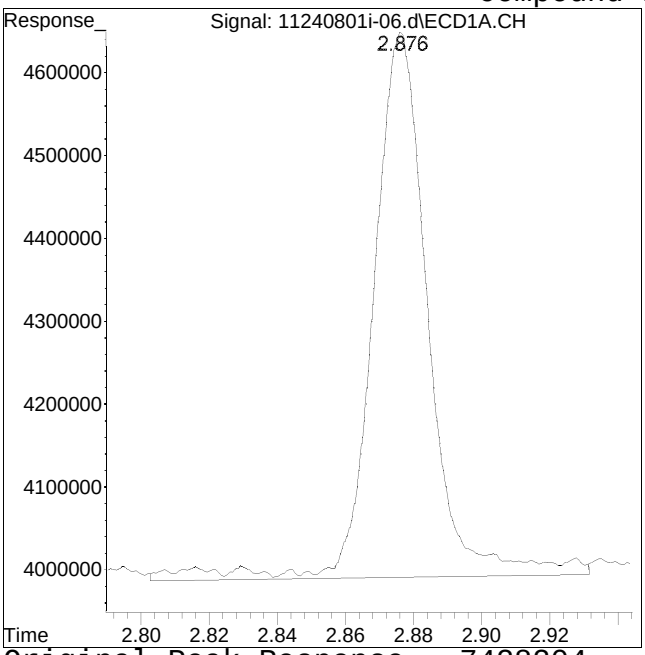




Original Peak Response = 31673252 Manual Peak Response = 31469739 M4
M4 = Poor automated baseline construction.

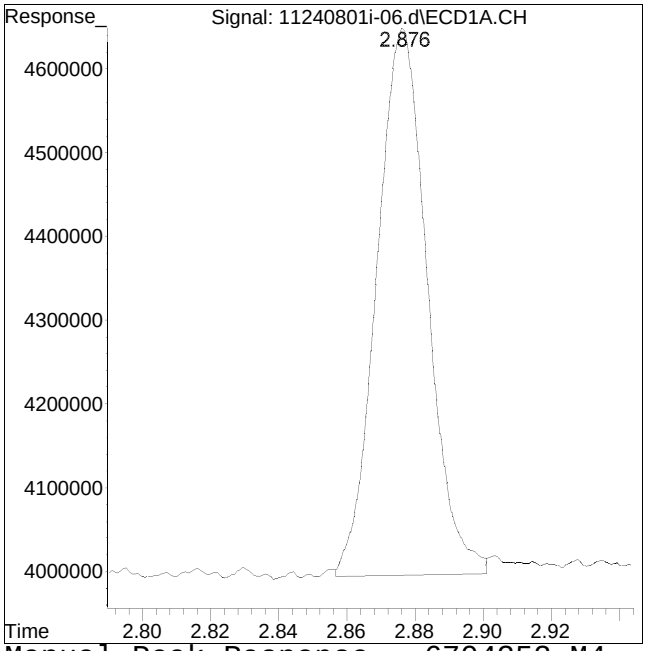
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #10: Alachlor




Original Peak Response = 7428204



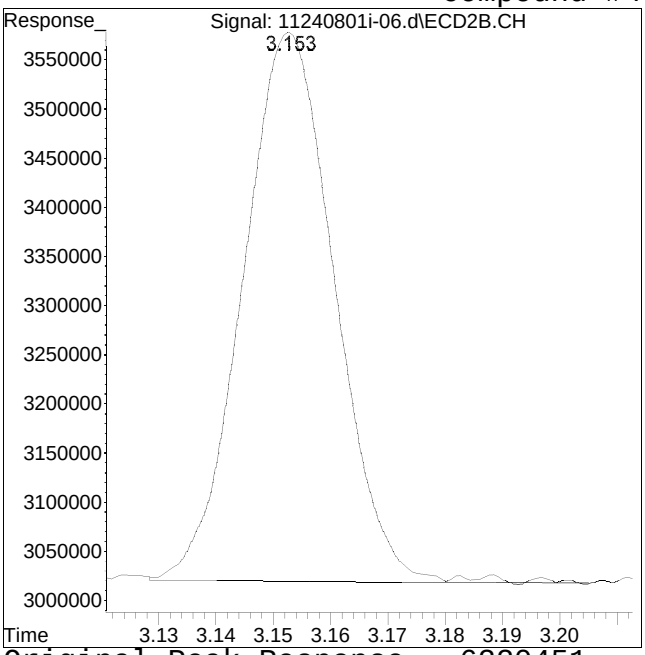

Manual Peak Response = 6704352 M4

M4 = Poor automated baseline construction.

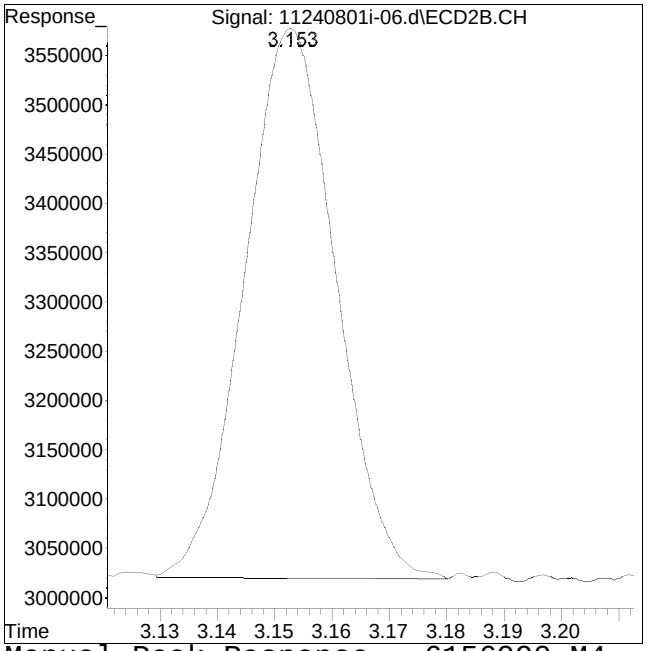
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #48: Alachlor #2




Original Peak Response = 6220451



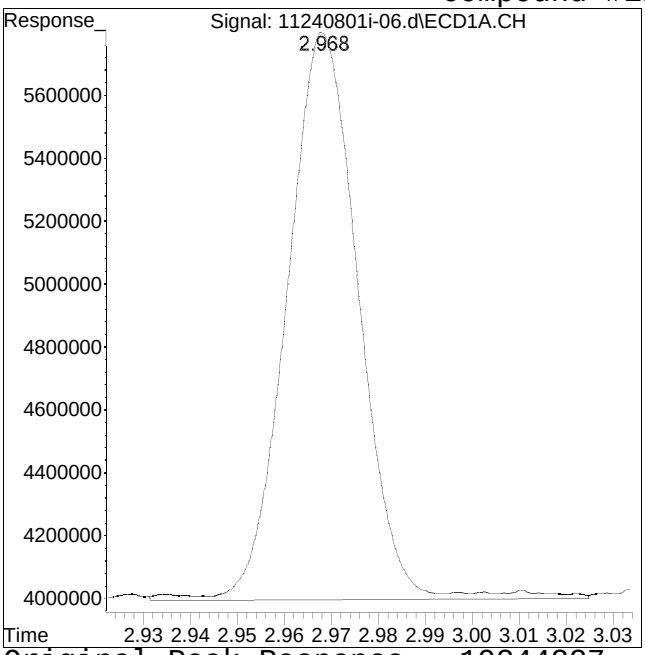

Manual Peak Response = 6156990 M4

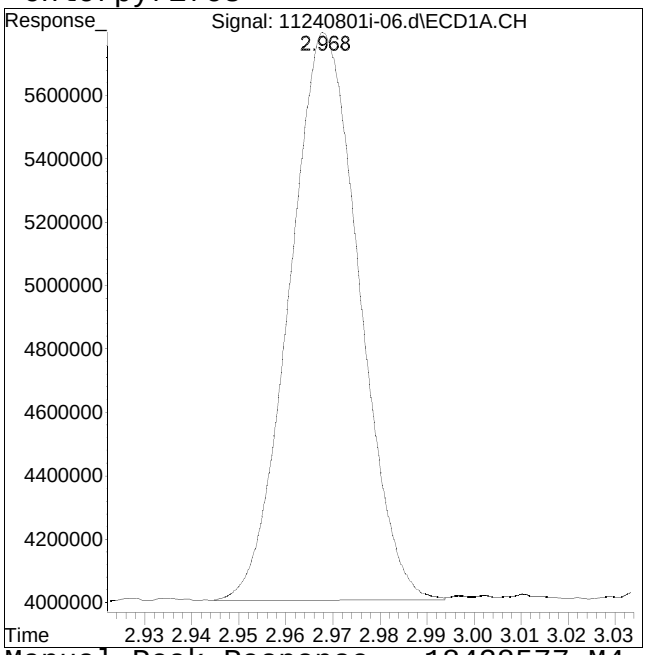
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #11: Chlorpyrifos



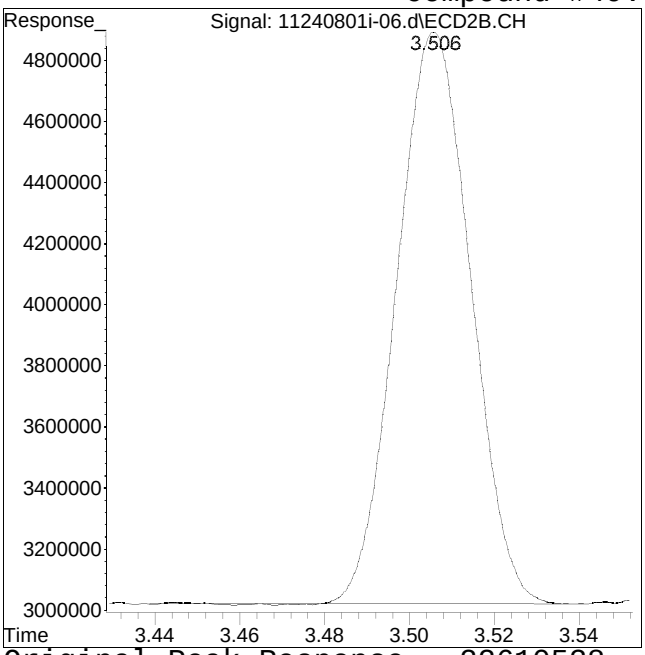




Original Peak Response = 19244227 Manual Peak Response = 18438577 M4
M4 = Poor automated baseline construction.

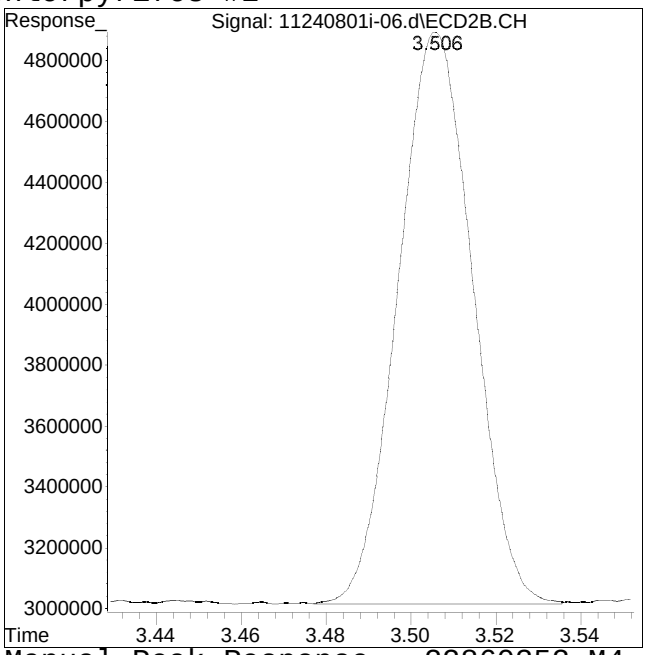
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 22610538



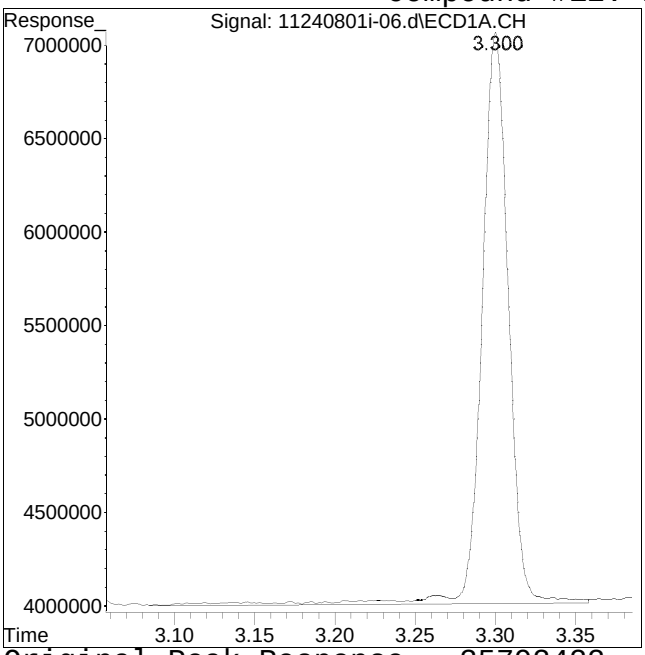

Manual Peak Response = 22860352 M4

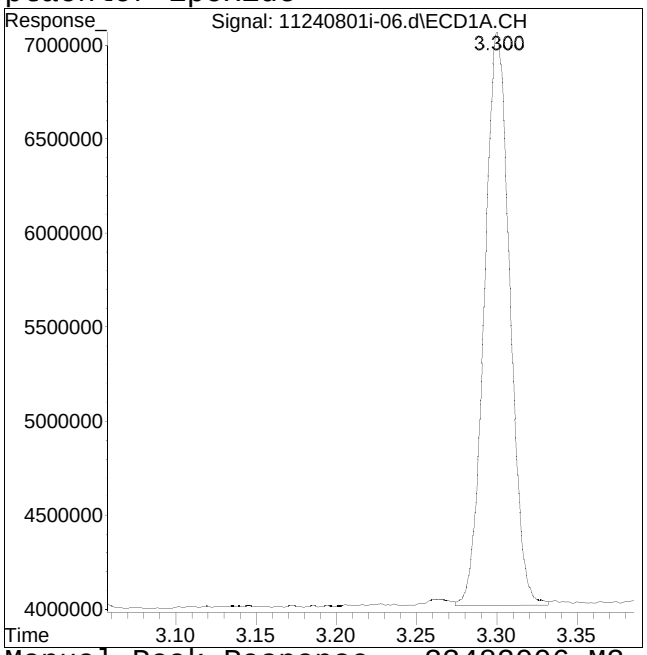
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #12: Heptachlor Epoxide



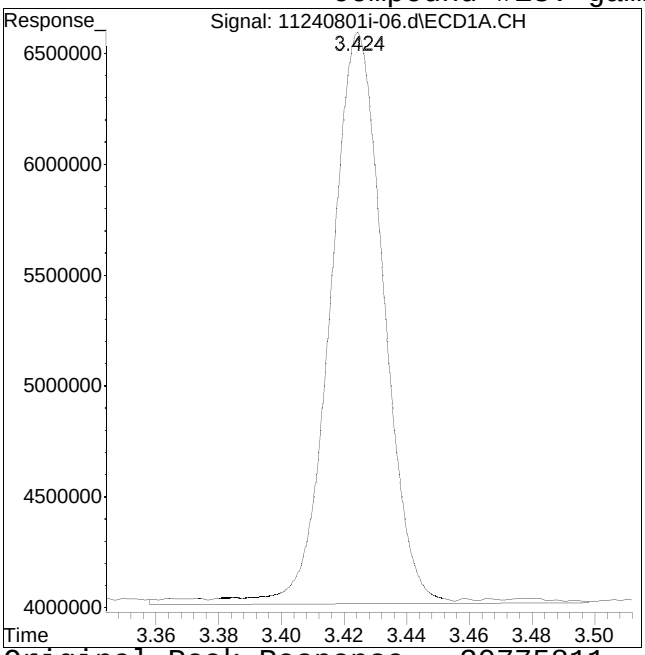

Original Peak Response = 35792422 Manual Peak Response = 33482006 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

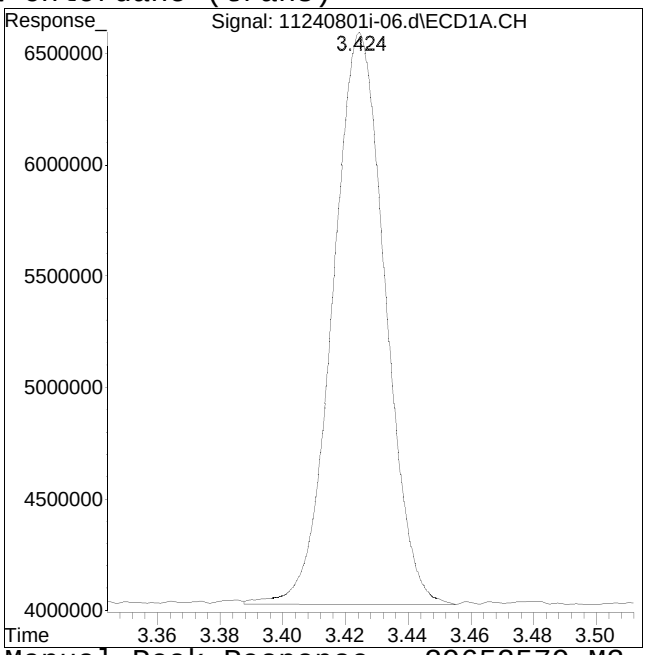
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #13: gamma-Chlordane (trans)




Original Peak Response = 30775811 Manual Peak Response = 29652579 M3

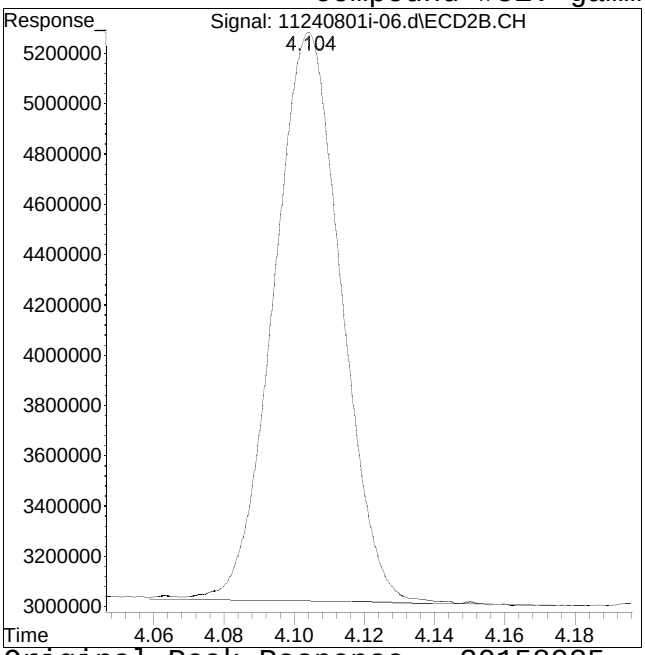
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

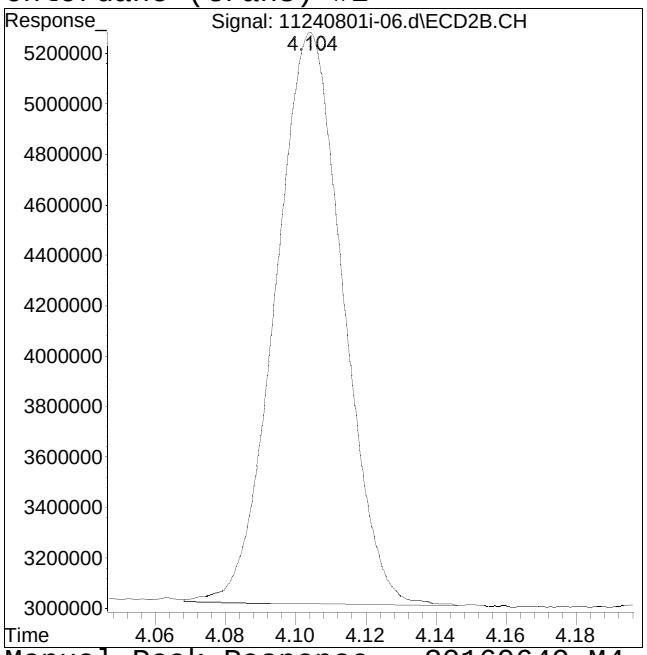
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 30158935




Manual Peak Response = 30160649 M4

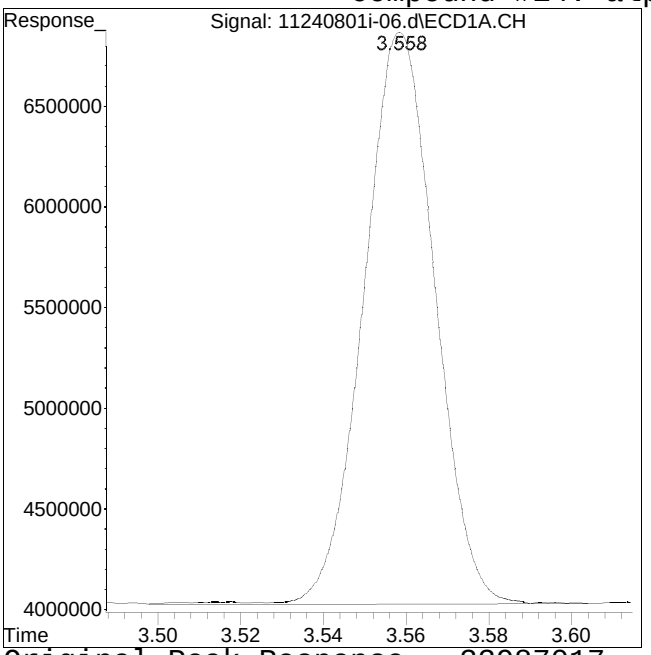
M4 = Poor automated baseline construction.

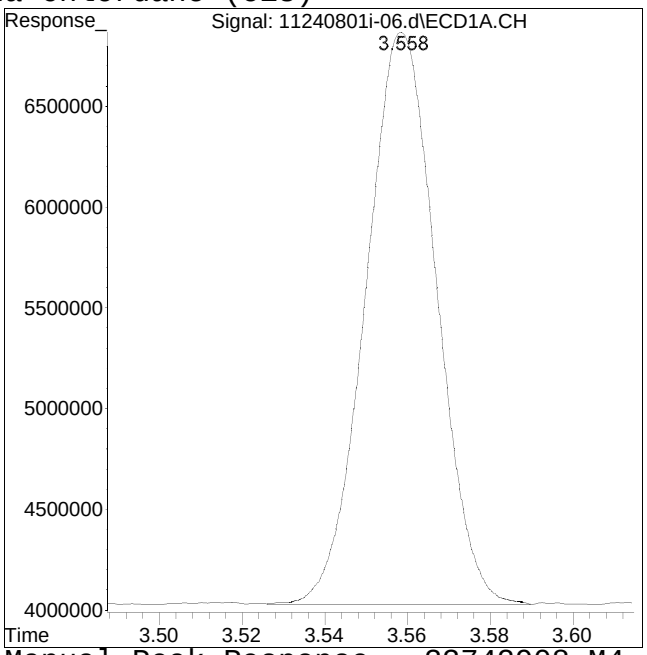
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #14: alpha-Chlordane (cis)



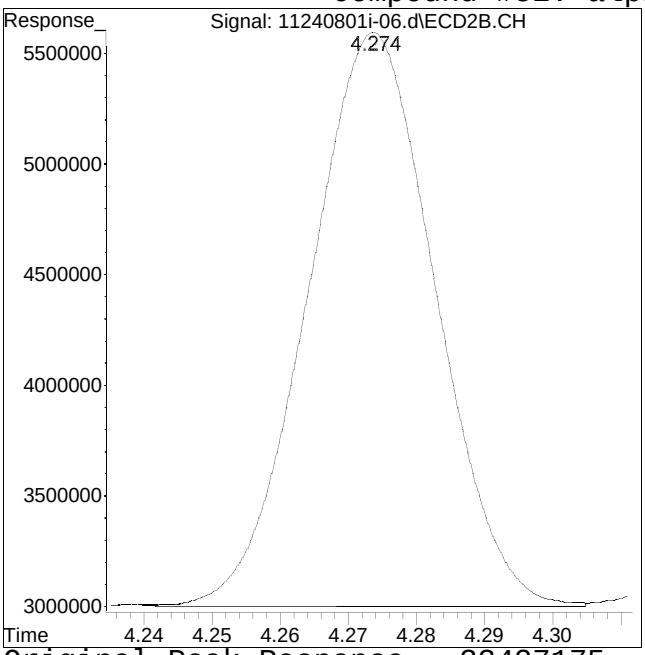




Original Peak Response = 33987017 Manual Peak Response = 33742908 M4
M4 = Poor automated baseline construction.

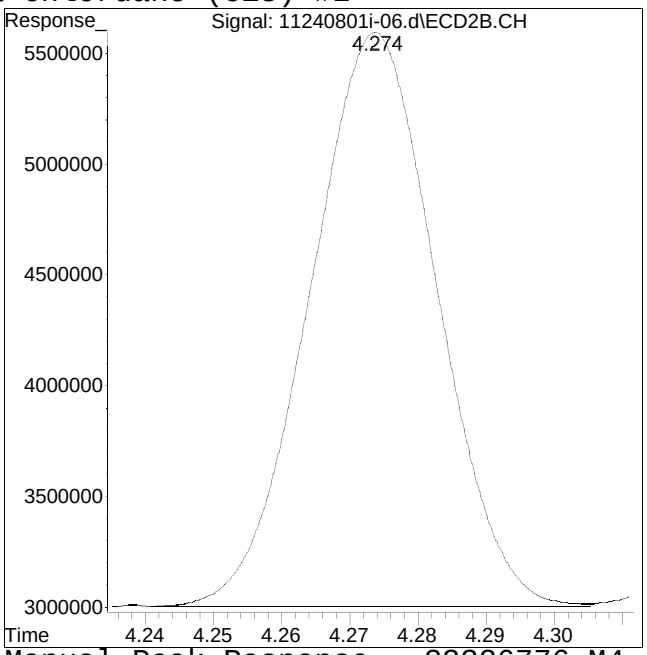
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 33427175




Manual Peak Response = 33326776 M4

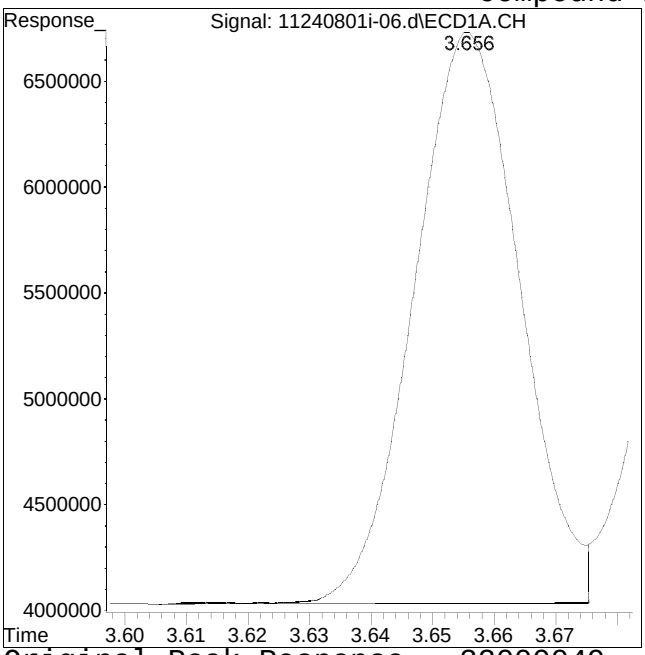
M4 = Poor automated baseline construction.

Manual Integration Report

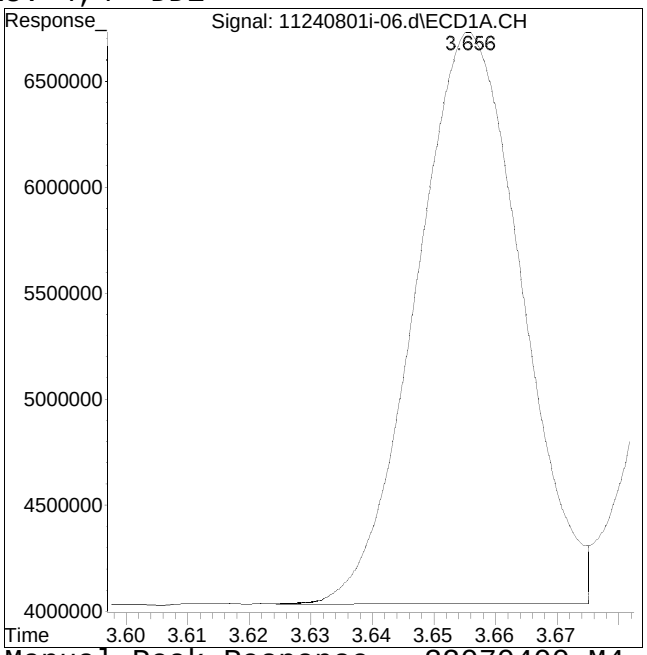
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #15: 4,4'-DDE




Original Peak Response = 32000049




Manual Peak Response = 32070400 M4

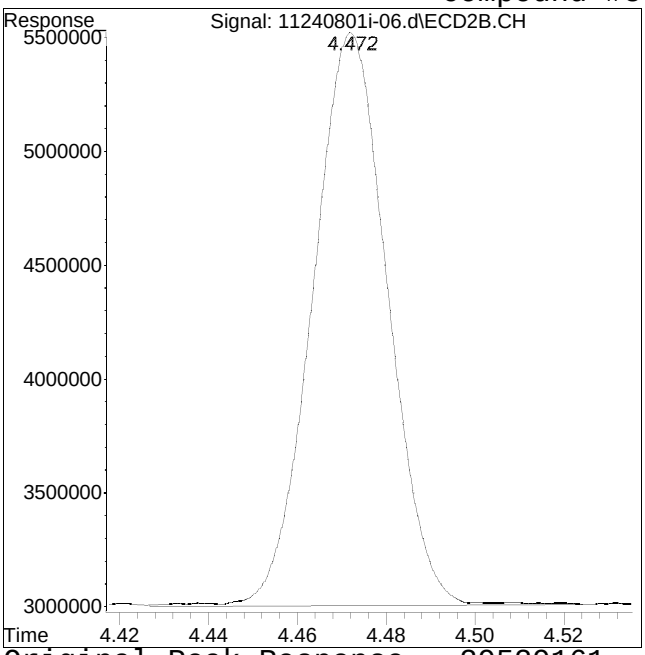
M4 = Poor automated baseline construction.

Manual Integration Report

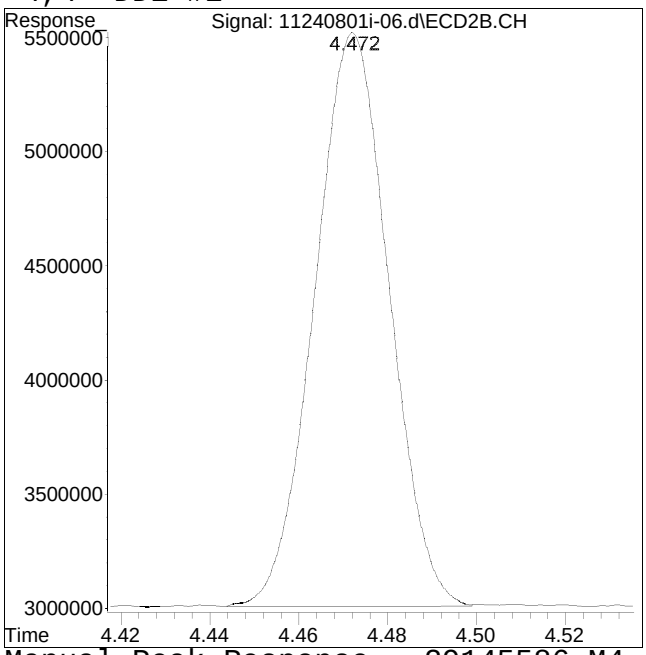
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 29529161




Manual Peak Response = 29145586 M4

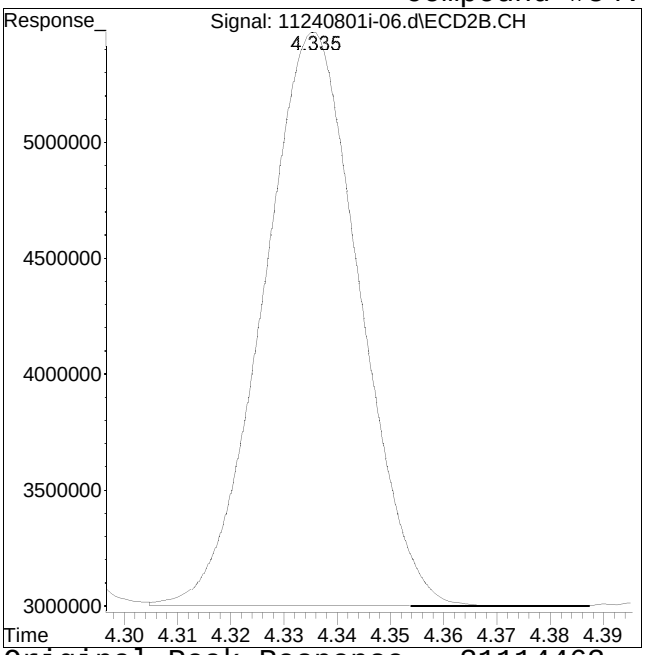
M4 = Poor automated baseline construction.

# Manual Integration Report

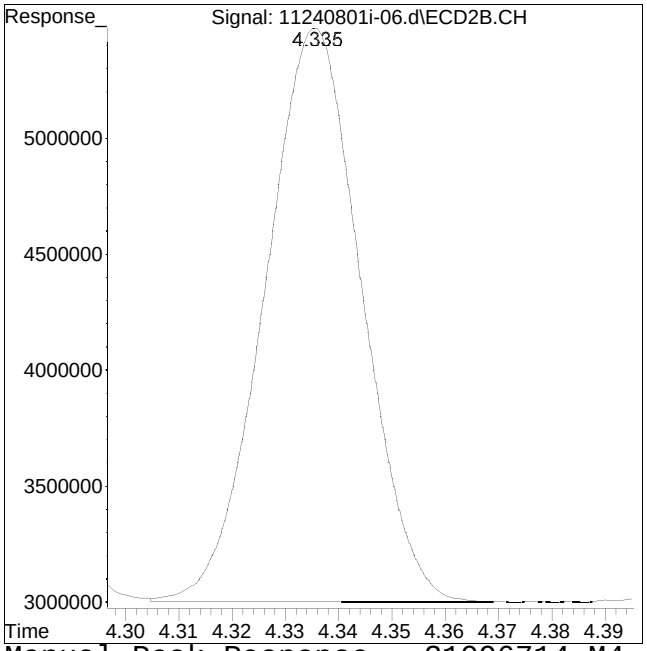
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #54: Endosulfan I #2




Original Peak Response = 31114463




Manual Peak Response = 31096714 M4

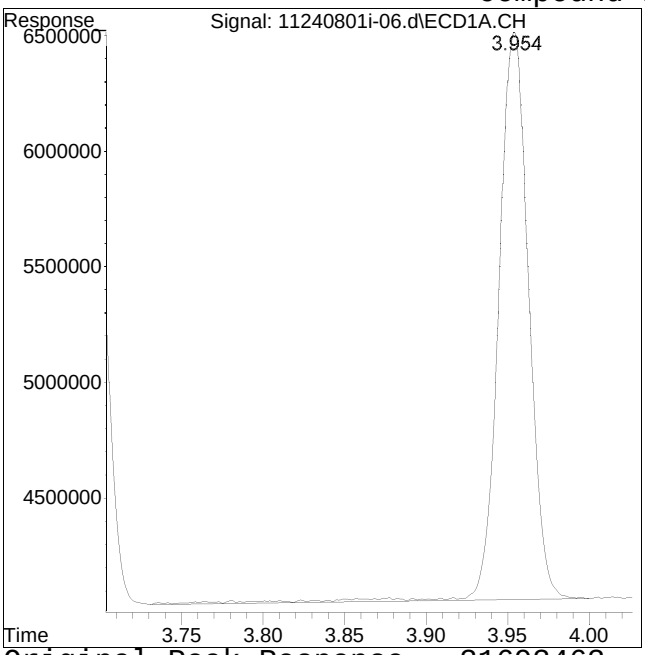
M4 = Poor automated baseline construction.

Manual Integration Report

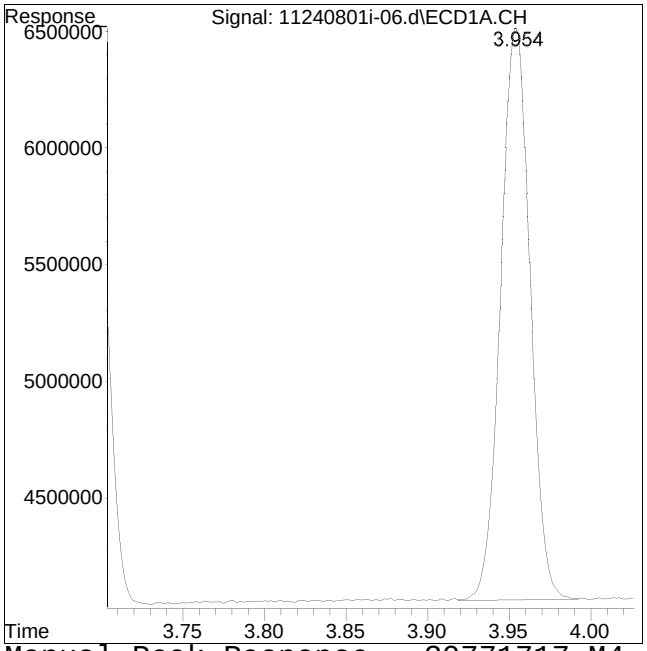
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #17: Dieldrin




Original Peak Response = 31693463




Manual Peak Response = 30771717 M4

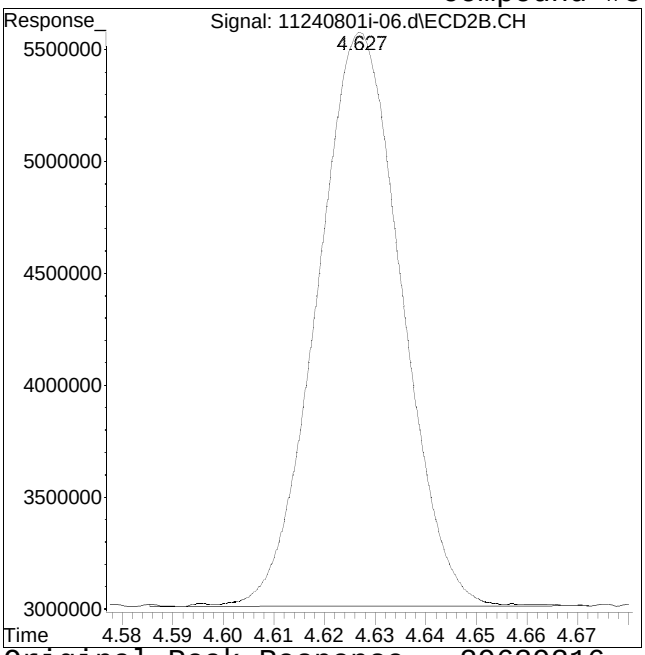
M4 = Poor automated baseline construction.

# Manual Integration Report

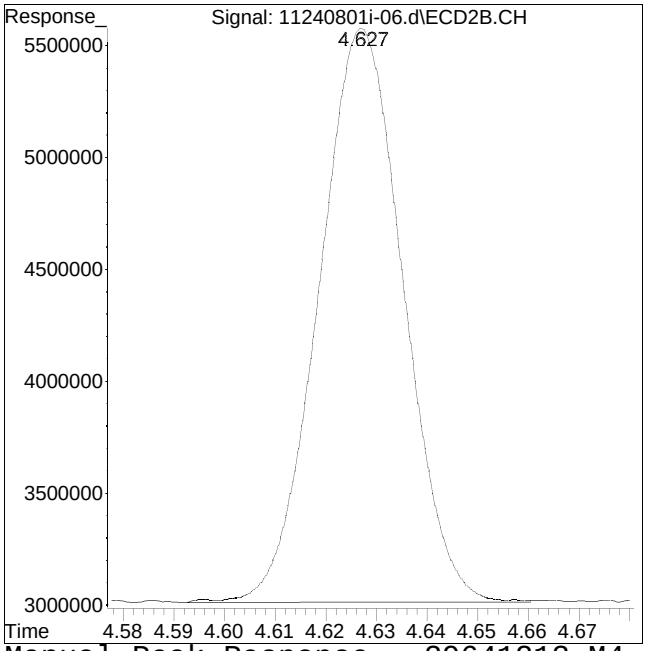
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #55: Dieldrin #2




Original Peak Response = 29639216




Manual Peak Response = 29641213 M4

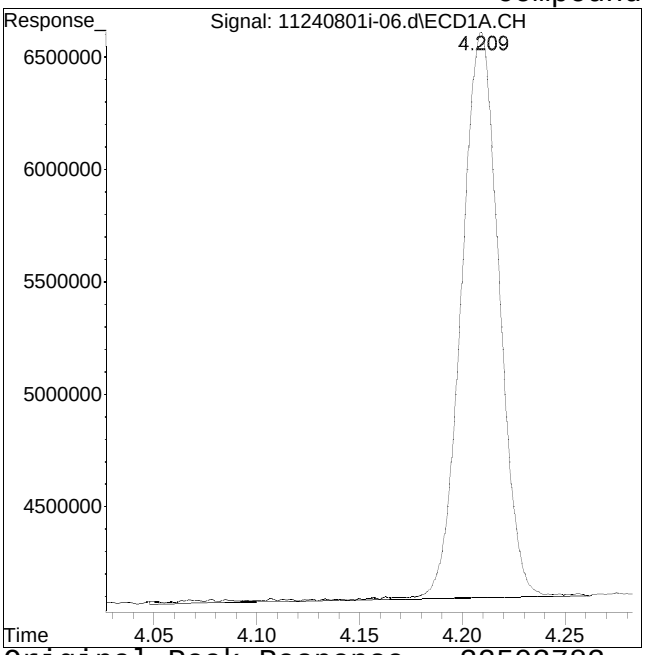
M4 = Poor automated baseline construction.

Manual Integration Report

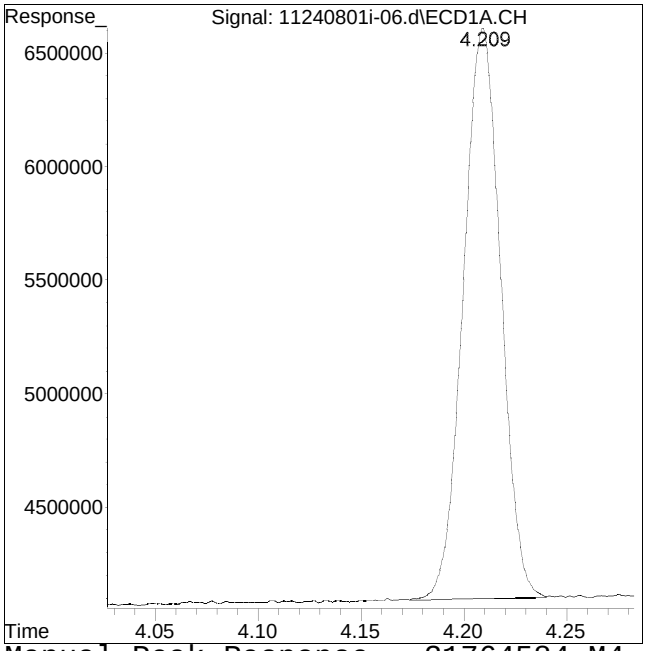
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #18: Endrin




Original Peak Response = 32503783



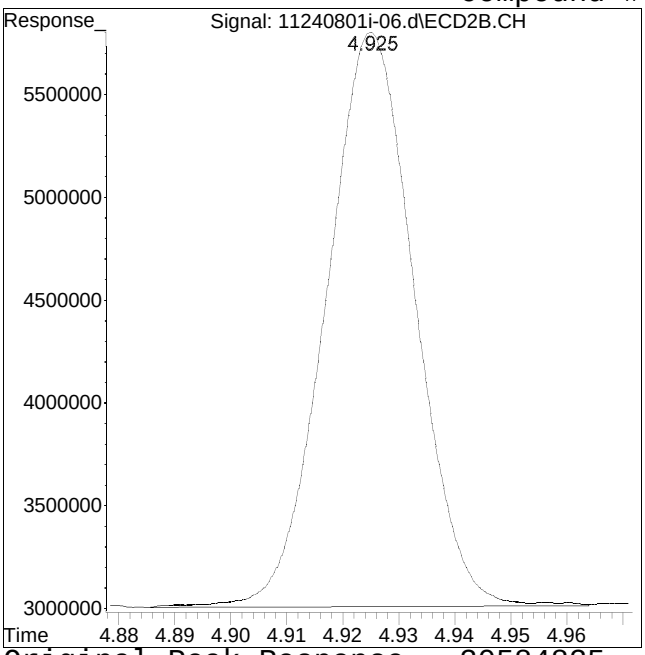

Manual Peak Response = 31764584 M4

M4 = Poor automated baseline construction.

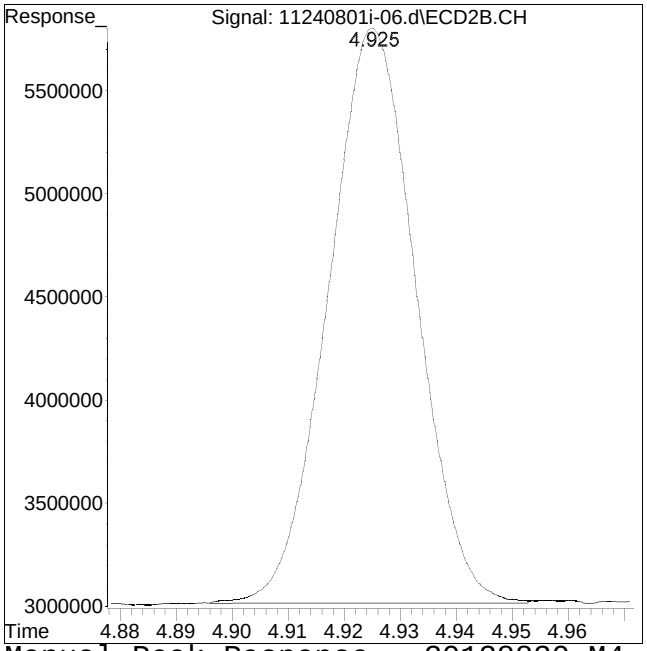
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #56: Endrin #2




Original Peak Response = 30584835




Manual Peak Response = 30138830 M4

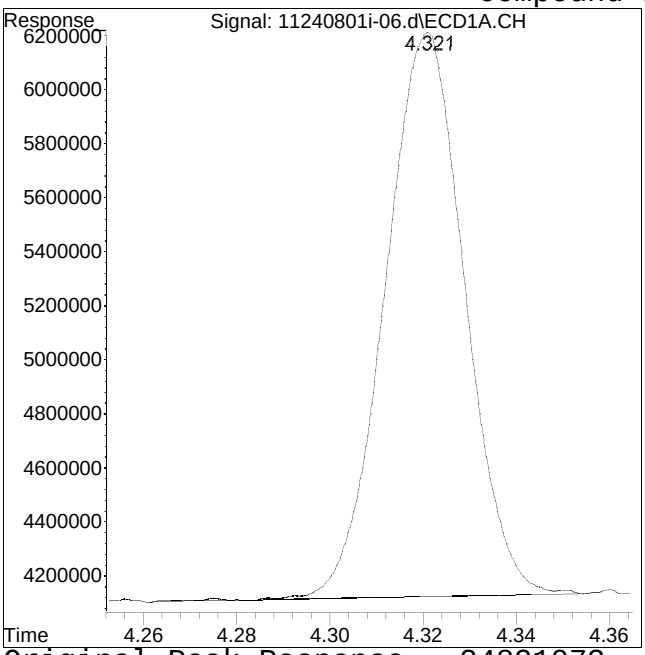
M4 = Poor automated baseline construction.

Manual Integration Report

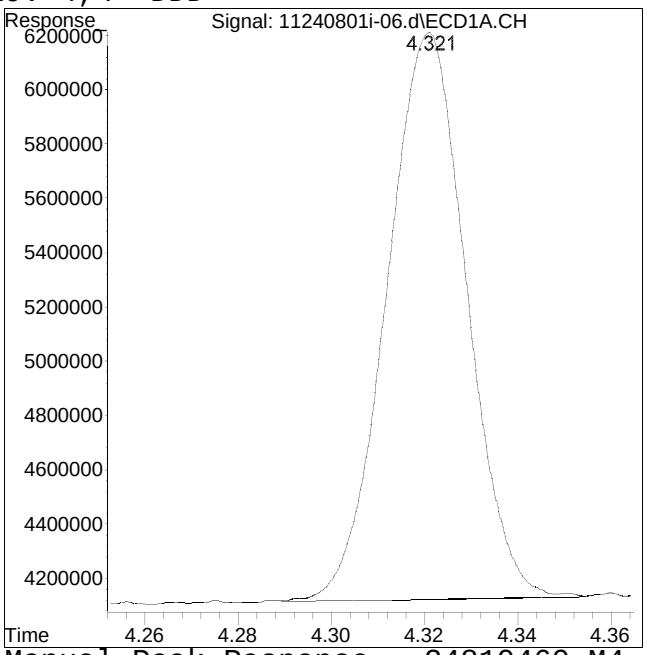
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #19: 4,4'-DDD




Original Peak Response = 24821073




Manual Peak Response = 24810460 M4

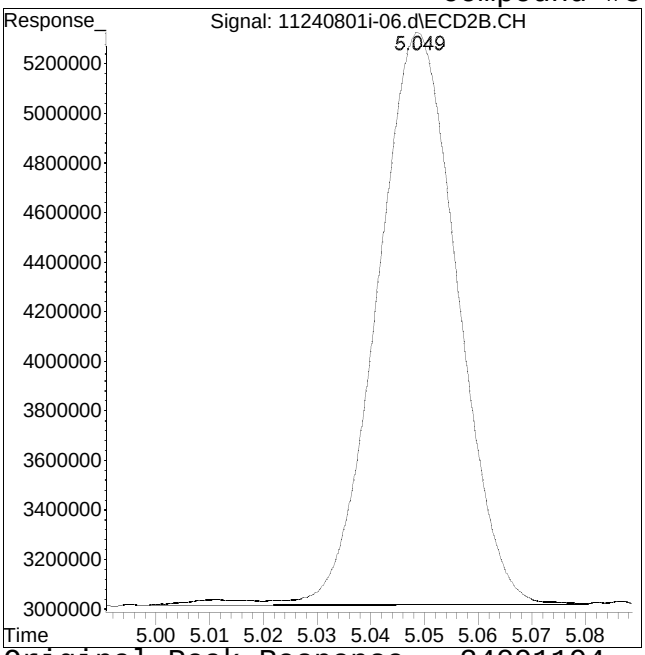
M4 = Poor automated baseline construction.

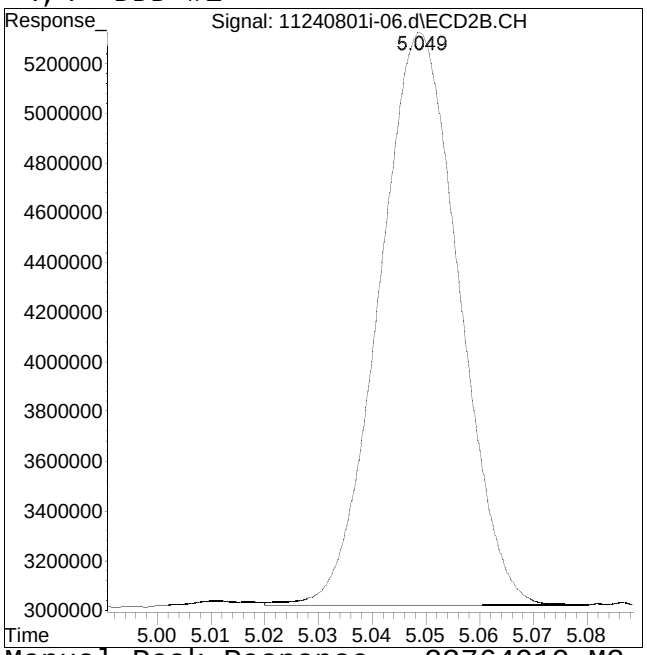
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #57: 4,4'-DDD #2



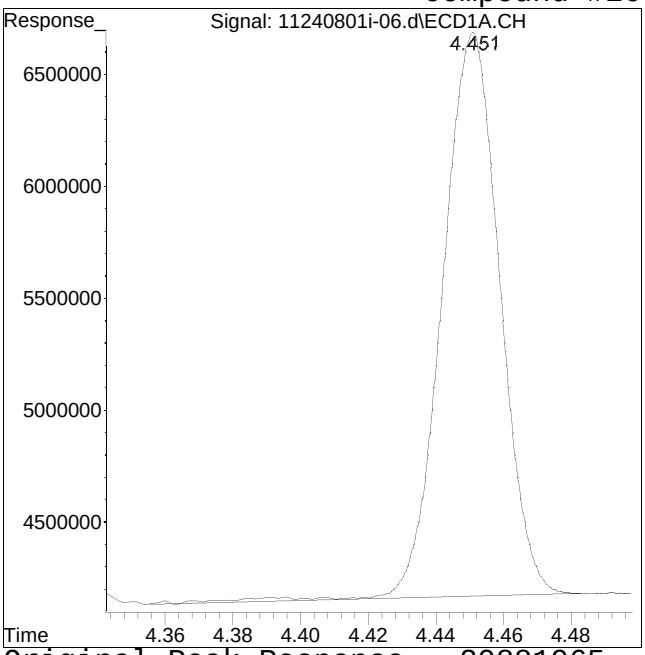

Original Peak Response = 24091194 Manual Peak Response = 23764919 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

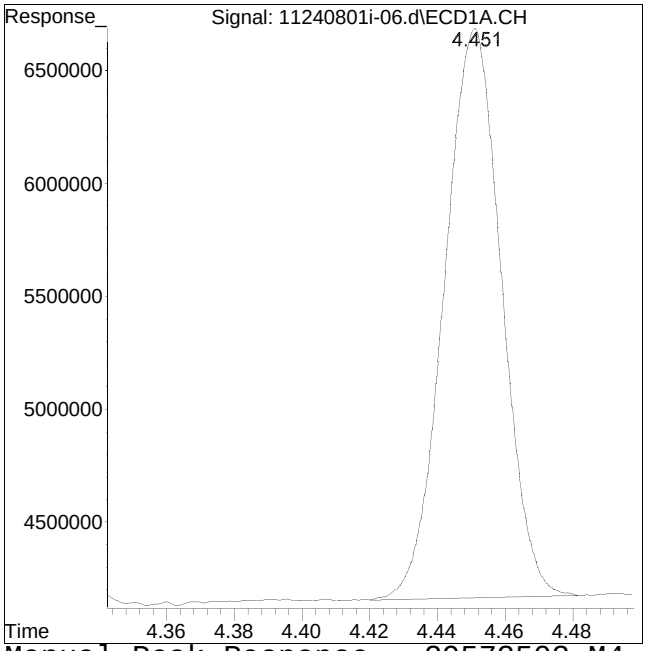
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

## Compound #20: Endosulfan II




Original Peak Response = 29881965



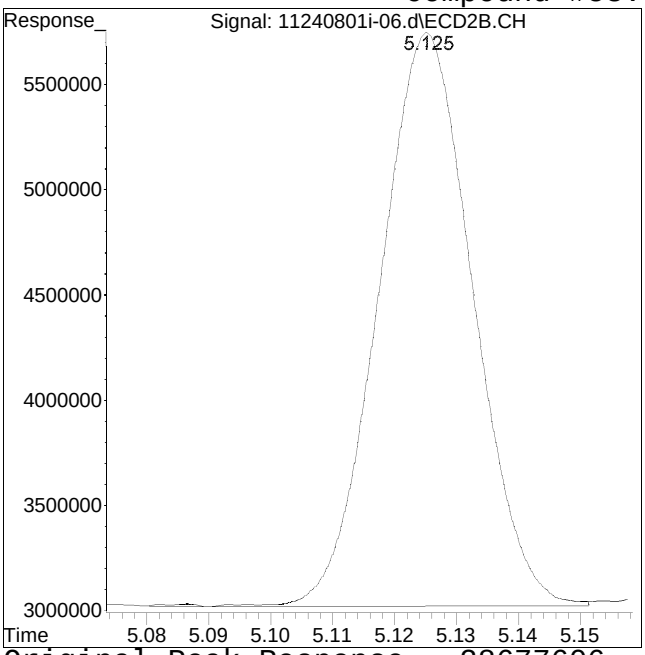

Manual Peak Response = 29573503 M4

M4 = Poor automated baseline construction.

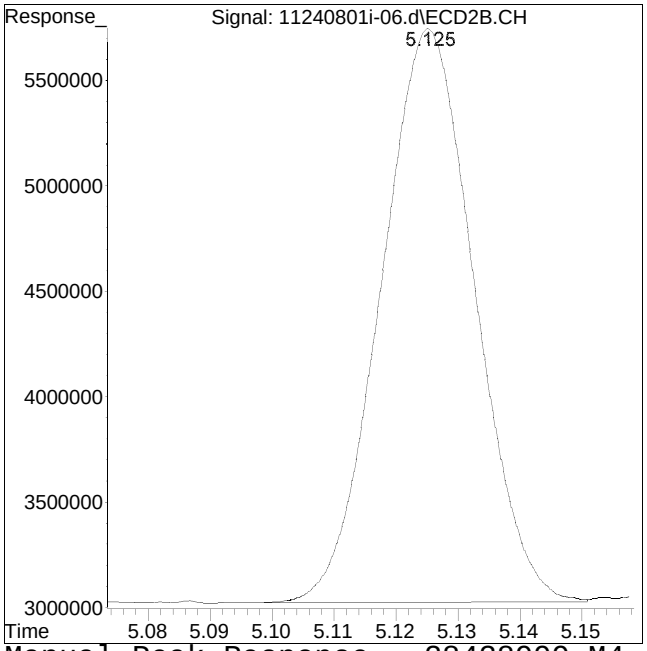
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #58: Endosulfan II #2




Original Peak Response = 28677606




Manual Peak Response = 28438999 M4

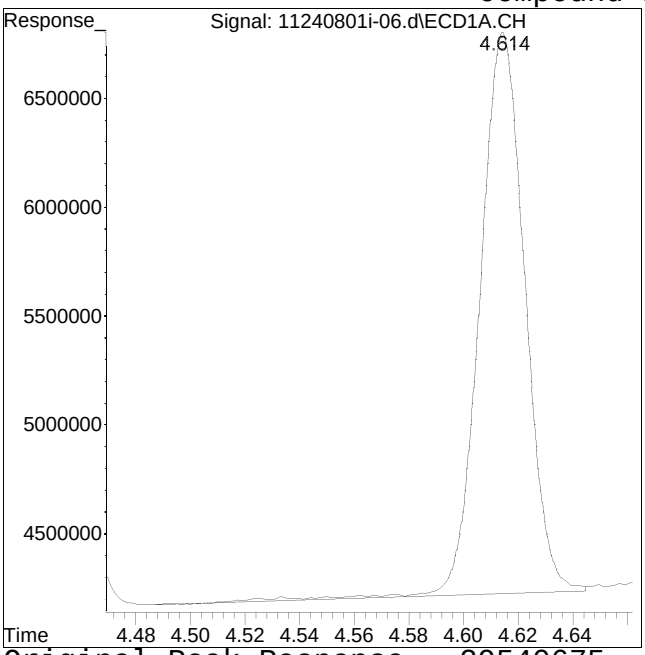
M4 = Poor automated baseline construction.

Manual Integration Report

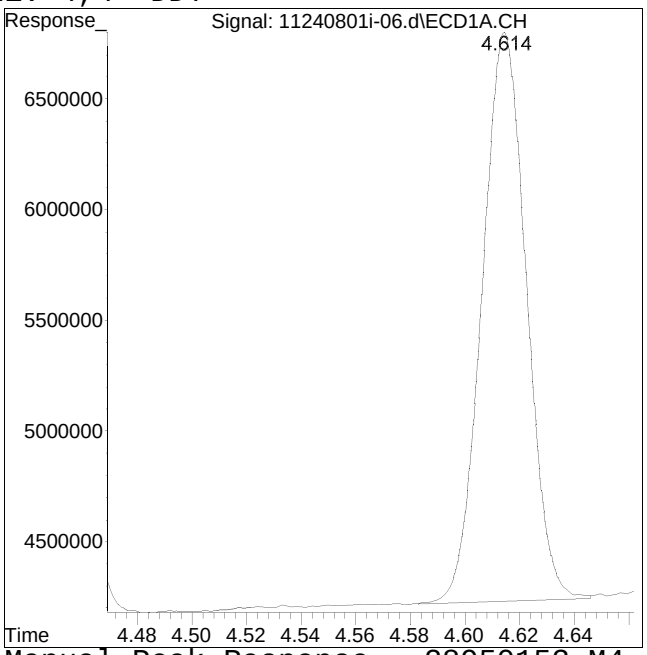
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #21: 4,4'-DDT




Original Peak Response = 29540675




Manual Peak Response = 28950153 M4

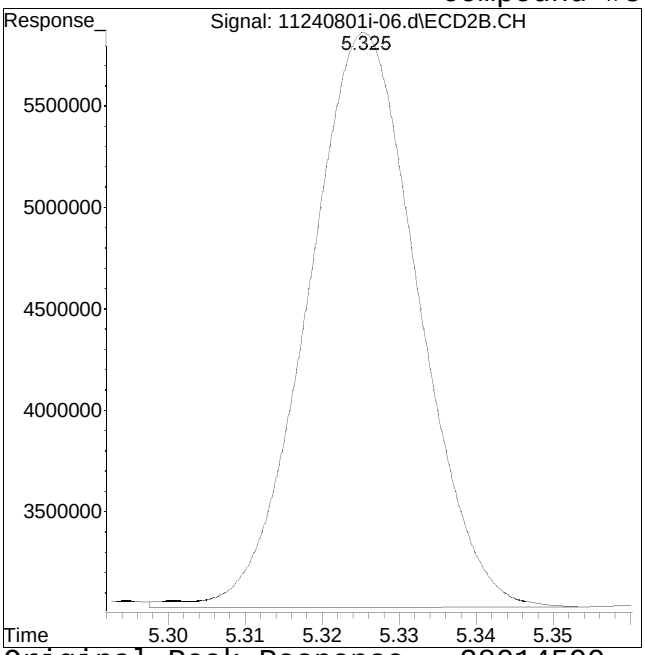
M4 = Poor automated baseline construction.

Manual Integration Report

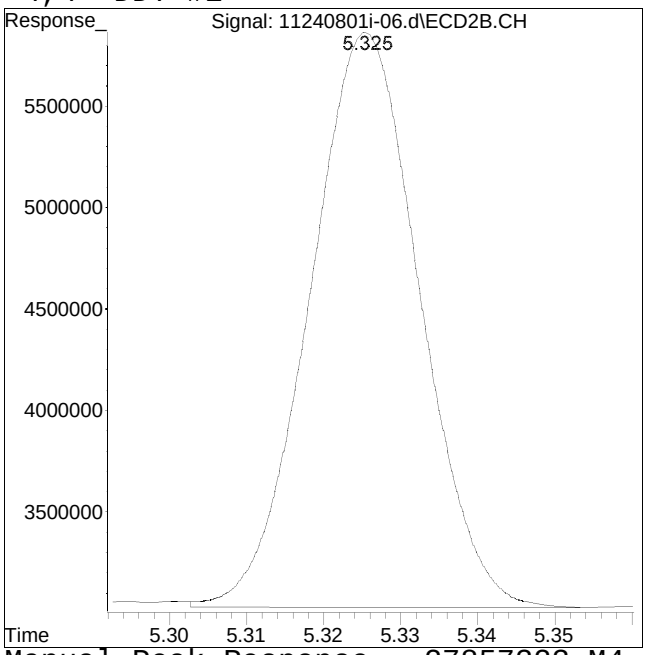
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #59: 4,4'-DDT #2




Original Peak Response = 28014590



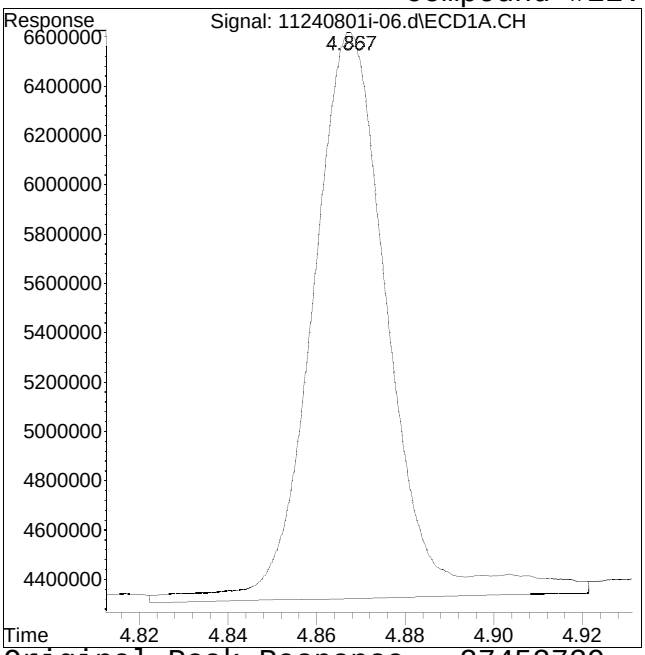

Manual Peak Response = 27857323 M4

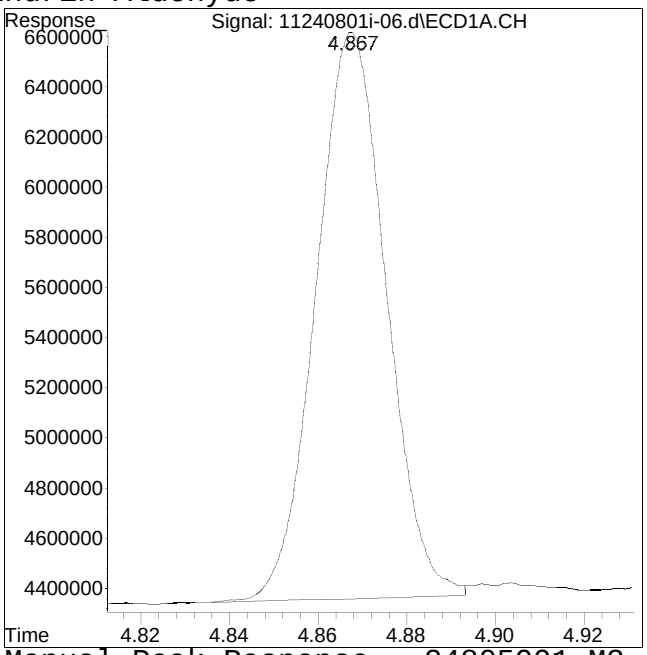
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #22: Endrin Aldehyde



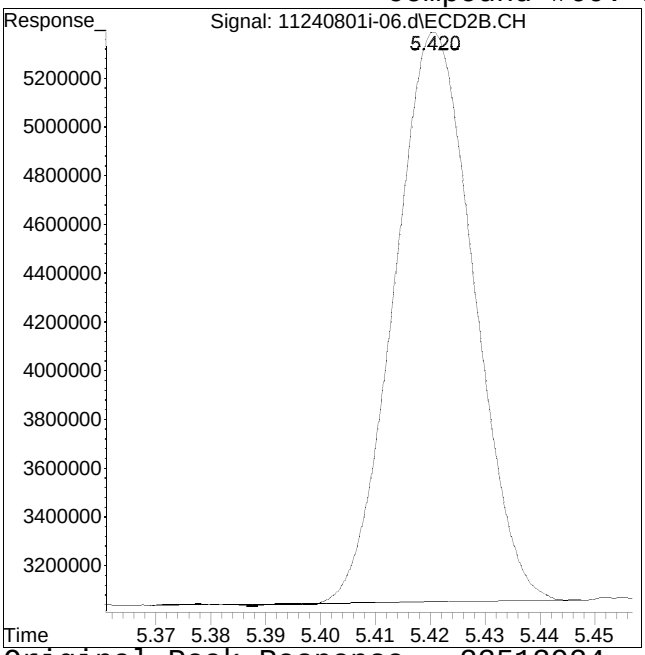




Original Peak Response = 27452739 Manual Peak Response = 24805991 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

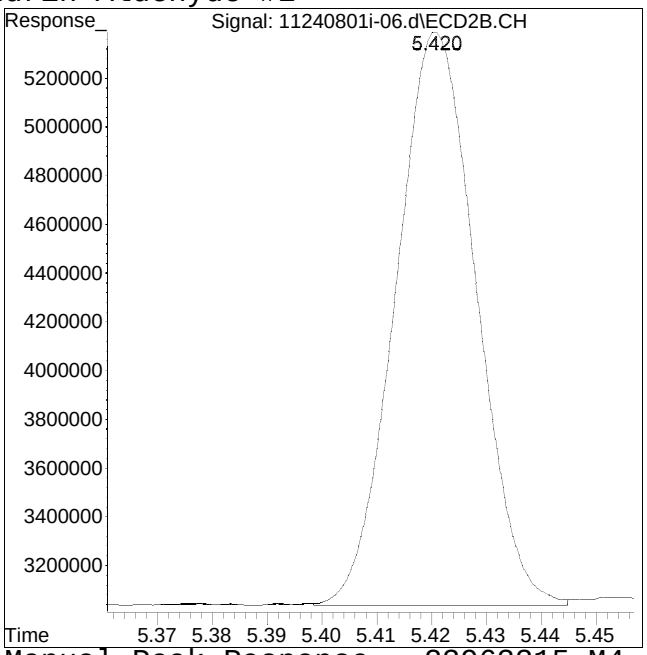
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-06.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:13 Instrument : Pest 11
Sample : il4pest,42e,,pp 11684 L0.0Quant Date : 8/2/2024 11:00 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 23513924



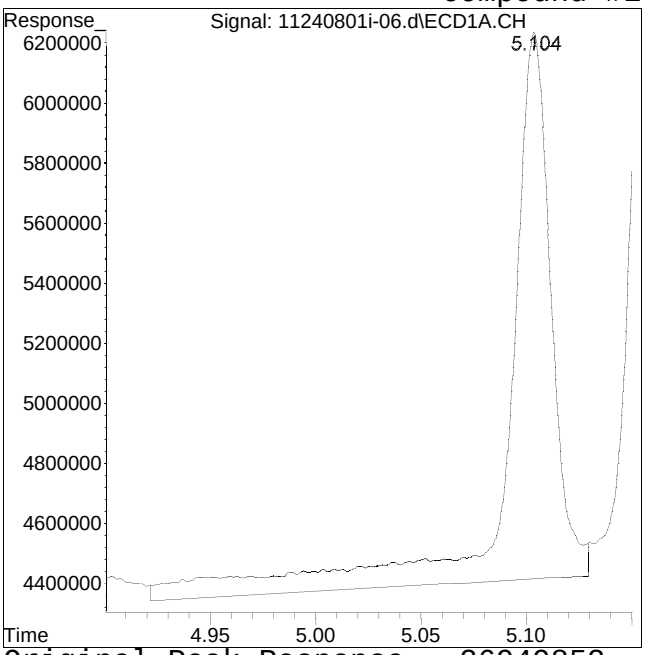

Manual Peak Response = 23963315 M4

M4 = Poor automated baseline construction.

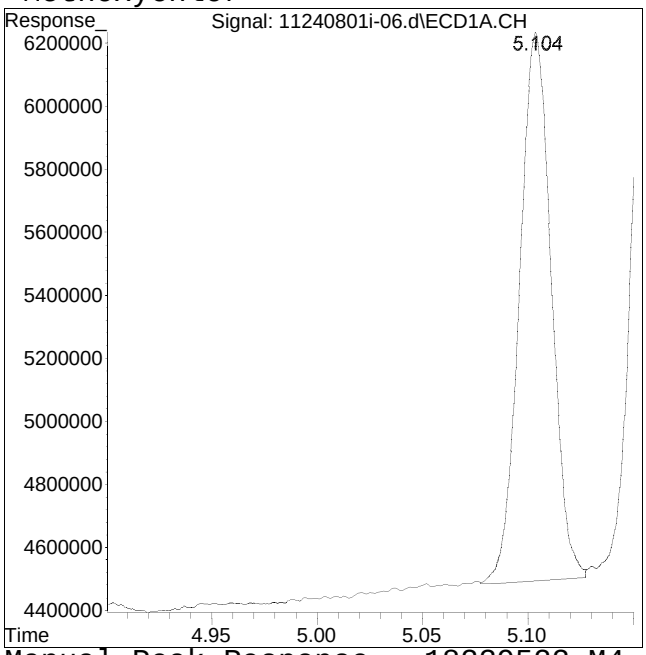
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #23: Methoxychlor




Original Peak Response = 26949852



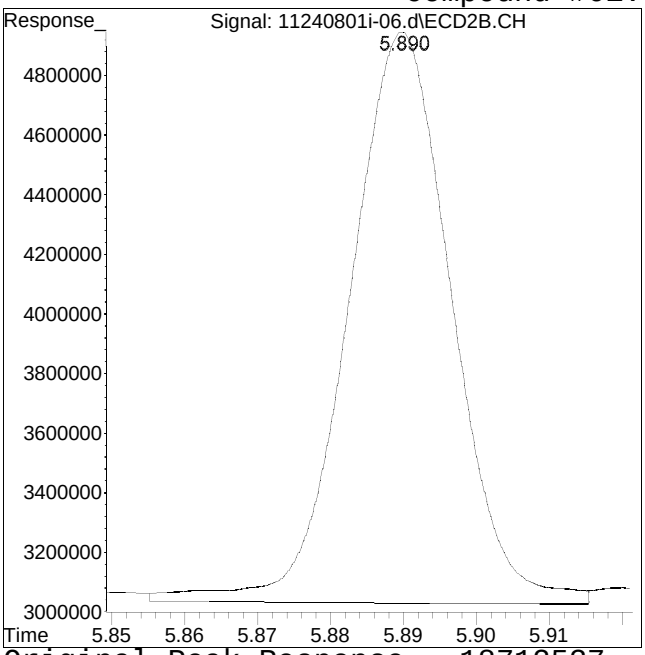

Manual Peak Response = 18239522 M4

M4 = Poor automated baseline construction.

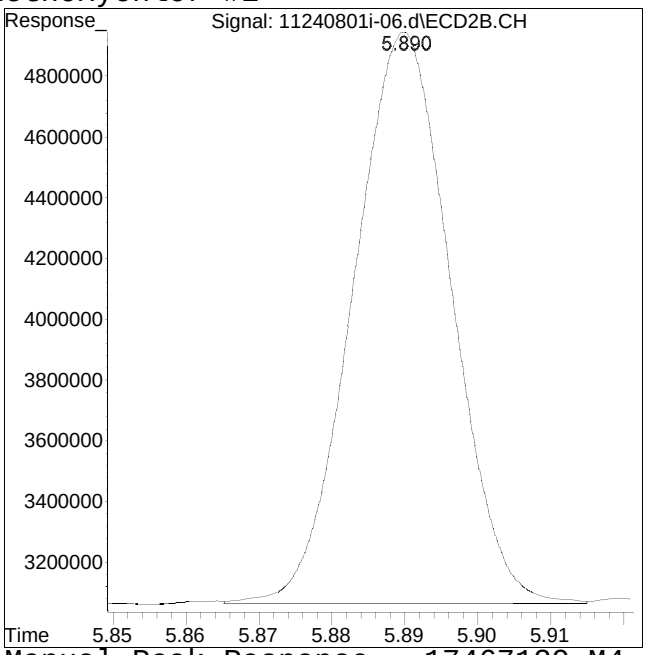
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #61: Methoxychlor #2




Original Peak Response = 18712537




Manual Peak Response = 17467129 M4

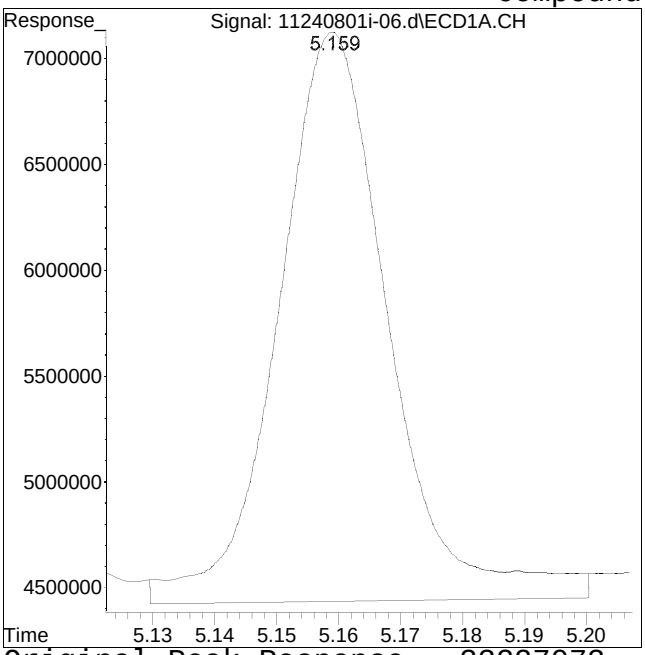
M4 = Poor automated baseline construction.

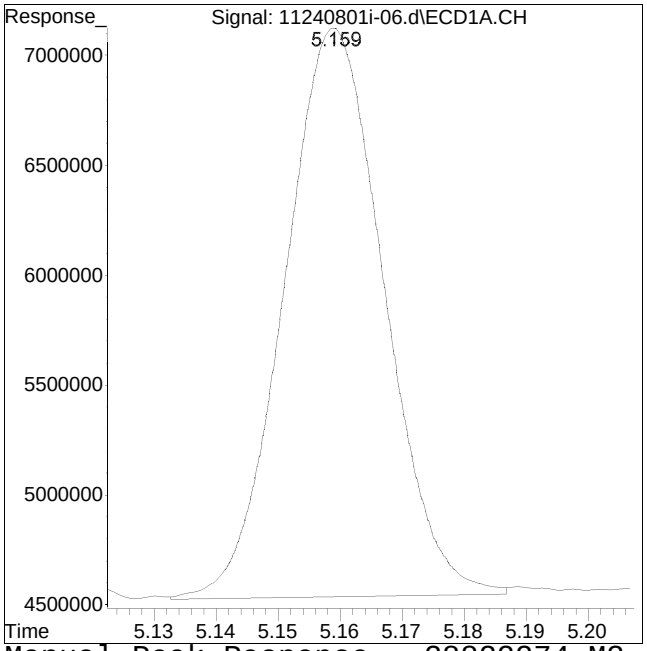
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #24: Mirex




Original Peak Response = 33227073 Manual Peak Response = 28822274 M3

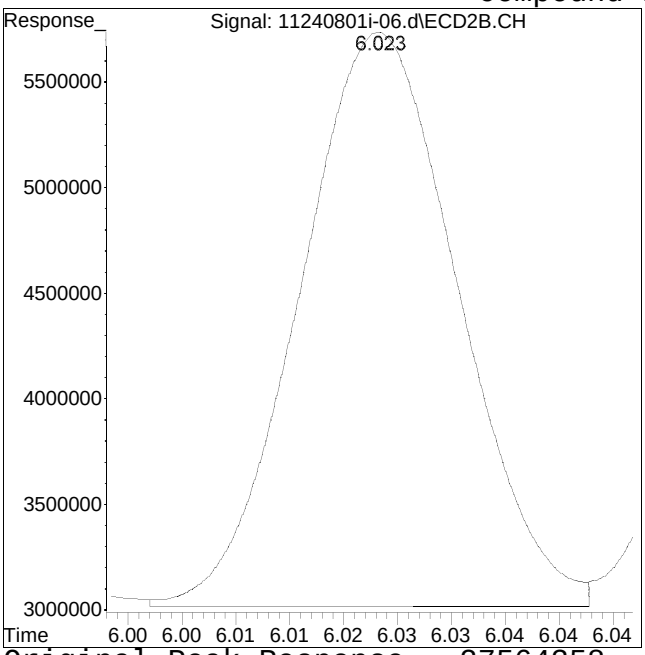
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

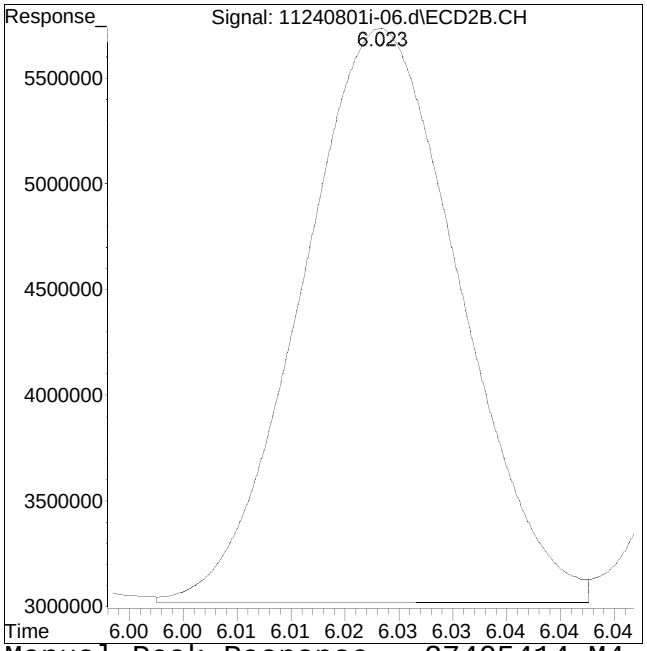
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #62: Mirex #2



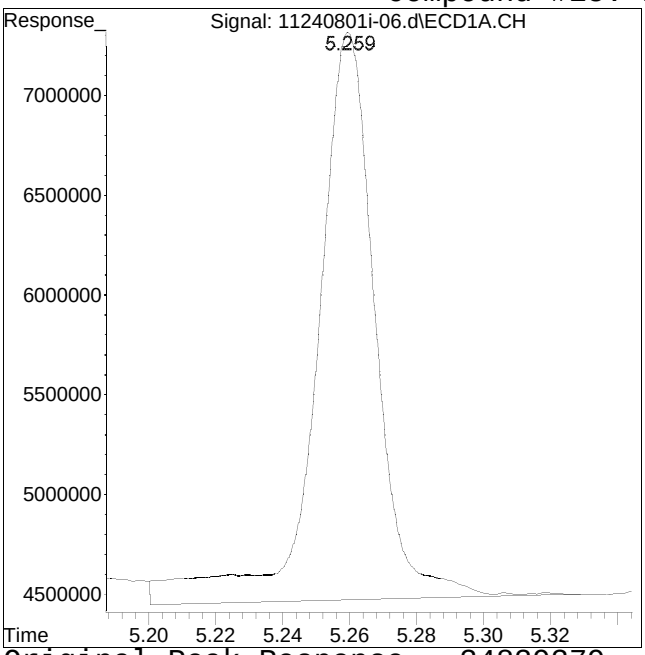



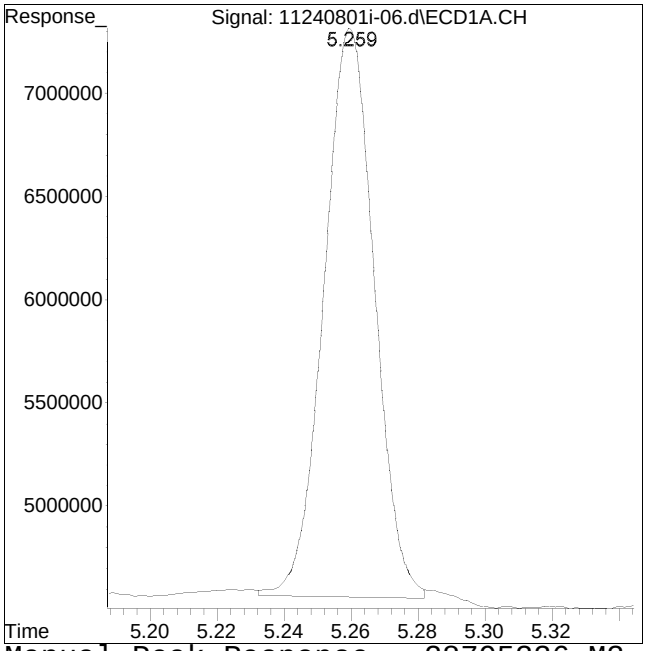

Original Peak Response = 27564358 Manual Peak Response = 27405414 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #25: Endosulfan Sulfate




Original Peak Response = 34839379 Manual Peak Response = 28795336 M3

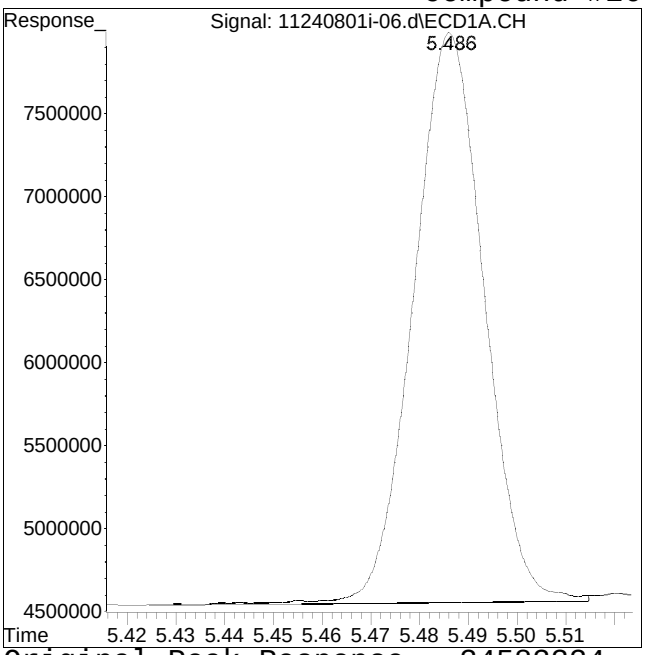
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

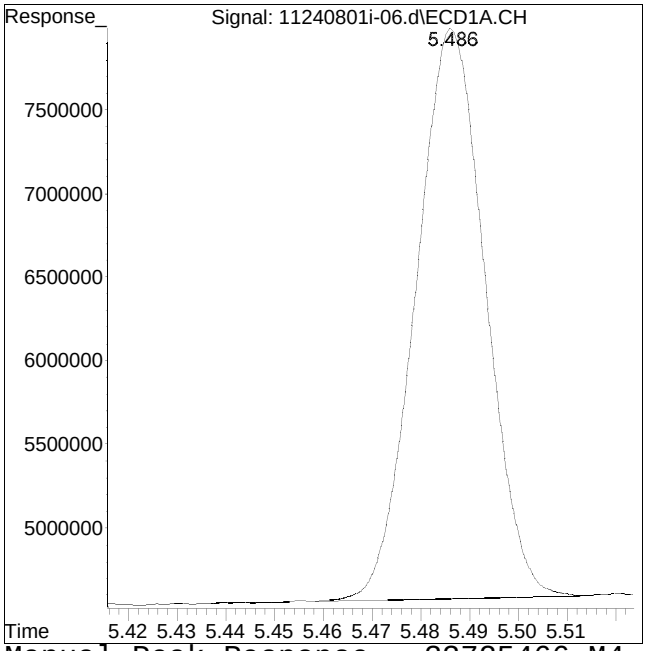
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #26: Endrin Ketone



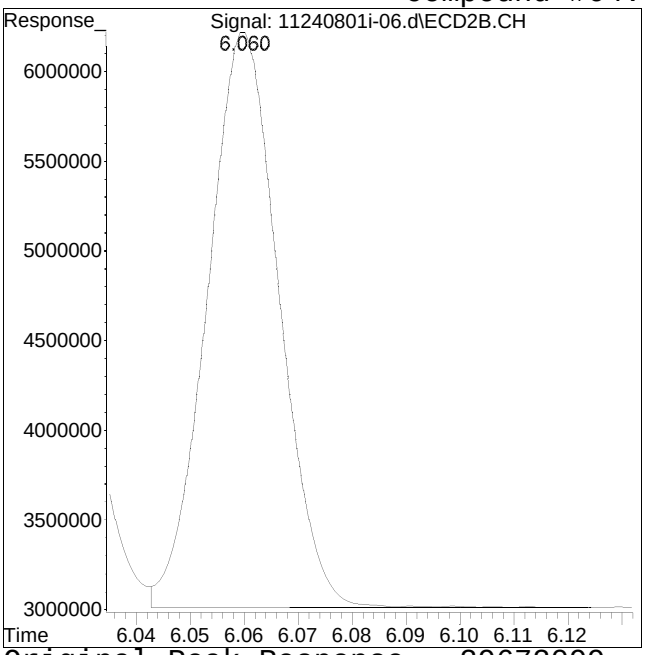




Original Peak Response = 34583334 Manual Peak Response = 33725466 M4
M4 = Poor automated baseline construction.

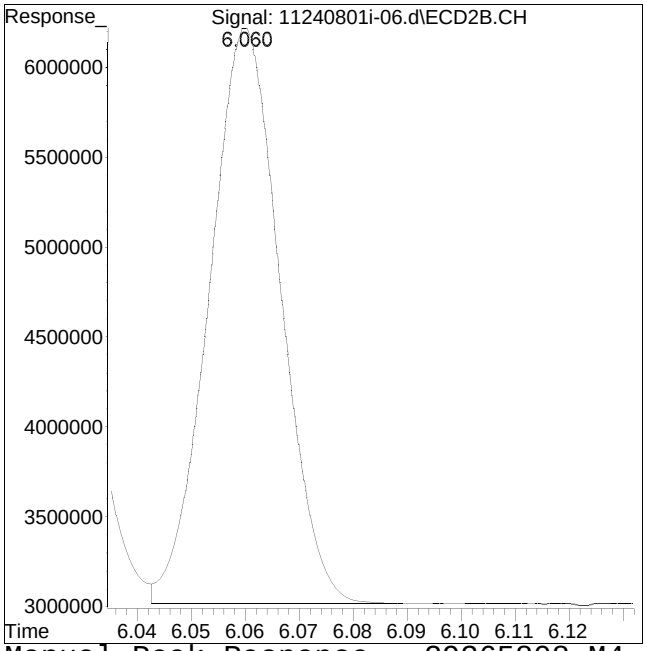
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #64: Endrin Ketone #2




Original Peak Response = 29672099



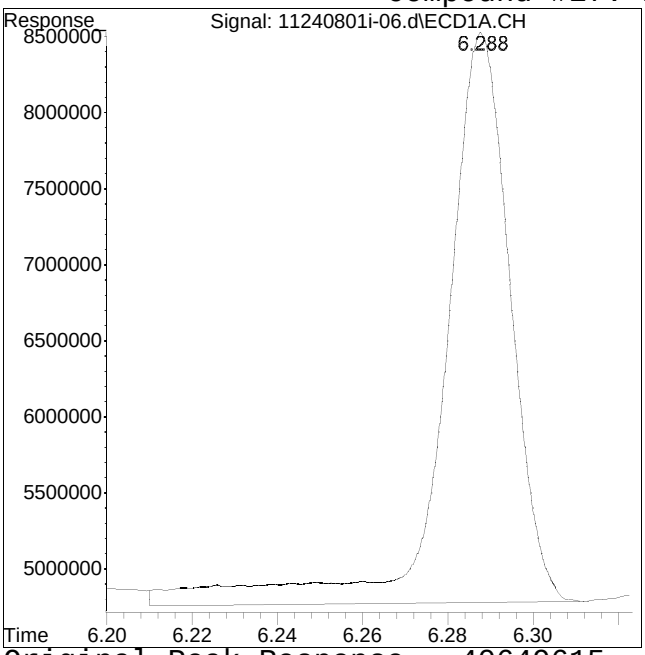

Manual Peak Response = 29365808 M4

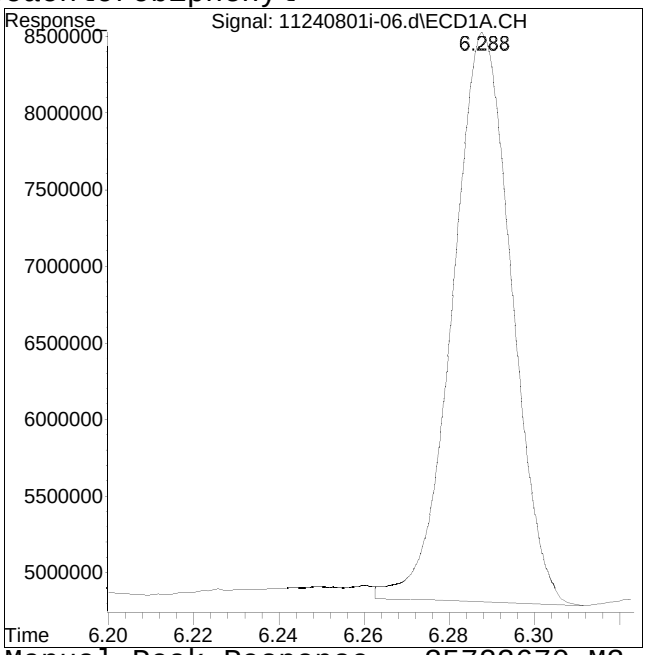
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-06.d
Date Inj'd : 8/1/2024 19:13
Sample : il4pest,42e,,pp 11684 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:00 am

Compound #27: Decachlorobiphenyl




Original Peak Response = 40649615 Manual Peak Response = 35723670 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:25
Operator : PEST11:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:53:34 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:53:25 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 236.8E6 | 187.7E6 | 25.000M4 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.651 | 1.858 | 38521121 | 33228326 | 3.958M4 | 4.126M4 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 7.92%# | 8.25%# |
| 27) s | Decachlorobi | 6.288 | 6.922 | 45749494 | 33190514 | 4.585M3 | 4.626M3 |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 9.17%# | 9.25%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.864 | 2.177 | 53831993 | 37517540 | 4.262M3 | 4.355M3 |
| 4) t | alpha-BHC | 1.963 | 2.270 | 50099814 | 44404100 | 3.378 | 3.499M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 48429966 | 42423894 | 3.532M4 | 3.691M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 23627338 | 22130202 | 4.112M4 | 4.572M4 |
| 7) t | delta-BHC | 2.349 | 2.889 | 47212643 | 42358835 | 3.409M4 | 3.618 |
| 8) t | Heptachlor | 2.513 | 2.951 | 48539979 | 47303379 | 3.873M4 | 4.125M4 |
| 9) t | Aldrin | 2.755 | 3.270 | 43725904 | 41038709 | 3.629M3 | 3.833M4 |
| 10) t | Alachlor | 2.876 | 3.152 | 8846077 | 7914947 | 4.229M4 | 5.313M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 24028161 | 29105048 | 4.744M4 | 5.206 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:25
Operator : PEST11:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:53:34 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:53:25 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.883 | 43926945 | 42803293 | 3.942M3 | 4.261M4 |
| 13) | t | gamma-Chlord | 3.424 | 4.104 | 38878589 | 38970708 | 3.786M4 | 4.193M4 |
| 14) | t | alpha-Chlord | 3.559 | 4.273 | 44728489 | 43103625 | 3.859M3 | 4.197M4 |
| 15) | t | 4,4'-DDE | 3.656 | 4.472 | 42411214 | 37932784 | 3.626M4 | 3.740M3 |
| 16) | t | Endosulfan I | 3.695 | 4.335 | 41113069 | 40054576 | 3.894 | 4.272M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 40416298 | 38468360 | 3.654M4 | 3.937M4 |
| 18) | t | Endrin | 4.209 | 4.925 | 41670444 | 39189618 | 3.747M4 | 3.963M4 |
| 19) | t | 4,4'-DDD | 4.321 | 5.049 | 32563209 | 30675797 | 3.557M4 | 3.766M4 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 38878709 | 36626235 | 3.907M4 | 4.280M4 |
| 21) | t | 4,4'-DDT | 4.615 | 5.326 | 37823947 | 35899886 | 3.661M4 | 3.859M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 32912480 | 30791502 | 3.951M4 | 4.329M4 |
| 23) | t | Methoxychlor | 5.103 | 5.890 | 23121492 | 22184815 | 4.437M4 | 4.706M4 |
| 24) | t | Mirex | 5.159 | 6.023 | 37112581 | 34701868 | 4.423M4 | 4.946M4 |
| 25) | t | Endosulfan S | 5.259 | 5.650 | 37357641 | 36575099 | 4.010M3 | 4.387M4 |
| 26) | t | Endrin Keton | 5.486 | 6.060 | 44230088 | 37958462 | 3.979M4 | 4.219M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:25
Operator : PEST11:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:53:34 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:53:25 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

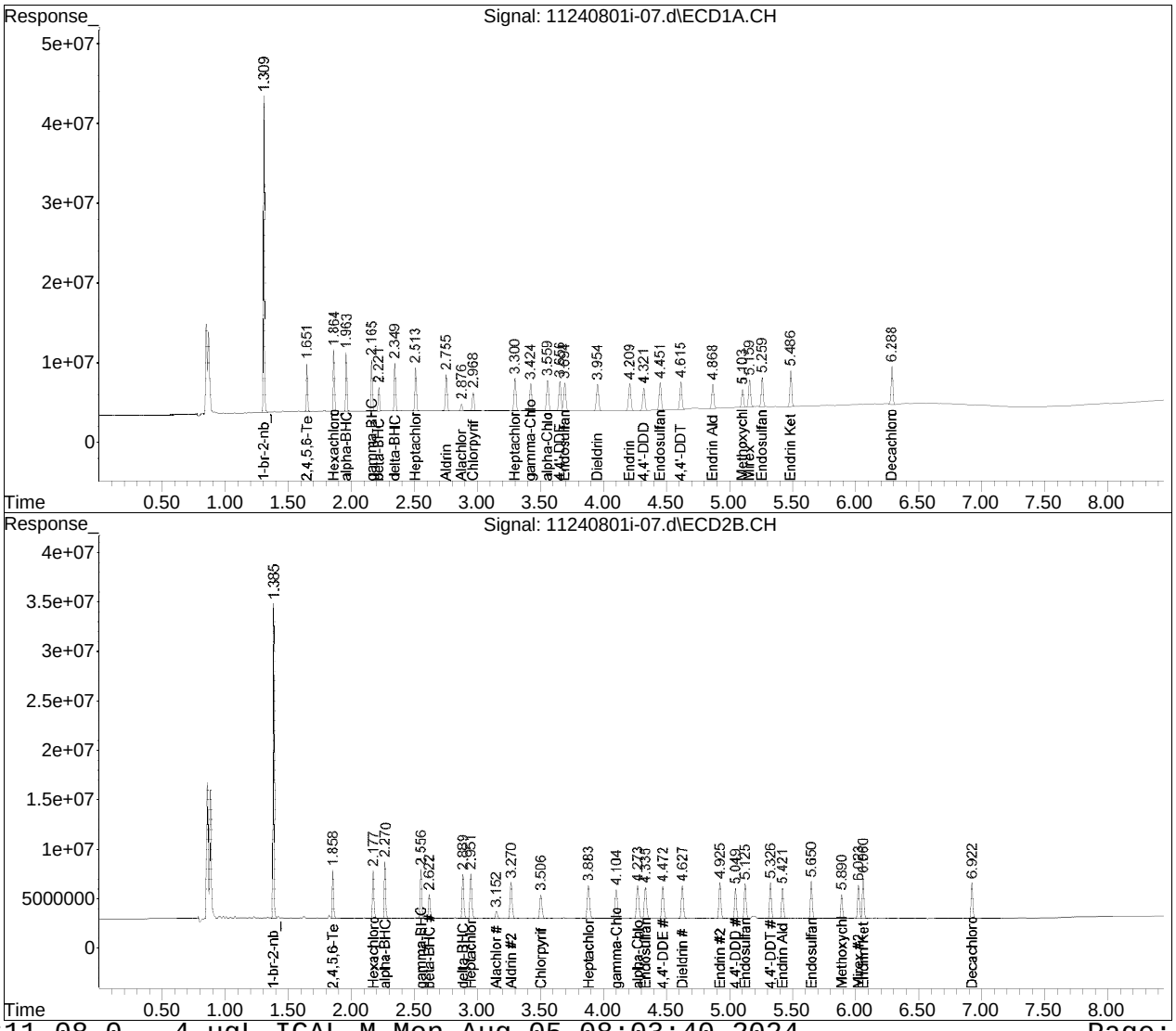
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-07.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  19:25
Operator : PEST11:ejl
Sample : il5pest,42e,,pp 11683 L0.004
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:53:34 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:53:25 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

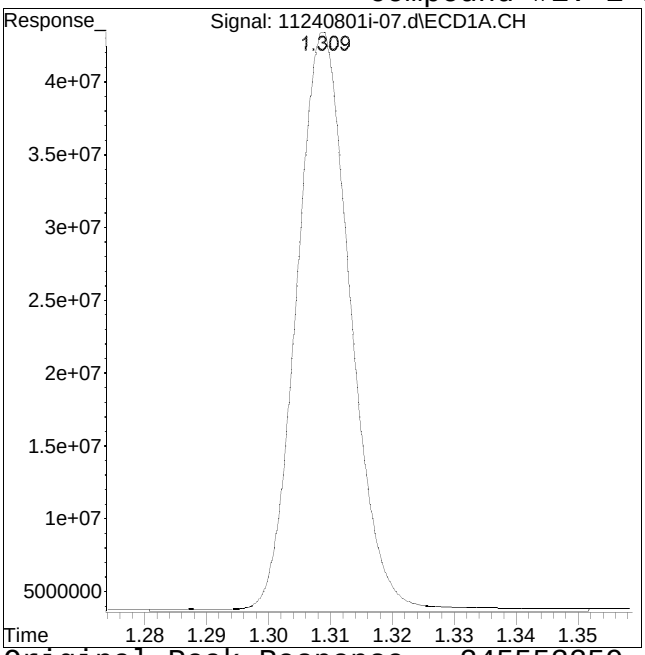


Manual Integration Report

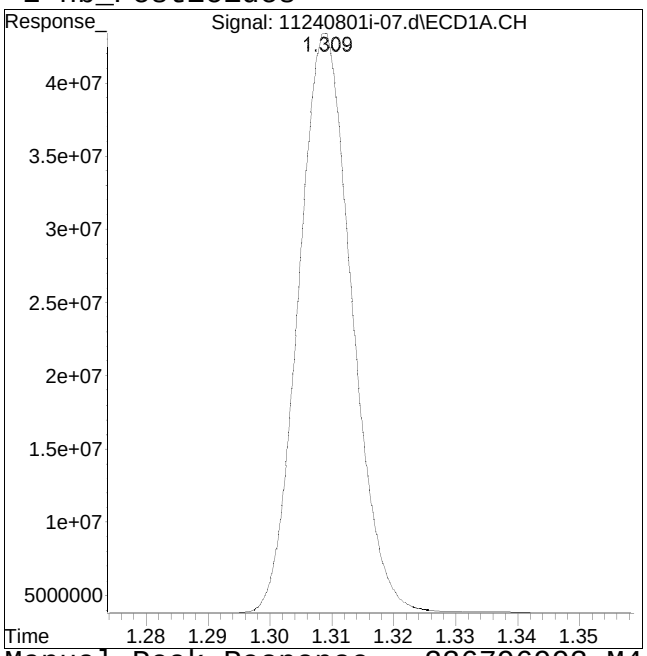
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 245553359



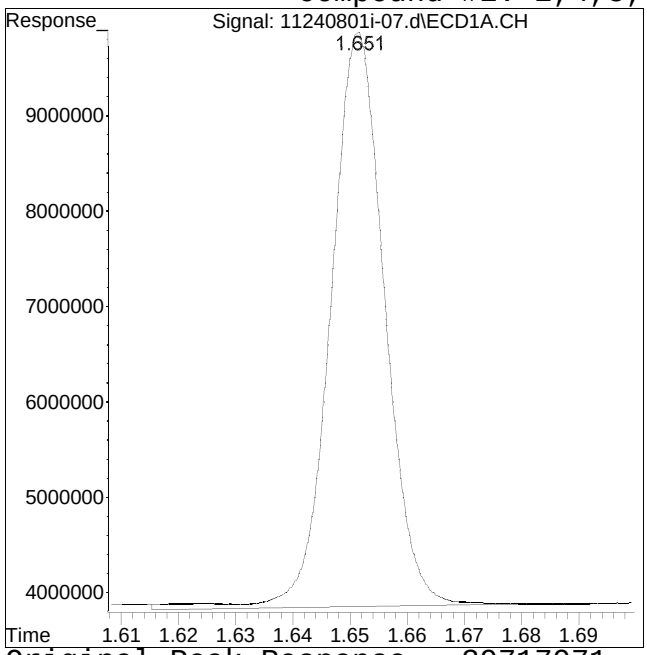

Manual Peak Response = 236796993 M4

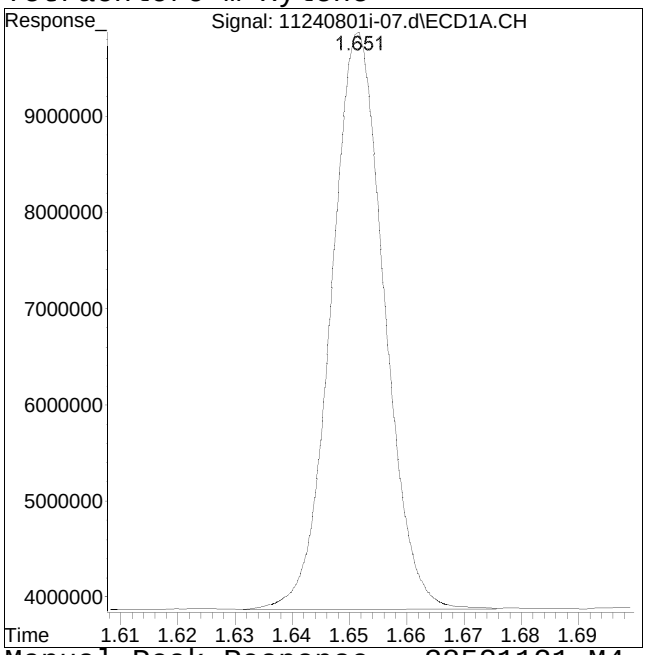
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



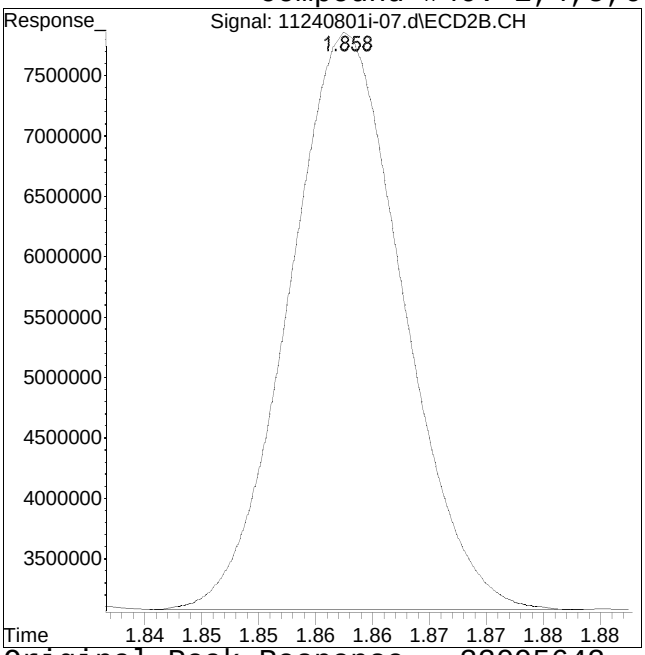

Original Peak Response = 39717971 Manual Peak Response = 38521121 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

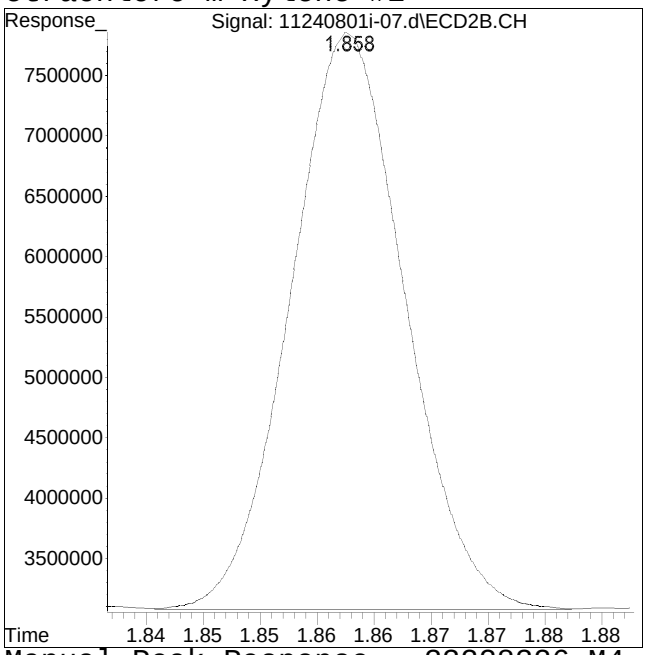
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 33095642



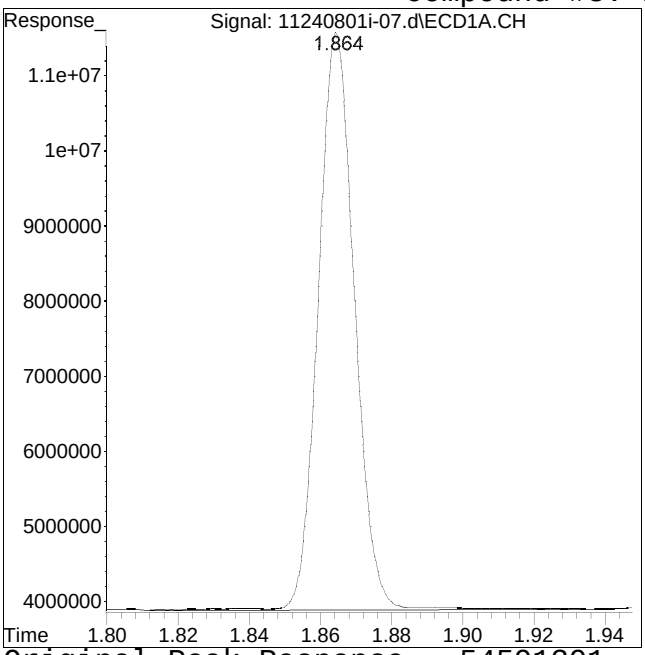

Manual Peak Response = 33228326 M4

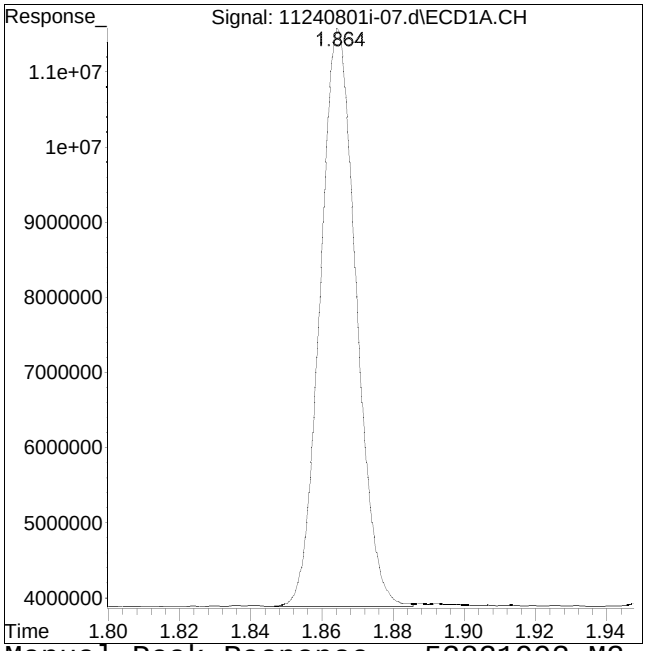
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #3: Hexachlorobenzene



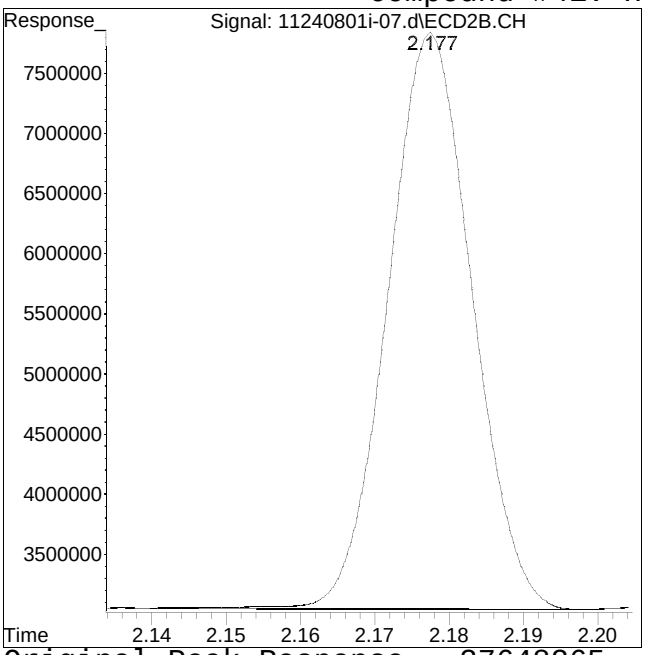



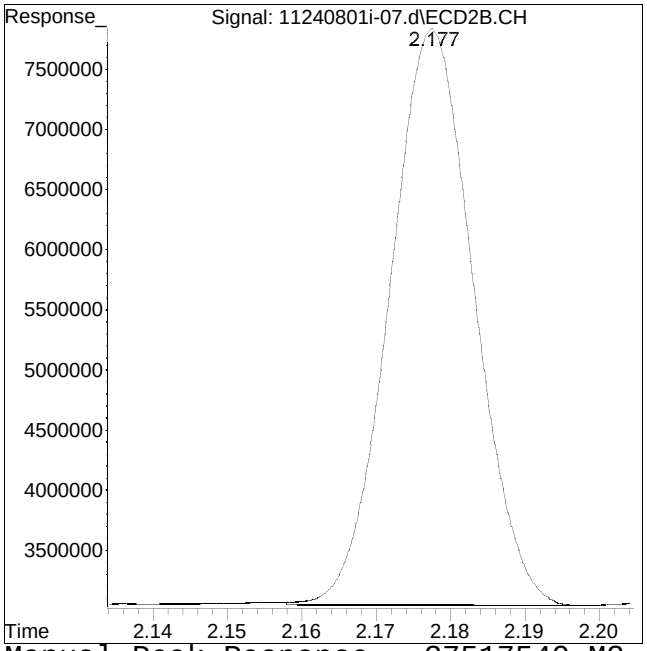

Original Peak Response = 54591391 Manual Peak Response = 53831993 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #41: Hexachlorobenzene #2



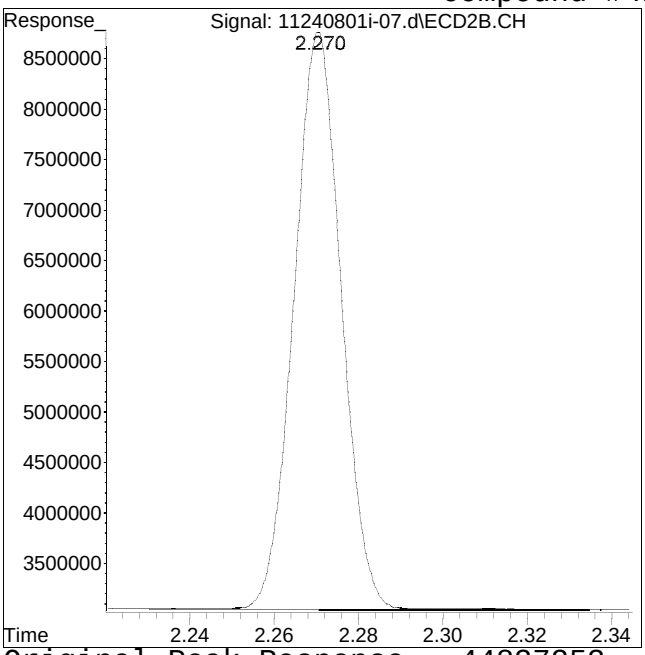




Original Peak Response = 37648265 Manual Peak Response = 37517540 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

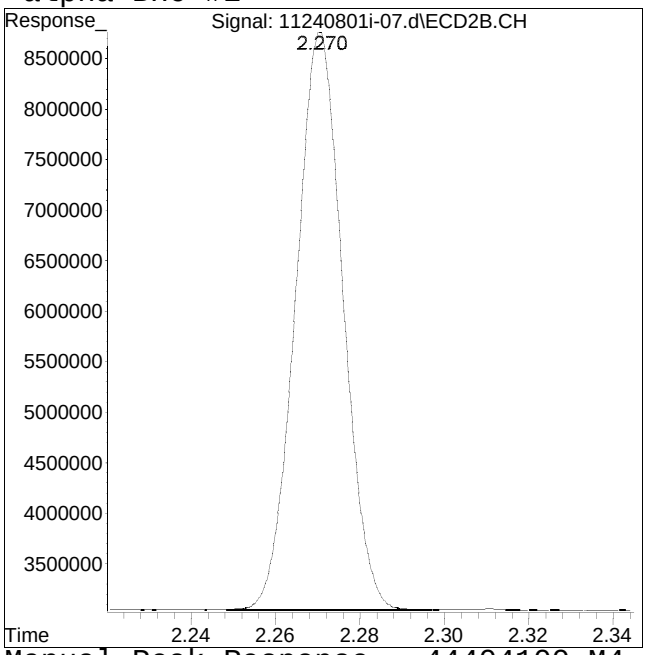
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0 Quant Date : 8/2/2024 10:53 am

Compound #42: alpha-BHC #2




Original Peak Response = 44837253



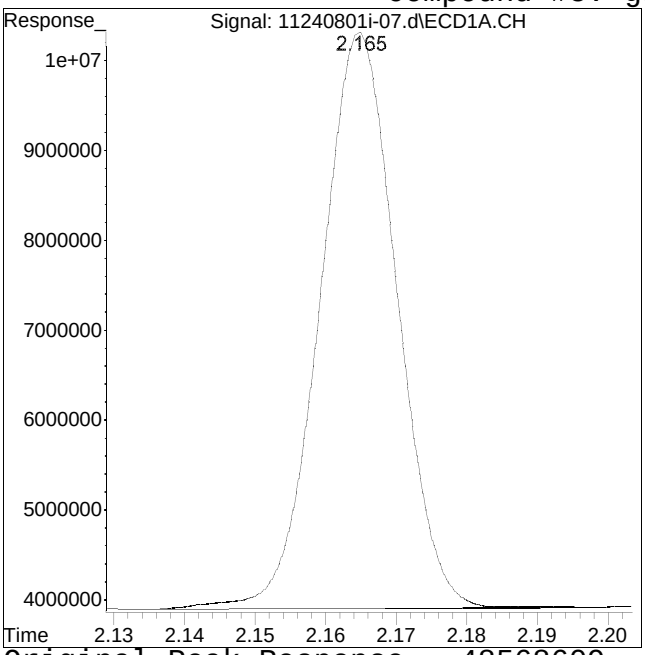

Manual Peak Response = 44404100 M4

M4 = Poor automated baseline construction.

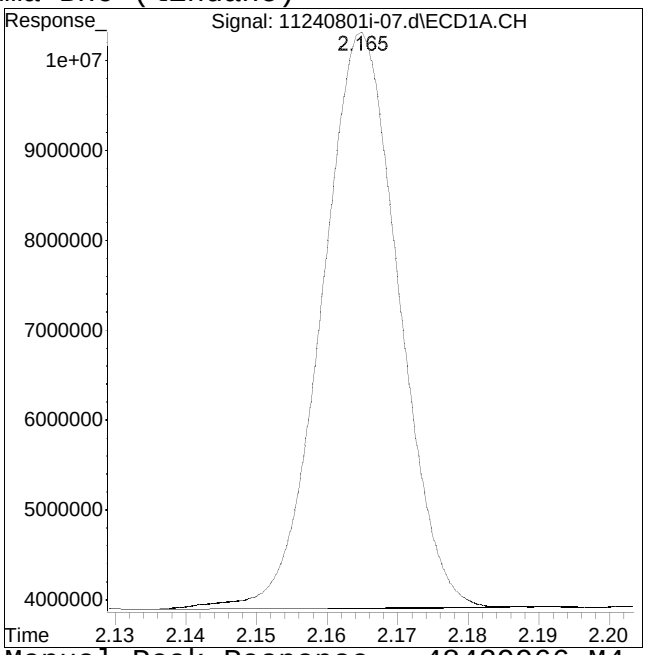
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 48568609

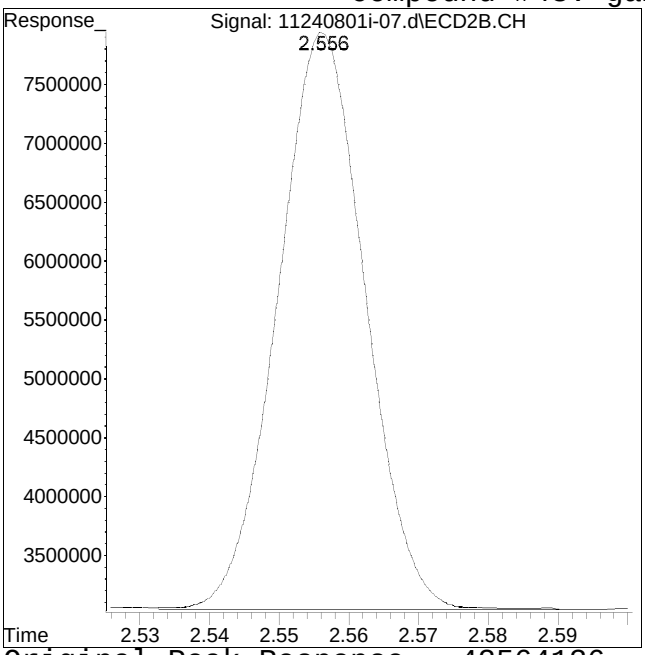



Manual Peak Response = 48429966 M4
M4 = Poor automated baseline construction.

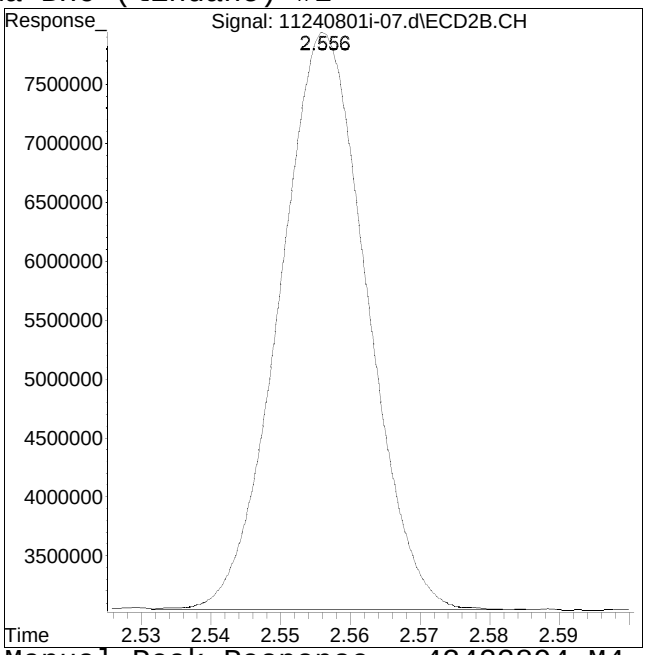
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 42564136



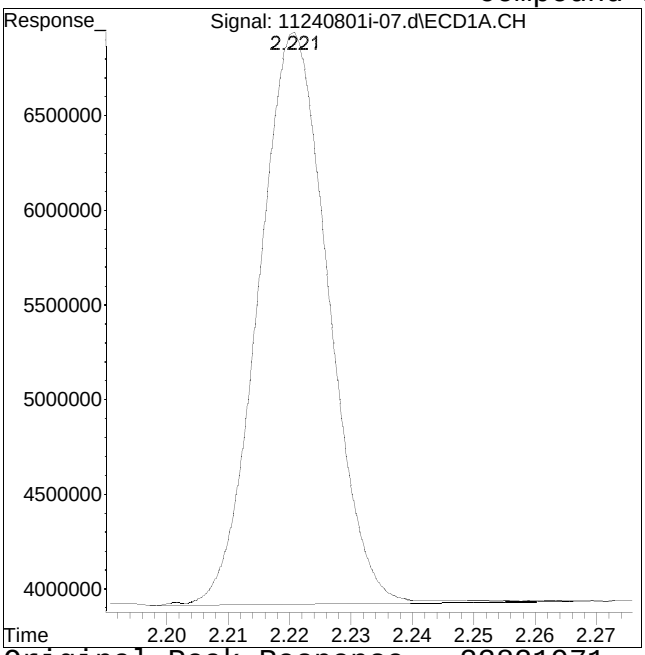

Manual Peak Response = 42423894 M4

M4 = Poor automated baseline construction.

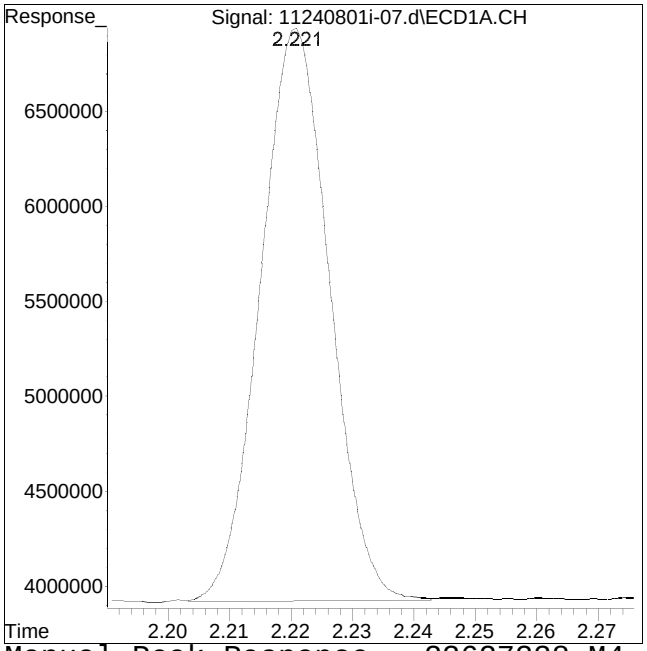
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #6: beta-BHC




Original Peak Response = 23821971




Manual Peak Response = 23627338 M4

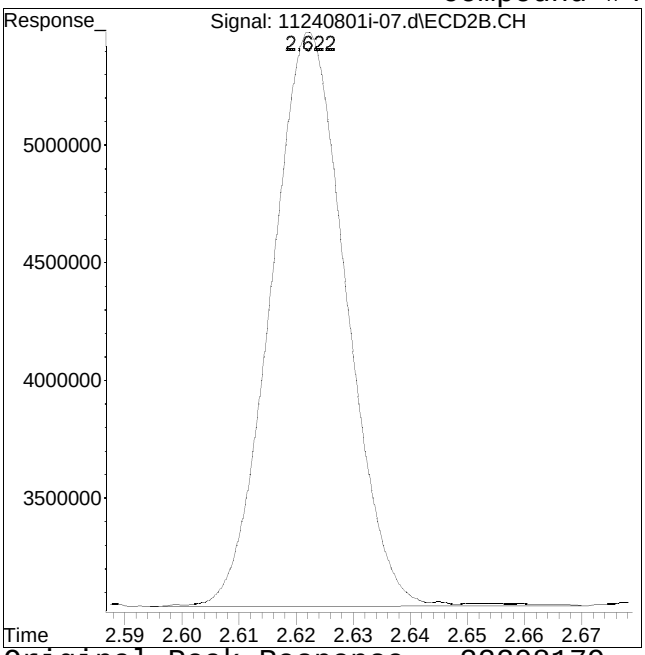
M4 = Poor automated baseline construction.

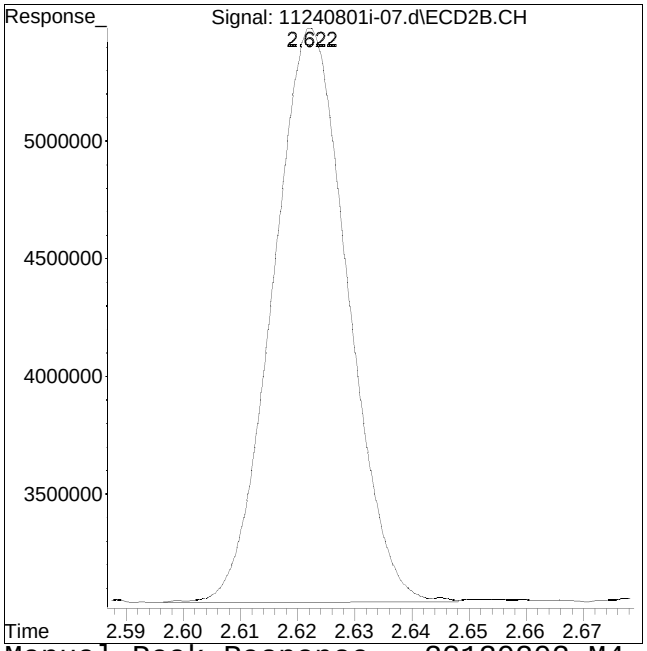
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #44: beta-BHC #2



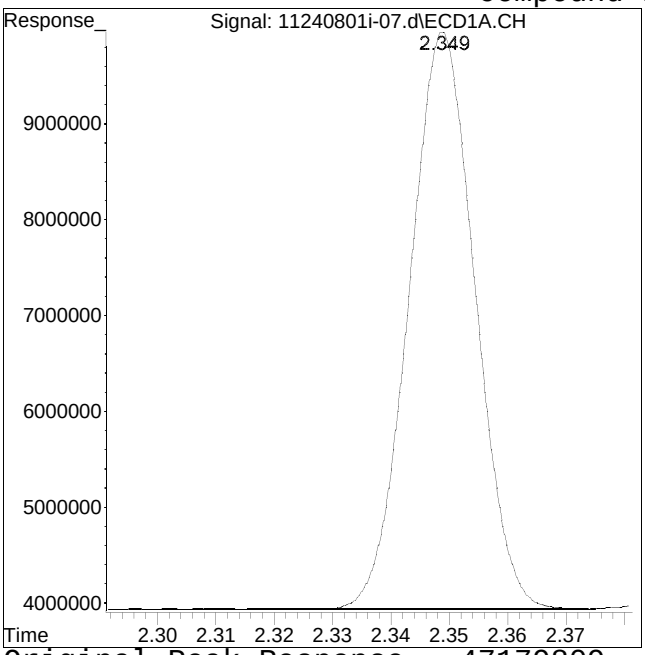

Original Peak Response = 22208179 Manual Peak Response = 22130202 M4
M4 = Poor automated baseline construction.

Manual Integration Report

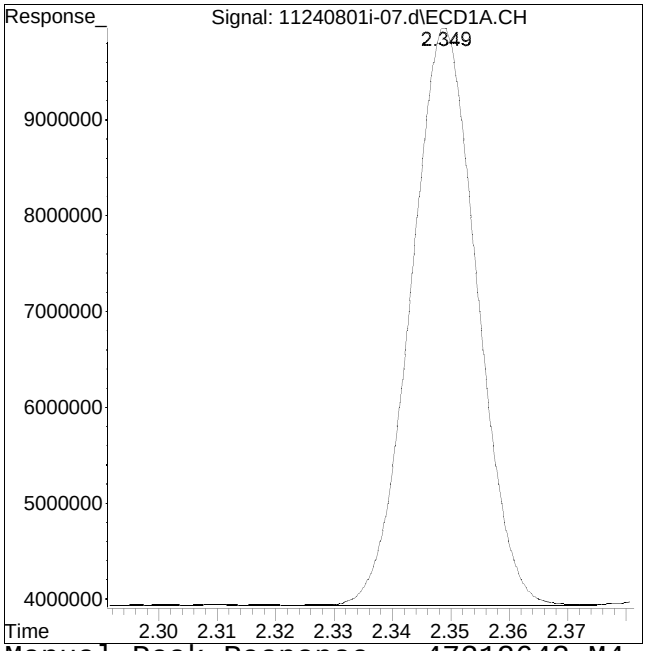
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #7: delta-BHC




Original Peak Response = 47179809



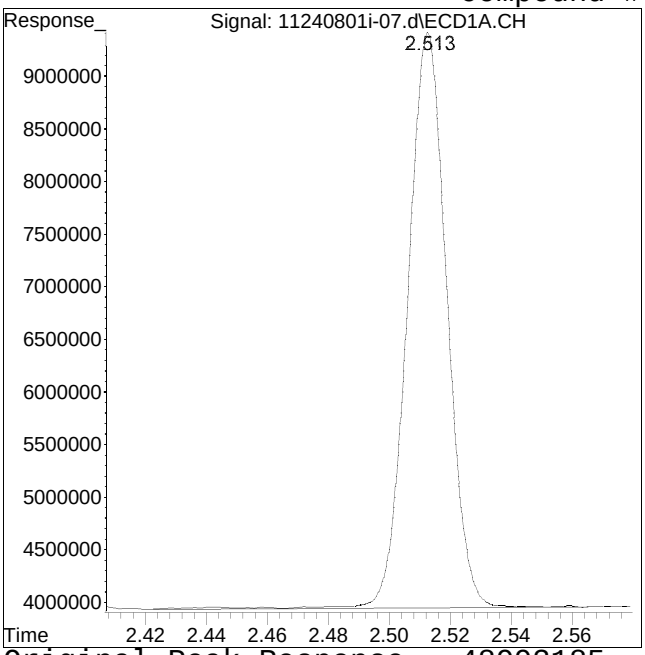

Manual Peak Response = 47212643 M4

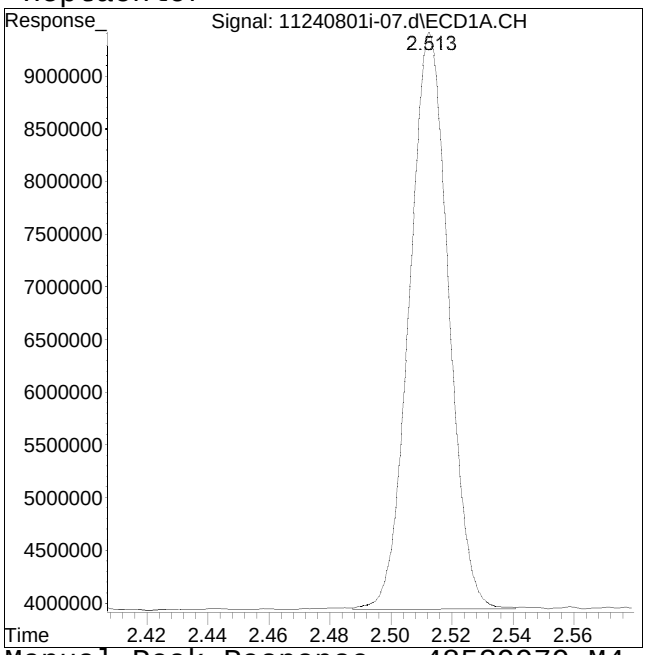
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #8: Heptachlor



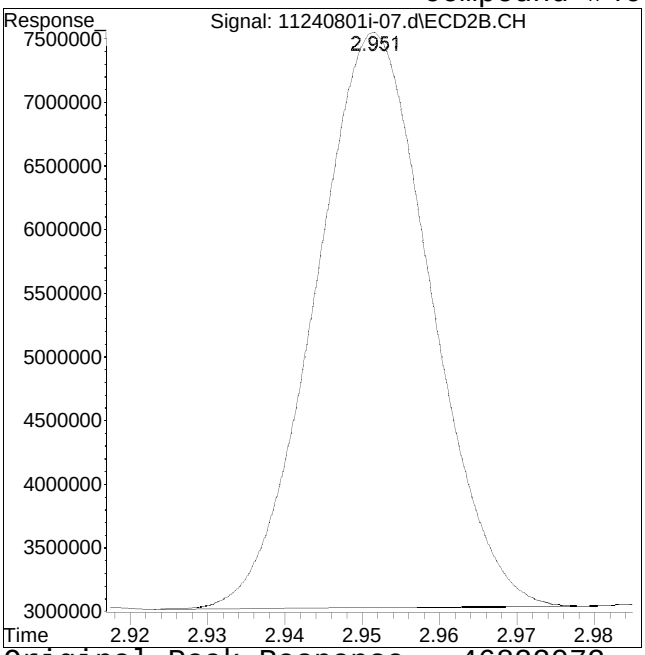

Original Peak Response = 48993185 Manual Peak Response = 48539979 M4
M4 = Poor automated baseline construction.

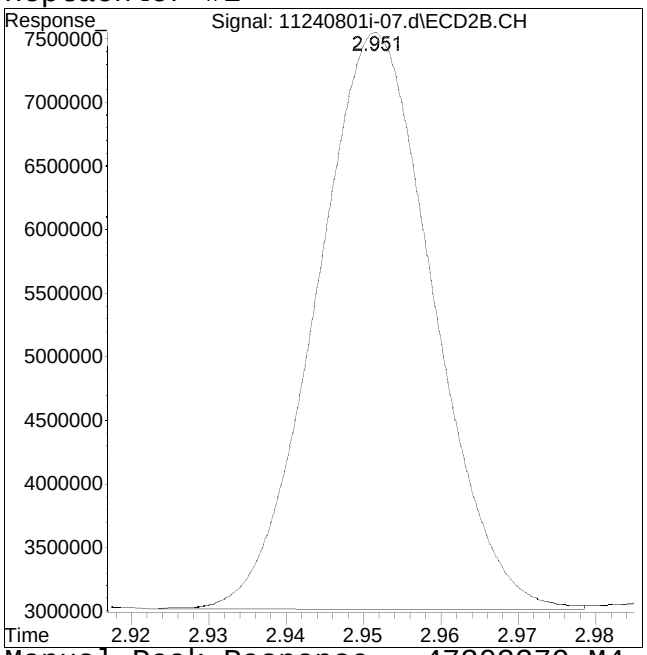
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #46: Heptachlor #2



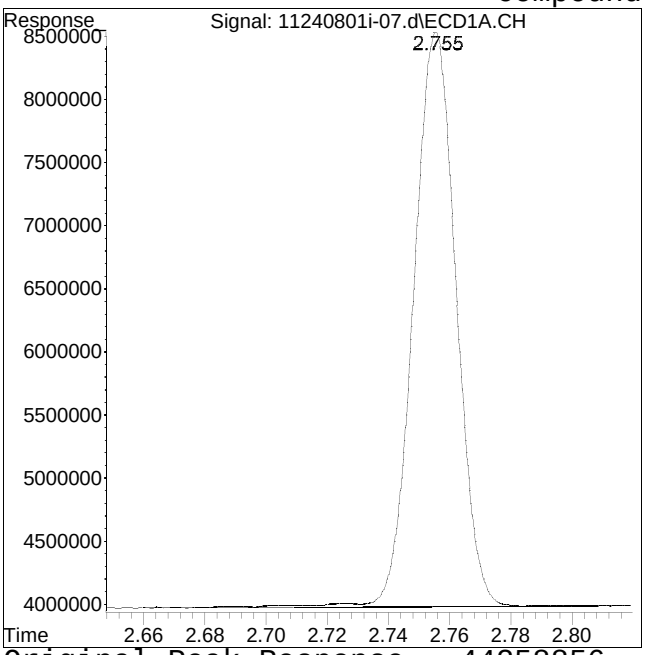

Original Peak Response = 46822072 Manual Peak Response = 47303379 M4
M4 = Poor automated baseline construction.

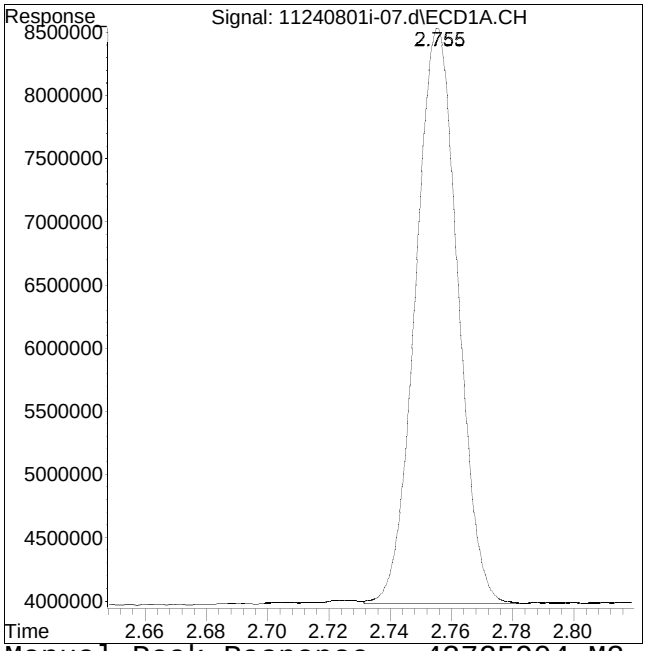
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #9: Aldrin




Original Peak Response = 44258856 Manual Peak Response = 43725904 M3

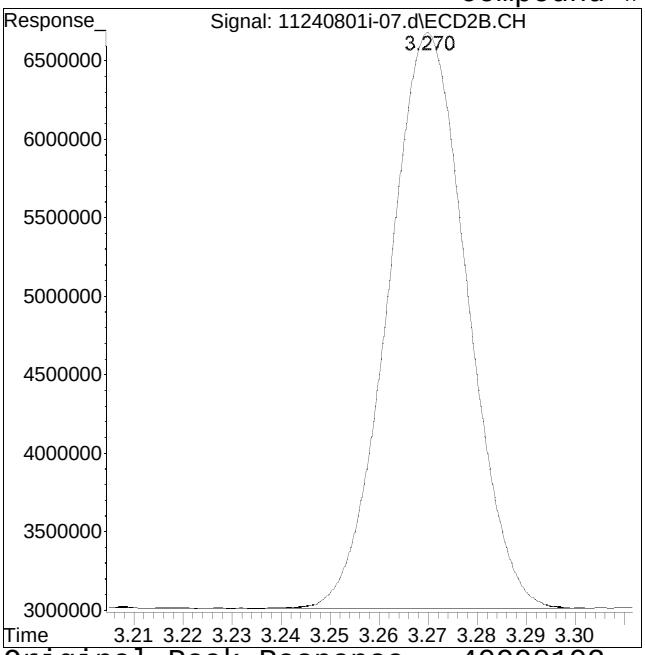
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

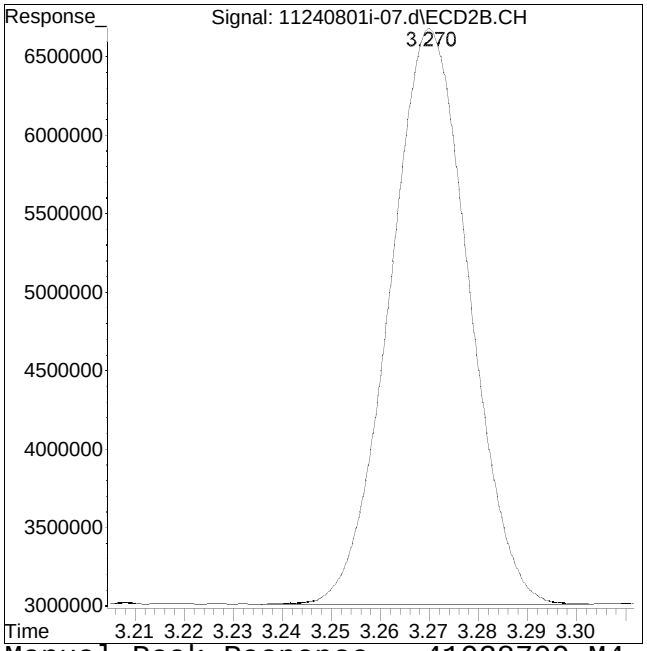
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #47: Aldrin #2



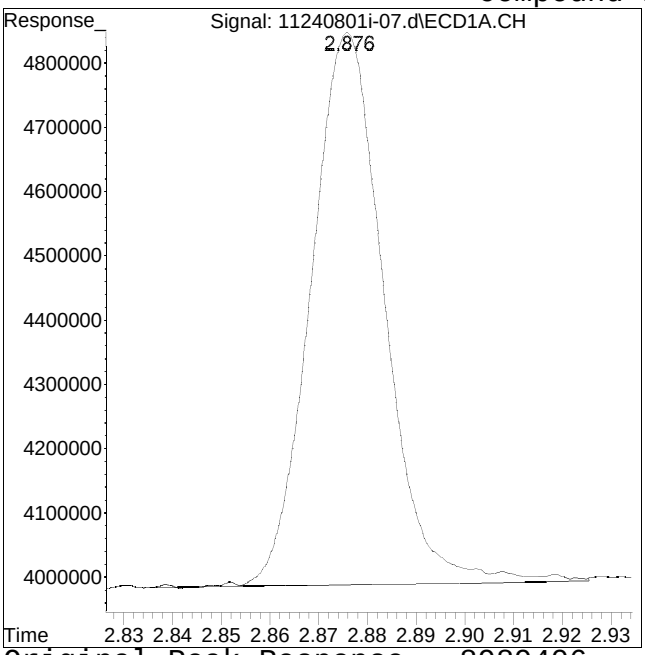

Original Peak Response = 40990192 Manual Peak Response = 41038709 M4
M4 = Poor automated baseline construction.

Manual Integration Report

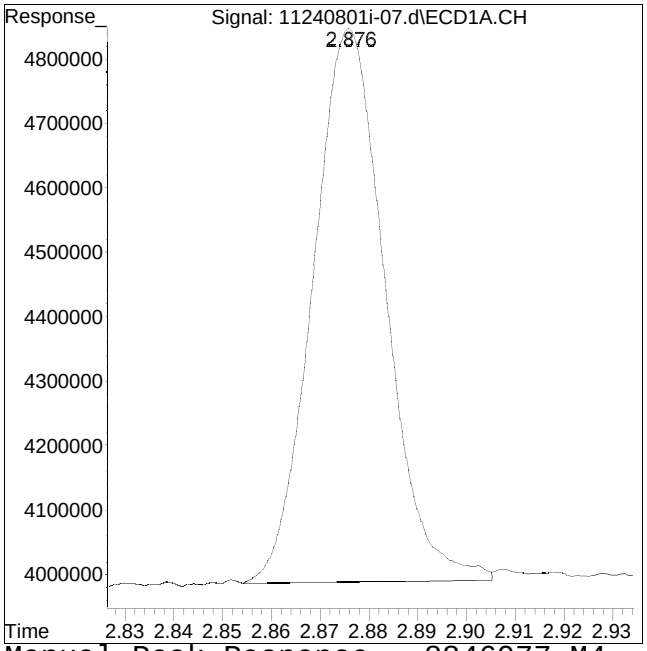
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #10: Alachlor




Original Peak Response = 8989406



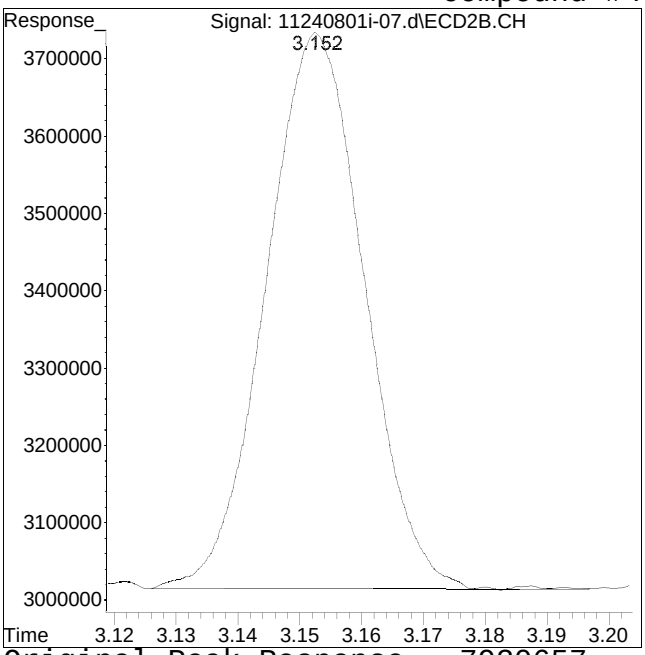

Manual Peak Response = 8846077 M4

M4 = Poor automated baseline construction.

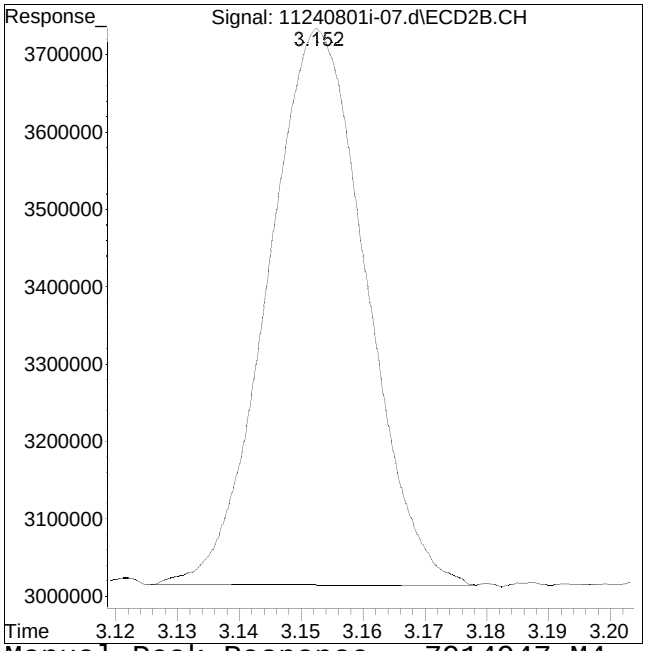
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #48: Alachlor #2




Original Peak Response = 7930657




Manual Peak Response = 7914947 M4

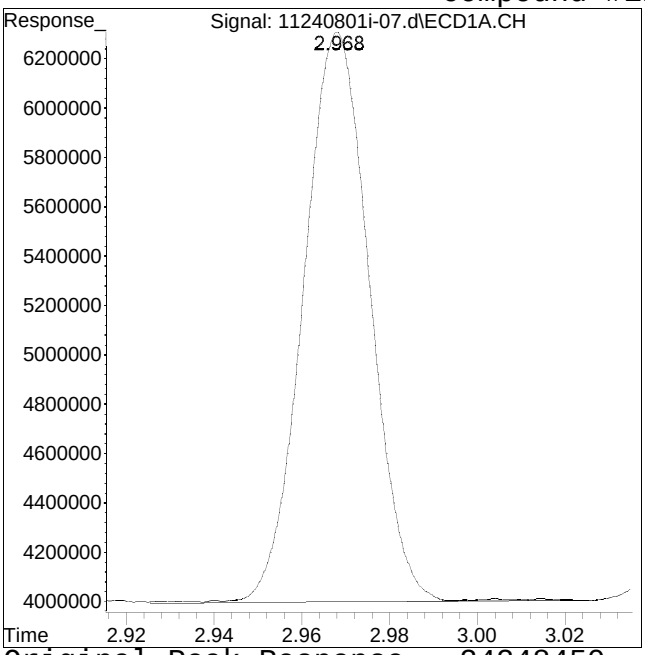
M4 = Poor automated baseline construction.

Manual Integration Report

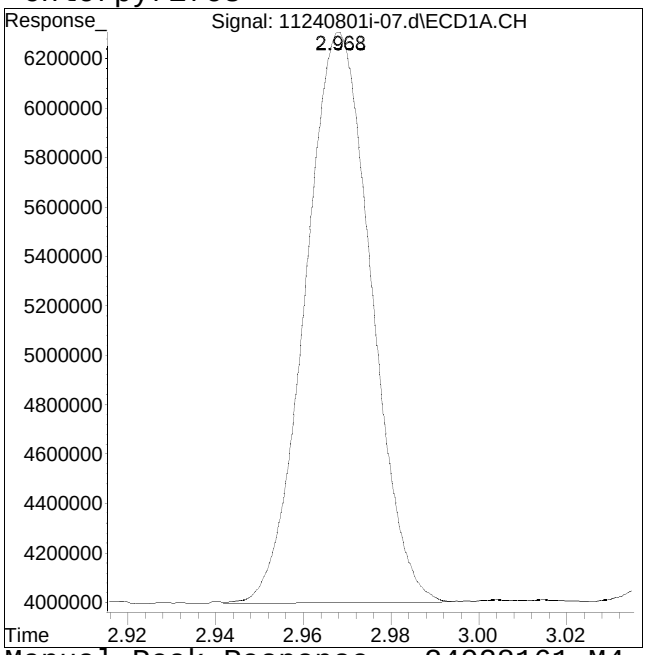
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #11: Chlorpyrifos




Original Peak Response = 24248450



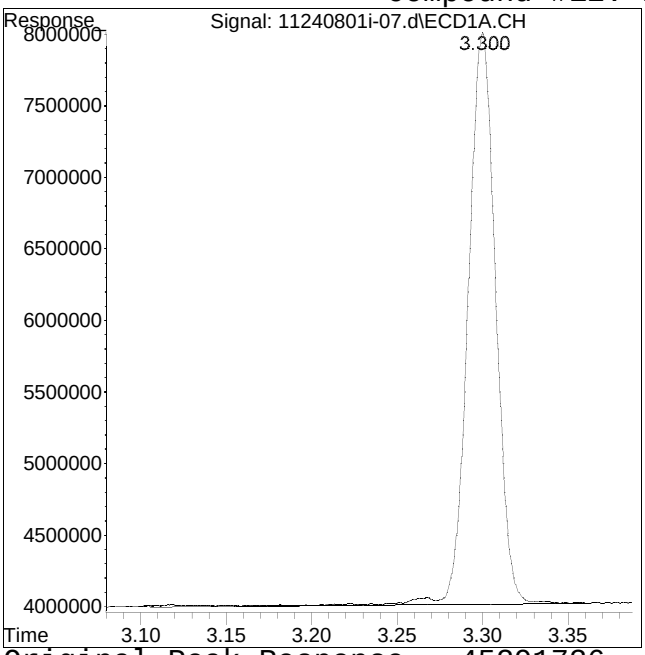

Manual Peak Response = 24028161 M4

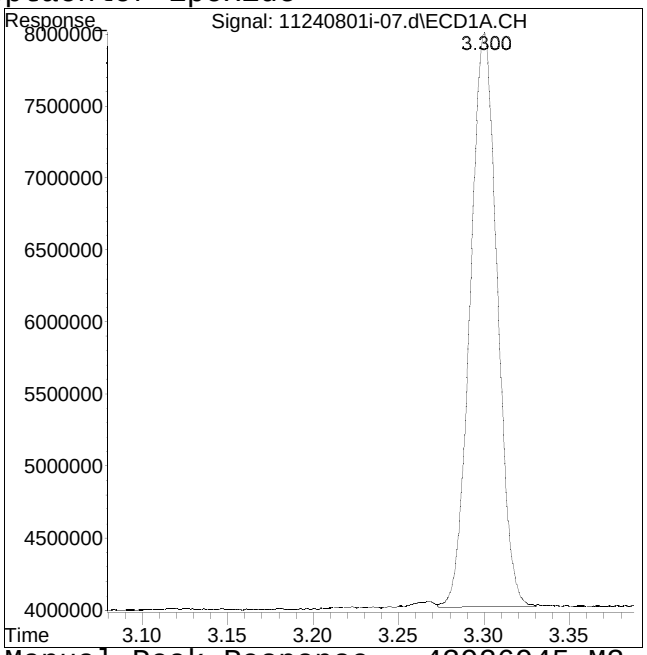
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #12: Heptachlor Epoxide



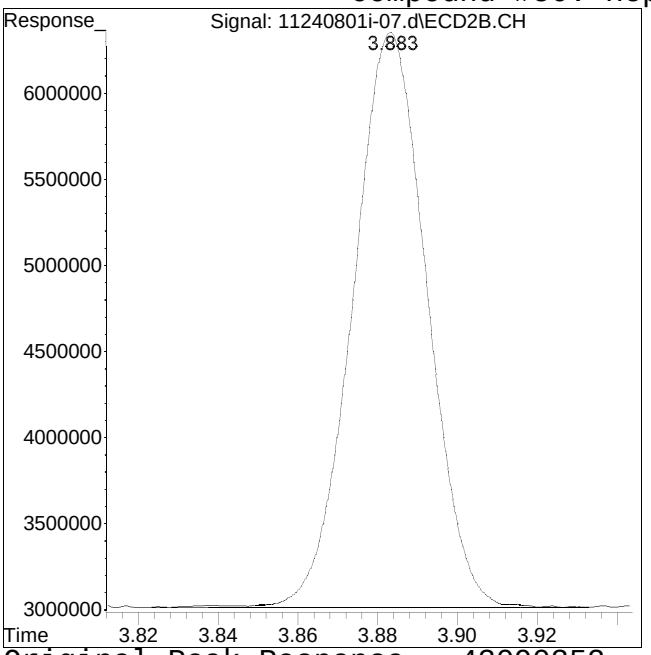



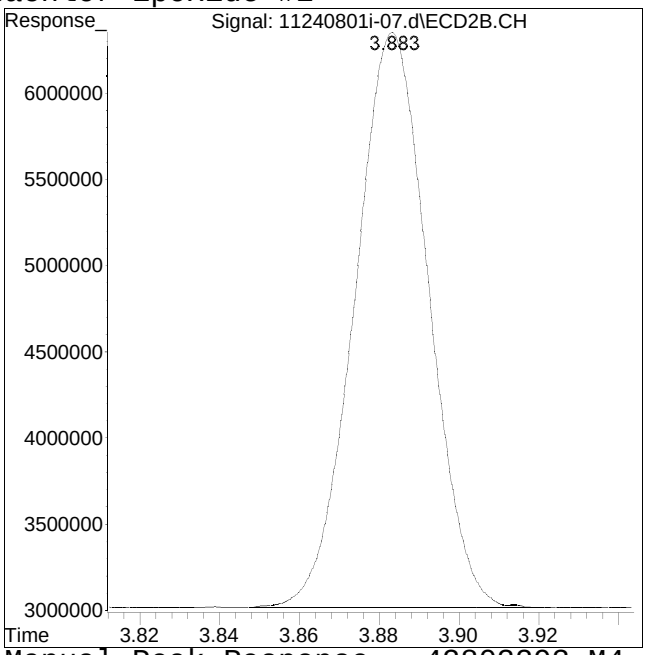

Original Peak Response = 45291736 Manual Peak Response = 43926945 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #50: Heptachlor Epoxide #2



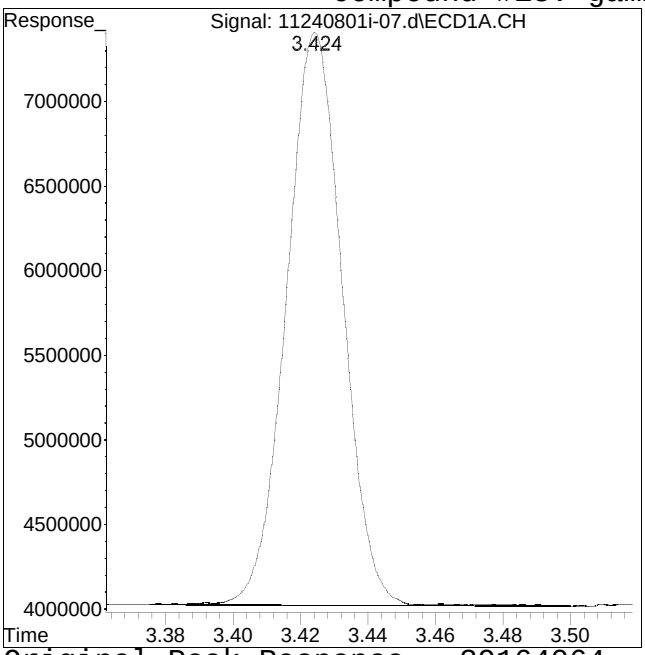




Original Peak Response = 43090352 Manual Peak Response = 42803293 M4
M4 = Poor automated baseline construction.

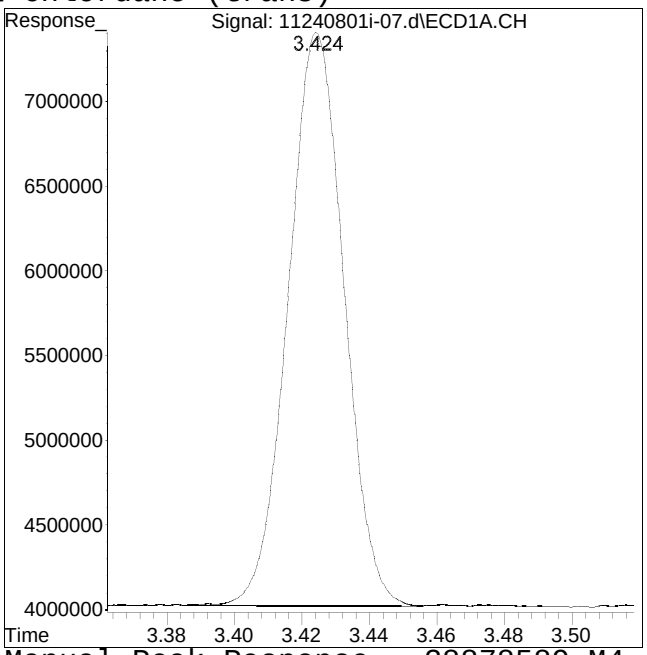
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #13: gamma-Chlordane (trans)




Original Peak Response = 39164064




Manual Peak Response = 38878589 M4

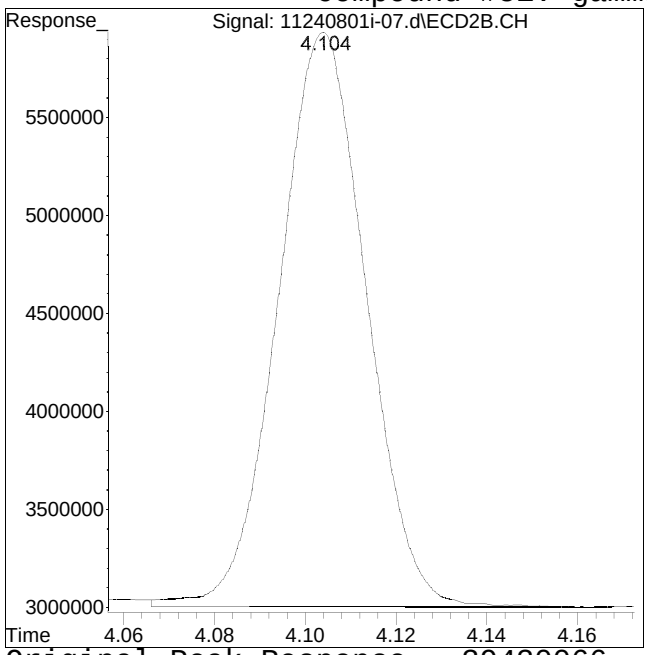
M4 = Poor automated baseline construction.

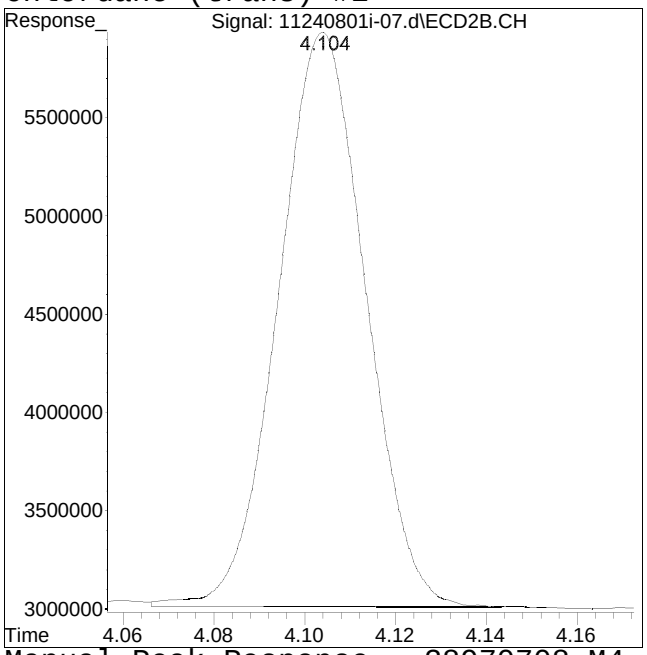
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #51: gamma-Chlordane (trans) #2



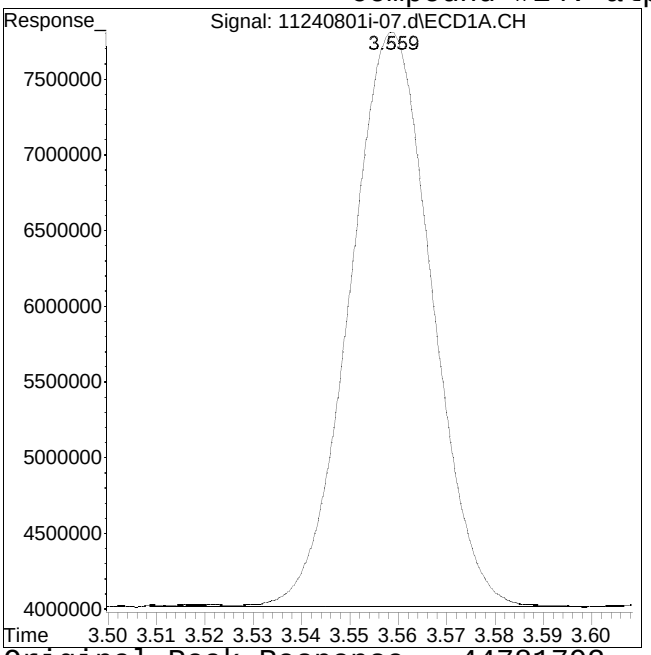



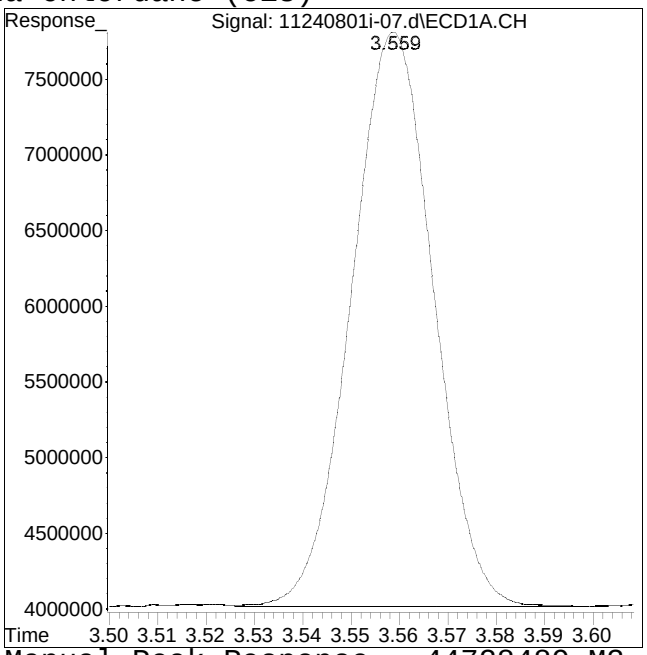

Original Peak Response = 39430066 Manual Peak Response = 38970708 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #14: alpha-Chlordane (cis)



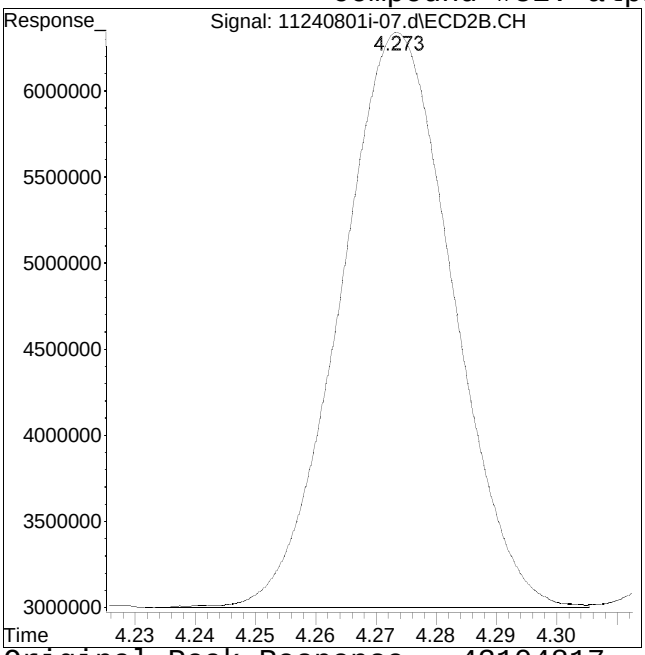

Original Peak Response = 44781792 Manual Peak Response = 44728489 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

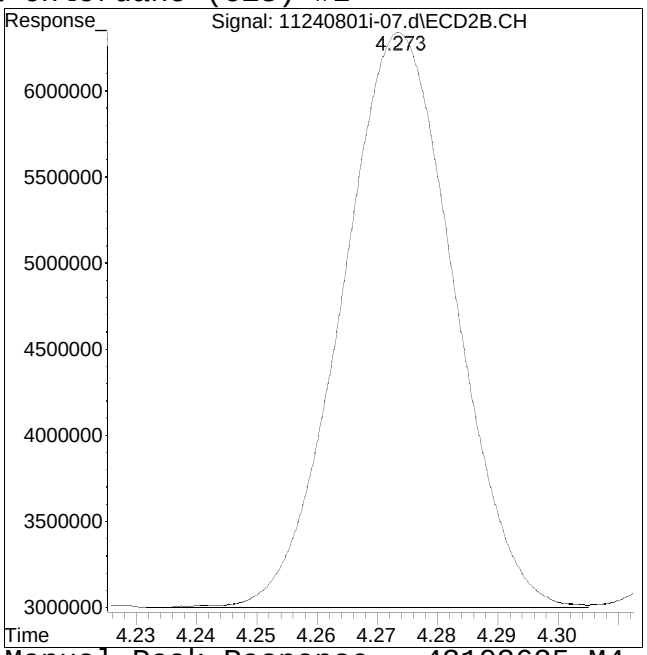
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 43104817




Manual Peak Response = 43103625 M4

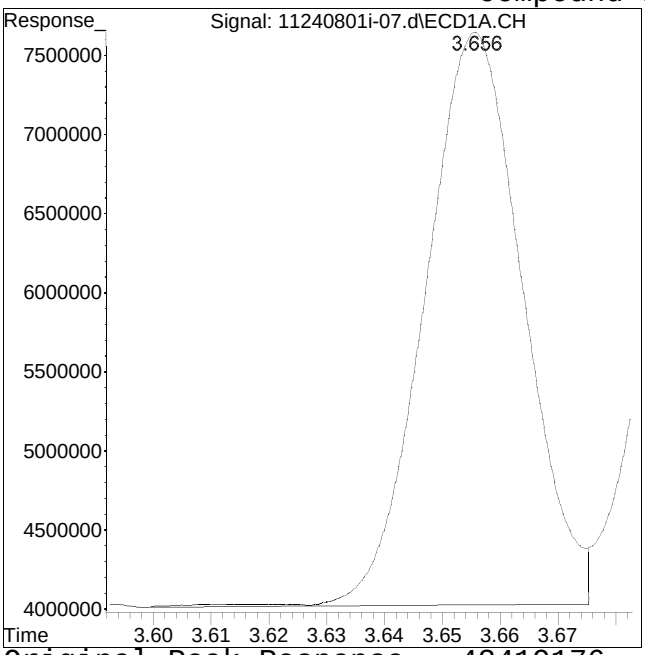
M4 = Poor automated baseline construction.

Manual Integration Report

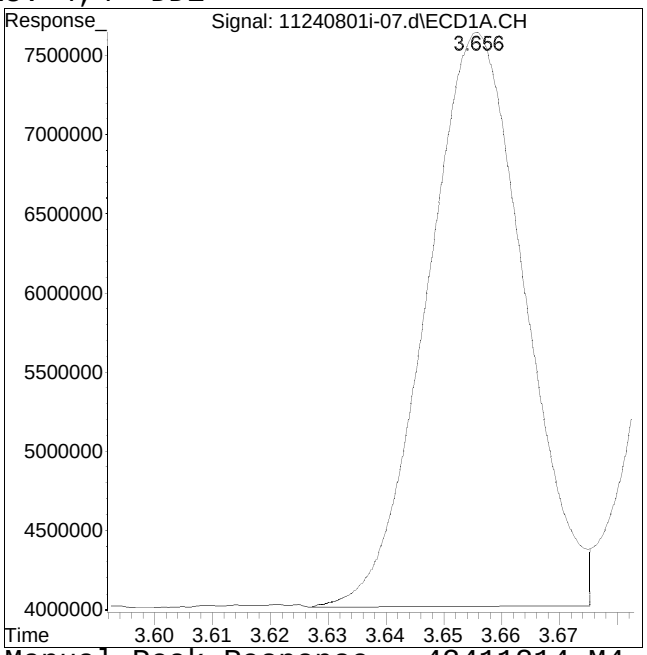
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #15: 4,4'-DDE




Original Peak Response = 42419176



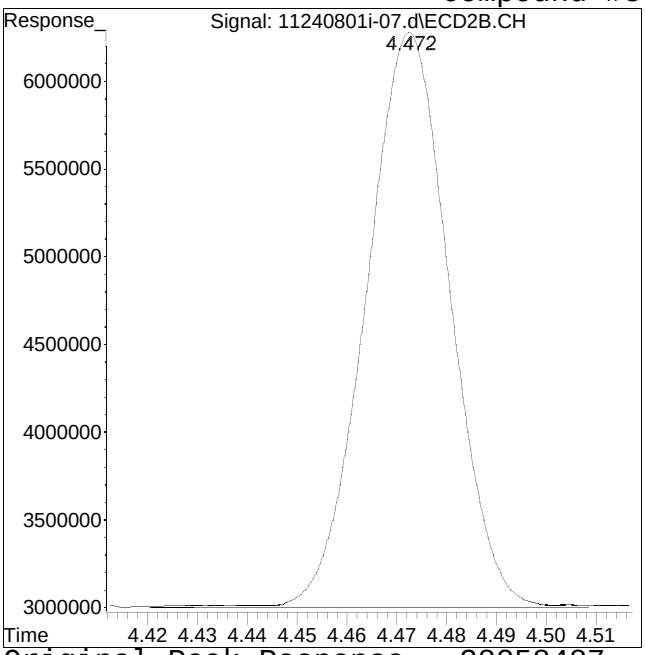

Manual Peak Response = 42411214 M4

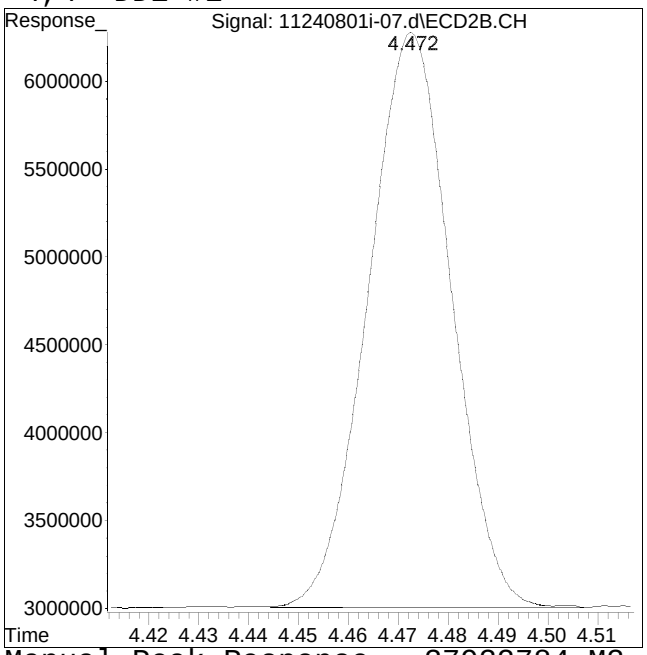
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #53: 4,4'-DDE #2



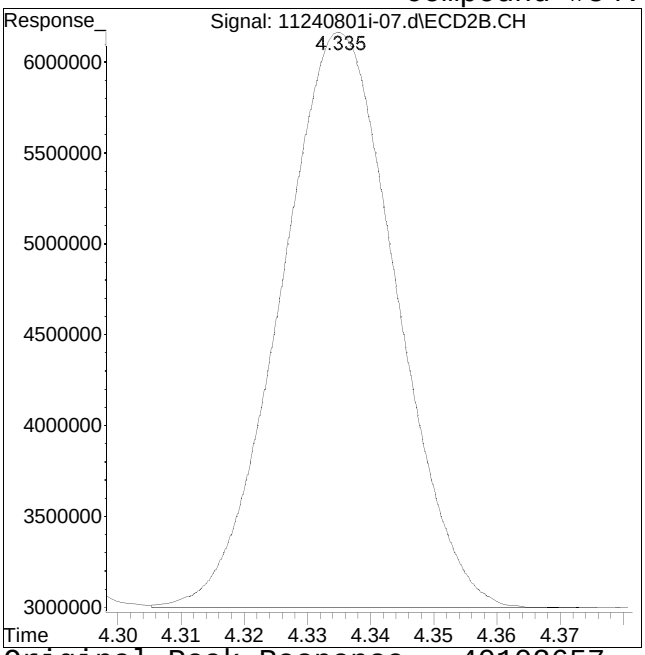




Original Peak Response = 38258487 Manual Peak Response = 37932784 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

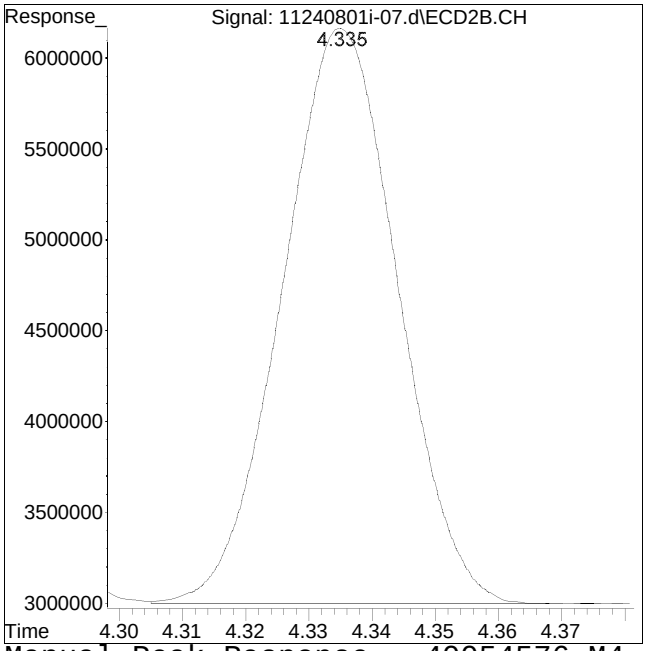
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #54: Endosulfan I #2




Original Peak Response = 40102657



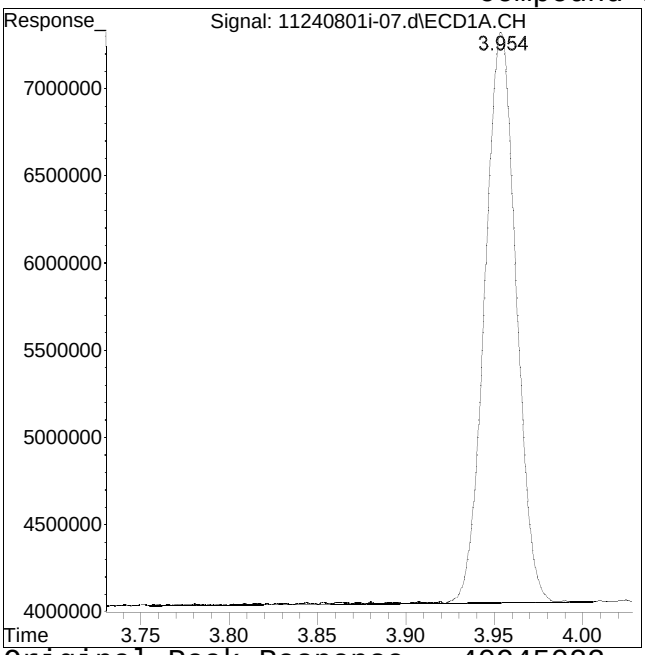

Manual Peak Response = 40054576 M4

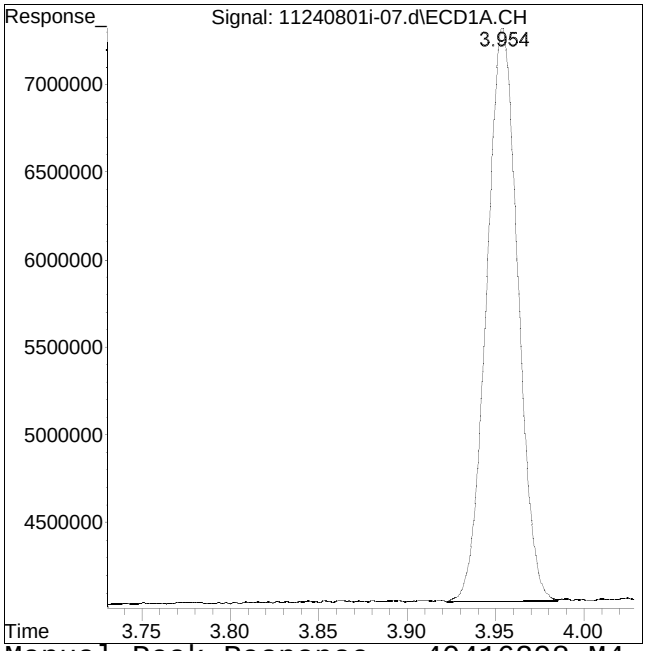
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #17: Dieldrin



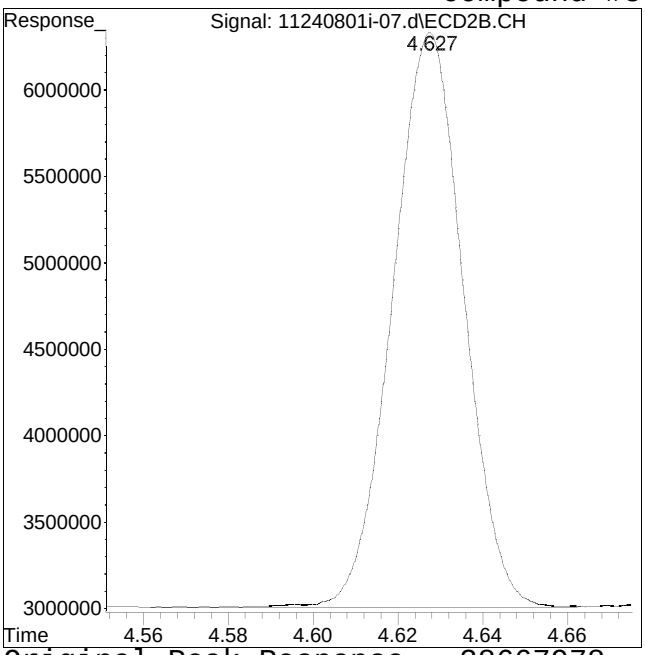




Original Peak Response = 40945022 Manual Peak Response = 40416298 M4
M4 = Poor automated baseline construction.

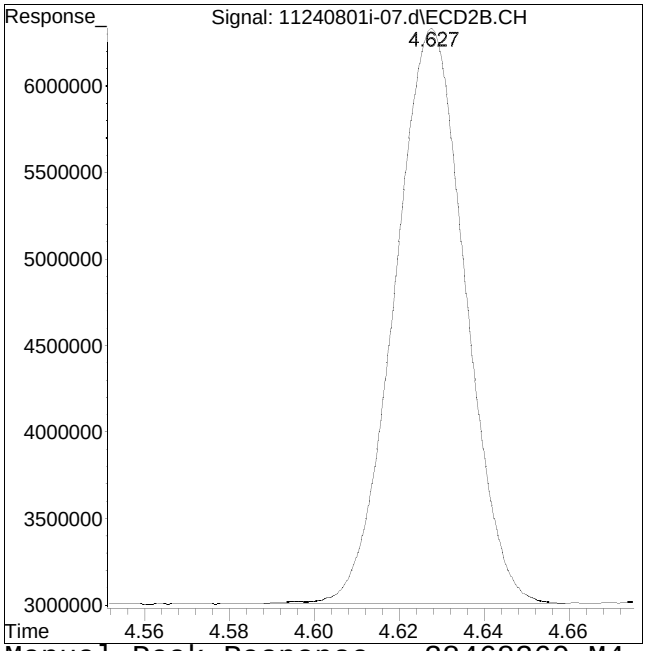
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #55: Dieldrin #2




Original Peak Response = 38667978



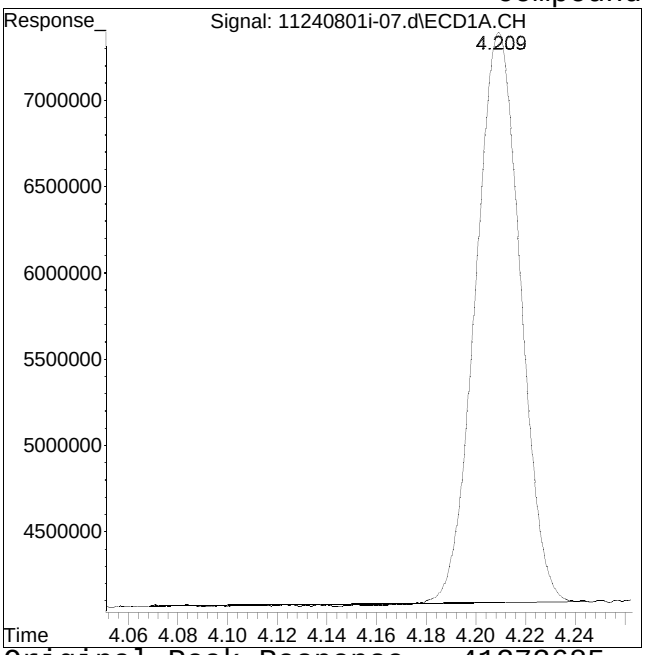

Manual Peak Response = 38468360 M4

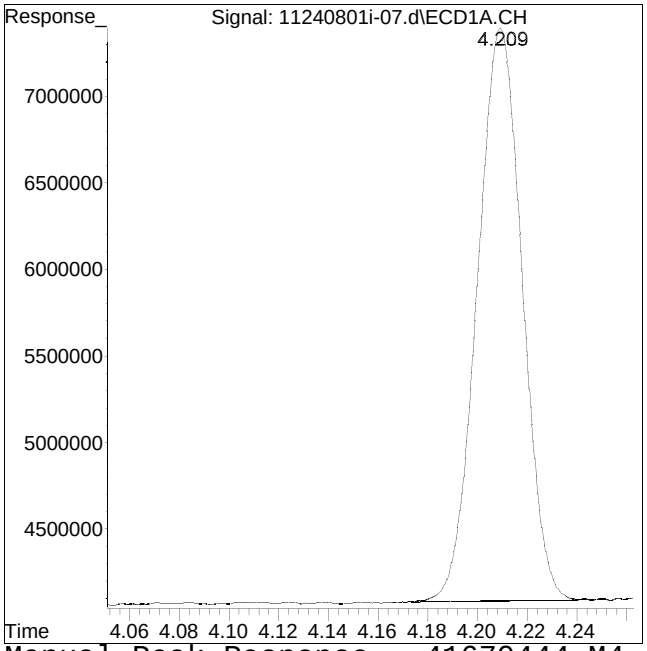
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #18: Endrin



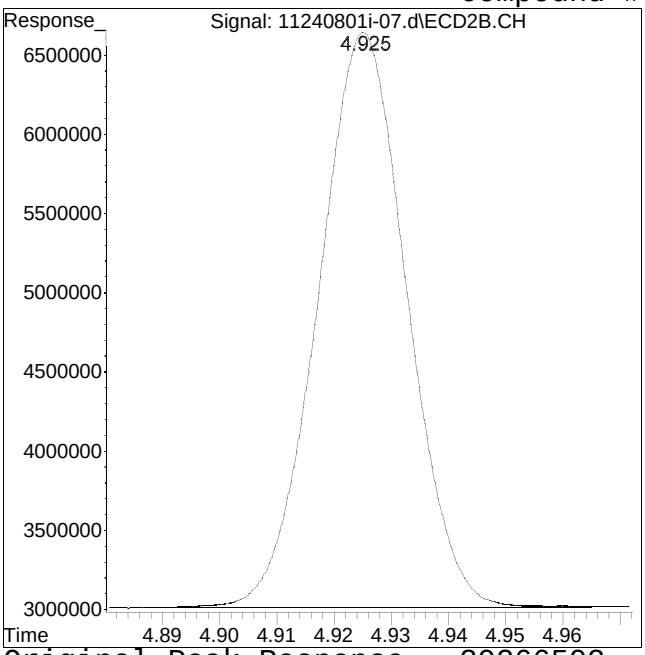




Original Peak Response = 41273685 Manual Peak Response = 41670444 M4
M4 = Poor automated baseline construction.

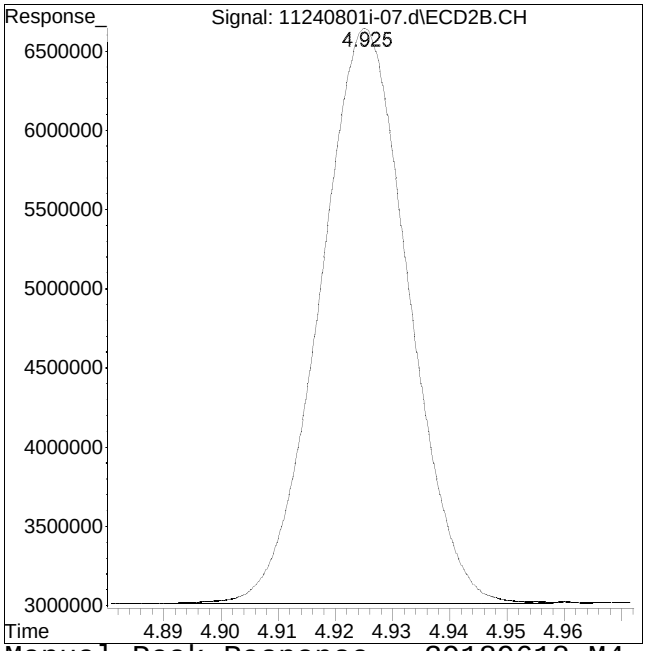
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #56: Endrin #2




Original Peak Response = 39266592




Manual Peak Response = 39189618 M4

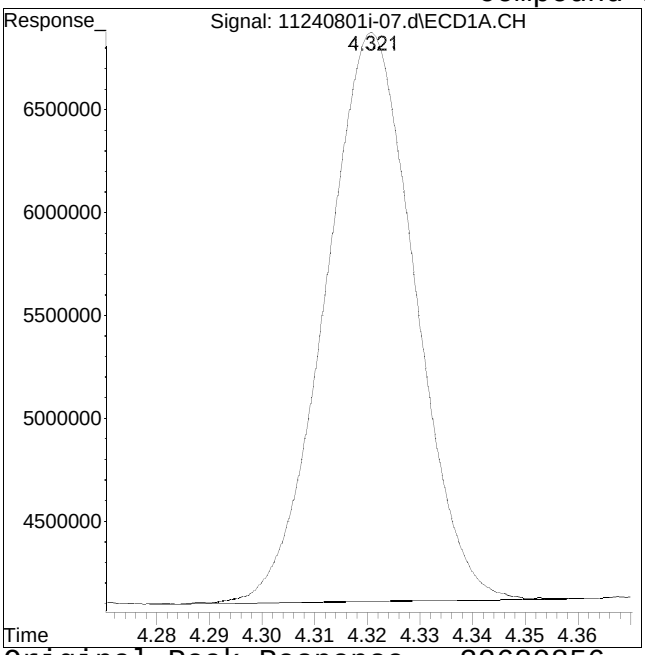
M4 = Poor automated baseline construction.

Manual Integration Report

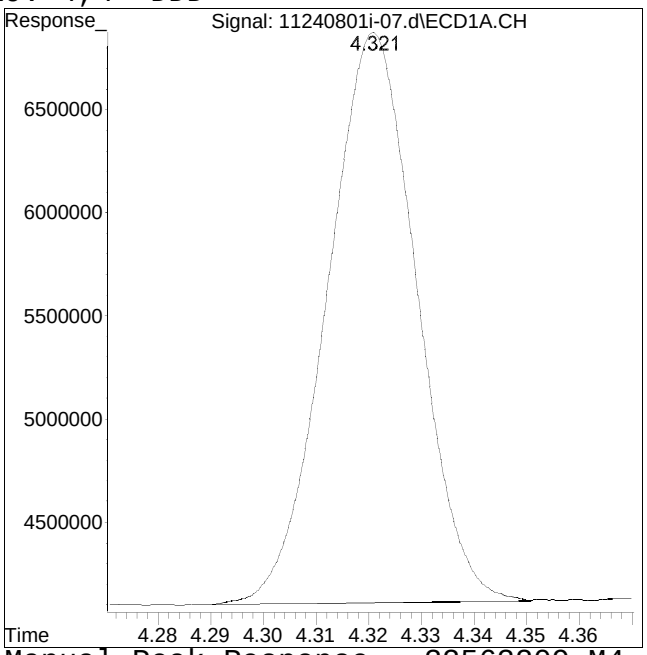
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #19: 4,4'-DDD




Original Peak Response = 32620856




Manual Peak Response = 32563209 M4

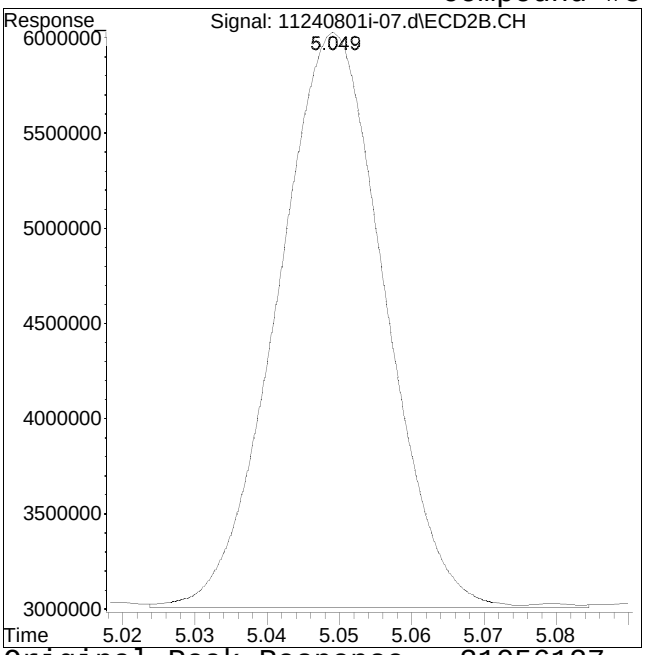
M4 = Poor automated baseline construction.

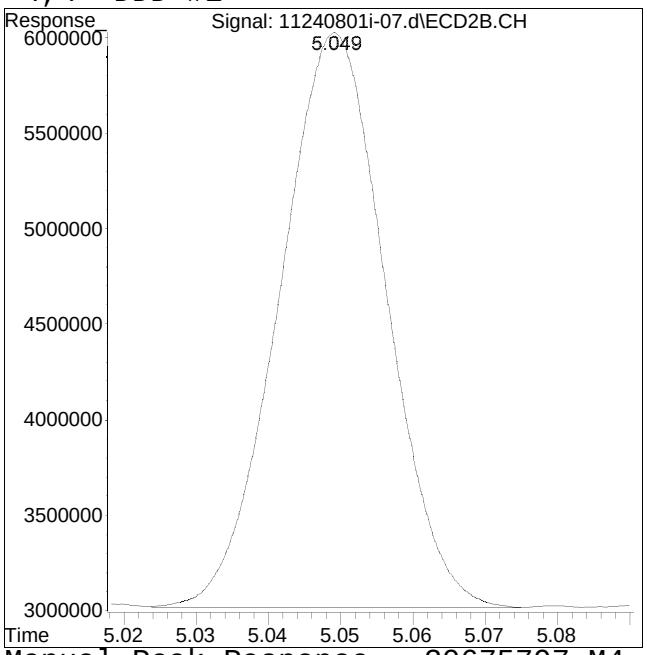
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #57: 4,4'-DDD #2



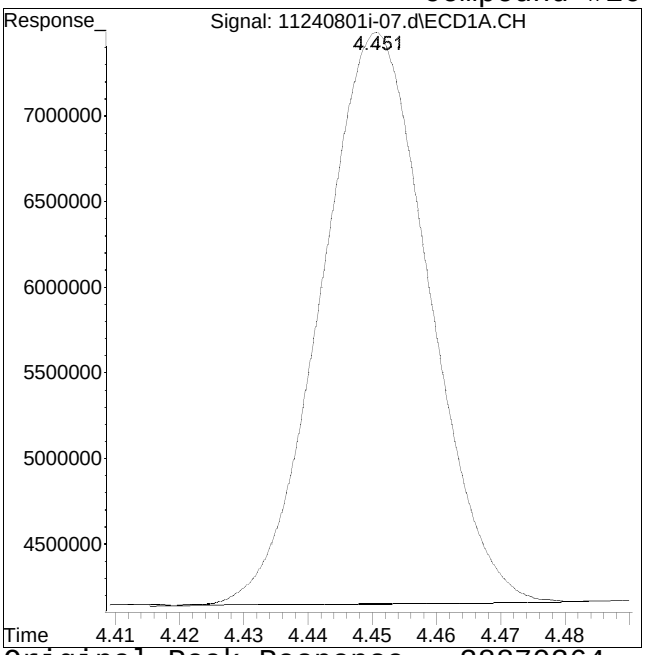




Original Peak Response = 31056127 Manual Peak Response = 30675797 M4
M4 = Poor automated baseline construction.

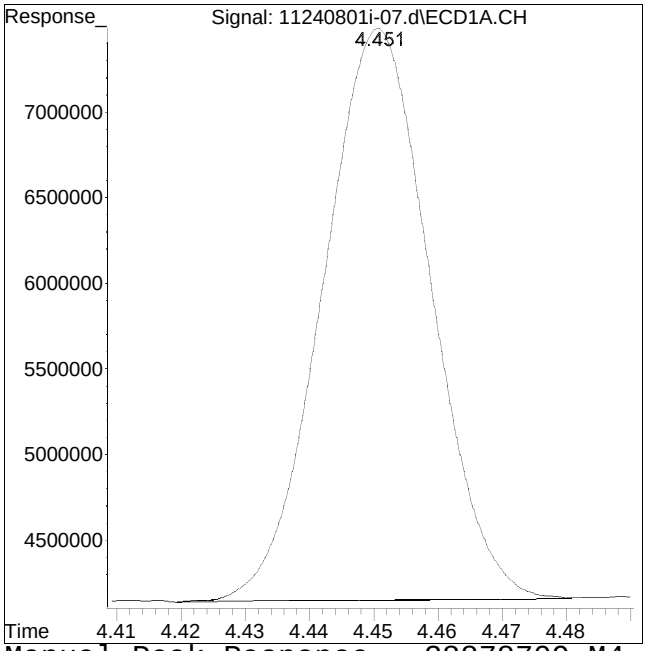
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #20: Endosulfan II




Original Peak Response = 38870364



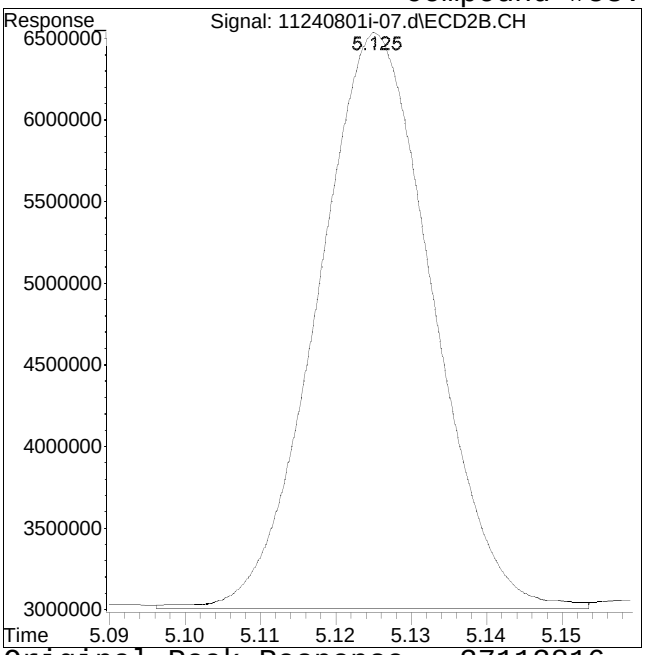

Manual Peak Response = 38878709 M4

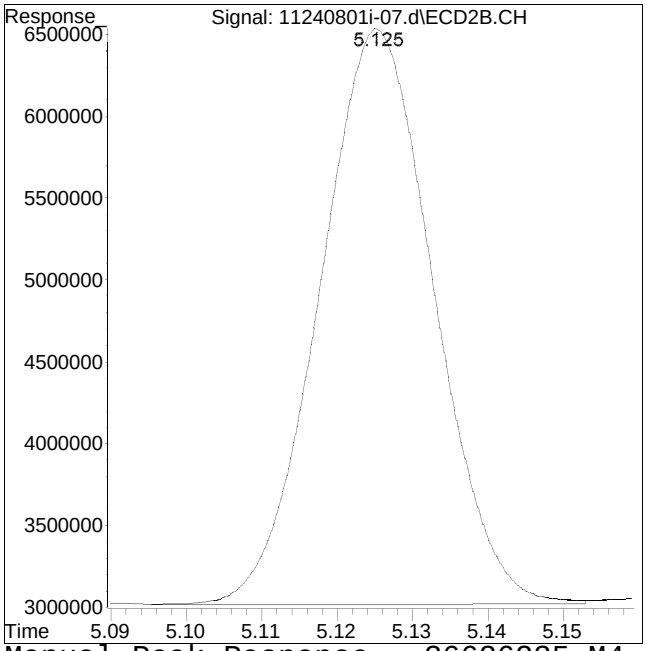
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #58: Endosulfan II #2



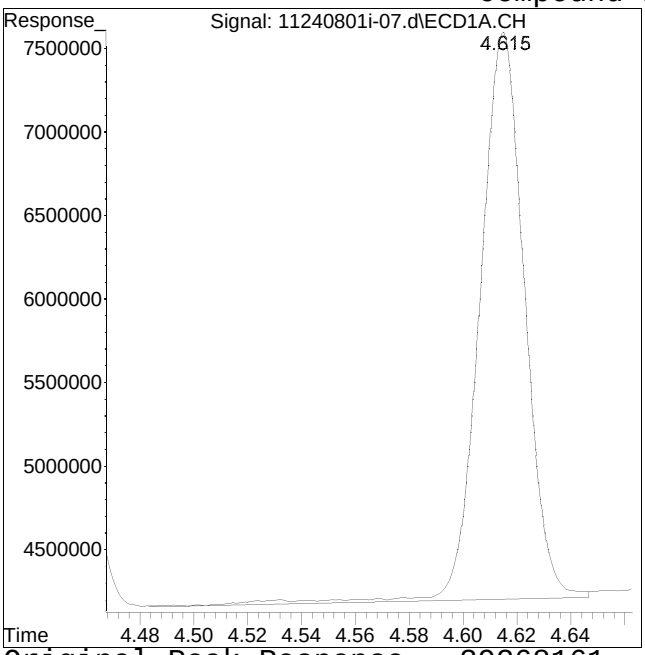




Original Peak Response = 37113816 Manual Peak Response = 36626235 M4
M4 = Poor automated baseline construction.

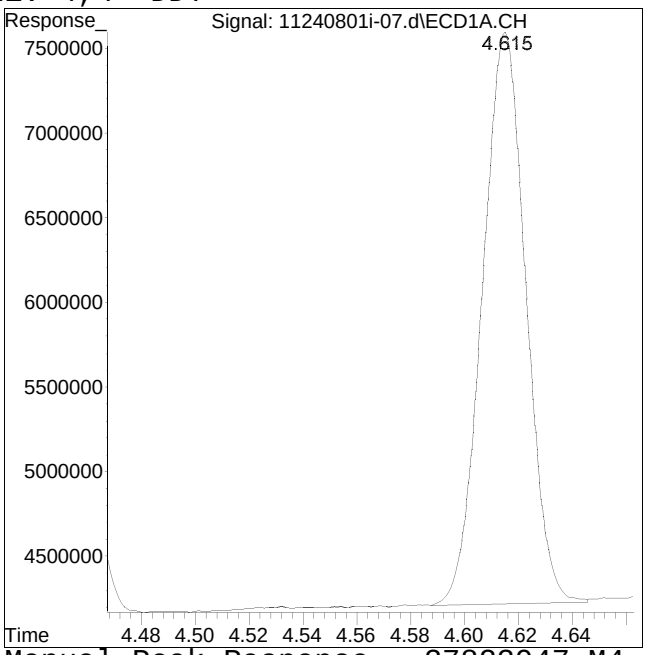
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #21: 4,4'-DDT




Original Peak Response = 39268161



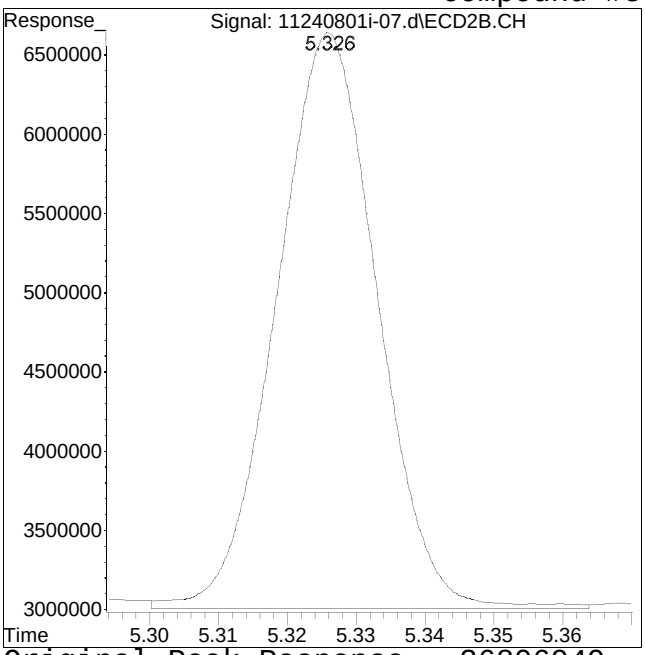

Manual Peak Response = 37823947 M4

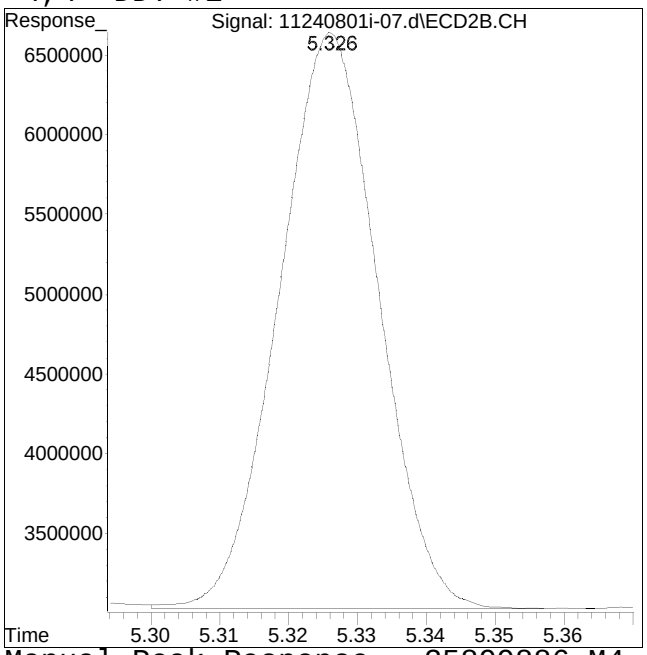
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0 Quant Date : 8/2/2024 10:53 am

Compound #59: 4,4'-DDT #2



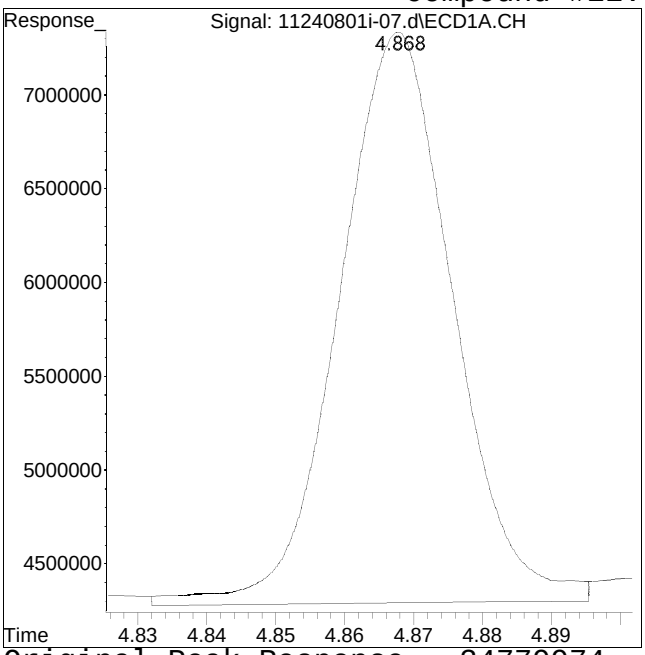




Original Peak Response = 36806949 Manual Peak Response = 35899886 M4
M4 = Poor automated baseline construction.

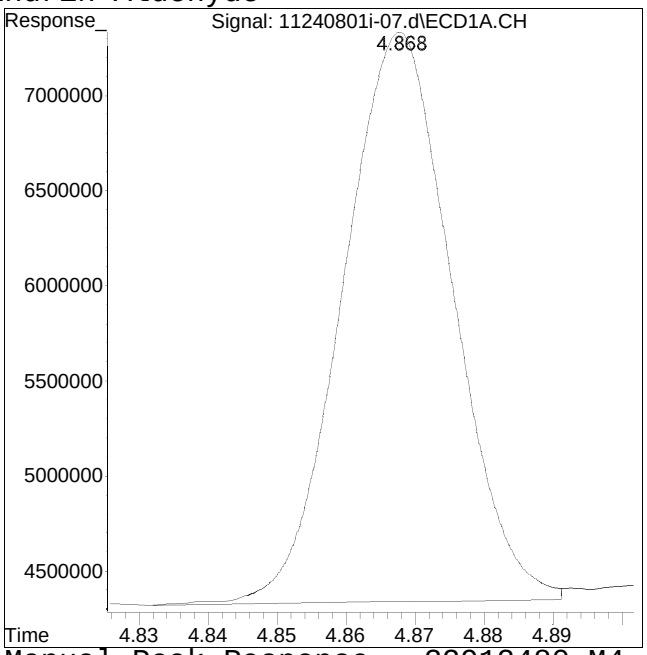
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

## Compound #22: Endrin Aldehyde




Original Peak Response = 34779974




Manual Peak Response = 32912480 M4

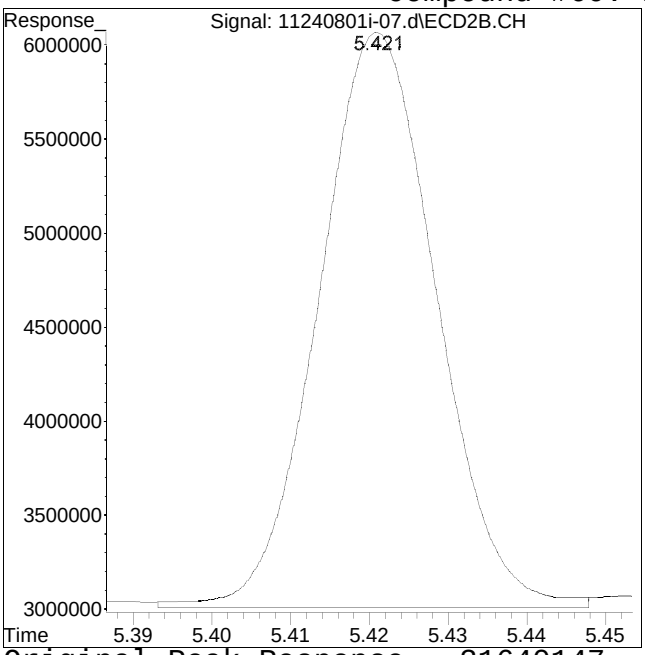
M4 = Poor automated baseline construction.

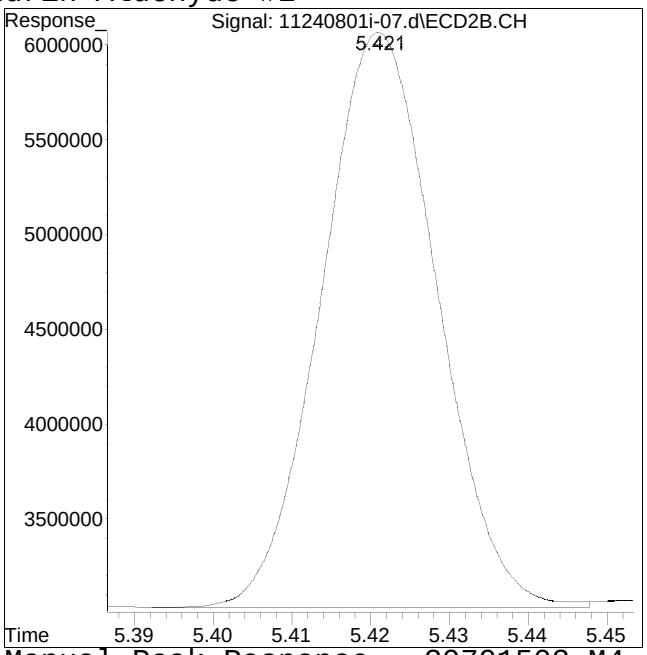
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #60: Endrin Aldehyde #2



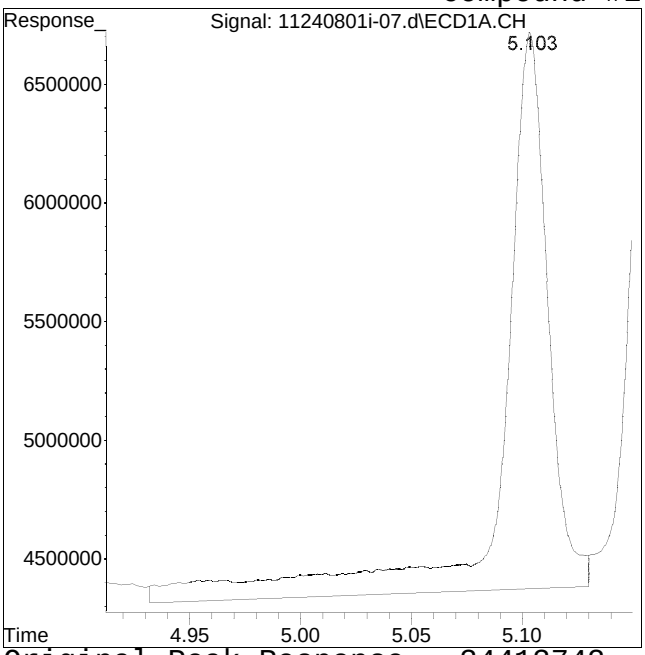

Original Peak Response = 31640147 Manual Peak Response = 30791502 M4
M4 = Poor automated baseline construction.

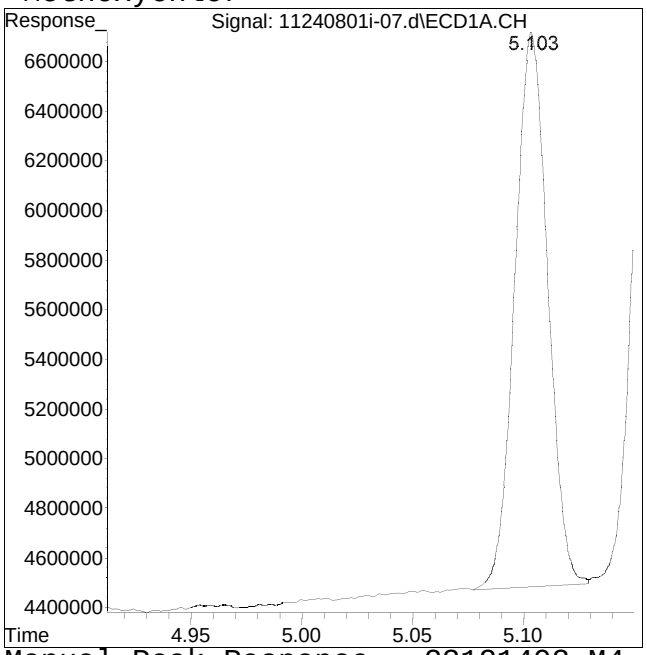
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #23: Methoxychlor



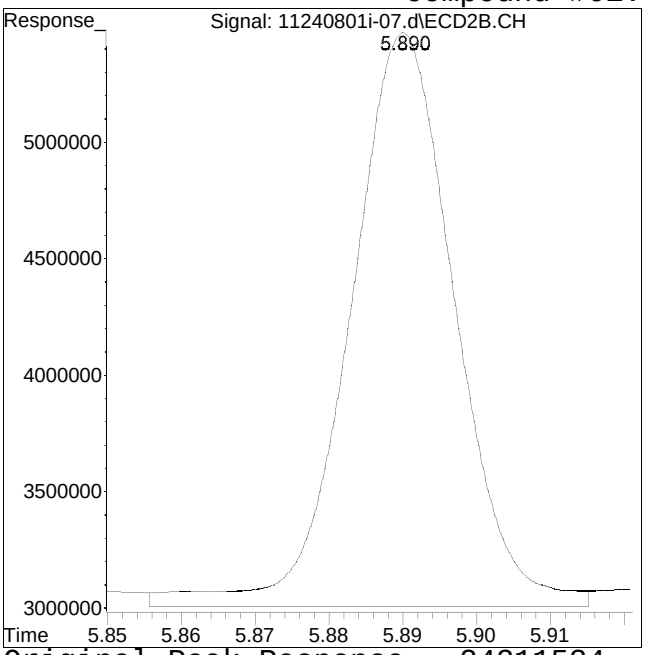




Original Peak Response = 34413742 Manual Peak Response = 23121492 M4
M4 = Poor automated baseline construction.

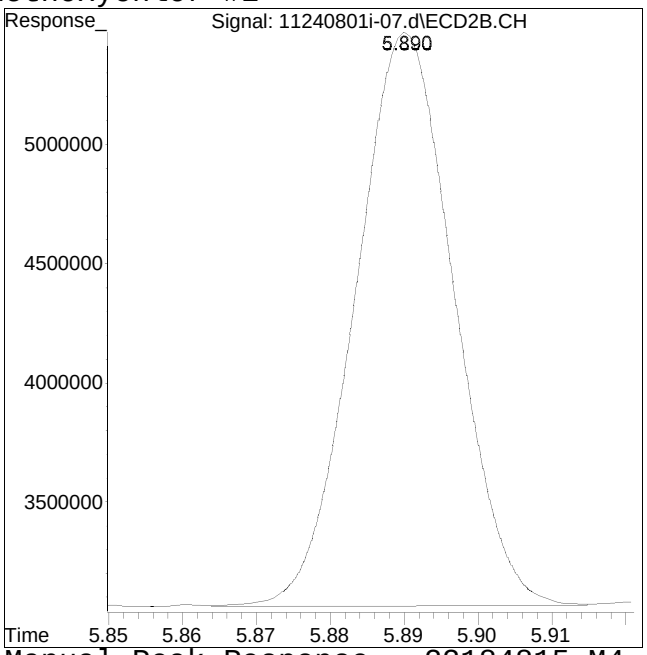
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #61: Methoxychlor #2




Original Peak Response = 24211534



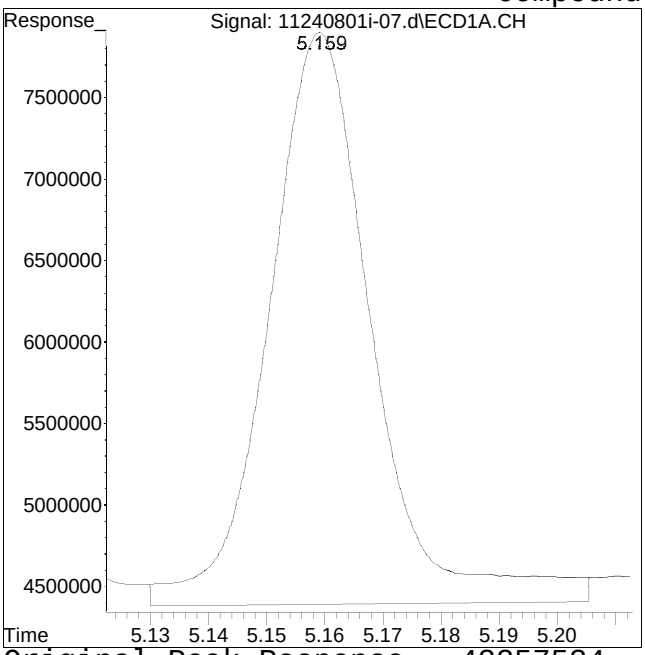

Manual Peak Response = 22184815 M4

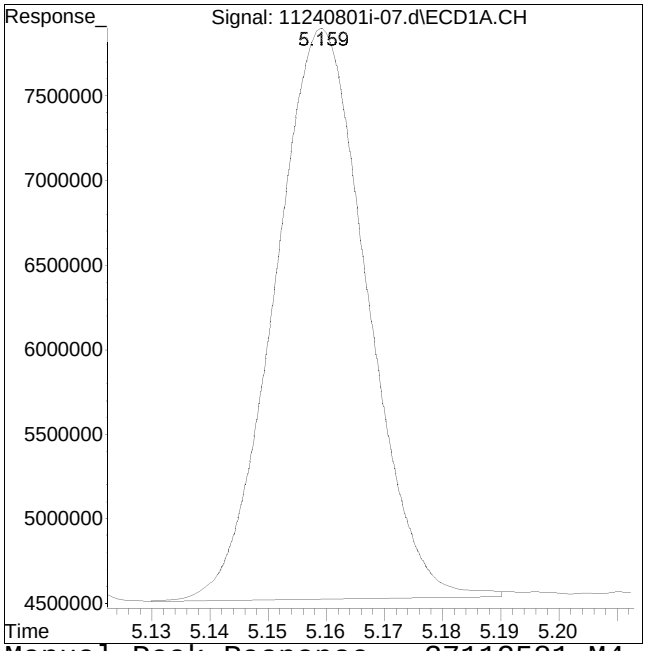
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #24: Mirex



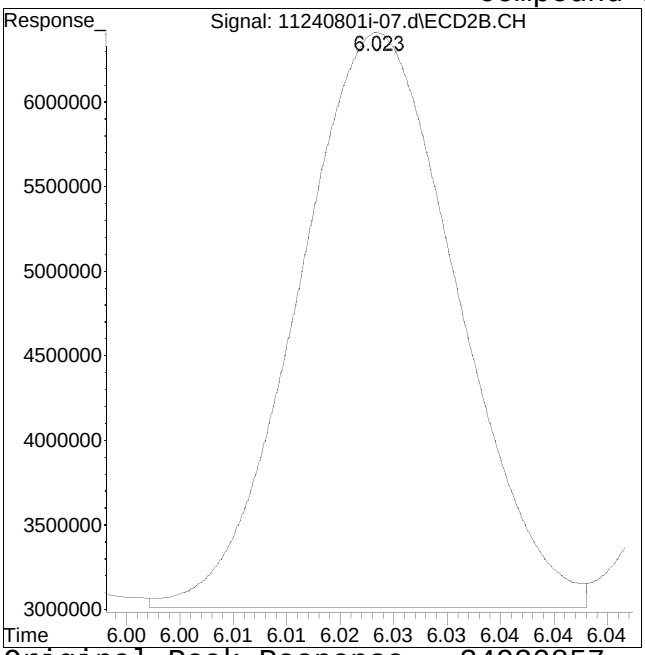

Original Peak Response = 43357534 Manual Peak Response = 37112581 M4
M4 = Poor automated baseline construction.

Manual Integration Report

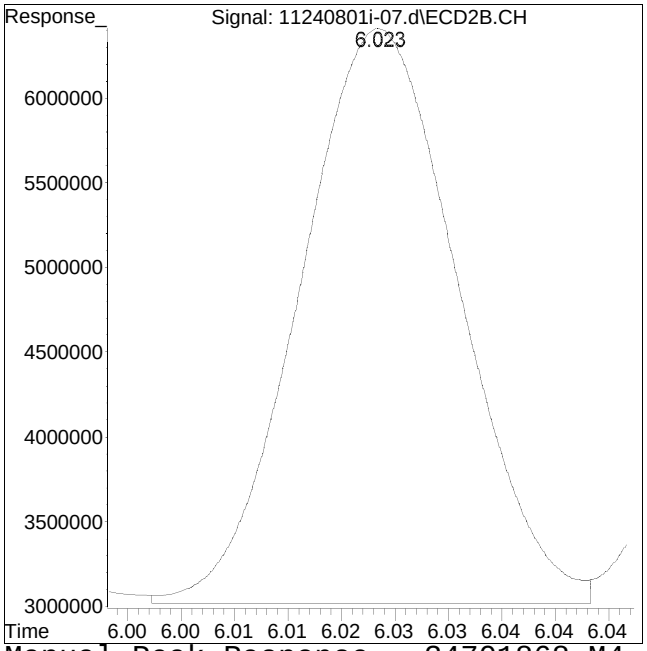
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #62: Mirex #2




Original Peak Response = 34930857



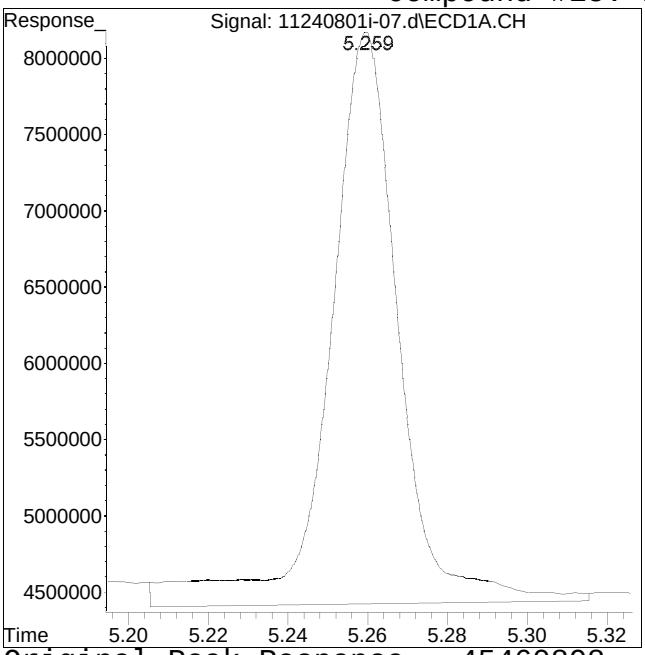

Manual Peak Response = 34701868 M4

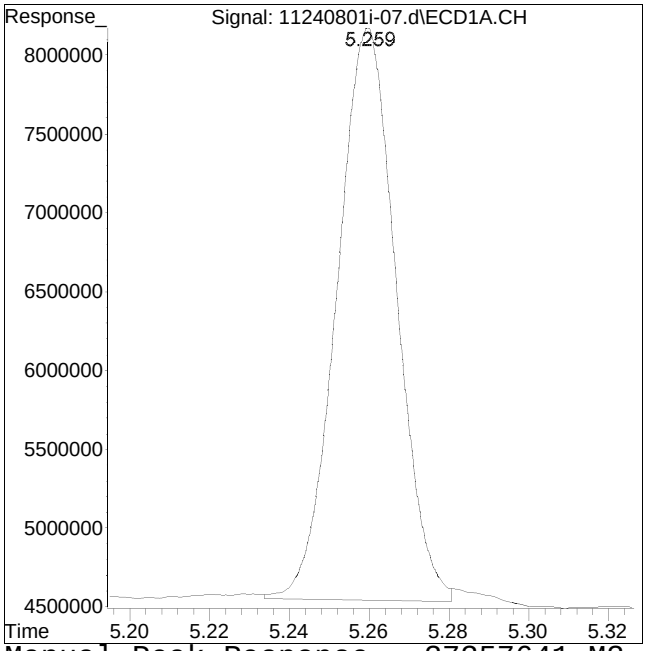
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #25: Endosulfan Sulfate



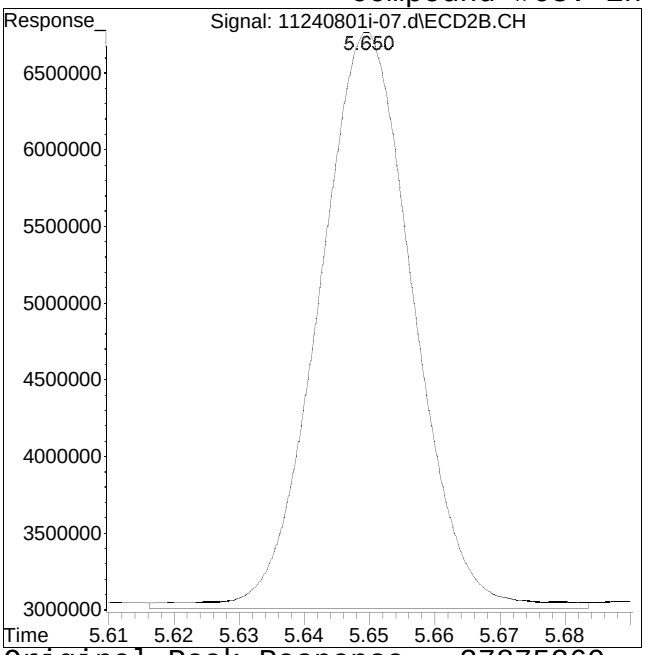

Original Peak Response = 45460898 Manual Peak Response = 37357641 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

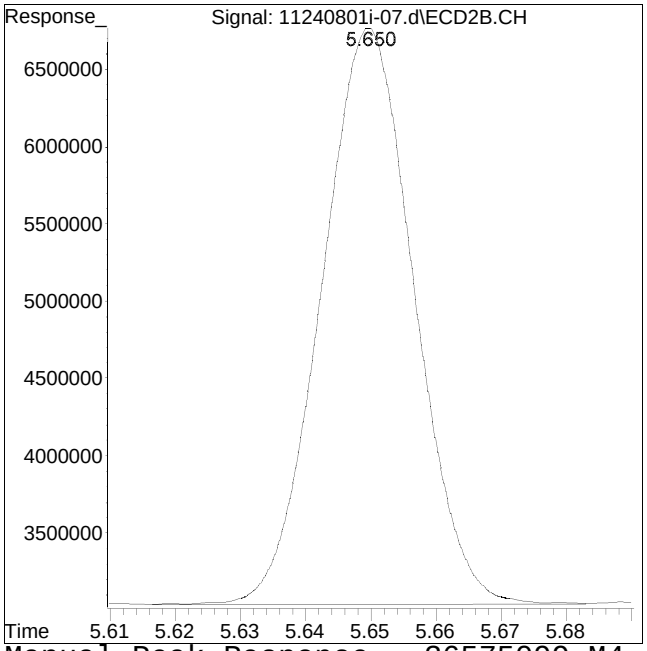
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

## Compound #63: Endosulfan Sulfate #2




Original Peak Response = 37875360




Manual Peak Response = 36575099 M4

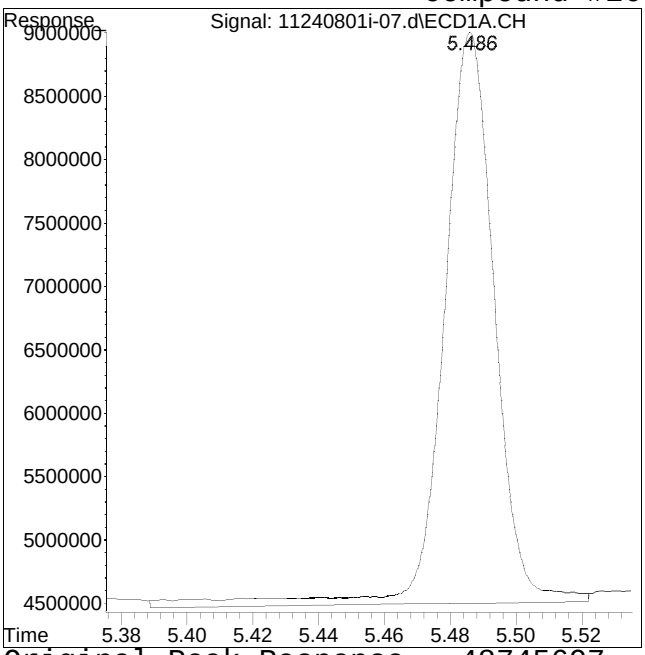
M4 = Poor automated baseline construction.

Manual Integration Report

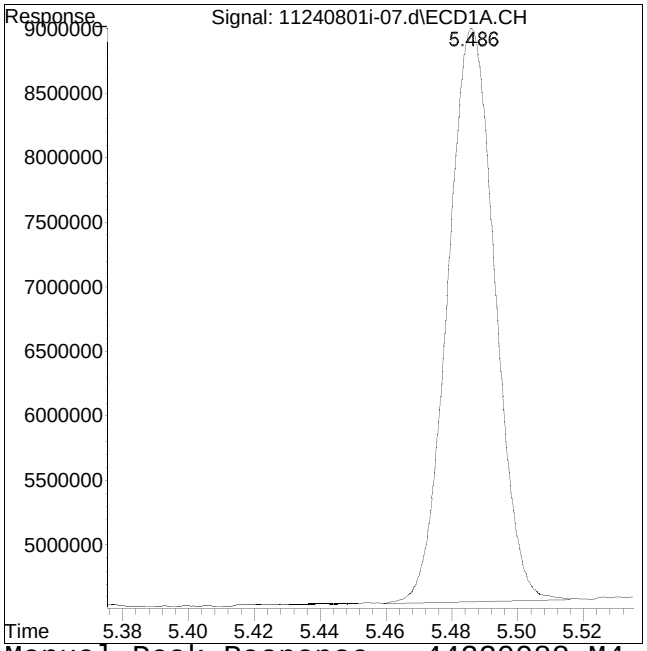
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #26: Endrin Ketone




Original Peak Response = 48745697




Manual Peak Response = 44230088 M4

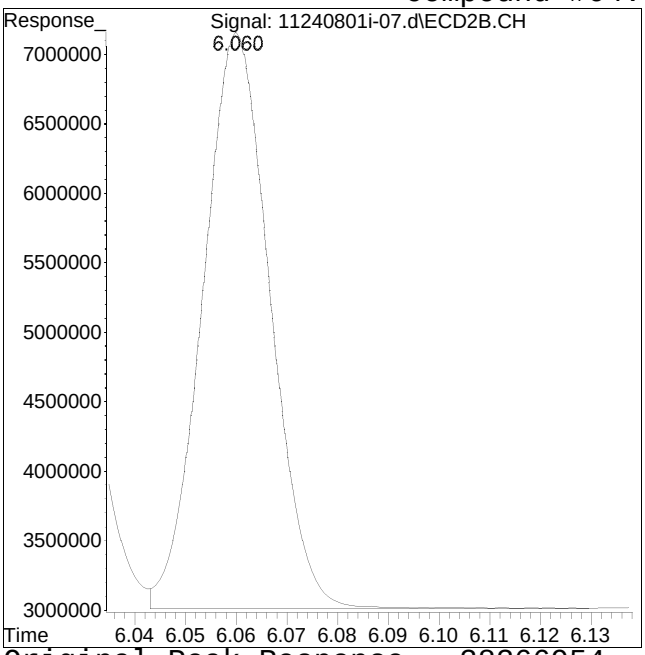
M4 = Poor automated baseline construction.

Manual Integration Report

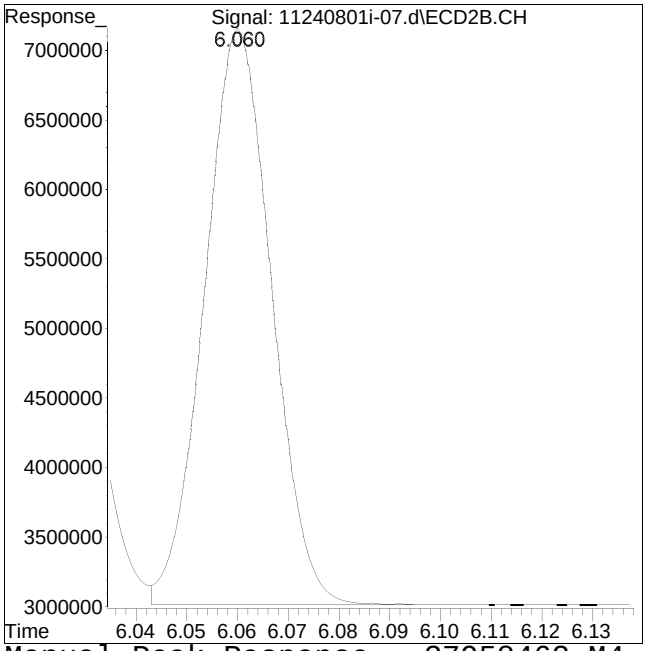
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-07.d
Date Inj'd : 8/1/2024 19:25
Sample : il5pest,42e,,pp 11683 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:53 am

Compound #64: Endrin Ketone #2




Original Peak Response = 38366954



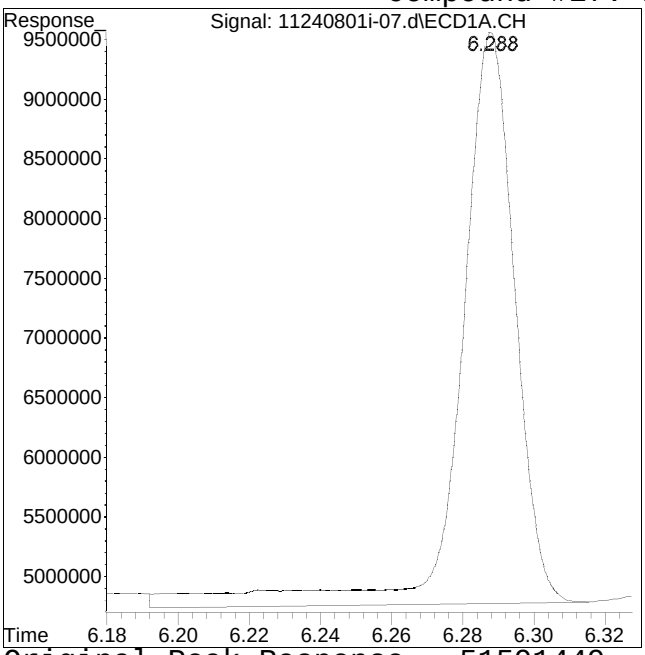

Manual Peak Response = 37958462 M4

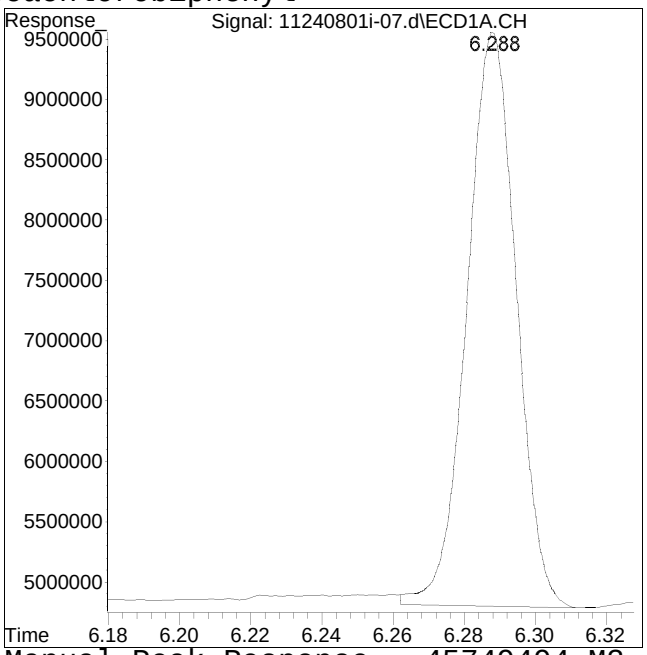
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #27: Decachlorobiphenyl



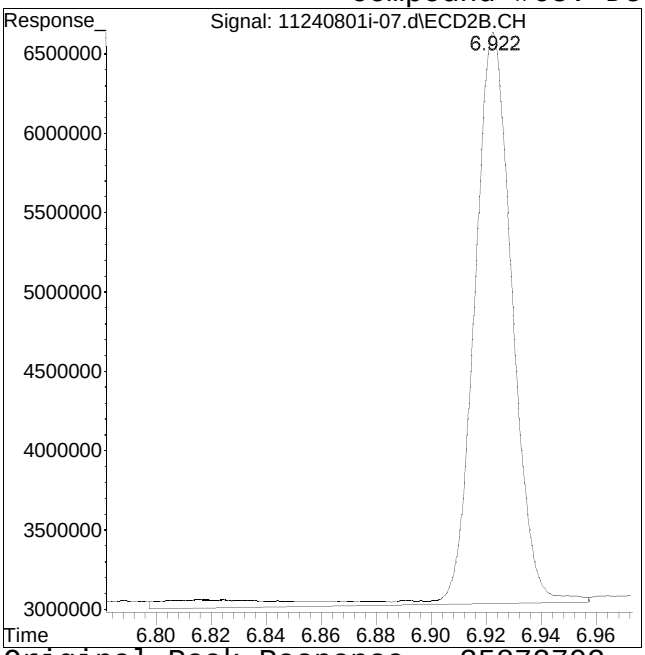



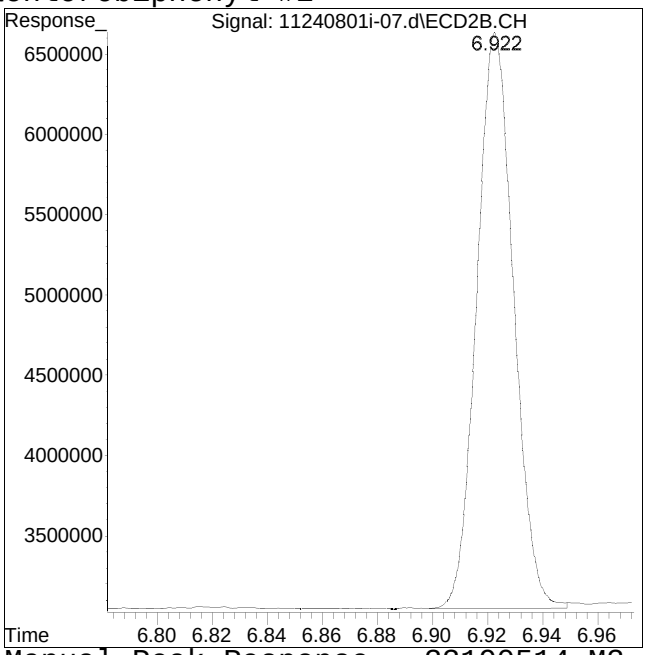

Original Peak Response = 51591449 Manual Peak Response = 45749494 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-07.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:25 Instrument : Pest 11
Sample : il5pest,42e,,pp 11683 L0.0Quant Date : 8/2/2024 10:53 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 35872792 Manual Peak Response = 33190514 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:37
Operator : PEST11:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:46:08 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:46:00 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 230.2E6 | 183.2E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 94692243 | 79326112 | 10.009M3 | 10.112M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 20.02%# | 20.22%# |
| 27) s | Decachlorobi | 6.288 | 6.926 | 105.6E6 | 76218538 | 11.126M4 | 11.124M3 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 22.25%# | 22.25%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.178 | 128.7E6 | 87741303 | 10.612M3 | 10.546M4 |
| 4) t | alpha-BHC | 1.963 | 2.271 | 131.5E6 | 113.4E6 | 8.927M4 | 8.964M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 124.7E6 | 105.7E6 | 9.208M4 | 9.281M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 57666588 | 50690449 | 10.408M4 | 10.925M4 |
| 7) t | delta-BHC | 2.349 | 2.889 | 123.1E6 | 105.8E6 | 8.948M4 | 9.082M4 |
| 8) t | Heptachlor | 2.513 | 2.952 | 121.4E6 | 113.2E6 | 9.955M3 | 10.142M4 |
| 9) t | Aldrin | 2.756 | 3.271 | 111.0E6 | 100.2E6 | 9.353M3 | 9.490 |
| 10) t | Alachlor | 2.876 | 3.153 | 21898451 | 17688763 | 11.052M3 | 13.104M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 56598911 | 64282619 | 12.097M4 | 12.517M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:37
Operator : PEST11:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:46:08 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:46:00 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.884 | 109.2E6 | 100.6E6 | 10.102M3 | 10.320M4 |
| 13) | t | gamma-Chlord | 3.424 | 4.104 | 96157290 | 90465298 | 9.543M4 | 9.961M4 |
| 14) | t | alpha-Chlord | 3.558 | 4.274 | 110.5E6 | 101.3E6 | 9.760M3 | 10.124M4 |
| 15) | t | 4,4'-DDE | 3.656 | 4.473 | 107.5E6 | 93263696 | 9.325M4 | 9.283M4 |
| 16) | t | Endosulfan I | 3.695 | 4.335 | 102.4E6 | 94144855 | 9.968 | 10.358M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 102.5E6 | 92864186 | 9.418M4 | 9.671M3 |
| 18) | t | Endrin | 4.209 | 4.925 | 105.4E6 | 94579708 | 9.682M4 | 9.746M4 |
| 19) | t | 4,4'-DDD | 4.321 | 5.049 | 82871356 | 75210993 | 9.153M4 | 9.330M4 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 97072990 | 86490847 | 10.043 | 10.443M4 |
| 21) | t | 4,4'-DDT | 4.615 | 5.326 | 95391216 | 87653270 | 9.380M4 | 9.565M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 80826935 | 71991100 | 9.975M3 | 10.462M3 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 55896006 | 50960693 | 11.325M4 | 11.378M3 |
| 24) | t | Mirex | 5.159 | 6.024 | 88807138 | 77737040 | 11.134M3 | 11.745 |
| 25) | t | Endosulfan S | 5.259 | 5.650 | 92158727 | 84950349 | 10.221M3 | 10.550M4 |
| 26) | t | Endrin Keton | 5.486 | 6.060 | 110.5E6 | 91234131 | 10.280M4 | 10.487M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:37
Operator : PEST11:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:46:08 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:46:00 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

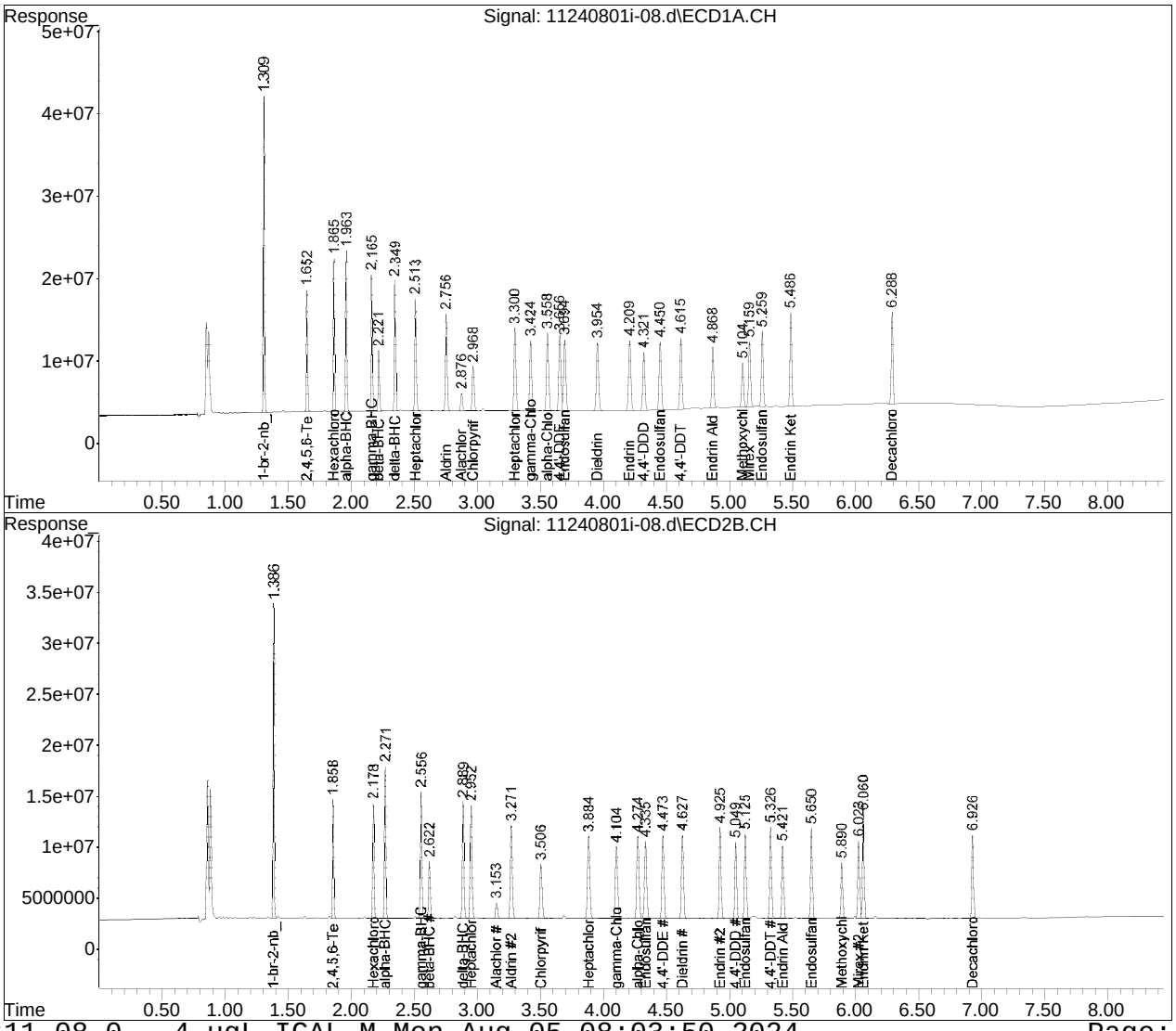
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-08.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  19:37
Operator : PEST11:ejl
Sample : il7pest,42e,,pp 11682 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 10:46:08 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 10:46:00 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

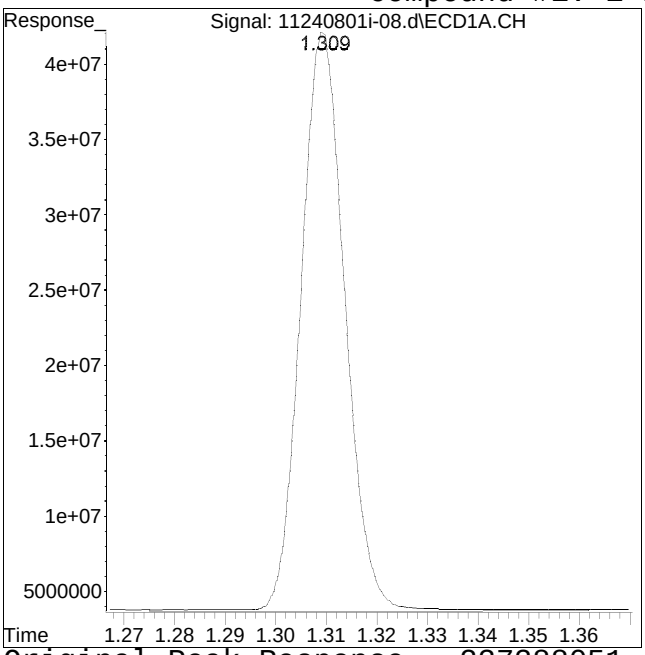
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



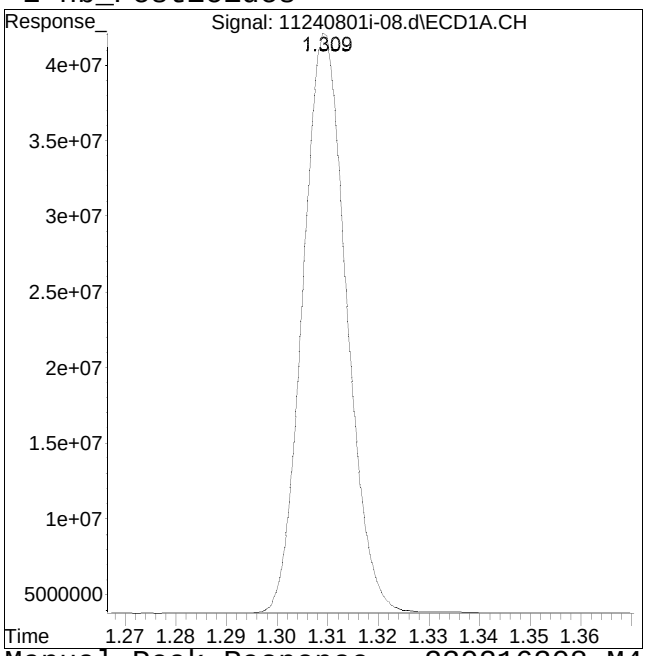
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 237388051




Manual Peak Response = 230216308 M4

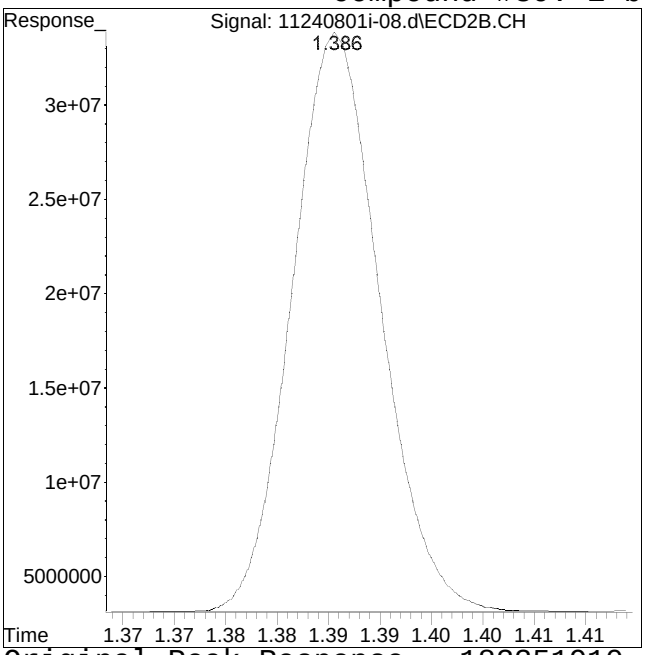
M4 = Poor automated baseline construction.

# Manual Integration Report

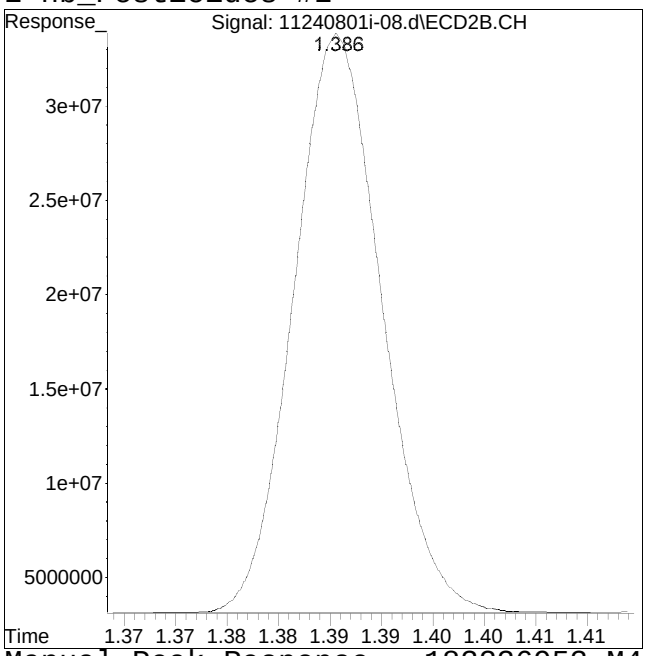
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 183351910



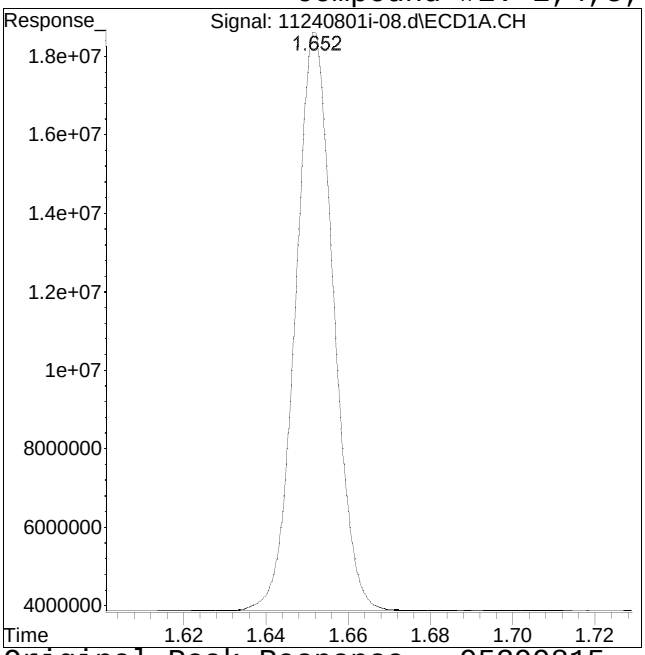

Manual Peak Response = 183236953 M4

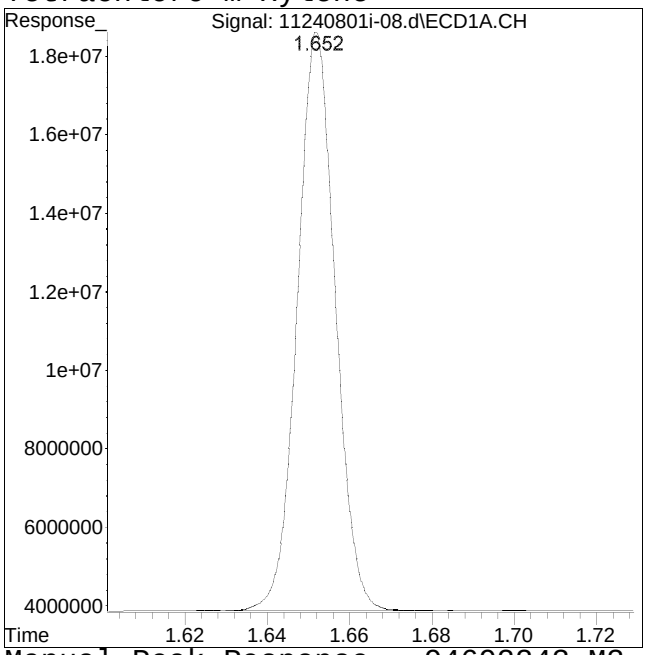
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



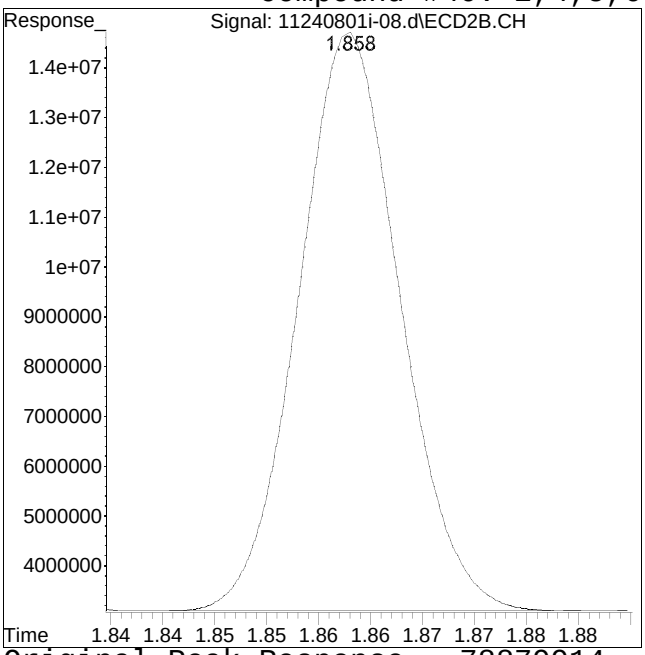




Original Peak Response = 95399815 Manual Peak Response = 94692243 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

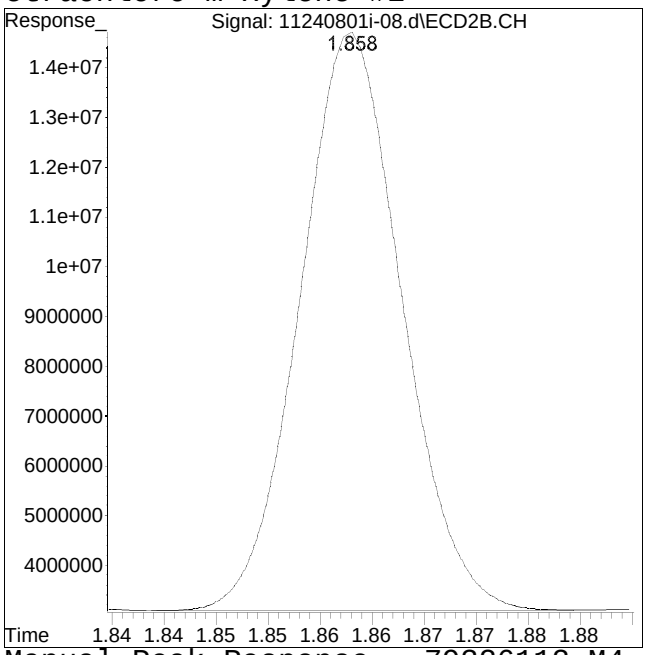
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 78879914



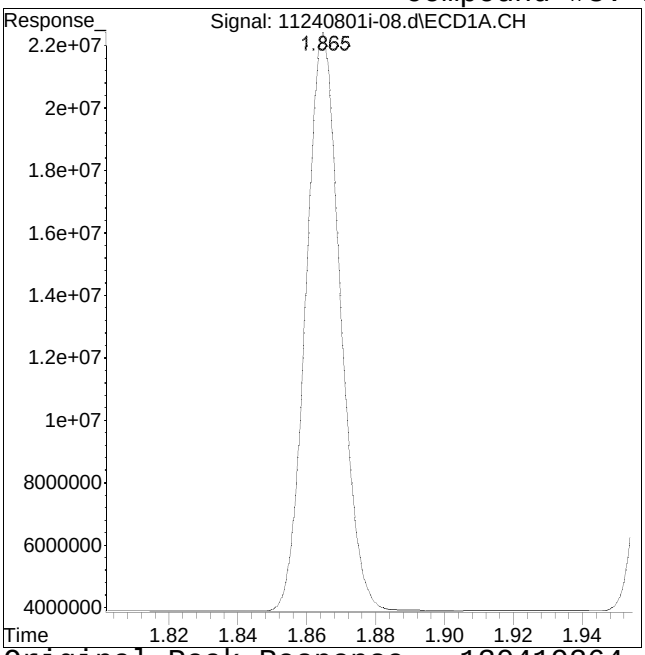

Manual Peak Response = 79326112 M4

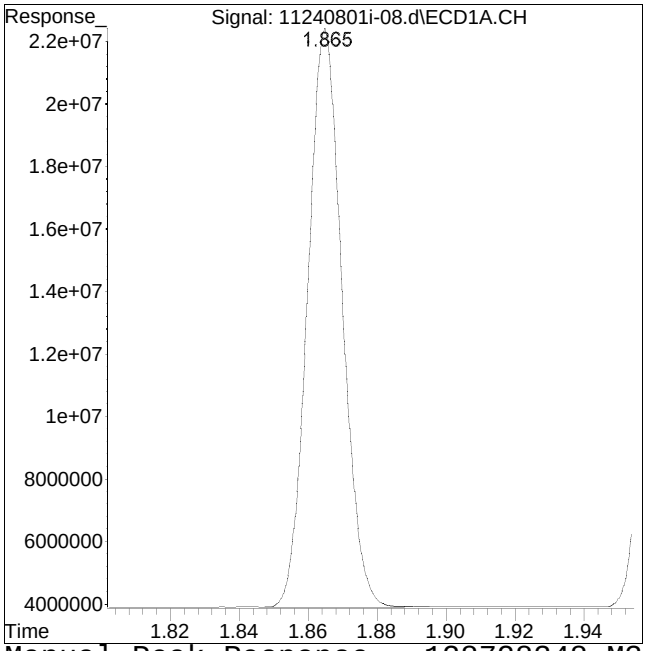
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #3: Hexachlorobenzene



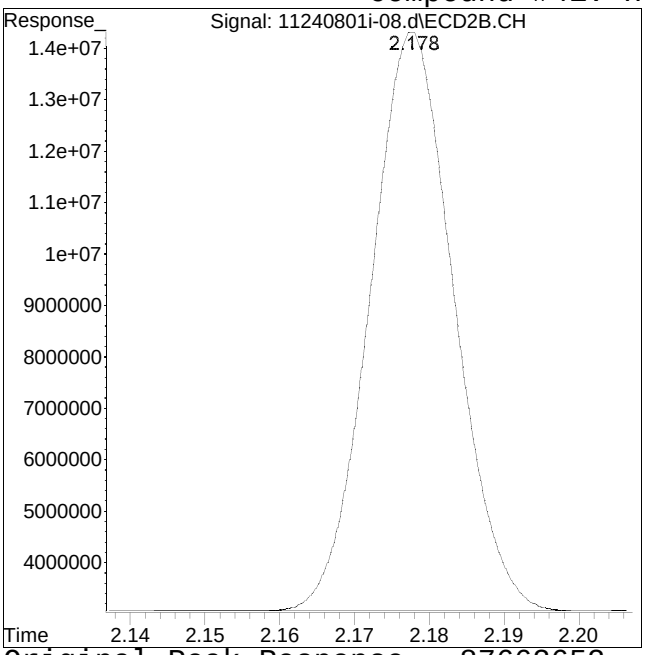

Original Peak Response = 130419364 Manual Peak Response = 128728348 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

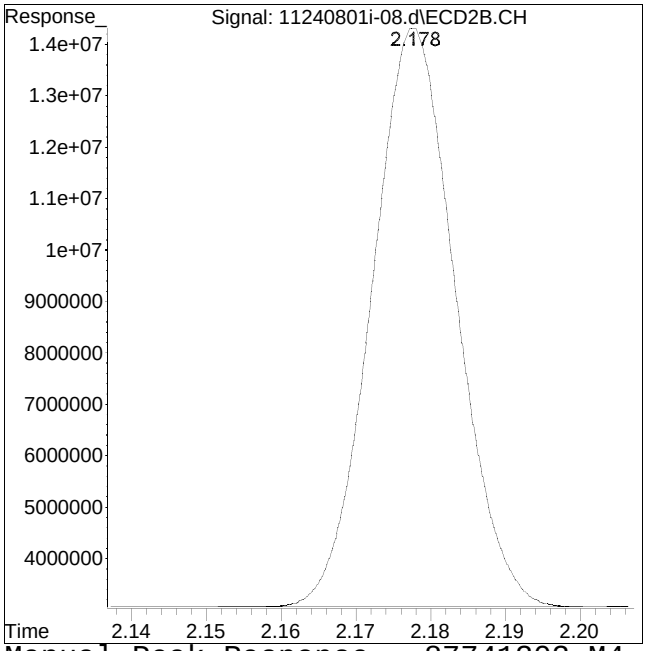
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #41: Hexachlorobenzene #2




Original Peak Response = 87662652



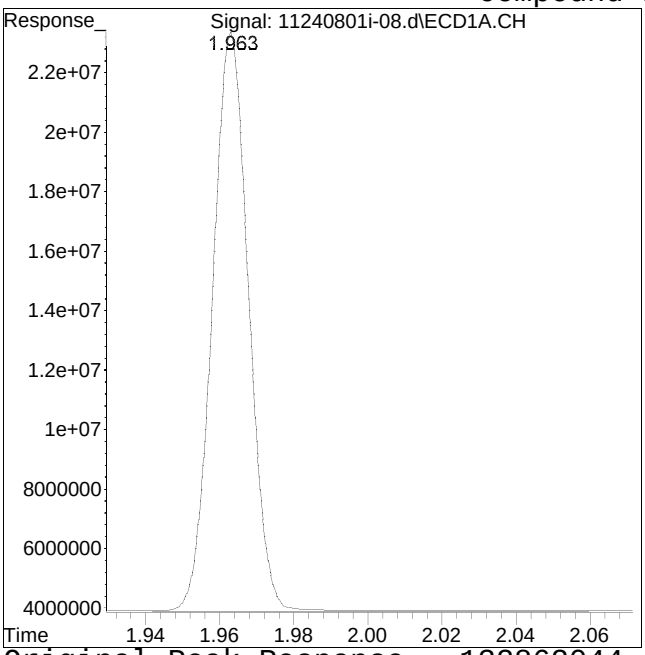

Manual Peak Response = 87741303 M4

M4 = Poor automated baseline construction.

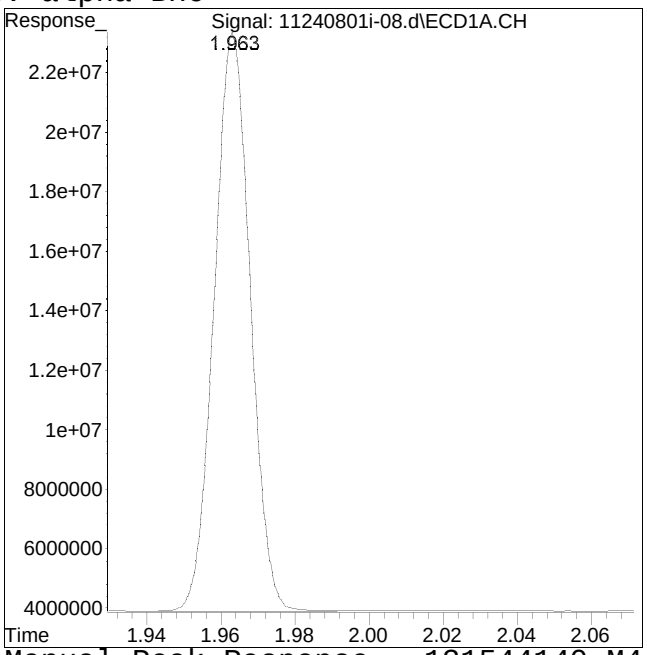
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #4: alpha-BHC




Original Peak Response = 132862044



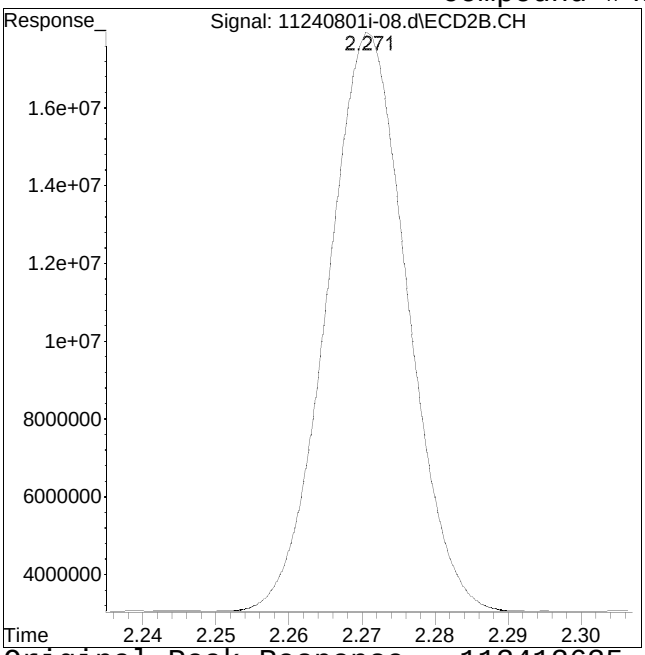

Manual Peak Response = 131544140 M4

M4 = Poor automated baseline construction.

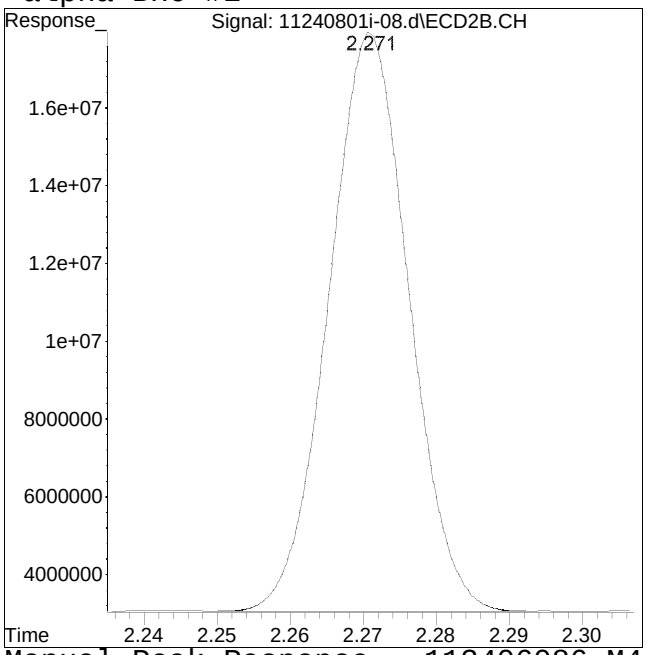
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #42: alpha-BHC #2




Original Peak Response = 113412635




Manual Peak Response = 113406086 M4

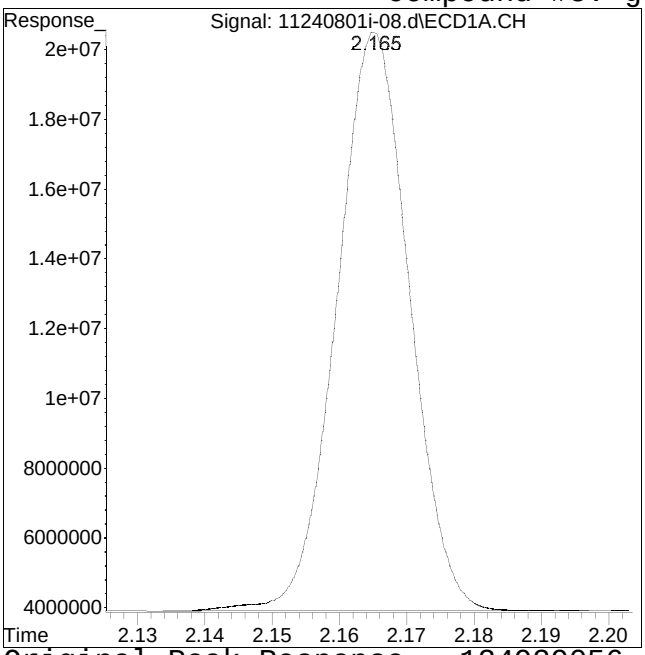
M4 = Poor automated baseline construction.

Manual Integration Report

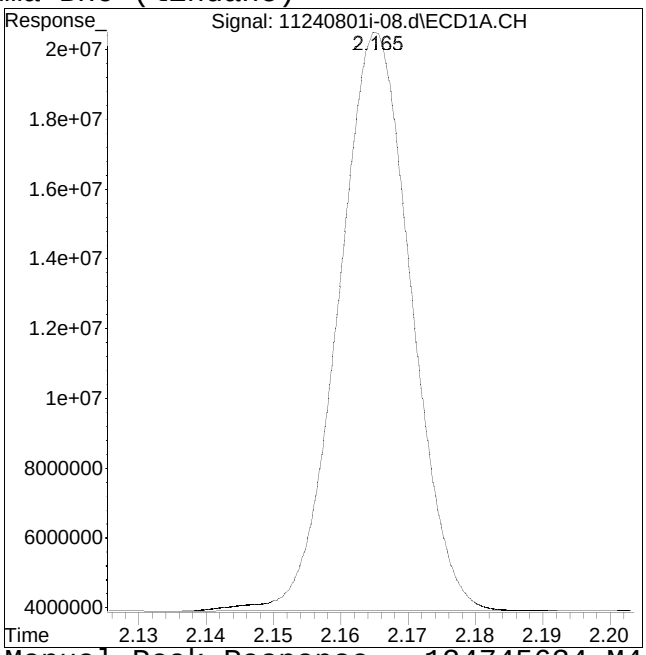
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 124929056



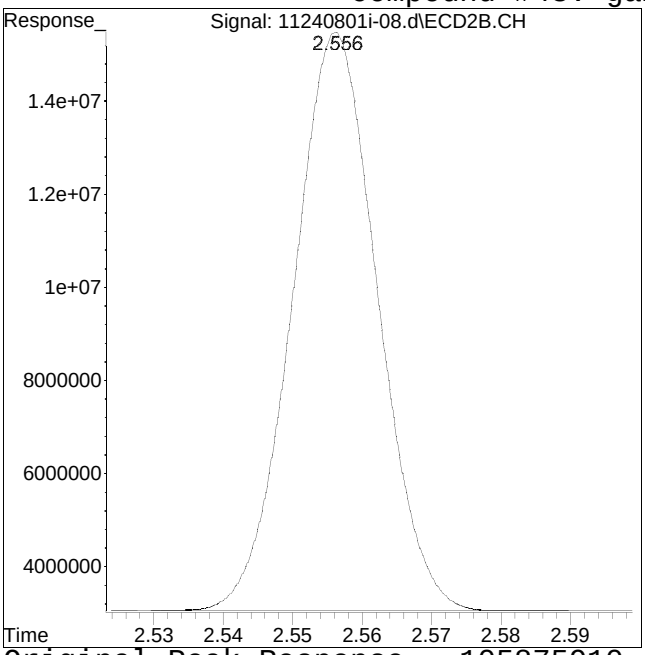

Manual Peak Response = 124745634 M4

M4 = Poor automated baseline construction.

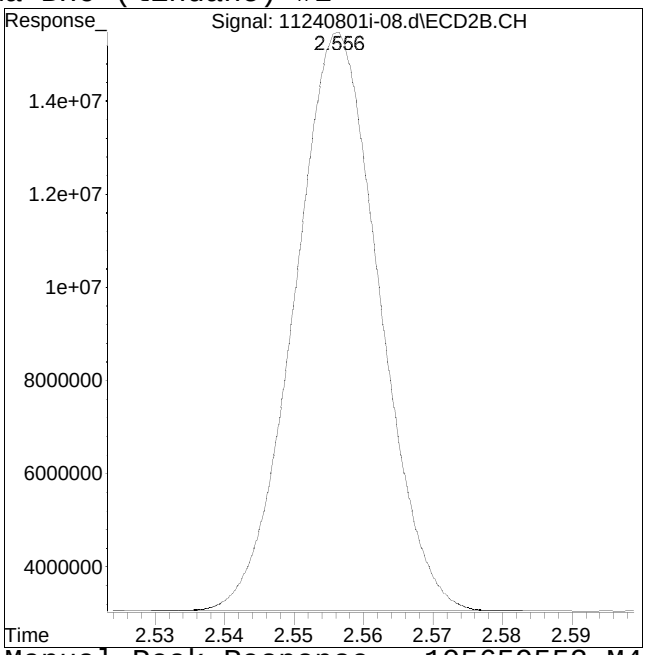
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 105875910



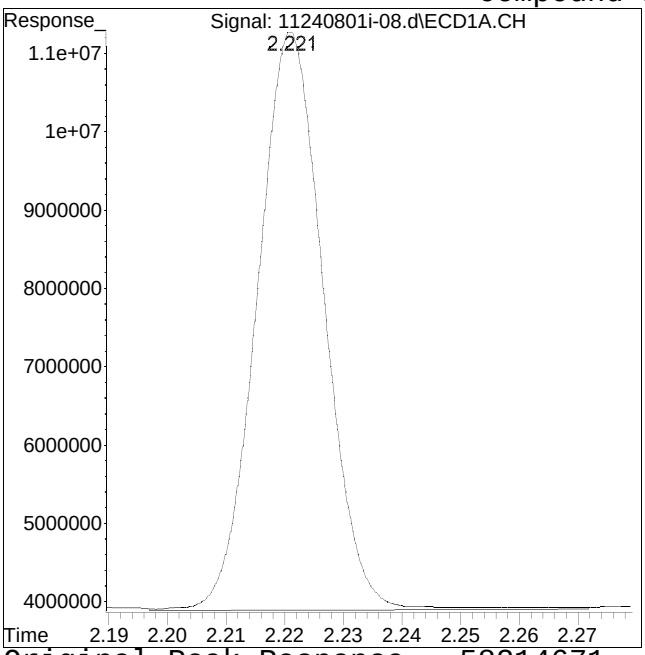

Manual Peak Response = 105659552 M4

M4 = Poor automated baseline construction.

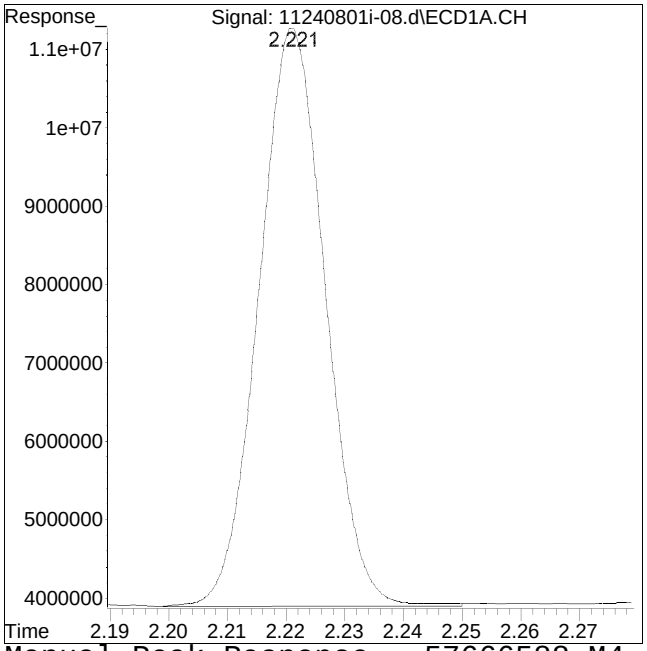
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #6: beta-BHC




Original Peak Response = 58214671



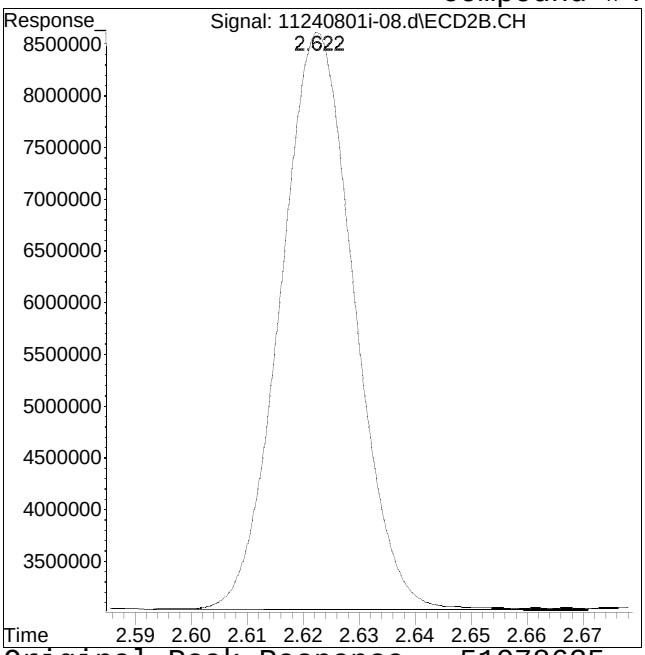

Manual Peak Response = 57666588 M4

M4 = Poor automated baseline construction.

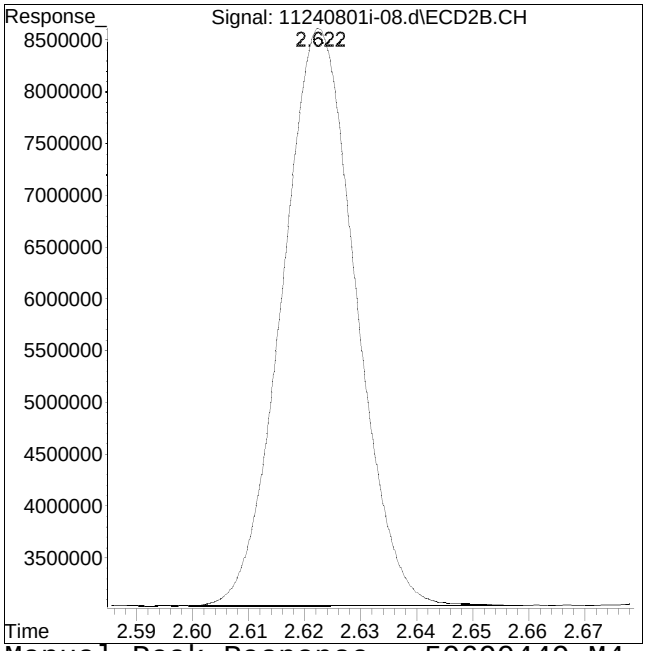
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #44: beta-BHC #2




Original Peak Response = 51078635




Manual Peak Response = 50690449 M4

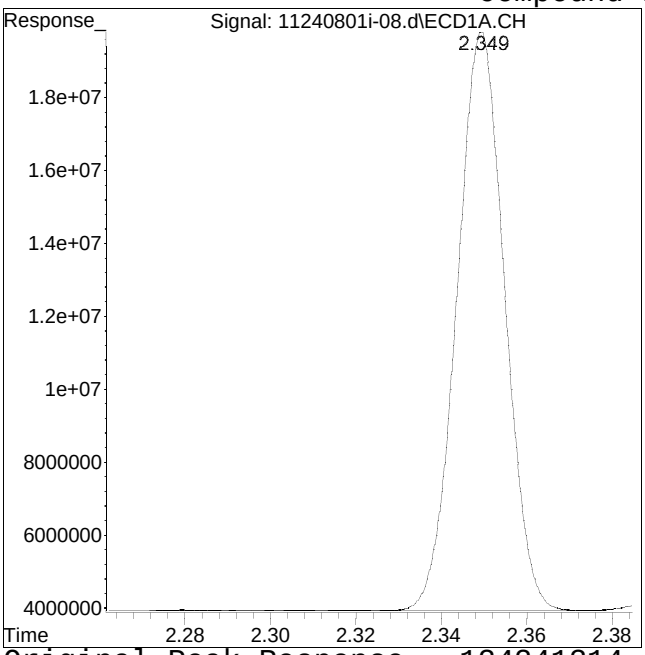
M4 = Poor automated baseline construction.

Manual Integration Report

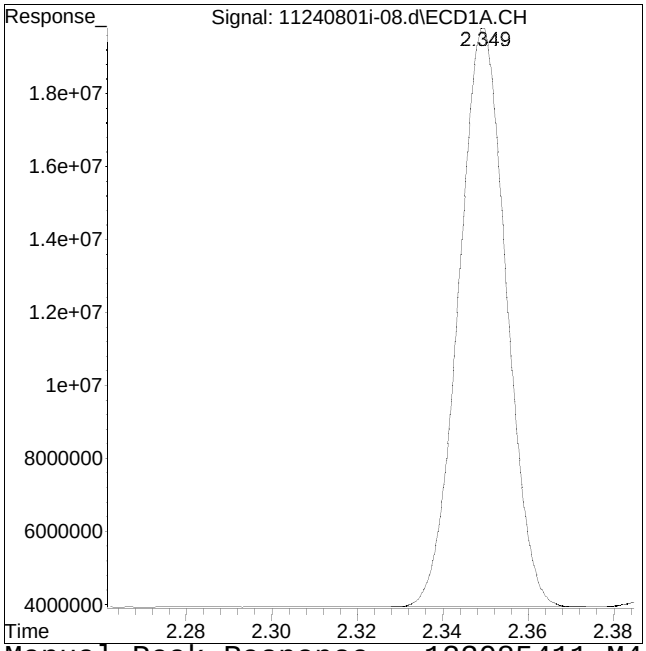
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #7: delta-BHC




Original Peak Response = 124241314



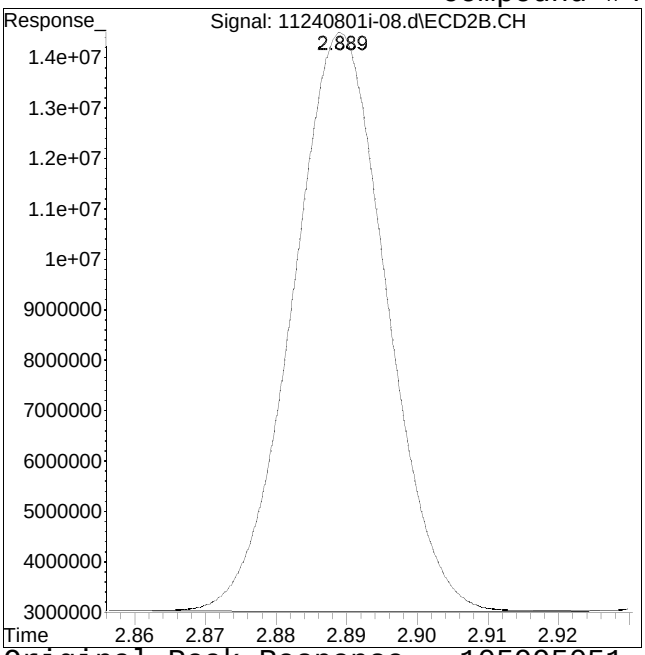

Manual Peak Response = 123085411 M4

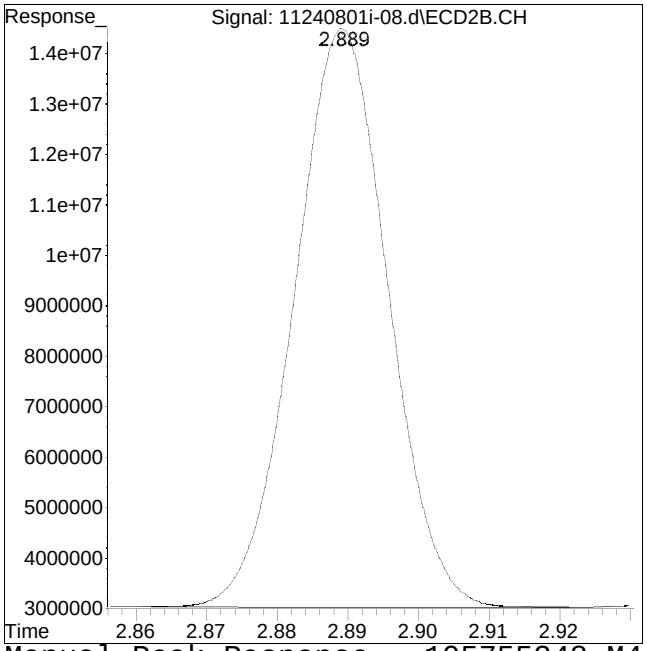
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #45: delta-BHC #2



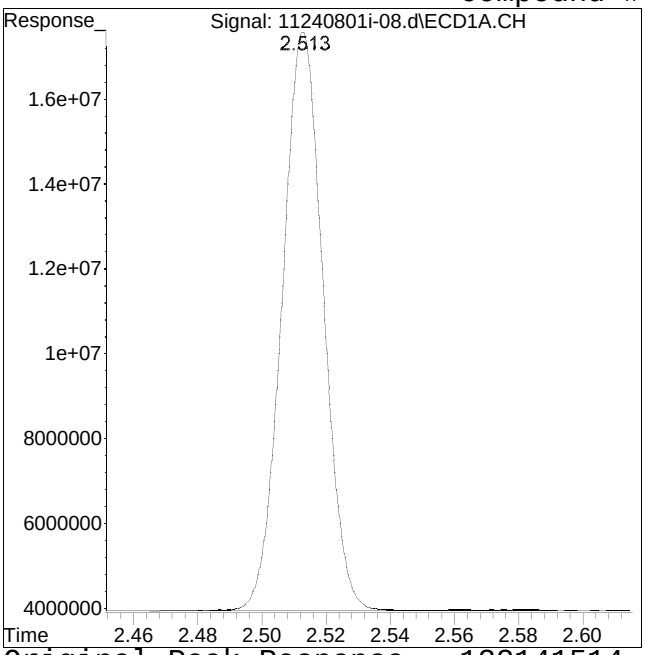



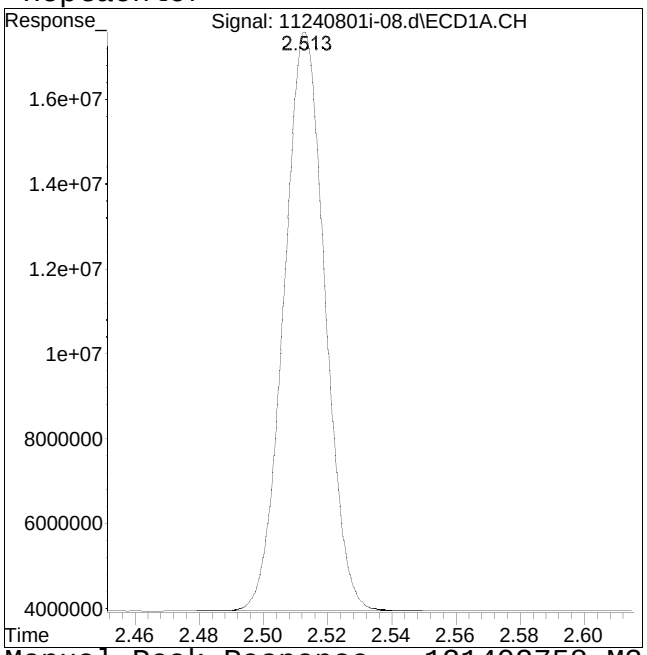

Original Peak Response = 105995051 Manual Peak Response = 105755248 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #8: Heptachlor



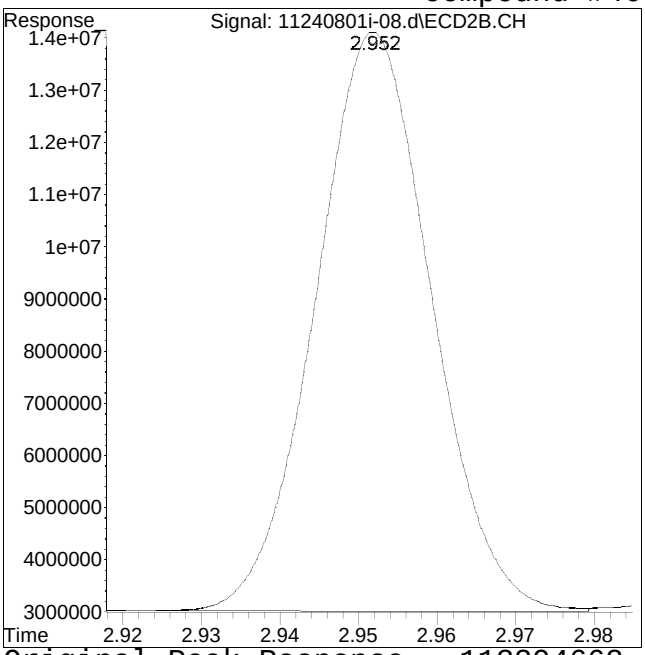




Original Peak Response = 122141514 Manual Peak Response = 121402758 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

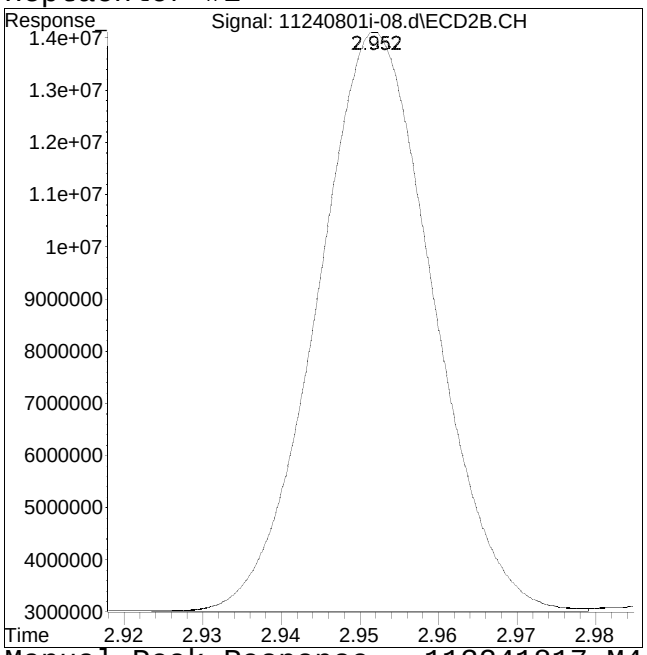
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #46: Heptachlor #2




Original Peak Response = 113394662




Manual Peak Response = 113241817 M4

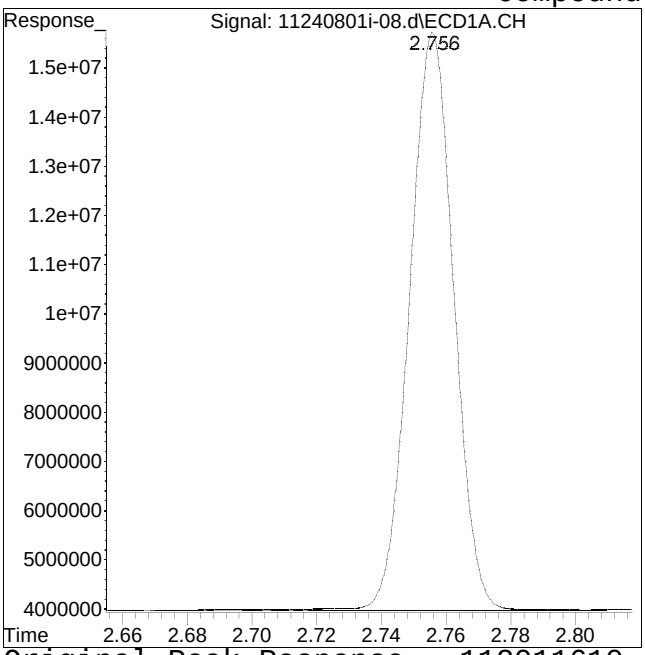
M4 = Poor automated baseline construction.

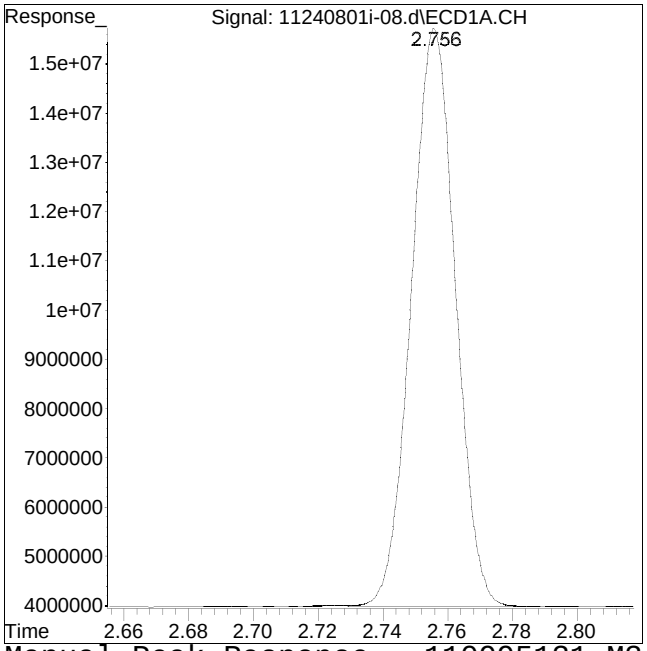
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #9: Aldrin



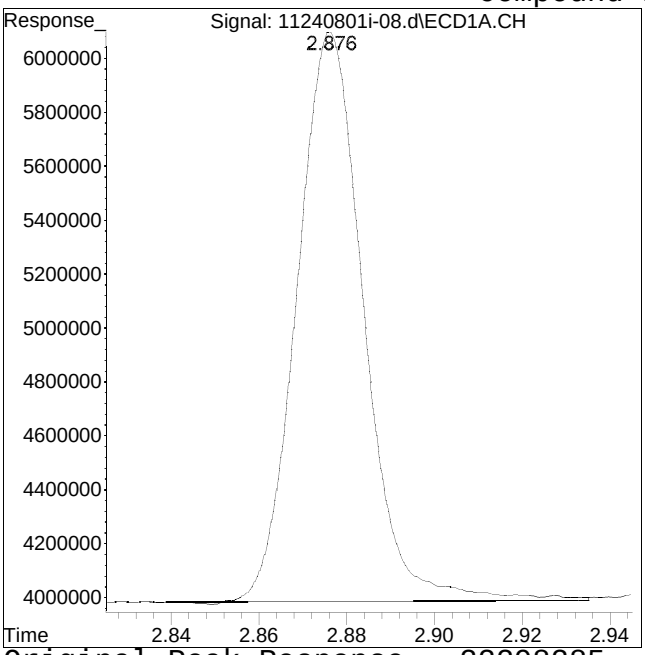

Original Peak Response = 112011610 Manual Peak Response = 110995131 M3

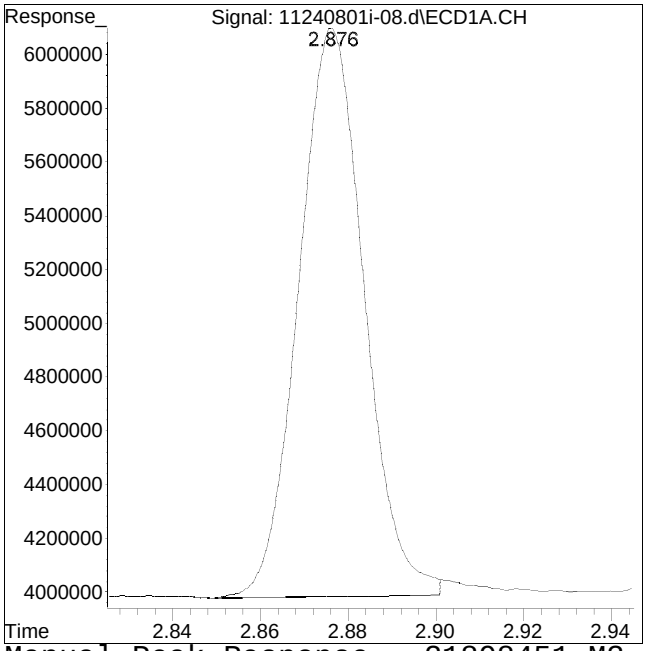
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #10: Alachlor




Original Peak Response = 22298285 Manual Peak Response = 21898451 M3

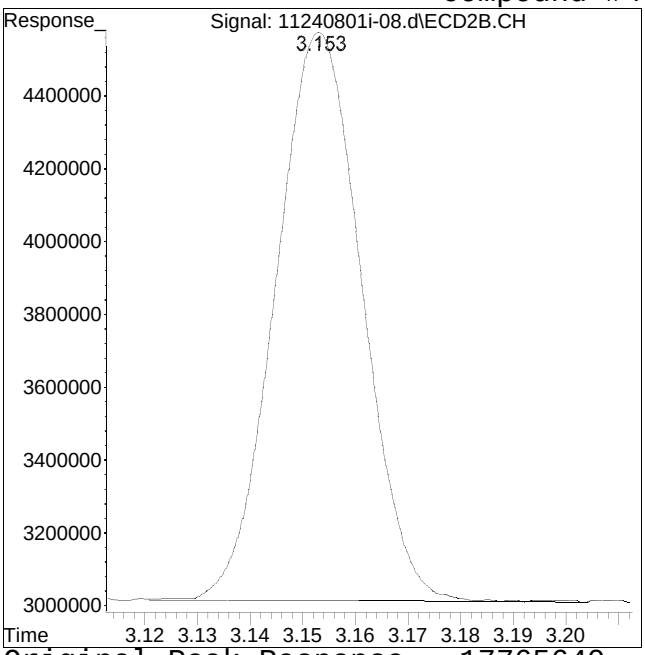
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

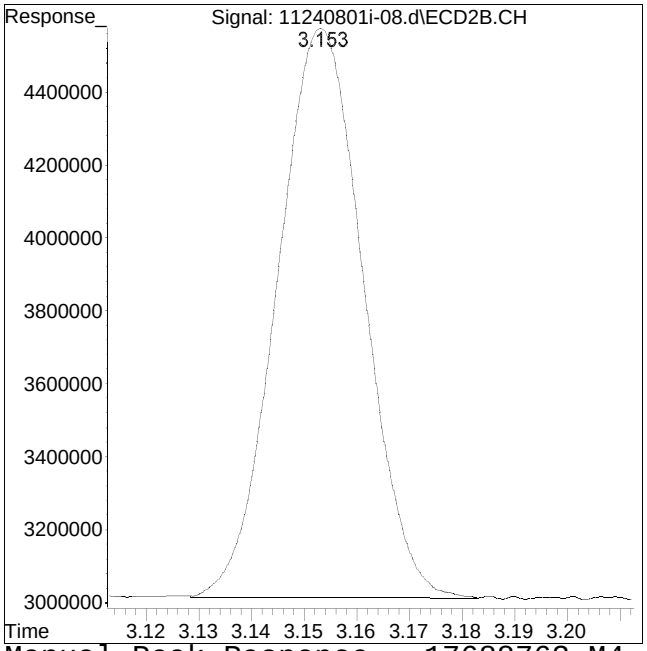
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #48: Alachlor #2




Original Peak Response = 17765640



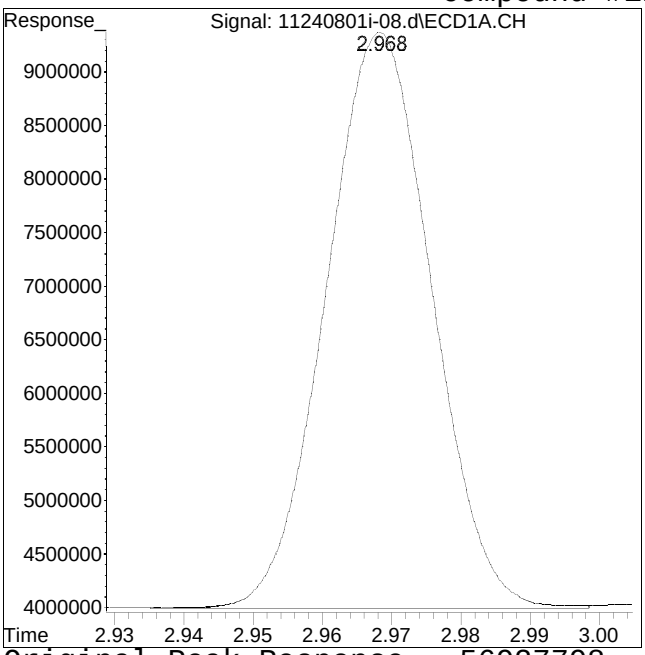

Manual Peak Response = 17688763 M4

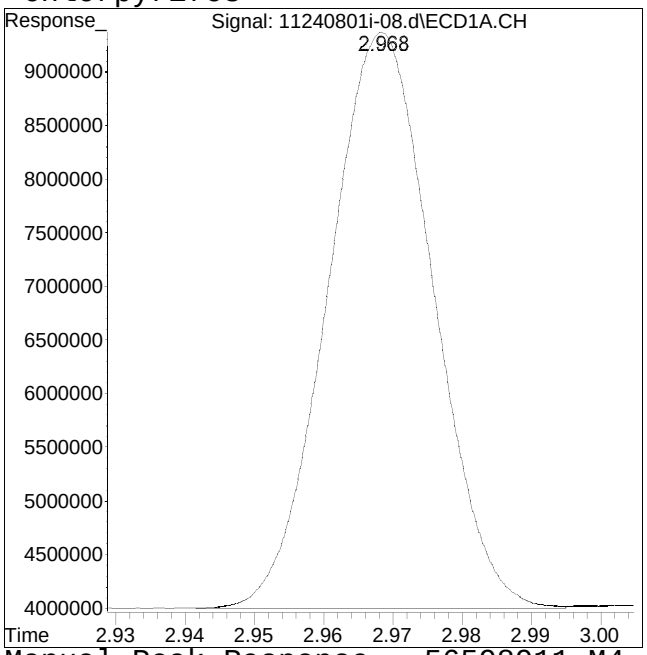
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #11: Chlorpyrifos



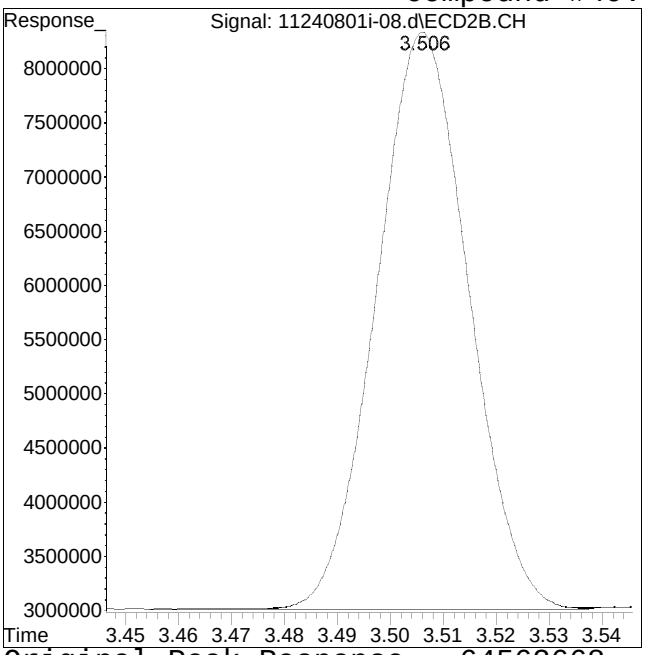




Original Peak Response = 56927798 Manual Peak Response = 56598911 M4
M4 = Poor automated baseline construction.

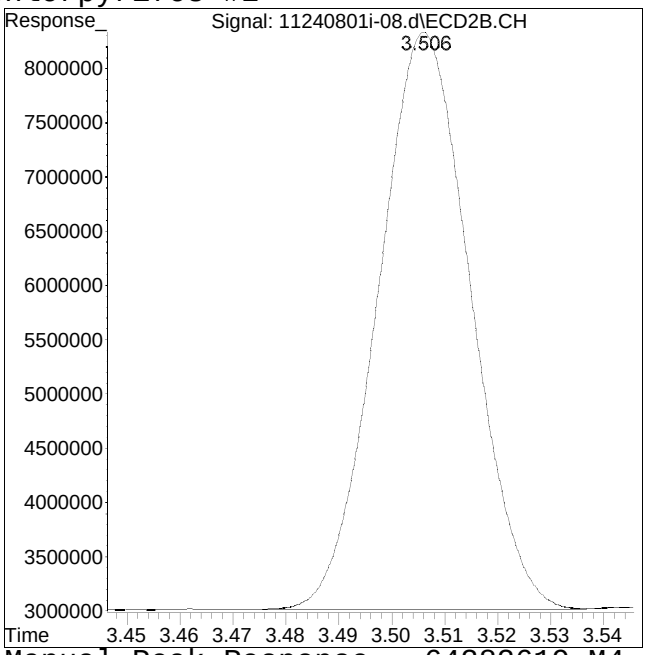
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 64562668



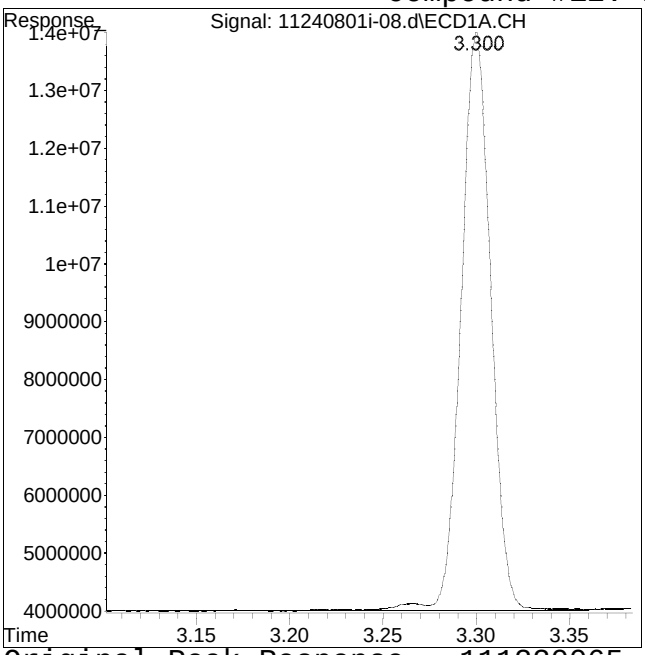

Manual Peak Response = 64282619 M4

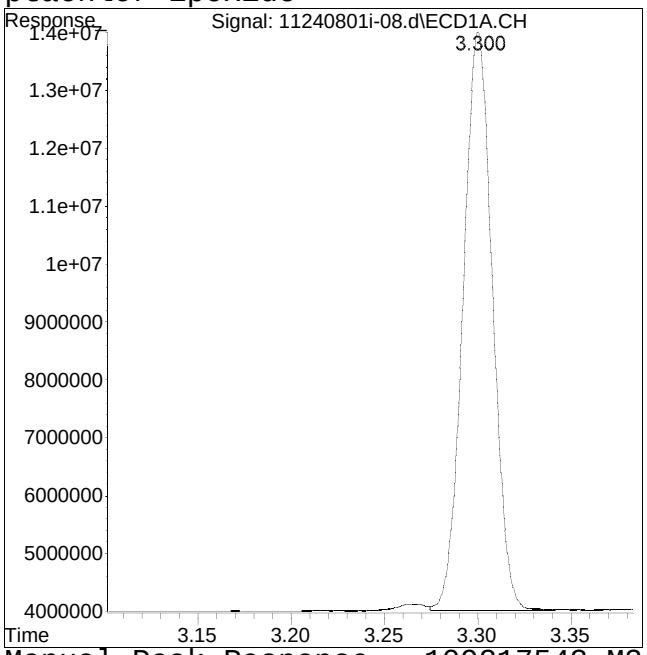
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #12: Heptachlor Epoxide



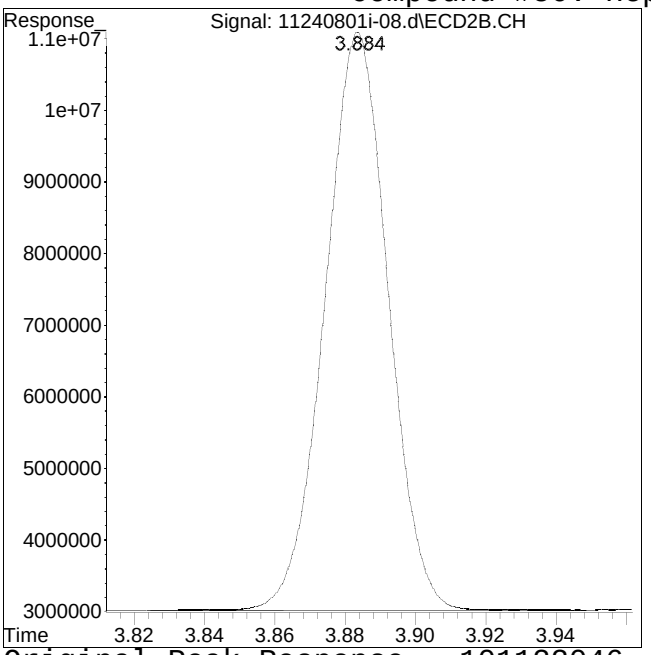



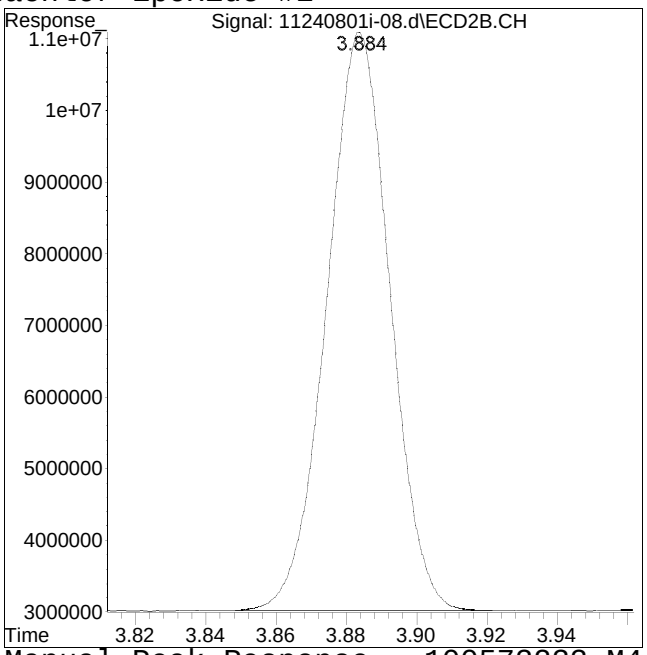

Original Peak Response = 111220065 Manual Peak Response = 109217543 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #50: Heptachlor Epoxide #2



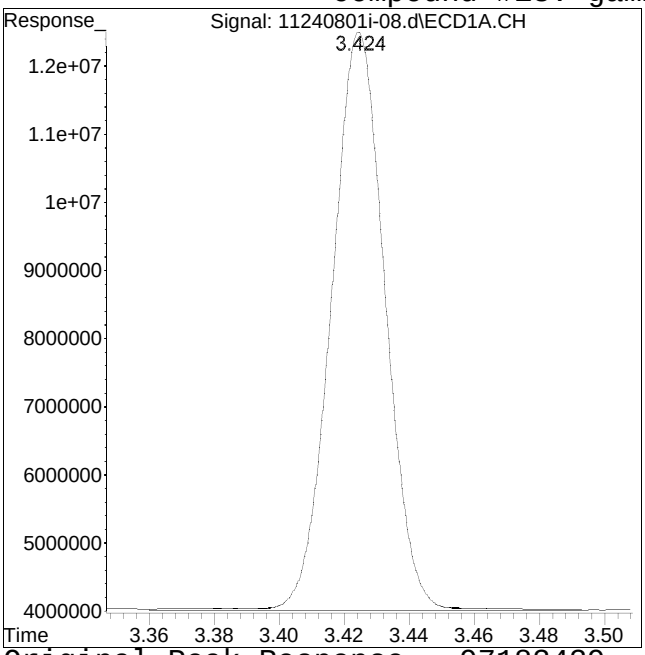

Original Peak Response = 101122046 Manual Peak Response = 100573233 M4
M4 = Poor automated baseline construction.

Manual Integration Report

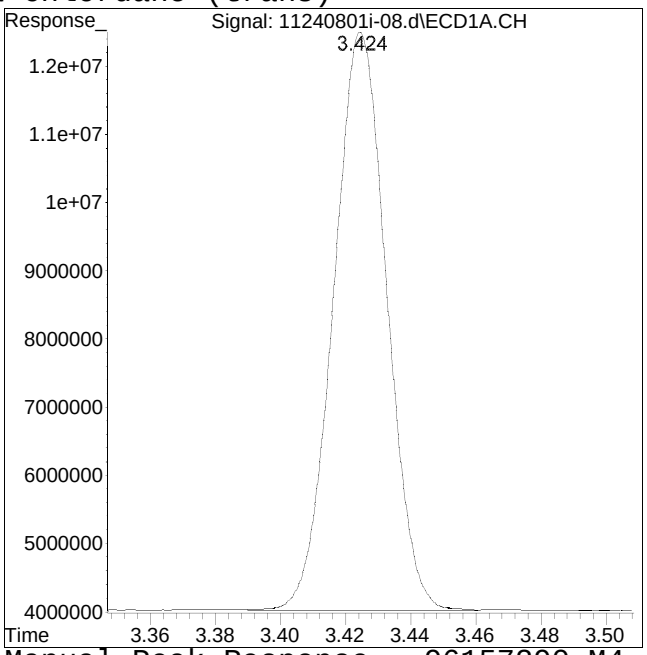
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #13: gamma-Chlordane (trans)




Original Peak Response = 97183439




Manual Peak Response = 96157290 M4

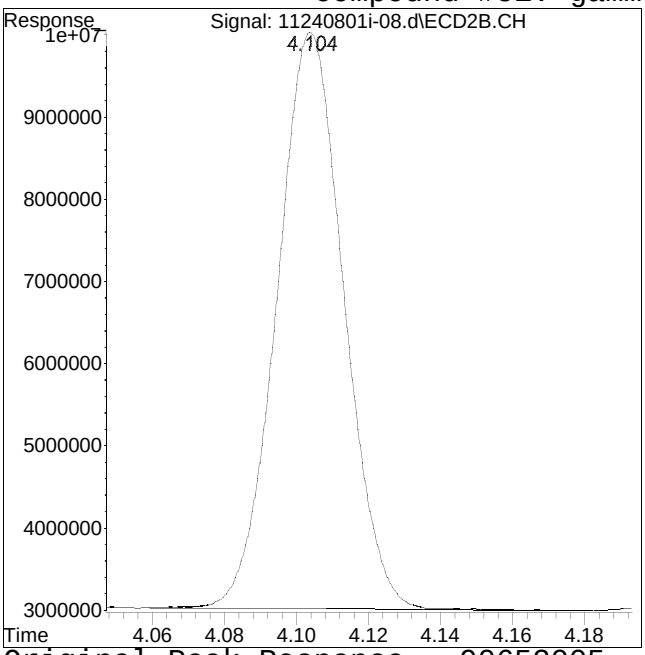
M4 = Poor automated baseline construction.

Manual Integration Report

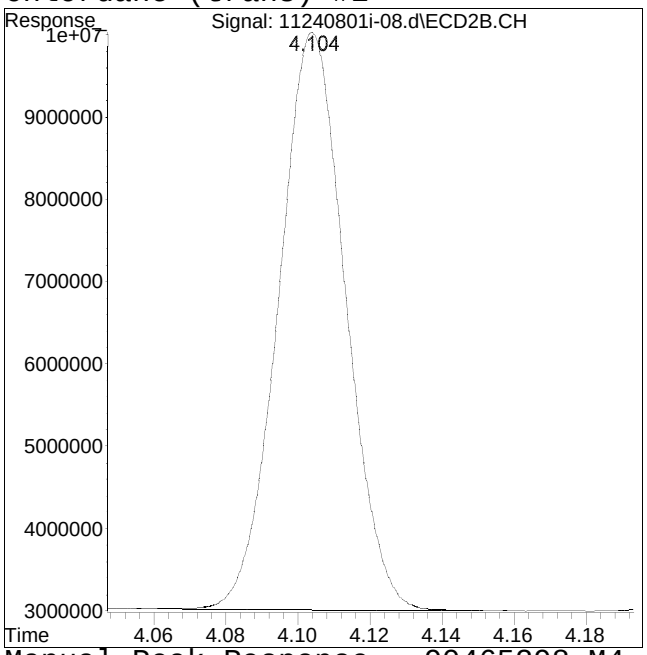
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 90652005



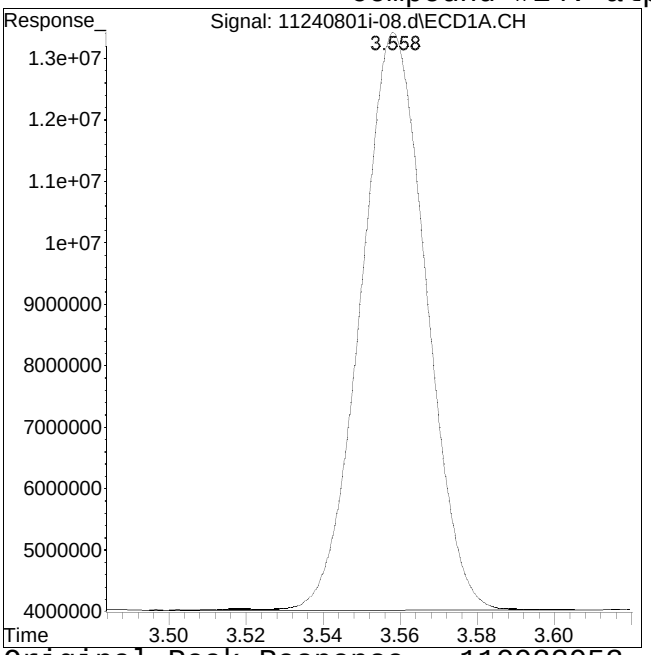

Manual Peak Response = 90465298 M4

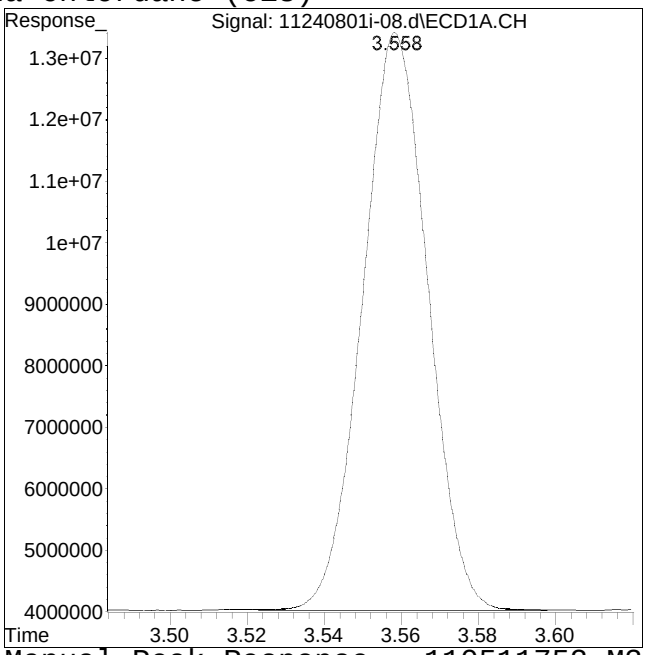
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #14: alpha-Chlordane (cis)



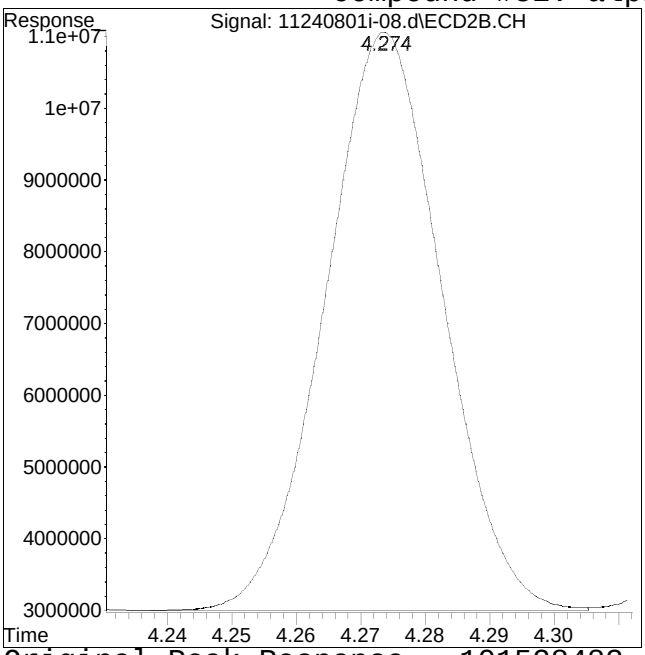

Original Peak Response = 110933953 Manual Peak Response = 110511752 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

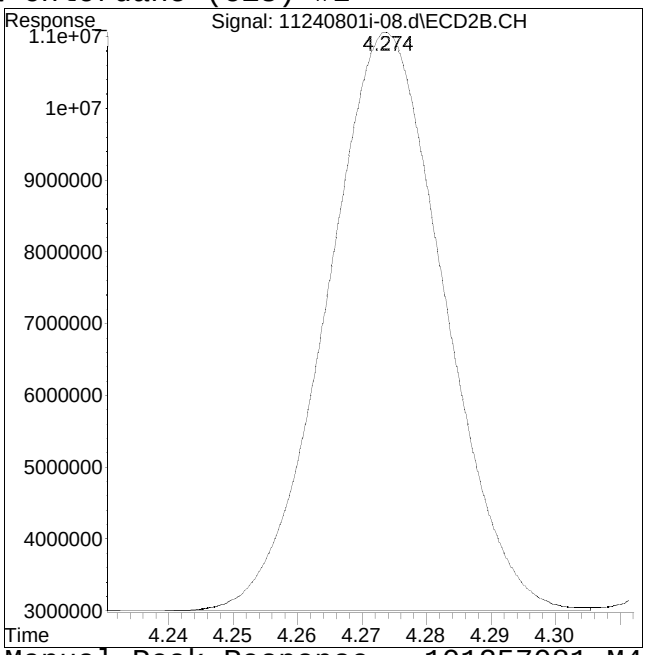
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #52: alpha-Chlordane (cis) #2



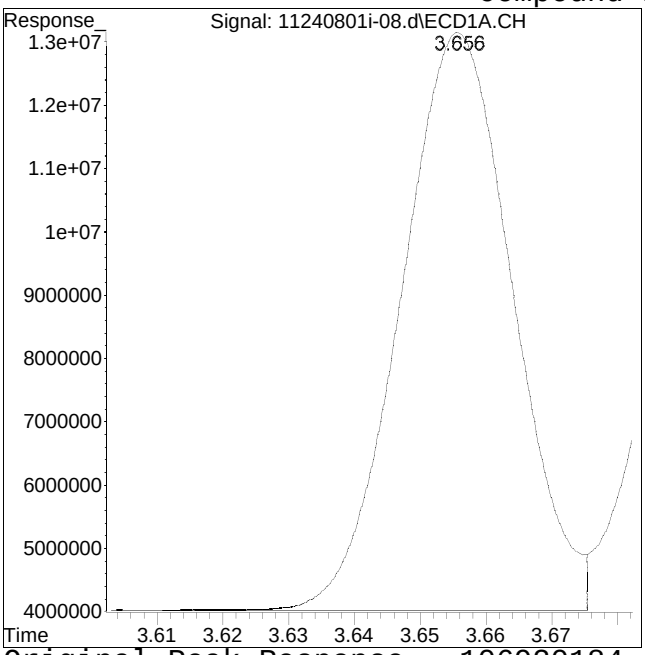

Original Peak Response = 101528483 Manual Peak Response = 101257081 M4
M4 = Poor automated baseline construction.

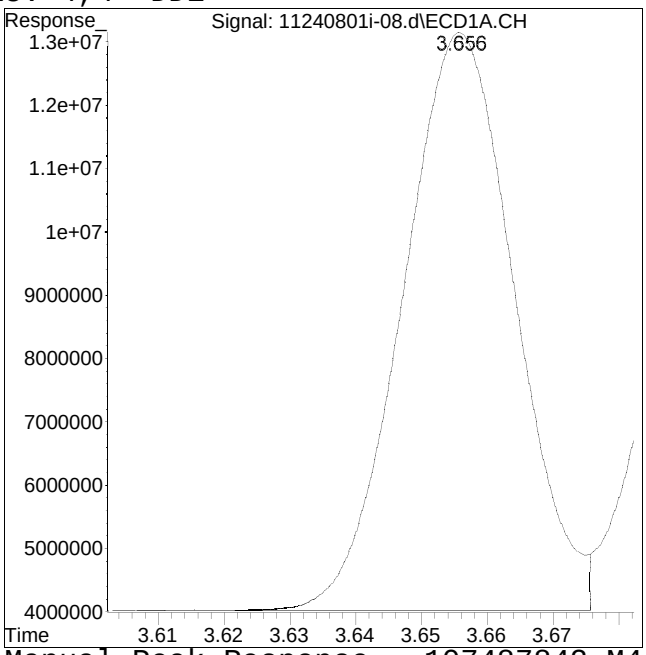
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #15: 4,4'-DDE



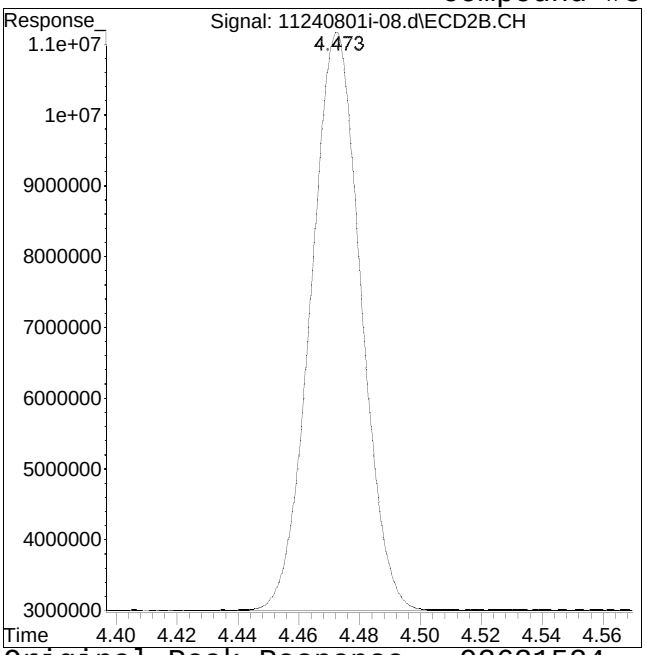

Original Peak Response = 106920184 Manual Peak Response = 107487842 M4
M4 = Poor automated baseline construction.

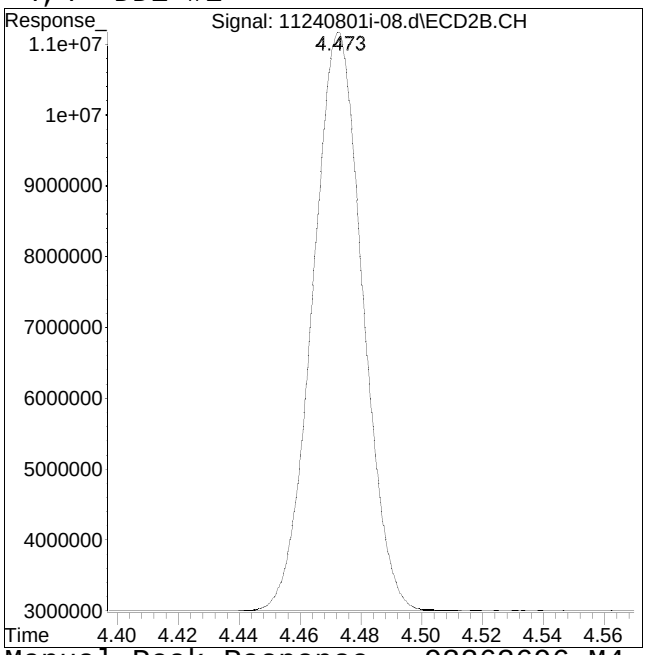
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #53: 4,4'-DDE #2



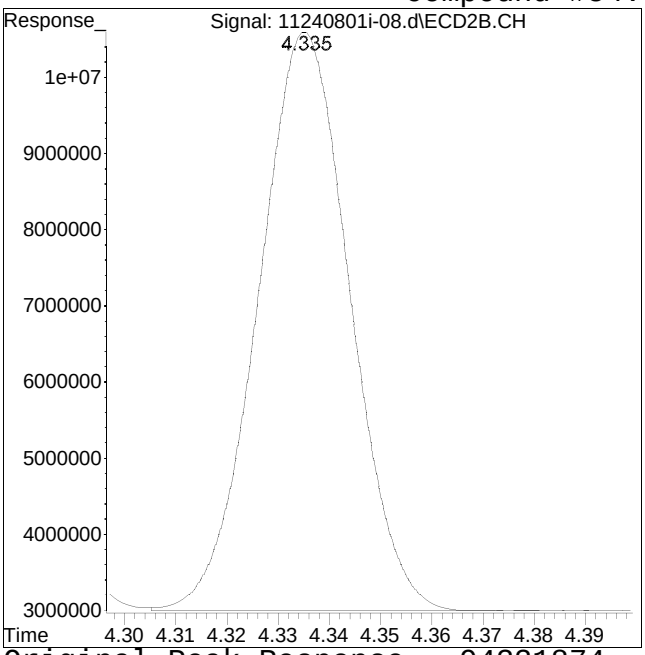




Original Peak Response = 93631524 Manual Peak Response = 93263696 M4
M4 = Poor automated baseline construction.

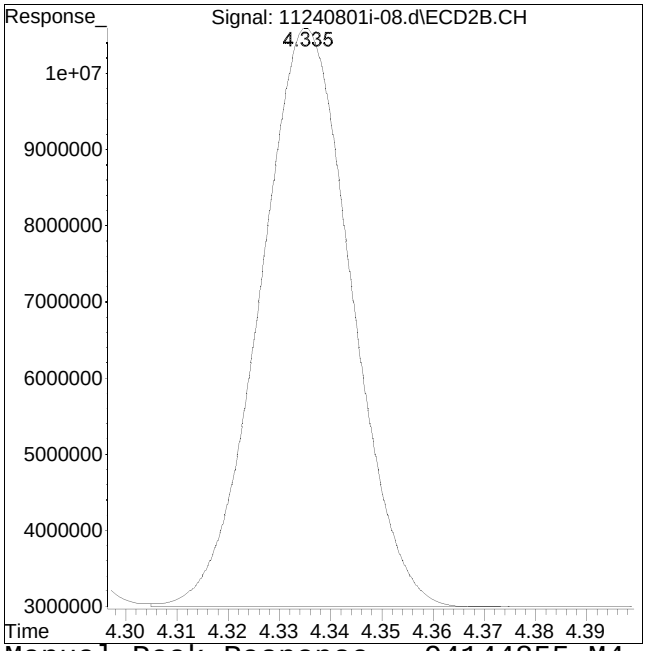
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #54: Endosulfan I #2




Original Peak Response = 94331874




Manual Peak Response = 94144855 M4

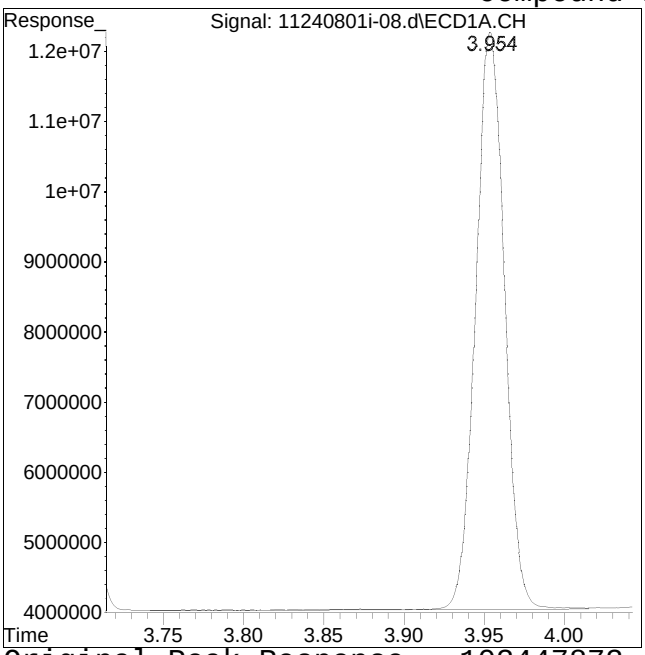
M4 = Poor automated baseline construction.

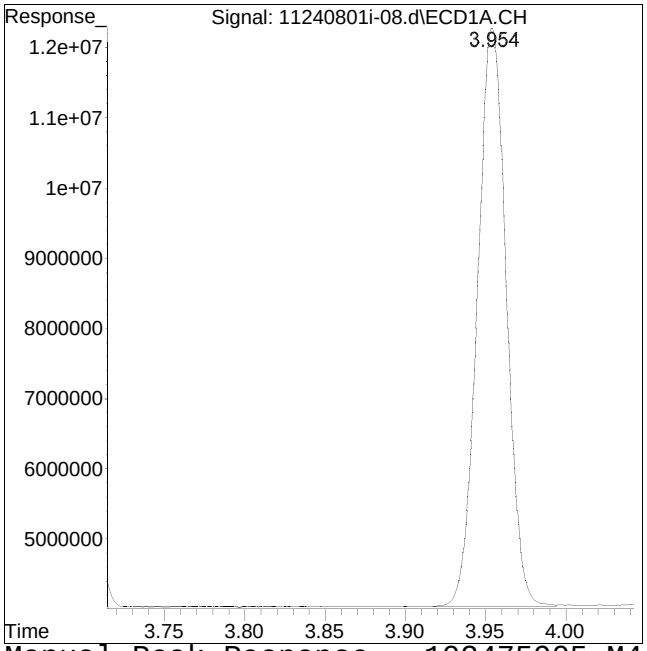
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

## Compound #17: Dieldrin



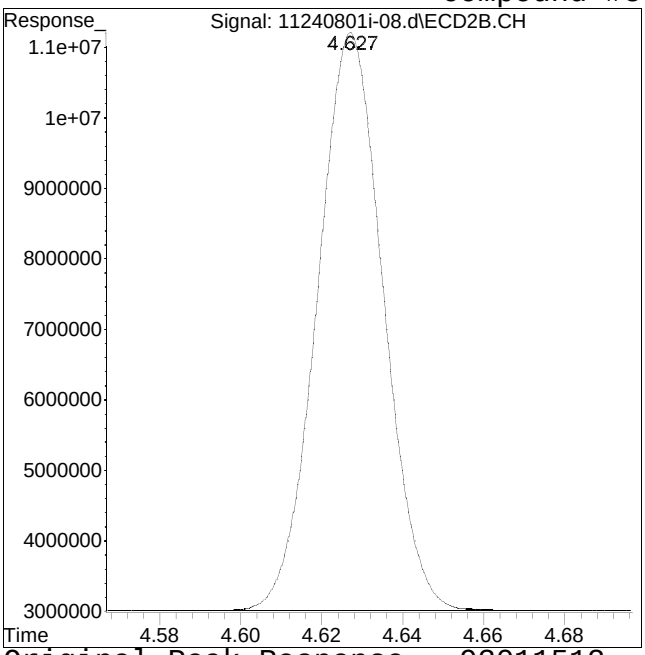

Original Peak Response = 103447873 Manual Peak Response = 102475905 M4
M4 = Poor automated baseline construction.

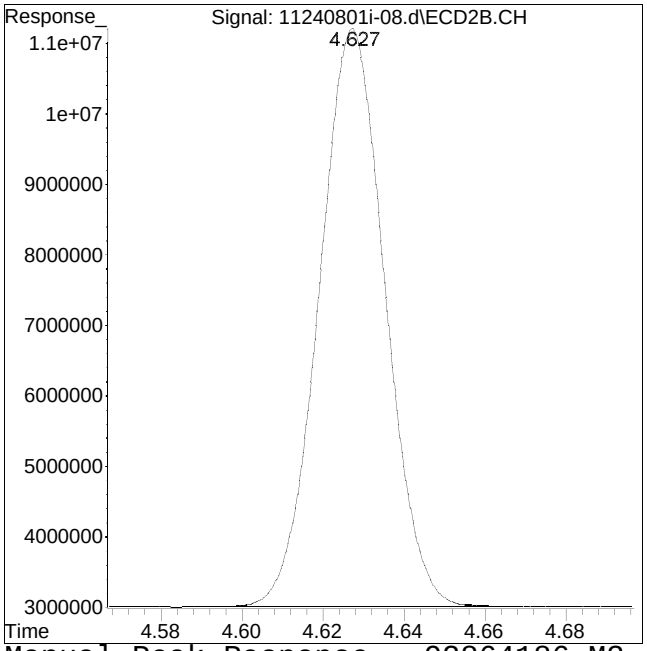
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #55: Dieldrin #2




Original Peak Response = 93011512 Manual Peak Response = 92864186 M3

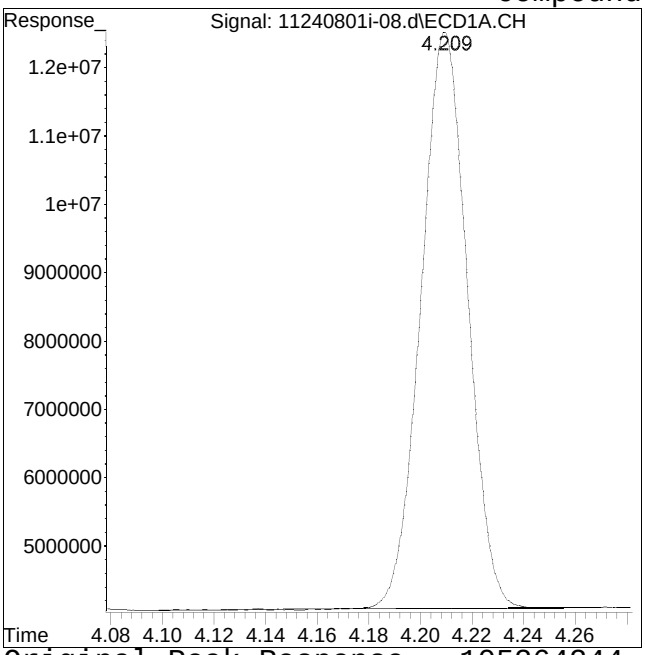
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

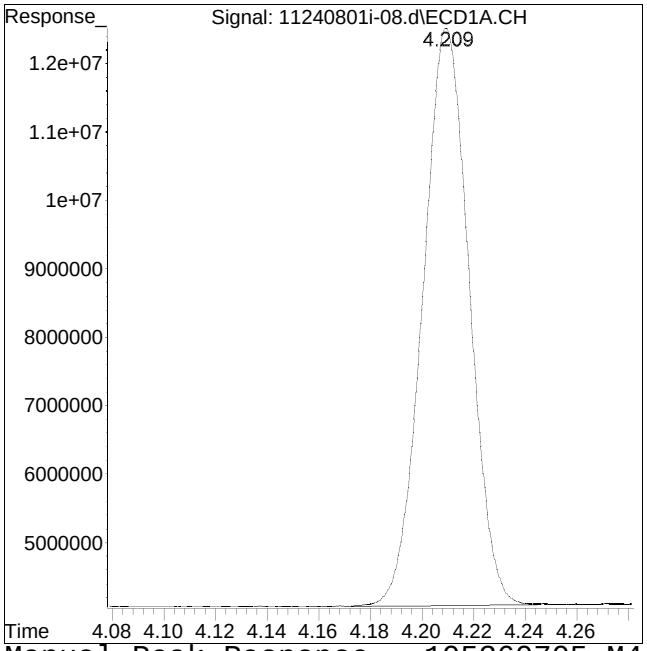
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #18: Endrin




Original Peak Response = 105264244



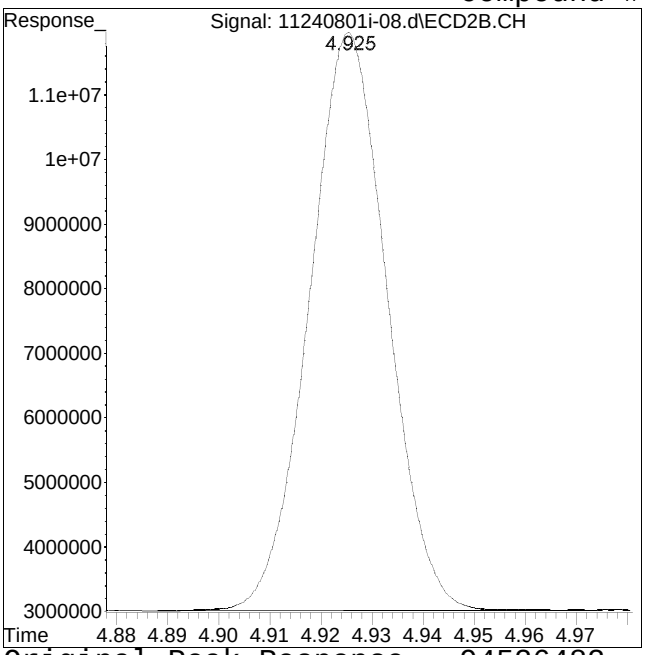

Manual Peak Response = 105360705 M4

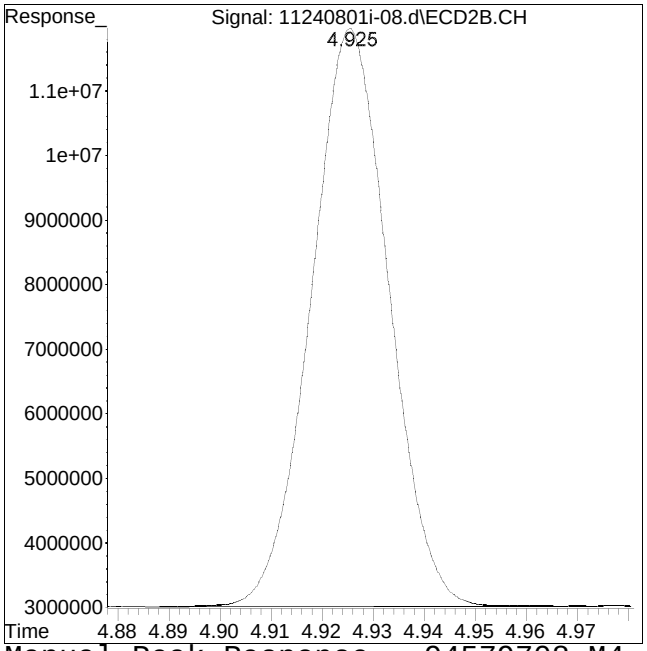
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #56: Endrin #2



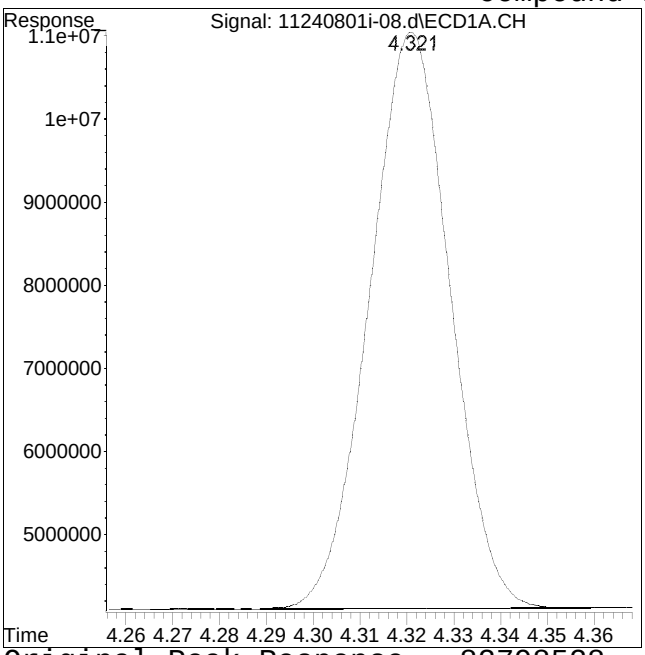

Original Peak Response = 94526482 Manual Peak Response = 94579708 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

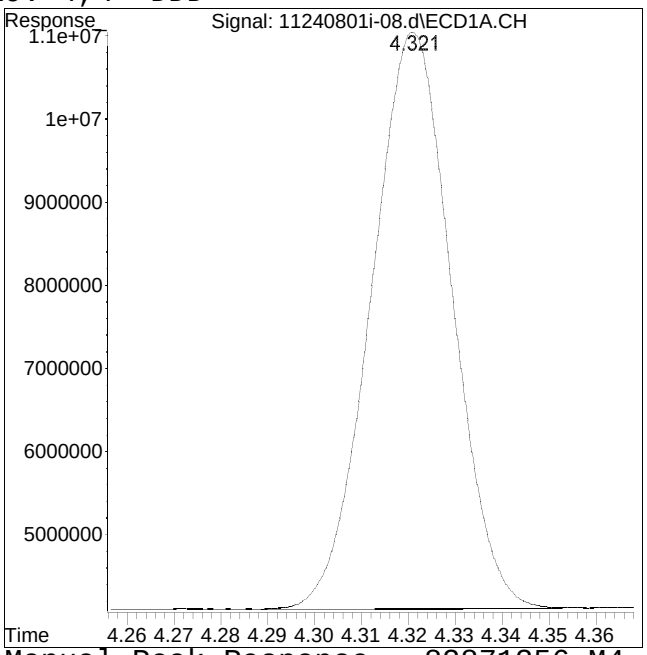
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

## Compound #19: 4,4'-DDD




Original Peak Response = 82798528



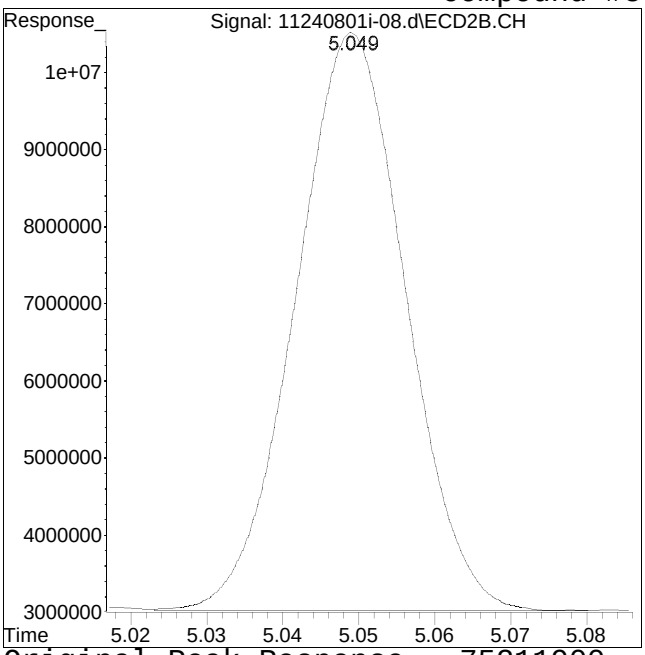

Manual Peak Response = 82871356 M4

M4 = Poor automated baseline construction.

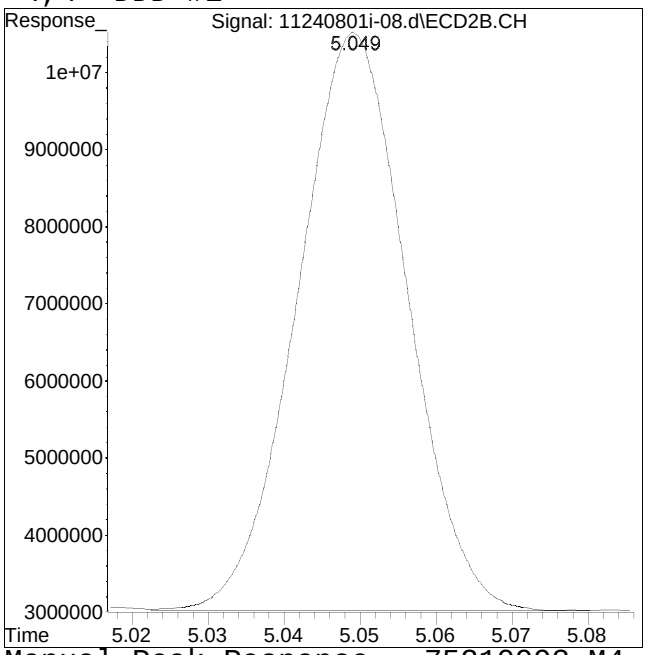
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #57: 4,4'-DDD #2




Original Peak Response = 75211900



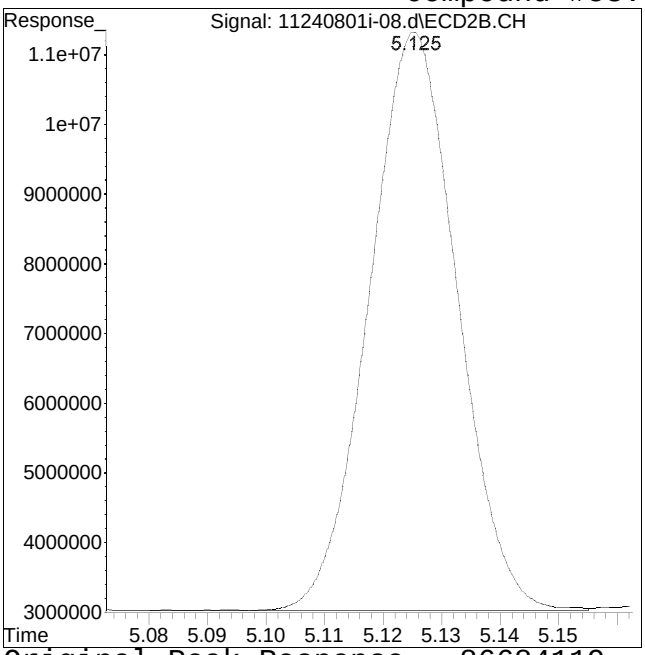

Manual Peak Response = 75210993 M4

M4 = Poor automated baseline construction.

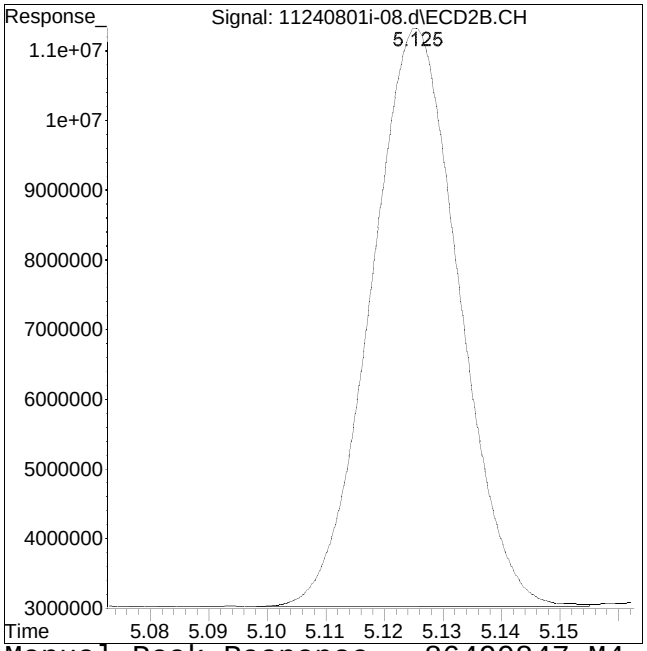
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #58: Endosulfan II #2




Original Peak Response = 86684119




Manual Peak Response = 86490847 M4

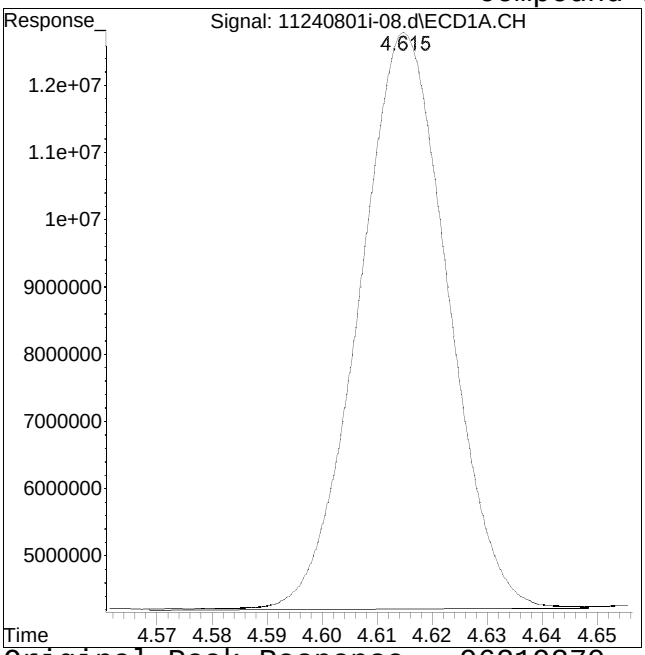
M4 = Poor automated baseline construction.

Manual Integration Report

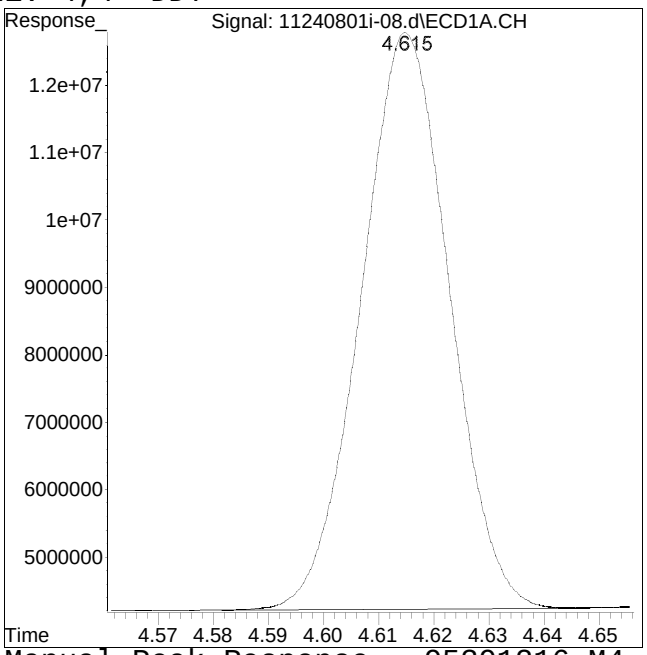
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #21: 4,4'-DDT




Original Peak Response = 96219270



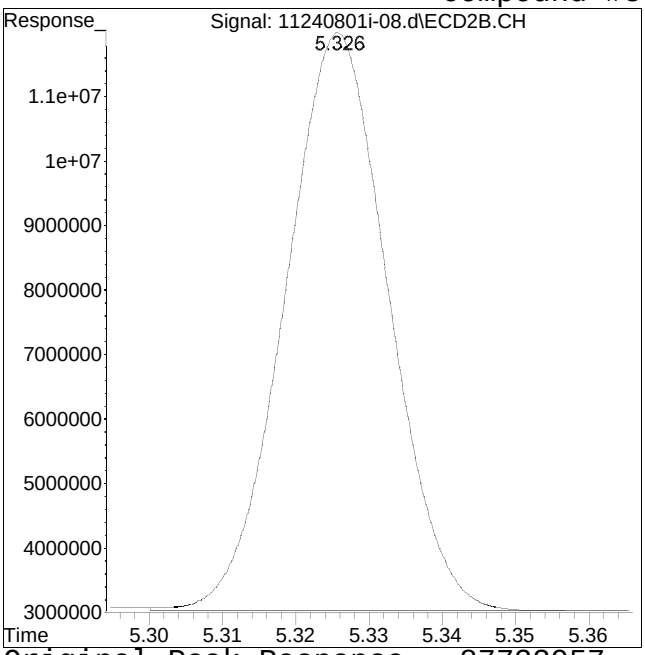

Manual Peak Response = 95391216 M4

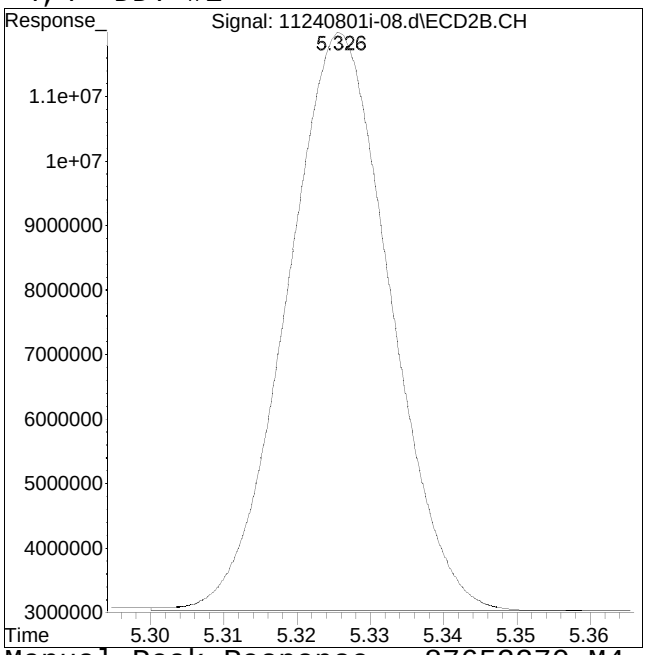
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #59: 4,4'-DDT #2



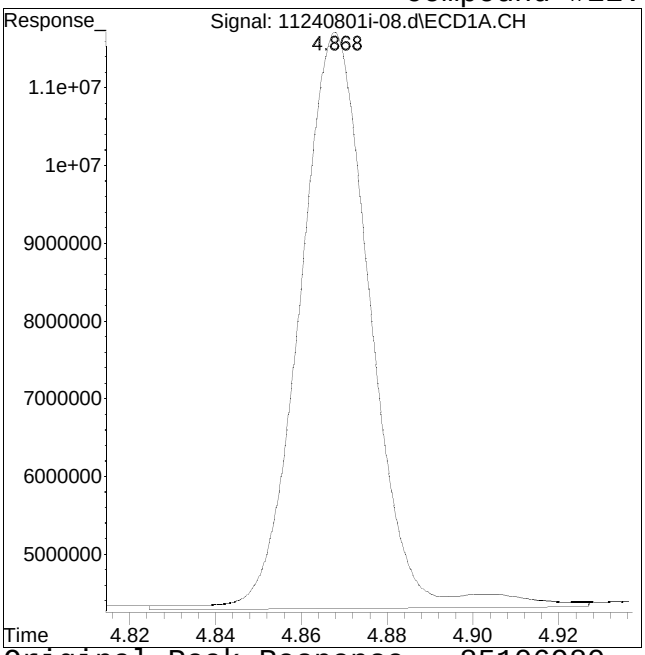



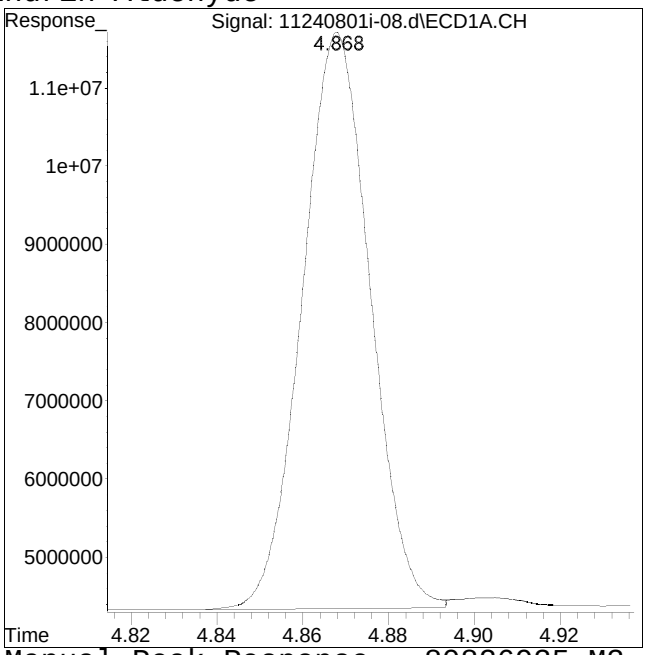

Original Peak Response = 87732957 Manual Peak Response = 87653270 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #22: Endrin Aldehyde



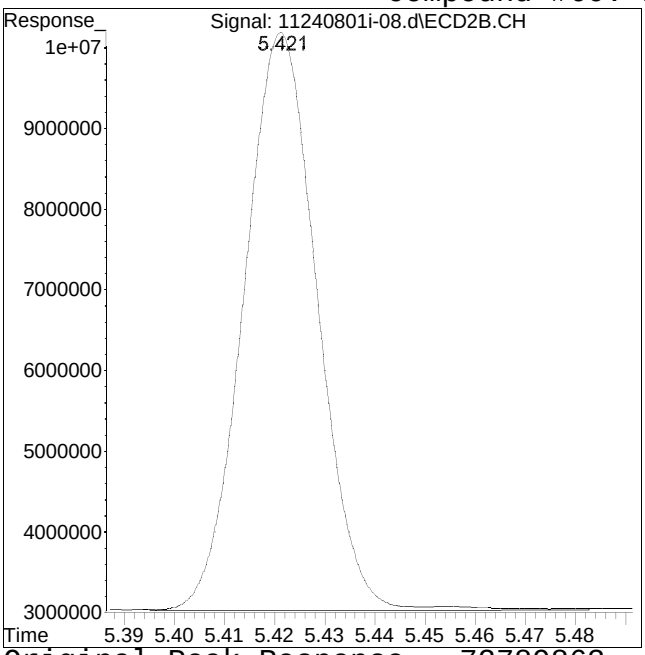



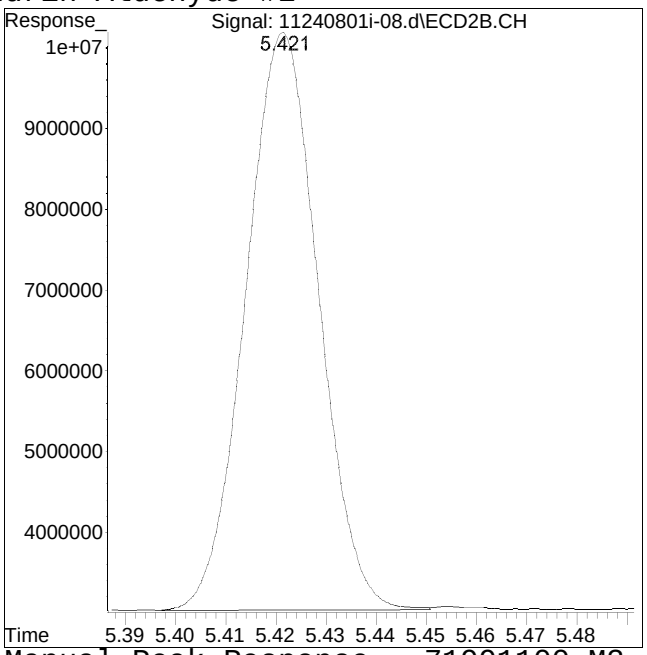

Original Peak Response = 85106980 Manual Peak Response = 80826935 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #60: Endrin Aldehyde #2



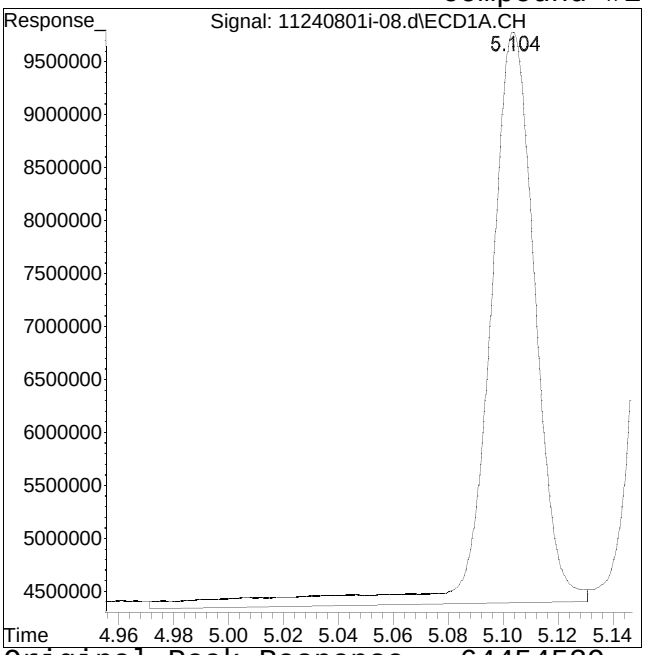

Original Peak Response = 72789863 Manual Peak Response = 71991100 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

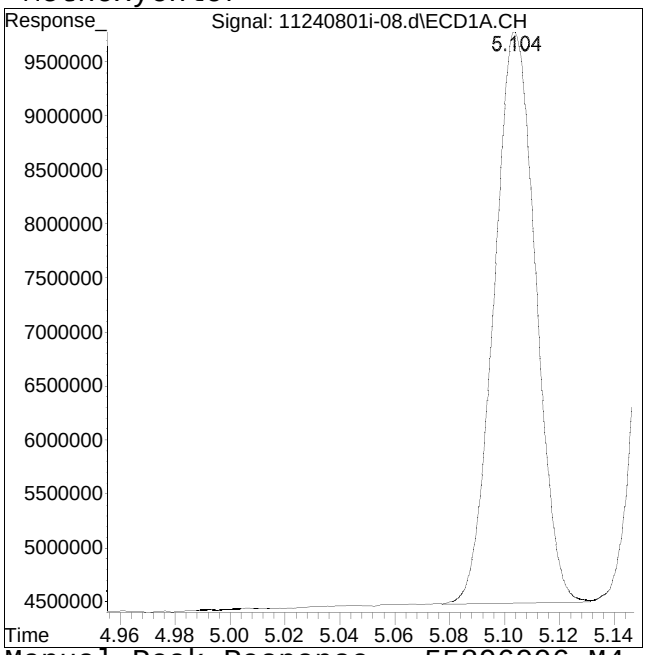
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #23: Methoxychlor




Original Peak Response = 64454539




Manual Peak Response = 55896006 M4

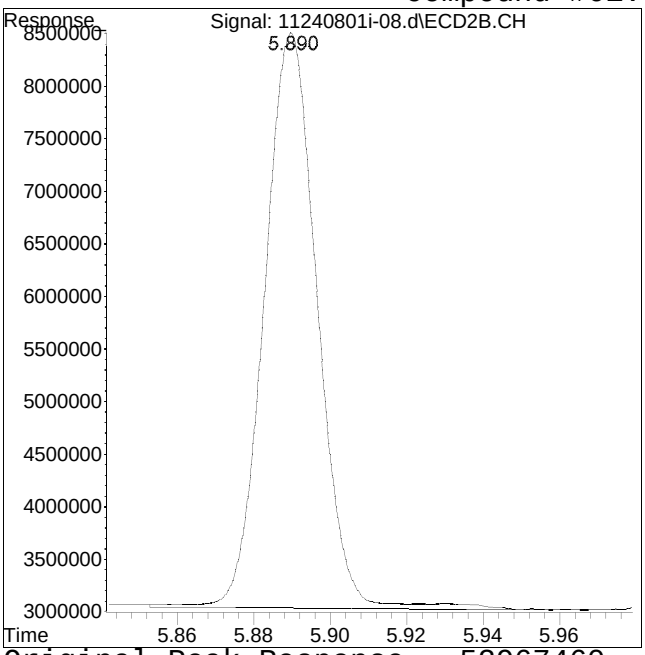
M4 = Poor automated baseline construction.

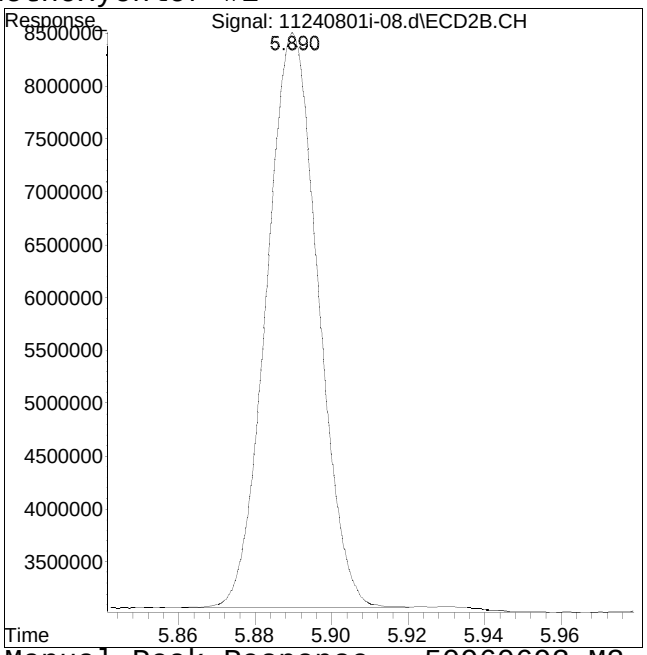
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #61: Methoxychlor #2



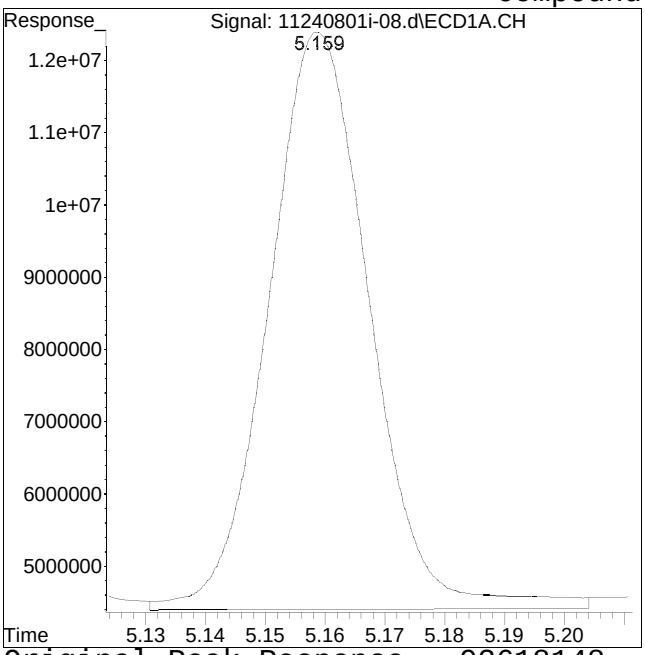

Original Peak Response = 52967460 Manual Peak Response = 50960693 M3

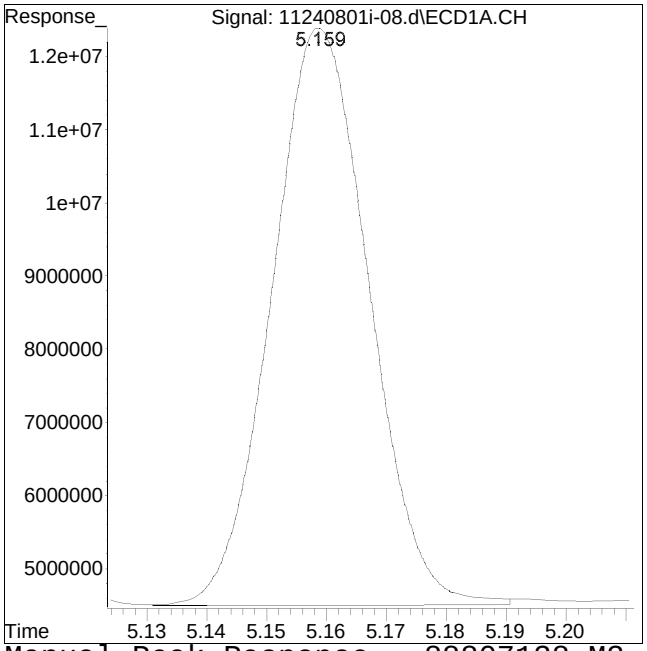
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #24: Mirex



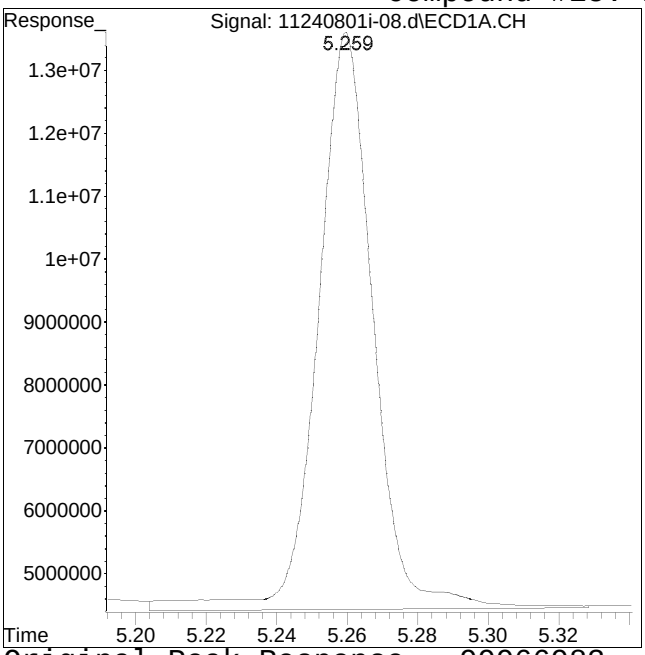



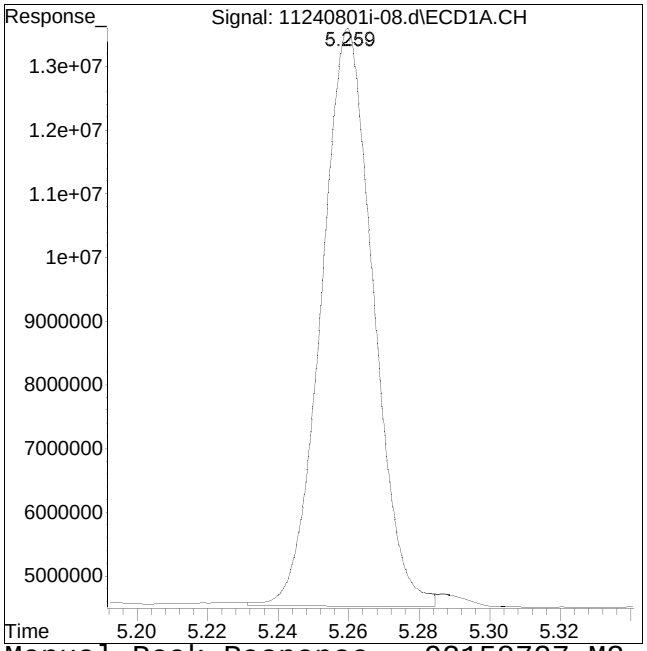

Original Peak Response = 93618148 Manual Peak Response = 88807138 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #25: Endosulfan Sulfate



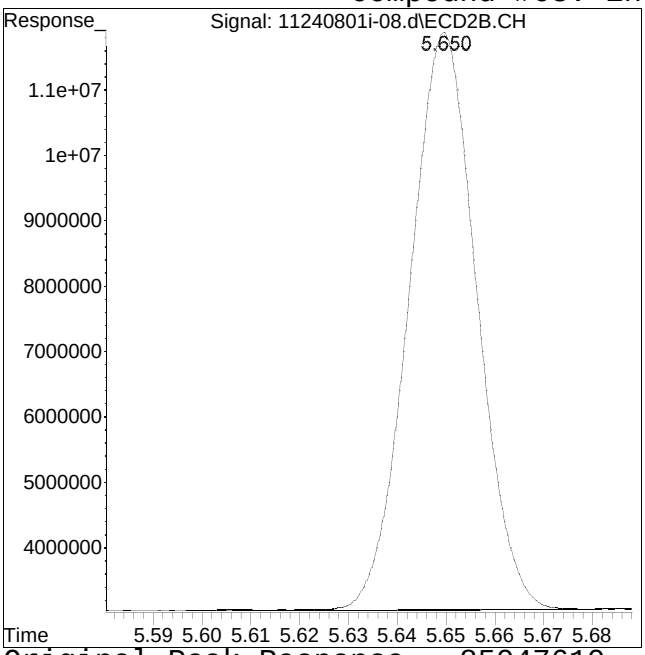

Original Peak Response = 99966983 Manual Peak Response = 92158727 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

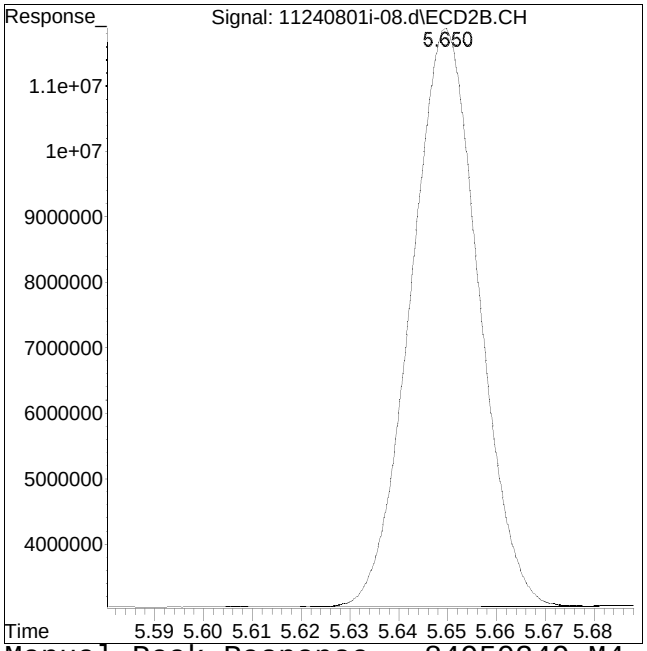
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 85047610



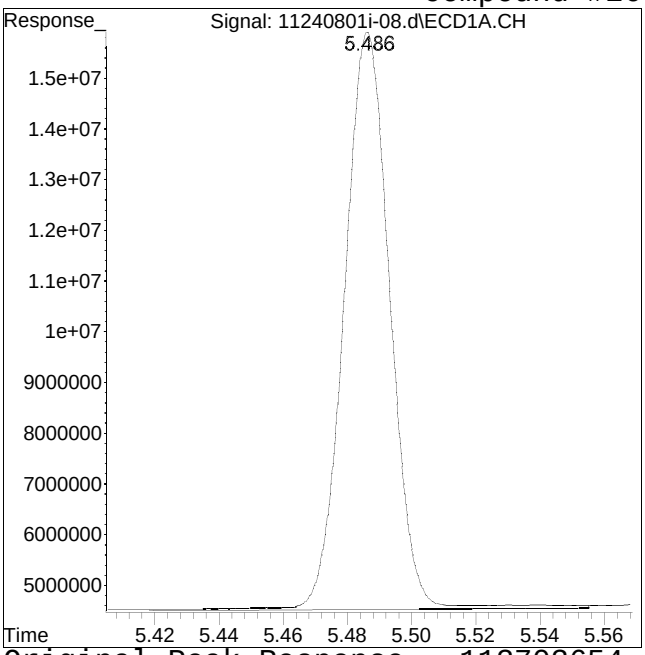

Manual Peak Response = 84950349 M4

M4 = Poor automated baseline construction.

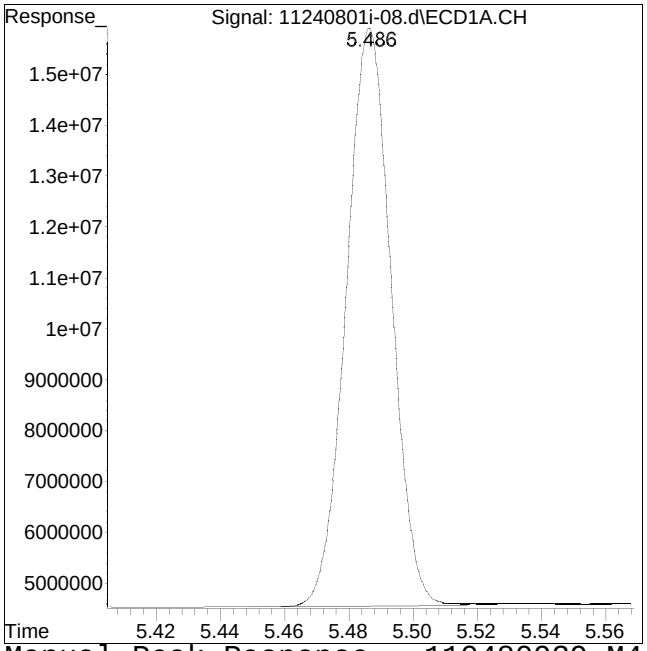
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #26: Endrin Ketone




Original Peak Response = 113703654



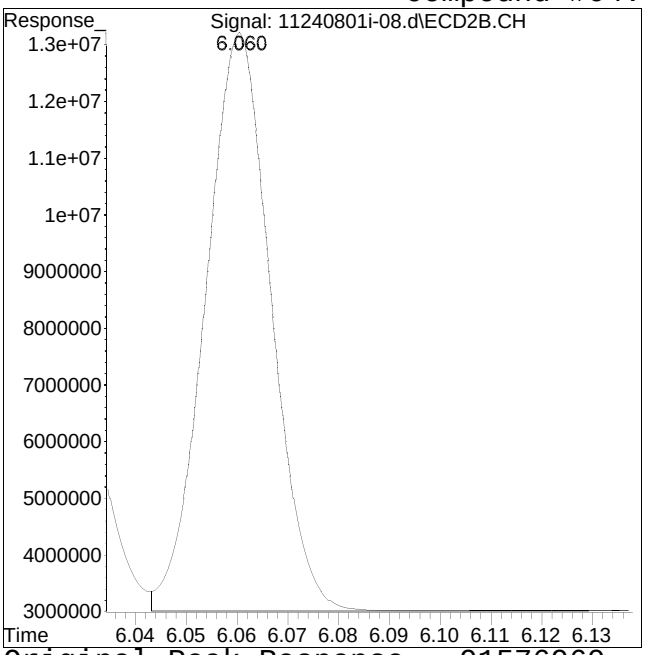

Manual Peak Response = 110480939 M4

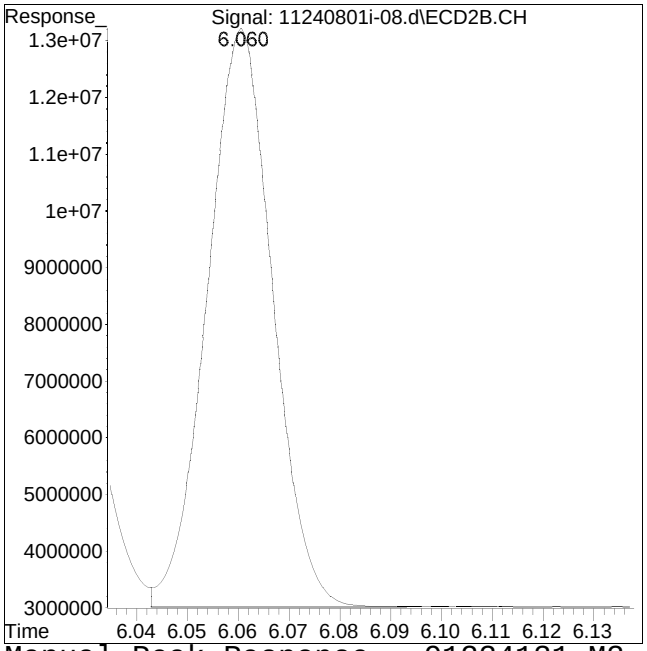
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-08.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:37 Instrument : Pest 11
Sample : il7pest,42e,,pp 11682 L0.0Quant Date : 8/2/2024 10:46 am

Compound #64: Endrin Ketone #2



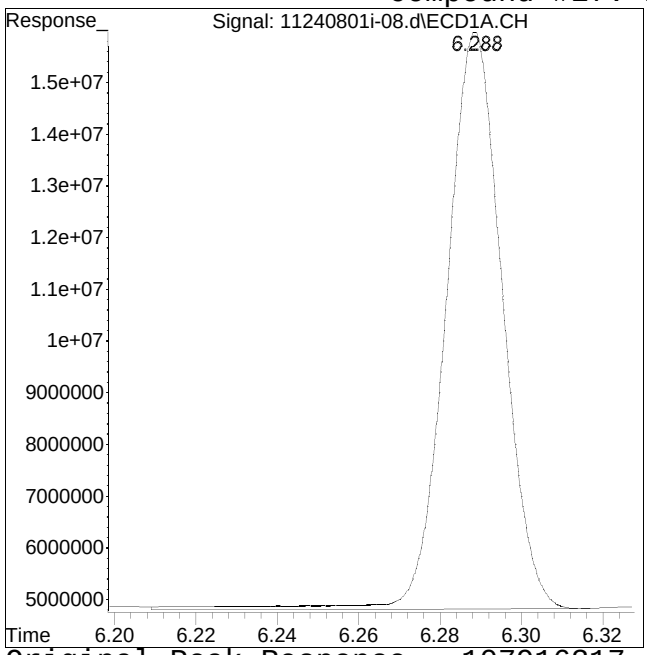

Original Peak Response = 91576960 Manual Peak Response = 91234131 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

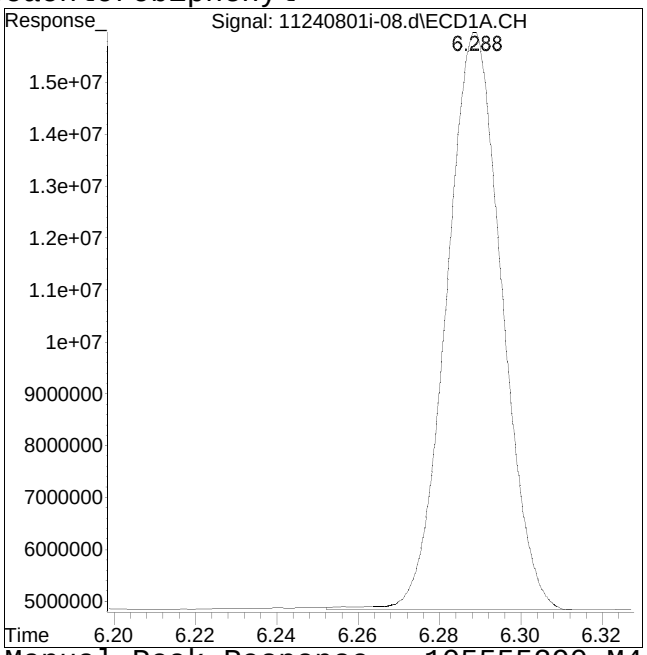
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #27: Decachlorobiphenyl




Original Peak Response = 107916317




Manual Peak Response = 105555290 M4

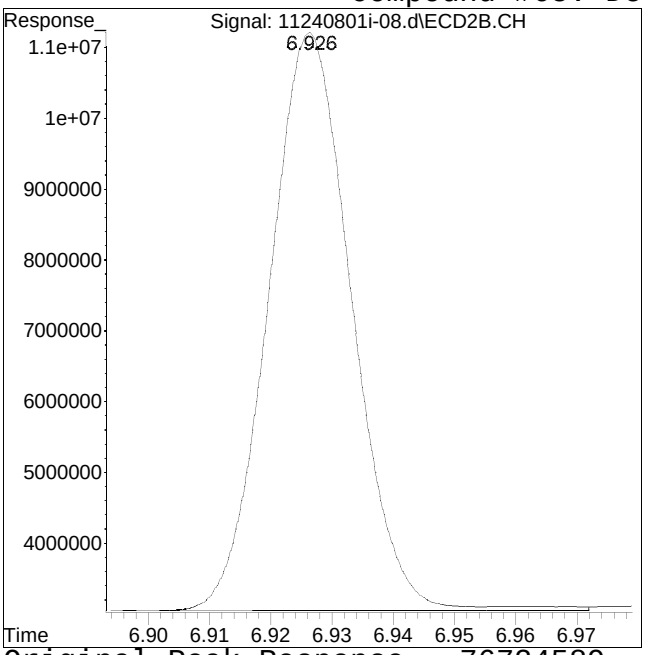
M4 = Poor automated baseline construction.

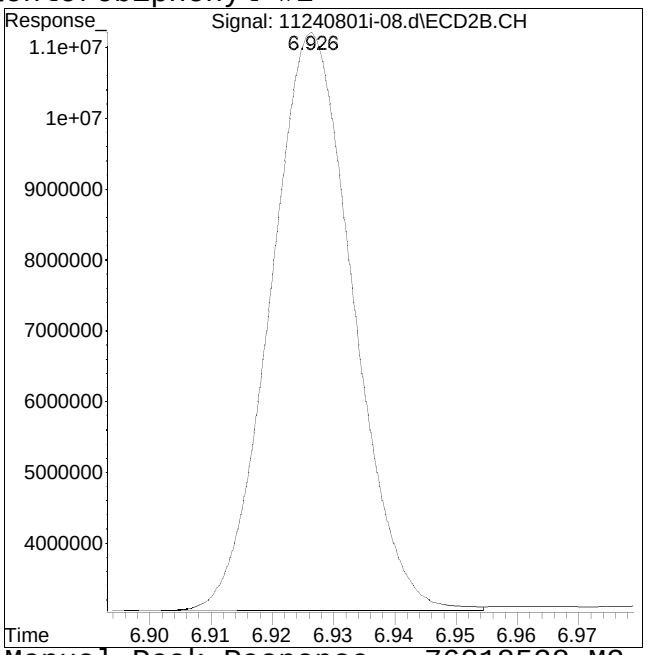
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-08.d
Date Inj'd : 8/1/2024 19:37
Sample : il7pest,42e,,pp 11682 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 10:46 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 76724589 Manual Peak Response = 76218538 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:49
Operator : PEST11:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:03:26 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:03:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 236.1E6 | 187.7E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 492.0E6 | 407.5E6 | NoCal M3 | NoCal |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 6.288 | 6.920 | 489.2E6 | 351.4E6 | NoCal M4 | NoCal M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.178 | 634.9E6 | 430.2E6 | NoCal M3 | NoCal M4 |
| 4) t | alpha-BHC | 1.963 | 2.271 | 745.5E6 | 633.1E6 | NoCal M4 | NoCal M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 687.9E6 | 572.6E6 | NoCal M4 | NoCal M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 286.7E6 | 241.2E6 | NoCal M4 | NoCal M3 |
| 7) t | delta-BHC | 2.350 | 2.889 | 694.2E6 | 581.2E6 | NoCal M4 | NoCal M4 |
| 8) t | Heptachlor | 2.513 | 2.952 | 641.1E6 | 583.2E6 | NoCal M4 | NoCal M4 |
| 9) t | Aldrin | 2.756 | 3.271 | 607.8E6 | 538.3E6 | NoCal M4 | NoCal M4 |
| 10) t | Alachlor | 2.876 | 3.153 | 106.6E6 | 73985916 | NoCal M4 | NoCal M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.507 | 254.3E6 | 276.4E6 | NoCal M4 | NoCal |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:49
Operator : PEST11:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:03:26 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:03:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.883 | 567.8E6 | 507.8E6 | NoCal M3 | NoCal M4 |
| 13) | t | gamma-Chlord | 3.425 | 4.104 | 508.9E6 | 459.6E6 | NoCal M4 | NoCal M4 |
| 14) | t | alpha-Chlord | 3.559 | 4.274 | 577.6E6 | 510.2E6 | NoCal M3 | NoCal M4 |
| 15) | t | 4,4'-DDE | 3.656 | 4.473 | 579.1E6 | 505.9E6 | NoCal M4 | NoCal M4 |
| 16) | t | Endosulfan I | 3.695 | 4.336 | 533.8E6 | 473.2E6 | NoCal M3 | NoCal M4 |
| 17) | t | Dieldrin | 3.955 | 4.628 | 554.2E6 | 490.0E6 | NoCal M4 | NoCal M4 |
| 18) | t | Endrin | 4.210 | 4.926 | 563.1E6 | 497.8E6 | NoCal | NoCal M4 |
| 19) | t | 4,4'-DDD | 4.322 | 5.049 | 451.2E6 | 402.1E6 | NoCal | NoCal M4 |
| 20) | t | Endosulfan I | 4.452 | 5.125 | 505.7E6 | 433.2E6 | NoCal | NoCal M4 |
| 21) | t | 4,4'-DDT | 4.616 | 5.326 | 511.5E6 | 460.7E6 | NoCal M4 | NoCal M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 414.1E6 | 353.4E6 | NoCal M4 | NoCal M3 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 267.0E6 | 236.7E6 | NoCal M4 | NoCal M4 |
| 24) | t | Mirex | 5.160 | 6.023 | 415.8E6 | 345.7E6 | NoCal M3 | NoCal M4 |
| 25) | t | Endosulfan S | 5.260 | 5.649 | 466.7E6 | 415.6E6 | NoCal M3 | NoCal M3 |
| 26) | t | Endrin Keton | 5.487 | 6.060 | 564.8E6 | 452.3E6 | NoCal M4 | NoCal M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:49
Operator : PEST11:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:03:26 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:03:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

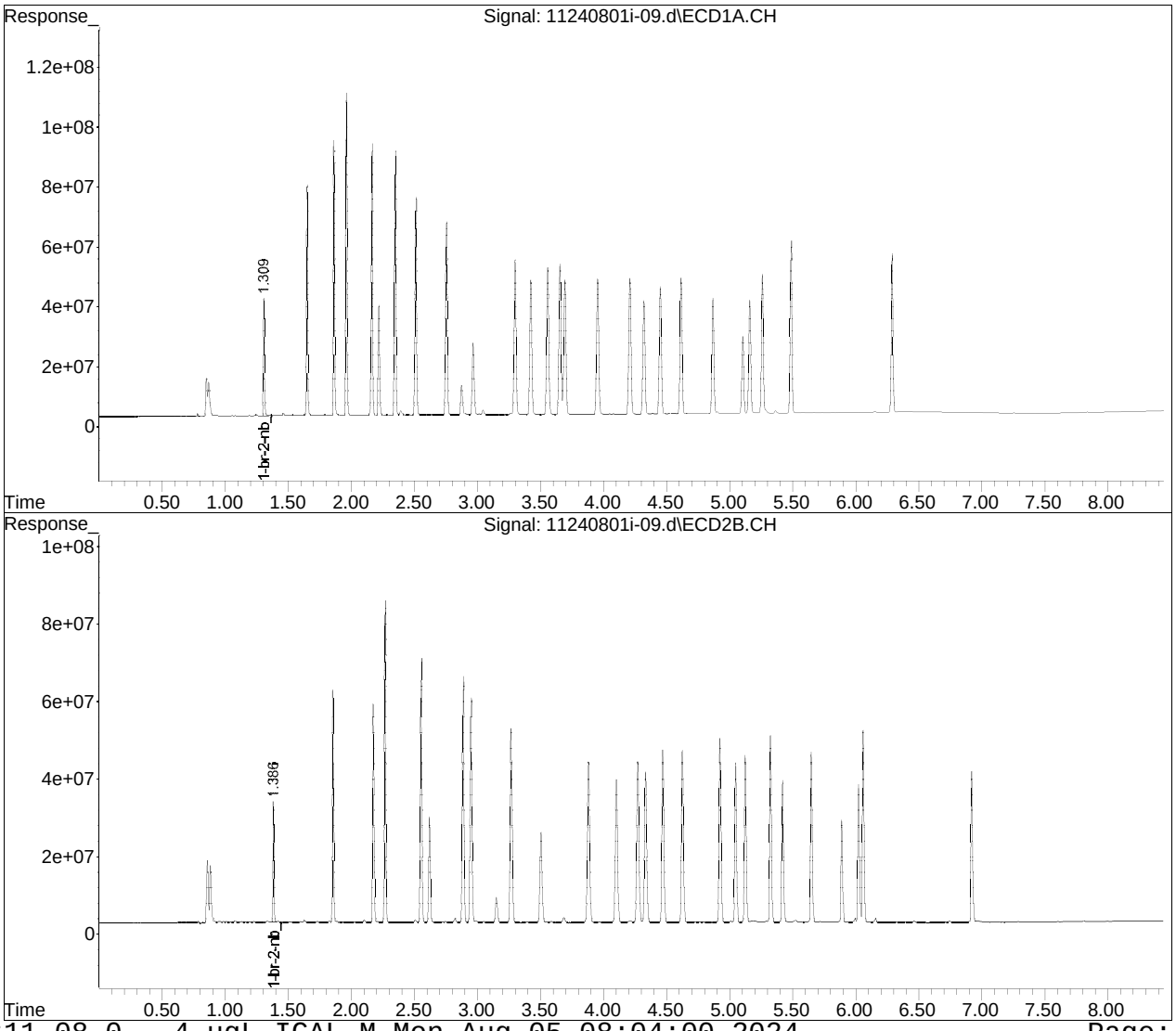
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 19:49
Operator : PEST11:ejl
Sample : il8pest,42e,,pp 11681 L0.05
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:03:26 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:03:16 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

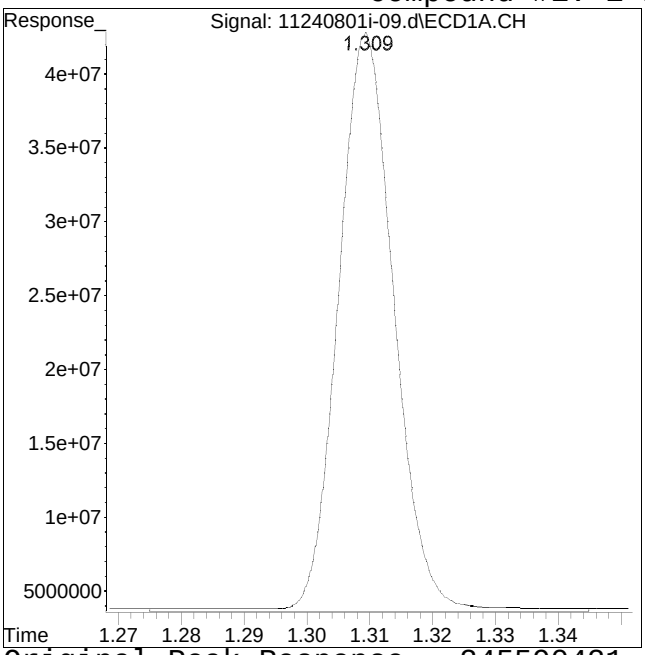


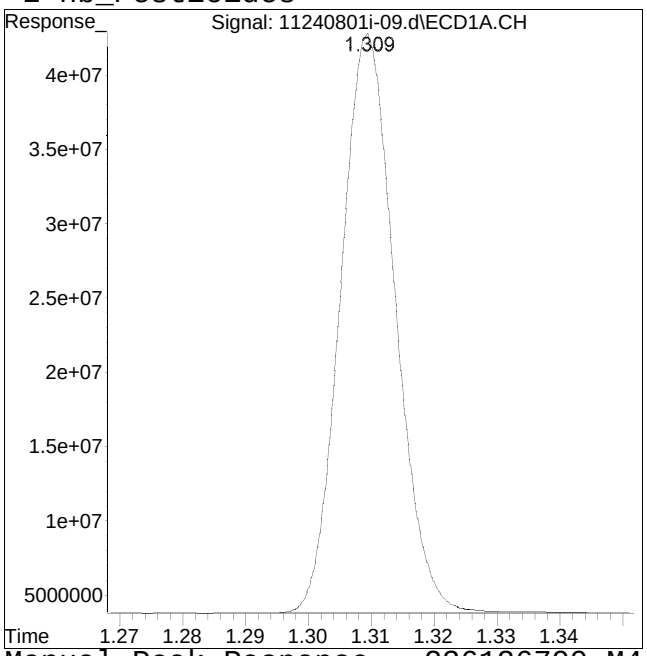
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

## Compound #1: 1-br-2-nb_Pesticides



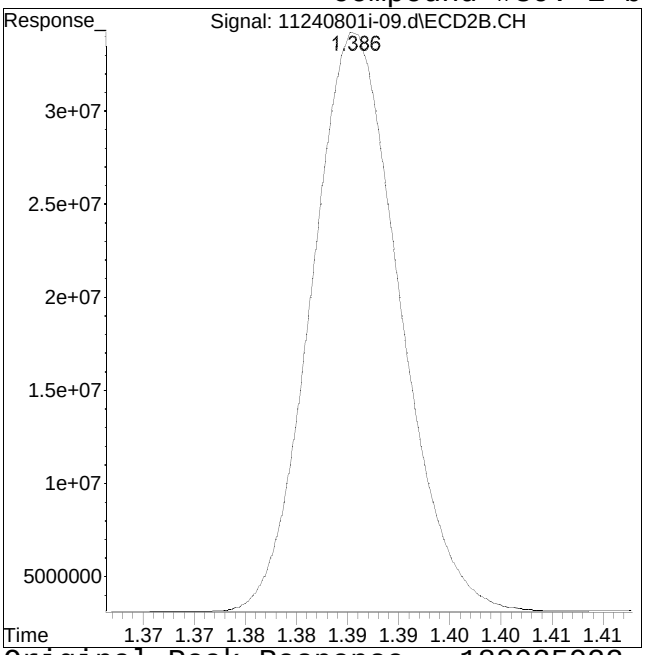

Original Peak Response = 245590421 Manual Peak Response = 236126790 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

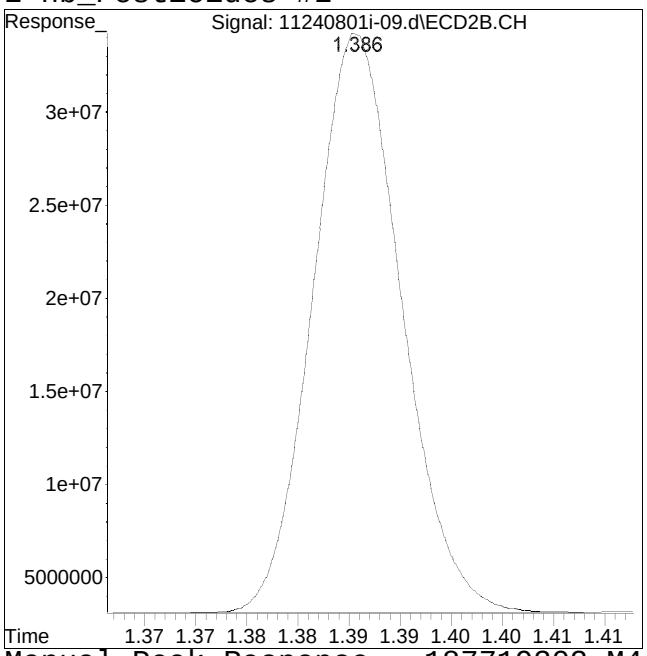
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

## Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 188025922



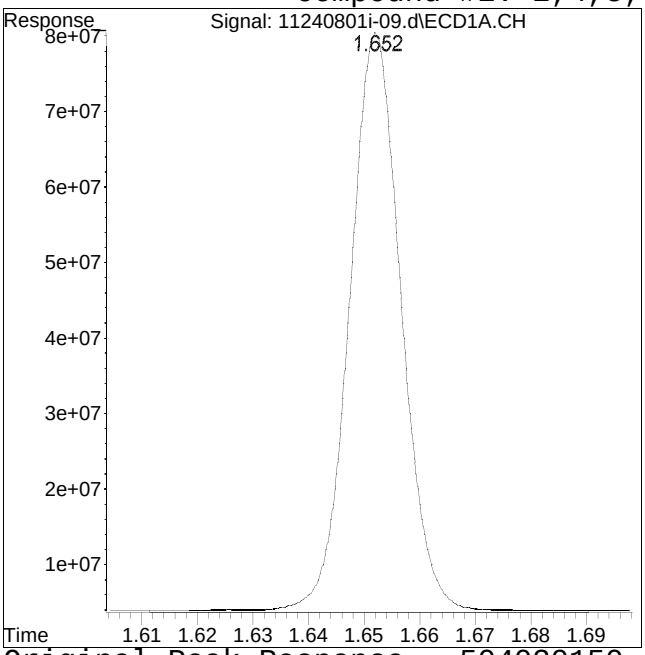

Manual Peak Response = 187719302 M4

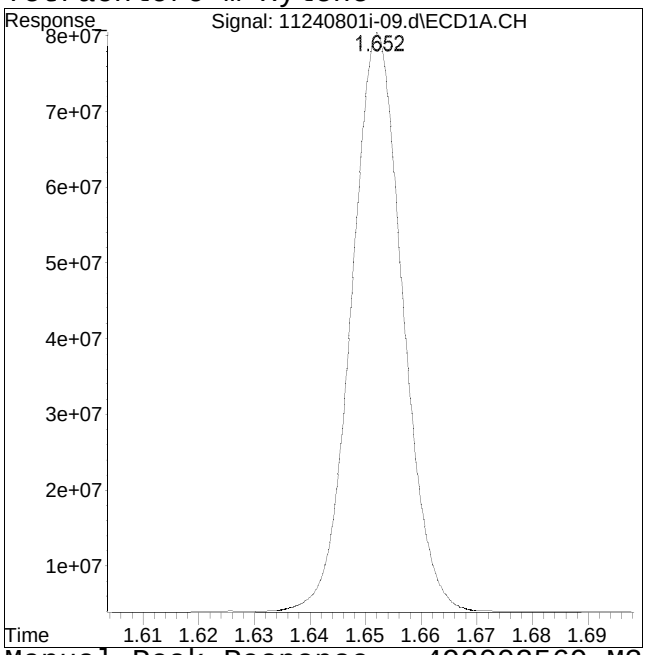
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0 Quant Date : 8/2/2024 9:03 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



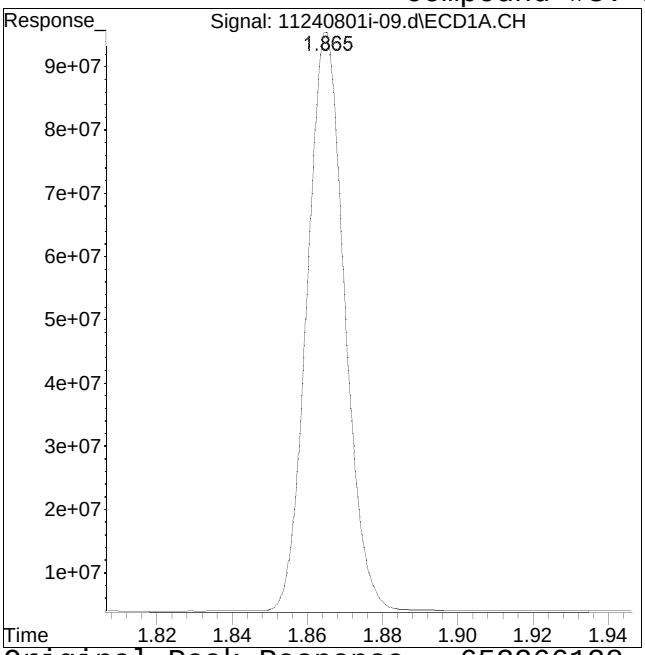



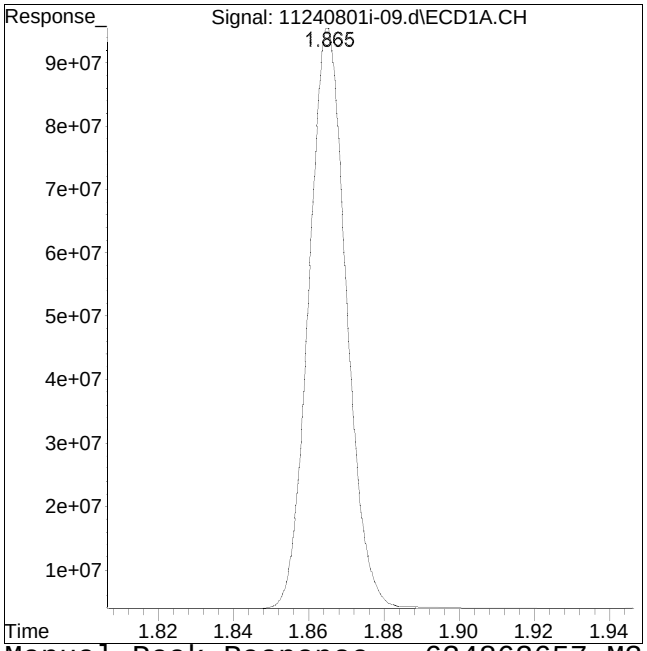

Original Peak Response = 504030150 Manual Peak Response = 492002569 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0 Quant Date : 8/2/2024 9:03 am

Compound #3: Hexachlorobenzene



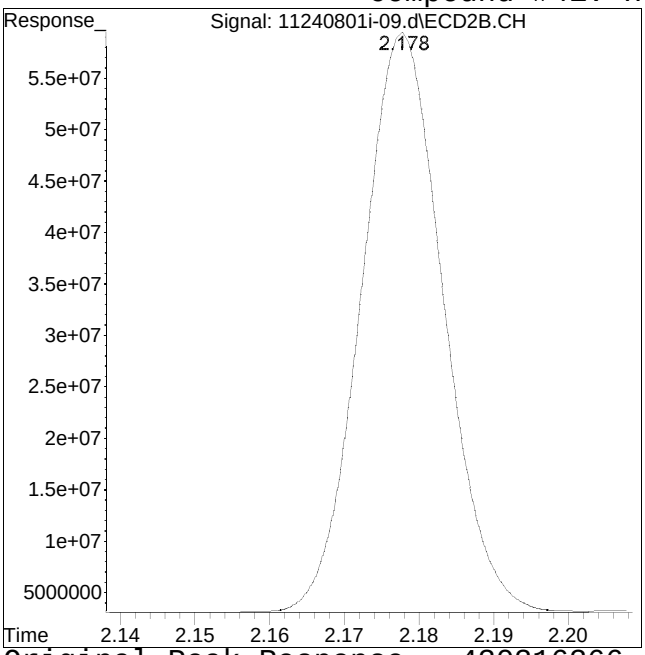



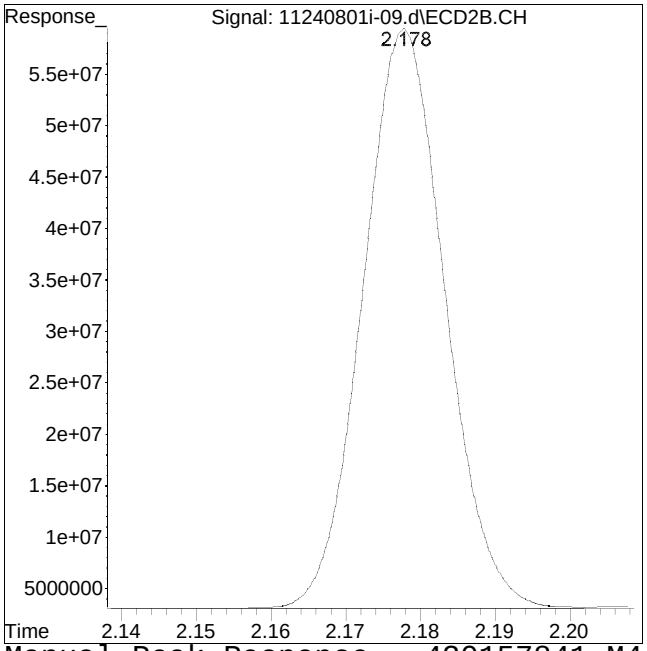

Original Peak Response = 652266128 Manual Peak Response = 634863657 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #41: Hexachlorobenzene #2



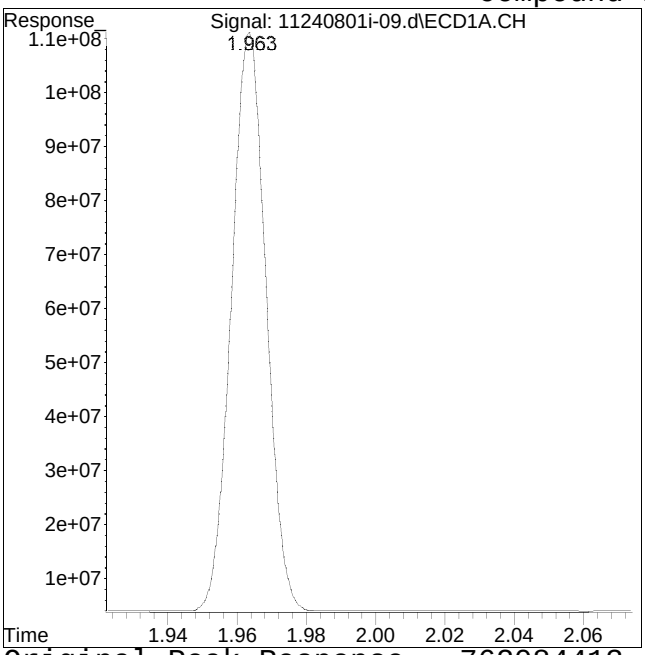

Original Peak Response = 430316366 Manual Peak Response = 430157841 M4
M4 = Poor automated baseline construction.

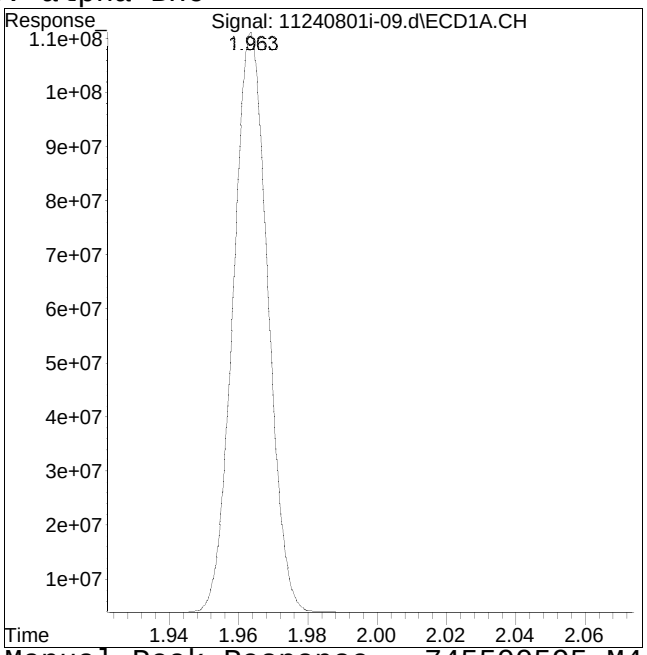
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #4: alpha-BHC



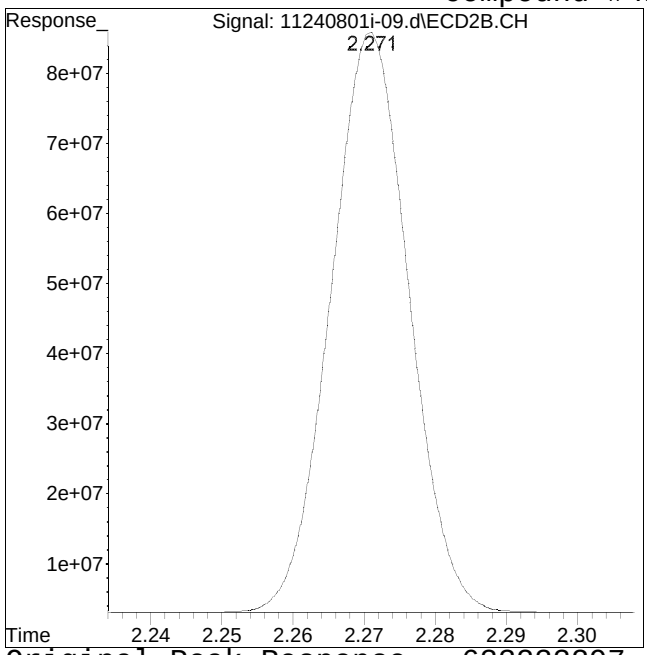




Original Peak Response = 762084413 Manual Peak Response = 745500595 M4
M4 = Poor automated baseline construction.

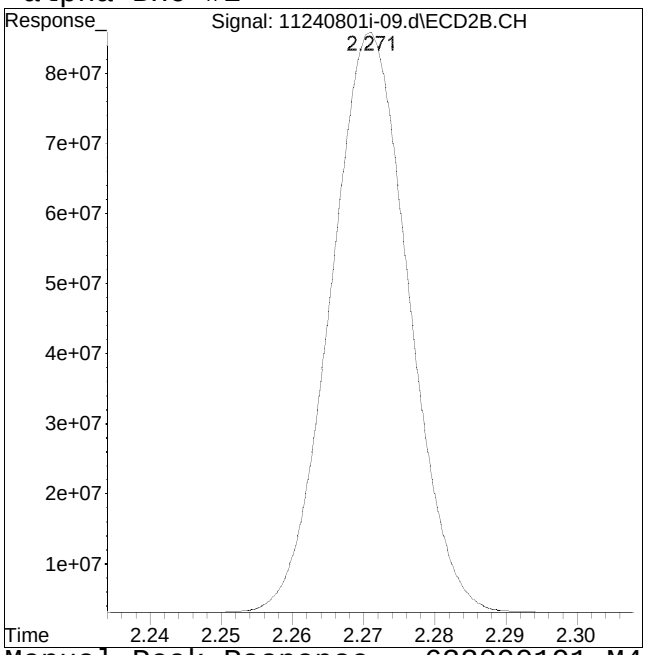
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #42: alpha-BHC #2




Original Peak Response = 633233297

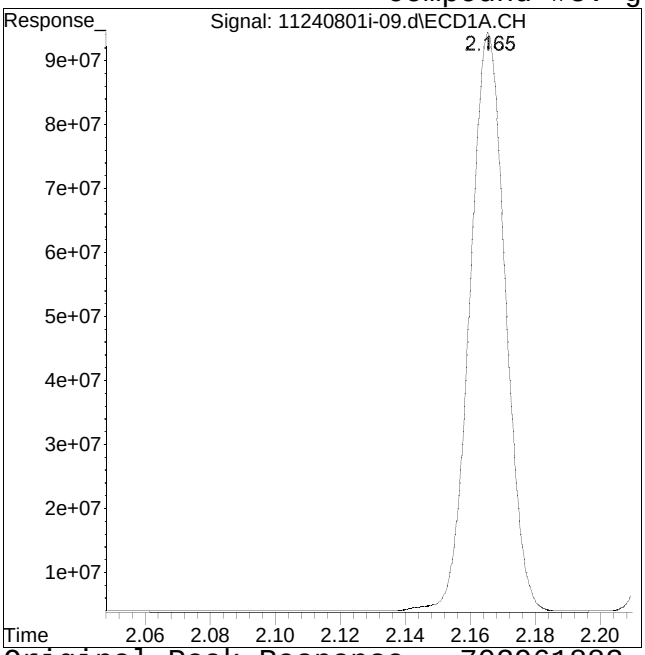


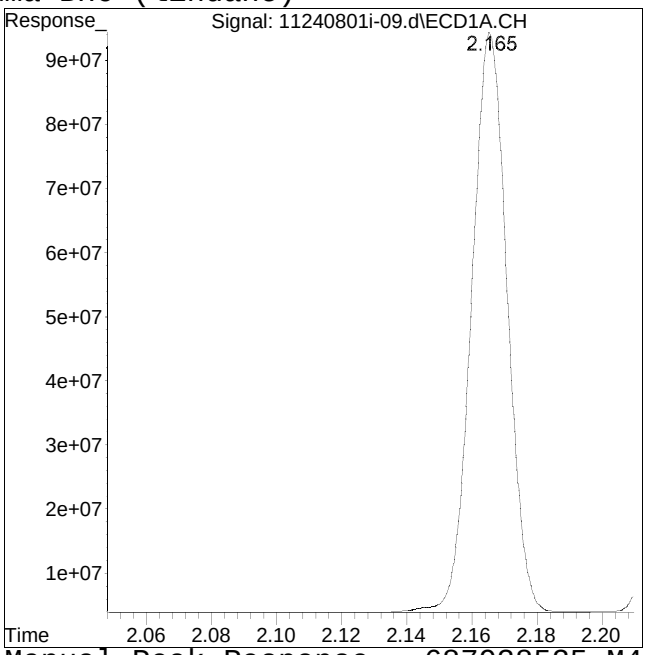

Manual Peak Response = 633090191 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #5: gamma-BHC (lindane)



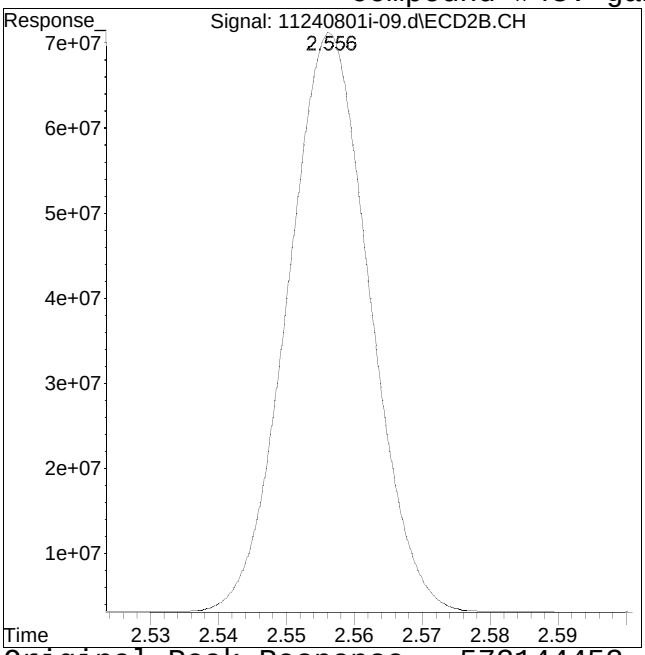




Original Peak Response = 702961883 Manual Peak Response = 687938525 M4
M4 = Poor automated baseline construction.

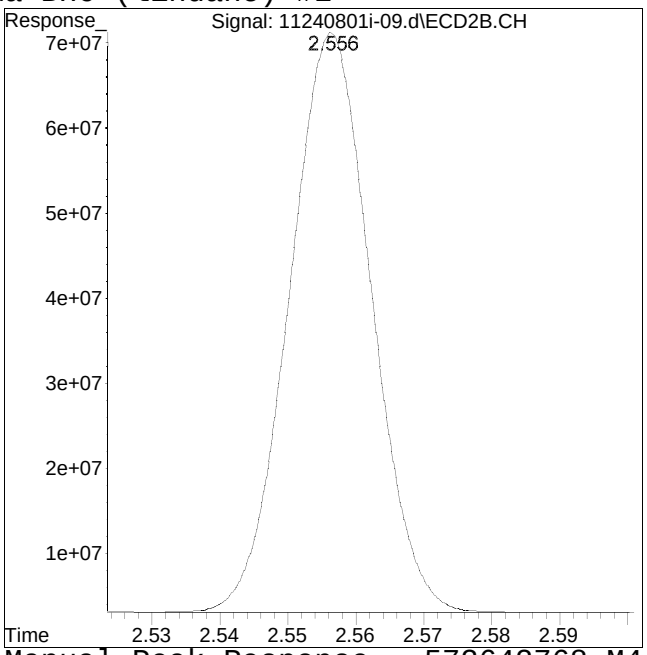
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 573144453

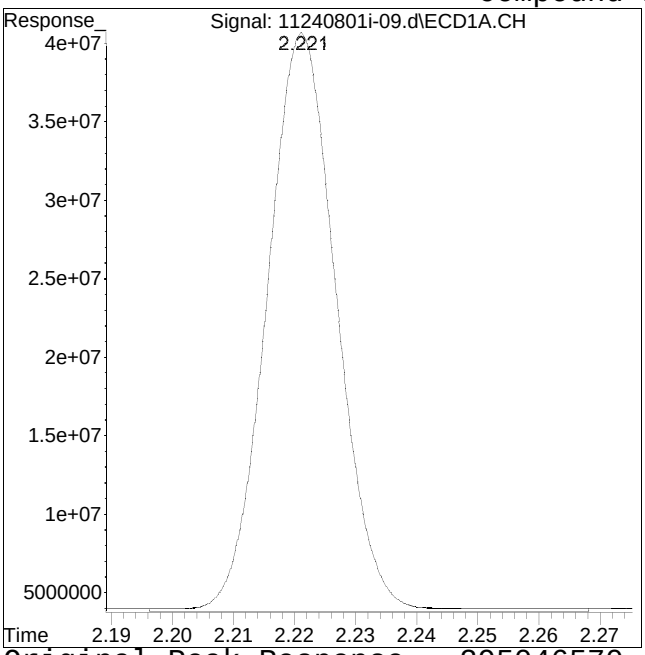


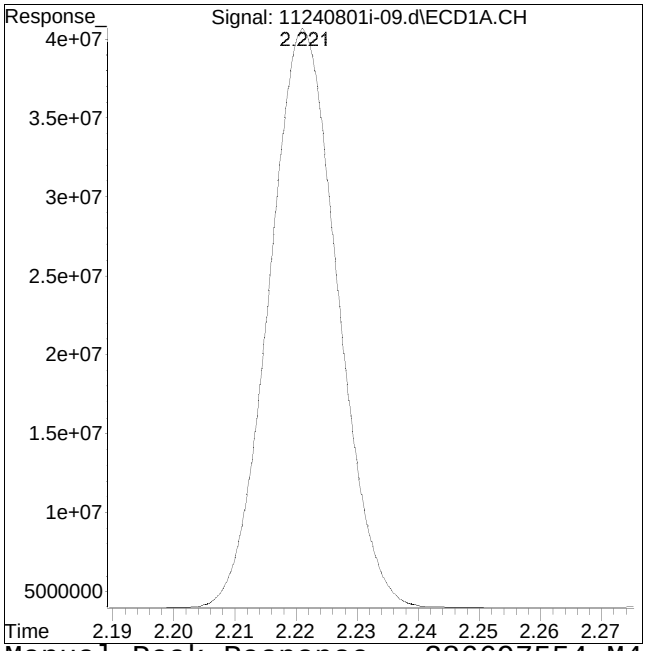

Manual Peak Response = 572642768 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #6: beta-BHC



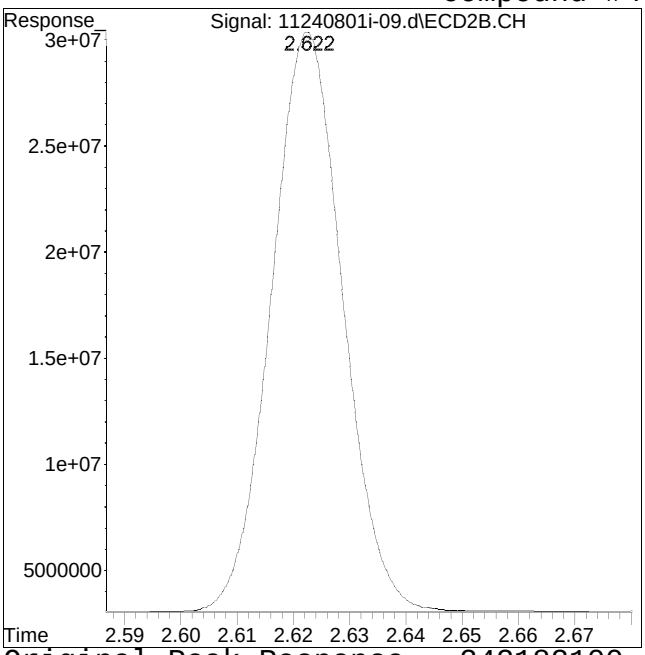

Original Peak Response = 295046570 Manual Peak Response = 286697554 M4
M4 = Poor automated baseline construction.

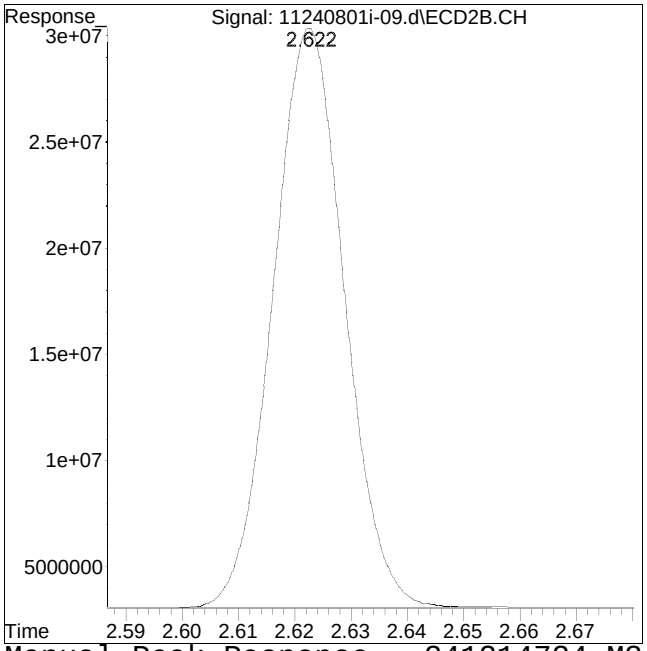
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #44: beta-BHC #2



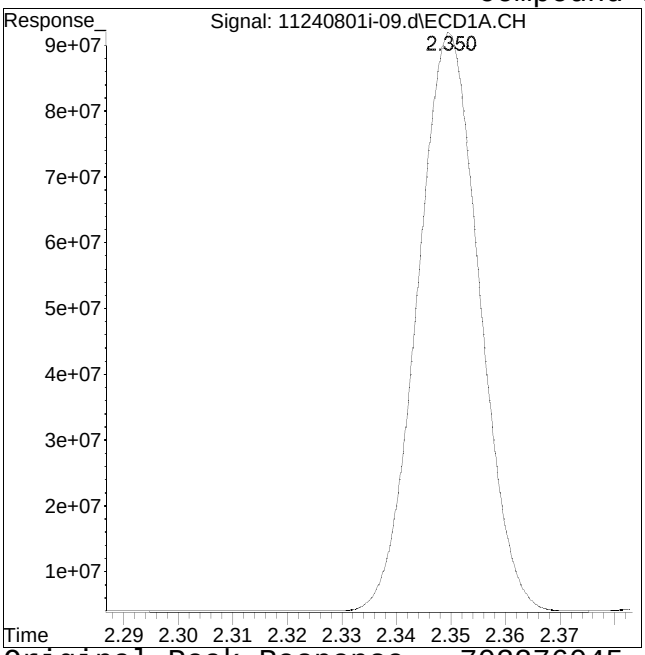

Original Peak Response = 242182100 Manual Peak Response = 241214724 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

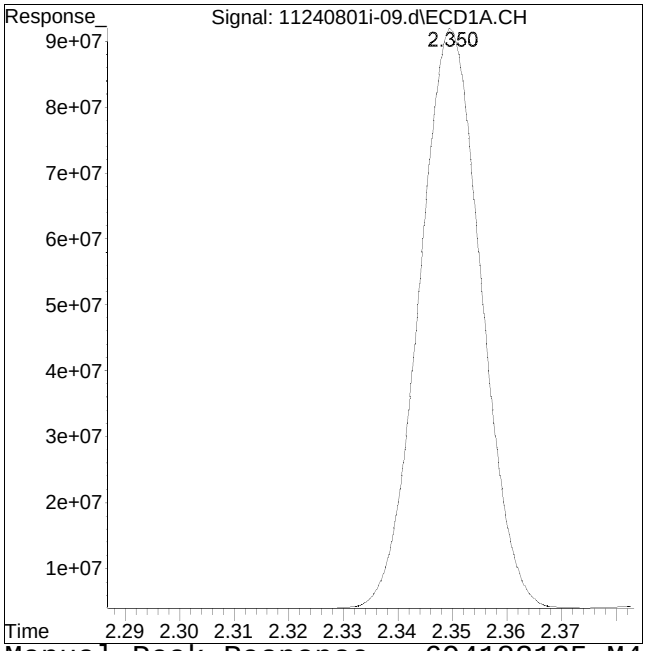
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #7: delta-BHC




Original Peak Response = 703276045



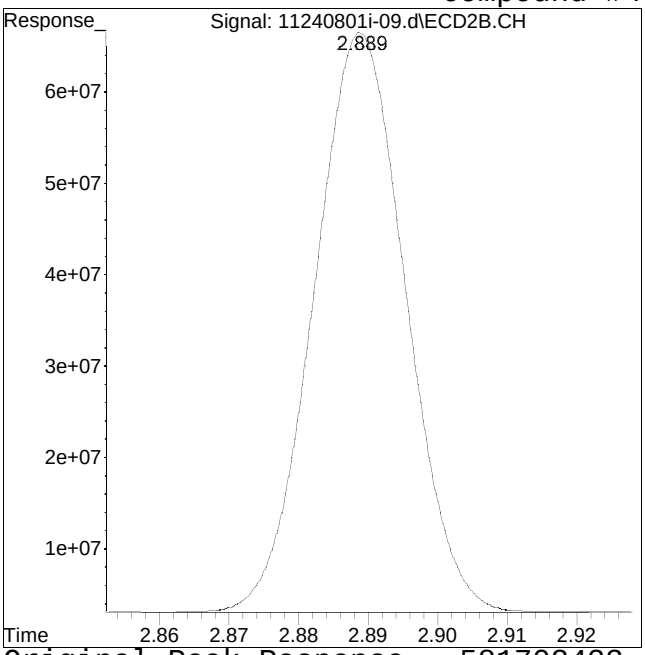

Manual Peak Response = 694183125 M4

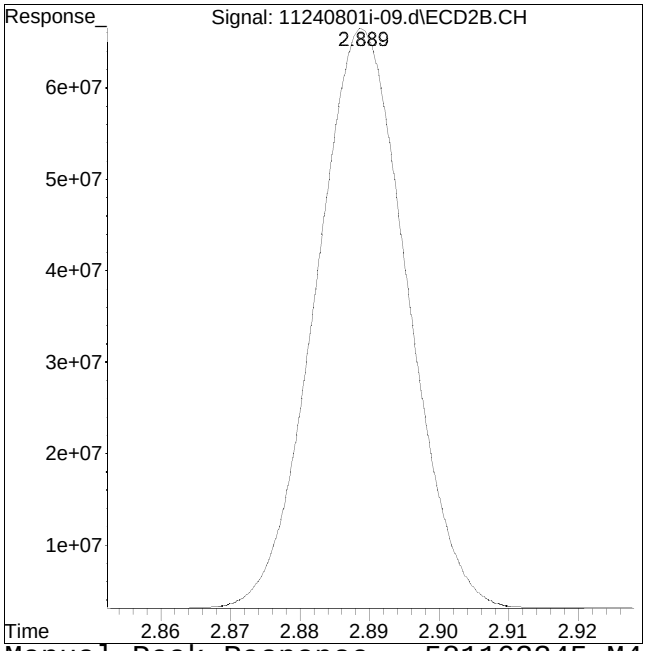
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #45: delta-BHC #2



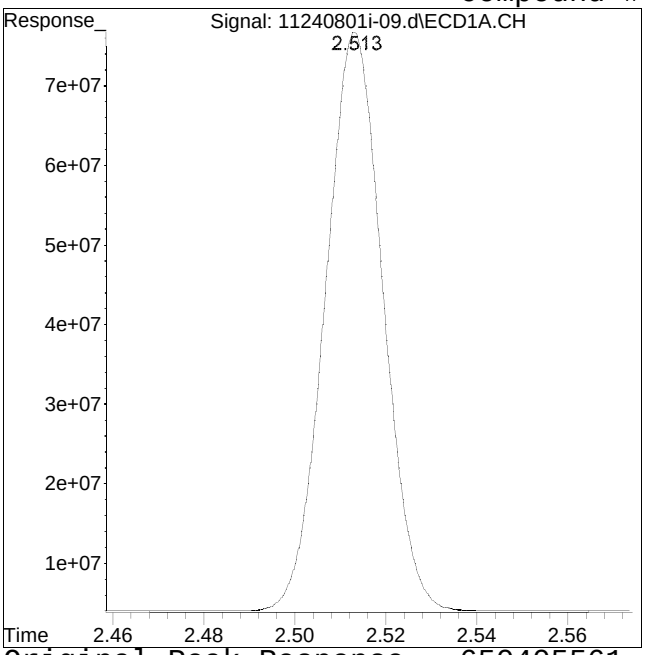



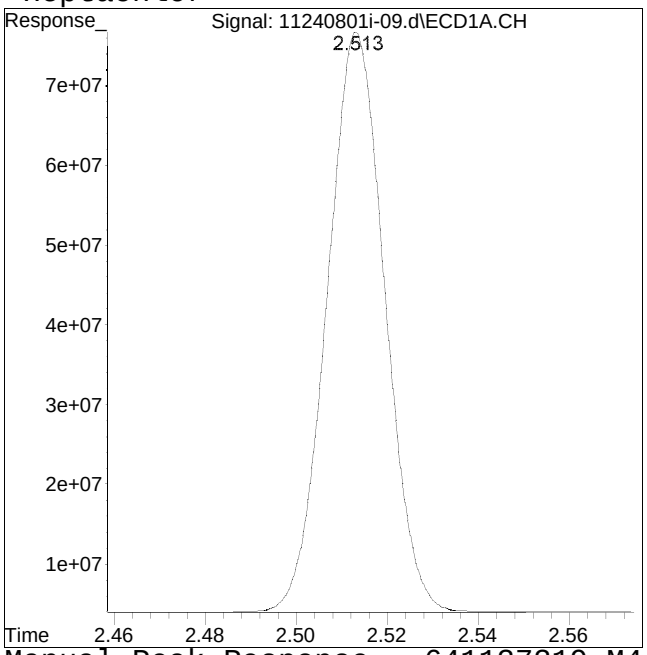

Original Peak Response = 581702423 Manual Peak Response = 581163345 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #8: Heptachlor



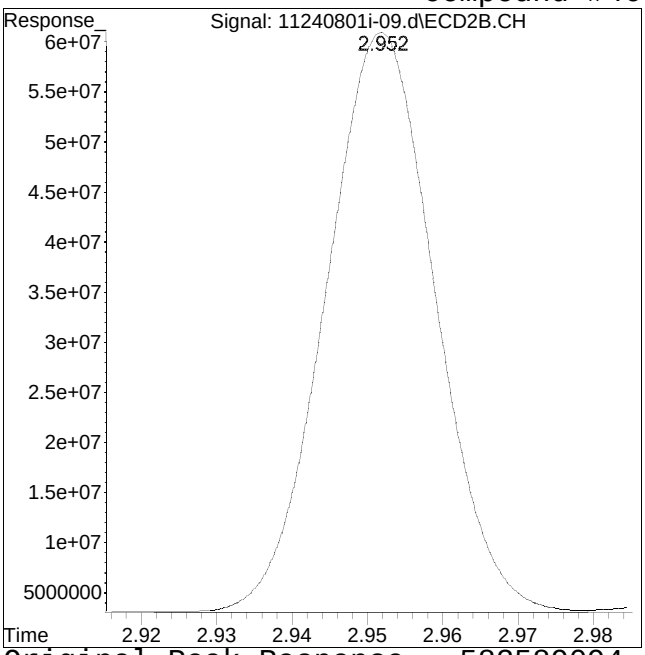



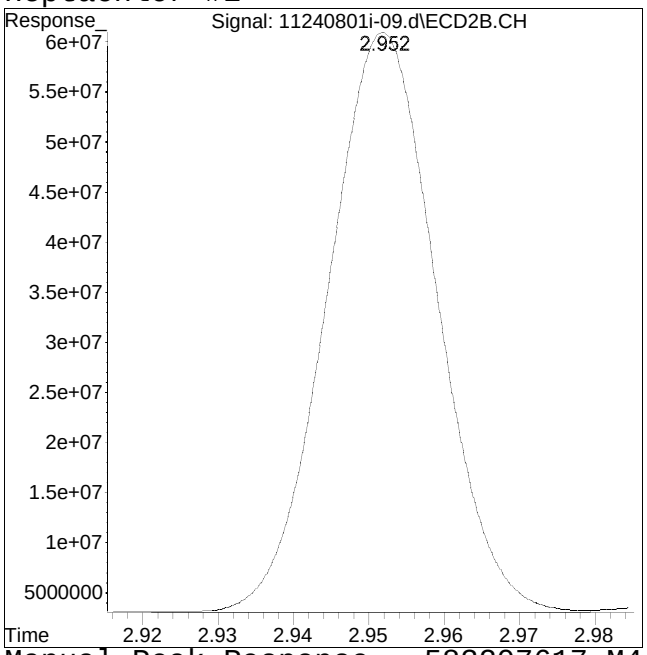

Original Peak Response = 650405561 Manual Peak Response = 641137319 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #46: Heptachlor #2



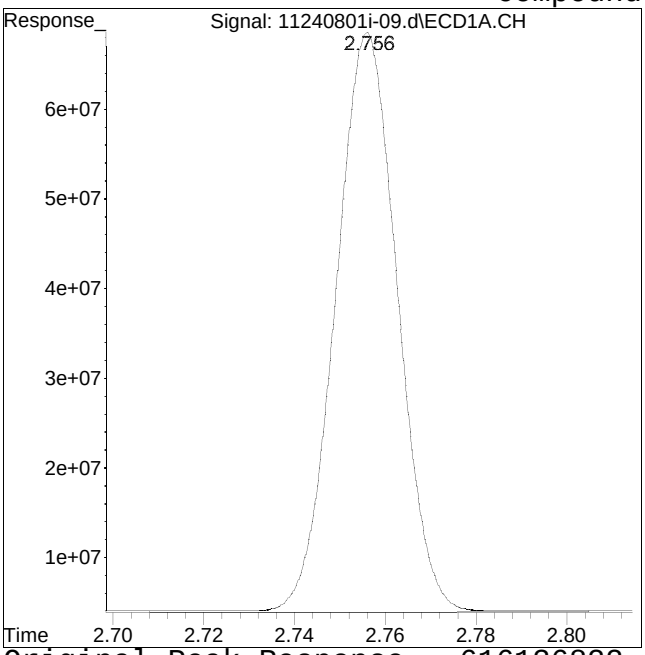



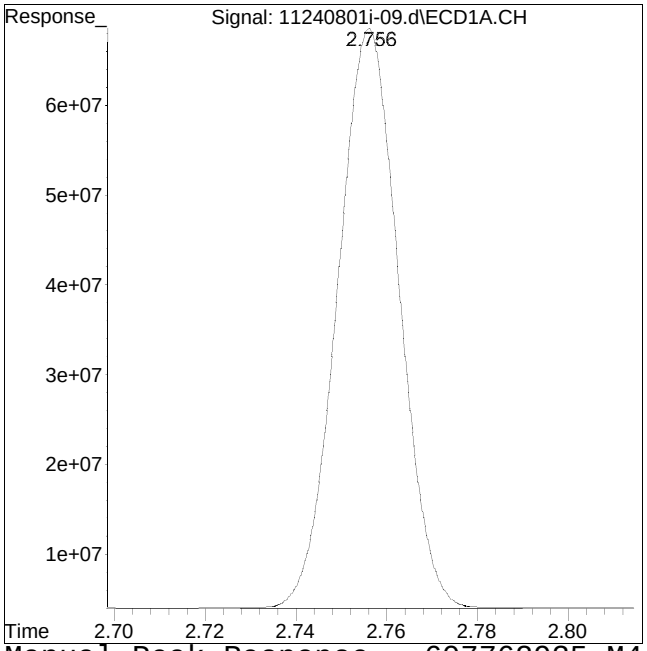

Original Peak Response = 583589094 Manual Peak Response = 583207617 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #9: Aldrin



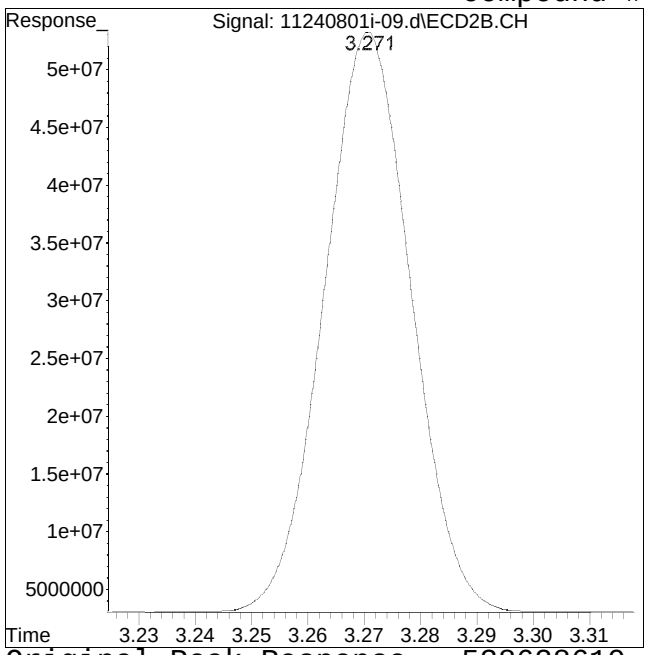

Original Peak Response = 616136822 Manual Peak Response = 607762935 M4
M4 = Poor automated baseline construction.

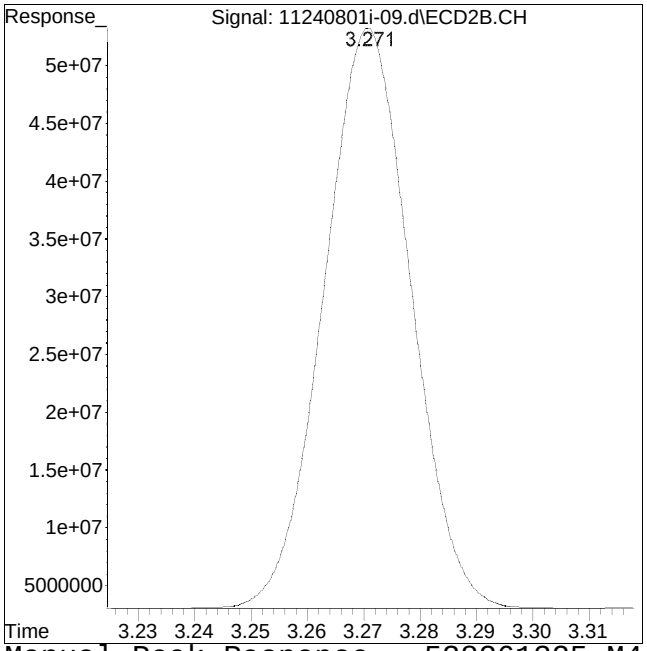
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #47: Aldrin #2



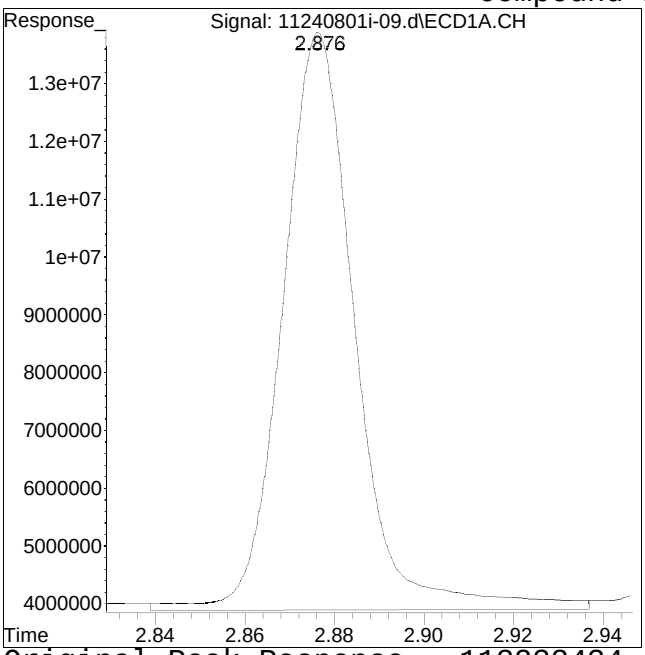



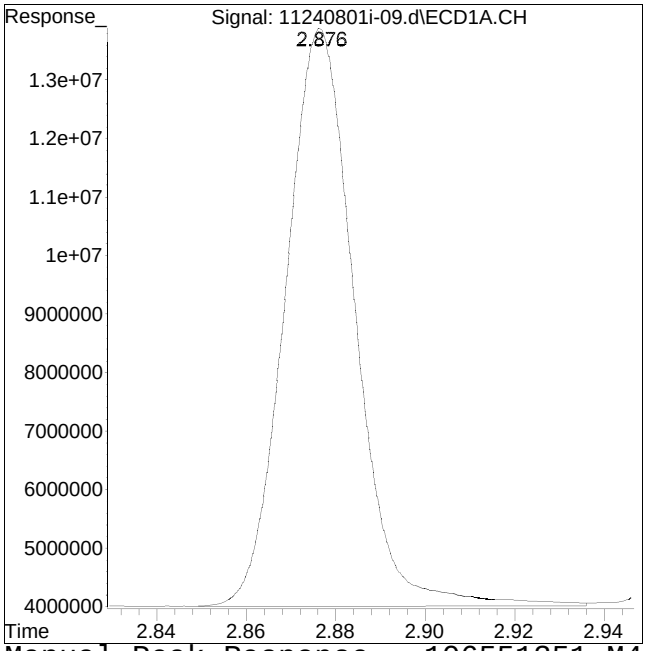

Original Peak Response = 538628610 Manual Peak Response = 538261325 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #10: Alachlor



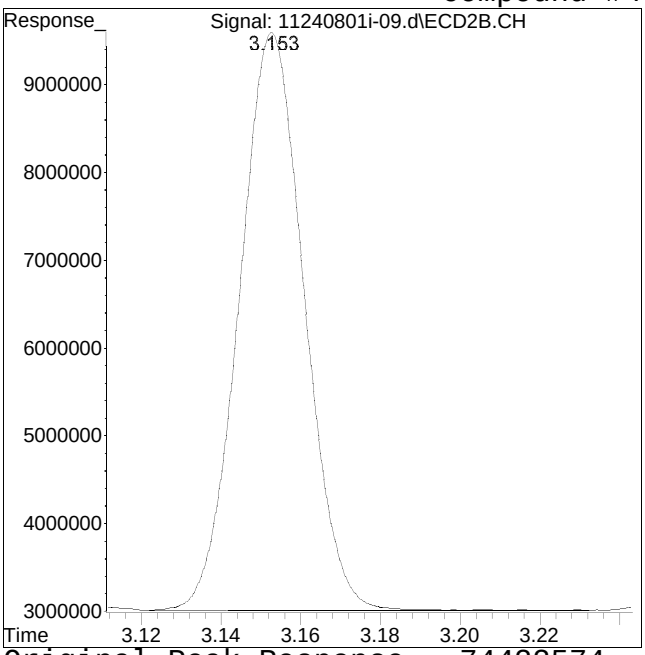



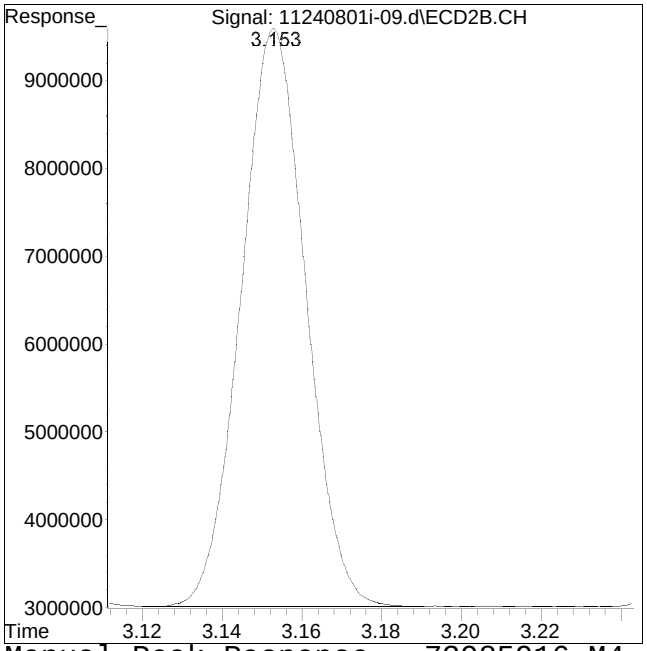

Original Peak Response = 113232434 Manual Peak Response = 106551351 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #48: Alachlor #2



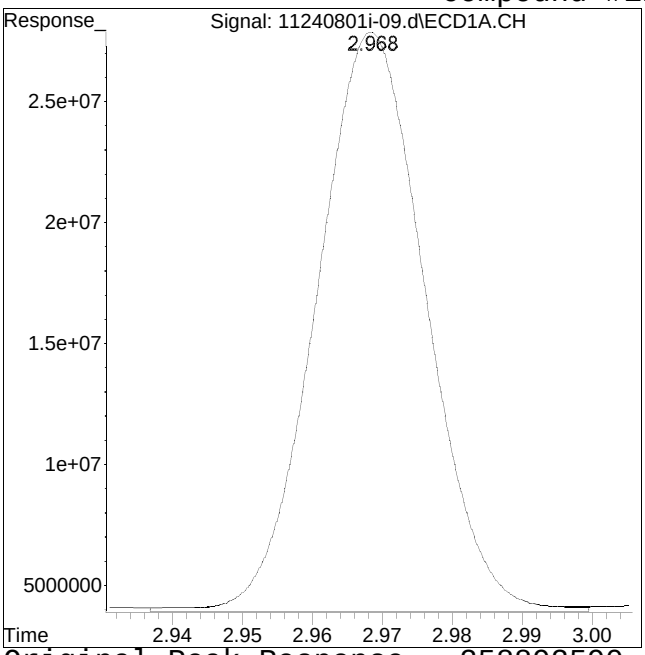



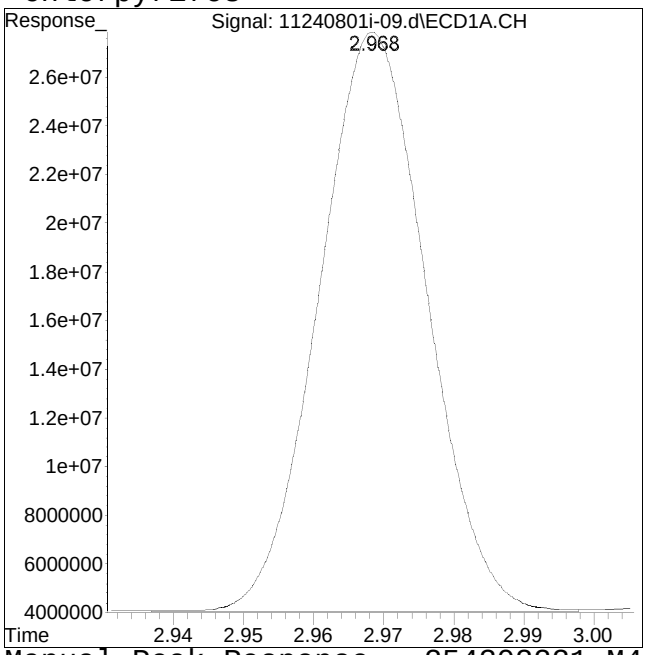

Original Peak Response = 74422574 Manual Peak Response = 73985916 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #11: Chlorpyrifos



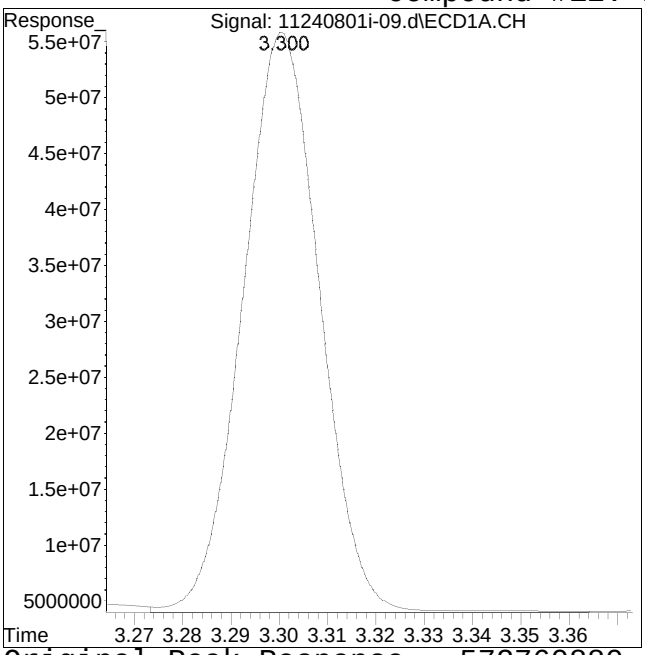



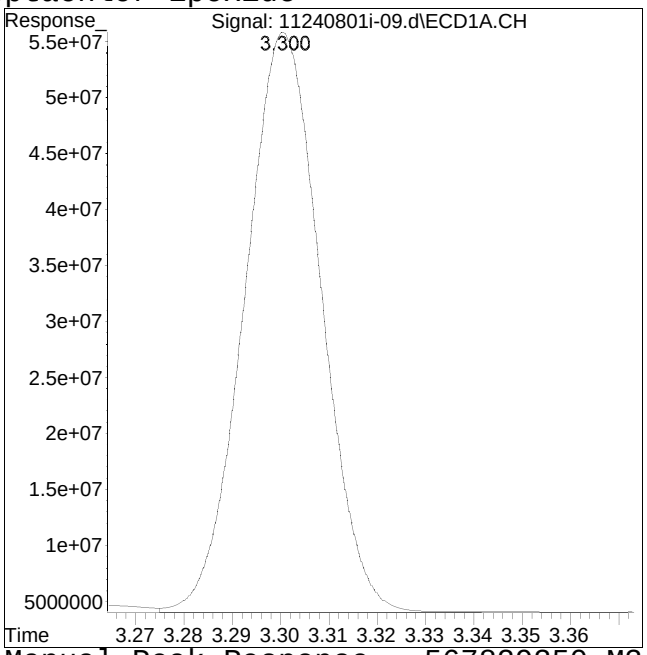

Original Peak Response = 258892590 Manual Peak Response = 254302221 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #12: Heptachlor Epoxide



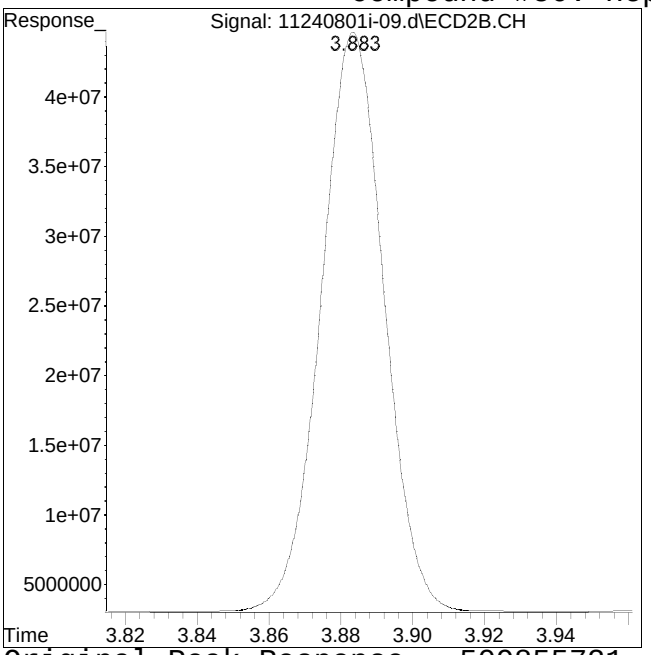




Original Peak Response = 572760880 Manual Peak Response = 567829350 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

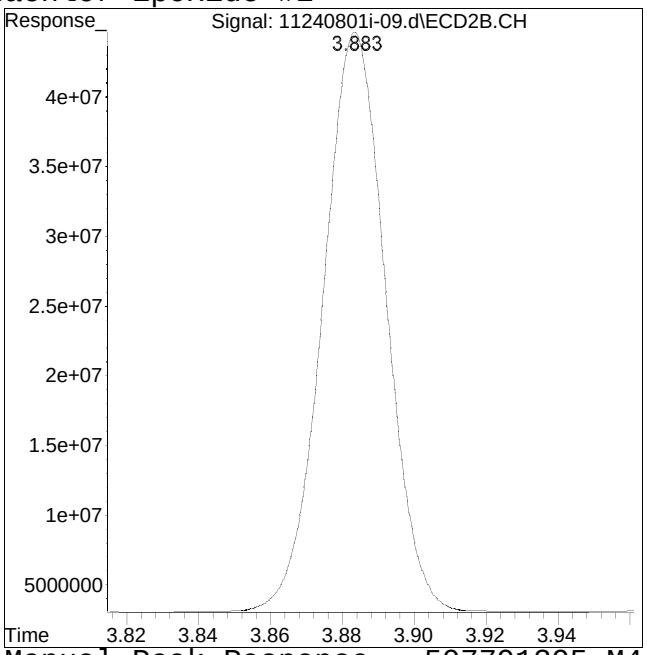
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 509855721




Manual Peak Response = 507791395 M4

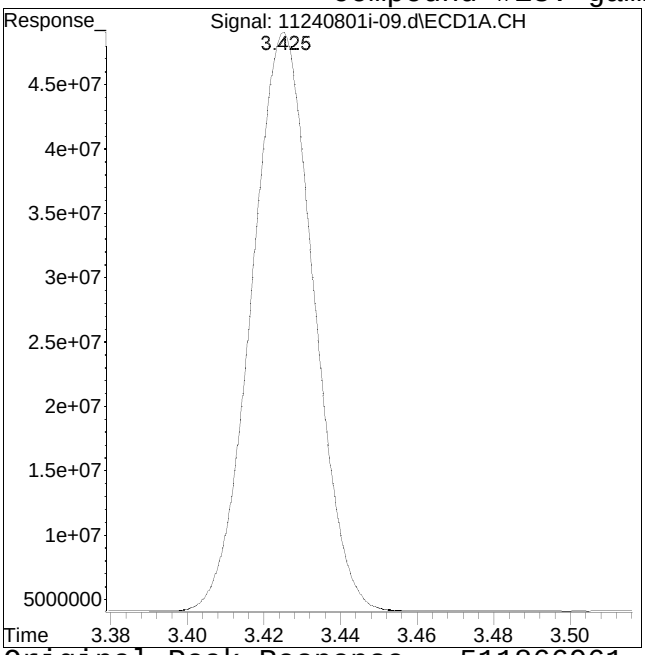
M4 = Poor automated baseline construction.

# Manual Integration Report

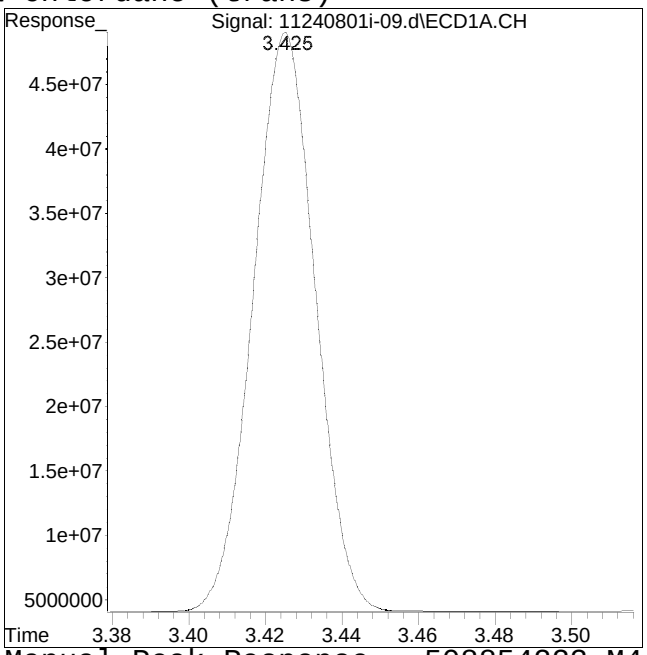
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

## Compound #13: gamma-Chlordane (trans)




Original Peak Response = 511866961



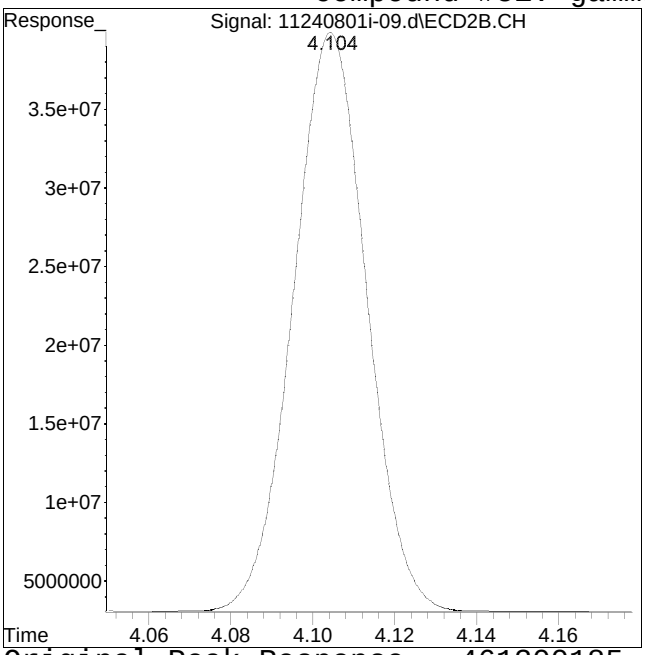

Manual Peak Response = 508854223 M4

M4 = Poor automated baseline construction.

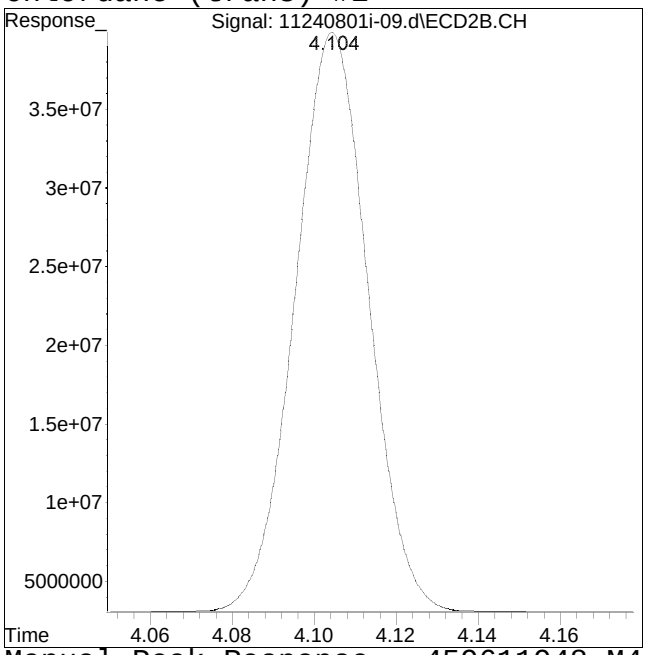
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 461300185

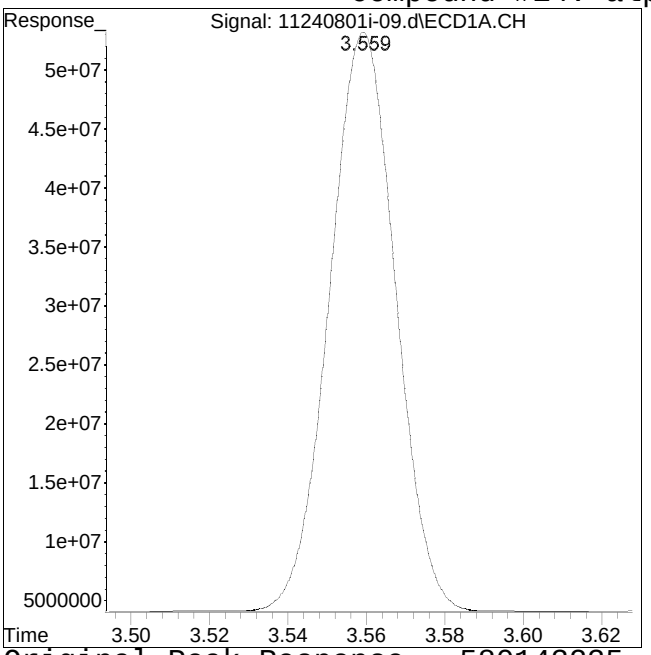


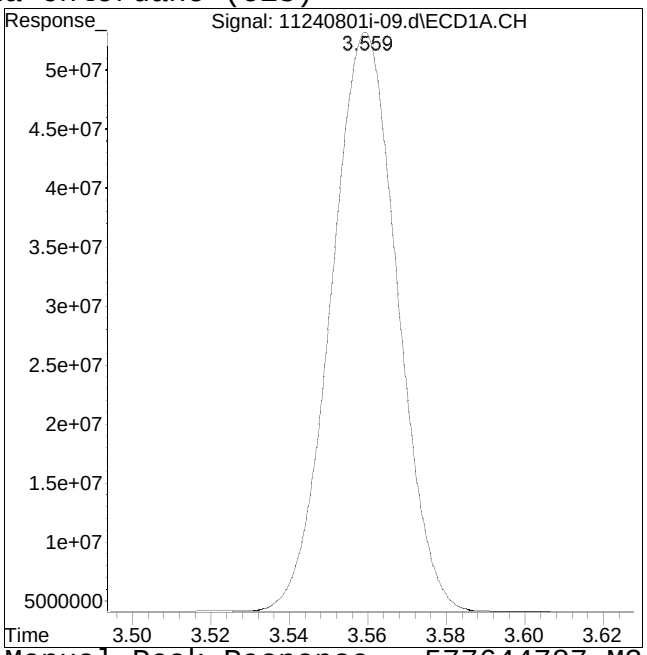

Manual Peak Response = 459611948 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #14: alpha-Chlordane (cis)



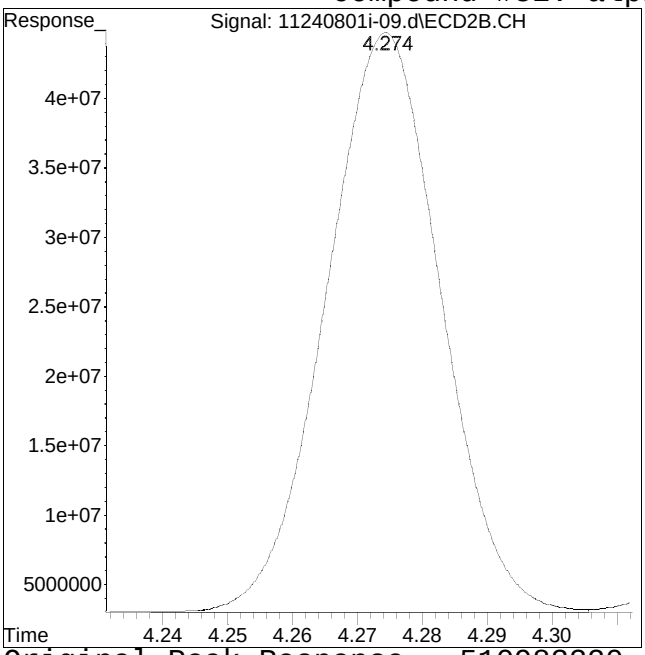




Original Peak Response = 580143235 Manual Peak Response = 577644787 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

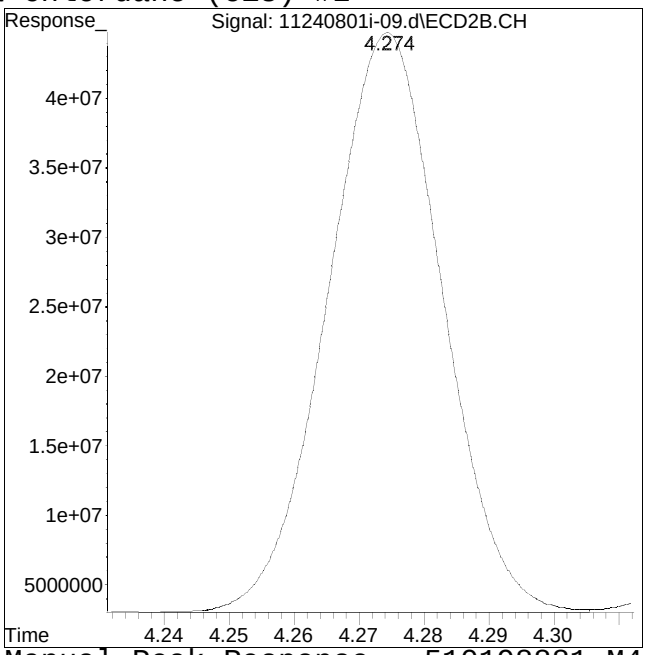
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 510983320




Manual Peak Response = 510198881 M4

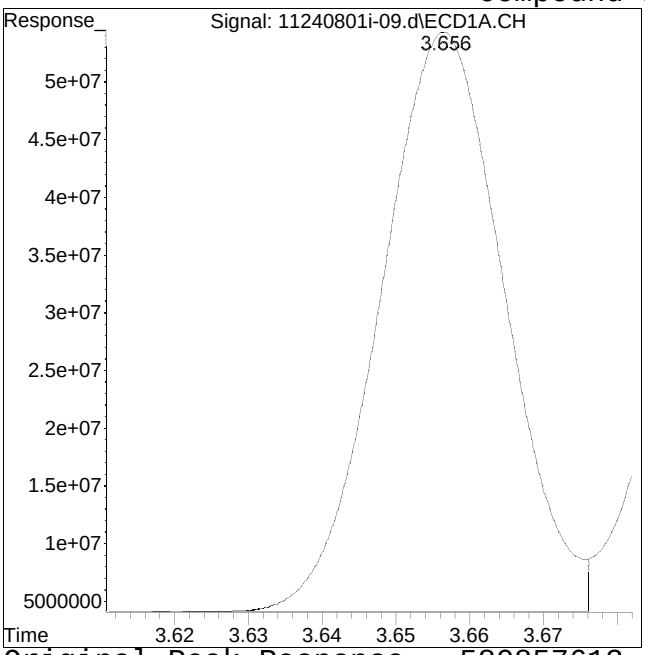
M4 = Poor automated baseline construction.

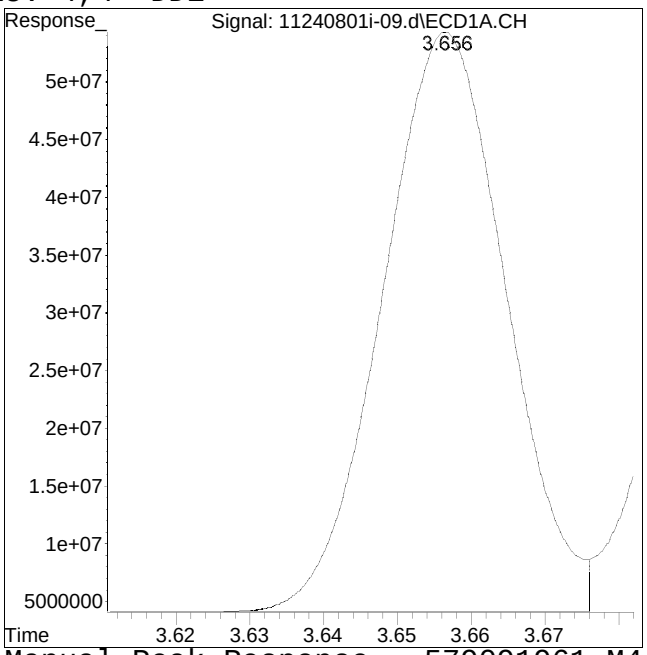
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #15: 4,4'-DDE



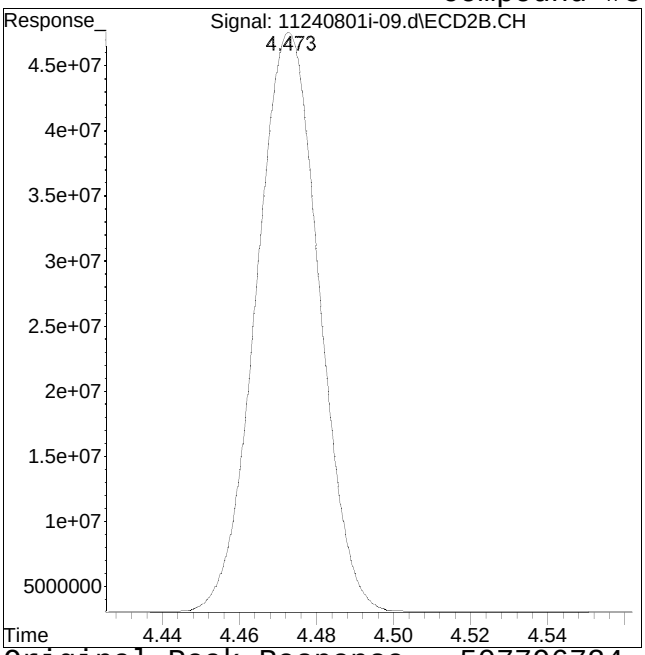



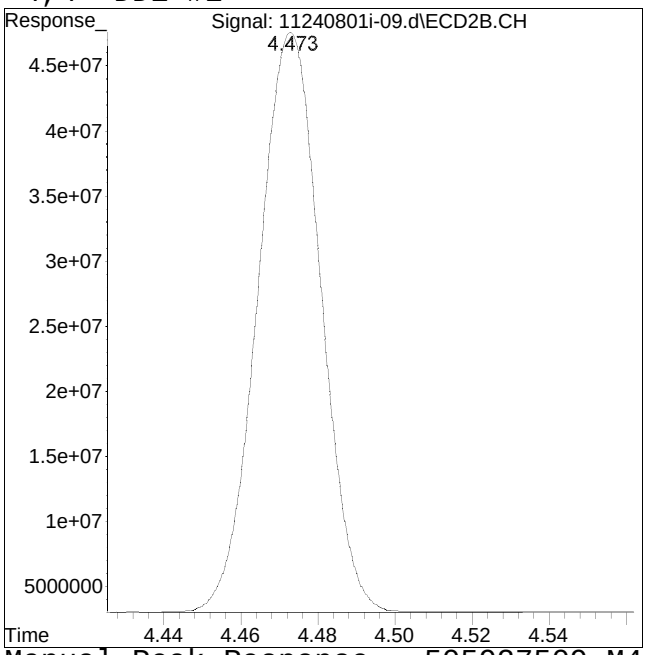

Original Peak Response = 580857613 Manual Peak Response = 579091961 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #53: 4,4'-DDE #2



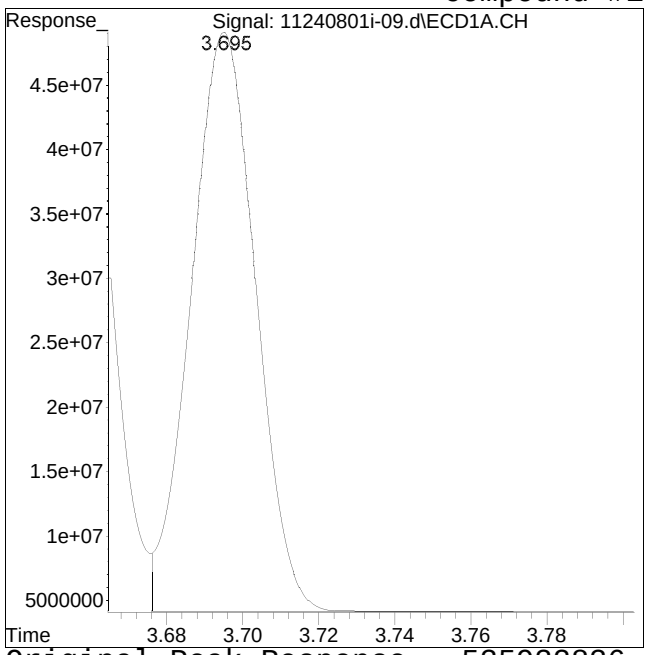

Original Peak Response = 507796724 Manual Peak Response = 505927509 M4
M4 = Poor automated baseline construction.

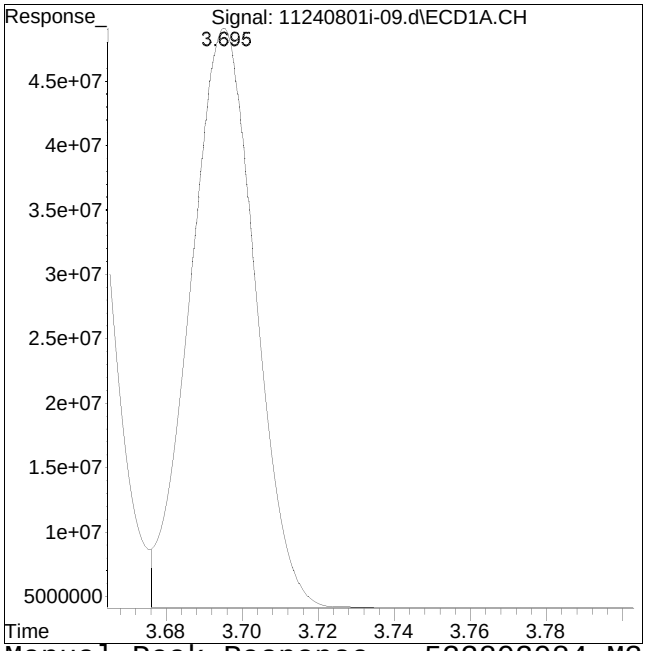
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #16: Endosulfan I



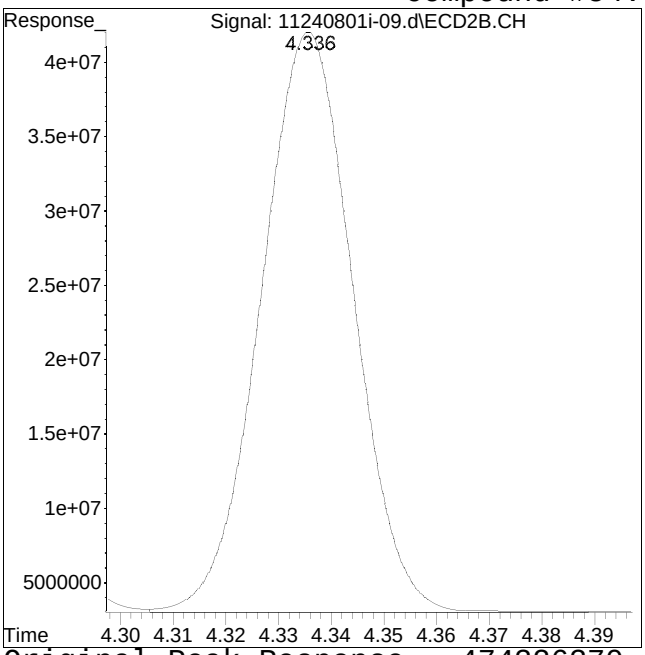




Original Peak Response = 535932836 Manual Peak Response = 533803084 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

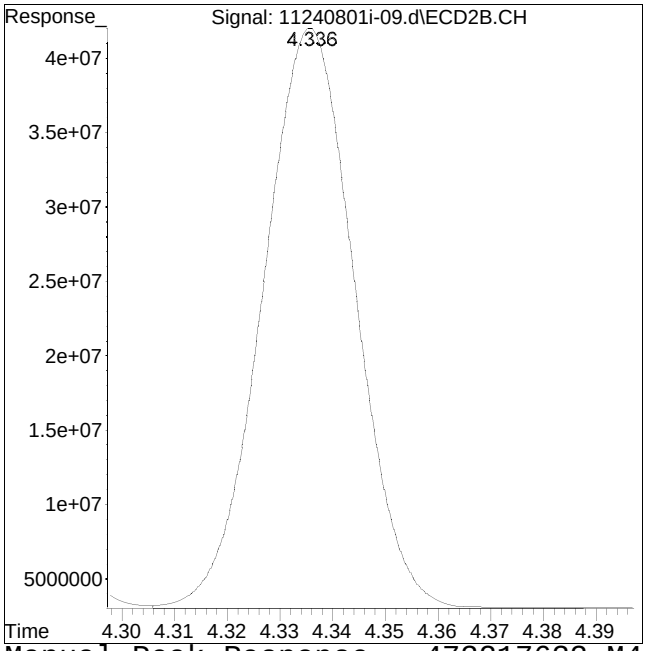
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #54: Endosulfan I #2




Original Peak Response = 474326370



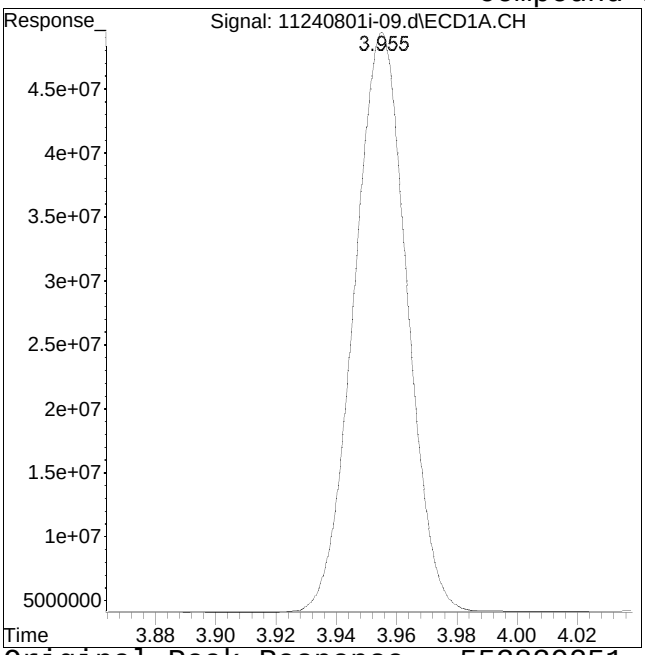

Manual Peak Response = 473217633 M4

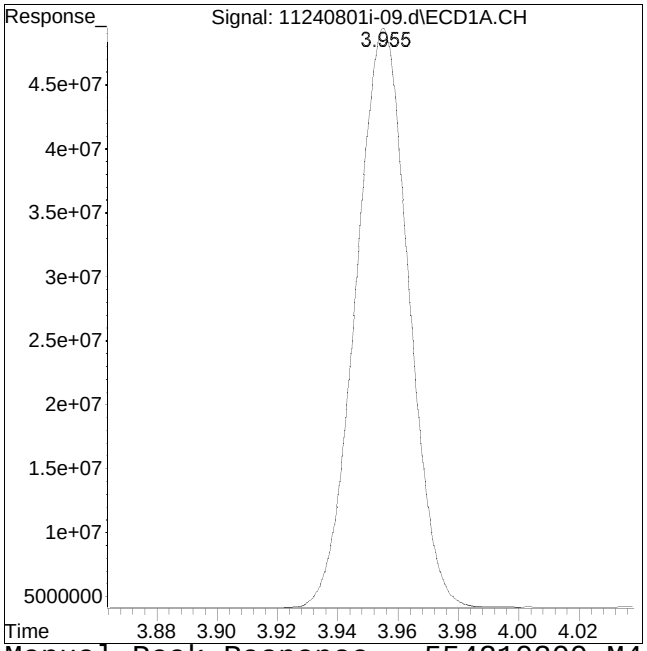
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #17: Dieldrin



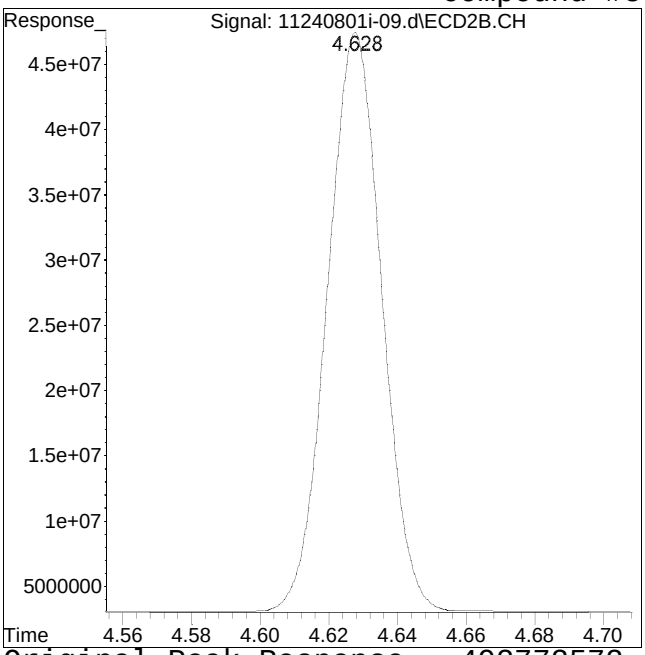



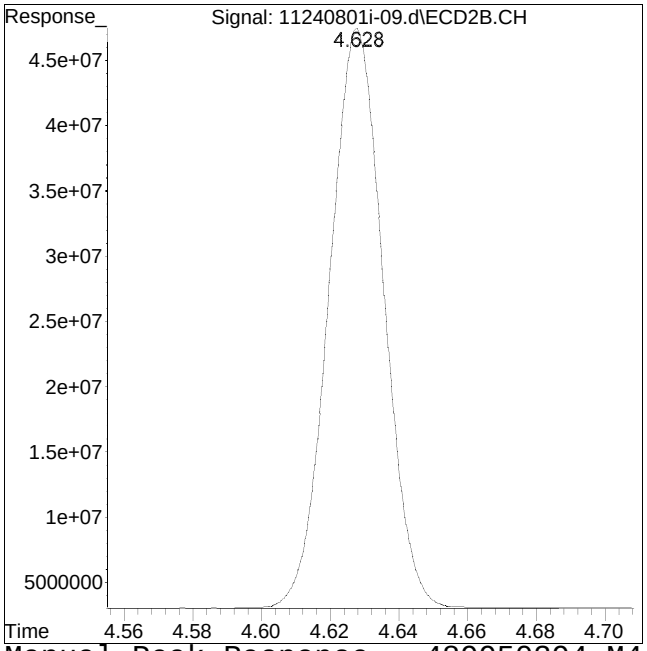

Original Peak Response = 553839251 Manual Peak Response = 554210200 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #55: Dieldrin #2



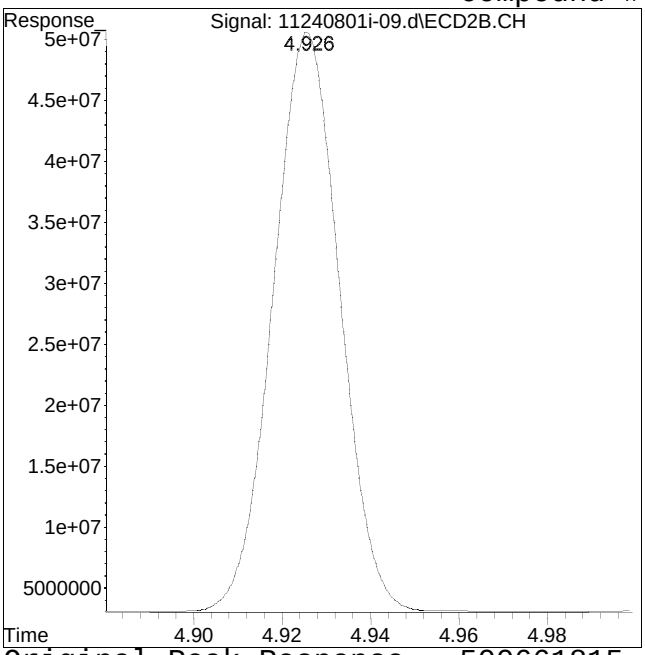




Original Peak Response = 492772572 Manual Peak Response = 489950394 M4
M4 = Poor automated baseline construction.

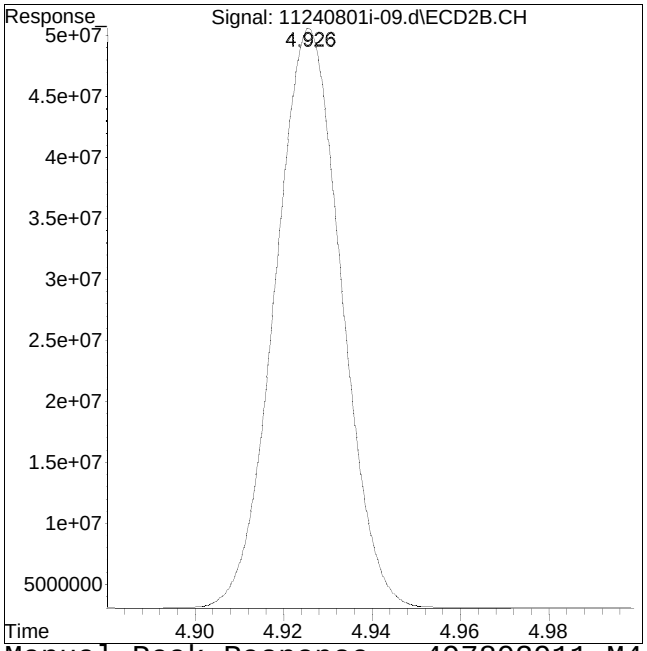
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #56: Endrin #2




Original Peak Response = 500661815



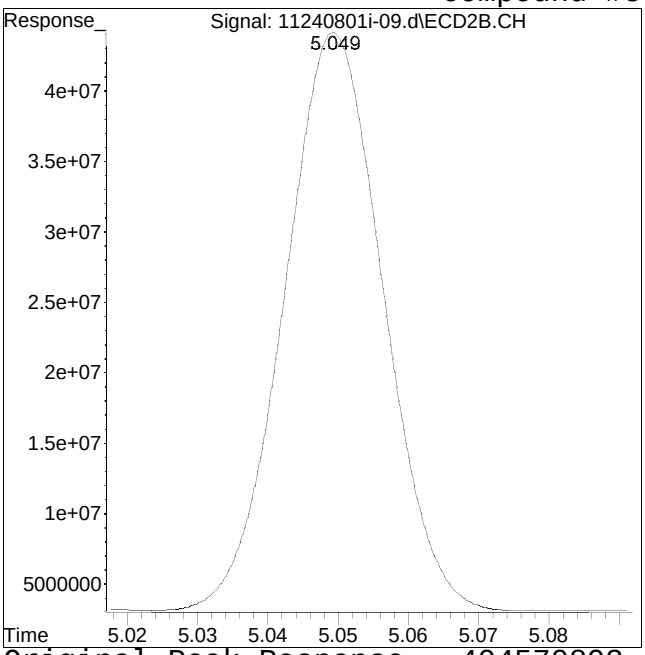

Manual Peak Response = 497803911 M4

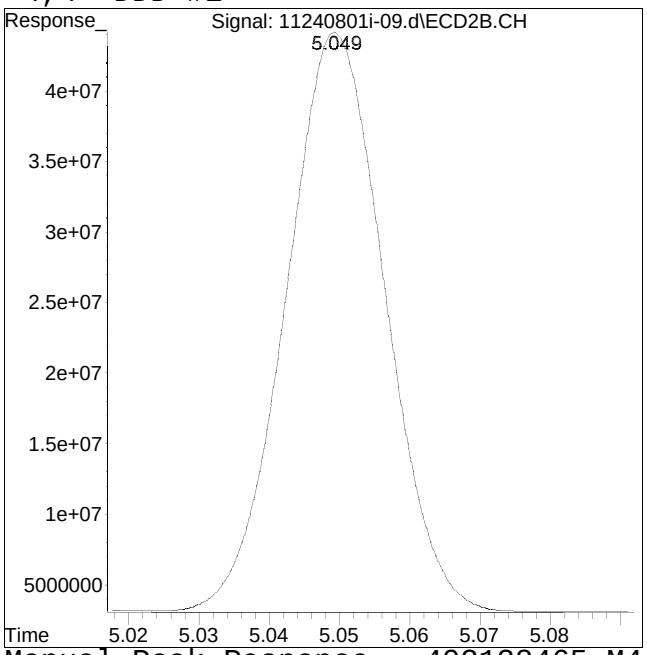
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #57: 4,4'-DDD #2



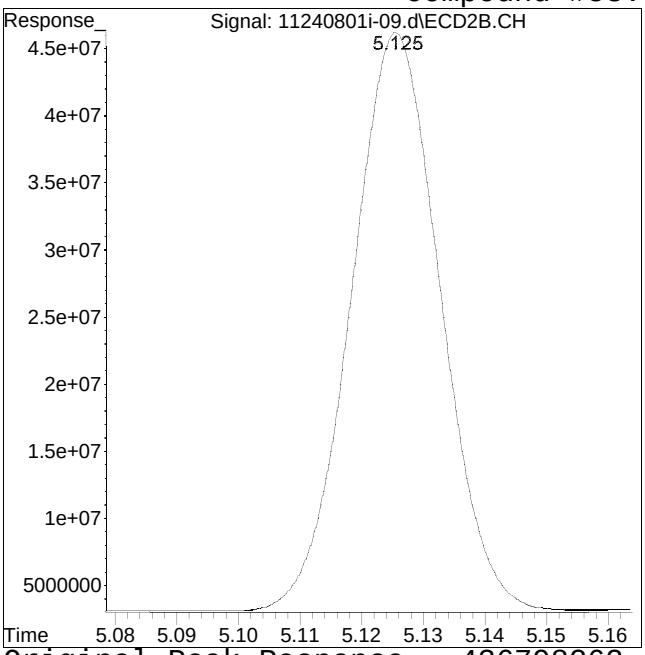



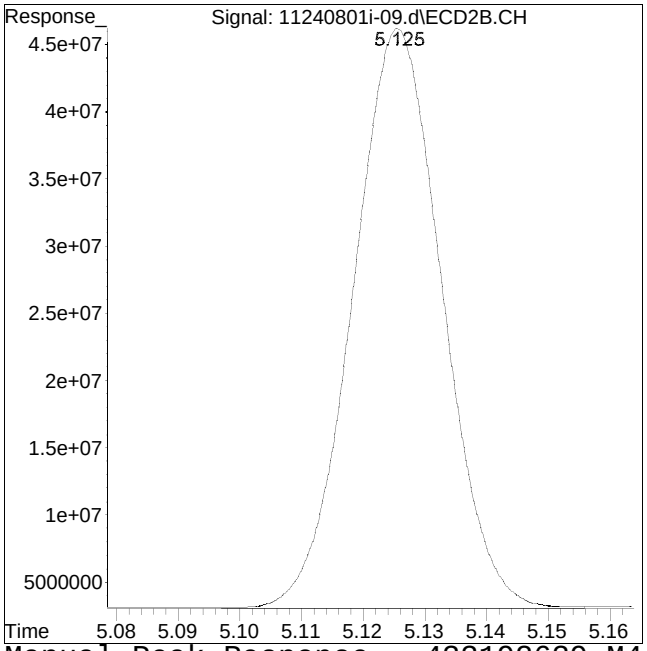

Original Peak Response = 404570893 Manual Peak Response = 402138465 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #58: Endosulfan II #2



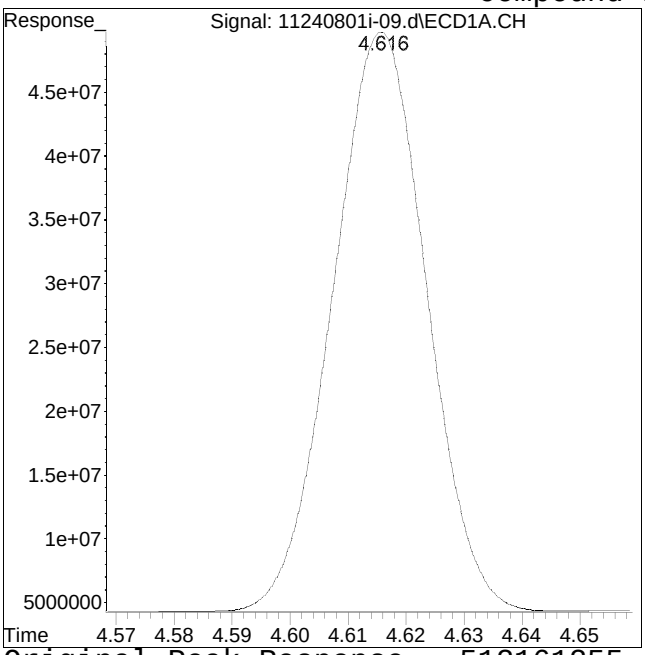



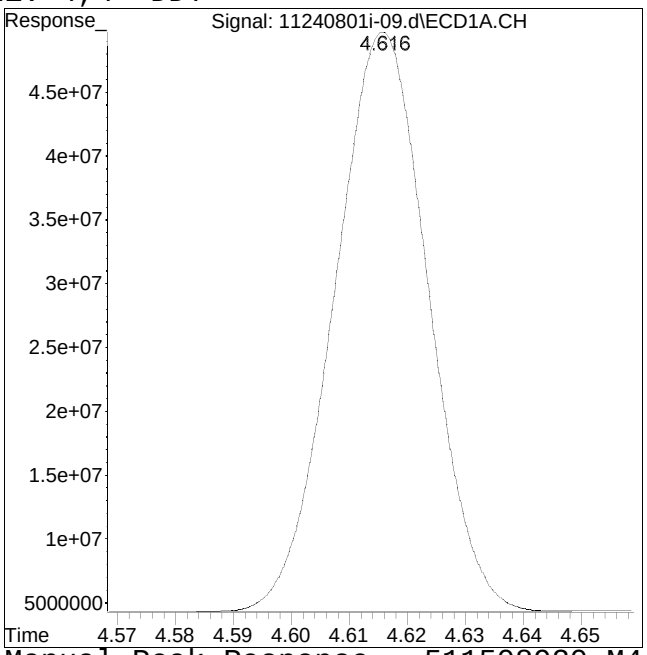

Original Peak Response = 436798262 Manual Peak Response = 433192639 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #21: 4,4'-DDT



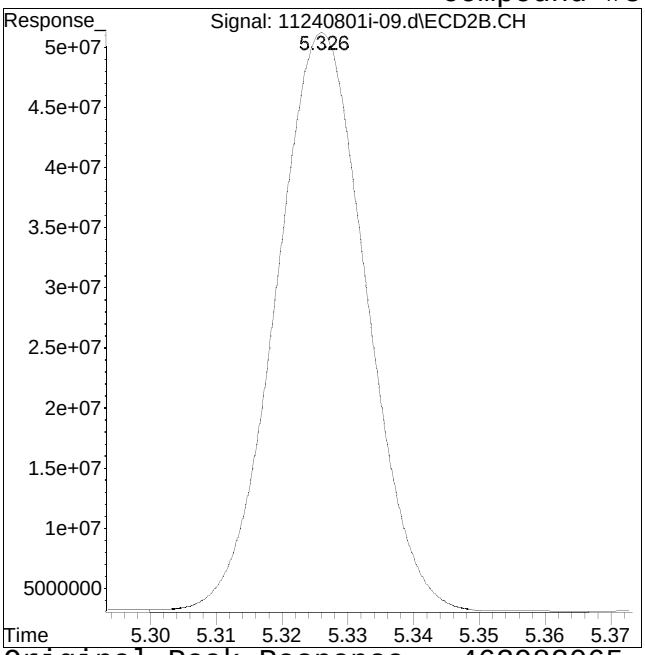



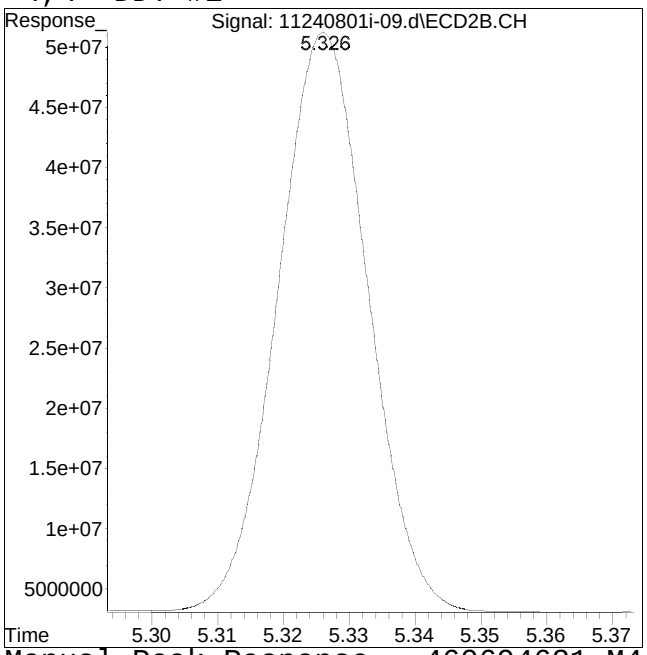

Original Peak Response = 512161255 Manual Peak Response = 511508920 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #59: 4,4'-DDT #2



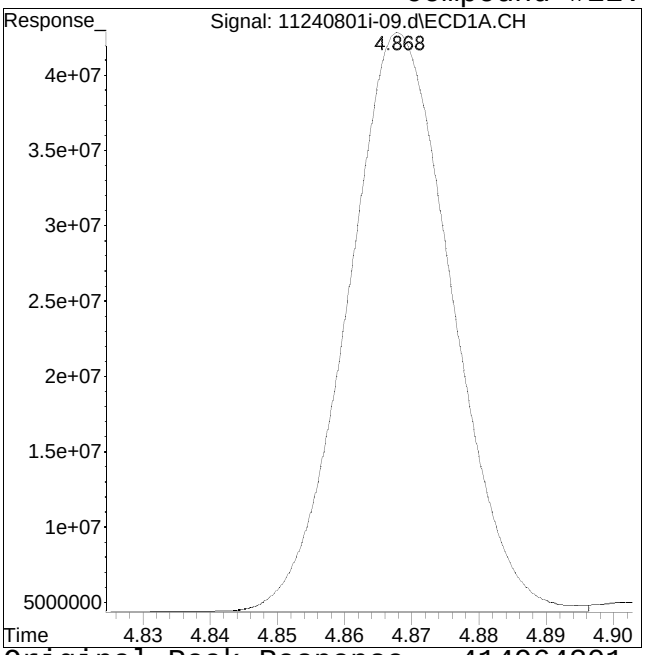

Original Peak Response = 463982065 Manual Peak Response = 460694621 M4
M4 = Poor automated baseline construction.

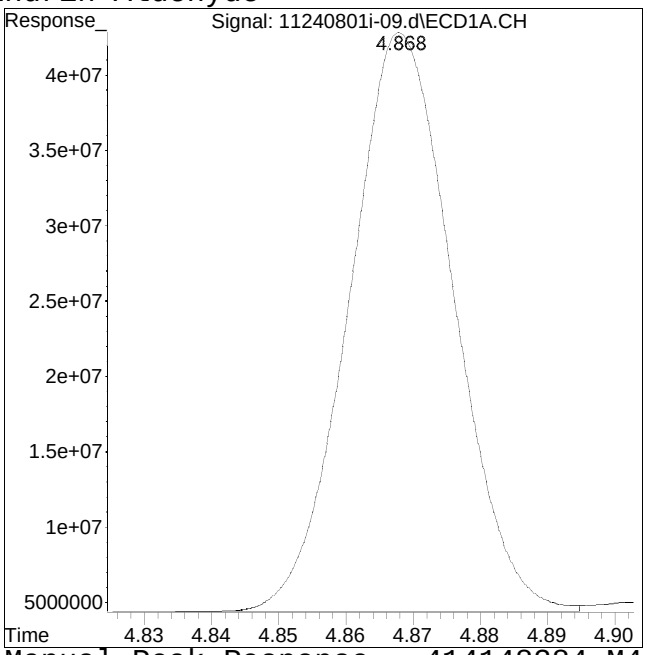
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #22: Endrin Aldehyde



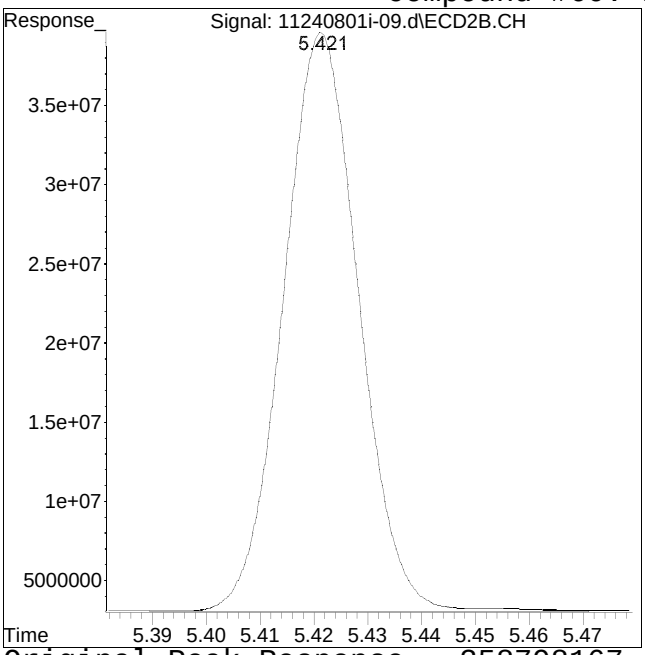



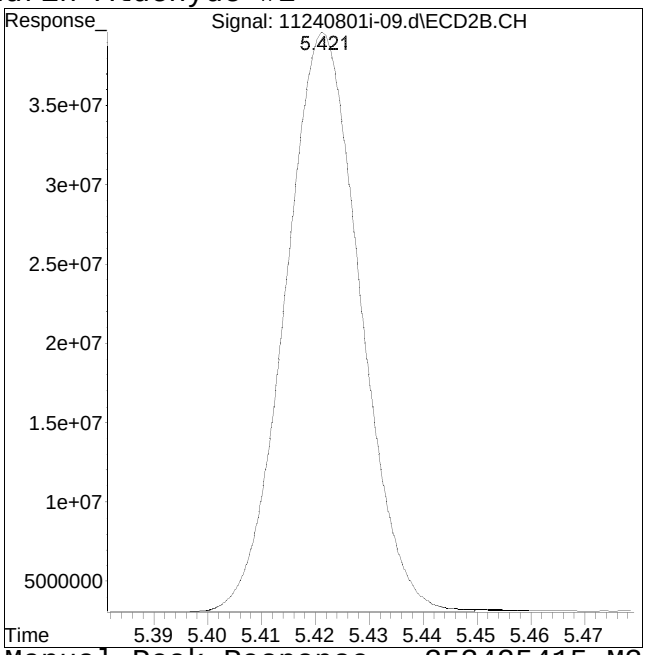

Original Peak Response = 414964301 Manual Peak Response = 414148384 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #60: Endrin Aldehyde #2



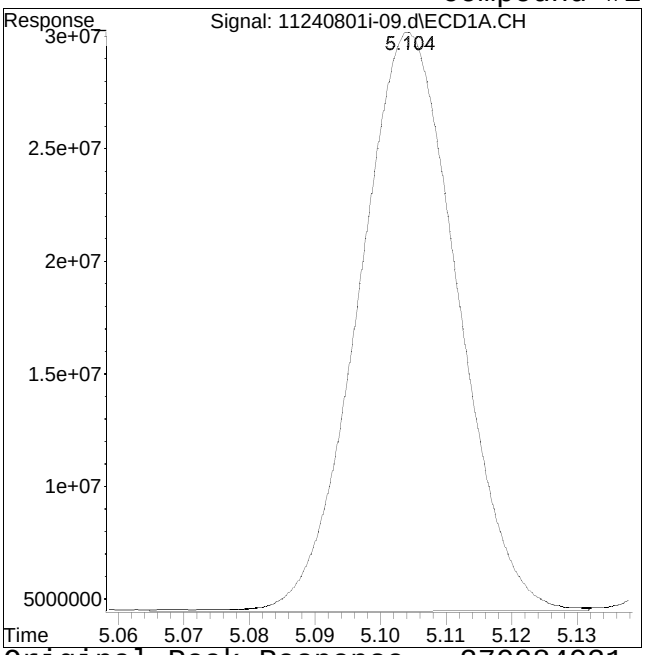

Original Peak Response = 358798167 Manual Peak Response = 353425415 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

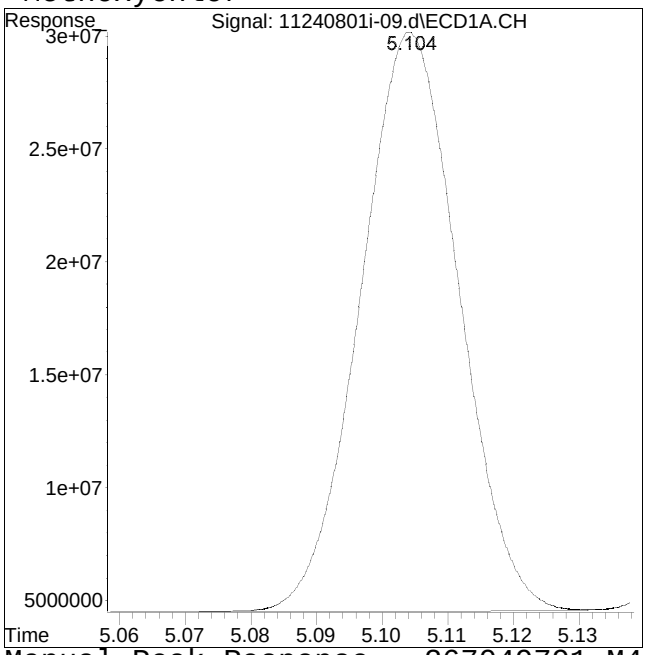
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #23: Methoxychlor




Original Peak Response = 270284931



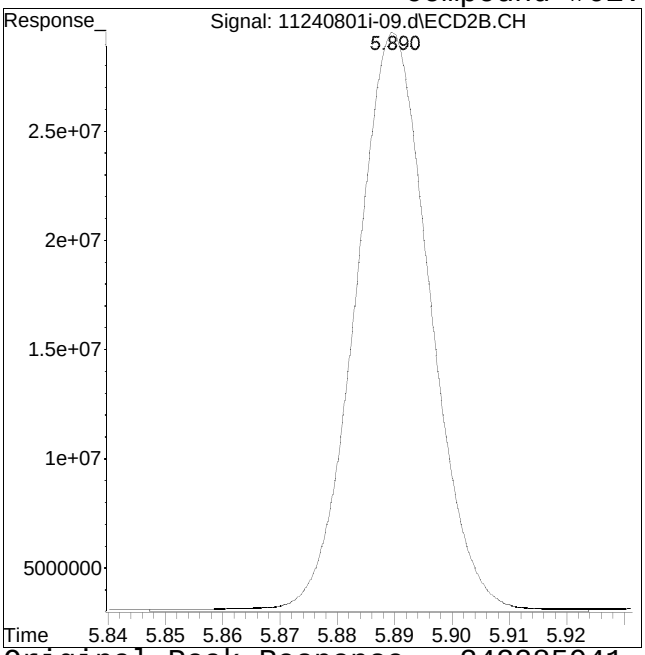

Manual Peak Response = 267049791 M4

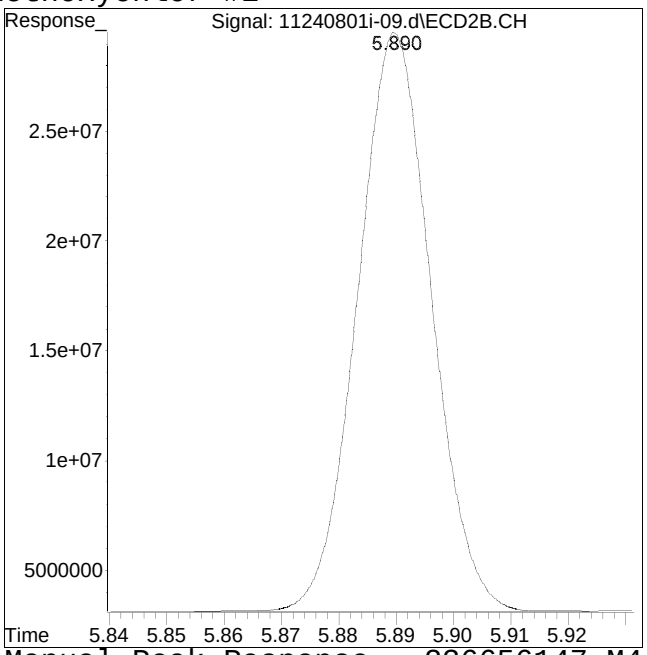
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #61: Methoxychlor #2



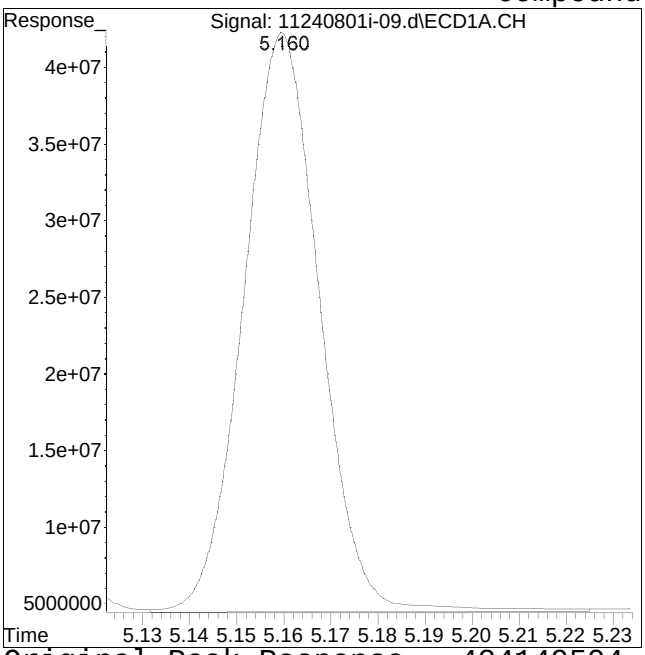



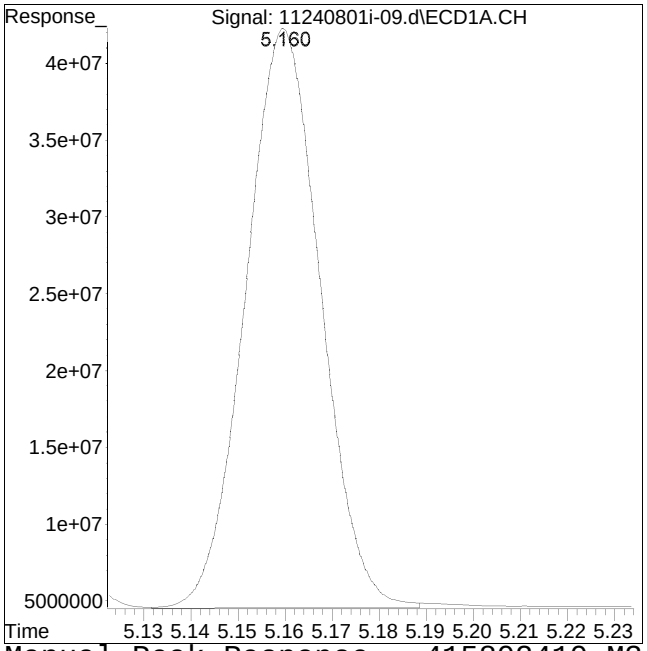

Original Peak Response = 242285941 Manual Peak Response = 236656147 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #24: Mirex




Original Peak Response = 424149504 Manual Peak Response = 415802410 M3

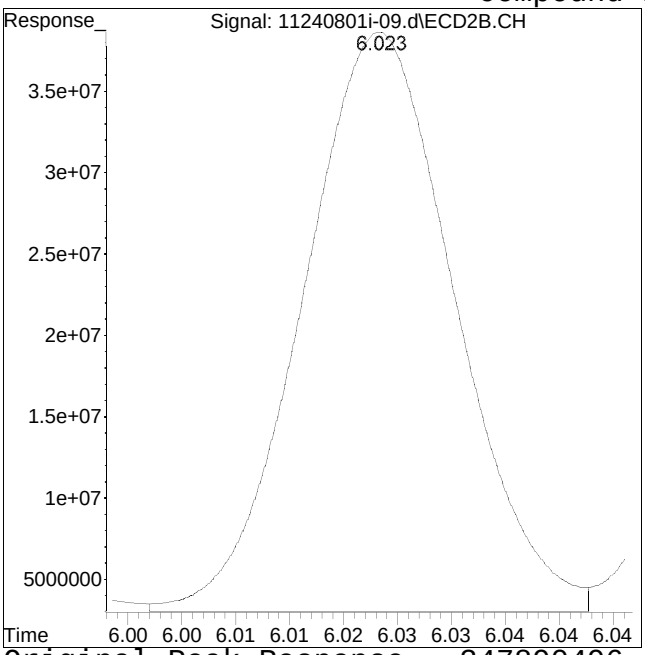
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

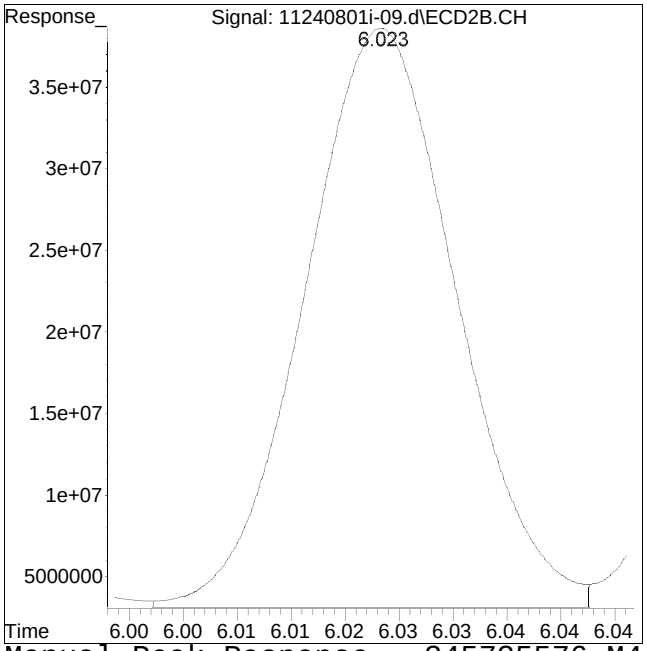
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #62: Mirex #2



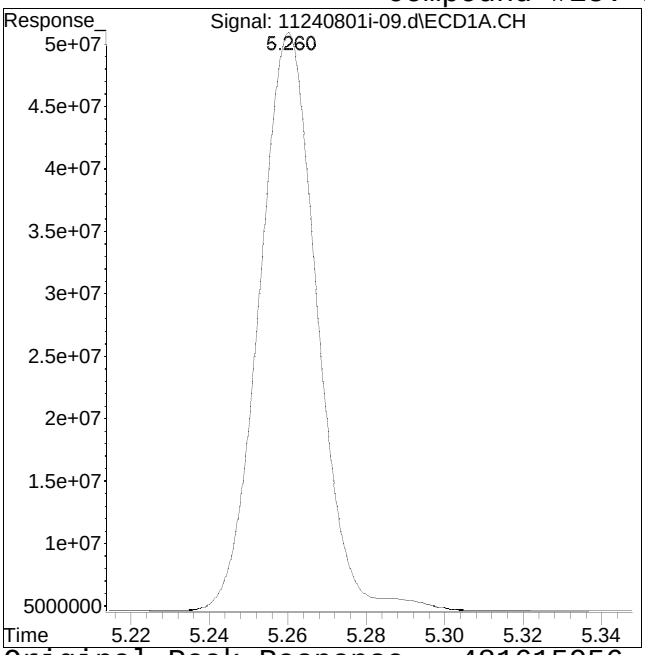



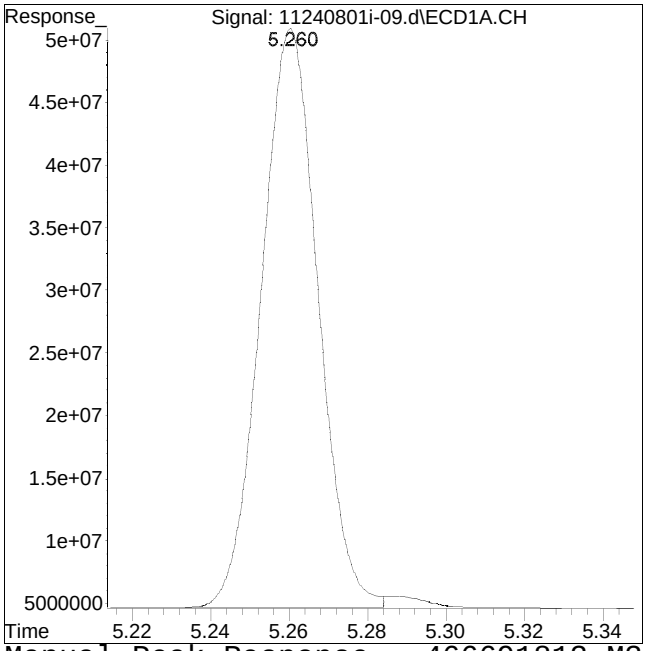

Original Peak Response = 347890496 Manual Peak Response = 345735576 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #25: Endosulfan Sulfate



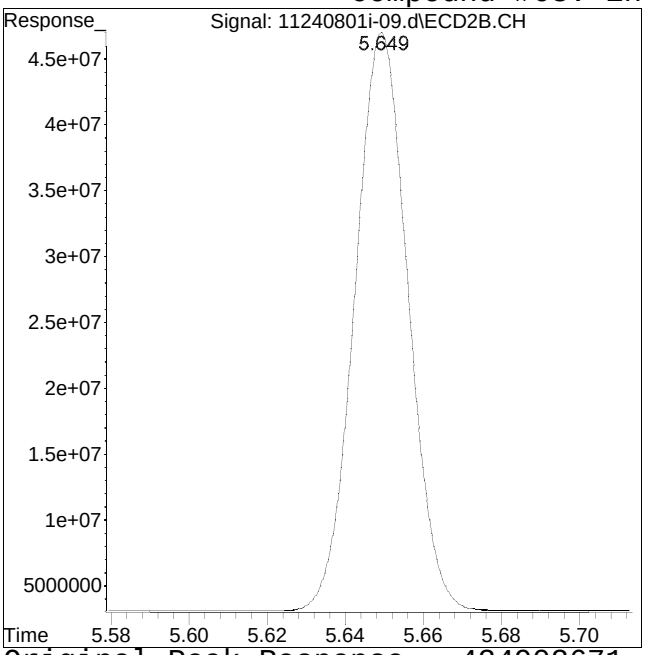



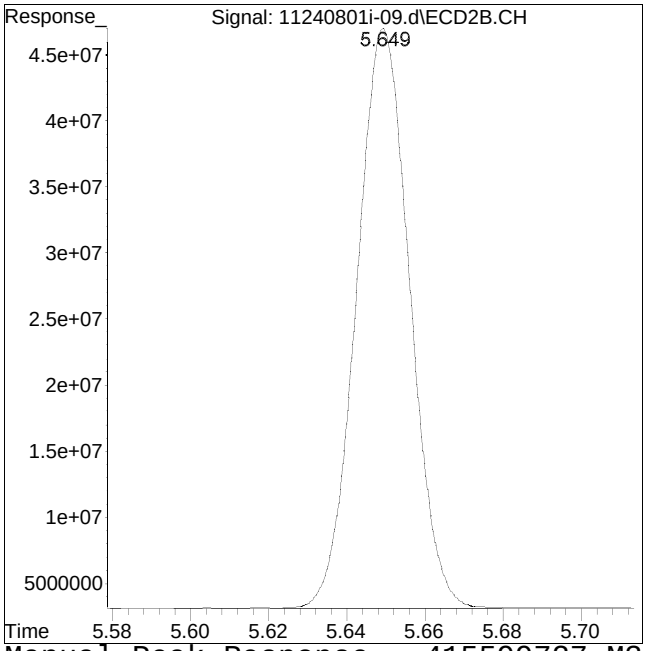

Original Peak Response = 481615956 Manual Peak Response = 466691813 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #63: Endosulfan Sulfate #2



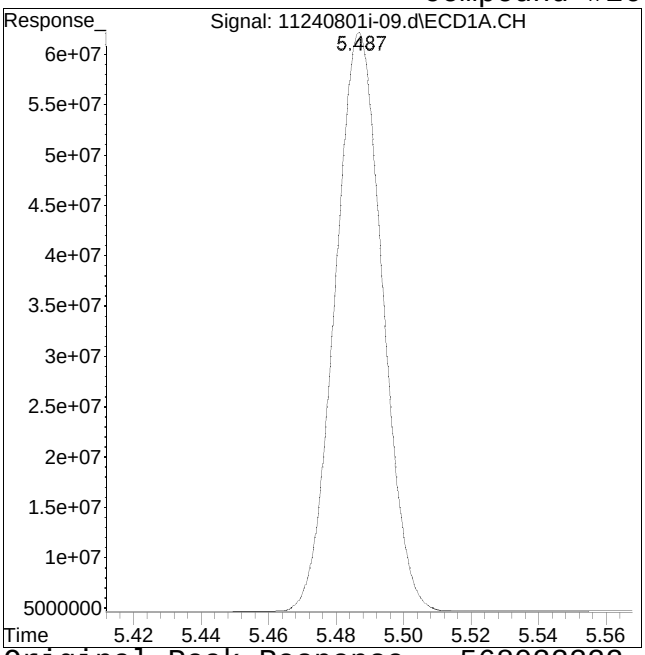




Original Peak Response = 424902671 Manual Peak Response = 415599727 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

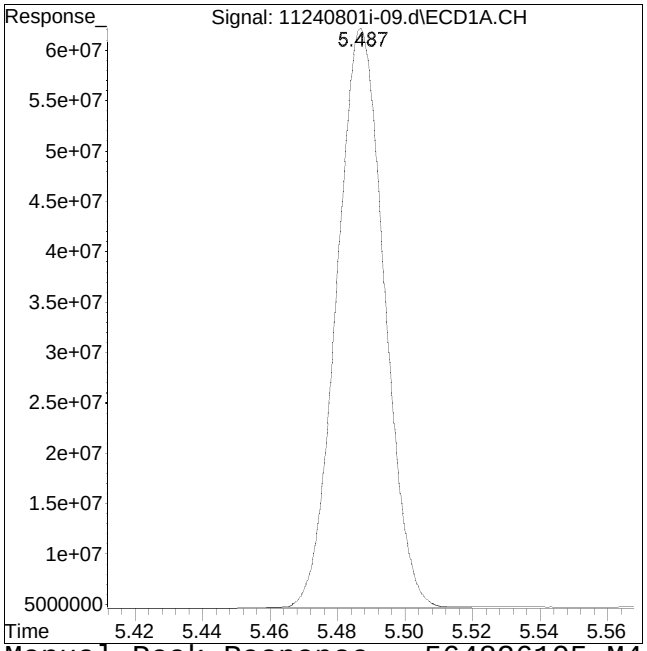
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #26: Endrin Ketone




Original Peak Response = 568032322



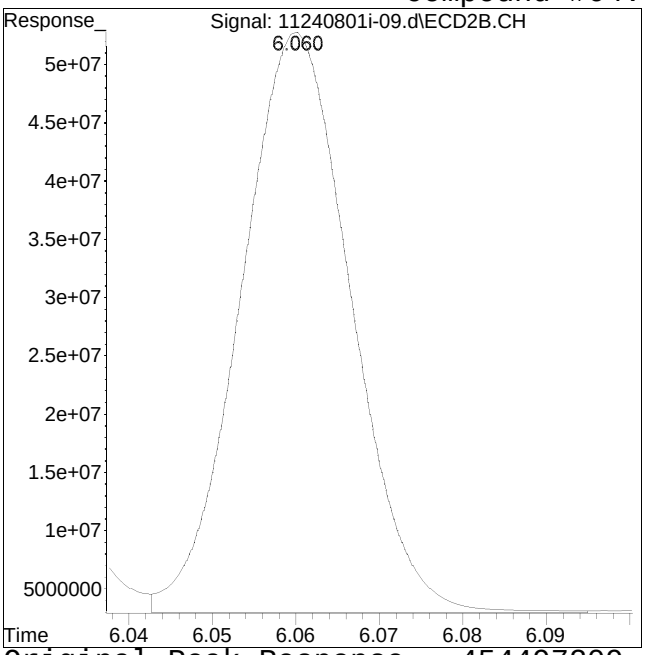

Manual Peak Response = 564826105 M4

M4 = Poor automated baseline construction.

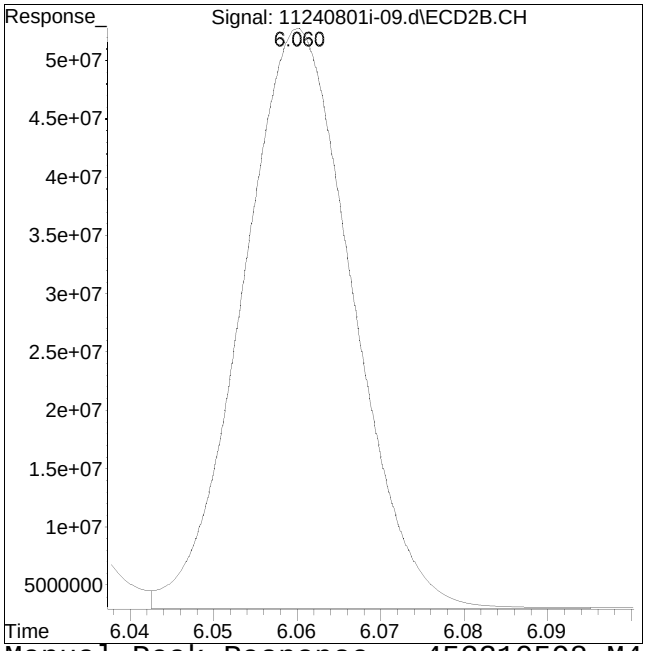
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #64: Endrin Ketone #2




Original Peak Response = 454497209



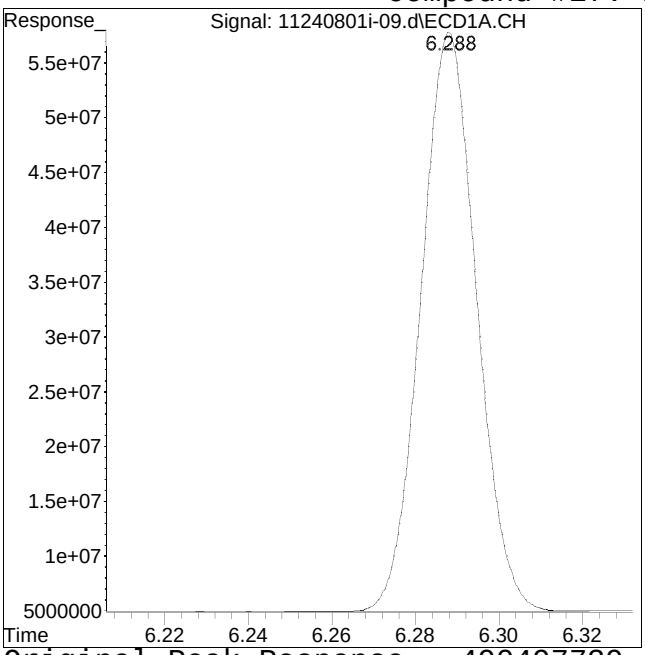

Manual Peak Response = 452310598 M4

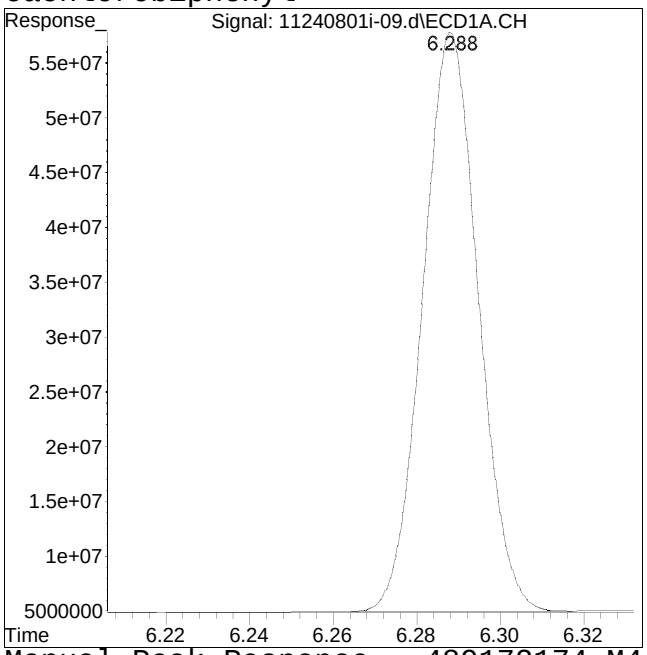
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-09.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 19:49 Instrument : Pest 11
Sample : il8pest,42e,,pp 11681 L0.0Quant Date : 8/2/2024 9:03 am

Compound #27: Decachlorobiphenyl



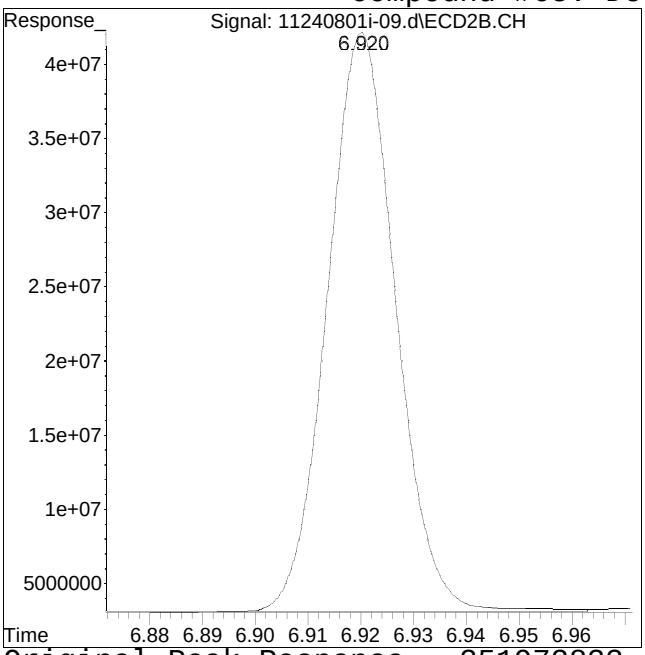




Original Peak Response = 490497739 Manual Peak Response = 489172174 M4
M4 = Poor automated baseline construction.

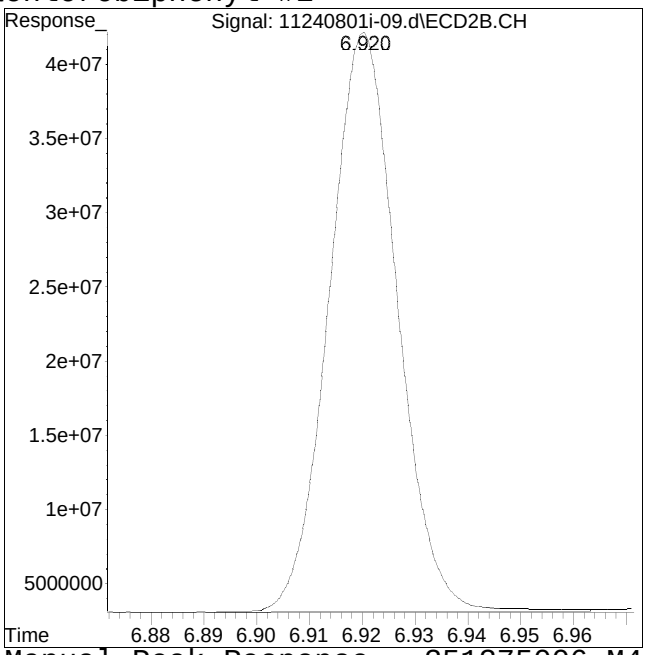
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-09.d
Date Inj'd : 8/1/2024 19:49
Sample : il8pest,42e,,pp 11681 L0.0
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:03 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 351972833




Manual Peak Response = 351375006 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:01
Operator : PEST11:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:10:53 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:10:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.385 | 228.9E6 | 186.0E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 978.0E6 | 793.9E6 | 102.526M3 | 98.316M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 205.05%# | 196.63%# |
| 27) s | Decachlorobi | 6.287 | 6.920 | 966.4E6 | 693.4E6 | 101.892M4 | 99.592M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 203.78%# | 199.18%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.178 | 1254.4E6 | 852.0E6 | 101.913M3 | 99.956M4 |
| 4) t | alpha-BHC | 1.963 | 2.271 | 1517.1E6 | 1291.2E6 | 104.962M3 | 102.929M3 |
| 5) t | gamma-BHC (l | 2.165 | 2.556 | 1395.5E6 | 1162.9E6 | 104.626M4 | 102.486M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 569.7E6 | 475.2E6 | 102.483M3 | 99.416M4 |
| 7) t | delta-BHC | 2.349 | 2.889 | 1415.2E6 | 1188.9E6 | 105.152M4 | 103.238M4 |
| 8) t | Heptachlor | 2.513 | 2.952 | 1281.7E6 | 1164.2E6 | 103.113M4 | 100.742 |
| 9) t | Aldrin | 2.756 | 3.271 | 1234.2E6 | 1093.2E6 | 104.739M4 | 102.495 |
| 10) t | Alachlor | 2.876 | 3.153 | 202.3E6 | 136.5E6 | 97.935M4 | 93.096M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 476.2E6 | 520.8E6 | 96.581M4 | 95.072 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:01
Operator : PEST11:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:10:53 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:10:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.301 | 3.884 | 1132.0E6 | 1013.1E6 | 102.826M4 | 100.688M4 |
| 13) | t | gamma-Chlord | 3.425 | 4.104 | 1037.3E6 | 931.1E6 | 105.142M4 | 102.239M4 |
| 14) | t | alpha-Chlord | 3.559 | 4.274 | 1167.6E6 | 1027.5E6 | 104.255M3 | 101.638 |
| 15) | t | 4,4'-DDE | 3.657 | 4.473 | 1188.4E6 | 1034.3E6 | 105.852 | 103.171M4 |
| 16) | t | Endosulfan I | 3.695 | 4.336 | 1073.0E6 | 944.4E6 | 103.673M3 | 100.715 |
| 17) | t | Dieldrin | 3.955 | 4.627 | 1129.5E6 | 992.5E6 | 105.119M3 | 102.230M3 |
| 18) | t | Endrin | 4.210 | 4.925 | 1134.9E6 | 1004.3E6 | 103.955M4 | 101.809M4 |
| 19) | t | 4,4'-DDD | 4.321 | 5.049 | 929.4E6 | 823.1E6 | 106.236M4 | 103.291M4 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 1017.3E6 | 866.0E6 | 103.751 | 100.883M4 |
| 21) | t | 4,4'-DDT | 4.616 | 5.326 | 1043.2E6 | 939.1E6 | 105.189M4 | 102.870M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 836.3E6 | 707.4E6 | 104.157M3 | 101.016M3 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 519.3E6 | 461.0E6 | 100.292M4 | 98.297M4 |
| 24) | t | Mirex | 5.160 | 6.023 | 822.7E6 | 677.1E6 | 102.053M4 | 98.827M4 |
| 25) | t | Endosulfan S | 5.260 | 5.649 | 939.0E6 | 830.0E6 | 103.773M3 | 100.783M3 |
| 26) | t | Endrin Keton | 5.487 | 6.060 | 1123.4E6 | 898.2E6 | 102.585M4 | 100.220M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:01
Operator : PEST11:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:10:53 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:10:44 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

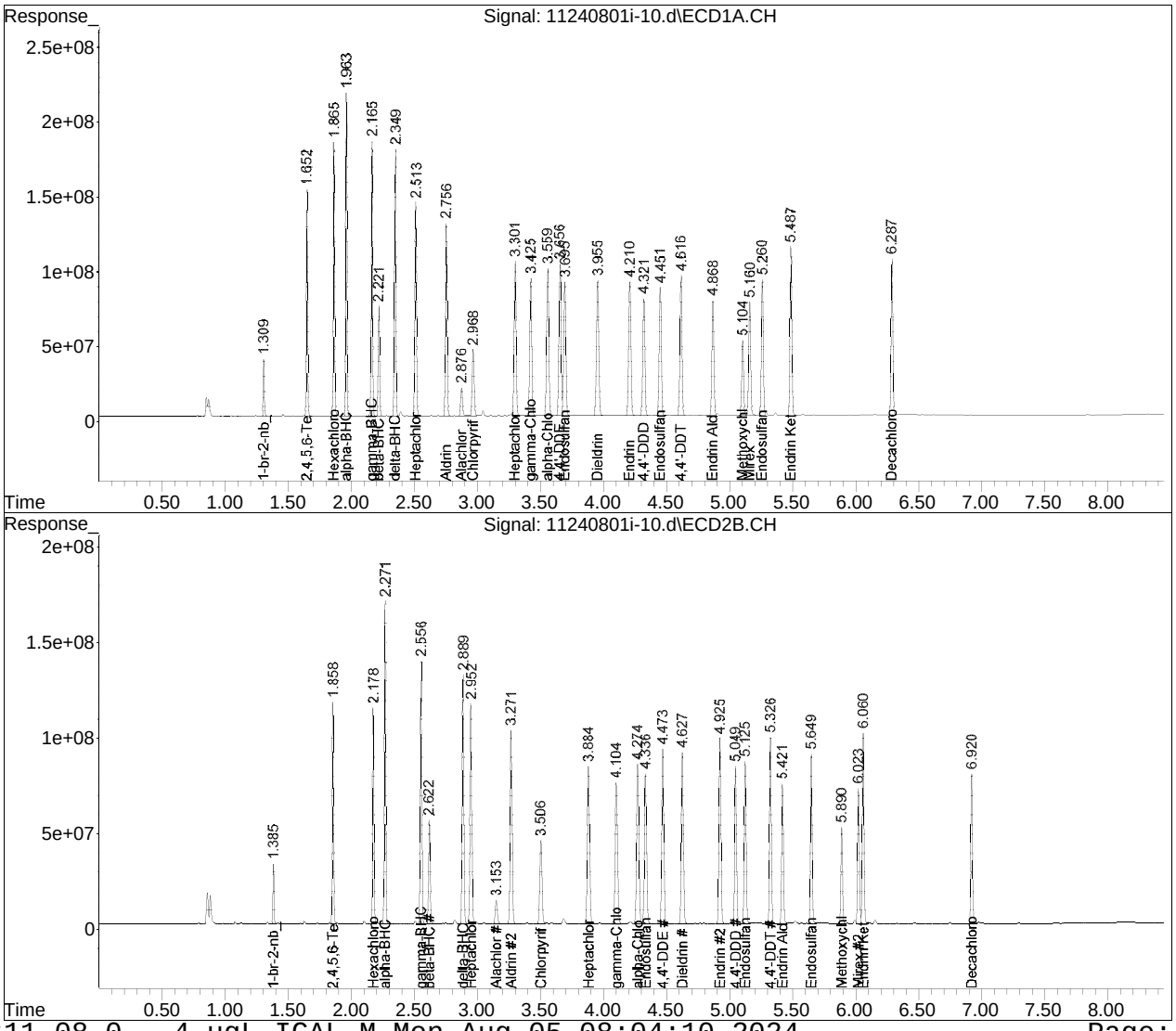
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-10.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  20:01
Operator : PEST11:ejl
Sample : il9pest,42e,,pp 11680 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:10:53 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:10:44 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

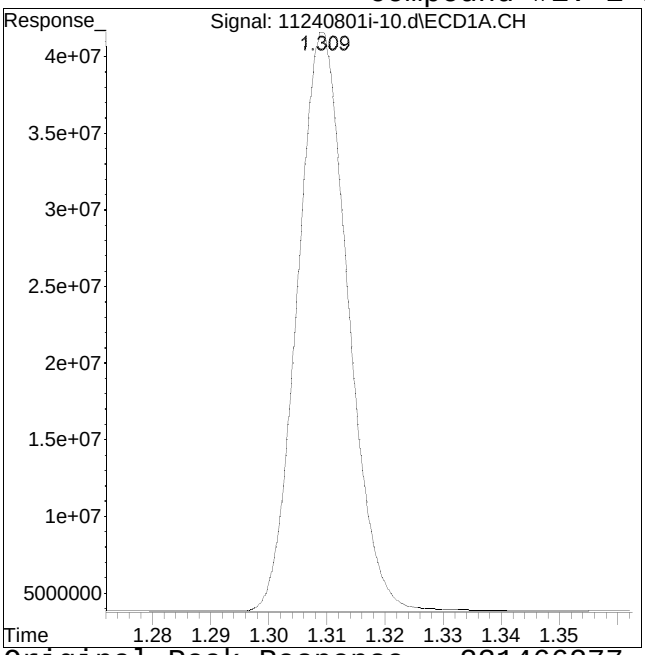


# Manual Integration Report

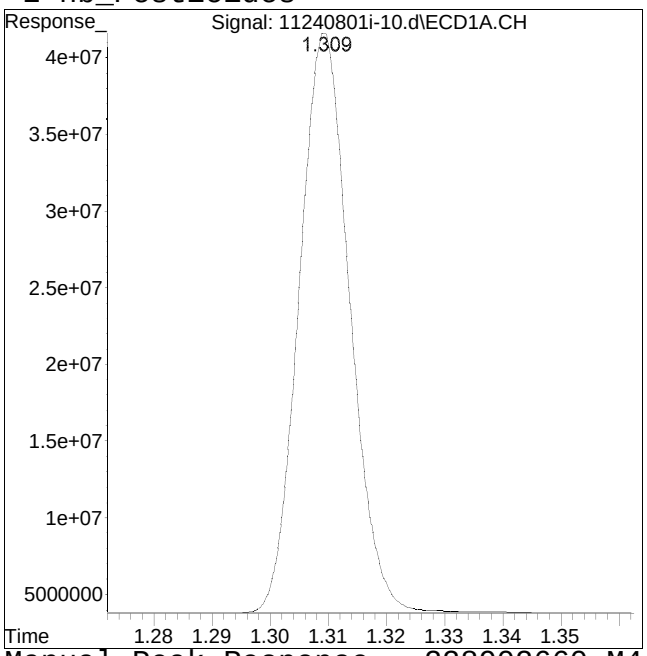
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 231466277




Manual Peak Response = 228902660 M4

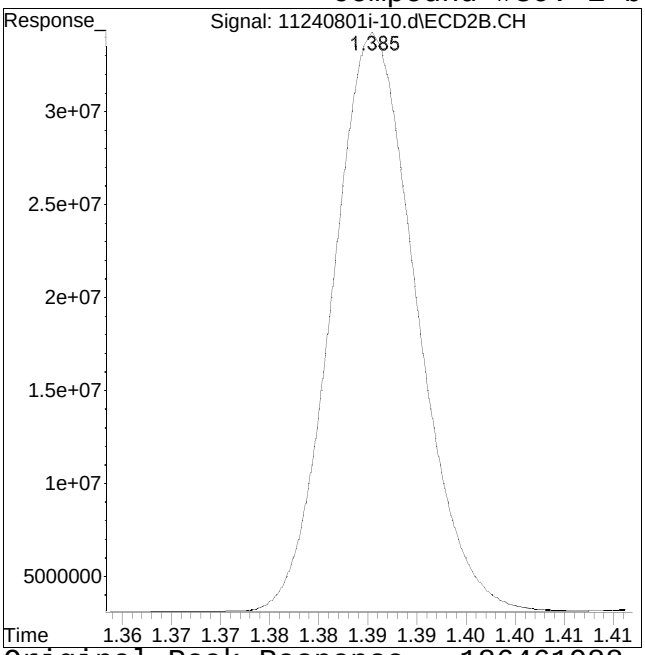
M4 = Poor automated baseline construction.

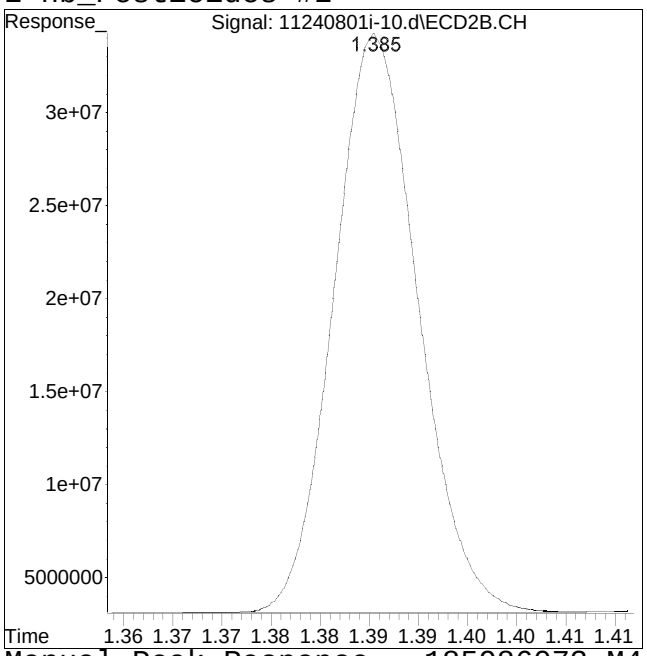
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

## Compound #39: 1-br-2-nb_Pesticides #2



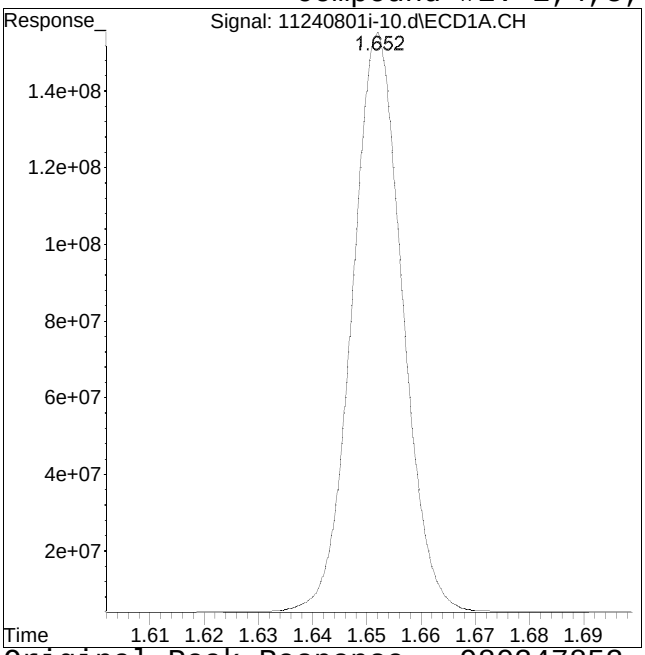



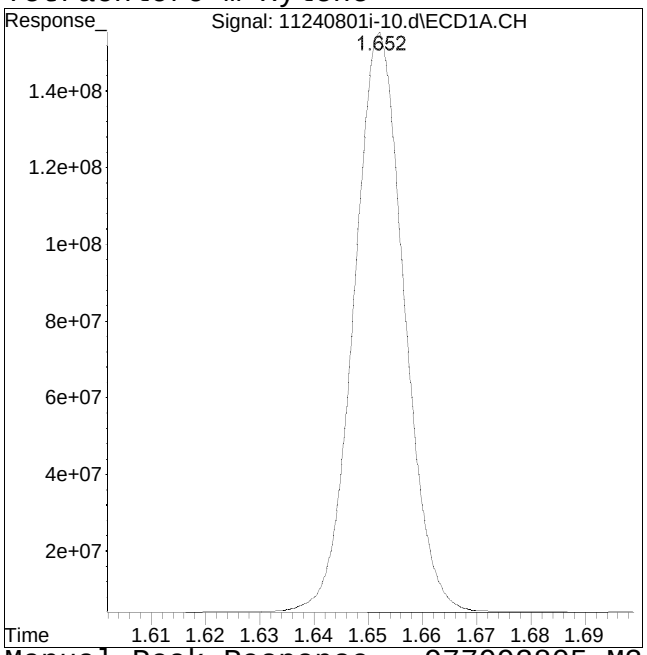

Original Peak Response = 186461988 Manual Peak Response = 185986073 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



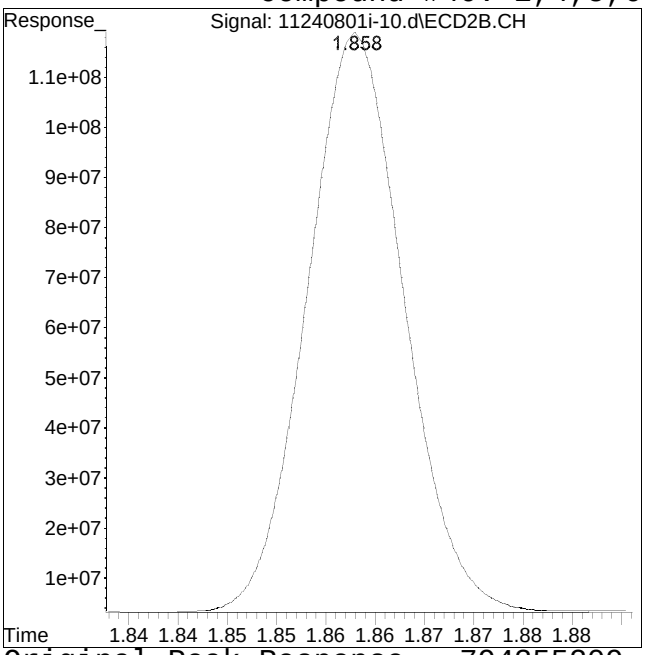

Original Peak Response = 980347853 Manual Peak Response = 977993805 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

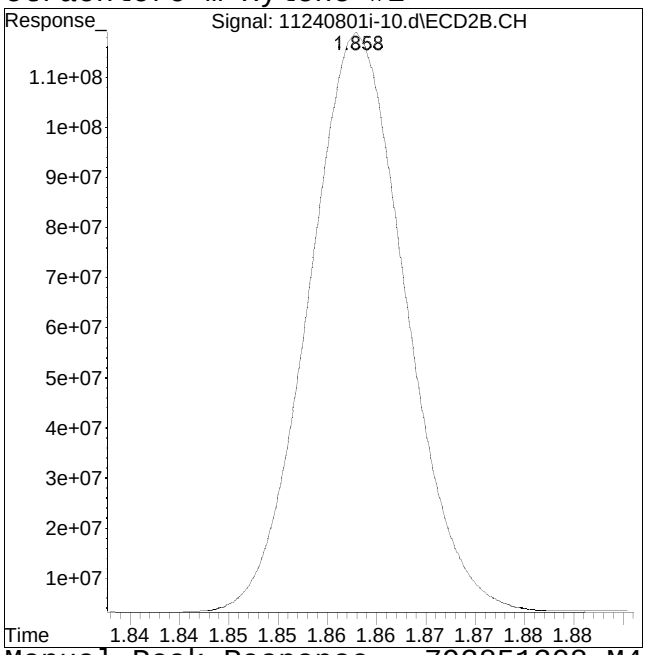
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

## Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 794355209




Manual Peak Response = 793851308 M4

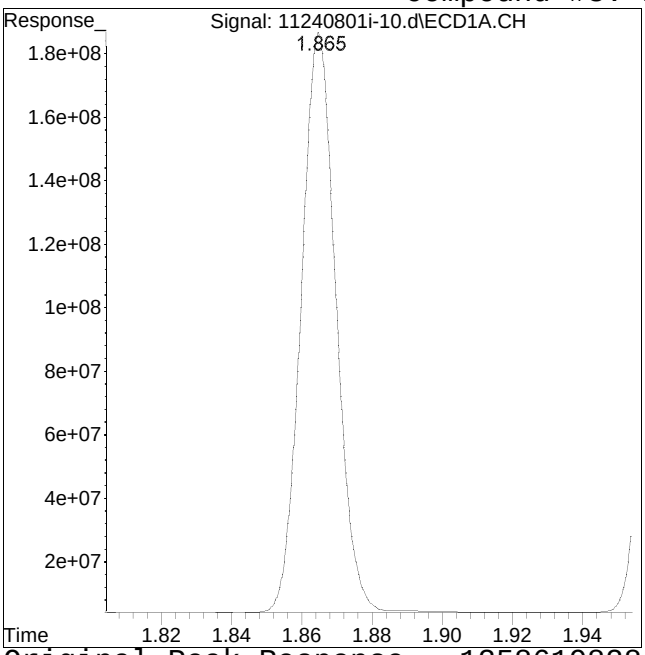
M4 = Poor automated baseline construction.

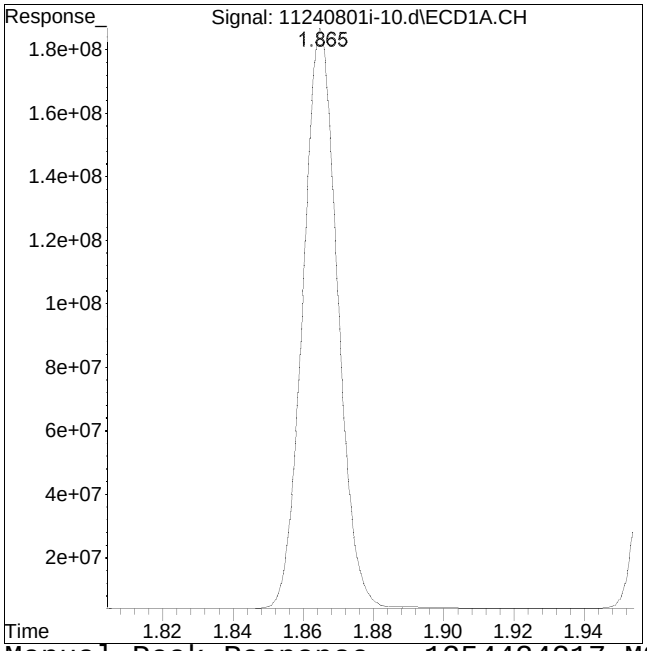
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #3: Hexachlorobenzene



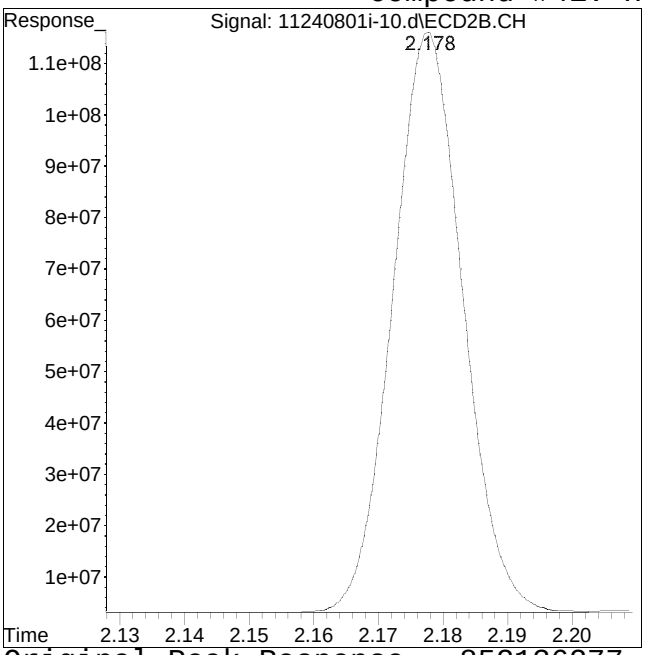



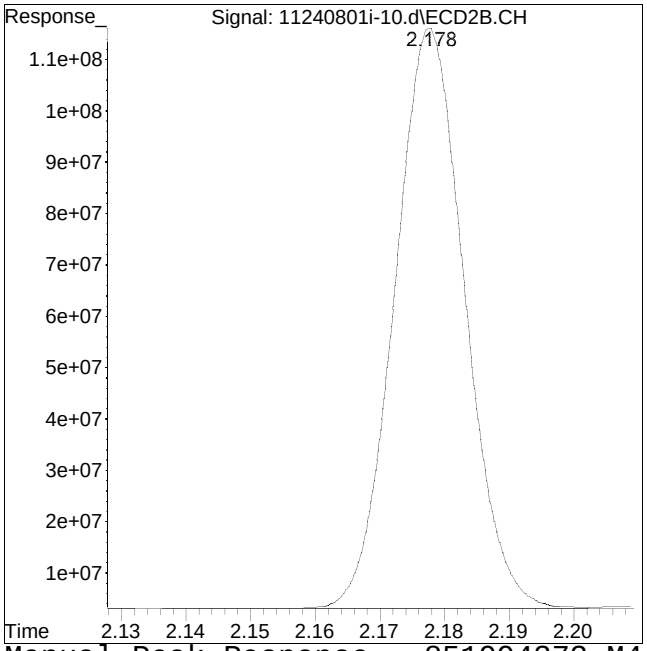

Original Peak Response = 1258619828 Manual Peak Response = 1254424217 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1 Quant Date : 8/2/2024 9:10 am

Compound #41: Hexachlorobenzene #2



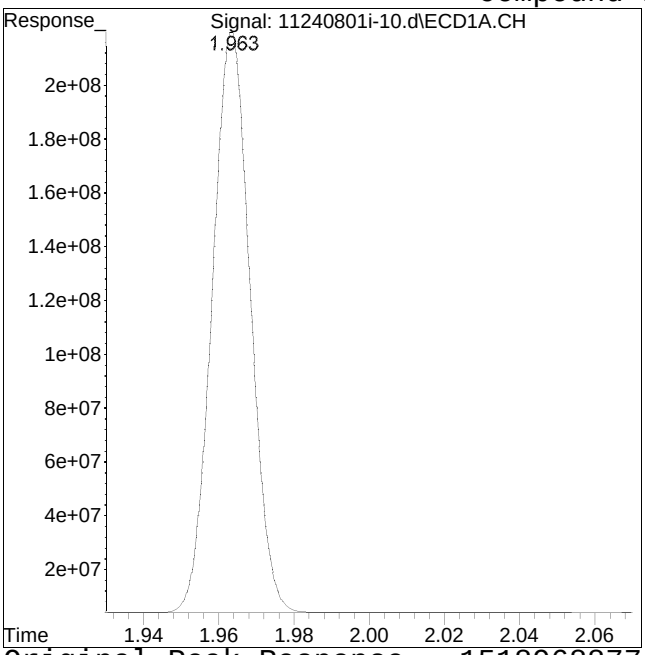



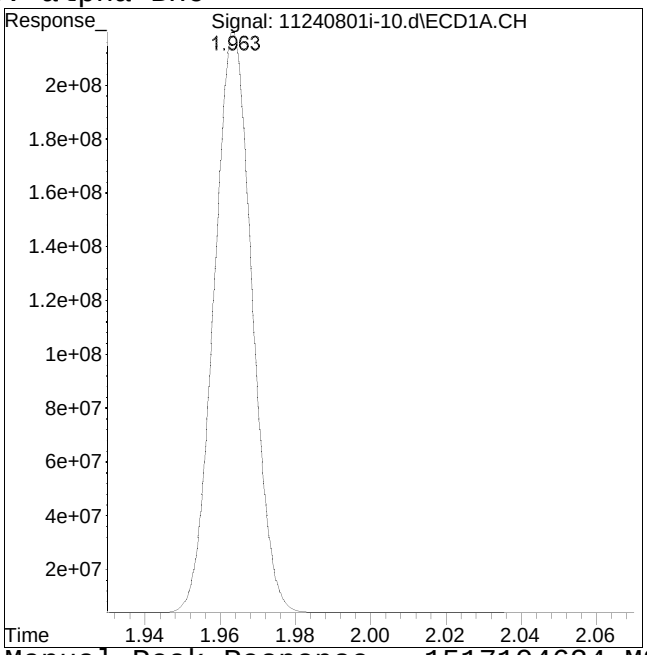

Original Peak Response = 852136277 Manual Peak Response = 851994373 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1 Quant Date : 8/2/2024 9:10 am

Compound #4: alpha-BHC



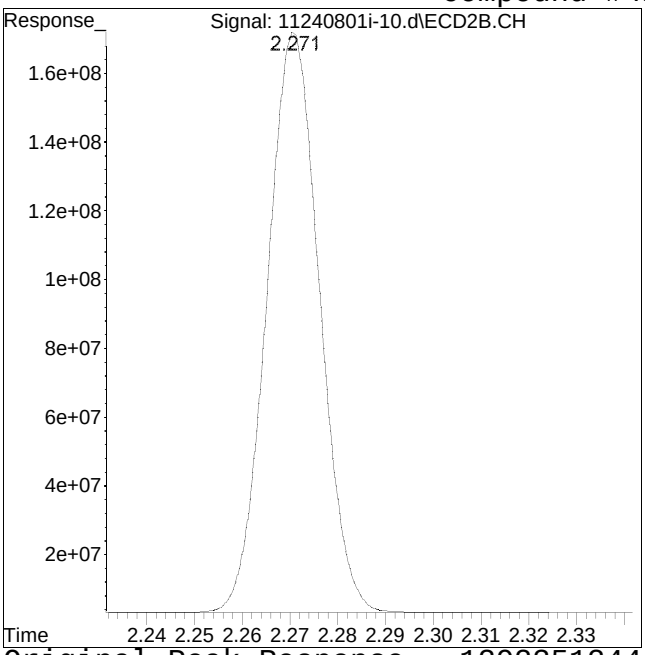



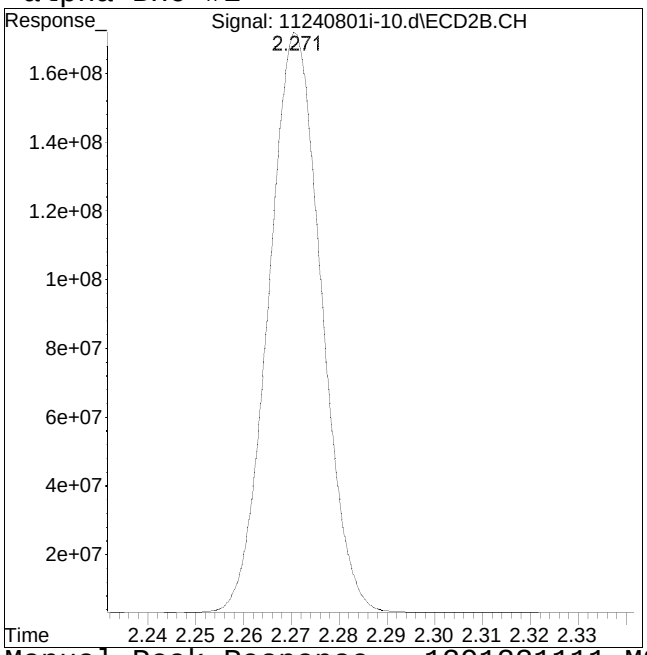

Original Peak Response = 1518968877 Manual Peak Response = 1517104624 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1 Quant Date : 8/2/2024 9:10 am

Compound #42: alpha-BHC #2



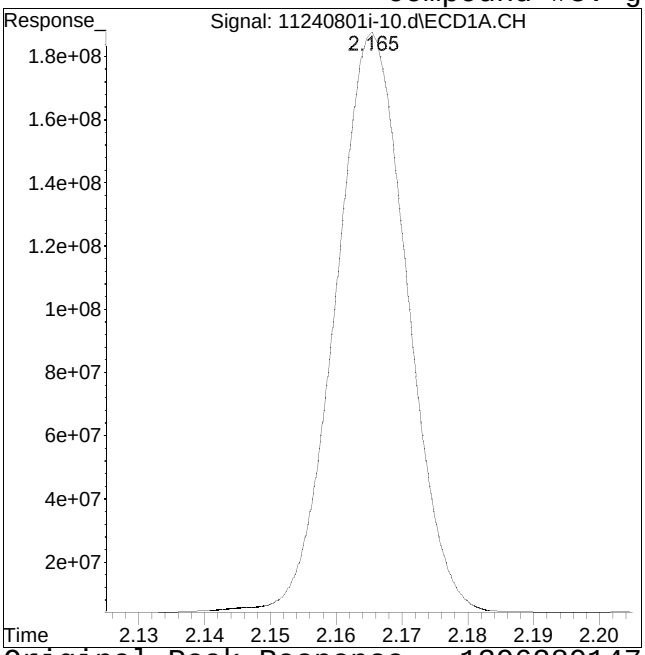

Original Peak Response = 1292351244 Manual Peak Response = 1291231111 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

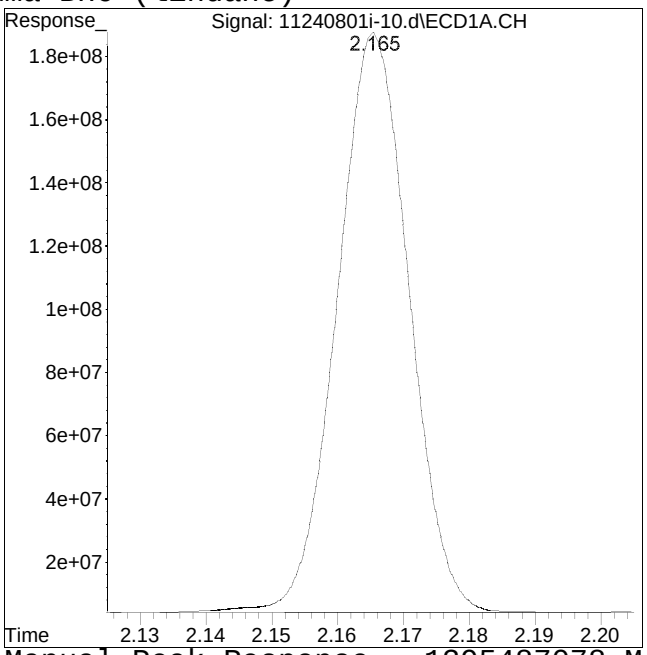
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #5: gamma-BHC (lindane)



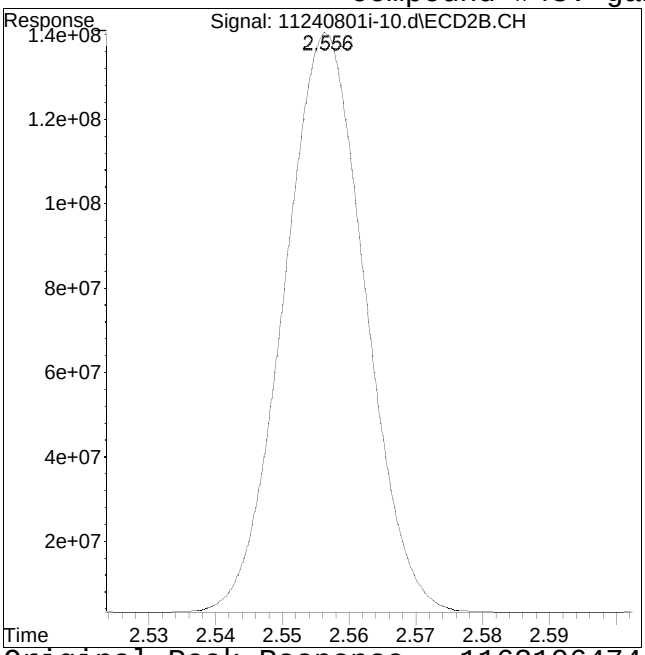



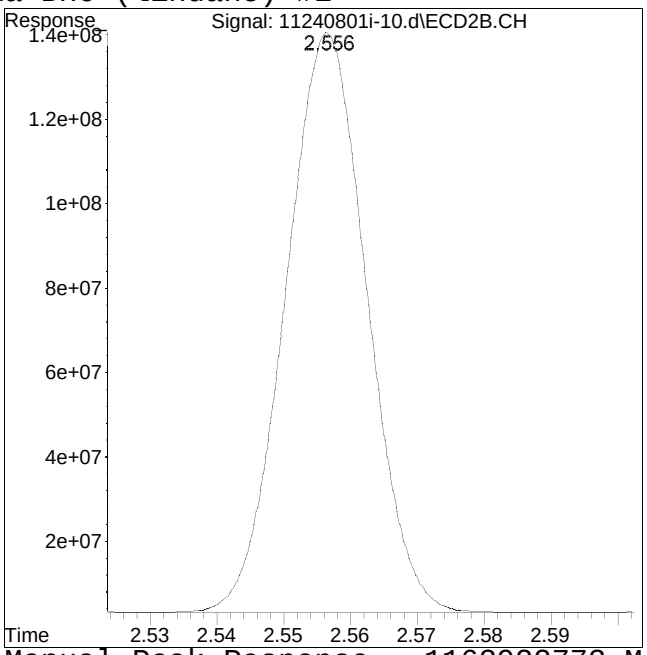

Original Peak Response = 1396289147 Manual Peak Response = 1395487078 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #43: gamma-BHC (lindane) #2



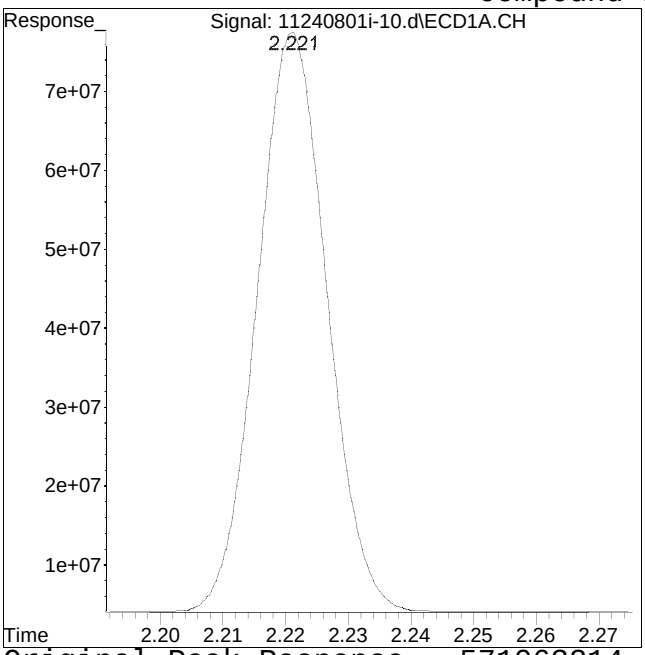

Original Peak Response = 1163106474 Manual Peak Response = 1162922773 M4
M4 = Poor automated baseline construction.

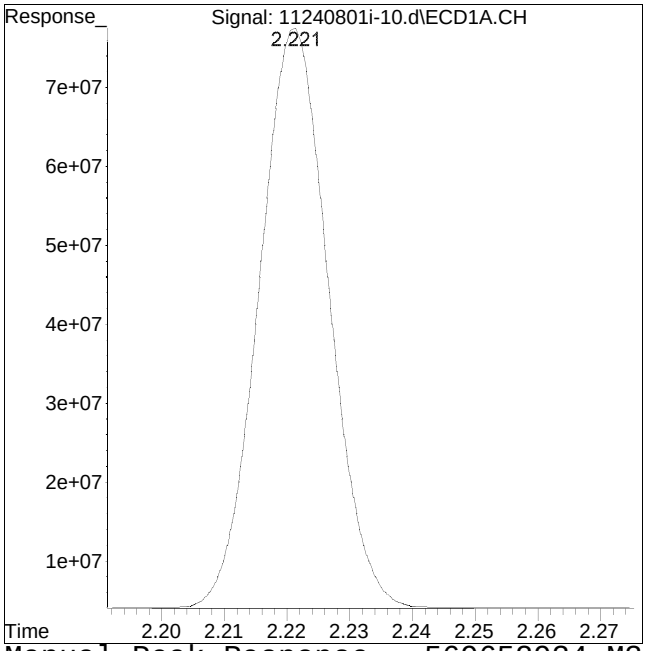
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #6: beta-BHC



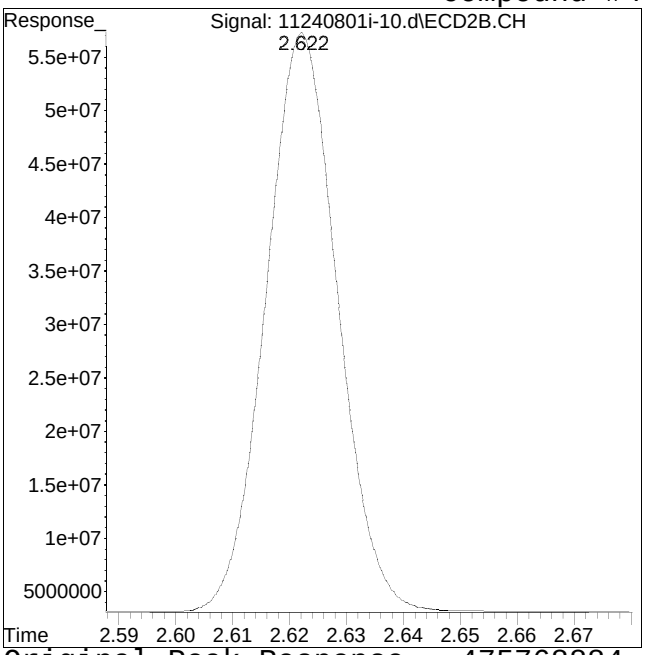



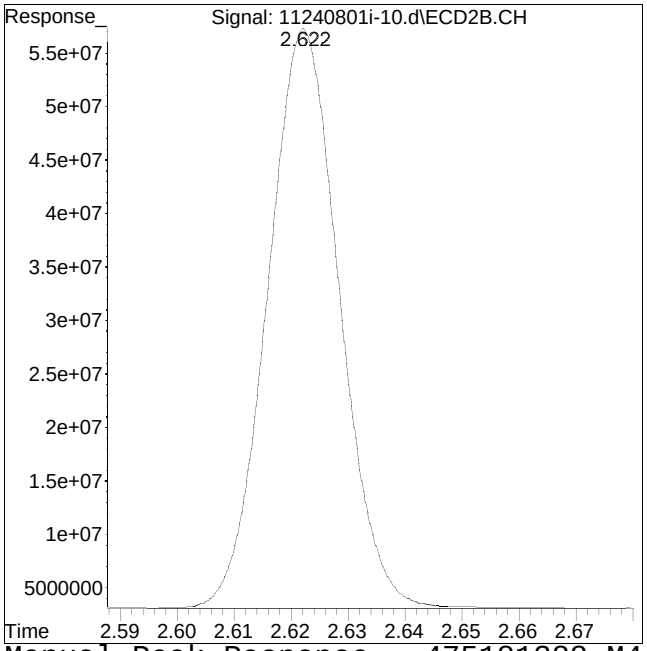

Original Peak Response = 571063214 Manual Peak Response = 569652934 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #44: beta-BHC #2



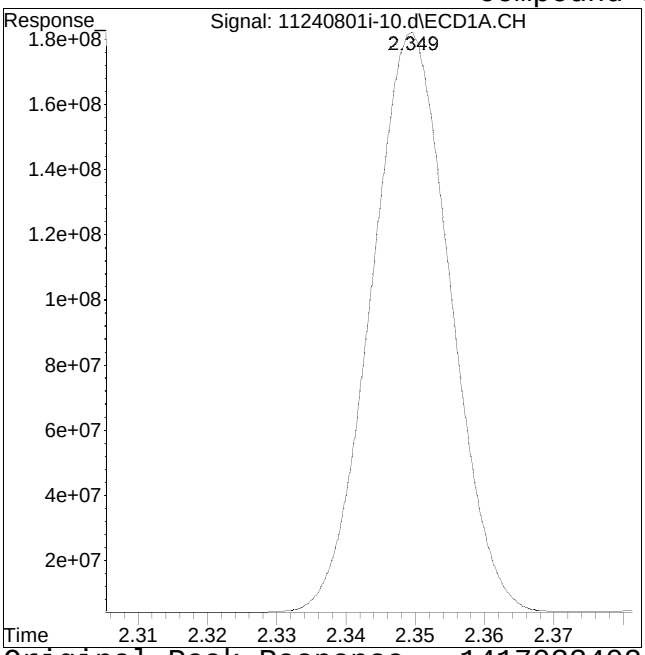



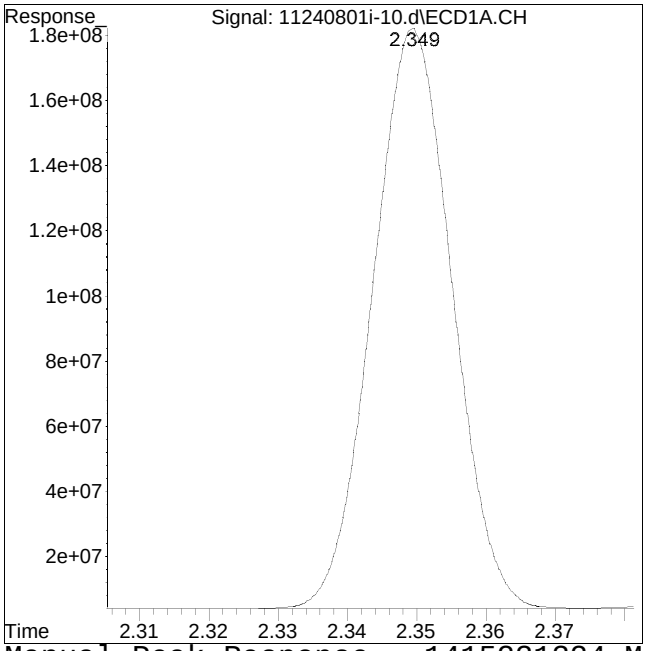

Original Peak Response = 475768884 Manual Peak Response = 475181388 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #7: delta-BHC



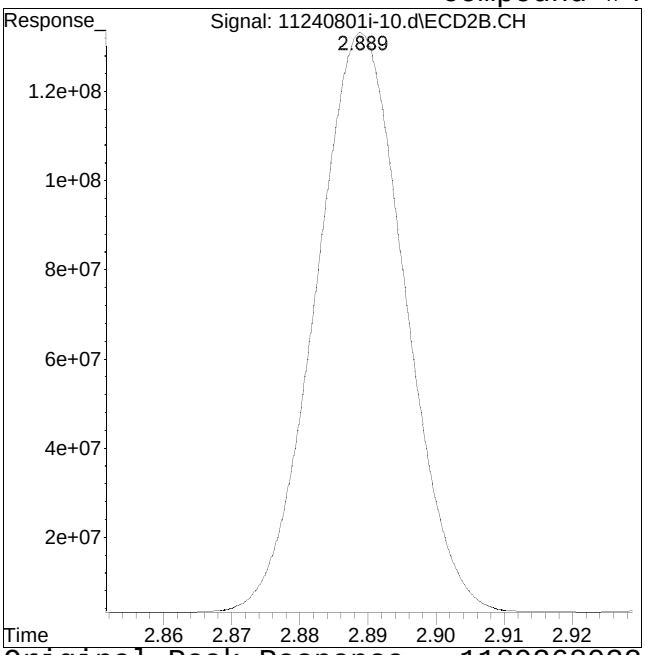

Original Peak Response = 1417033402 Manual Peak Response = 1415231324 M4
M4 = Poor automated baseline construction.

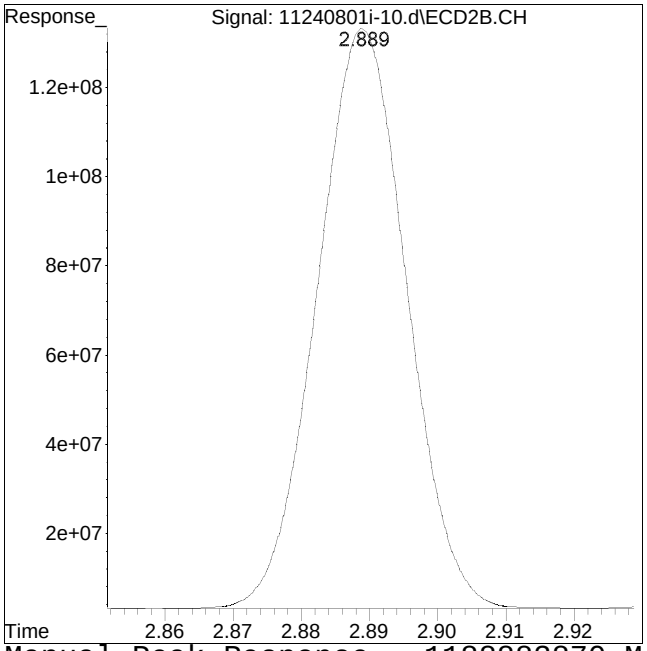
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #45: delta-BHC #2



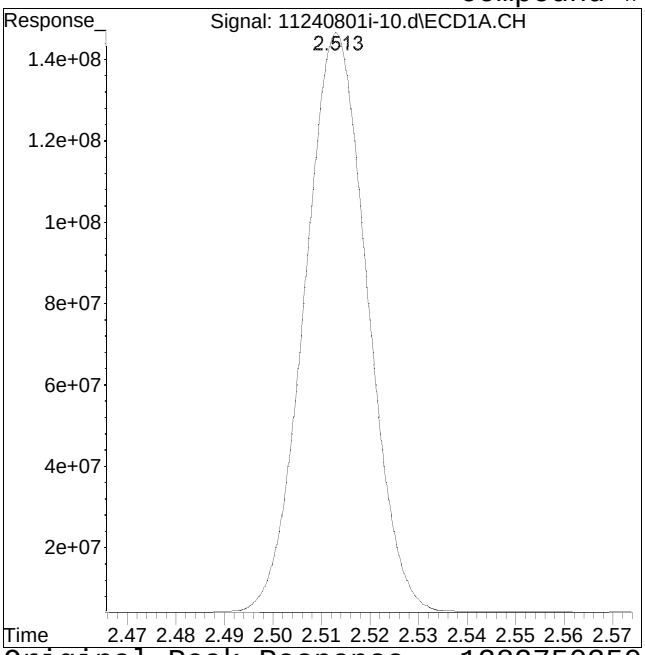

Original Peak Response = 1189268032 Manual Peak Response = 1188883870 M4
M4 = Poor automated baseline construction.

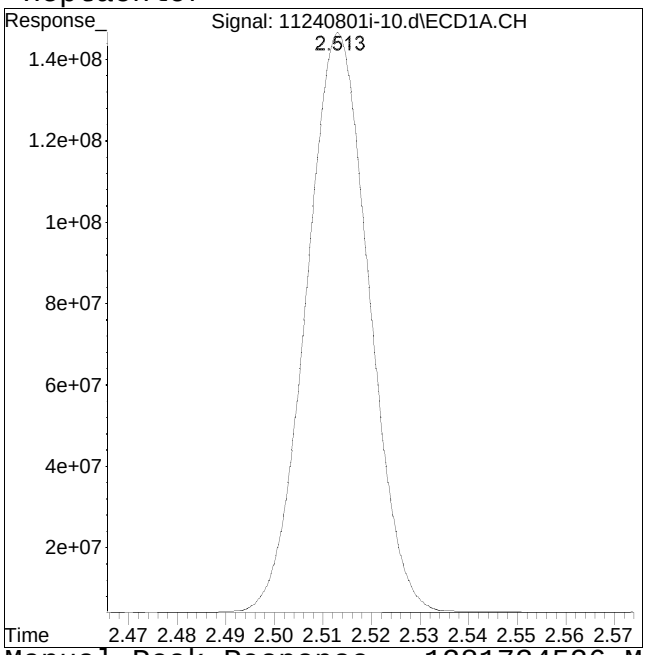
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #8: Heptachlor



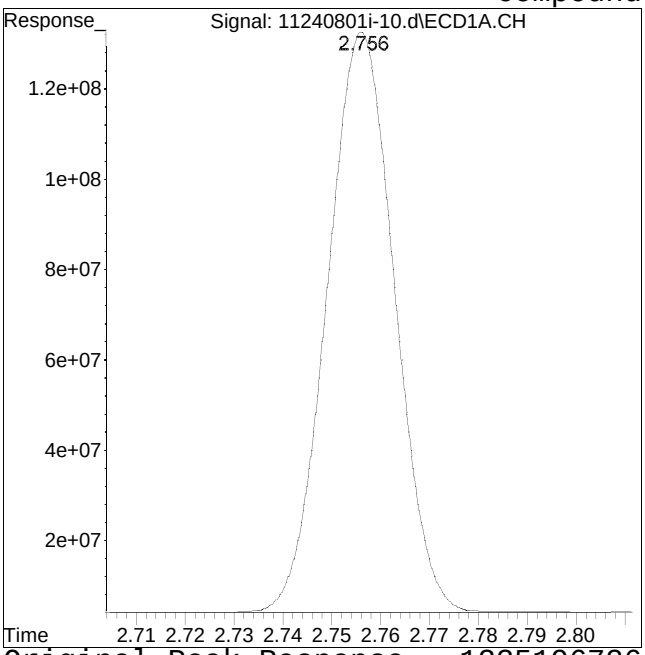

Original Peak Response = 1282750350 Manual Peak Response = 1281734526 M4
M4 = Poor automated baseline construction.

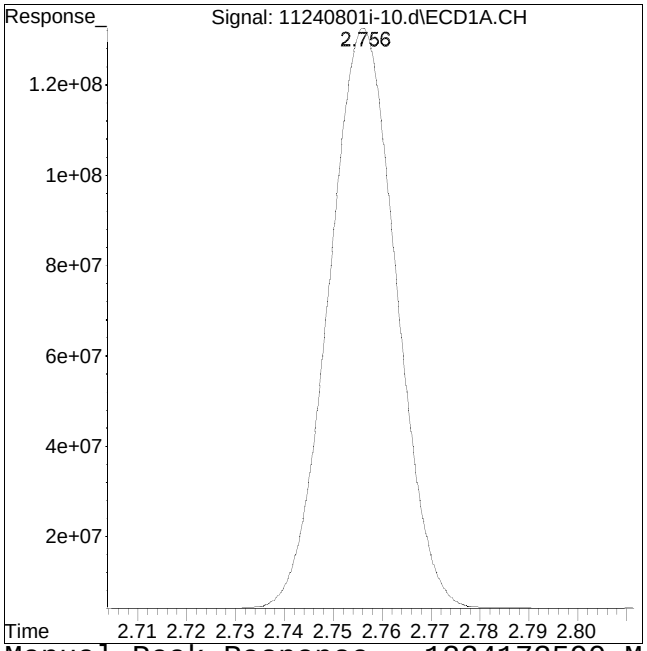
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #9: Aldrin



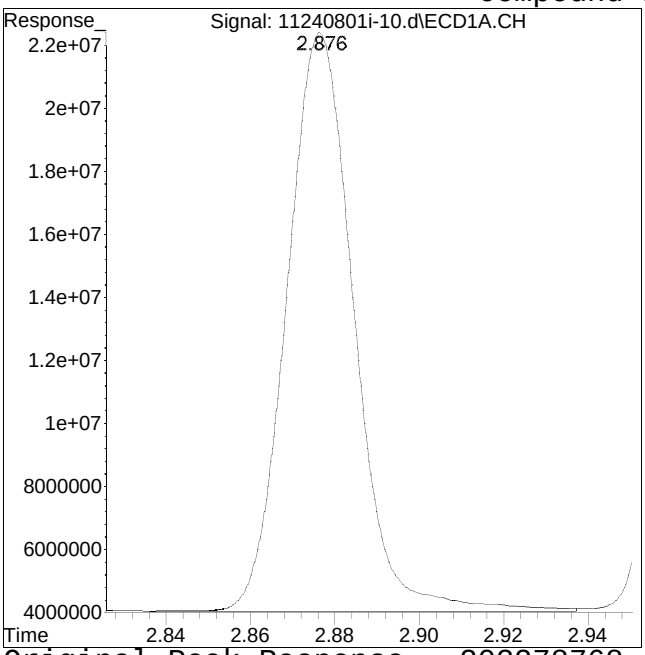

Original Peak Response = 1235196726 Manual Peak Response = 1234173590 M4
M4 = Poor automated baseline construction.

Manual Integration Report

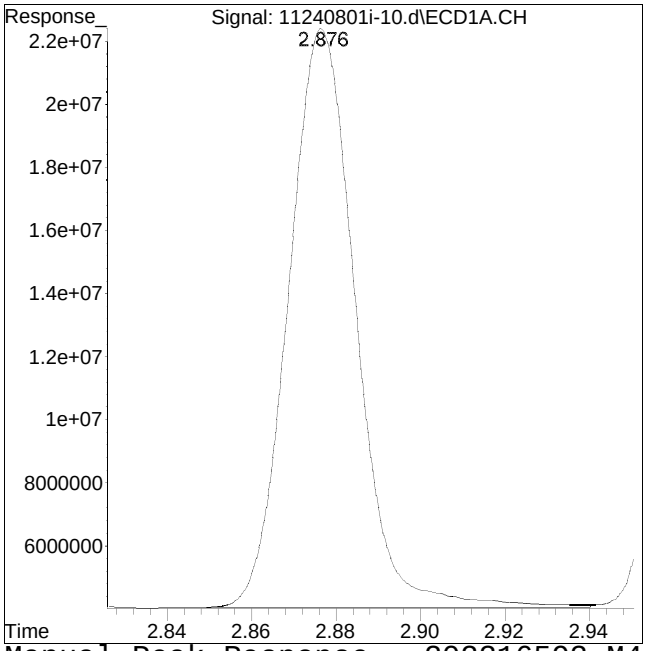
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #10: Alachlor




Original Peak Response = 203278768




Manual Peak Response = 202316593 M4

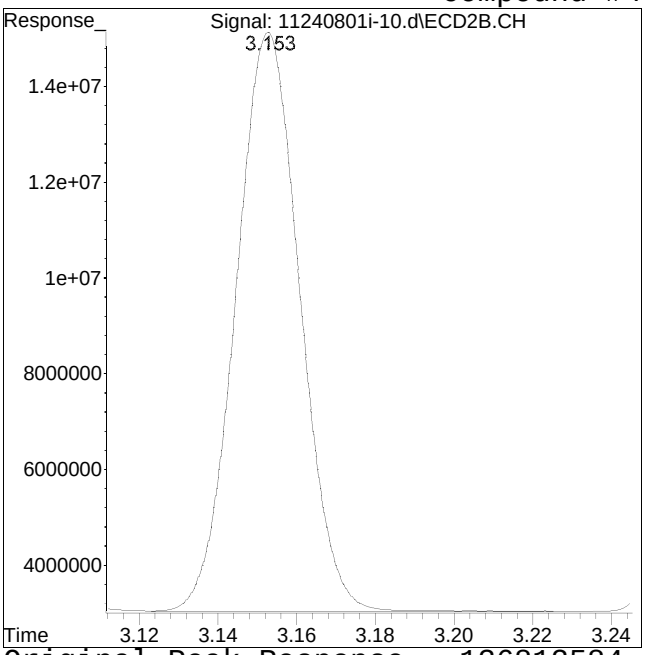
M4 = Poor automated baseline construction.

Manual Integration Report

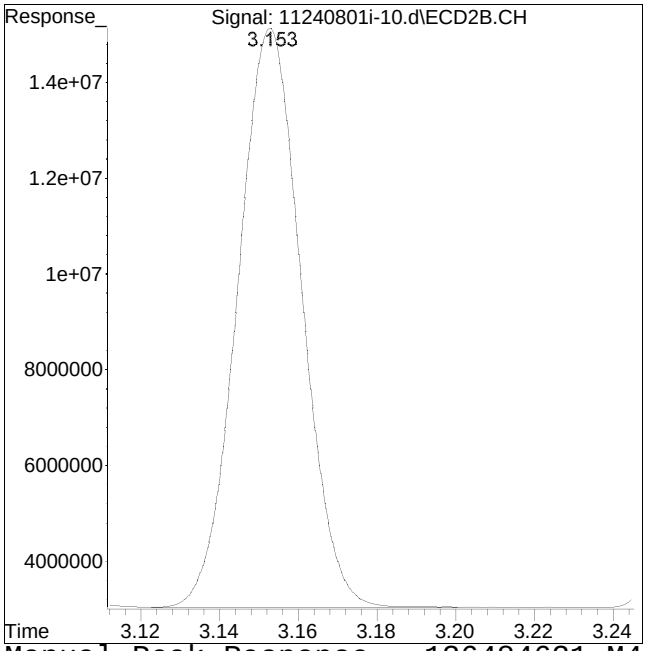
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #48: Alachlor #2




Original Peak Response = 136812584




Manual Peak Response = 136484631 M4

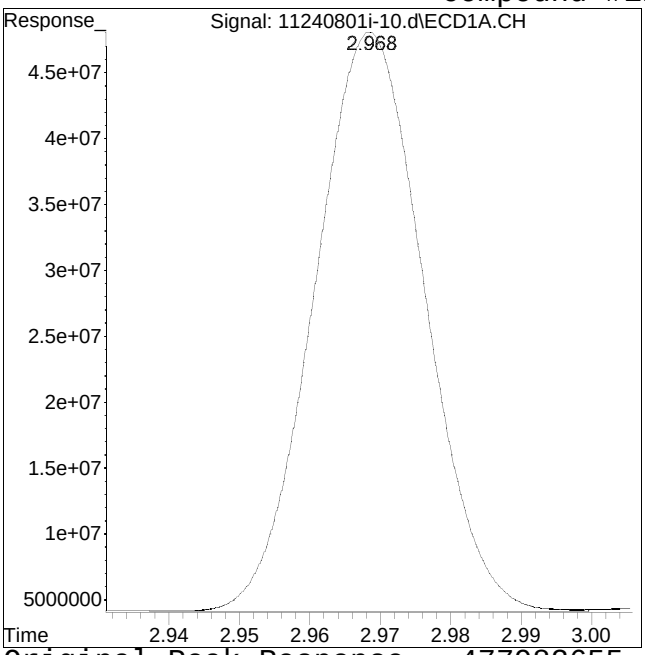
M4 = Poor automated baseline construction.

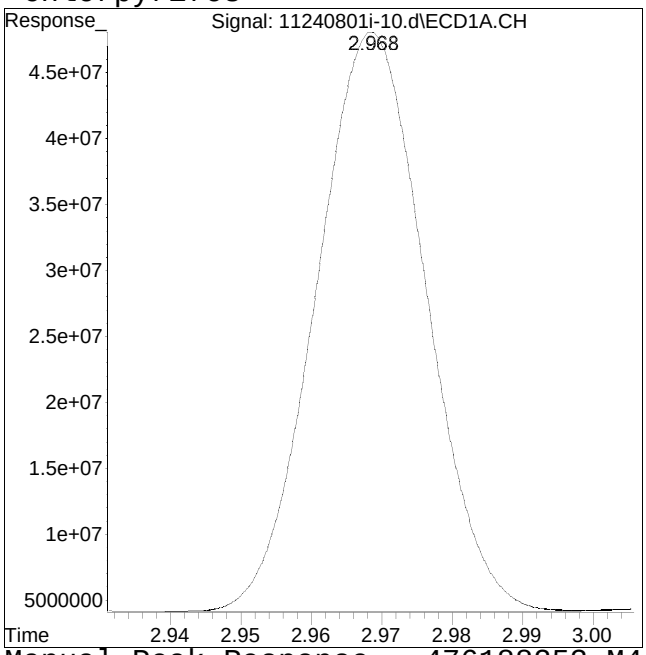
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #11: Chlorpyrifos



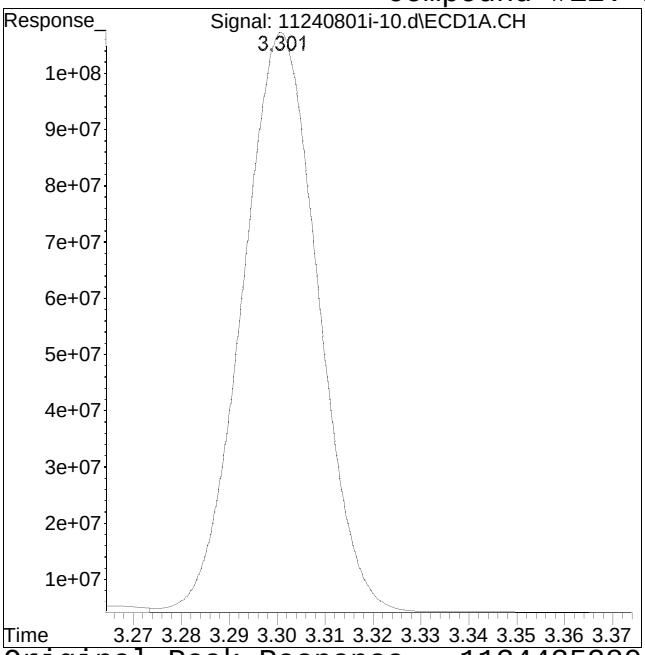



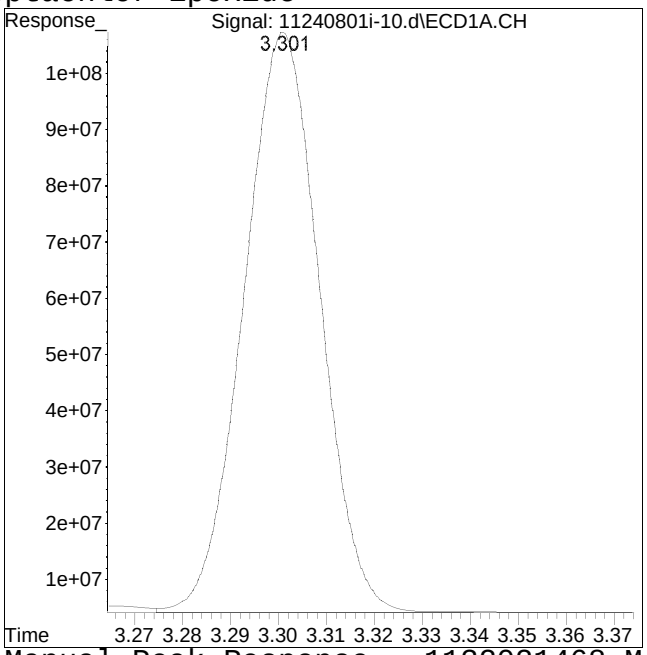

Original Peak Response = 477982655 Manual Peak Response = 476188253 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #12: Heptachlor Epoxide



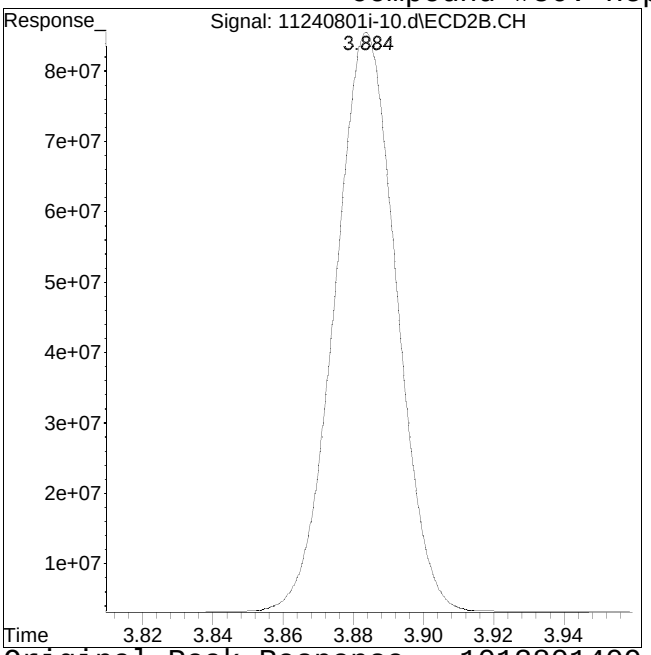



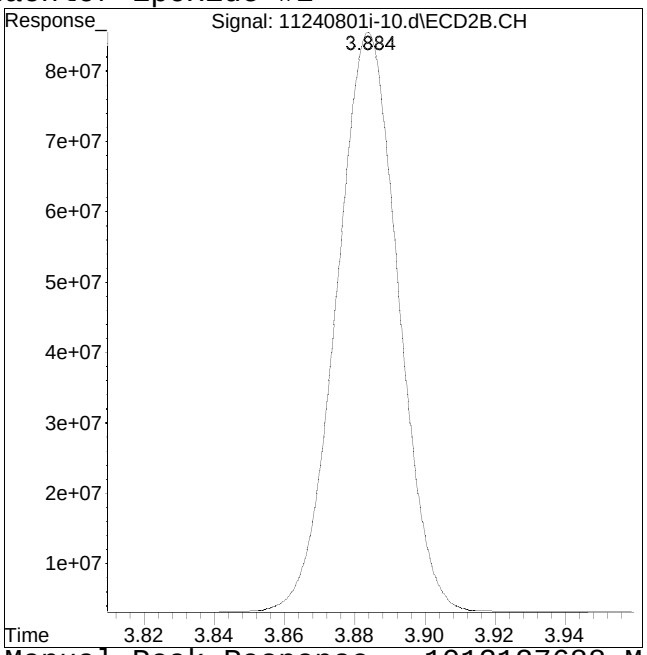

Original Peak Response = 1134435380 Manual Peak Response = 1132021468 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #50: Heptachlor Epoxide #2



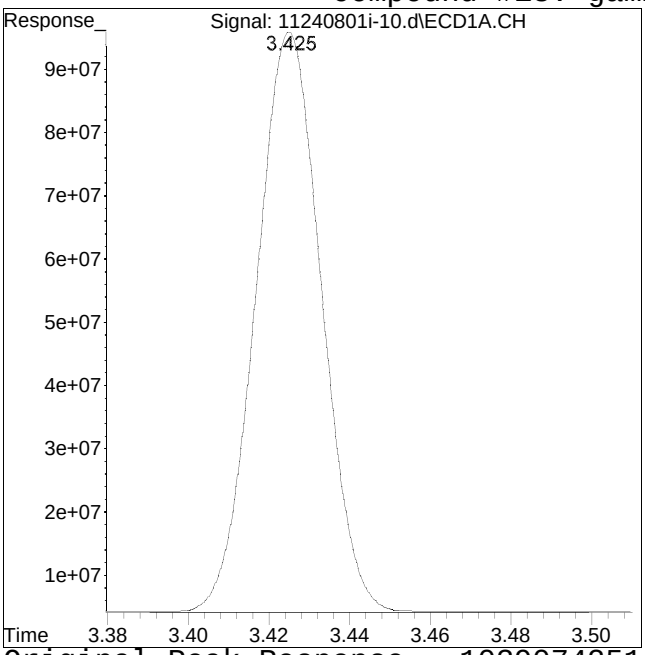



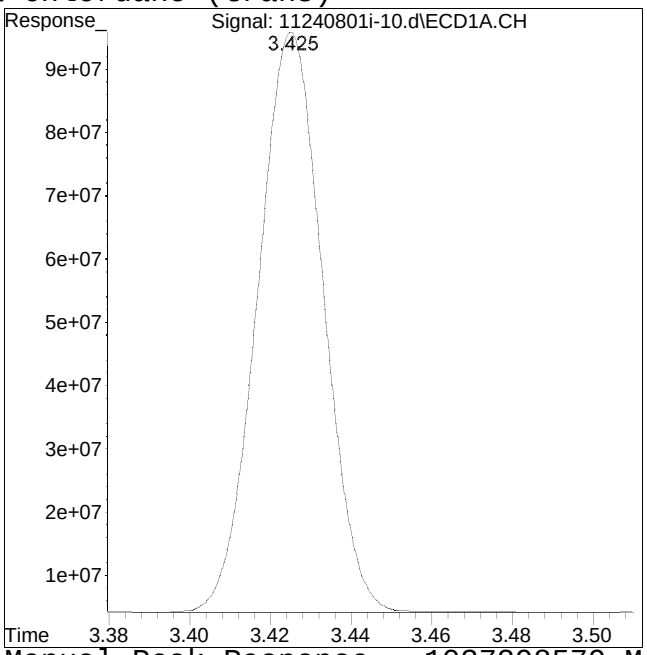

Original Peak Response = 1013801409 Manual Peak Response = 1013127688 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #13: gamma-Chlordane (trans)



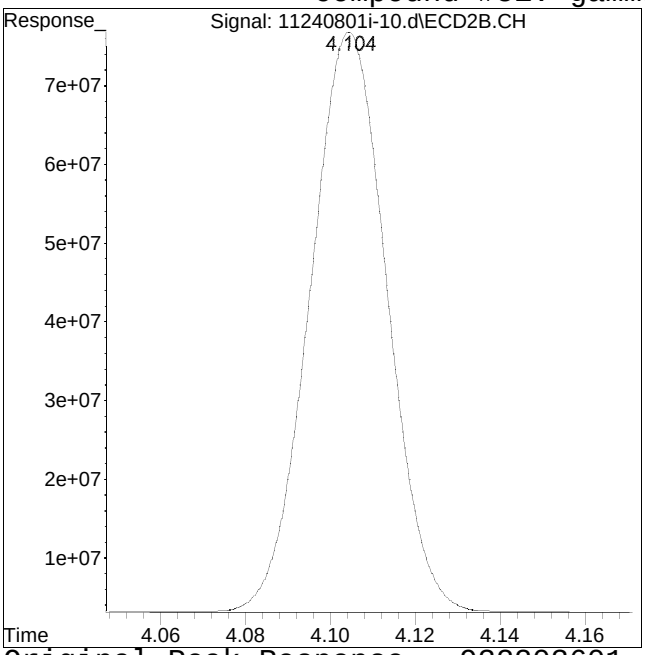




Original Peak Response = 1039074251 Manual Peak Response = 1037298579 M4
M4 = Poor automated baseline construction.

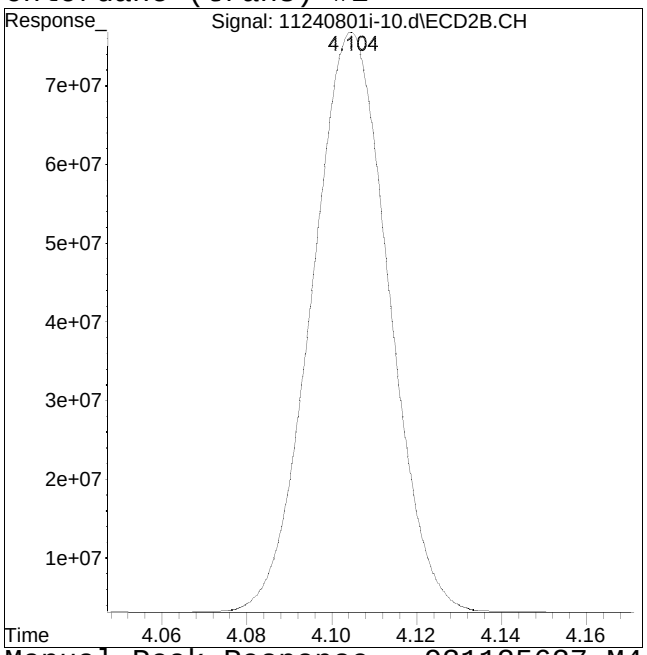
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 932203601



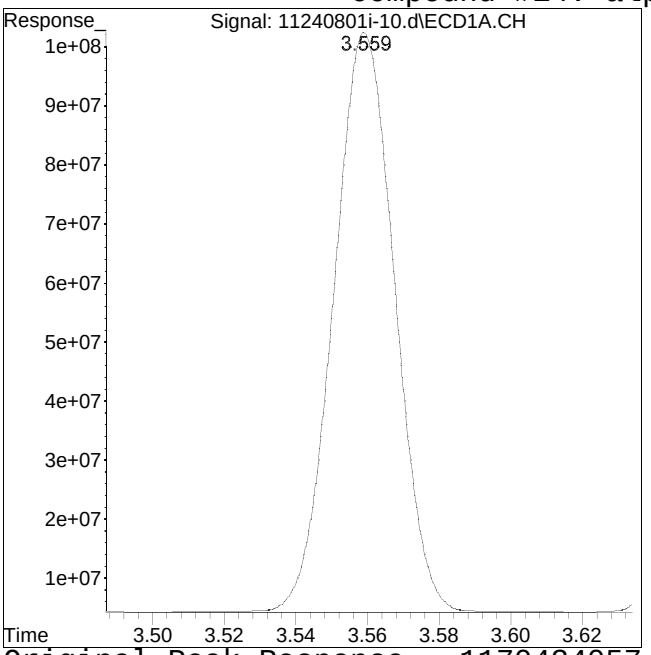

Manual Peak Response = 931125627 M4
M4 = Poor automated baseline construction.

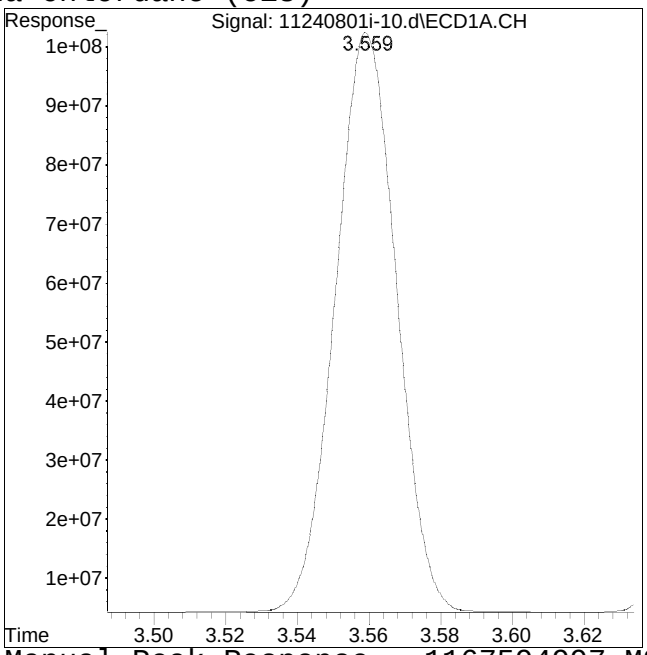
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #14: alpha-Chlordane (cis)



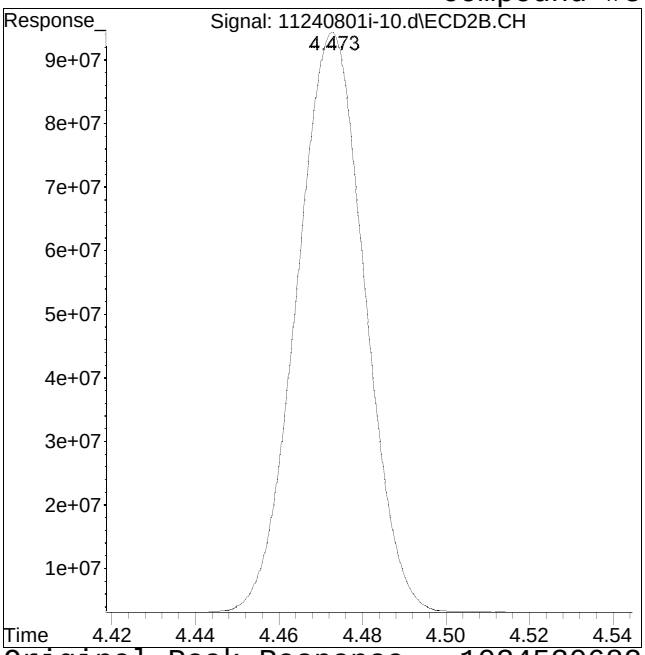

Original Peak Response = 1170434057 Manual Peak Response = 1167594997 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

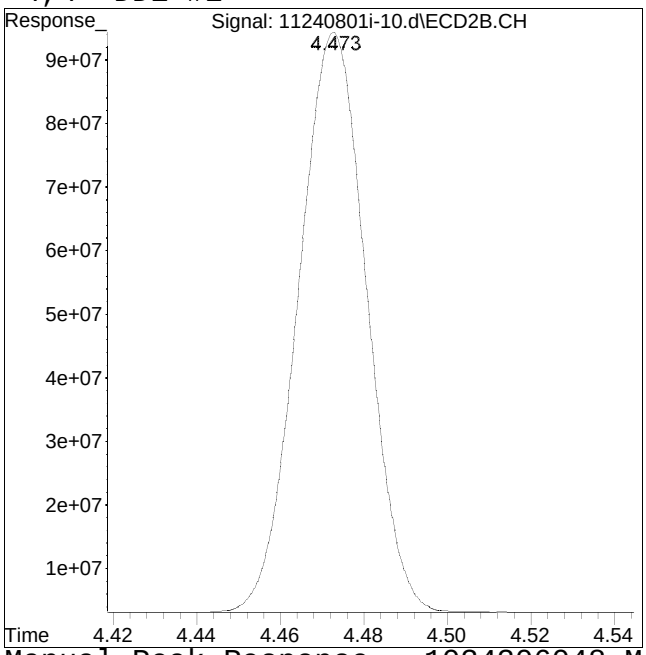
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #53: 4,4'-DDE #2



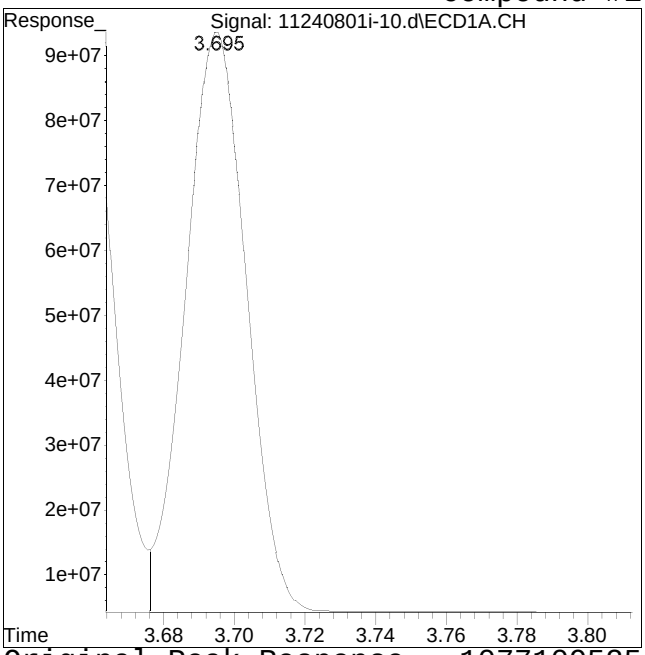

Original Peak Response = 1034530682 Manual Peak Response = 1034306048 M4
M4 = Poor automated baseline construction.

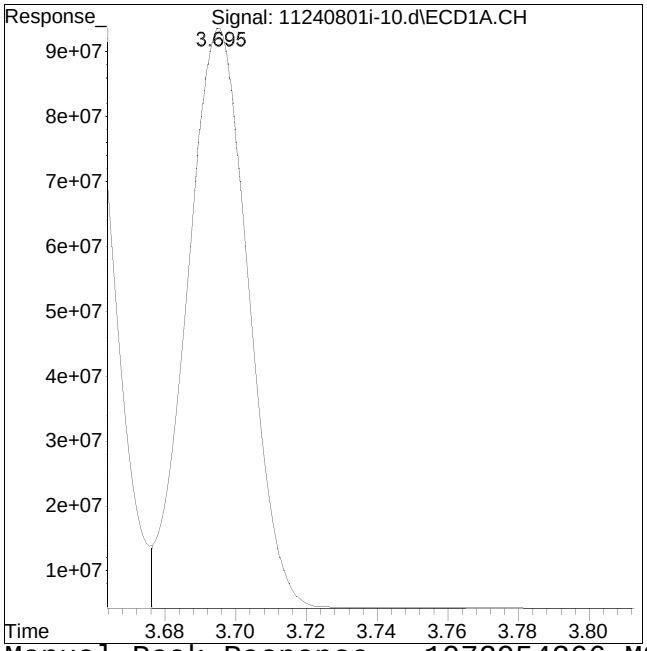
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #16: Endosulfan I



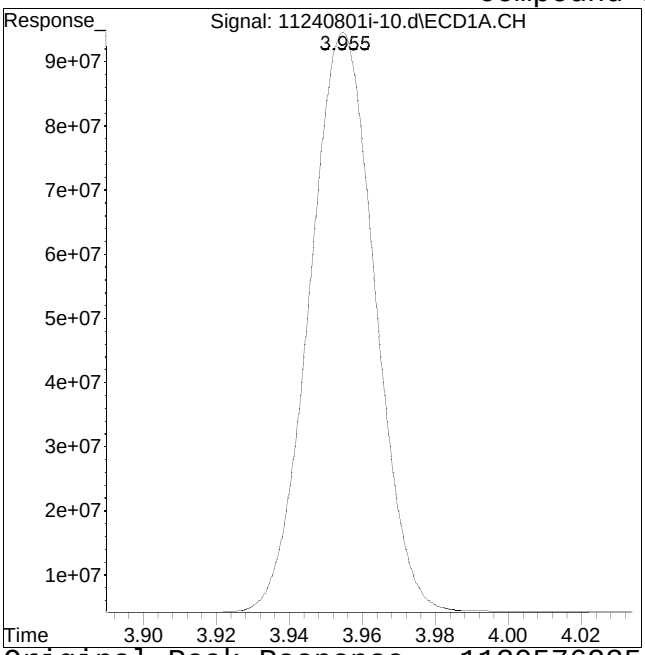



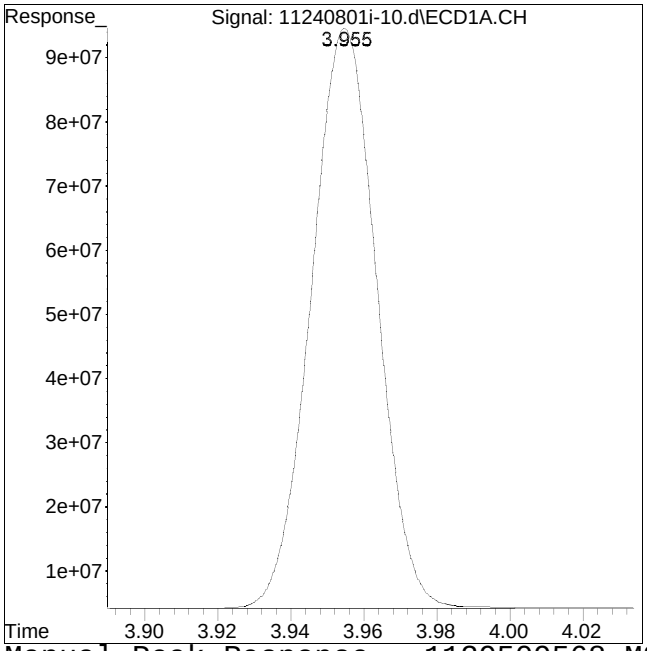

Original Peak Response = 1077109525 Manual Peak Response = 1072954266 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #17: Dieldrin



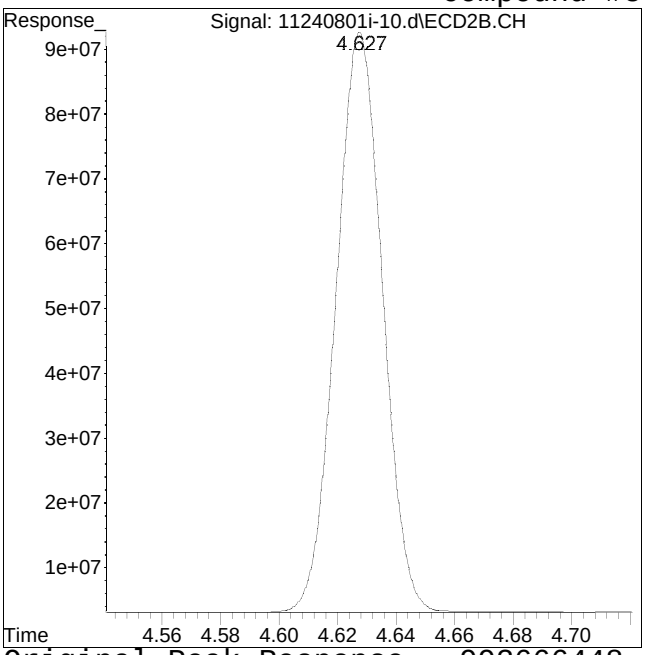

Original Peak Response = 1130576235 Manual Peak Response = 1129509568 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

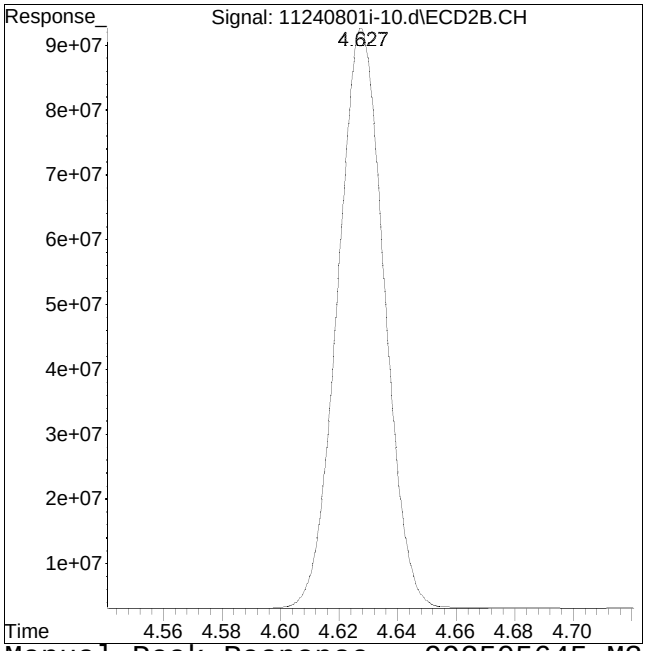
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #55: Dieldrin #2



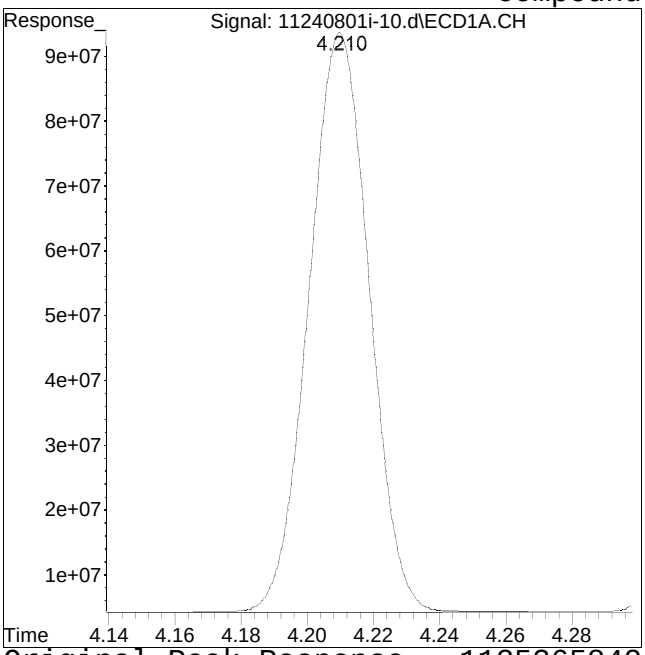

Original Peak Response = 993666448 Manual Peak Response = 992505645 M3

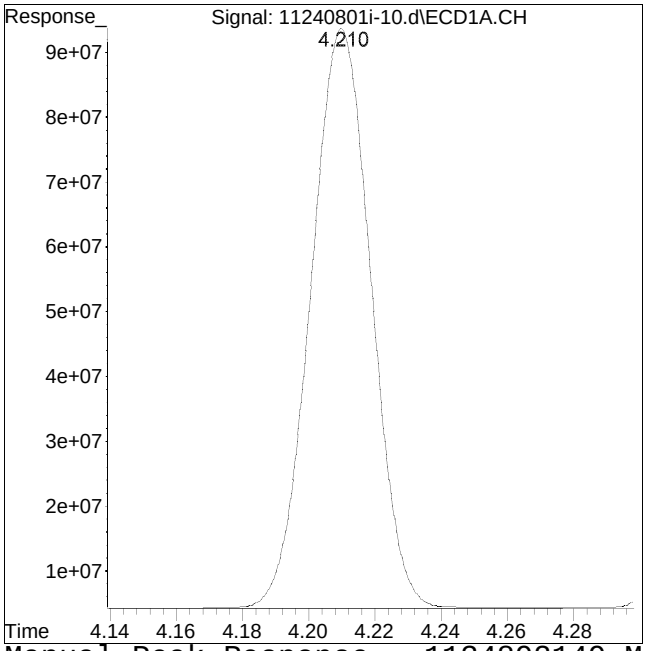
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #18: Endrin



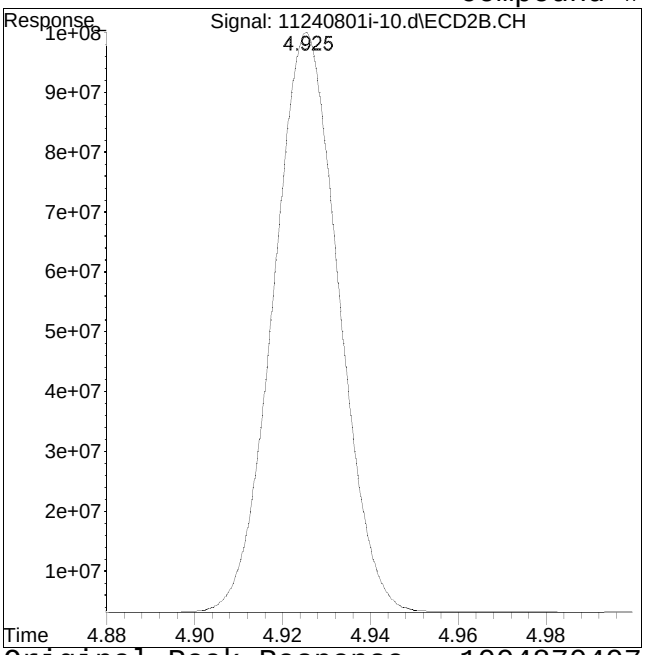



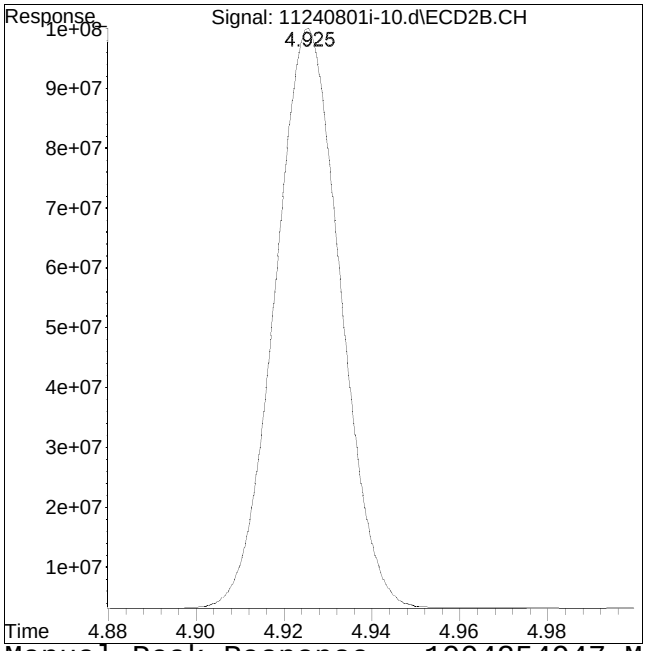

Original Peak Response = 1135365842 Manual Peak Response = 1134892149 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1 Quant Date : 8/2/2024 9:10 am

Compound #56: Endrin #2



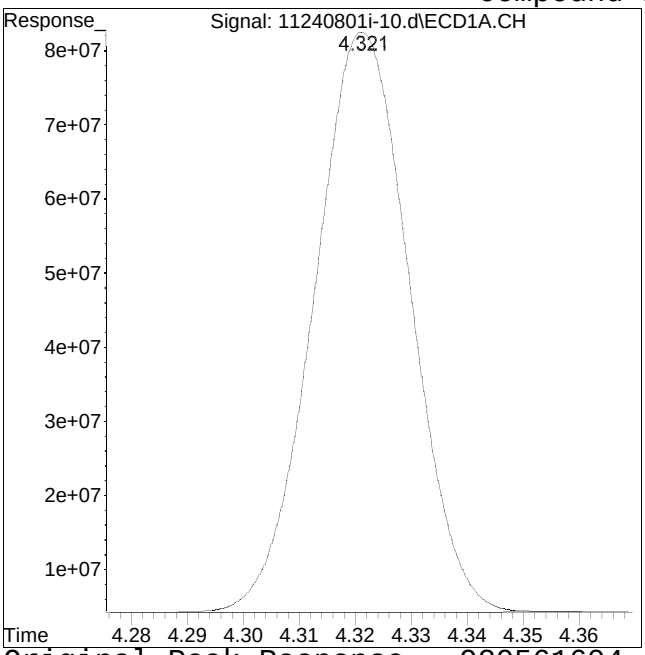

Original Peak Response = 1004870407 Manual Peak Response = 1004254947 M4
M4 = Poor automated baseline construction.

Manual Integration Report

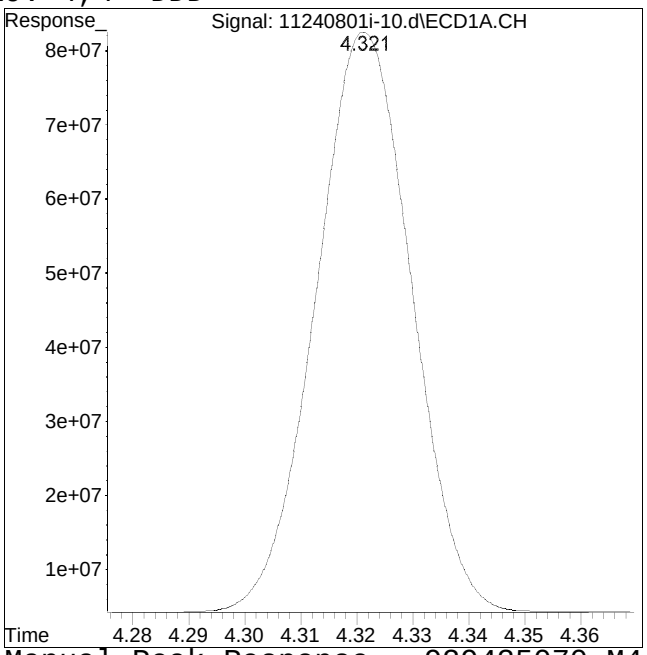
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #19: 4,4'-DDD




Original Peak Response = 929561604




Manual Peak Response = 929435070 M4

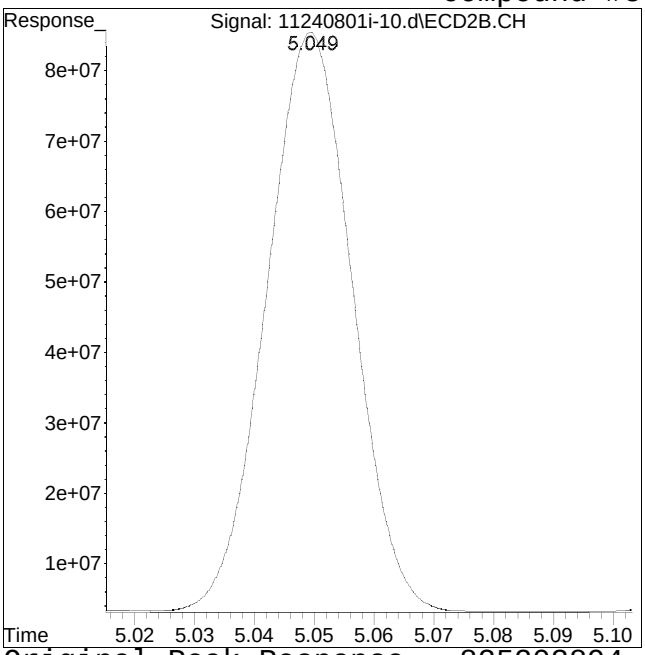
M4 = Poor automated baseline construction.

Manual Integration Report

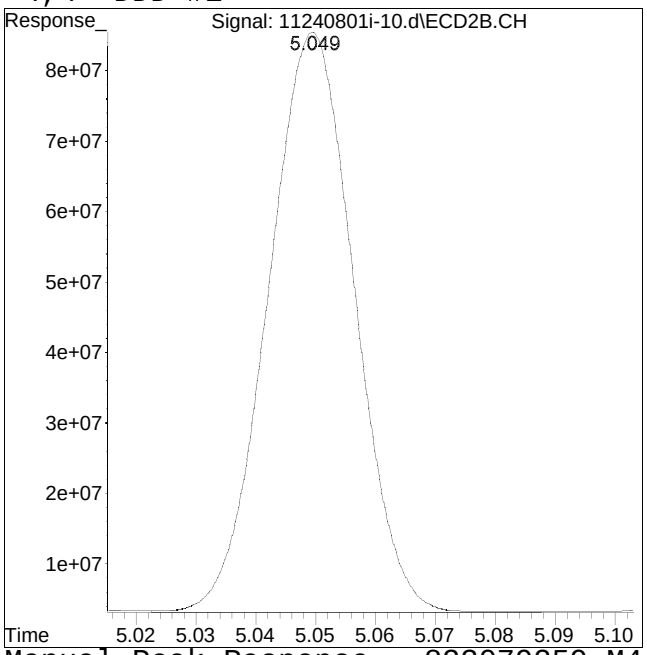
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #57: 4,4'-DDD #2




Original Peak Response = 825203894




Manual Peak Response = 823079259 M4

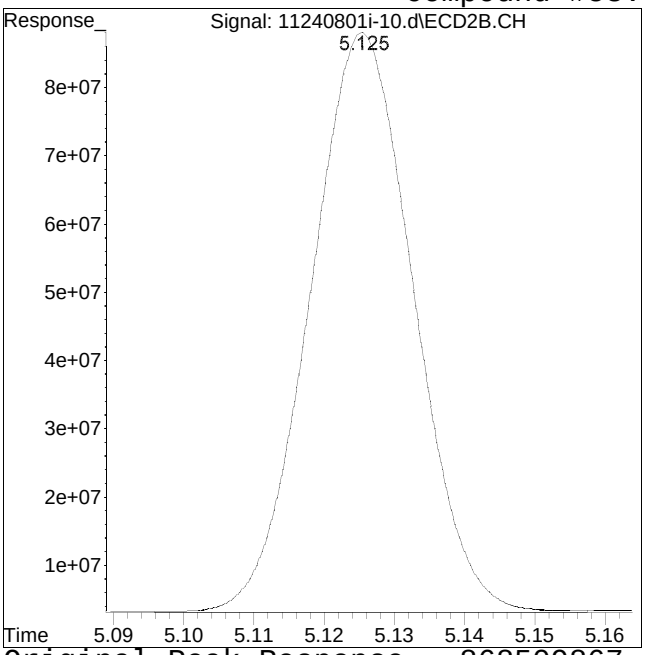
M4 = Poor automated baseline construction.

Manual Integration Report

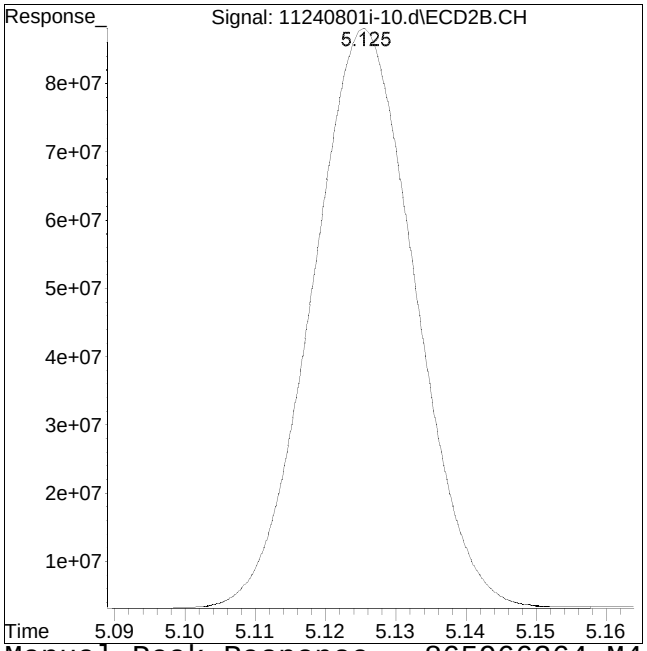
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #58: Endosulfan II #2




Original Peak Response = 868509867




Manual Peak Response = 865966264 M4

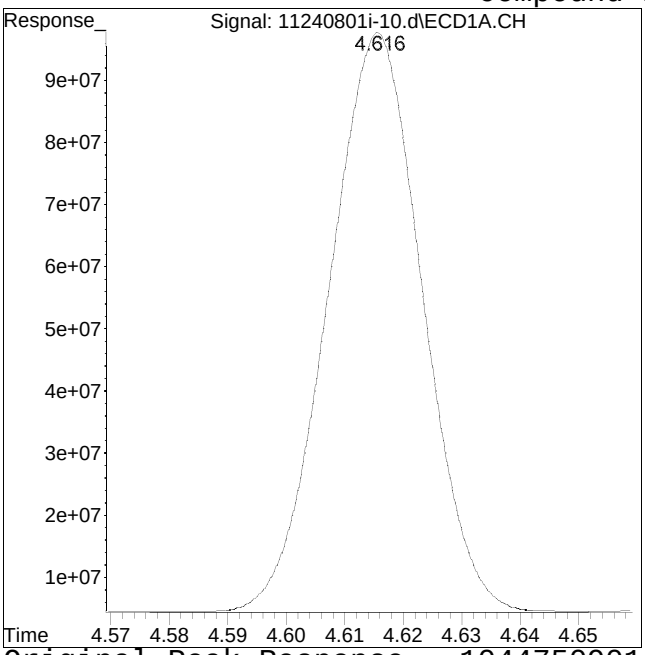
M4 = Poor automated baseline construction.

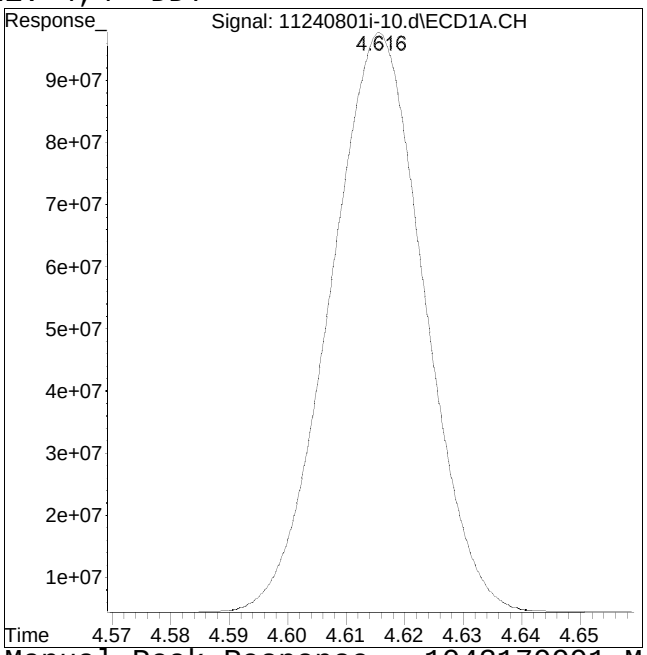
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

## Compound #21: 4,4'-DDT



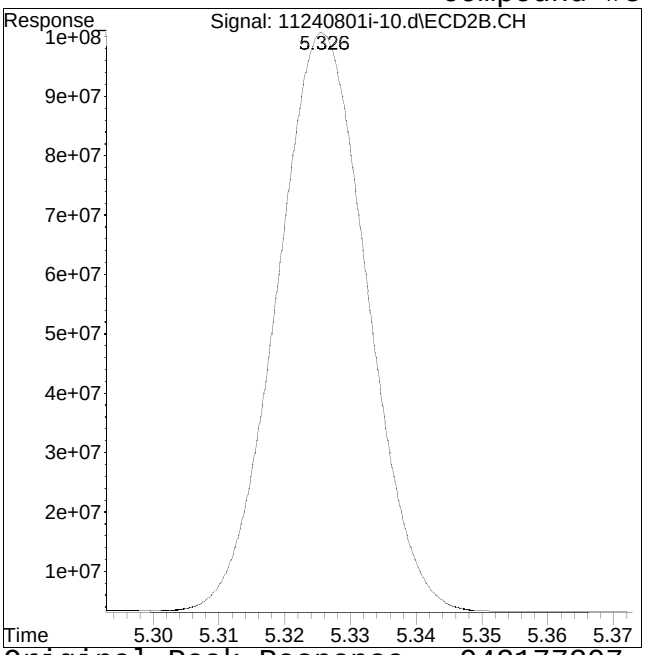

Original Peak Response = 1044750901 Manual Peak Response = 1043179991 M4
M4 = Poor automated baseline construction.

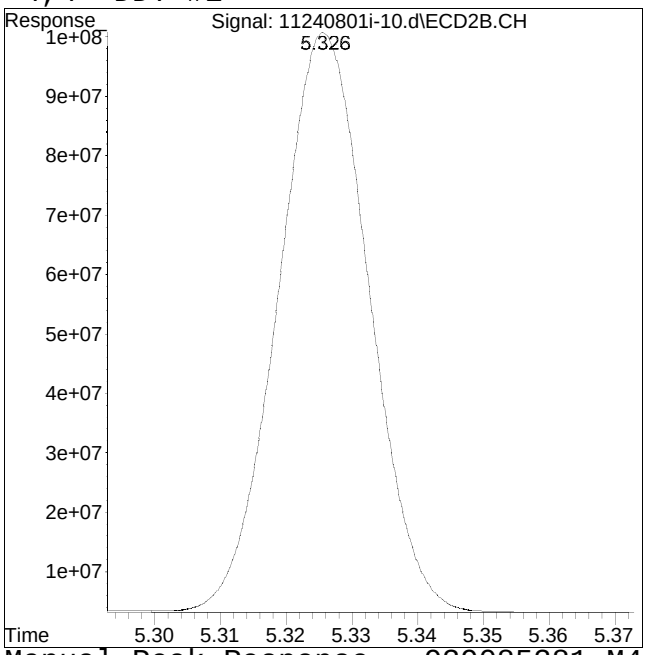
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #59: 4,4'-DDT #2



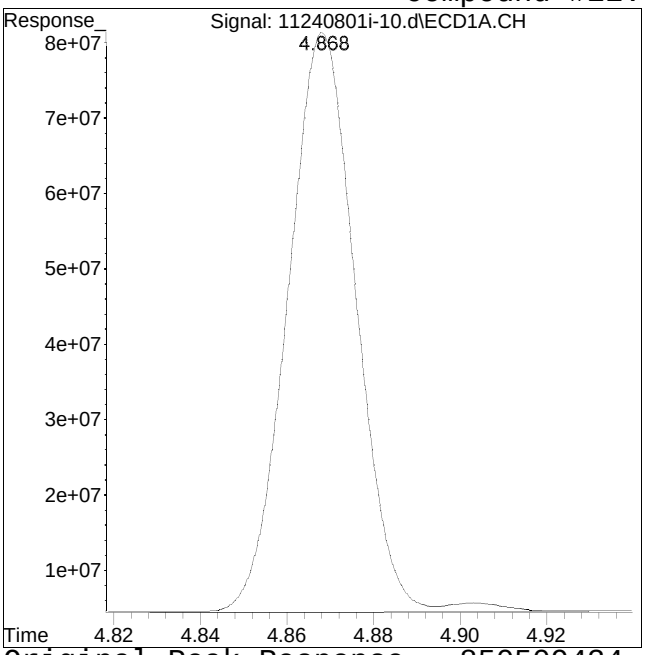

Original Peak Response = 942177307 Manual Peak Response = 939085381 M4
M4 = Poor automated baseline construction.

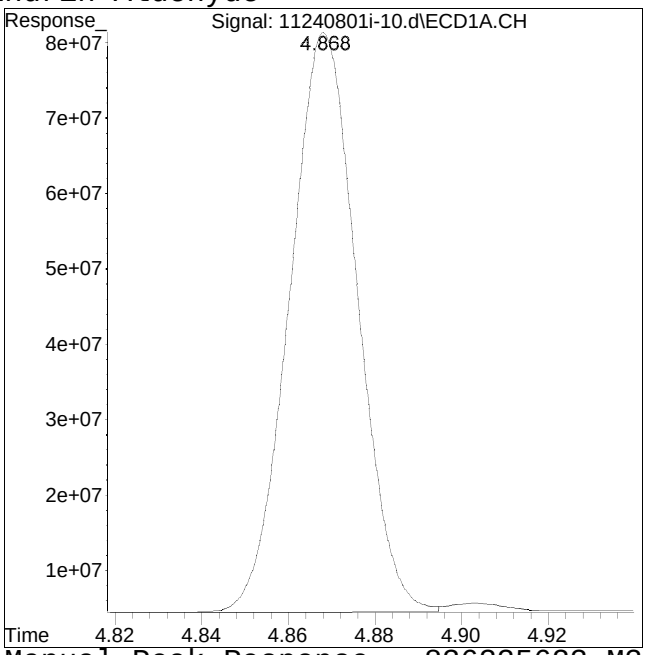
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #22: Endrin Aldehyde



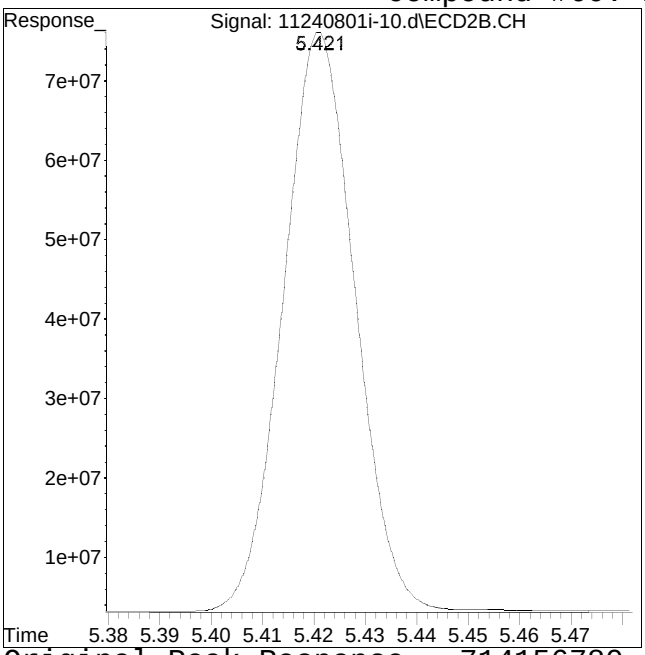

Original Peak Response = 850509434 Manual Peak Response = 836335623 M3

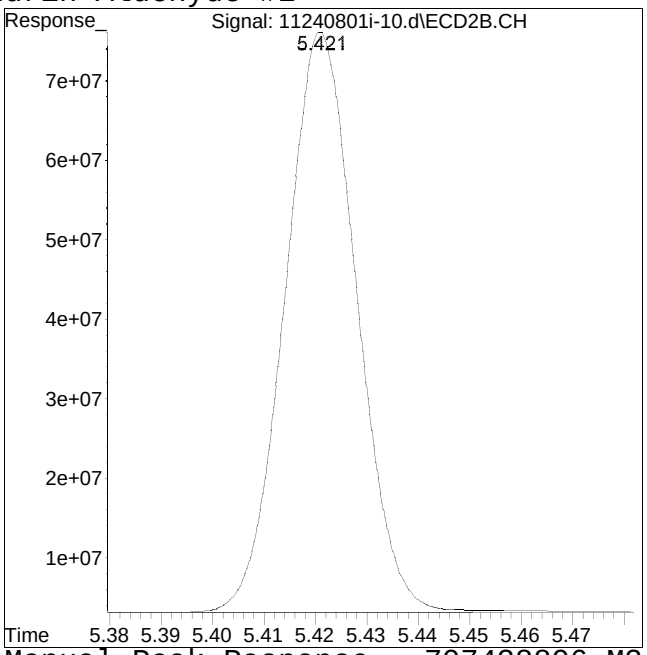
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 714156780 Manual Peak Response = 707438896 M3

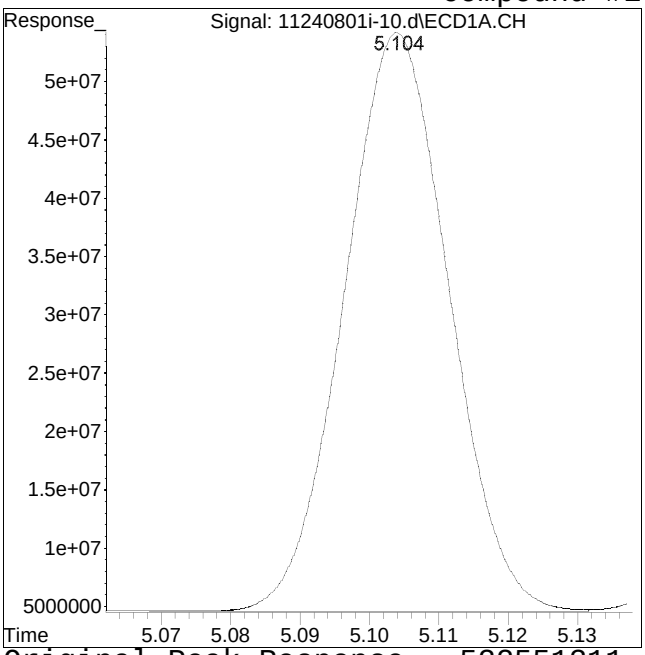
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

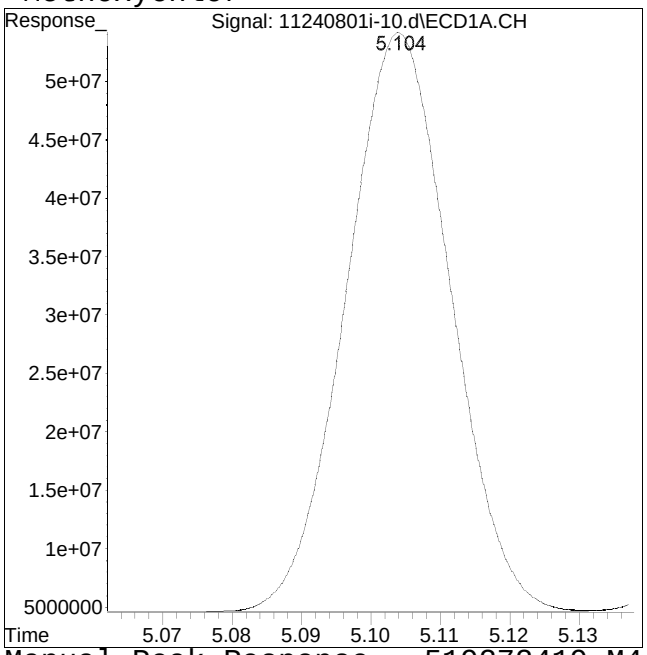
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #23: Methoxychlor



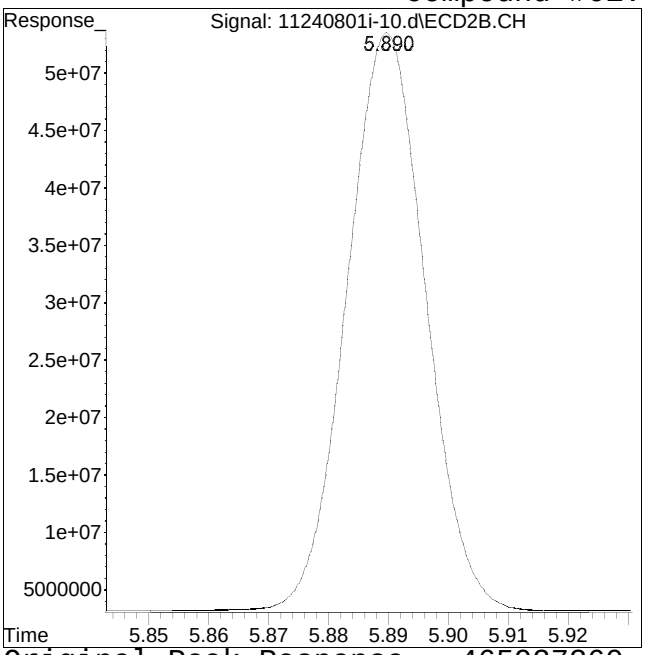




Original Peak Response = 522551311 Manual Peak Response = 519272419 M4
M4 = Poor automated baseline construction.

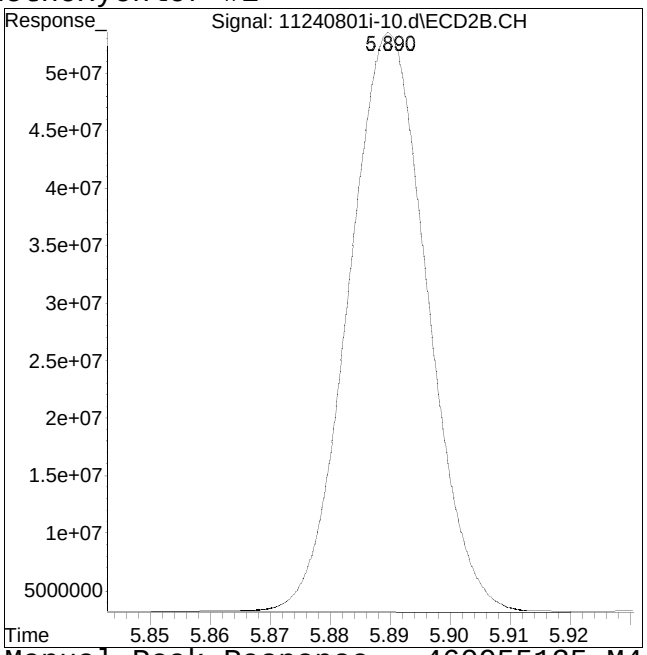
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #61: Methoxychlor #2




Original Peak Response = 465927360




Manual Peak Response = 460955135 M4

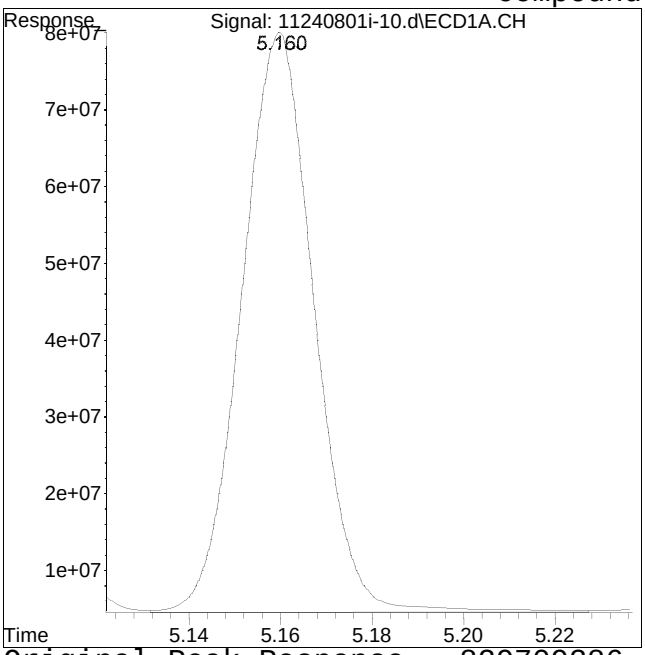
M4 = Poor automated baseline construction.

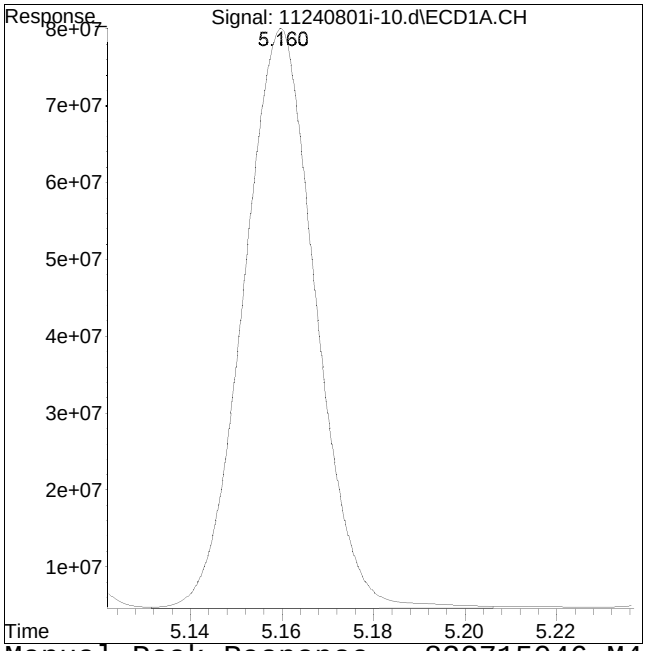
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #24: Mirex



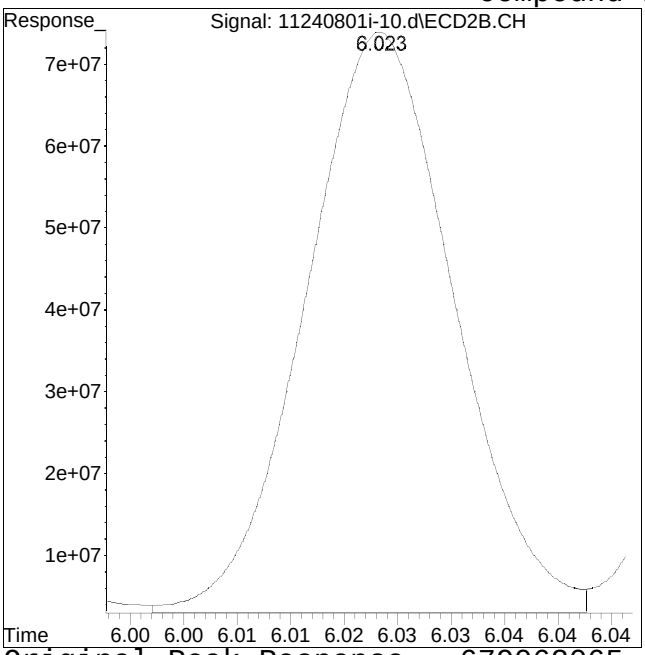




Original Peak Response = 829709386 Manual Peak Response = 822715046 M4
M4 = Poor automated baseline construction.

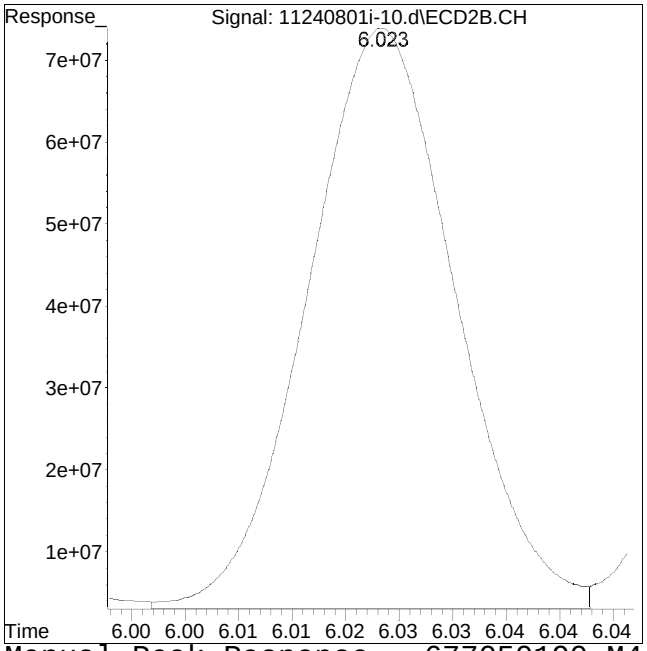
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-10.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:01 Instrument : Pest 11
Sample : il9pest,42e,,pp 11680 L0.1Quant Date : 8/2/2024 9:10 am

Compound #62: Mirex #2




Original Peak Response = 679062065



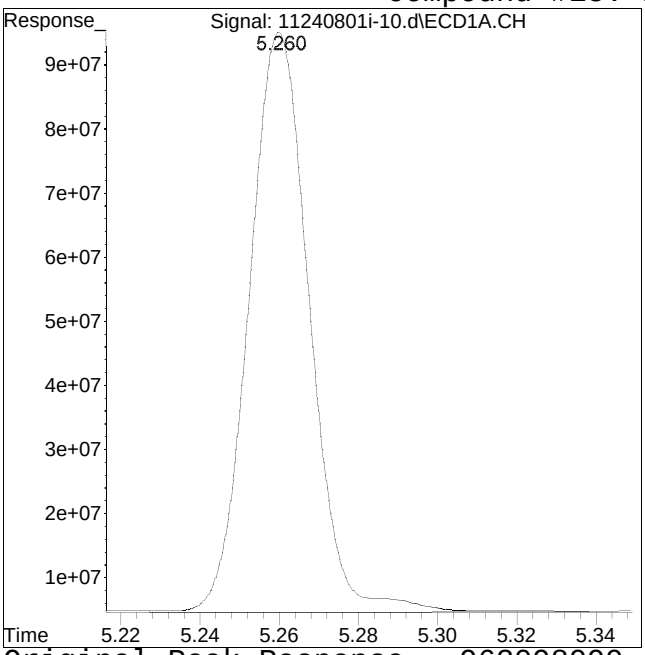

Manual Peak Response = 677050190 M4
M4 = Poor automated baseline construction.

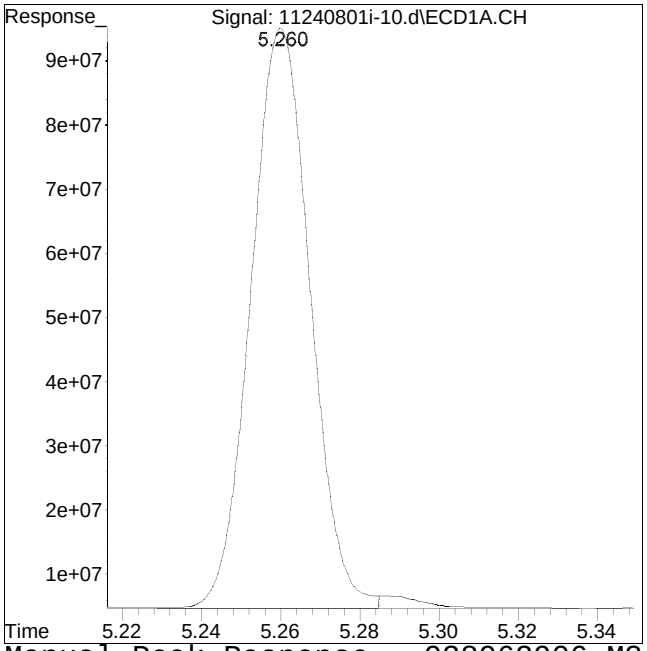
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #25: Endosulfan Sulfate




Original Peak Response = 963098999 Manual Peak Response = 938962906 M3

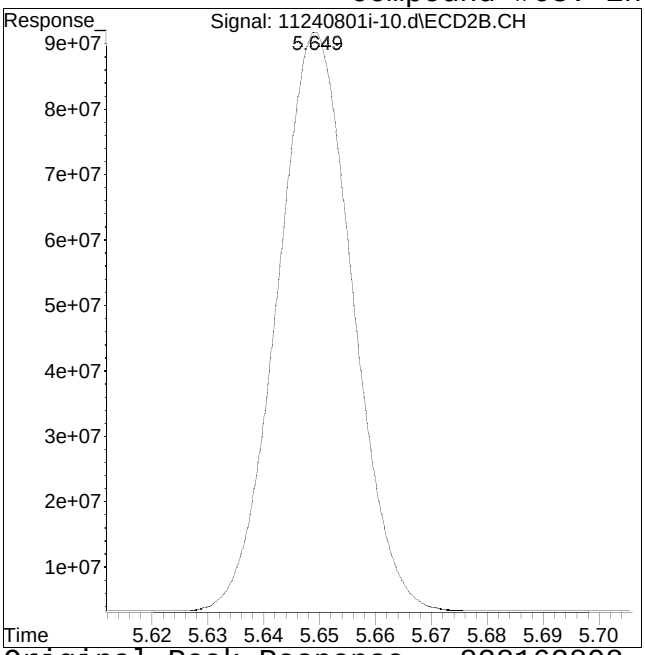
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

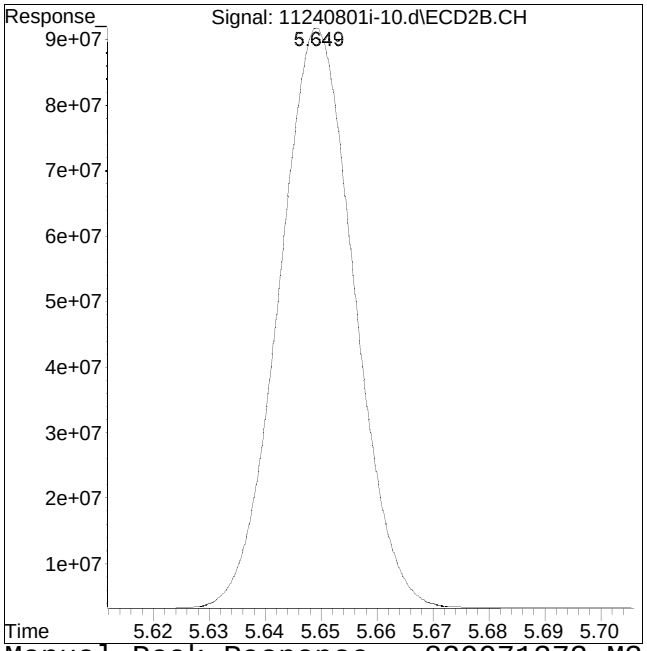
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 838162808 Manual Peak Response = 829971373 M3

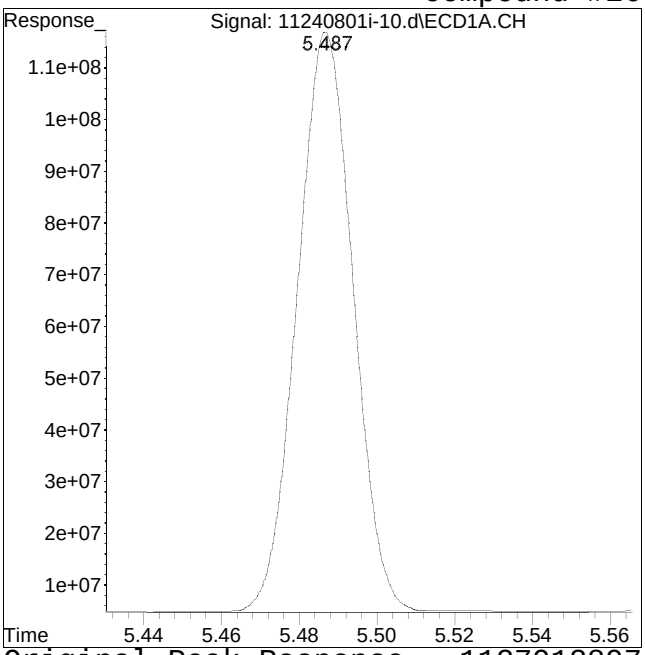
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

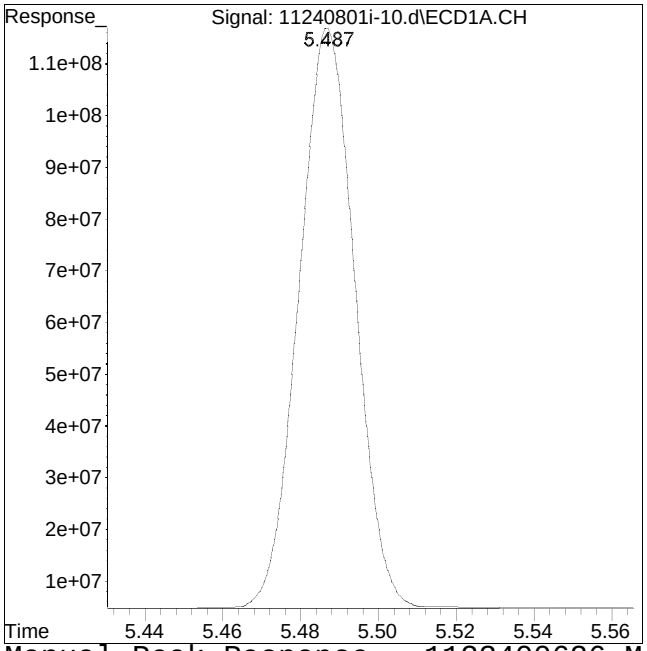
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #26: Endrin Ketone



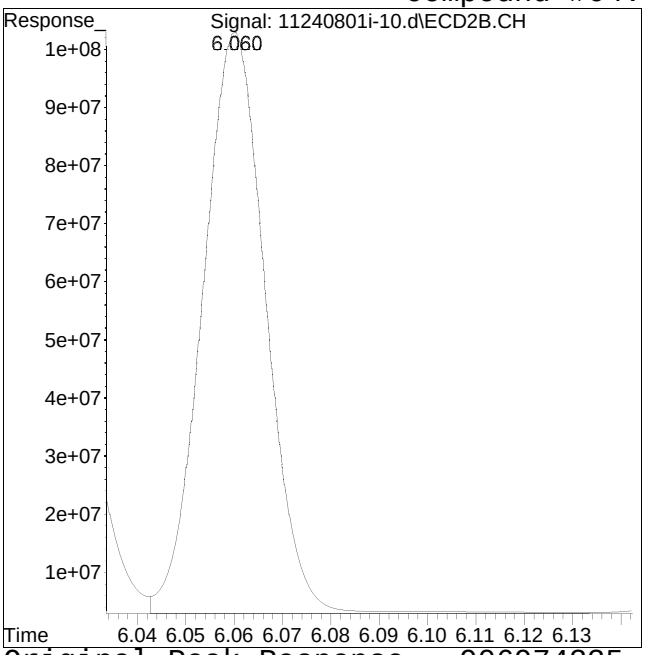

Original Peak Response = 1127912897 Manual Peak Response = 1123400626 M4
M4 = Poor automated baseline construction.

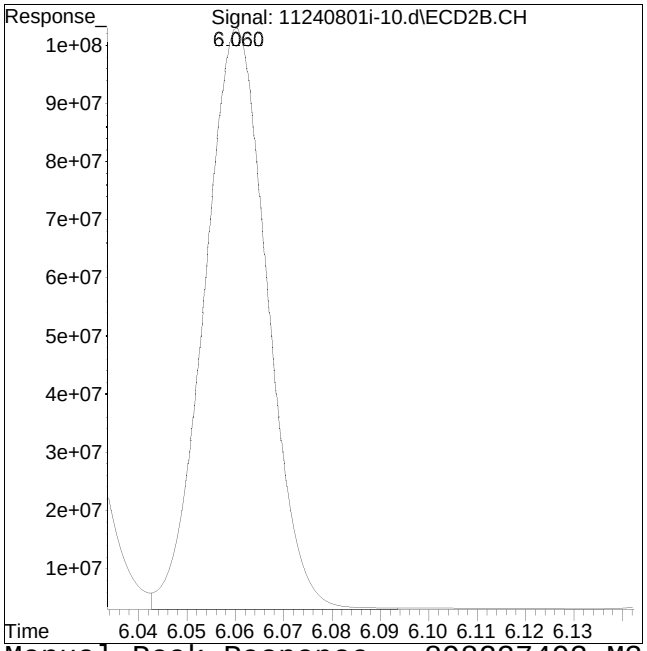
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #64: Endrin Ketone #2




Original Peak Response = 906974335 Manual Peak Response = 898237493 M3

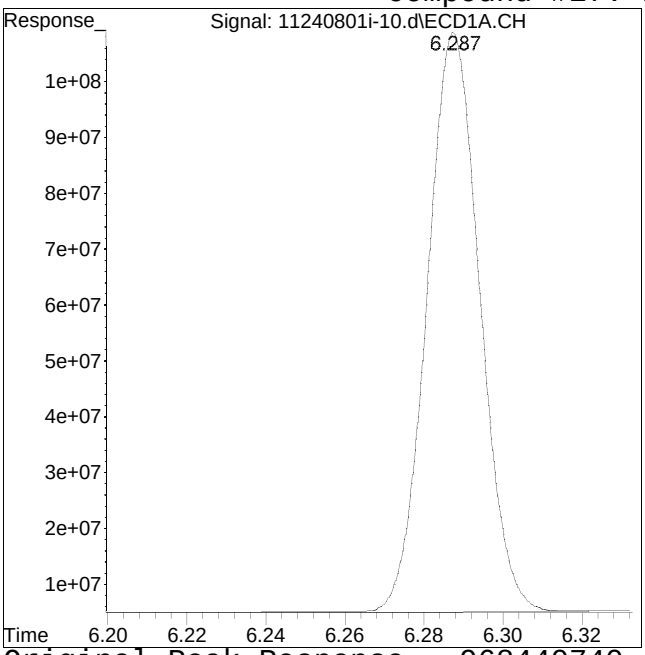
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

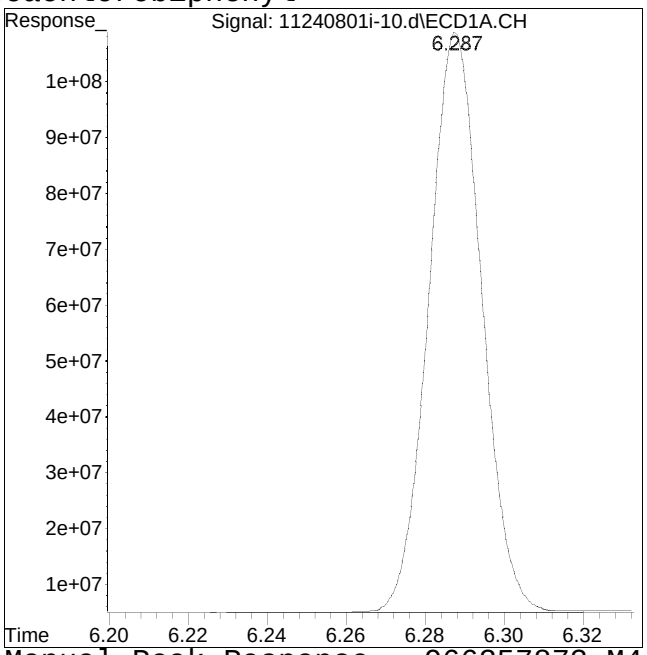
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

## Compound #27: Decachlorobiphenyl




Original Peak Response = 968440740




Manual Peak Response = 966357873 M4

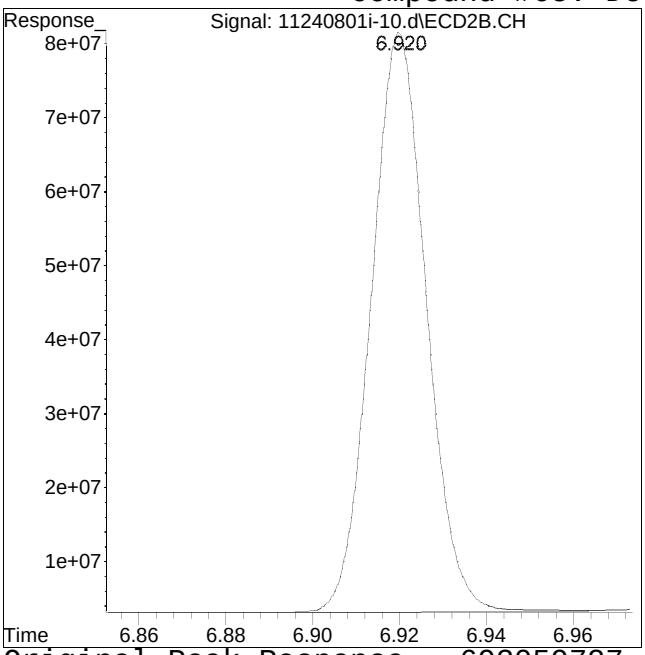
M4 = Poor automated baseline construction.

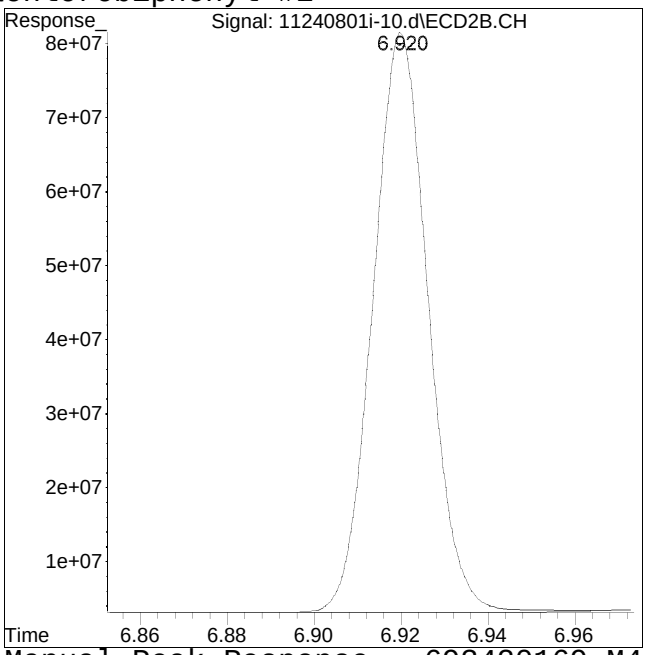
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-10.d
Date Inj'd : 8/1/2024 20:01
Sample : il9pest,42e,,pp 11680 L0.1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:10 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 693059727 Manual Peak Response = 693420169 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:12
Operator : PEST11:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:29:32 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 234.6E6 | 183.1E6 | 25.000M3 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 1913.3E6 | 1598.0E6 | 193.264M3 | 202.706M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 386.53%# | 405.41%# |
| 27) s | Decachlorobi | 6.288 | 6.920 | 1913.5E6 | 1380.9E6 | 195.015M4 | 201.842M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 390.03%# | 403.68%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.178 | 2442.7E6 | 1675.4E6 | 191.797M3 | 199.678 |
| 4) t | alpha-BHC | 1.964 | 2.271 | 3010.2E6 | 2583.6E6 | 198.283M4 | 206.150M3 |
| 5) t | gamma-BHC (l | 2.166 | 2.557 | 2765.0E6 | 2320.8E6 | 197.699M3 | 205.175M4 |
| 6) t | beta-BHC | 2.221 | 2.622 | 1120.5E6 | 933.3E6 | 194.276M4 | 198.901M4 |
| 7) t | delta-BHC | 2.350 | 2.889 | 2819.2E6 | 2384.1E6 | 199.250M4 | 206.915M4 |
| 8) t | Heptachlor | 2.513 | 2.952 | 2482.5E6 | 2268.1E6 | 191.877M4 | 198.593M4 |
| 9) t | Aldrin | 2.757 | 3.271 | 2440.7E6 | 2165.8E6 | 197.425M4 | 203.689 |
| 10) t | Alachlor | 2.877 | 3.153 | 373.3E6 | 252.0E6 | 178.169M4 | 180.792M3 |
| 11) t | Chlorpyrifos | 2.969 | 3.506 | 874.1E6 | 975.3E6 | 175.986M4 | 185.391M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:12
Operator : PEST11:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:29:32 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.301 | 3.884 | 2205.7E6 | 1981.0E6 | 192.763M3 | 199.269M4 |
| 13) | t | gamma-Chlord | 3.425 | 4.105 | 2083.4E6 | 1868.5E6 | 200.885M4 | 206.064M4 |
| 14) | t | alpha-Chlord | 3.559 | 4.274 | 2331.6E6 | 2051.6E6 | 198.900M3 | 204.428M4 |
| 15) | t | 4,4'-DDE | 3.657 | 4.473 | 2393.8E6 | 2077.4E6 | 202.115M4 | 207.169M3 |
| 16) | t | Endosulfan I | 3.696 | 4.336 | 2104.4E6 | 1850.2E6 | 194.817M4 | 199.685M4 |
| 17) | t | Dieldrin | 3.955 | 4.628 | 2245.1E6 | 1969.5E6 | 198.785M4 | 203.766M4 |
| 18) | t | Endrin | 4.210 | 4.926 | 2229.3E6 | 1985.9E6 | 195.383M3 | 202.639M4 |
| 19) | t | 4,4'-DDD | 4.322 | 5.050 | 1880.5E6 | 1661.0E6 | 203.384M4 | 208.277M4 |
| 20) | t | Endosulfan I | 4.452 | 5.126 | 1974.6E6 | 1684.2E6 | 192.875M4 | 198.396M4 |
| 21) | t | 4,4'-DDT | 4.616 | 5.326 | 2109.7E6 | 1890.1E6 | 202.314M4 | 207.312M3 |
| 22) | t | Endrin Aldeh | 4.869 | 5.421 | 1666.3E6 | 1402.7E6 | 198.364M4 | 202.391M3 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 988.3E6 | 899.3E6 | 185.976M4 | 196.434M3 |
| 24) | t | Mirex | 5.160 | 6.023 | 1621.2E6 | 1338.7E6 | 194.224M4 | 199.638M4 |
| 25) | t | Endosulfan S | 5.260 | 5.649 | 1840.3E6 | 1637.4E6 | 194.770M3 | 201.144M4 |
| 26) | t | Endrin Keton | 5.487 | 6.060 | 2176.6E6 | 1757.5E6 | 191.458M4 | 198.938M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:12
Operator : PEST11:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:29:32 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

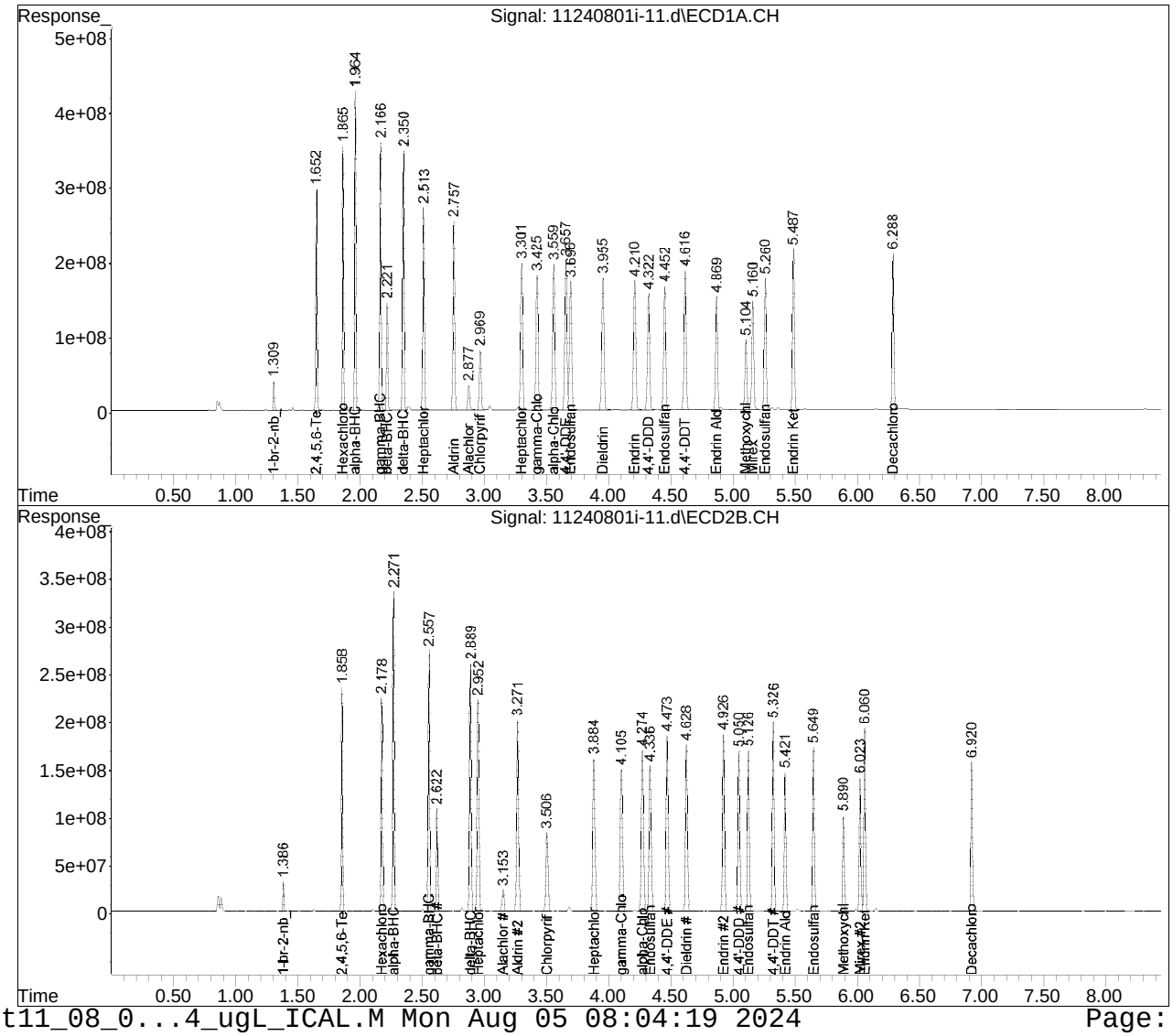
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:12
Operator : PEST11:ejl
Sample : il10pest,42e,,pp 11679 L0.2
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:29:32 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

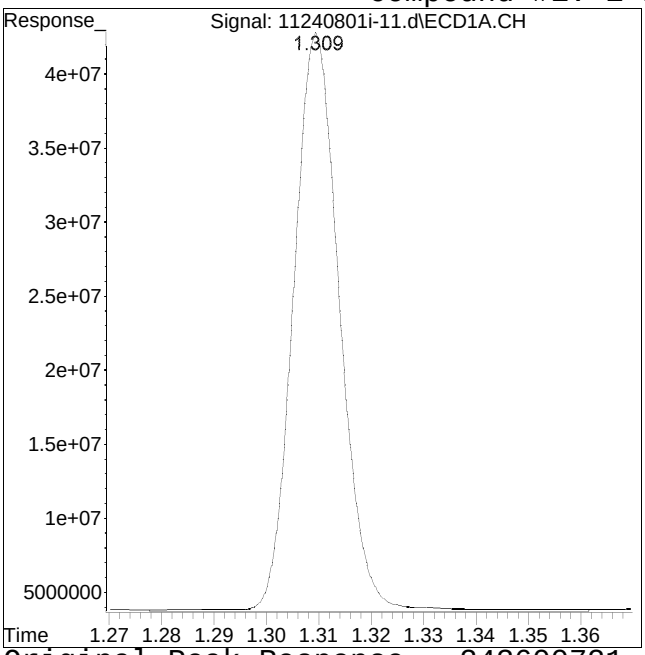
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

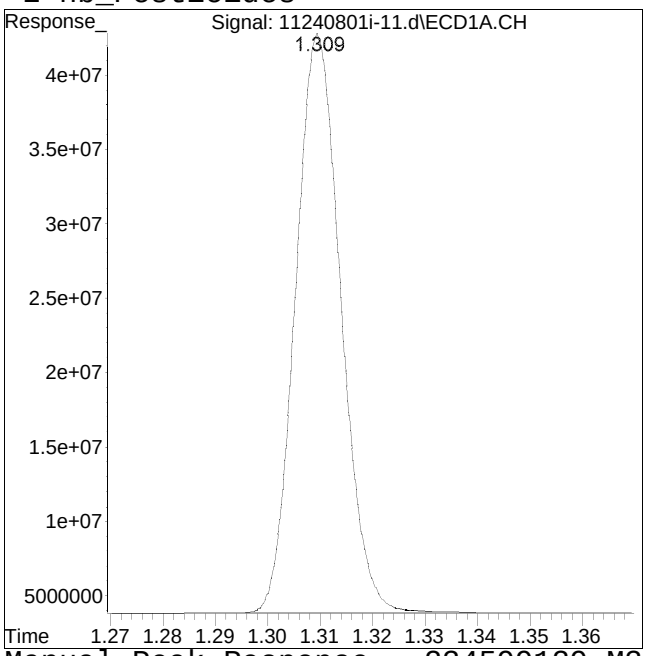


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #1: 1-br-2-nb_Pesticides



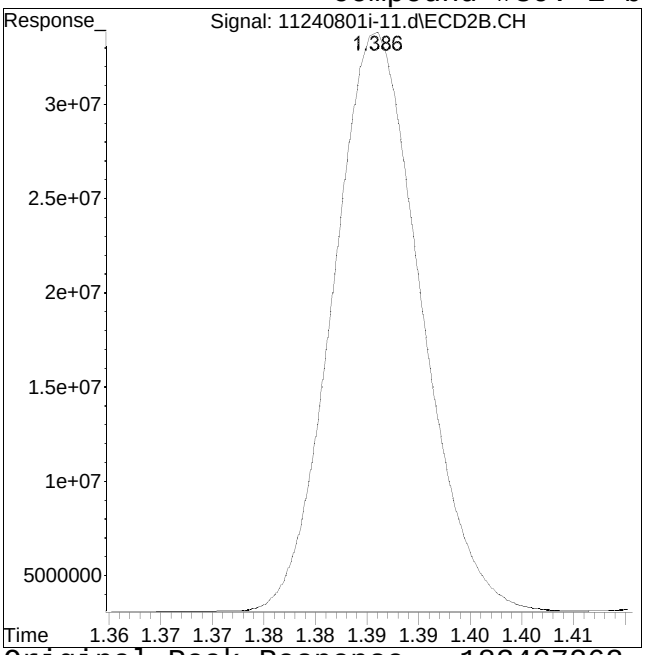




Original Peak Response = 243600721 Manual Peak Response = 234599129 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

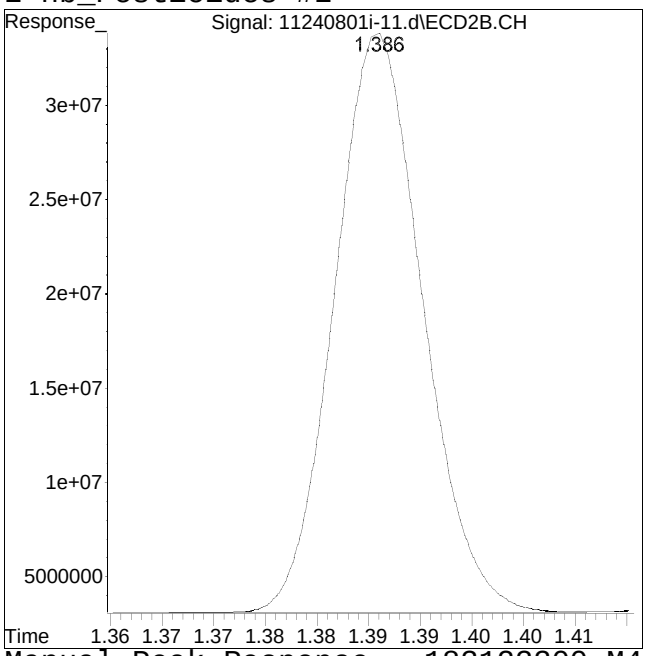
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-11.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:12 Instrument : Pest 11
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 8/2/2024 9:29 am

Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 183427262



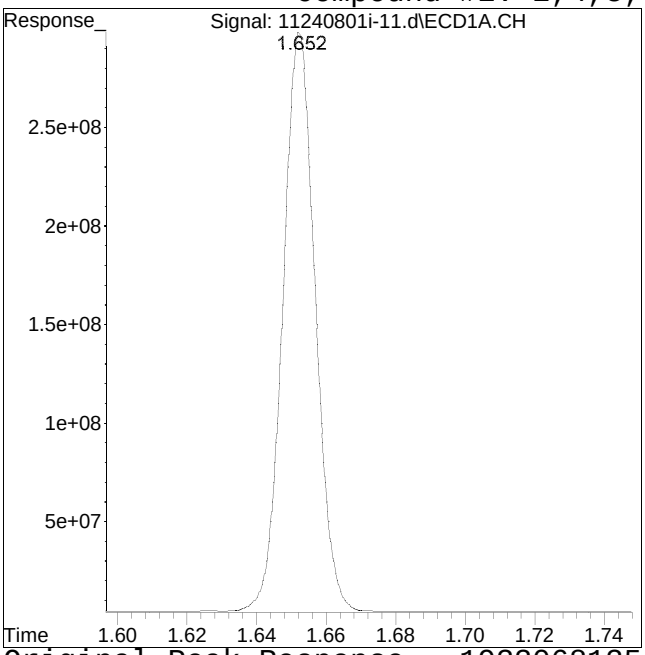

Manual Peak Response = 183123300 M4

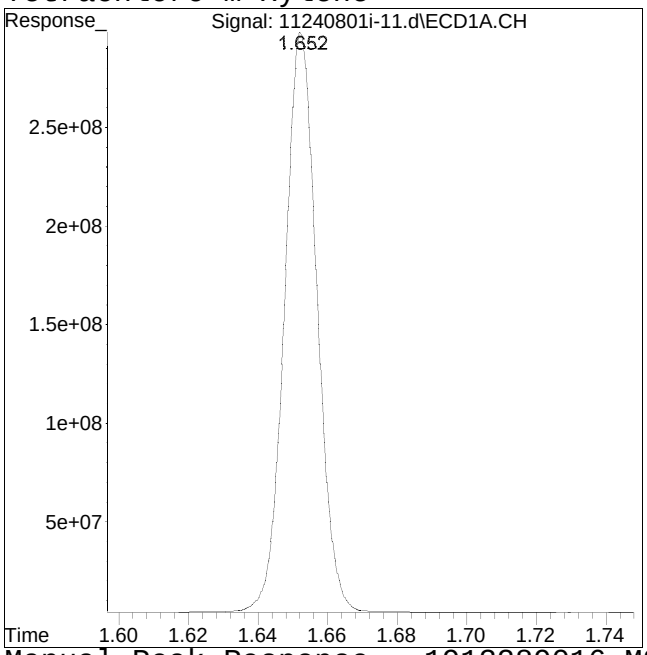
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



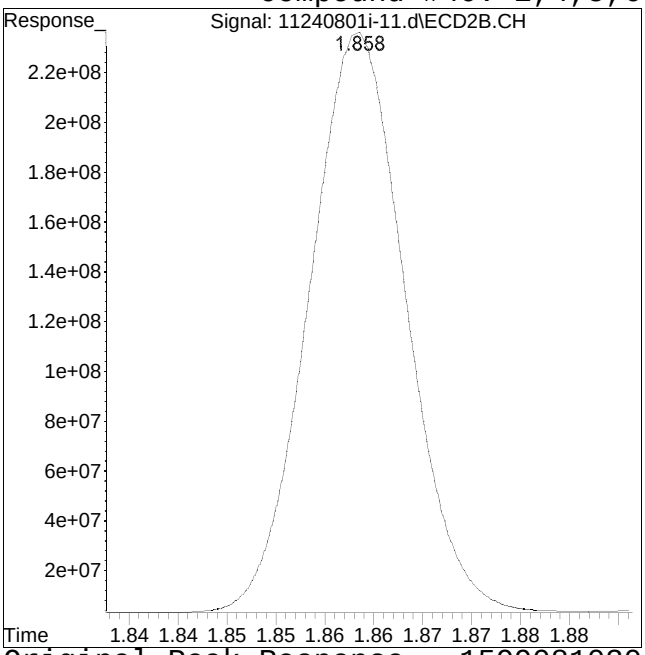

Original Peak Response = 1933068135 Manual Peak Response = 1913289016 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

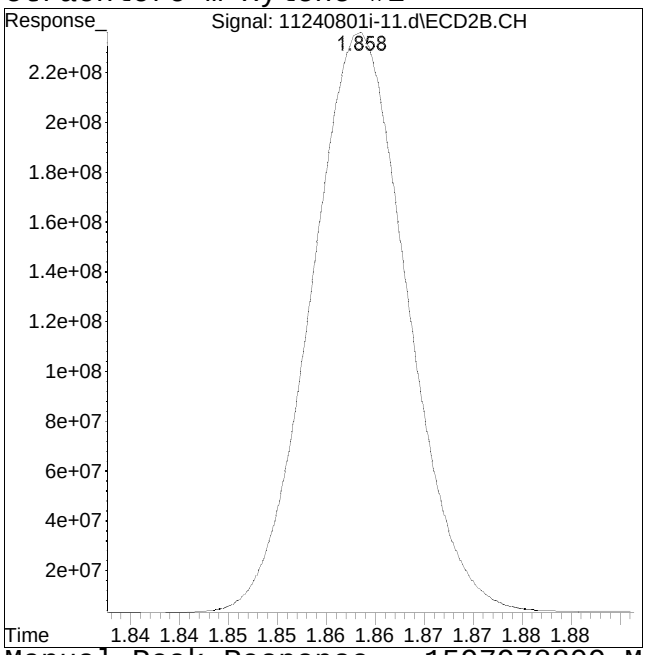
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



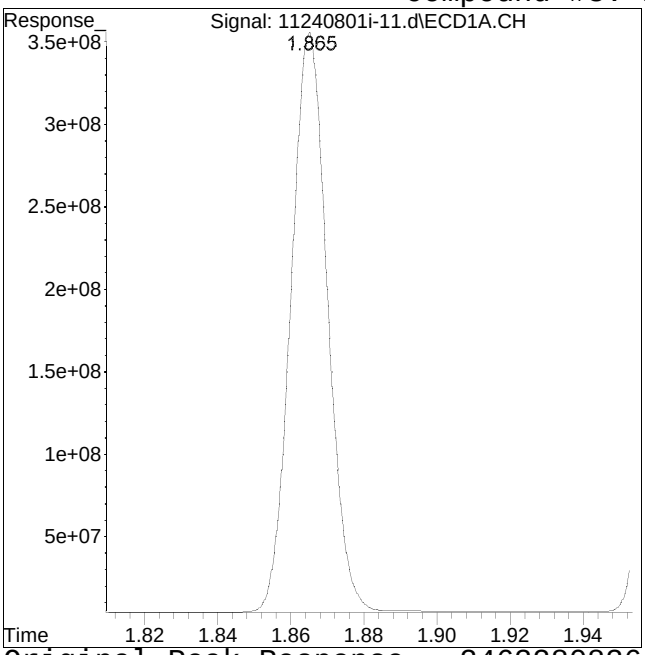



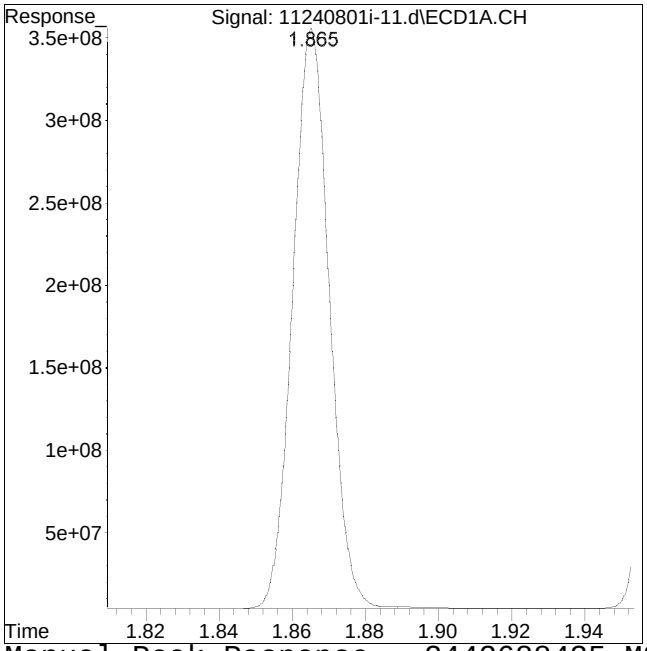

Original Peak Response = 1599081030 Manual Peak Response = 1597978809 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #3: Hexachlorobenzene



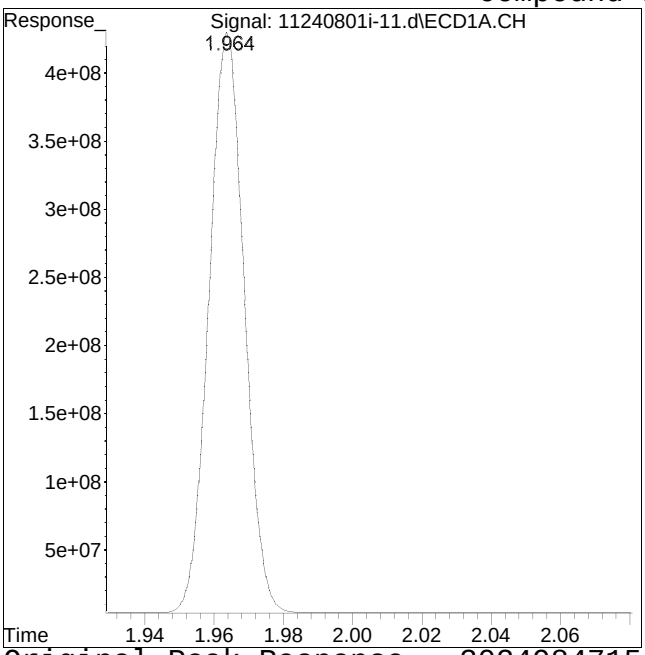



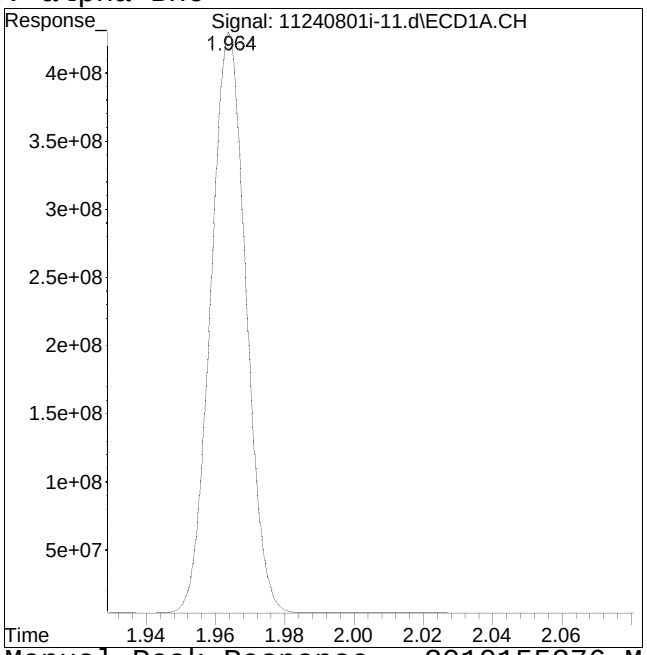

Original Peak Response = 2463280836 Manual Peak Response = 2442688435 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #4: alpha-BHC



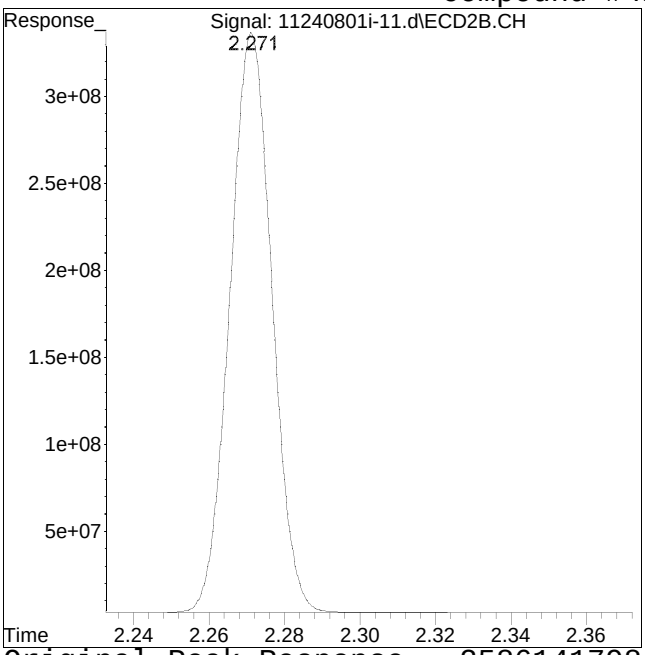



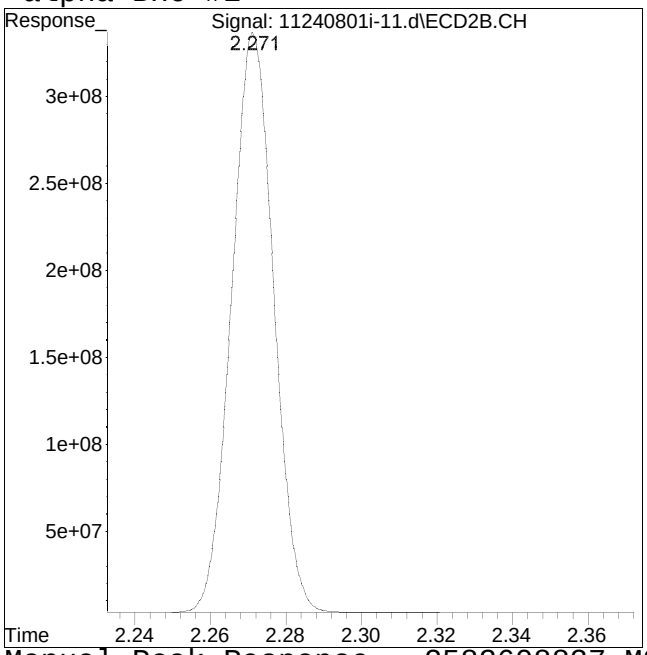

Original Peak Response = 3024984715 Manual Peak Response = 3010155376 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #42: alpha-BHC #2



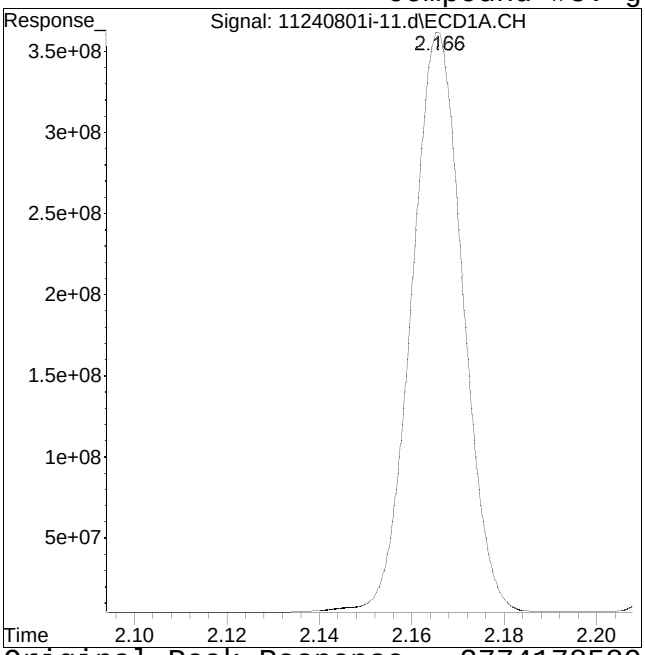



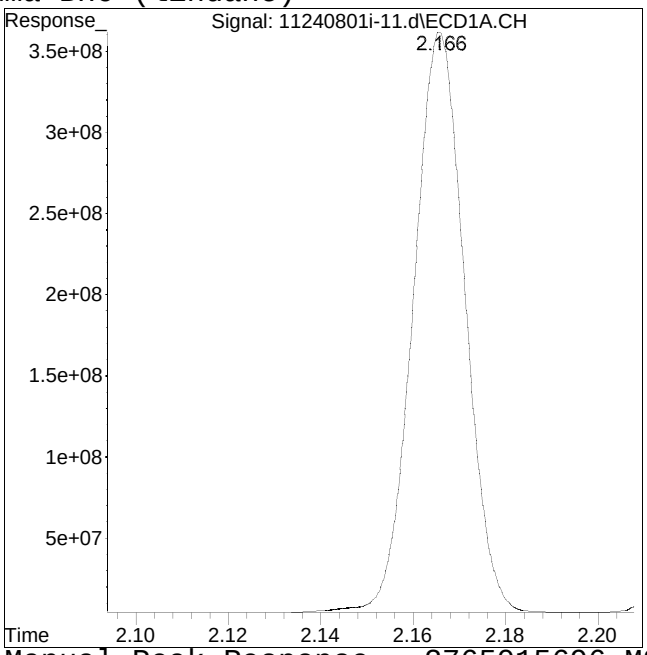

Original Peak Response = 2586141798 Manual Peak Response = 2583608837 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #5: gamma-BHC (lindane)



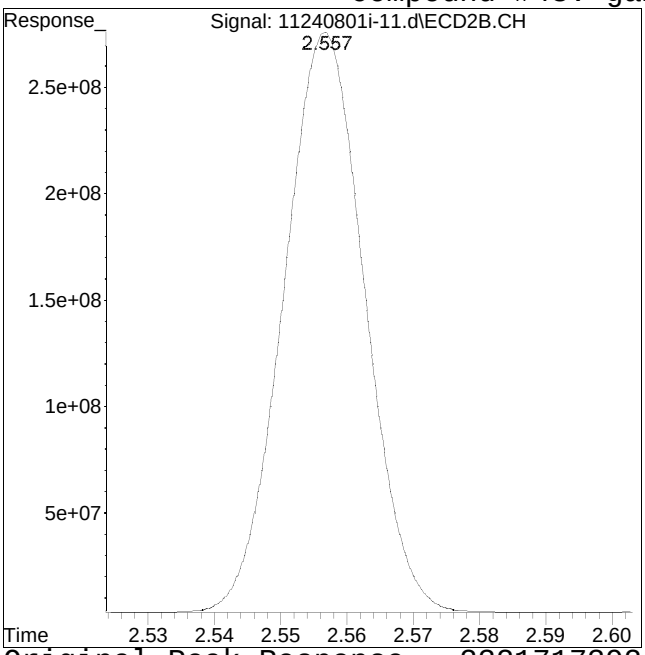



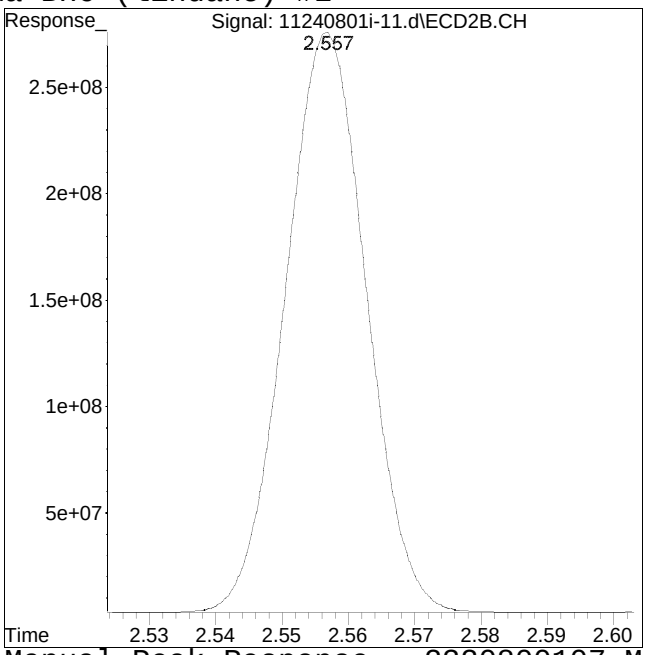

Original Peak Response = 2774178589 Manual Peak Response = 2765015696 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #43: gamma-BHC (lindane) #2



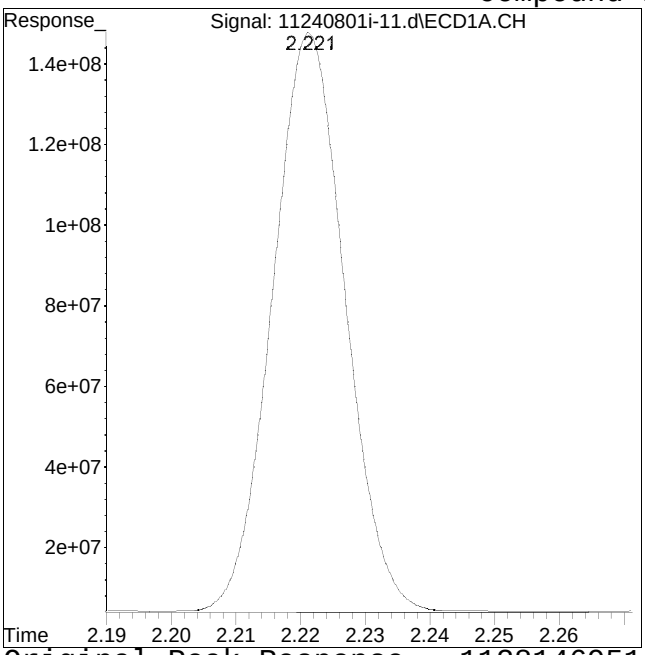



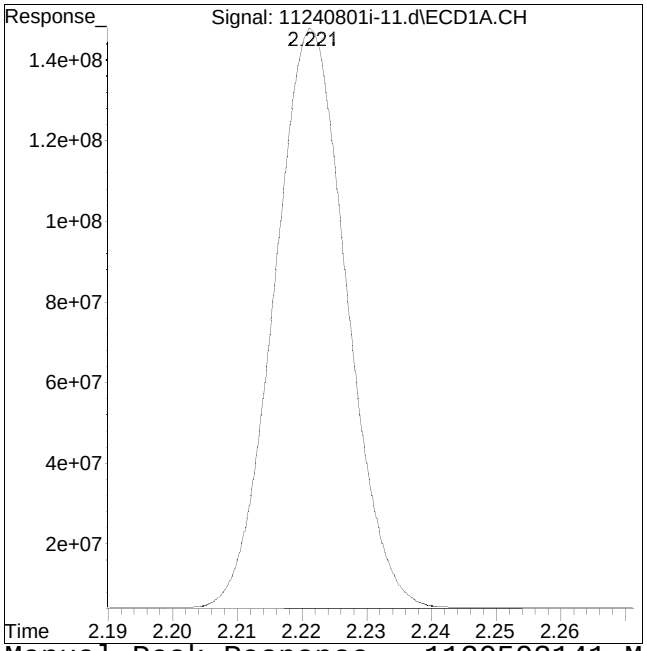

Original Peak Response = 2321717392 Manual Peak Response = 2320800107 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #6: beta-BHC



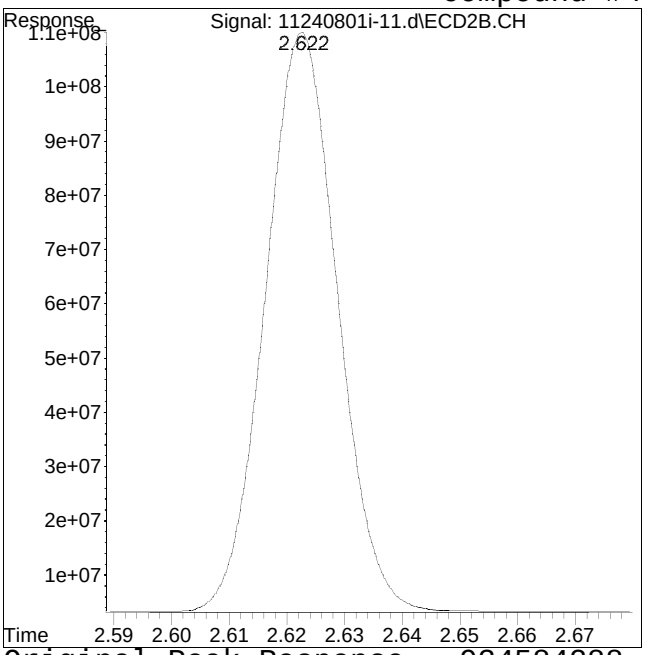



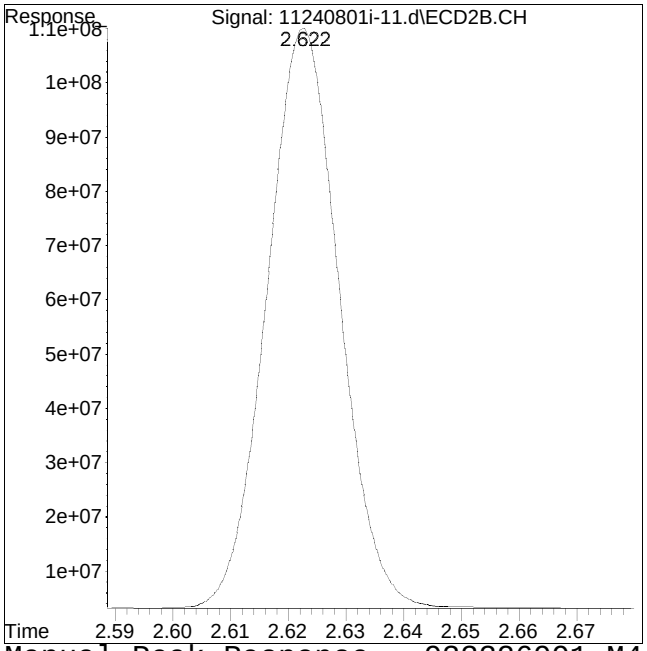

Original Peak Response = 1128146951 Manual Peak Response = 1120503141 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #44: beta-BHC #2



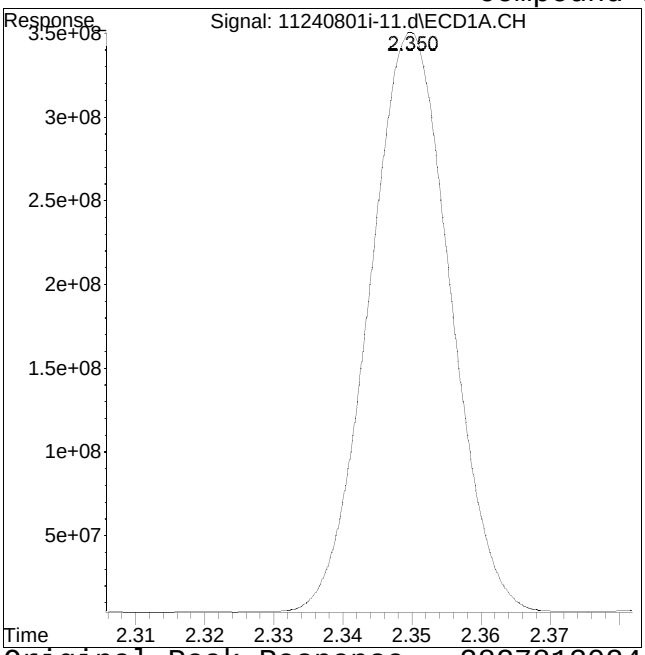

Original Peak Response = 934584288 Manual Peak Response = 933326991 M4
M4 = Poor automated baseline construction.

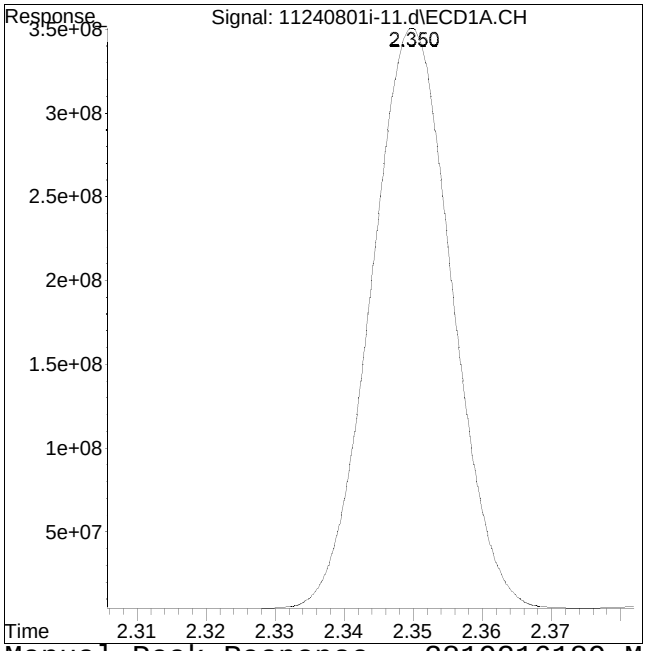
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #7: delta-BHC



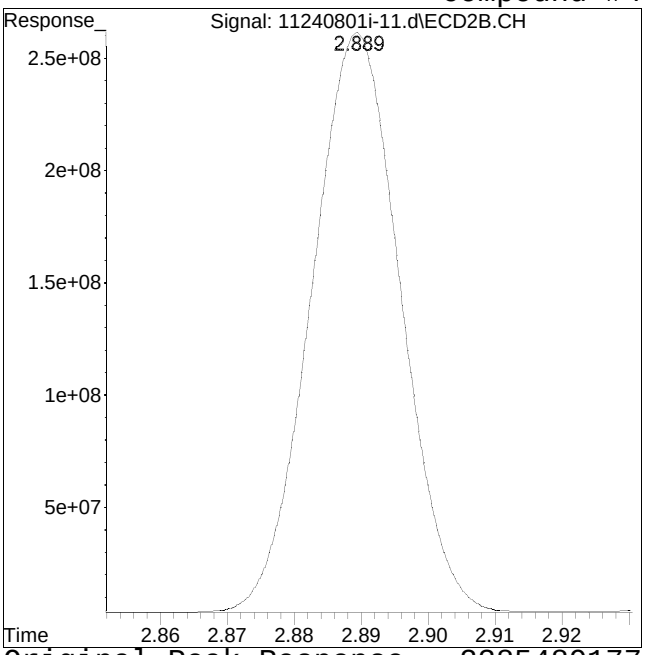

Original Peak Response = 2827813024 Manual Peak Response = 2819216189 M4
M4 = Poor automated baseline construction.

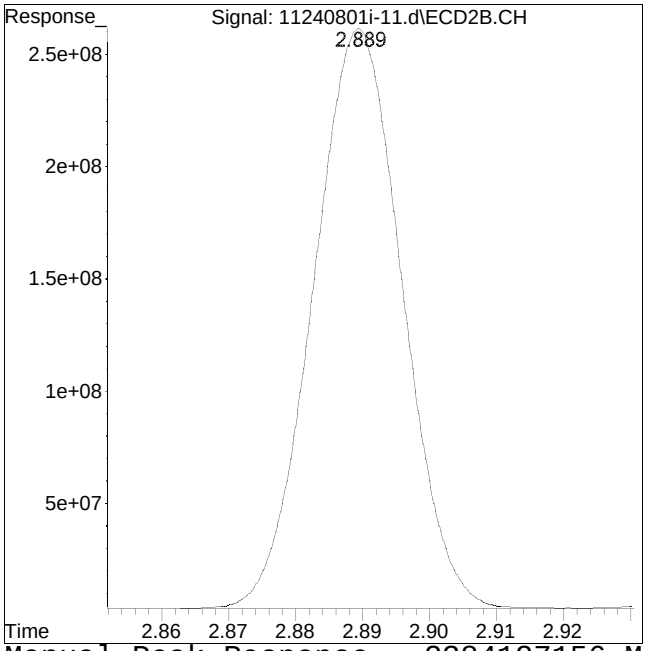
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #45: delta-BHC #2



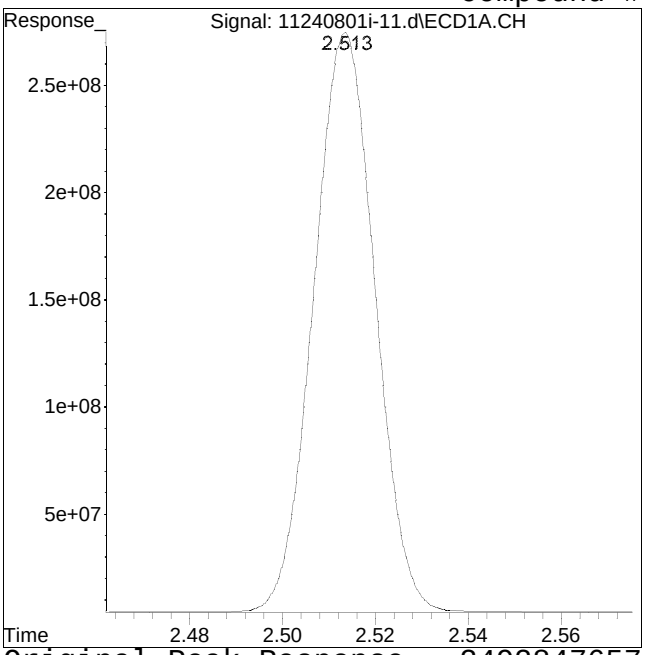

Original Peak Response = 2385489177 Manual Peak Response = 2384127156 M4
M4 = Poor automated baseline construction.

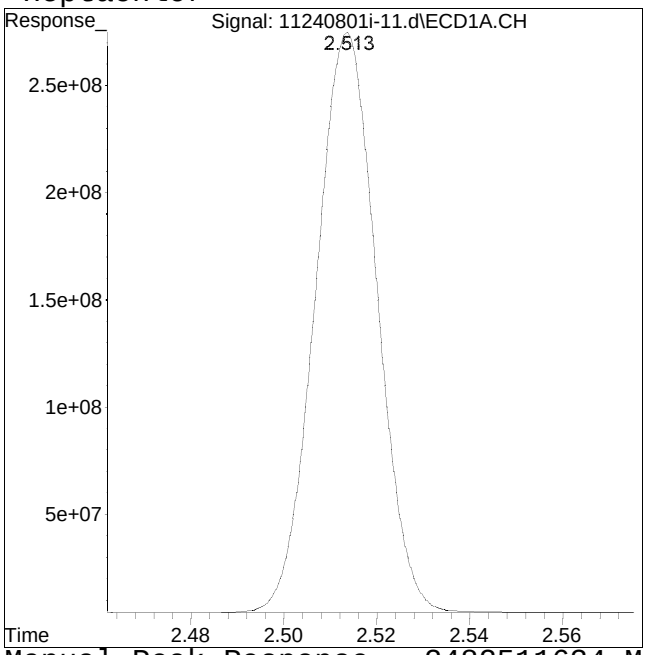
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #8: Heptachlor



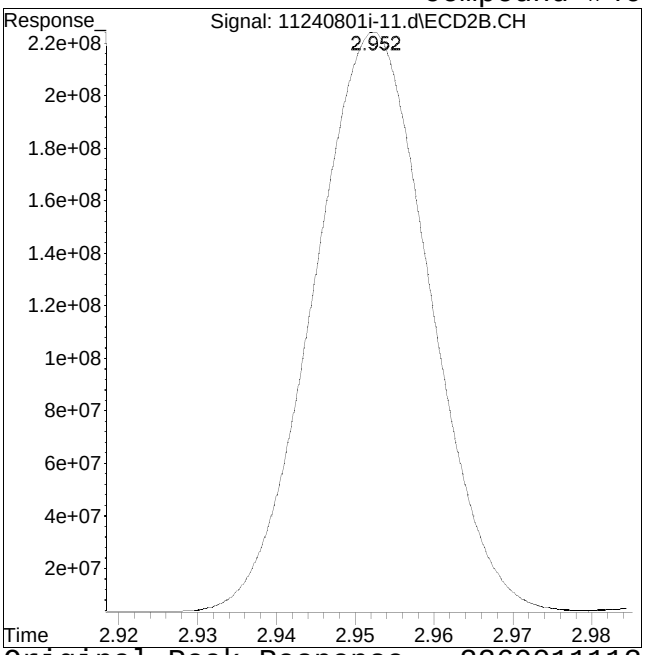



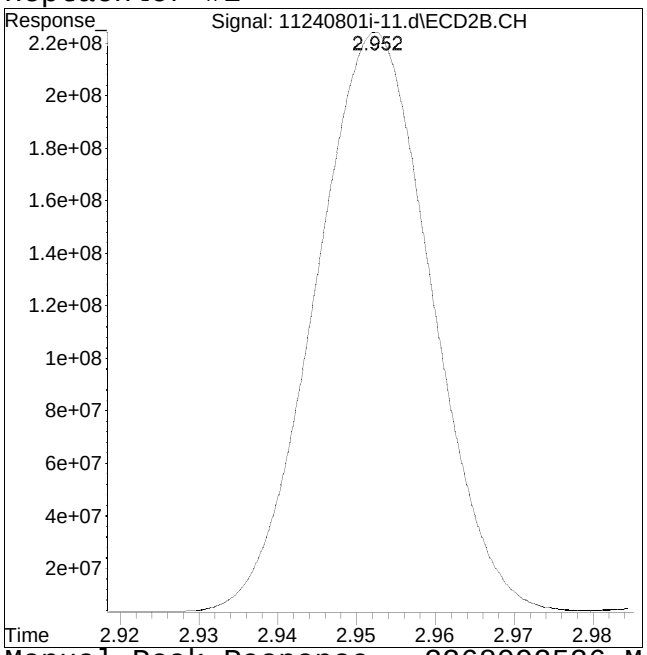

Original Peak Response = 2492847657 Manual Peak Response = 2482511634 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #46: Heptachlor #2



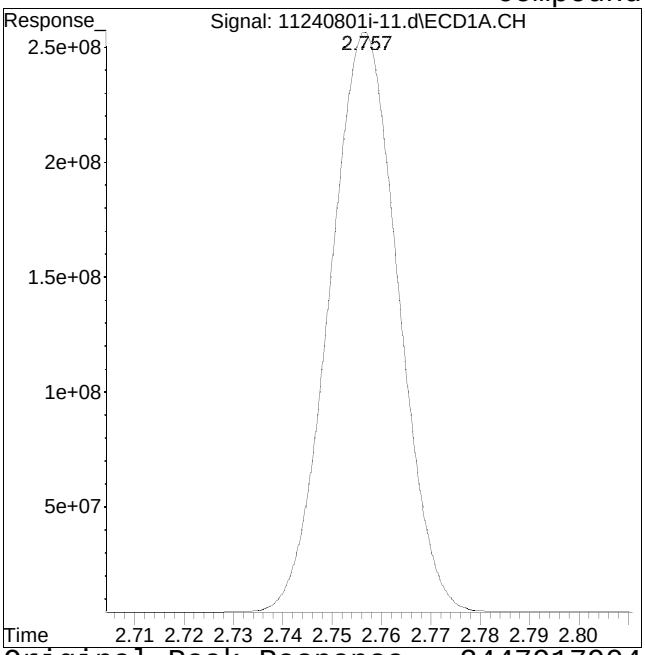

Original Peak Response = 2269011113 Manual Peak Response = 2268092526 M4
M4 = Poor automated baseline construction.

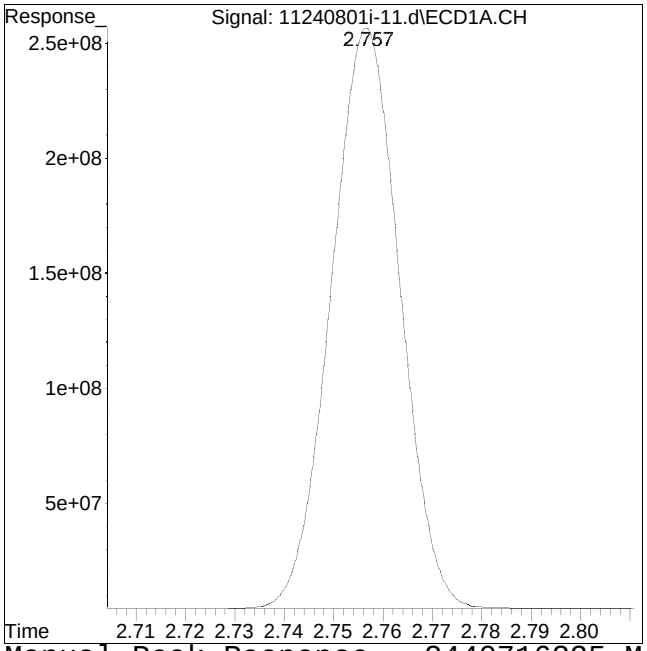
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #9: Aldrin



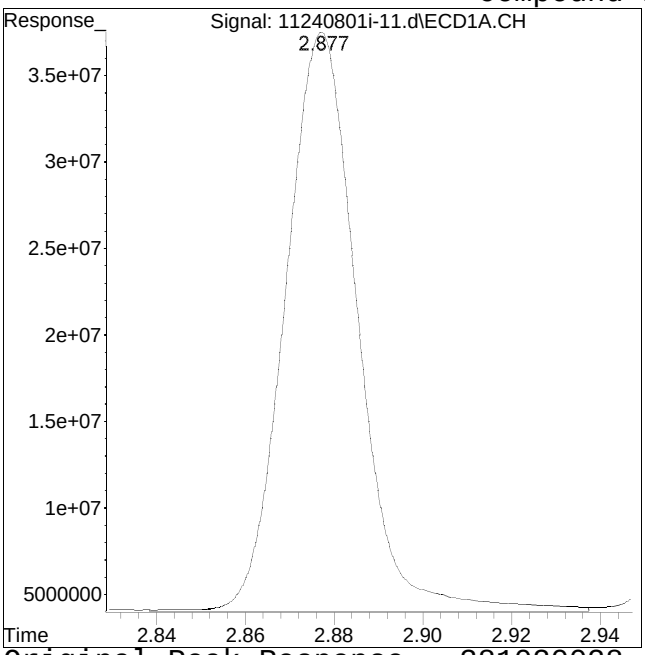

Original Peak Response = 2447917904 Manual Peak Response = 2440716225 M4
M4 = Poor automated baseline construction.

Manual Integration Report

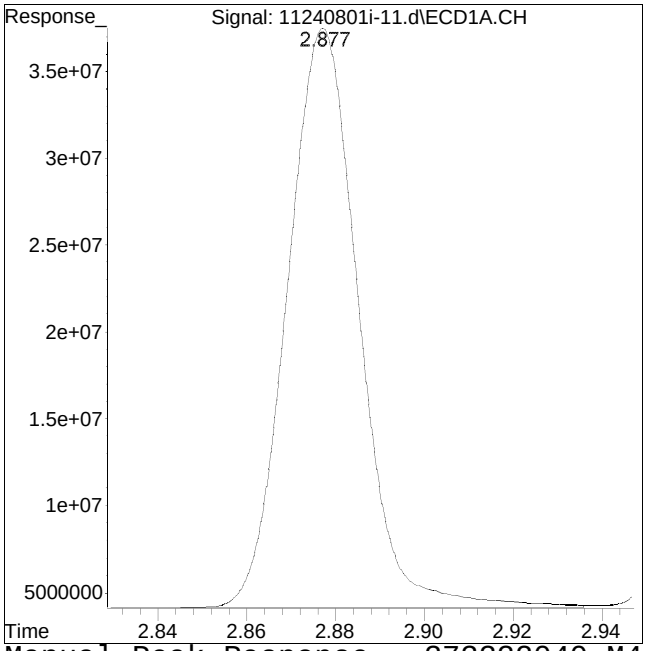
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #10: Alachlor




Original Peak Response = 381020028




Manual Peak Response = 373332040 M4

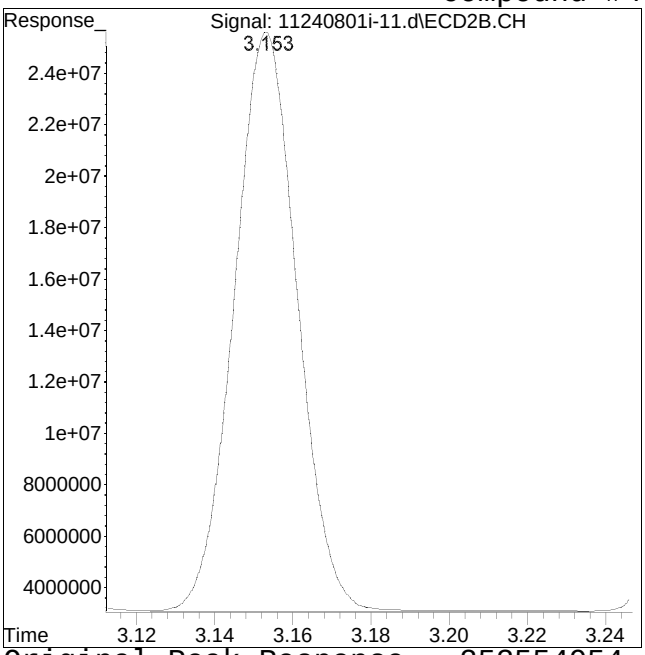
M4 = Poor automated baseline construction.

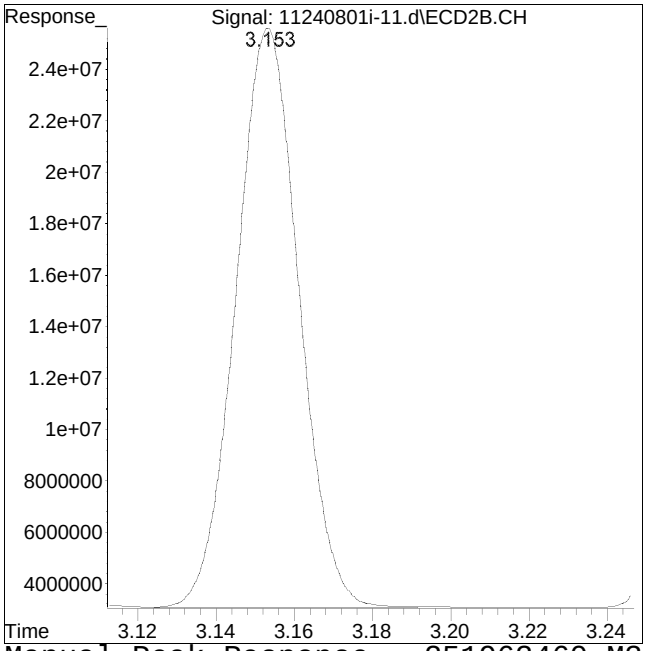
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #48: Alachlor #2




Original Peak Response = 253554954 Manual Peak Response = 251963460 M3

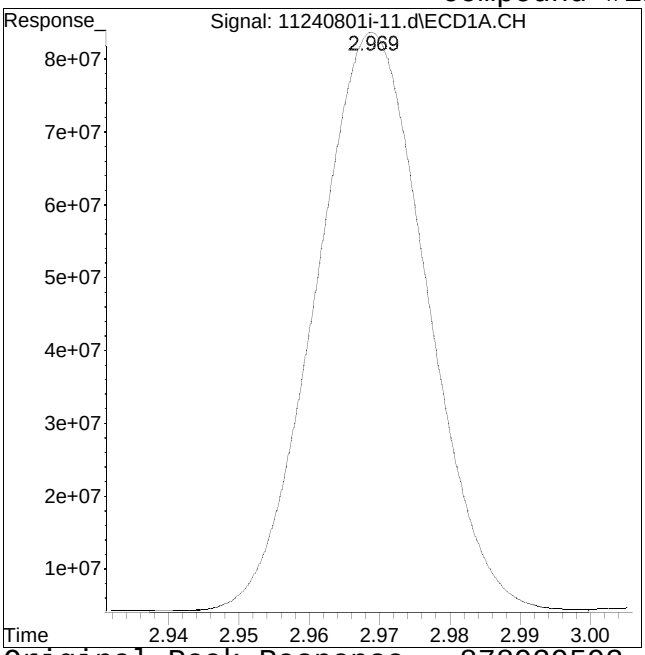
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

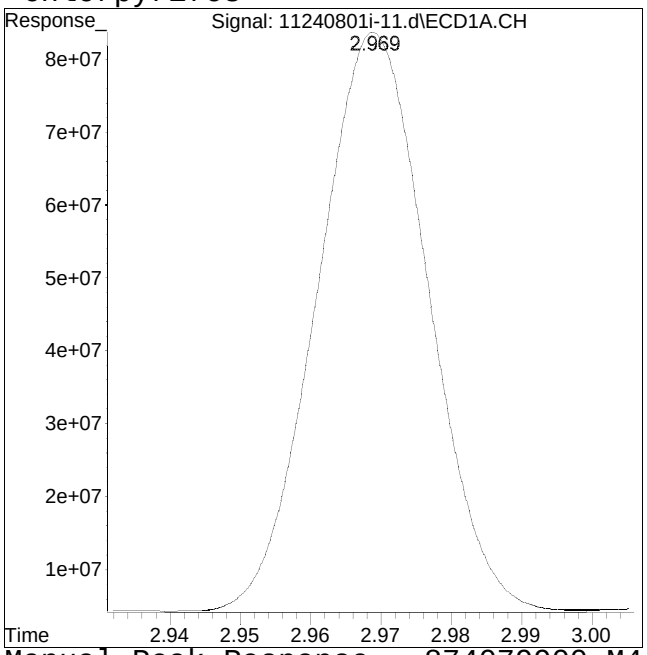
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #11: Chlorpyrifos




Original Peak Response = 878939593



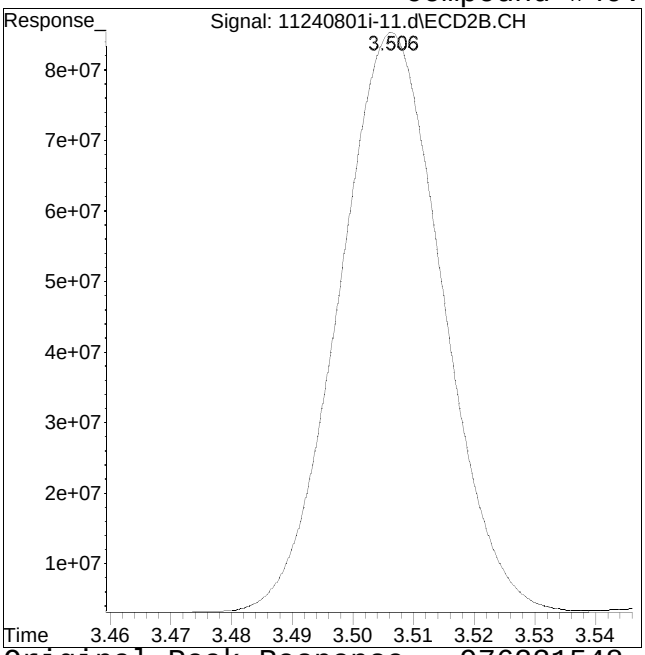

Manual Peak Response = 874079900 M4

M4 = Poor automated baseline construction.

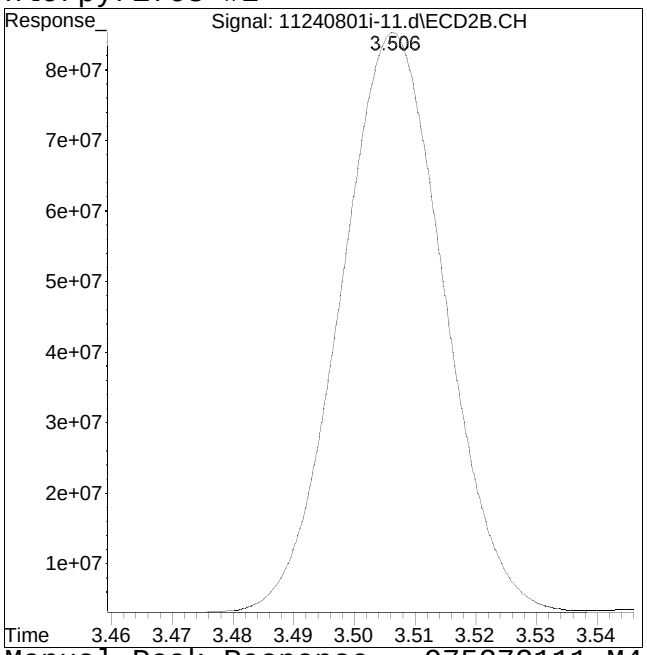
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-11.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:12 Instrument : Pest 11
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 8/2/2024 9:29 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 976231548




Manual Peak Response = 975272111 M4

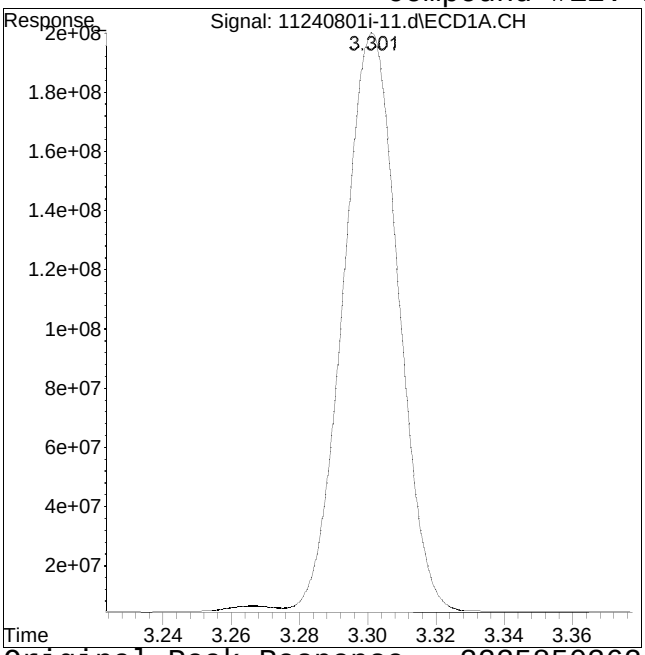
M4 = Poor automated baseline construction.

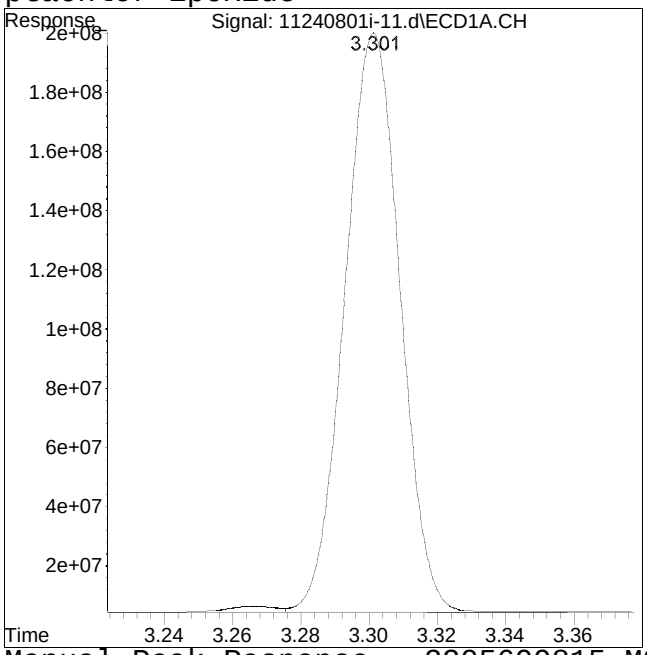
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #12: Heptachlor Epoxide




Original Peak Response = 2235850362 Manual Peak Response = 2205699815 M3

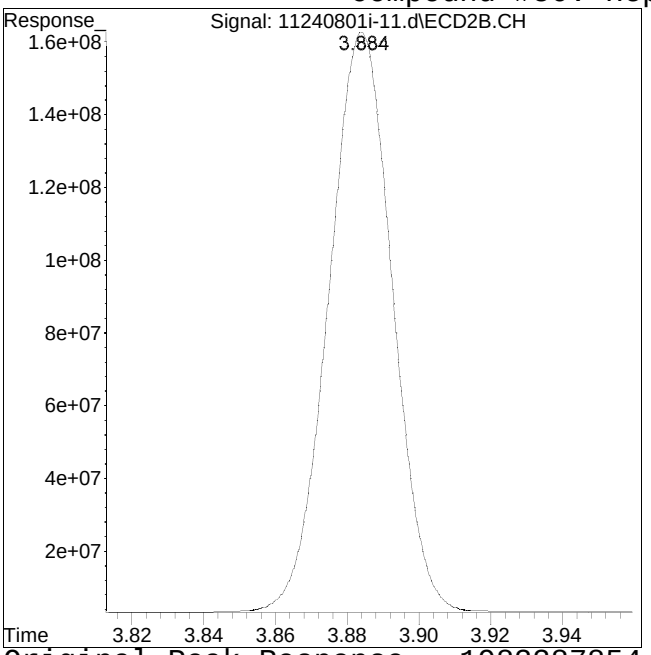
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

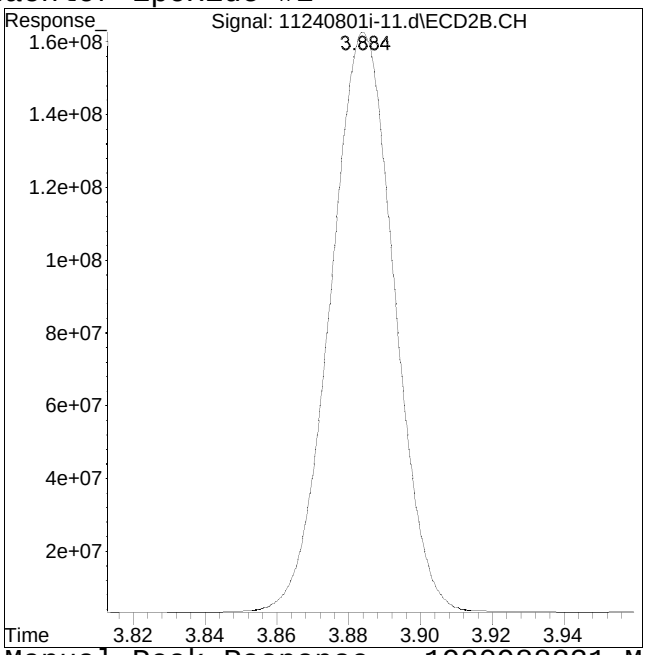
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 1983387854



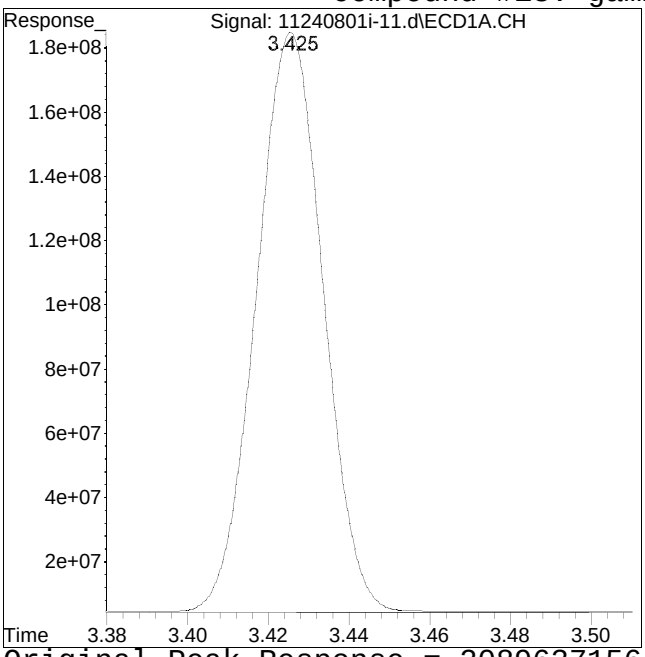

Manual Peak Response = 1980988231 M4

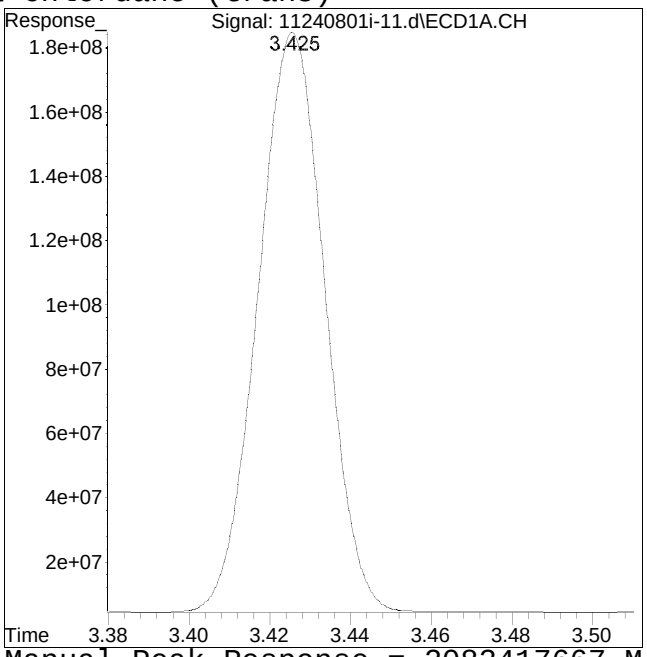
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #13: gamma-Chlordane (trans)



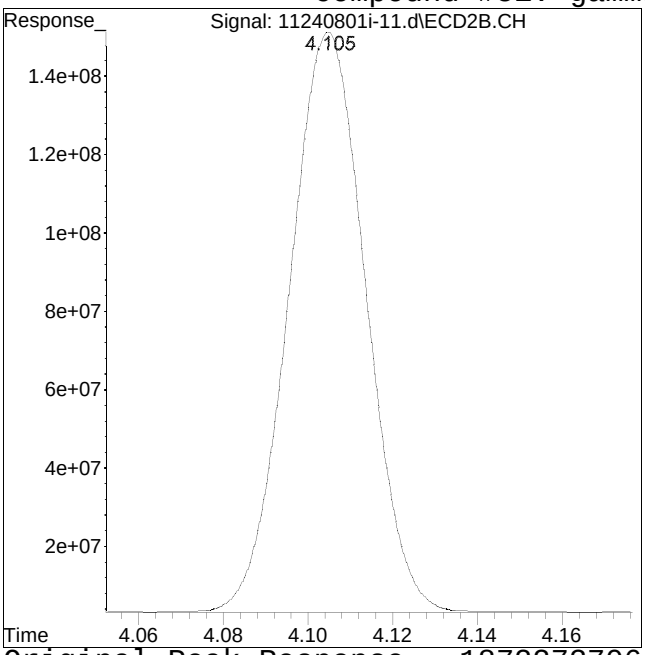

Original Peak Response = 2089637156 Manual Peak Response = 2083417667 M4
M4 = Poor automated baseline construction.

Manual Integration Report

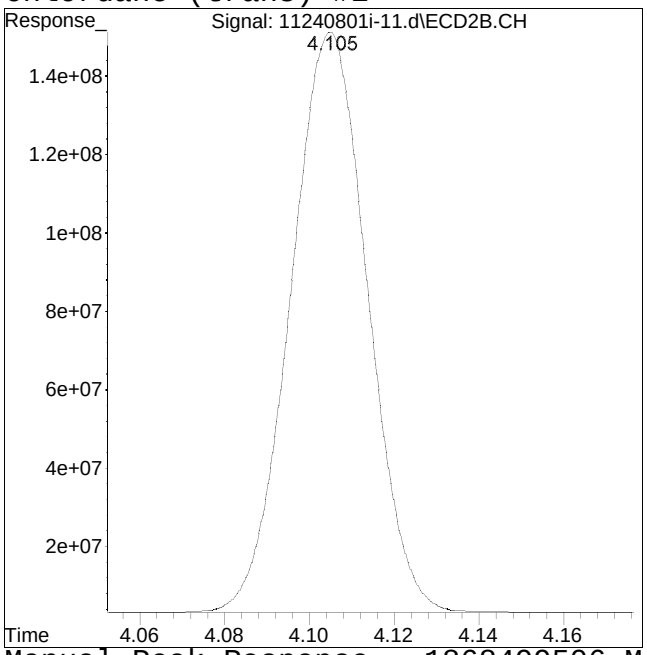
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 1872273706



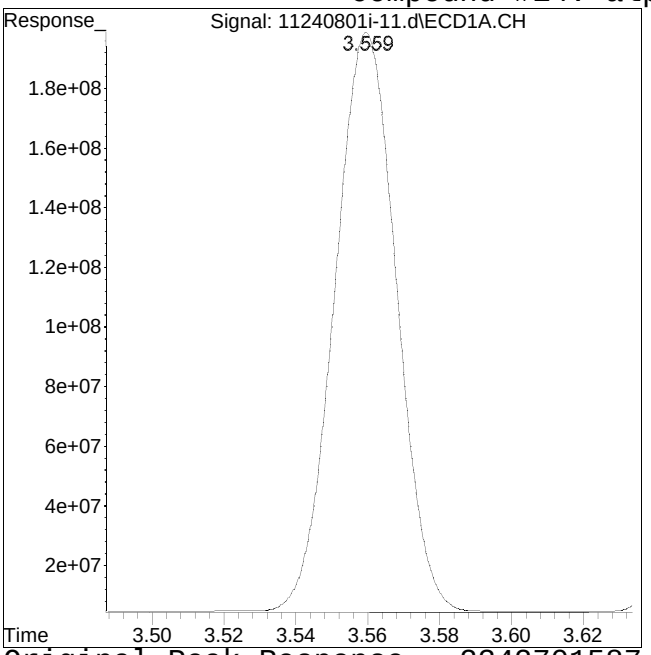

Manual Peak Response = 1868499506 M4

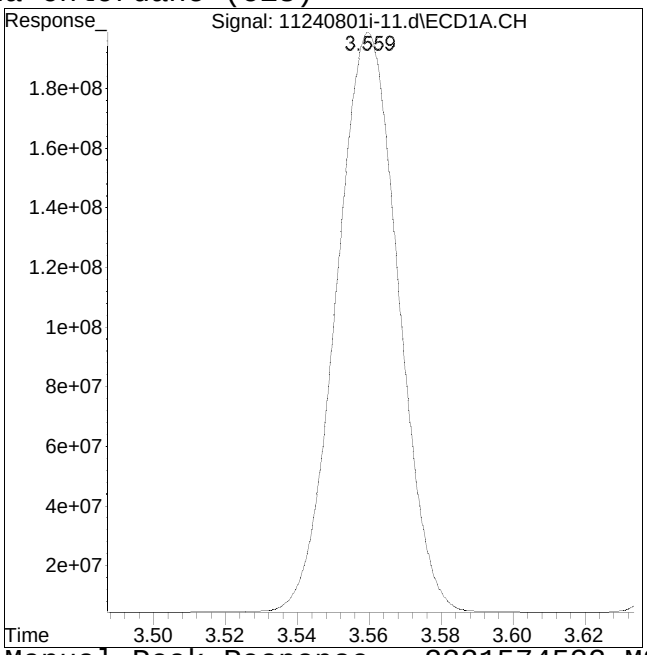
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #14: alpha-Chlordane (cis)



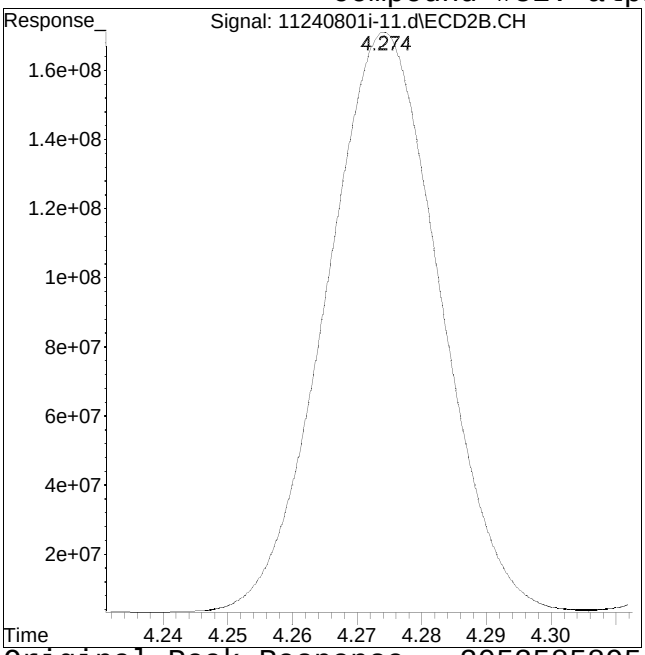

Original Peak Response = 2342701587 Manual Peak Response = 2331574532 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

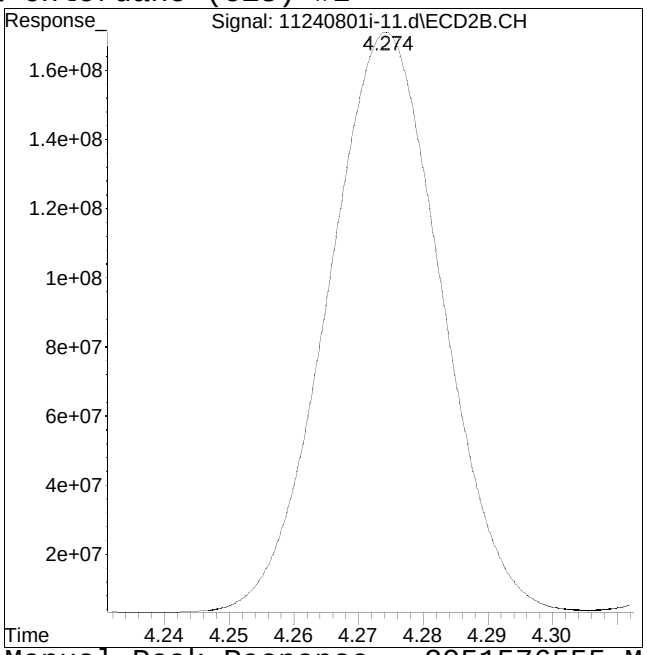
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #52: alpha-Chlordane (cis) #2



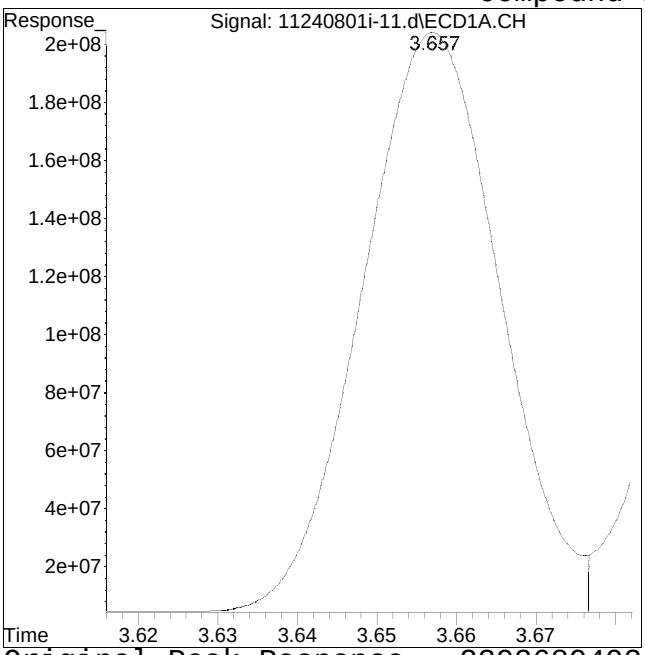

Original Peak Response = 2053585895 Manual Peak Response = 2051576555 M4
M4 = Poor automated baseline construction.

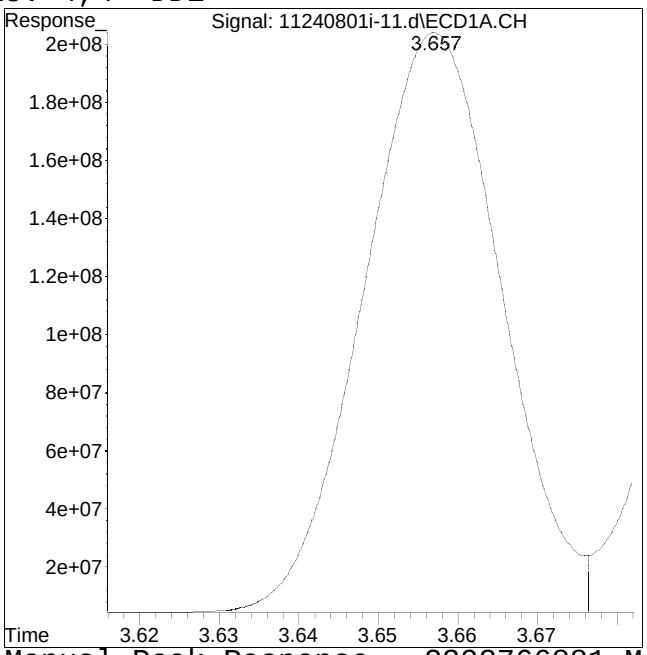
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #15: 4,4'-DDE



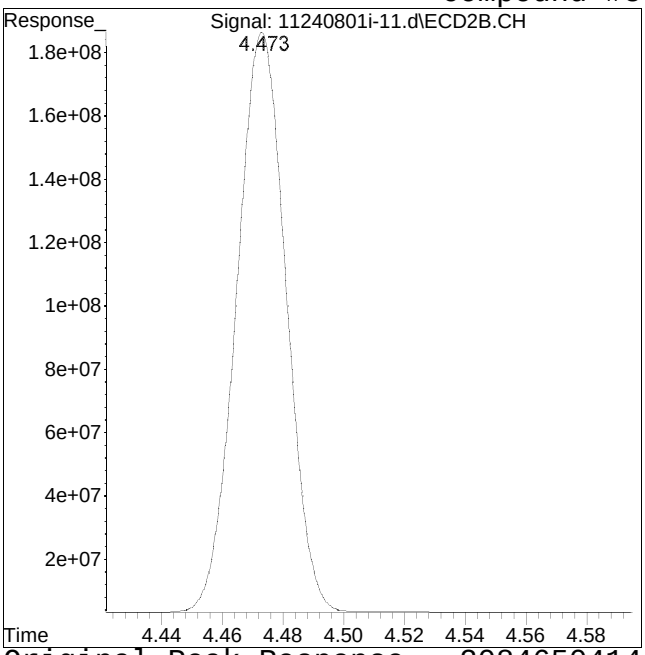

Original Peak Response = 2392689493 Manual Peak Response = 2393766881 M4
M4 = Poor automated baseline construction.

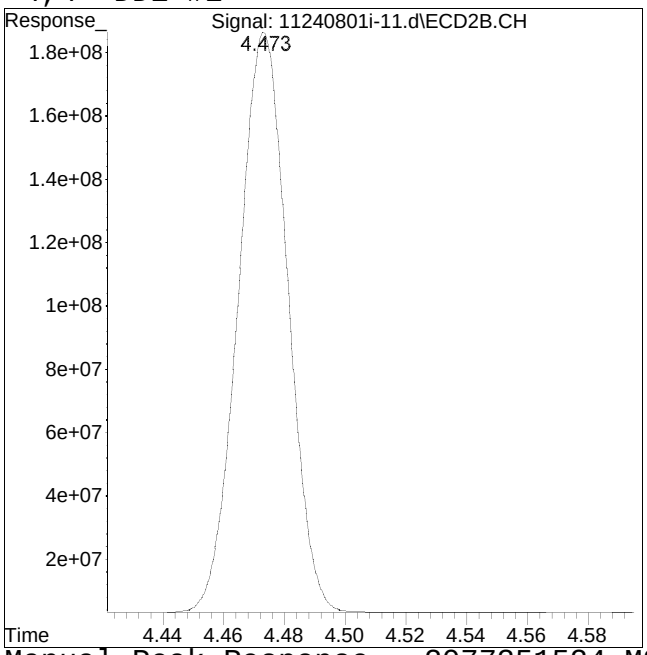
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 2084650414 Manual Peak Response = 2077351524 M3

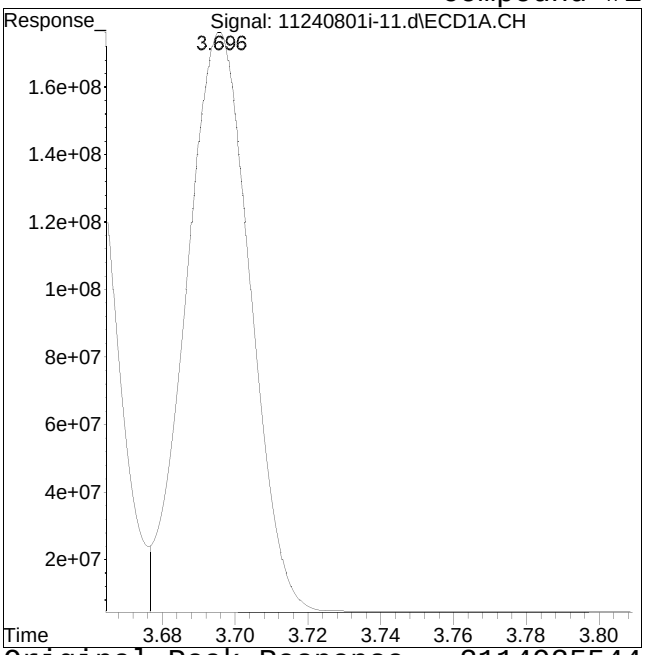
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

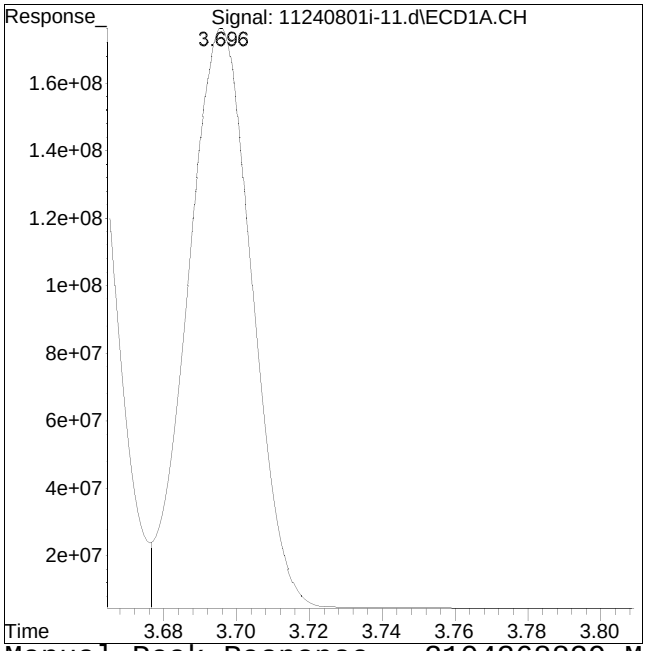
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #16: Endosulfan I




Original Peak Response = 2114925544



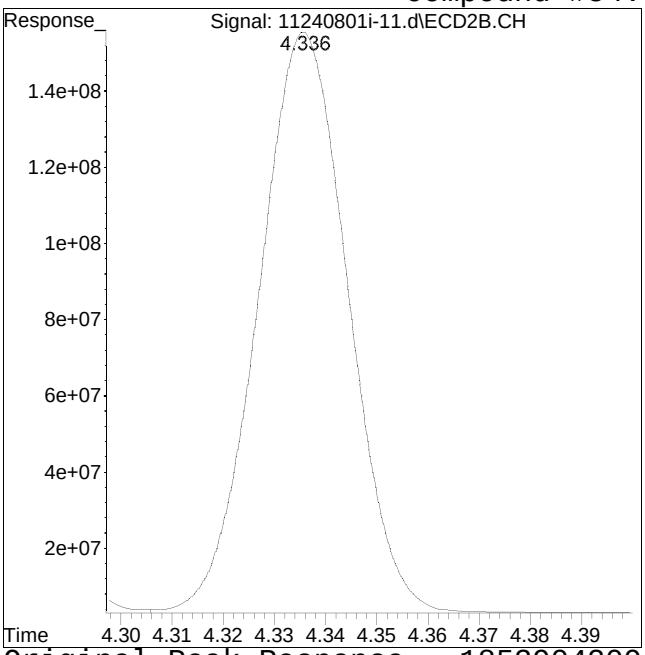

Manual Peak Response = 2104368839 M4

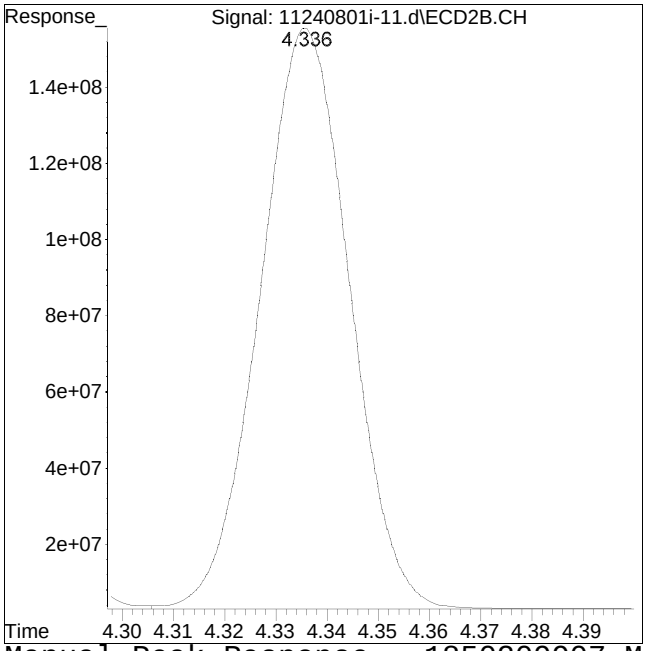
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #54: Endosulfan I #2



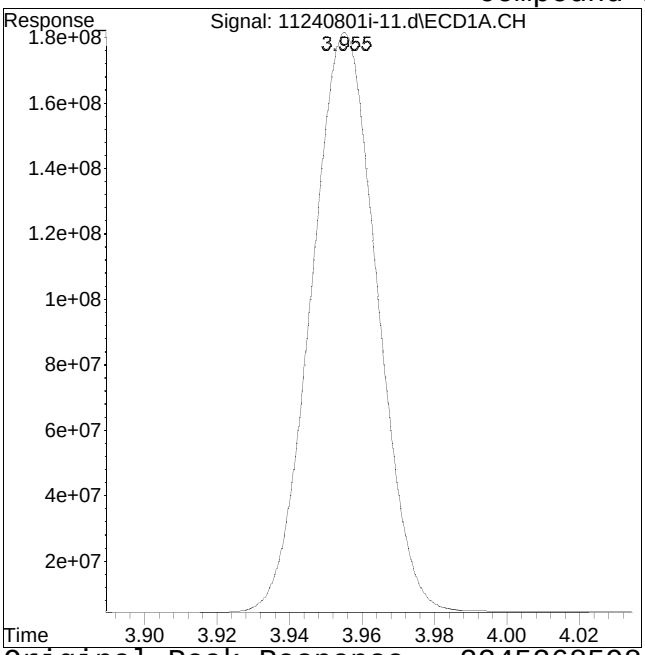

Original Peak Response = 1853904209 Manual Peak Response = 1850209907 M4
M4 = Poor automated baseline construction.

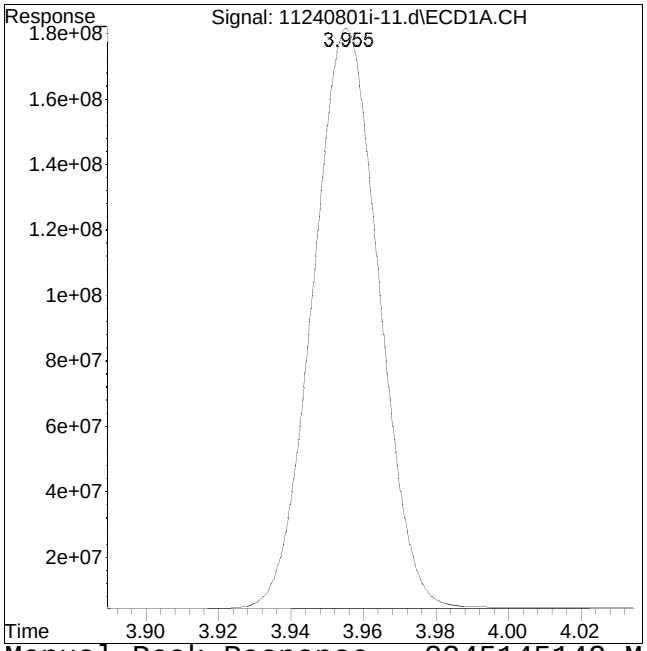
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #17: Dieldrin



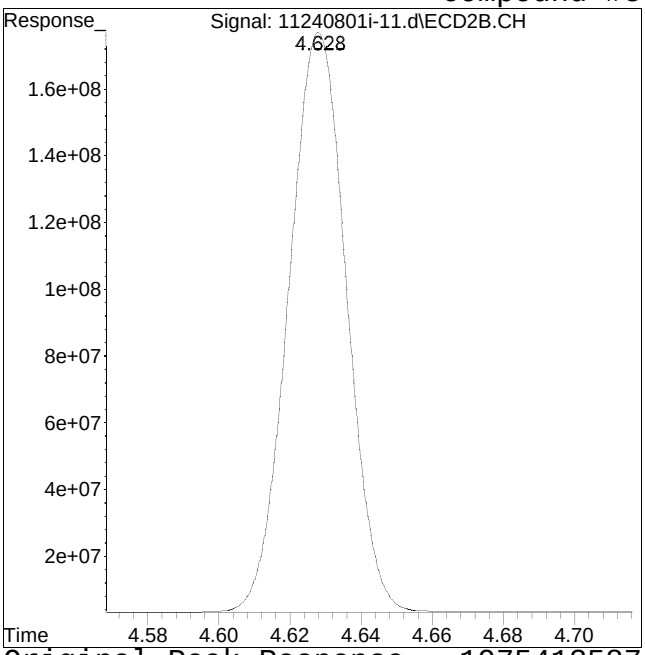



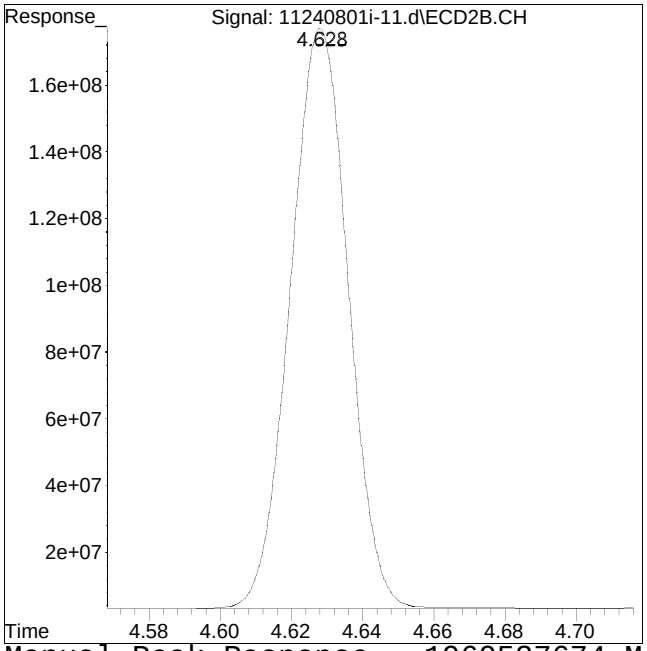

Original Peak Response = 2245268598 Manual Peak Response = 2245145142 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #55: Dieldrin #2



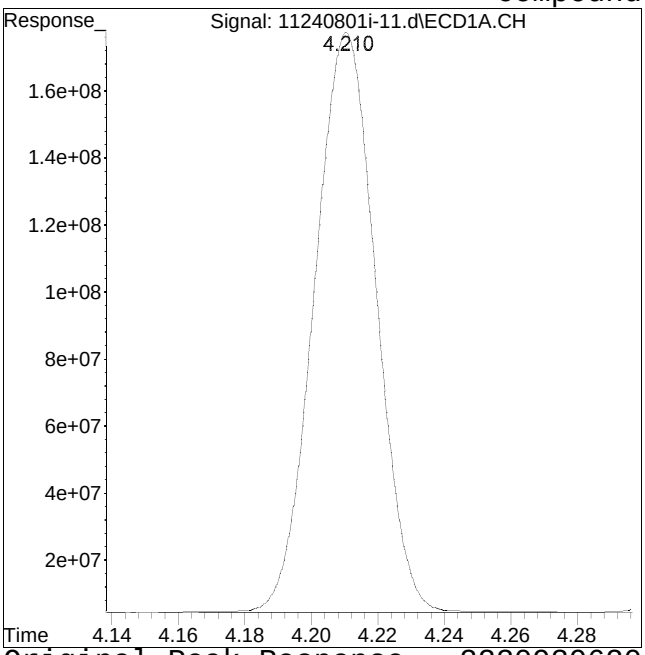



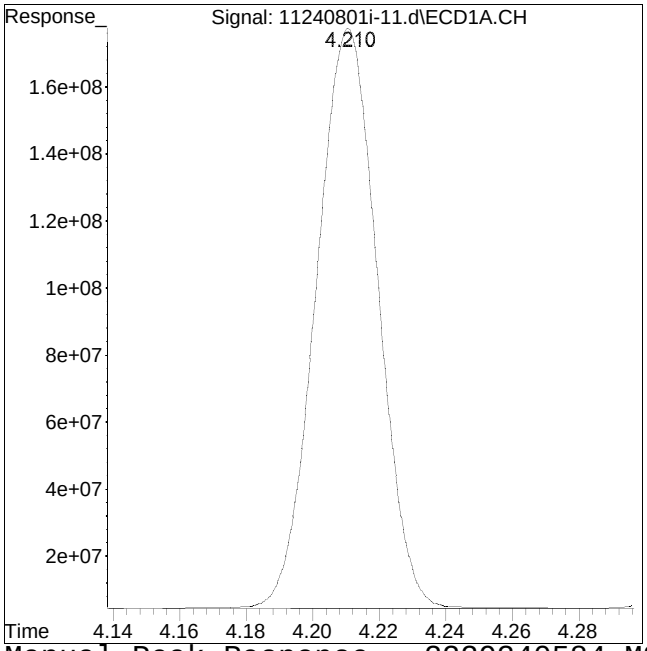

Original Peak Response = 1975413587 Manual Peak Response = 1969537674 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-11.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:12 Instrument : Pest 11
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 8/2/2024 9:29 am

Compound #18: Endrin



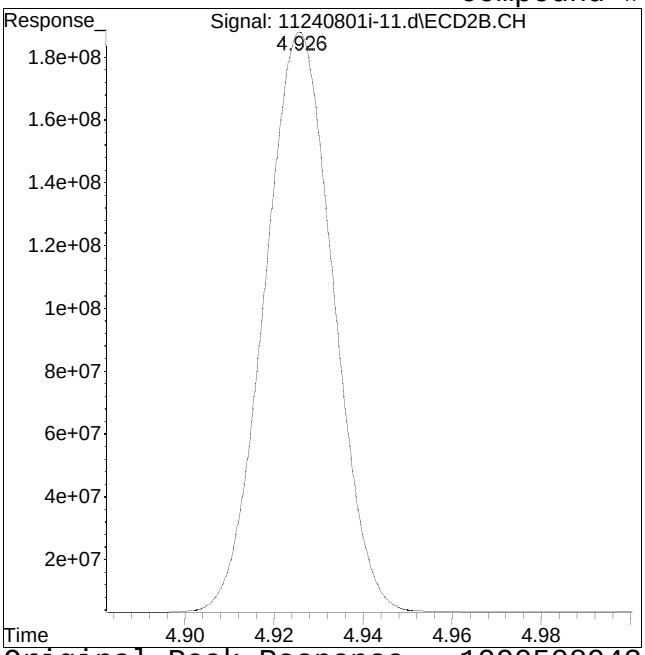



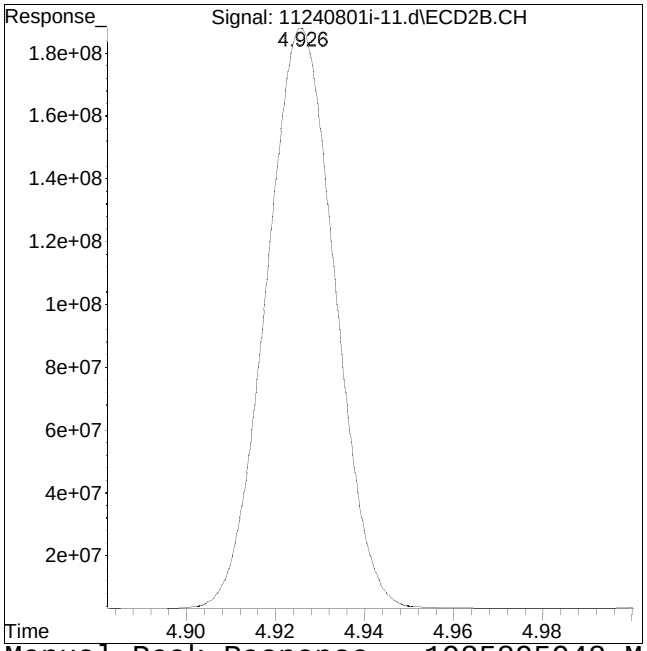

Original Peak Response = 2230939620 Manual Peak Response = 2229340584 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #56: Endrin #2



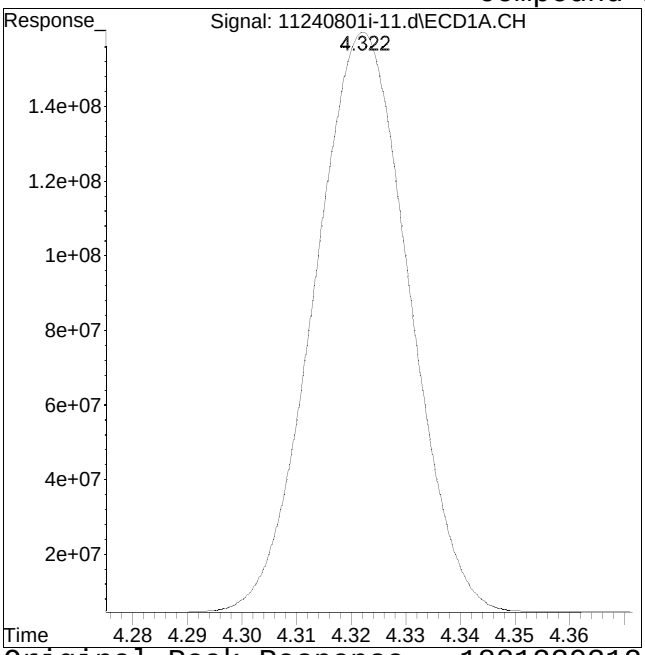

Original Peak Response = 1990508943 Manual Peak Response = 1985895948 M4
M4 = Poor automated baseline construction.

Manual Integration Report

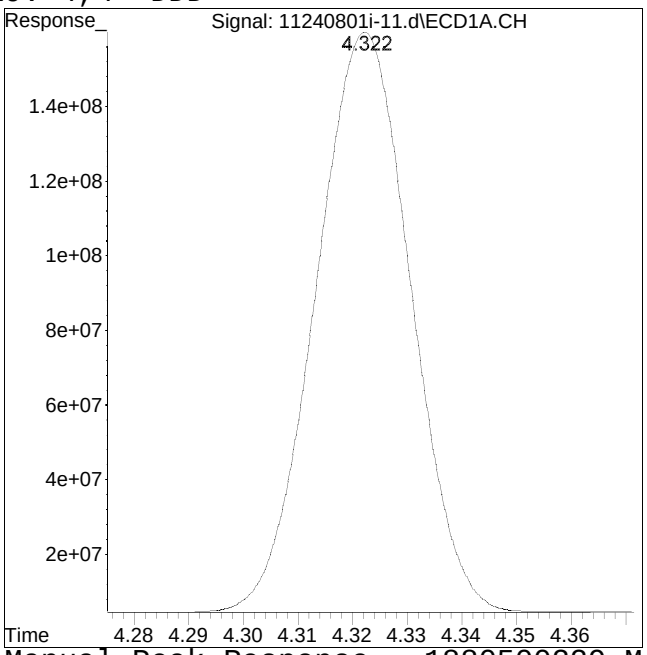
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #19: 4,4'-DDD




Original Peak Response = 1881239312



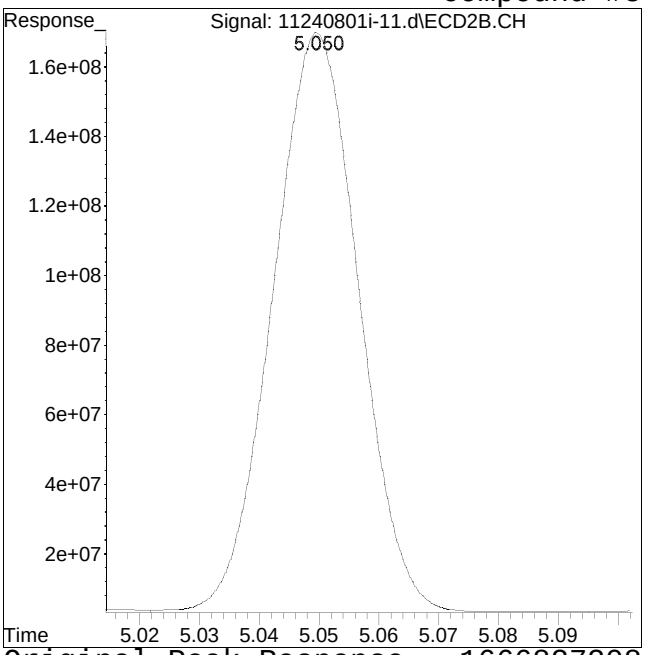

Manual Peak Response = 1880500229 M4

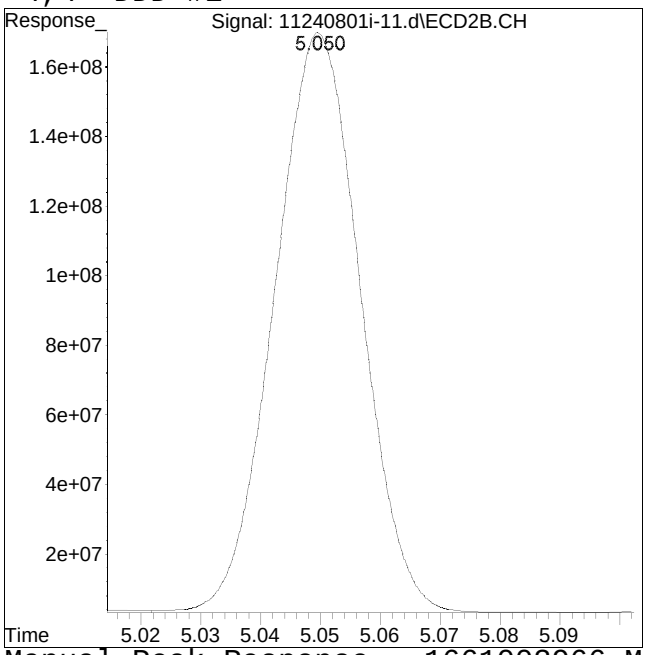
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #57: 4,4'-DDD #2



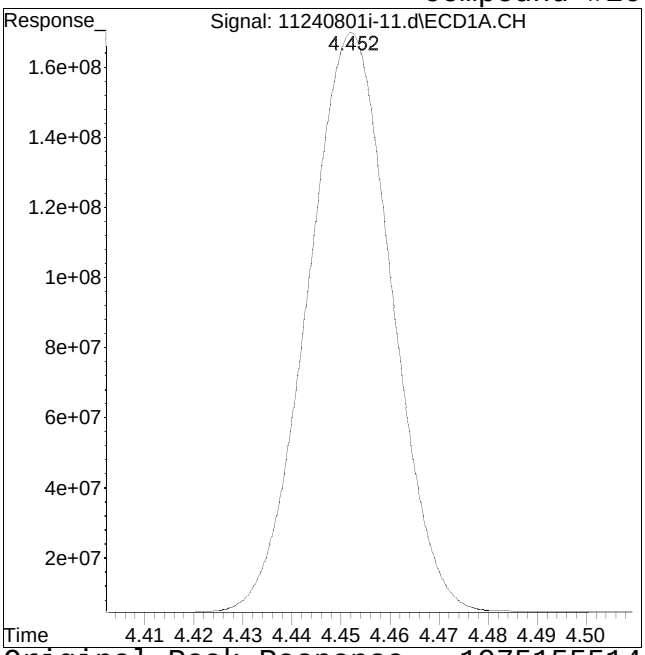

Original Peak Response = 1666827208 Manual Peak Response = 1661003966 M4
M4 = Poor automated baseline construction.

Manual Integration Report

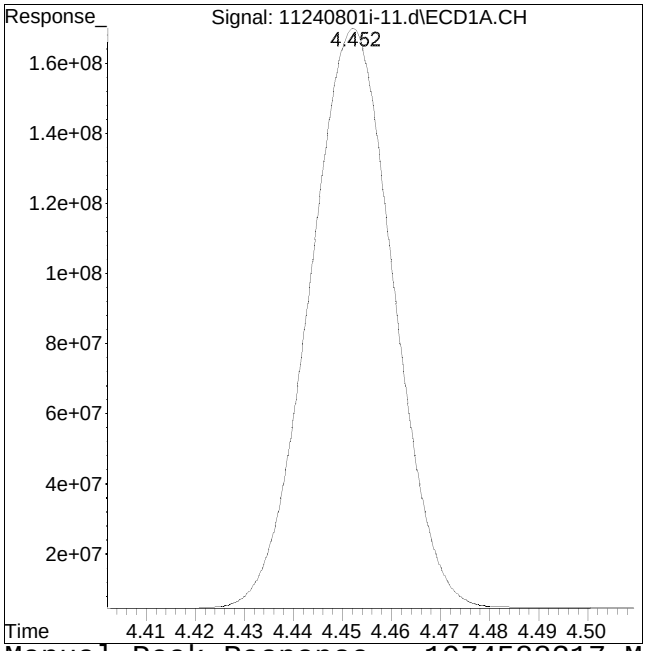
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #20: Endosulfan II




Original Peak Response = 1975155514




Manual Peak Response = 1974588317 M4

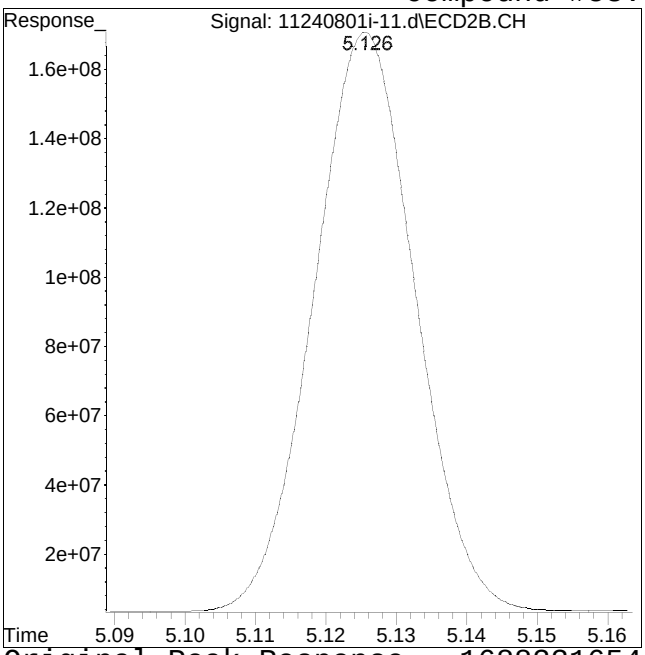
M4 = Poor automated baseline construction.

Manual Integration Report

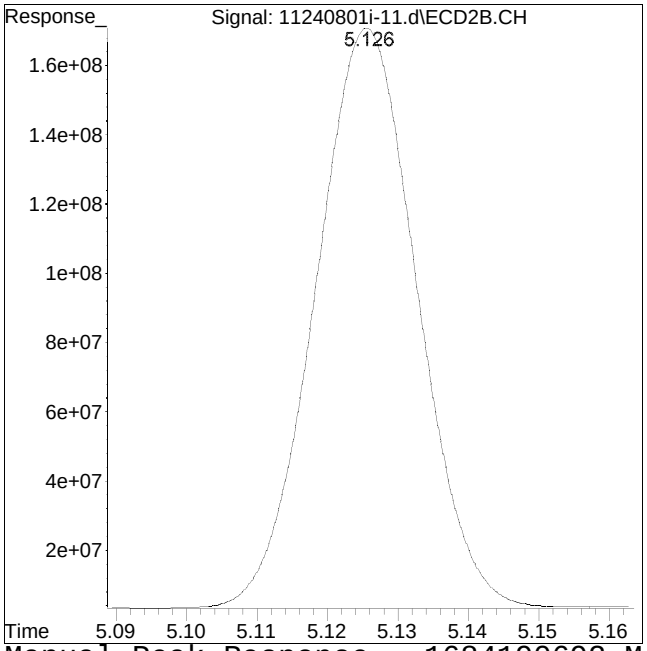
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #58: Endosulfan II #2




Original Peak Response = 1688331654




Manual Peak Response = 1684190692 M4

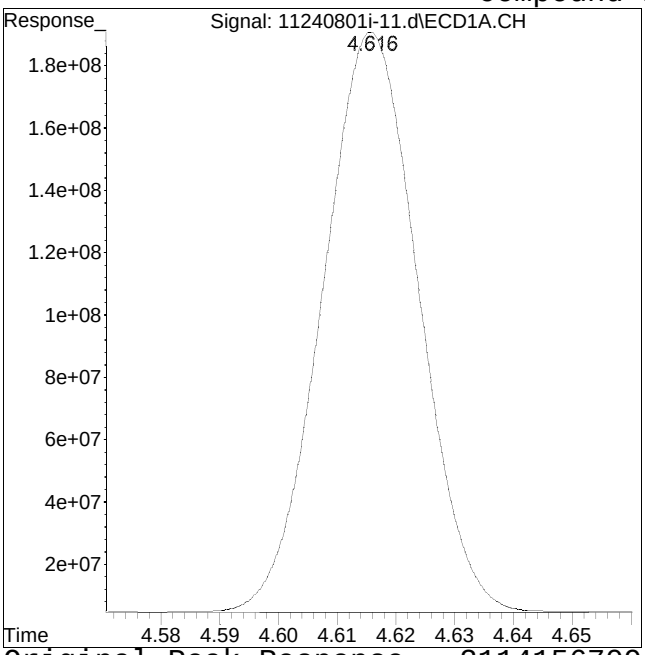
M4 = Poor automated baseline construction.

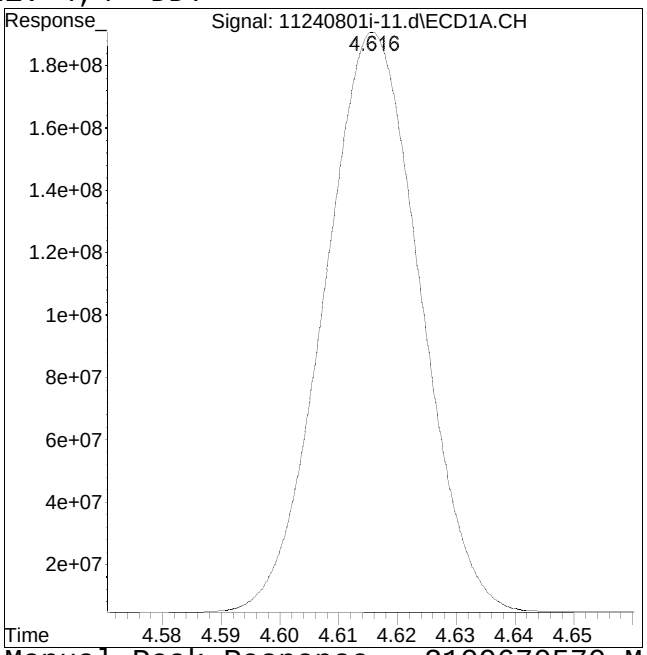
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #21: 4,4'-DDT



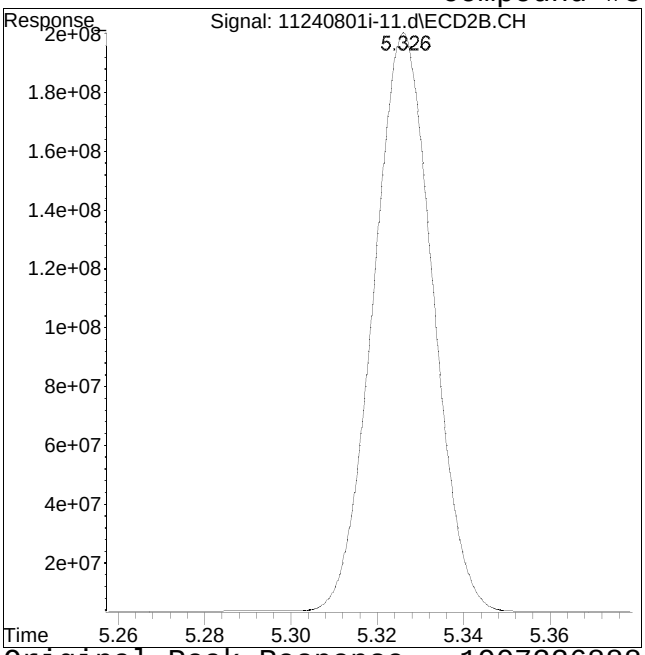



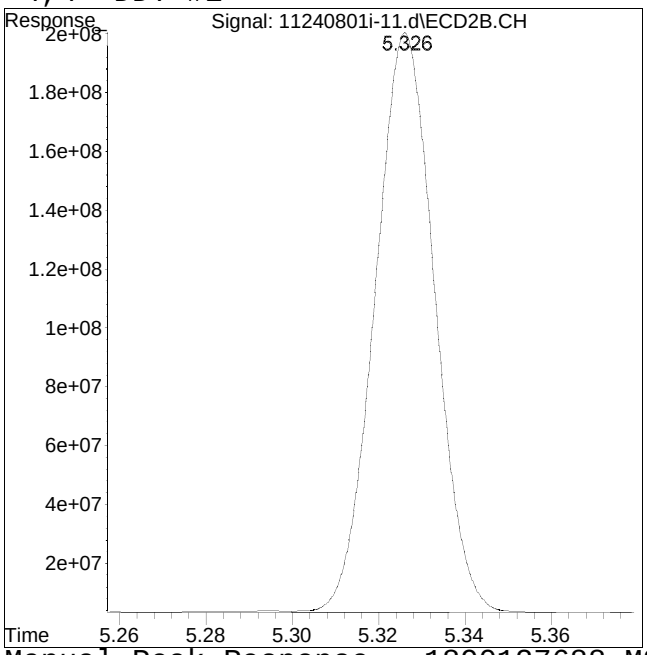

Original Peak Response = 2114156709 Manual Peak Response = 2109670570 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #59: 4,4'-DDT #2



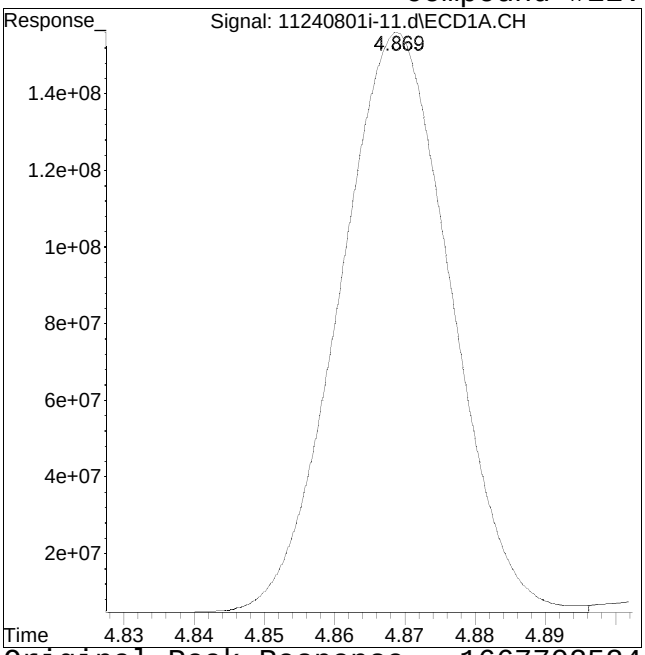



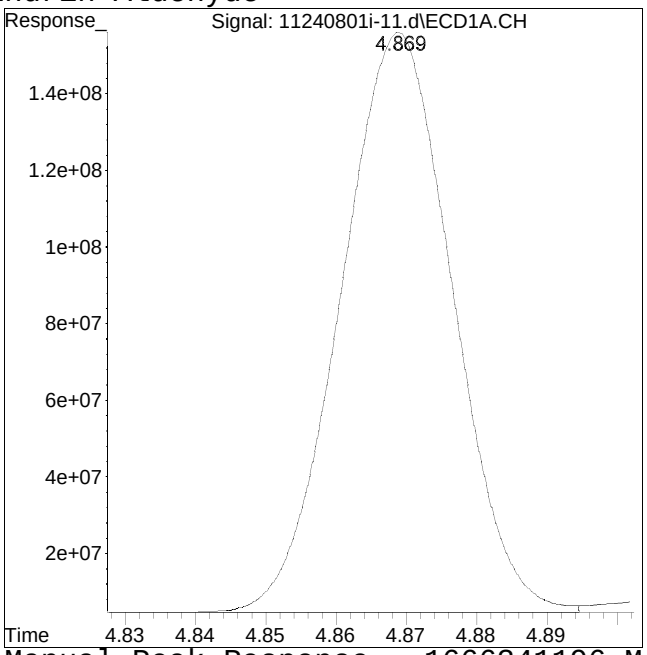

Original Peak Response = 1907326888 Manual Peak Response = 1890127688 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #22: Endrin Aldehyde



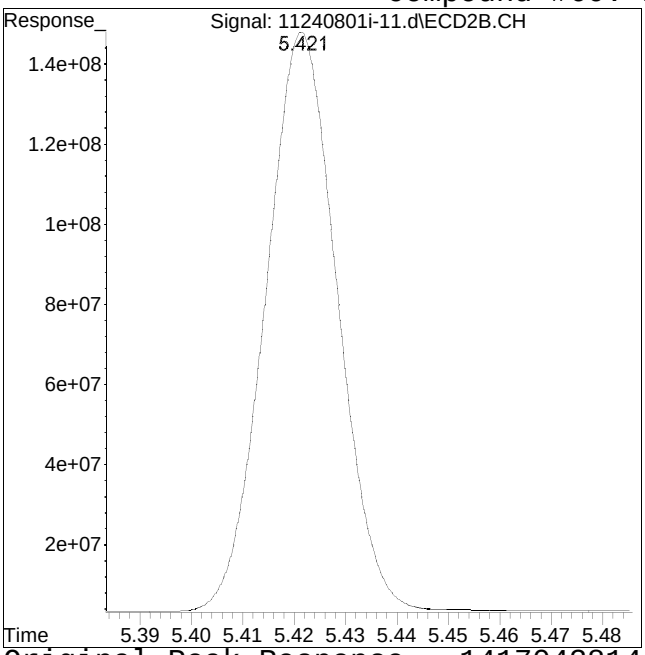



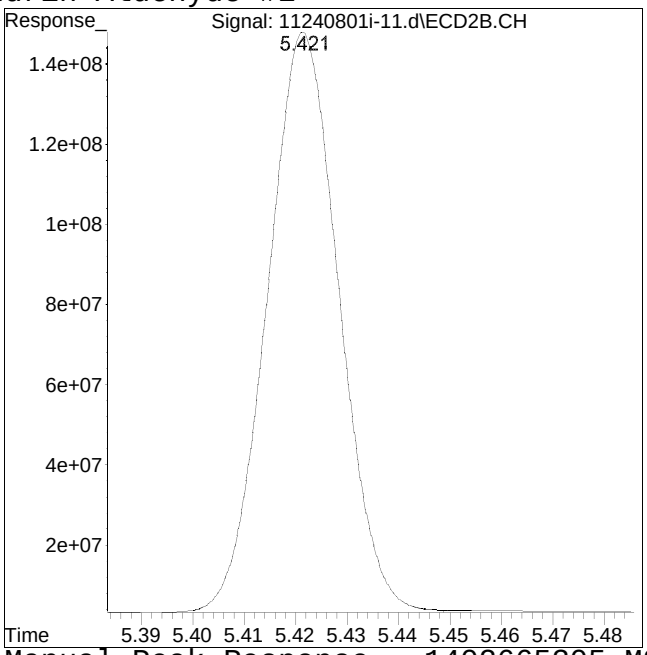

Original Peak Response = 1667702524 Manual Peak Response = 1666341196 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #60: Endrin Aldehyde #2



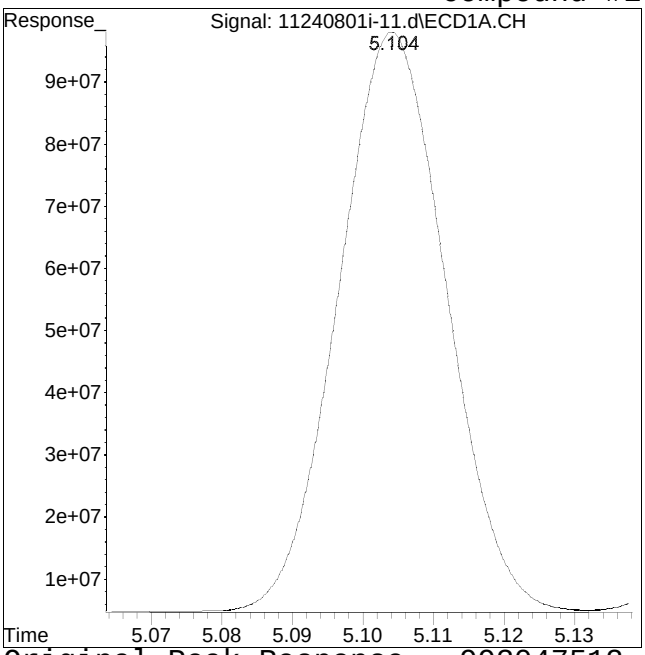




Original Peak Response = 1417043814 Manual Peak Response = 1402665305 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

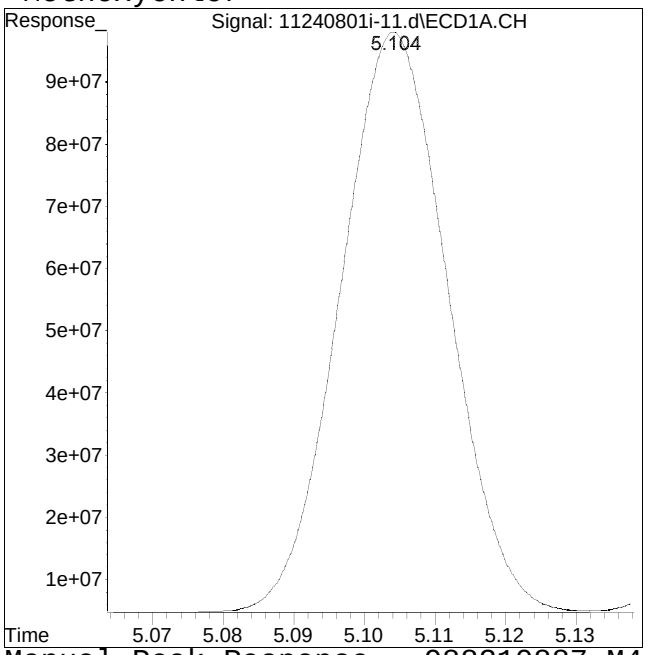
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

## Compound #23: Methoxychlor




Original Peak Response = 993047512



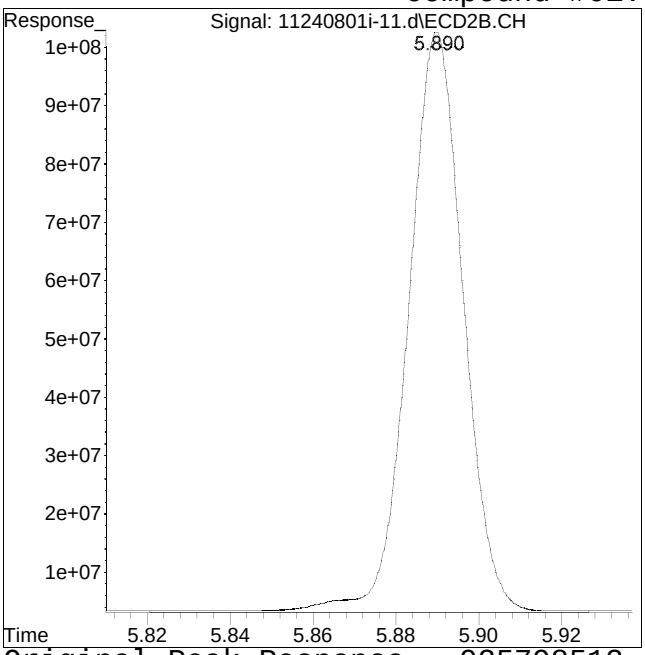

Manual Peak Response = 988310887 M4

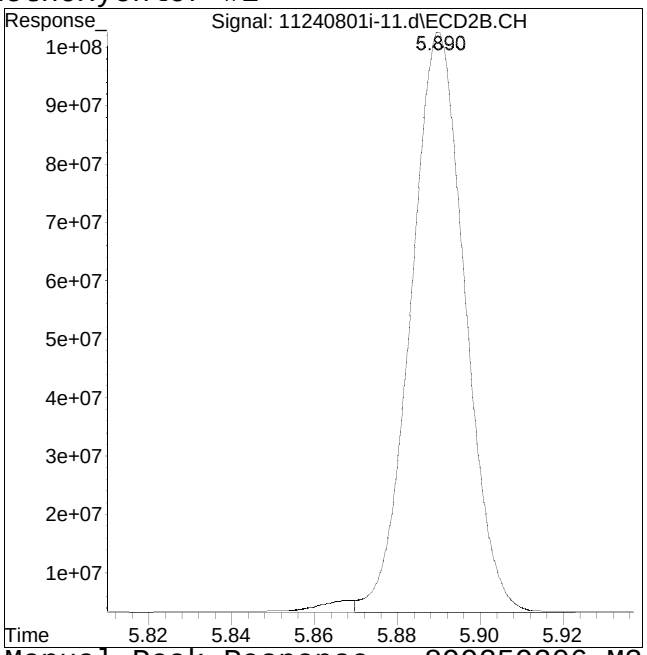
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-11.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:12 Instrument : Pest 11
Sample : il10pest,42e,,pp 11679 L0.Quant Date : 8/2/2024 9:29 am

Compound #61: Methoxychlor #2



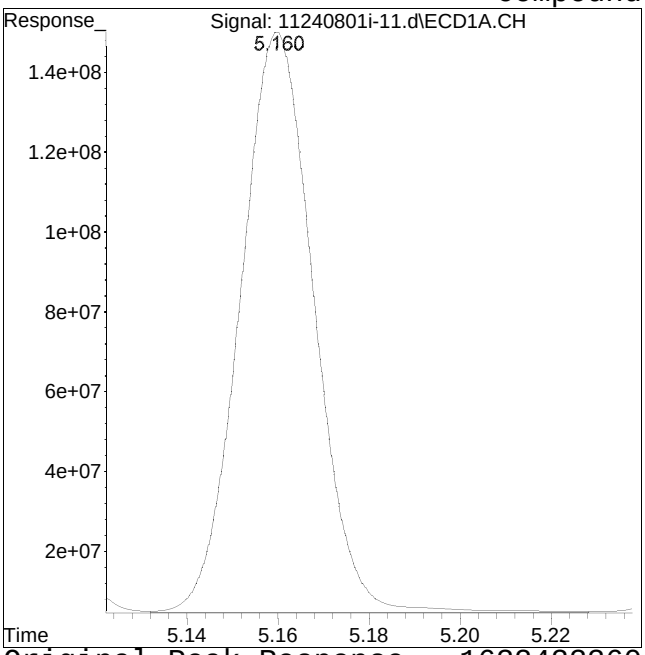

Original Peak Response = 925798512 Manual Peak Response = 899259206 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

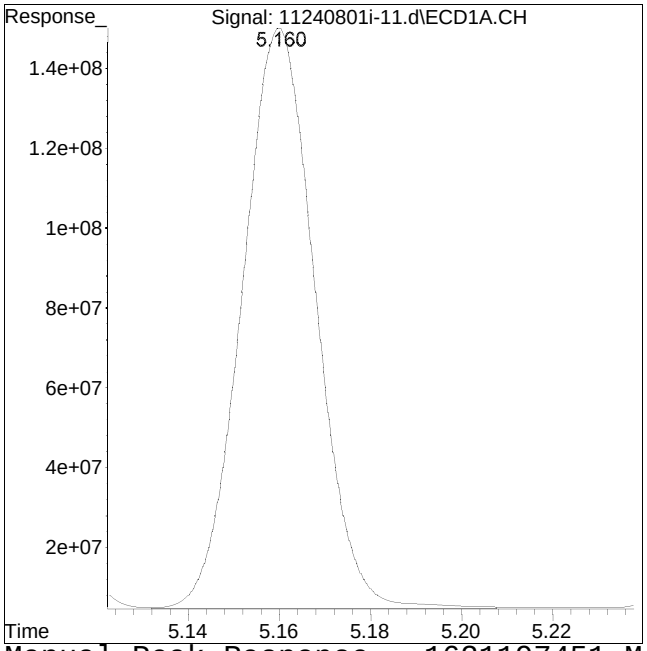
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #24: Mirex



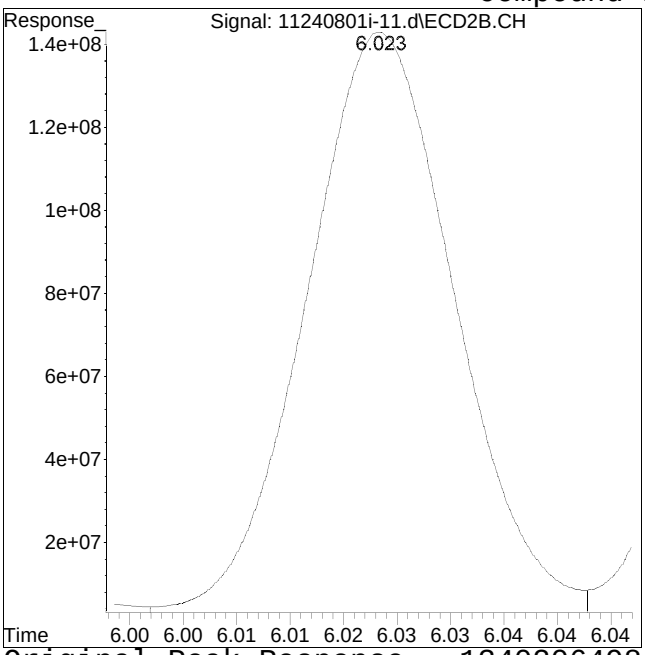

Original Peak Response = 1632423360 Manual Peak Response = 1621197451 M4
M4 = Poor automated baseline construction.

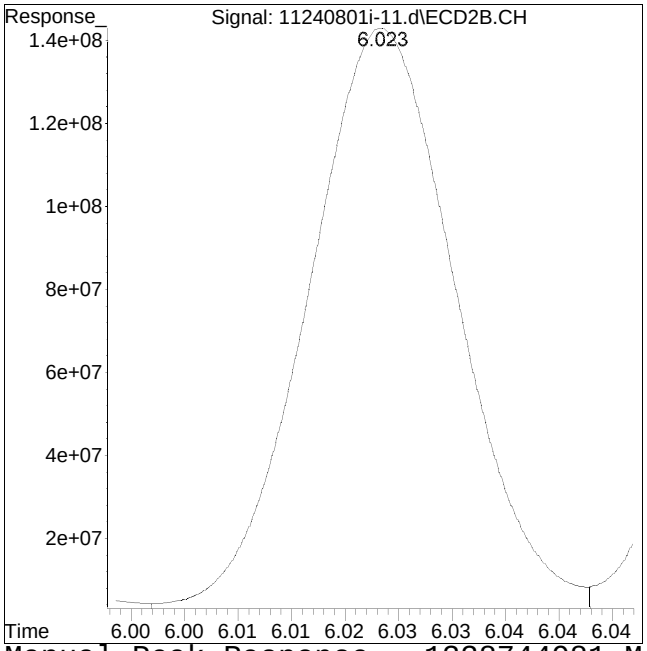
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #62: Mirex #2



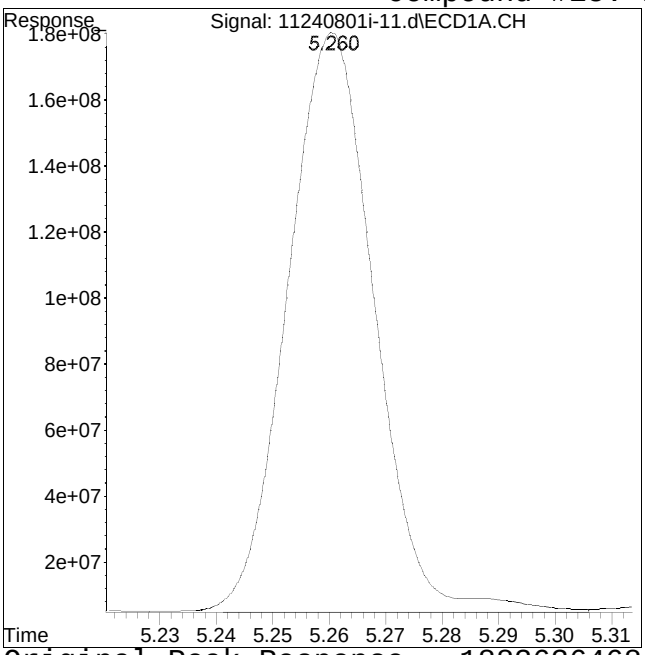

Original Peak Response = 1340206498 Manual Peak Response = 1338744981 M4
M4 = Poor automated baseline construction.

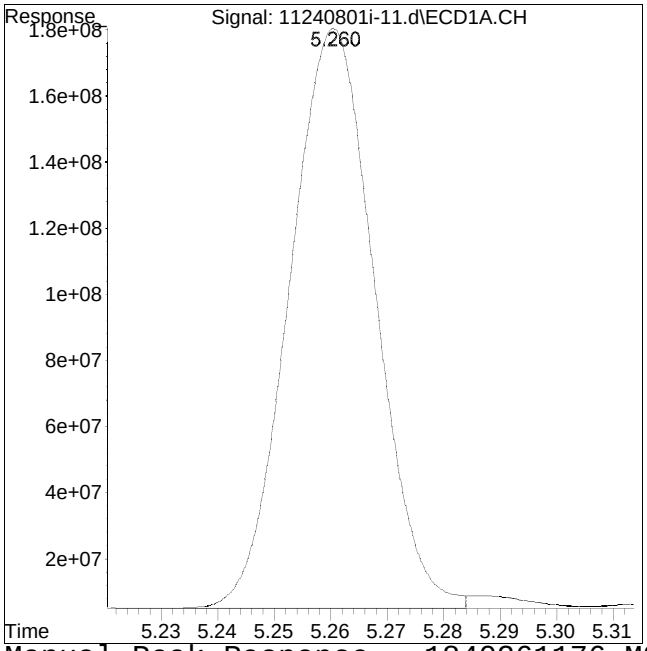
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #25: Endosulfan Sulfate




Original Peak Response = 1883636468 Manual Peak Response = 1840261176 M3

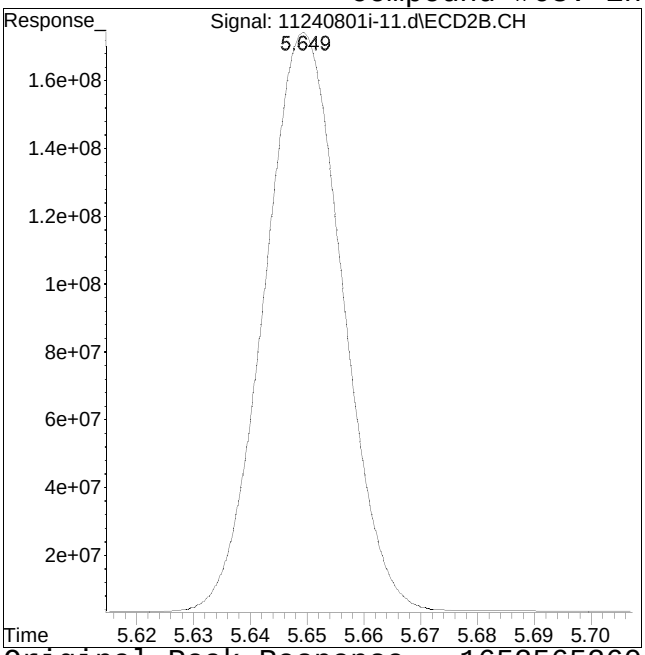
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

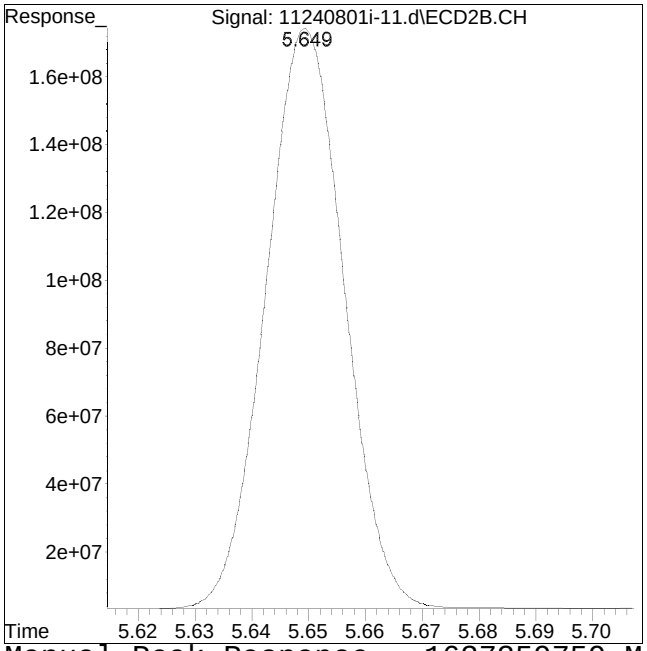
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 1652565260




Manual Peak Response = 1637359759 M4

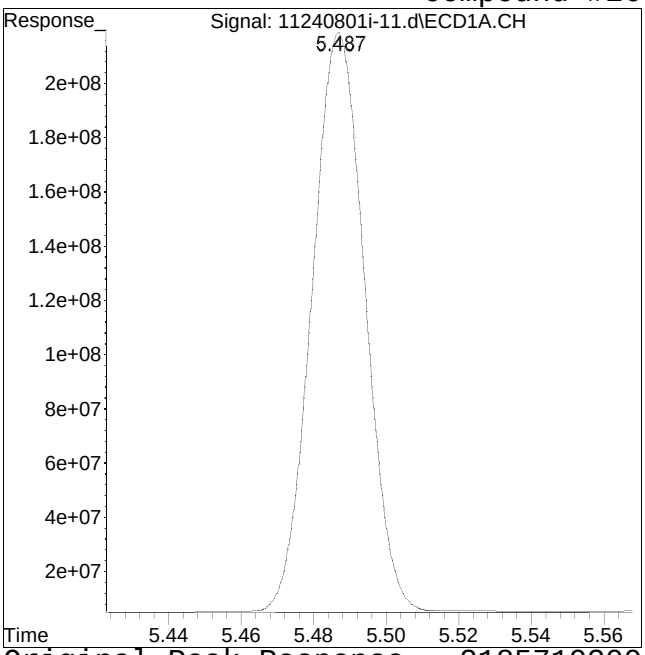
M4 = Poor automated baseline construction.

Manual Integration Report

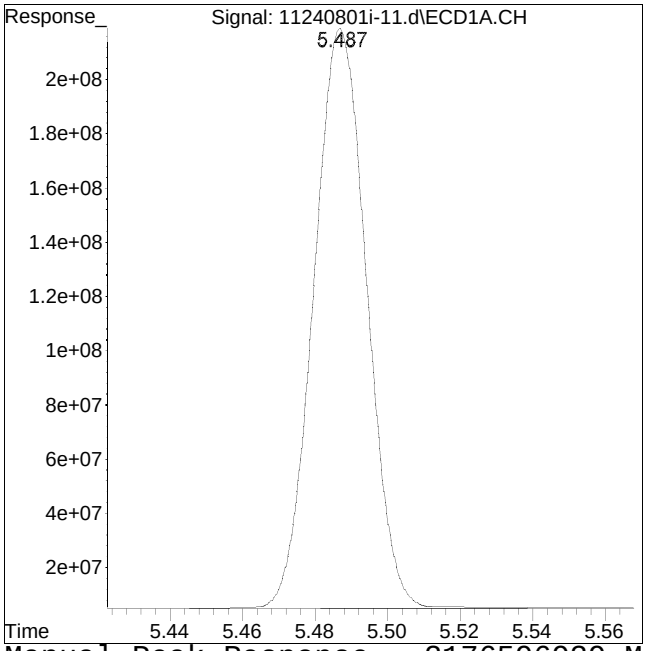
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #26: Endrin Ketone




Original Peak Response = 2185719300




Manual Peak Response = 2176596939 M4

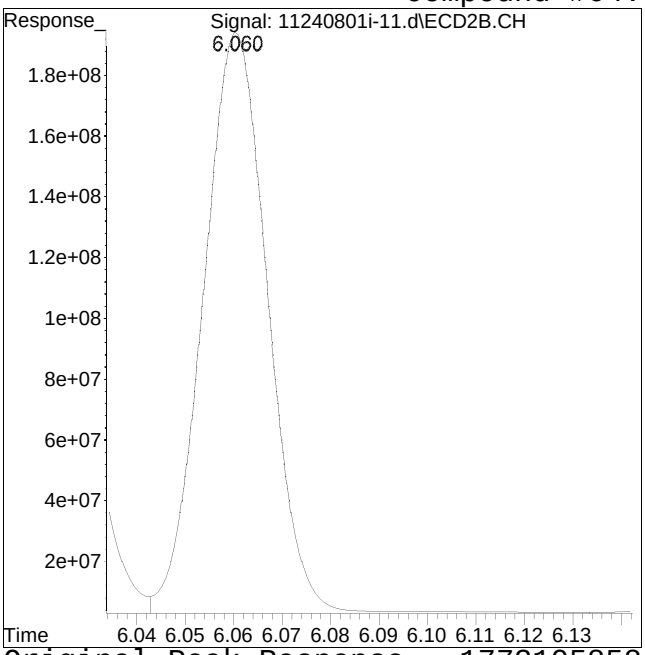
M4 = Poor automated baseline construction.

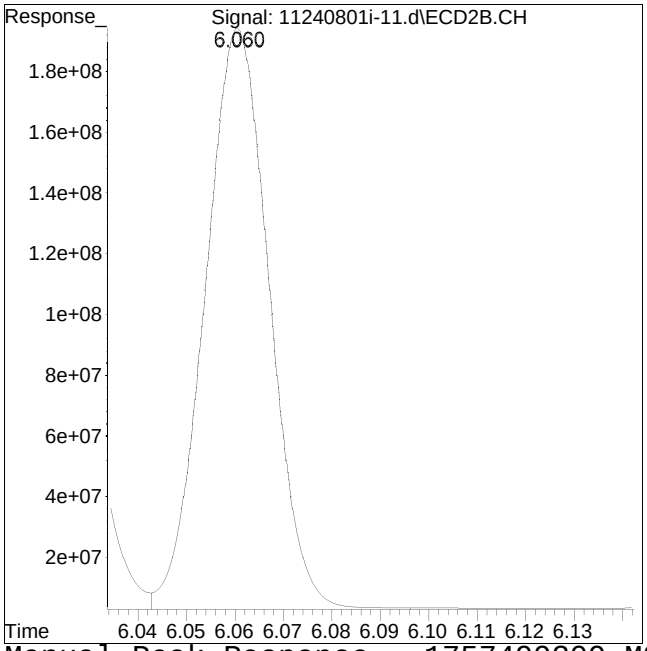
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #64: Endrin Ketone #2




Original Peak Response = 1773105858 Manual Peak Response = 1757499309 M3

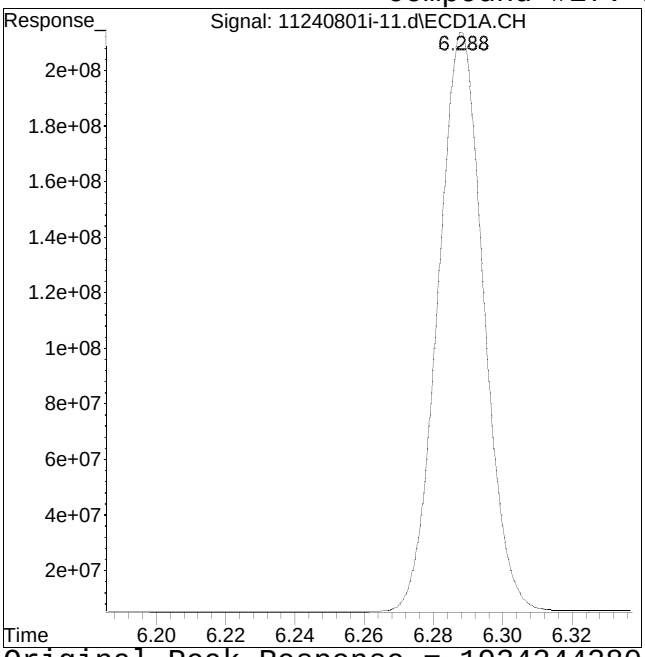
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

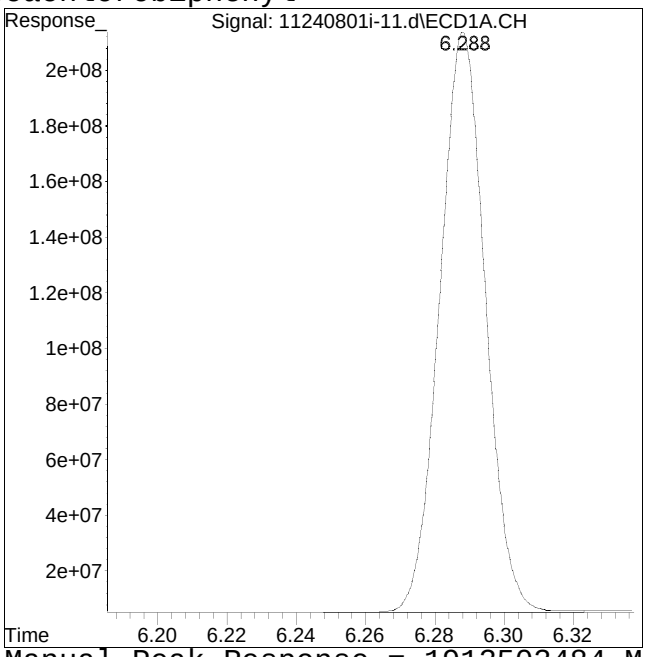
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

## Compound #27: Decachlorobiphenyl



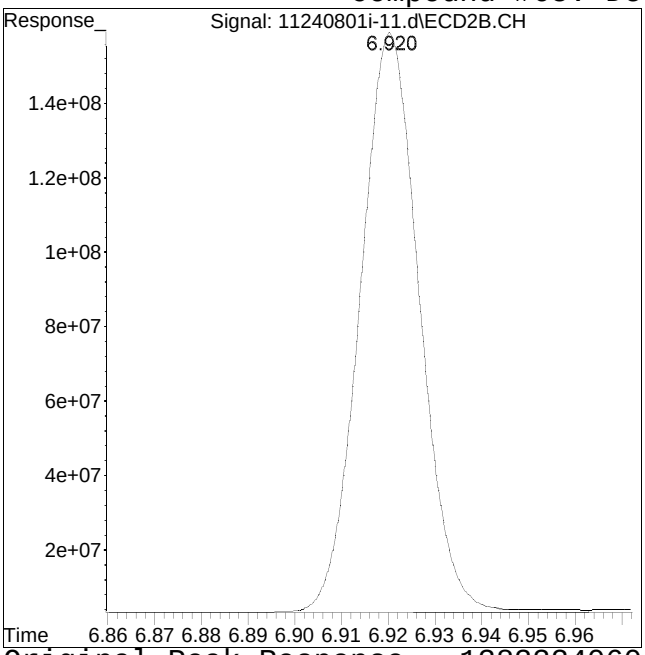

Original Peak Response = 1934244280 Manual Peak Response = 1913503484 M4
M4 = Poor automated baseline construction.

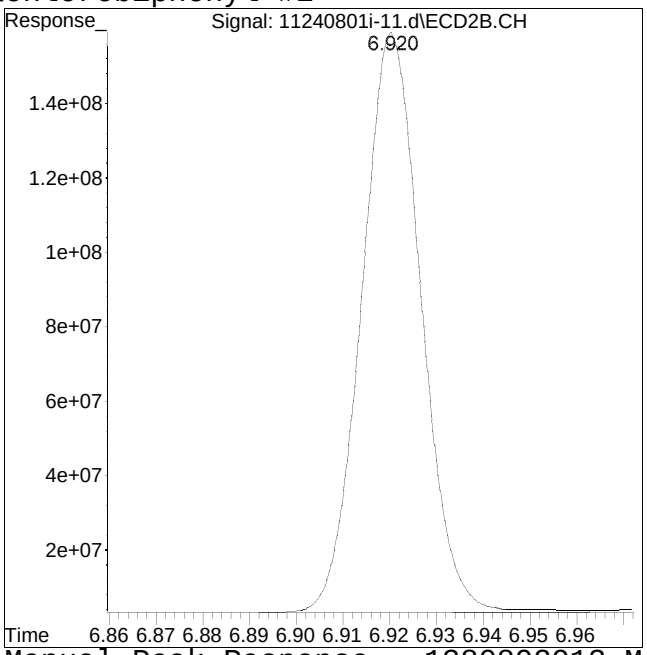
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-11.d
Date Inj'd : 8/1/2024 20:12
Sample : il10pest,42e,,pp 11679 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:29 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 1383324060 Manual Peak Response = 1380892913 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:25
Operator : PEST11:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:58:56 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:38:05 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.310 | 1.386 | 219.1E6 | 172.6E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.653 | 1.859 | 3436.3E6 | 2866.4E6 | 375.795M3 | 383.994 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 751.59%# | 767.99%# |
| 27) s | Decachlorobi | 6.288 | 6.919 | 3542.0E6 | 2565.1E6 | 389.672M4 | 396.514M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 779.34%# | 793.03%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.866 | 2.179 | 4393.8E6 | 3054.6E6 | 374.440M3 | 386.397M4 |
| 4) t | alpha-BHC | 1.965 | 2.272 | 5474.0E6 | 4748.1E6 | 387.113M3 | 397.820M3 |
| 5) t | gamma-BHC (l | 2.167 | 2.558 | 5015.2E6 | 4254.3E6 | 385.346M4 | 395.569 |
| 6) t | beta-BHC | 2.222 | 2.623 | 2035.1E6 | 1695.7E6 | 381.357M3 | 384.044 |
| 7) t | delta-BHC | 2.351 | 2.890 | 5109.5E6 | 4368.4E6 | 387.060M4 | 397.603M4 |
| 8) t | Heptachlor | 2.514 | 2.953 | 4267.4E6 | 3941.6E6 | 357.934M4 | 366.974M4 |
| 9) t | Aldrin | 2.757 | 3.272 | 4276.8E6 | 3818.0E6 | 371.928M4 | 378.594 |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 3.302 | 3.885 | 3795.3E6 | 3457.2E6 | 359.403M3 | 369.359M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:25
Operator : PEST11:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:58:56 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:38:05 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 13) | t | gamma-Chlord | 3.426 | 4.105 | 3704.6E6 | 3328.5E6 | 381.821M4 | 385.505M4 |
| 14) | t | alpha-Chlord | 3.560 | 4.275 | 4129.5E6 | 3639.2E6 | 377.801M3 | 381.858M4 |
| 15) | t | 4,4'-DDE | 3.658 | 4.474 | 4233.9E6 | 3665.1E6 | 381.347M4 | 383.165M3 |
| 16) | t | Endosulfan I | 3.696 | 4.336 | 3638.6E6 | 3224.0E6 | 363.740M3 | 369.311M4 |
| 17) | t | Dieldrin | 3.956 | 4.628 | 3938.0E6 | 3471.7E6 | 374.014M4 | 378.648M4 |
| 18) | t | Endrin | 4.211 | 4.926 | 3882.2E6 | 3492.7E6 | 367.059M3 | 376.416M4 |
| 19) | t | 4,4'-DDD | 4.323 | 5.050 | 3366.6E6 | 3005.8E6 | 387.600M4 | 394.381M4 |
| 20) | t | Endosulfan I | 4.452 | 5.126 | 3381.2E6 | 2907.3E6 | 357.803M4 | 364.277M4 |
| 21) | t | 4,4'-DDT | 4.617 | 5.327 | 3755.2E6 | 3373.8E6 | 384.027M4 | 387.821M3 |
| 22) | t | Endrin Aldeh | 4.869 | 5.422 | 2950.3E6 | 2501.6E6 | 376.997M4 | 381.397M3 |
| 23) | t | Methoxychlor | 5.105 | 5.891 | 1699.3E6 | 1603.4E6 | 350.495M4 | 373.779M3 |
| 24) | t | Mirex | 5.160 | 6.024 | 2881.7E6 | 2395.8E6 | 373.166M3 | 379.221M4 |
| 25) | t | Endosulfan S | 5.261 | 5.650 | 3233.7E6 | 2911.3E6 | 369.599M3 | 378.677M3 |
| 26) | t | Endrin Keton | 5.487 | 6.061 | 3805.9E6 | 3138.1E6 | 363.553M4 | 377.488M3 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:25
Operator : PEST11:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:58:56 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:38:05 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

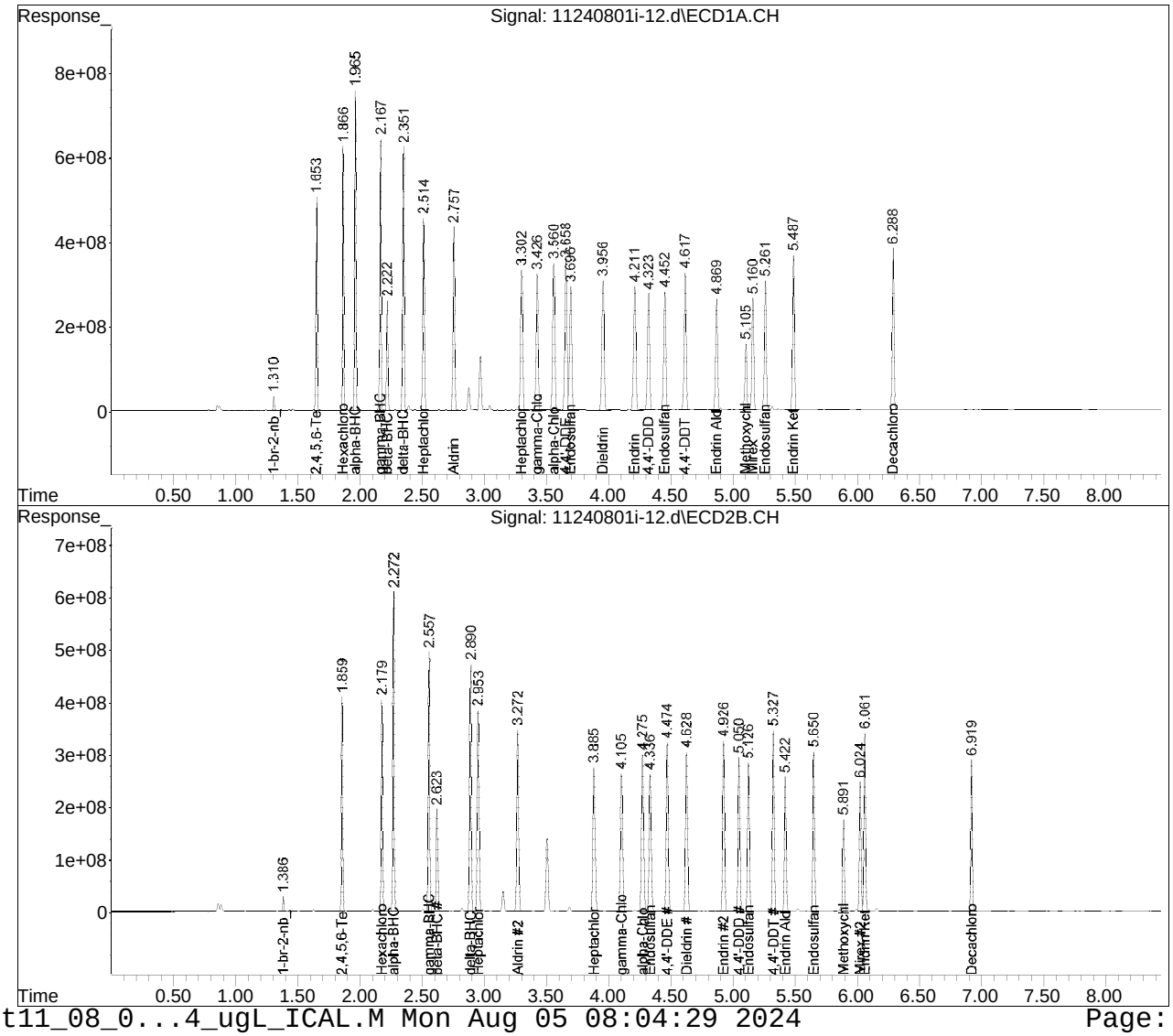
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:25
Operator : PEST11:ejl
Sample : il11pest,42e,,pp 11678 L0.4
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 09:58:56 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 09:38:05 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

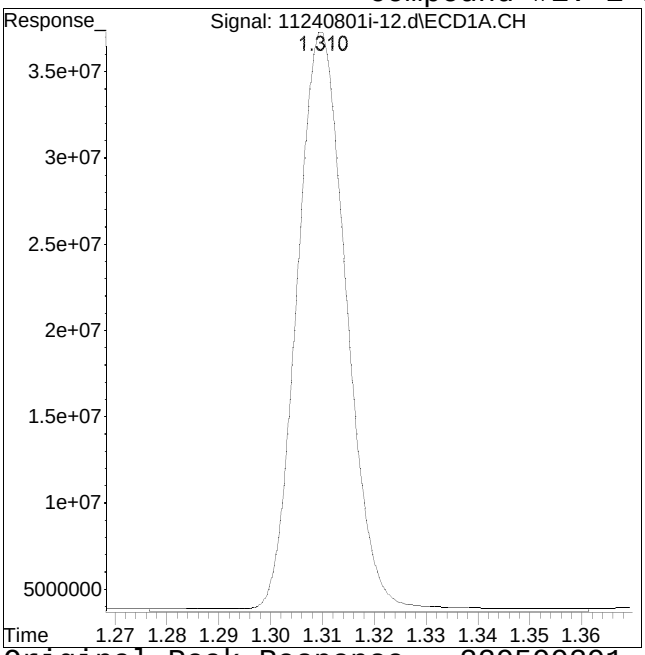
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



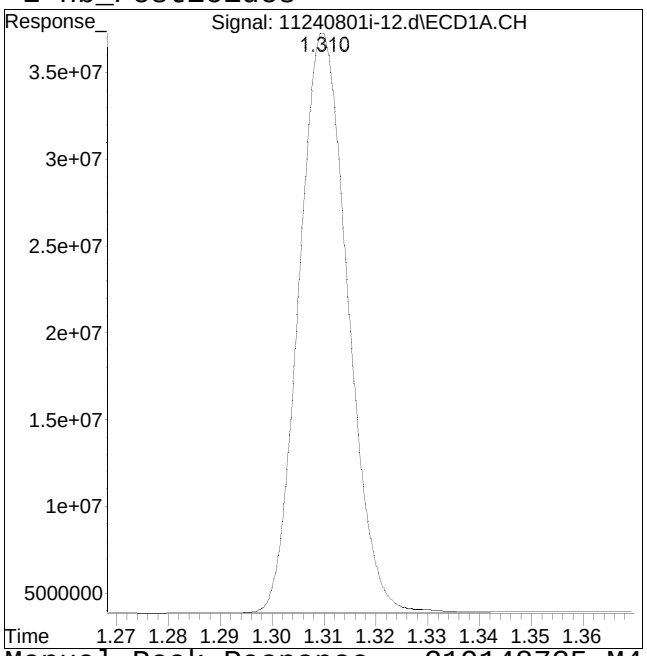
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 229599391



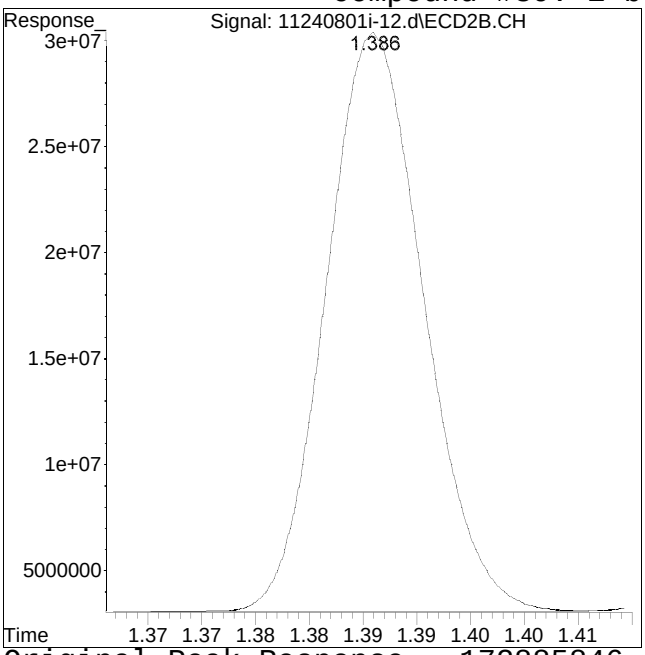

Manual Peak Response = 219148735 M4

M4 = Poor automated baseline construction.

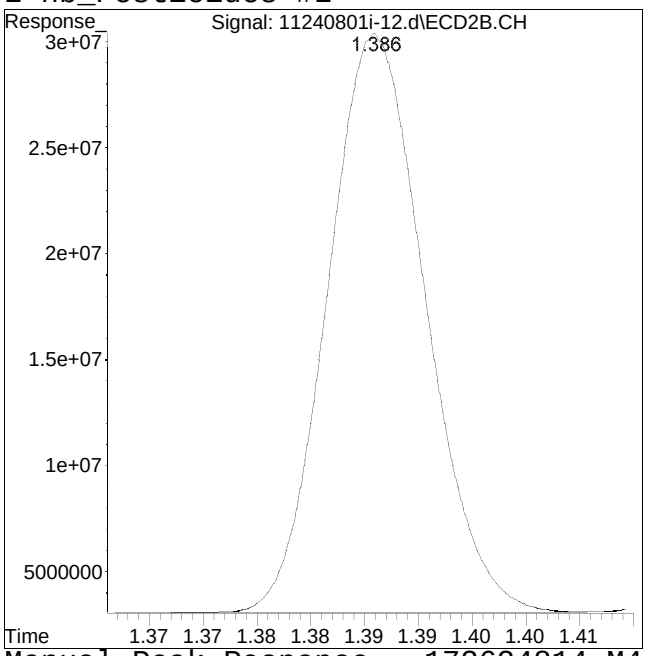
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 172885846




Manual Peak Response = 172624814 M4

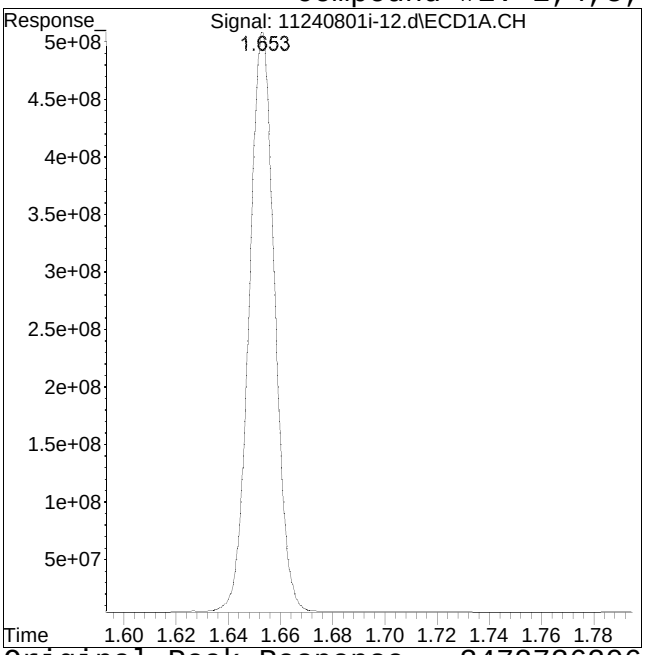
M4 = Poor automated baseline construction.

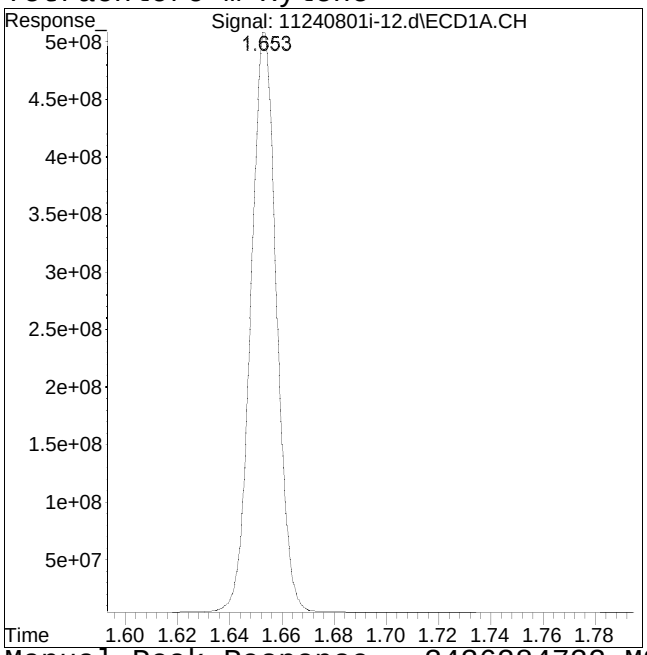
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



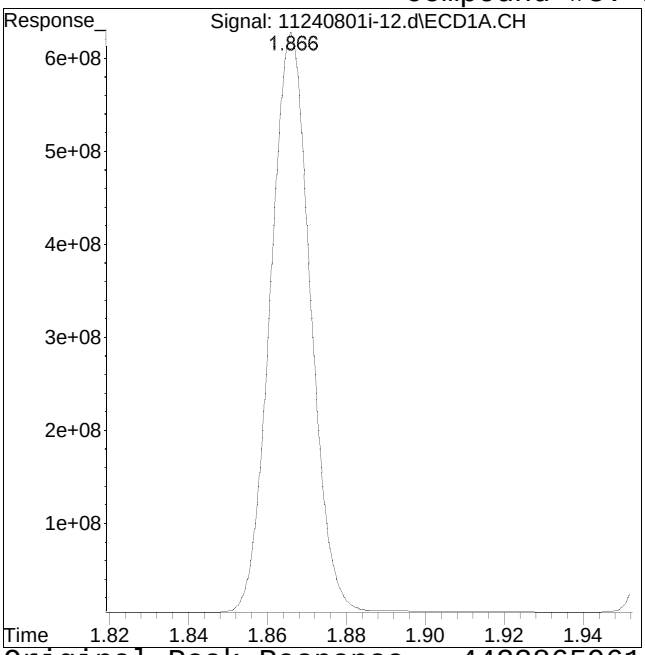

Original Peak Response = 3472736206 Manual Peak Response = 3436284732 M3

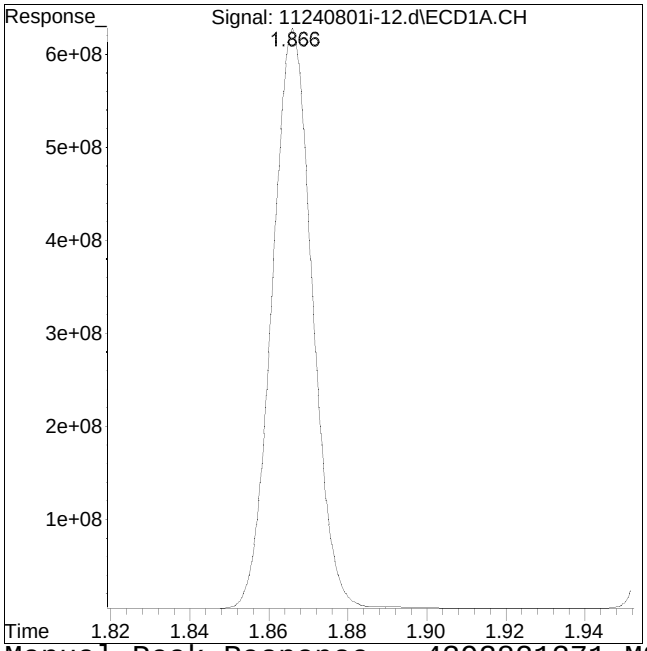
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #3: Hexachlorobenzene



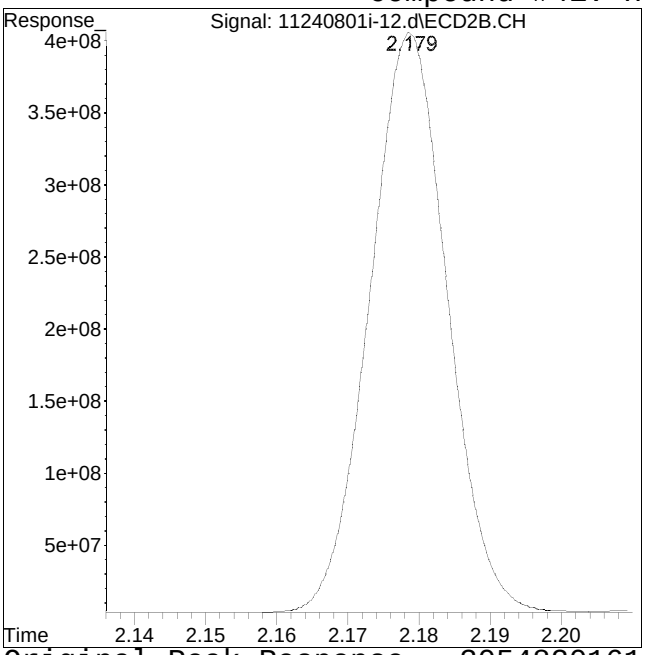



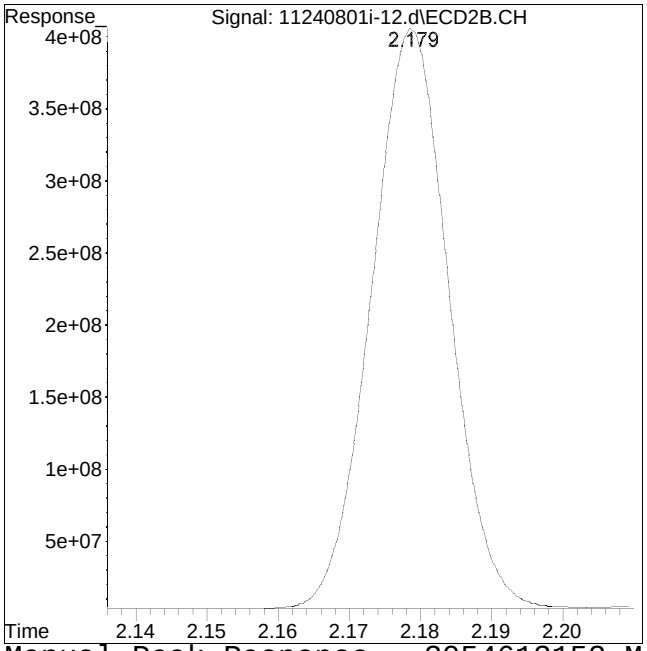

Original Peak Response = 4423865961 Manual Peak Response = 4393821371 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #41: Hexachlorobenzene #2



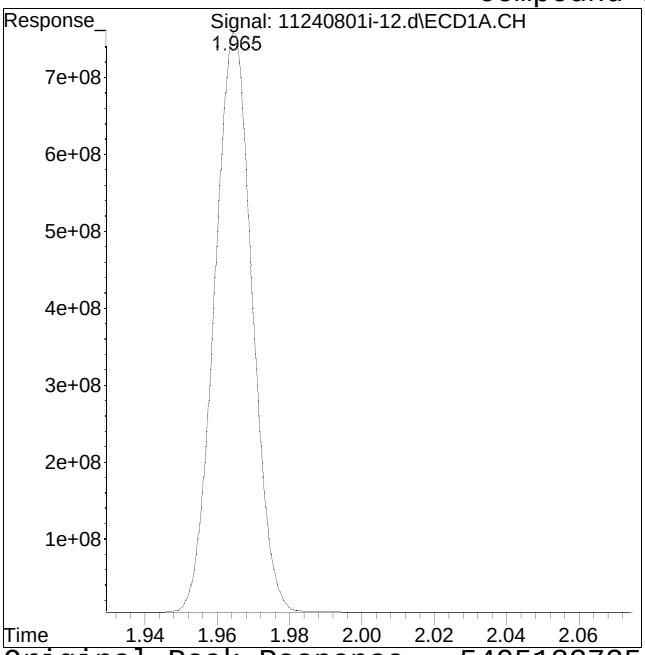



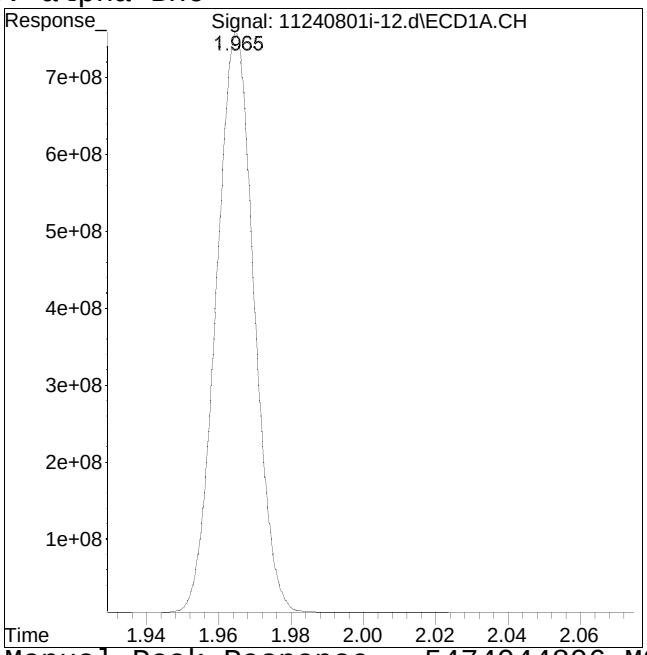

Original Peak Response = 3054820161 Manual Peak Response = 3054613153 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #4: alpha-BHC



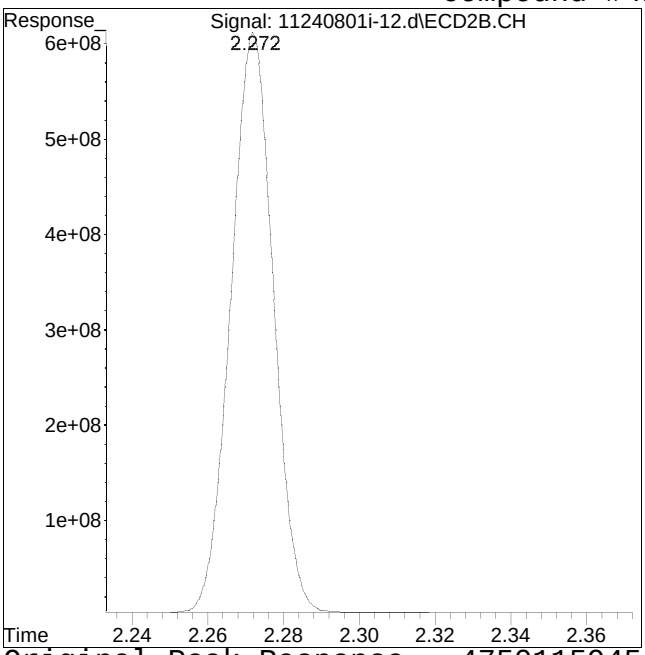



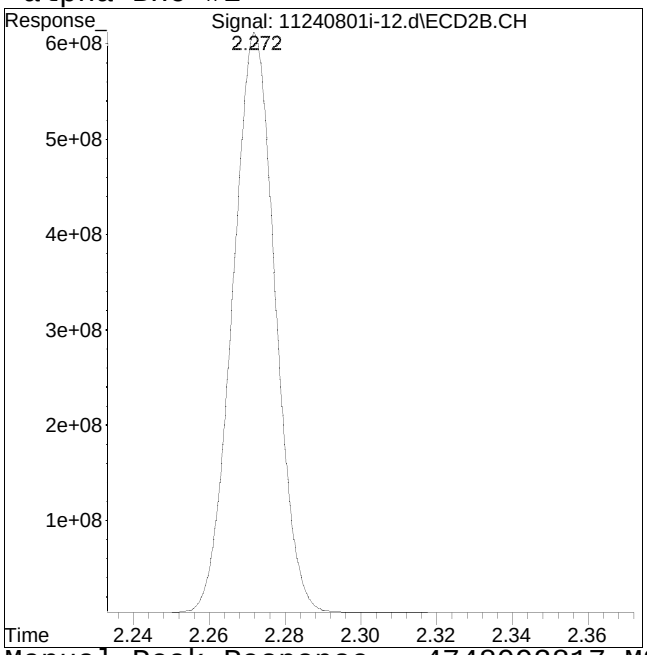

Original Peak Response = 5495133735 Manual Peak Response = 5474044806 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #42: alpha-BHC #2



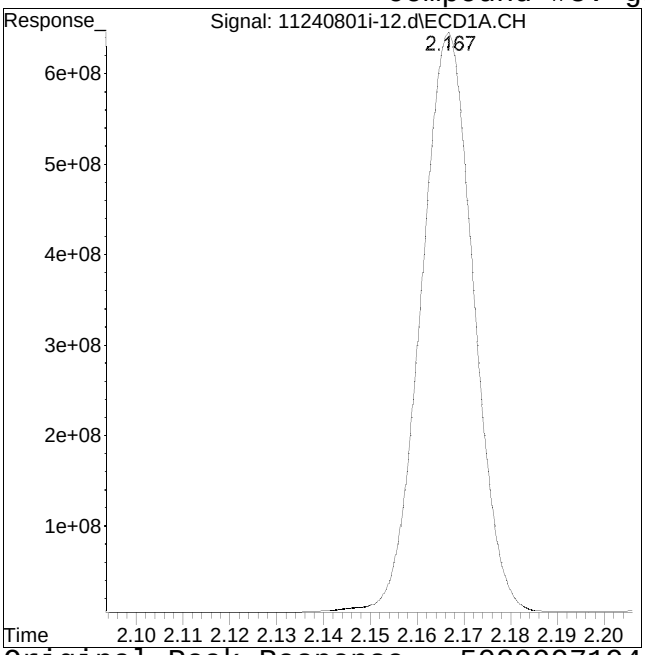

Original Peak Response = 4750115945 Manual Peak Response = 4748093817 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

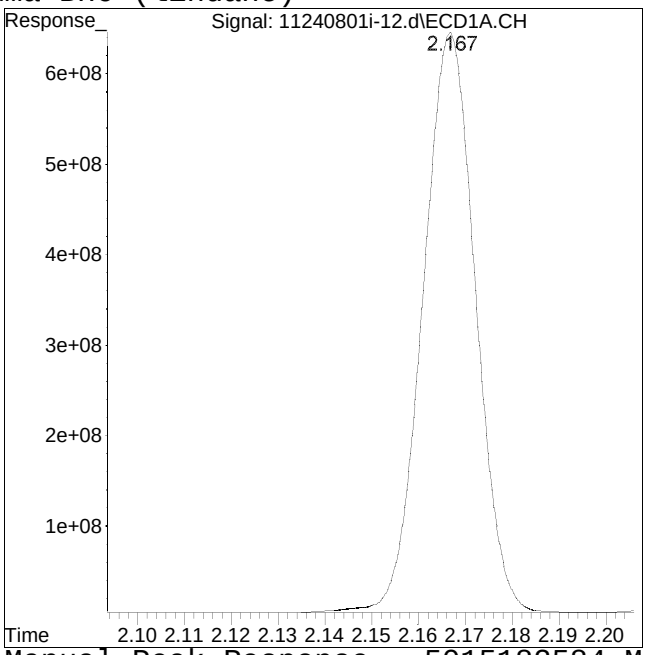
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #5: gamma-BHC (lindane)



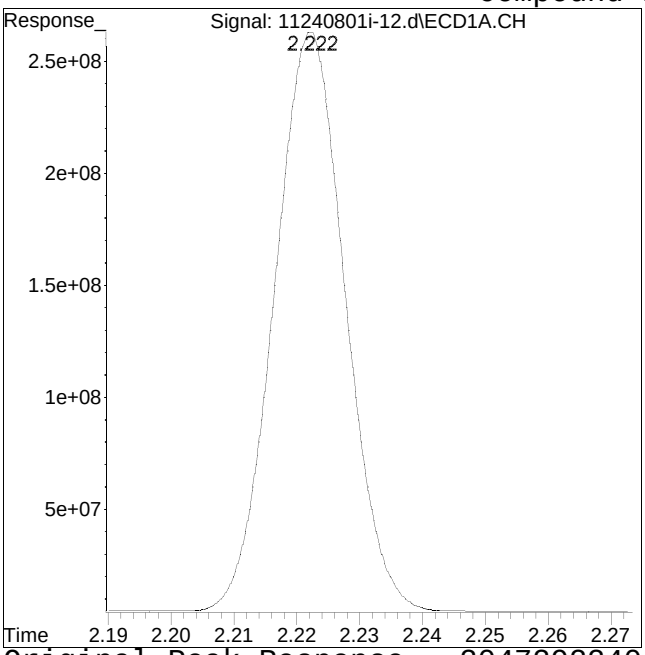



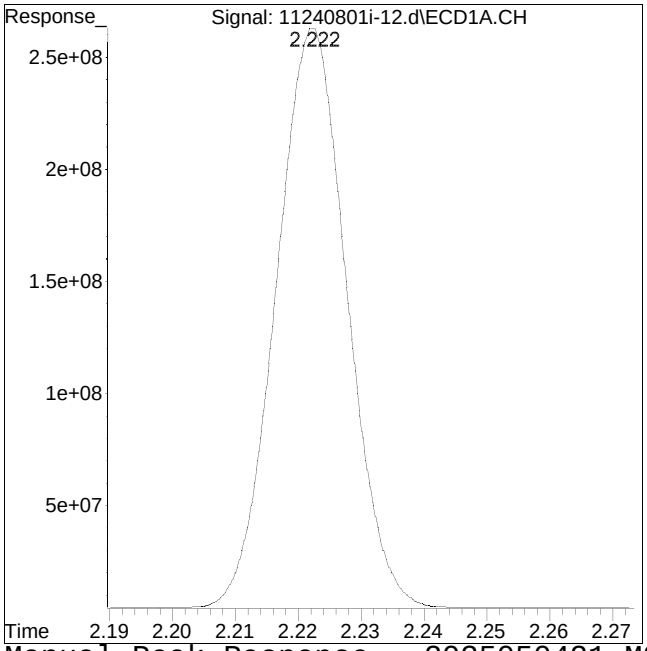

Original Peak Response = 5029997194 Manual Peak Response = 5015182584 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #6: beta-BHC



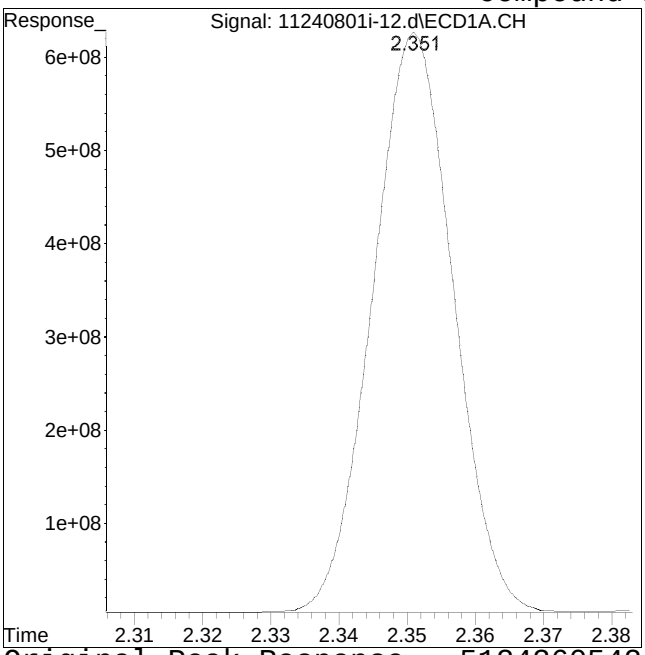



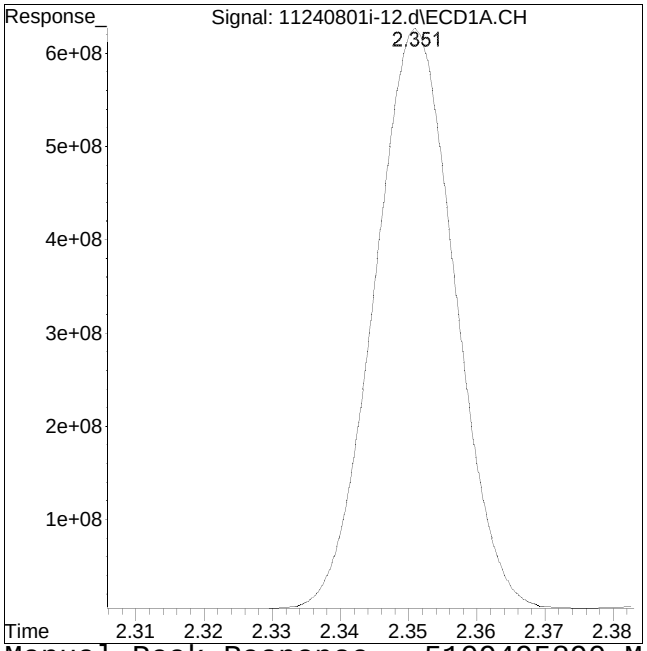

Original Peak Response = 2047292240 Manual Peak Response = 2035050421 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #7: delta-BHC



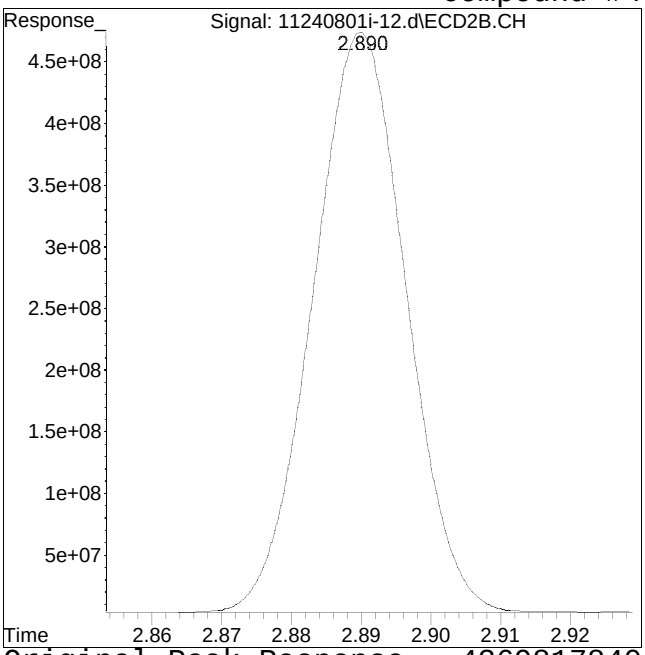

Original Peak Response = 5124360542 Manual Peak Response = 5109495890 M4
M4 = Poor automated baseline construction.

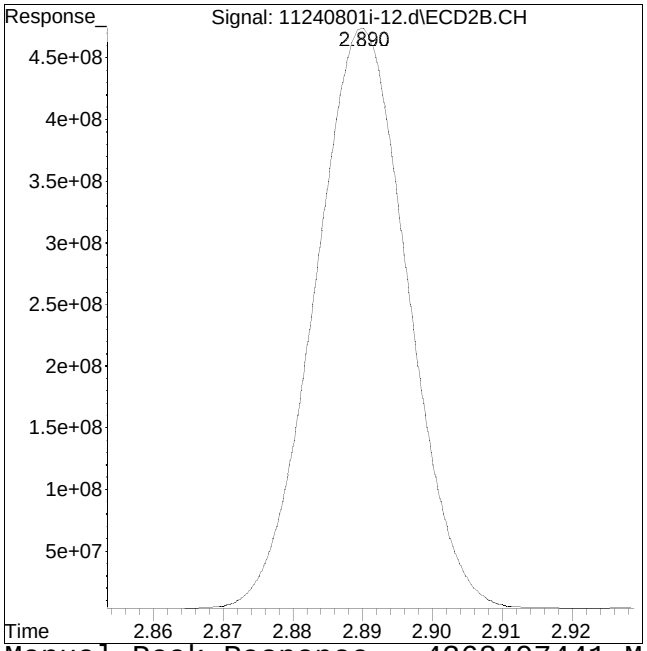
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #45: delta-BHC #2



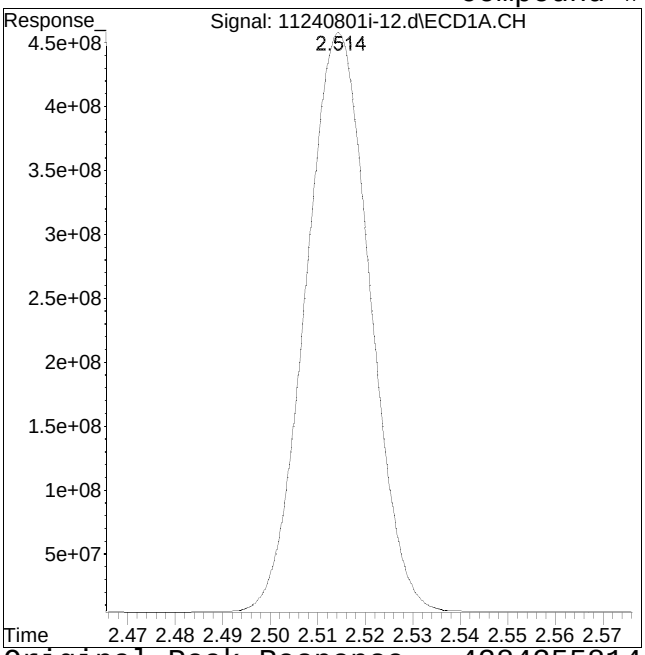

Original Peak Response = 4369817840 Manual Peak Response = 4368407441 M4
M4 = Poor automated baseline construction.

Manual Integration Report

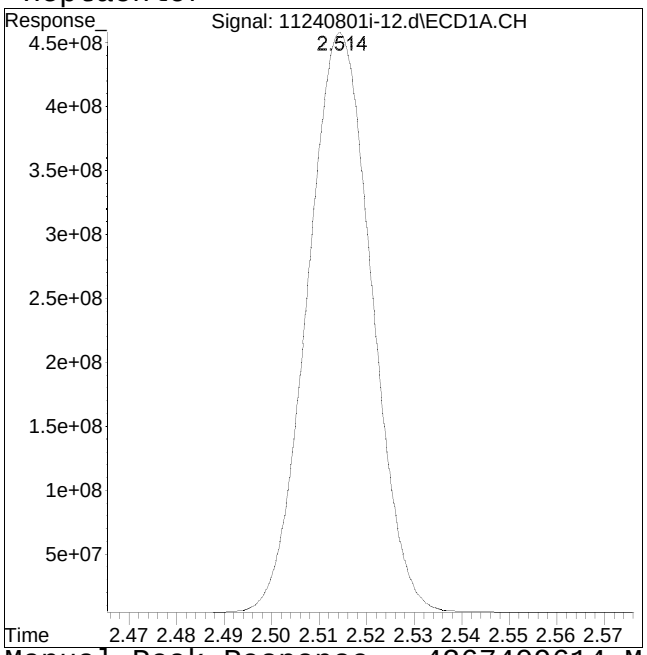
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #8: Heptachlor




Original Peak Response = 4284355814




Manual Peak Response = 4267409614 M4

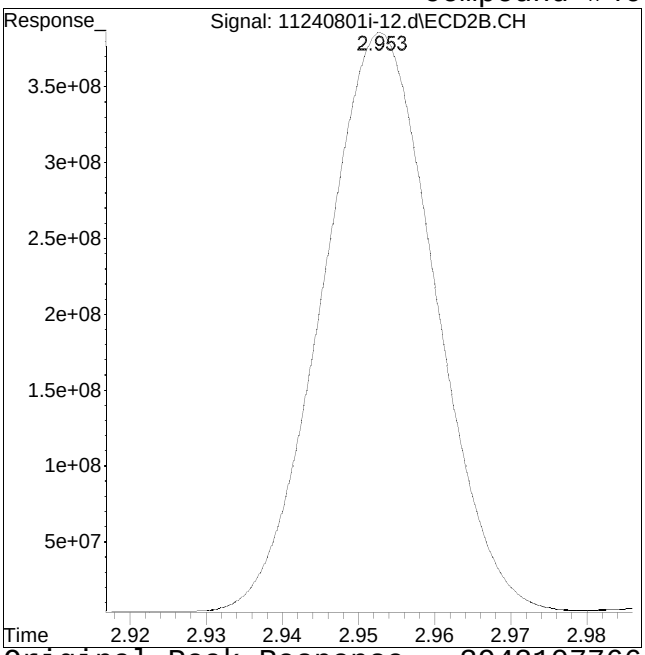
M4 = Poor automated baseline construction.

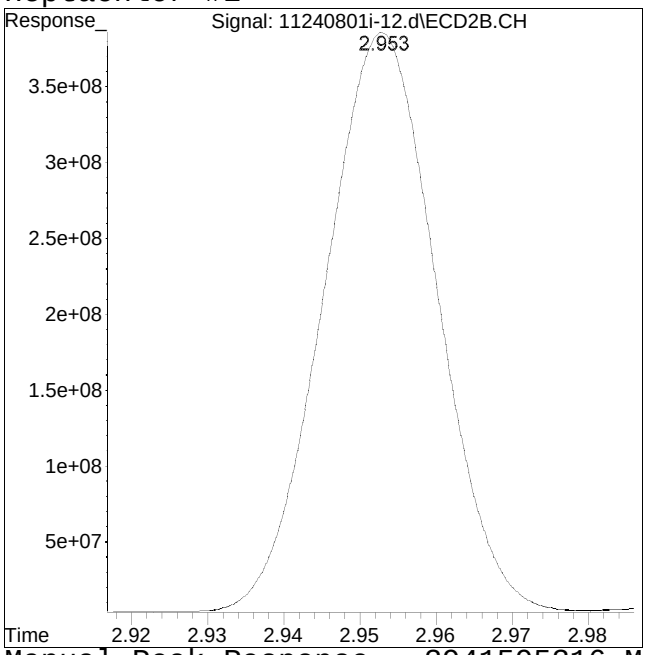
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #46: Heptachlor #2



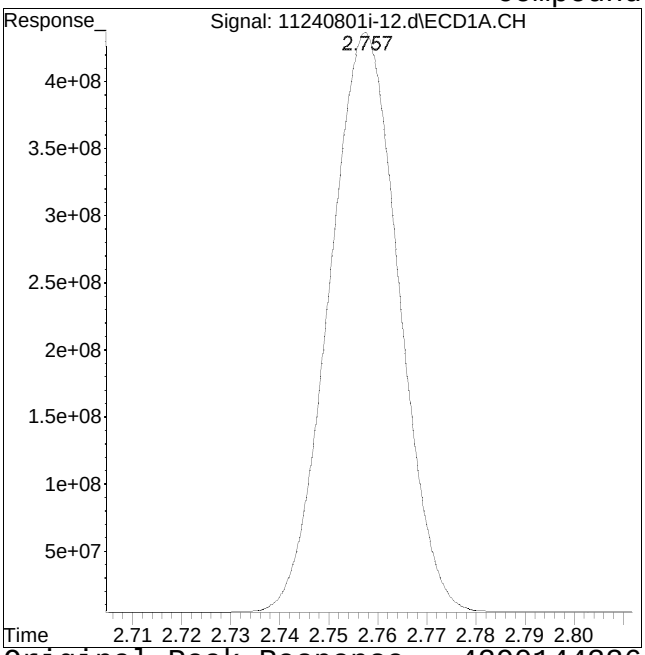

Original Peak Response = 3942107766 Manual Peak Response = 3941595316 M4
M4 = Poor automated baseline construction.

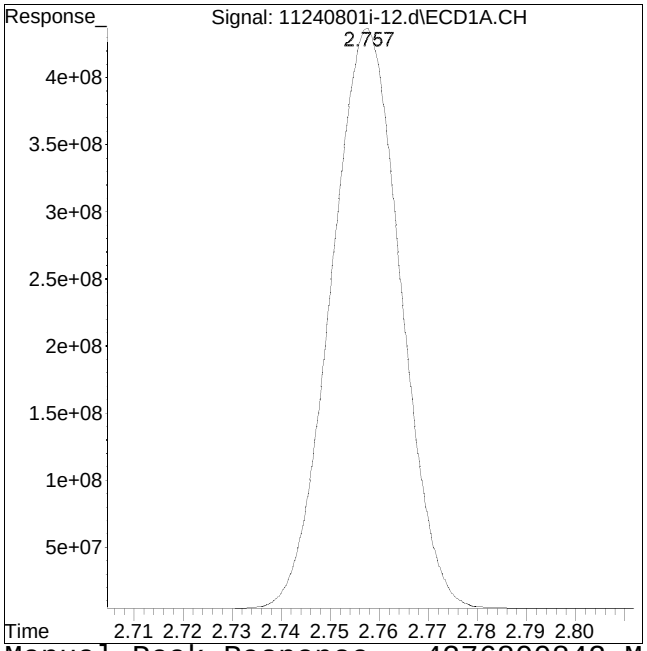
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #9: Aldrin



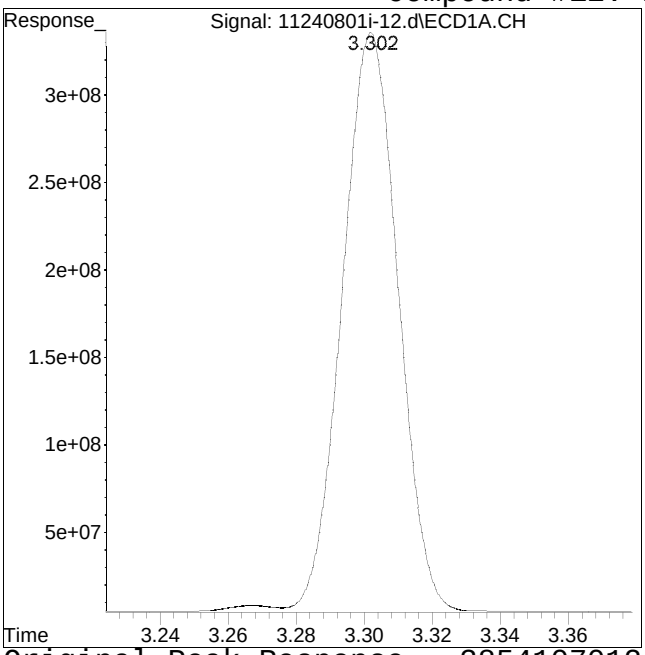



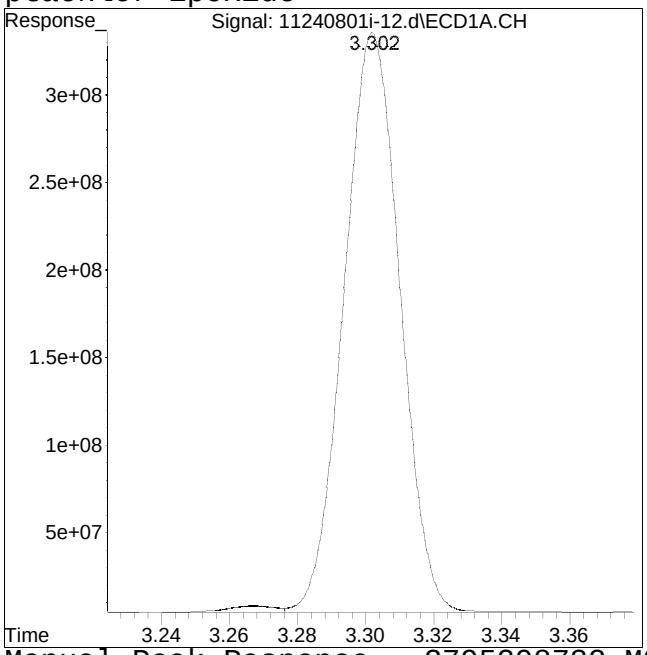

Original Peak Response = 4290144336 Manual Peak Response = 4276800842 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #12: Heptachlor Epoxide



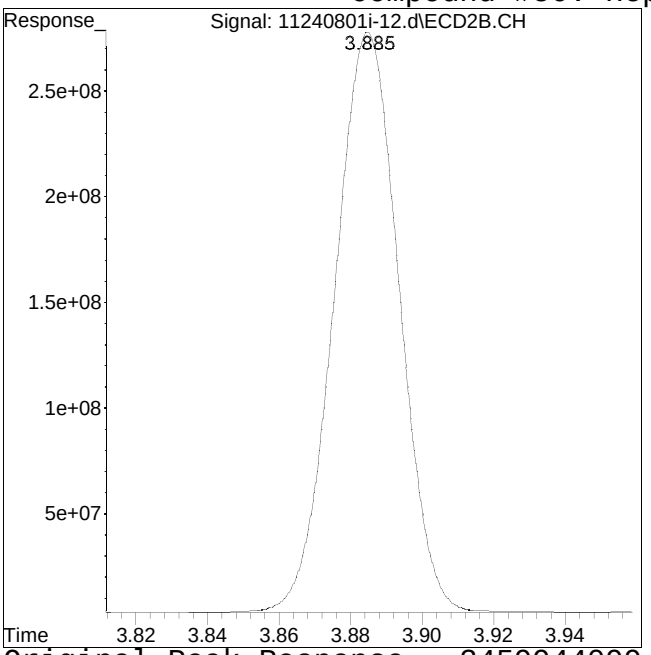



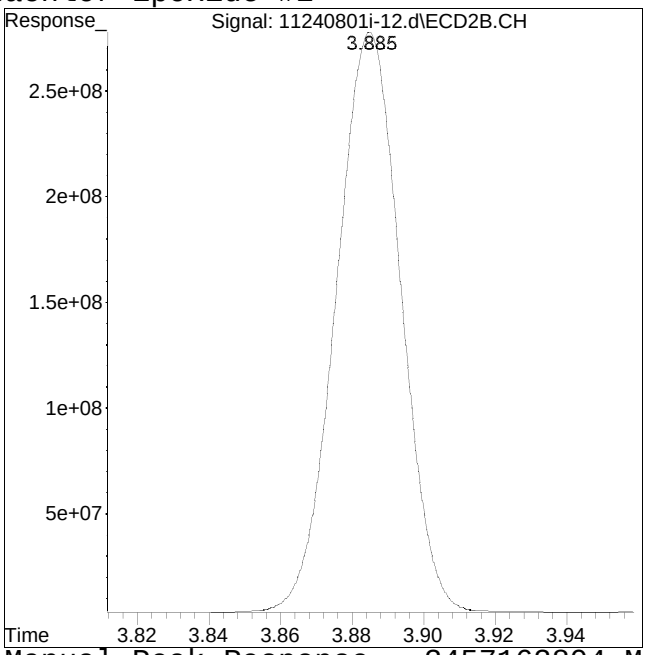

Original Peak Response = 3854107012 Manual Peak Response = 3795298732 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #50: Heptachlor Epoxide #2



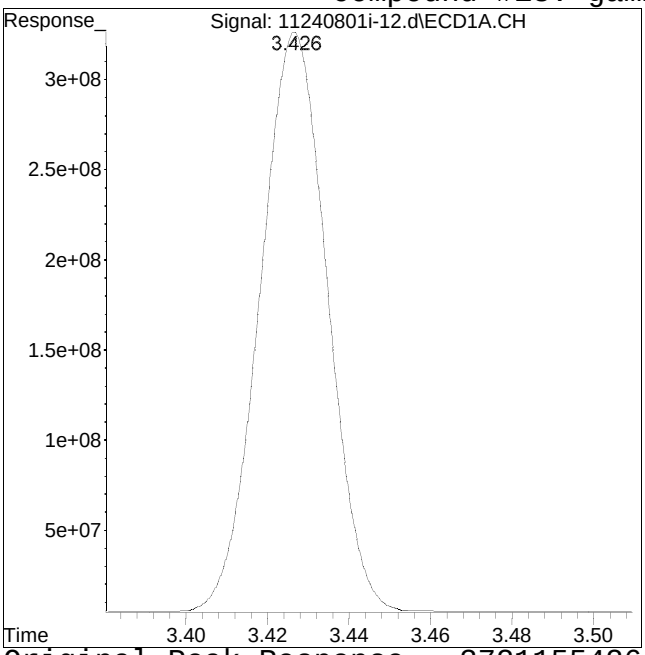



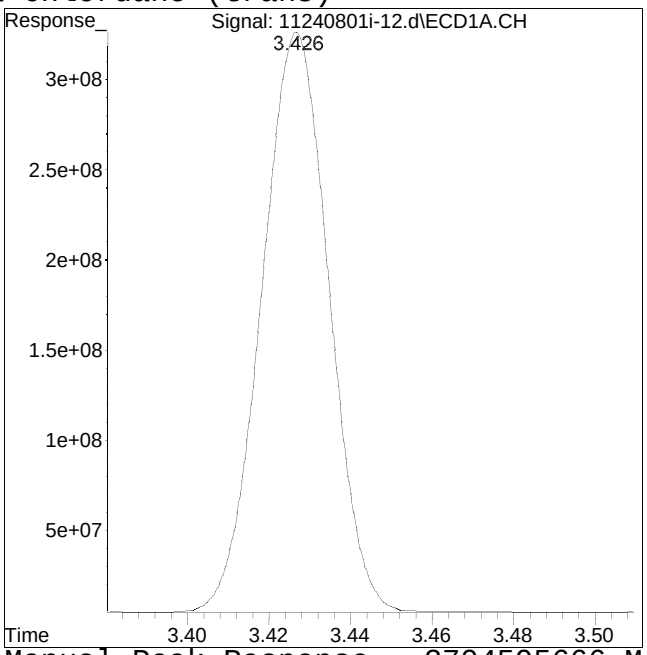

Original Peak Response = 3459944099 Manual Peak Response = 3457163804 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #13: gamma-Chlordane (trans)



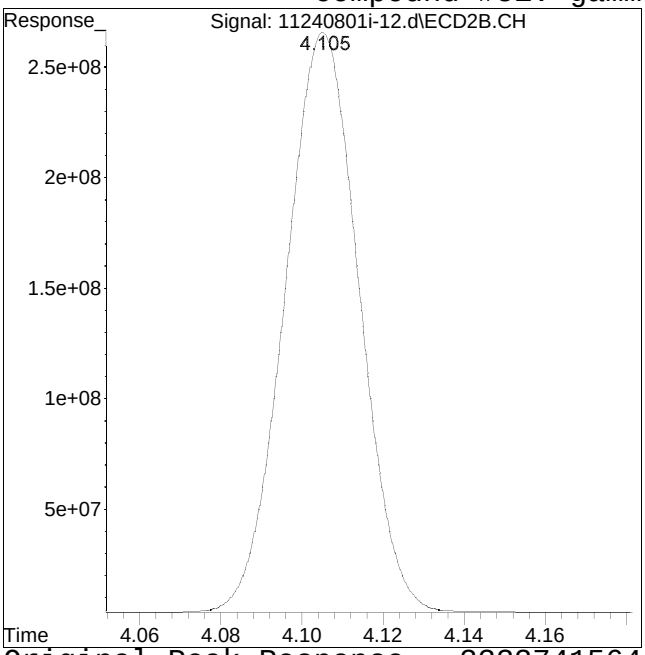



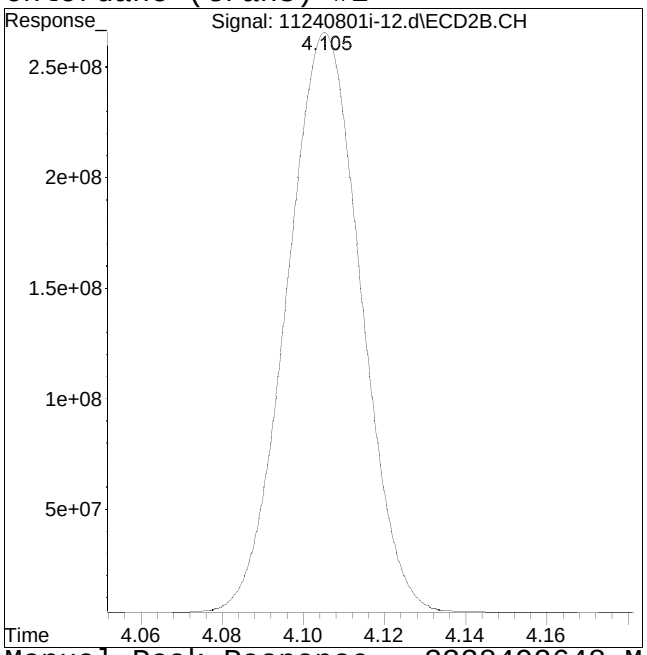

Original Peak Response = 3721155426 Manual Peak Response = 3704595666 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #51: gamma-Chlordane (trans) #2



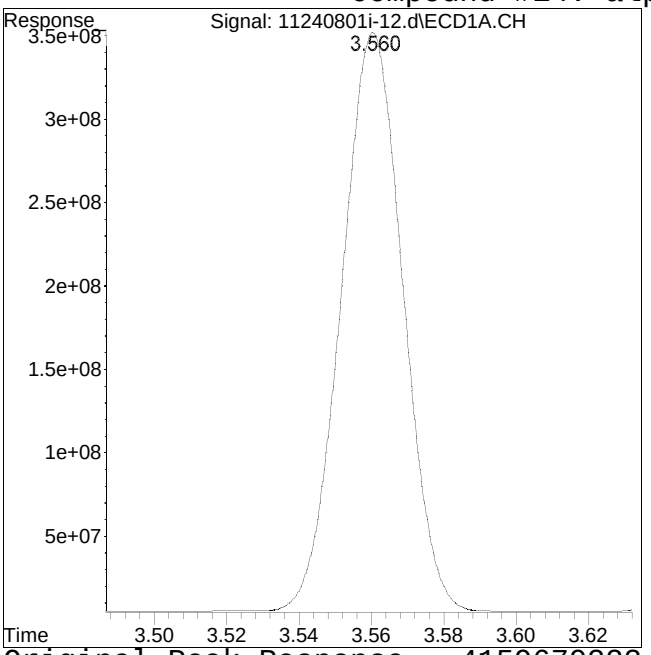



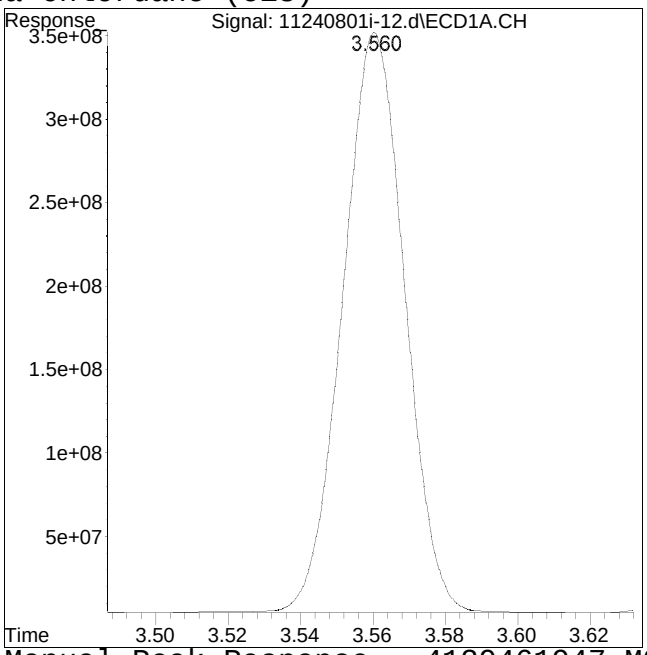

Original Peak Response = 3333741564 Manual Peak Response = 3328492648 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #14: alpha-Chlordane (cis)



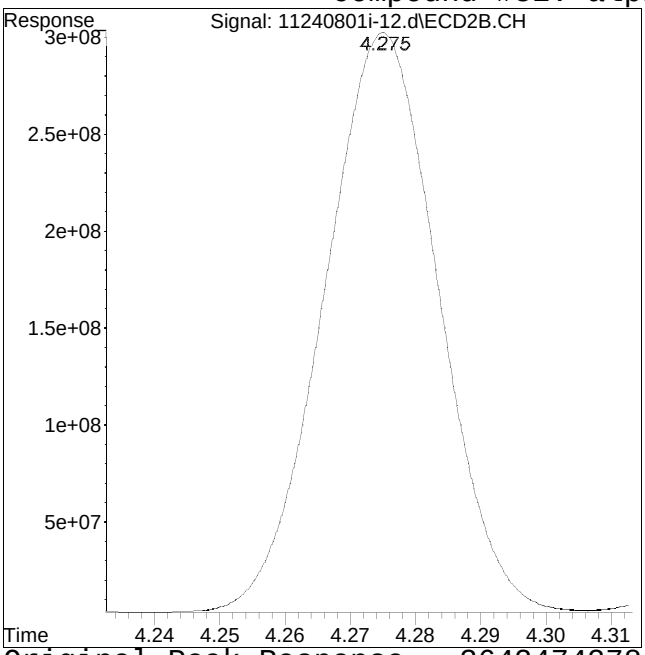

Original Peak Response = 4159679223 Manual Peak Response = 4129461947 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

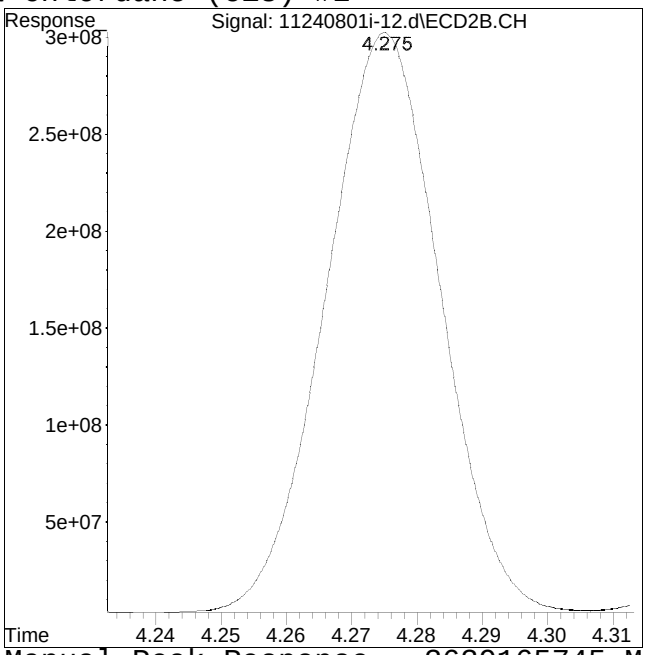
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #52: alpha-Chlordane (cis) #2



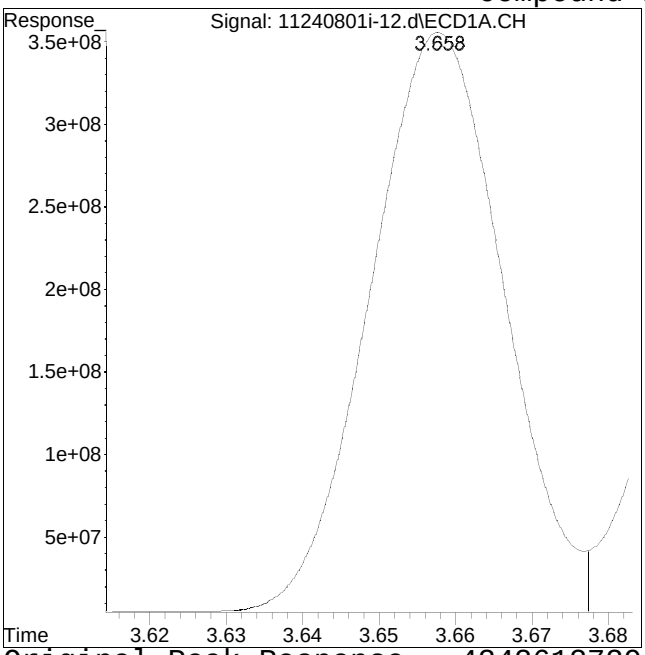

Original Peak Response = 3642474278 Manual Peak Response = 3639165745 M4
M4 = Poor automated baseline construction.

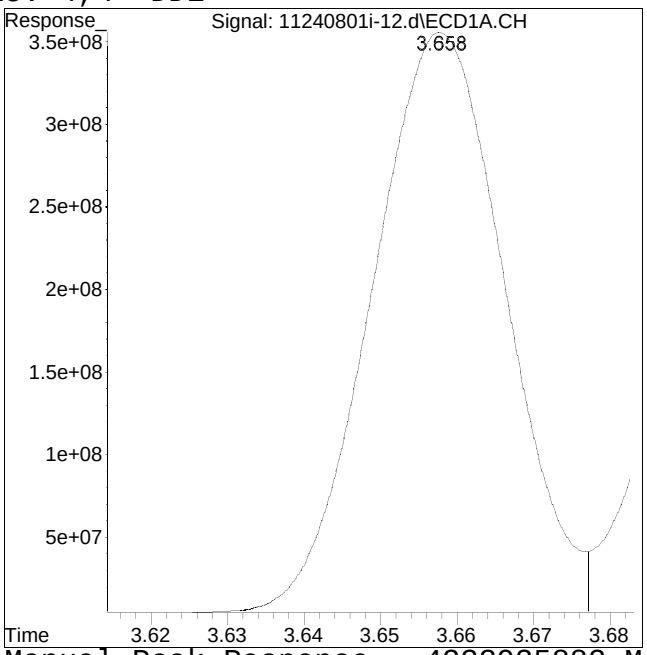
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #15: 4,4'-DDE



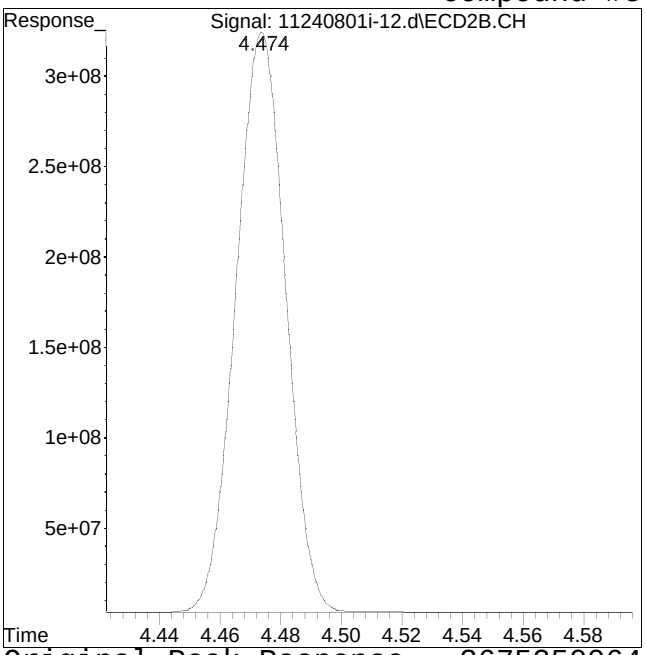



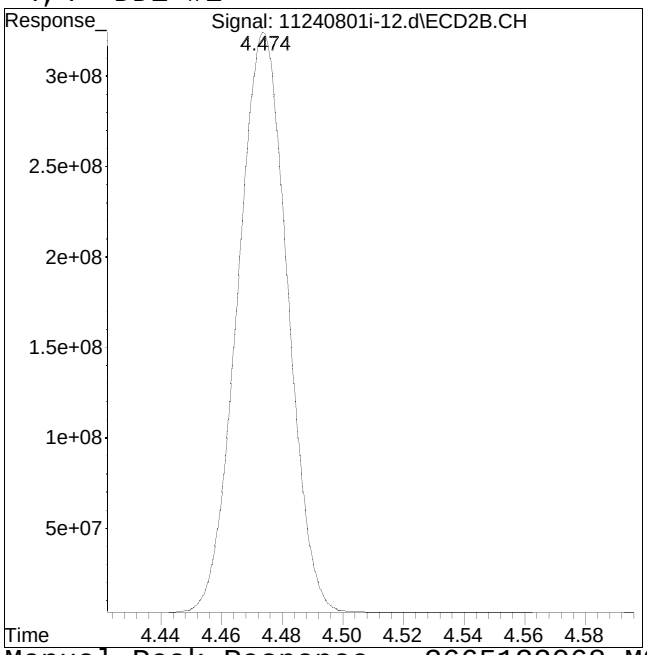

Original Peak Response = 4242612729 Manual Peak Response = 4233935882 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #53: 4,4'-DDE #2



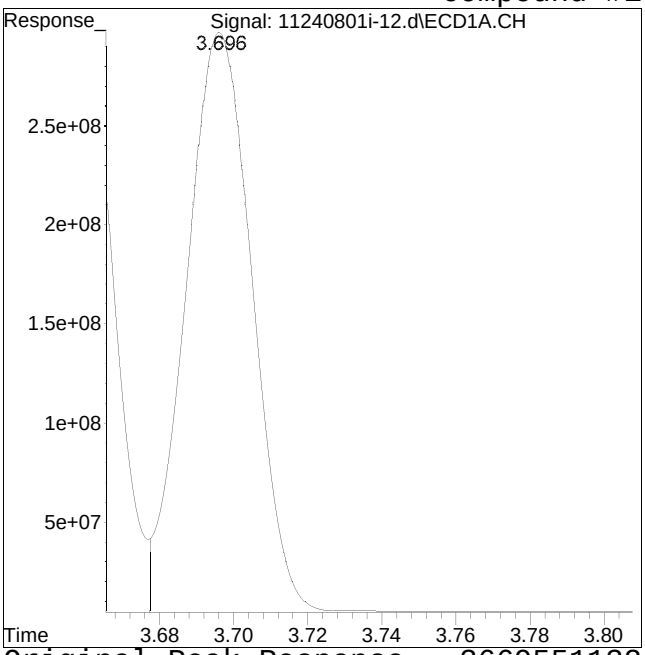



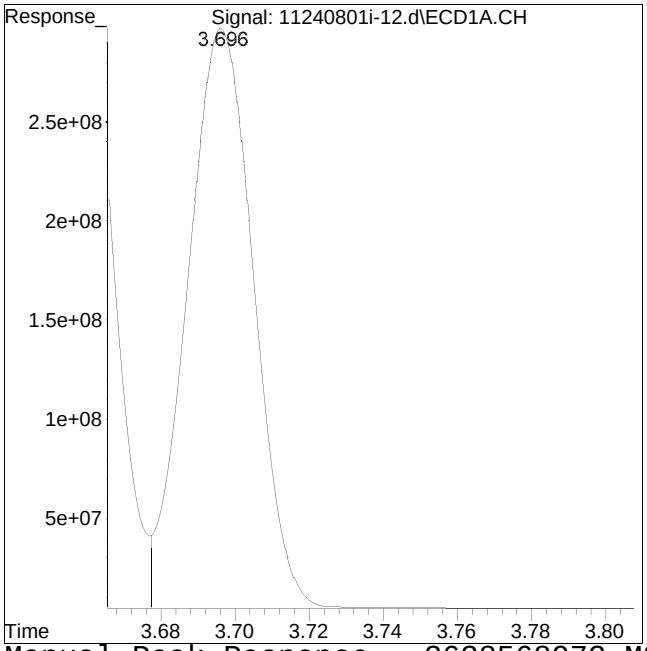

Original Peak Response = 3675250064 Manual Peak Response = 3665132068 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #16: Endosulfan I



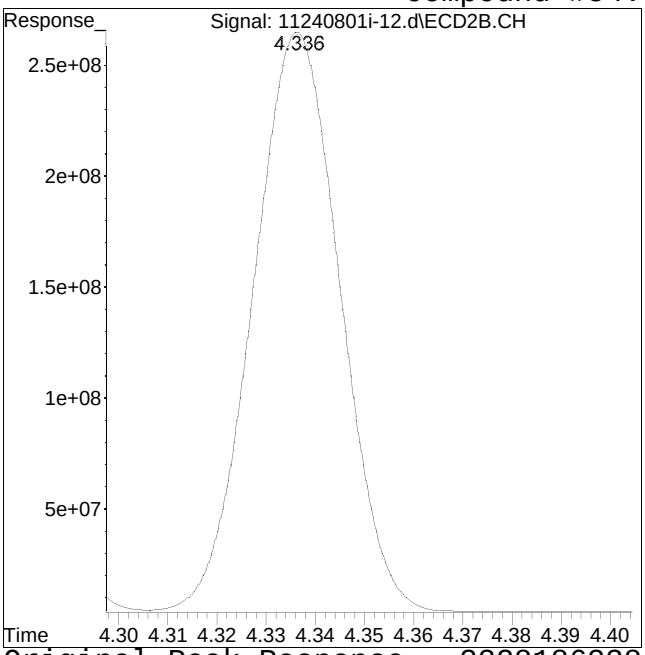




Original Peak Response = 3669551132 Manual Peak Response = 3638568973 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

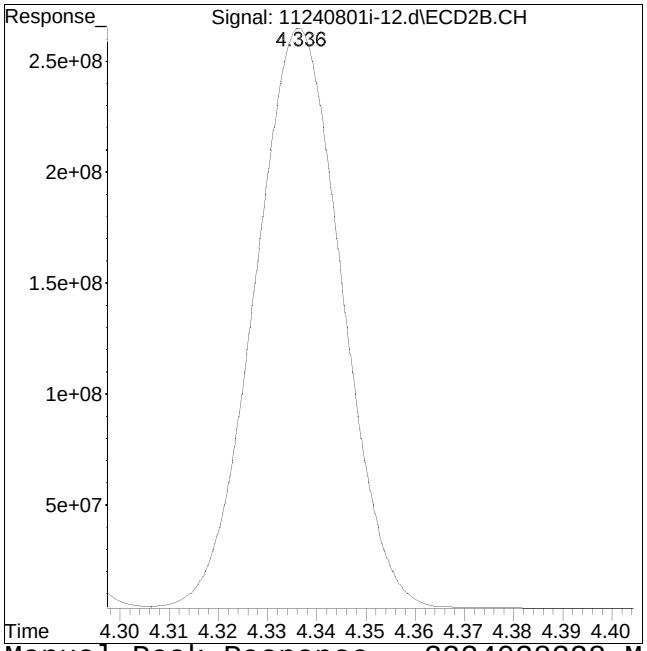
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #54: Endosulfan I #2




Original Peak Response = 3228186238




Manual Peak Response = 3224038328 M4

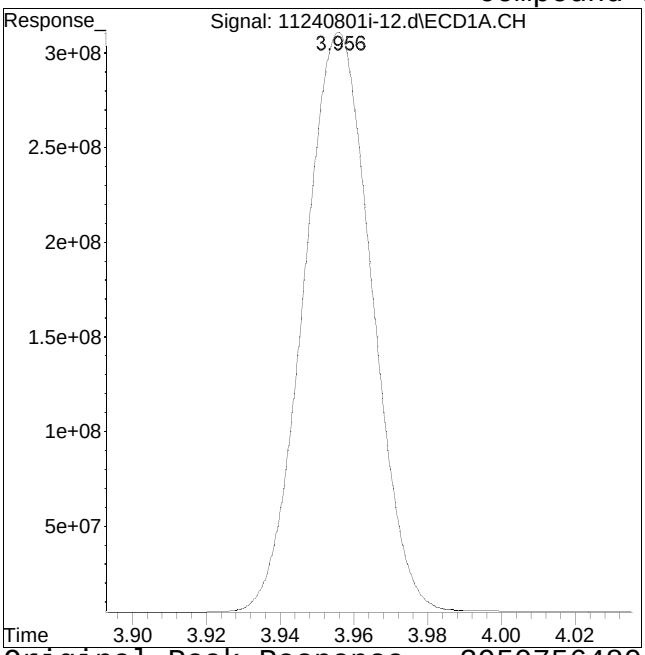
M4 = Poor automated baseline construction.

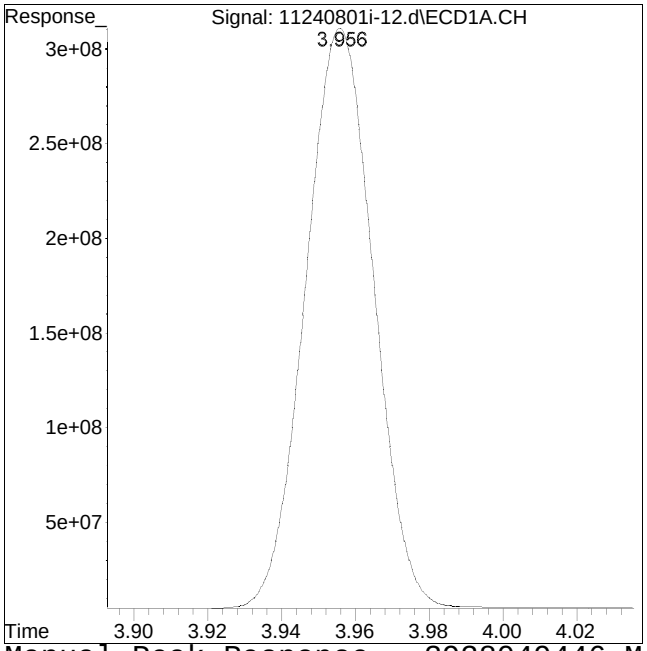
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #17: Dieldrin



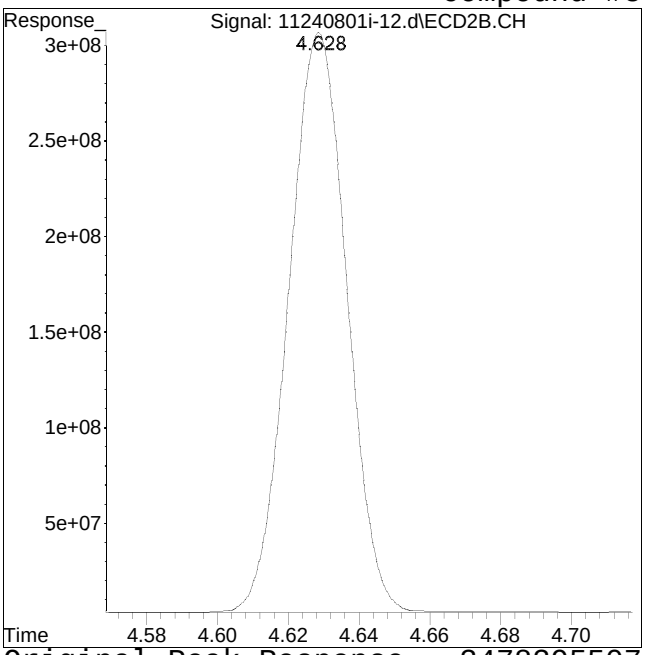



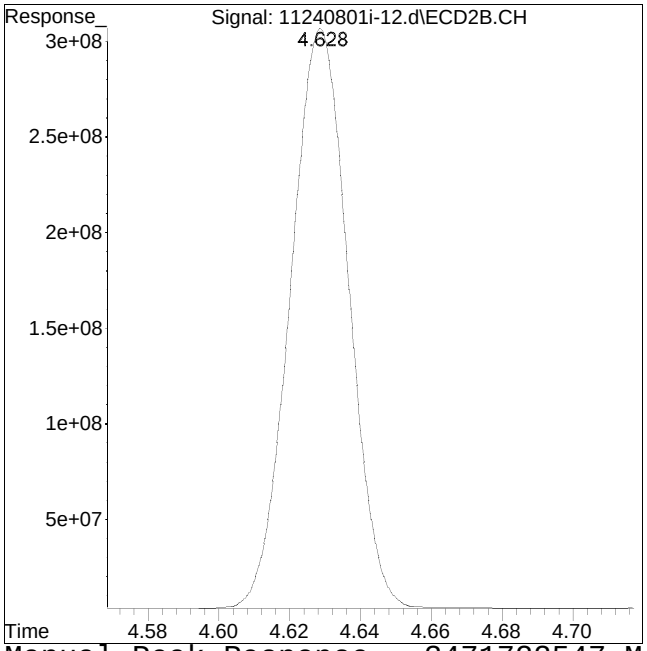

Original Peak Response = 3950756480 Manual Peak Response = 3938049446 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #55: Dieldrin #2



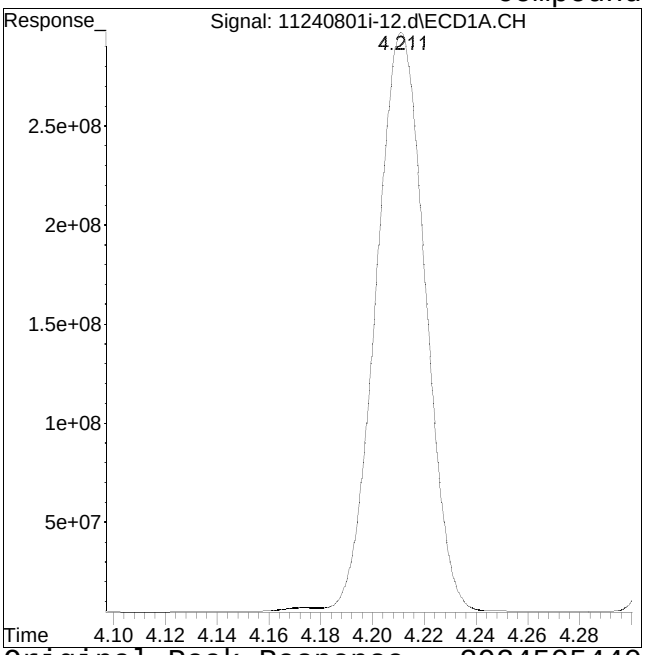



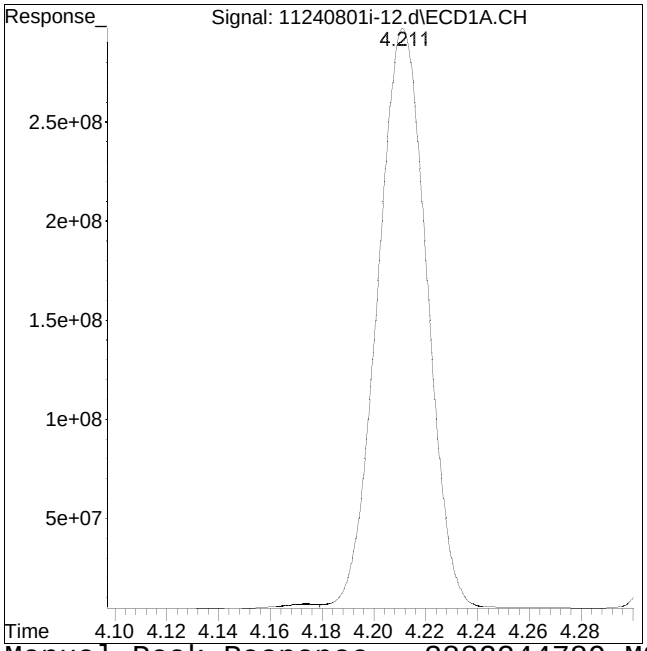

Original Peak Response = 3478395507 Manual Peak Response = 3471722547 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #18: Endrin



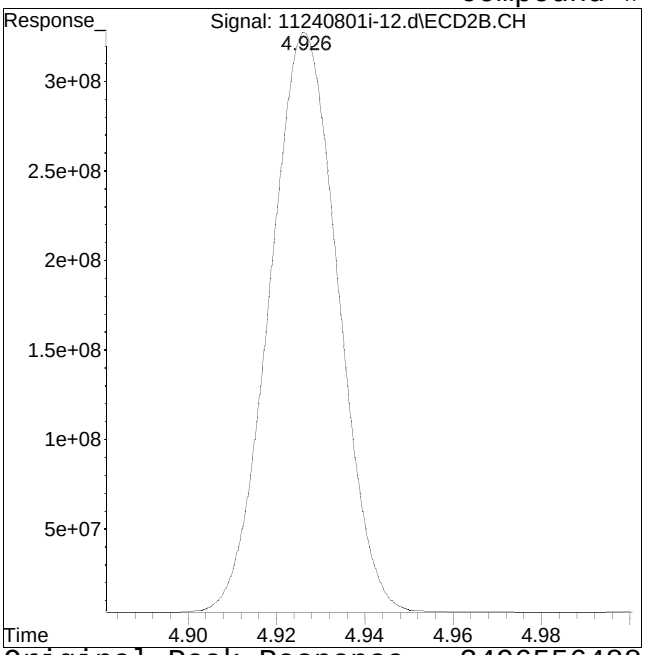

Original Peak Response = 3924505440 Manual Peak Response = 3882244789 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

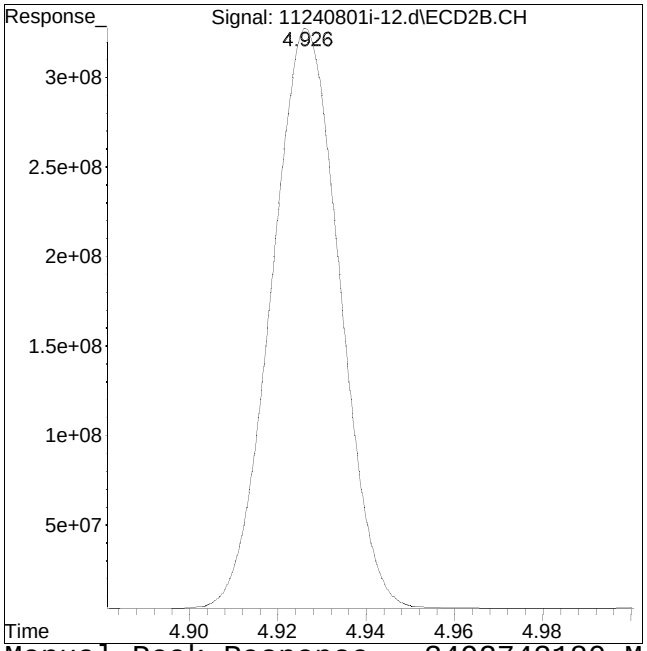
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #56: Endrin #2



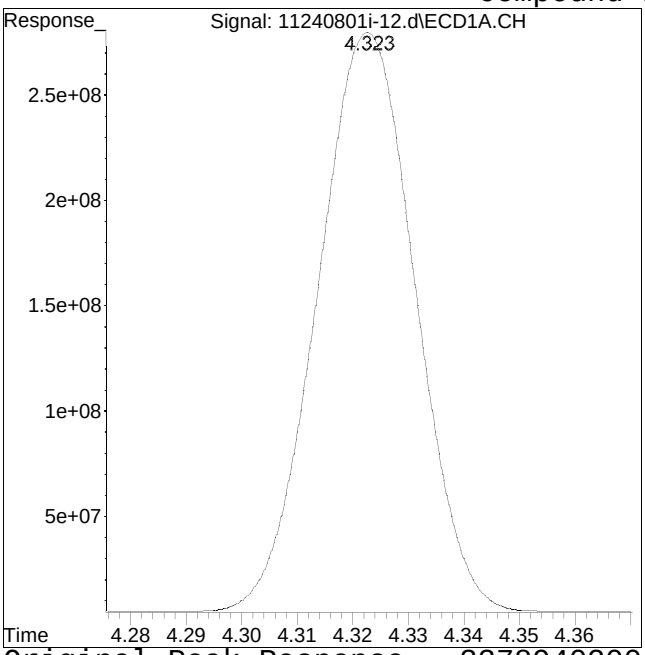

Original Peak Response = 3496556488 Manual Peak Response = 3492743180 M4
M4 = Poor automated baseline construction.

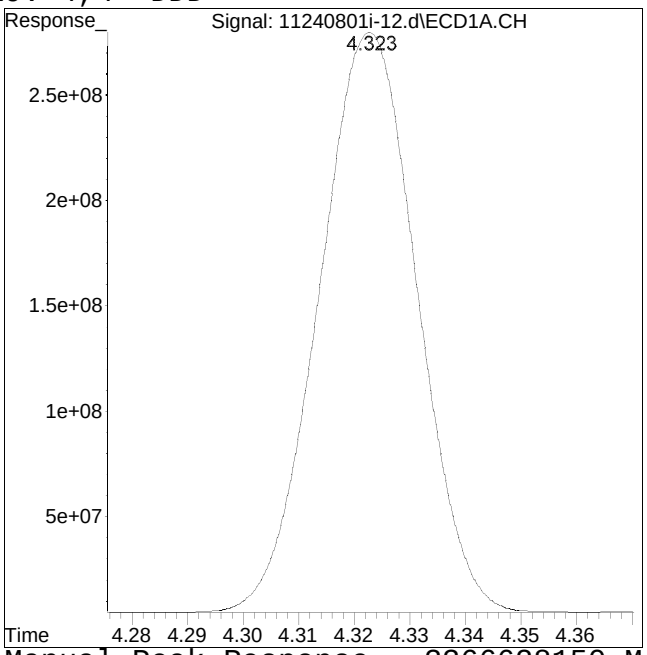
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #19: 4,4'-DDD



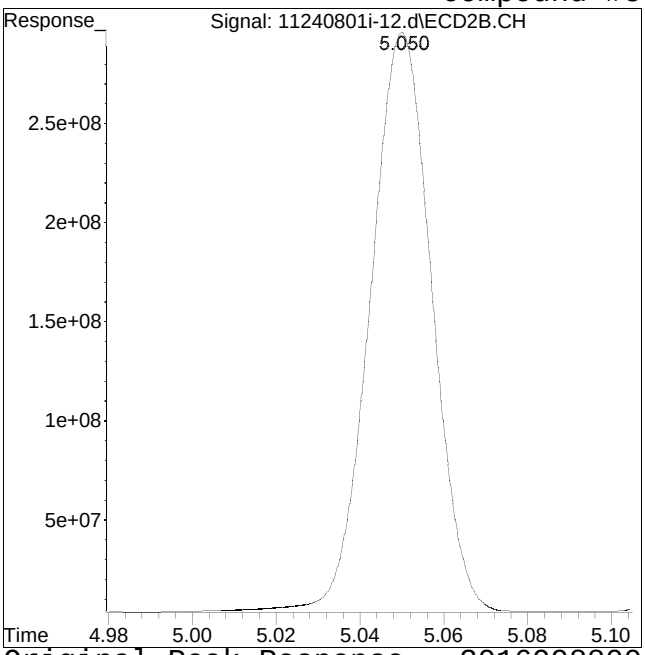



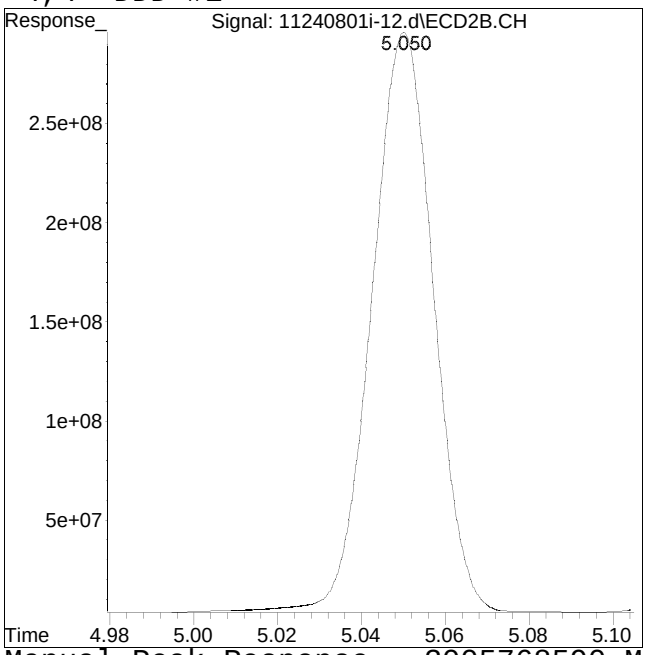

Original Peak Response = 3378940200 Manual Peak Response = 3366628150 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #57: 4,4'-DDD #2



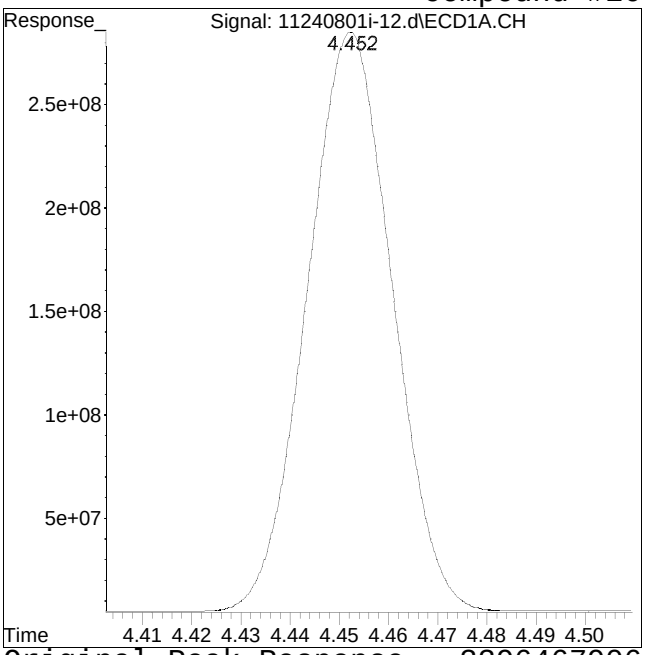



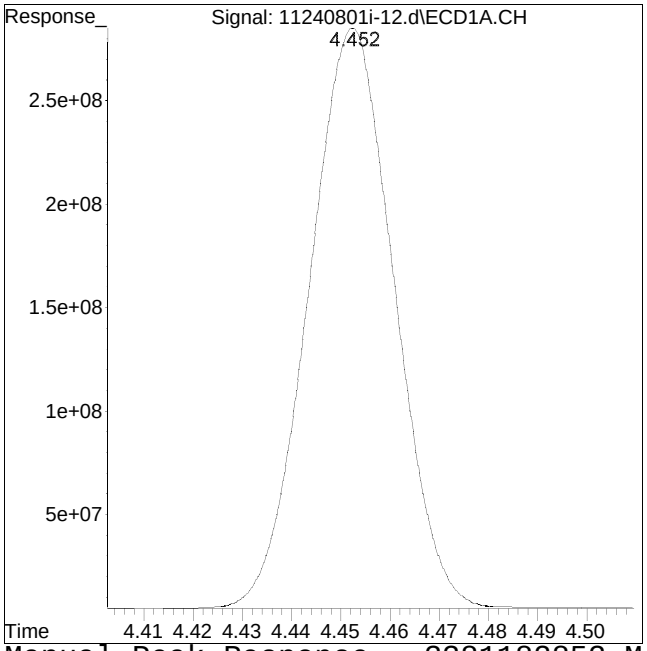

Original Peak Response = 3016998800 Manual Peak Response = 3005768590 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

## Compound #20: Endosulfan II



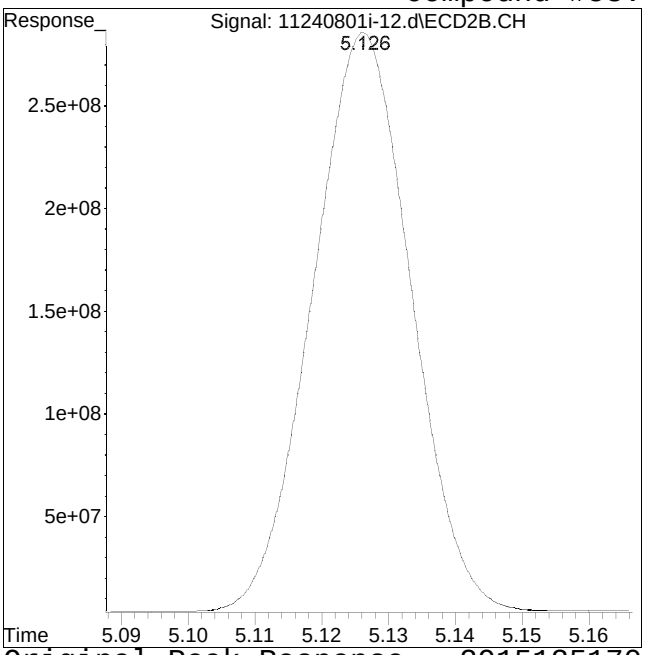



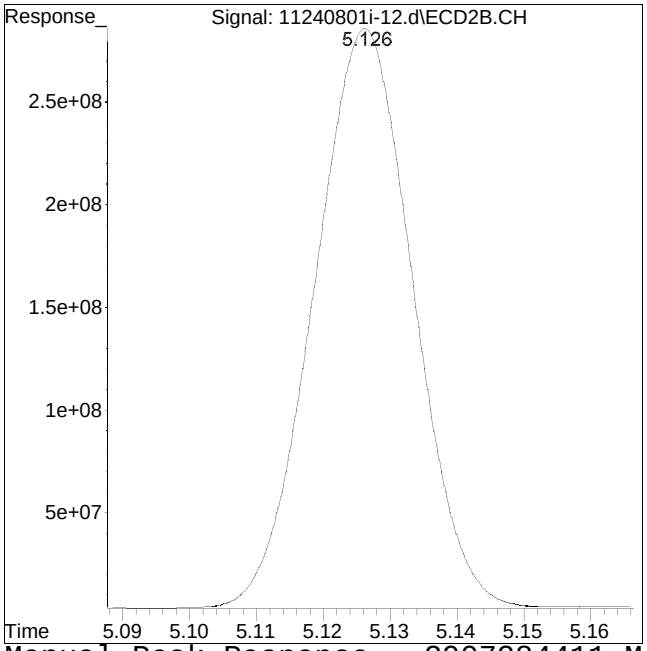

Original Peak Response = 3396467906 Manual Peak Response = 3381182853 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #58: Endosulfan II #2



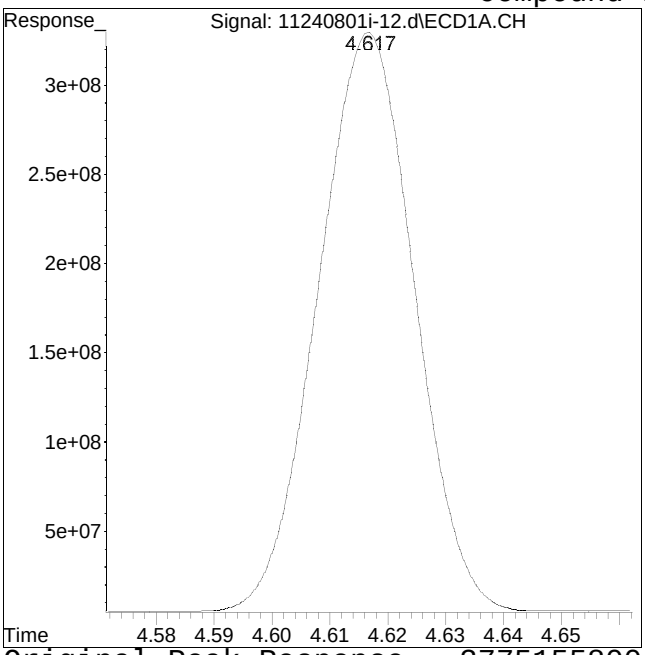

Original Peak Response = 2915125170 Manual Peak Response = 2907284411 M4
M4 = Poor automated baseline construction.

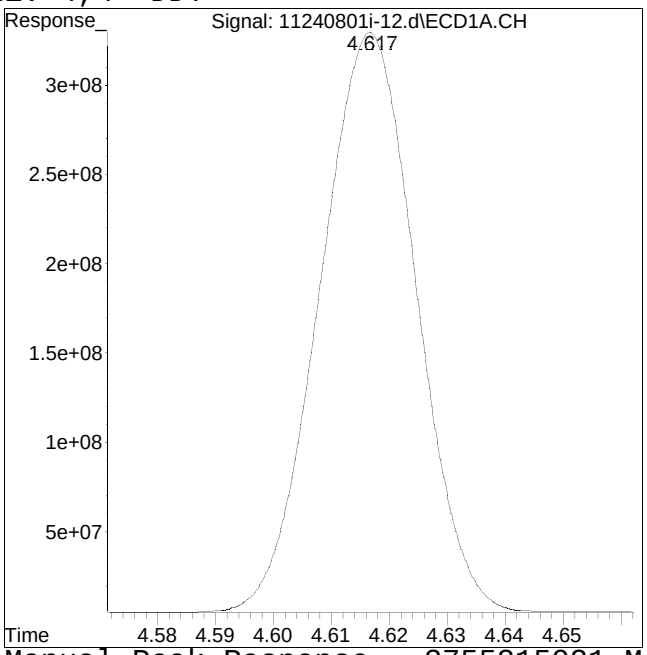
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #21: 4,4'-DDT



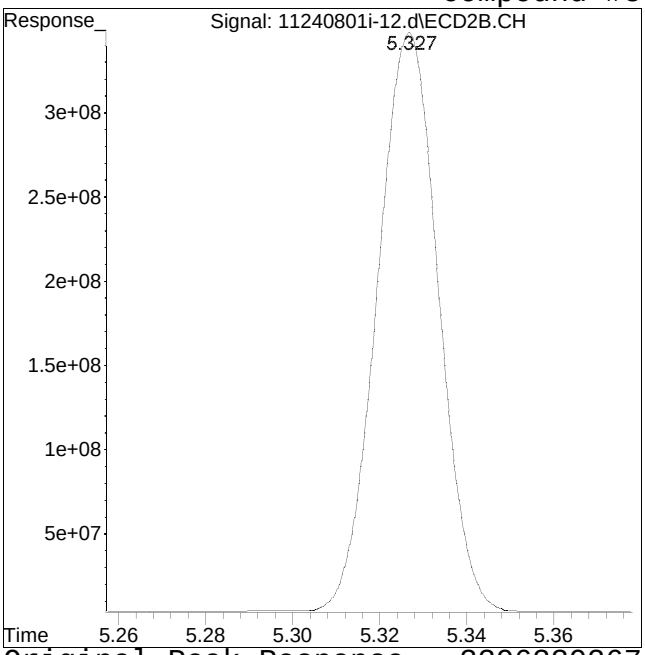



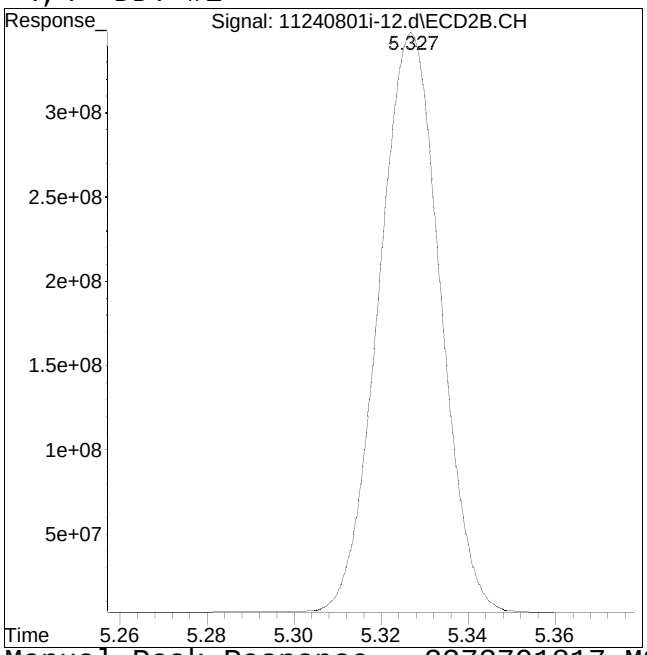

Original Peak Response = 3775155800 Manual Peak Response = 3755215921 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #59: 4,4'-DDT #2



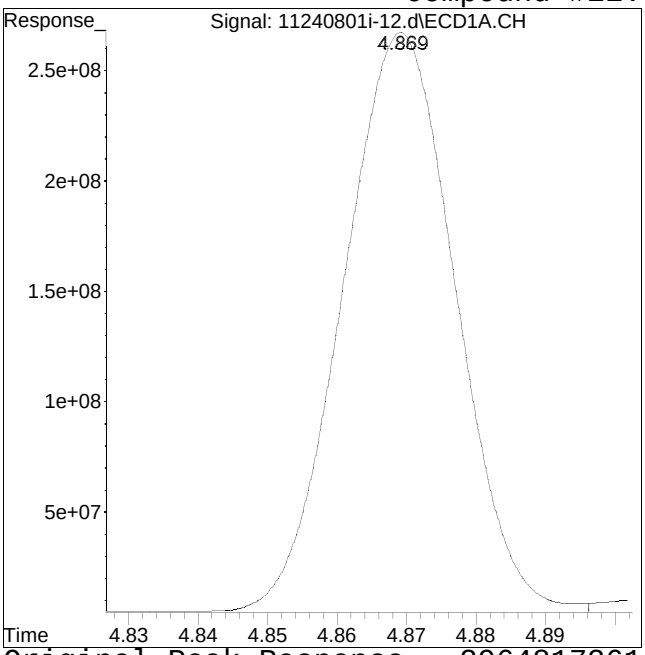



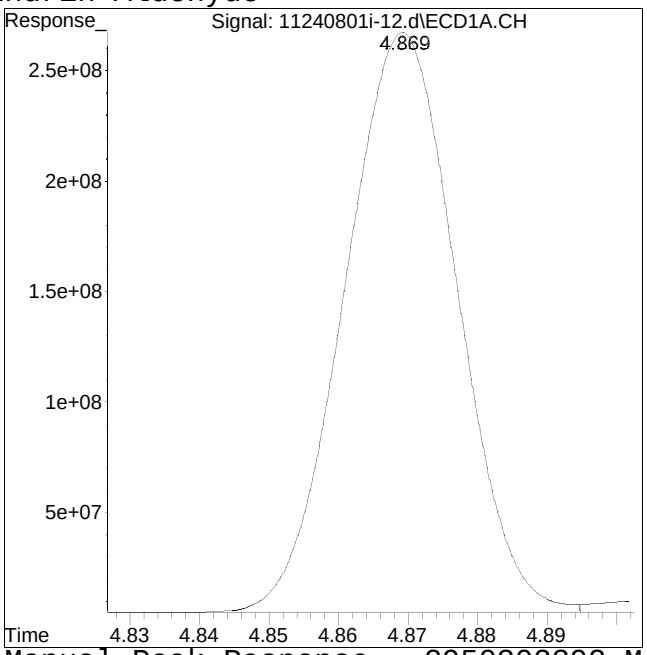

Original Peak Response = 3396339267 Manual Peak Response = 3373791817 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

## Compound #22: Endrin Aldehyde



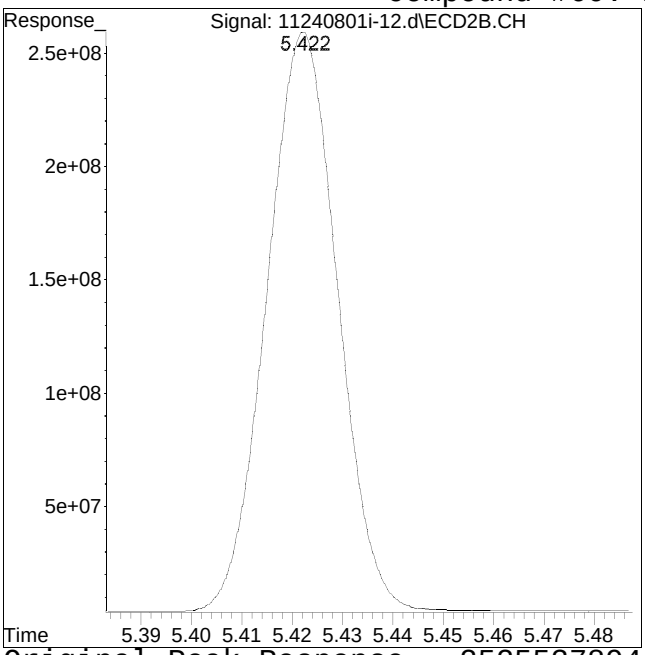



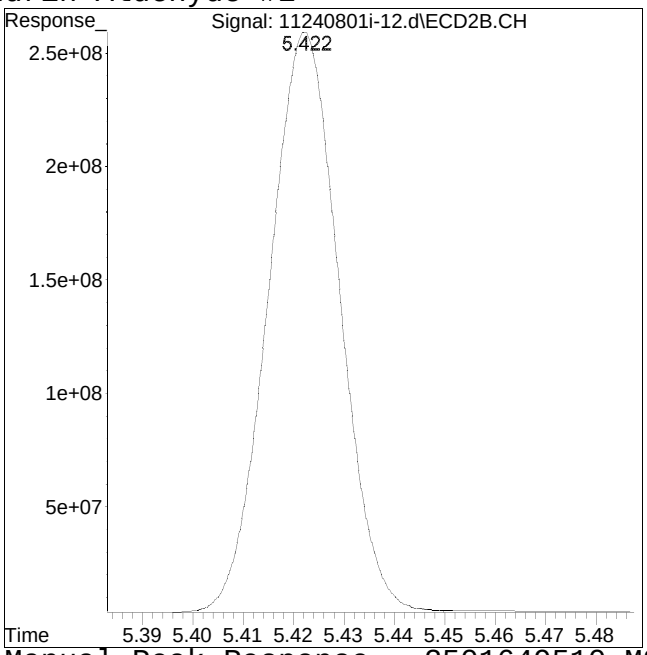

Original Peak Response = 2964817261 Manual Peak Response = 2950302392 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #60: Endrin Aldehyde #2



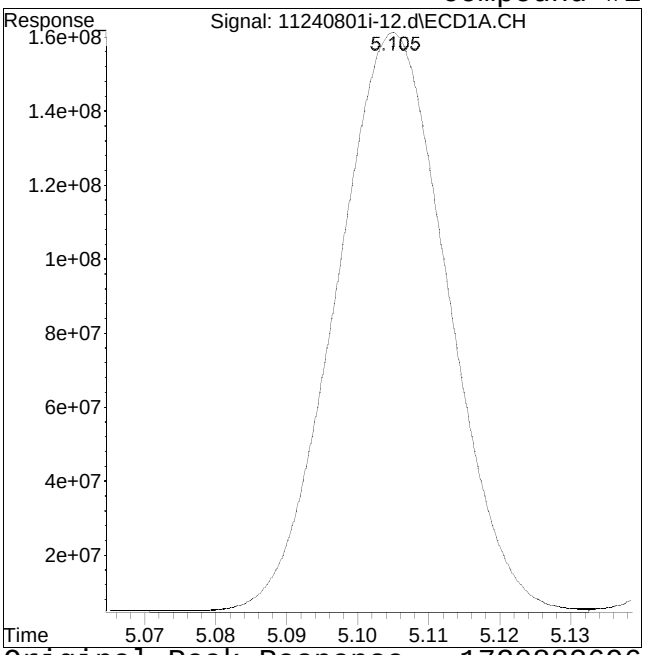

Original Peak Response = 2525537894 Manual Peak Response = 2501649510 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

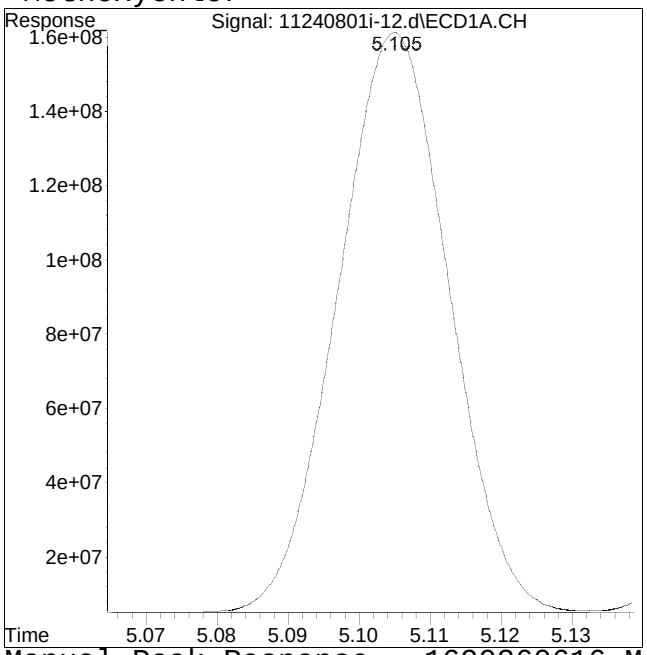
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #23: Methoxychlor



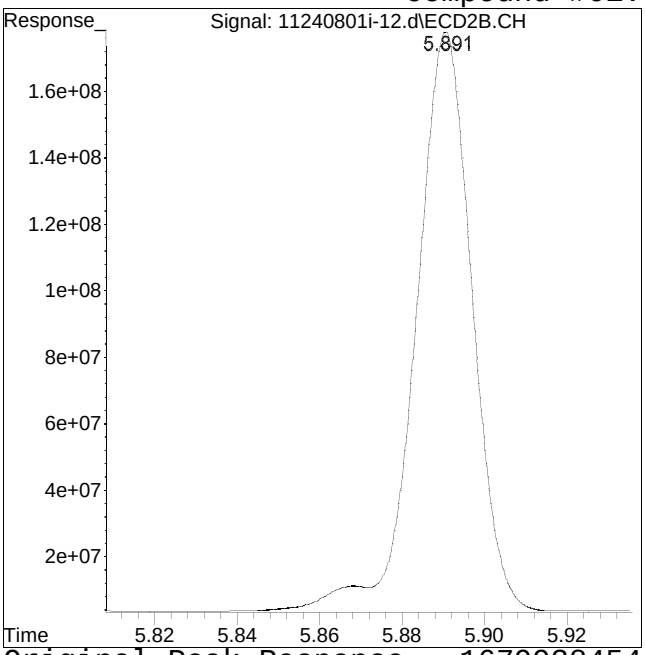



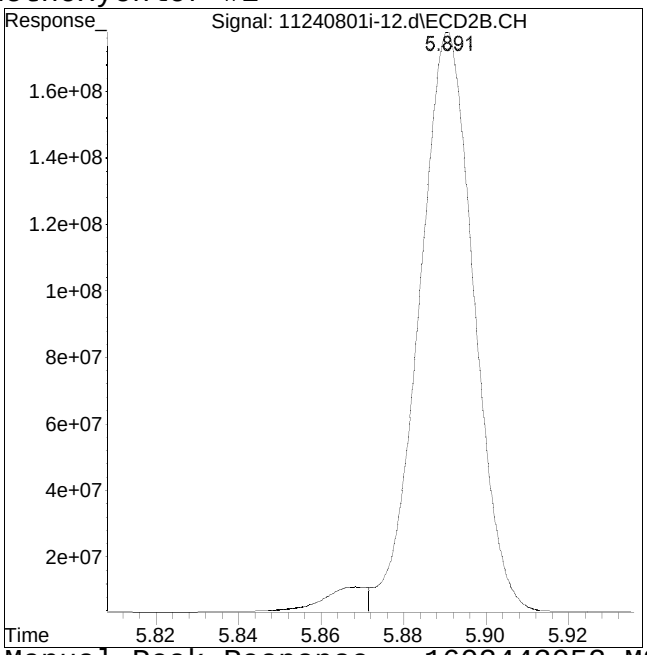

Original Peak Response = 1720883696 Manual Peak Response = 1699260616 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #61: Methoxychlor #2



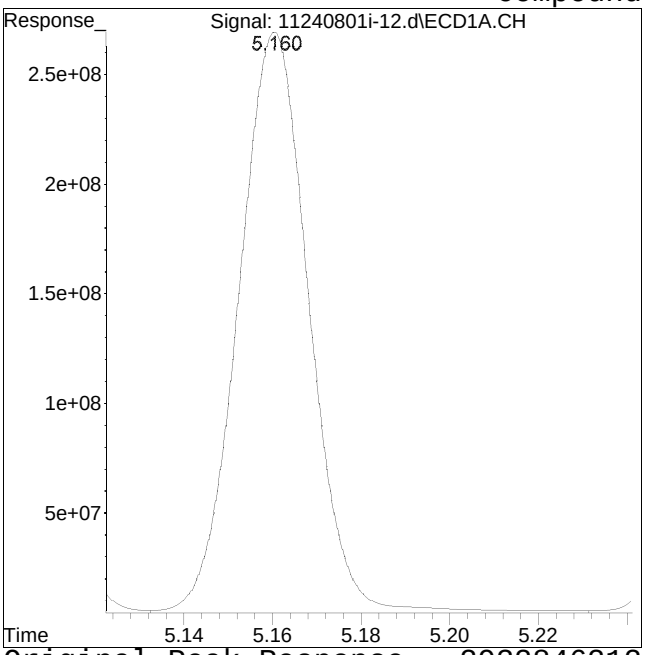



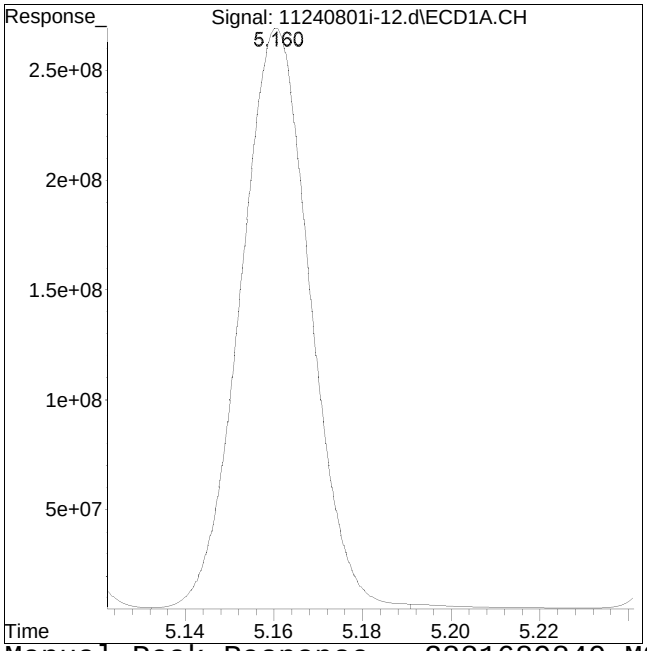

Original Peak Response = 1679938454 Manual Peak Response = 1603443052 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-12.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:25 Instrument : Pest 11
Sample : il11pest,42e,,pp 11678 L0.Quant Date : 8/2/2024 9:58 am

Compound #24: Mirex



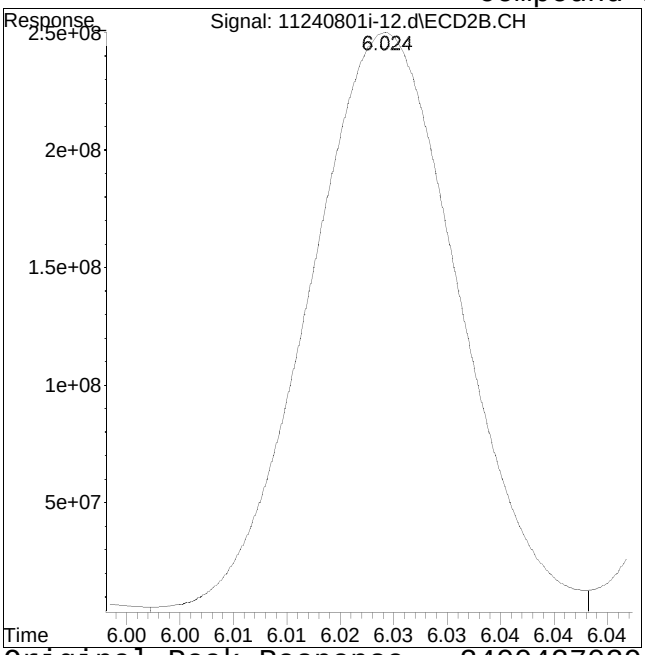

Original Peak Response = 2932846212 Manual Peak Response = 2881689840 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

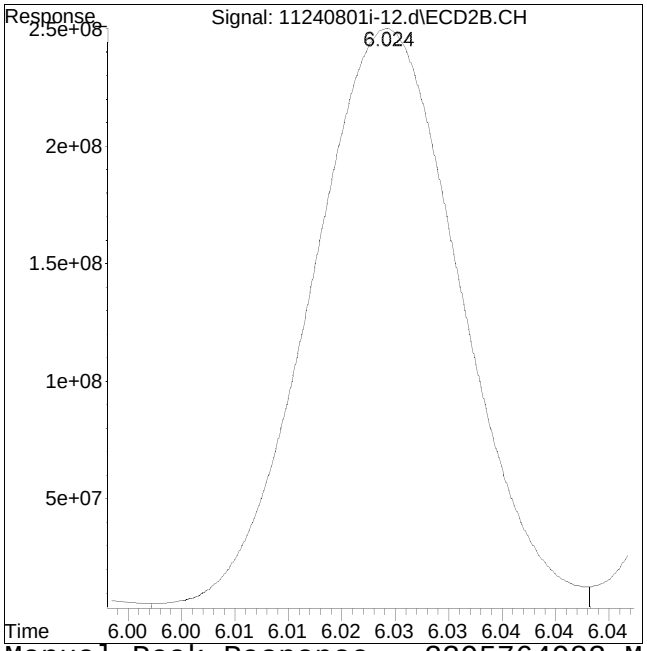
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #62: Mirex #2



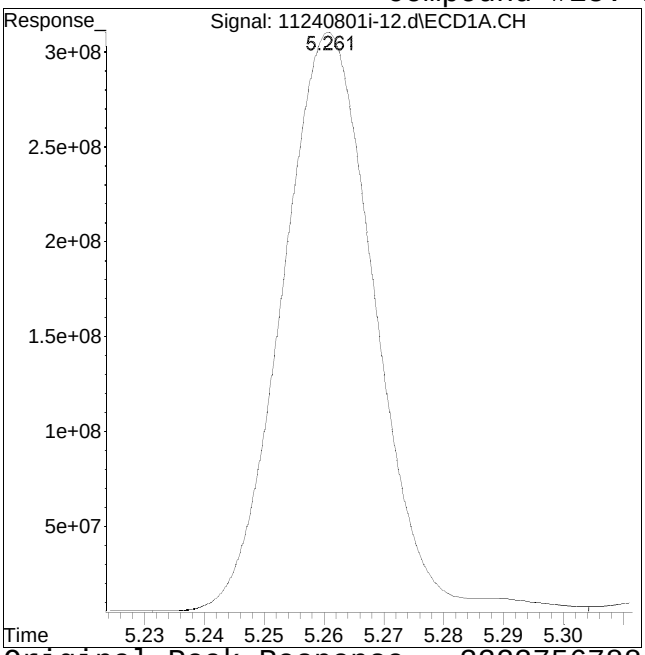



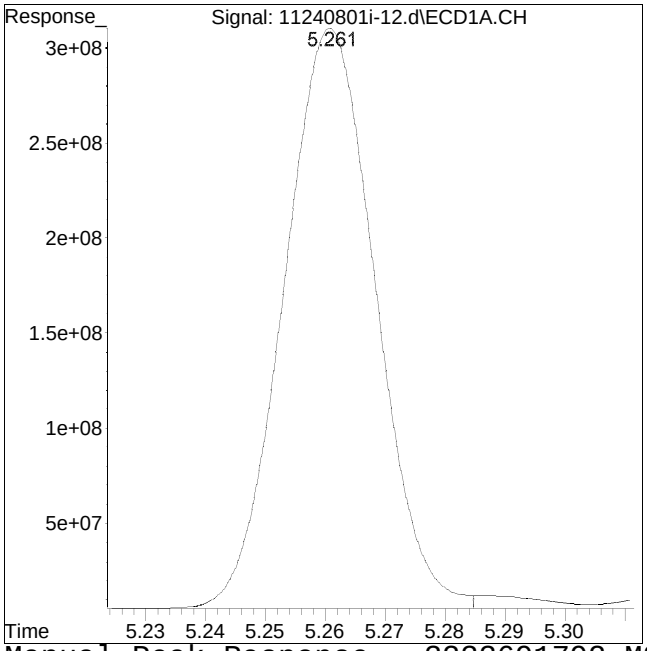

Original Peak Response = 2400427029 Manual Peak Response = 2395764983 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #25: Endosulfan Sulfate



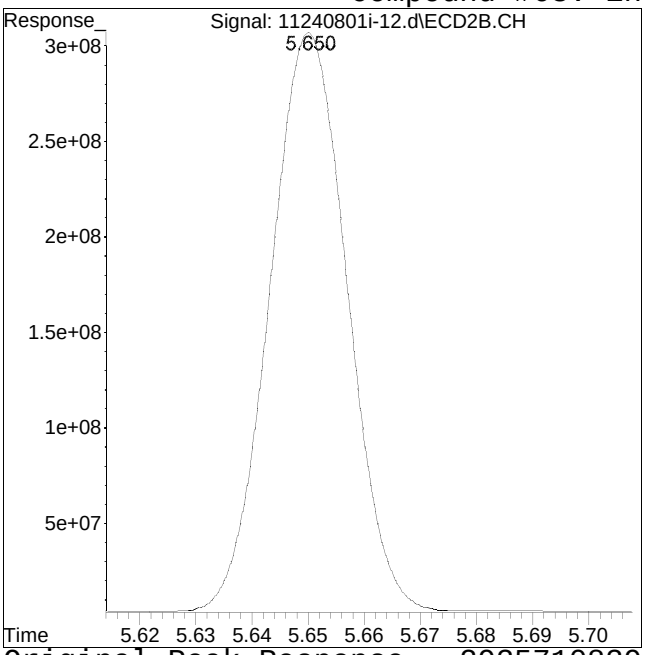



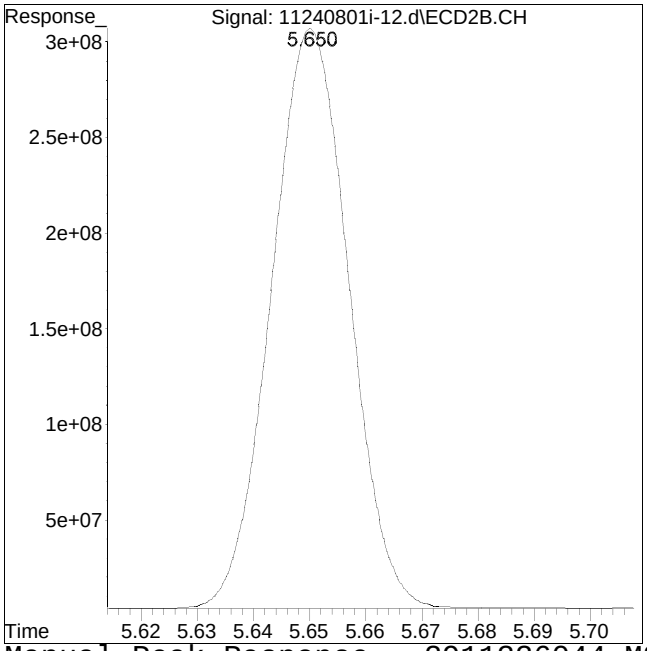

Original Peak Response = 3323756788 Manual Peak Response = 3233691792 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #63: Endosulfan Sulfate #2



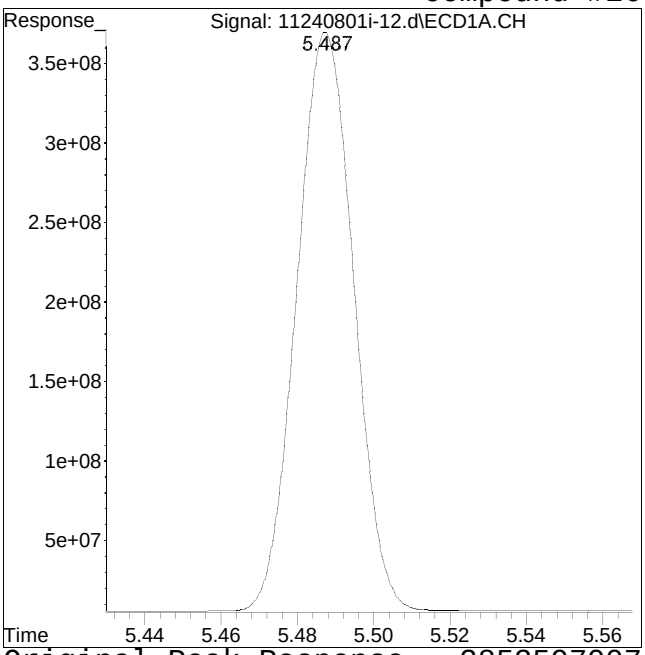



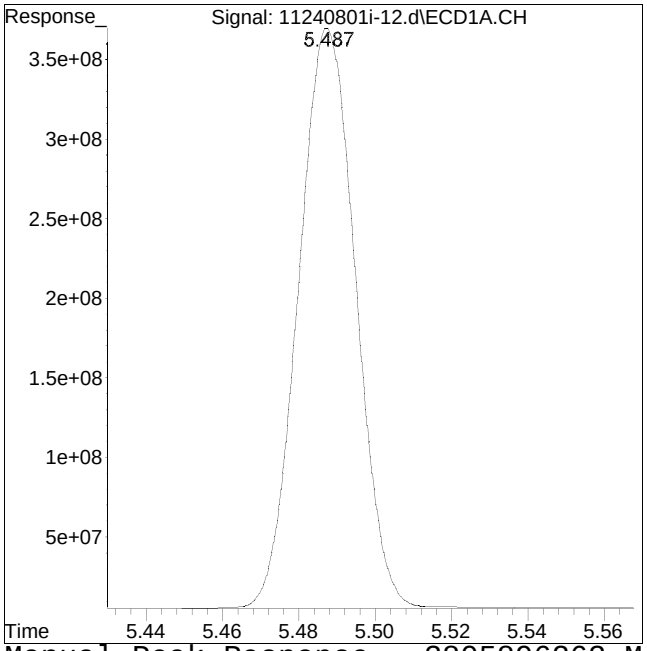

Original Peak Response = 2935710839 Manual Peak Response = 2911336044 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #26: Endrin Ketone



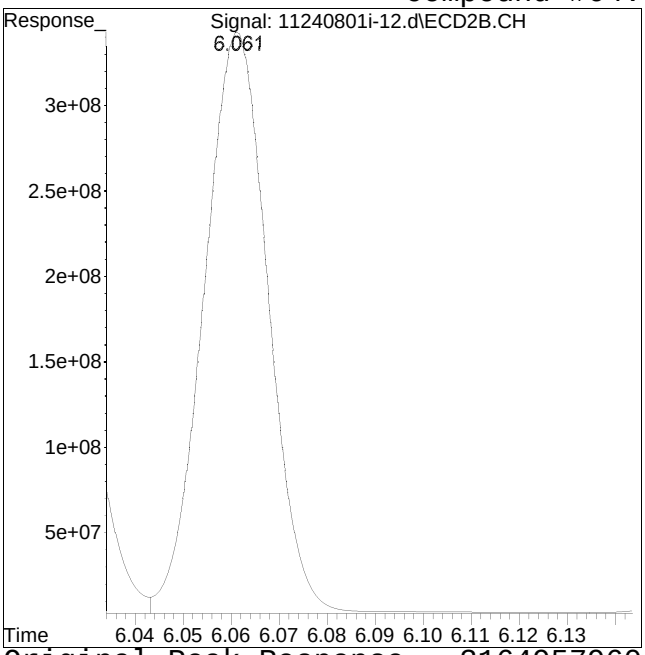



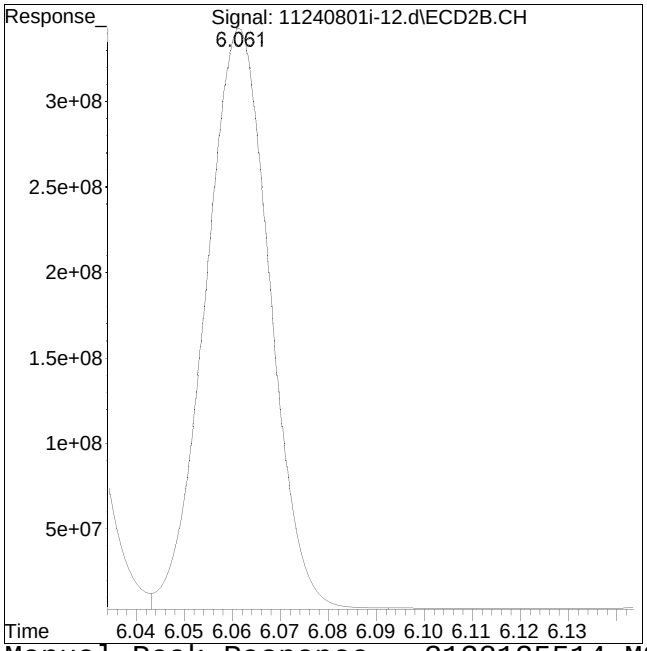

Original Peak Response = 3853597007 Manual Peak Response = 3805896263 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #64: Endrin Ketone #2



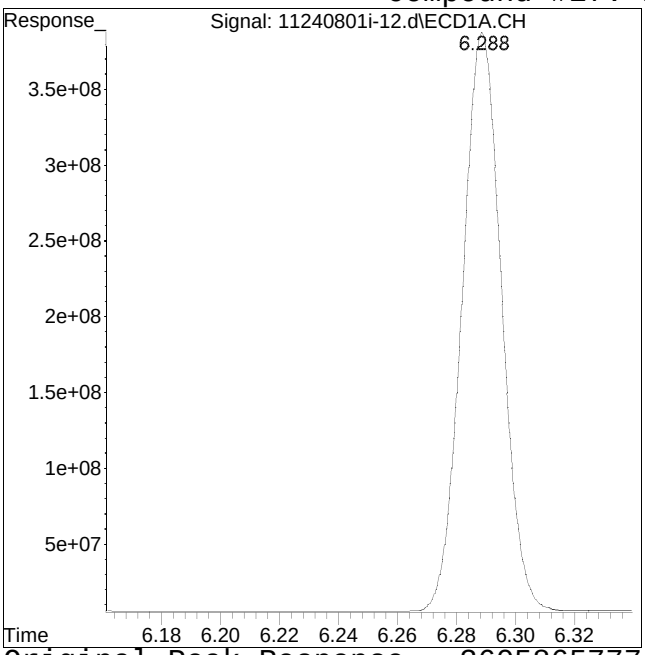

Original Peak Response = 3164957960 Manual Peak Response = 3138135514 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

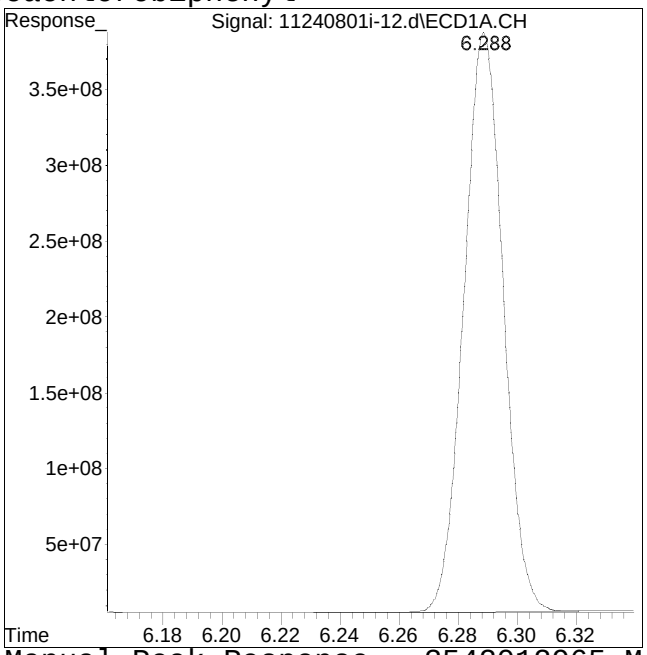
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #27: Decachlorobiphenyl



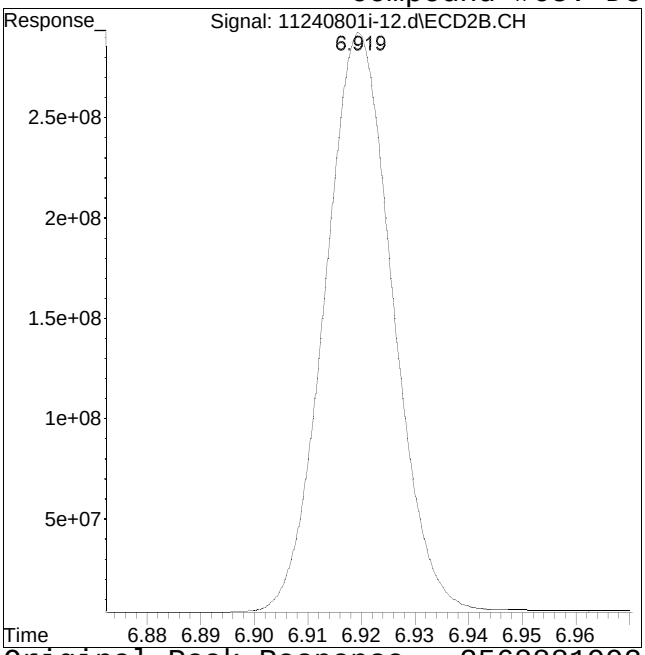



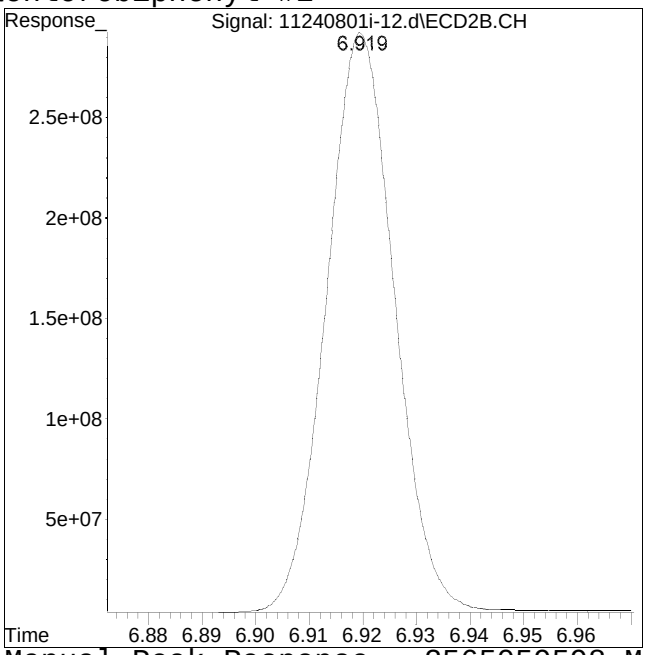

Original Peak Response = 3605865777 Manual Peak Response = 3542012965 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-12.d
Date Inj'd : 8/1/2024 20:25
Sample : il11pest,42e,,pp 11678 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 9:58 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 2568881992 Manual Peak Response = 2565059598 M4
M4 = Poor automated baseline construction.

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  20:36
Operator  : PEST11:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 13 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 1.028 | 1.1 | 93 | 0.00 |
| 3 | t | Hexachlorobenzene | | 1.406 | 1.322 | 6.0 | 93 | 0.00 |
| 4 | t | alpha-BHC | | 1.461 | 1.501 | -2.7 | 90 | 0.00 |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 1.357 | 2.7 | 88 | 0.00 |
| 6 | t | beta-BHC | | 0.628 | 0.580 | 7.6 | 90 | 0.00 |
| 7 | t | delta-BHC | | 1.374 | 1.334 | 2.9 | 85 | 0.00 |
| 8 | t | Heptachlor | | 1.321 | 1.281 | 3.0 | 89 | 0.00 |
| 9 | t | Aldrin | | 1.233 | 1.226 | 0.6 | 90 | 0.00 |
| 10 | t | Alachlor | | 0.230 | 0.221 | 3.9 | 92 | 0.00 |
| 11 | t | Chlorpyrifos | | 0.590 | 0.520 | 11.9 | 91 | 0.00 |
| 12 | t | Heptachlor Epoxide | | 1.185 | 1.133 | 4.4 | 89 | 0.00 |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 1.158 | -7.5 | 101 | 0.00 |
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 1.146 | 5.8 | 88 | 0.00 |
| 15 | t | 4,4'-DDE | | 1.192 | 1.168 | 2.0 | 90 | 0.00 |
| 16 | t | Endosulfan I | | 1.116 | 1.064 | 4.7 | 89 | 0.00 |
| 17 | t | Dieldrin | | 1.135 | 1.204 | -6.1 | 97 | 0.00 |
| 18 | t | Endrin | | 1.153 | 1.120 | 2.9 | 88 | 0.00 |
| 19 | t | 4,4'-DDD | | 0.927 | 0.970 | -4.6 | 96 | 0.00 |
| 20 | t | Endosulfan II | | 1.052 | 1.055 | -0.3 | 93 | 0.00 |
| 21 | t | 4,4'-DDT | | 1.058 | 1.044 | 1.3 | 91 | 0.00 |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.798 | 9.9 | 86 | 0.00 |
| 23 | t | Methoxychlor | | 0.592 | 0.578 | 2.4 | 96 | 0.00 |
| 24 | t | Mirex | | 0.938 | 0.888 | 5.3 | 95 | 0.00 |
| 25 | t | Endosulfan Sulfate | | 1.010 | 0.981 | 2.9 | 93 | 0.00 |
| 26 | t | Endrin Ketone | | 1.183 | 1.257 | -6.3 | 99 | 0.00 |
| 27 | s | Decachlorobiphenyl | | 1.163 | 1.085 | 6.7 | 99 | 0.00 |

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  20:36
Operator  : PEST11:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 13 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 1.042 | 6.5 | 91 | 0.00 |
| 3 | t | Hexachlorobenzene | | 1.239 | 1.113 | 10.2 | 92 | 0.00 |
| 4 | t | alpha-BHC | | 1.620 | 1.576 | 2.7 | 88 | 0.00 |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 1.407 | 8.6 | 87 | 0.00 |
| 6 | t | beta-BHC | * | 50.000 | 47.735 | 4.5 | 89 | 0.00 |
| 7 | t | delta-BHC | | 1.523 | 1.383 | 9.2 | 85 | 0.00 |
| 8 | t | Heptachlor | | 1.598 | 1.441 | 9.8 | 88 | 0.00 |
| 9 | t | Aldrin | | 1.435 | 1.344 | 6.3 | 89 | 0.00 |
| 10 | t | Alachlor | * | 50.000 | 52.133 | -4.3 | 92 | 0.00 |
| 11 | t | Chlorpyrifos | * | 50.000 | 49.655 | 0.7 | 89 | 0.00 |
| 12 | t | Heptachlor Epoxide | | 1.425 | 1.243 | 12.8 | 87 | 0.00 |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 1.296 | 1.2 | 100 | 0.00 |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 1.265 | 12.5 | 88 | 0.00 |
| 15 | t | 4,4'-DDE | | 1.343 | 1.252 | 6.8 | 88 | 0.00 |
| 16 | t | Endosulfan I | | 1.332 | 1.167 | 12.4 | 88 | 0.00 |
| 17 | t | Dieldrin | | 1.327 | 1.319 | 0.6 | 96 | 0.00 |
| 18 | t | Endrin | | 1.347 | 1.231 | 8.6 | 88 | 0.00 |
| 19 | t | 4,4'-DDD | | 1.084 | 1.070 | 1.3 | 94 | 0.00 |
| 20 | t | Endosulfan II | | 1.214 | 1.119 | 7.8 | 92 | 0.00 |
| 21 | t | 4,4'-DDT | | 1.250 | 1.163 | 7.0 | 90 | 0.00 |
| 22 | t | Endrin Aldehyde | * | 50.000 | 45.377 | 9.2 | 85 | 0.00 |
| 23 | t | Methoxychlor | | 0.704 | 0.626 | 11.1 | 94 | 0.00 |
| 24 | t | Mirex | * | 50.000 | 50.644 | -1.3 | 94 | 0.00 |
| 25 | t | Endosulfan Sulfate | | 1.199 | 1.078 | 10.1 | 92 | 0.00 |
| 26 | t | Endrin Ketone | | 1.261 | 1.242 | 1.5 | 98 | 0.00 |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.941 | 11.2 | 95 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  20:36
Operator  : PEST11:ejl
Sample    : cicvpest,42e,,pp 11675 L0.05ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 29 | l1 | chlordane-1 | * | 0.037 | 0.000 | 100.0# | 0# | -2.45# |
| 30 | l1 | chlordane-3 | * | 0.047 | 0.000 | 100.0# | 0# | -2.87# |
| 31 | l1 | chlordane-4 | * | 0.159 | 0.000 | 100.0# | 0# | -3.42# |
| 32 | l1 | chlordane-5 | * | 0.245 | 0.000 | 100.0# | 0# | -3.55# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 34 | l2 | toxaphene-2 | * | 0.050 | 0.000 | 100.0# | 0# | -4.44# |
| 35 | l2 | toxaphene-3 | * | 0.039 | 0.000 | 100.0# | 0# | -4.57# |
| 36 | l2 | toxaphene-4 | * | 0.042 | 0.000 | 100.0# | 0# | -4.79# |
| 37 | l2 | toxaphene-5 | * | 0.043 | 0.000 | 100.0# | 0# | -5.17# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 29 | l1 | chlordane-1 | * | 0.043 | 0.000 | 100.0# | 0# | -2.82# |
| 30 | l1 | chlordane-3 | * | 0.052 | 0.000 | 100.0# | 0# | -3.42# |
| 31 | l1 | chlordane-4 | * | 0.173 | 0.000 | 100.0# | 0# | -4.10# |
| 32 | l1 | chlordane-5 | * | 0.134 | 0.000 | 100.0# | 0# | -4.28# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 34 | l2 | toxaphene-2 | * | 0.025 | 0.000 | 100.0# | 0# | -5.08# |
| 35 | l2 | toxaphene-3 | * | 0.037 | 0.000 | 100.0# | 0# | -5.11# |
| 36 | l2 | toxaphene-4 | * | 0.044 | 0.000 | 100.0# | 0# | -5.43# |
| 37 | l2 | toxaphene-5 | * | 0.042 | 0.000 | 100.0# | 0# | -5.84# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:36
Operator : PEST11:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.309 | 1.386 | 222.3E6 | 177.6E6 | 25.000M4 | 25.000M4 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.652 | 1.858 | 456.9E6 | 370.0E6 | 49.453M3 | 46.772M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 98.91% | 93.54% |
| 27) s | Decachlorobi | 6.288 | 6.918 | 482.5E6 | 334.3E6 | 46.657M3 | 44.401M3 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 93.31% | 88.80% |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.865 | 2.178 | 587.8E6 | 395.1E6 | 47.014M3 | 44.899M3 |
| 4) t | alpha-BHC | 1.963 | 2.271 | 667.2E6 | 559.8E6 | 51.377M4 | 48.662M4 |
| 5) t | gamma-BHC (l | 2.165 | 2.557 | 603.3E6 | 499.8E6 | 48.621M4 | 45.722M4 |
| 6) t | beta-BHC | 2.221 | 2.623 | 257.8E6 | 214.1E6 | 46.189M4 | 47.735M3 |
| 7) t | delta-BHC | 2.349 | 2.890 | 593.1E6 | 491.2E6 | 48.542M4 | 45.411 |
| 8) t | Heptachlor | 2.513 | 2.953 | 569.5E6 | 511.7E6 | 48.485M4 | 45.092 |
| 9) t | Aldrin | 2.756 | 3.272 | 545.1E6 | 477.4E6 | 49.714M3 | 46.842 |
| 10) t | Alachlor | 2.876 | 3.153 | 98339329 | 67754072 | 48.033M4 | 52.133M4 |
| 11) t | Chlorpyrifos | 2.968 | 3.506 | 231.0E6 | 247.0E6 | 44.053M3 | 49.655M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:36
Operator : PEST11:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.300 | 3.884 | 503.7E6 | 441.6E6 | 47.784M3 | 43.617M3 |
| 13) | t | gamma-Chlord | 3.425 | 4.105 | 514.8E6 | 460.2E6 | 53.753M4 | 49.404M4 |
| 14) | t | alpha-Chlord | 3.559 | 4.274 | 509.4E6 | 449.4E6 | 47.103M4 | 43.758 |
| 15) | t | 4,4'-DDE | 3.656 | 4.473 | 519.3E6 | 444.5E6 | 49.014M4 | 46.608M4 |
| 16) | t | Endosulfan I | 3.695 | 4.336 | 473.1E6 | 414.6E6 | 47.669M3 | 43.821M4 |
| 17) | t | Dieldrin | 3.954 | 4.627 | 535.4E6 | 468.3E6 | 53.047M4 | 49.677M3 |
| 18) | t | Endrin | 4.210 | 4.926 | 497.7E6 | 437.0E6 | 48.558 | 45.687 |
| 19) | t | 4,4'-DDD | 4.322 | 5.049 | 431.2E6 | 379.8E6 | 52.297 | 49.344M4 |
| 20) | t | Endosulfan I | 4.451 | 5.125 | 468.9E6 | 397.6E6 | 50.128 | 46.124M4 |
| 21) | t | 4,4'-DDT | 4.616 | 5.326 | 464.0E6 | 412.9E6 | 49.301 | 46.497M4 |
| 22) | t | Endrin Aldeh | 4.868 | 5.421 | 355.0E6 | 301.1E6 | 45.037M4 | 45.377M3 |
| 23) | t | Methoxychlor | 5.104 | 5.890 | 256.9E6 | 222.3E6 | 48.807M4 | 44.431M3 |
| 24) | t | Mirex | 5.160 | 6.023 | 394.7E6 | 325.6E6 | 47.337M3 | 50.644M4 |
| 25) | t | Endosulfan S | 5.260 | 5.649 | 436.2E6 | 382.7E6 | 48.586M3 | 44.940M4 |
| 26) | t | Endrin Keton | 5.486 | 6.060 | 558.9E6 | 441.2E6 | 53.123M4 | 49.265M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:36
Operator : PEST11:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

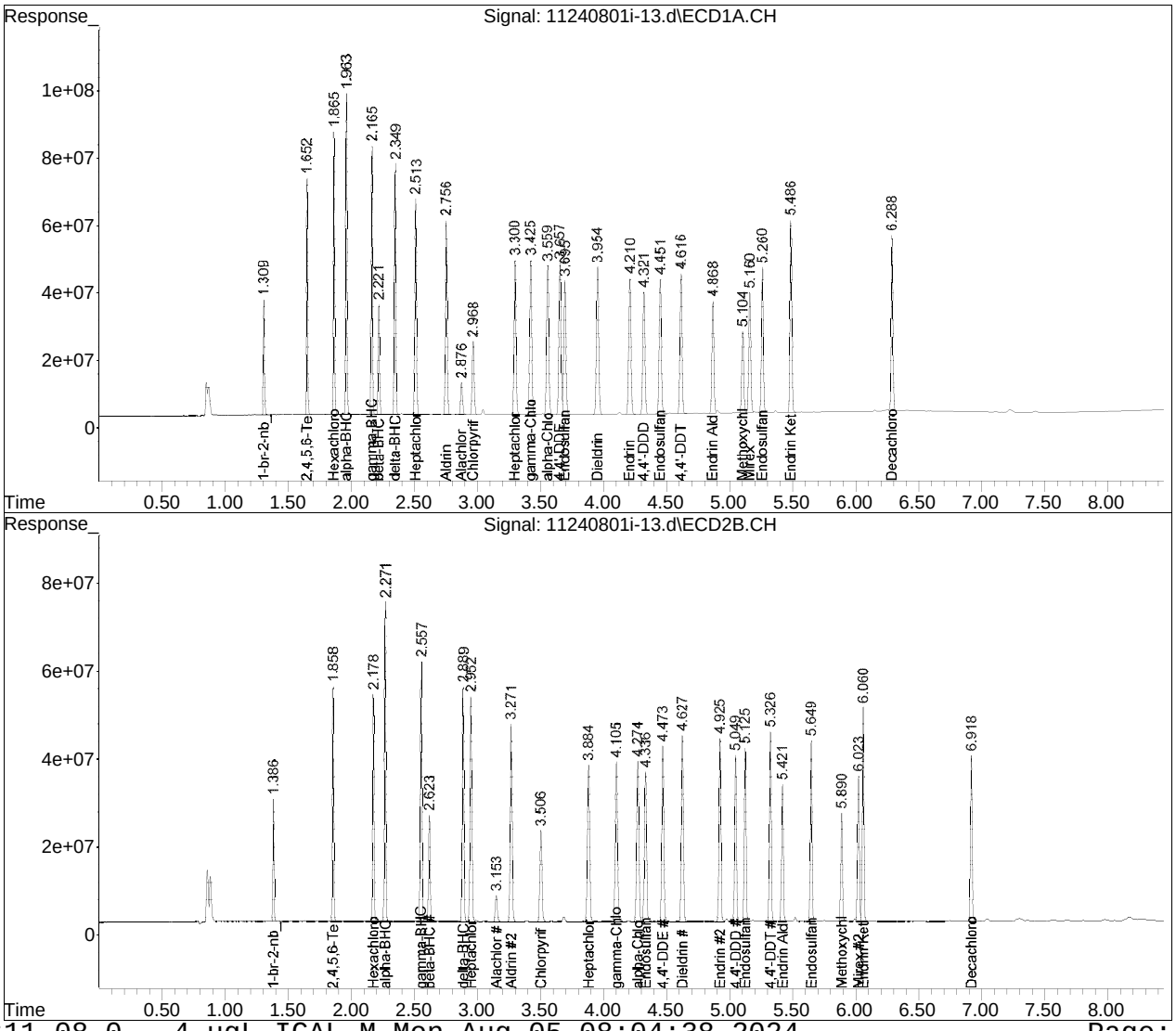
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-13.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  20:36
Operator : PEST11:ejl
Sample : cicvpest,42e,,pp 11675 L0.05ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:49:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:49:27 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

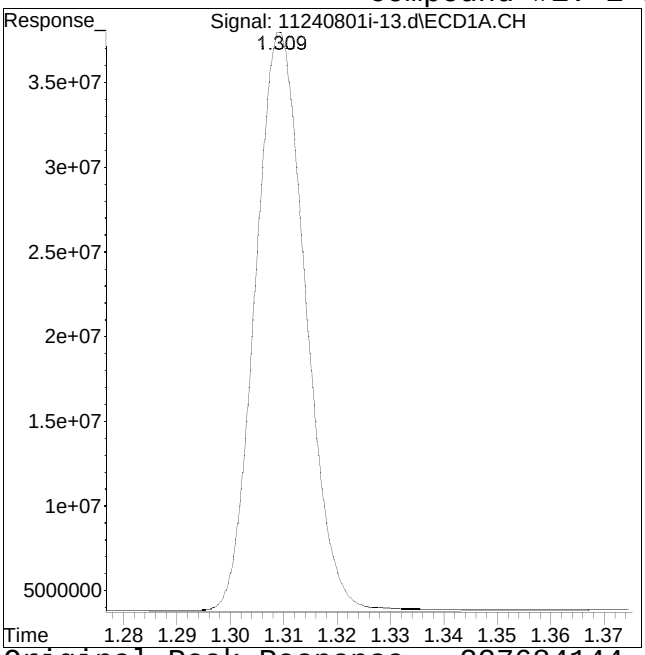


# Manual Integration Report

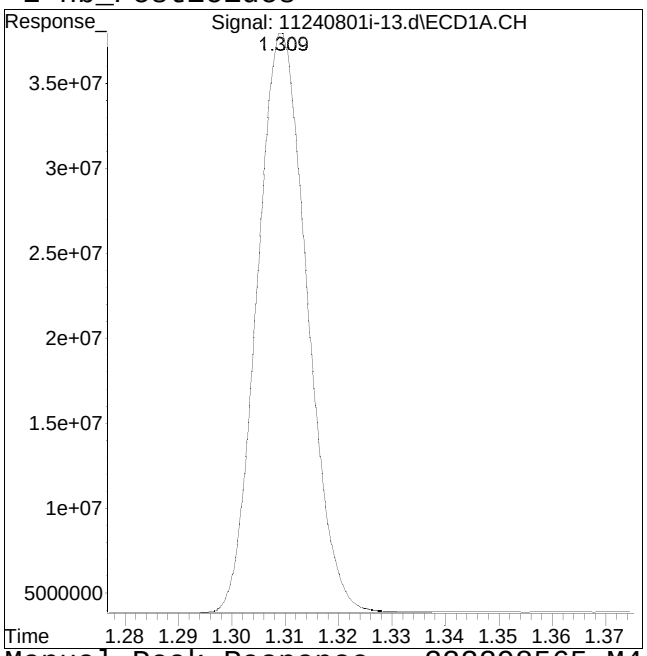
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 227684144




Manual Peak Response = 222298565 M4

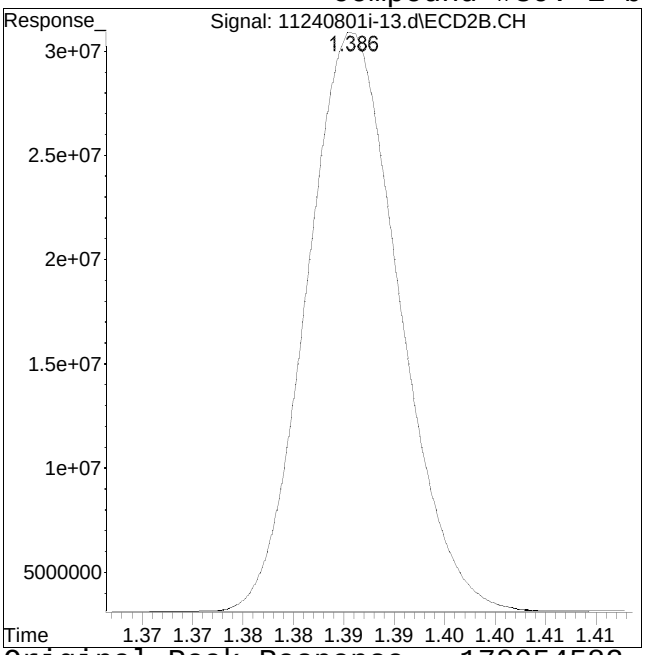
M4 = Poor automated baseline construction.

Manual Integration Report

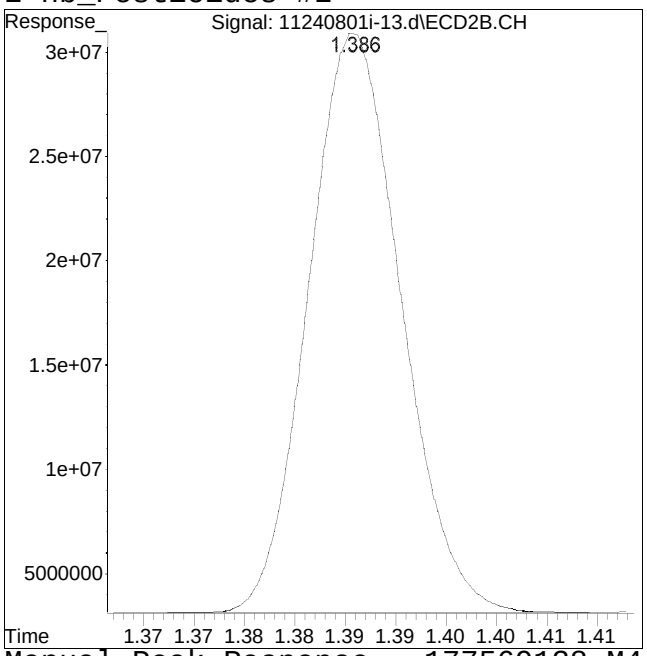
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #39: 1-br-2-nb_Pesticides #2




Original Peak Response = 178054582



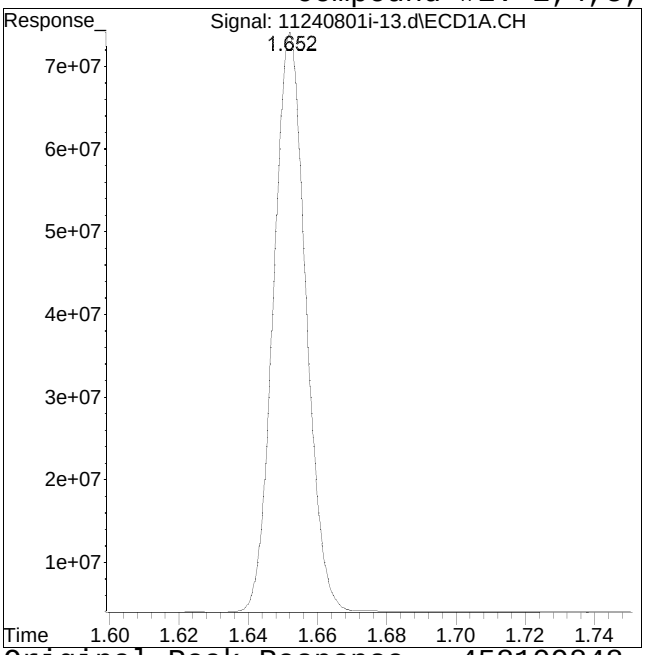

Manual Peak Response = 177569138 M4

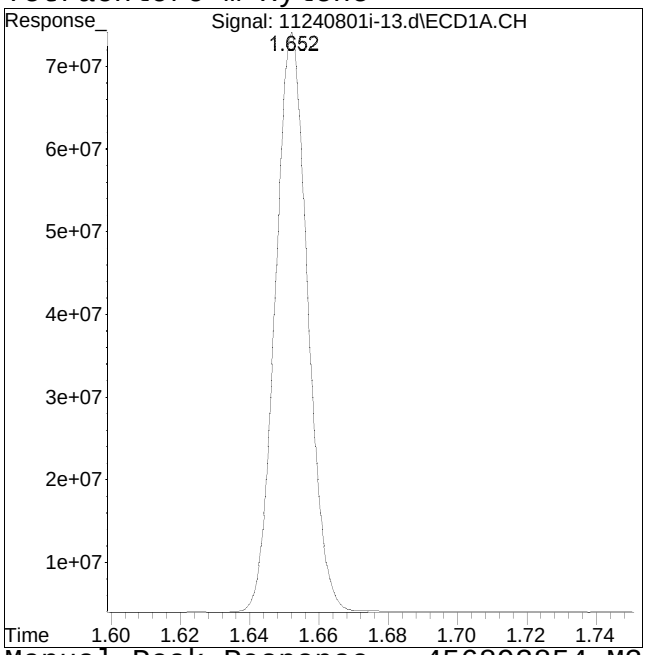
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



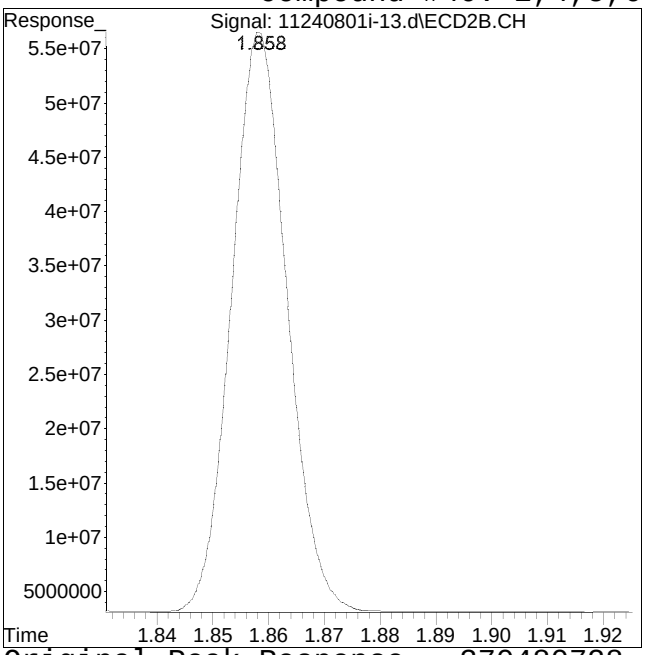




Original Peak Response = 458109848 Manual Peak Response = 456893854 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

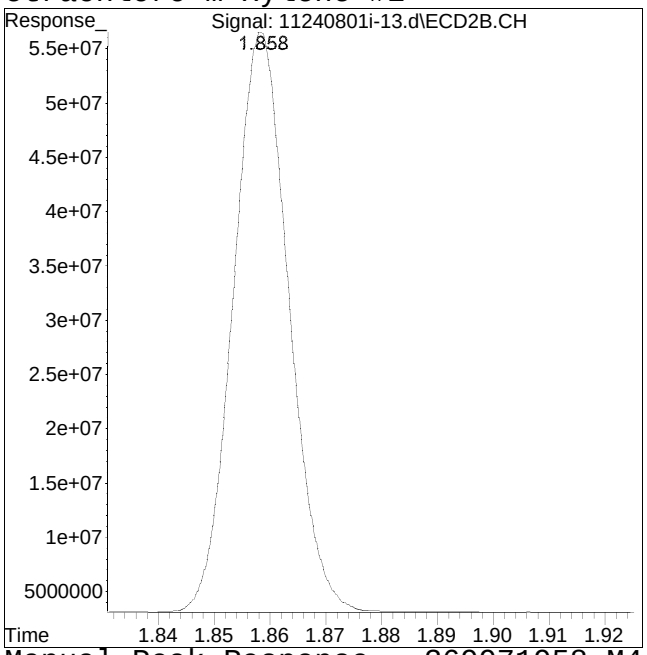
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 370480728




Manual Peak Response = 369971958 M4

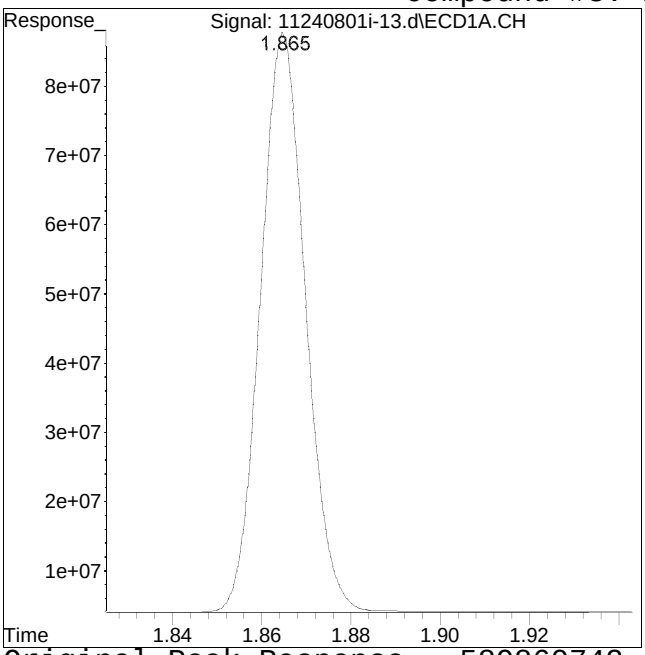
M4 = Poor automated baseline construction.

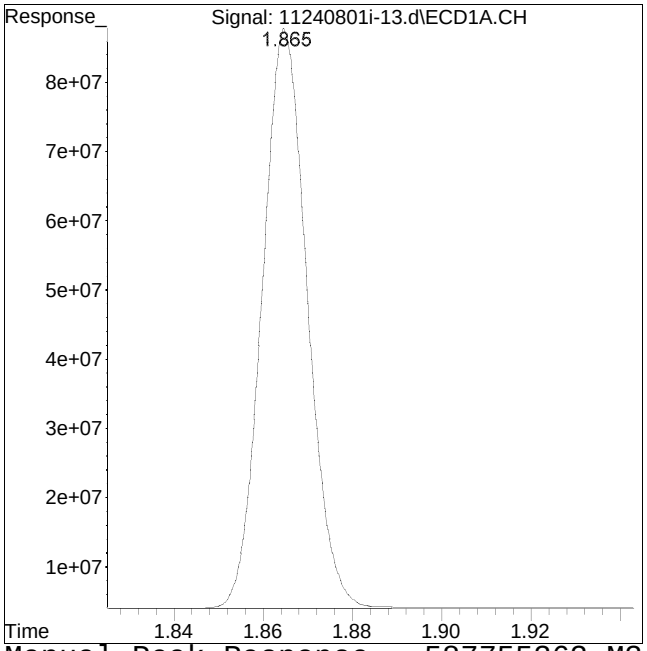
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #3: Hexachlorobenzene




Original Peak Response = 589860742 Manual Peak Response = 587755363 M3

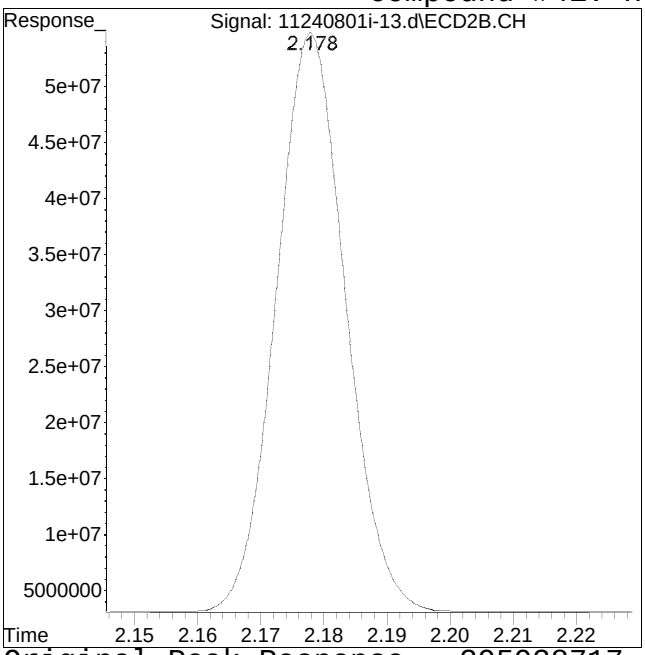
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

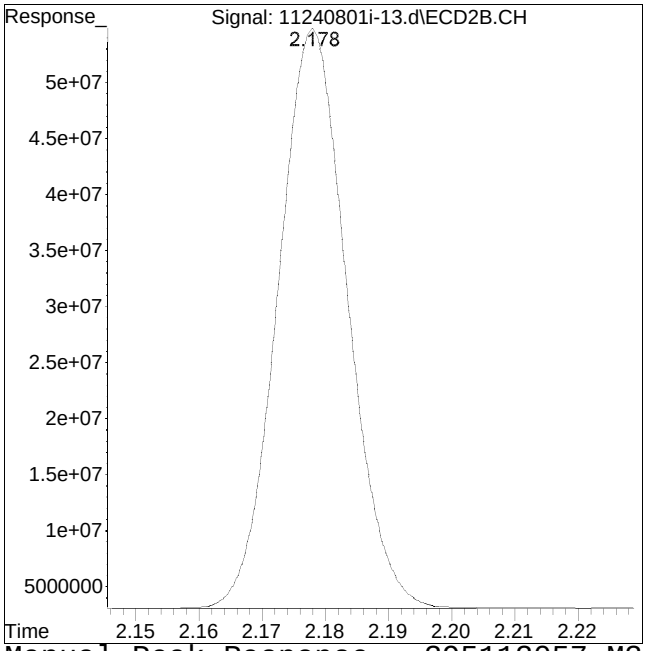
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #41: Hexachlorobenzene #2




Original Peak Response = 395938717 Manual Peak Response = 395113057 M3

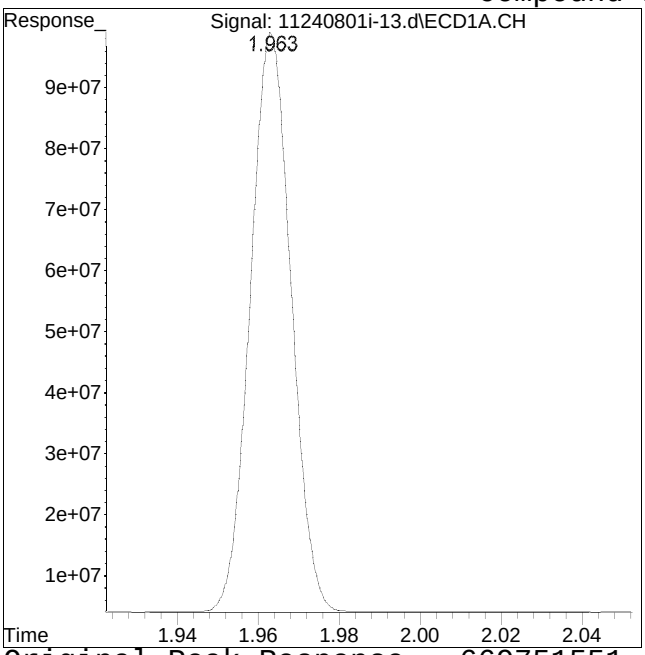
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

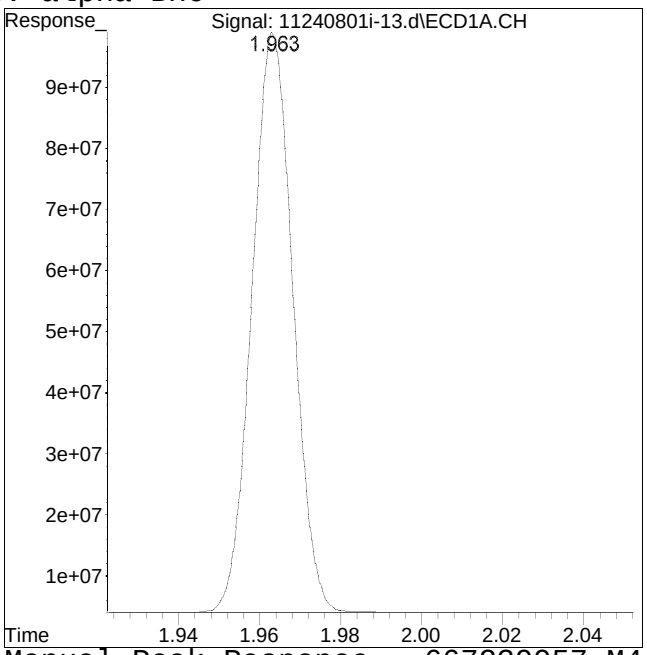
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #4: alpha-BHC




Original Peak Response = 669751551



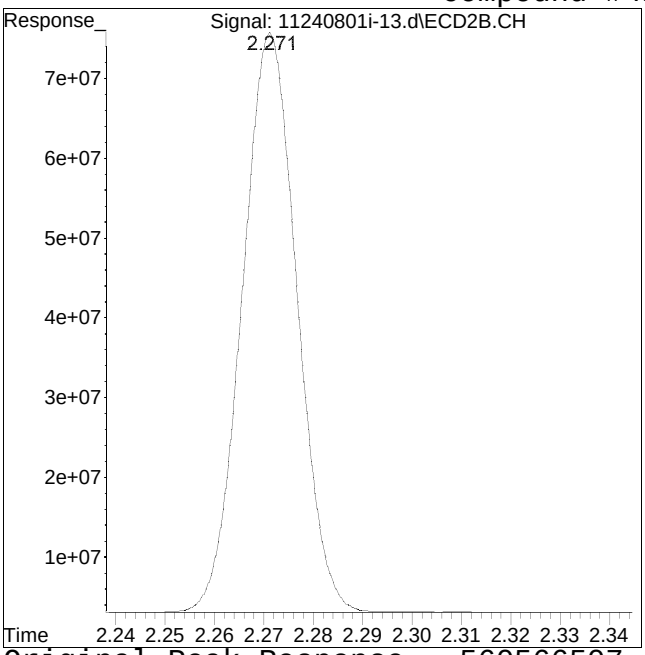

Manual Peak Response = 667239957 M4

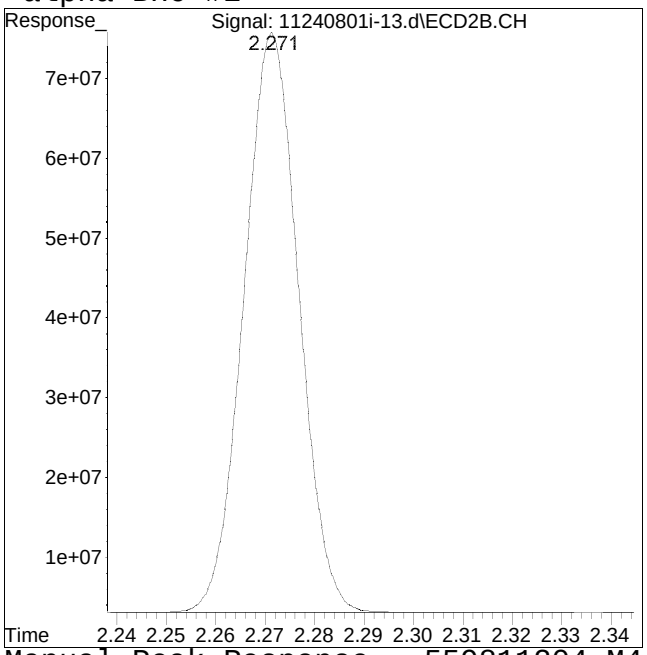
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #42: alpha-BHC #2



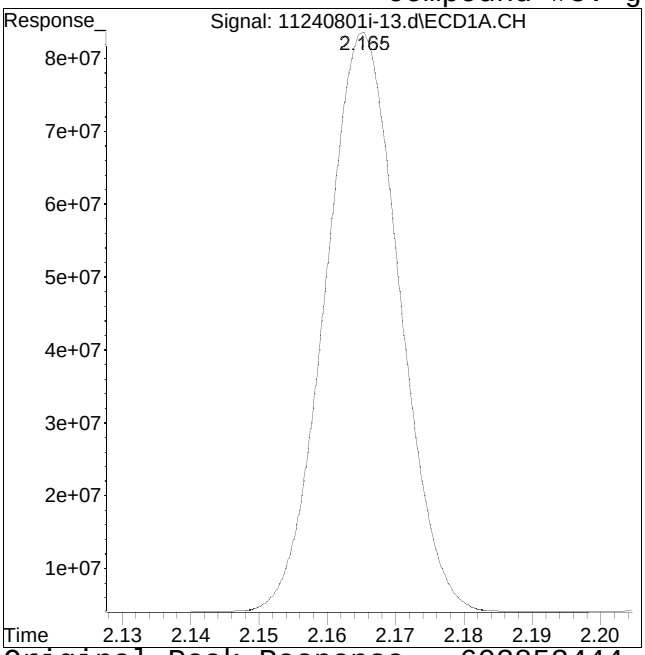




Original Peak Response = 560566507 Manual Peak Response = 559811204 M4
M4 = Poor automated baseline construction.

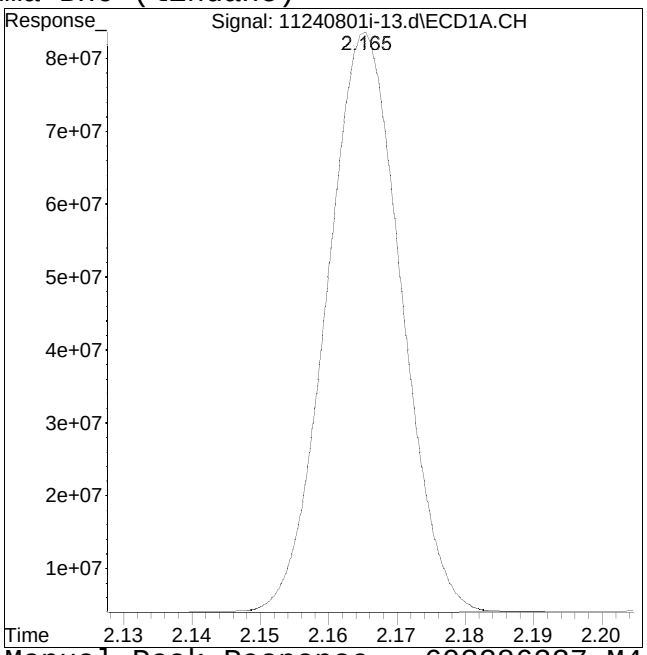
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #5: gamma-BHC (lindane)




Original Peak Response = 603852444



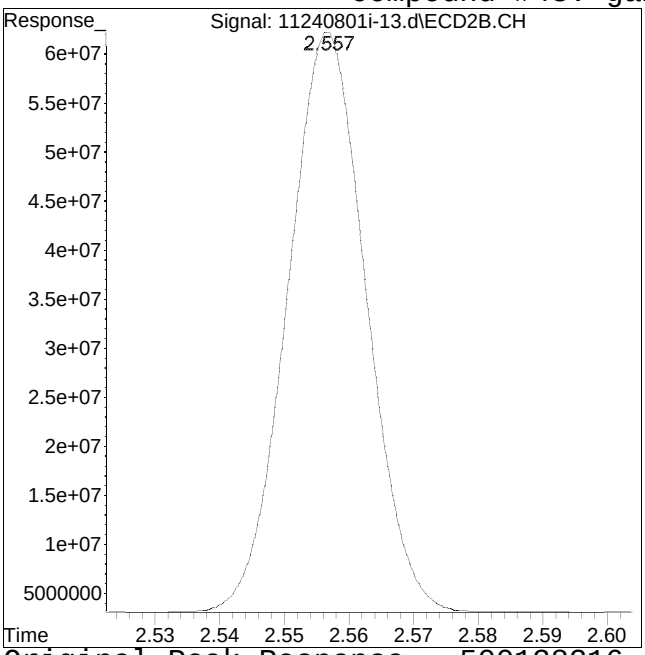

Manual Peak Response = 603286337 M4

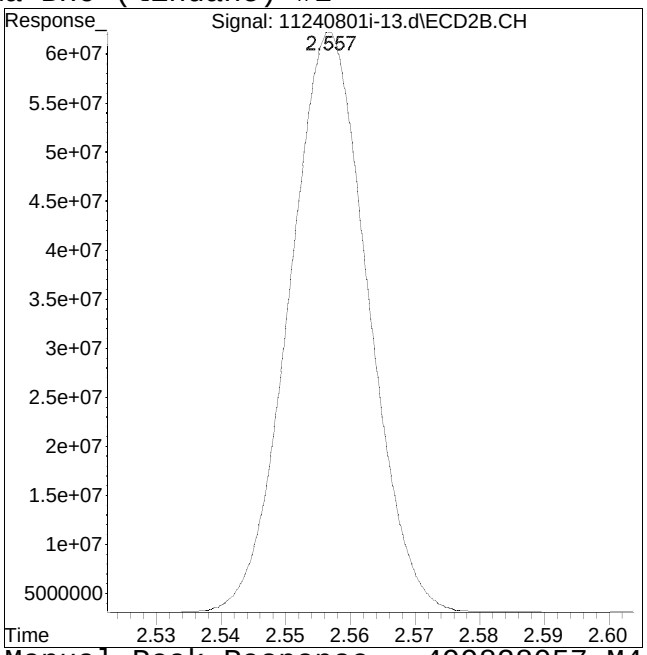
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #43: gamma-BHC (lindane) #2



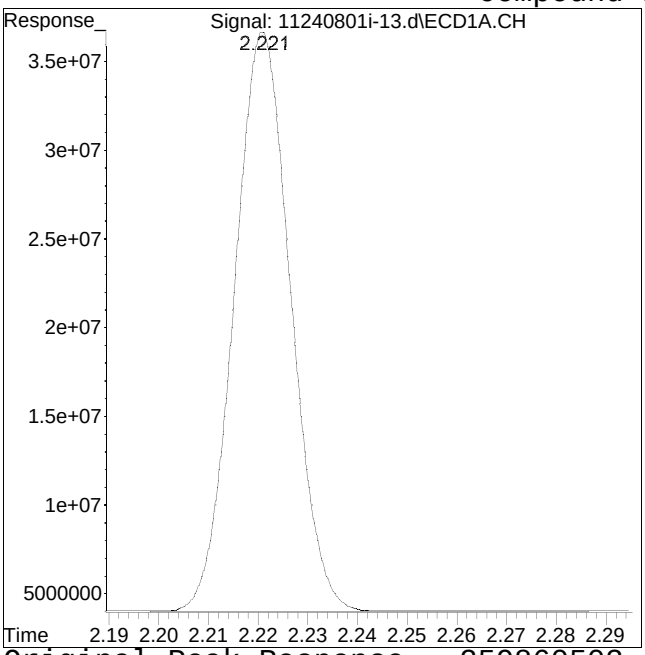




Original Peak Response = 500138316 Manual Peak Response = 499828057 M4
M4 = Poor automated baseline construction.

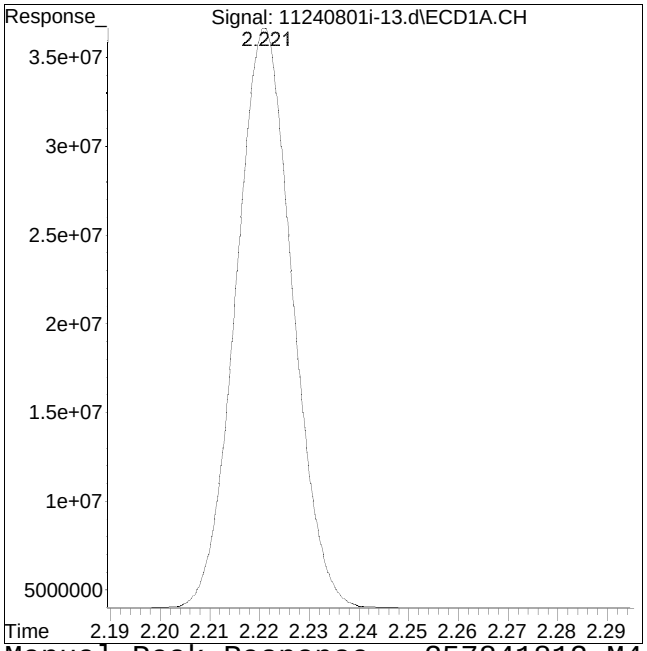
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #6: beta-BHC




Original Peak Response = 259860503



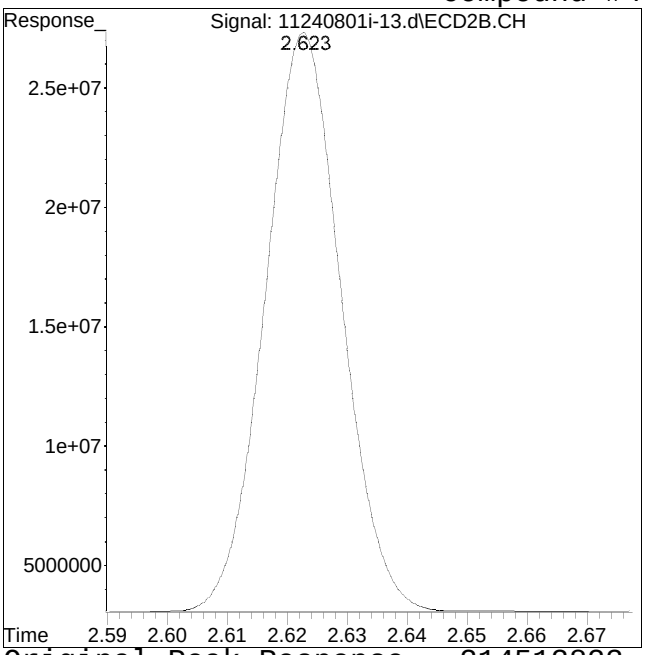

Manual Peak Response = 257841812 M4

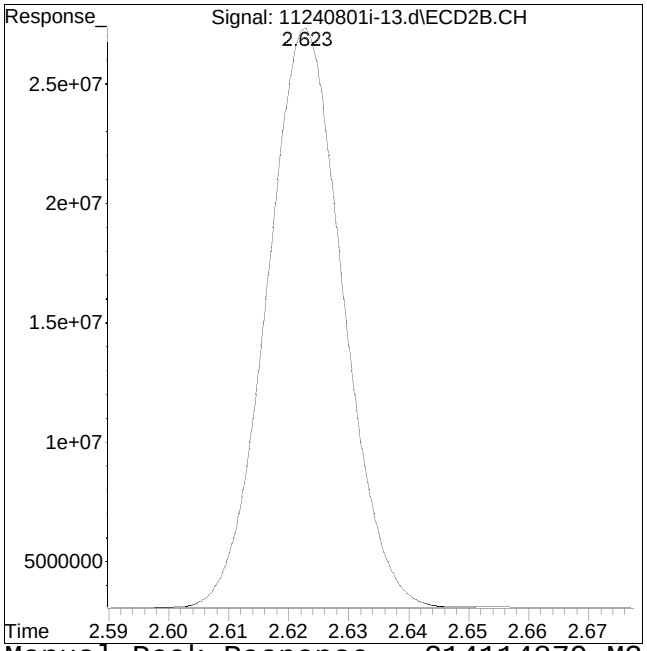
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #44: beta-BHC #2



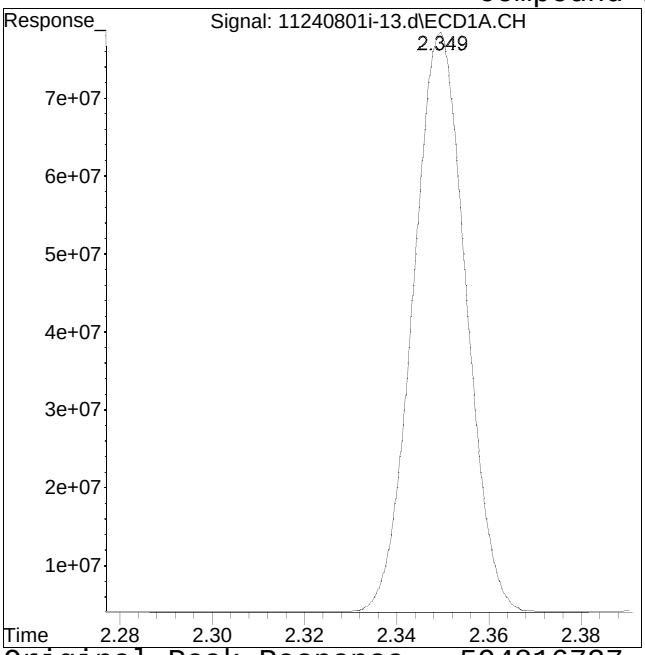

Original Peak Response = 214512823 Manual Peak Response = 214114879 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

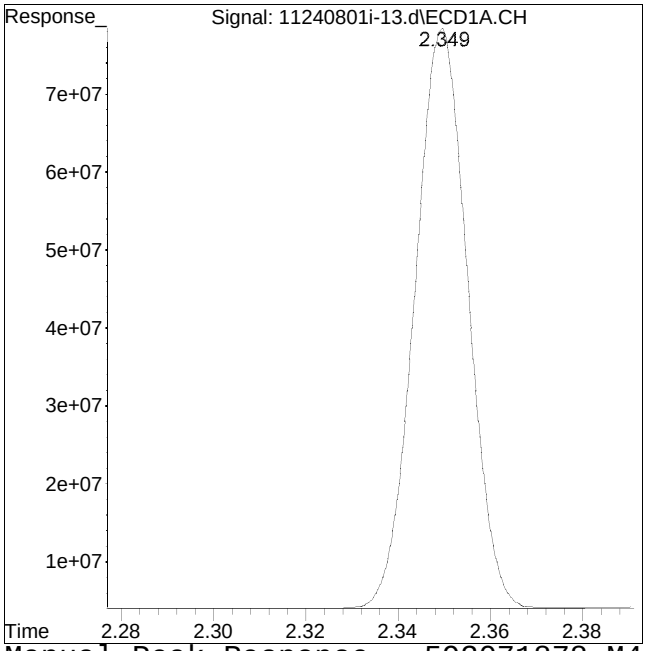
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #7: delta-BHC




Original Peak Response = 594816737




Manual Peak Response = 593071878 M4

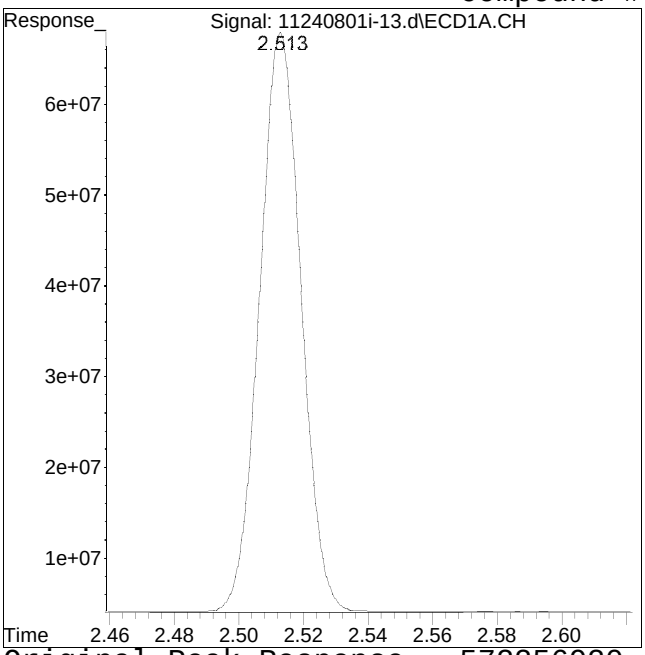
M4 = Poor automated baseline construction.

Manual Integration Report

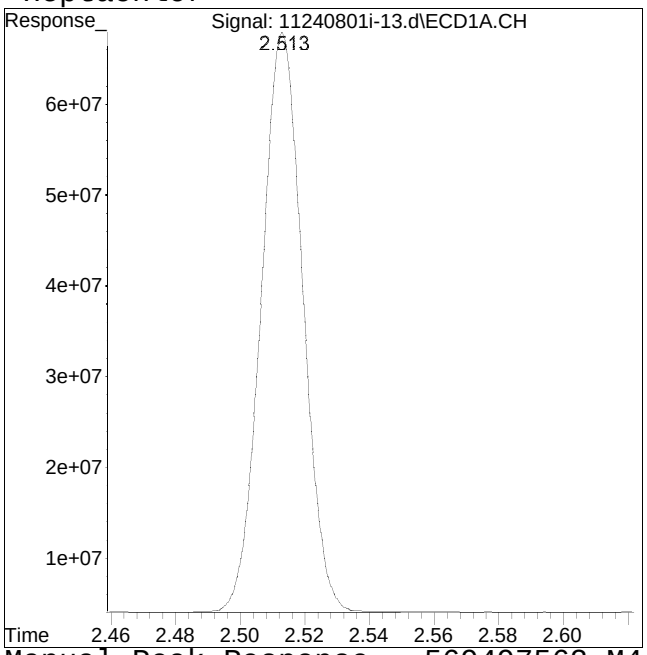
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #8: Heptachlor




Original Peak Response = 572256920




Manual Peak Response = 569497562 M4

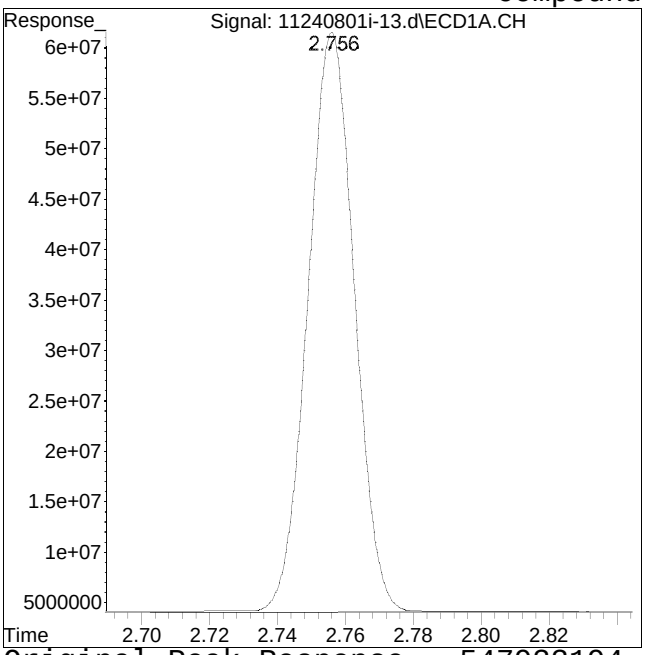
M4 = Poor automated baseline construction.

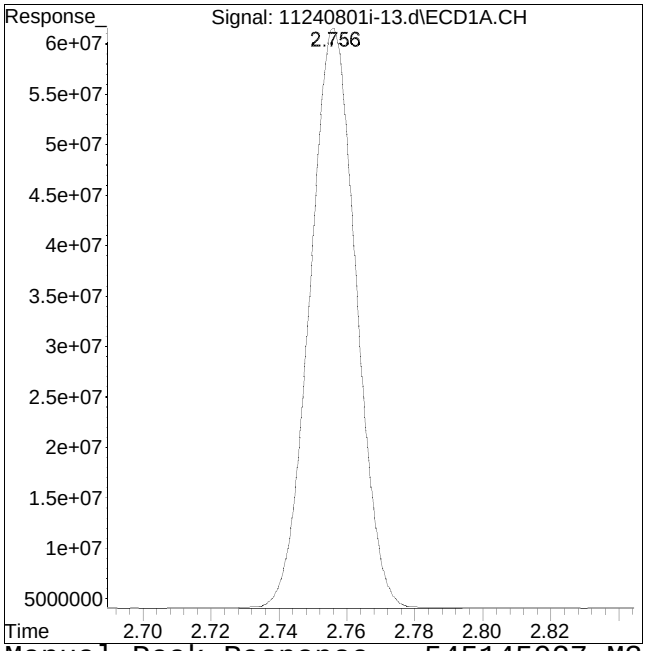
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #9: Aldrin




Original Peak Response = 547933194 Manual Peak Response = 545145027 M3

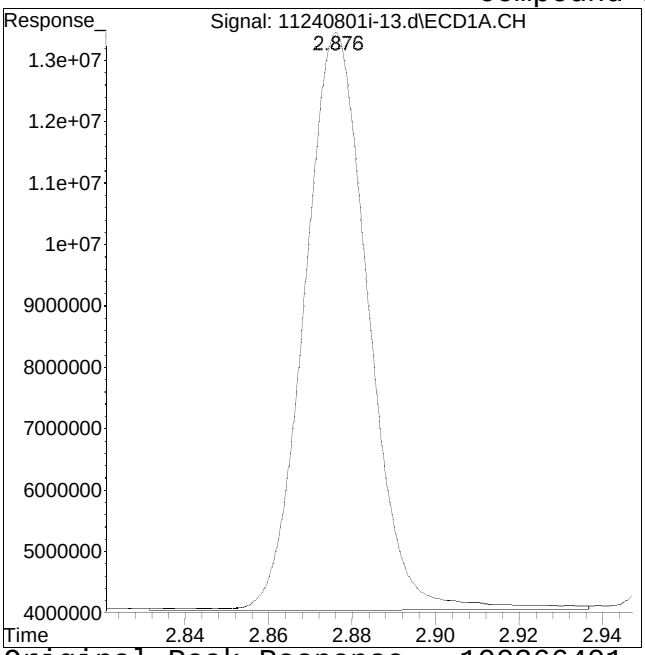
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

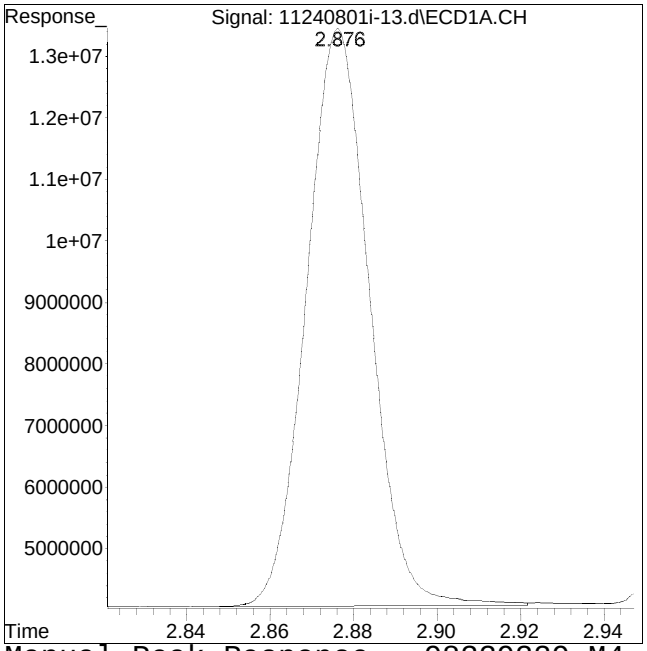
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #10: Alachlor




Original Peak Response = 100366401




Manual Peak Response = 98339329 M4

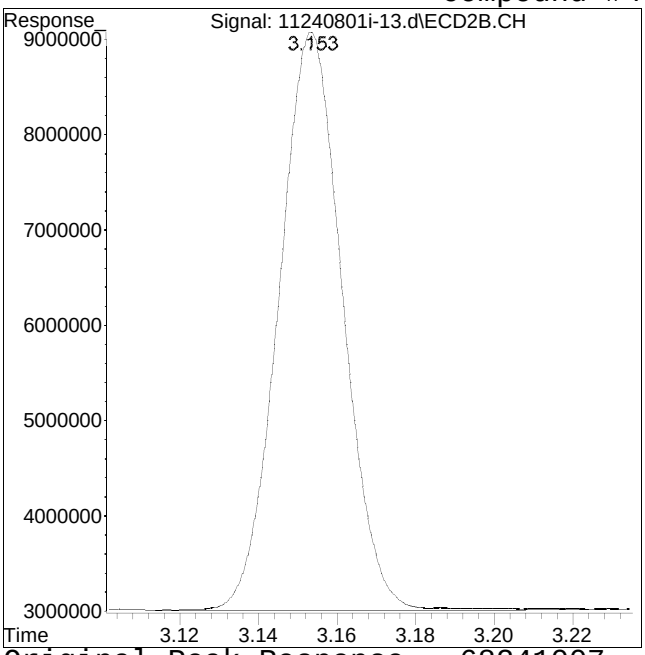
M4 = Poor automated baseline construction.

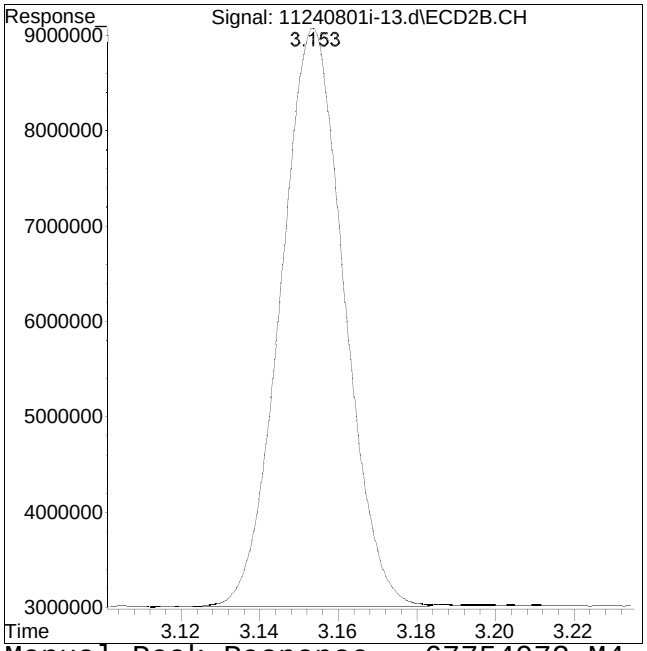
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #48: Alachlor #2



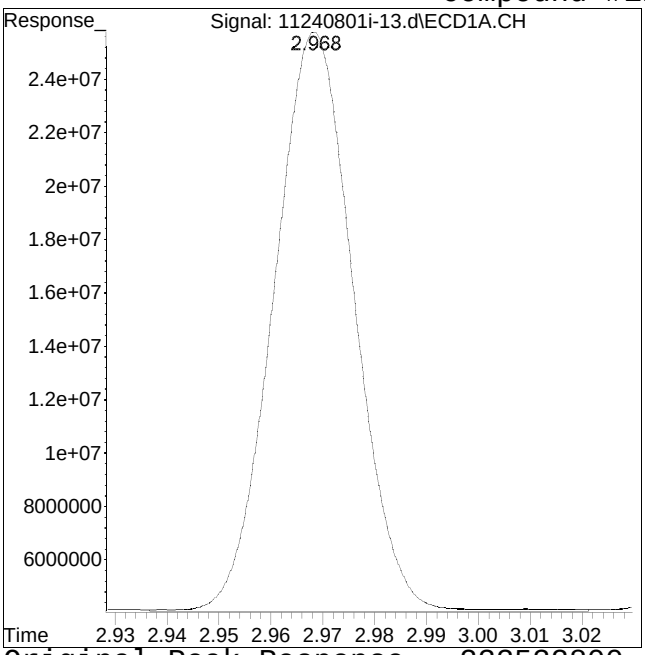



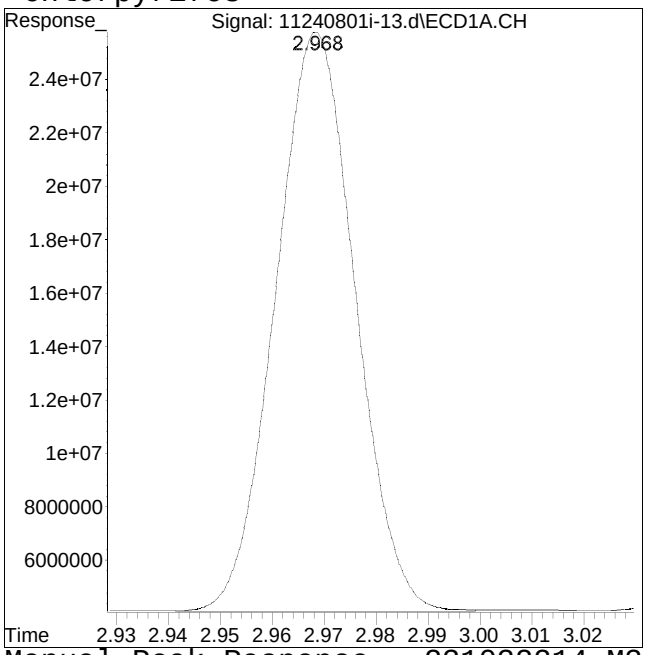

Original Peak Response = 68241007 Manual Peak Response = 67754072 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #11: Chlorpyrifos



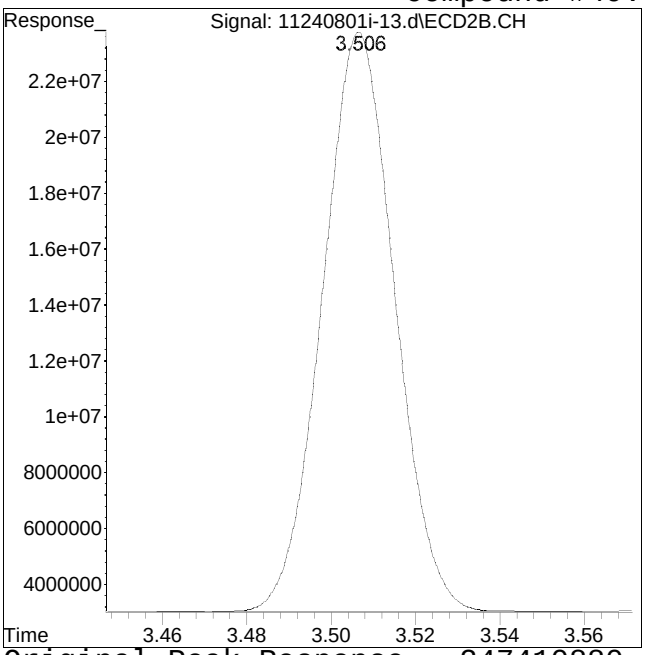

Original Peak Response = 233532800 Manual Peak Response = 231032214 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

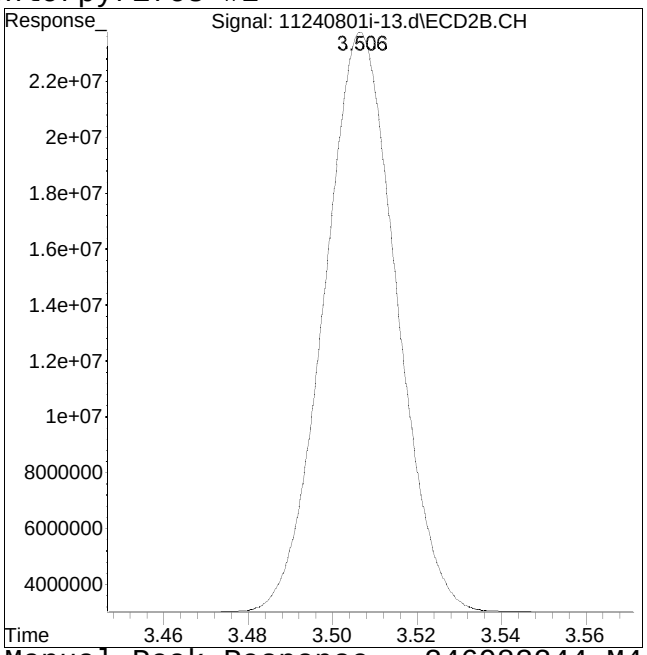
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #49: Chlorpyrifos #2




Original Peak Response = 247410880




Manual Peak Response = 246983244 M4

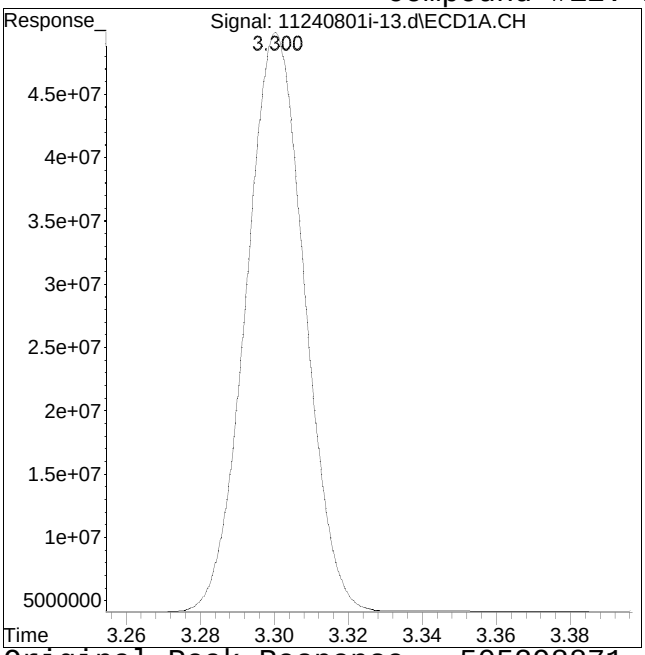
M4 = Poor automated baseline construction.

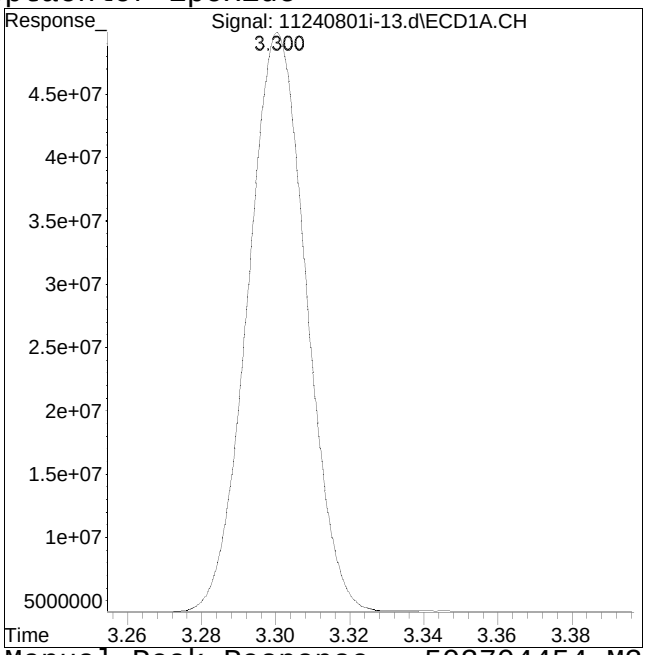
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #12: Heptachlor Epoxide




Original Peak Response = 505298871 Manual Peak Response = 503704454 M3

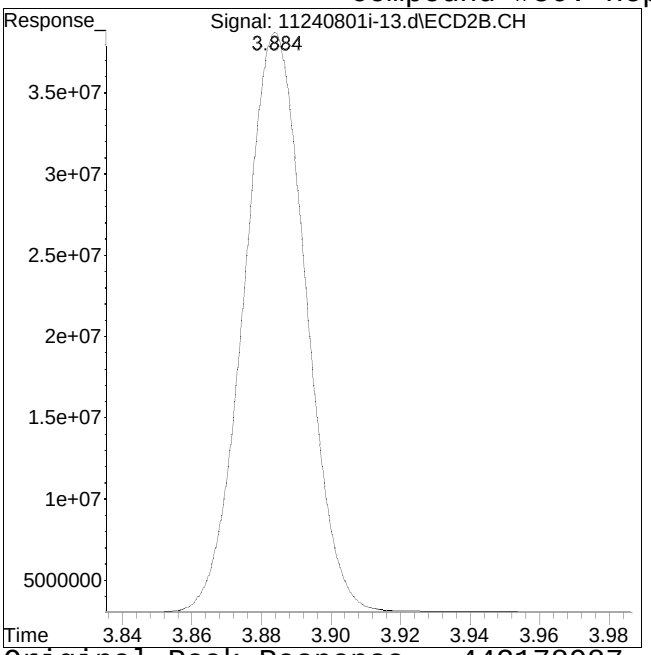
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

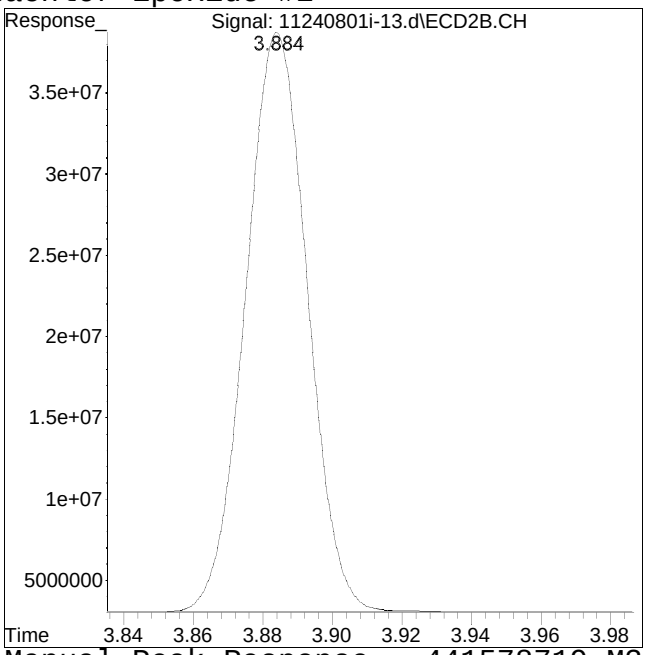
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 442178987 Manual Peak Response = 441578719 M3

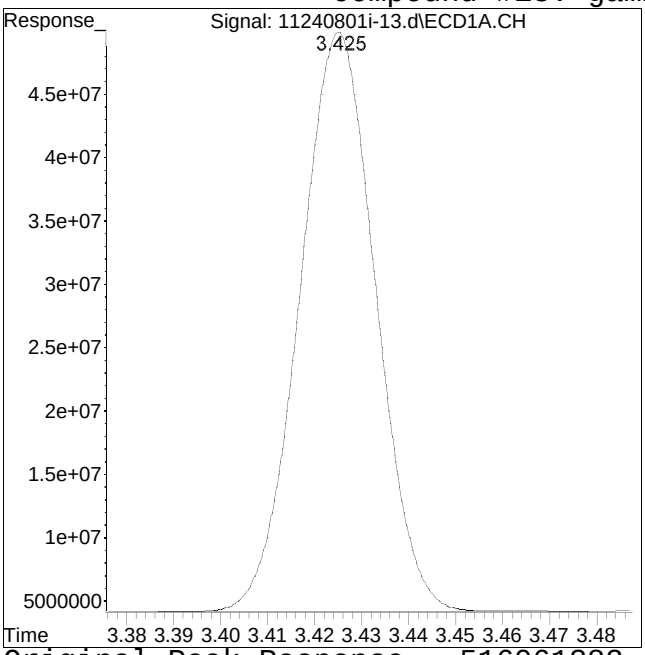
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

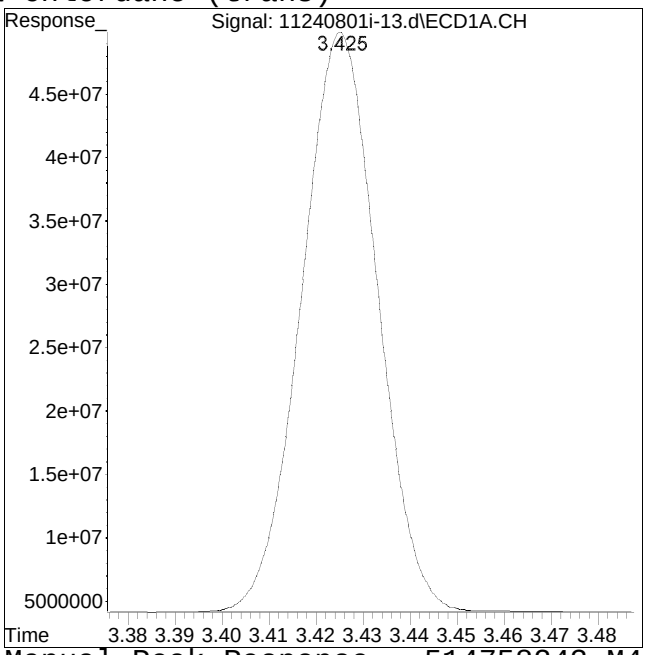
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #13: gamma-Chlordane (trans)



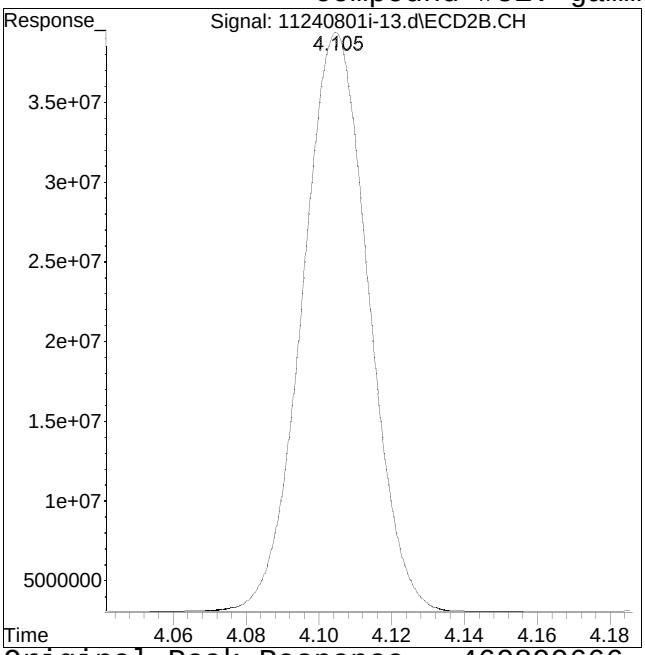

Original Peak Response = 516061382 Manual Peak Response = 514758243 M4
M4 = Poor automated baseline construction.

Manual Integration Report

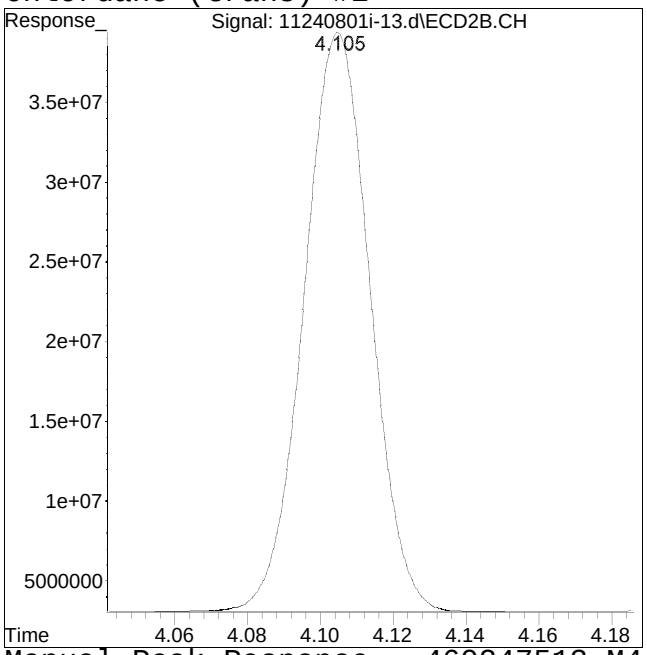
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 460899666




Manual Peak Response = 460247513 M4

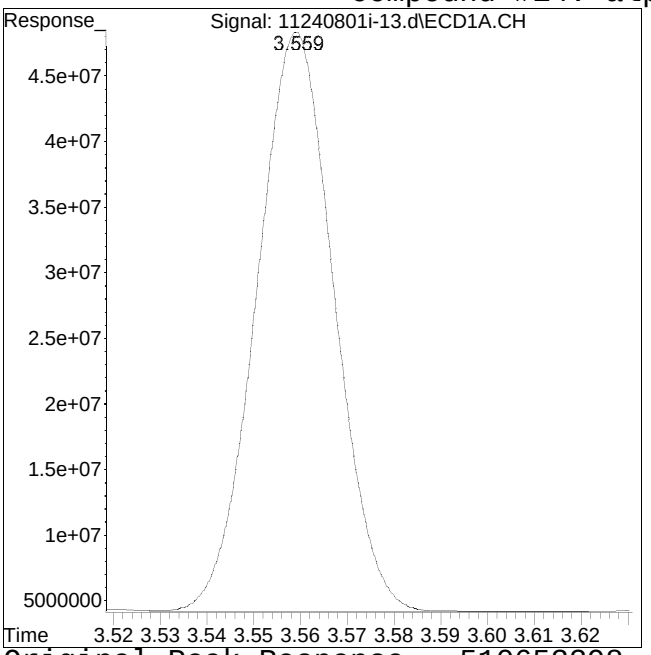
M4 = Poor automated baseline construction.

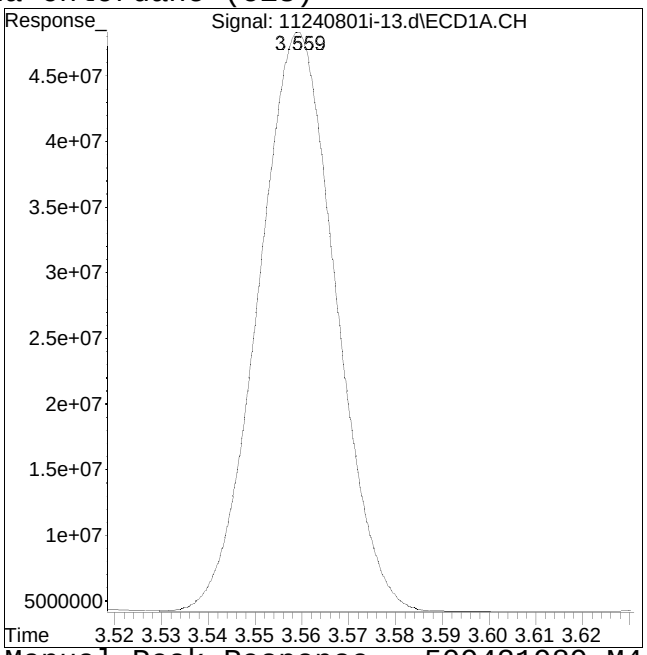
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #14: alpha-Chlordane (cis)



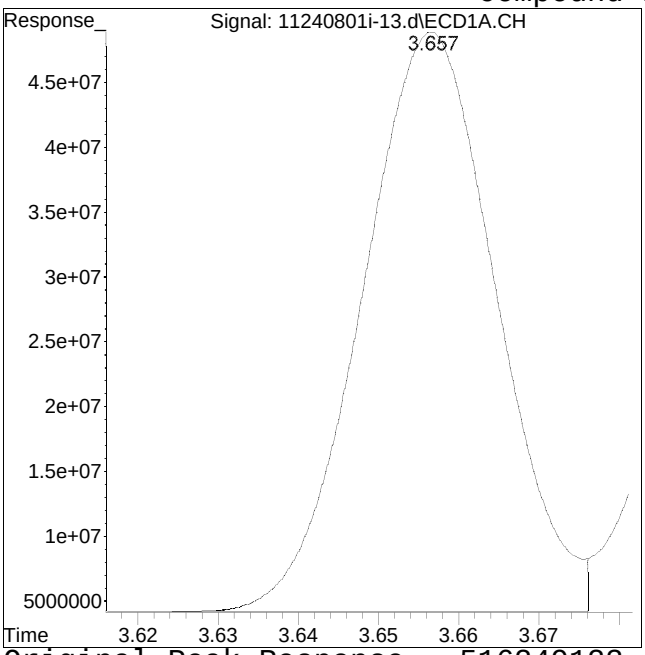



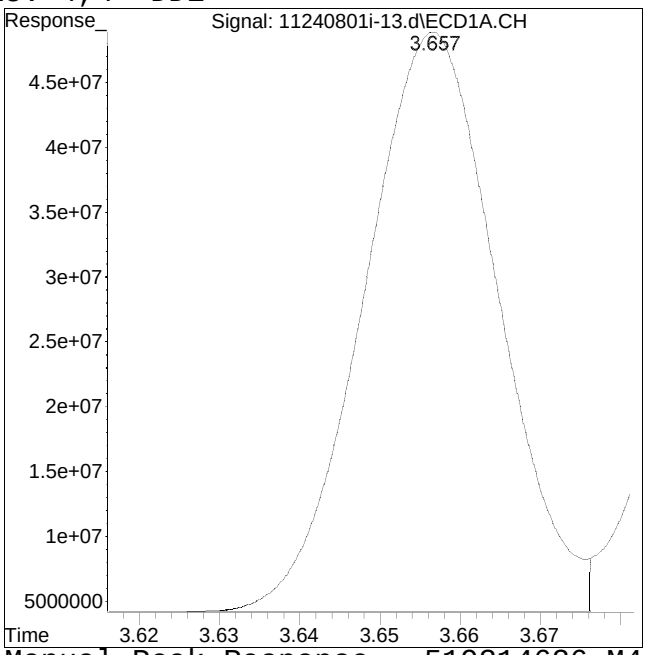

Original Peak Response = 510653398 Manual Peak Response = 509421989 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #15: 4,4'-DDE



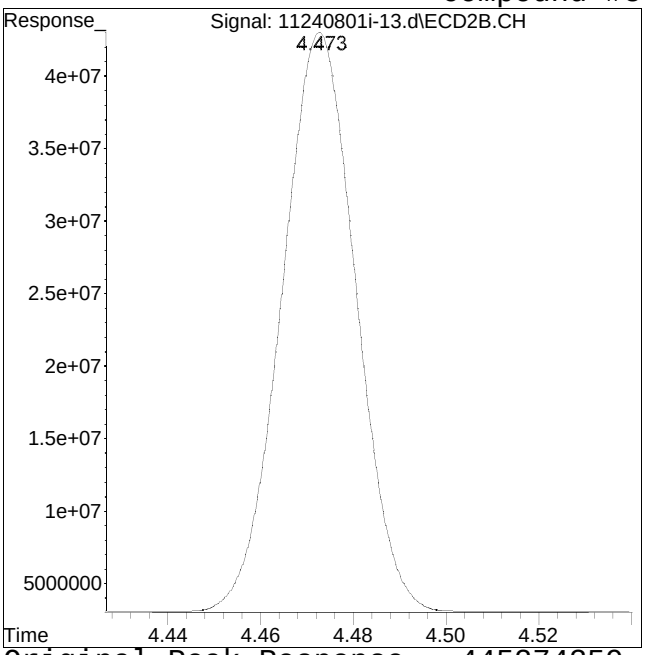

Original Peak Response = 516249123 Manual Peak Response = 519314626 M4
M4 = Poor automated baseline construction.

Manual Integration Report

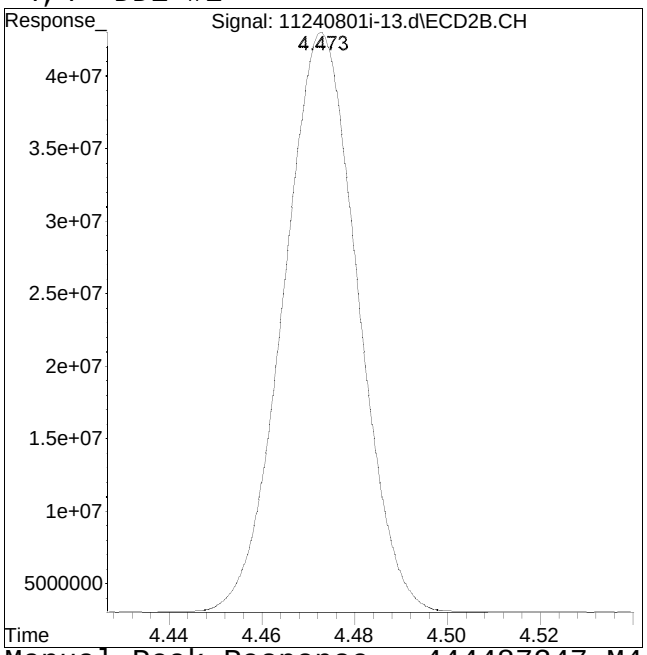
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 445274359



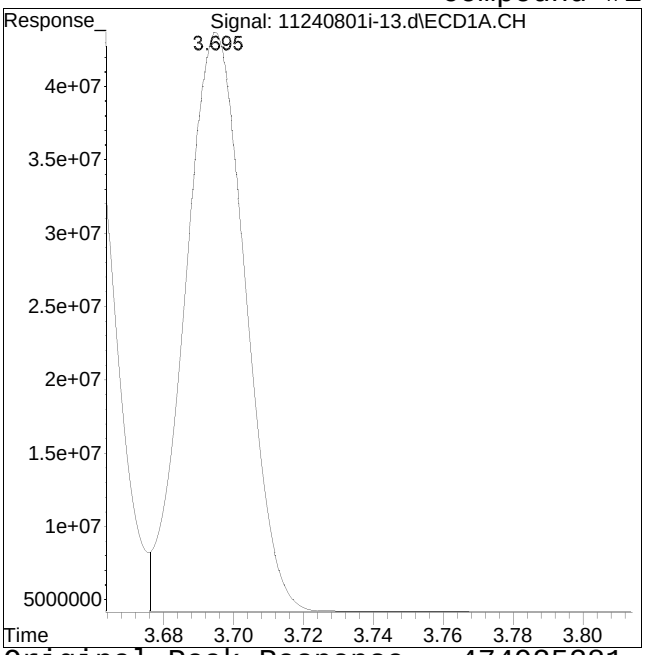

Manual Peak Response = 444487347 M4

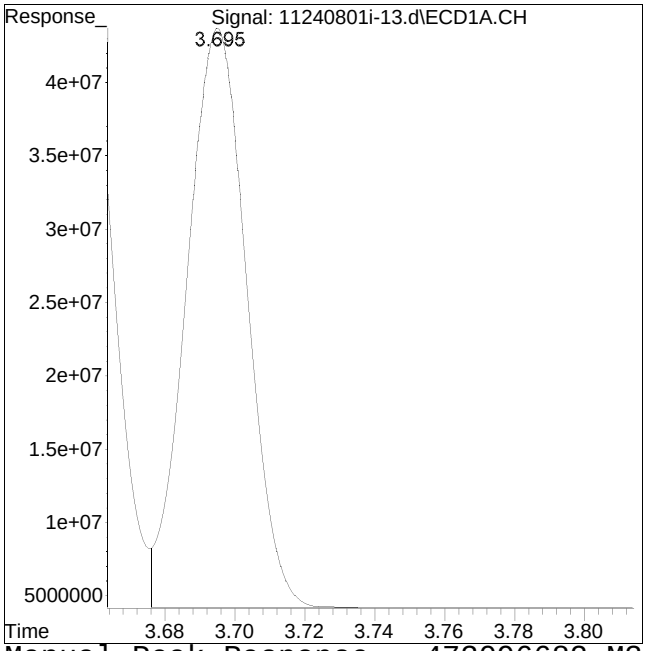
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #16: Endosulfan I




Original Peak Response = 474925381 Manual Peak Response = 473096682 M3

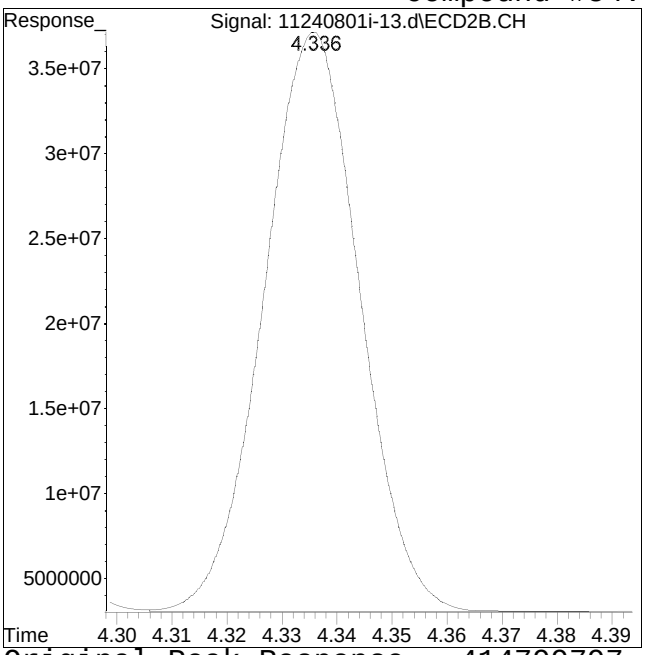
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

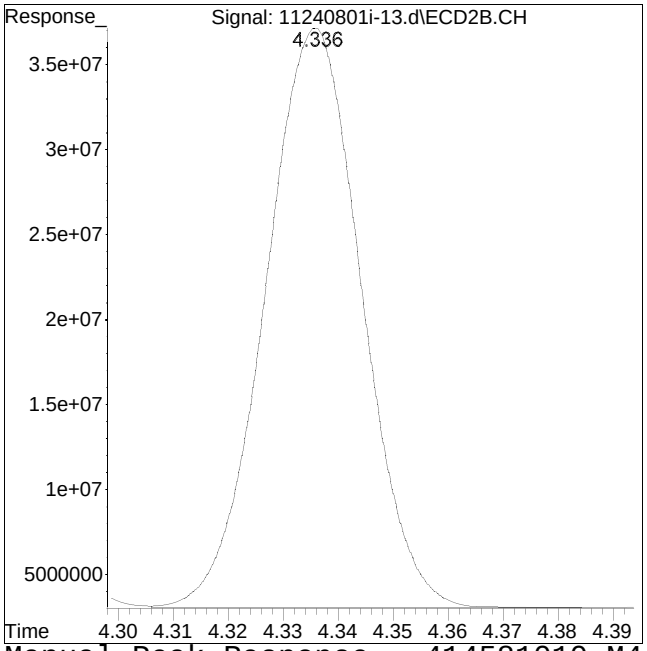
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #54: Endosulfan I #2




Original Peak Response = 414799797




Manual Peak Response = 414581010 M4

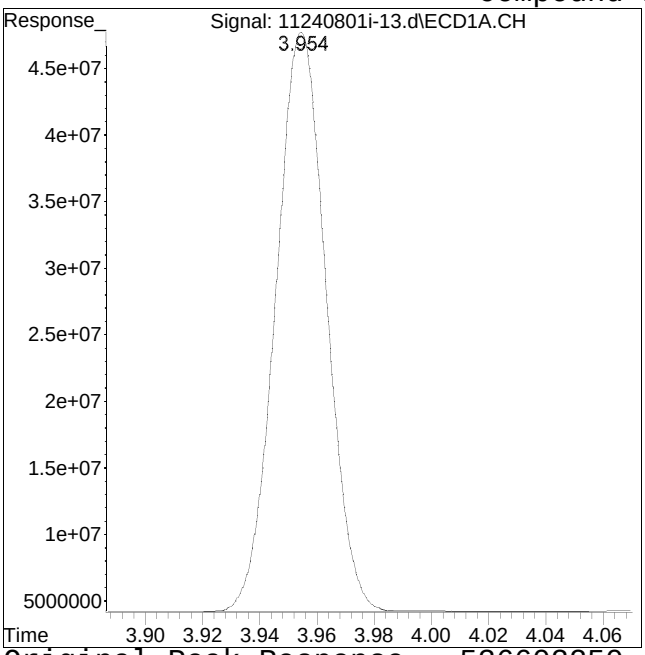
M4 = Poor automated baseline construction.

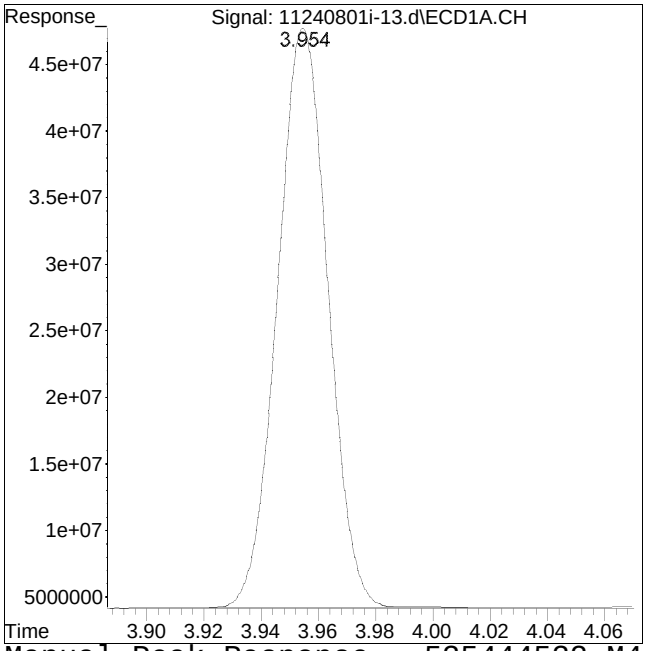
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #17: Dieldrin



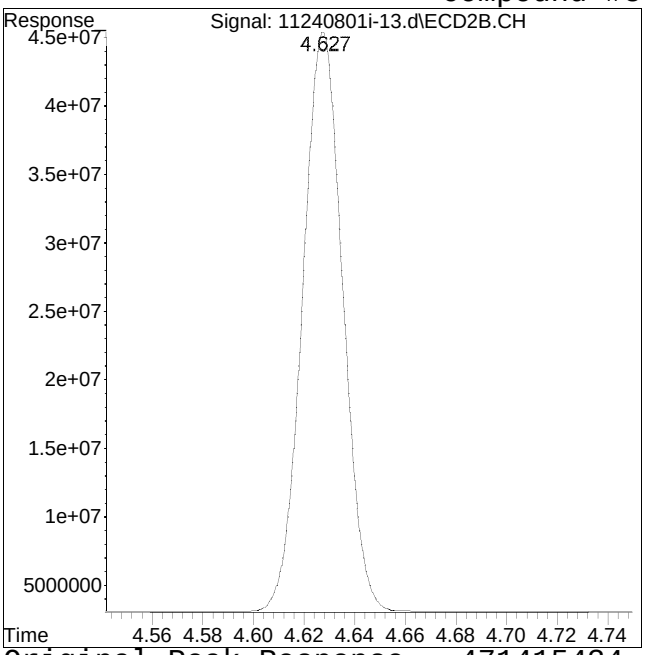



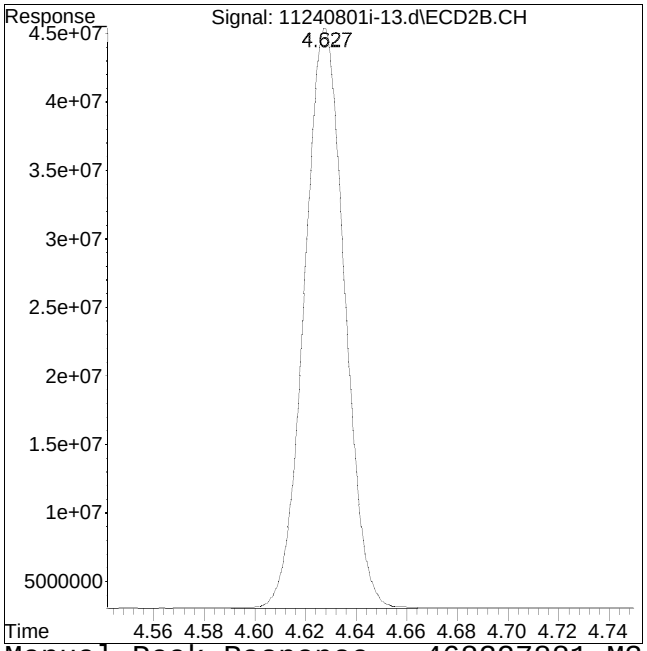

Original Peak Response = 536602250 Manual Peak Response = 535444532 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #55: Dieldrin #2



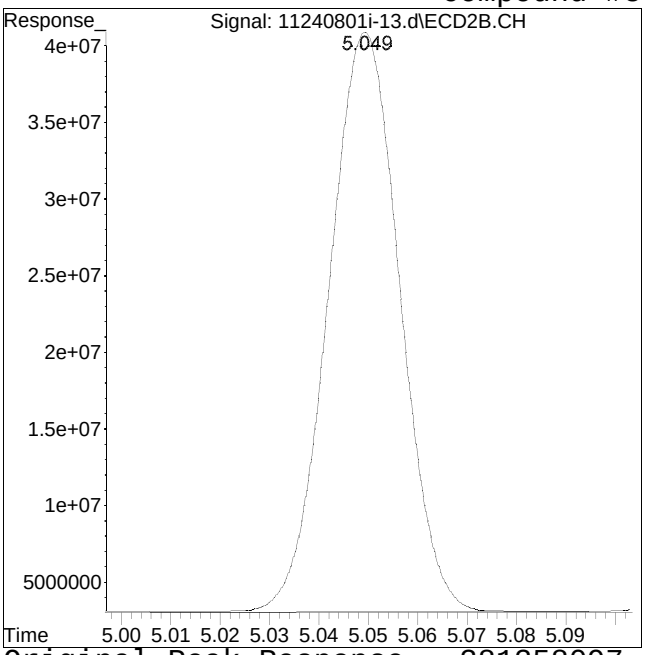

Original Peak Response = 471415434 Manual Peak Response = 468327881 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

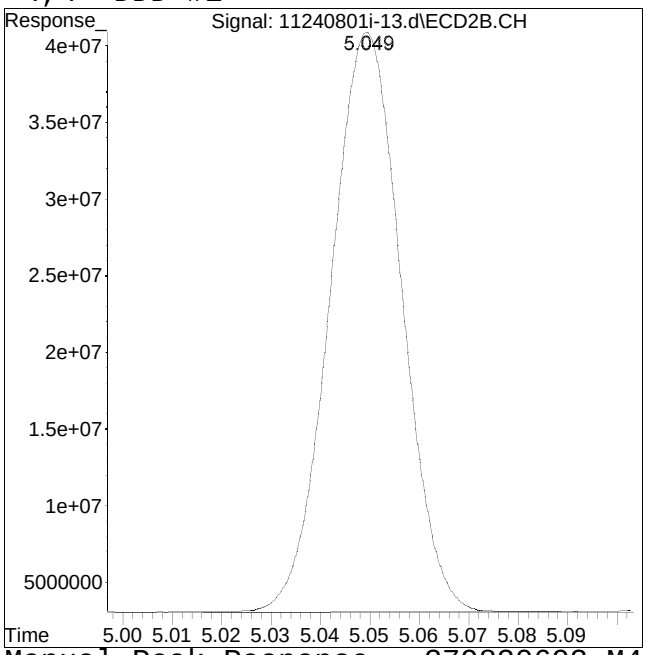
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #57: 4,4'-DDD #2




Original Peak Response = 381358097



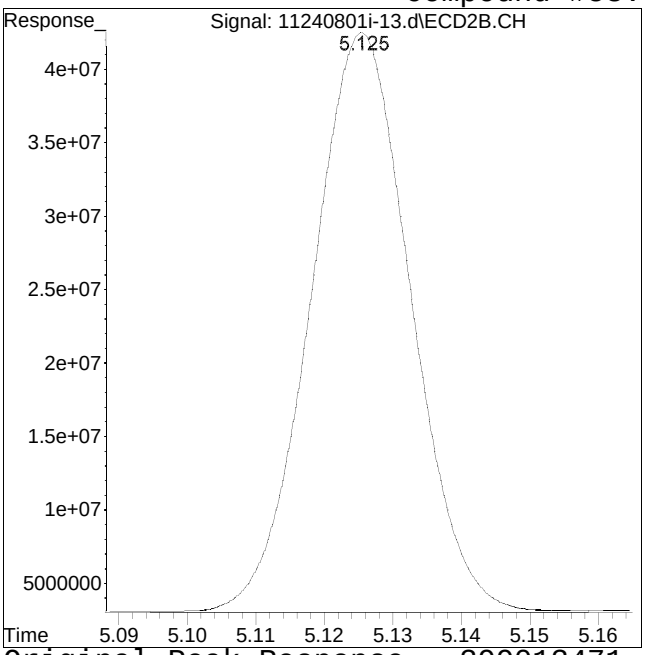

Manual Peak Response = 379830693 M4

M4 = Poor automated baseline construction.

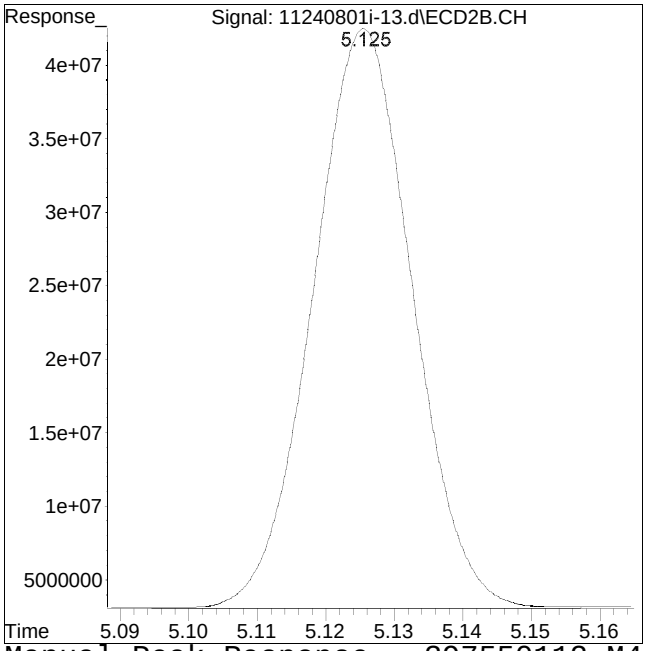
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #58: Endosulfan II #2




Original Peak Response = 399013471




Manual Peak Response = 397550112 M4

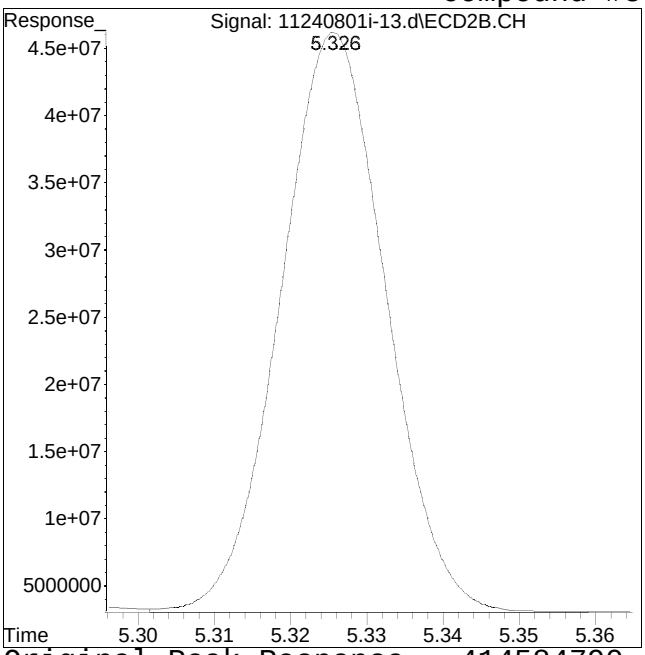
M4 = Poor automated baseline construction.

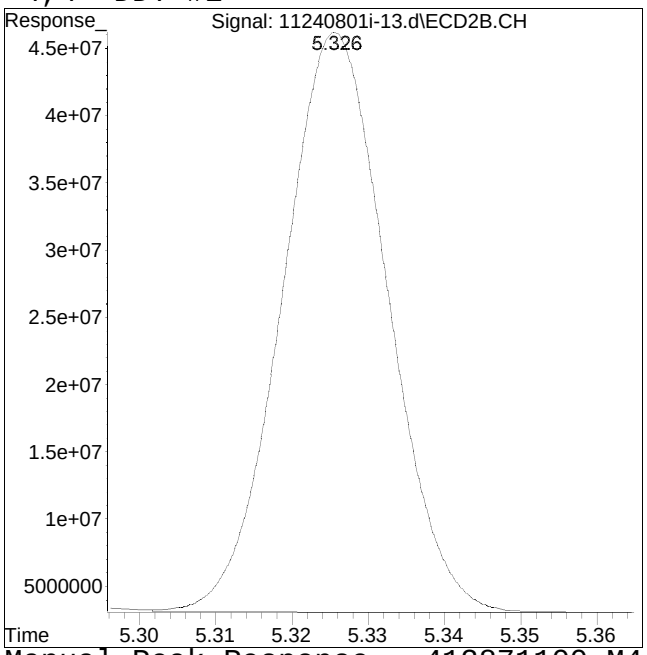
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #59: 4,4'-DDT #2



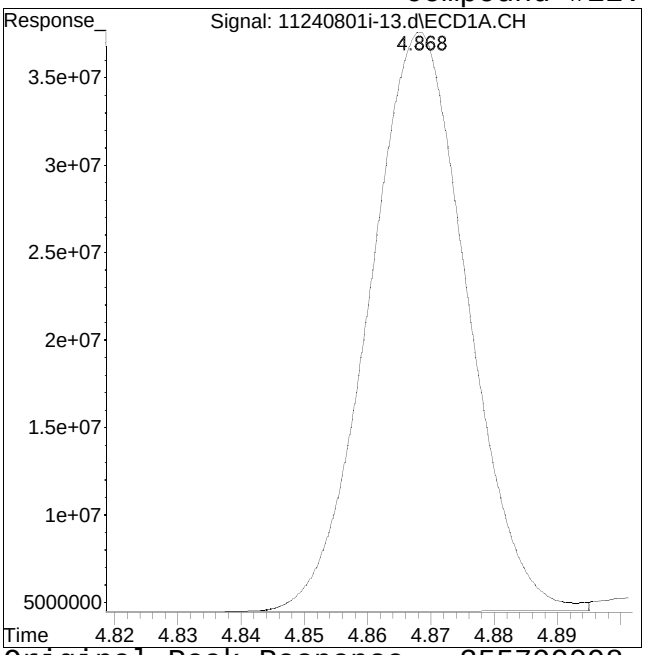




Original Peak Response = 414584790 Manual Peak Response = 412871100 M4
M4 = Poor automated baseline construction.

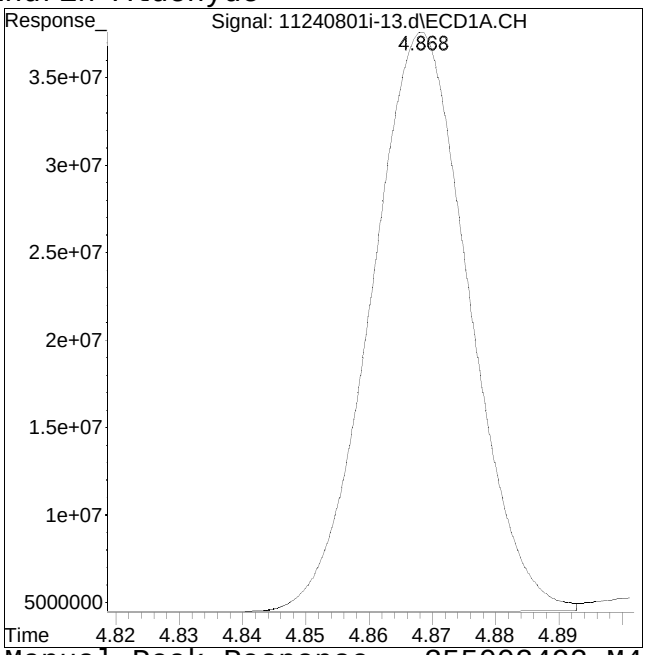
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #22: Endrin Aldehyde




Original Peak Response = 355799998



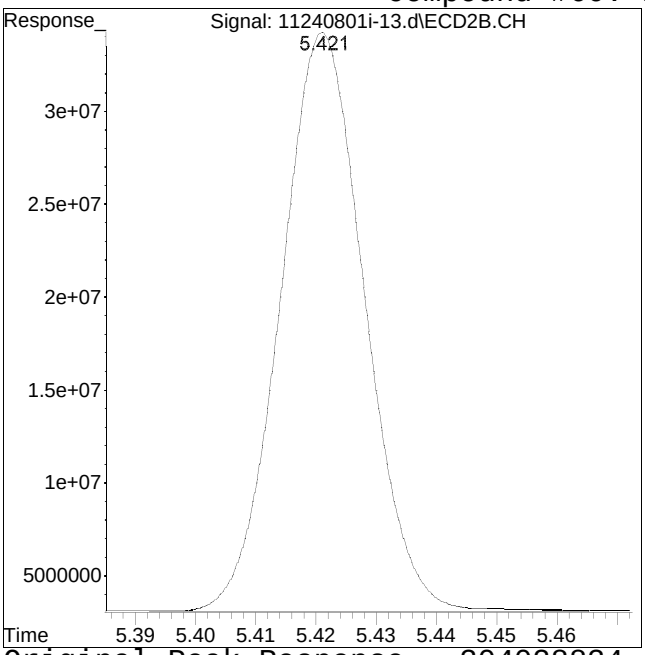

Manual Peak Response = 355002492 M4

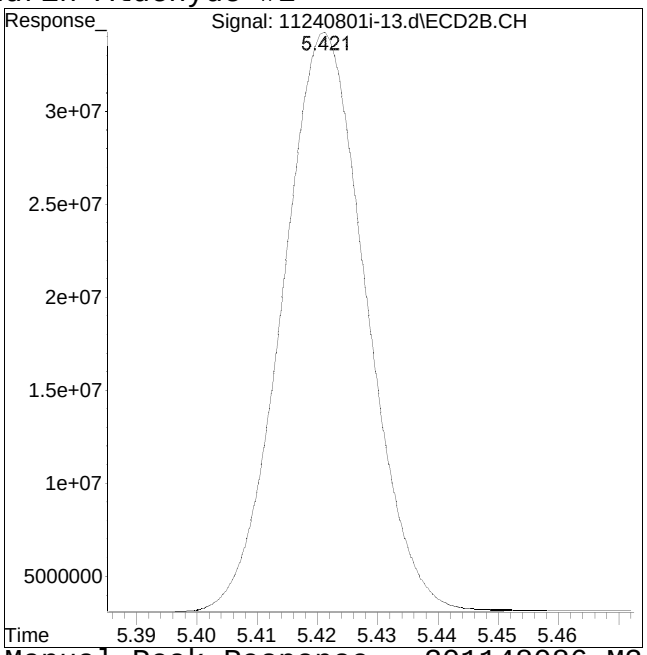
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 304028834 Manual Peak Response = 301148086 M3

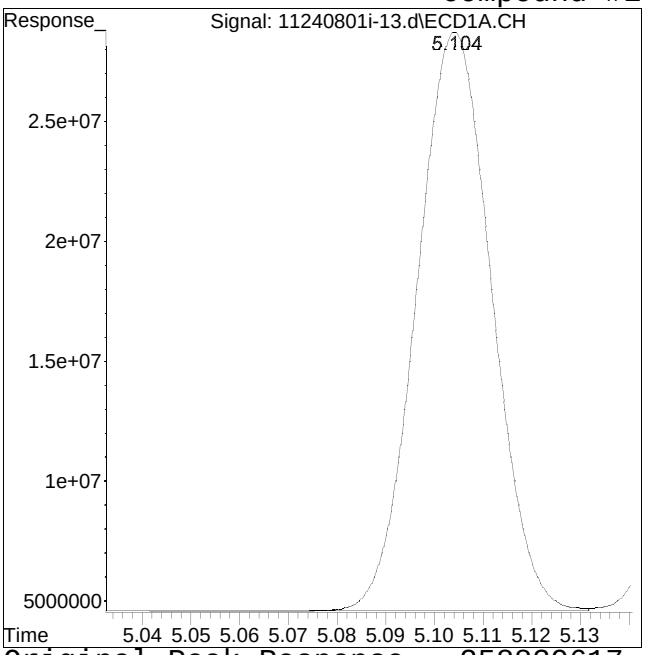
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

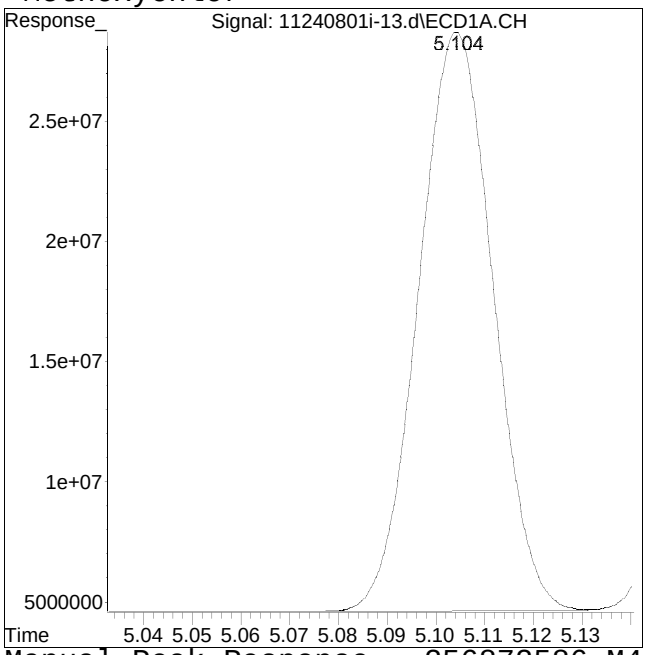
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #23: Methoxychlor




Original Peak Response = 258839617




Manual Peak Response = 256872586 M4

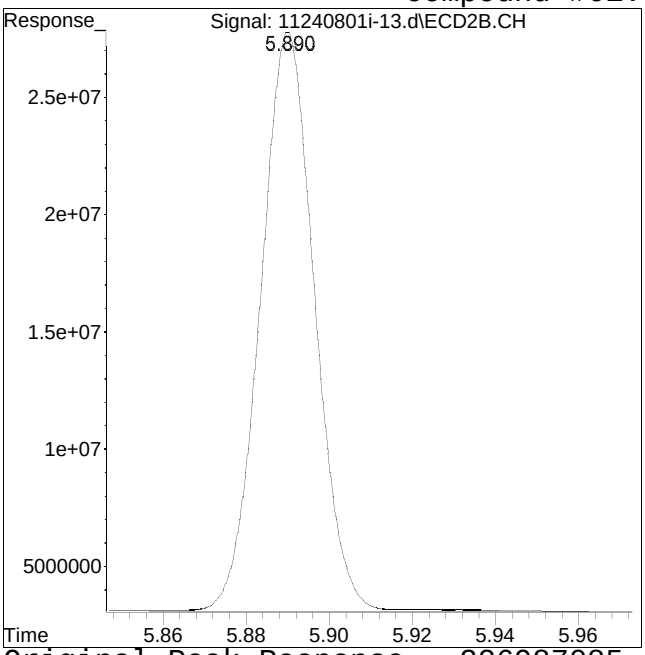
M4 = Poor automated baseline construction.

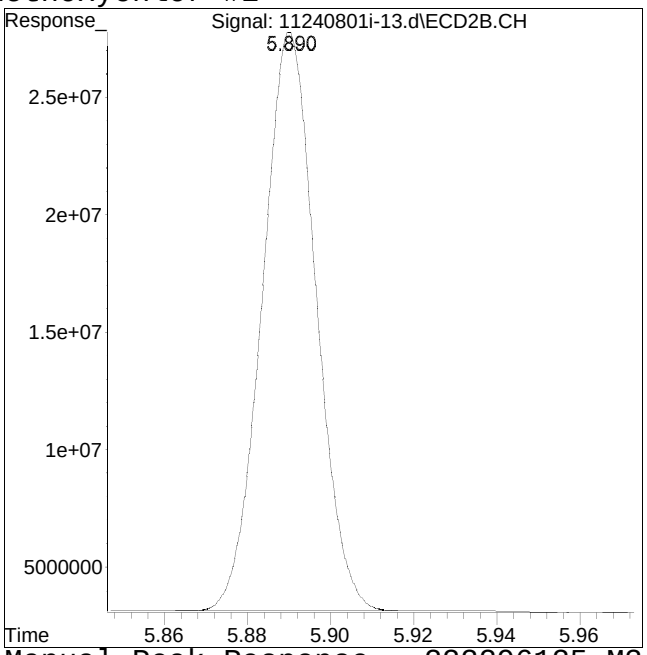
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #61: Methoxychlor #2




Original Peak Response = 226987085 Manual Peak Response = 222296125 M3

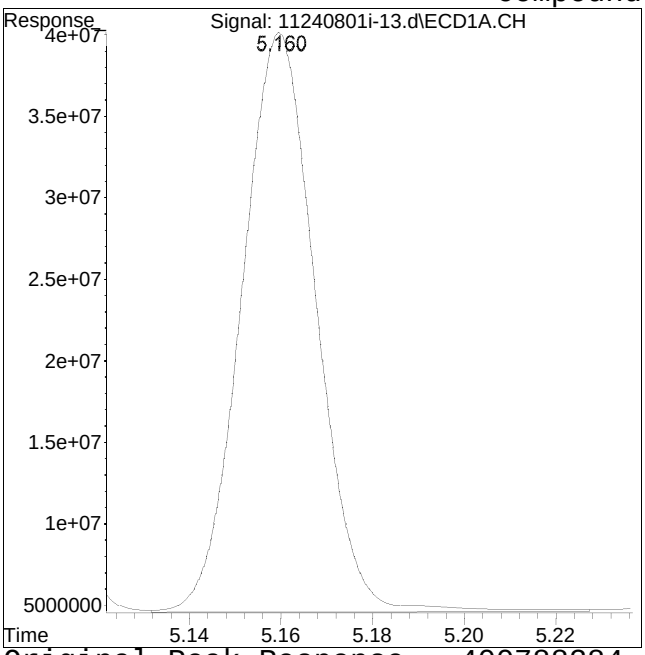
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

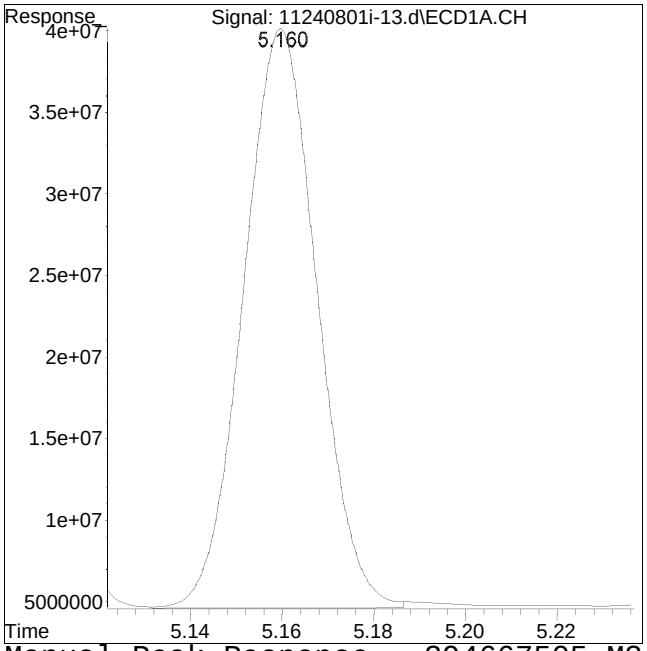
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #24: Mirex



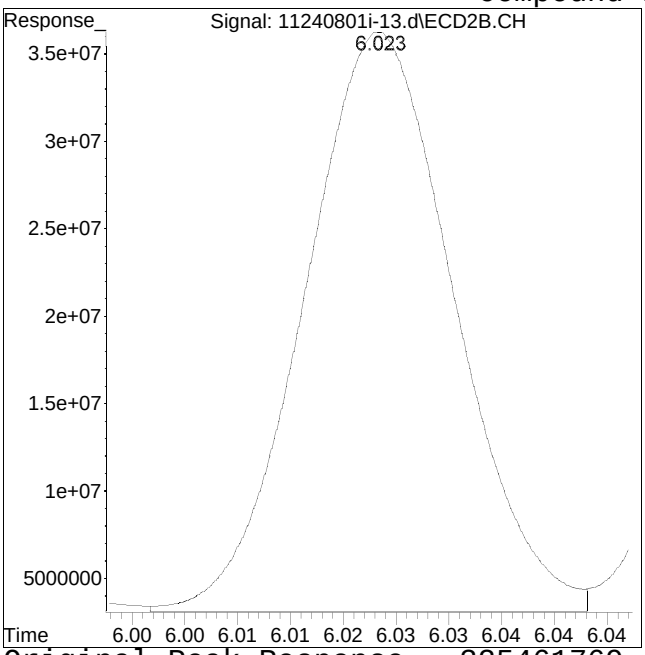

Original Peak Response = 400788384 Manual Peak Response = 394667505 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

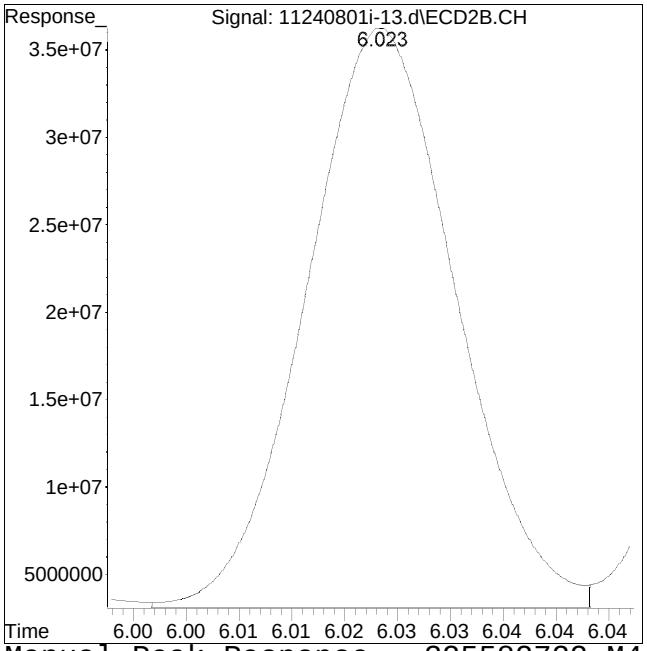
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #62: Mirex #2




Original Peak Response = 325461769



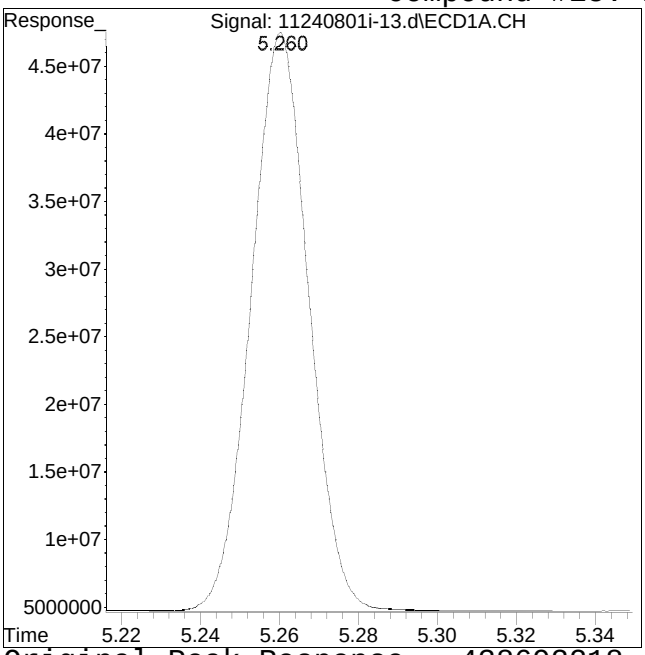

Manual Peak Response = 325582722 M4

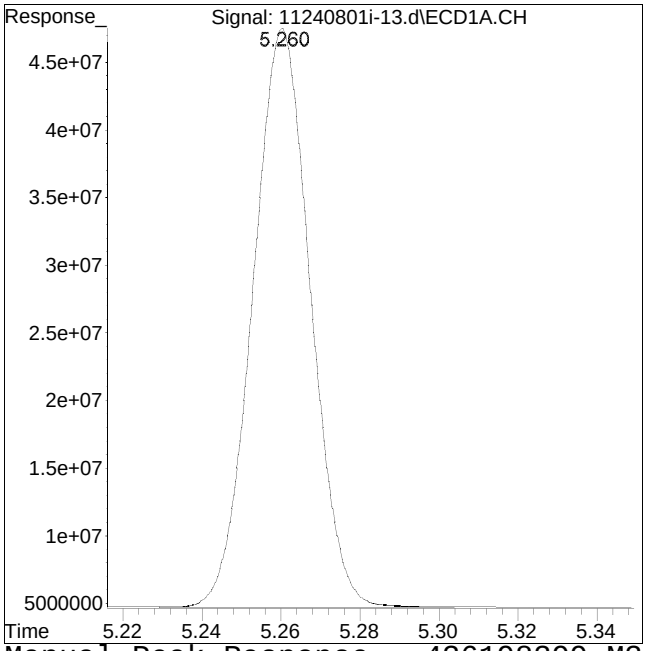
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #25: Endosulfan Sulfate




Original Peak Response = 438692218 Manual Peak Response = 436198399 M3

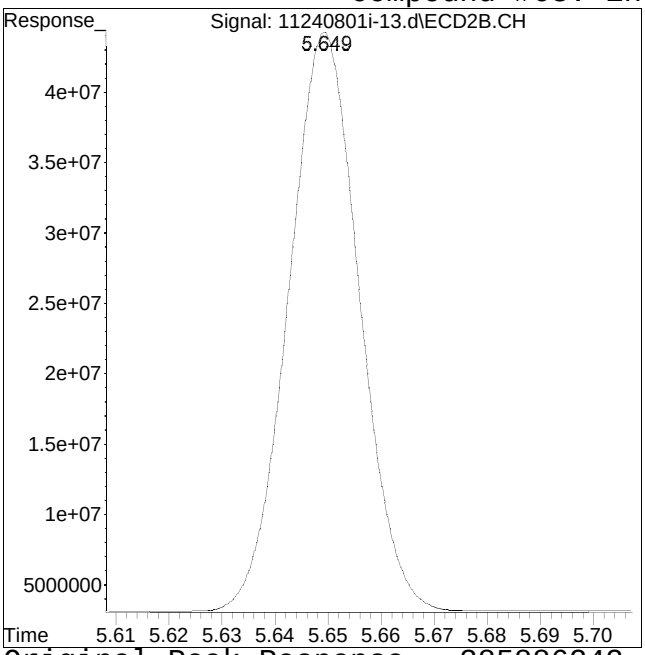
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

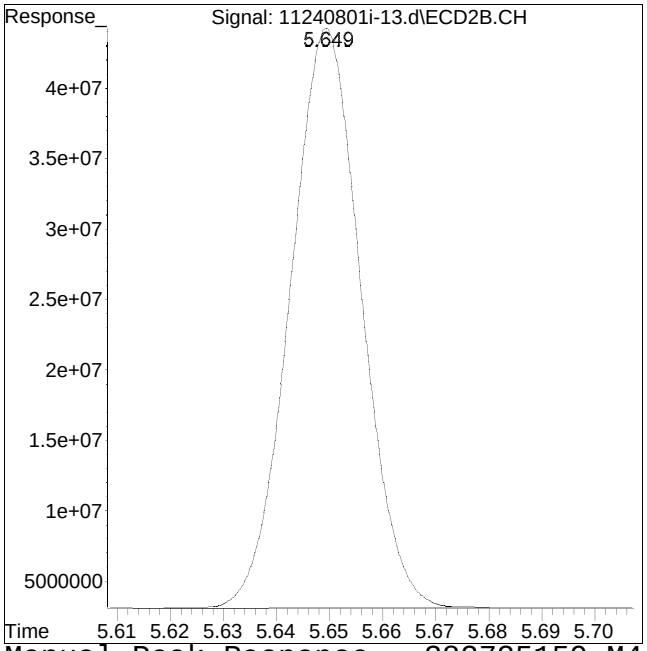
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #63: Endosulfan Sulfate #2



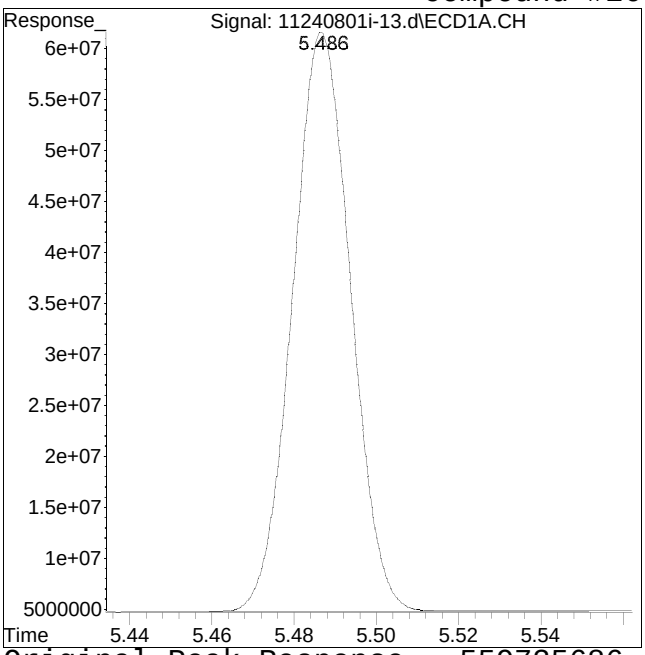




Original Peak Response = 385886242 Manual Peak Response = 382735159 M4
M4 = Poor automated baseline construction.

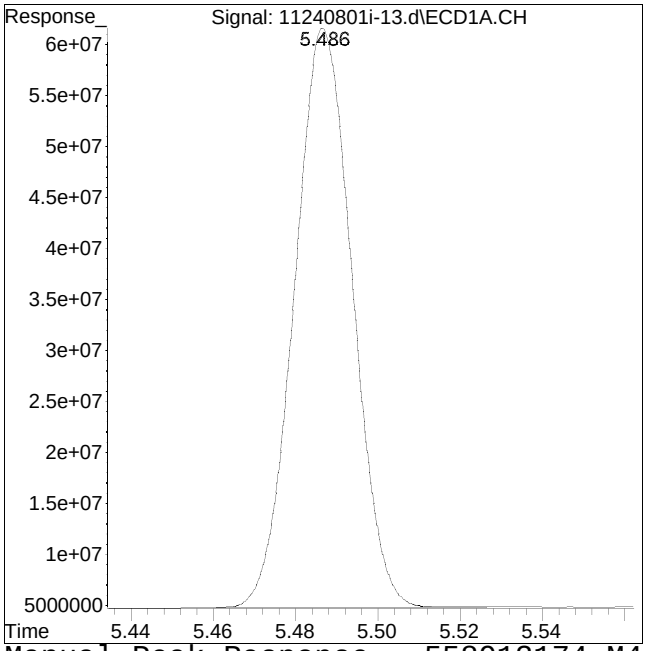
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #26: Endrin Ketone




Original Peak Response = 559735686



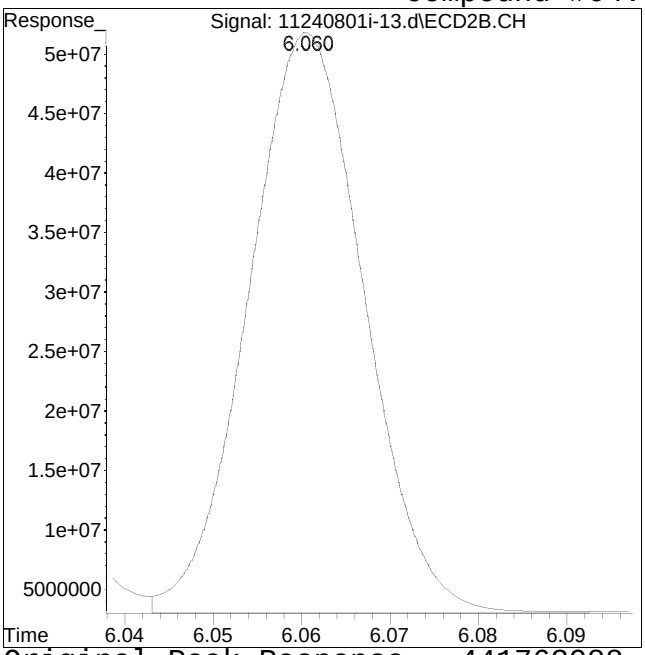

Manual Peak Response = 558913174 M4

M4 = Poor automated baseline construction.

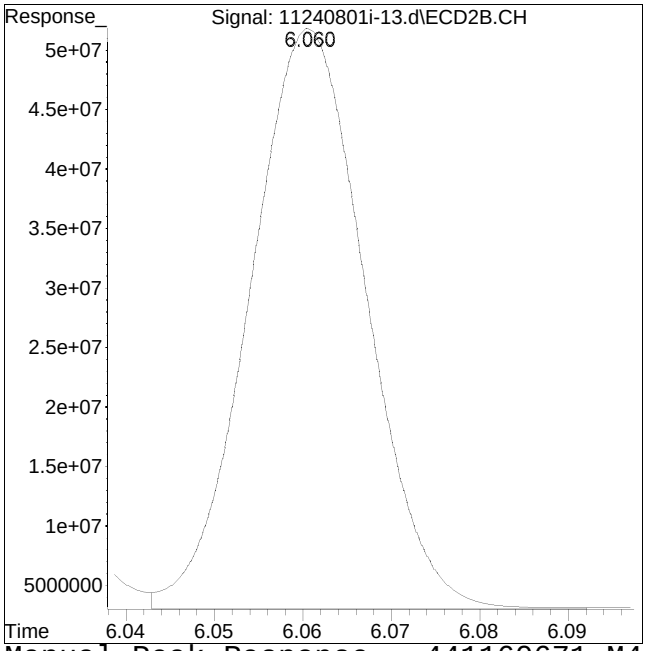
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-13.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 20:36 Instrument : Pest 11
Sample : cicvpest,42e,,pp 11675 L0.Quant Date : 8/2/2024 11:49 am

Compound #64: Endrin Ketone #2




Original Peak Response = 441763988



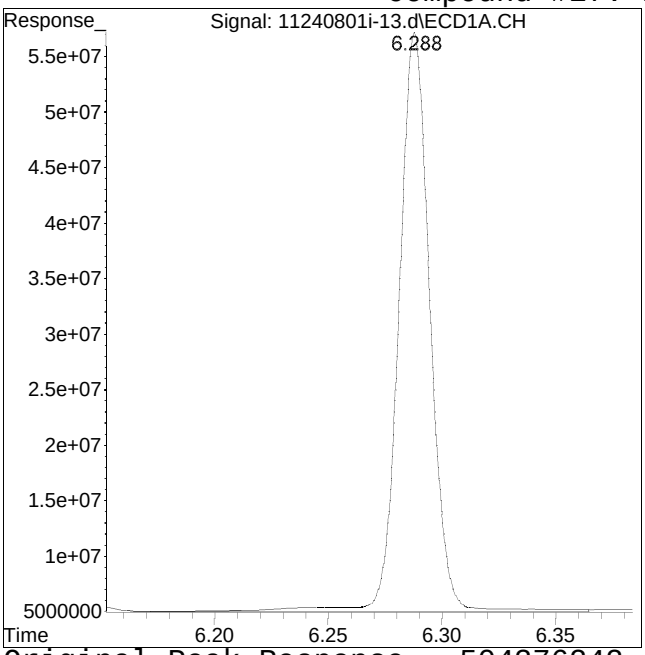

Manual Peak Response = 441160671 M4

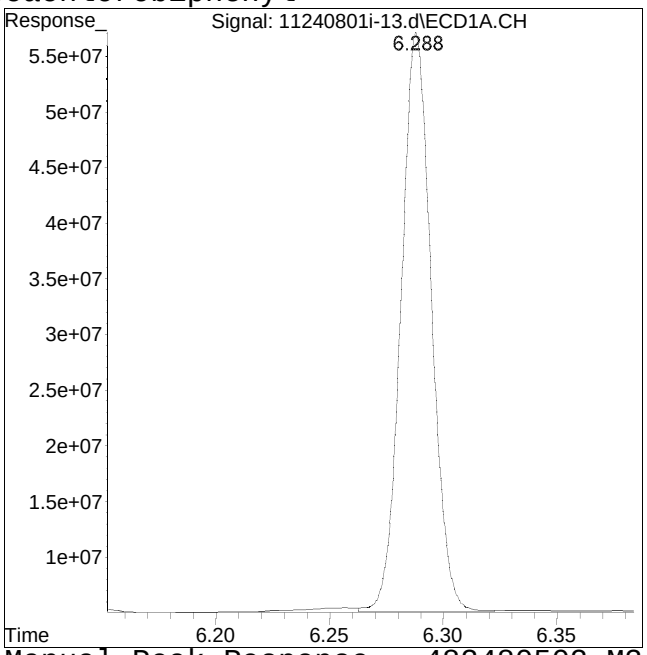
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #27: Decachlorobiphenyl



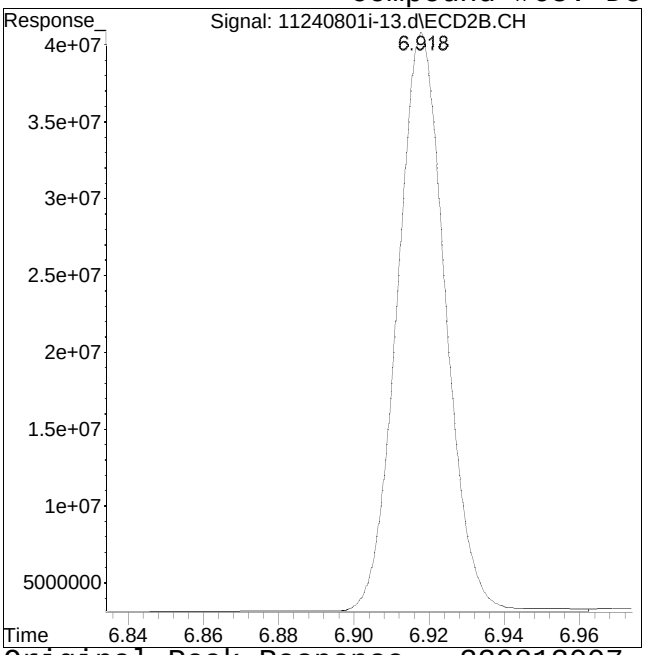

Original Peak Response = 504376242 Manual Peak Response = 482480502 M3

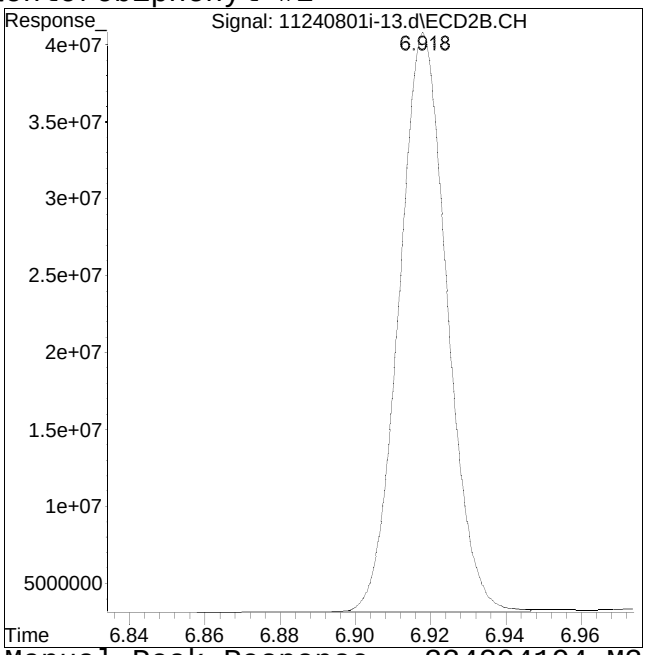
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-13.d
Date Inj'd : 8/1/2024 20:36
Sample : cicvpest,42e,,pp 11675 L0.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:49 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 339813007 Manual Peak Response = 334294194 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:48
Operator : PEST11:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:13:06 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:12:45 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.386 | 221.9E6 | 176.1E6 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 20:48
Operator : PEST11:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:13:06 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:12:45 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.817 | 3348778 | 3797653 | 10.230 | 12.954 |
| 30) l1 | chlordane-3 | 2.868 | 3.423 | 4387652 | 4962525 | 10.696M4 | 14.420 |
| 31) l1 | chlordane-4 | 3.425 | 4.104 | 14578311 | 14683745 | 10.355 | 12.473 |
| 32) l1 | chlordane-5 | 3.553 | 4.275 | 21582458 | 11409156 | 9.913 | 12.528 |
| Sum | chlordane-1 | | | 43897199 | 34853078 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 10.299 | 13.094 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

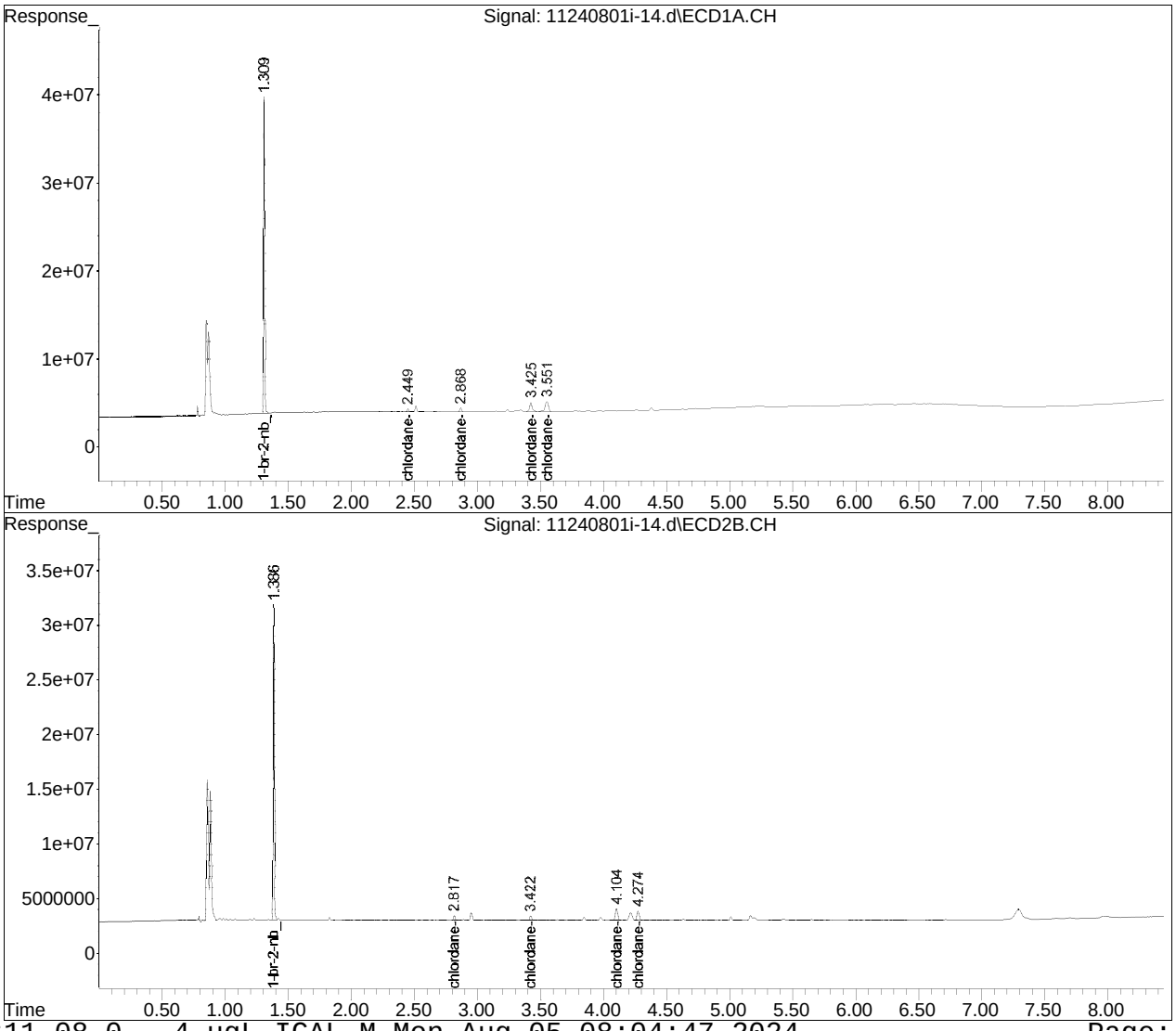
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-14.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  20:48
Operator : PEST11:ejl
Sample : il3chlor,42e,,pp 11694 L0.01
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:13:06 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:12:45 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

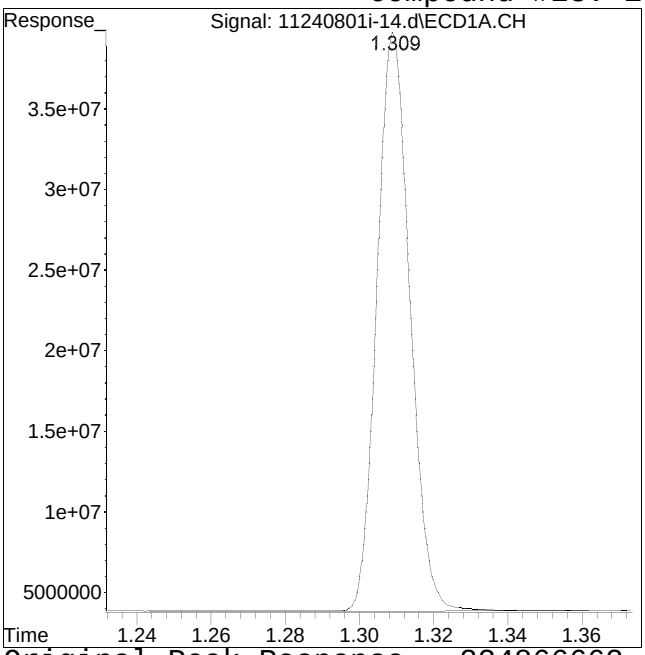


Manual Integration Report

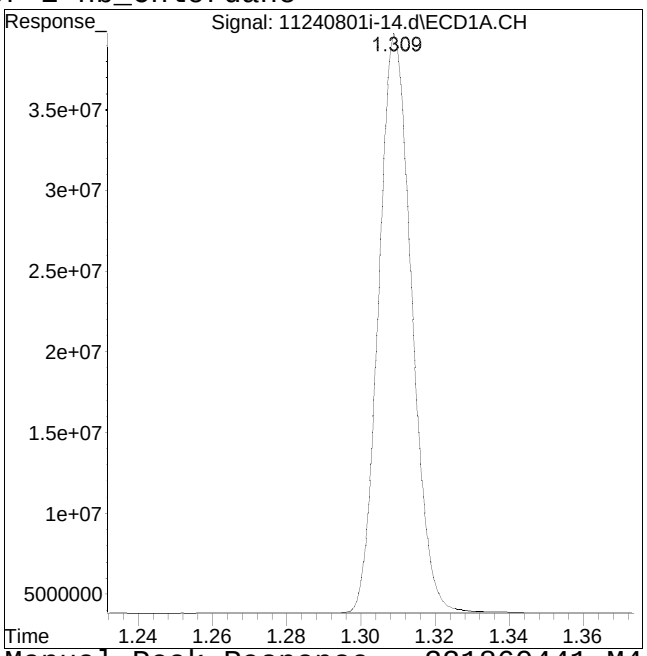
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-14.d
Date Inj'd : 8/1/2024 20:48
Sample : il3chlor,42e,,pp 11694 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:13 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 224866662




Manual Peak Response = 221860441 M4

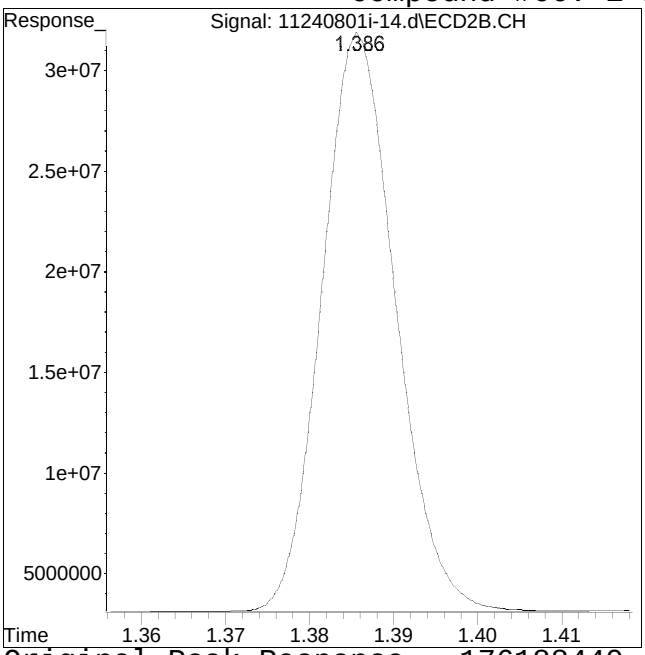
M4 = Poor automated baseline construction.

Manual Integration Report

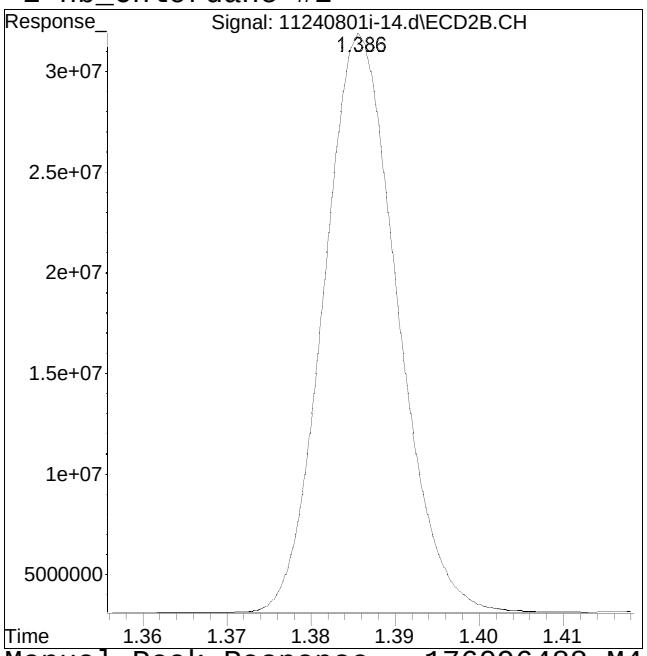
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-14.d
Date Inj'd : 8/1/2024 20:48
Sample : il3chlor,42e,,pp 11694 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:13 pm

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 176188440




Manual Peak Response = 176096488 M4

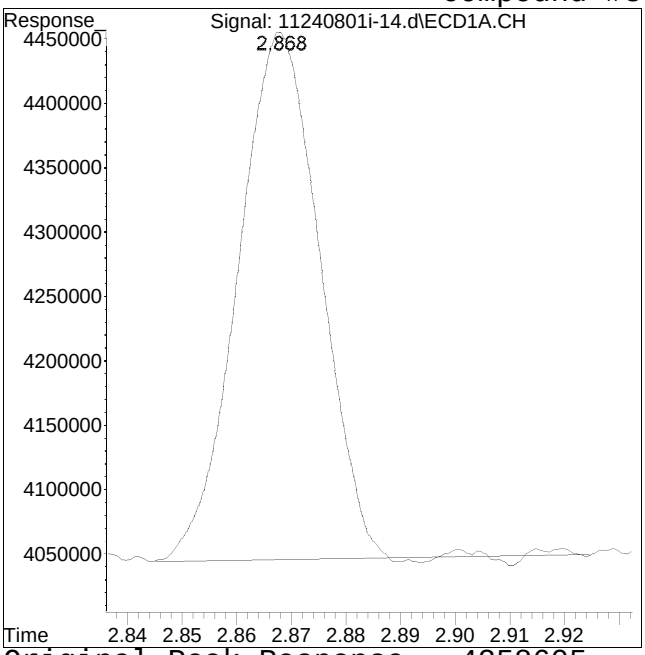
M4 = Poor automated baseline construction.

Manual Integration Report

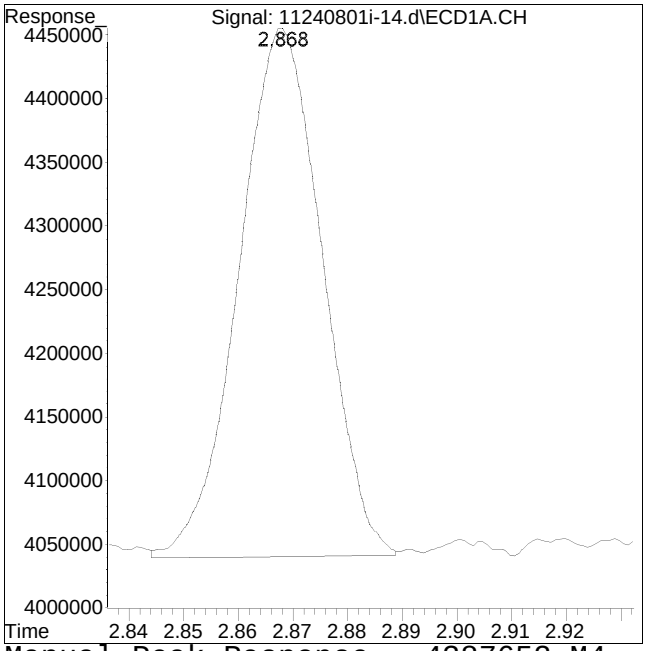
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-14.d
Date Inj'd : 8/1/2024 20:48
Sample : il3chlor,42e,,pp 11694 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:13 pm

Compound #30: chlordane-3




Original Peak Response = 4258605




Manual Peak Response = 4387652 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:00
Operator : PEST11:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:11:50 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:11:41 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.386 | 215.7E6 | 175.4E6 | 25.000M4 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:00
Operator : PEST11:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:11:50 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:11:41 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.818 | 6270200 | 7260829 | 19.646 | 26.129 |
| 30) l1 | chlordane-3 | 2.869 | 3.422 | 9042606 | 9017445 | 23.300 | 28.067M4 |
| 31) l1 | chlordane-4 | 3.426 | 4.105 | 27276142 | 26803162 | 19.917 | 23.521 |
| 32) l1 | chlordane-5 | 3.552 | 4.275 | 42068468 | 20966520 | 19.853 | 23.849 |
| Sum | chlordane-1 | | | 84657416 | 64047956 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 20.679 | 25.392 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

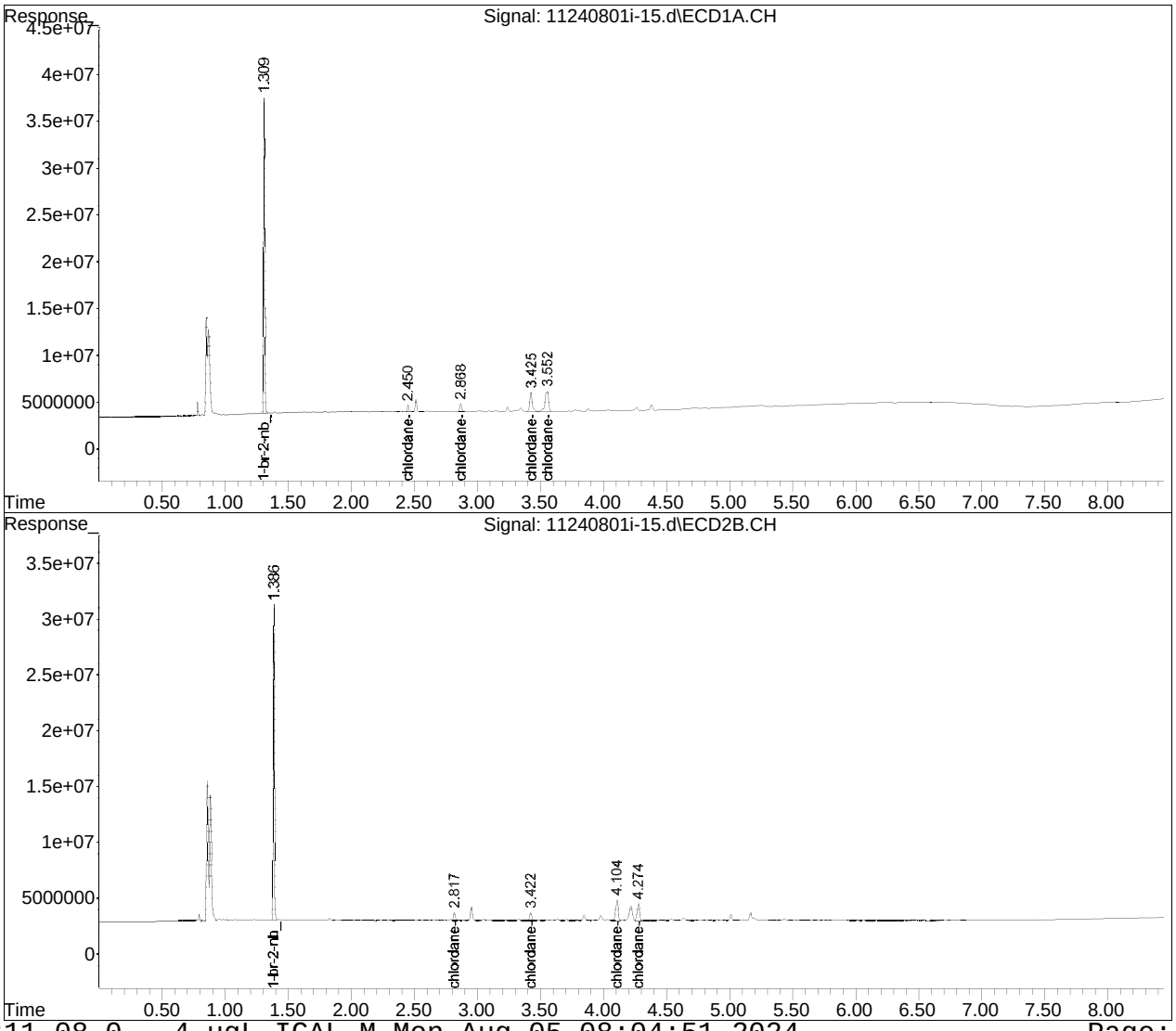
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:00
Operator : PEST11:ejl
Sample : il4chlor,42e,,pp 11693 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:11:50 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:11:41 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

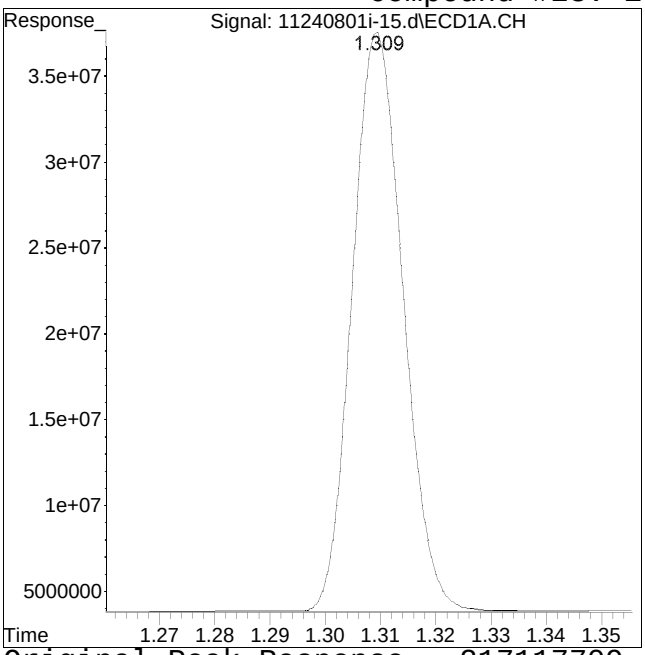
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

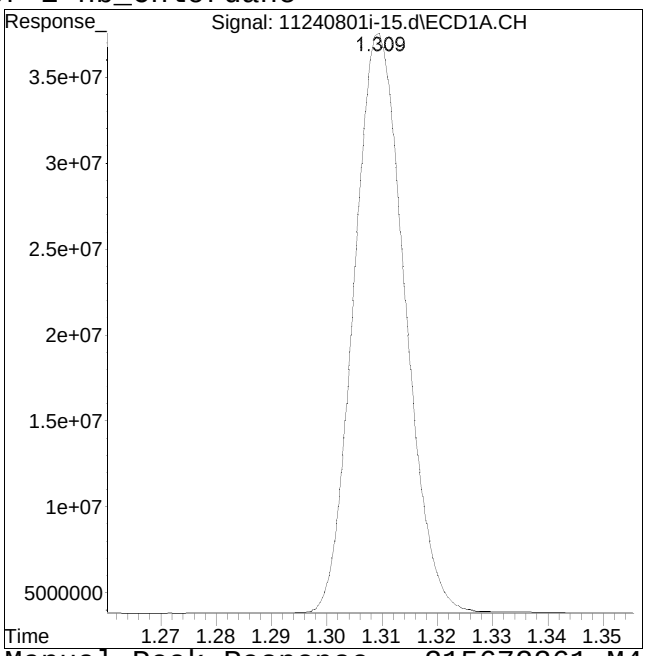


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-15.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:00 Instrument : Pest 11
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 8/2/2024 12:11 pm

Compound #28: 1-br-2-nb_Chlordane



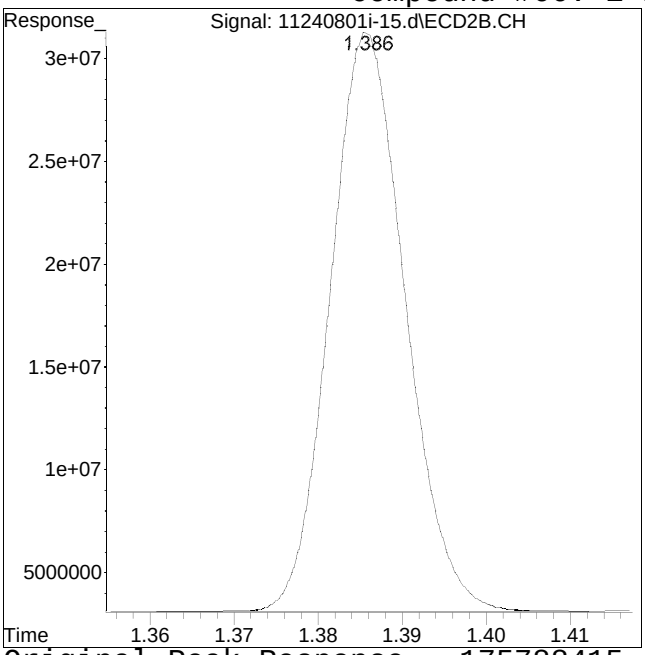



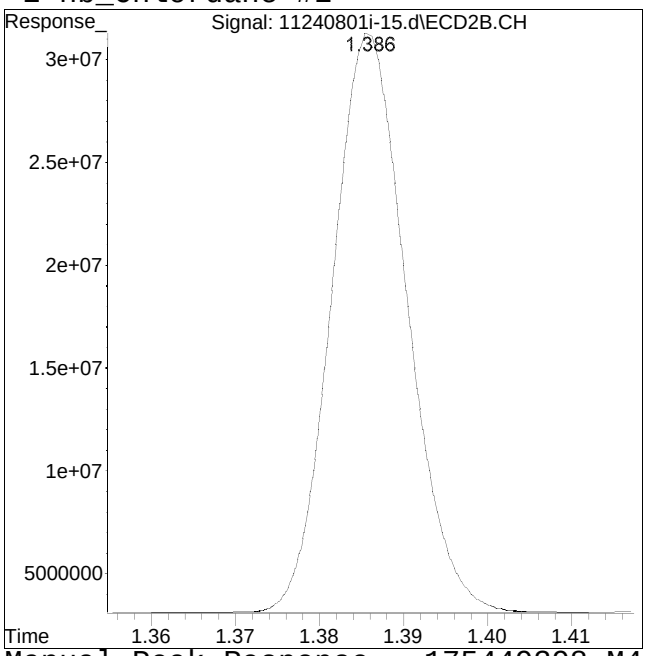

Original Peak Response = 217117709 Manual Peak Response = 215672261 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-15.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:00 Instrument : Pest 11
Sample : il4chlor,42e,,pp 11693 L0.Quant Date : 8/2/2024 12:11 pm

Compound #66: 1-br-2-nb_Chlordane #2



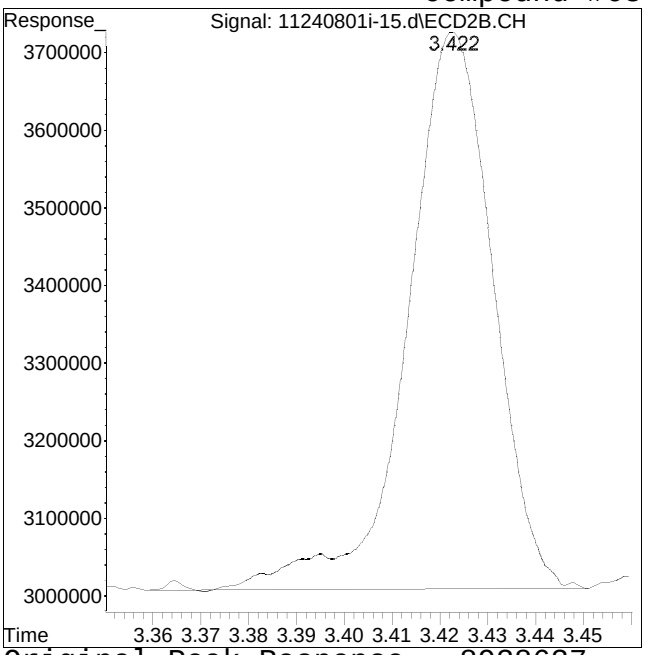

Original Peak Response = 175788415 Manual Peak Response = 175449398 M4
M4 = Poor automated baseline construction.

Manual Integration Report

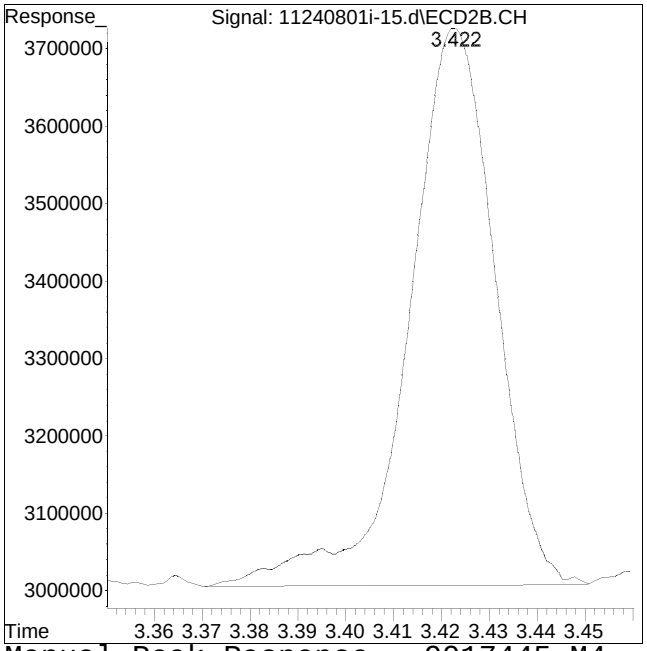
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-15.d
Date Inj'd : 8/1/2024 21:00
Sample : il4chlor,42e,,pp 11693 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:11 pm

Compound #68: chlordane-3 #2




Original Peak Response = 8938637




Manual Peak Response = 9017445 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:12
Operator : PEST11:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:10:36 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:10:28 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.310 | 1.386 | 213.1E6 | 177.4E6 | 25.000M3 | 25.000M4 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:12
Operator : PEST11:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:10:36 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:10:28 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.818 | 31747496 | 31529401 | 100.863 | 115.730 |
| 30) l1 | chlordane-3 | 2.868 | 3.423 | 42064633 | 39044033 | 112.438M3 | 126.559 |
| 31) l1 | chlordane-4 | 3.426 | 4.105 | 133.2E6 | 117.6E6 | 98.086 | 102.618 |
| 32) l1 | chlordane-5 | 3.553 | 4.275 | 208.7E6 | 92314998 | 99.611 | 104.846 |
| Sum | chlordane-1 | | | 415.7E6 | 280.5E6 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 102.749 | 112.438 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

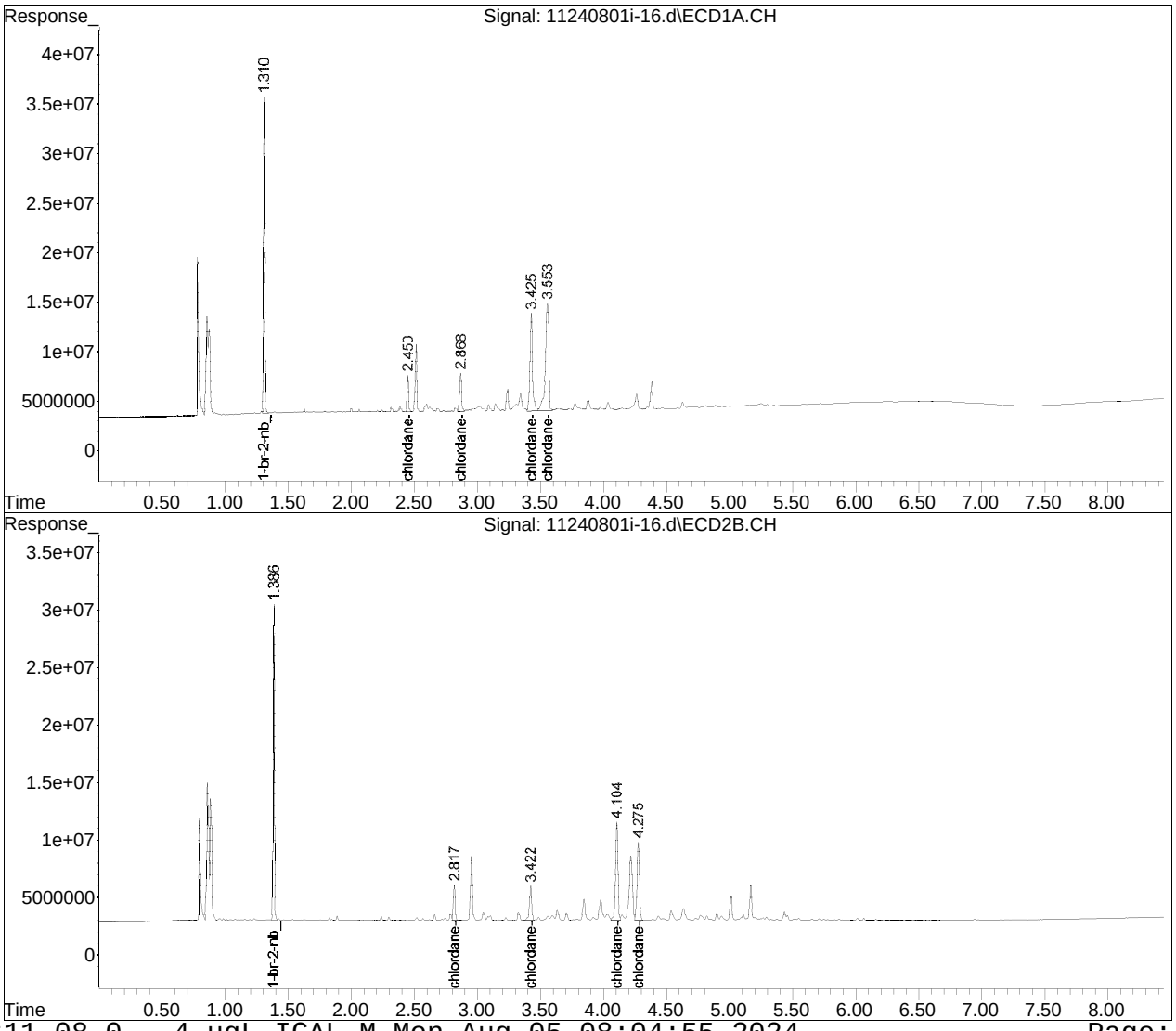
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-16.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  21:12
Operator : PEST11:ejl
Sample : il5chlor,42e,,pp 11692 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:10:36 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:10:28 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

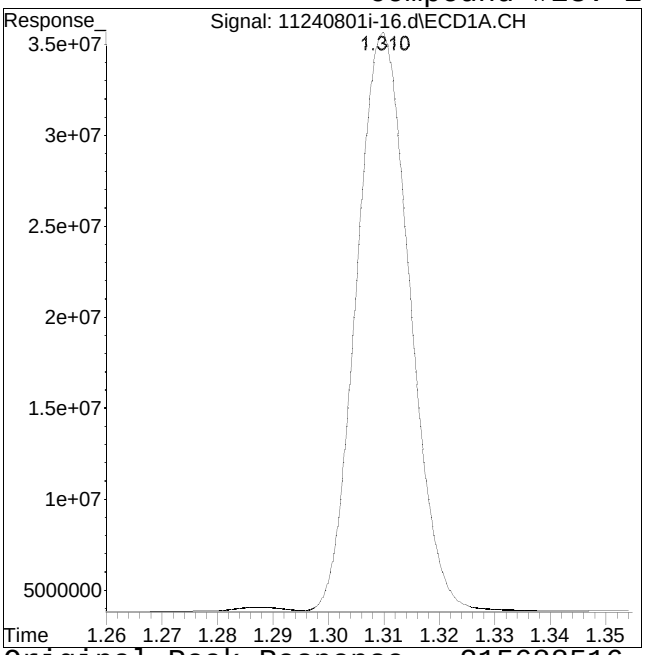


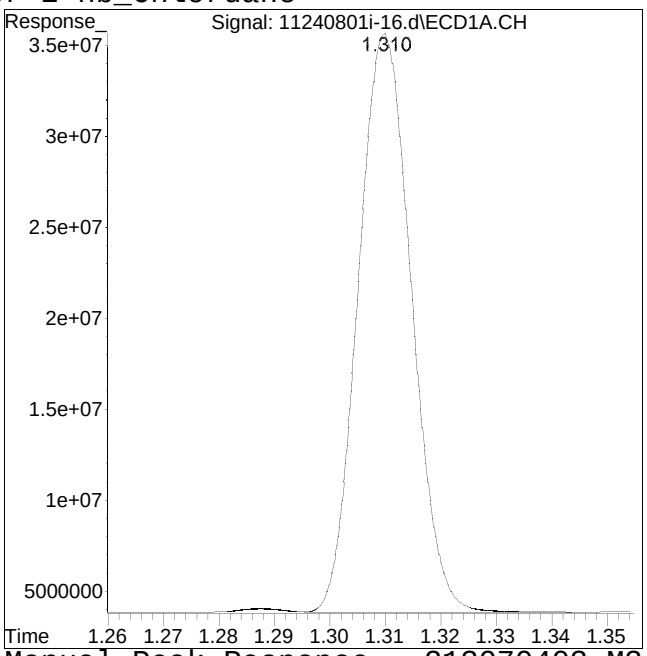
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-16.d
Date Inj'd : 8/1/2024 21:12
Sample : il5chlor,42e,,pp 11692 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:10 pm

Compound #28: 1-br-2-nb_Chlordane



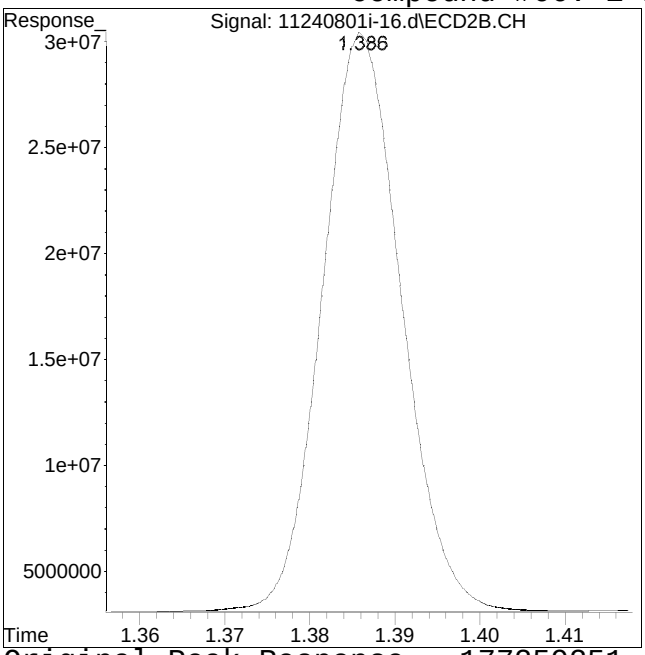

Original Peak Response = 215688516 Manual Peak Response = 213070403 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

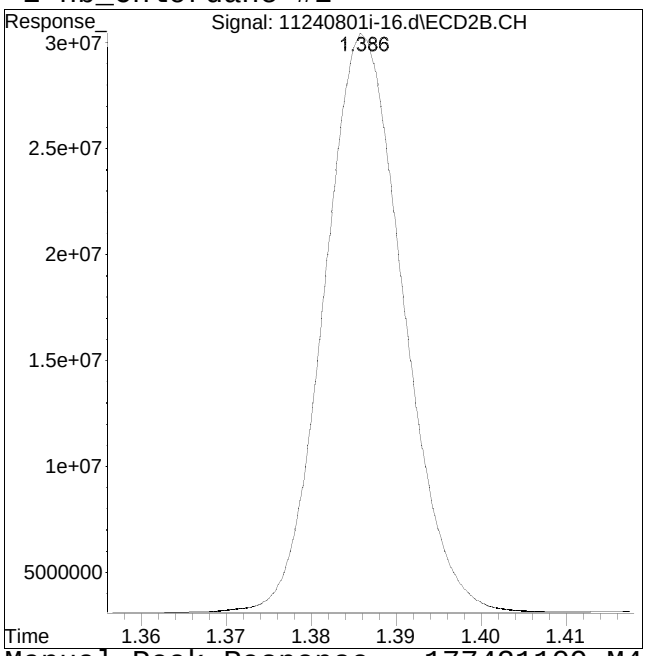
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-16.d
Date Inj'd : 8/1/2024 21:12
Sample : il5chlor,42e,,pp 11692 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:10 pm

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 177259251



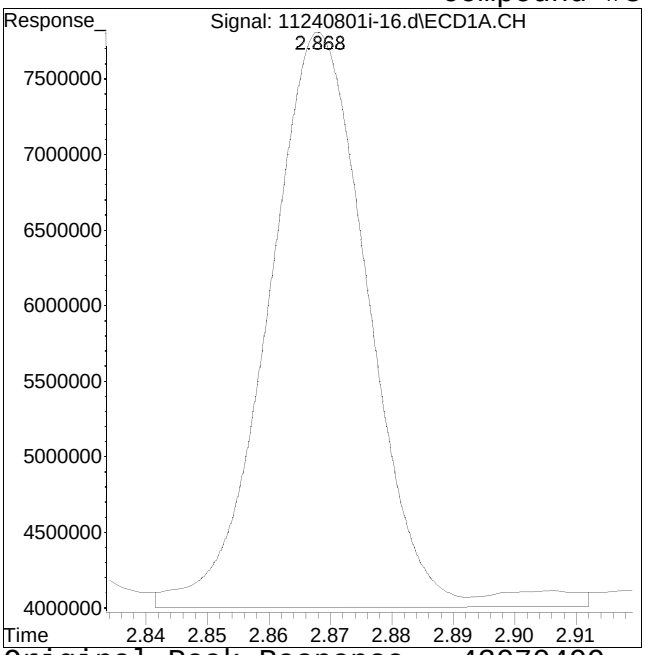

Manual Peak Response = 177421109 M4

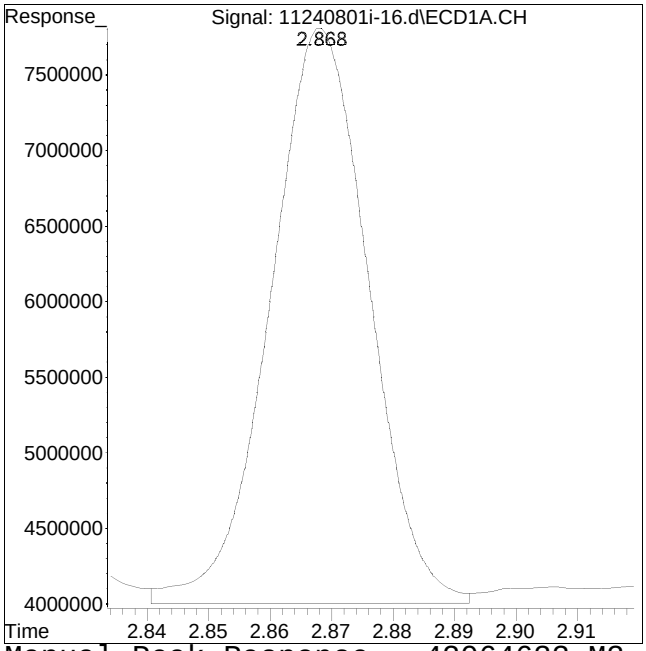
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-16.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:12 Instrument : Pest 11
Sample : il5chlor,42e,,pp 11692 L0.Quant Date : 8/2/2024 12:10 pm

Compound #30: chlordane-3




Original Peak Response = 43070499 Manual Peak Response = 42064633 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:24
Operator : PEST11:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:09:22 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:09:13 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.385 | 218.4E6 | 184.3E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:24
Operator : PEST11:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:09:22 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:09:13 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.818 | 161.0E6 | 143.9E6 | 498.684 | 511.438 |
| 30) l1 | chlordane-3 | 2.868 | 3.423 | 200.4E6 | 172.2E6 | 530.433 | 551.110 |
| 31) l1 | chlordane-4 | 3.425 | 4.105 | 700.4E6 | 600.2E6 | 504.213 | 505.425 |
| 32) l1 | chlordane-5 | 3.551 | 4.275 | 1089.8E6 | 462.7E6 | 510.023M3 | 507.838 |
| Sum | chlordane-1 | | | 2151.6E6 | 1379.0E6 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 510.838 | 518.953 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

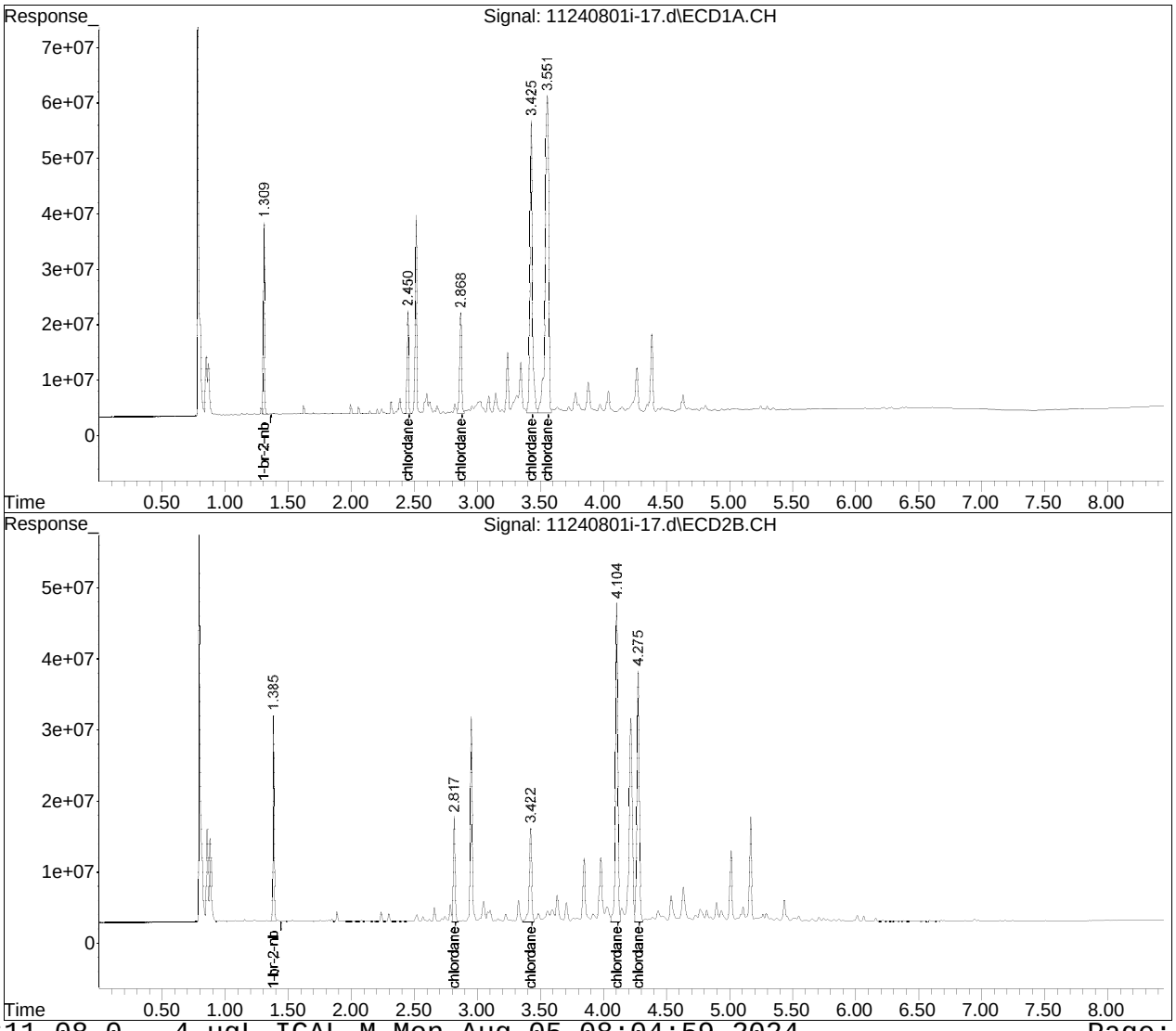
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:24
Operator : PEST11:ejl
Sample : il7chlor,42e,,pp 11691 L0.5
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:09:22 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:09:13 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

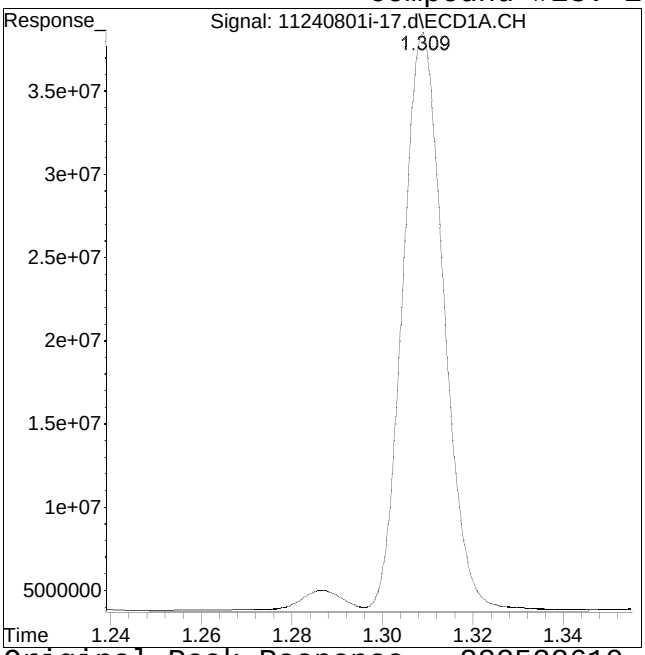


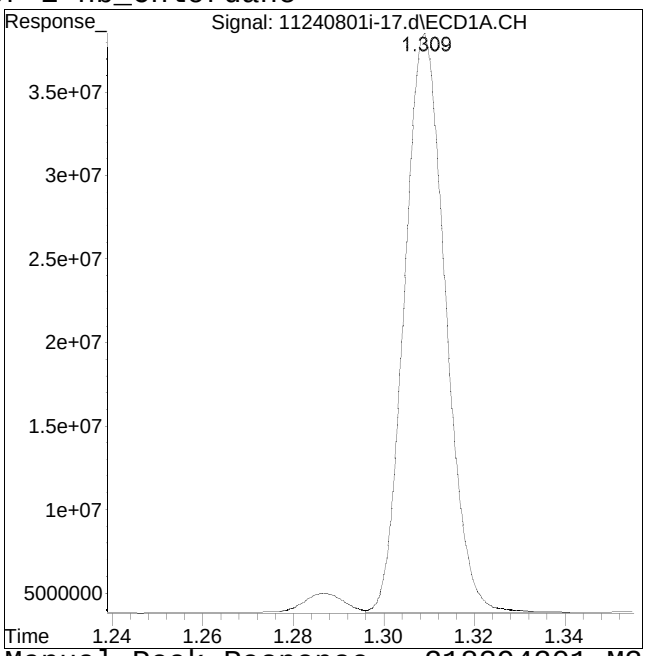
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-17.d
Date Inj'd : 8/1/2024 21:24
Sample : il7chlor,42e,,pp 11691 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:09 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 232522610 Manual Peak Response = 218394201 M3

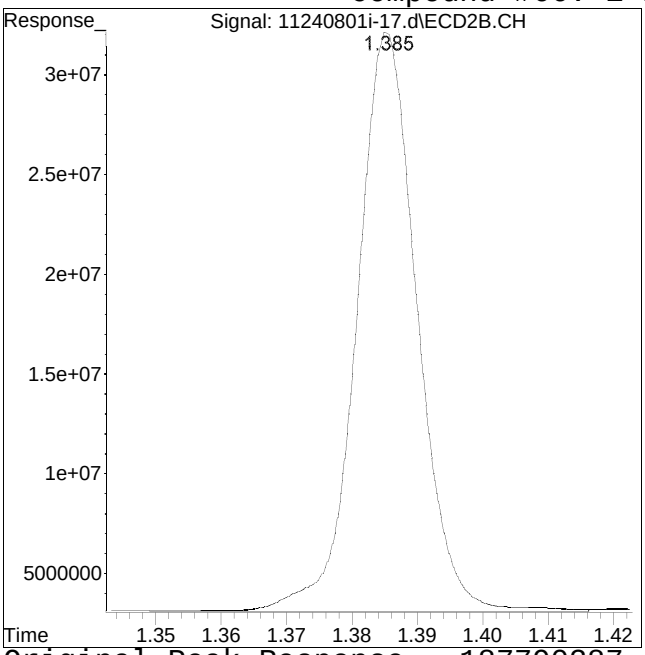
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

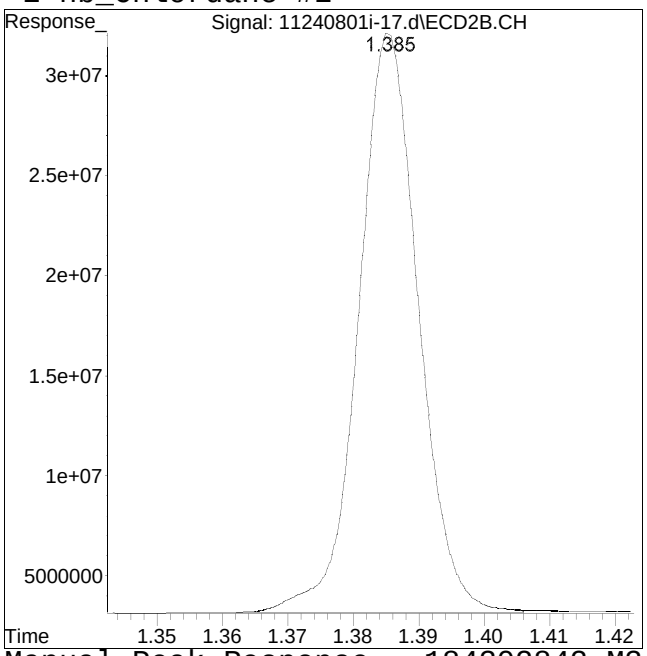
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-17.d
Date Inj'd : 8/1/2024 21:24
Sample : il7chlor,42e,,pp 11691 L0.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:09 pm

Compound #66: 1-br-2-nb_Chlordane #2



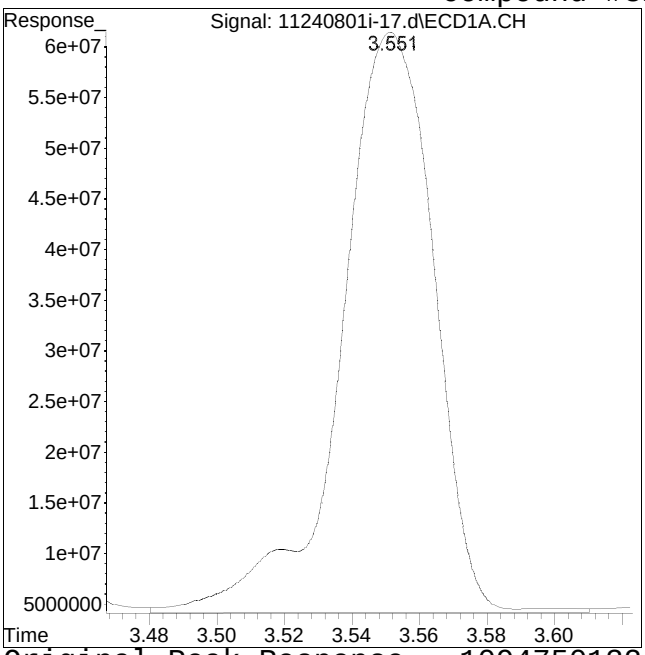

Original Peak Response = 187790387 Manual Peak Response = 184302842 M3

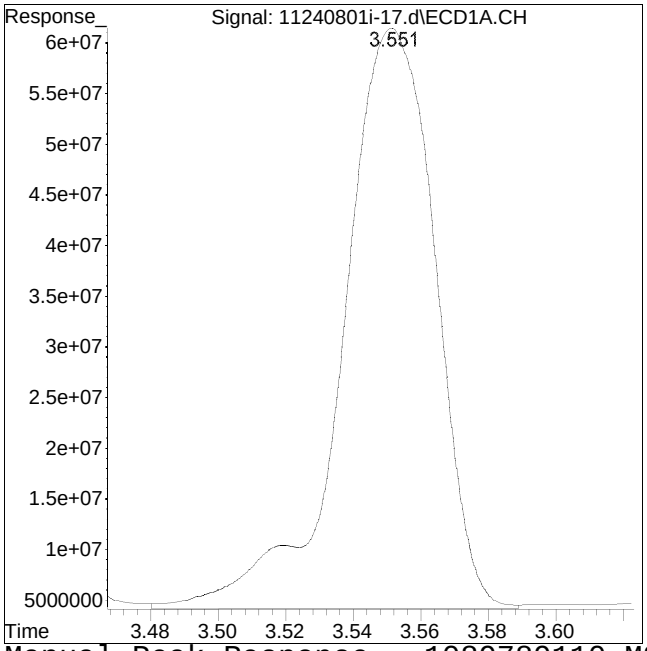
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-17.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:24 Instrument : Pest 11
Sample : il7chlor,42e,,pp 11691 L0.Quant Date : 8/2/2024 12:09 pm

Compound #32: chlordane-5




Original Peak Response = 1094750132 Manual Peak Response = 1089789110 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:36
Operator : PEST11:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:55:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:55:19 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.385 | 220.2E6 | 184.9E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:36
Operator : PEST11:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:55:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:55:19 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.817 | 332.9E6 | 292.8E6 | NoCal | NoCal |
| 30) l1 | chlordane-3 | 2.867 | 3.422 | 400.7E6 | 336.8E6 | NoCal M3 | NoCal |
| 31) l1 | chlordane-4 | 3.425 | 4.104 | 1449.5E6 | 1235.6E6 | NoCal | NoCal |
| 32) l1 | chlordane-5 | 3.552 | 4.275 | 2241.5E6 | 947.4E6 | NoCal M3 | NoCal |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

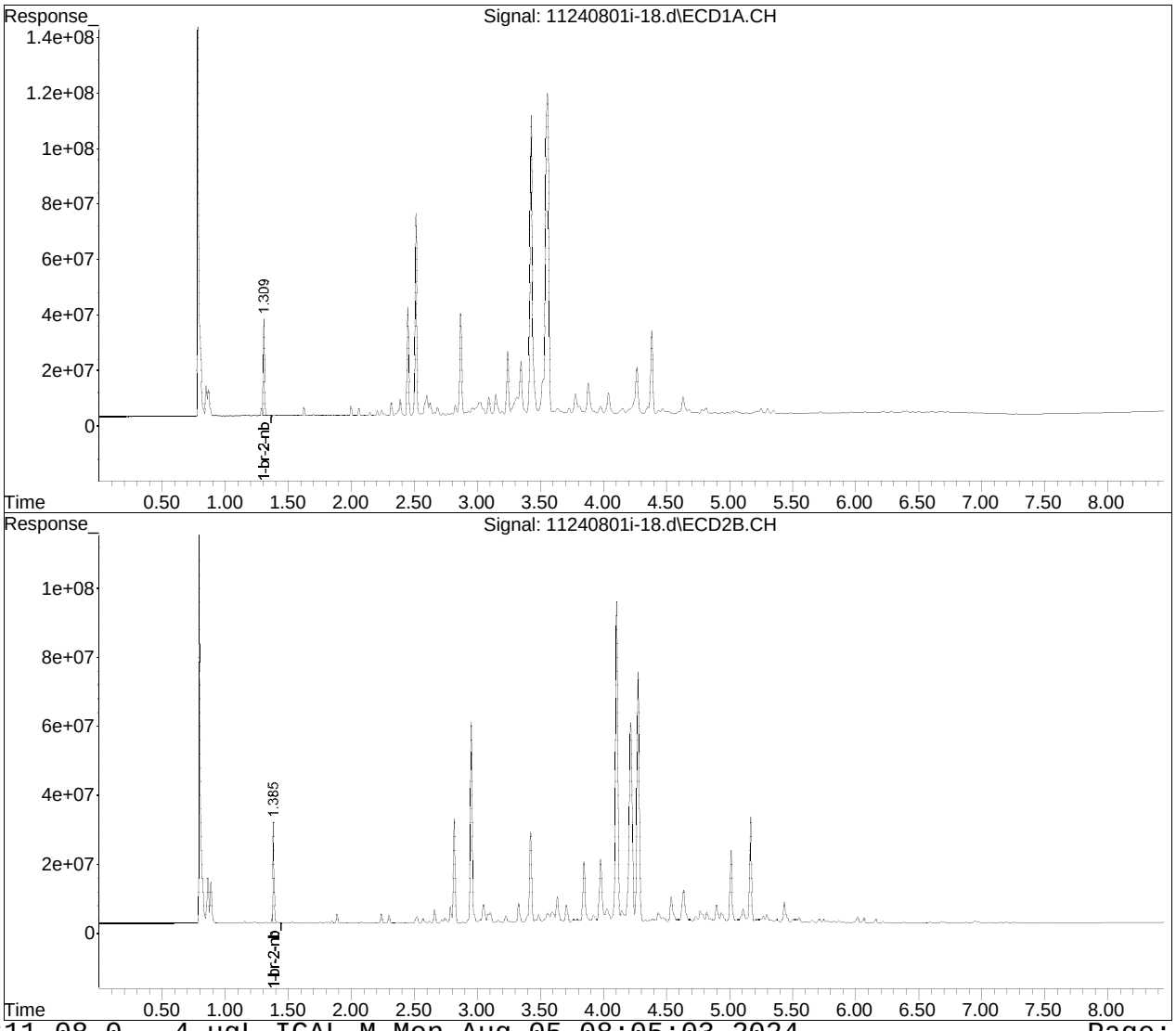
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-18.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  21:36
Operator : PEST11:ejl
Sample : il8chlor,42e,,pp 11690 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 11:55:27 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 11:55:19 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

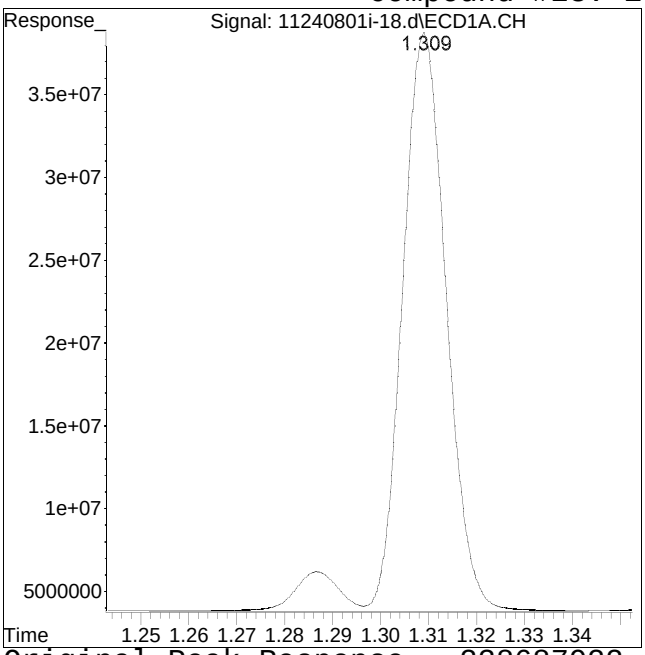
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

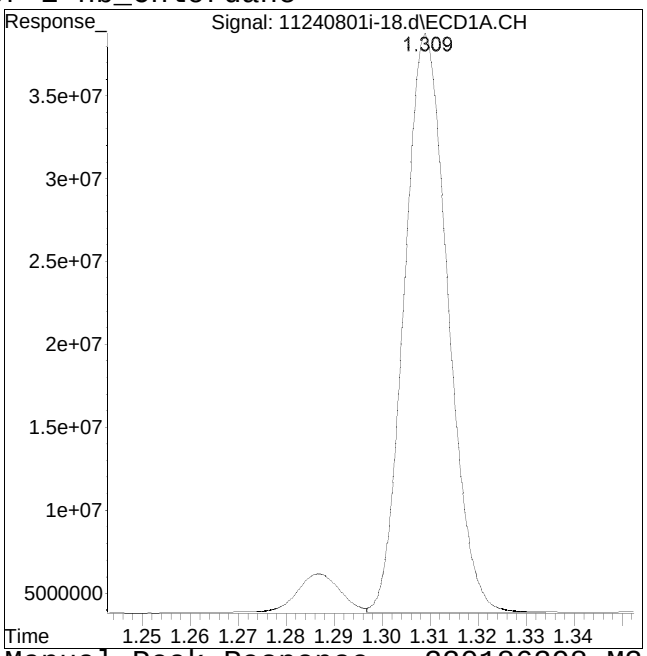


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-18.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:36 Instrument : Pest 11
Sample : il8chlor,42e,,pp 11690 L1.Quant Date : 8/2/2024 11:55 am

Compound #28: 1-br-2-nb_Chlordane



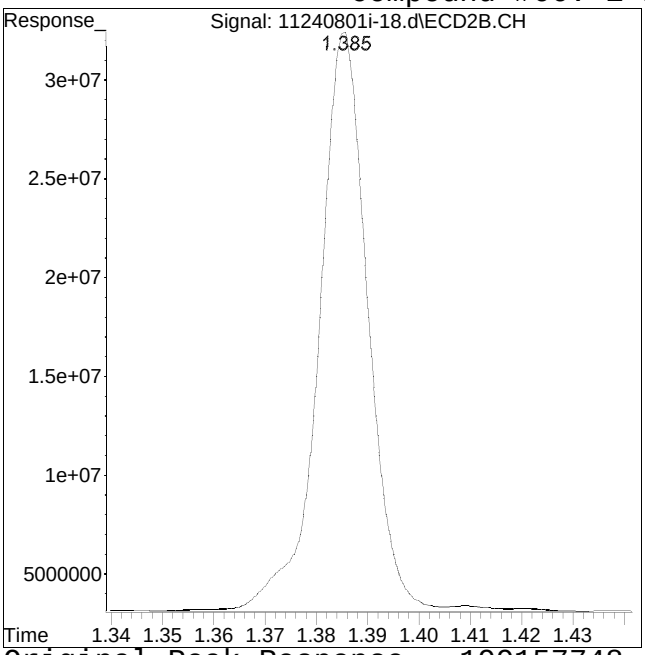



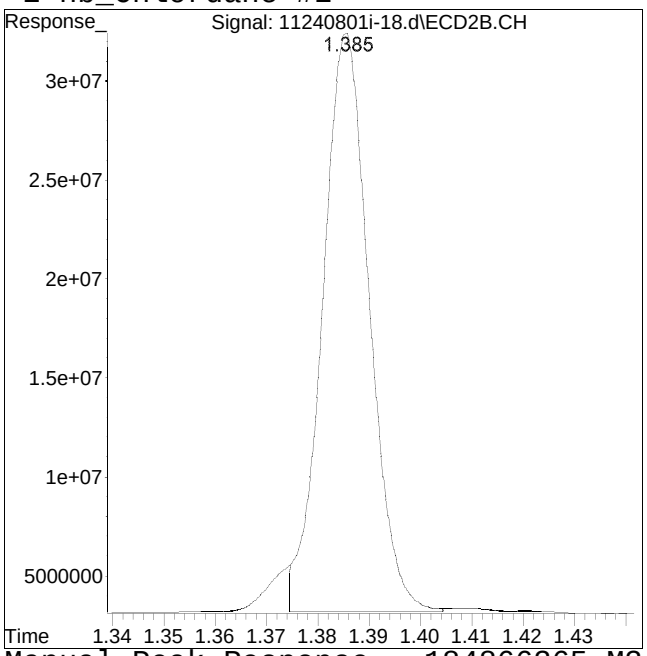

Original Peak Response = 238687922 Manual Peak Response = 220186398 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-18.d
Date Inj'd : 8/1/2024 21:36
Sample : il8chlor,42e,,pp 11690 L1.
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:55 am

Compound #66: 1-br-2-nb_Chlordane #2



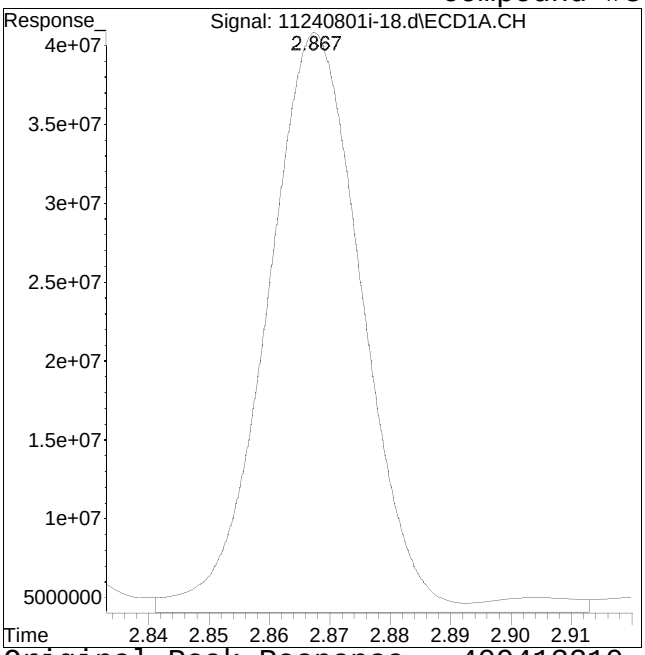

Original Peak Response = 199157748 Manual Peak Response = 184866365 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

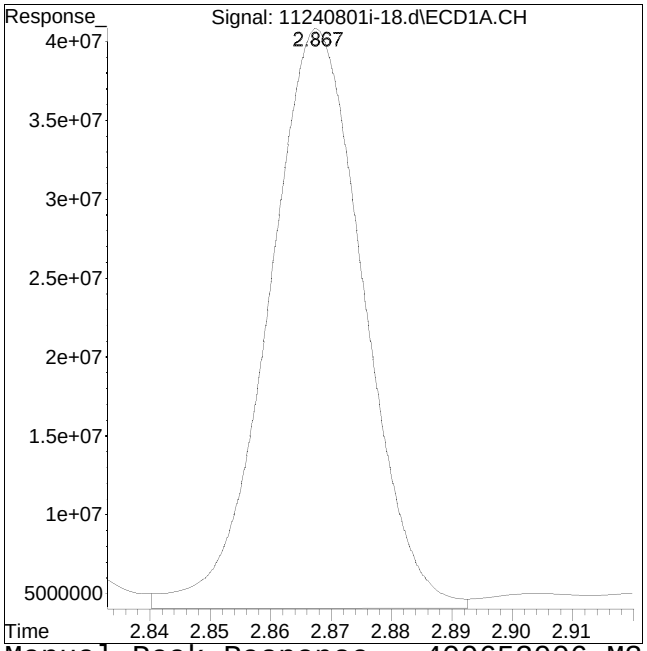
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-18.d
Date Inj'd : 8/1/2024 21:36
Sample : il8chlor,42e,,pp 11690 L1.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 11:55 am

Compound #30: chlordane-3



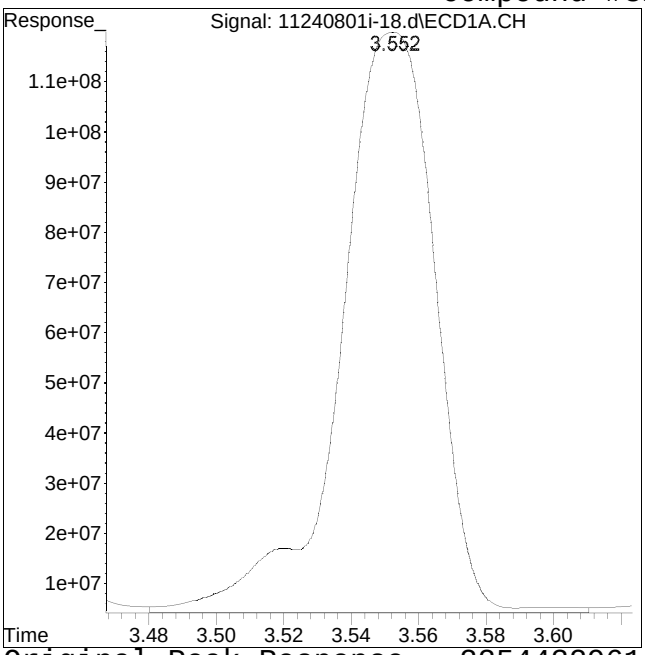

Original Peak Response = 409413310 Manual Peak Response = 400653006 M3

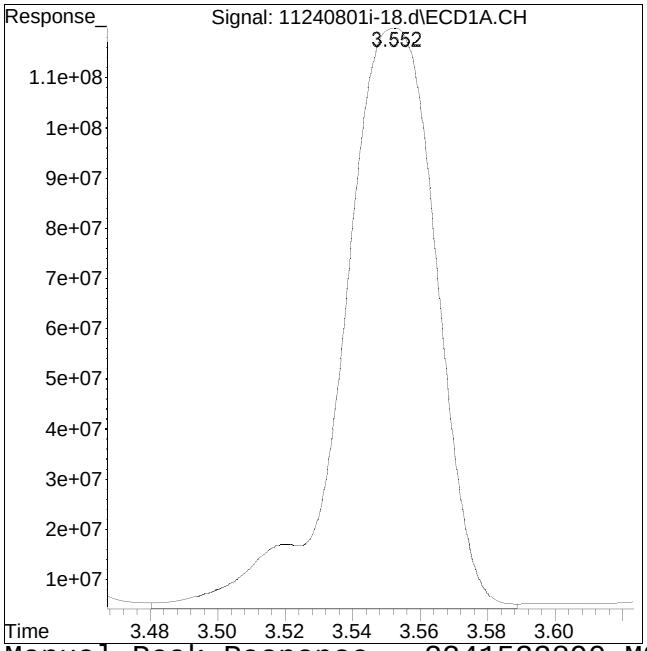
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-18.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:36 Instrument : Pest 11
Sample : il8chlor,42e,,pp 11690 L1.Quant Date : 8/2/2024 11:55 am

Compound #32: chlordane-5




Original Peak Response = 2254432961 Manual Peak Response = 2241533890 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:48
Operator : PEST11:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:06:31 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:06:20 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.385 | 225.5E6 | 184.1E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 21:48
Operator : PEST11:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:06:31 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:06:20 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.817 | 675.3E6 | 585.8E6 | 1981.244 | 2009.090 |
| 30) l1 | chlordane-3 | 2.867 | 3.423 | 788.9E6 | 650.4E6 | 1922.917M3 | 1939.223 |
| 31) l1 | chlordane-4 | 3.425 | 4.105 | 2915.2E6 | 2486.4E6 | 1964.100 | 2020.689 |
| 32) l1 | chlordane-5 | 3.552 | 4.275 | 4487.5E6 | 1905.6E6 | 1955.174 | 2019.653 |
| Sum | chlordane-1 | | | 8866.9E6 | 5628.2E6 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 1955.859 | 1997.164 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

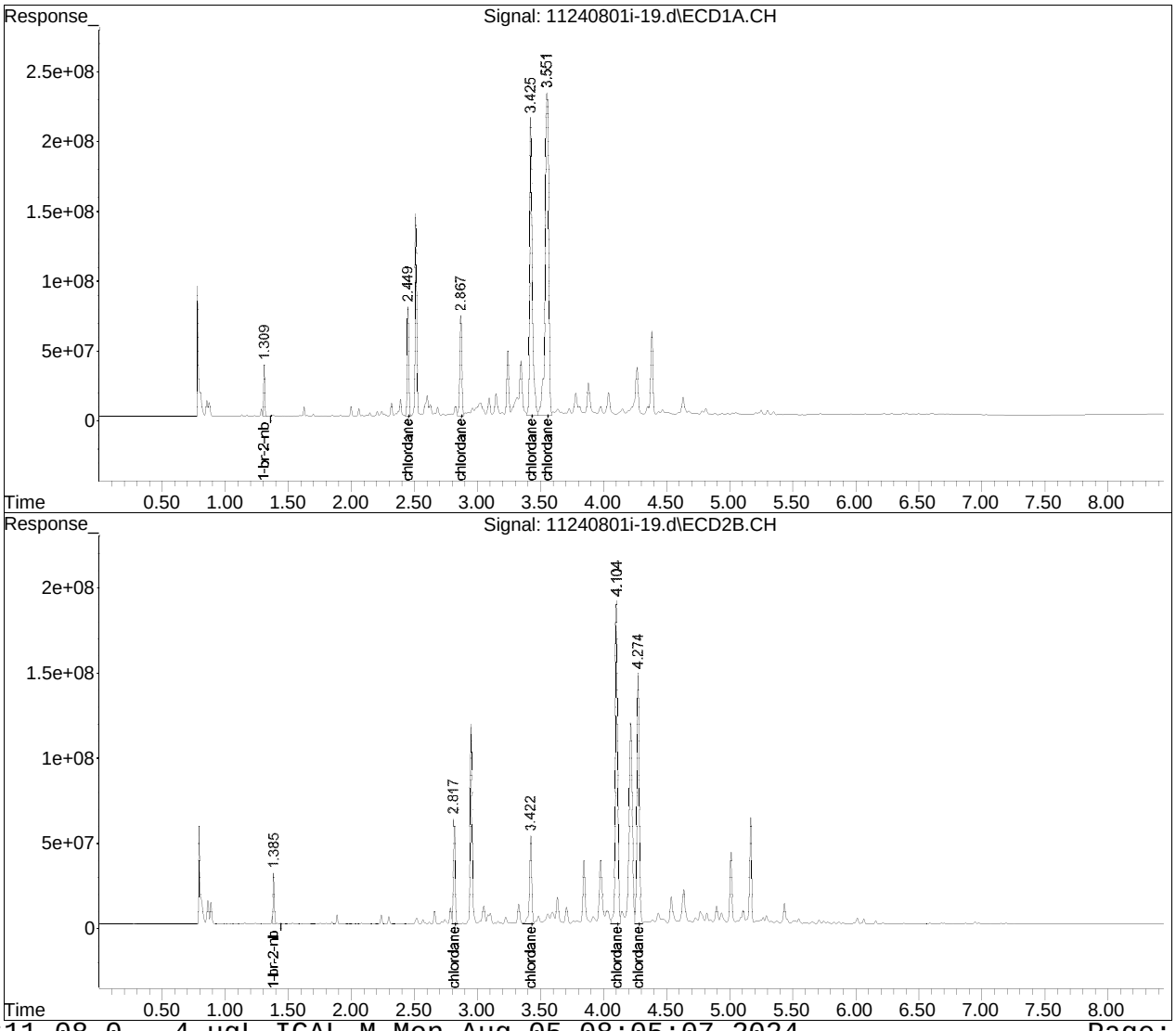
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-19.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  21:48
Operator : PEST11:ejl
Sample : il9chlor,42e,,pp 11689 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:06:31 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:06:20 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

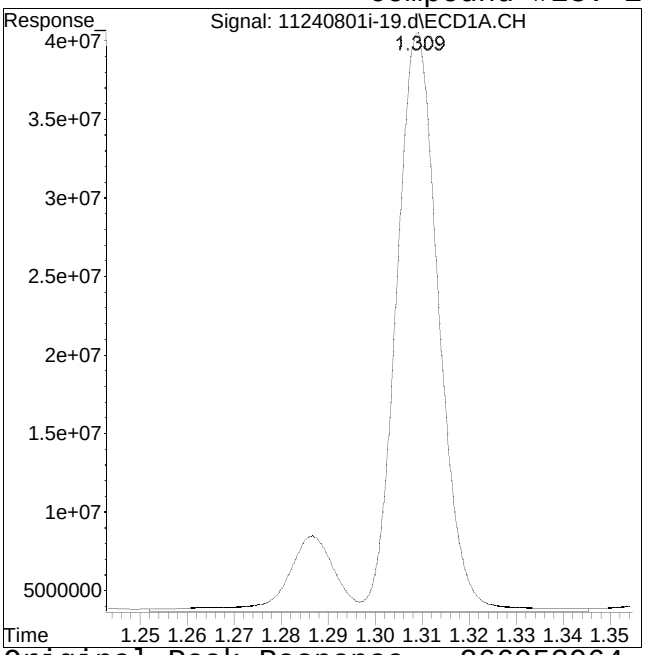


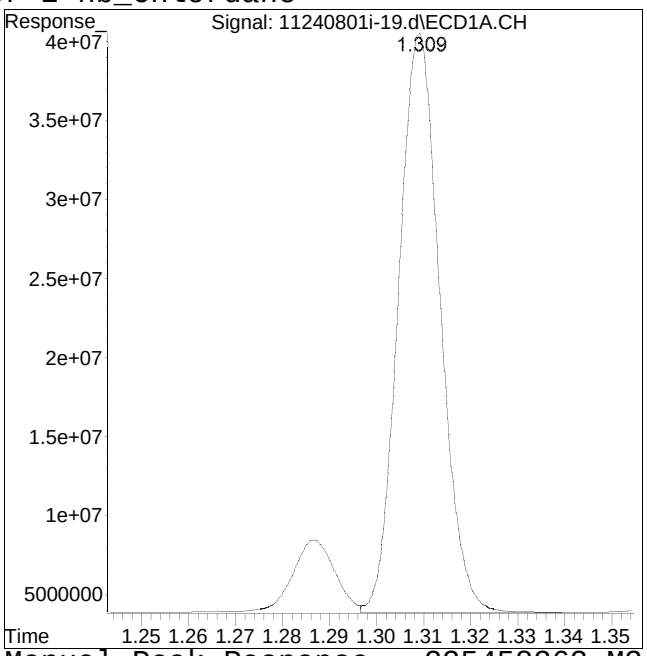
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-19.d
Date Inj'd : 8/1/2024 21:48
Sample : il9chlor,42e,,pp 11689 L2.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:06 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 266953964 Manual Peak Response = 225458262 M3

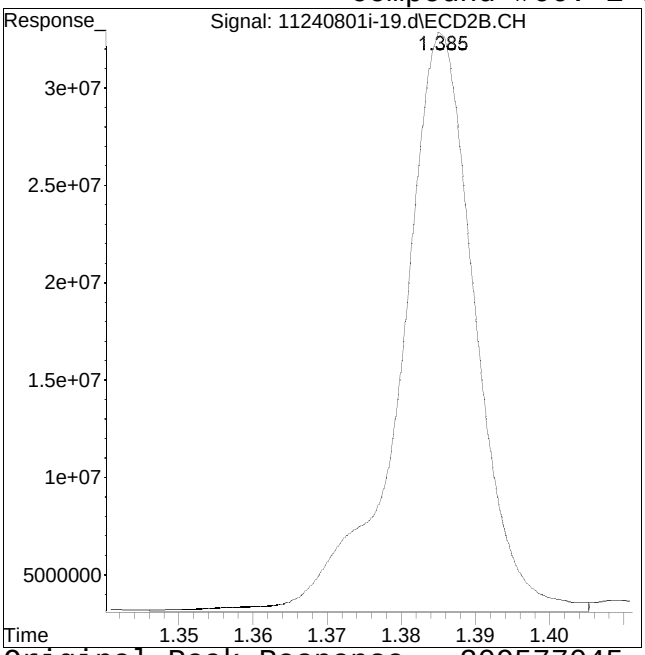
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

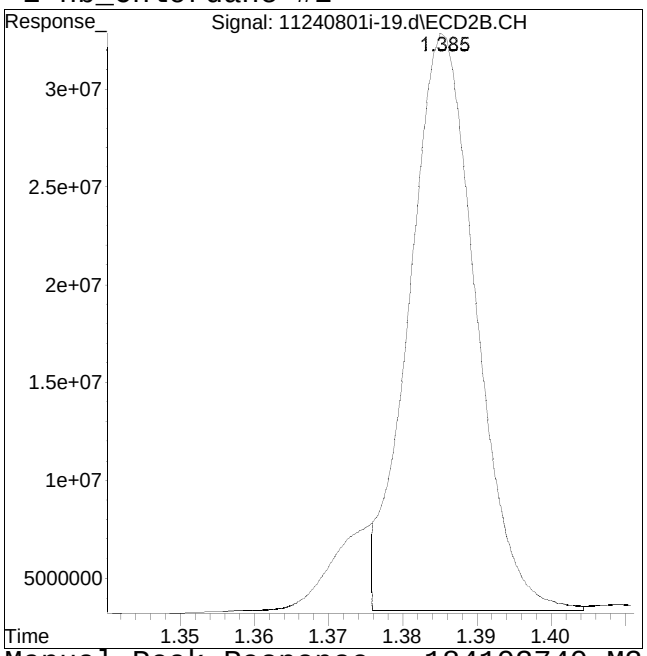
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-19.d
Date Inj'd : 8/1/2024 21:48
Sample : il9chlor,42e,,pp 11689 L2.

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:06 pm

Compound #66: 1-br-2-nb_Chlordane #2



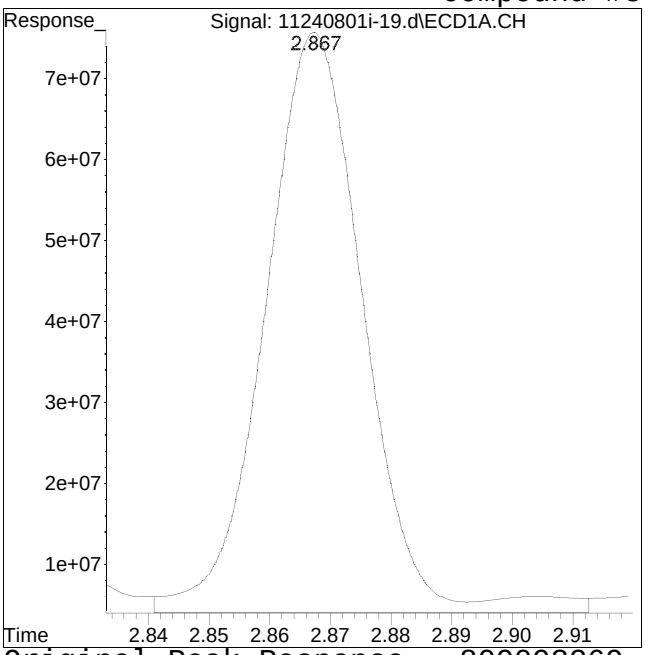

Original Peak Response = 209577045 Manual Peak Response = 184103740 M3

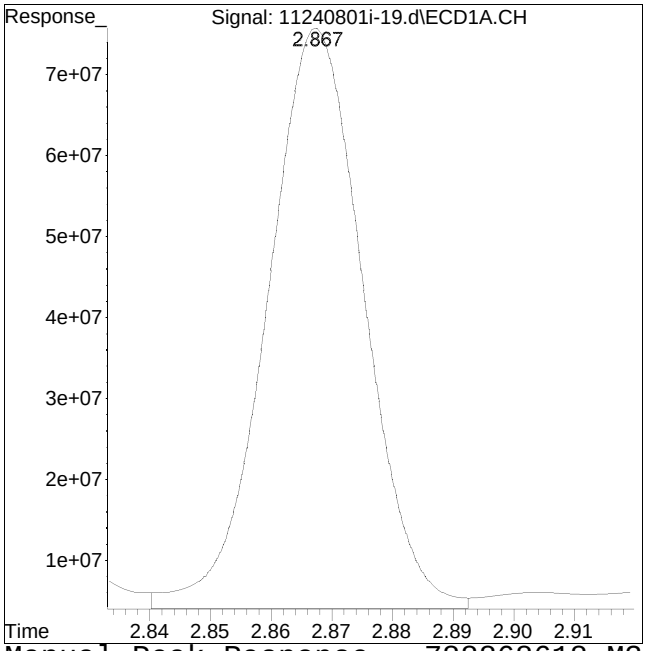
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-19.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 21:48 Instrument : Pest 11
Sample : il9chlor,42e,,pp 11689 L2.Quant Date : 8/2/2024 12:06 pm

Compound #30: chlordane-3




Original Peak Response = 809093269 Manual Peak Response = 788868618 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:00
Operator : PEST11:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:07:47 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:07:40 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.386 | 240.1E6 | 211.3E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:00
Operator : PEST11:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:07:47 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:07:40 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.818 | 1711.0E6 | 1485.0E6 | 4735.136 | 4428.395 |
| 30) l1 | chlordane-3 | 2.868 | 3.422 | 1944.4E6 | 1582.5E6 | 4537.369 | 4174.870 |
| 31) l1 | chlordane-4 | 3.425 | 4.105 | 7244.9E6 | 6226.2E6 | 4624.523 | 4386.798 |
| 32) l1 | chlordane-5 | 3.553 | 4.275 | 11069.4E6 | 4784.6E6 | 4579.501M3 | 4397.515 |
| Sum | chlordane-1 | | | 21969.7E6 | 14078.2E6 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 4619.132 | 4346.894 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

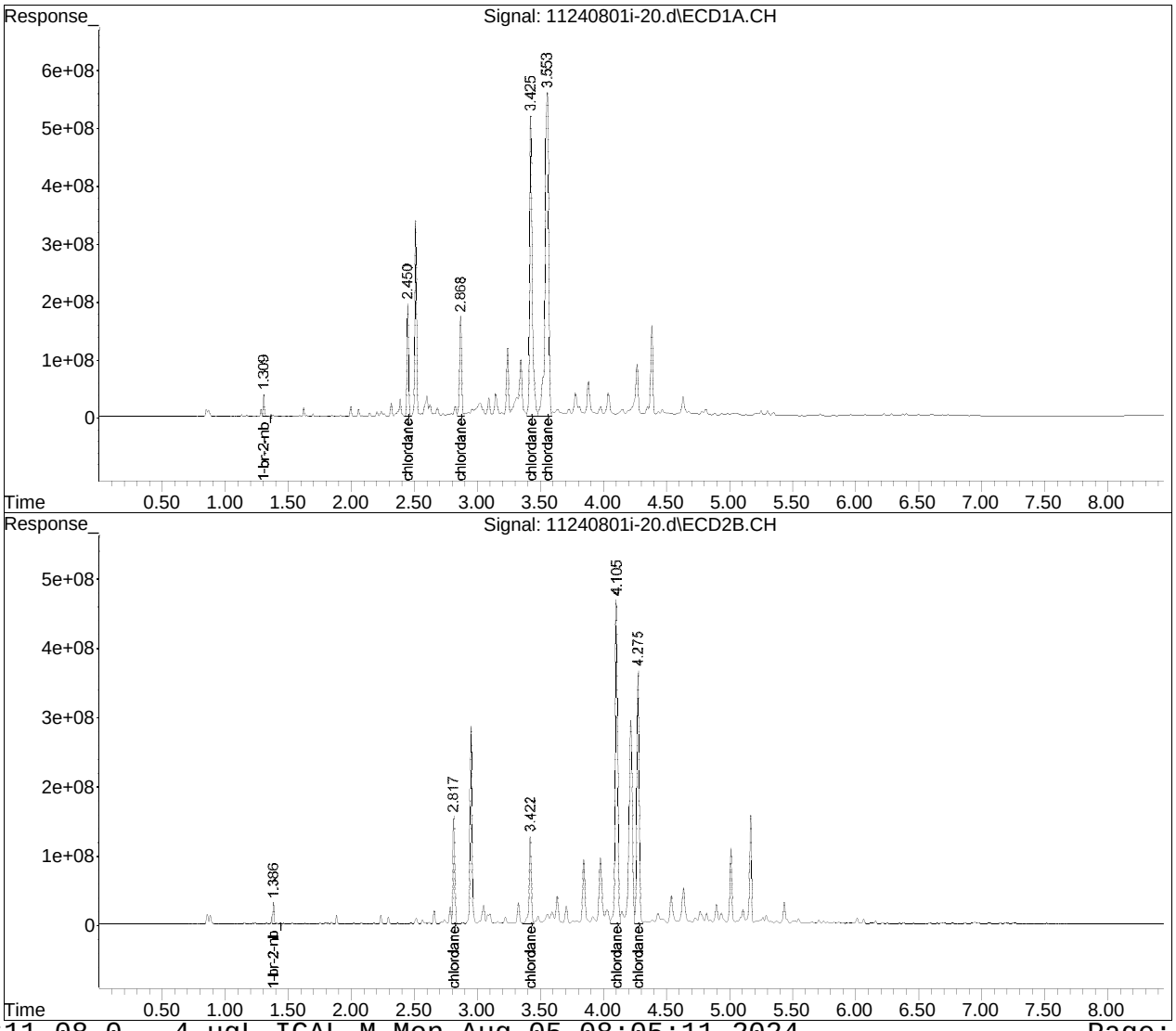
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-20.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  22:00
Operator : PEST11:ejl
Sample : il10chlor,42e,,pp 11688 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:07:47 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:07:40 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

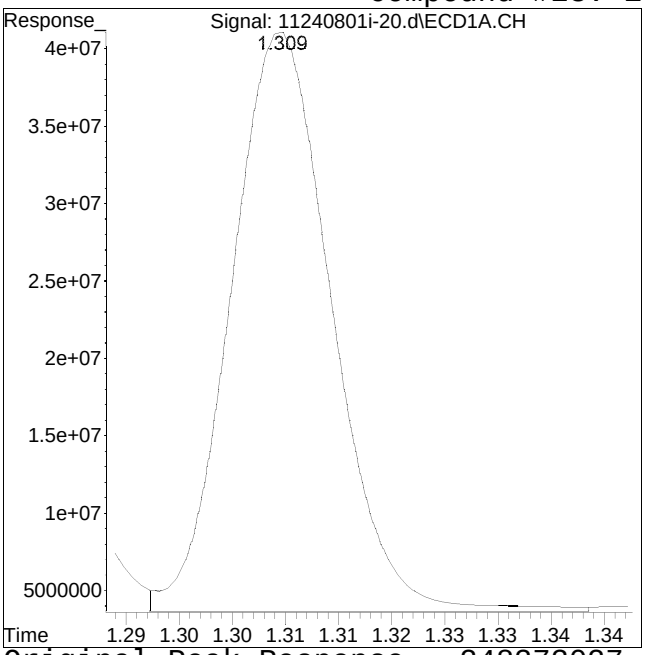


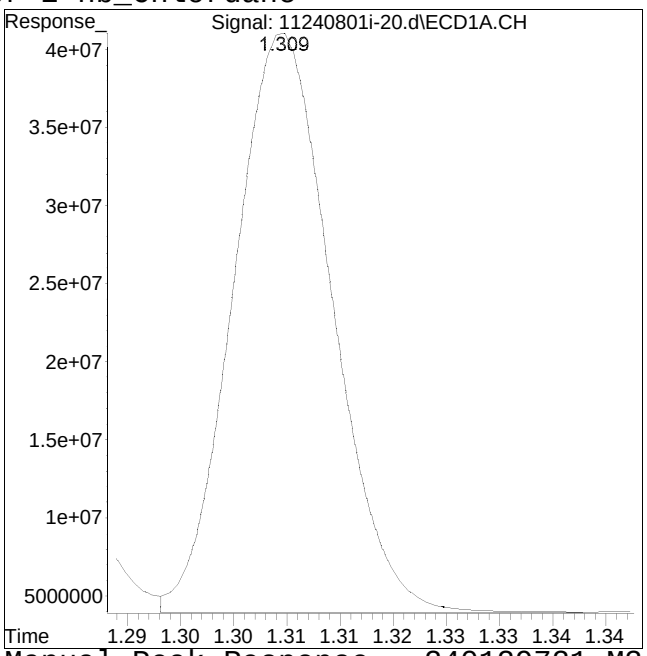
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-20.d
Date Inj'd : 8/1/2024 22:00
Sample : il10chlor,42e,,pp 11688 L5

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:07 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 248373027 Manual Peak Response = 240129721 M3

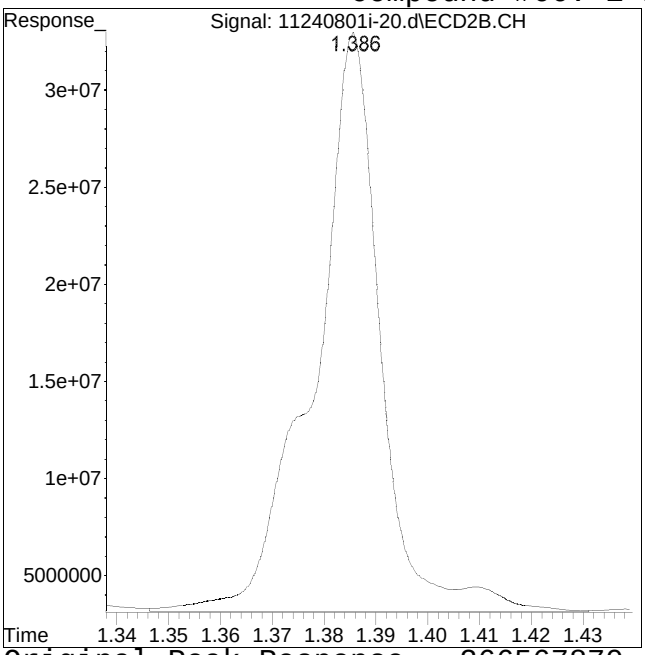
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

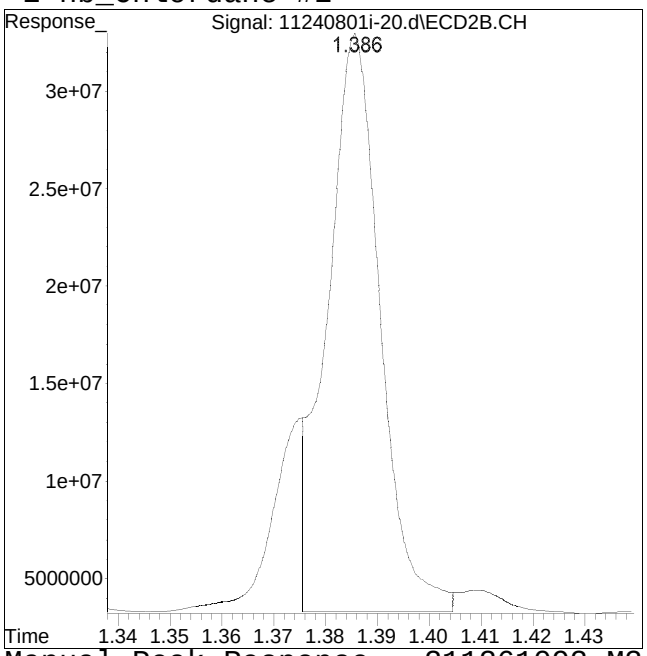
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-20.d
Date Inj'd : 8/1/2024 22:00
Sample : il10chlor,42e,,pp 11688 L5

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:07 pm

Compound #66: 1-br-2-nb_Chlordane #2



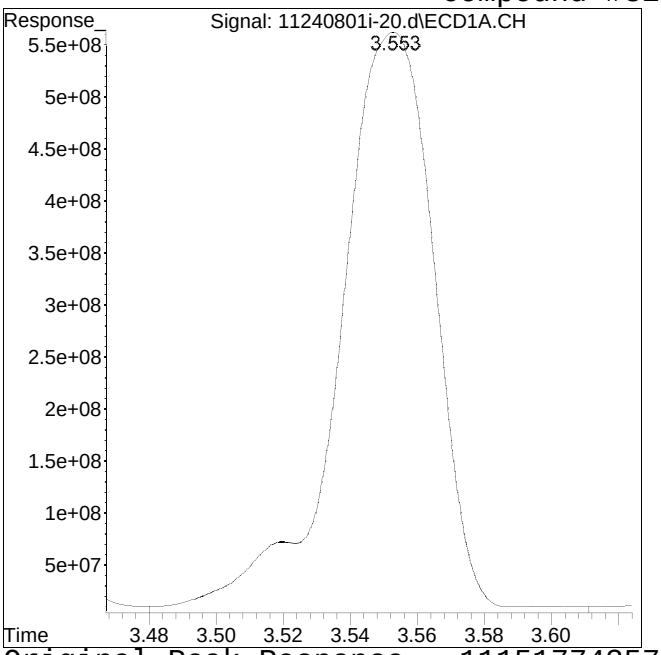

Original Peak Response = 266567870 Manual Peak Response = 211261092 M3

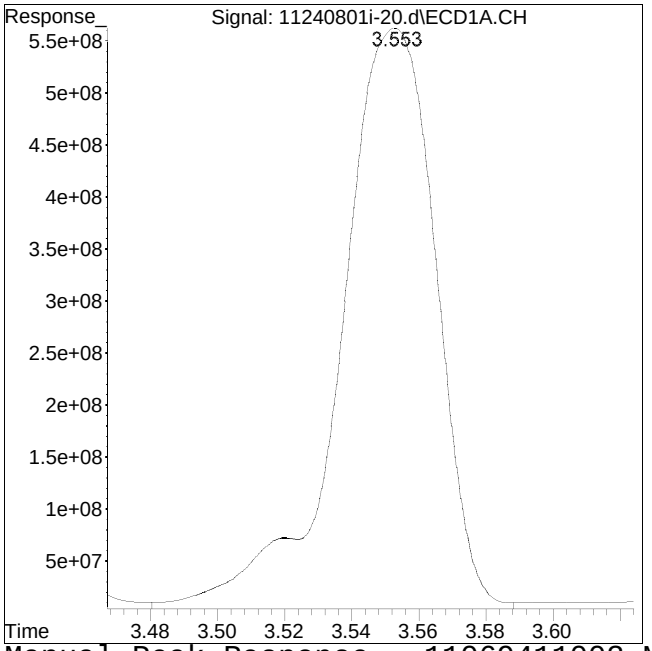
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-20.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:00 Instrument : Pest 11
Sample : il10chlor,42e,,pp 11688 L5Quant Date : 8/2/2024 12:07 pm

Compound #32: chlordane-5




Original Peak Response = 11151774357 Manual Peak Response = 11069411003 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  22:12
Operator  : PEST11:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 21 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 910.442 | 9.0 | 86 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 925.102 | 7.5 | 84 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 883.809 | 11.6 | 82 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 991.186 | 0.9 | 91 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 944.301 | 5.6 | 85 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 973.540 | 2.6 | 84 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 893.716 | 10.6 | 80 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 877.017 | 12.3 | 79 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 0.000 | 100.0# | 0# | -1.65# |
| 3 | t | Hexachlorobenzene | | 1.406 | 0.000 | 100.0# | 0# | -1.87# |
| 4 | t | alpha-BHC | | 1.461 | 0.000 | 100.0# | 0# | -1.96# |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 0.000 | 100.0# | 0# | -2.17# |
| 6 | t | beta-BHC | | 0.628 | 0.000 | 100.0# | 0# | -2.22# |
| 7 | t | delta-BHC | | 1.374 | 0.000 | 100.0# | 0# | -2.35# |
| 8 | t | Heptachlor | | 1.321 | 0.000 | 100.0# | 0# | -2.51# |
| 9 | t | Aldrin | | 1.233 | 0.000 | 100.0# | 0# | -2.76# |
| 10 | t | Alachlor | | 0.230 | 0.000 | 100.0# | 0# | -2.88# |
| 11 | t | Chlorpyrifos | | 0.590 | 0.000 | 100.0# | 0# | -2.97# |
| 12 | t | Heptachlor Epoxide | | 1.185 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 0.000 | 100.0# | 0# | -3.42# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  22:12
Operator  : PEST11:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 21 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 0.000 | 100.0# | 0# | -3.56# |
| 15 | t | 4,4'-DDE | | 1.192 | 0.000 | 100.0# | 0# | -3.66# |
| 16 | t | Endosulfan I | | 1.116 | 0.000 | 100.0# | 0# | -3.69# |
| 17 | t | Dieldrin | | 1.135 | 0.000 | 100.0# | 0# | -3.96# |
| 18 | t | Endrin | | 1.153 | 0.000 | 100.0# | 0# | -4.21# |
| 19 | t | 4,4'-DDD | | 0.927 | 0.000 | 100.0# | 0# | -4.32# |
| 20 | t | Endosulfan II | | 1.052 | 0.000 | 100.0# | 0# | -4.45# |
| 21 | t | 4,4'-DDT | | 1.058 | 0.000 | 100.0# | 0# | -4.62# |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.000 | 100.0# | 0# | -4.87# |
| 23 | t | Methoxychlor | | 0.592 | 0.000 | 100.0# | 0# | -5.10# |
| 24 | t | Mirex | | 0.938 | 0.000 | 100.0# | 0# | -5.16# |
| 25 | t | Endosulfan Sulfate | | 1.010 | 0.000 | 100.0# | 0# | -5.26# |
| 26 | t | Endrin Ketone | | 1.183 | 0.000 | 100.0# | 0# | -5.49# |
| 27 | s | Decachlorobiphenyl | | 1.163 | 0.000 | 100.0# | 0# | -6.29# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 34 | l2 | toxaphene-2 | * | 0.050 | 0.000 | 100.0# | 0# | -4.44# |
| 35 | l2 | toxaphene-3 | * | 0.039 | 0.000 | 100.0# | 0# | -4.57# |
| 36 | l2 | toxaphene-4 | * | 0.042 | 0.000 | 100.0# | 0# | -4.79# |
| 37 | l2 | toxaphene-5 | * | 0.043 | 0.000 | 100.0# | 0# | -5.17# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 0.000 | 100.0# | 0# | -1.86# |
| 3 | t | Hexachlorobenzene | | 1.239 | 0.000 | 100.0# | 0# | -2.18# |
| 4 | t | alpha-BHC | | 1.620 | 0.000 | 100.0# | 0# | -2.27# |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 0.000 | 100.0# | 0# | -2.56# |
| 6 | t | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -2.62# |
| 7 | t | delta-BHC | | 1.523 | 0.000 | 100.0# | 0# | -2.89# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  22:12
Operator  : PEST11:ejl
Sample    : cicvchlor,42e,,pp 11670 L1.0ICV
Misc      : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial  : 21 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                  Signal #2 Phase:
Signal #1 Info  :                  Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | t | Heptachlor | | 1.598 | 0.000 | 100.0# | 0# | -2.95# |
| 9 | t | Aldrin | | 1.435 | 0.000 | 100.0# | 0# | -3.27# |
| 10 | t | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.15# |
| 11 | t | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.51# |
| 12 | t | Heptachlor Epoxide | | 1.425 | 0.000 | 100.0# | 0# | -3.88# |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 0.000 | 100.0# | 0# | -4.10# |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 0.000 | 100.0# | 0# | -4.27# |
| 15 | t | 4,4'-DDE | | 1.343 | 0.000 | 100.0# | 0# | -4.47# |
| 16 | t | Endosulfan I | | 1.332 | 0.000 | 100.0# | 0# | -4.34# |
| 17 | t | Dieldrin | | 1.327 | 0.000 | 100.0# | 0# | -4.63# |
| 18 | t | Endrin | | 1.347 | 0.000 | 100.0# | 0# | -4.93# |
| 19 | t | 4,4'-DDD | | 1.084 | 0.000 | 100.0# | 0# | -5.05# |
| 20 | t | Endosulfan II | | 1.214 | 0.000 | 100.0# | 0# | -5.13# |
| 21 | t | 4,4'-DDT | | 1.250 | 0.000 | 100.0# | 0# | -5.33# |
| 22 | t | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.42# |
| 23 | t | Methoxychlor | | 0.704 | 0.000 | 100.0# | 0# | -5.89# |
| 24 | t | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.02# |
| 25 | t | Endosulfan Sulfate | | 1.199 | 0.000 | 100.0# | 0# | -5.65# |
| 26 | t | Endrin Ketone | | 1.261 | 0.000 | 100.0# | 0# | -6.06# |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.000 | 100.0# | 0# | -6.92# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 34 | l2 | toxaphene-2 | * | 0.025 | 0.000 | 100.0# | 0# | -5.08# |
| 35 | l2 | toxaphene-3 | * | 0.037 | 0.000 | 100.0# | 0# | -5.11# |
| 36 | l2 | toxaphene-4 | * | 0.044 | 0.000 | 100.0# | 0# | -5.43# |
| 37 | l2 | toxaphene-5 | * | 0.042 | 0.000 | 100.0# | 0# | -5.84# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:12
Operator : PEST11:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.309 | 1.385 | 215.4E6 | 177.1E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:12
Operator : PEST11:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 2.450 | 2.817 | 285.6E6 | 248.8E6 | 910.442 | 944.301 |
| 30) l1 | chlordane-3 | 2.868 | 3.422 | 337.4E6 | 282.0E6 | 925.102 | 973.540 |
| 31) l1 | chlordane-4 | 3.426 | 4.105 | 1185.4E6 | 988.3E6 | 883.809 | 893.716 |
| 32) l1 | chlordane-5 | 3.550 | 4.275 | 2040.5E6 | 745.1E6 | 991.186 | 877.017 |
| Sum | chlordane-1 | | | 3848.9E6 | 2264.2E6 | NoCal | NoCal D |
| Average | chlordane-1 | | | | | 927.635 | 922.144 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

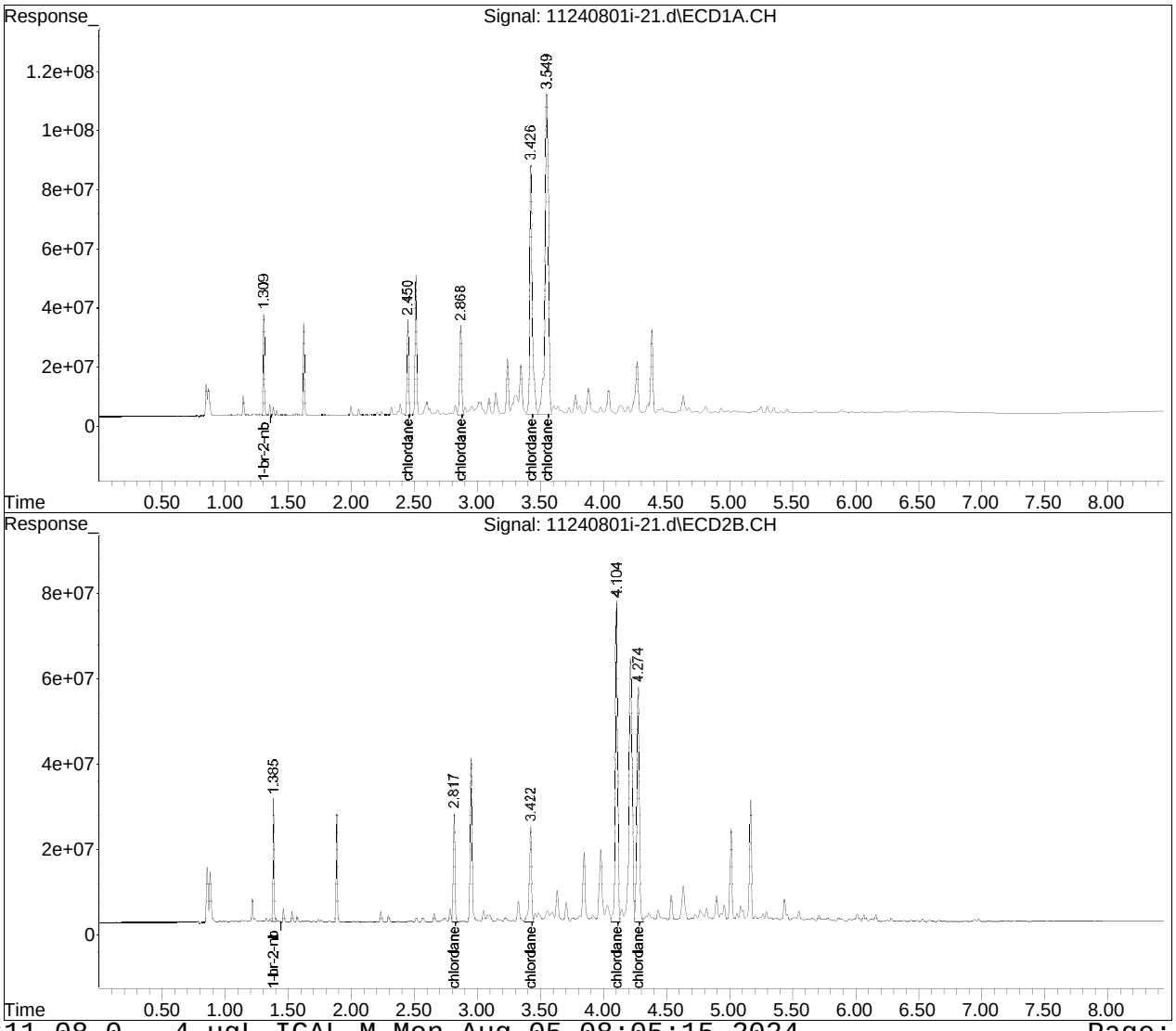
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:12
Operator : PEST11:ejl
Sample : cicvchlor,42e,,pp 11670 L1.0ICV
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:16:29 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:16:29 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

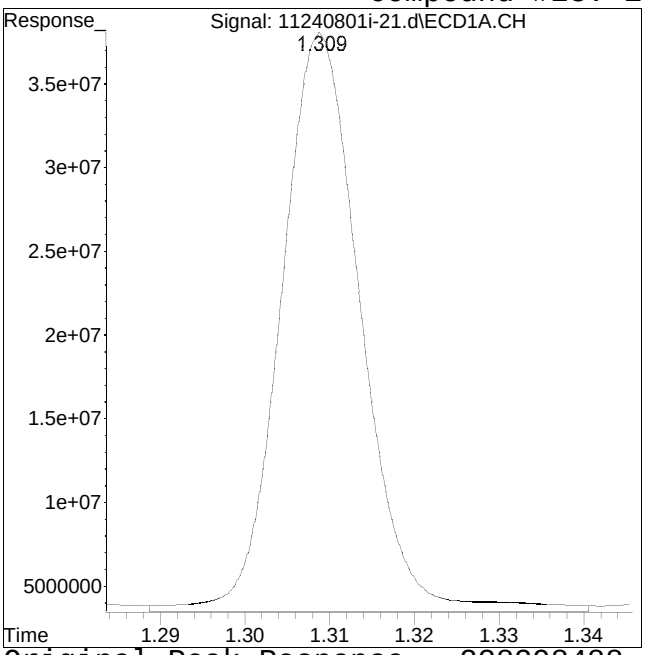


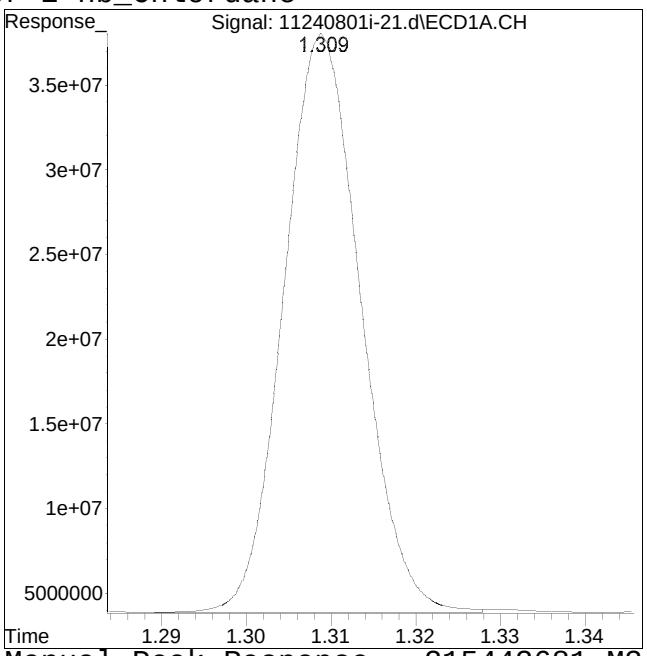
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-21.d
Date Inj'd : 8/1/2024 22:12
Sample : cicvchlor,42e,,pp 11670 L1

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:16 pm

Compound #28: 1-br-2-nb_Chlordane



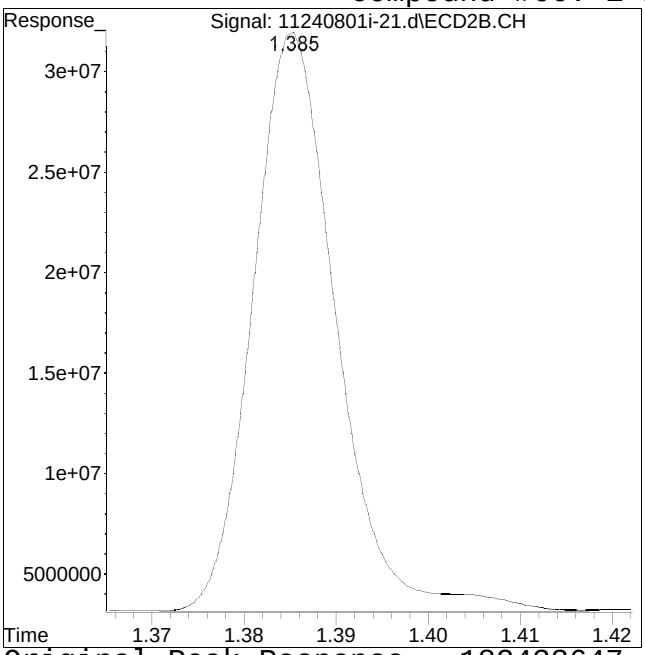

Original Peak Response = 228298488 Manual Peak Response = 215443681 M3

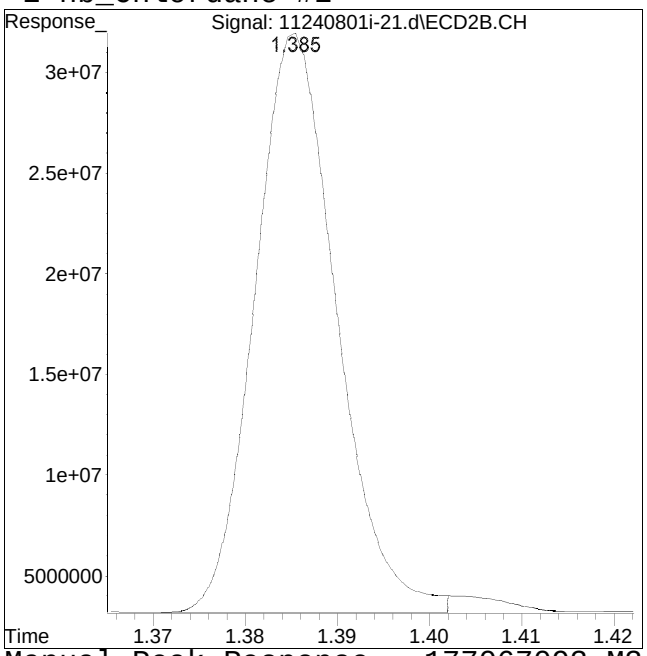
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-21.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:12 Instrument : Pest 11
Sample : cicvchlor,42e,,pp 11670 L1Quant Date : 8/2/2024 12:16 pm

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 182433647 Manual Peak Response = 177067093 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:24
Operator : PEST11:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:25:16 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:25:08 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.385 | 207.9E6 | 171.7E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:24
Operator : PEST11:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:25:16 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:25:08 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.443 | 5.084 | 6298815 | 3783276 | 14.276 | 22.443 |
| 35) l2 | toxaphene-3 | 4.566 | 5.112 | 5311161 | 5766534 | 15.580 | 23.257 |
| 36) l2 | toxaphene-4 | 4.792 | 5.429 | 6754862 | 6780894 | 19.276M3 | 23.080 |
| 37) l2 | toxaphene-5 | 5.168 | 5.836 | 8888706 | 6922230 | 26.745M4 | 25.343 |
| Sum | toxaphene-2 | | | 27253545 | 23252934 | 75.878 | 94.123 |
| Average | toxaphene-2 | | | | | 18.970 | 23.531 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 27253545 | 23252934 | 75.878 | 94.123 |
| Average | toxaphene-2 | | | | | 18.970 | 23.531 |

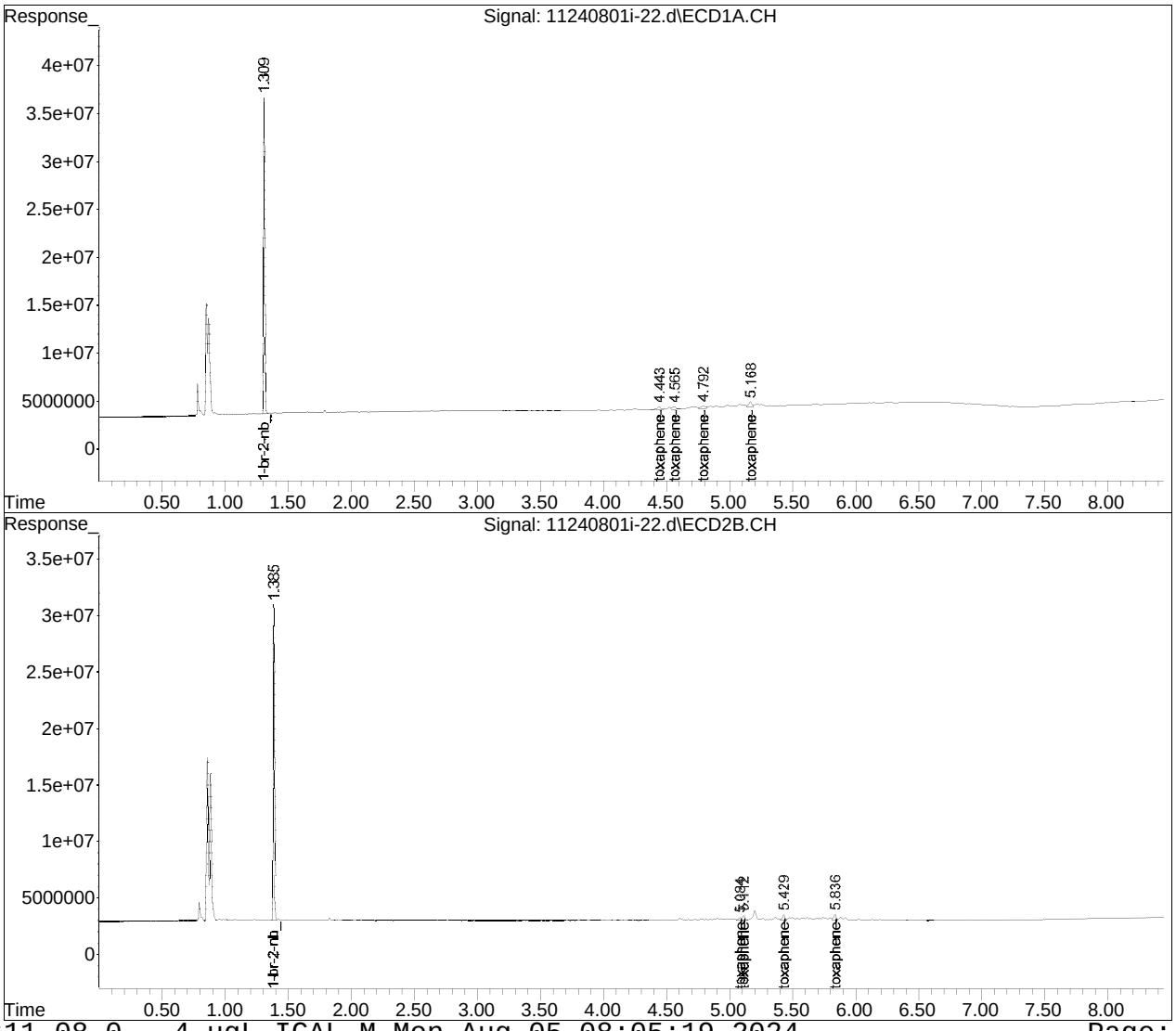
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:24
Operator : PEST11:ejl
Sample : il3tox,42e,,pp 11703 L0.02
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:25:16 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:25:08 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

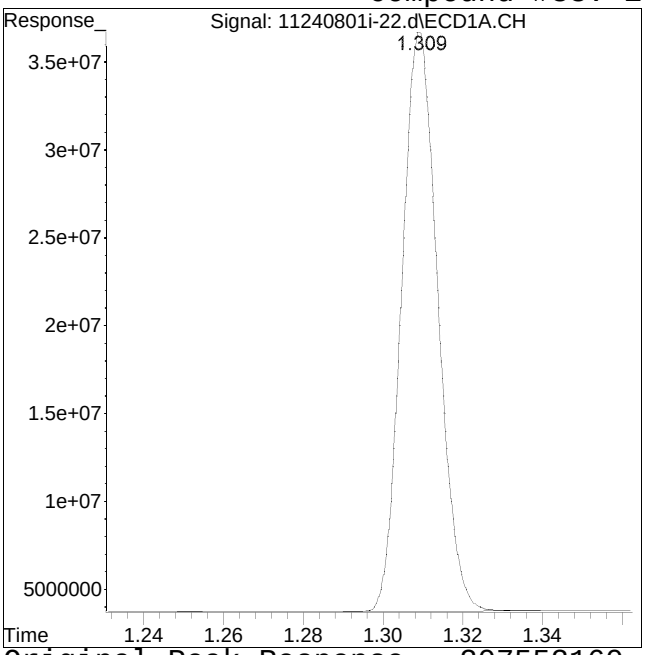


Manual Integration Report

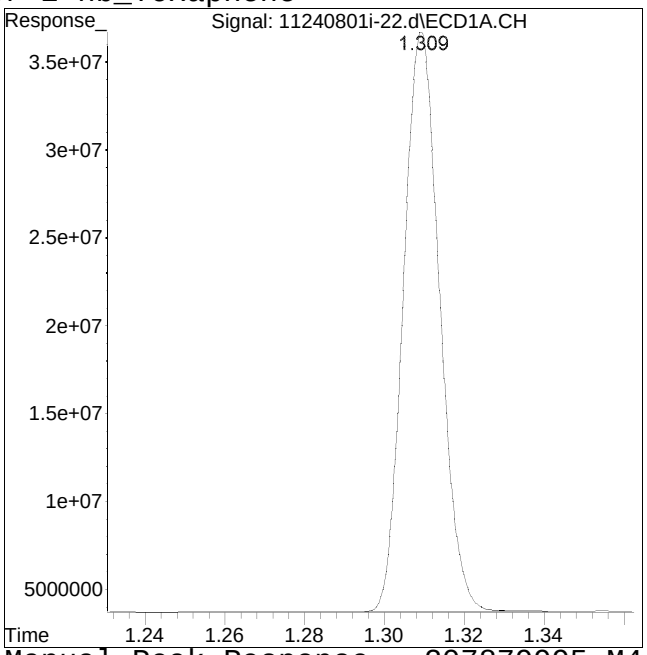
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-22.d
Date Inj'd : 8/1/2024 22:24
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:25 pm

Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 207552160




Manual Peak Response = 207879995 M4

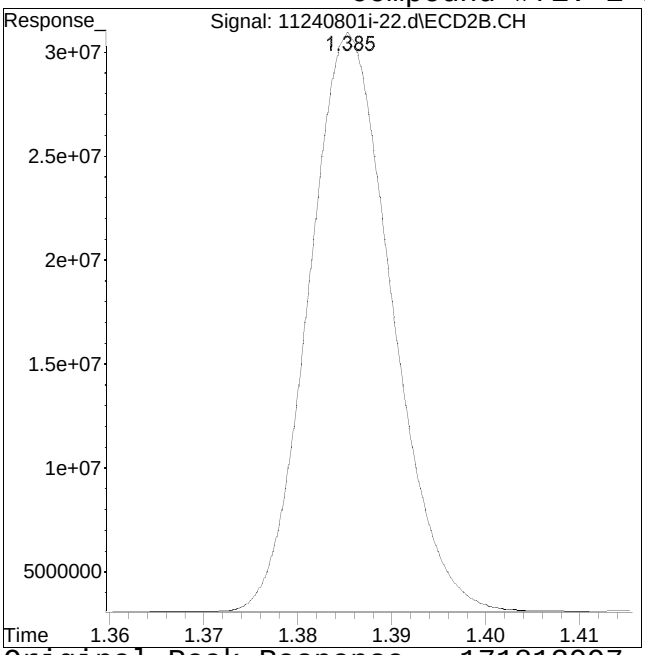
M4 = Poor automated baseline construction.

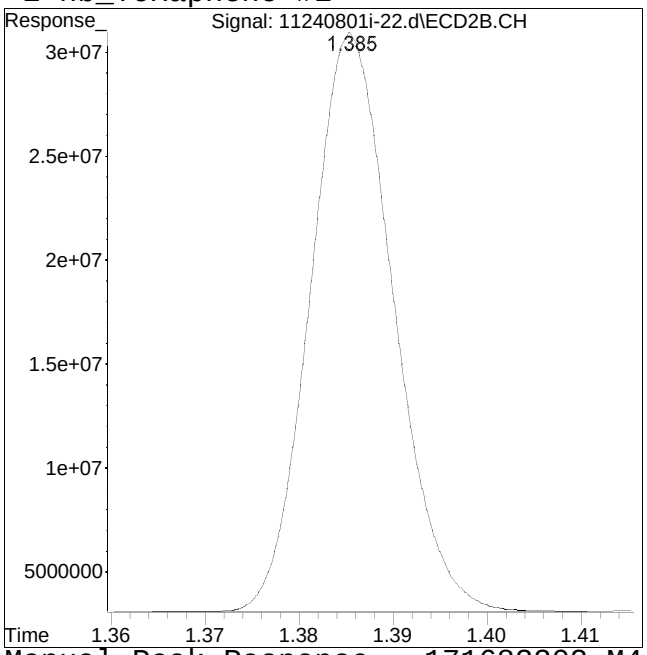
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-22.d
Date Inj'd : 8/1/2024 22:24
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:25 pm

Compound #71: 1-br-2-nb_Toxaphene #2



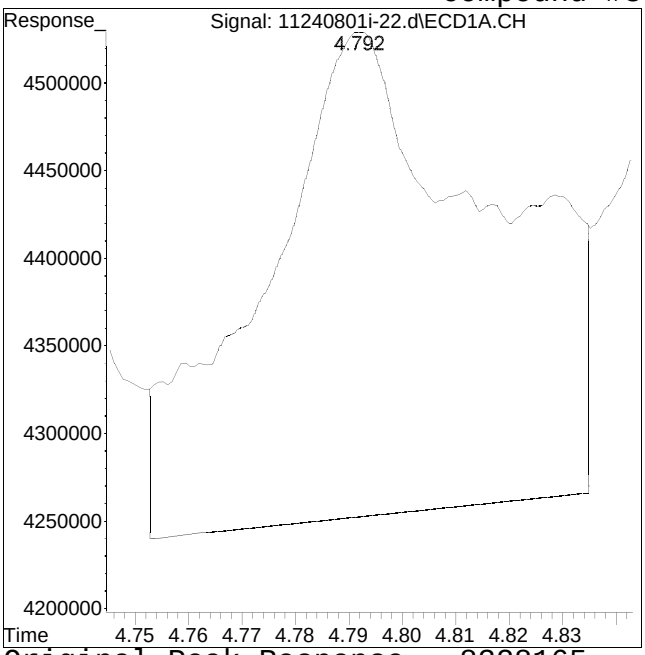

Original Peak Response = 171813997 Manual Peak Response = 171683302 M4
M4 = Poor automated baseline construction.

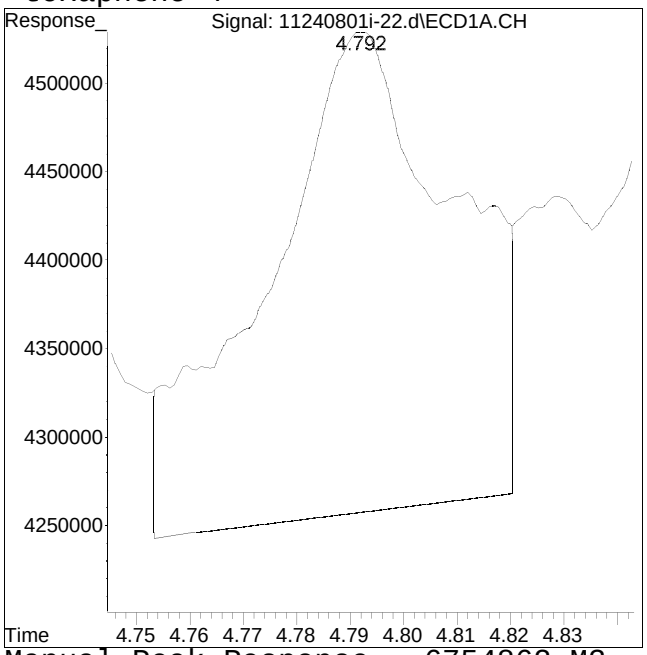
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-22.d
Date Inj'd : 8/1/2024 22:24
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:25 pm

Compound #36: toxaphene-4




Original Peak Response = 8328165 Manual Peak Response = 6754862 M3

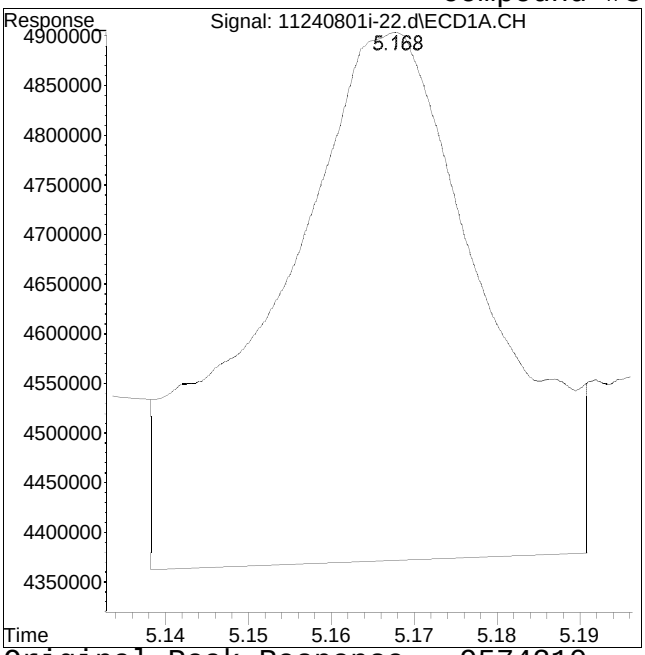
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

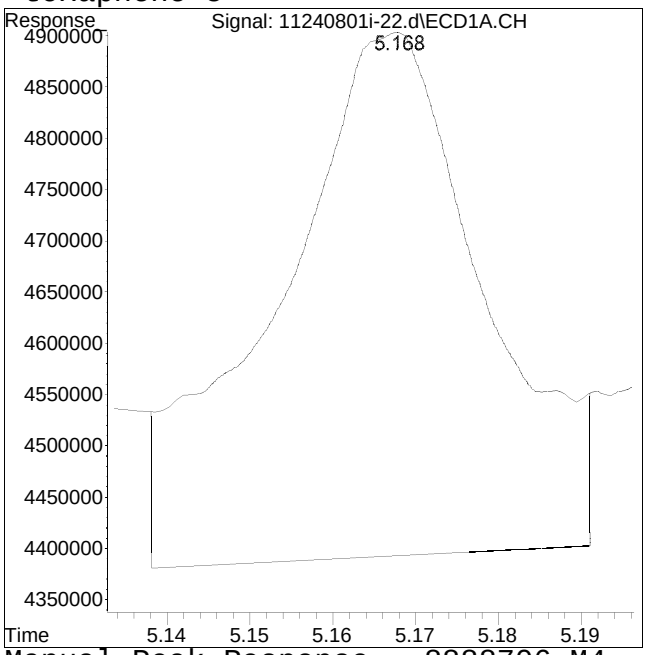
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-22.d
Date Inj'd : 8/1/2024 22:24
Sample : il3tox,42e,,pp 11703 L0.02

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:25 pm

Compound #37: toxaphene-5




Original Peak Response = 9574210




Manual Peak Response = 8888706 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:36
Operator : PEST11:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:57 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:23:47 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.385 | 214.5E6 | 175.4E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:36
Operator : PEST11:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:57 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:23:47 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.443 | 5.084 | 39578469 | 19576926 | 83.312 | 119.105 |
| 35) l2 | toxaphene-3 | 4.566 | 5.112 | 30033204 | 28384507 | 81.420 | 116.744 |
| 36) l2 | toxaphene-4 | 4.791 | 5.429 | 33900580 | 32843972 | 91.845M3 | 112.974 |
| 37) l2 | toxaphene-5 | 5.168 | 5.836 | 35593892 | 31255677 | 105.126 | 116.675 |
| Sum | toxaphene-2 | | | 139.1E6 | 112.1E6 | 361.703 | 465.498 |
| Average | toxaphene-2 | | | | | 90.426 | 116.374 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 139.1E6 | 112.1E6 | 361.703 | 465.498 |
| Average | toxaphene-2 | | | | | 90.426 | 116.374 |

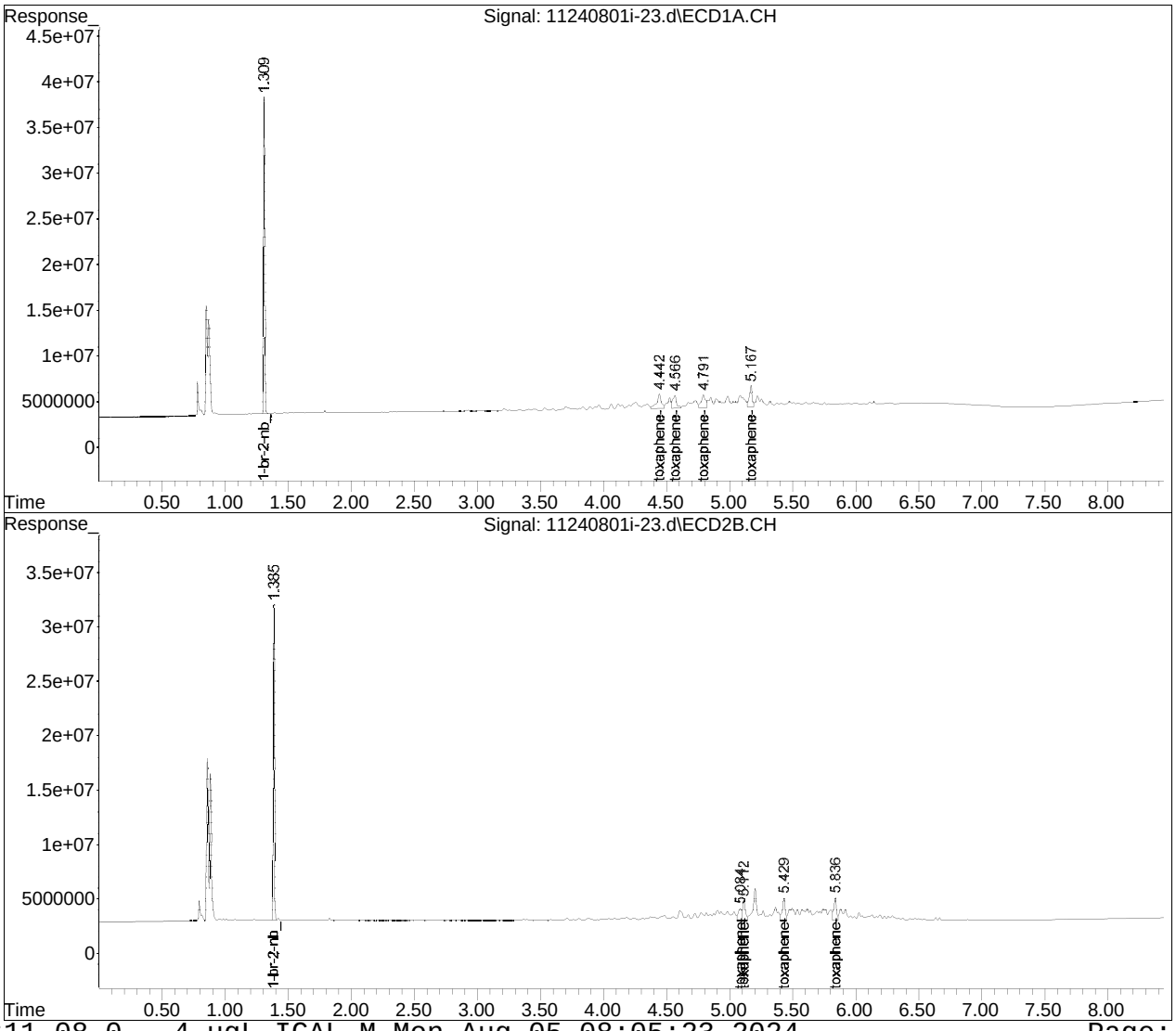
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:36
Operator : PEST11:ejl
Sample : il4tox,42e,,pp 11702 L0.1
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:57 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:23:47 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

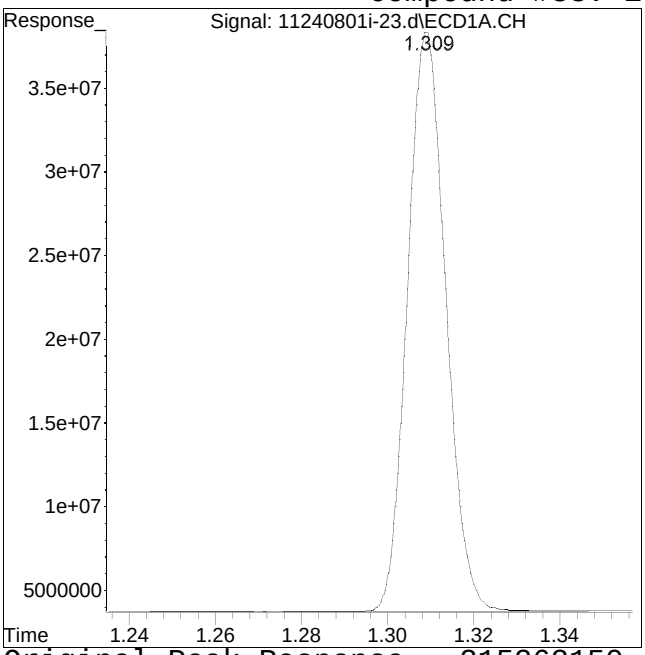
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

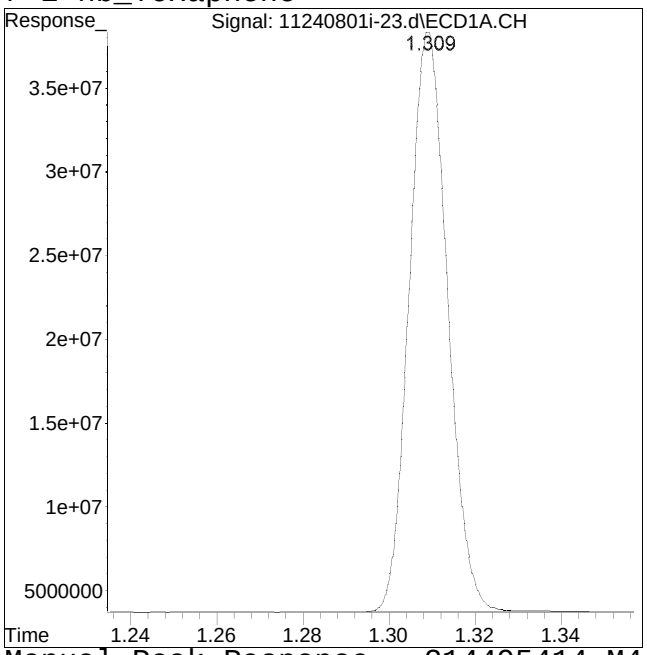


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-23.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:36 Instrument : Pest 11
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 8/2/2024 12:23 pm

Compound #33: 1-br-2-nb_Toxaphene



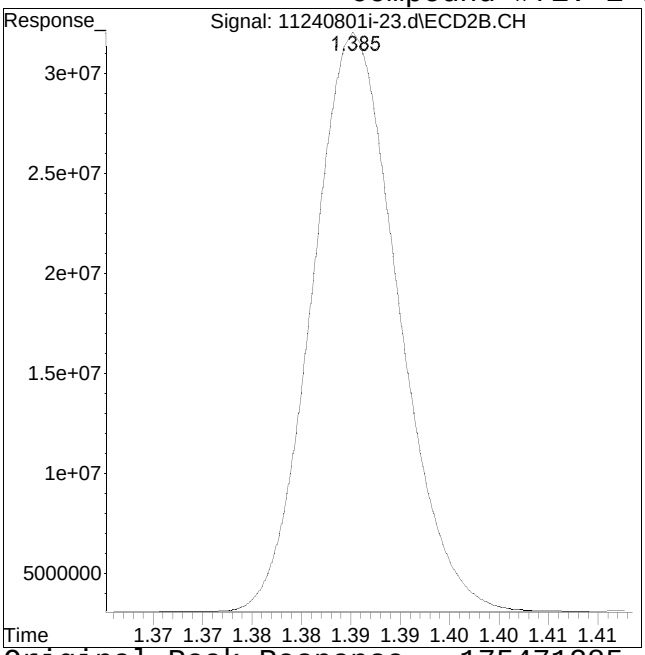




Original Peak Response = 215262150 Manual Peak Response = 214495414 M4
M4 = Poor automated baseline construction.

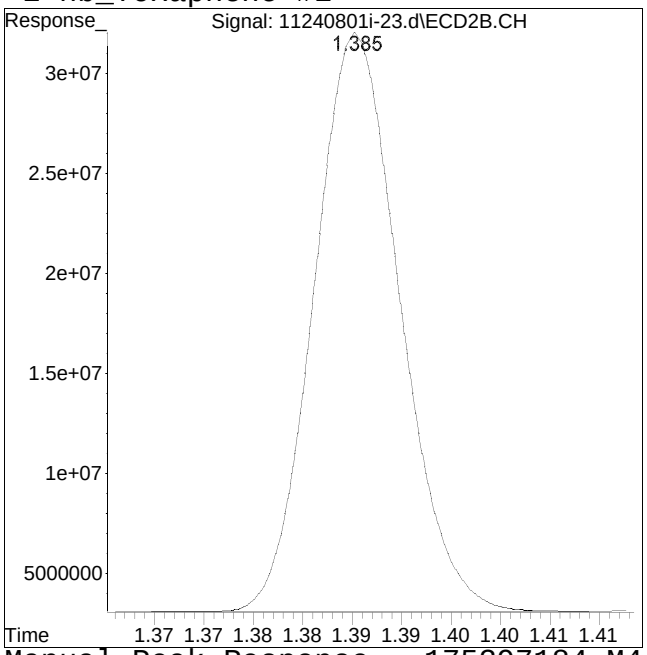
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-23.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:36 Instrument : Pest 11
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 8/2/2024 12:23 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 175471285



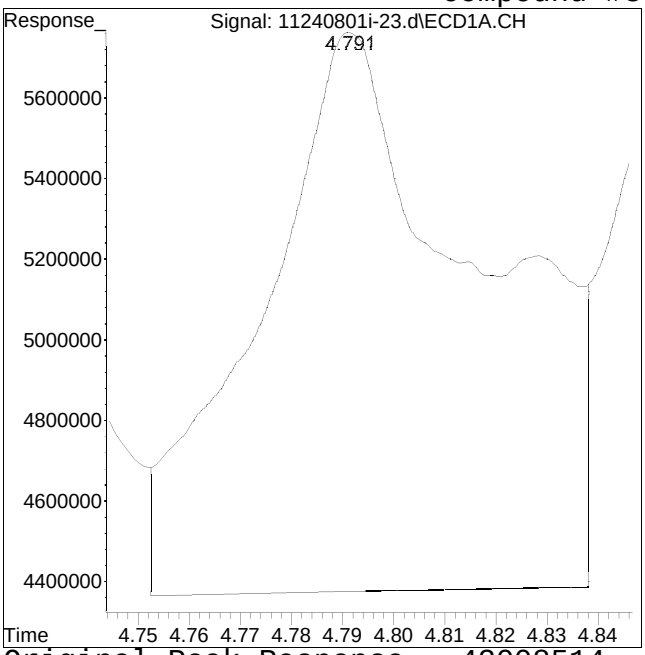

Manual Peak Response = 175397184 M4

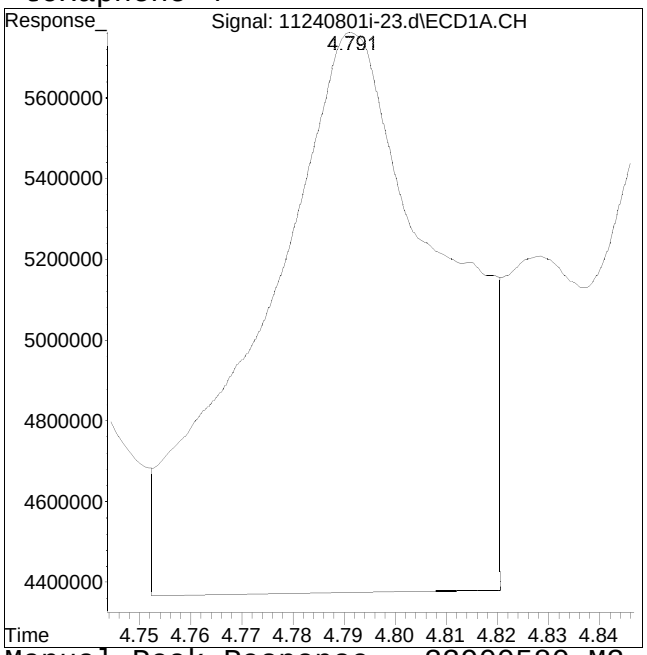
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-23.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:36 Instrument : Pest 11
Sample : il4tox,42e,,pp 11702 L0.1 Quant Date : 8/2/2024 12:23 pm

Compound #36: toxaphene-4




Original Peak Response = 42008514 Manual Peak Response = 33900580 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:47
Operator : PEST11:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:05 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:22:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.385 | 217.4E6 | 172.7E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:47
Operator : PEST11:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:05 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:22:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.442 | 5.084 | 475.5E6 | 162.1E6 | 981.231 | 1002.404 |
| 35) l2 | toxaphene-3 | 4.566 | 5.112 | 362.8E6 | 238.4E6 | 956.095 | 993.623 |
| 36) l2 | toxaphene-4 | 4.792 | 5.429 | 362.1E6 | 283.2E6 | 952.261 | 983.638 |
| 37) l2 | toxaphene-5 | 5.167 | 5.836 | 340.4E6 | 261.1E6 | 987.487 | 984.711 |
| Sum | toxaphene-2 | | | 1540.8E6 | 944.9E6 | 3877.074 | 3964.377 |
| Average | toxaphene-2 | | | | | 969.268 | 991.094 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 1540.8E6 | 944.9E6 | 3877.074 | 3964.377 |
| Average | toxaphene-2 | | | | | 969.268 | 991.094 |

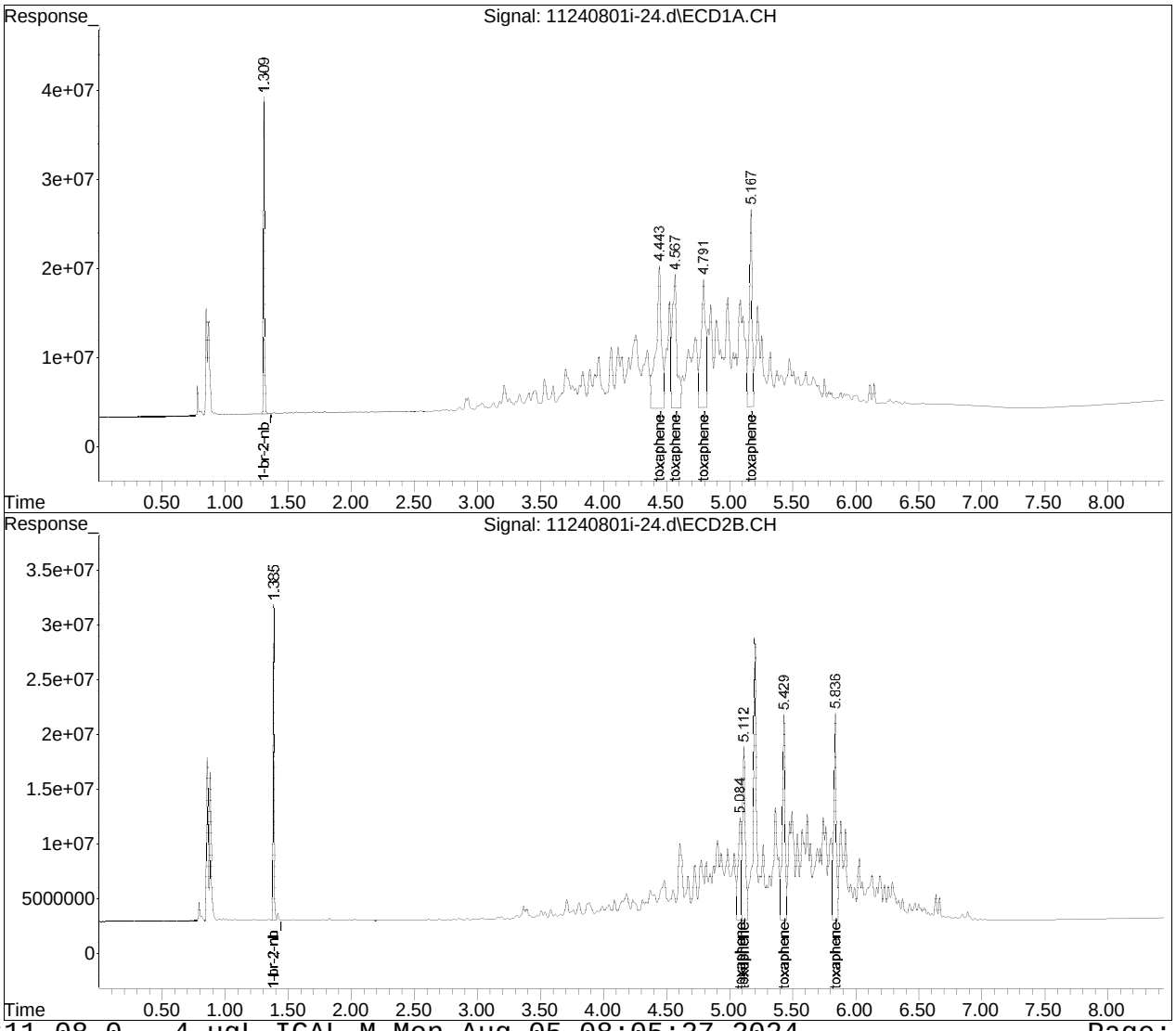
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:47
Operator : PEST11:ejl
Sample : il7tox,42e,,pp 11701 L1.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:23:05 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:22:58 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

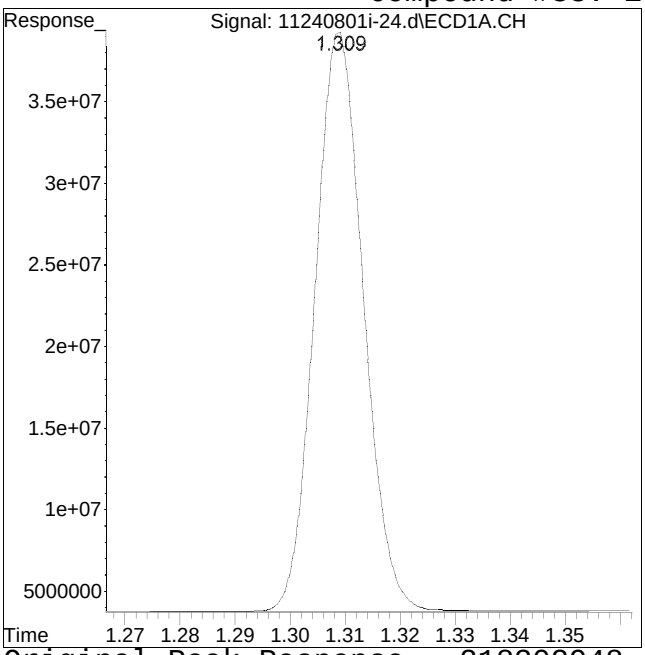
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

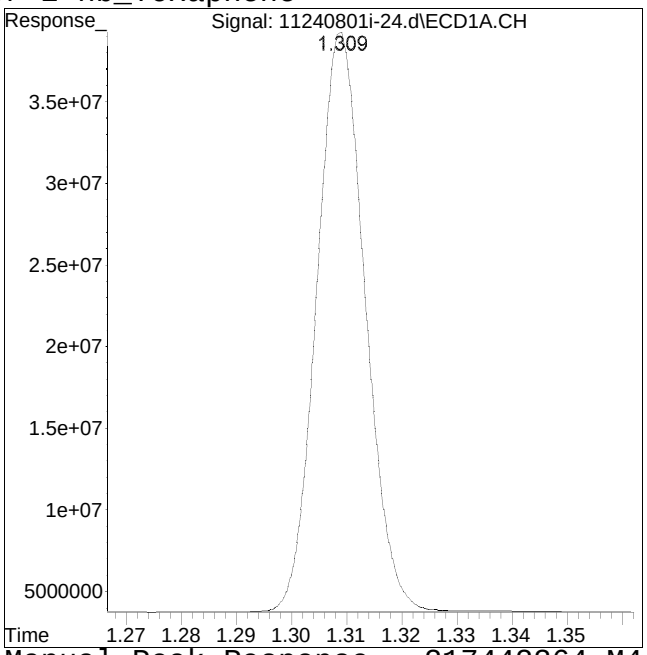


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-24.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:47 Instrument : Pest 11
Sample : il7tox,42e,,pp 11701 L1.0 Quant Date : 8/2/2024 12:23 pm

Compound #33: 1-br-2-nb_Toxaphene



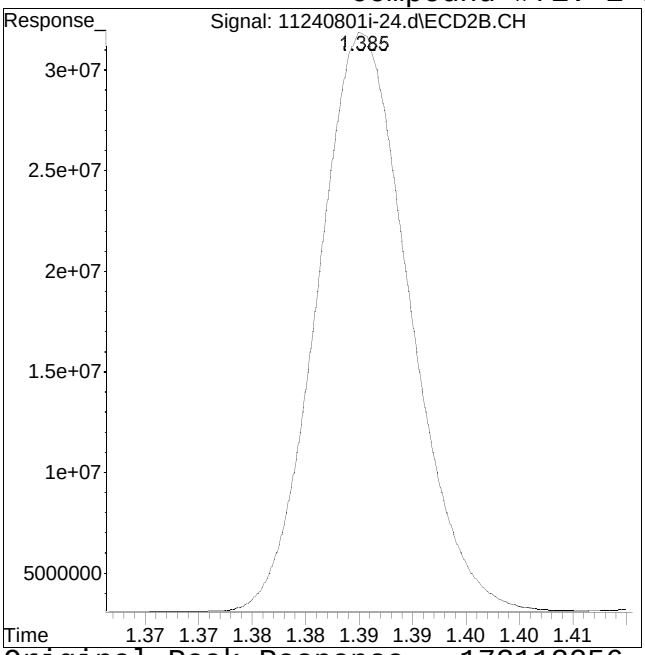




Original Peak Response = 218302948 Manual Peak Response = 217442364 M4
M4 = Poor automated baseline construction.

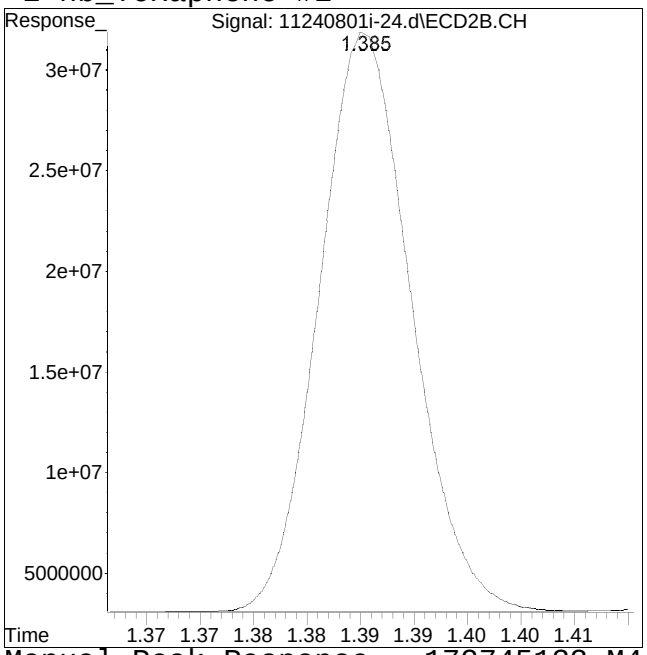
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-24.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:47 Instrument : Pest 11
Sample : il7tox,42e,,pp 11701 L1.0 Quant Date : 8/2/2024 12:23 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 173112256




Manual Peak Response = 172745133 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:59
Operator : PEST11:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:20:35 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:20:26 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.385 | 226.5E6 | 177.8E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 22:59
Operator : PEST11:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:20:35 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:20:26 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.443 | 5.084 | 1003.1E6 | 329.8E6 | NoCal | NoCal |
| 35) l2 | toxaphene-3 | 4.567 | 5.112 | 782.8E6 | 491.2E6 | NoCal M3 | NoCal |
| 36) l2 | toxaphene-4 | 4.792 | 5.429 | 774.4E6 | 585.9E6 | NoCal | NoCal |
| 37) l2 | toxaphene-5 | 5.168 | 5.836 | 711.9E6 | 540.3E6 | NoCal | NoCal |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

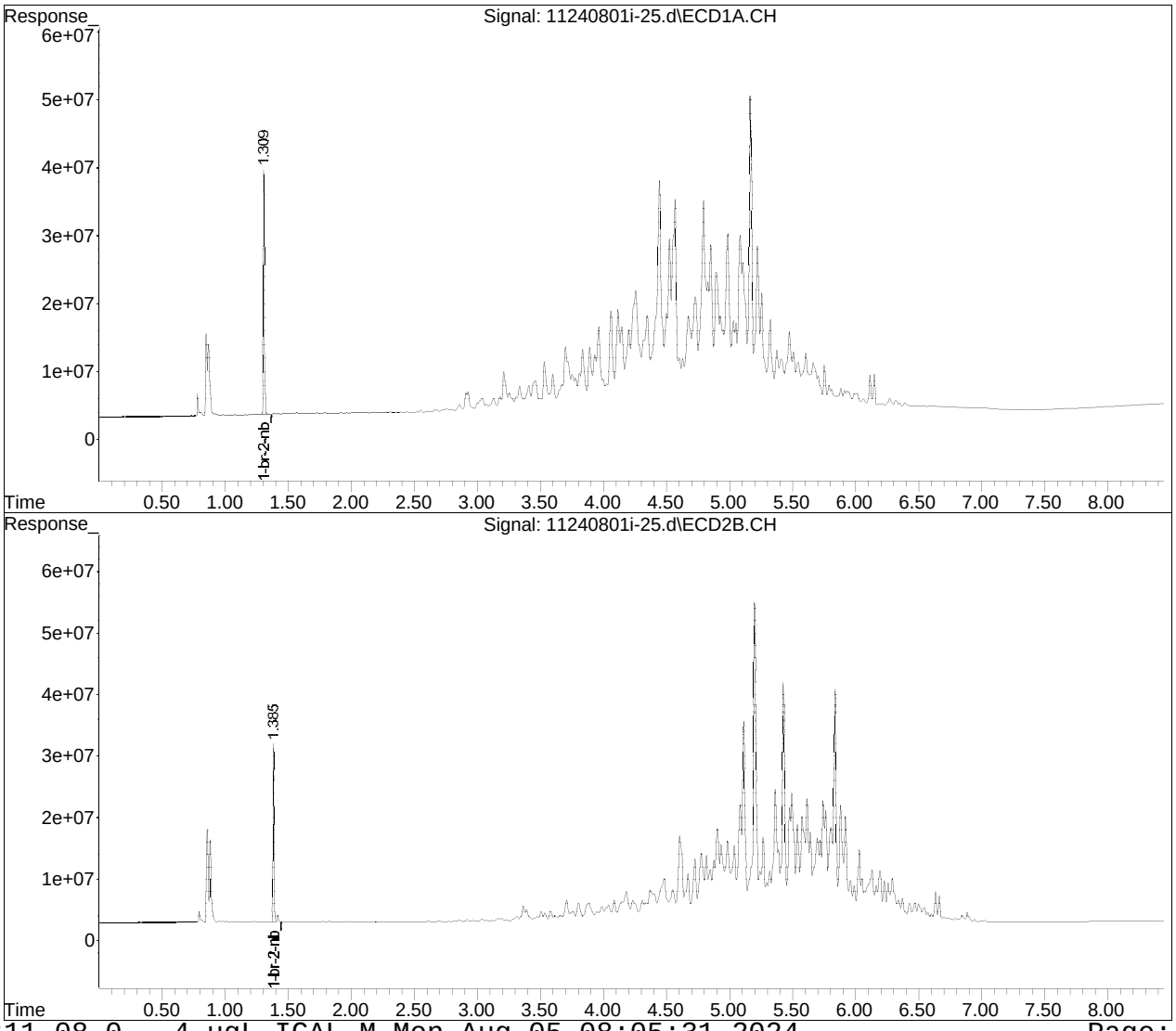
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-25.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  22:59
Operator : PEST11:ejl
Sample : il8tox,42e,,pp 11700 L2.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:20:35 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:20:26 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

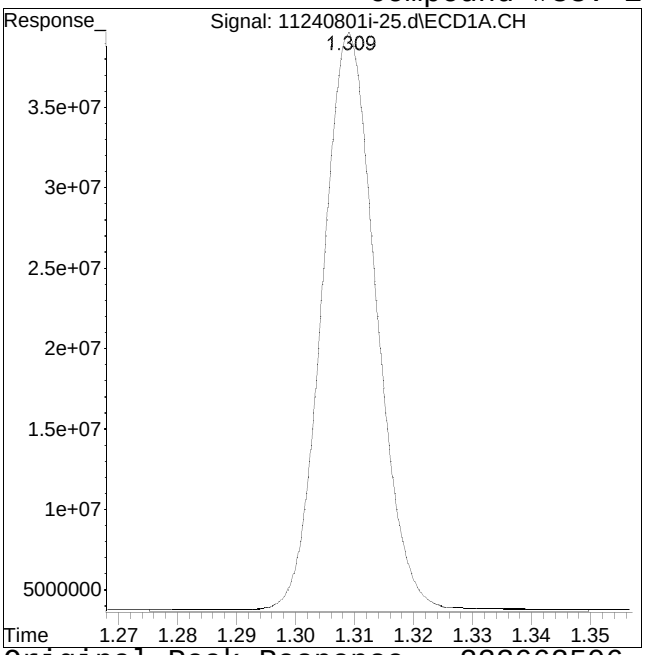
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

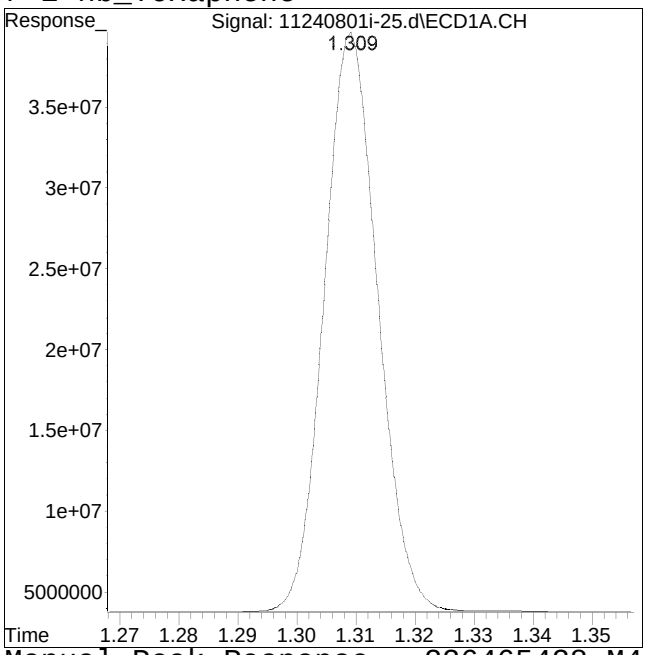


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-25.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:59 Instrument : Pest 11
Sample : il8tox,42e,,pp 11700 L2.0 Quant Date : 8/2/2024 12:20 pm

Compound #33: 1-br-2-nb_Toxaphene



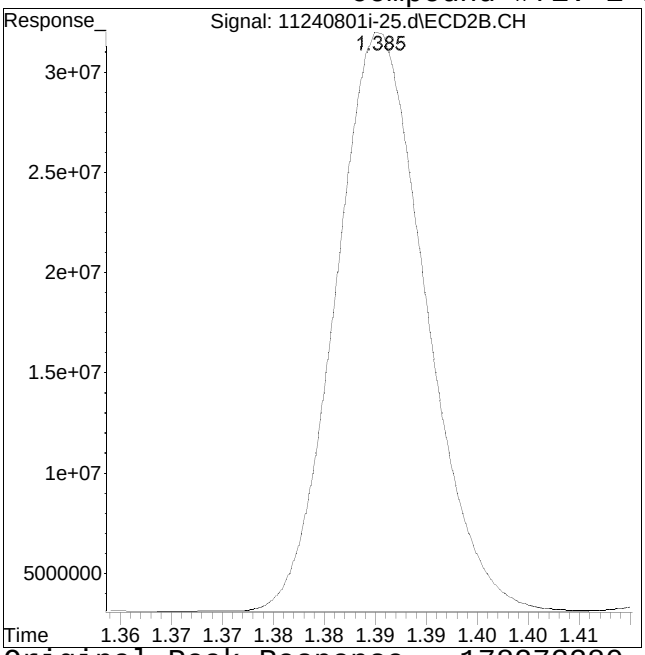



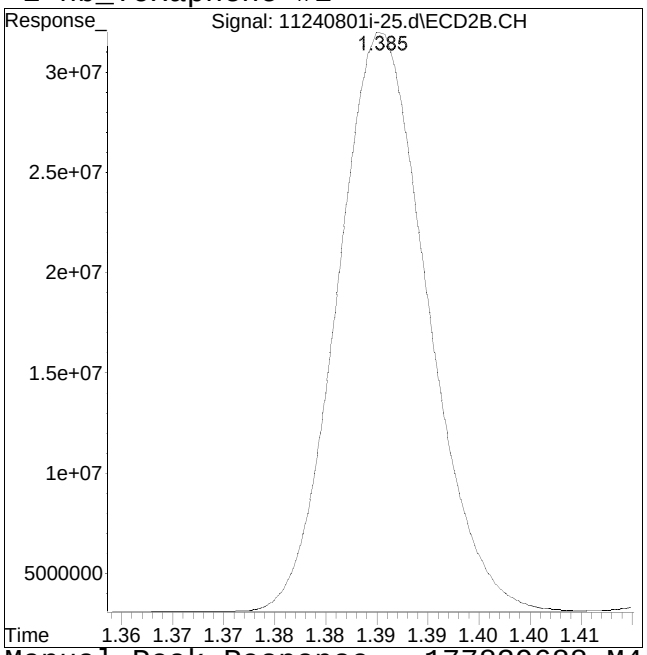

Original Peak Response = 233662506 Manual Peak Response = 226465428 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-25.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:59 Instrument : Pest 11
Sample : il8tox,42e,,pp 11700 L2.0 Quant Date : 8/2/2024 12:20 pm

Compound #71: 1-br-2-nb_Toxaphene #2



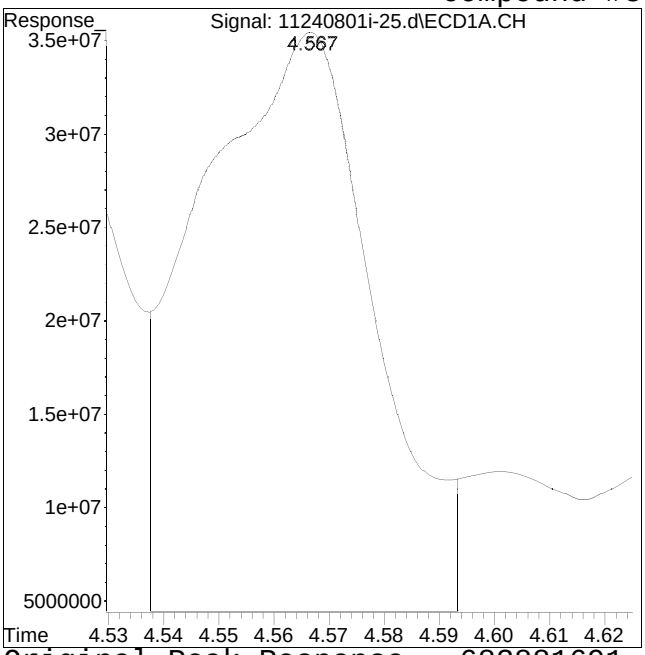



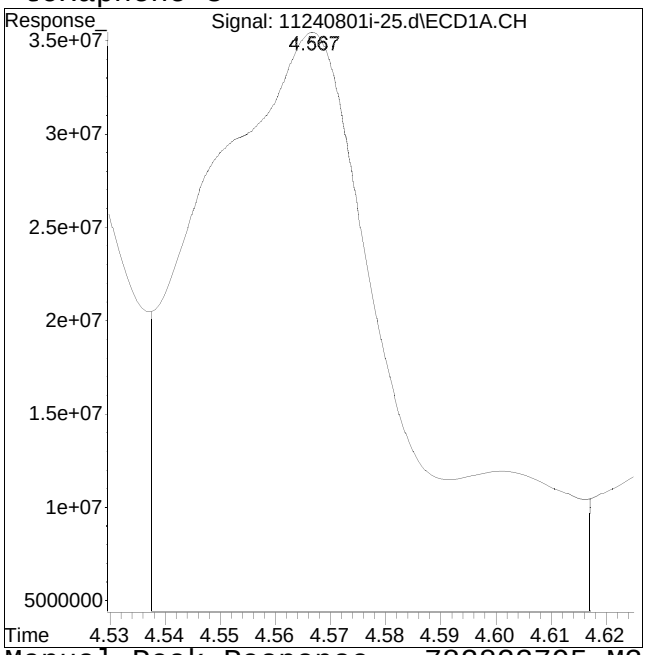

Original Peak Response = 178272380 Manual Peak Response = 177839688 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-25.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 22:59 Instrument : Pest 11
Sample : il8tox,42e,,pp 11700 L2.0 Quant Date : 8/2/2024 12:20 pm

Compound #35: toxaphene-3




Original Peak Response = 683881691 Manual Peak Response = 782823795 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-26.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 23:11
Operator : PEST11:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:22:02 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:21:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.386 | 224.3E6 | 174.1E6 | 25.000M3 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-26.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 23:11
Operator : PEST11:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:22:02 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:21:54 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.442 | 5.084 | 2515.7E6 | 823.1E6 | 5063.269 | 5099.870 |
| 35) l2 | toxaphene-3 | 4.566 | 5.113 | 1976.6E6 | 1216.3E6 | 5097.738 | 5059.169 |
| 36) l2 | toxaphene-4 | 4.791 | 5.430 | 2005.0E6 | 1467.5E6 | 5227.075M3 | 5116.982 |
| 37) l2 | toxaphene-5 | 5.167 | 5.836 | 1793.0E6 | 1350.3E6 | 5084.921 | 5105.955 |
| Sum | toxaphene-2 | | | 8290.1E6 | 4857.3E6 | 20473.004 | 20381.976 |
| Average | toxaphene-2 | | | | | 5118.251 | 5095.494 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 8290.1E6 | 4857.3E6 | 20473.004 | 20381.976 |
| Average | toxaphene-2 | | | | | 5118.251 | 5095.494 |

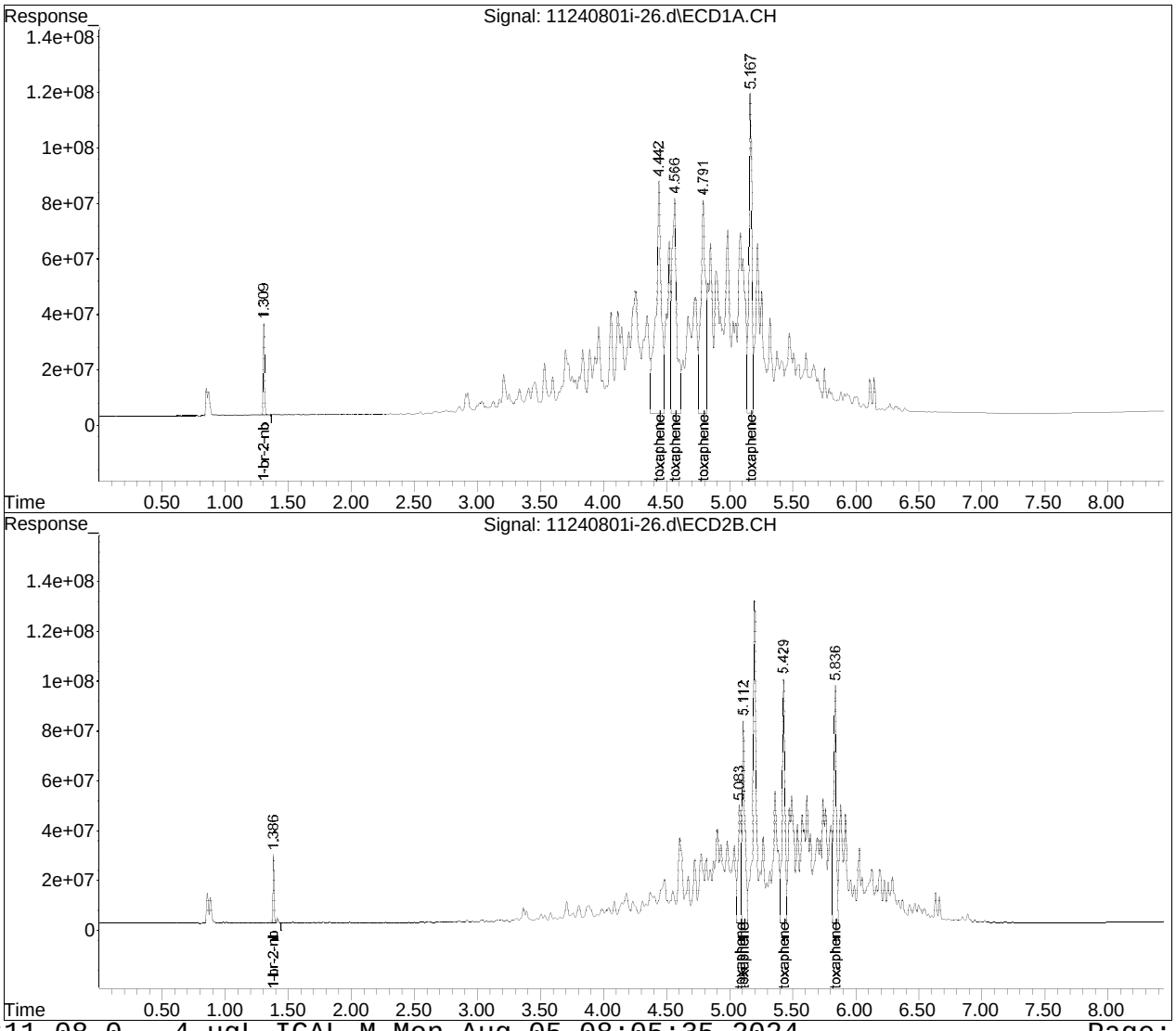
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-26.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 01 Aug 2024  23:11
Operator : PEST11:ejl
Sample : il9tox,42e,,pp 11695 L5.0
Misc : WG1955254,ical (Sig #1); ,,ical (Sig #2)
ALS Vial : 26 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:22:02 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:21:54 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

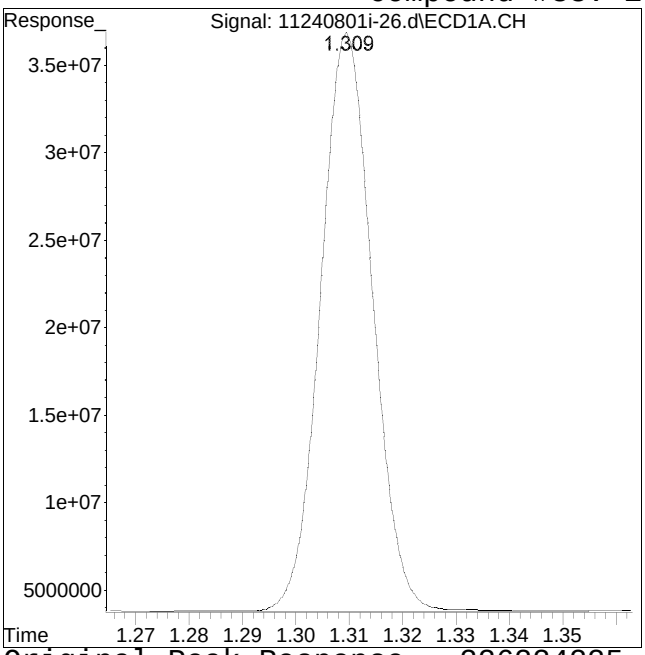
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

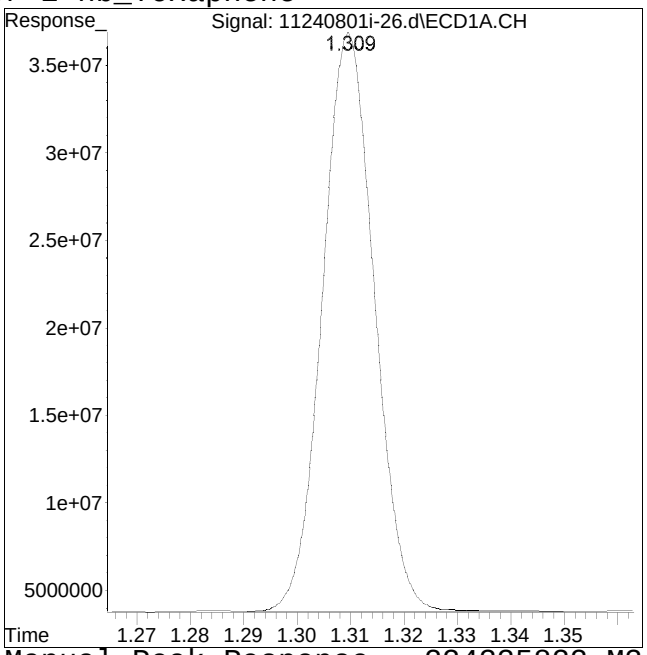


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-26.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 23:11 Instrument : Pest 11
Sample : il9tox,42e,,pp 11695 L5.0 Quant Date : 8/2/2024 12:22 pm

Compound #33: 1-br-2-nb_Toxaphene



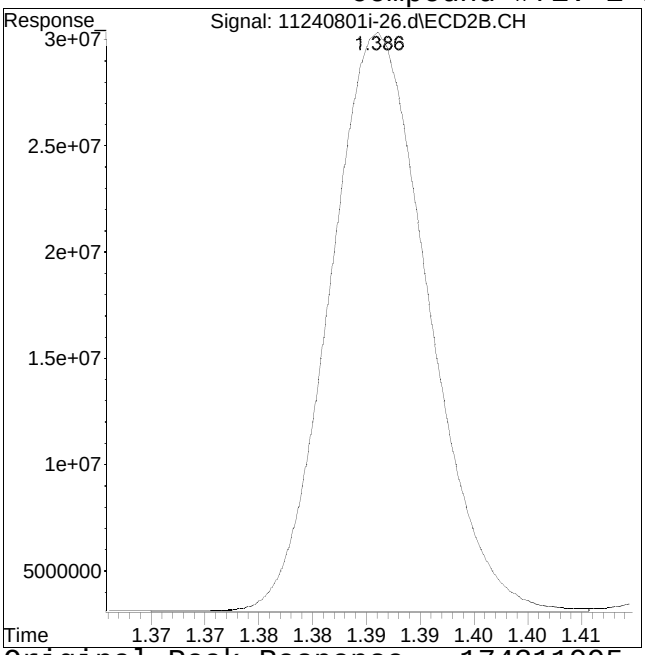




Original Peak Response = 226224225 Manual Peak Response = 224335822 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

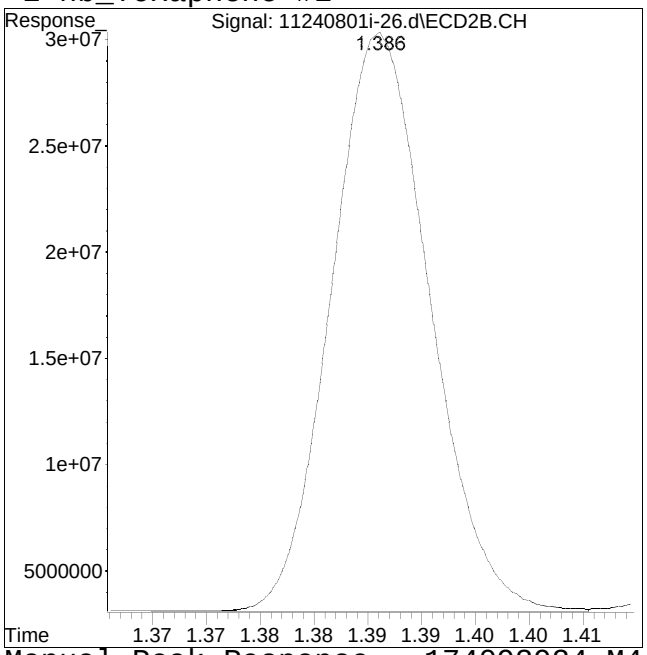
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-26.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 23:11 Instrument : Pest 11
Sample : il9tox,42e,,pp 11695 L5.0 Quant Date : 8/2/2024 12:22 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 174311995



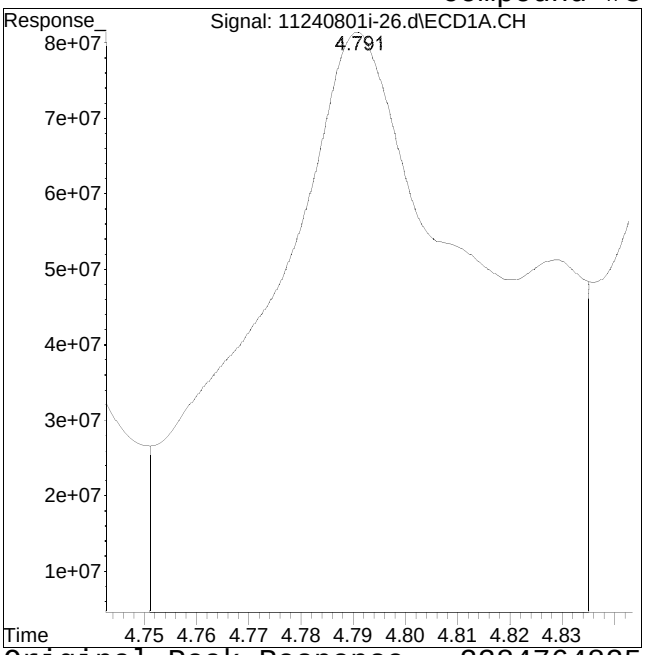

Manual Peak Response = 174093924 M4

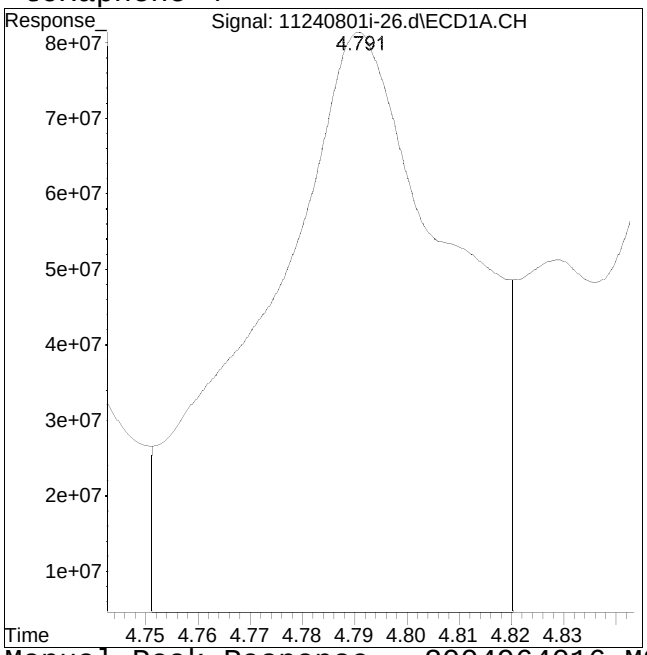
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-26.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 23:11 Instrument : Pest 11
Sample : il9tox,42e,,pp 11695 L5.0 Quant Date : 8/2/2024 12:22 pm

Compound #36: toxaphene-4




Original Peak Response = 2384764825 Manual Peak Response = 2004964016 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  23:23
Operator  : PEST11:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1955254,ical
ALS Vial  : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 34 | l2 | toxaphene-2 | | *2000.000 | 1966.030 | 1.7 | 97 | 0.00 |
| 35 | l2 | toxaphene-3 | | *2000.000 | 1837.511 | 8.1 | 91 | 0.00 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 1758.818 | 12.1 | 89 | 0.00 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 1870.162 | 6.5 | 93 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 34 | l2 | toxaphene-2 | | *2000.000 | 1898.603 | 5.1 | 96 | 0.00 |
| 35 | l2 | toxaphene-3 | | *2000.000 | 1889.204 | 5.5 | 95 | 0.00 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 1769.287 | 11.5 | 90 | 0.00 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 1896.013 | 5.2 | 96 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 0.000 | 100.0# | 0# | -1.65# |
| 3 | t | Hexachlorobenzene | | 1.406 | 0.000 | 100.0# | 0# | -1.87# |
| 4 | t | alpha-BHC | | 1.461 | 0.000 | 100.0# | 0# | -1.96# |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 0.000 | 100.0# | 0# | -2.17# |
| 6 | t | beta-BHC | | 0.628 | 0.000 | 100.0# | 0# | -2.22# |
| 7 | t | delta-BHC | | 1.374 | 0.000 | 100.0# | 0# | -2.35# |
| 8 | t | Heptachlor | | 1.321 | 0.000 | 100.0# | 0# | -2.51# |
| 9 | t | Aldrin | | 1.233 | 0.000 | 100.0# | 0# | -2.76# |
| 10 | t | Alachlor | | 0.230 | 0.000 | 100.0# | 0# | -2.88# |
| 11 | t | Chlorpyrifos | | 0.590 | 0.000 | 100.0# | 0# | -2.97# |
| 12 | t | Heptachlor Epoxide | | 1.185 | 0.000 | 100.0# | 0# | -3.30# |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 0.000 | 100.0# | 0# | -3.42# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  23:23
Operator  : PEST11:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1955254,ical
ALS Vial  : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 0.000 | 100.0# | 0# | -3.56# |
| 15 | t | 4,4'-DDE | | 1.192 | 0.000 | 100.0# | 0# | -3.66# |
| 16 | t | Endosulfan I | | 1.116 | 0.000 | 100.0# | 0# | -3.69# |
| 17 | t | Dieldrin | | 1.135 | 0.000 | 100.0# | 0# | -3.96# |
| 18 | t | Endrin | | 1.153 | 0.000 | 100.0# | 0# | -4.21# |
| 19 | t | 4,4'-DDD | | 0.927 | 0.000 | 100.0# | 0# | -4.32# |
| 20 | t | Endosulfan II | | 1.052 | 0.000 | 100.0# | 0# | -4.45# |
| 21 | t | 4,4'-DDT | | 1.058 | 0.000 | 100.0# | 0# | -4.62# |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.000 | 100.0# | 0# | -4.87# |
| 23 | t | Methoxychlor | | 0.592 | 0.000 | 100.0# | 0# | -5.10# |
| 24 | t | Mirex | | 0.938 | 0.000 | 100.0# | 0# | -5.16# |
| 25 | t | Endosulfan Sulfate | | 1.010 | 0.000 | 100.0# | 0# | -5.26# |
| 26 | t | Endrin Ketone | | 1.183 | 0.000 | 100.0# | 0# | -5.49# |
| 27 | s | Decachlorobiphenyl | | 1.163 | 0.000 | 100.0# | 0# | -6.29# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.31# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -2.45# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -2.87# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -3.42# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -3.55# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 0.000 | 100.0# | 0# | -1.86# |
| 3 | t | Hexachlorobenzene | | 1.239 | 0.000 | 100.0# | 0# | -2.18# |
| 4 | t | alpha-BHC | | 1.620 | 0.000 | 100.0# | 0# | -2.27# |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 0.000 | 100.0# | 0# | -2.56# |
| 6 | t | beta-BHC | | * 50.000 | 0.000 | 100.0# | 0 | -2.62# |
| 7 | t | delta-BHC | | 1.523 | 0.000 | 100.0# | 0# | -2.89# |

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 01 Aug 2024  23:23
Operator  : PEST11:ejl
Sample    : cicvtox,42e,,pp 11668 L2.0ICV
Misc      : WG1955254,ical
ALS Vial  : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title  : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | t | Heptachlor | | 1.598 | 0.000 | 100.0# | 0# | -2.95# |
| 9 | t | Aldrin | | 1.435 | 0.000 | 100.0# | 0# | -3.27# |
| 10 | t | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.15# |
| 11 | t | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.51# |
| 12 | t | Heptachlor Epoxide | | 1.425 | 0.000 | 100.0# | 0# | -3.88# |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 0.000 | 100.0# | 0# | -4.10# |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 0.000 | 100.0# | 0# | -4.27# |
| 15 | t | 4,4'-DDE | | 1.343 | 0.000 | 100.0# | 0# | -4.47# |
| 16 | t | Endosulfan I | | 1.332 | 0.000 | 100.0# | 0# | -4.34# |
| 17 | t | Dieldrin | | 1.327 | 0.000 | 100.0# | 0# | -4.63# |
| 18 | t | Endrin | | 1.347 | 0.000 | 100.0# | 0# | -4.93# |
| 19 | t | 4,4'-DDD | | 1.084 | 0.000 | 100.0# | 0# | -5.05# |
| 20 | t | Endosulfan II | | 1.214 | 0.000 | 100.0# | 0# | -5.13# |
| 21 | t | 4,4'-DDT | | 1.250 | 0.000 | 100.0# | 0# | -5.33# |
| 22 | t | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.42# |
| 23 | t | Methoxychlor | | 0.704 | 0.000 | 100.0# | 0# | -5.89# |
| 24 | t | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.02# |
| 25 | t | Endosulfan Sulfate | | 1.199 | 0.000 | 100.0# | 0# | -5.65# |
| 26 | t | Endrin Ketone | | 1.261 | 0.000 | 100.0# | 0# | -6.06# |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.000 | 100.0# | 0# | -6.92# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.39# |
| 29 | l1 | chlordane-1 | * | 1000.000 | 0.000 | 100.0# | 0 | -2.82# |
| 30 | l1 | chlordane-3 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.42# |
| 31 | l1 | chlordane-4 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.10# |
| 32 | l1 | chlordane-5 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.28# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 23:23
Operator : PEST11:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1955254,ical
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.309 | 1.386 | 223.1E6 | 177.4E6 | 25.000M4 | 25.000M4 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 23:23
Operator : PEST11:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1955254,ical
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.443 | 5.084 | 975.4E6 | 317.3E6 | 1966.030 | 1898.603 |
| 35) l2 | toxaphene-3 | 4.567 | 5.112 | 712.2E6 | 467.1E6 | 1837.511 | 1889.204 |
| 36) l2 | toxaphene-4 | 4.792 | 5.430 | 686.8E6 | 525.1E6 | 1758.818M3 | 1769.287 |
| 37) l2 | toxaphene-5 | 5.168 | 5.836 | 662.9E6 | 518.4E6 | 1870.162 | 1896.013 |
| Sum | toxaphene-2 | | | 3037.3E6 | 1827.9E6 | 7432.520 | 7453.107 |
| Average | toxaphene-2 | | | | | 1858.130 | 1863.277 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 3037.3E6 | 1827.9E6 | 7432.520 | 7453.107 |
| Average | toxaphene-2 | | | | | 1858.130 | 1863.277 |

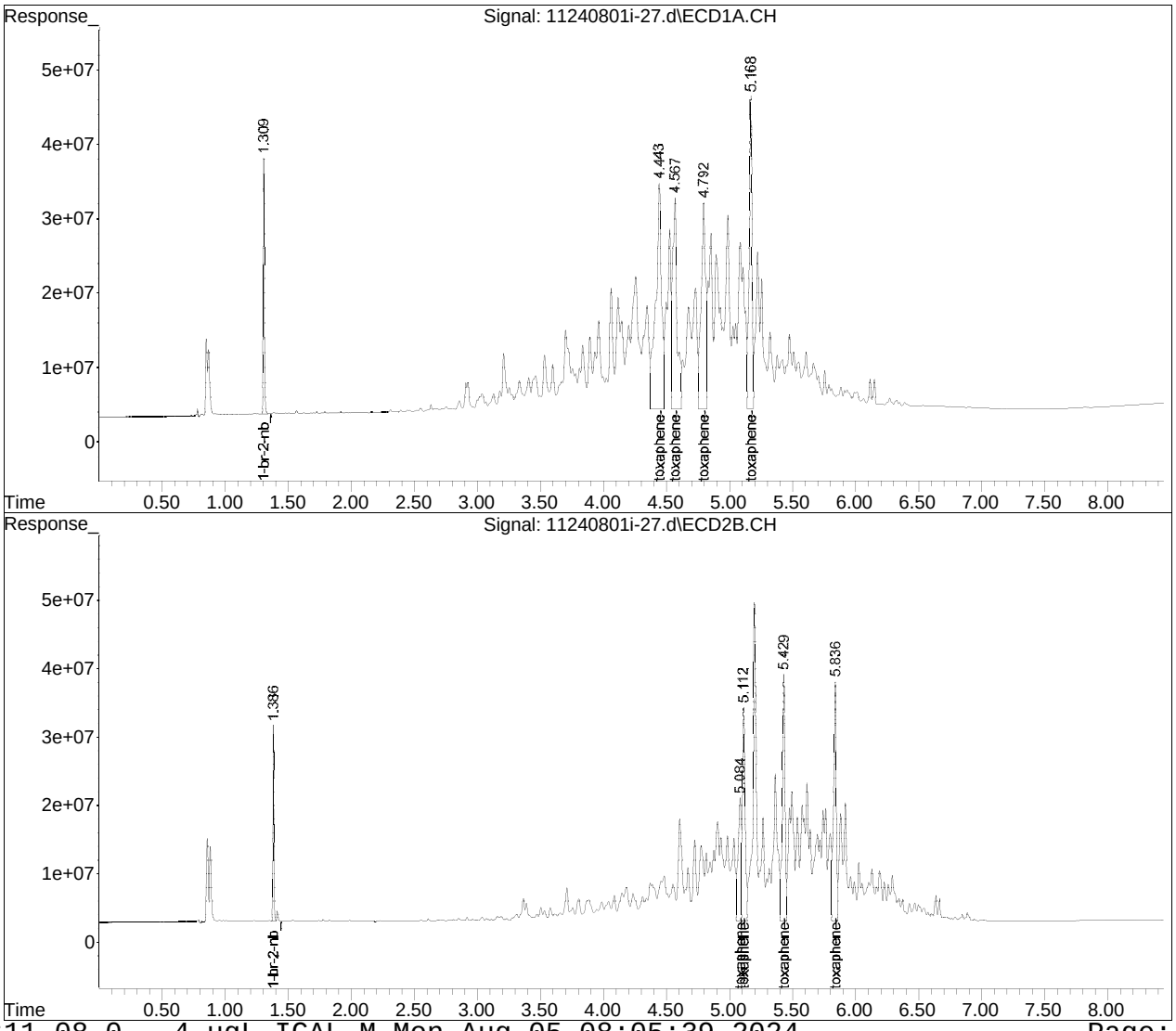
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240801ical\
Data File : 11240801i-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Aug 2024 23:23
Operator : PEST11:ejl
Sample : cicvtox,42e,,pp 11668 L2.0ICV
Misc : WG1955254,ical
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 02 12:29:24 2024
Quant Method : I:\PEST\Pest11\2024\240801ical\pest11_08_01_24_ugL_ICAL.M
Quant Title : pest
QLast Update : Fri Aug 02 12:29:24 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

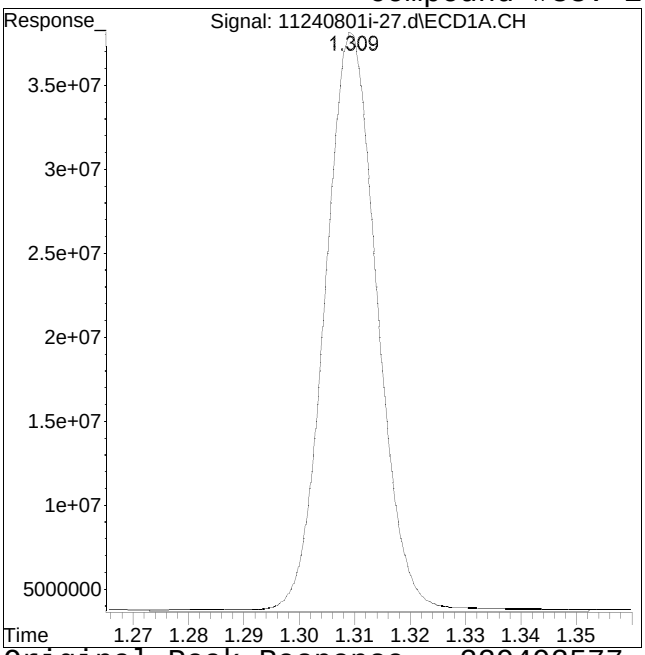
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

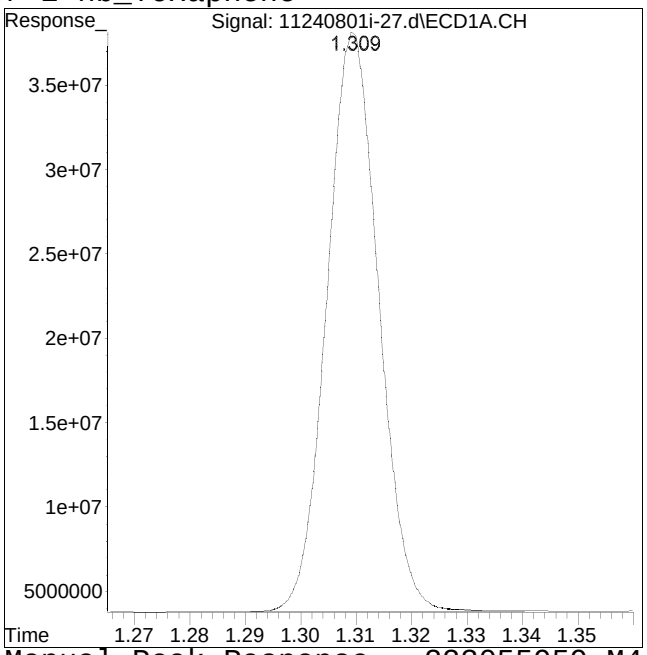


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801Q Method : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-27.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 23:23 Instrument : Pest 11
Sample : cicvtox,42e,,pp 11668 L2.0 Quant Date : 8/2/2024 12:29 pm

Compound #33: 1-br-2-nb_Toxaphene



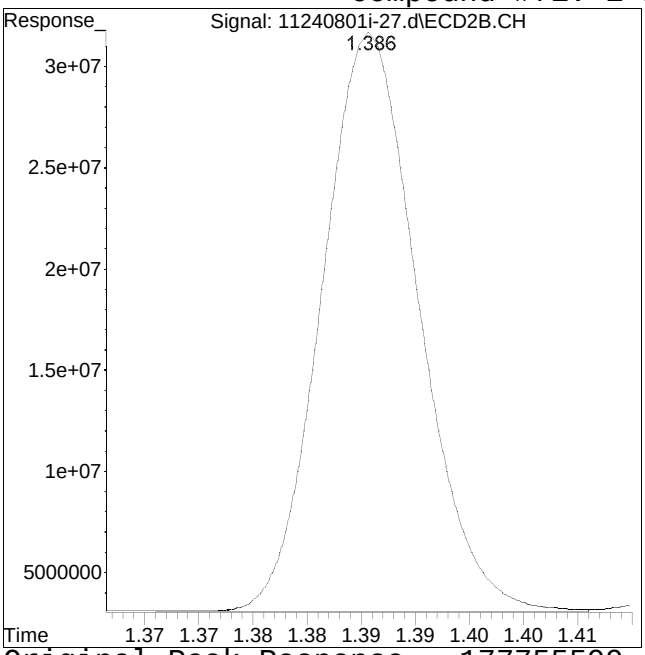

Original Peak Response = 229492577 Manual Peak Response = 223055959 M4
M4 = Poor automated baseline construction.

Manual Integration Report

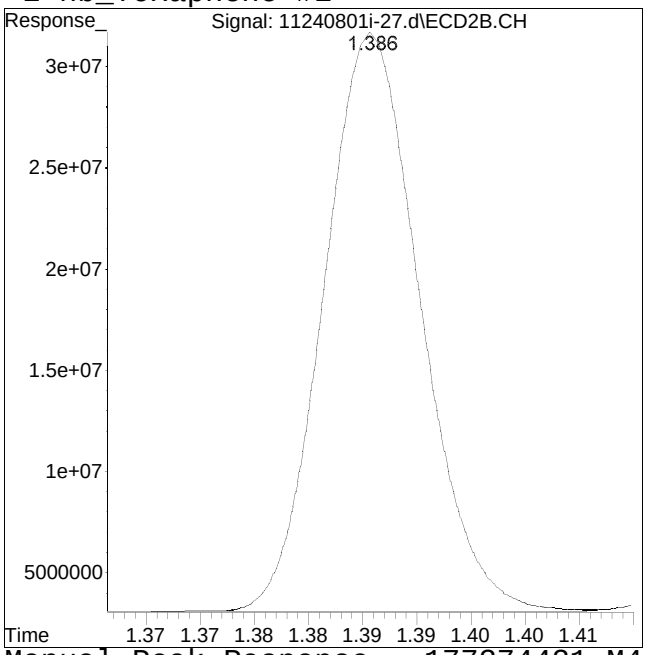
Data Path : I:\PEST\Pest11\2024\240801Q
Data File : 11240801i-27.d
Date Inj'd : 8/1/2024 23:23
Sample : cicvtox,42e,,pp 11668 L2.0

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 8/2/2024 12:29 pm

Compound #71: 1-br-2-nb_Toxaphene #2




Original Peak Response = 177755599



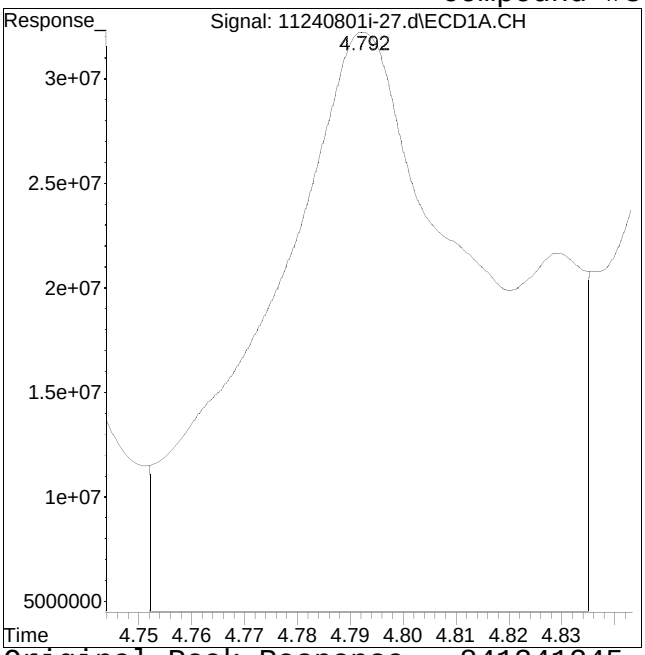

Manual Peak Response = 177374421 M4

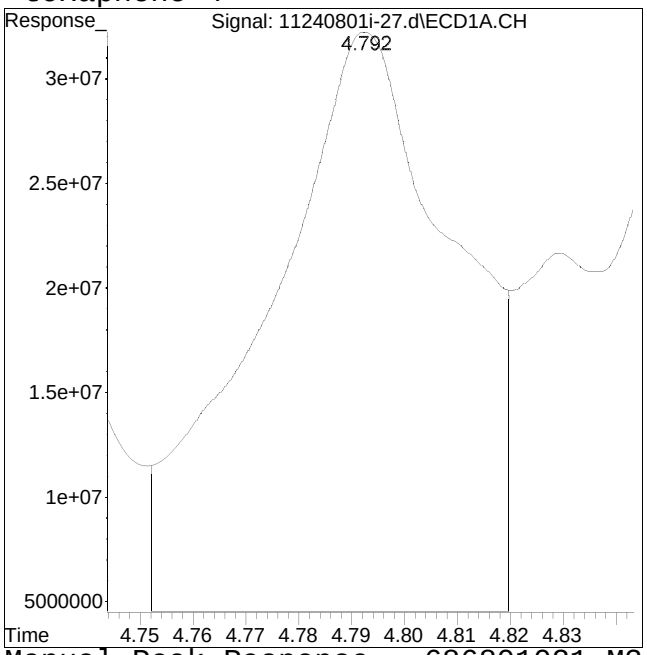
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240801QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240801i-27.d Operator : PEST11:ejl
Date Inj'd : 8/1/2024 23:23 Instrument : Pest 11
Sample : cicvtox,42e,,pp 11668 L2.0Quant Date : 8/2/2024 12:29 pm

Compound #36: toxaphene-4




Original Peak Response = 841341245 Manual Peak Response = 686801021 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Evaluate Relative Error Report Pest 11

Method Path : I:\PEST\Pest11\2024\240801ical\
Method File : pest11_08_01_24_ugL_ICAL.M
Title : pest
Last Update : Fri Aug 02 12:29:15 2024

| | COMPOUND | CalFit | Units | TrueMid | MidConc | %RE | TrueLow | LowConc | %RE |
|---|---|---|---|---|---|---|---|---|---|
| 29 | L1 chlordane-1 | L | ug/l | 1000.0 | 1038.450 | 3.8 | 10.00 | 9.627 | -3.7 |
| 30 | L1 chlordane-3 | L | ug/l | 1000.0 | 1075.547 | 7.6 | 10.00 | 7.099 | -29.0 |
| 31 | L1 chlordane-4 | L | ug/l | 1000.0 | 1057.641 | 5.8 | 10.00 | 9.470 | -5.3 |
| 32 | L1 chlordane-5 | L | ug/l | 1000.0 | 1065.479 | 6.5 | 10.00 | 9.042 | -9.6 |
| 34 | L2 toxaphene-2 | L | ug/l | 2000.0 | 1991.278 | -0.4 | 20.00 | 22.016 | 10.1 |
| 35 | L2 toxaphene-3 | L | ug/l | 2000.0 | 1988.580 | -0.6 | 20.00 | 22.909 | 14.5 |
| 36 | L2 toxaphene-4 | L | ug/l | 2000.0 | 1952.950 | -2.4 | 20.00 | 22.256 | 11.3 |
| 37 | L2 toxaphene-5 | L | ug/l | 2000.0 | 1978.581 | -1.1 | 20.00 | 20.714 | 3.6 |
| 44 | T beta-BHC #2 | L | ug/l | 50.0 | 50.907 | 1.8 | 1.00 | 0.790 | -21.0 |
| 48 | T Alachlor #2 | L | ug/l | 50.0 | 53.910 | 7.8 | 2.00 | 1.484 | -25.8 |
| 49 | T Chlorpyrifos #2 | L | ug/l | 50.0 | 52.668 | 5.3 | 2.00 | 1.609 | -19.6 |
| 60 | T Endrin Aldehyde #2 | L | ug/l | 50.0 | 50.418 | 0.8 | 1.00 | 0.856 | -14.4 |
| 62 | T Mirex #2 | L | ug/l | 50.0 | 50.877 | 1.8 | 2.00 | 1.727 | -13.6 |
| 67 | L1 chlordane-1 #2 | L | ug/l | 1000.0 | 1065.397 | 6.5 | 10.00 | 7.110 | -28.9 |
| 68 | L1 chlordane-3 #2 | L | ug/l | 1000.0 | 1115.565 | 11.6 | 10.00 | 5.208 | -47.9 |
| 69 | L1 chlordane-4 #2 | L | ug/l | 1000.0 | 1071.147 | 7.1 | 10.00 | 8.535 | -14.6 |
| 70 | L1 chlordane-5 #2 | L | ug/l | 1000.0 | 1069.213 | 6.9 | 10.00 | 8.307 | -16.9 |
| 72 | L2 toxaphene-2 #2 | L | ug/l | 2000.0 | 1968.160 | -1.6 | 20.00 | 17.722 | -11.4 |
| 73 | L2 toxaphene-3 #2 | L | ug/l | 2000.0 | 1981.747 | -0.9 | 20.00 | 18.240 | -8.8 |
| 74 | L2 toxaphene-4 #2 | L | ug/l | 2000.0 | 1969.518 | -1.5 | 20.00 | 19.050 | -4.7 |
| 75 | L2 toxaphene-5 #2 | L | ug/l | 2000.0 | 1971.269 | -1.4 | 20.00 | 18.840 | -5.8 |

## Calibration Correlation Report

| | COMPOUND | CalFit | CoefOfDet | QuadTerm | LinTerm | Constant |
|---|---|---|---|---|---|---|
| 29 | L1 chlordane-1 | Linear | 0.999348 | 0.000000 | 0.0363716 | 0.00108757 |
| 30 | L1 chlordane-3 | Linear | 0.997393 | 0.000000 | 0.0421132 | 0.0078182 |
| 31 | L1 chlordane-4 | Linear | 0.998643 | 0.000000 | 0.155448 | 0.0068286 |
| 32 | L1 chlordane-5 | Linear | 0.998228 | 0.000000 | 0.238606 | 0.0109807 |
| 34 | L2 toxaphene-2 | Linear | 0.999824 | 0.000000 | 0.055848 | -0.0188813 |
| 35 | L2 toxaphene-3 | Linear | 0.999518 | 0.000000 | 0.0436385 | -0.01444 |
| 36 | L2 toxaphene-4 | Linear | 0.999238 | 0.000000 | 0.0438591 | -0.00655081 |
| 37 | L2 toxaphene-5 | Linear | 0.999880 | 0.000000 | 0.0395938 | 0.00995327 |
| 44 | T beta-BHC #2 | Linear | 0.999559 | 0.000000 | 0.62395 | 0.0144288 |
| 48 | T Alachlor #2 | Linear | 0.996730 | 0.000000 | 0.176781 | 0.0129204 |
| 49 | T Chlorpyrifos #2 | Linear | 0.998303 | 0.000000 | 0.678141 | 0.0439823 |
| 60 | T Endrin Aldehyde #2 | Linear | 0.999312 | 0.000000 | 0.92637 | 0.0145142 |
| 62 | T Mirex #2 | Linear | 0.999318 | 0.000000 | 0.884014 | 0.0427365 |
| 67 | L1 chlordane-1 #2 | Linear | 0.996325 | 0.000000 | 0.0369026 | 0.0110712 |
| 68 | L1 chlordane-3 #2 | Linear | 0.991238 | 0.000000 | 0.0403855 | 0.0197671 |
| 69 | L1 chlordane-4 #2 | Linear | 0.995940 | 0.000000 | 0.155283 | 0.0303717 |
| 70 | L1 chlordane-5 #2 | Linear | 0.996066 | 0.000000 | 0.119242 | 0.0251686 |
| 72 | L2 toxaphene-2 #2 | Linear | 0.999654 | 0.000000 | 0.0234841 | 0.00538869 |
| 73 | L2 toxaphene-3 #2 | Linear | 0.999781 | 0.000000 | 0.0347383 | 0.00824347 |
| 74 | L2 toxaphene-4 #2 | Linear | 0.999739 | 0.000000 | 0.0417228 | 0.00770414 |
| 75 | L2 toxaphene-5 #2 | Linear | 0.999723 | 0.000000 | 0.0383851 | 0.0113923 |

# Continuing Calibration

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:35 | | |
| **Lab File ID** | : 11240922a-03 | **Init. Calib. Date(s)** | : 08/01/24 | 08/01/24 | |
| **Sample No** | : WG1974788-1 | **Init. Calib. Times** | : 18:37 | 23:11 | |
| **Channel** | : A | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Pesticides | 1 | 1 | - | 0 | 20 | 122 | 0 |
| 2,4,5,6-Tetrachloro-m-xylen | 1.039 | 1.089 | - | -4.8 | 20 | 124 | 0 |
| Hexachlorobenzene | 1.406 | 1.23 | - | 12.5 | 20 | 109 | 0 |
| alpha-BHC | 1.461 | 1.75 | - | -19.8 | 20 | 131 | 0 |
| gamma-BHC (lindane) | 1.395 | 1.567 | - | -12.3 | 20 | 128 | 0 |
| beta-BHC | 0.628 | 0.665 | - | -5.9 | 20 | 130 | 0 |
| delta-BHC | 1.374 | 1.529 | - | -11.3 | 20 | 123 | 0 |
| Heptachlor | 1.321 | 1.529 | - | -15.7 | 20 | 134 | 0 |
| Aldrin | 1.233 | 1.424 | - | -15.5 | 20 | 131 | 0 |
| Alachlor | 0.23 | 0.206 | - | 10.4 | 20 | 108 | 0 |
| Chlorpyrifos | 0.59 | 0.681 | - | -15.4 | 20 | 150 | 0 |
| Heptachlor Epoxide | 1.185 | 1.271 | - | -7.3 | 20 | 125 | 0 |
| gamma-Chlordane (trans) | 1.077 | 1.366 | - | -26.8* | 20 | 150 | 0 |
| alpha-Chlordane (cis) | 1.216 | 1.343 | - | -10.4 | 20 | 130 | 0 |
| 4,4'-DDE | 1.192 | 1.333 | - | -11.8 | 20 | 129 | 0 |
| Endosulfan I | 1.116 | 1.231 | - | -10.3 | 20 | 129 | 0 |
| Dieldrin | 1.135 | 1.399 | - | -23.3* | 20 | 141 | 0 |
| Endrin | 1.153 | 1.323 | - | -14.7 | 20 | 132 | 0 |
| 4,4'-DDD | 0.927 | 1.116 | - | -20.4* | 20 | 139 | 0 |
| Endosulfan II | 1.052 | 1.211 | - | -15.1 | 20 | 134 | 0 |
| 4,4'-DDT | 1.058 | 1.108 | - | -4.7 | 20 | 121 | 0 |
| Endrin Aldehyde | 0.886 | 0.892 | - | -0.7 | 20 | 121 | 0 |
| Methoxychlor | 0.592 | 0.669 | - | -13 | 20 | 140 | 0 |
| Mirex | 0.938 | 1.029 | - | -9.7 | 20 | 139 | 0 |
| Endosulfan Sulfate | 1.01 | 1.183 | - | -17.1 | 20 | 142 | 0 |
| Endrin Ketone | 1.183 | 1.328 | - | -12.3 | 20 | 132 | 0 |
| Decachlorobiphenyl | 1.163 | 0.951 | - | 18.2 | 20 | 109 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:35 | | |
| **Lab File ID** | : 11240922a-03 | **Init. Calib. Date(s)** | : 08/01/24 | 08/01/24 | |
| **Sample No** | : WG1974788-1 | **Init. Calib. Times** | : 18:37 | 23:11 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Pesticides | 1 | 1 | - | 0 | 20 | 108 | 0 |
| 2,4,5,6-Tetrachloro-m-xyl | 1.114 | 0.958 | - | 14 | 20 | 93 | 0 |
| Hexachlorobenzene | 1.239 | 1.033 | - | 16.6 | 20 | 95 | 0 |
| alpha-BHC | 1.62 | 1.445 | - | 10.8 | 20 | 90 | 0 |
| gamma-BHC (lindane) | 1.539 | 1.295 | - | 15.9 | 20 | 90 | 0 |
| beta-BHC | 50 | 44.021 | - | 12 | 20 | 91 | 0 |
| delta-BHC | 1.523 | 1.271 | - | 16.5 | 20 | 87 | 0 |
| Heptachlor | 1.598 | 1.223 | - | 23.5* | 20 | 83 | 0 |
| Aldrin | 1.435 | 1.155 | - | 19.5 | 20 | 85 | 0 |
| Alachlor | 50 | 48.122 | - | 3.8 | 20 | 95 | 0 |
| Chlorpyrifos | 50 | 41.256 | - | 17.5 | 20 | 83 | 0 |
| Heptachlor Epoxide | 1.425 | 1.058 | - | 25.8* | 20 | 83 | 0 |
| gamma-Chlordane (trans) | 1.312 | 1.098 | - | 16.3 | 20 | 95 | 0 |
| alpha-Chlordane (cis) | 1.446 | 1.075 | - | 25.7* | 20 | 83 | 0 |
| 4,4'-DDE | 1.343 | 1.055 | - | 21.4* | 20 | 83 | 0 |
| Endosulfan I | 1.332 | 1.002 | - | 24.8* | 20 | 84 | 0 |
| Dieldrin | 1.327 | 1.13 | - | 14.8 | 20 | 91 | 0 |
| Endrin | 1.347 | 1.068 | - | 20.7* | 20 | 85 | 0 |
| 4,4'-DDD | 1.084 | 0.906 | - | 16.4 | 20 | 89 | 0 |
| Endosulfan II | 1.214 | 0.975 | - | 19.7 | 20 | 89 | 0 |
| 4,4'-DDT | 1.25 | 0.957 | - | 23.4* | 20 | 82 | 0 |
| Endrin Aldehyde | 50 | 38.75 | - | 22.5* | 20 | 81 | 0 |
| Methoxychlor | 0.704 | 0.519 | - | 26.3* | 20 | 87 | 0 |
| Mirex | 50 | 42.671 | - | 14.7 | 20 | 89 | 0 |
| Endosulfan Sulfate | 1.199 | 0.931 | - | 22.4* | 20 | 89 | 0 |
| Endrin Ketone | 1.261 | 1.084 | - | 14 | 20 | 95 | 0 |
| Decachlorobiphenyl | 1.06 | 0.804 | - | 24.2* | 20 | 91 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:47 |
| **Lab File ID** | : 11240922a-04 | **Init. Calib. Date(s)** | : 08/01/24 08/01/24 |
| **Sample No** | : WG1974788-2 | **Init. Calib. Times** | : 18:37 23:11 |
| **Channel** | : A | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Chlordane | 1 | 1 | - | 0 | 20 | 125 | 0 |
| chlordane-1 | 1000 | 1124.262 | - | -12.4 | 20 | 136 | 0 |
| chlordane-3 | 1000 | 1122.741 | - | -12.3 | 20 | 131 | 0 |
| chlordane-4 | 1000 | 1109.782 | - | -11 | 20 | 132 | 0 |
| chlordane-5 | 1000 | 1238.054 | - | -23.8* | 20 | 146 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:47 | | |
| **Lab File ID** | : 11240922a-04 | **Init. Calib. Date(s)** | : 08/01/24 | 08/01/24 | |
| **Sample No** | : WG1974788-2 | **Init. Calib. Times** | : 18:37 | 23:11 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Chlordane | 1 | 1 | - | 0 | 20 | 100 | 0 |
| chlordane-1 | 1000 | 908.079 | - | 9.2 | 20 | 85 | 0 |
| chlordane-3 | 1000 | 935.919 | - | 6.4 | 20 | 84 | 0 |
| chlordane-4 | 1000 | 837.914 | - | 16.2 | 20 | 78 | 0 |
| chlordane-5 | 1000 | 830.371 | - | 17 | 20 | 78 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 09:49 | | |
| **Lab File ID** | : 20240922a-04 | **Init. Calib. Date(s)** | : 07/22/24 | 07/22/24 | |
| **Sample No** | : WG1974790-2 | **Init. Calib. Times** | : 18:09 | 22:55 | |
| **Channel** | : A | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Chlordane | 1 | 1 | - | 0 | 20 | 118 | 0 |
| chlordane-1 | 1000 | 916.583 | - | 8.3 | 20 | 106 | 0 |
| chlordane-3 | 1000 | 918.974 | - | 8.1 | 20 | 106 | 0 |
| chlordane-4 | 1000 | 970.11 | - | 3 | 20 | 111 | 0 |
| chlordane-5 | 1000 | 1071.628 | - | -7.2 | 20 | 122 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 09:49 | | |
| **Lab File ID** | : 20240922a-04 | **Init. Calib. Date(s)** | : 07/22/24 | 07/22/24 | |
| **Sample No** | : WG1974790-2 | **Init. Calib. Times** | : 18:09 | 22:55 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Chlordane | 1 | 1 | - | 0 | 20 | 122 | 0 |
| chlordane-1 | 1000 | 993.66 | - | 0.6 | 20 | 116 | 0 |
| chlordane-3 | 1000 | 1009.847 | - | -1 | 20 | 117 | 0 |
| chlordane-4 | 1000 | 1018.522 | - | -1.9 | 20 | 118 | 0 |
| chlordane-5 | 1000 | 1014.386 | - | -1.4 | 20 | 118 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:59 |
| **Lab File ID** | : 11240922a-05 | **Init. Calib. Date(s)** | : 08/01/24 08/01/24 |
| **Sample No** | : WG1974788-3 | **Init. Calib. Times** | : 18:37 23:11 |
| **Channel** | : A | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Toxaphene | 1 | 1 | - | 0 | 20 | 140 | 0 |
| toxaphene-2 | 2000 | 2542.36 | - | -27.1* | 20 | 173 | 0 |
| toxaphene-3 | 2000 | 2433.388 | - | -21.7* | 20 | 165 | 0 |
| toxaphene-4 | 2000 | 2187.534 | - | -9.4 | 20 | 151 | 0 |
| toxaphene-5 | 2000 | 2353.437 | - | -17.7 | 20 | 161 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST11 | **Calibration Date** | : 09/22/24 09:59 | | |
| **Lab File ID** | : 11240922a-05 | **Init. Calib. Date(s)** | : 08/01/24 | 08/01/24 | |
| **Sample No** | : WG1974788-3 | **Init. Calib. Times** | : 18:37 | 23:11 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Toxaphene | 1 | 1 | - | 0 | 20 | 112 | 0 |
| toxaphene-2 | 2000 | 1844.666 | - | 7.8 | 20 | 103 | 0 |
| toxaphene-3 | 2000 | 1924.242 | - | 3.8 | 20 | 107 | 0 |
| toxaphene-4 | 2000 | 1787.486 | - | 10.6 | 20 | 100 | 0 |
| toxaphene-5 | 2000 | 1931.077 | - | 3.4 | 20 | 108 | 0 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 10:24 |
| **Lab File ID** | : 20240922a-05 | **Init. Calib. Date(s)** | : 07/22/24 07/22/24 |
| **Sample No** | : WG1974790-3 | **Init. Calib. Times** | : 18:09 22:55 |
| **Channel** | : A | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Toxaphene | 1 | 1 | - | 0 | 20 | 122 | .03 |
| toxaphene-1 | 2000 | 2216.931 | - | -10.8 | 20 | 124 | .04 |
| toxaphene-2 | 2000 | 2291.346 | - | -14.6 | 20 | 130 | .04 |
| toxaphene-4 | 2000 | 2030.93 | - | -1.5 | 20 | 116 | .04 |
| toxaphene-5 | 2000 | 2234.673 | - | -11.7 | 20 | 129 | .04 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 10:24 |
| **Lab File ID** | : 20240922a-05 | **Init. Calib. Date(s)** | : 07/22/24 07/22/24 |
| **Sample No** | : WG1974790-3 | **Init. Calib. Times** | : 18:09 22:55 |
| **Channel** | : B | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Toxaphene | 1 | 1 | - | 0 | 20 | 134 | .02 |
| toxaphene-1 | 2000 | 2204.817 | - | -10.2 | 20 | 143 | .02 |
| toxaphene-2 | 2000 | 2099.066 | - | -5 | 20 | 138 | .02 |
| toxaphene-4 | 2000 | 2022.463 | - | -1.1 | 20 | 133 | .02 |
| toxaphene-5 | 2000 | 2084.692 | - | -4.2 | 20 | 138 | .03 |

* Value outside of QC limits.

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 16:03 | | |
| **Lab File ID** | : 20240922a-32 | **Init. Calib. Date(s)** | : 07/22/24 | 07/22/24 | |
| **Sample No** | : WG1974790-4 | **Init. Calib. Times** | : 18:09 | 22:55 | |
| **Channel** | : A | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Pesticides | 1 | 1 | - | 0 | 20 | 128 | 0 |
| 2,4,5,6-Tetrachloro-m-xylen | 50 | 51.292 | - | -2.6 | 20 | 122 | 0 |
| Hexachlorobenzene | 50 | 50.804 | - | -1.6 | 20 | 121 | 0 |
| alpha-BHC | 1.586 | 1.474 | - | 7.1 | 20 | 122 | 0 |
| gamma-BHC (lindane) | 1.529 | 1.327 | - | 13.2 | 20 | 121 | 0 |
| beta-BHC | 50 | 50.33 | - | -0.7 | 20 | 120 | 0 |
| delta-BHC | 1.478 | 1.296 | - | 12.3 | 20 | 117 | 0 |
| Heptachlor | 1.494 | 1.348 | - | 9.8 | 20 | 127 | 0 |
| Aldrin | 1.394 | 1.325 | - | 4.9 | 20 | 129 | 0 |
| Alachlor | 50 | 57.152 | - | -14.3 | 20 | 130 | 0 |
| Chlorpyrifos | 50 | 52 | - | -4 | 20 | 121 | 0 |
| Heptachlor Epoxide | 1.349 | 1.238 | - | 8.2 | 20 | 129 | 0 |
| gamma-Chlordane (trans) | 50 | 60.413 | - | -20.8* | 20 | 149 | 0 |
| alpha-Chlordane (cis) | 50 | 53.206 | - | -6.4 | 20 | 130 | 0 |
| 4,4'-DDE | 1.333 | 1.259 | - | 5.6 | 20 | 126 | 0 |
| Endosulfan I | 1.261 | 1.185 | - | 6 | 20 | 131 | 0 |
| Dieldrin | 1.315 | 1.348 | - | -2.5 | 20 | 143 | 0 |
| Endrin | 1.292 | 1.271 | - | 1.6 | 20 | 134 | 0 |
| 4,4'-DDD | 1.086 | 1.097 | - | -1 | 20 | 137 | 0 |
| Endosulfan II | 1.175 | 1.135 | - | 3.4 | 20 | 136 | 0 |
| 4,4'-DDT | 50 | 55.81 | - | -11.6 | 20 | 135 | 0 |
| Endrin Aldehyde | 50 | 48.213 | - | 3.6 | 20 | 116 | 0 |
| Methoxychlor | 50 | 56.835 | - | -13.7 | 20 | 129 | 0 |
| Mirex | 50 | 58.47 | - | -16.9 | 20 | 135 | 0 |
| Endosulfan Sulfate | 50 | 55.629 | - | -11.3 | 20 | 137 | 0 |
| Endrin Ketone | 1.275 | 1.276 | - | -0.1 | 20 | 140 | 0 |
| Decachlorobiphenyl | 50 | 51.745 | - | -3.5 | 20 | 124 | 0 |

*** Value outside of QC limits.**

# Calibration Verification Summary
# Form 7
# Pesticides

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 | | |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 | | |
| **Instrument ID** | : PEST20 | **Calibration Date** | : 09/22/24 16:03 | | |
| **Lab File ID** | : 20240922a-32 | **Init. Calib. Date(s)** | : 07/22/24 | 07/22/24 | |
| **Sample No** | : WG1974790-4 | **Init. Calib. Times** | : 18:09 | 22:55 | |
| **Channel** | : B | | | | |

| Compound | Ave. RRF | RRF | Min RRF | %D | Max %D | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1-br-2-nb_Pesticides | 1 | 1 | - | 0 | 20 | 141 | 0 |
| 2,4,5,6-Tetrachloro-m-xyl | 1.223 | 1.044 | - | 14.6 | 20 | 128 | 0 |
| Hexachlorobenzene | 50 | 47.863 | - | 4.3 | 20 | 129 | 0 |
| alpha-BHC | 1.533 | 1.403 | - | 8.5 | 20 | 129 | 0 |
| gamma-BHC (lindane) | 1.477 | 1.269 | - | 14.1 | 20 | 128 | 0 |
| beta-BHC | 50 | 46.967 | - | 6.1 | 20 | 127 | 0 |
| delta-BHC | 1.443 | 1.241 | - | 14 | 20 | 124 | 0 |
| Heptachlor | 1.403 | 1.223 | - | 12.8 | 20 | 132 | 0 |
| Aldrin | 1.268 | 1.179 | - | 7 | 20 | 136 | 0 |
| Alachlor | 50 | 53.508 | - | -7 | 20 | 138 | 0 |
| Chlorpyrifos | 50 | 48.071 | - | 3.9 | 20 | 126 | 0 |
| Heptachlor Epoxide | 1.268 | 1.118 | - | 11.8 | 20 | 134 | 0 |
| gamma-Chlordane (trans) | 1.09 | 1.145 | - | -5 | 20 | 157 | 0 |
| alpha-Chlordane (cis) | 1.237 | 1.118 | - | 9.6 | 20 | 137 | 0 |
| 4,4'-DDE | 1.193 | 1.089 | - | 8.7 | 20 | 133 | 0 |
| Endosulfan I | 1.153 | 1.046 | - | 9.3 | 20 | 137 | 0 |
| Dieldrin | 1.161 | 1.18 | - | -1.6 | 20 | 150 | 0 |
| Endrin | 1.185 | 1.121 | - | 5.4 | 20 | 139 | 0 |
| 4,4'-DDD | 0.979 | 0.95 | - | 3 | 20 | 142 | 0 |
| Endosulfan II | 1.098 | 1.014 | - | 7.7 | 20 | 141 | 0 |
| 4,4'-DDT | 1.11 | 0.994 | - | 10.5 | 20 | 132 | 0 |
| Endrin Aldehyde | 50 | 45.514 | - | 9 | 20 | 125 | 0 |
| Methoxychlor | 50 | 50.535 | - | -1.1 | 20 | 131 | 0 |
| Mirex | 50 | 52.176 | - | -4.4 | 20 | 136 | 0 |
| Endosulfan Sulfate | 50 | 50.133 | - | -0.3 | 20 | 139 | 0 |
| Endrin Ketone | 1.192 | 1.129 | - | 5.3 | 20 | 142 | 0 |
| Decachlorobiphenyl | 50 | 50.526 | - | -1.1 | 20 | 136 | 0 |

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  09:49
Operator  : pest20:ejl
Sample    : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 4   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 916.583 | 8.3 | 106 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 918.974 | 8.1 | 106 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 970.110 | 3.0 | 111 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 1071.628 | -7.2 | 122 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 993.660 | 0.6 | 116 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 1009.847 | -1.0 | 117 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 1018.522 | -1.9 | 118 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 1014.386 | -1.4 | 118 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 0.000 | 100.0# | 0 | -2.38# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.66# |
| 4 | | alpha-BHC | | 1.586 | 0.000 | 100.0# | 0# | -2.78# |
| 5 | | gamma-BHC (lindane) | | 1.529 | 0.000 | 100.0# | 0# | -3.03# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.09# |
| 7 | | delta-BHC | | 1.478 | 0.000 | 100.0# | 0# | -3.24# |
| 8 | | Heptachlor | | 1.494 | 0.000 | 100.0# | 0# | -3.43# |
| 9 | | Aldrin | | 1.394 | 0.000 | 100.0# | 0# | -3.71# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.86# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.96# |
| 12 | | Heptachlor Epoxide | | 1.349 | 0.000 | 100.0# | 0# | -4.33# |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 0.000 | 100.0# | 0 | -4.46# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  09:49
Operator  : pest20:ejl
Sample    : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 4   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 0.000 | 100.0# | 0 | -4.61# |
| 15 | | 4,4'-DDE | | 1.333 | 0.000 | 100.0# | 0# | -4.72# |
| 16 | | Endosulfan I | | 1.261 | 0.000 | 100.0# | 0# | -4.76# |
| 17 | | Dieldrin | | 1.315 | 0.000 | 100.0# | 0# | -5.03# |
| 18 | | Endrin | | 1.292 | 0.000 | 100.0# | 0# | -5.27# |
| 19 | | 4,4'-DDD | | 1.086 | 0.000 | 100.0# | 0# | -5.37# |
| 20 | | Endosulfan II | | 1.175 | 0.000 | 100.0# | 0# | -5.50# |
| 21 | | 4,4'-DDT | * | 50.000 | 0.000 | 100.0# | 0 | -5.64# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.89# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.10# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.17# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.27# |
| 26 | | Endrin Ketone | | 1.275 | 0.000 | 100.0# | 0# | -6.50# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.28# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 34 | l2 | toxaphene-1 | * | 2000.000 | 0.000 | 100.0# | 0 | -5.50# |
| 35 | l2 | toxaphene-2 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.01# |
| 36 | l2 | toxaphene-4 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.11# |
| 37 | l2 | toxaphene-5 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.19# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 0.000 | 100.0# | 0# | -2.57# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.95# |
| 4 | | alpha-BHC | | 1.533 | 0.000 | 100.0# | 0# | -3.06# |
| 5 | | gamma-BHC (lindane) | | 1.477 | 0.000 | 100.0# | 0# | -3.39# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.46# |
| 7 | | delta-BHC | | 1.443 | 0.000 | 100.0# | 0# | -3.76# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  09:49
Operator  : pest20:ejl
Sample    : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 4   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | | Heptachlor | | 1.403 | 0.000 | 100.0# | 0# | -3.83# |
| 9 | | Aldrin | | 1.268 | 0.000 | 100.0# | 0# | -4.17# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -4.05# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.43# |
| 12 | | Heptachlor Epoxide | | 1.268 | 0.000 | 100.0# | 0# | -4.84# |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 0.000 | 100.0# | 0# | -5.06# |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 0.000 | 100.0# | 0# | -5.21# |
| 15 | | 4,4'-DDE | | 1.193 | 0.000 | 100.0# | 0# | -5.40# |
| 16 | | Endosulfan I | | 1.153 | 0.000 | 100.0# | 0# | -5.27# |
| 17 | | Dieldrin | | 1.161 | 0.000 | 100.0# | 0# | -5.55# |
| 18 | | Endrin | | 1.185 | 0.000 | 100.0# | 0# | -5.84# |
| 19 | | 4,4'-DDD | | 0.979 | 0.000 | 100.0# | 0# | -5.95# |
| 20 | | Endosulfan II | | 1.098 | 0.000 | 100.0# | 0# | -6.03# |
| 21 | | 4,4'-DDT | | 1.110 | 0.000 | 100.0# | 0# | -6.22# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -6.32# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.78# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.93# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.55# |
| 26 | | Endrin Ketone | | 1.192 | 0.000 | 100.0# | 0# | -6.96# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.85# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 34 | l2 | toxaphene-1 | * | 2000.000 | 0.000 | 100.0# | 0 | -5.99# |
| 35 | l2 | toxaphene-2 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.02# |
| 36 | l2 | toxaphene-4 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.33# |
| 37 | l2 | toxaphene-5 | * | 2000.000 | 0.000 | 100.0# | 0 | -6.74# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:49
Operator : pest20:ejl
Sample : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.909 | 1.965 | 62301216 | 108.4E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:49
Operator : pest20:ejl
Sample : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 23) | | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) | l1 | chlordane-1 | 3.359 | 3.676 | 90332041 | 146.7E6 | 916.583 | 993.660 |
| 30) | l1 | chlordane-3 | 3.839 | 4.337 | 109.9E6 | 175.5E6 | 918.974 | 1009.847M3 |
| 31) | l1 | chlordane-4 | 4.459 | 5.053 | 396.1E6 | 579.5E6 | 970.110 | 1018.522 |
| 32) | l1 | chlordane-5 | 4.594 | 5.213 | 675.1E6 | 451.4E6 | 1071.628 | 1014.386 |
| | Sum | chlordane-1 | | | 1271.4E6 | 1353.0E6 | N.D. | N.D. D |
| Average | | chlordane-1 | | | | | 969.324 | 1009.104 |
| 34) | l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) | l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) | l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) | l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | | toxaphene-1 | | | | | 0.000 | 0.000 |

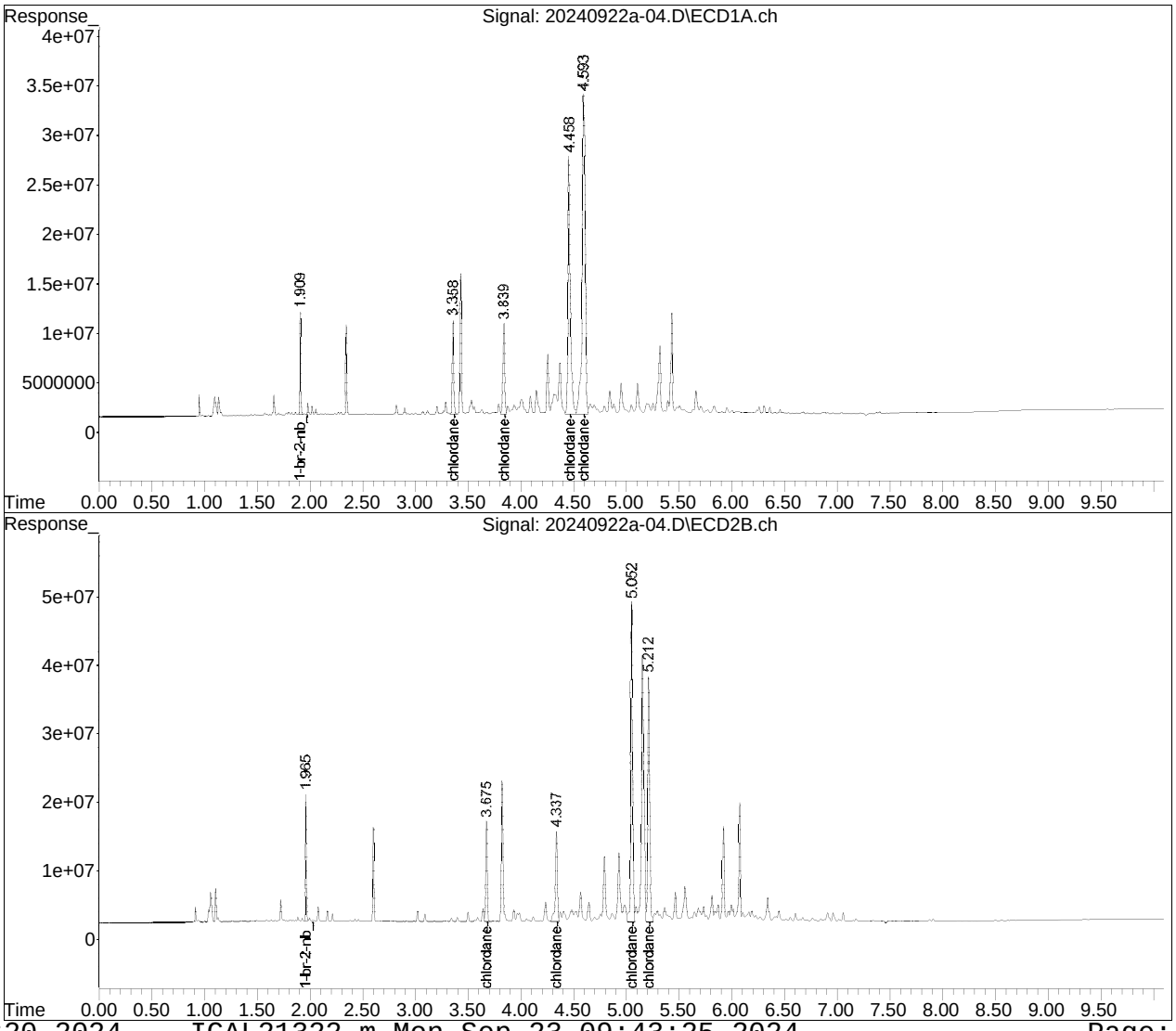
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-04.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:49
Operator : pest20:ejl
Sample : wg1974790-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:08:49 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

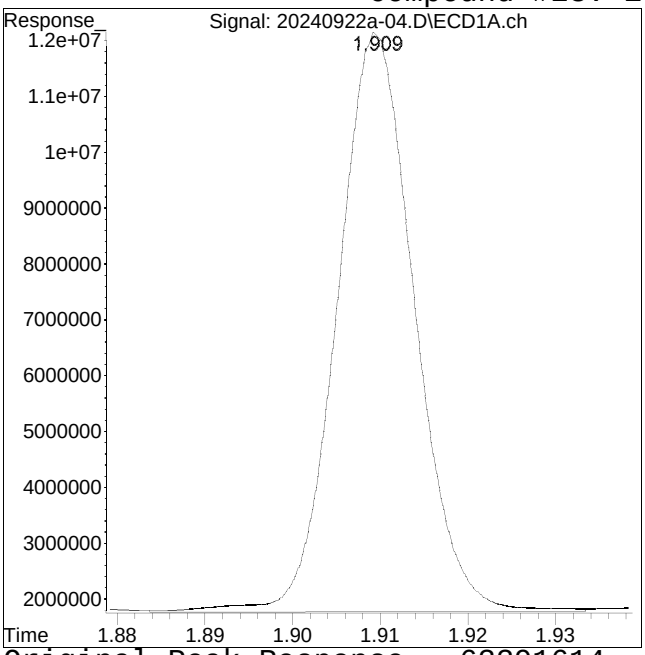
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

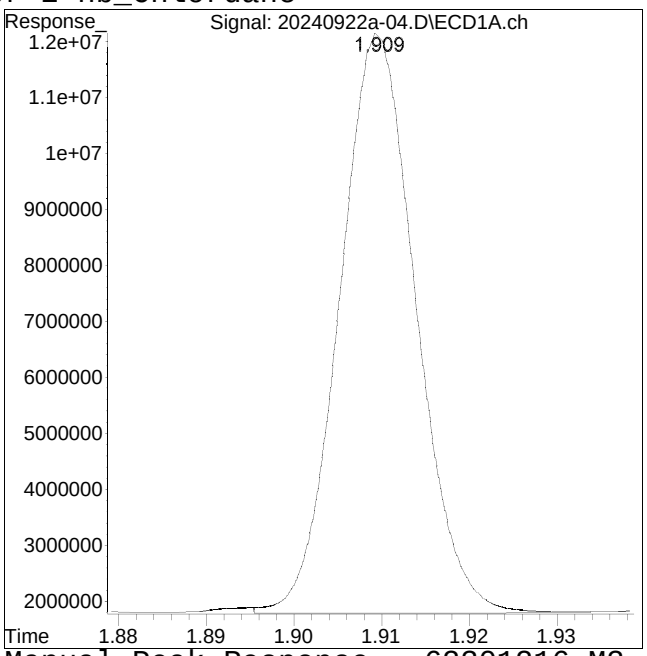


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-04.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:49 Instrument : PEST 20
Sample : wg1974790-2,42,,chlor11670Quant Date : 9/22/2024 10:08 am

Compound #28: 1-br-2-nb_Chlordane



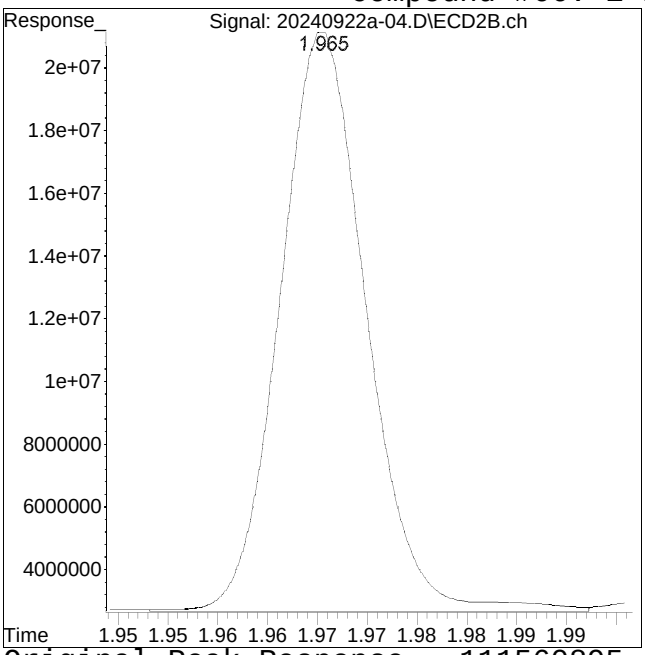



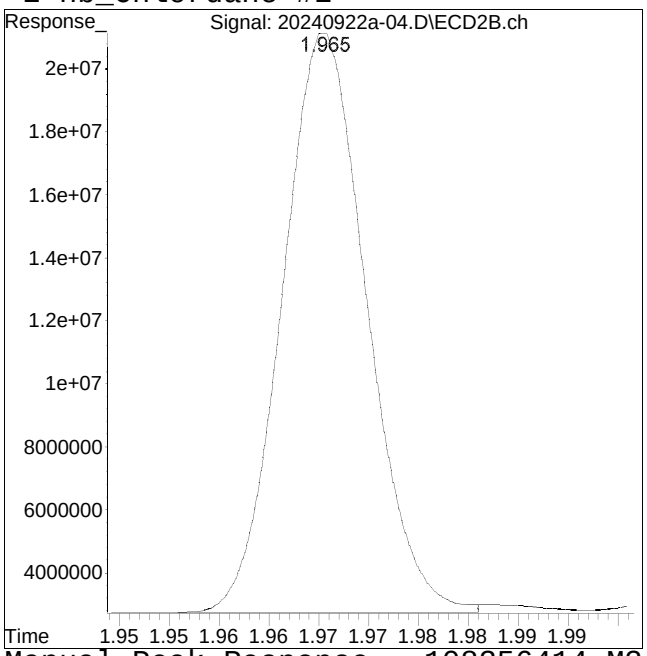

Original Peak Response = 63391614 Manual Peak Response = 62301216 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-04.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:49 Instrument : PEST 20
Sample : wg1974790-2,42,,chlor11670Quant Date : 9/22/2024 10:08 am

Compound #66: 1-br-2-nb_Chlordane #2



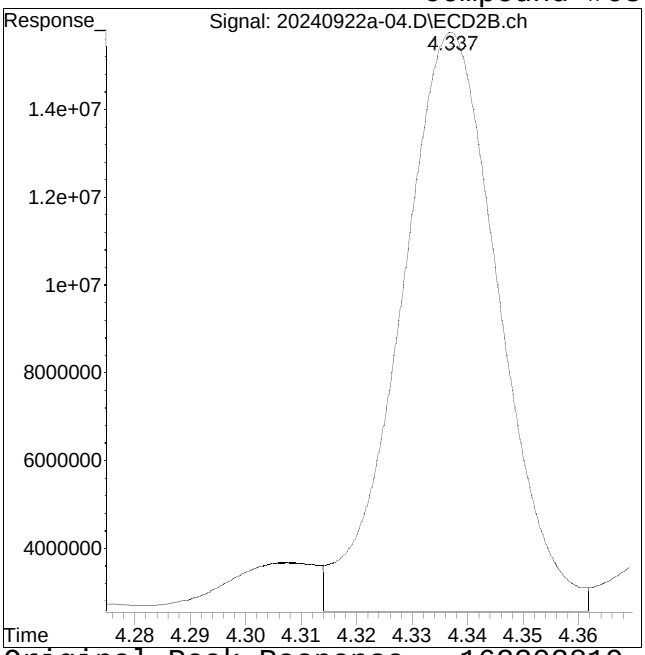



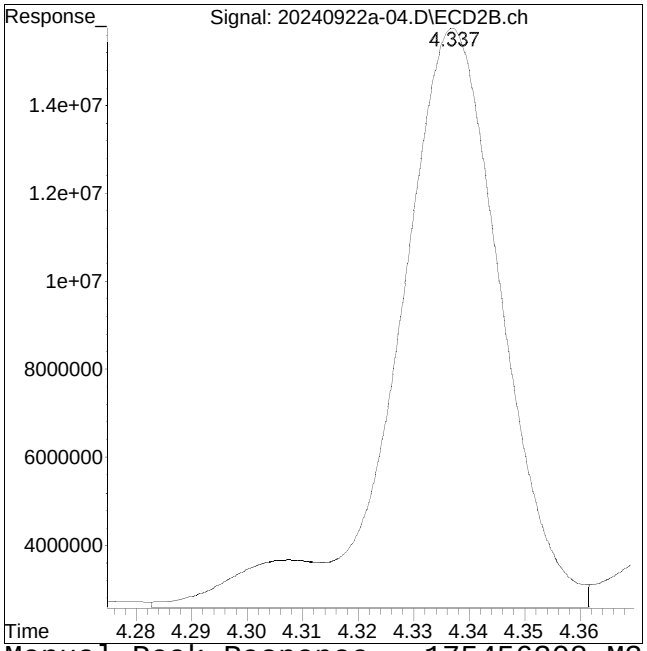

Original Peak Response = 111560895 Manual Peak Response = 108356414 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-04.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:49 Instrument : PEST 20
Sample : wg1974790-2,42,,chlor11670Quant Date : 9/22/2024 10:08 am

Compound #68: chlordane-3 #2




Original Peak Response = 162302819 Manual Peak Response = 175456308 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  10:24
Operator  : pest20:ejl
Sample    : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 5   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 122 | 0.03 |
| 34 | l2 | toxaphene-1 | | *2000.000 | 2216.931 | -10.8 | 124 | 0.04 |
| 35 | l2 | toxaphene-2 | | *2000.000 | 2291.346 | -14.6 | 130 | 0.04 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 2030.930 | -1.5 | 116 | 0.04 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 2234.673 | -11.7 | 129 | 0.04 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 134 | 0.02 |
| 34 | l2 | toxaphene-1 | | *2000.000 | 2204.817 | -10.2 | 143 | 0.02 |
| 35 | l2 | toxaphene-2 | | *2000.000 | 2099.066 | -5.0 | 138 | 0.02 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 2022.463 | -1.1 | 133 | 0.02 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 2084.692 | -4.2 | 138 | 0.03 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 0.000 | 100.0# | 0 | -2.38# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.66# |
| 4 | | alpha-BHC | | 1.586 | 0.000 | 100.0# | 0# | -2.78# |
| 5 | | gamma-BHC (lindane) | | 1.529 | 0.000 | 100.0# | 0# | -3.03# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.09# |
| 7 | | delta-BHC | | 1.478 | 0.000 | 100.0# | 0# | -3.24# |
| 8 | | Heptachlor | | 1.494 | 0.000 | 100.0# | 0# | -3.43# |
| 9 | | Aldrin | | 1.394 | 0.000 | 100.0# | 0# | -3.71# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -3.86# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.96# |
| 12 | | Heptachlor Epoxide | | 1.349 | 0.000 | 100.0# | 0# | -4.33# |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 0.000 | 100.0# | 0 | -4.46# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  10:24
Operator  : pest20:ejl
Sample    : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 5   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 0.000 | 100.0# | 0 | -4.61# |
| 15 | | 4,4'-DDE | | 1.333 | 0.000 | 100.0# | 0# | -4.72# |
| 16 | | Endosulfan I | | 1.261 | 0.000 | 100.0# | 0# | -4.76# |
| 17 | | Dieldrin | | 1.315 | 0.000 | 100.0# | 0# | -5.03# |
| 18 | | Endrin | | 1.292 | 0.000 | 100.0# | 0# | -5.27# |
| 19 | | 4,4'-DDD | | 1.086 | 0.000 | 100.0# | 0# | -5.37# |
| 20 | | Endosulfan II | | 1.175 | 0.000 | 100.0# | 0# | -5.50# |
| 21 | | 4,4'-DDT | * | 50.000 | 0.000 | 100.0# | 0 | -5.64# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.89# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.10# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.17# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.27# |
| 26 | | Endrin Ketone | | 1.275 | 0.000 | 100.0# | 0# | -6.50# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.28# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 29 | l1 | chlordane-1 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.36# |
| 30 | l1 | chlordane-3 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.84# |
| 31 | l1 | chlordane-4 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.46# |
| 32 | l1 | chlordane-5 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.59# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 0.000 | 100.0# | 0# | -2.57# |
| 3 | | Hexachlorobenzene | * | 50.000 | 0.000 | 100.0# | 0 | -2.95# |
| 4 | | alpha-BHC | | 1.533 | 0.000 | 100.0# | 0# | -3.06# |
| 5 | | gamma-BHC (lindane) | | 1.477 | 0.000 | 100.0# | 0# | -3.39# |
| 6 | | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -3.46# |
| 7 | | delta-BHC | | 1.443 | 0.000 | 100.0# | 0# | -3.76# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  10:24
Operator  : pest20:ejl
Sample    : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974790,,ical21322
ALS Vial  : 5   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | | Heptachlor | | 1.403 | 0.000 | 100.0# | 0# | -3.83# |
| 9 | | Aldrin | | 1.268 | 0.000 | 100.0# | 0# | -4.17# |
| 10 | | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -4.05# |
| 11 | | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -4.43# |
| 12 | | Heptachlor Epoxide | | 1.268 | 0.000 | 100.0# | 0# | -4.84# |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 0.000 | 100.0# | 0# | -5.06# |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 0.000 | 100.0# | 0# | -5.21# |
| 15 | | 4,4'-DDE | | 1.193 | 0.000 | 100.0# | 0# | -5.40# |
| 16 | | Endosulfan I | | 1.153 | 0.000 | 100.0# | 0# | -5.27# |
| 17 | | Dieldrin | | 1.161 | 0.000 | 100.0# | 0# | -5.55# |
| 18 | | Endrin | | 1.185 | 0.000 | 100.0# | 0# | -5.84# |
| 19 | | 4,4'-DDD | | 0.979 | 0.000 | 100.0# | 0# | -5.95# |
| 20 | | Endosulfan II | | 1.098 | 0.000 | 100.0# | 0# | -6.03# |
| 21 | | 4,4'-DDT | | 1.110 | 0.000 | 100.0# | 0# | -6.22# |
| 22 | | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -6.32# |
| 23 | | Methoxychlor | * | 50.000 | 0.000 | 100.0# | 0 | -6.78# |
| 24 | | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -6.93# |
| 25 | | Endosulfan Sulfate | * | 50.000 | 0.000 | 100.0# | 0 | -6.55# |
| 26 | | Endrin Ketone | | 1.192 | 0.000 | 100.0# | 0# | -6.96# |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 0.000 | 100.0# | 0 | -7.85# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 29 | l1 | chlordane-1 | * | 1000.000 | 0.000 | 100.0# | 0 | -3.68# |
| 30 | l1 | chlordane-3 | * | 1000.000 | 0.000 | 100.0# | 0 | -4.34# |
| 31 | l1 | chlordane-4 | * | 1000.000 | 0.000 | 100.0# | 0 | -5.05# |
| 32 | l1 | chlordane-5 | * | 1000.000 | 0.000 | 100.0# | 0 | -5.21# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 10:24
Operator : pest20:ejl
Sample : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 1.943f | 1.987f | 65728695 | 111.3E6 | 25.000M3 | 25.000M3 |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 10:24
Operator : pest20:ejl
Sample : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 5.539f | 6.012f | 228.6E6 | 208.0E6 | 2216.931M3 | 2204.817 |
| 35) l2 | toxaphene-2 | 6.049f | 6.041f | 234.7E6 | 294.6E6 | 2291.346M3 | 2099.066M3 |
| 36) l2 | toxaphene-4 | 6.144f | 6.352f | 134.9E6 | 328.8E6 | 2030.930M3 | 2022.463 |
| 37) l2 | toxaphene-5 | 6.226f | 6.766f | 227.3E6 | 322.2E6 | 2234.673M3 | 2084.692M3 |
| Sum | toxaphene-1 | | | 825.4E6 | 1153.6E6 | 8773.881 | 8411.038 |
| Average | toxaphene-1 | | | | | 2193.470 | 2102.760 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 825.4E6 | 1153.6E6 | 8773.881 | 8411.038 |
| Average | toxaphene-1 | | | | | 2193.470 | 2102.760 |

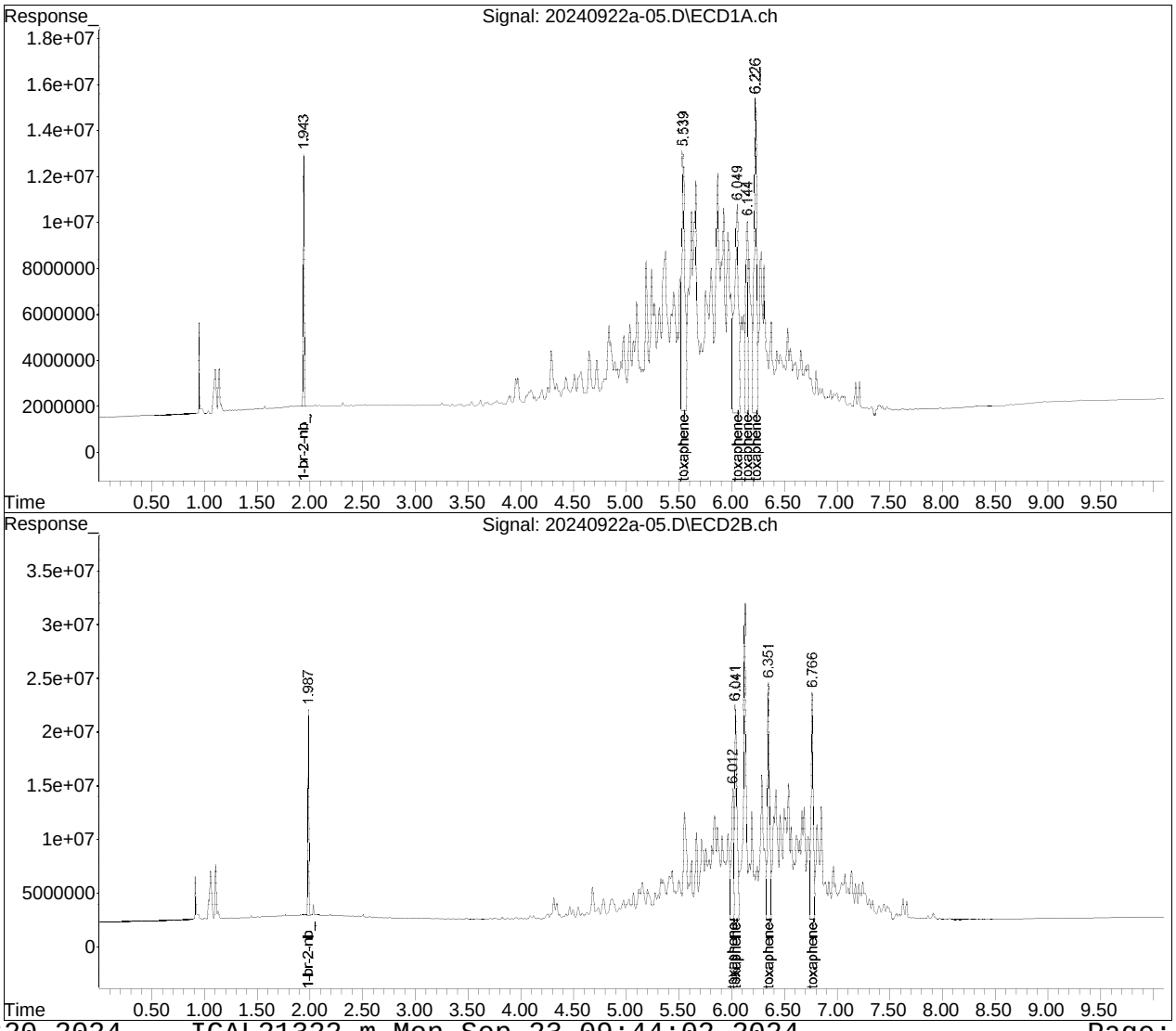
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-05.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 10:24
Operator : pest20:ejl
Sample : wg1974790-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:35:41 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

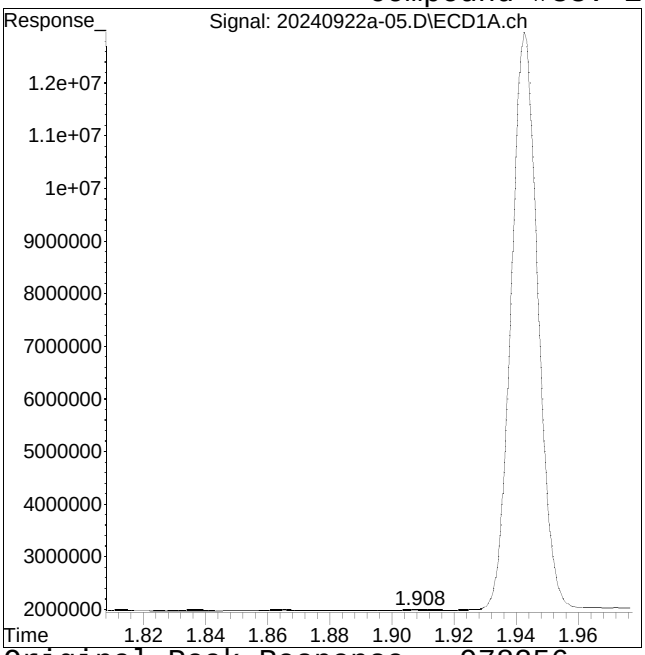
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

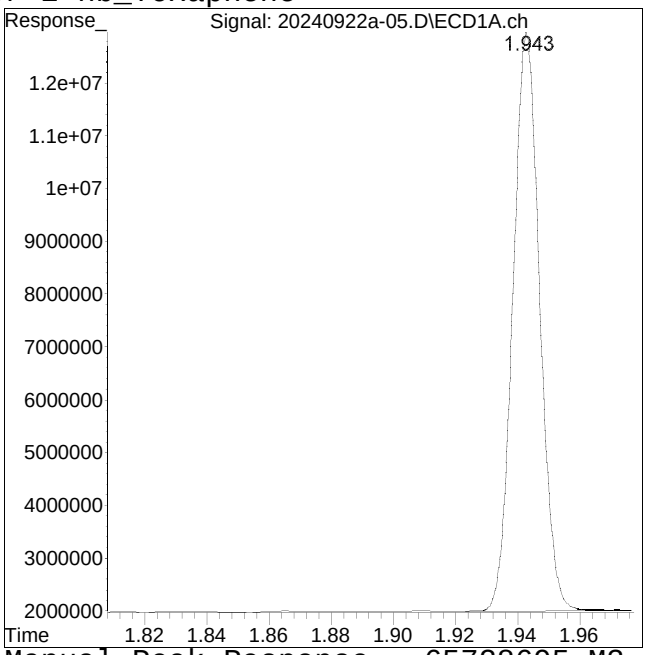


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #33: 1-br-2-nb_Toxaphene



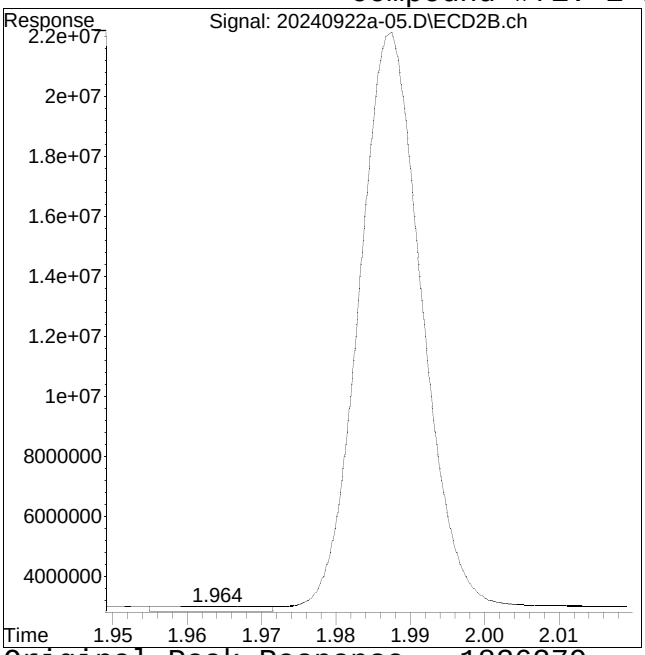



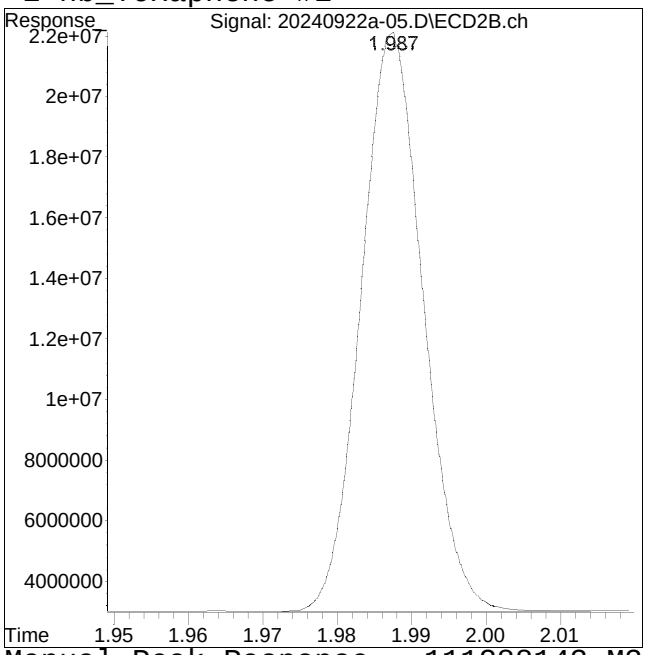

Original Peak Response = 978256 Manual Peak Response = 65728695 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #71: 1-br-2-nb_Toxaphene #2



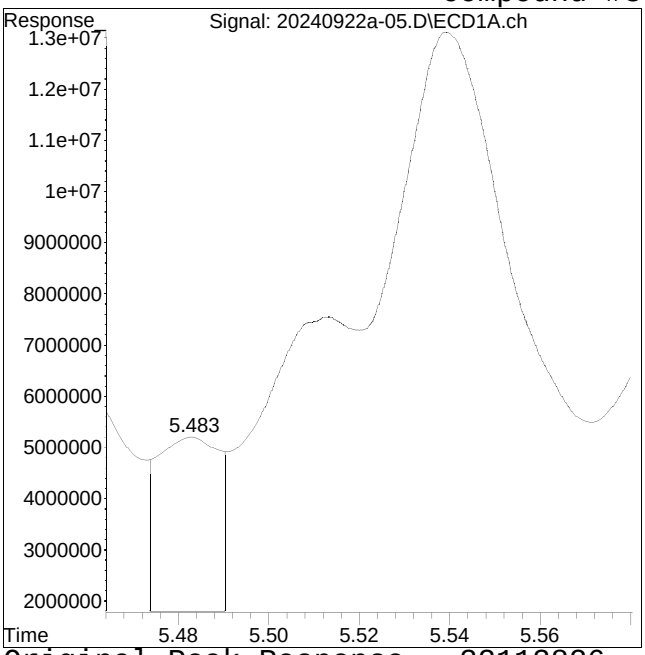



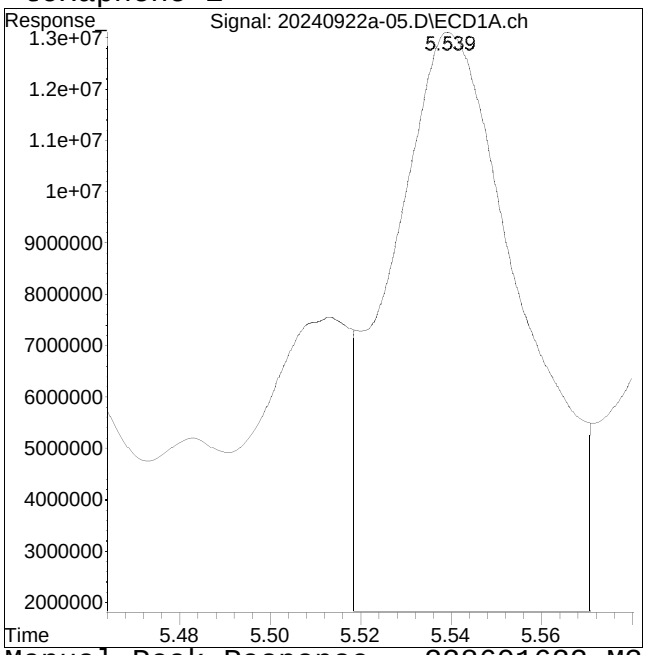

Original Peak Response = 1836279 Manual Peak Response = 111288143 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #34: toxaphene-1



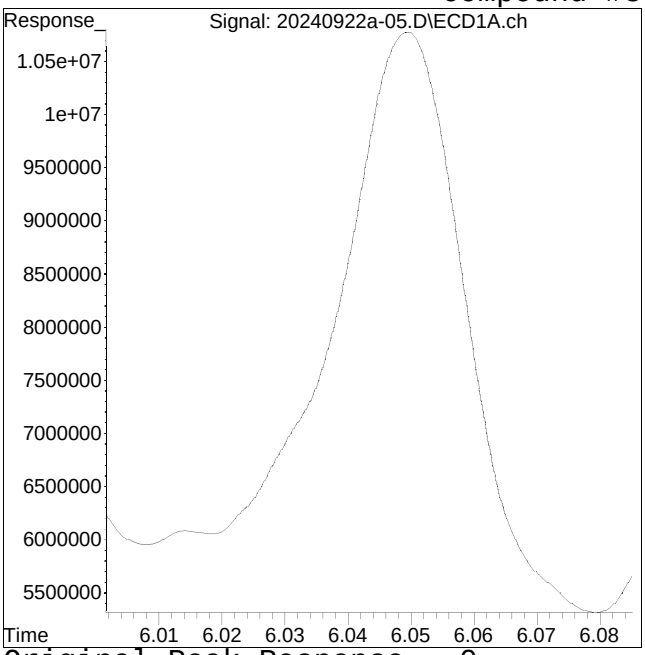



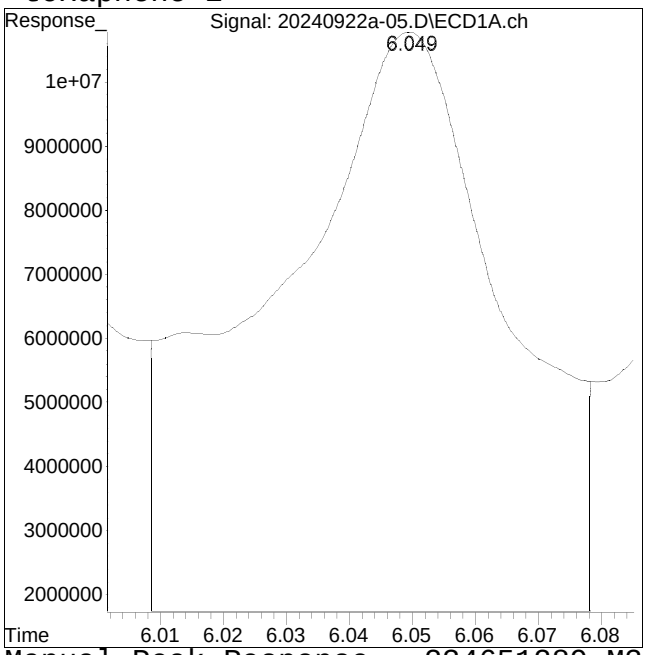

Original Peak Response = 32113826 Manual Peak Response = 228601622 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #35: toxaphene-2



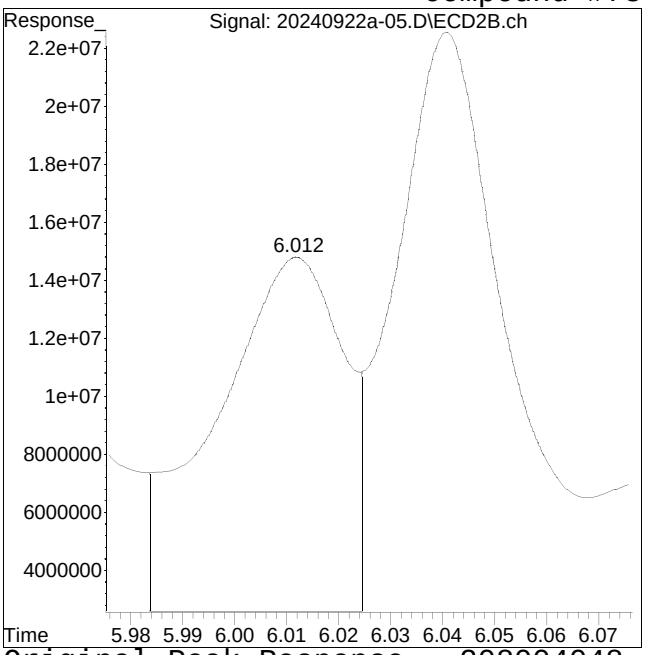



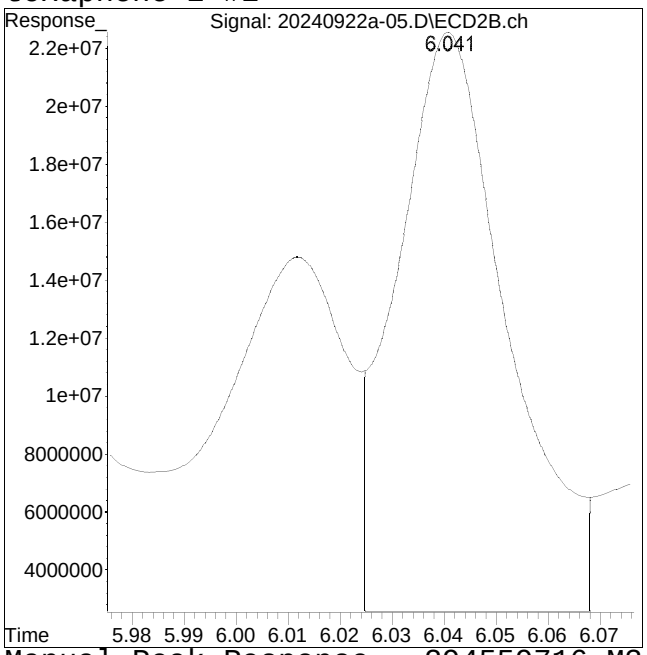

Original Peak Response = 0 Manual Peak Response = 234651289 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #73: toxaphene-2 #2



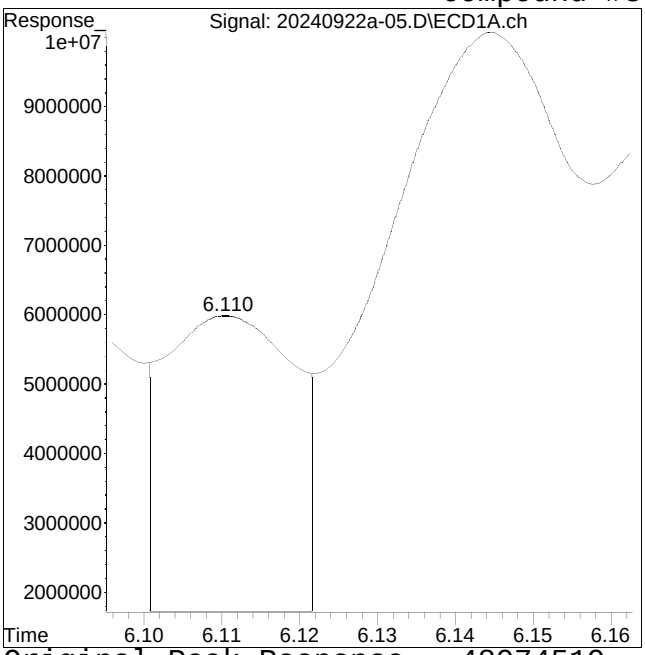



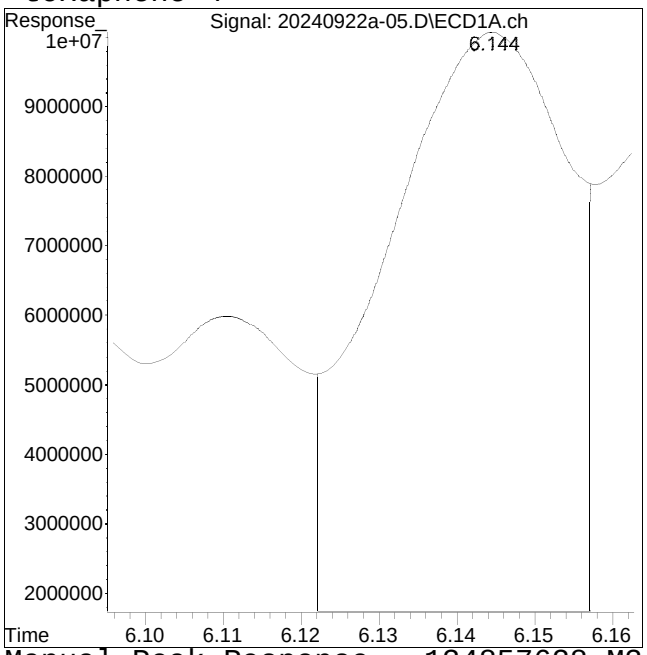

Original Peak Response = 208004048 Manual Peak Response = 294559716 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #36: toxaphene-4



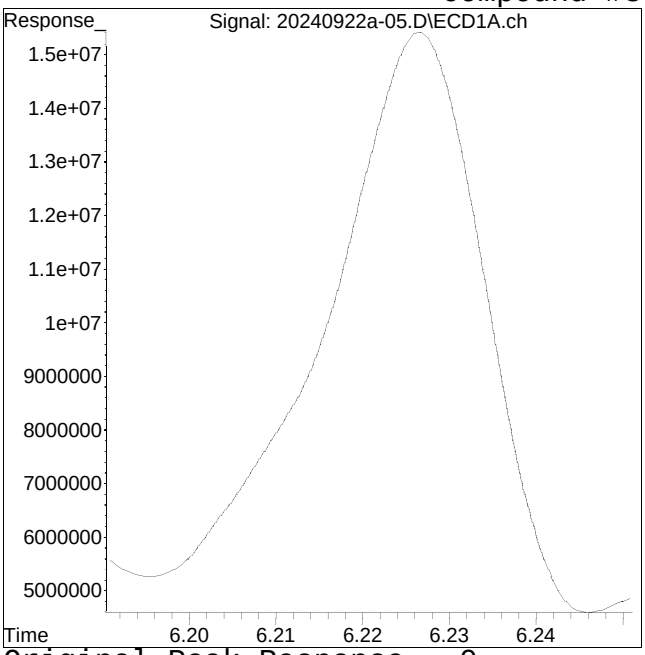



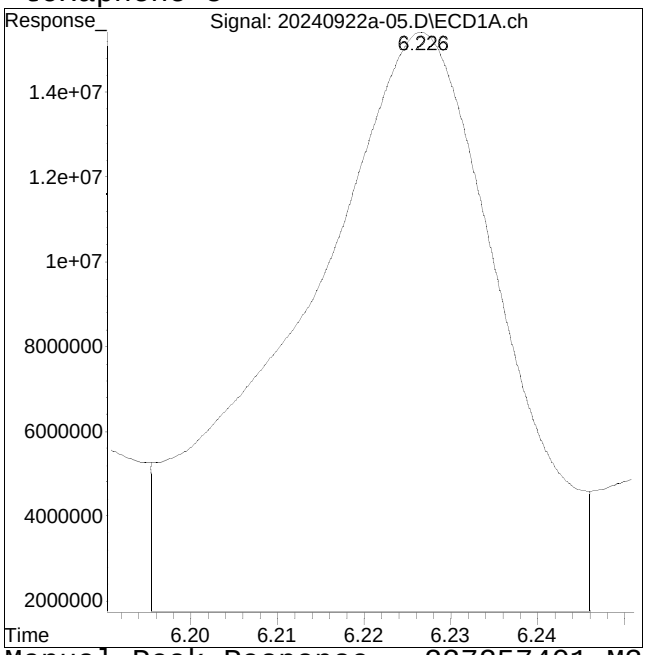

Original Peak Response = 48974519 Manual Peak Response = 134857628 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #37: toxaphene-5



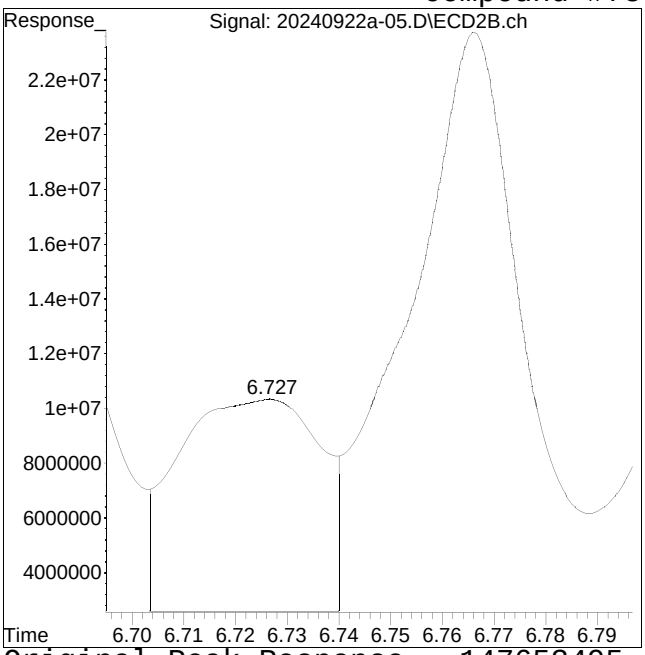



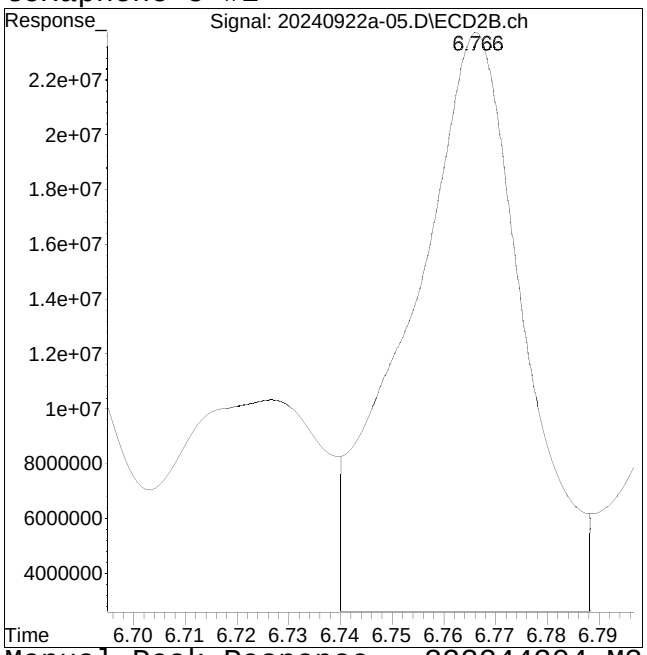

Original Peak Response = 0 Manual Peak Response = 227257401 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-05.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 10:24 Instrument : PEST 20
Sample : wg1974790-3,42,,tox11668 Quant Date : 9/22/2024 10:35 am

Compound #75: toxaphene-5 #2




Original Peak Response = 147653495 Manual Peak Response = 322244304 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  16:03
Operator  : pest20:emr
Sample    : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : WG1974790,,ical21322
ALS Vial  : 32   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 128 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | * | 50.000 | 51.292 | -2.6 | 122 | 0.00 |
| 3 | | Hexachlorobenzene | * | 50.000 | 50.804 | -1.6 | 121 | 0.00 |
| 4 | | alpha-BHC | | 1.586 | 1.474 | 7.1 | 122 | 0.00 |
| 5 | | gamma-BHC (lindane) | | 1.529 | 1.327 | 13.2 | 121 | 0.00 |
| 6 | | beta-BHC | * | 50.000 | 50.330 | -0.7 | 120 | 0.00 |
| 7 | | delta-BHC | | 1.478 | 1.296 | 12.3 | 117 | 0.00 |
| 8 | | Heptachlor | | 1.494 | 1.348 | 9.8 | 127 | 0.00 |
| 9 | | Aldrin | | 1.394 | 1.325 | 4.9 | 129 | 0.00 |
| 10 | | Alachlor | * | 50.000 | 57.152 | -14.3 | 130 | 0.00 |
| 11 | | Chlorpyrifos | * | 50.000 | 52.000 | -4.0 | 121 | 0.00 |
| 12 | | Heptachlor Epoxide | | 1.349 | 1.238 | 8.2 | 129 | 0.00 |
| 13 | | gamma-Chlordane (trans) | * | 50.000 | 60.413 | -20.8# | 149 | 0.00 |
| 14 | | alpha-Chlordane (cis) | * | 50.000 | 53.206 | -6.4 | 130 | 0.00 |
| 15 | | 4,4'-DDE | | 1.333 | 1.259 | 5.6 | 126 | 0.00 |
| 16 | | Endosulfan I | | 1.261 | 1.185 | 6.0 | 131 | 0.00 |
| 17 | | Dieldrin | | 1.315 | 1.348 | -2.5 | 143 | 0.00 |
| 18 | | Endrin | | 1.292 | 1.271 | 1.6 | 134 | 0.00 |
| 19 | | 4,4'-DDD | | 1.086 | 1.097 | -1.0 | 137 | 0.00 |
| 20 | | Endosulfan II | | 1.175 | 1.135 | 3.4 | 136 | 0.00 |
| 21 | | 4,4'-DDT | * | 50.000 | 55.810 | -11.6 | 135 | 0.00 |
| 22 | | Endrin Aldehyde | * | 50.000 | 48.213 | 3.6 | 116 | 0.00 |
| 23 | | Methoxychlor | * | 50.000 | 56.835 | -13.7 | 129 | 0.00 |
| 24 | | Mirex | * | 50.000 | 58.470 | -16.9 | 135 | 0.00 |
| 25 | | Endosulfan Sulfate | * | 50.000 | 55.629 | -11.3 | 137 | 0.00 |
| 26 | | Endrin Ketone | | 1.275 | 1.276 | -0.1 | 140 | 0.00 |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 51.745 | -3.5 | 124 | 0.00 |

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  16:03
Operator  : pest20:emr
Sample    : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : WG1974790,,ical21322
ALS Vial  : 32   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 141 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.223 | 1.044 | 14.6 | 128 | 0.00 |
| 3 | | Hexachlorobenzene | * | 50.000 | 47.863 | 4.3 | 129 | 0.00 |
| 4 | | alpha-BHC | | 1.533 | 1.403 | 8.5 | 129 | 0.00 |
| 5 | | gamma-BHC (lindane) | | 1.477 | 1.269 | 14.1 | 128 | 0.00 |
| 6 | | beta-BHC | * | 50.000 | 46.967 | 6.1 | 127 | 0.00 |
| 7 | | delta-BHC | | 1.443 | 1.241 | 14.0 | 124 | 0.00 |
| 8 | | Heptachlor | | 1.403 | 1.223 | 12.8 | 132 | 0.00 |
| 9 | | Aldrin | | 1.268 | 1.179 | 7.0 | 136 | 0.00 |
| 10 | | Alachlor | * | 50.000 | 53.508 | -7.0 | 138 | 0.00 |
| 11 | | Chlorpyrifos | * | 50.000 | 48.071 | 3.9 | 126 | 0.00 |
| 12 | | Heptachlor Epoxide | | 1.268 | 1.118 | 11.8 | 134 | 0.00 |
| 13 | | gamma-Chlordane (trans) | | 1.090 | 1.145 | -5.0 | 157# | 0.00 |
| 14 | | alpha-Chlordane (cis) | | 1.237 | 1.118 | 9.6 | 137 | 0.00 |
| 15 | | 4,4'-DDE | | 1.193 | 1.089 | 8.7 | 133 | 0.00 |
| 16 | | Endosulfan I | | 1.153 | 1.046 | 9.3 | 137 | 0.00 |
| 17 | | Dieldrin | | 1.161 | 1.180 | -1.6 | 150 | 0.00 |
| 18 | | Endrin | | 1.185 | 1.121 | 5.4 | 139 | 0.00 |
| 19 | | 4,4'-DDD | | 0.979 | 0.950 | 3.0 | 142 | 0.00 |
| 20 | | Endosulfan II | | 1.098 | 1.014 | 7.7 | 141 | 0.00 |
| 21 | | 4,4'-DDT | | 1.110 | 0.994 | 10.5 | 132 | 0.00 |
| 22 | | Endrin Aldehyde | * | 50.000 | 45.514 | 9.0 | 125 | 0.00 |
| 23 | | Methoxychlor | * | 50.000 | 50.535 | -1.1 | 131 | 0.00 |
| 24 | | Mirex | * | 50.000 | 52.176 | -4.4 | 136 | 0.00 |
| 25 | | Endosulfan Sulfate | * | 50.000 | 50.133 | -0.3 | 139 | 0.00 |
| 26 | | Endrin Ketone | | 1.192 | 1.129 | 5.3 | 142 | 0.00 |
| 27 | s | Decachlorobiphenyl | * | 50.000 | 50.526 | -1.1 | 136 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Sep 2024  16:03
Operator  : pest20:emr
Sample    : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : WG1974790,,ical21322
ALS Vial  : 32   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title  : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -3.36# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -3.84# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -4.46# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -4.59# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.91# |
| 34 | l2 | toxaphene-1 | | *2000.000 | 0.000 | 100.0# | 0 | -5.50# |
| 35 | l2 | toxaphene-2 | | *2000.000 | 0.000 | 100.0# | 0 | -6.01# |
| 36 | l2 | toxaphene-4 | | *2000.000 | 0.000 | 100.0# | 0 | -6.11# |
| 37 | l2 | toxaphene-5 | | *2000.000 | 0.000 | 100.0# | 0 | -6.19# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -3.68# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -4.34# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -5.05# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -5.21# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.97# |
| 34 | l2 | toxaphene-1 | | *2000.000 | 0.000 | 100.0# | 0 | -5.99# |
| 35 | l2 | toxaphene-2 | | *2000.000 | 0.000 | 100.0# | 0 | -6.02# |
| 36 | l2 | toxaphene-4 | | *2000.000 | 0.000 | 100.0# | 0 | -6.33# |
| 37 | l2 | toxaphene-5 | | *2000.000 | 0.000 | 100.0# | 0 | -6.74# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 16:03
Operator : pest20:emr
Sample : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : WG1974790,,ical21322
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.911 | 1.966 | 64933398 | 113.2E6 | 25.000 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 2.385 | 2.573 | 145.9E6 | 236.4E6 | 51.292 | 42.668 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 102.58% | 85.34% |
| 27) s | Decachlorobi | 7.283 | 7.849 | 144.7E6 | 204.0E6 | 51.745M4 | 50.526 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 103.49% | 101.05% |
| | Target Compounds | | | | | | |
| 3) | Hexachlorobe | 2.656 | 2.950 | 150.1E6 | 243.3E6 | 50.804 | 47.863 |
| 4) | alpha-BHC | 2.780 | 3.064 | 191.4E6 | 317.7E6 | 46.465 | 45.754 |
| 5) | gamma-BHC (l | 3.025 | 3.387 | 172.3E6 | 287.4E6 | 43.400 | 42.979 |
| 6) | beta-BHC | 3.094 | 3.464 | 81374043 | 133.7E6 | 50.330 | 46.967 |
| 7) | delta-BHC | 3.244 | 3.757 | 168.3E6 | 280.9E6 | 43.831 | 42.990 |
| 8) | Heptachlor | 3.432 | 3.825 | 175.1E6 | 277.0E6 | 45.130 | 43.605 |
| 9) | Aldrin | 3.711 | 4.172 | 172.1E6 | 266.9E6 | 47.513 | 46.470 |
| 10) | Alachlor | 3.855 | 4.051 | 28704023 | 40923995 | 57.152 | 53.508 |
| 11) | Chlorpyrifos | 3.956 | 4.432 | 79027300 | 129.5E6 | 52.000 | 48.071 |
| 12) | Heptachlor E | 4.325 | 4.834 | 160.7E6 | 253.2E6 | 45.881 | 44.094 |
| 13) | gamma-Chlord | 4.461 | 5.054 | 168.6E6 | 259.2E6 | 60.413 | 52.499 |
| 14) | alpha-Chlord | 4.609 | 5.213 | 166.1E6 | 253.1E6 | 53.206 | 45.195 |
| 15) | 4,4'-DDE | 4.714 | 5.398 | 163.5E6 | 246.5E6 | 47.226 | 45.636 |
| 16) | Endosulfan I | 4.760 | 5.271 | 154.0E6 | 236.8E6 | 47.018 | 45.373 |
| 17) | Dieldrin | 5.031 | 5.551 | 175.0E6 | 267.2E6 | 51.248 | 50.823 |
| 18) | Endrin | 5.272 | 5.839 | 165.1E6 | 253.9E6 | 49.203 | 47.311 |
| 19) | 4,4'-DDD | 5.367 | 5.953 | 142.4E6 | 215.0E6 | 50.485 | 48.494 |
| 20) | Endosulfan I | 5.497 | 6.033 | 147.4E6 | 229.6E6 | 48.301 | 46.204 |
| 21) | 4,4'-DDT | 5.642 | 6.224 | 153.2E6 | 225.1E6 | 55.810 | 44.805 |
| 22) | Endrin Aldeh | 5.895 | 6.322 | 109.1E6 | 173.6E6 | 48.213 | 45.514 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 16:03
Operator : pest20:emr
Sample : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : WG1974790,,ical21322
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) | Methoxychlor | 6.101 | 6.777 | 83608069 | 123.1E6 | 56.835 | 50.535 |
| 24) | Mirex | 6.174 | 6.927 | 132.8E6 | 186.7E6 | 58.470 | 52.176 |
| 25) | Endosulfan S | 6.274 | 6.548 | 141.1E6 | 219.2E6 | 55.629 | 50.133 |
| 26) | Endrin Keton | 6.498 | 6.960 | 165.7E6 | 255.6E6 | 50.013 | 47.371 |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-1 | | | | | 0.000 | 0.000 |

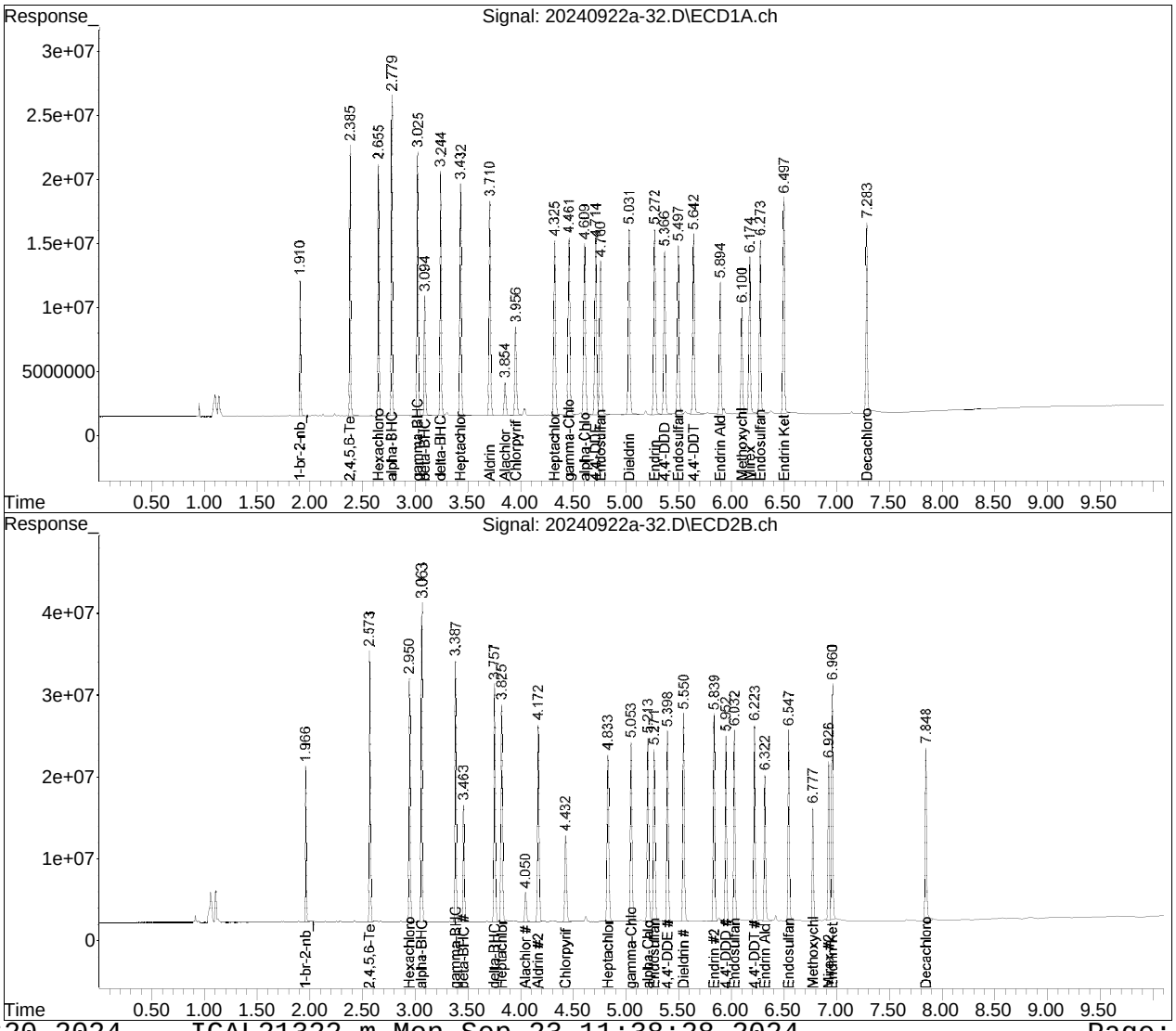
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-32.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 16:03
Operator : pest20:emr
Sample : WG1974790-4,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : WG1974790,,ical21322
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 23 09:06:22 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sun Sep 22 10:08:41 2024
Response via : Initial Calibration
Integrator: ChemStation

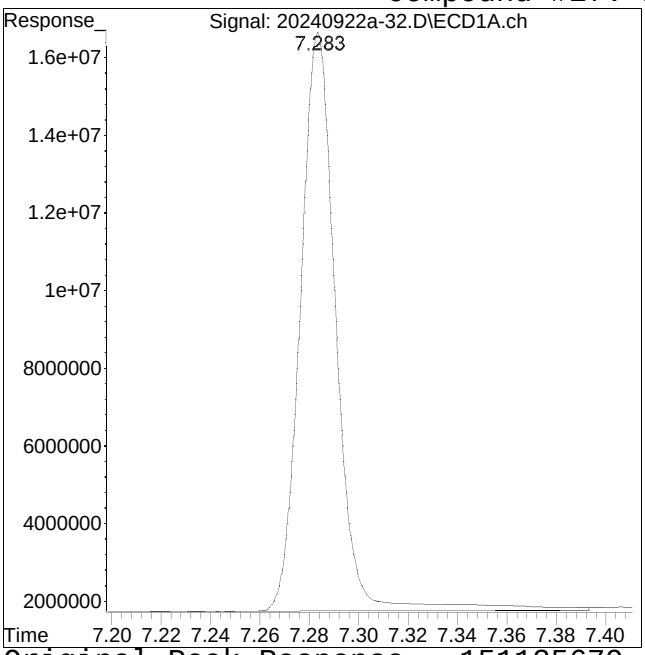
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

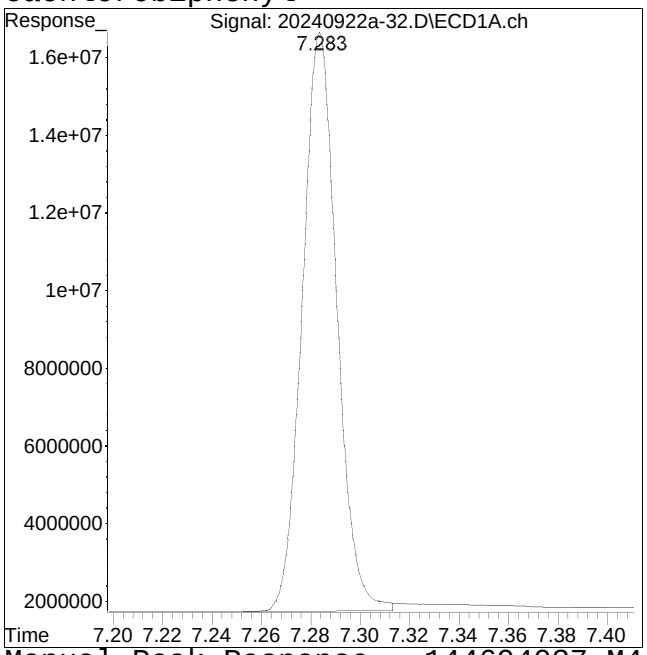


Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-32.D Operator : pest20:emr
Date Inj'd : 9/22/2024 16:03 Instrument : PEST 20
Sample : WG1974790-4,42,,pest11675 Quant Date : 9/23/2024 9:06 am

Compound #27: Decachlorobiphenyl




Original Peak Response = 151125679 Manual Peak Response = 144694037 M4
M4 = Poor automated baseline construction.

# Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:35
Operator  : PEST11:ejl
Sample    : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 1.089 | -4.8 | 124 | 0.00 |
| 3 | t | Hexachlorobenzene | | 1.406 | 1.230 | 12.5 | 109 | 0.00 |
| 4 | t | alpha-BHC | | 1.461 | 1.750 | -19.8 | 131 | 0.00 |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 1.567 | -12.3 | 128 | 0.00 |
| 6 | t | beta-BHC | | 0.628 | 0.665 | -5.9 | 130 | 0.00 |
| 7 | t | delta-BHC | | 1.374 | 1.529 | -11.3 | 123 | 0.00 |
| 8 | t | Heptachlor | | 1.321 | 1.529 | -15.7 | 134 | 0.00 |
| 9 | t | Aldrin | | 1.233 | 1.424 | -15.5 | 131 | 0.00 |
| 10 | t | Alachlor | | 0.230 | 0.206 | 10.4 | 108 | 0.00 |
| 11 | t | Chlorpyrifos | | 0.590 | 0.681 | -15.4 | 150# | 0.00 |
| 12 | t | Heptachlor Epoxide | | 1.185 | 1.271 | -7.3 | 125 | 0.00 |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 1.366 | -26.8# | 150# | 0.00 |
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 1.343 | -10.4 | 130 | 0.00 |
| 15 | t | 4,4'-DDE | | 1.192 | 1.333 | -11.8 | 129 | 0.00 |
| 16 | t | Endosulfan I | | 1.116 | 1.231 | -10.3 | 129 | 0.00 |
| 17 | t | Dieldrin | | 1.135 | 1.399 | -23.3# | 141 | 0.00 |
| 18 | t | Endrin | | 1.153 | 1.323 | -14.7 | 132 | 0.00 |
| 19 | t | 4,4'-DDD | | 0.927 | 1.116 | -20.4 | 139 | 0.00 |
| 20 | t | Endosulfan II | | 1.052 | 1.211 | -15.1 | 134 | 0.00 |
| 21 | t | 4,4'-DDT | | 1.058 | 1.108 | -4.7 | 121 | 0.00 |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.892 | -0.7 | 121 | 0.00 |
| 23 | t | Methoxychlor | | 0.592 | 0.669 | -13.0 | 140 | 0.00 |
| 24 | t | Mirex | | 0.938 | 1.029 | -9.7 | 139 | 0.00 |
| 25 | t | Endosulfan Sulfate | | 1.010 | 1.183 | -17.1 | 142 | 0.00 |
| 26 | t | Endrin Ketone | | 1.183 | 1.328 | -12.3 | 132 | 0.00 |
| 27 | s | Decachlorobiphenyl | | 1.163 | 0.951 | 18.2 | 109 | 0.00 |

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:35
Operator  : PEST11:ejl
Sample    : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 0.958 | 14.0 | 93 | 0.00 |
| 3 | t | Hexachlorobenzene | | 1.239 | 1.033 | 16.6 | 95 | 0.00 |
| 4 | t | alpha-BHC | | 1.620 | 1.445 | 10.8 | 90 | 0.00 |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 1.295 | 15.9 | 90 | 0.00 |
| 6 | t | beta-BHC | * | 50.000 | 44.021 | 12.0 | 91 | 0.00 |
| 7 | t | delta-BHC | | 1.523 | 1.271 | 16.5 | 87 | 0.00 |
| 8 | t | Heptachlor | | 1.598 | 1.223 | 23.5# | 83 | 0.00 |
| 9 | t | Aldrin | | 1.435 | 1.155 | 19.5 | 85 | 0.00 |
| 10 | t | Alachlor | * | 50.000 | 48.122 | 3.8 | 95 | 0.00 |
| 11 | t | Chlorpyrifos | * | 50.000 | 41.256 | 17.5 | 83 | 0.00 |
| 12 | t | Heptachlor Epoxide | | 1.425 | 1.058 | 25.8# | 83 | 0.00 |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 1.098 | 16.3 | 95 | 0.00 |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 1.075 | 25.7# | 83 | 0.00 |
| 15 | t | 4,4'-DDE | | 1.343 | 1.055 | 21.4# | 83 | 0.00 |
| 16 | t | Endosulfan I | | 1.332 | 1.002 | 24.8# | 84 | 0.00 |
| 17 | t | Dieldrin | | 1.327 | 1.130 | 14.8 | 91 | 0.00 |
| 18 | t | Endrin | | 1.347 | 1.068 | 20.7# | 85 | 0.00 |
| 19 | t | 4,4'-DDD | | 1.084 | 0.906 | 16.4 | 89 | 0.00 |
| 20 | t | Endosulfan II | | 1.214 | 0.975 | 19.7 | 89 | 0.00 |
| 21 | t | 4,4'-DDT | | 1.250 | 0.957 | 23.4# | 82 | 0.00 |
| 22 | t | Endrin Aldehyde | * | 50.000 | 38.750 | 22.5# | 81 | 0.00 |
| 23 | t | Methoxychlor | | 0.704 | 0.519 | 26.3# | 87 | 0.00 |
| 24 | t | Mirex | * | 50.000 | 42.671 | 14.7 | 89 | 0.00 |
| 25 | t | Endosulfan Sulfate | | 1.199 | 0.931 | 22.4# | 89 | 0.00 |
| 26 | t | Endrin Ketone | | 1.261 | 1.084 | 14.0 | 95 | 0.00 |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.804 | 24.2# | 91 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:35
Operator  : PEST11:ejl
Sample    : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -2.29# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -2.69# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -3.22# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -3.34# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 34 | l2 | toxaphene-2 | | *2000.000 | 0.000 | 100.0# | 0 | -4.22# |
| 35 | l2 | toxaphene-3 | | *2000.000 | 0.000 | 100.0# | 0 | -4.36# |
| 36 | l2 | toxaphene-4 | | *2000.000 | 0.000 | 100.0# | 0 | -4.60# |
| 37 | l2 | toxaphene-5 | | *2000.000 | 0.000 | 100.0# | 0 | -4.98# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -2.63# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -3.21# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -3.87# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -4.04# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 34 | l2 | toxaphene-2 | | *2000.000 | 0.000 | 100.0# | 0 | -4.90# |
| 35 | l2 | toxaphene-3 | | *2000.000 | 0.000 | 100.0# | 0 | -4.92# |
| 36 | l2 | toxaphene-4 | | *2000.000 | 0.000 | 100.0# | 0 | -5.25# |
| 37 | l2 | toxaphene-5 | | *2000.000 | 0.000 | 100.0# | 0 | -5.67# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:35
Operator : PEST11:ejl
Sample : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.201 | 1.274 | 280.1E6 | 198.1E6 | 25.000M4 | 25.000 |
| 28) i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.529 | 1.723 | 609.7E6 | 379.6E6 | 52.381M3 | 43.027 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 104.76% | 86.05% |
| 27) s | Decachlorobi | 6.135 | 6.766 | 532.5E6 | 318.5E6 | 40.872M4 | 37.929M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = | | 81.74% | 75.86% |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 1.731 | 2.025 | 689.1E6 | 409.1E6 | 43.754M4 | 41.677 |
| 4) t | alpha-BHC | 1.825 | 2.114 | 980.2E6 | 572.6E6 | 59.910M4 | 44.618M3 |
| 5) t | gamma-BHC (l | 2.016 | 2.385 | 877.8E6 | 513.2E6 | 56.154M4 | 42.085 |
| 6) t | beta-BHC | 2.070 | 2.449 | 372.7E6 | 220.5E6 | 52.999M4 | 44.021M3 |
| 7) t | delta-BHC | 2.191 | 2.703 | 856.3E6 | 503.5E6 | 55.631M4 | 41.736 |
| 8) t | Heptachlor | 2.346 | 2.760 | 856.5E6 | 484.5E6 | 57.881M4 | 38.279 |
| D | | | | | | | |
| 9) t | Aldrin | 2.577 | 3.065 | 797.8E6 | 457.6E6 | 57.748M4 | 40.255 |
| 10) t | Alachlor | 2.696 | 2.958 | 115.6E6 | 69959040 | 44.799M4 | 48.122 |
| 11) t | Chlorpyrifos | 2.785 | 3.297 | 381.5E6 | 230.4E6 | 57.745M3 | 41.256 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:35
Operator : PEST11:ejl
Sample : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| 12) | t | Heptachlor E | 3.099 | 3.655 | 711.7E6 | 419.2E6 | 53.588M3 | 37.122 |
| 13) | t | gamma-Chlord | 3.219 | 3.869 | 765.4E6 | 434.8E6 | 63.440M4 | 41.840M3 D |
| 14) | t | alpha-Chlord | 3.348 | 4.038 | 752.3E6 | 425.8E6 | 55.217M3 | 37.166 |
| 15) | t | 4,4'-DDE | 3.446 | 4.255 | 746.4E6 | 418.1E6 | 55.917M4 | 39.305 |
| 16) | t | Endosulfan I | 3.477 | 4.100 | 689.4E6 | 397.0E6 | 55.138M3 | 37.623 |
| 17) | t | Dieldrin | 3.729 | 4.414 | 783.4E6 | 447.6E6 | 61.602M4 | 42.565 |
| 18) | t | Endrin | 3.976 | 4.727 | 741.2E6 | 423.0E6 | 57.392M3 | 39.644M4 |
| 19) | t | 4,4'-DDD | 4.097 | 4.865 | 625.0E6 | 358.8E6 | 60.165M3 | 41.785M4 |
| 20) | t | Endosulfan I | 4.230 | 4.936 | 678.1E6 | 386.3E6 | 57.542M4 | 40.179M4 |
| 21) | t | 4,4'-DDT | 4.412 | 5.151 | 620.5E6 | 379.3E6 | 52.332 | 38.293M4 |
| 22) | t | Endrin Aldeh | 4.672 | 5.244 | 499.6E6 | 287.3E6 | 50.305 | 38.750M4 |
| 23) | t | Methoxychlor | 4.929 | 5.734 | 374.5E6 | 205.5E6 | 56.481 | 36.817 D |
| 24) | t | Mirex | 4.972 | 5.855 | 576.2E6 | 307.3E6 | 54.855 | 42.671 |
| 25) | t | Endosulfan S | 5.078 | 5.478 | 662.5E6 | 368.8E6 | 58.575M3 | 38.816M4 D |
| 26) | t | Endrin Keton | 5.310 | 5.896 | 743.8E6 | 429.4E6 | 56.111M3 | 42.984M4 |
| 29) | l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) | l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) | l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) | l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:35
Operator : PEST11:ejl
Sample : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 |

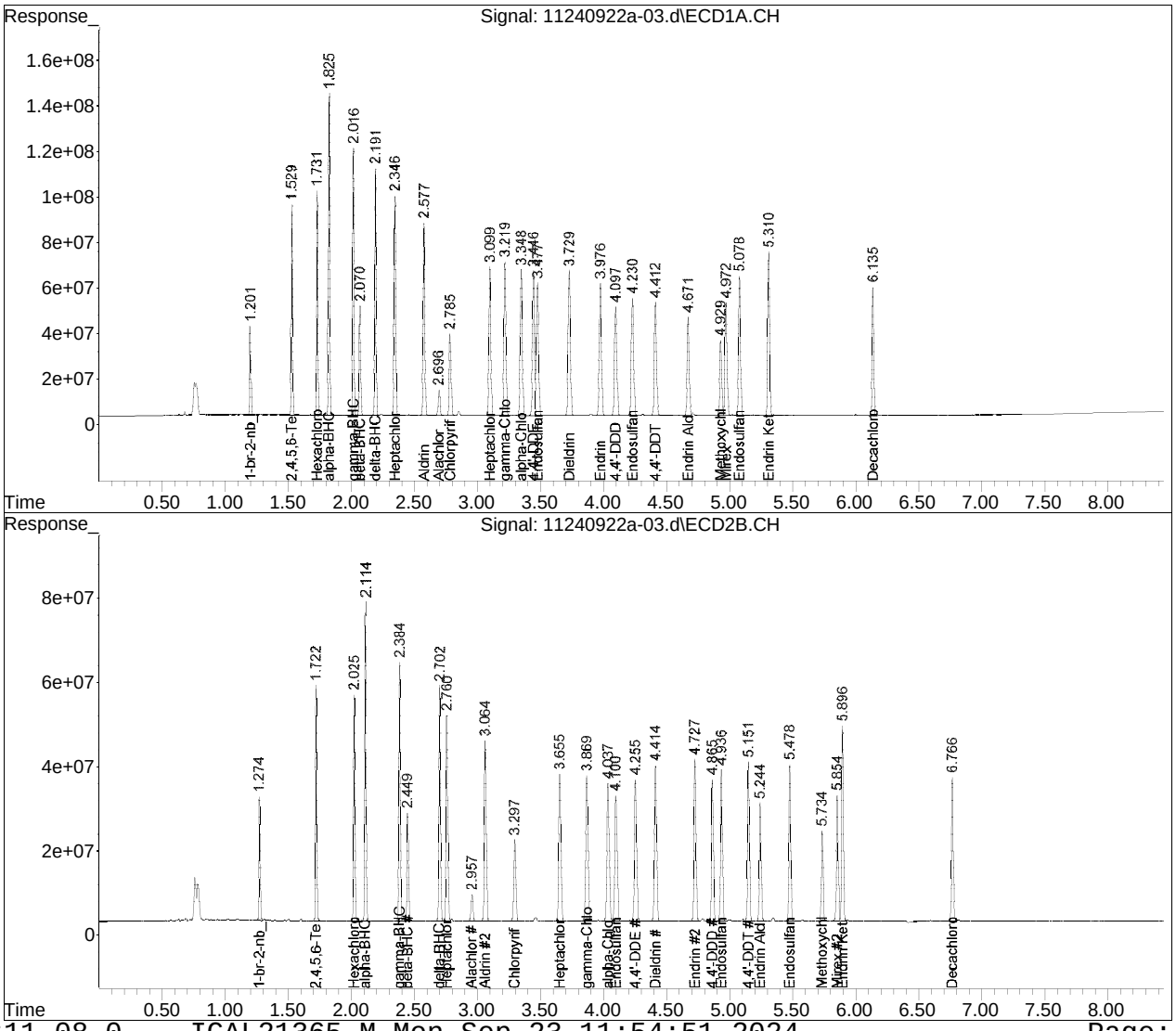
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:35
Operator : PEST11:ejl
Sample : wg1974788-1,42,,pest11675 (Sig #1); pest11675 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:48:43 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

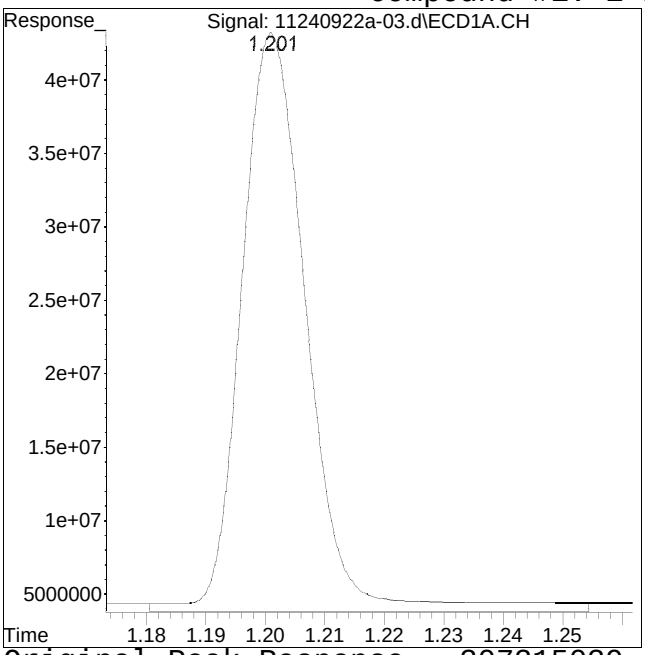
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

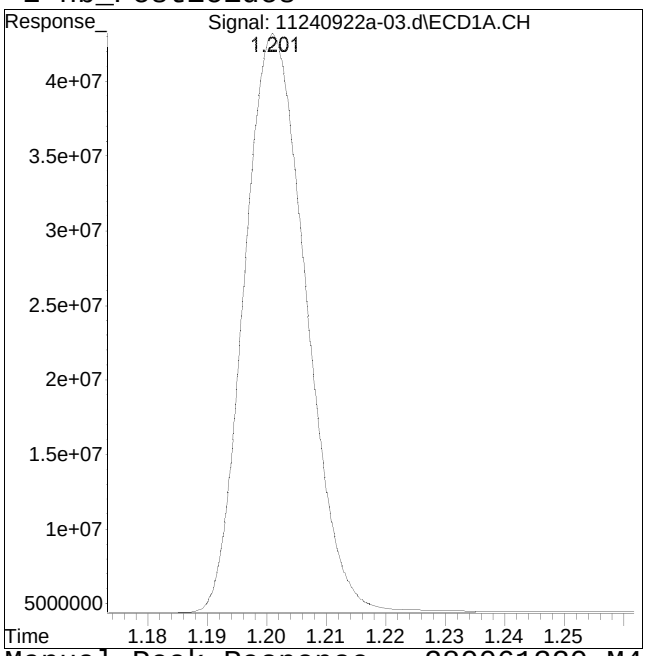


# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #1: 1-br-2-nb_Pesticides



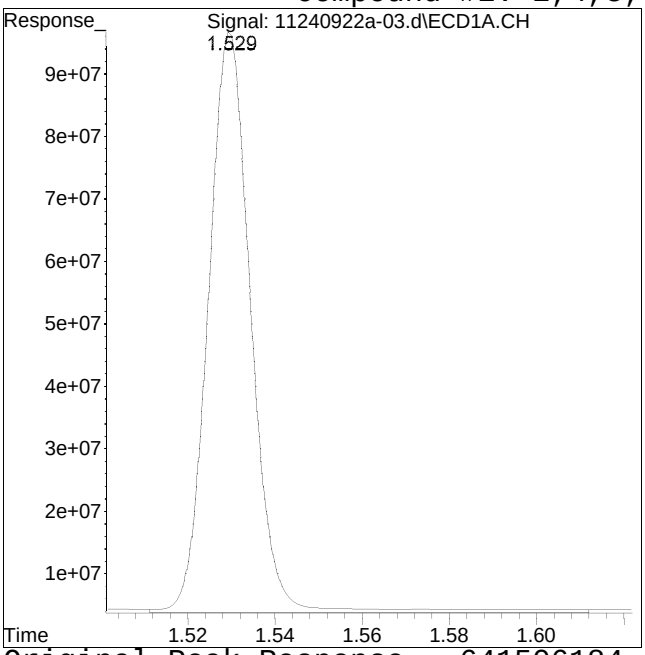



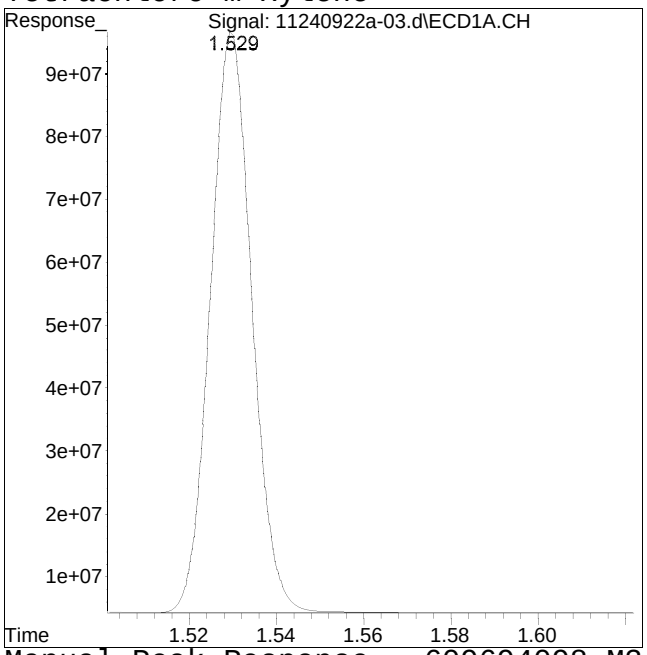

Original Peak Response = 307315039 Manual Peak Response = 280061320 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



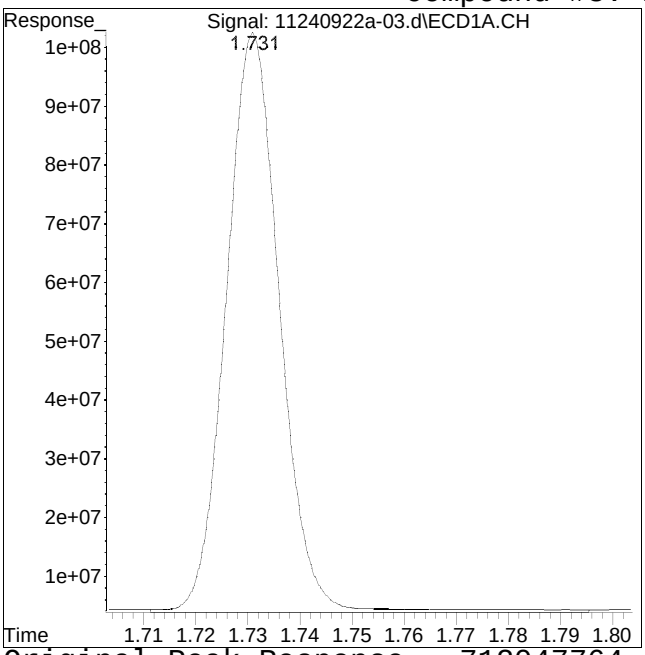



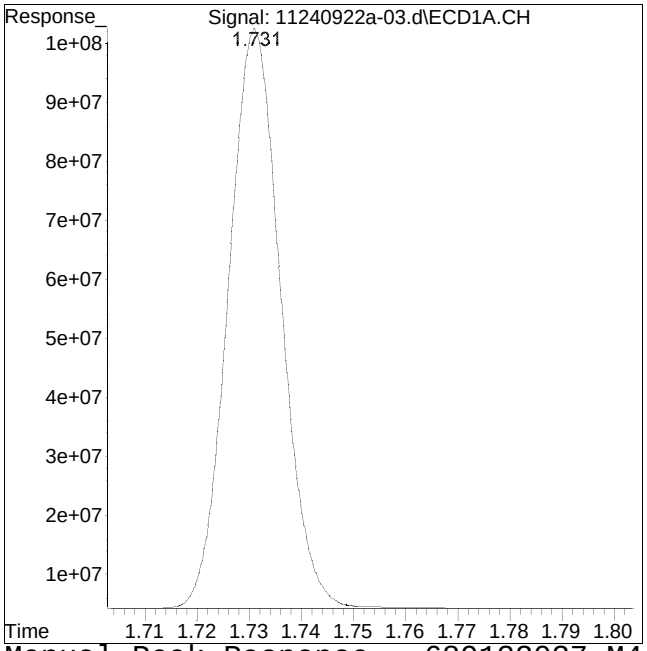

Original Peak Response = 641506184 Manual Peak Response = 609694098 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #3: Hexachlorobenzene



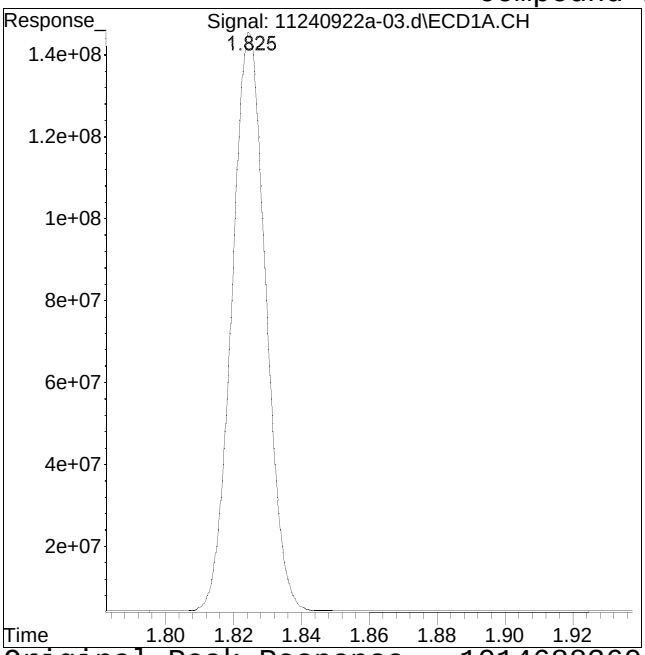



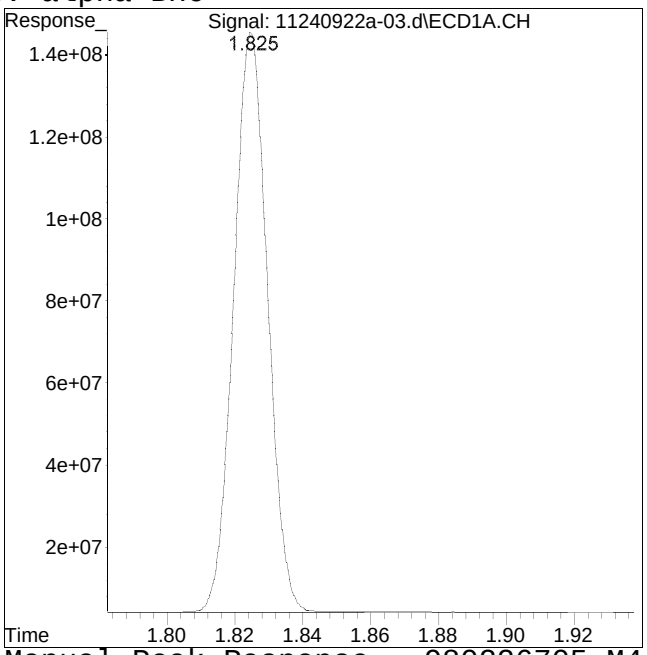

Original Peak Response = 712047764 Manual Peak Response = 689133037 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #4: alpha-BHC



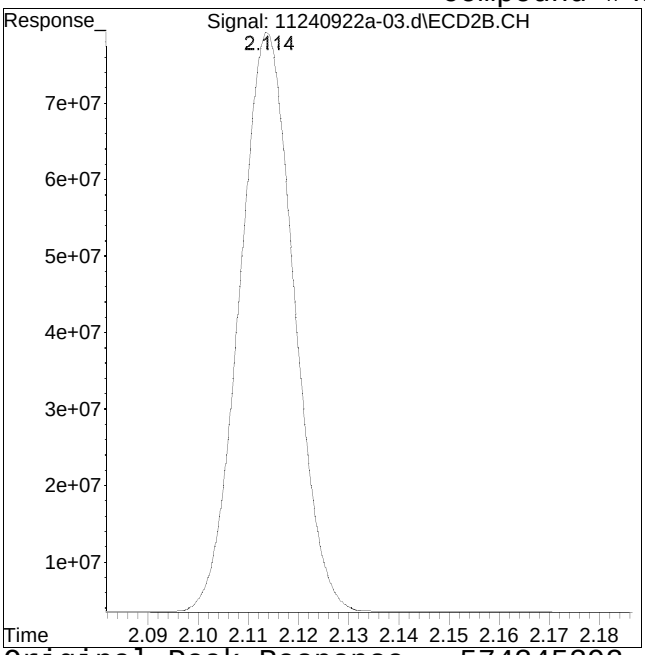



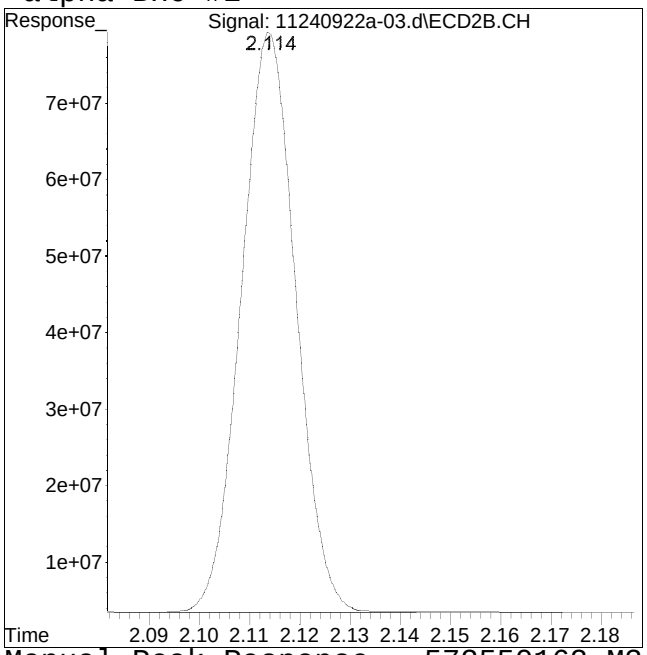

Original Peak Response = 1014688360 Manual Peak Response = 980226705 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #42: alpha-BHC #2



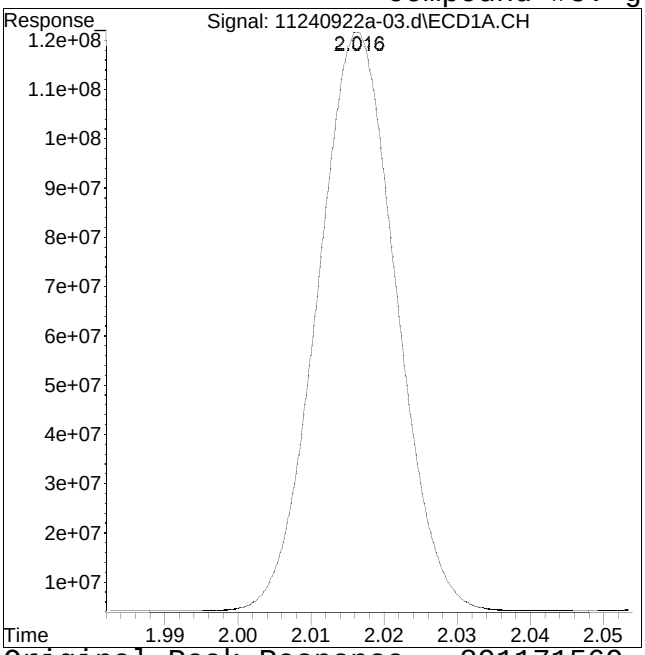



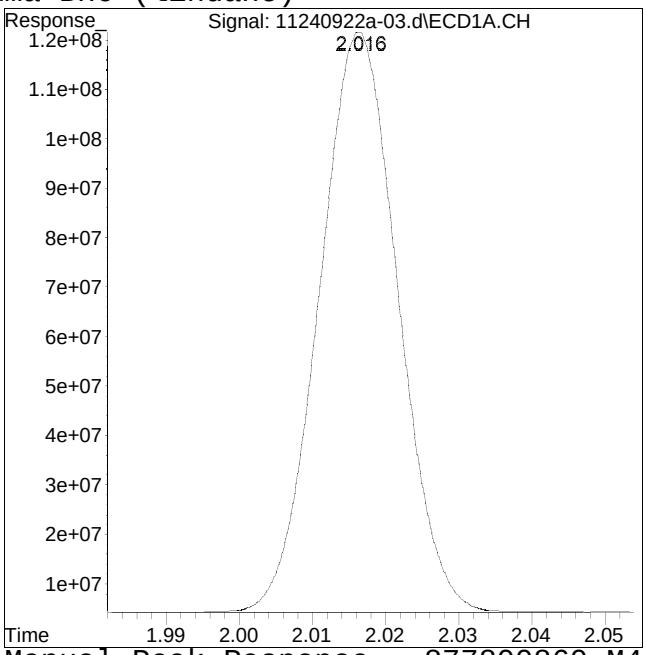

Original Peak Response = 574345392 Manual Peak Response = 572550162 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #5: gamma-BHC (lindane)



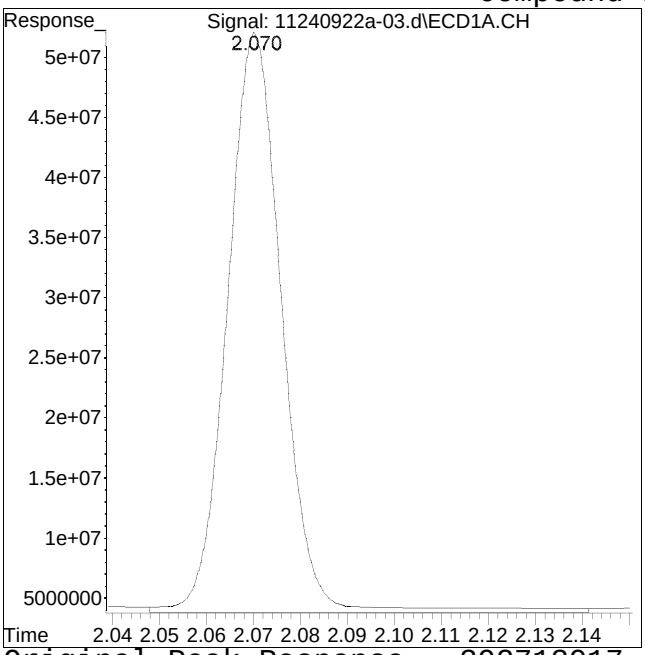




Original Peak Response = 891171569 Manual Peak Response = 877800860 M4
M4 = Poor automated baseline construction.

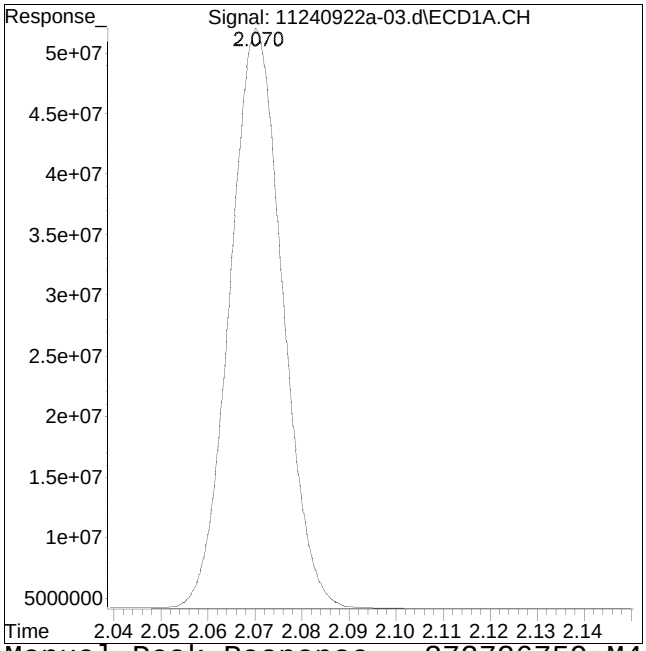
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #6: beta-BHC




Original Peak Response = 392713917



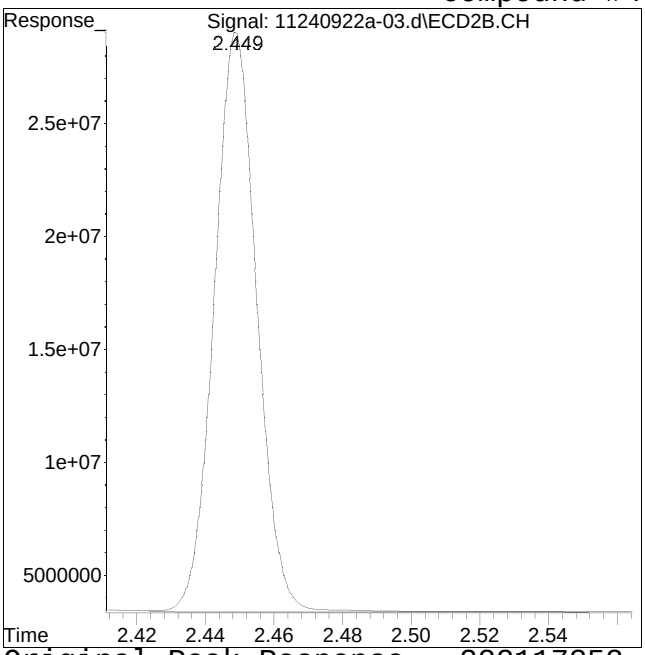

Manual Peak Response = 372726759 M4

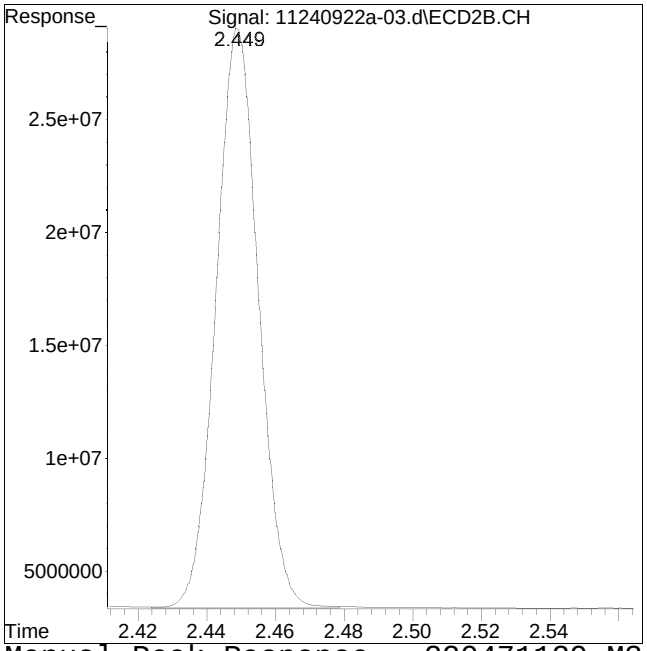
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #44: beta-BHC #2



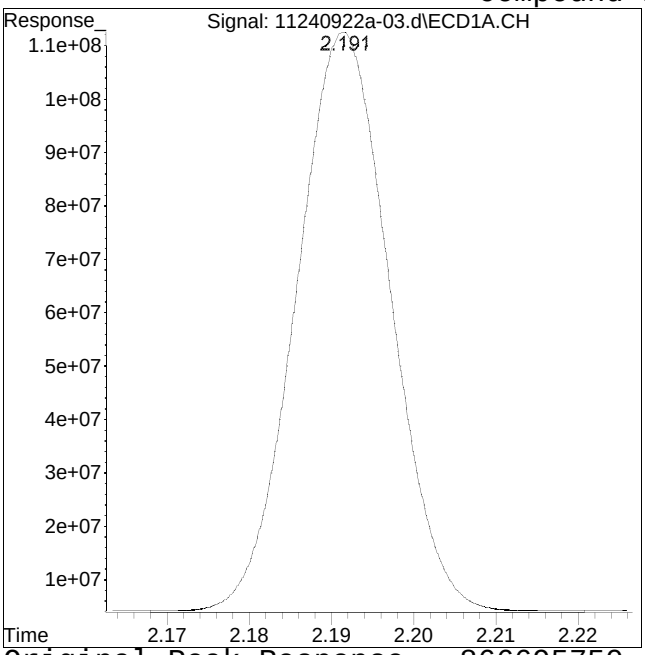




Original Peak Response = 222117352 Manual Peak Response = 220471129 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

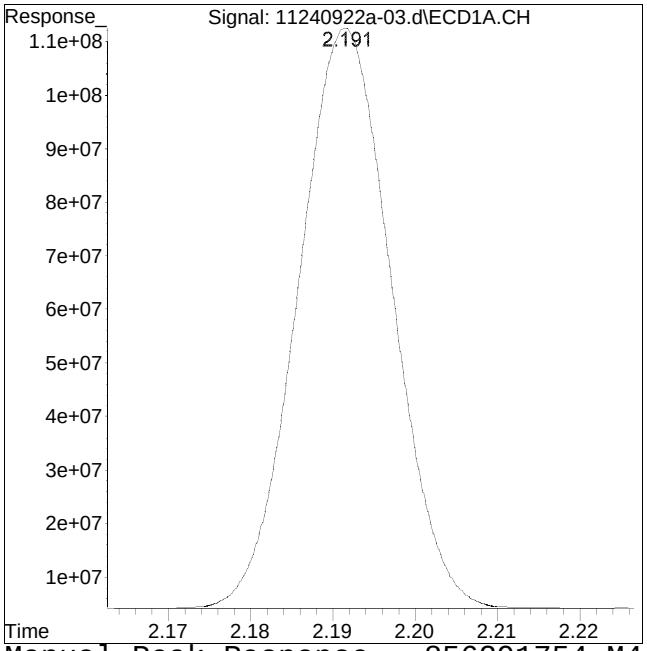
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #7: delta-BHC




Original Peak Response = 866695750



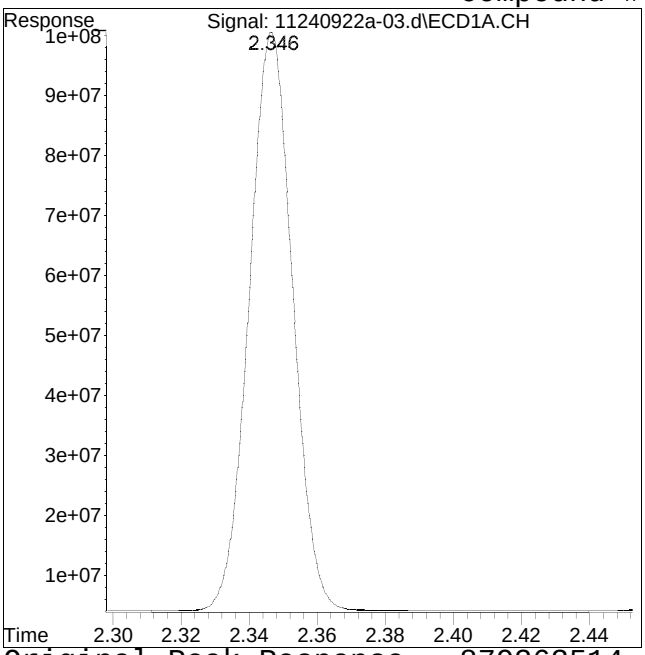

Manual Peak Response = 856291754 M4

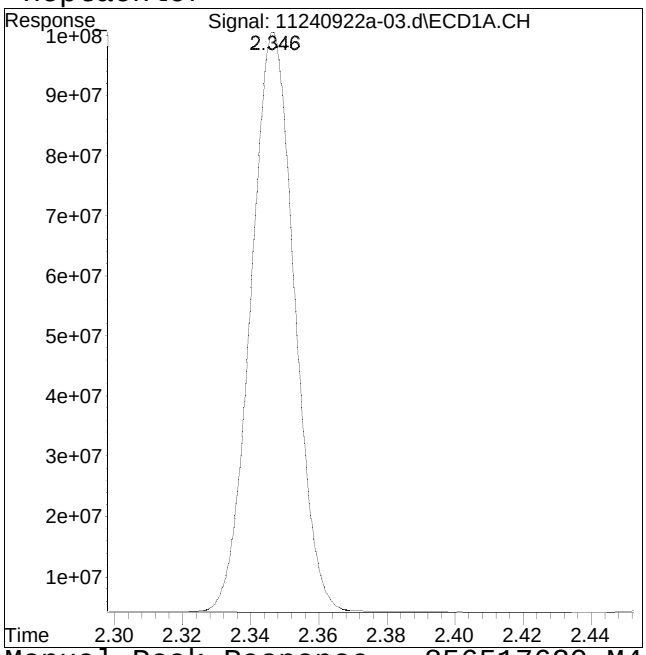
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #8: Heptachlor



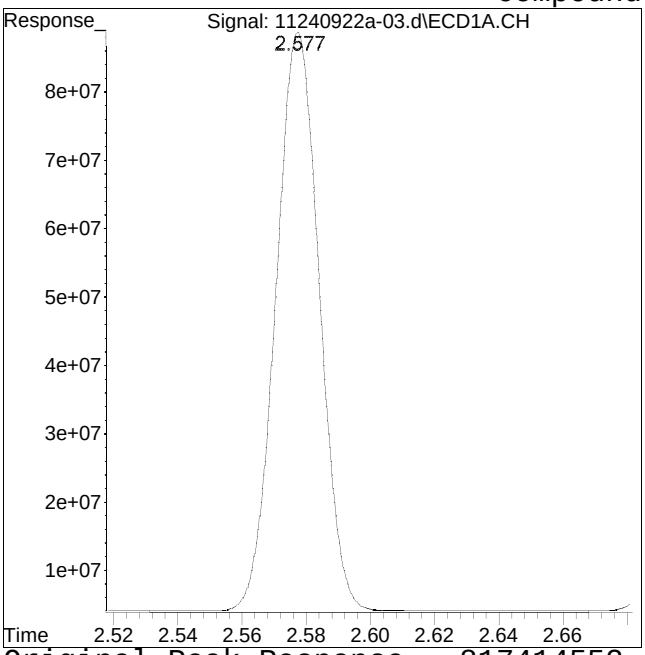




Original Peak Response = 879363514 Manual Peak Response = 856517620 M4
M4 = Poor automated baseline construction.

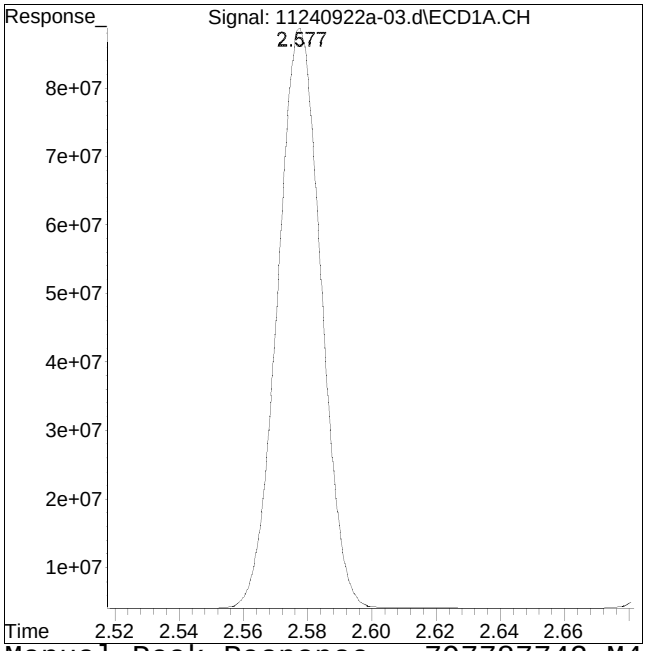
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #9: Aldrin




Original Peak Response = 817414552



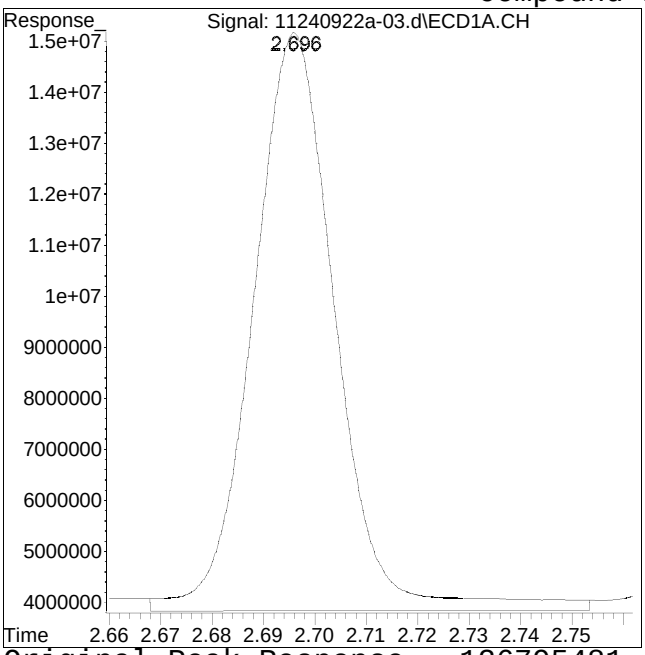

Manual Peak Response = 797787742 M4

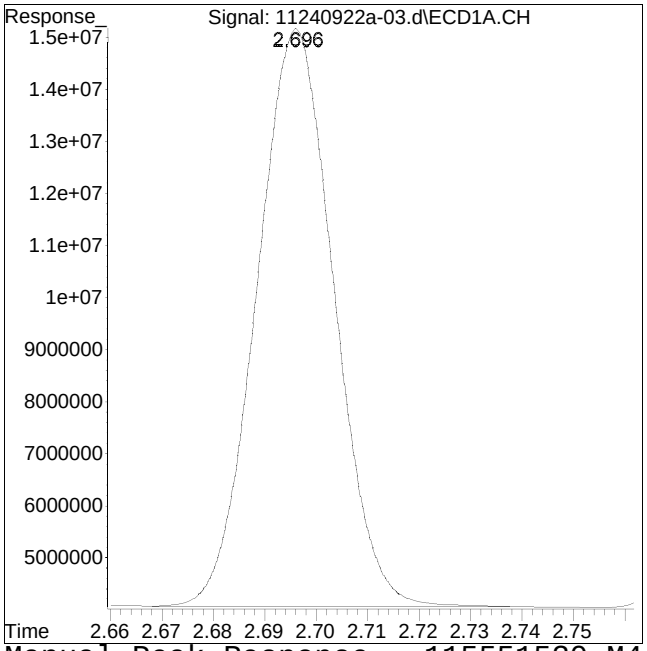
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #10: Alachlor



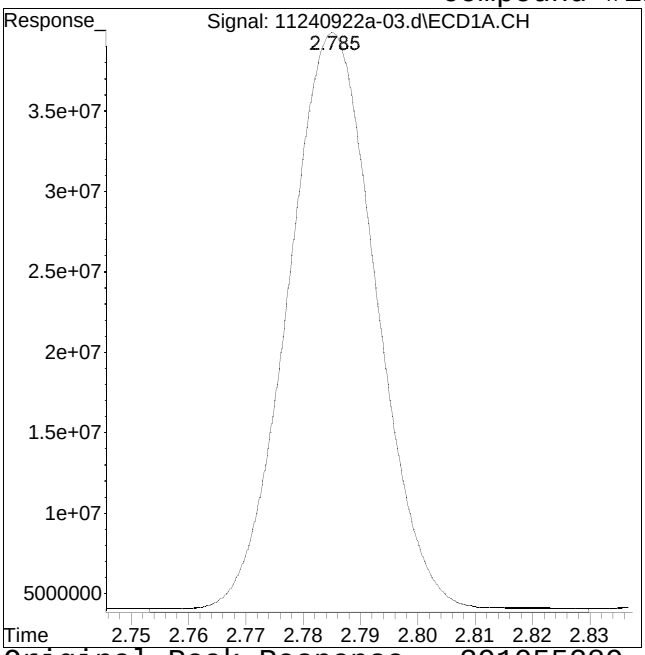



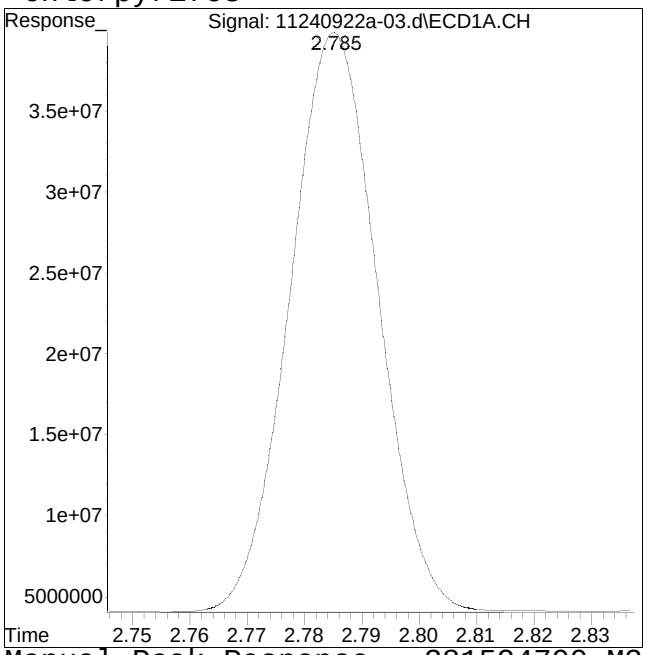

Original Peak Response = 126795481 Manual Peak Response = 115551530 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #11: Chlorpyrifos



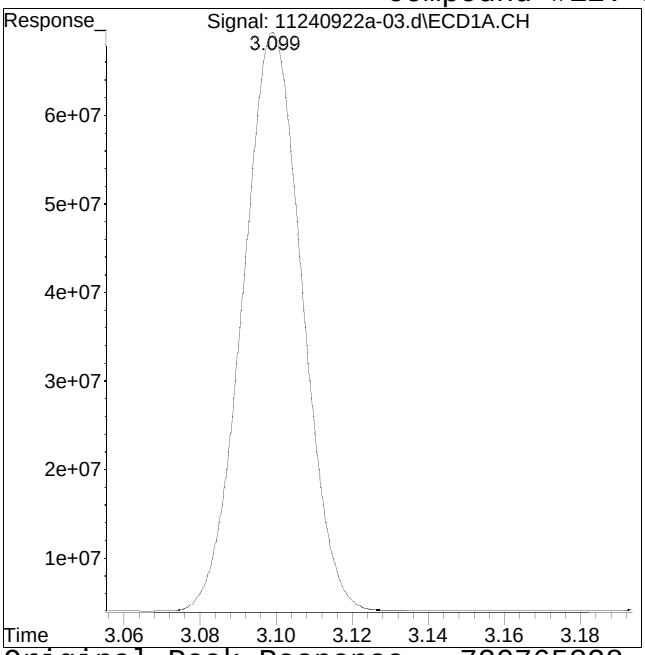



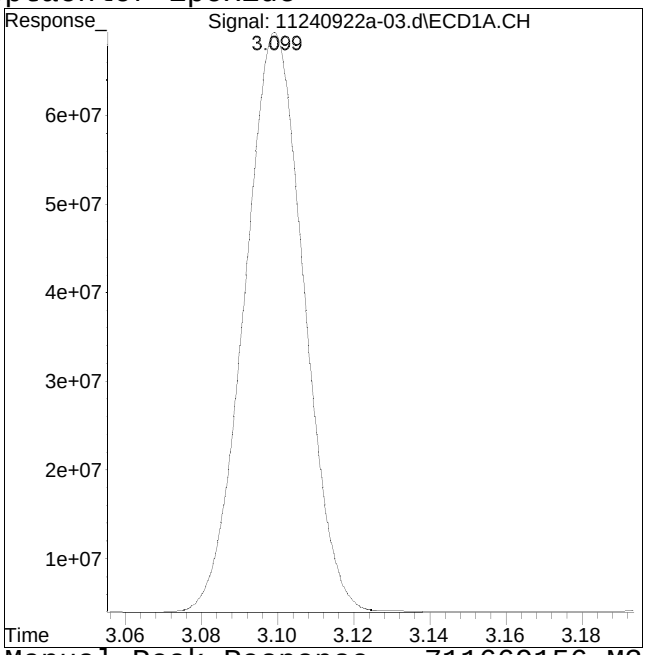

Original Peak Response = 391055289 Manual Peak Response = 381524790 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #12: Heptachlor Epoxide



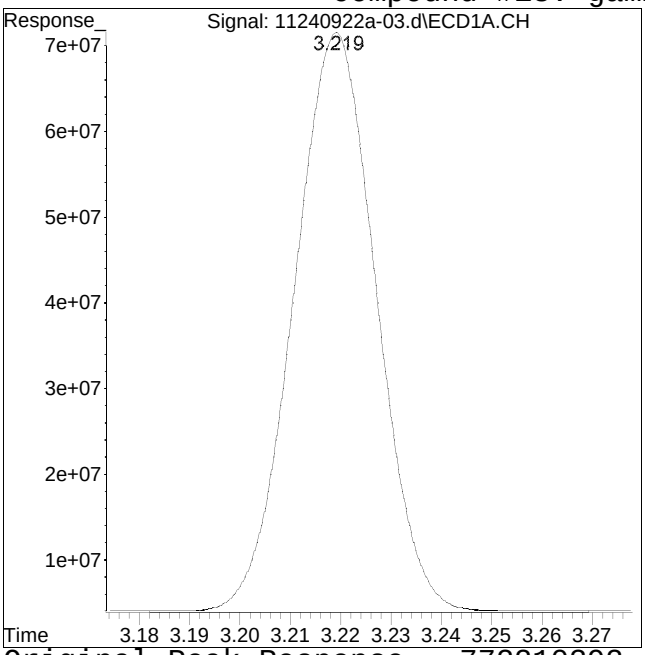




Original Peak Response = 720765328 Manual Peak Response = 711669156 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

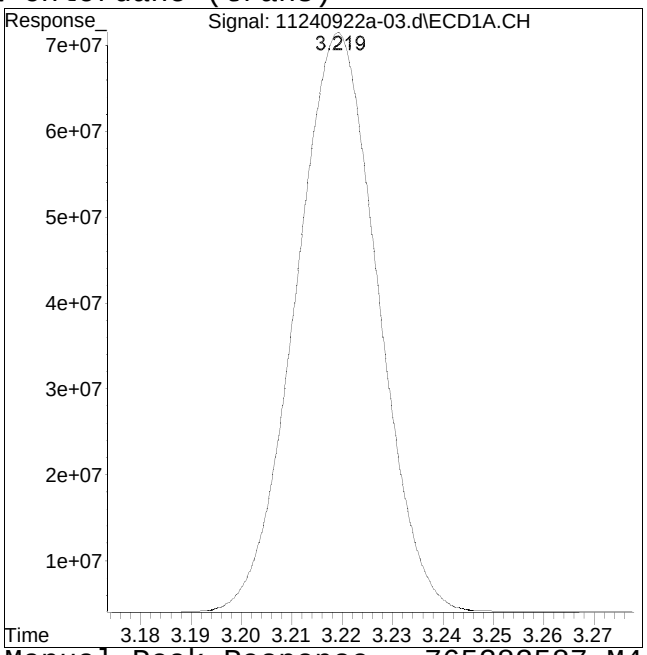
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #13: gamma-Chlordane (trans)




Original Peak Response = 772210392



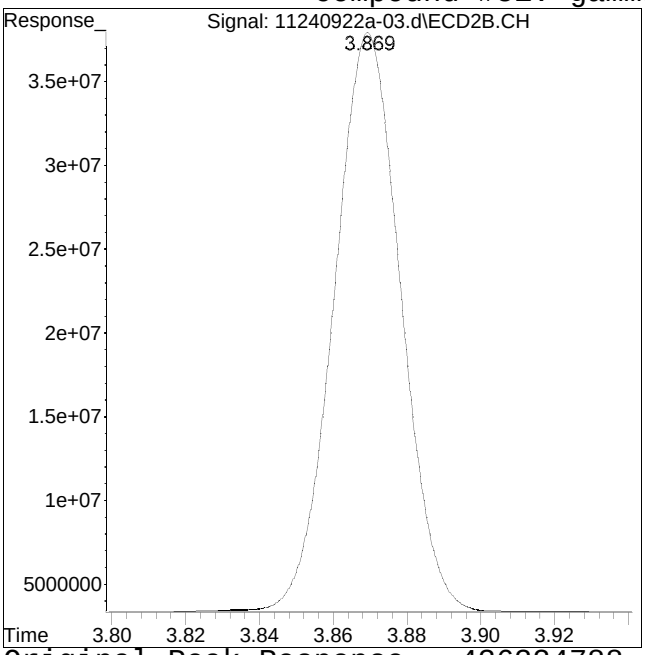

Manual Peak Response = 765383587 M4

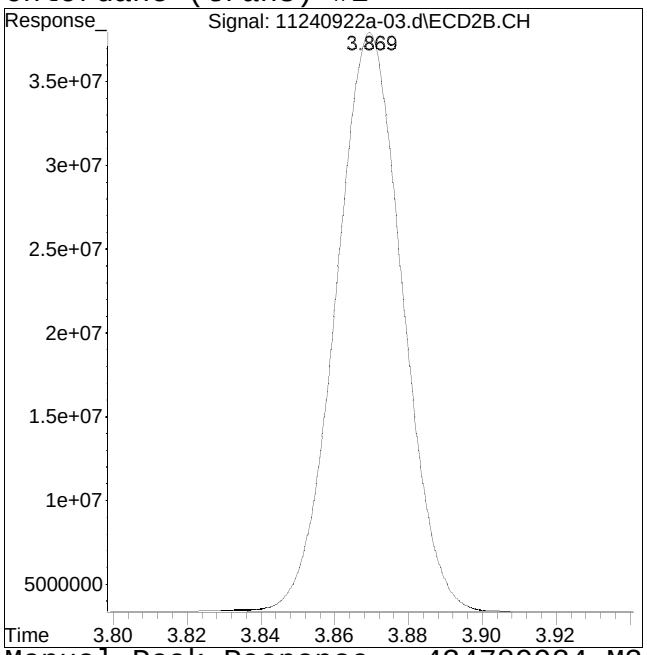
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #51: gamma-Chlordane (trans) #2



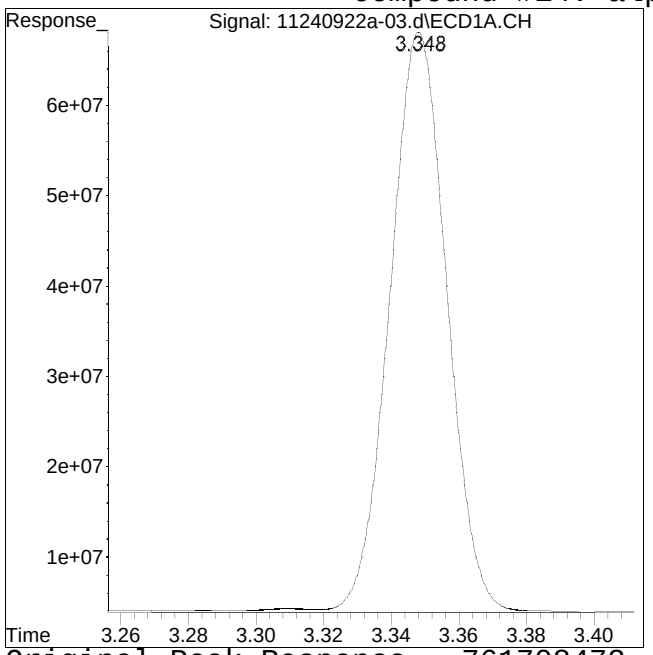



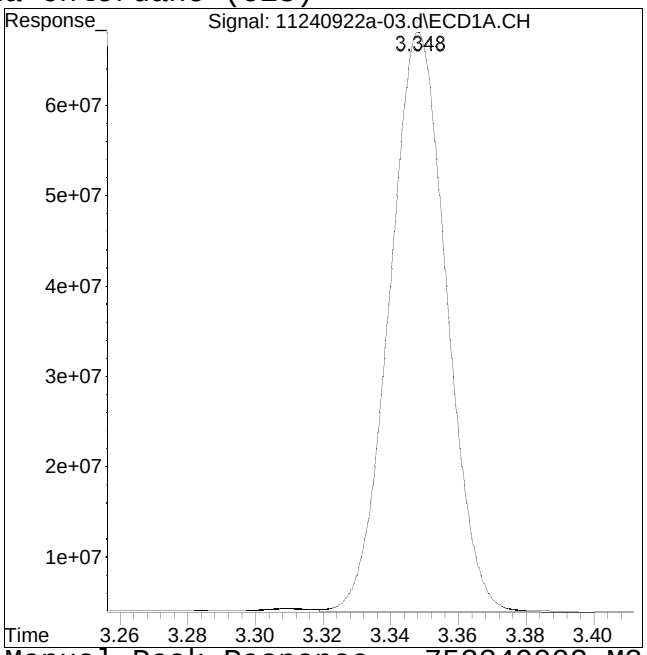

Original Peak Response = 436324788 Manual Peak Response = 434789924 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #14: alpha-Chlordane (cis)



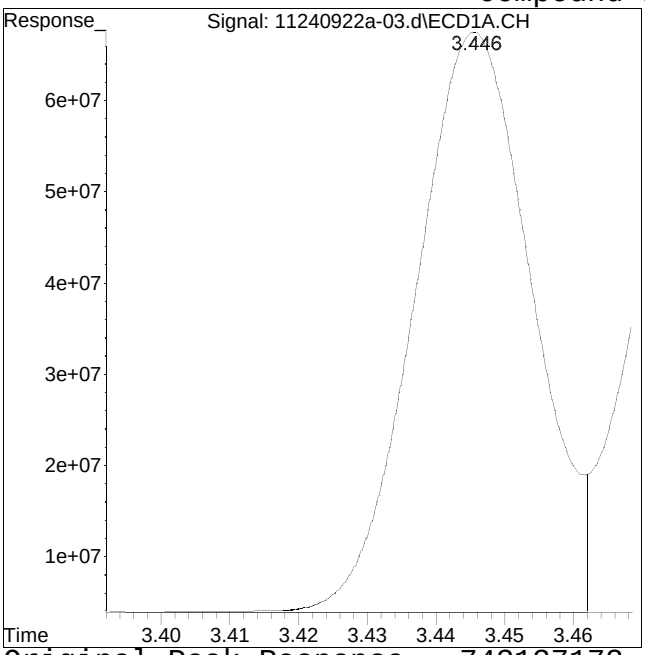




Original Peak Response = 761708472 Manual Peak Response = 752349992 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

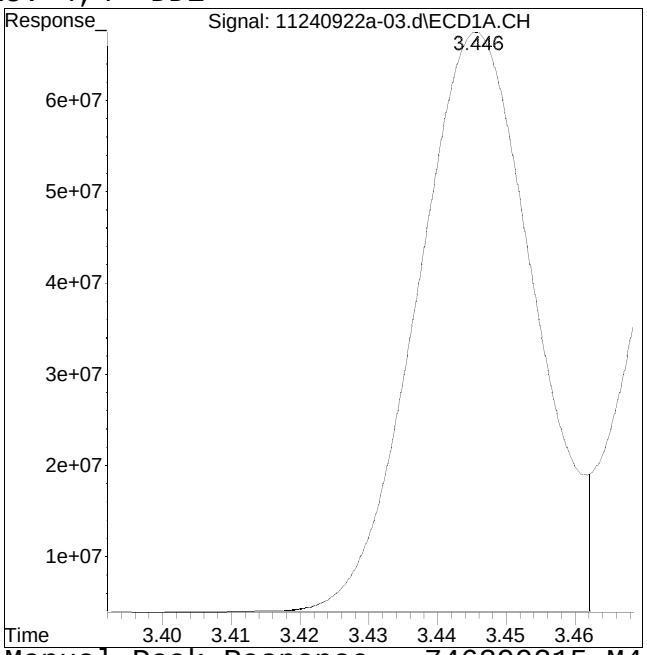
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #15: 4,4'-DDE




Original Peak Response = 743137173



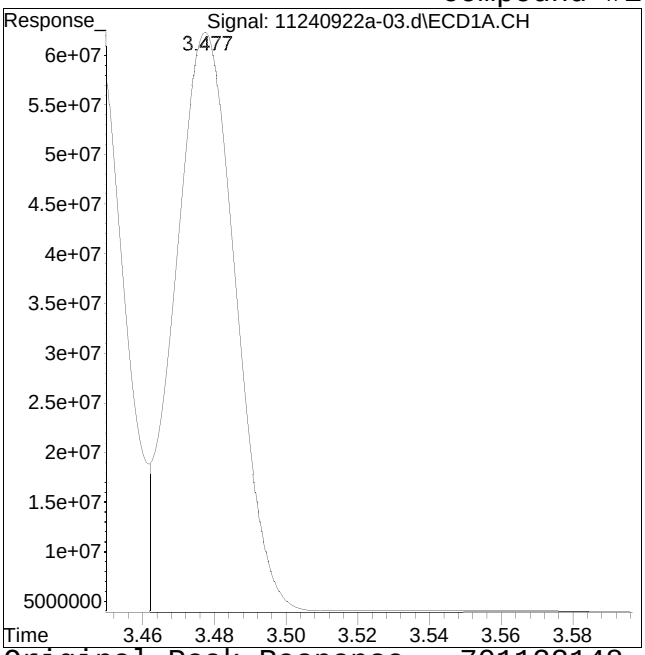

Manual Peak Response = 746399215 M4

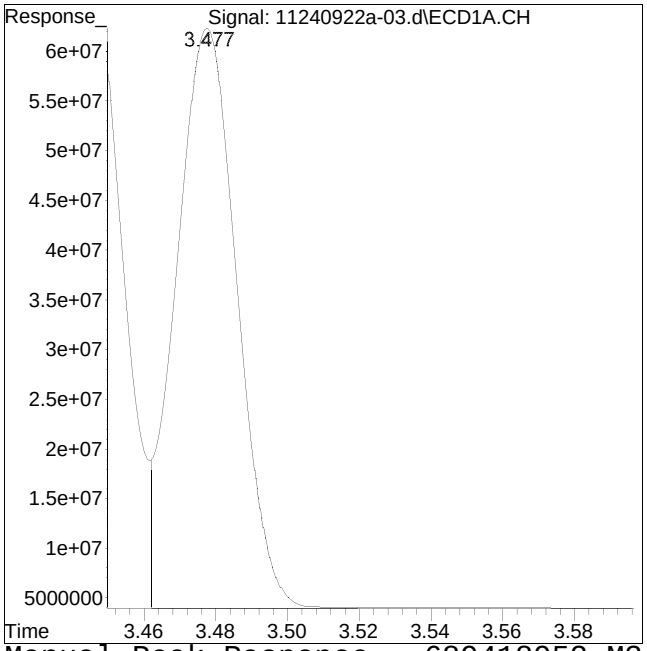
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #16: Endosulfan I



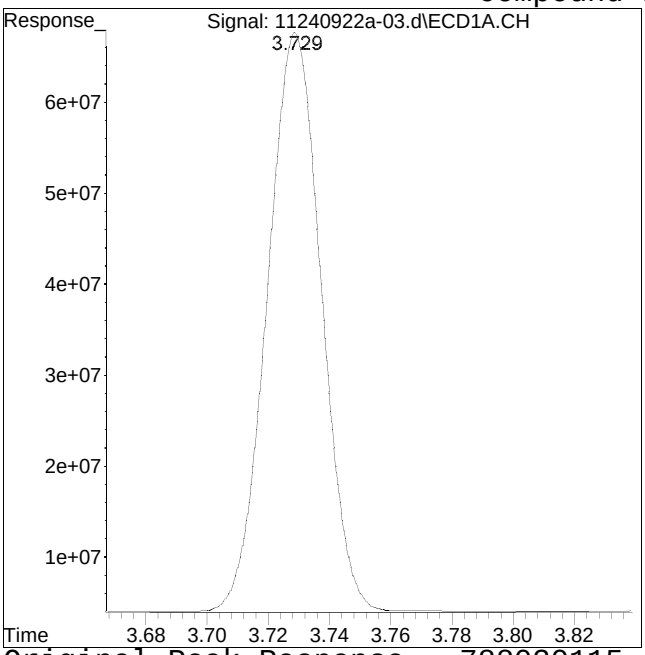




Original Peak Response = 701122148 Manual Peak Response = 689418952 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

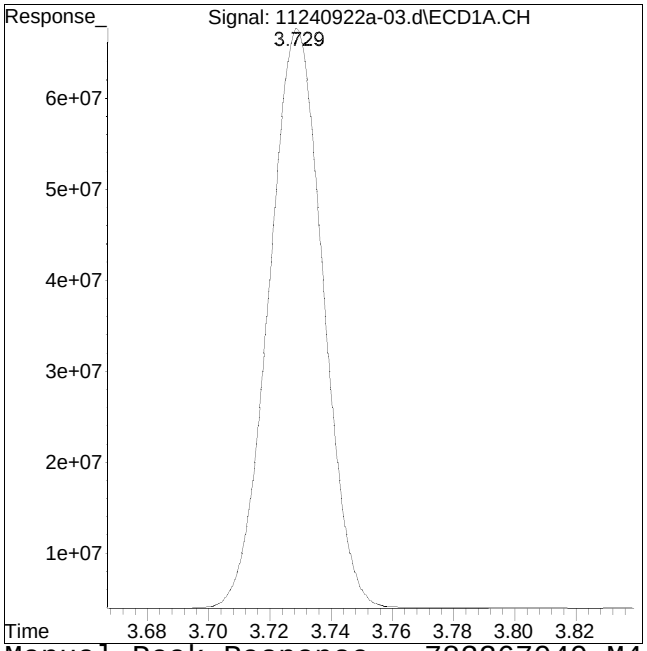
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #17: Dieldrin




Original Peak Response = 788030115



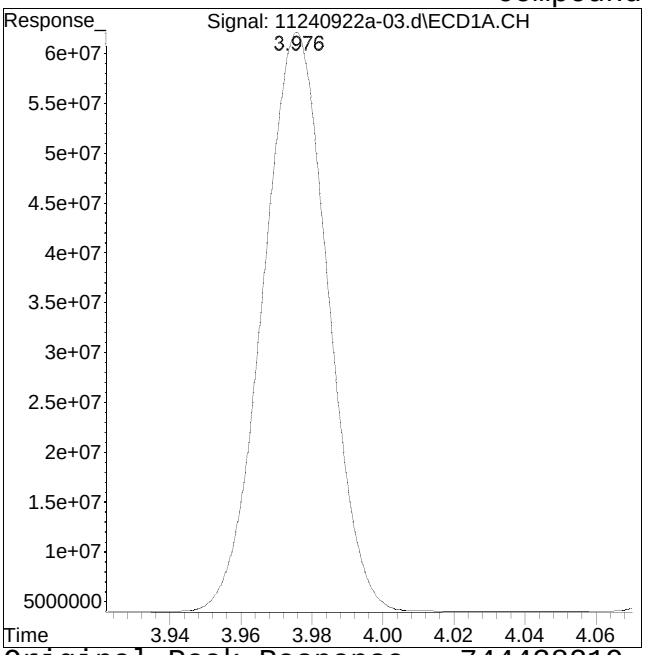

Manual Peak Response = 783367040 M4

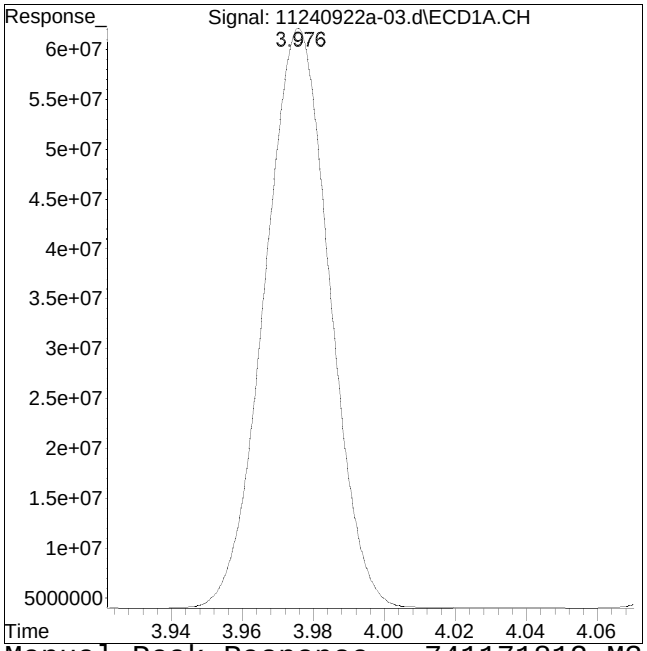
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #18: Endrin



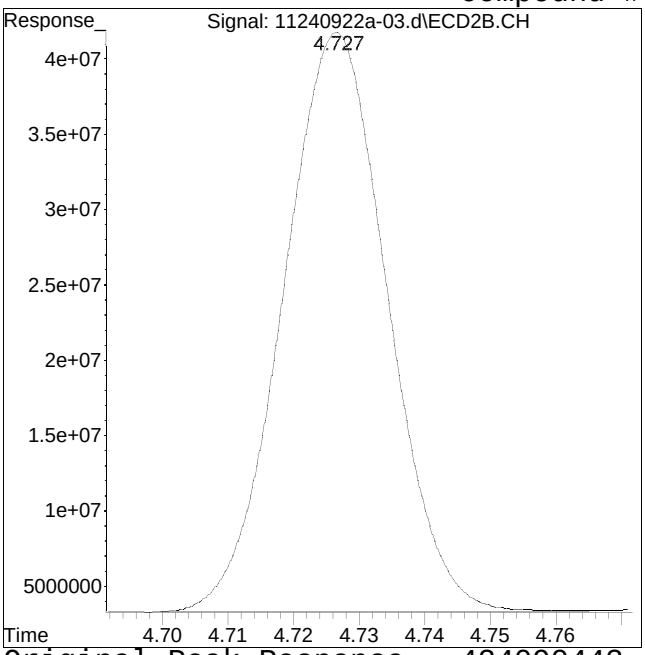



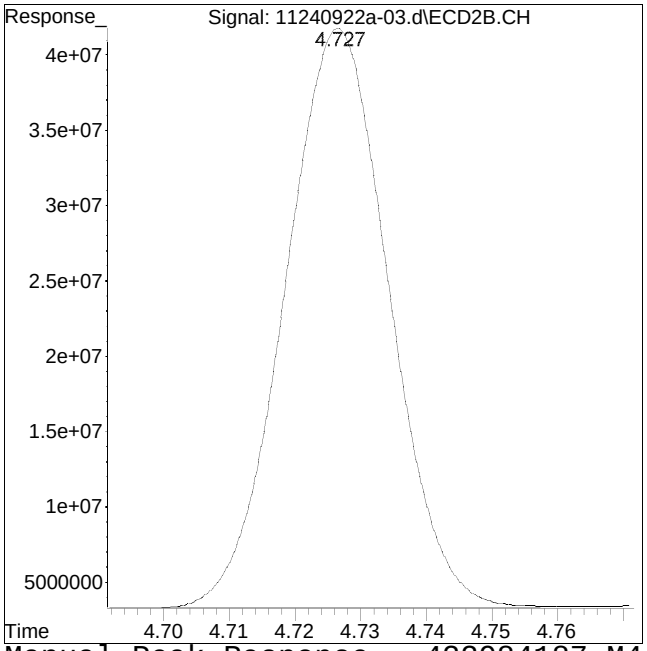

Original Peak Response = 744438219 Manual Peak Response = 741171812 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #56: Endrin #2



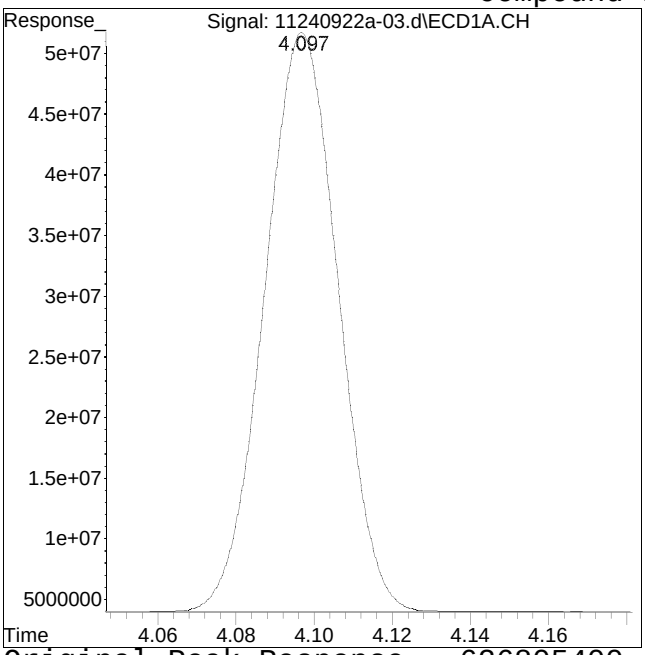



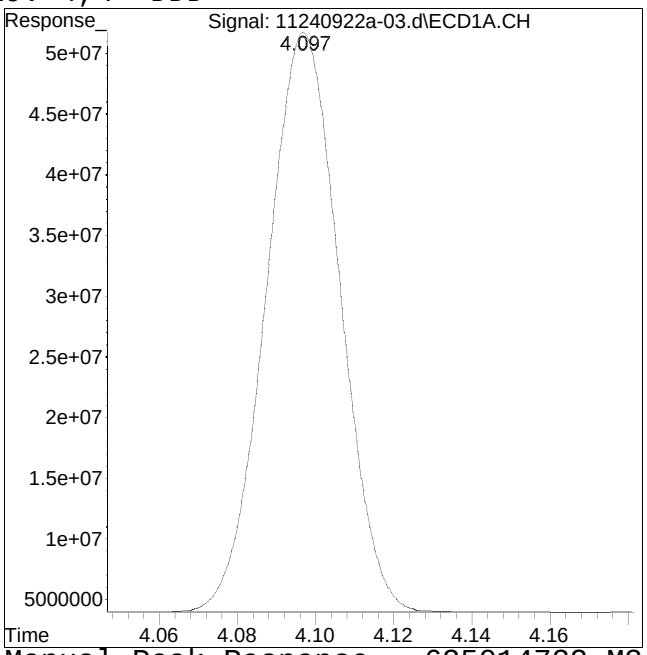

Original Peak Response = 424090443 Manual Peak Response = 422984187 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #19: 4,4'-DDD



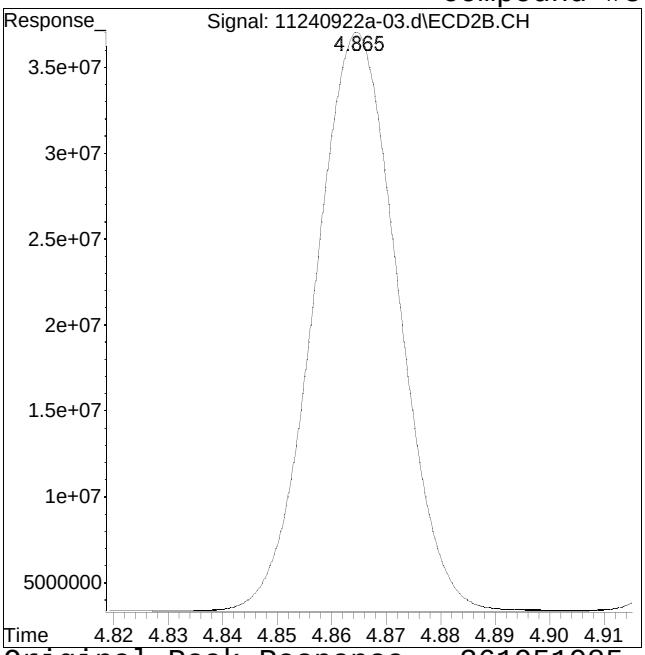




Original Peak Response = 626805400 Manual Peak Response = 625014722 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

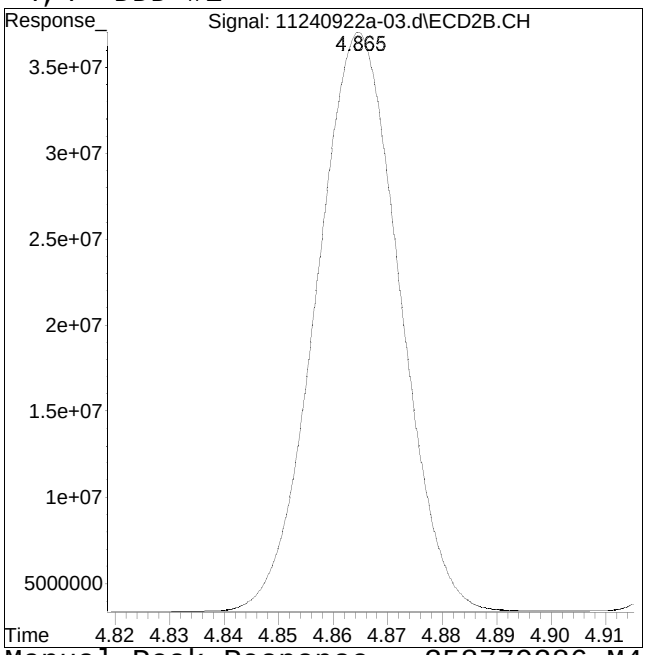
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #57: 4,4'-DDD #2




Original Peak Response = 361951985



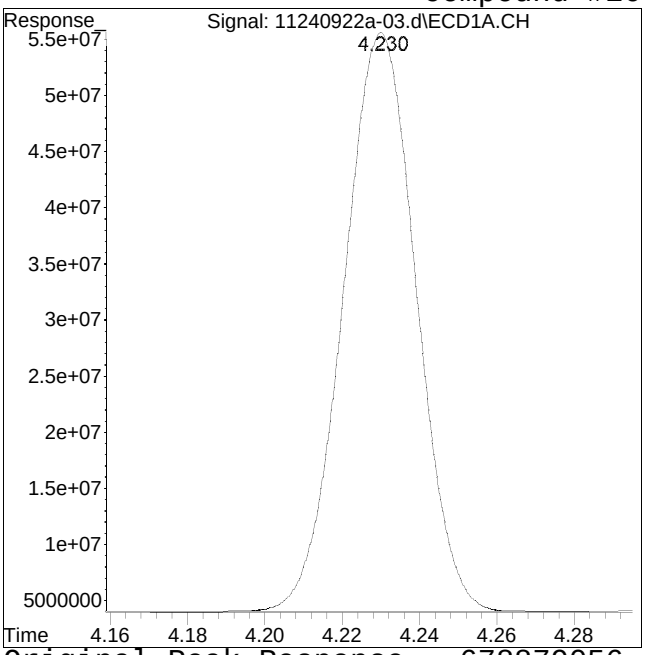

Manual Peak Response = 358779286 M4

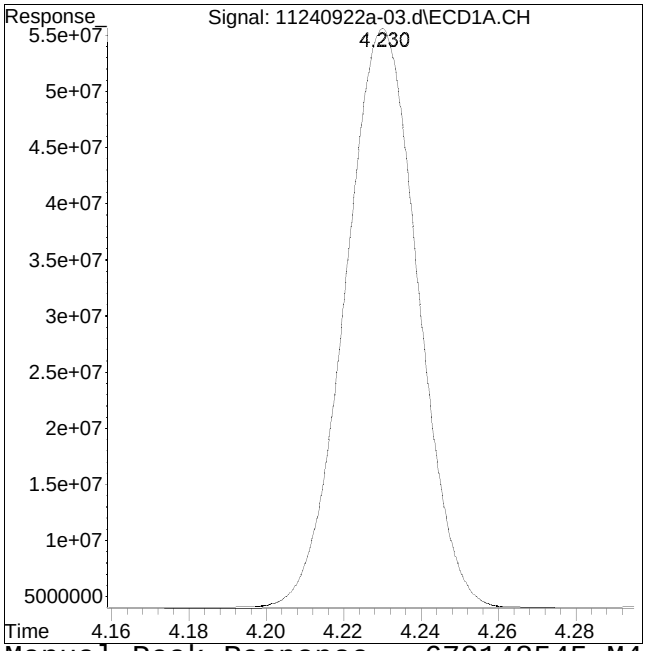
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #20: Endosulfan II



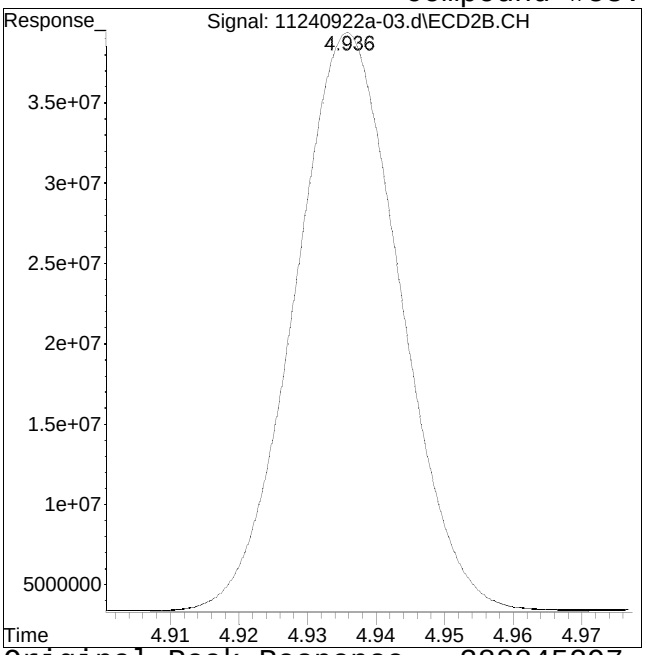




Original Peak Response = 678879056 Manual Peak Response = 678148545 M4
M4 = Poor automated baseline construction.

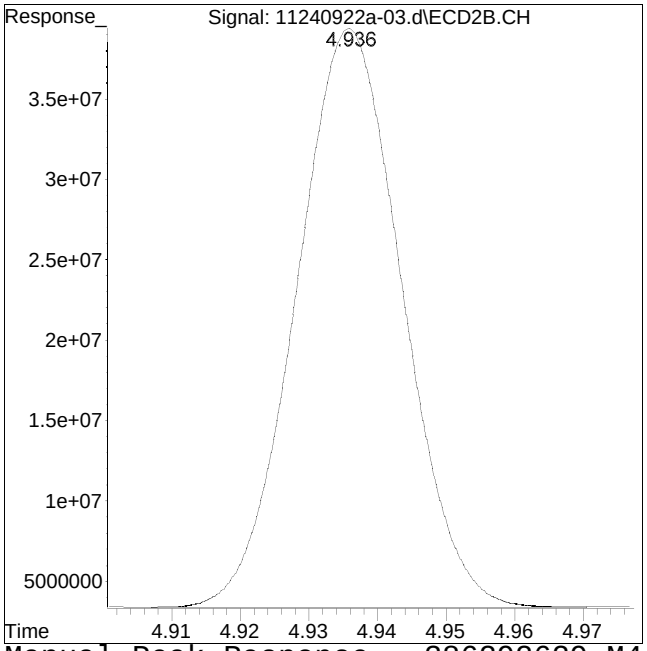
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #58: Endosulfan II #2




Original Peak Response = 388845297



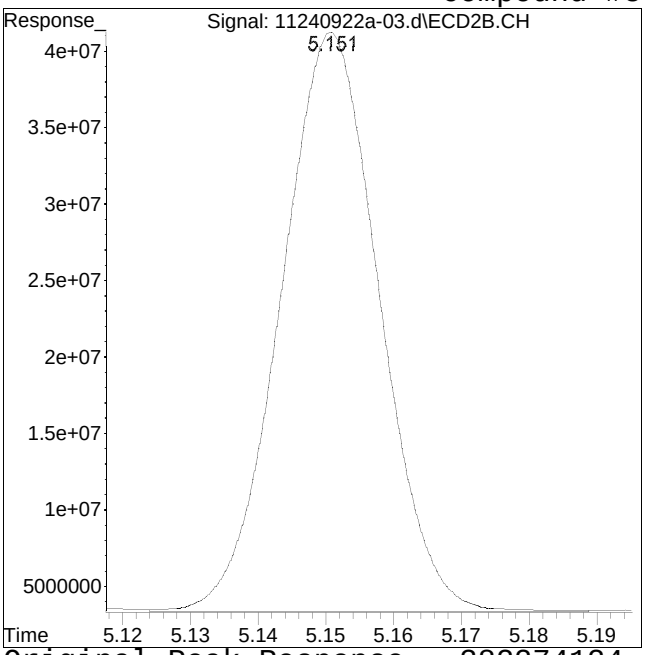

Manual Peak Response = 386292629 M4

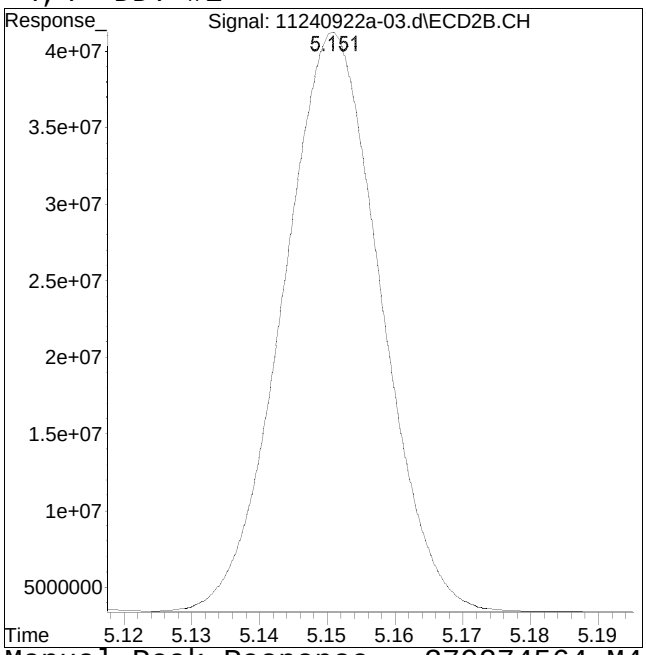
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #59: 4,4'-DDT #2



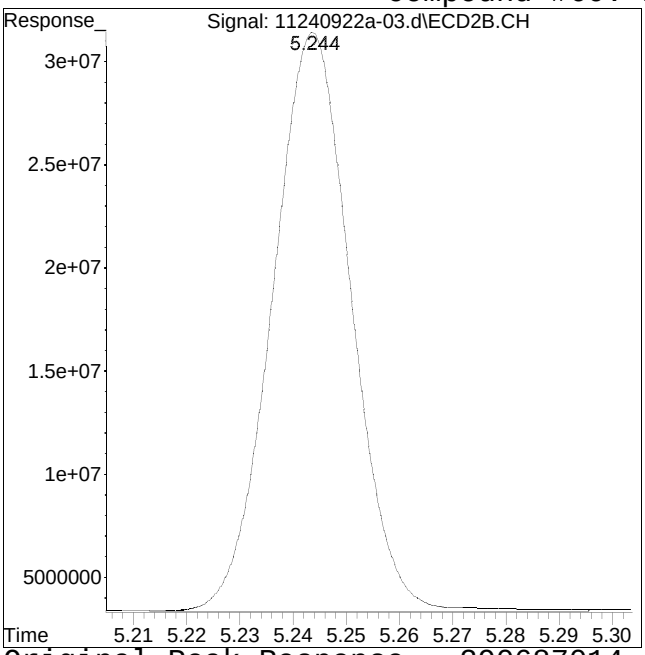




Original Peak Response = 382274124 Manual Peak Response = 379274564 M4
M4 = Poor automated baseline construction.

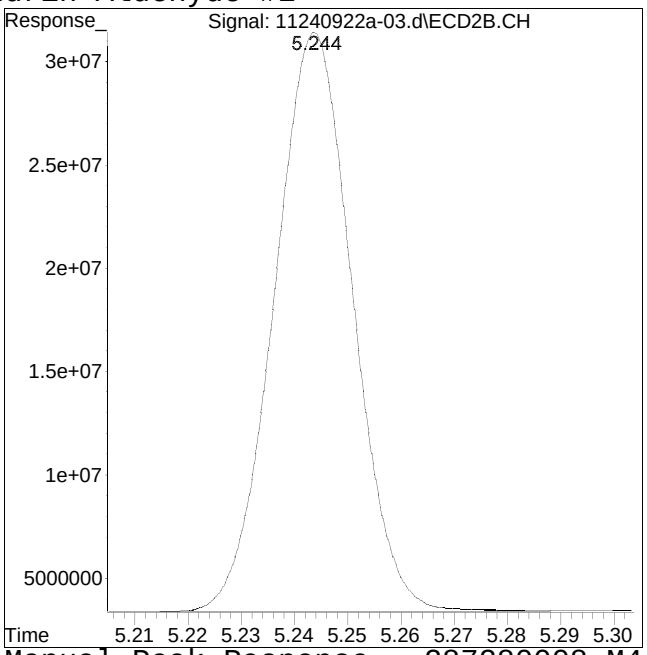
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

## Compound #60: Endrin Aldehyde #2




Original Peak Response = 290687014



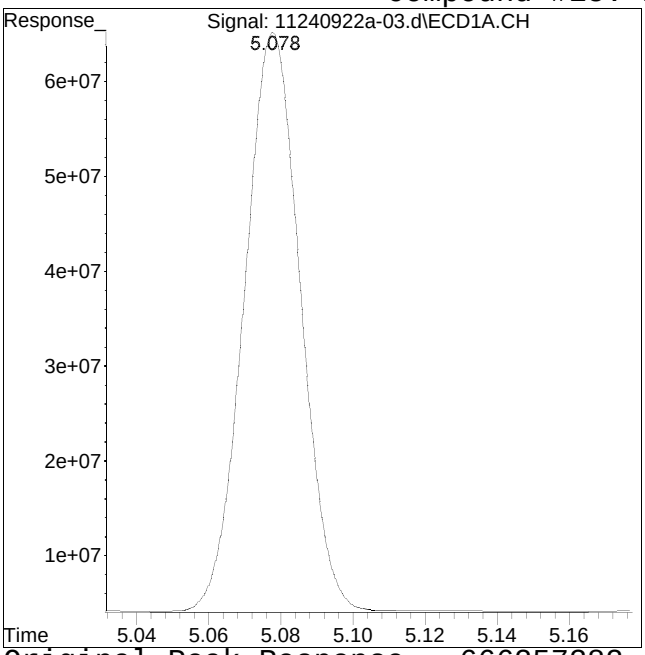

Manual Peak Response = 287280008 M4

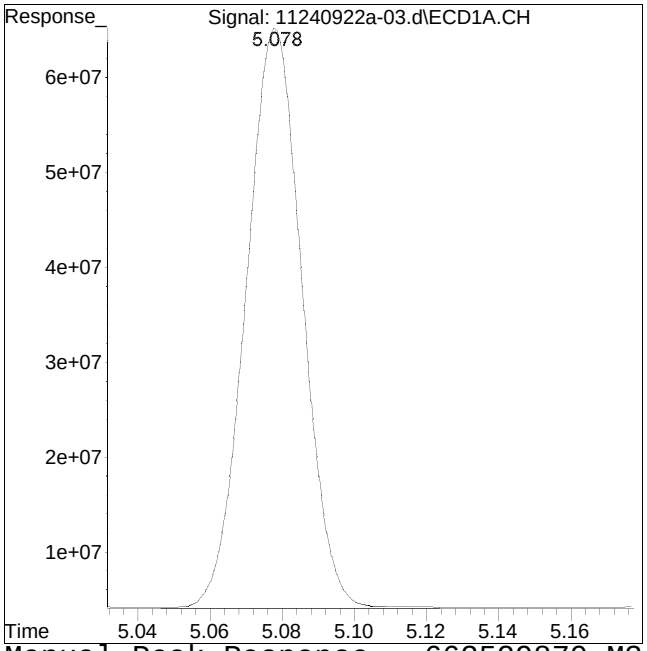
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #25: Endosulfan Sulfate



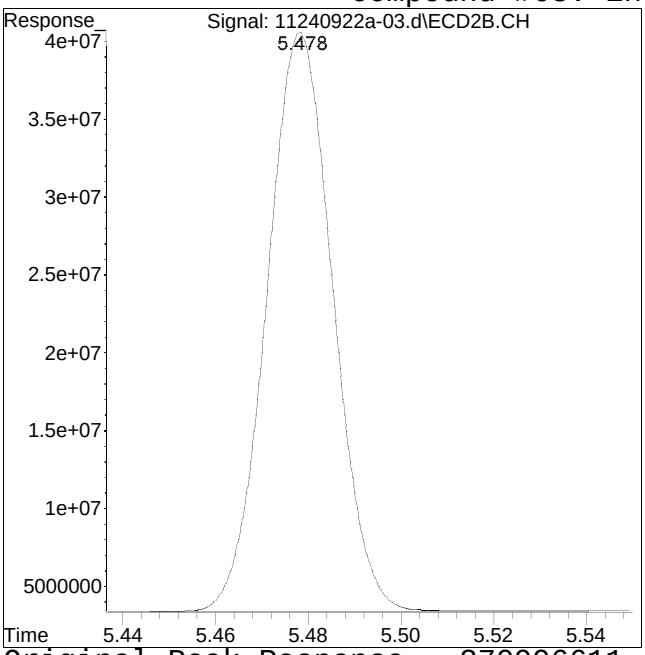




Original Peak Response = 666257382 Manual Peak Response = 662529870 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

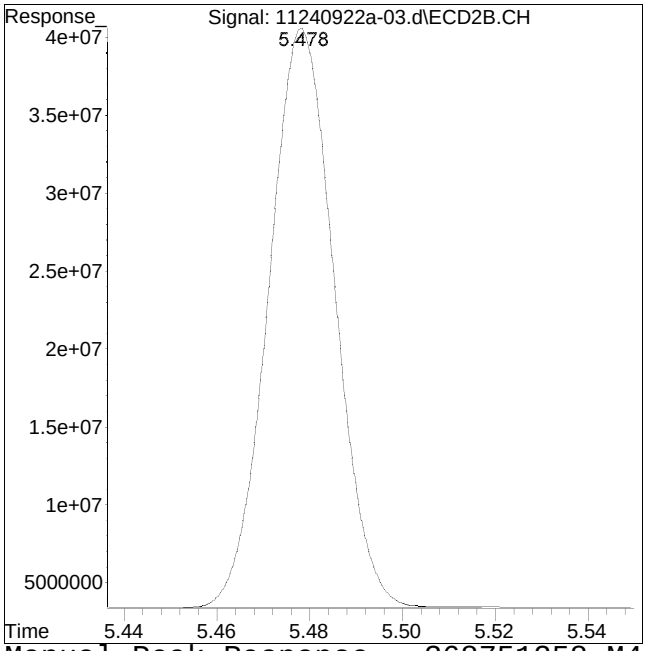
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 370996611



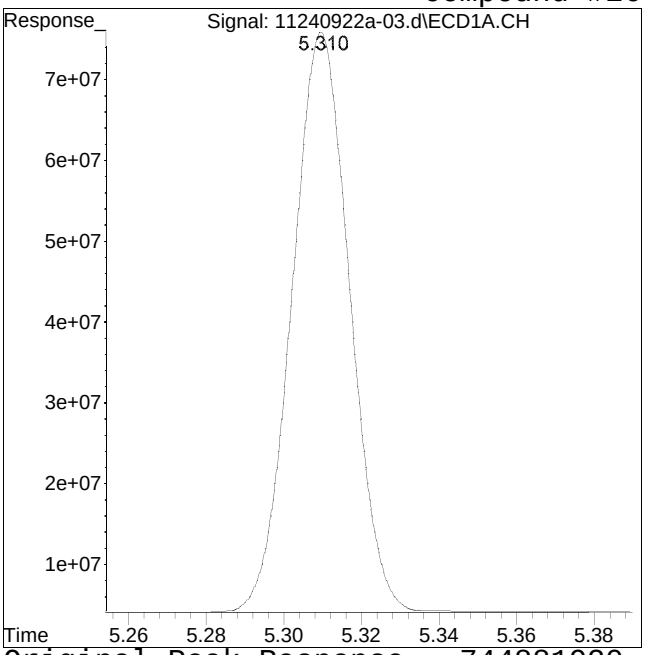

Manual Peak Response = 368751258 M4

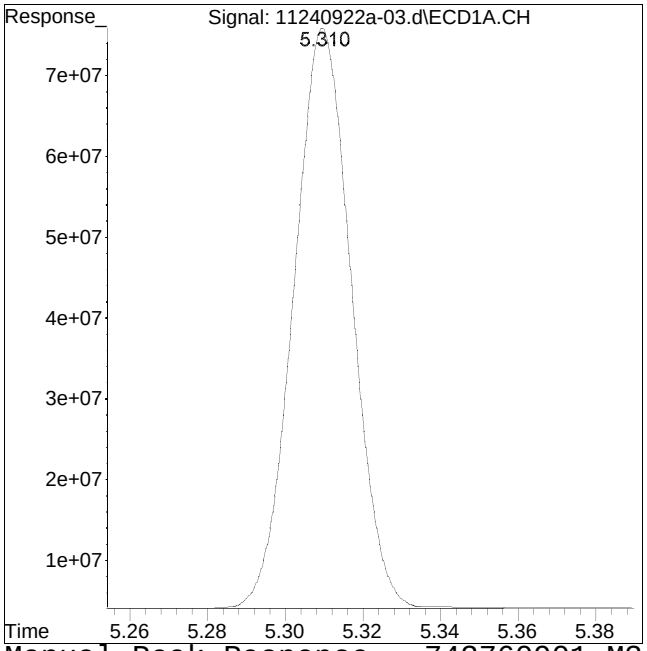
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #26: Endrin Ketone



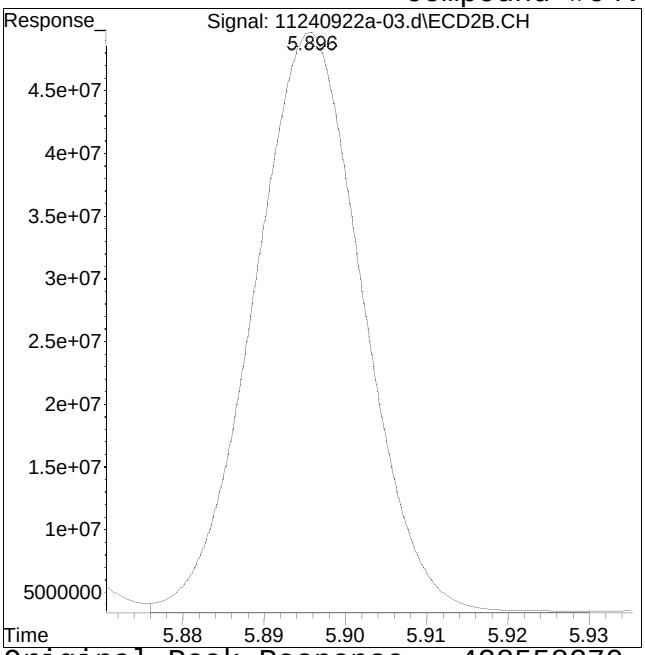




Original Peak Response = 744881920 Manual Peak Response = 743760901 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

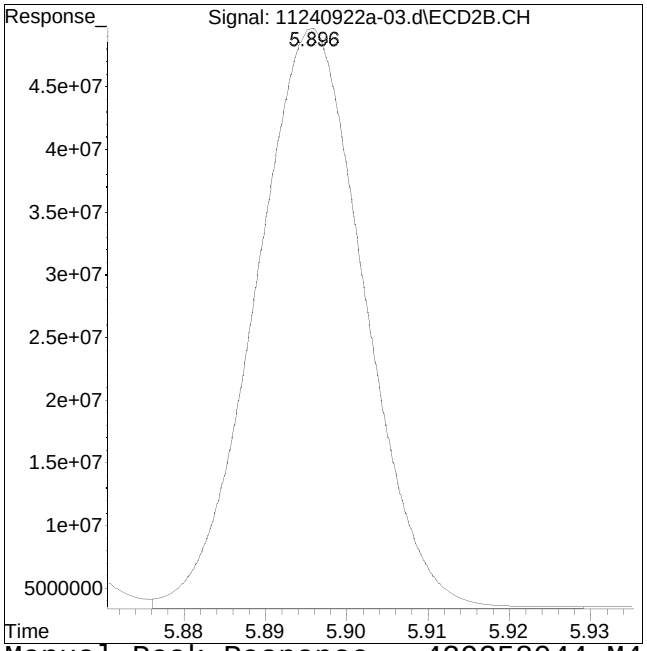
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #64: Endrin Ketone #2




Original Peak Response = 428558270



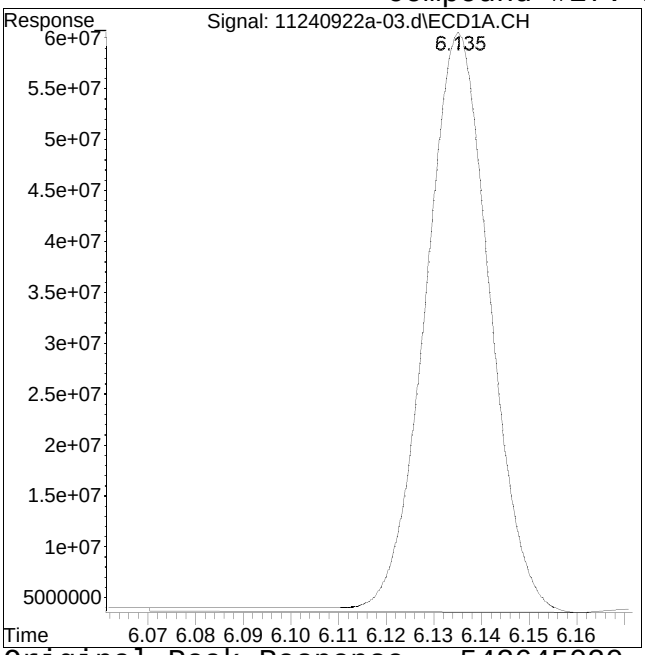

Manual Peak Response = 429358044 M4

M4 = Poor automated baseline construction.

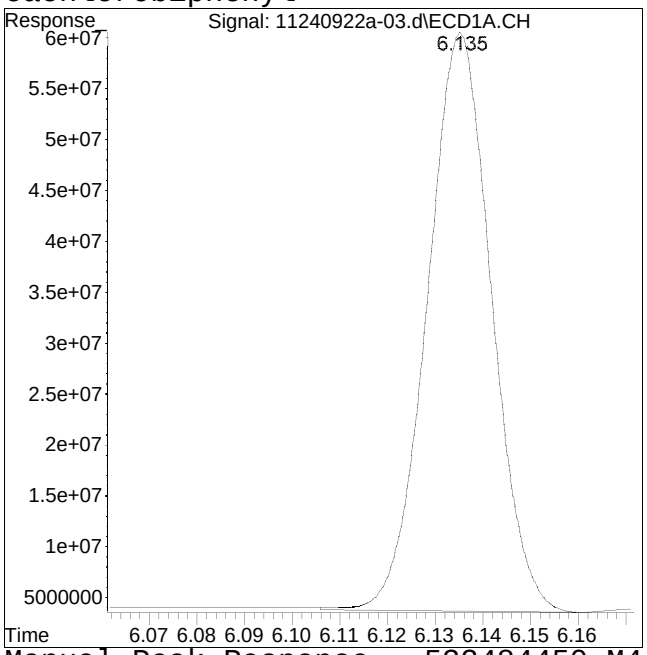
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #27: Decachlorobiphenyl




Original Peak Response = 542645020



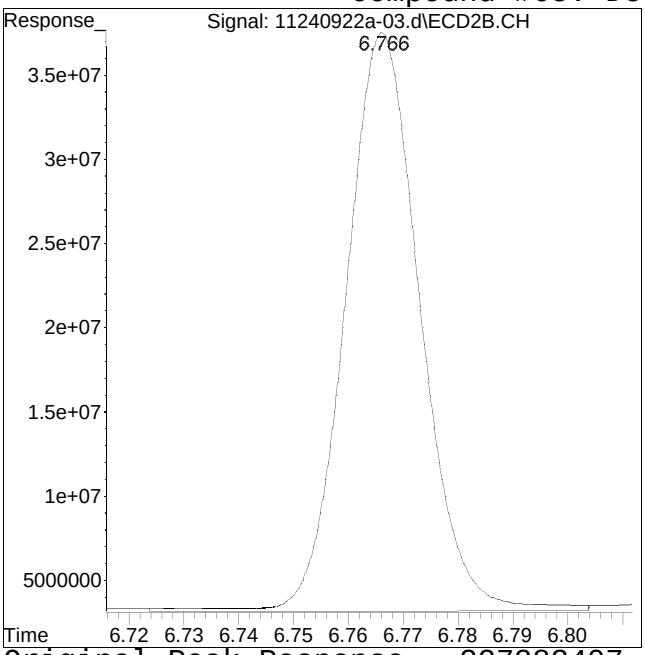

Manual Peak Response = 532484450 M4

M4 = Poor automated baseline construction.

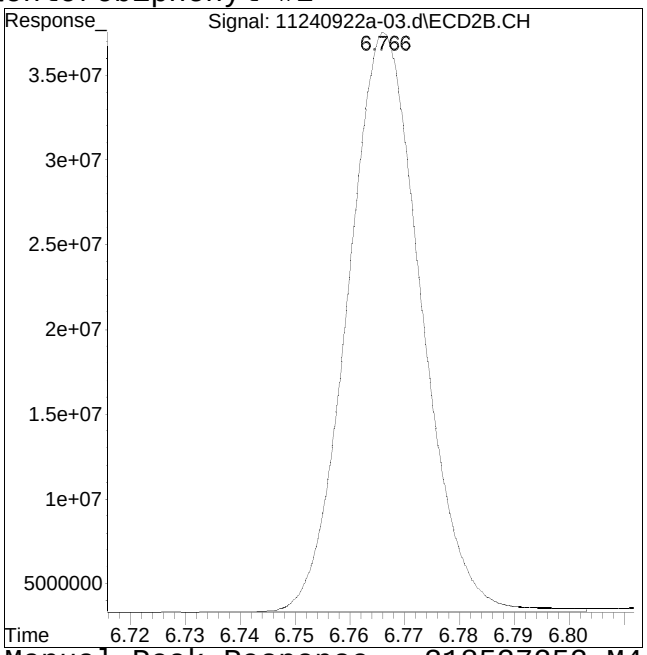
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-03.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:35 Instrument : Pest 11
Sample : wg1974788-1,42,,pest11675 Quant Date : 9/22/2024 9:48 am

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 327383407




Manual Peak Response = 318537252 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:47
Operator  : PEST11:ejl
Sample    : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 125 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 1124.262 | -12.4 | 136 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 1122.741 | -12.3 | 131 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 1109.782 | -11.0 | 132 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 1238.054 | -23.8# | 146 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 29 | l1 | chlordane-1 | | *1000.000 | 908.079 | 9.2 | 85 | 0.00 |
| 30 | l1 | chlordane-3 | | *1000.000 | 935.919 | 6.4 | 84 | 0.00 |
| 31 | l1 | chlordane-4 | | *1000.000 | 837.914 | 16.2 | 78 | 0.00 |
| 32 | l1 | chlordane-5 | | *1000.000 | 830.371 | 17.0 | 78 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 0.000 | 100.0# | 0# | -1.53# |
| 3 | t | Hexachlorobenzene | | 1.406 | 0.000 | 100.0# | 0# | -1.73# |
| 4 | t | alpha-BHC | | 1.461 | 0.000 | 100.0# | 0# | -1.83# |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 0.000 | 100.0# | 0# | -2.02# |
| 6 | t | beta-BHC | | 0.628 | 0.000 | 100.0# | 0# | -2.07# |
| 7 | t | delta-BHC | | 1.374 | 0.000 | 100.0# | 0# | -2.19# |
| 8 | t | Heptachlor | | 1.321 | 0.000 | 100.0# | 0# | -2.35# |
| 9 | t | Aldrin | | 1.233 | 0.000 | 100.0# | 0# | -2.58# |
| 10 | t | Alachlor | | 0.230 | 0.000 | 100.0# | 0# | -2.70# |
| 11 | t | Chlorpyrifos | | 0.590 | 0.000 | 100.0# | 0# | -2.79# |
| 12 | t | Heptachlor Epoxide | | 1.185 | 0.000 | 100.0# | 0# | -3.10# |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 0.000 | 100.0# | 0# | -3.22# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:47
Operator  : PEST11:ejl
Sample    : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 0.000 | 100.0# | 0# | -3.35# |
| 15 | t | 4,4'-DDE | | 1.192 | 0.000 | 100.0# | 0# | -3.45# |
| 16 | t | Endosulfan I | | 1.116 | 0.000 | 100.0# | 0# | -3.48# |
| 17 | t | Dieldrin | | 1.135 | 0.000 | 100.0# | 0# | -3.73# |
| 18 | t | Endrin | | 1.153 | 0.000 | 100.0# | 0# | -3.98# |
| 19 | t | 4,4'-DDD | | 0.927 | 0.000 | 100.0# | 0# | -4.10# |
| 20 | t | Endosulfan II | | 1.052 | 0.000 | 100.0# | 0# | -4.23# |
| 21 | t | 4,4'-DDT | | 1.058 | 0.000 | 100.0# | 0# | -4.42# |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.000 | 100.0# | 0# | -4.68# |
| 23 | t | Methoxychlor | | 0.592 | 0.000 | 100.0# | 0# | -4.93# |
| 24 | t | Mirex | | 0.938 | 0.000 | 100.0# | 0# | -4.97# |
| 25 | t | Endosulfan Sulfate | | 1.010 | 0.000 | 100.0# | 0# | -5.08# |
| 26 | t | Endrin Ketone | | 1.183 | 0.000 | 100.0# | 0# | -5.31# |
| 27 | s | Decachlorobiphenyl | | 1.163 | 0.000 | 100.0# | 0# | -6.14# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 34 | l2 | toxaphene-2 | | *2000.000 | 0.000 | 100.0# | 0 | -4.22# |
| 35 | l2 | toxaphene-3 | | *2000.000 | 0.000 | 100.0# | 0 | -4.36# |
| 36 | l2 | toxaphene-4 | | *2000.000 | 0.000 | 100.0# | 0 | -4.60# |
| 37 | l2 | toxaphene-5 | | *2000.000 | 0.000 | 100.0# | 0 | -4.98# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 0.000 | 100.0# | 0# | -1.72# |
| 3 | t | Hexachlorobenzene | | 1.239 | 0.000 | 100.0# | 0# | -2.02# |
| 4 | t | alpha-BHC | | 1.620 | 0.000 | 100.0# | 0# | -2.11# |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 0.000 | 100.0# | 0# | -2.38# |
| 6 | t | beta-BHC | * | 50.000 | 0.000 | 100.0# | 0 | -2.45# |
| 7 | t | delta-BHC | | 1.523 | 0.000 | 100.0# | 0# | -2.70# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:47
Operator  : PEST11:ejl
Sample    : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | t | Heptachlor | | 1.598 | 0.000 | 100.0# | 0# | -2.76# |
| 9 | t | Aldrin | | 1.435 | 0.000 | 100.0# | 0# | -3.06# |
| 10 | t | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -2.96# |
| 11 | t | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.30# |
| 12 | t | Heptachlor Epoxide | | 1.425 | 0.000 | 100.0# | 0# | -3.66# |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 0.000 | 100.0# | 0# | -3.87# |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 0.000 | 100.0# | 0# | -4.04# |
| 15 | t | 4,4'-DDE | | 1.343 | 0.000 | 100.0# | 0# | -4.26# |
| 16 | t | Endosulfan I | | 1.332 | 0.000 | 100.0# | 0# | -4.10# |
| 17 | t | Dieldrin | | 1.327 | 0.000 | 100.0# | 0# | -4.41# |
| 18 | t | Endrin | | 1.347 | 0.000 | 100.0# | 0# | -4.73# |
| 19 | t | 4,4'-DDD | | 1.084 | 0.000 | 100.0# | 0# | -4.87# |
| 20 | t | Endosulfan II | | 1.214 | 0.000 | 100.0# | 0# | -4.94# |
| 21 | t | 4,4'-DDT | | 1.250 | 0.000 | 100.0# | 0# | -5.15# |
| 22 | t | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.24# |
| 23 | t | Methoxychlor | | 0.704 | 0.000 | 100.0# | 0# | -5.74# |
| 24 | t | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -5.86# |
| 25 | t | Endosulfan Sulfate | | 1.199 | 0.000 | 100.0# | 0# | -5.48# |
| 26 | t | Endrin Ketone | | 1.261 | 0.000 | 100.0# | 0# | -5.90# |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.000 | 100.0# | 0# | -6.77# |
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 34 | l2 | toxaphene-2 | * | 2000.000 | 0.000 | 100.0# | 0 | -4.90# |
| 35 | l2 | toxaphene-3 | * | 2000.000 | 0.000 | 100.0# | 0 | -4.92# |
| 36 | l2 | toxaphene-4 | * | 2000.000 | 0.000 | 100.0# | 0 | -5.25# |
| 37 | l2 | toxaphene-5 | * | 2000.000 | 0.000 | 100.0# | 0 | -5.67# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:47
Operator : PEST11:ejl
Sample : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) i | 1-br-2-nb_Ch | 1.201 | 1.274 | 276.9E6 | 185.0E6 | 25.000M3 | 25.000M3 |
| 33) i | 1-br-2-nb_To | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | System Monitoring Compounds | | | | | | |
| 2) s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | Target Compounds | | | | | | |
| 3) t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:47
Operator : PEST11:ejl
Sample : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l | |
|---|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 29) l1 | chlordane-1 | 2.287 | 2.632 | 453.2E6 | 250.0E6 | 1124.262 | 908.079 | |
| 30) l1 | chlordane-3 | 2.687 | 3.213 | 525.9E6 | 283.3E6 | 1122.741 | 935.919 | |
| 31) l1 | chlordane-4 | 3.221 | 3.870 | 1912.7E6 | 968.3E6 | 1109.782 | 837.914 | |
| 32) l1 | chlordane-5 | 3.341 | 4.039 | 3275.1E6 | 737.3E6 | 1238.054 | 830.371 | |
| Sum | chlordane-1 | | | 6166.9E6 | 2238.9E6 | N.D. | N.D. | D |
| Average | chlordane-1 | | | | | 1148.710 | 878.071 | |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d | |
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. | |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 | |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 0 | 0 | N.D. | N.D. | |
| Average | toxaphene-2 | | | | | 0.000 | 0.000 | |

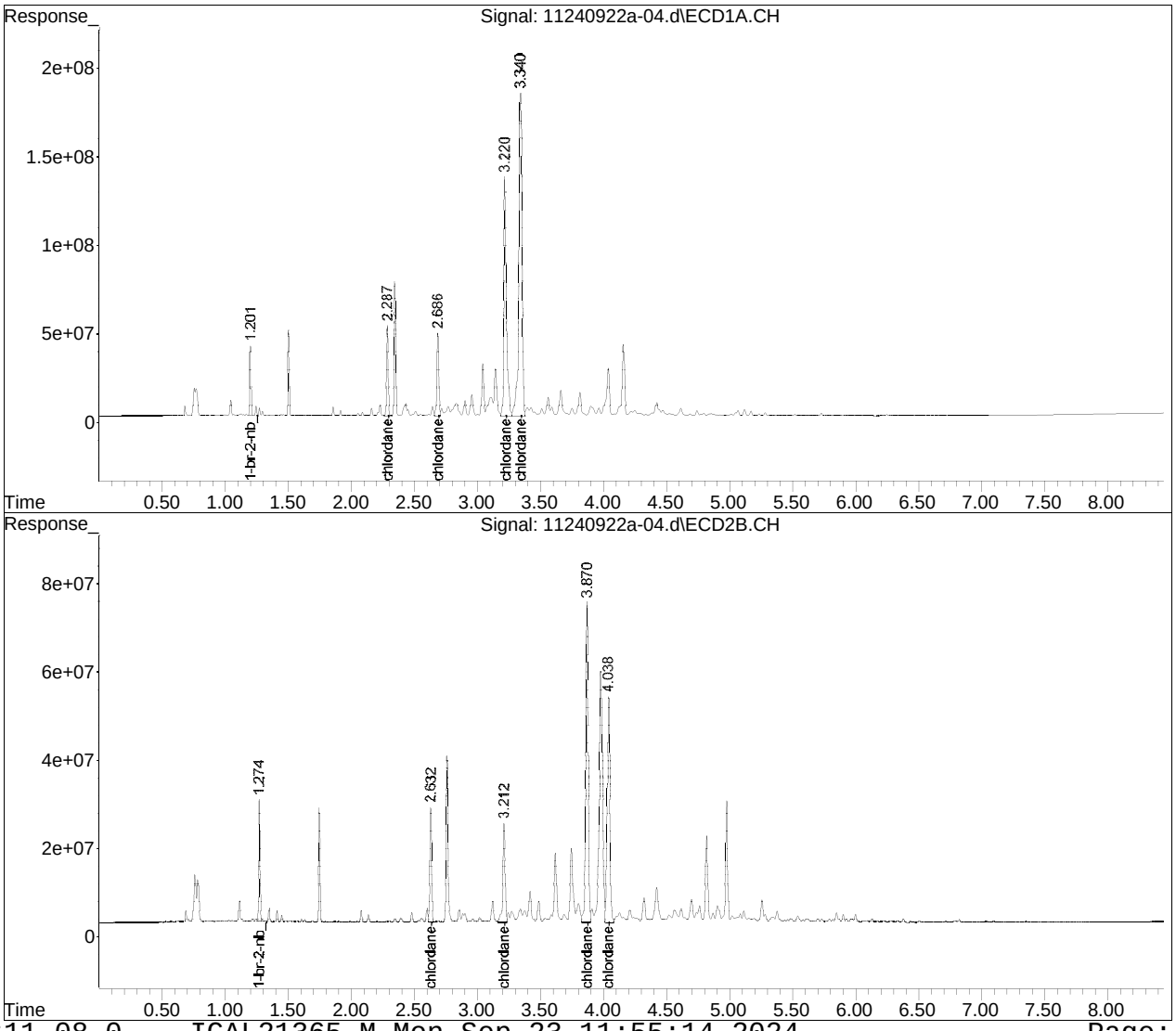
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:47
Operator : PEST11:ejl
Sample : wg1974788-2,42,,chlor11670 (Sig #1); chlor11670 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:57:47 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

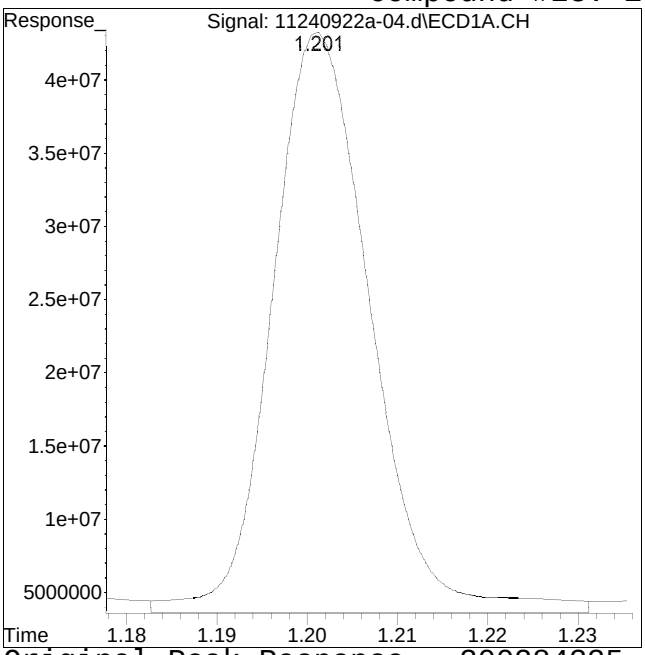
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

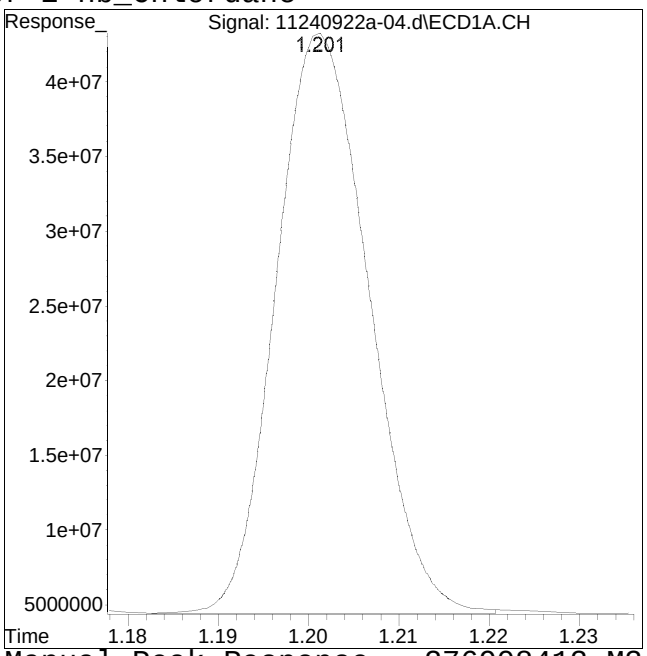


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-04.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:47 Instrument : Pest 11
Sample : wg1974788-2,42,,chlor11670Quant Date : 9/22/2024 9:57 am

Compound #28: 1-br-2-nb_Chlordane



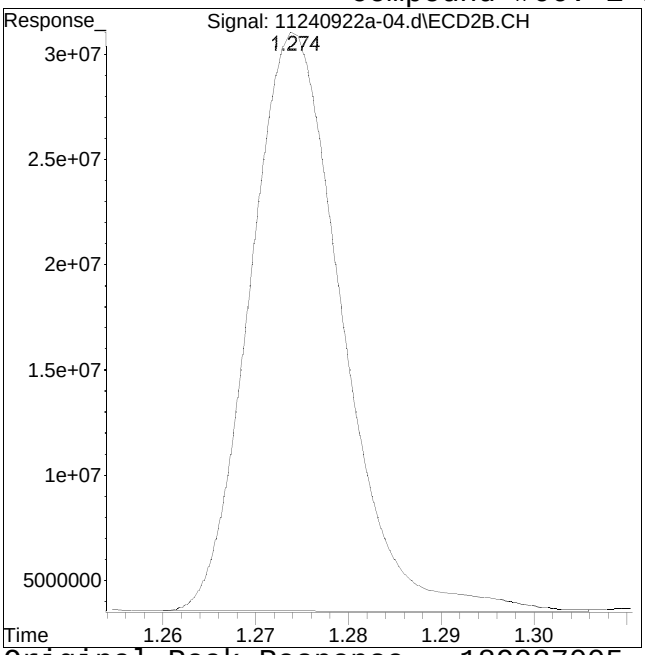



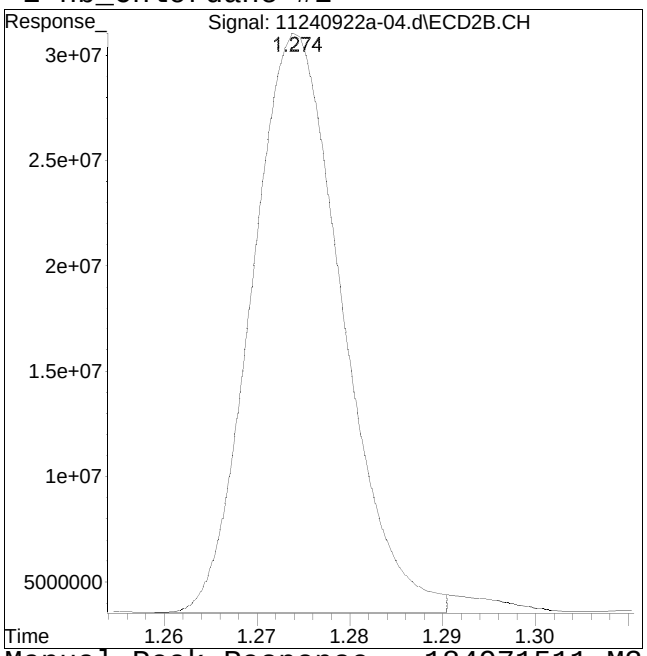

Original Peak Response = 300284335 Manual Peak Response = 276908412 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-04.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:47 Instrument : Pest 11
Sample : wg1974788-2,42,,chlor11670Quant Date : 9/22/2024 9:57 am

Compound #66: 1-br-2-nb_Chlordane #2




Original Peak Response = 189937005 Manual Peak Response = 184971511 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:59
Operator  : PEST11:ejl
Sample    : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 140 | 0.00 |
| 34 | l2 | toxaphene-2 | | *2000.000 | 2542.360 | -27.1# | 173 | 0.00 |
| 35 | l2 | toxaphene-3 | | *2000.000 | 2433.388 | -21.7# | 165 | 0.00 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 2187.534 | -9.4 | 151 | 0.00 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 2353.437 | -17.7 | 161 | 0.00 |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 33 | i | 1-br-2-nb_Toxaphene | ^ | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 34 | l2 | toxaphene-2 | | *2000.000 | 1844.666 | 7.8 | 103 | 0.00 |
| 35 | l2 | toxaphene-3 | | *2000.000 | 1924.242 | 3.8 | 107 | 0.00 |
| 36 | l2 | toxaphene-4 | | *2000.000 | 1787.486 | 10.6 | 100 | 0.00 |
| 37 | l2 | toxaphene-5 | | *2000.000 | 1931.077 | 3.4 | 108 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xylen | | 1.039 | 0.000 | 100.0# | 0# | -1.53# |
| 3 | t | Hexachlorobenzene | | 1.406 | 0.000 | 100.0# | 0# | -1.73# |
| 4 | t | alpha-BHC | | 1.461 | 0.000 | 100.0# | 0# | -1.83# |
| 5 | t | gamma-BHC (lindane) | | 1.395 | 0.000 | 100.0# | 0# | -2.02# |
| 6 | t | beta-BHC | | 0.628 | 0.000 | 100.0# | 0# | -2.07# |
| 7 | t | delta-BHC | | 1.374 | 0.000 | 100.0# | 0# | -2.19# |
| 8 | t | Heptachlor | | 1.321 | 0.000 | 100.0# | 0# | -2.35# |
| 9 | t | Aldrin | | 1.233 | 0.000 | 100.0# | 0# | -2.58# |
| 10 | t | Alachlor | | 0.230 | 0.000 | 100.0# | 0# | -2.70# |
| 11 | t | Chlorpyrifos | | 0.590 | 0.000 | 100.0# | 0# | -2.79# |
| 12 | t | Heptachlor Epoxide | | 1.185 | 0.000 | 100.0# | 0# | -3.10# |
| 13 | t | gamma-Chlordane (trans) | | 1.077 | 0.000 | 100.0# | 0# | -3.22# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:59
Operator  : PEST11:ejl
Sample    : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 14 | t | alpha-Chlordane (cis) | | 1.216 | 0.000 | 100.0# | 0# | -3.35# |
| 15 | t | 4,4'-DDE | | 1.192 | 0.000 | 100.0# | 0# | -3.45# |
| 16 | t | Endosulfan I | | 1.116 | 0.000 | 100.0# | 0# | -3.48# |
| 17 | t | Dieldrin | | 1.135 | 0.000 | 100.0# | 0# | -3.73# |
| 18 | t | Endrin | | 1.153 | 0.000 | 100.0# | 0# | -3.98# |
| 19 | t | 4,4'-DDD | | 0.927 | 0.000 | 100.0# | 0# | -4.10# |
| 20 | t | Endosulfan II | | 1.052 | 0.000 | 100.0# | 0# | -4.23# |
| 21 | t | 4,4'-DDT | | 1.058 | 0.000 | 100.0# | 0# | -4.42# |
| 22 | t | Endrin Aldehyde | | 0.886 | 0.000 | 100.0# | 0# | -4.68# |
| 23 | t | Methoxychlor | | 0.592 | 0.000 | 100.0# | 0# | -4.93# |
| 24 | t | Mirex | | 0.938 | 0.000 | 100.0# | 0# | -4.97# |
| 25 | t | Endosulfan Sulfate | | 1.010 | 0.000 | 100.0# | 0# | -5.08# |
| 26 | t | Endrin Ketone | | 1.183 | 0.000 | 100.0# | 0# | -5.31# |
| 27 | s | Decachlorobiphenyl | | 1.163 | 0.000 | 100.0# | 0# | -6.14# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.20# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -2.29# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -2.69# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -3.22# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -3.34# |

Signal #2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | i | 1-br-2-nb_Pesticides | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 2 | s | 2,4,5,6-Tetrachloro-m-xyl | | 1.114 | 0.000 | 100.0# | 0# | -1.72# |
| 3 | t | Hexachlorobenzene | | 1.239 | 0.000 | 100.0# | 0# | -2.02# |
| 4 | t | alpha-BHC | | 1.620 | 0.000 | 100.0# | 0# | -2.11# |
| 5 | t | gamma-BHC (lindane) | | 1.539 | 0.000 | 100.0# | 0# | -2.38# |
| 6 | t | beta-BHC | | * 50.000 | 0.000 | 100.0# | 0 | -2.45# |
| 7 | t | delta-BHC | | 1.523 | 0.000 | 100.0# | 0# | -2.70# |

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 22 Sep 2024   9:59
Operator  : PEST11:ejl
Sample    : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc      : wg1974788,,ical21365
ALS Vial  : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title  : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%

| | | Compound | | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 8 | t | Heptachlor | | 1.598 | 0.000 | 100.0# | 0# | -2.76# |
| 9 | t | Aldrin | | 1.435 | 0.000 | 100.0# | 0# | -3.06# |
| 10 | t | Alachlor | * | 50.000 | 0.000 | 100.0# | 0 | -2.96# |
| 11 | t | Chlorpyrifos | * | 50.000 | 0.000 | 100.0# | 0 | -3.30# |
| 12 | t | Heptachlor Epoxide | | 1.425 | 0.000 | 100.0# | 0# | -3.66# |
| 13 | t | gamma-Chlordane (trans) | | 1.312 | 0.000 | 100.0# | 0# | -3.87# |
| 14 | t | alpha-Chlordane (cis) | | 1.446 | 0.000 | 100.0# | 0# | -4.04# |
| 15 | t | 4,4'-DDE | | 1.343 | 0.000 | 100.0# | 0# | -4.26# |
| 16 | t | Endosulfan I | | 1.332 | 0.000 | 100.0# | 0# | -4.10# |
| 17 | t | Dieldrin | | 1.327 | 0.000 | 100.0# | 0# | -4.41# |
| 18 | t | Endrin | | 1.347 | 0.000 | 100.0# | 0# | -4.73# |
| 19 | t | 4,4'-DDD | | 1.084 | 0.000 | 100.0# | 0# | -4.87# |
| 20 | t | Endosulfan II | | 1.214 | 0.000 | 100.0# | 0# | -4.94# |
| 21 | t | 4,4'-DDT | | 1.250 | 0.000 | 100.0# | 0# | -5.15# |
| 22 | t | Endrin Aldehyde | * | 50.000 | 0.000 | 100.0# | 0 | -5.24# |
| 23 | t | Methoxychlor | | 0.704 | 0.000 | 100.0# | 0# | -5.74# |
| 24 | t | Mirex | * | 50.000 | 0.000 | 100.0# | 0 | -5.86# |
| 25 | t | Endosulfan Sulfate | | 1.199 | 0.000 | 100.0# | 0# | -5.48# |
| 26 | t | Endrin Ketone | | 1.261 | 0.000 | 100.0# | 0# | -5.90# |
| 27 | s | Decachlorobiphenyl | | 1.060 | 0.000 | 100.0# | 0# | -6.77# |
| 28 | i | 1-br-2-nb_Chlordane | ^ | 1.000 | 1.000 | 0.0 | 0 | -1.27# |
| 29 | l1 | chlordane-1 | | *1000.000 | 0.000 | 100.0# | 0 | -2.63# |
| 30 | l1 | chlordane-3 | | *1000.000 | 0.000 | 100.0# | 0 | -3.21# |
| 31 | l1 | chlordane-4 | | *1000.000 | 0.000 | 100.0# | 0 | -3.87# |
| 32 | l1 | chlordane-5 | | *1000.000 | 0.000 | 100.0# | 0 | -4.04# |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range  SPCC's out = 0  CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:59
Operator : PEST11:ejl
Sample : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| | | Internal Standards | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 28) | i | 1-br-2-nb_Ch | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 33) | i | 1-br-2-nb_To | 1.201 | 1.274 | 305.9E6 | 195.6E6 | 25.000M3 | 25.000 |
| | | System Monitoring Compounds | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| 27) | s | Decachlorobi | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | | Spiked Amount | 50.000 | Range 30 - 150 | | Recovery = | 0.00%# | 0.00%# |
| | | Target Compounds | | | | | | |
| 3) | t | Hexachlorobe | 0.000 | 0.000 | 0 | 0 | N.D. | N.D. |
| 4) | t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) | t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) | t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) | t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) | t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) | t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 10) | t | Alachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 11) | t | Chlorpyrifos | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) | t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) | t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) | t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) | t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) | t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) | t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 18) | t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) | t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) | t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) | t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) | t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:59
Operator : PEST11:ejl
Sample : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 24) t | Mirex | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 29) l1 | chlordane-1 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 30) l1 | chlordane-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 31) l1 | chlordane-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 32) l1 | chlordane-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| Sum | chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average | chlordane-1 | | | | | 0.000 | 0.000 |
| 34) l2 | toxaphene-2 | 4.223 | 4.896 | 1731.5E6 | 339.9E6 | 2542.360 | 1844.666 |
| 35) l2 | toxaphene-3 | 4.355 | 4.923 | 1294.9E6 | 524.5E6 | 2433.388M3 | 1924.242 |
| 36) l2 | toxaphene-4 | 4.596 | 5.253 | 1171.9E6 | 584.9E6 | 2187.534 | 1787.486 |
| 37) l2 | toxaphene-5 | 4.982 | 5.667 | 1143.2E6 | 582.1E6 | 2353.437 | 1931.077 |
| Sum | toxaphene-2 | | | 5341.6E6 | 2031.5E6 | 9516.719 | 7487.470 |
| Average | toxaphene-2 | | | | | 2379.180 | 1871.868 |

SemiQuant Compounds - Not Calibrated on this Instrument

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sum | toxaphene-2 | | | 5341.6E6 | 2031.5E6 | 9516.719 | 7487.470 |
| Average | toxaphene-2 | | | | | 2379.180 | 1871.868 |

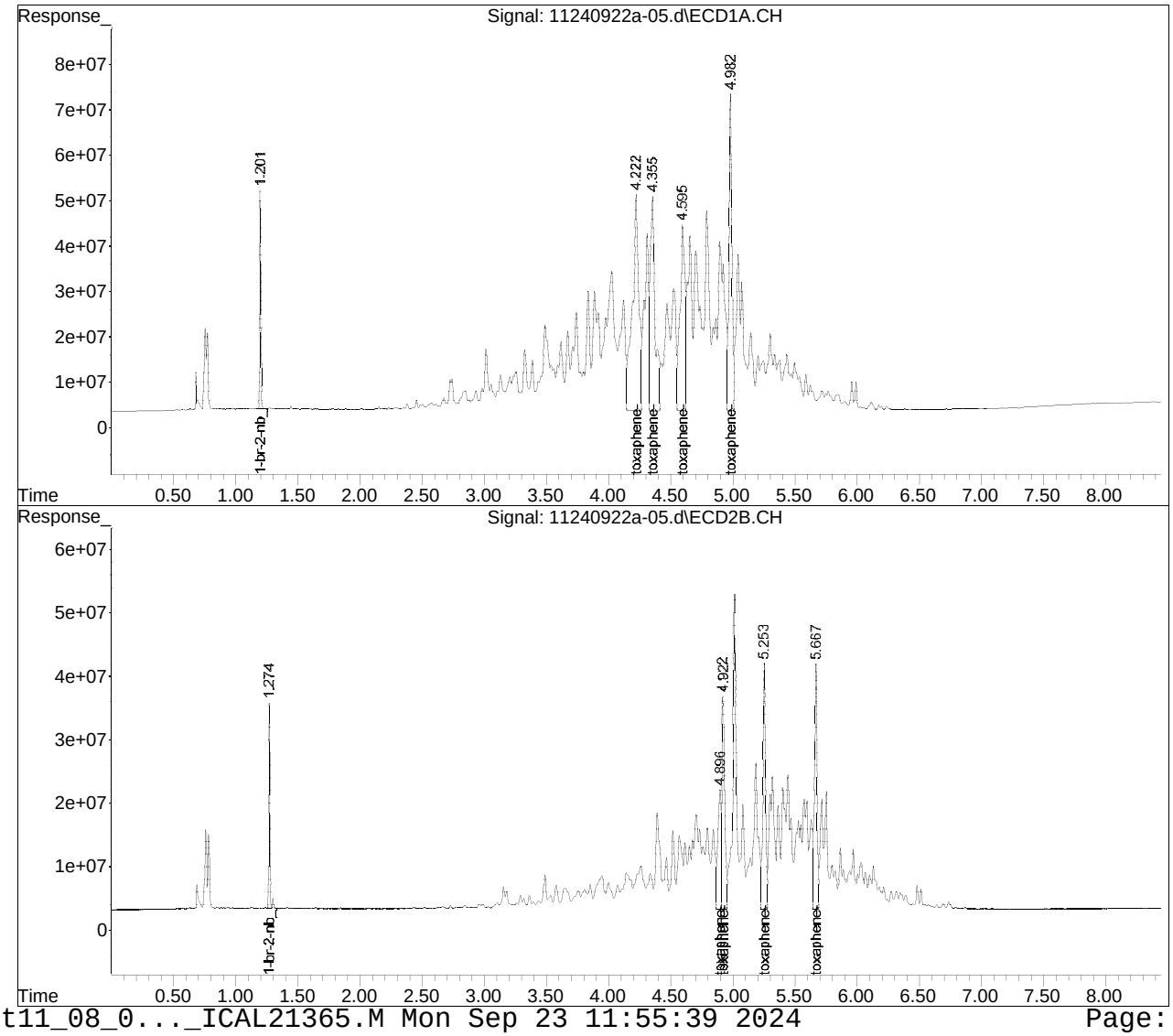
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:59
Operator : PEST11:ejl
Sample : wg1974788-3,42,,tox11668 (Sig #1); tox11668 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 10:11:48 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

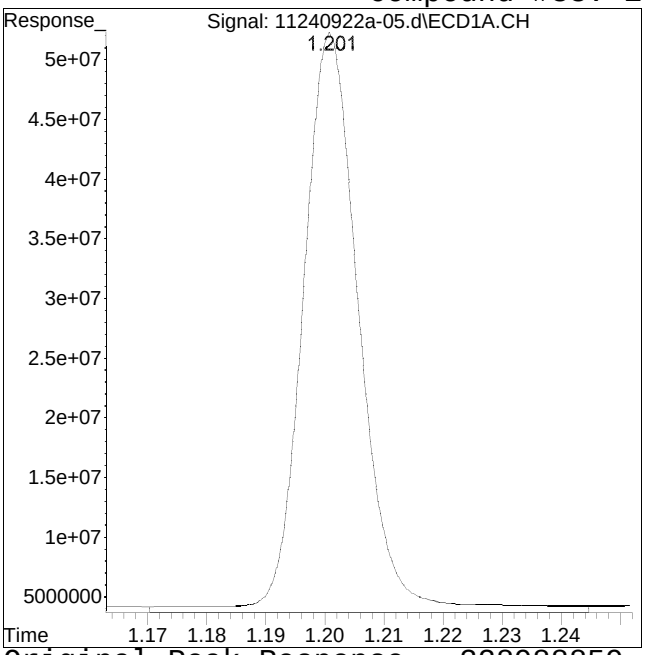
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

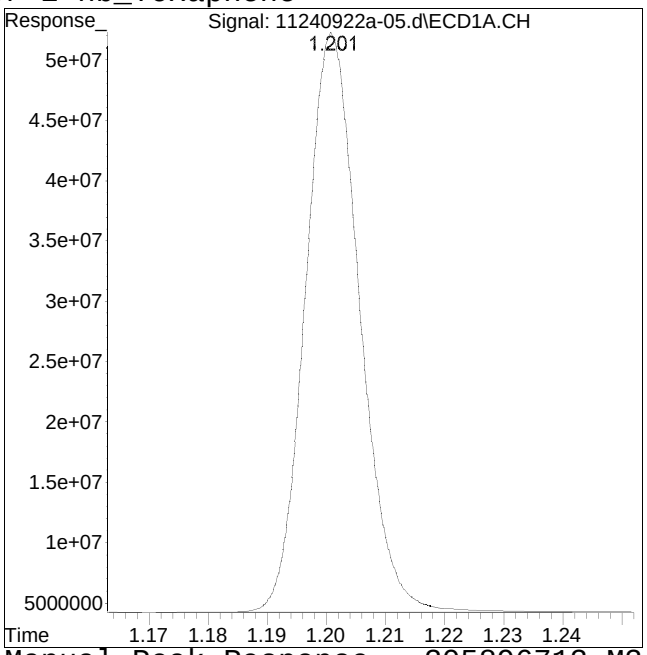


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-05.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:59 Instrument : Pest 11
Sample : wg1974788-3,42,,tox11668 Quant Date : 9/22/2024 10:11 am

Compound #33: 1-br-2-nb_Toxaphene



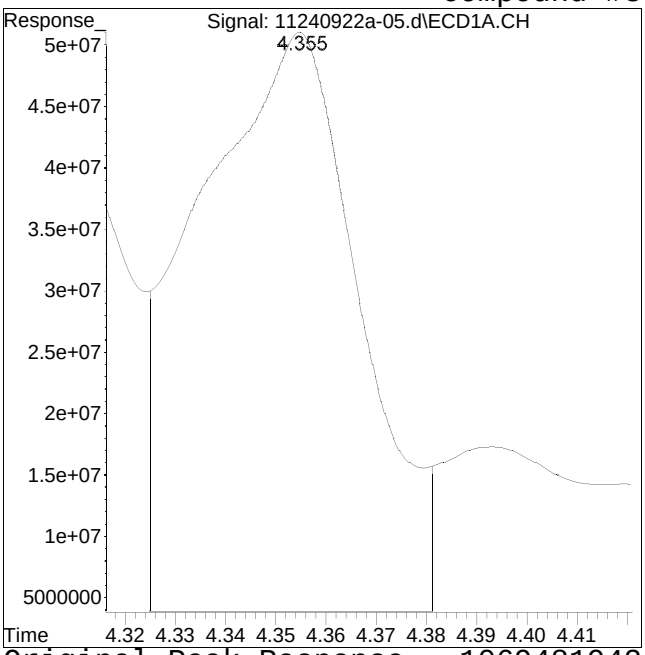



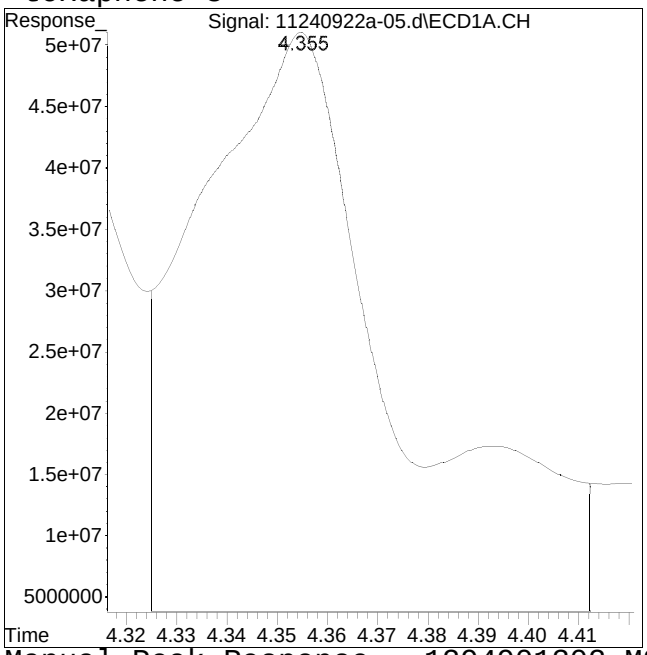

Original Peak Response = 328988859 Manual Peak Response = 305896713 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-05.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:59 Instrument : Pest 11
Sample : wg1974788-3,42,,tox11668 Quant Date : 9/22/2024 10:11 am

Compound #35: toxaphene-3




Original Peak Response = 1069481942 Manual Peak Response = 1294901302 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Degradation Check Standard

# Performance Evaluation Mixture Summary
# Form 15
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST11 | **Analysis Date** | : 09/22/24 09:23 |
| **PEM Standard** | : R1879103-1 | | |
| **Column 1** | : RTX-5 | **Column 2** | : RTX-CLPPesticides2 |

| Parameter | Signal 1 | Signal 2 |
|---|---|---|
| 4,4'-DDE | 689216.98032 | 1006943.03127 |
| Endrin | 781424128.42217 | 462267511.46347 |
| 4,4'-DDD | 2746573.52893 | 2695856 |
| 4,4'-DDT | 1468404065.8718 | 848057325.60606 |
| Endrin Aldehyde | 822995.7008 | 605076.40917 |
| Endrin Ketone | 3111399.5404 | 2403841.26198 |

| Parameter | %Breakdown 1 | %Breakdown 2 |
|---|---|---|
| Endrin | 0.501 | 0.647 |
| DDT | 0.233 | 0.435 |

# Performance Evaluation Mixture Summary
# Form 15
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : PEST20 | **Analysis Date** | : 09/22/24 09:24 |
| **PEM Standard** | : R1879015-1 | | |
| **Column 1** | : RTX-5 | **Column 2** | : RTX-CLPPesticides2 |

| Parameter | Signal 1 | Signal 2 |
|---|---|---|
| 4,4'-DDE | 248026.83526 | 392025.98392 |
| Endrin | 164825777.74537 | 266052881.73724 |
| 4,4'-DDD | 699675.06366 | 1127731.04272 |
| 4,4'-DDT | 302552958.31783 | 480256812.30526 |
| Endrin Aldehyde | 208016.54153 | 648819.69245 |
| Endrin Ketone | 417991.68355 | 655527.2198 |

| Parameter | %Breakdown 1 | %Breakdown 2 |
|---|---|---|
| Endrin | 0.378 | 0.488 |
| DDT | 0.312 | 0.315 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:23
Operator : PEST11:ejl
Sample : pem11240922a-01,42,,deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:55:51 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.200 | 1.273 | 290.5E6 | 192.7E6 | 25.000M4 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | |
| 15) t D | 4,4'-DDE | 3.445 | 4.254 | 689217 | 1006943 | 0.050M2 | 0.097M4 |
| 18) t | Endrin | 3.973 | 4.725 | 781.4E6 | 462.3E6 | 58.332M3 | 44.523M3 |
| 19) t | 4,4'-DDD | 4.095 | 4.865 | 2746574 | 2695856 | 0.255M4 | 0.323 |
| 21) t | 4,4'-DDT | 4.411 | 5.150 | 1468.4E6 | 848.1E6 | 119.384 | 87.988 |
| 22) t D | Endrin Aldeh | 4.671 | 5.244 | 822996 | 605076 | 0.080M2 | N.D. M4 |
| 26) t | Endrin Keton | 5.307 | 5.895 | 3111400 | 2403841 | 0.226M3 | 0.247M3 |
| | Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| | Average chlordane-1 | | | | | 0.000 | 0.000 |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |
| | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:23
Operator : PEST11:ejl
Sample : pem11240922a-01,42,,deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:55:51 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

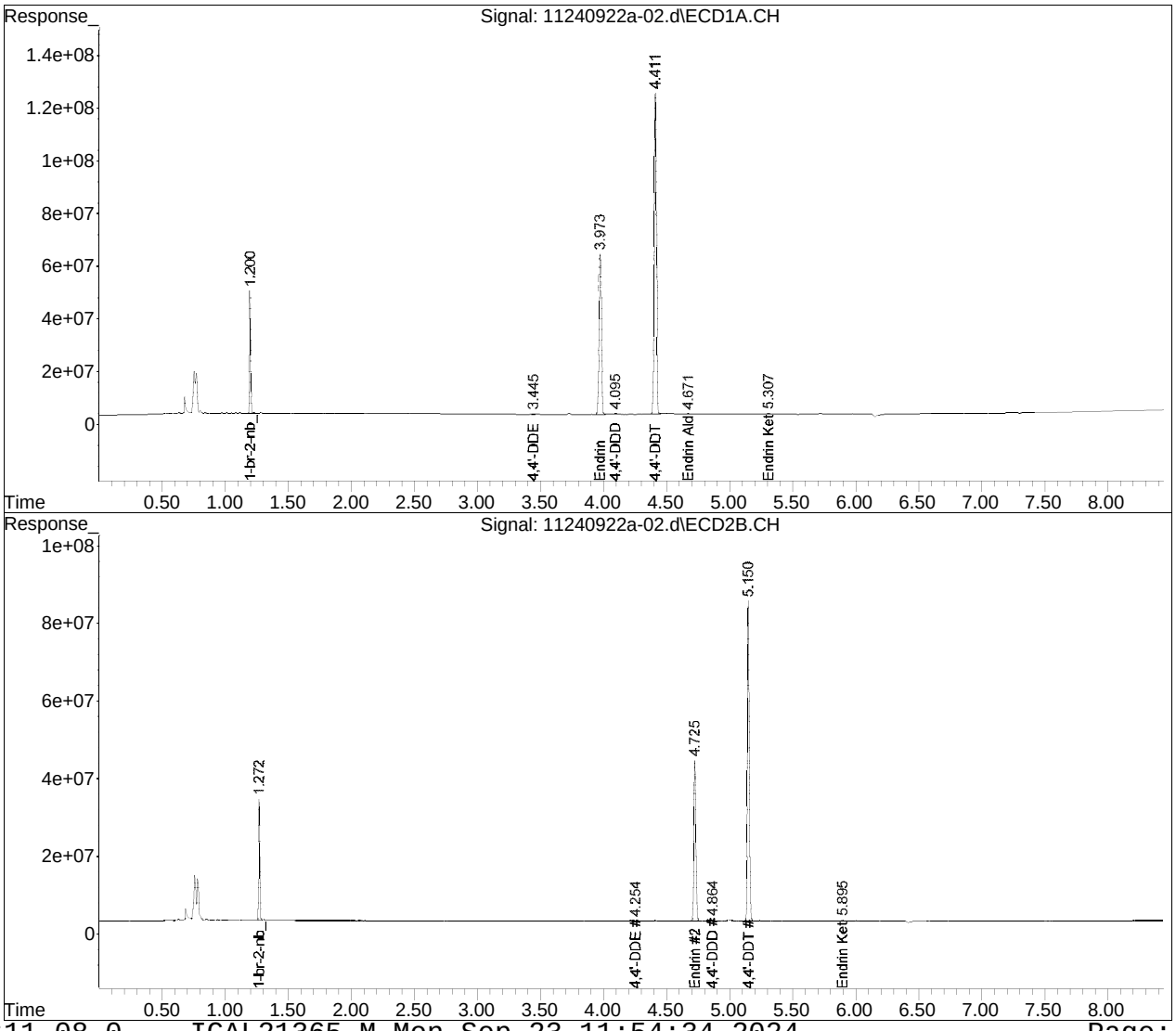
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 9:23
Operator : PEST11:ejl
Sample : pem11240922a-01,42,,deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974788,,ical21365
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 09:55:51 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

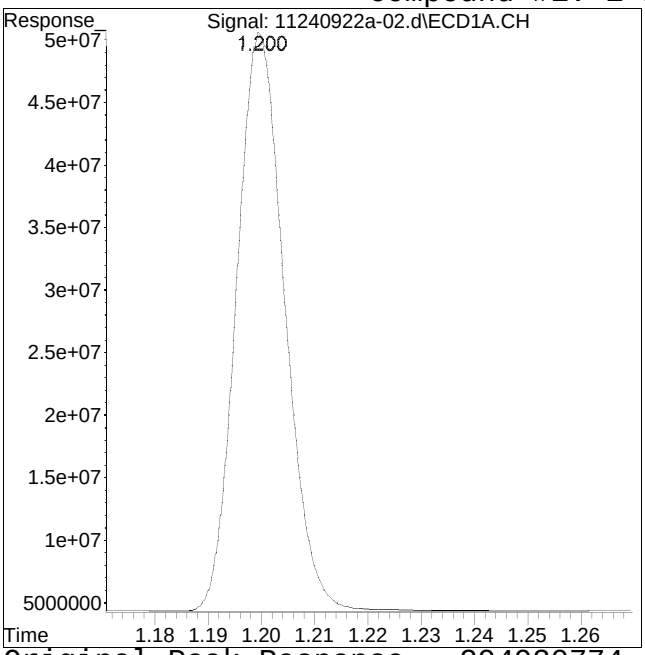
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



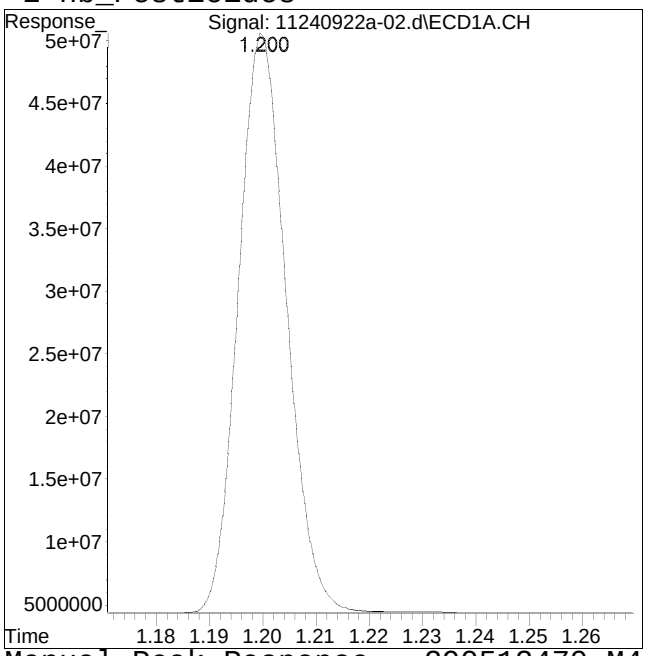
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 294920774



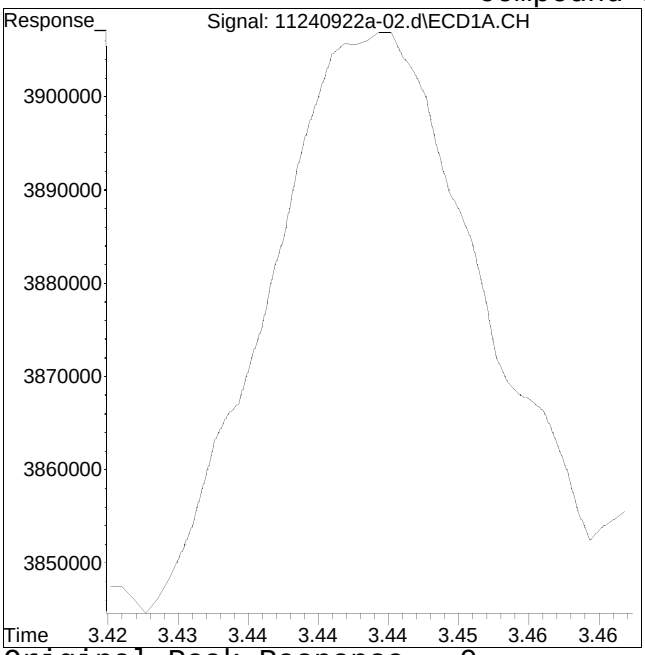

Manual Peak Response = 290513470 M4

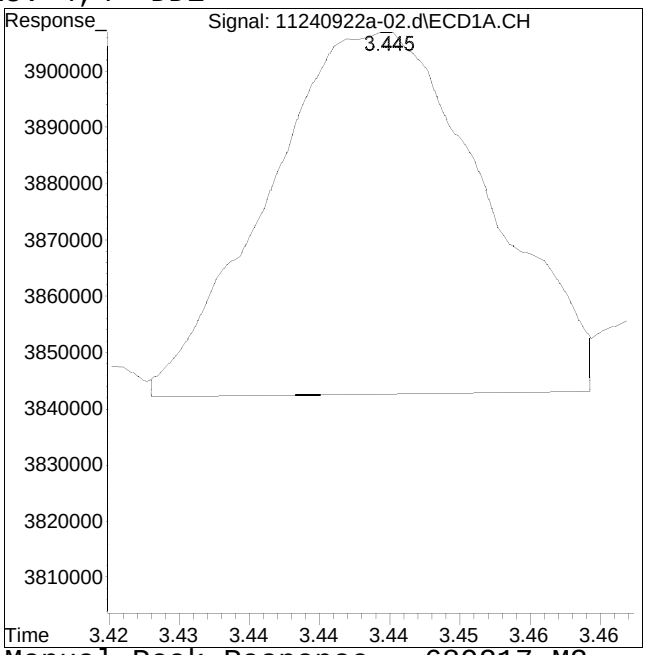
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #15: 4,4'-DDE



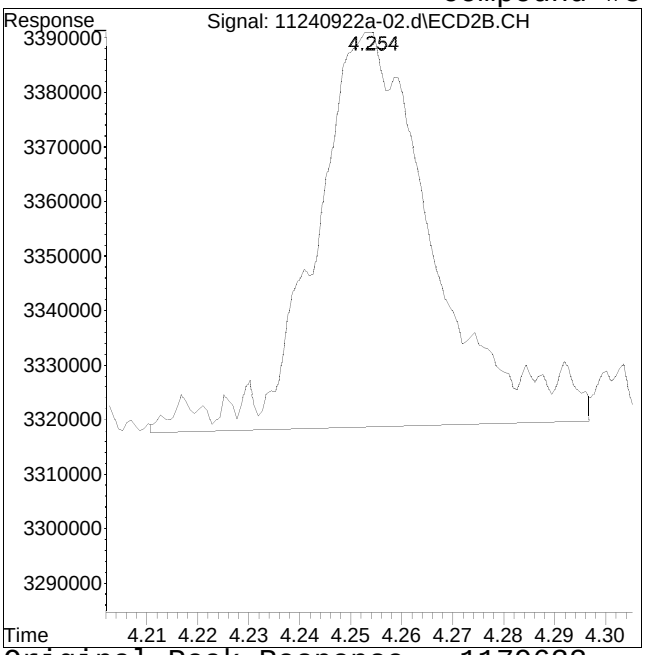




Original Peak Response = 0 Manual Peak Response = 689217 M2
M2 = Peak not found by automatic integration algorithm.

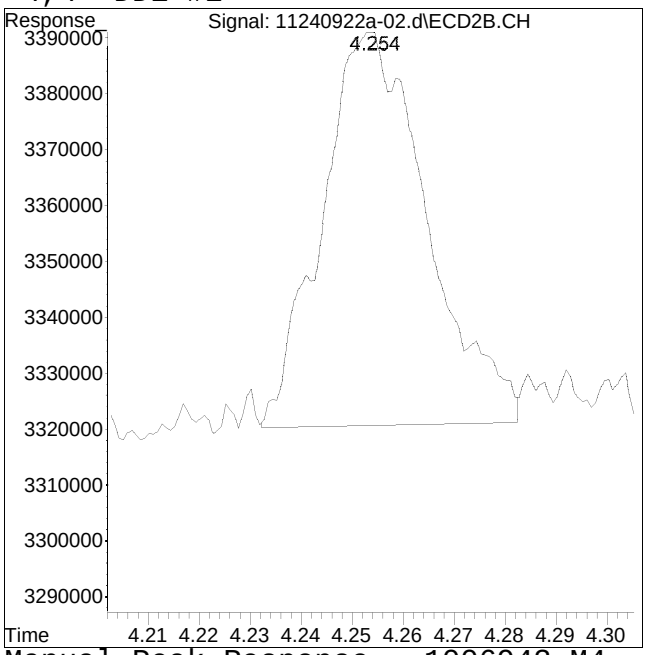
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #53: 4,4'-DDE #2




Original Peak Response = 1179633



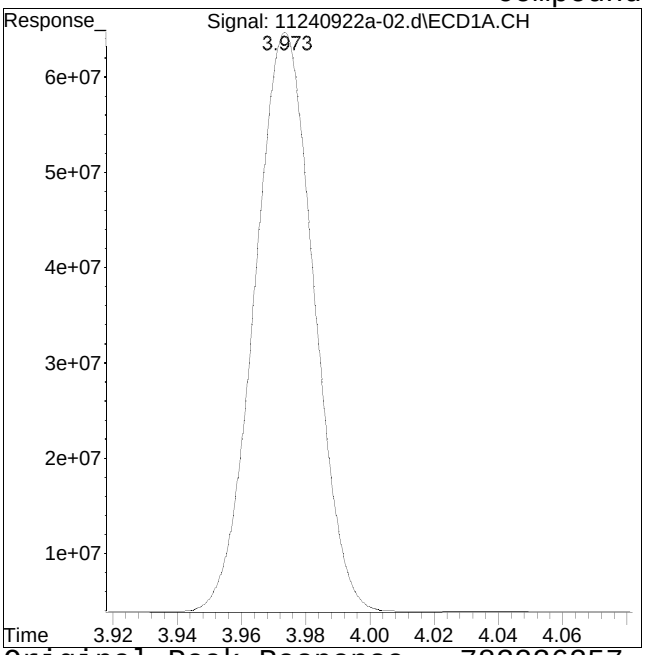

Manual Peak Response = 1006943 M4

M4 = Poor automated baseline construction.

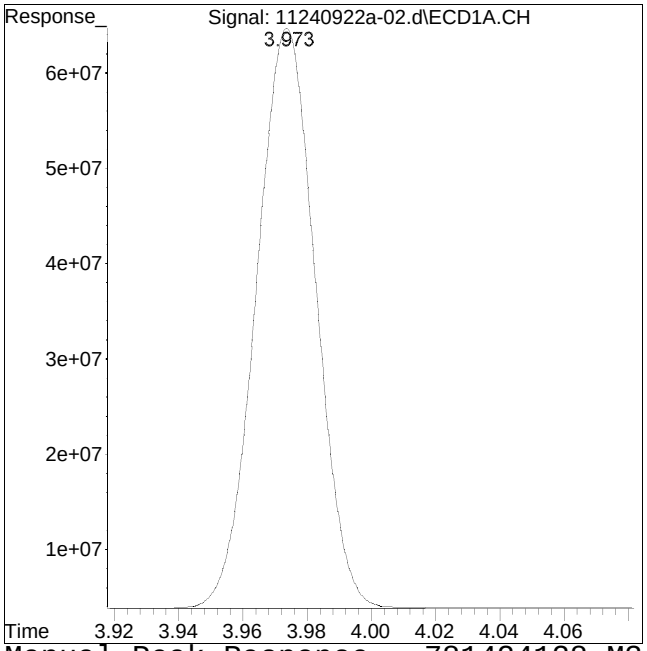
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #18: Endrin




Original Peak Response = 783236357



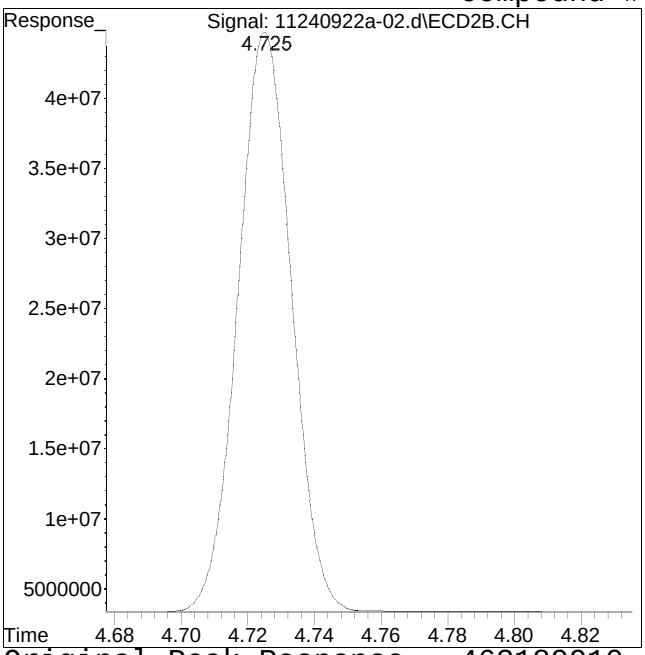

Manual Peak Response = 781424128 M3

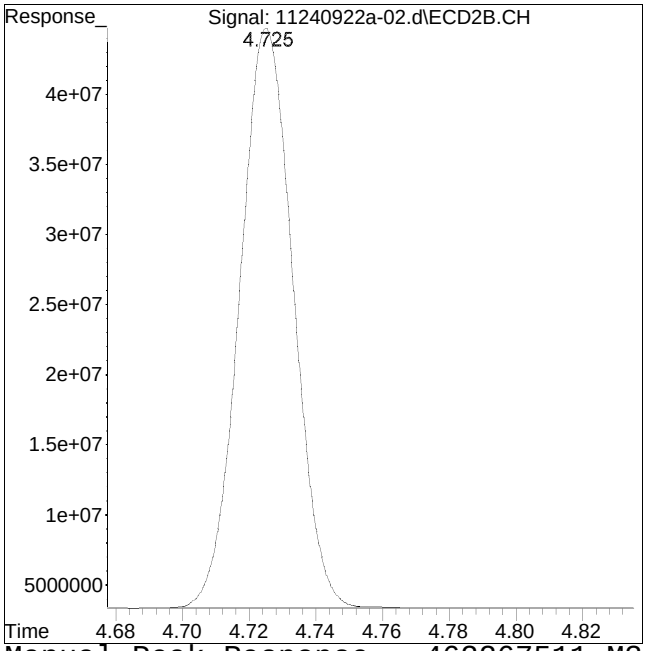
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #56: Endrin #2



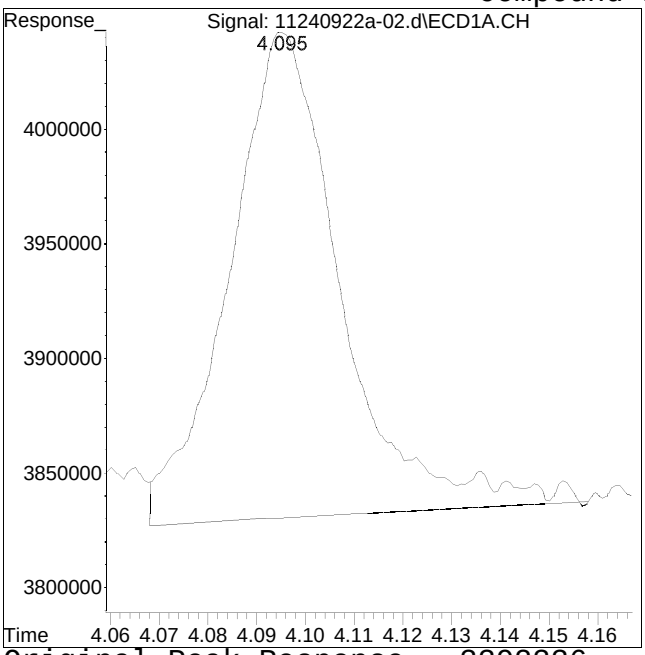




Original Peak Response = 463189910 Manual Peak Response = 462267511 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

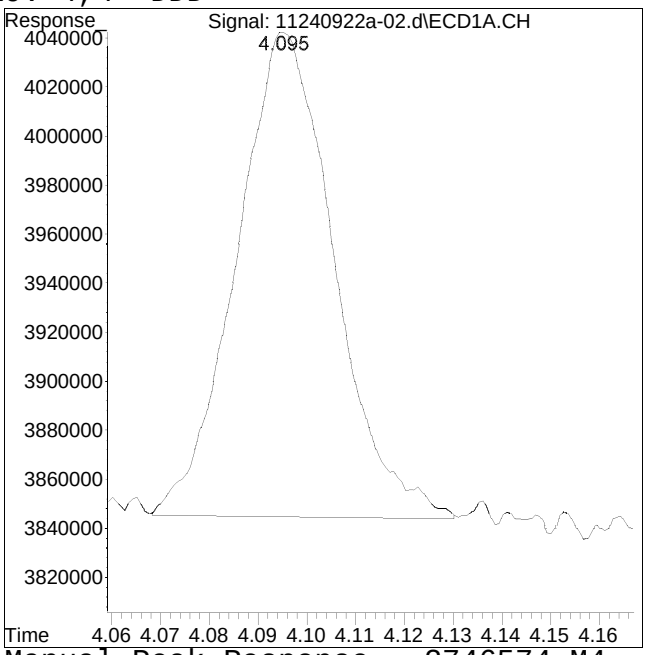
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #19: 4,4'-DDD




Original Peak Response = 3392336




Manual Peak Response = 2746574 M4

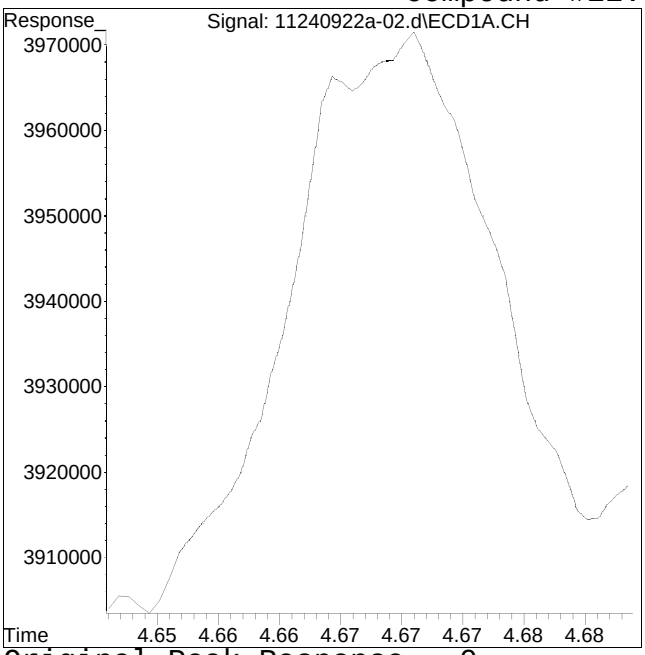
M4 = Poor automated baseline construction.

# Manual Integration Report

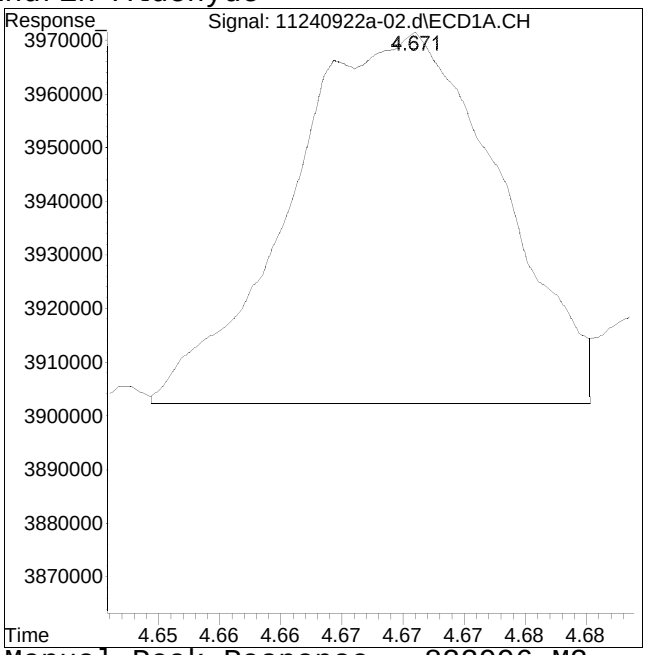
Data Path : I:\PEST\Pest11\2024\240922Q
Data File : 11240922a-02.d
Date Inj'd : 9/22/2024 9:23
Sample : pem11240922a-01,42,,deg115

Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 9/22/2024 9:55 am

## Compound #22: Endrin Aldehyde




Original Peak Response = 0



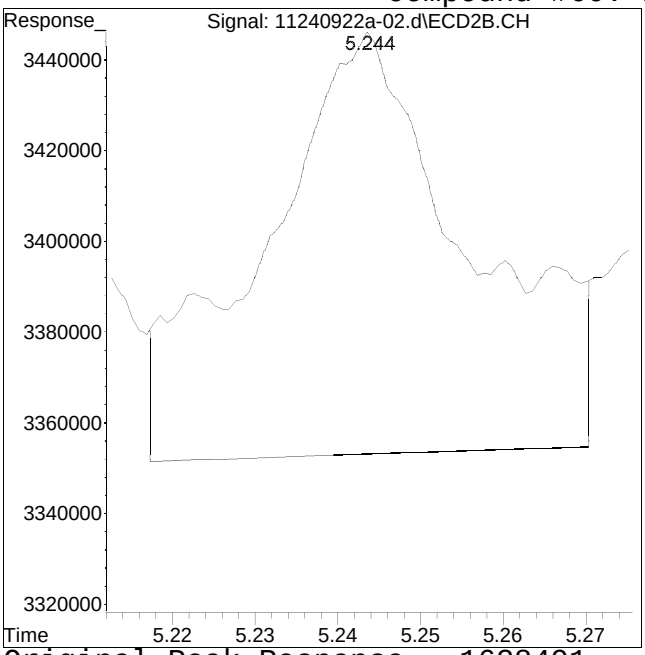

Manual Peak Response = 822996 M2

M2 = Peak not found by automatic integration algorithm.

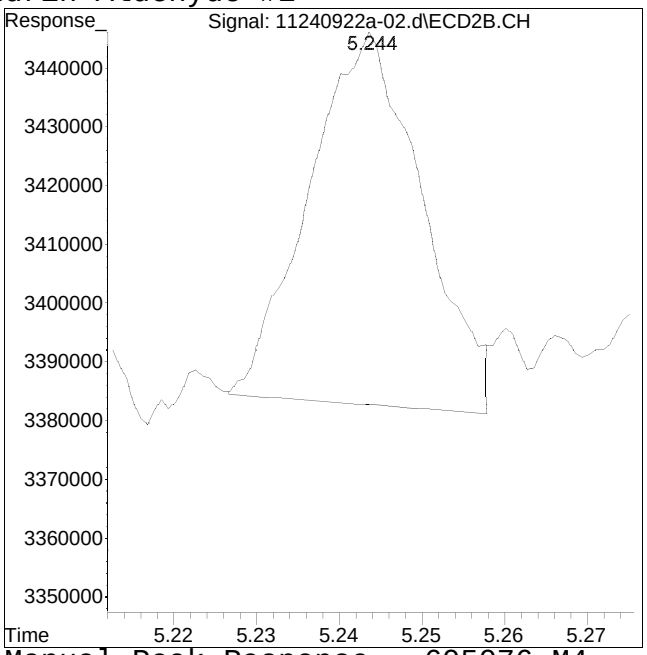
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 1628491



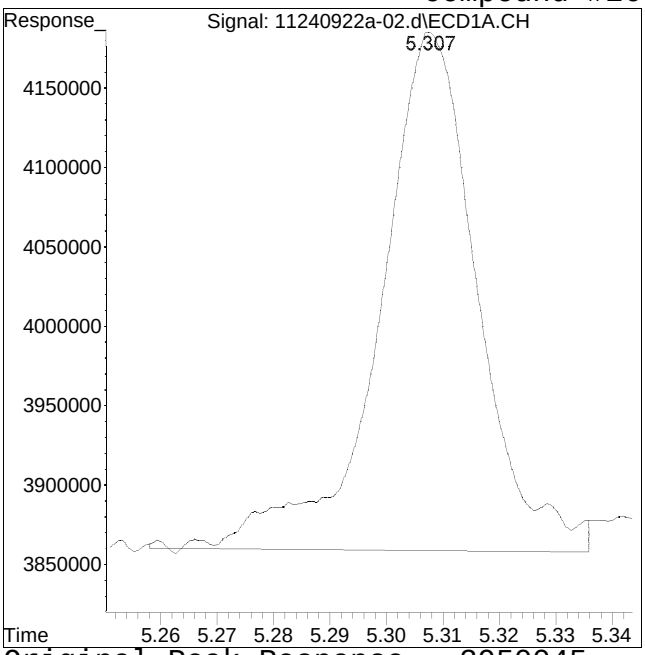

Manual Peak Response = 605076 M4

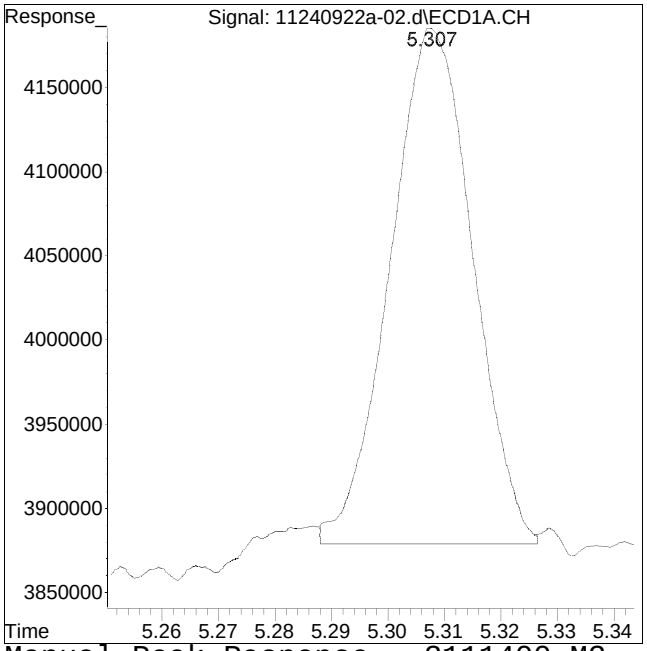
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-02.d Operator : PEST11:ejl
Date Inj'd : 9/22/2024 9:23 Instrument : Pest 11
Sample : pem11240922a-01,42,,deg115Quant Date : 9/22/2024 9:55 am

Compound #26: Endrin Ketone



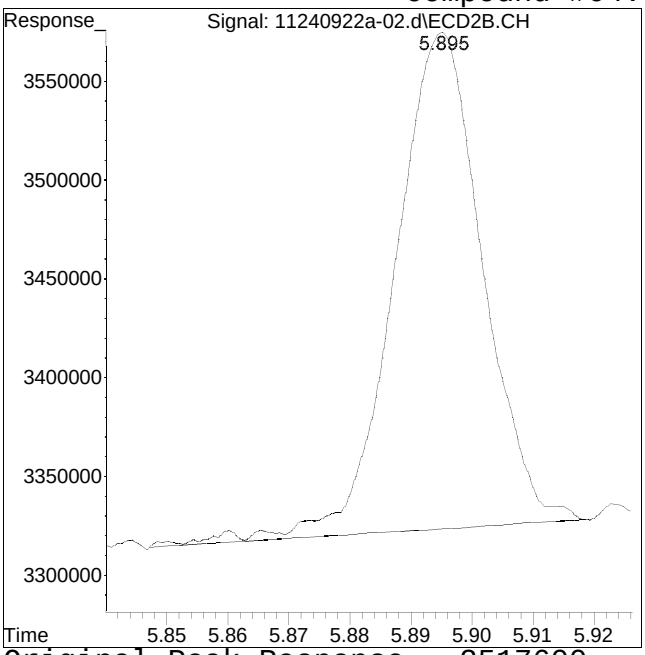




Original Peak Response = 3950045 Manual Peak Response = 3111400 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

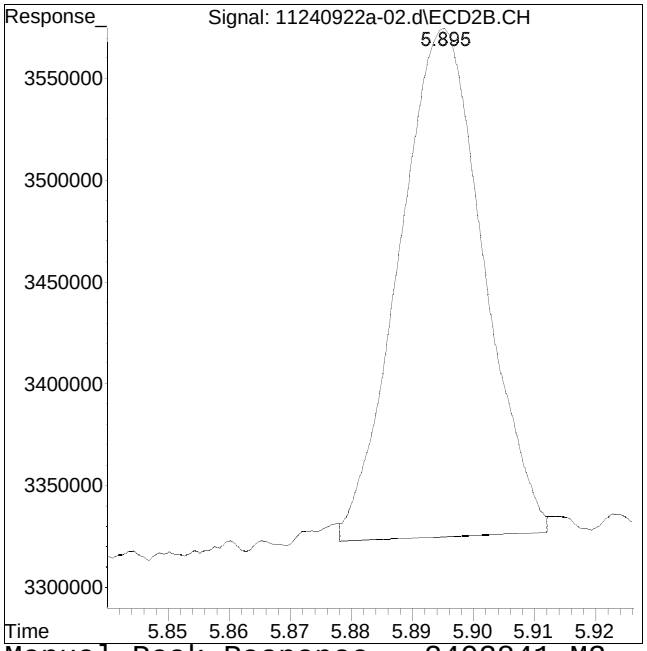
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922Q
Data File : 11240922a-02.d
Date Inj'd : 9/22/2024 9:23
Sample : pem11240922a-01,42,,deg115
Method : pest11_08_01_24_ugL_ICAL
Operator : PEST11:ejl
Instrument : Pest 11
Quant Date : 9/22/2024 9:55 am

Compound #64: Endrin Ketone #2




Original Peak Response = 2517600




Manual Peak Response = 2403841 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:24
Operator : pest20:ejl
Sample : pem20240922a-01,42..deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:05:47 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sat Sep 21 12:06:45 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| | Internal Standards | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.910 | 1.966 | 62032401 | 110.4E6 | 25.000M3 | 25.000 |
| | System Monitoring Compounds | | | | | | |
| | Target Compounds | | | | | | |
| 15) | 4,4'-DDE | 4.715 | 5.398 | 248027 | 392026 | 0.075M2 | 0.074 |
| 18) | Endrin | 5.267 | 5.837 | 164.8E6 | 266.1E6 | 51.411M4 | 50.823M4 |
| 19) | 4,4'-DDD | 5.362 | 5.950 | 699675 | 1127731 | 0.260M2 | 0.261M3 |
| 21) | 4,4'-DDT | 5.636 | 6.221 | 302.6E6 | 480.3E6 | 116.038M4 | 97.987M4 |
| 22) | Endrin Aldeh | 5.893 | 6.322 | 208017 | 648820 | N.D. M2 | N.D. M4 |
| 26) | Endrin Keton | 6.492 | 6.956 | 417992 | 655527 | 0.132M2 | 0.125M3 |
| | Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| | Average chlordane-1 | | | | | 0.000 | 0.000 |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |
| | SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| | Sum toxaphene-1 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-1 | | | | | 0.000 | 0.000 |

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:24
Operator : pest20:ejl
Sample : pem20240922a-01,42..deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:05:47 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sat Sep 21 12:06:45 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|

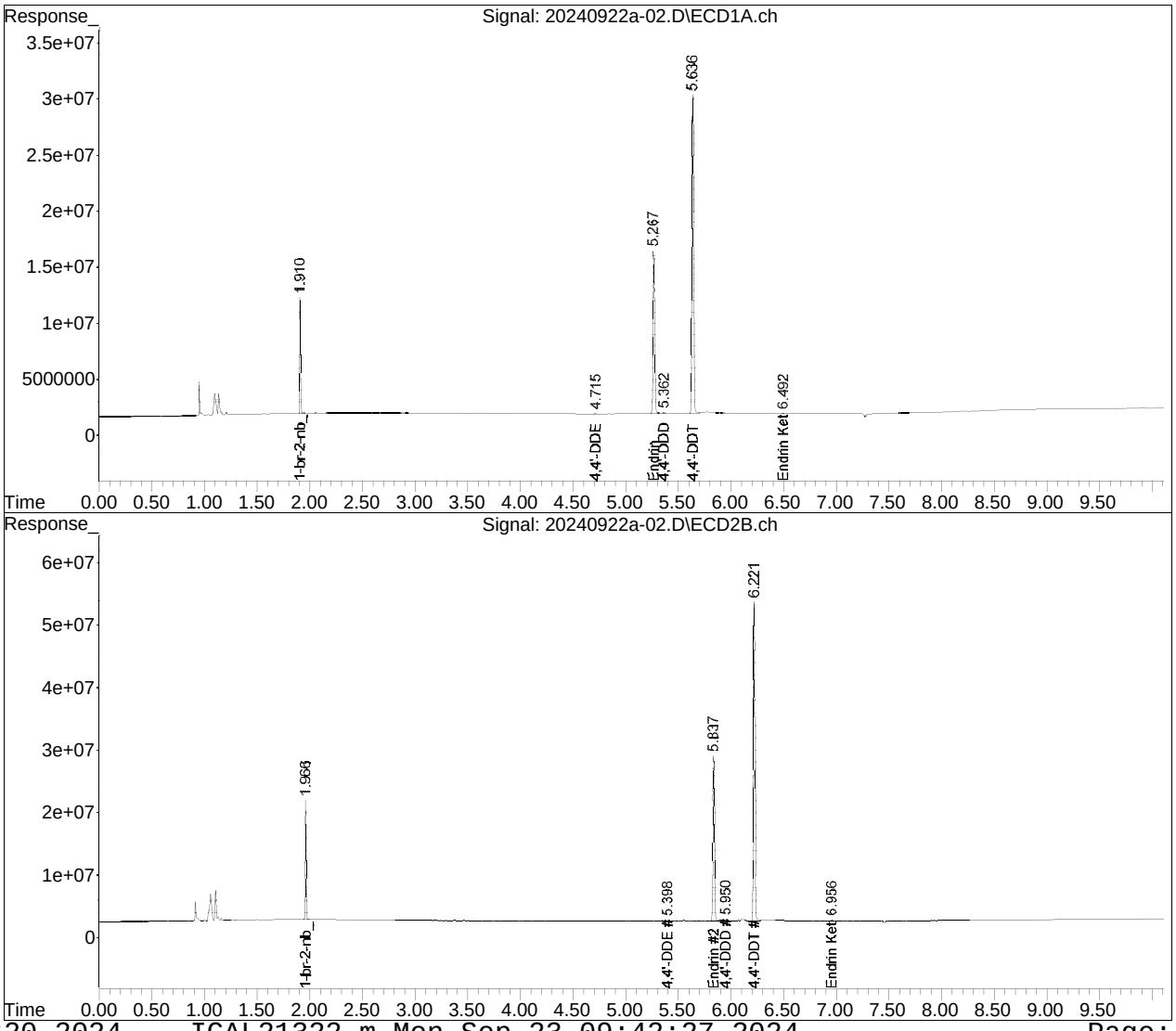
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest20\2024\240922a\
Data File : 20240922a-02.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Sep 2024 09:24
Operator : pest20:ejl
Sample : pem20240922a-01,42..deg11573 (Sig #1); deg11573 (Sig #2)
Misc : wg1974790,,ical21322
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 22 10:05:47 2024
Quant Method : I:\PEST\Pest20\2024\240922a\pest20_2024_07_22_ugL_ICAL21322.m
Quant Title : pest
QLast Update : Sat Sep 21 12:06:45 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

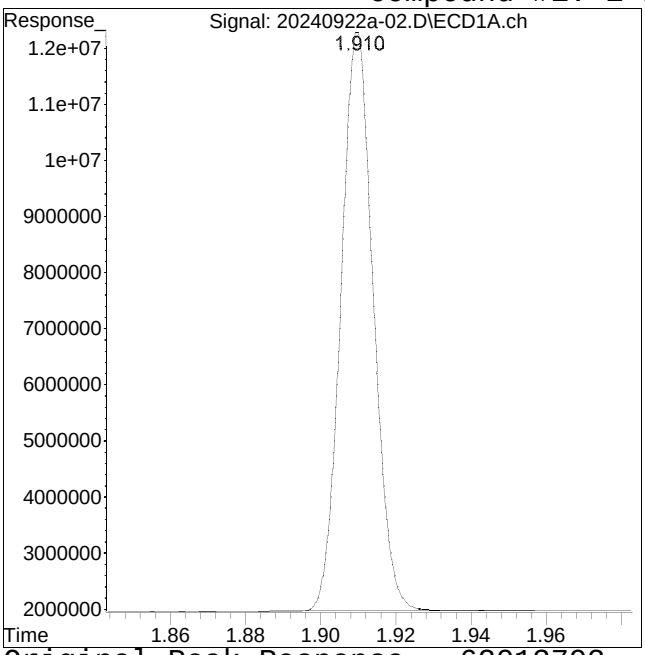


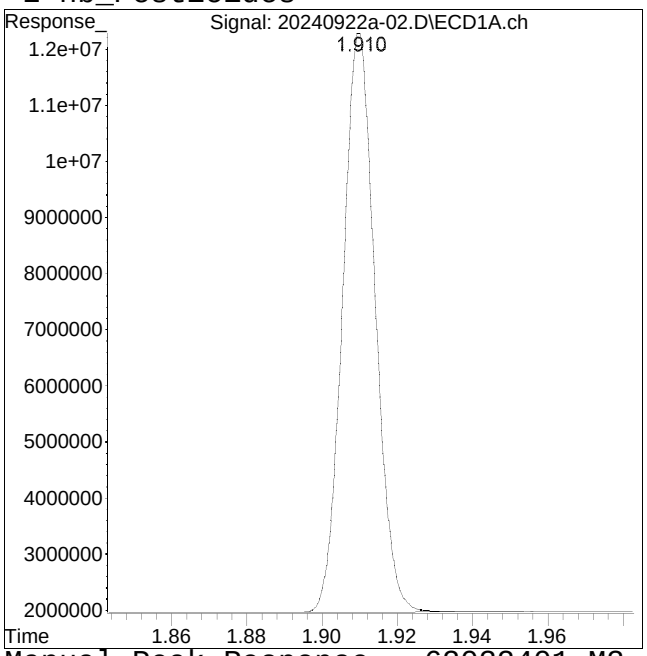
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 62013792 Manual Peak Response = 62032401 M3

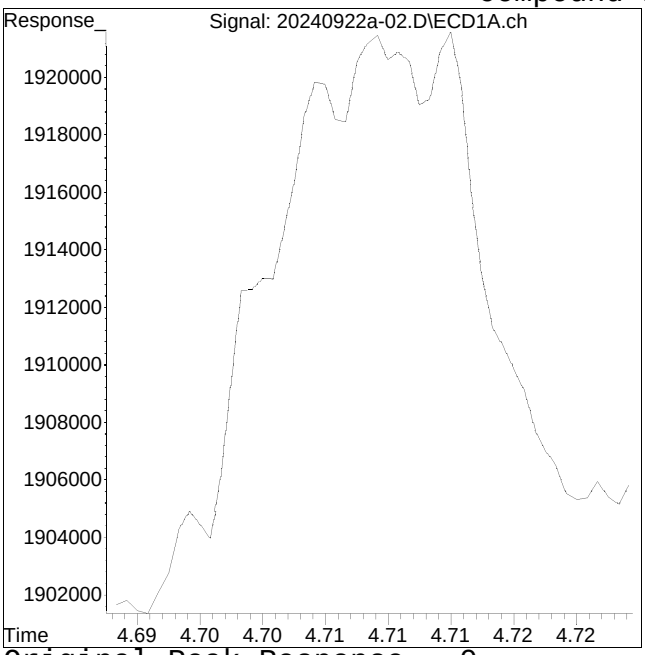
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

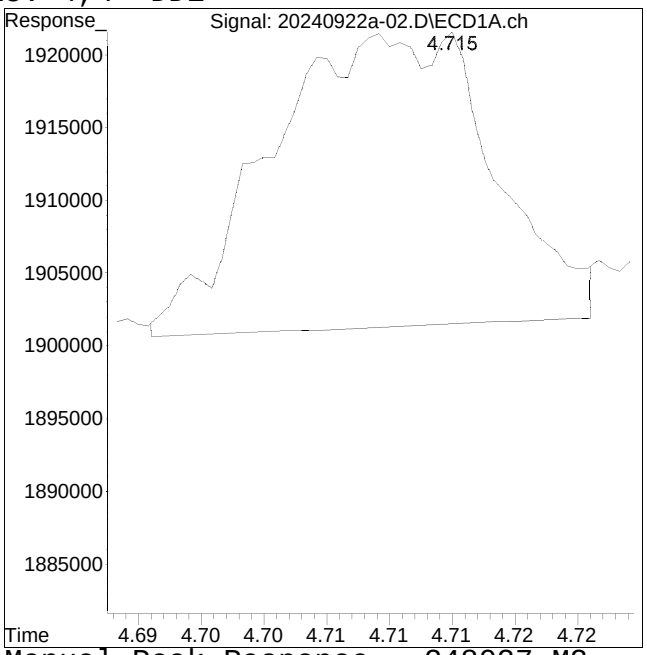
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #15: 4,4'-DDE



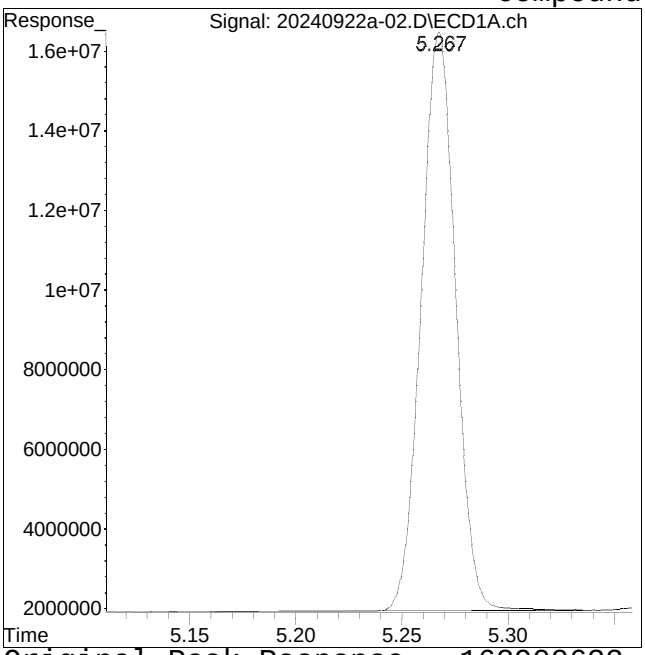

Original Peak Response = 0
Manual Peak Response = 248027 M2
M2 = Peak not found by automatic integration algorithm.

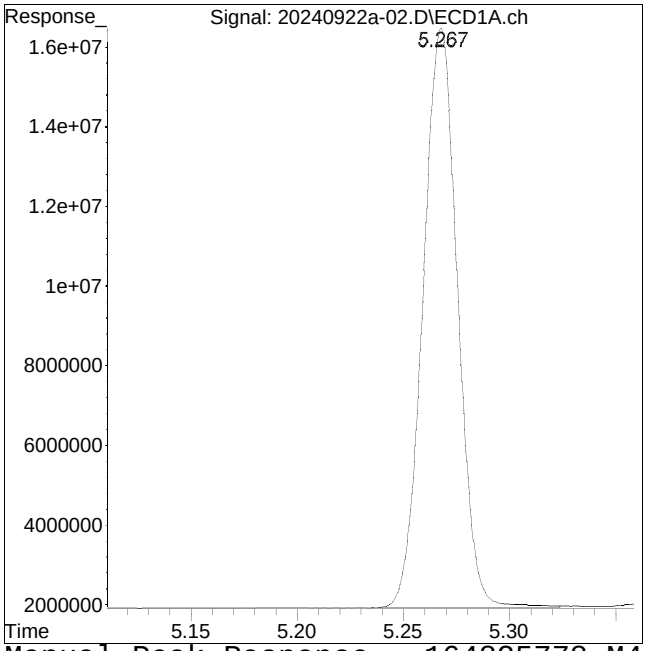
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #18: Endrin



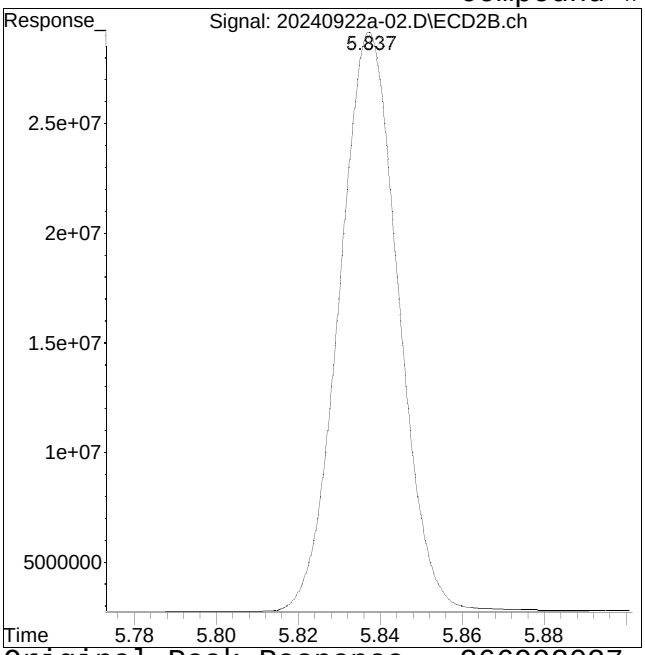



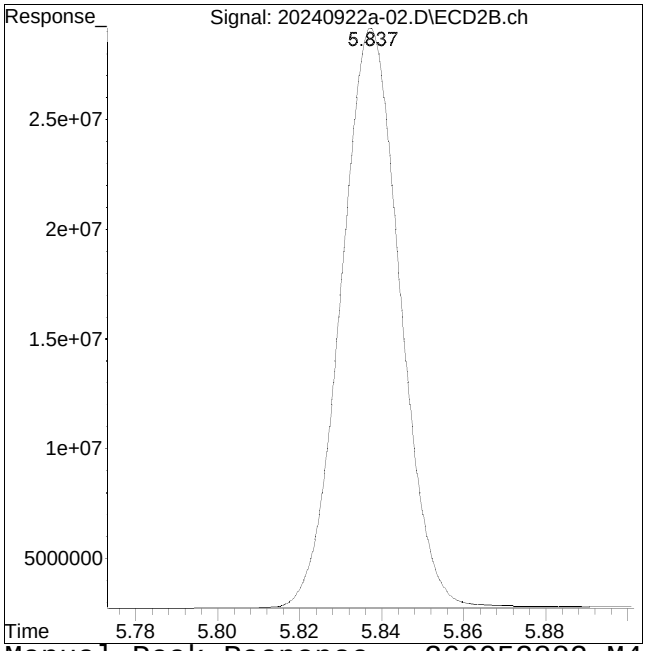

Original Peak Response = 162900632 Manual Peak Response = 164825778 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-02.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:24 Instrument : PEST 20
Sample : pem20240922a-01,42..deg115Quant Date : 9/22/2024 10:05 am

Compound #56: Endrin #2



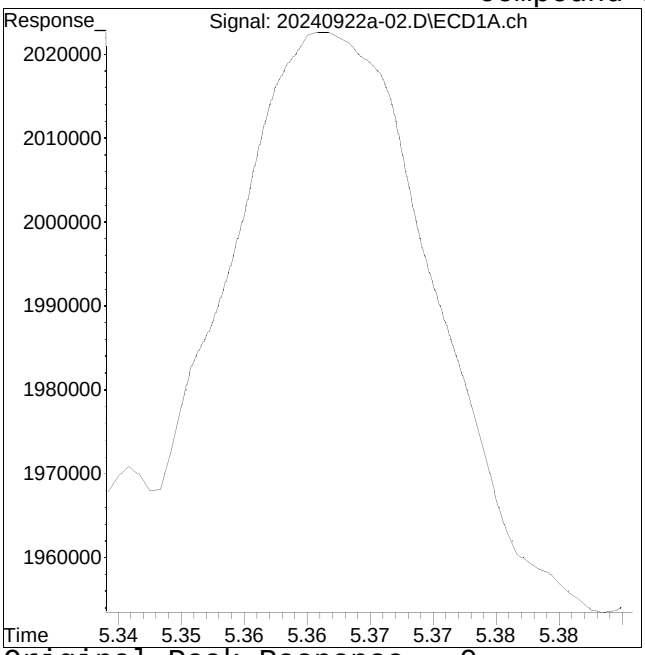

Original Peak Response = 266992027 Manual Peak Response = 266052882 M4
M4 = Poor automated baseline construction.

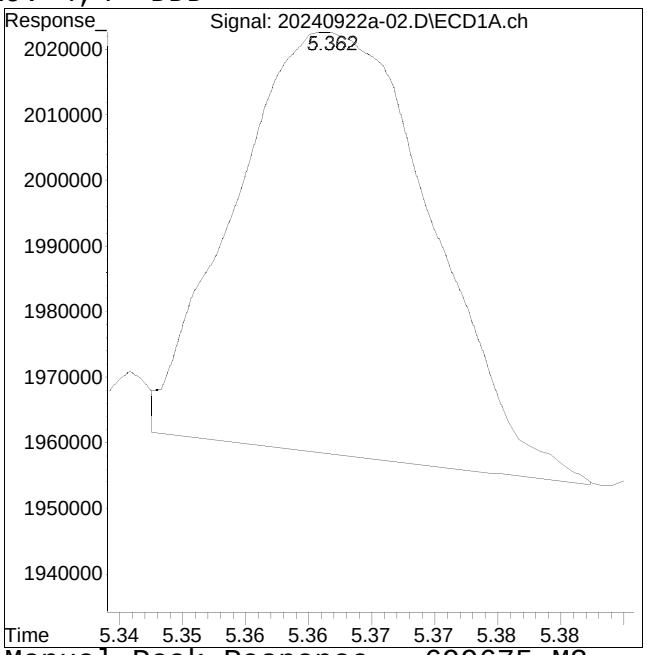
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #19: 4,4'-DDD



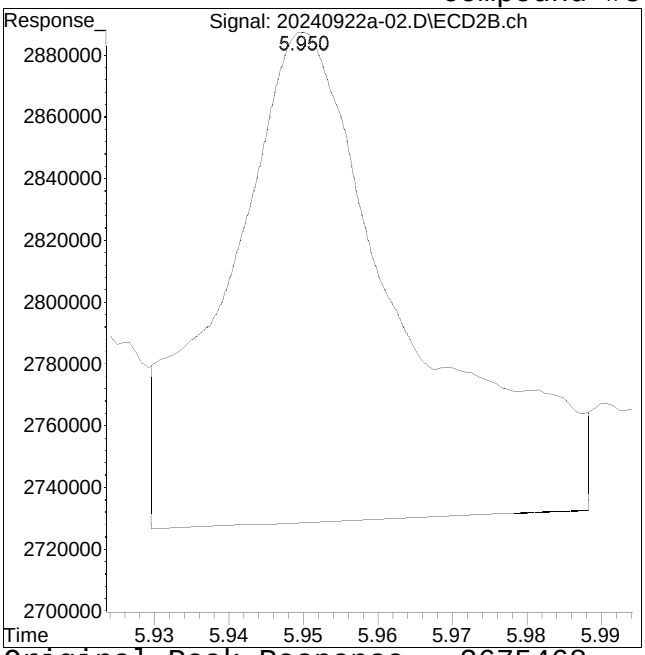

Original Peak Response = 0
Manual Peak Response = 699675 M2
M2 = Peak not found by automatic integration algorithm.

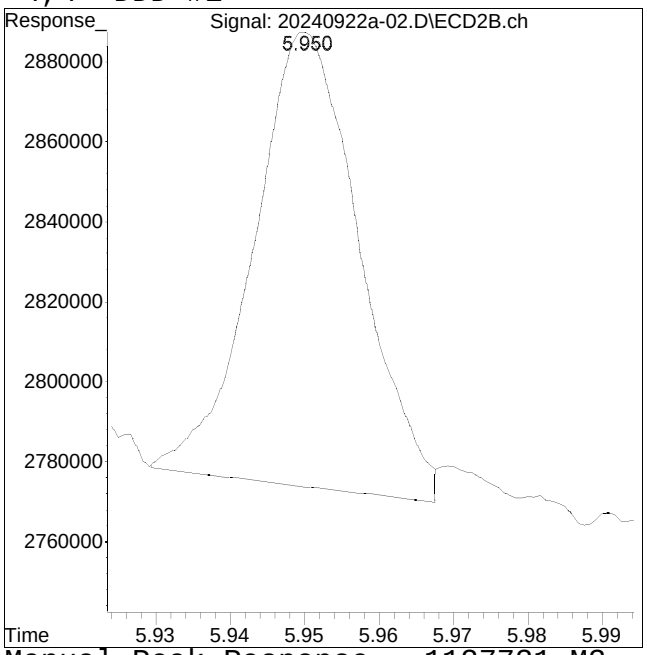
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #57: 4,4'-DDD #2



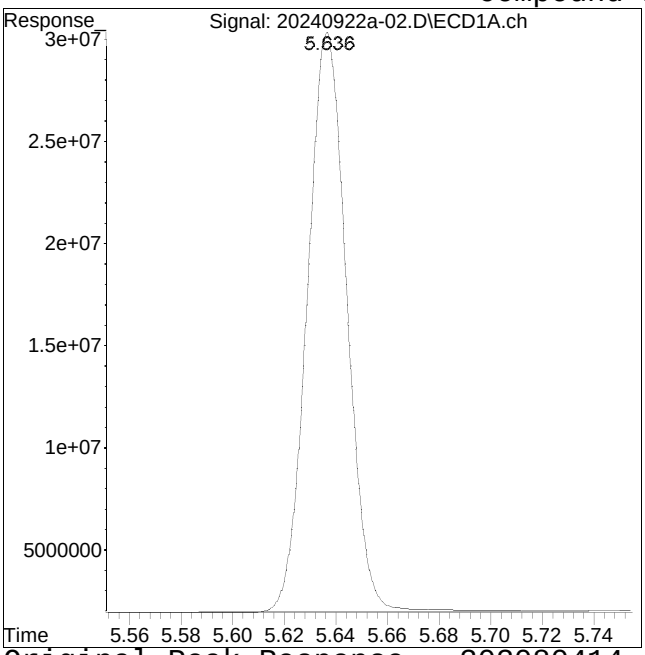

Original Peak Response = 2675468 Manual Peak Response = 1127731 M3

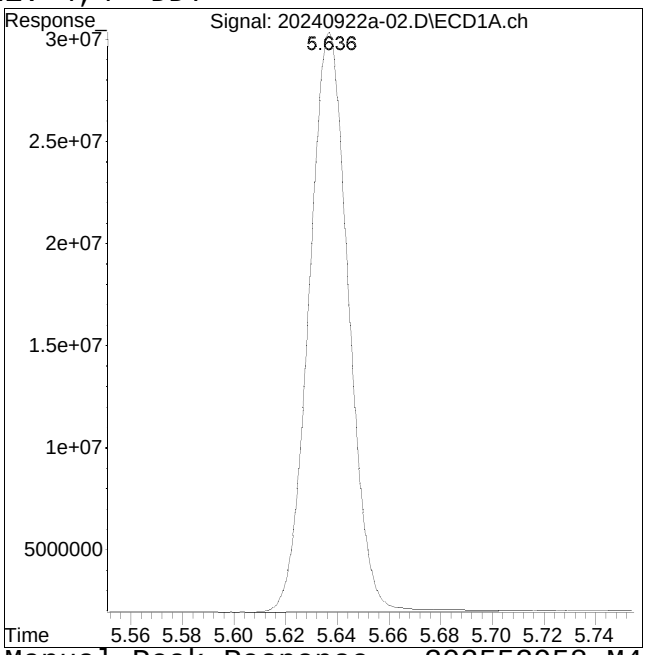
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-02.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:24 Instrument : PEST 20
Sample : pem20240922a-01,42..deg115Quant Date : 9/22/2024 10:05 am

Compound #21: 4,4'-DDT



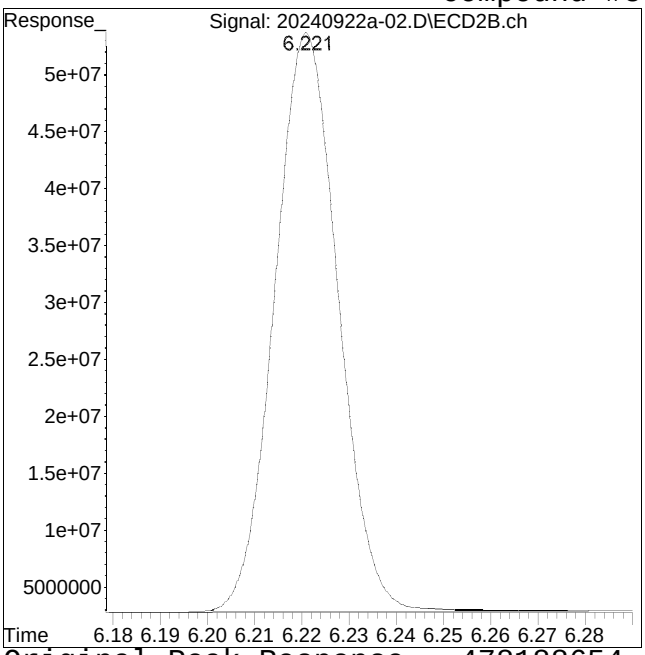




Original Peak Response = 303080414 Manual Peak Response = 302552958 M4
M4 = Poor automated baseline construction.

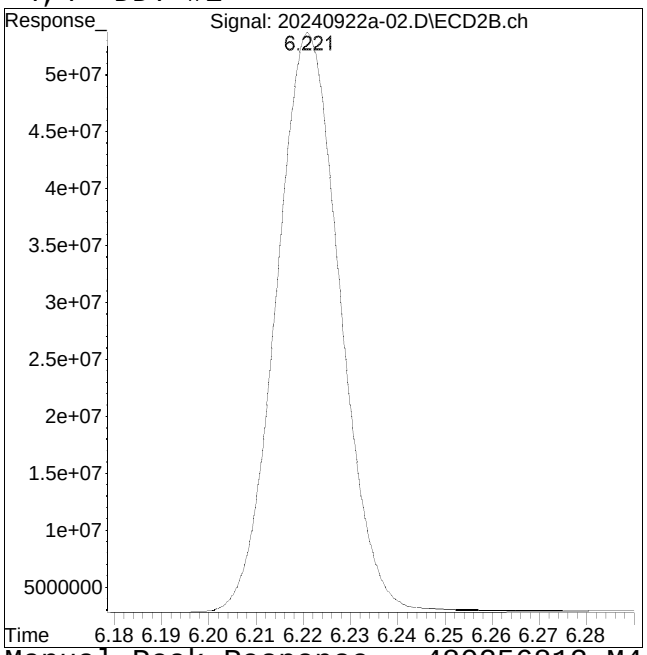
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-02.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:24 Instrument : PEST 20
Sample : pem20240922a-01,42..deg115Quant Date : 9/22/2024 10:05 am

Compound #59: 4,4'-DDT #2




Original Peak Response = 478188654



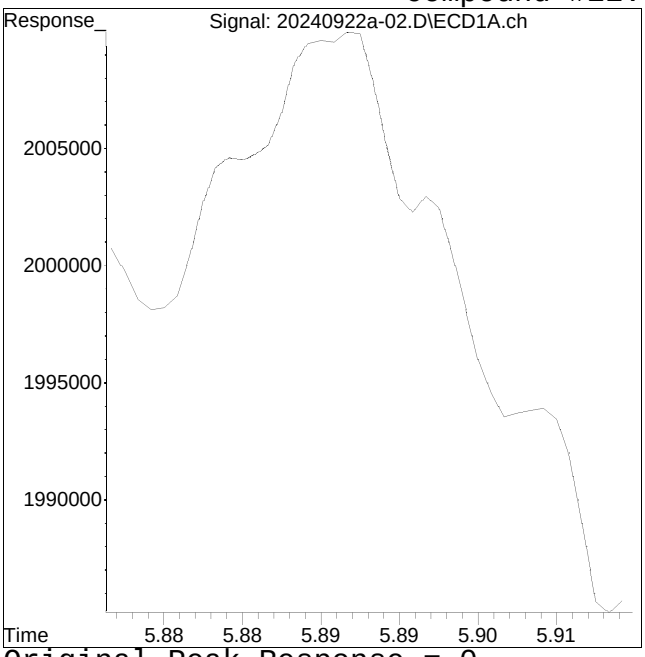

Manual Peak Response = 480256812 M4

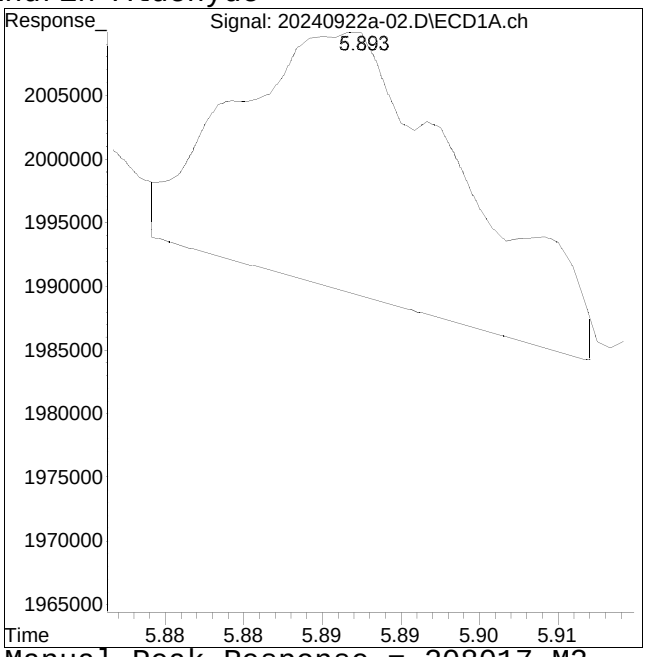
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-02.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:24 Instrument : PEST 20
Sample : pem20240922a-01,42..deg115Quant Date : 9/22/2024 10:05 am

Compound #22: Endrin Aldehyde



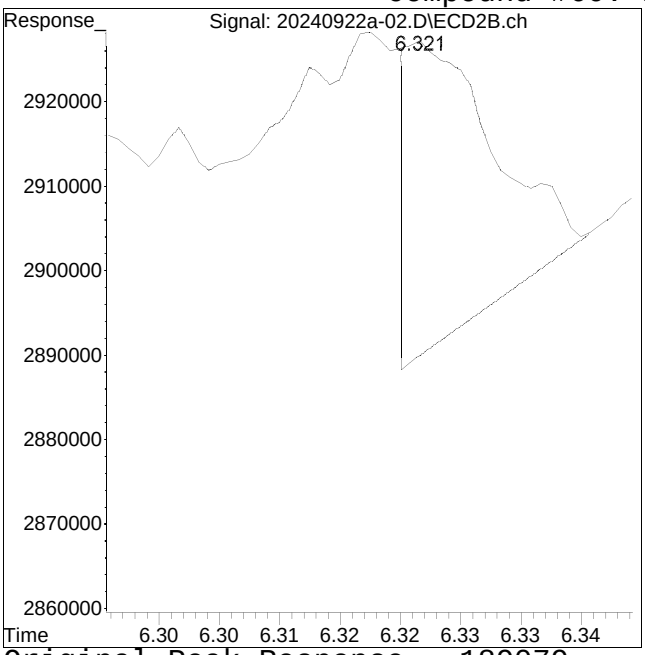

Original Peak Response = 0 Manual Peak Response = 208017 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

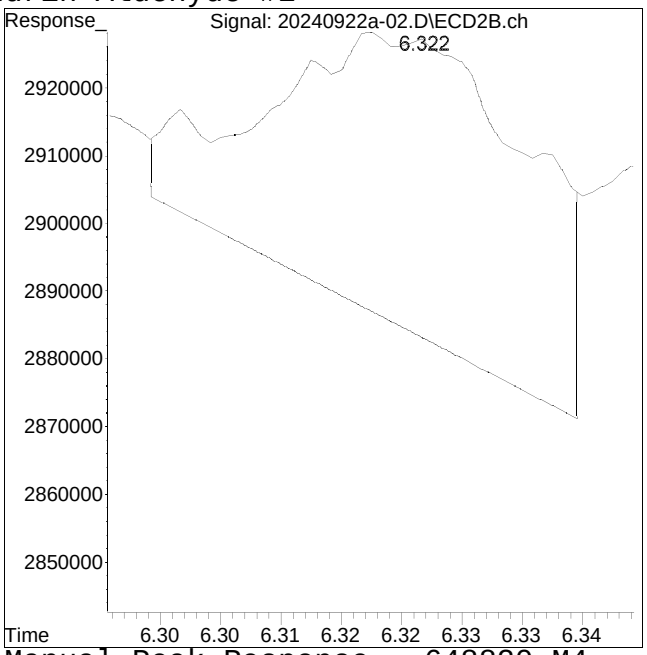
Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #60: Endrin Aldehyde #2




Original Peak Response = 189079




Manual Peak Response = 648820 M4

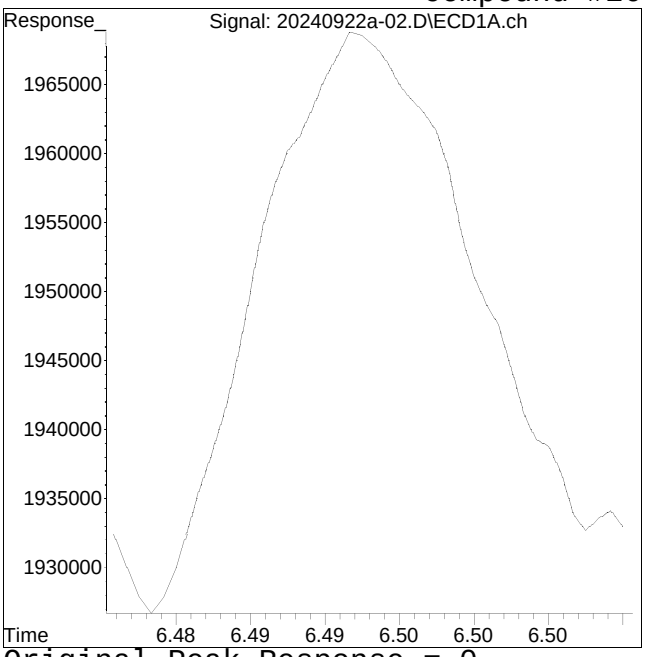
M4 = Poor automated baseline construction.

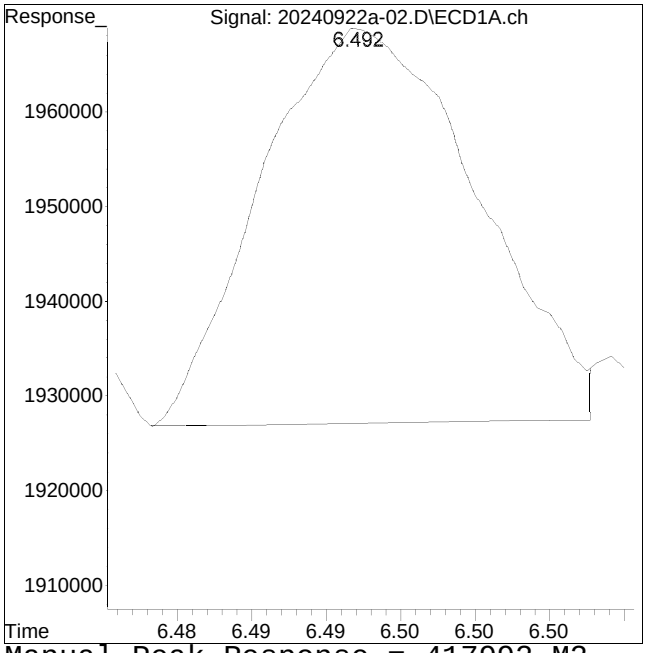
Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922Q
Data File : 20240922a-02.D
Date Inj'd : 9/22/2024 9:24
Sample : pem20240922a-01,42..deg115

Method : pest20_2024_07_22_ugL_IC
Operator : pest20:ejl
Instrument : PEST 20
Quant Date : 9/22/2024 10:05 am

Compound #26: Endrin Ketone



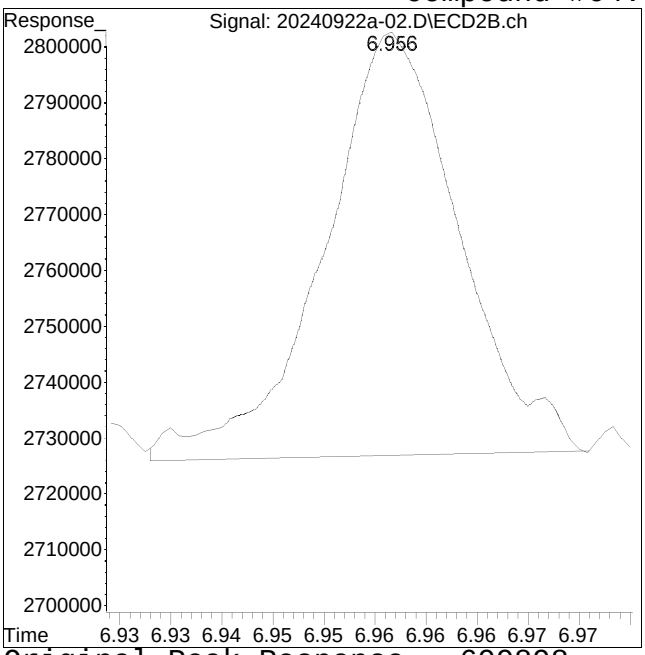



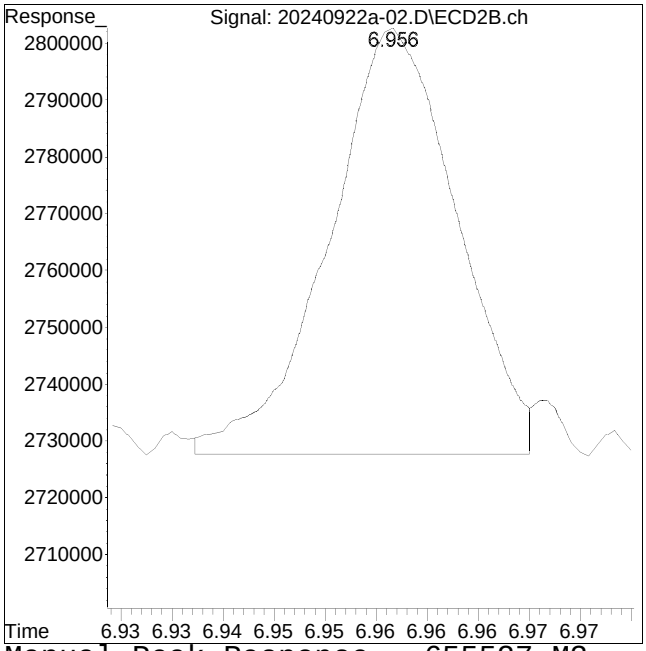

Original Peak Response = 0
Manual Peak Response = 417992 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\PEST\Pest20\2024\240922QMethod : pest20_2024_07_22_ugL_IC
Data File : 20240922a-02.D Operator : pest20:ejl
Date Inj'd : 9/22/2024 9:24 Instrument : PEST 20
Sample : pem20240922a-01,42..deg115Quant Date : 9/22/2024 10:05 am

Compound #64: Endrin Ketone #2




Original Peak Response = 699898 Manual Peak Response = 655527 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# RT Shift  Summary

# Identification Summary
# Form 10
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : L2453053-01 | | |
| **Client ID** | : MW-1SR | | |
| **Date Analyzed (1)** | : 09/22/24 11:56 | **Date Analyzed (2)** | : 09/22/24 11:56 |
| **Instrument ID (1)** | : PEST11 | **Instrument ID (2)** | : PEST11 |
| **GC Column (1)** | : CLPPesticides | **GC Column (2)** | : CLPPesticidesII |

| Analyte | Col | RT | RT Window From | RT Window To | Concentration | RPD |
|---|---|---|---|---|---|---|
| 4,4'-DDT | 1 | 4.41 | 4.36 | 4.46 | 0.00551J | |
| | 2 | 5.15 | 5.10 | 5.20 | 0.00493J | NC |

# Identification Summary
# Form 10
# Pesticides

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab Sample ID** | : L2453053-03 | | |
| **Client ID** | : MW-11S | | |
| **Date Analyzed (1)** | : 09/22/24 12:44 | **Date Analyzed (2)** | : 09/22/24 12:44 |
| **Instrument ID (1)** | : PEST11 | **Instrument ID (2)** | : PEST11 |
| **GC Column (1)** | : CLPPesticides | **GC Column (2)** | : CLPPesticidesII |

| Analyte | Col | RT | RT Window From | RT Window To | Concentration | RPD |
|---|---|---|---|---|---|---|
| 4,4'-DDT | 1 | 4.41 | 4.36 | 4.46 | 0.00747J | |
| | 2 | 5.15 | 5.10 | 5.20 | 0.00626J | NC |

# Pesticides Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 11:44
Operator : PEST11:emr
Sample : WG1974576-1,42,, re for cracked glassware
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:24 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.204 | 1.277 | 344.1E6 | 214.3E6 | 25.000M4 | 25.000 |
| | Standard Area 1 : #1 = 280061320 | | | | Recovery = 122.86% | | |
| | Standard Area 1 : #2 = 198070219 | | | | Recovery = 108.19% | | |
| 28) i | 1-br-2-nb_Ch | 1.204 | 1.277 | 344.1E6 | 214.3E6 | 25.000M4 | 25.000 |
| 33) i | 1-br-2-nb_To | 1.204 | 1.277 | 344.1E6 | 214.3E6 | 25.000M4 | 25.000 |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.532 | 1.725 | 487.6E6 | 296.3E6 | 34.100M4 | 31.033 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 68.20% | | 62.07% |
| 27) s | Decachlorobi | 6.136 | 6.767 | 448.1E6 | 237.6E6 | 27.997M4 | 26.151M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | | Recovery = 55.99% | | 52.30% |
| Target Compounds | | | | | | | |
| 4) t | alpha-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 5) t | gamma-BHC (l | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 6) t | beta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 7) t | delta-BHC | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 8) t | Heptachlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 9) t | Aldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 12) t | Heptachlor E | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 13) t | gamma-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 14) t | alpha-Chlord | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 15) t | 4,4'-DDE | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 16) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 17) t | Dieldrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 11:44
Operator : PEST11:emr
Sample : WG1974576-1,42,, re for cracked glassware
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:24 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : Default - All compounds listed

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| 18) t | Endrin | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 19) t | 4,4'-DDD | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 20) t | Endosulfan I | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 21) t | 4,4'-DDT | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 22) t | Endrin Aldeh | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 23) t | Methoxychlor | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 25) t | Endosulfan S | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 26) t | Endrin Keton | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 34) l2 | toxaphene-2 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 35) l2 | toxaphene-3 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 36) l2 | toxaphene-4 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| 37) l2 | toxaphene-5 | 0.000 | 0.000 | 0 | 0 | N.D. d | N.D. d |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | | |
| | Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| | Average toxaphene-2 | | | | | 0.000 | 0.000 |

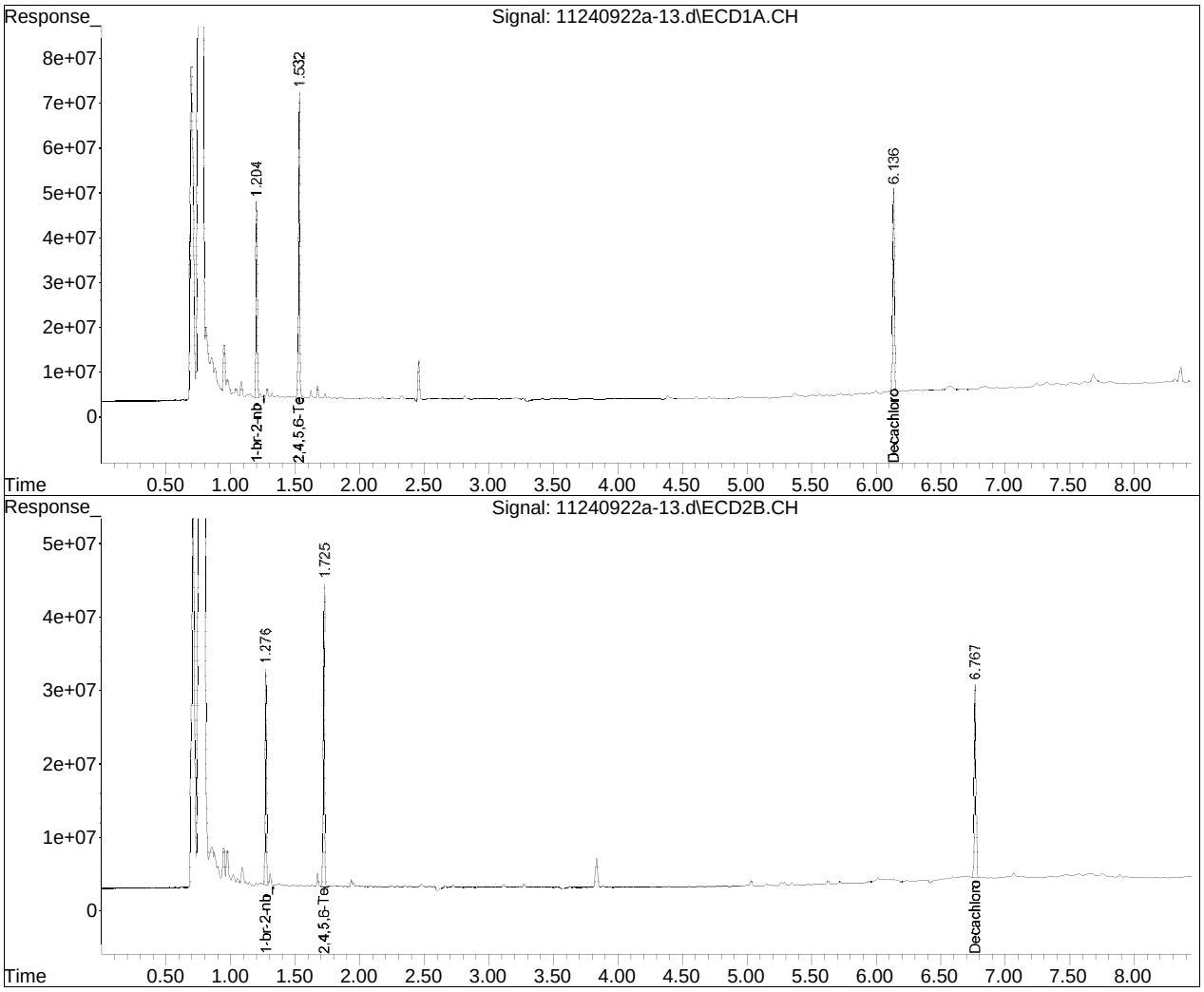
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listeda\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-13.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  11:44
Operator : PEST11:emr
Sample : WG1974576-1,42,, re for cracked glassware
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 13 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:24 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

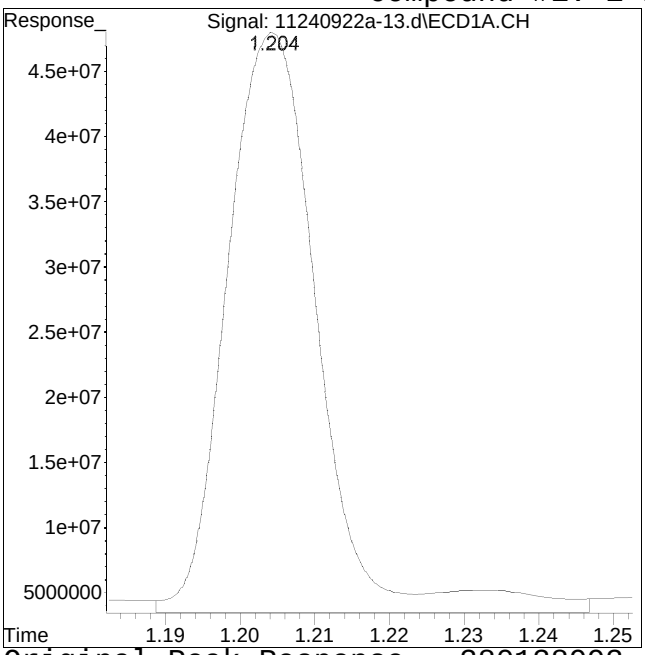
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



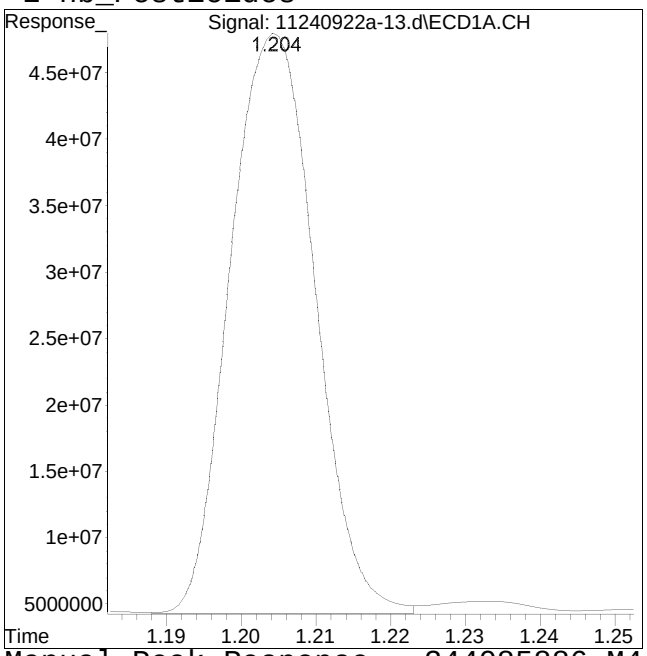
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 380138993



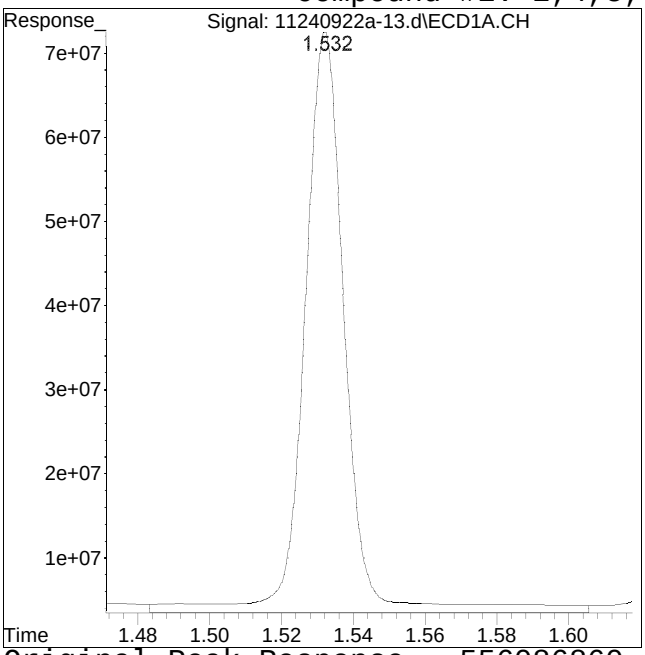

Manual Peak Response = 344085886 M4

M4 = Poor automated baseline construction.

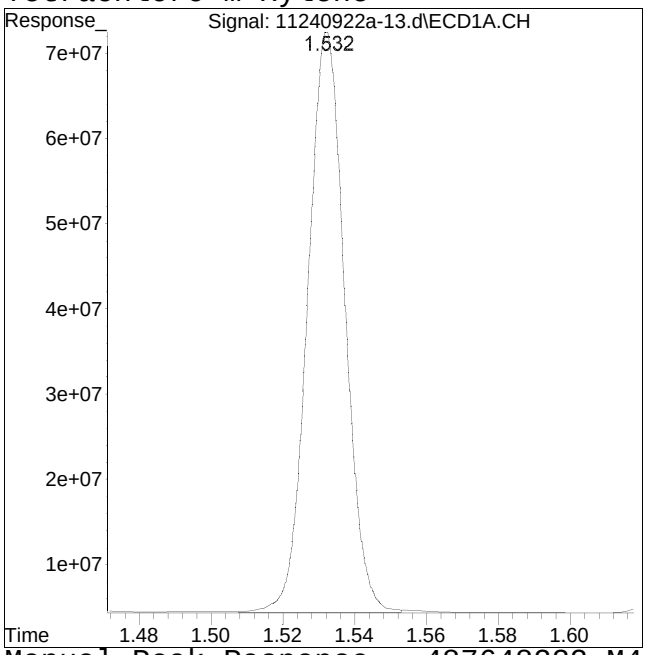
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 556086860



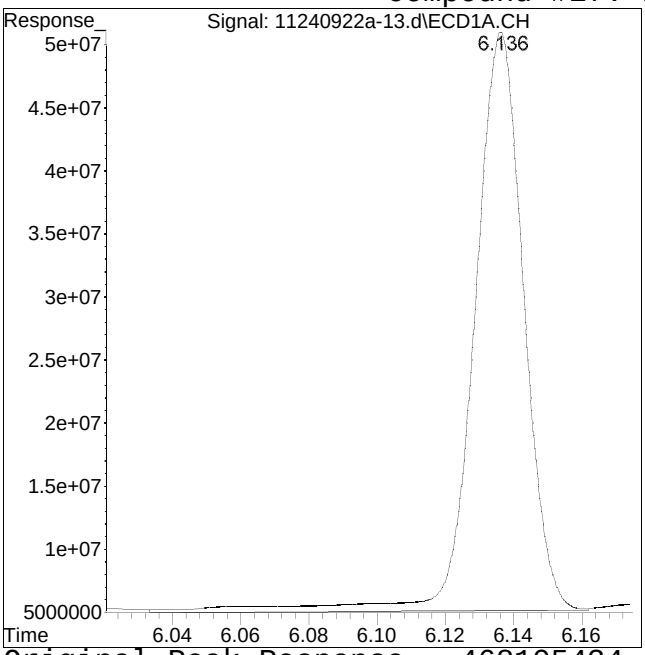

Manual Peak Response = 487648222 M4

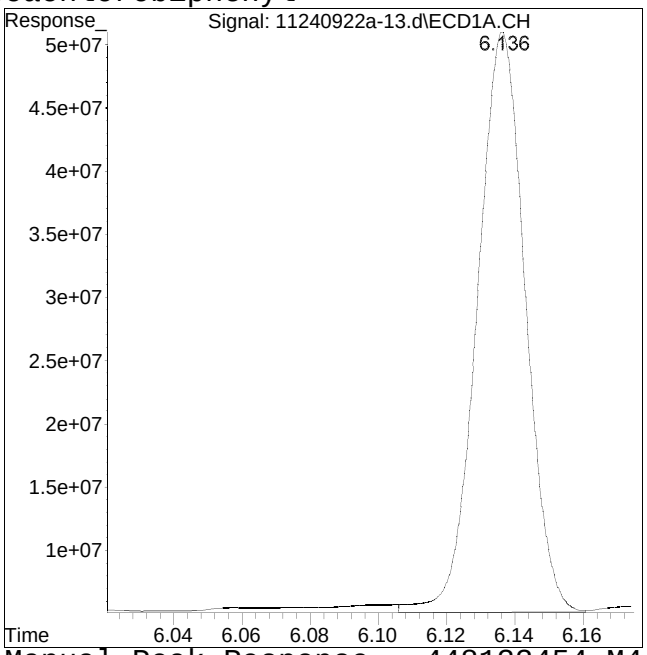
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



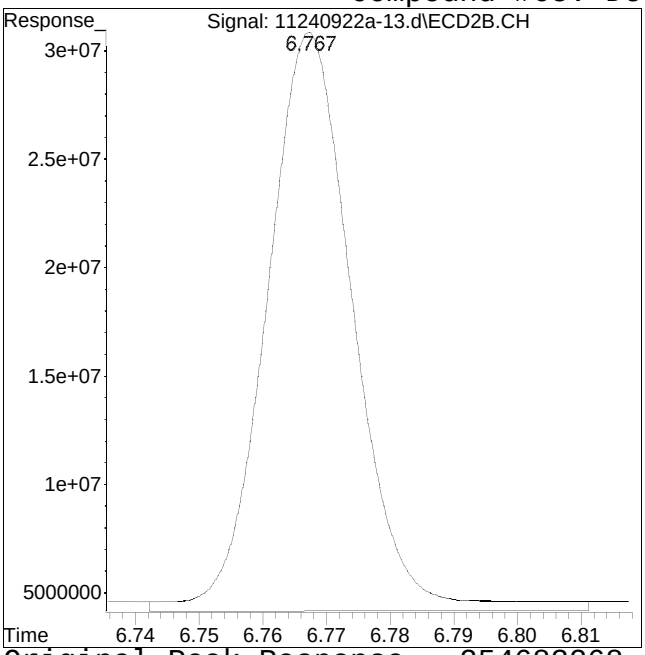



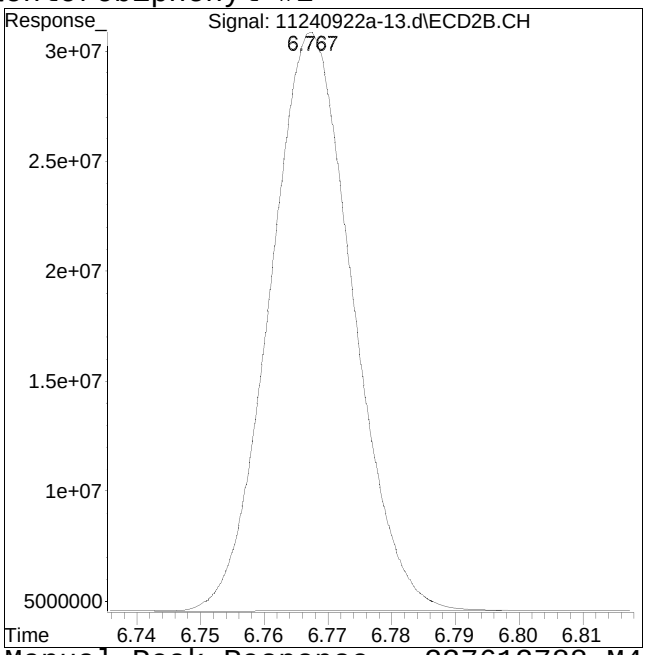

Original Peak Response = 468105434 Manual Peak Response = 448133454 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2



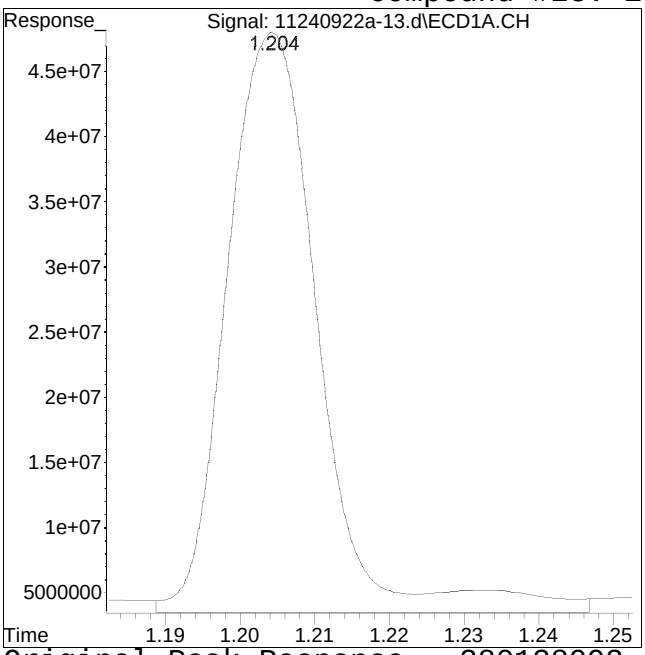




Original Peak Response = 254683268 Manual Peak Response = 237612788 M4
M4 = Poor automated baseline construction.

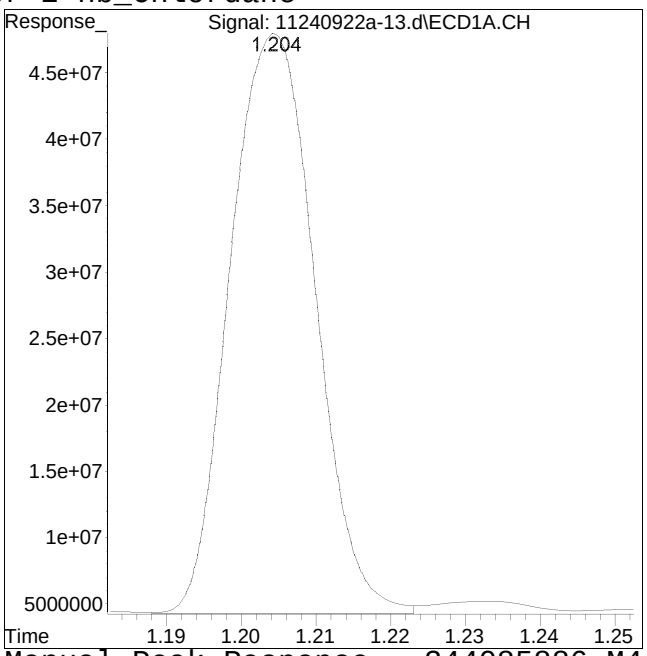
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

Compound #28: 1-br-2-nb_Chlordane




Original Peak Response = 380138993



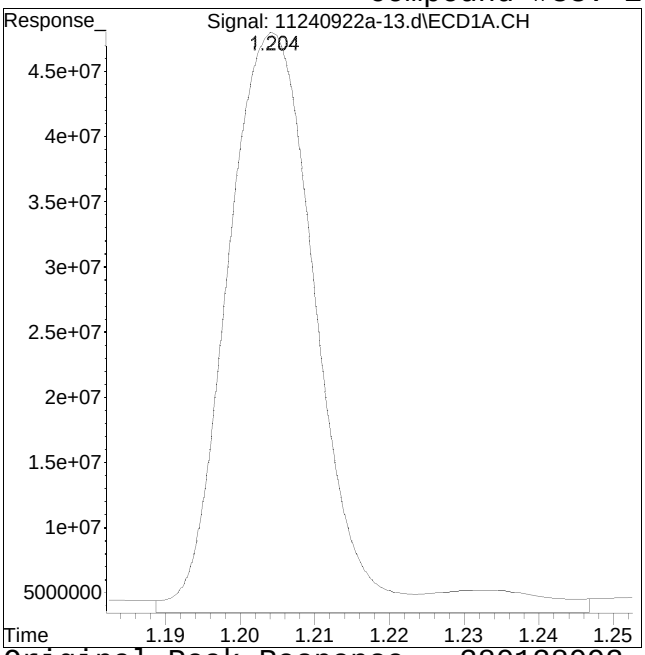

Manual Peak Response = 344085886 M4

M4 = Poor automated baseline construction.

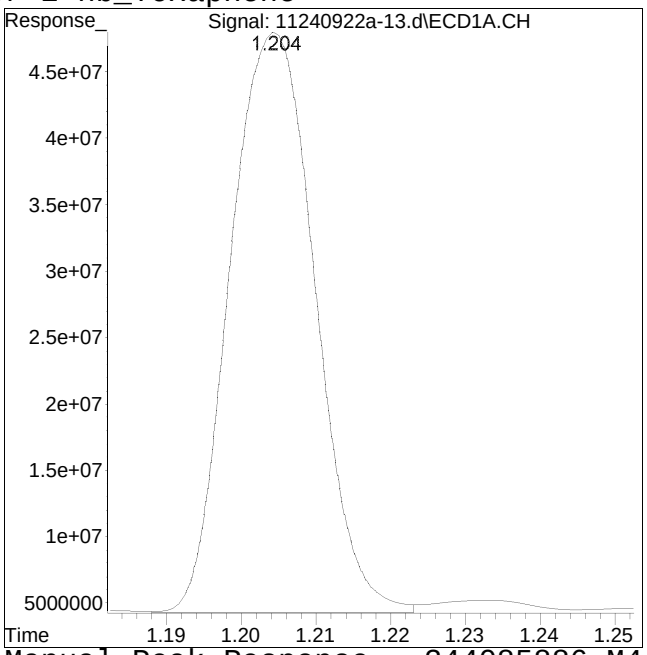
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-13.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 11:44 Instrument : Pest 11
Sample : WG1974576-1,42,, re for crQuant Date : 9/22/2024 3:27 pm

## Compound #33: 1-br-2-nb_Toxaphene




Original Peak Response = 380138993




Manual Peak Response = 344085886 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 10:45
Operator : PEST11:emr
Sample : WG1974576-2,42,,
Misc : WG1974788,WG1974576,ical21365 (Sig #1); WG1974788,WG1974587,ical21365 (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:12 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| | Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) i | 1-br-2-nb_Pe | 1.202 | 1.275 | 343.2E6 | 220.9E6 | 25.000M4 | 25.000 |
| | Standard Area 1 : #1 = 280061320 | | | | Recovery = 122.53% | | |
| | Standard Area 1 : #2 = 198070219 | | | | Recovery = 111.52% | | |
| System Monitoring Compounds | | | | | | | |
| 2) s | 2,4,5,6-Tetr | 1.530 | 1.724 | 432.4E6 | 268.0E6 | 30.320M4 | 27.234 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = 60.64% | | 54.47% | |
| 27) s | Decachlorobi | 6.136 | 6.766 | 358.5E6 | 213.8E6 | 22.458M4 | 22.831M4 |
| | Spiked Amount 50.000 | Range 30 - 150 | | Recovery = 44.92% | | 45.66% | |
| Target Compounds | | | | | | | |
| 4) t | alpha-BHC | 1.826 | 2.114 | 674.7E6 | 399.3E6 | 33.656M4 | 27.906M4 |
| 5) t | gamma-BHC (l | 2.017 | 2.385 | 604.7E6 | 362.5E6 | 31.568M4 | 26.657M4 |
| 6) t | beta-BHC | 2.071 | 2.449 | 285.1E6 | 158.0E6 | 33.081M4 | 28.079M4 |
| 7) t | delta-BHC | 2.192 | 2.703 | 572.9E6 | 331.5E6 | 30.376M3 | 24.640M4 |
| 8) t | Heptachlor | 2.347 | 2.761 | 602.9E6 | 337.6E6 | 33.251M4 | 23.915M4 |
| 9) t | Aldrin | 2.579 | 3.065 | 526.5E6 | 331.2E6 | 31.103M4 | 26.126M4 |
| 12) t | Heptachlor E | 3.101 | 3.656 | 513.2E6 | 306.8E6 | 31.538M4 | 24.358M4 |
| 13) t | gamma-Chlord | 3.221 | 3.870 | 522.4E6 | 315.5E6 | 35.336M4 | 27.228M4 |
| 14) t | alpha-Chlord | 3.350 | 4.038 | 490.0E6 | 314.4E6 | 29.351M4 | 24.611M4 |
| 15) t | 4,4'-DDE | 3.447 | 4.255 | 491.7E6 | 297.0E6 | 30.065M4 | 25.032M4 |
| 16) t | Endosulfan I | 3.479 | 4.100 | 524.6E6 | 288.8E6 | 34.240M4 | 24.536M4 |
| 17) t | Dieldrin | 3.730 | 4.414 | 547.9E6 | 322.3E6 | 35.163M4 | 27.480M4 |
| 18) t | Endrin | 3.977 | 4.727 | 516.6E6 | 305.2E6 | 32.644M4 | 25.646M4 |
| 19) t | 4,4'-DDD | 4.098 | 4.865 | 429.5E6 | 253.3E6 | 33.743M4 | 26.451M4 |
| 20) t | Endosulfan I | 4.232 | 4.937 | 476.2E6 | 278.3E6 | 32.975M4 | 25.956M4 |
| 21) t | 4,4'-DDT | 4.413 | 5.151 | 526.4E6 | 304.4E6 | 36.231M4 | 27.554M4 |

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 10:45
Operator : PEST11:emr
Sample : WG1974576-2,42,,
Misc : WG1974788,WG1974576,ical21365 (Sig #1); WG1974788,WG1974587,ical21365 (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:12 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 22) t Endrin Aldeh | 4.672 | 5.244 | 333.9E6 | 200.3E6 | 27.441M4 | 24.084M4 |
| 23) t Methoxychlor | 4.930 | 5.734 | 289.2E6 | 149.8E6 | 35.592M4 | 24.068M4 |
| 25) t Endosulfan S | 5.079 | 5.479 | 461.0E6 | 263.4E6 | 33.260M4 | 24.859M4 |
| 26) t Endrin Keton | 5.310 | 5.895 | 534.6E6 | 308.8E6 | 32.914M4 | 27.719M4 |
| Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average chlordane-1 | | | | | 0.000 | 0.000 |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |

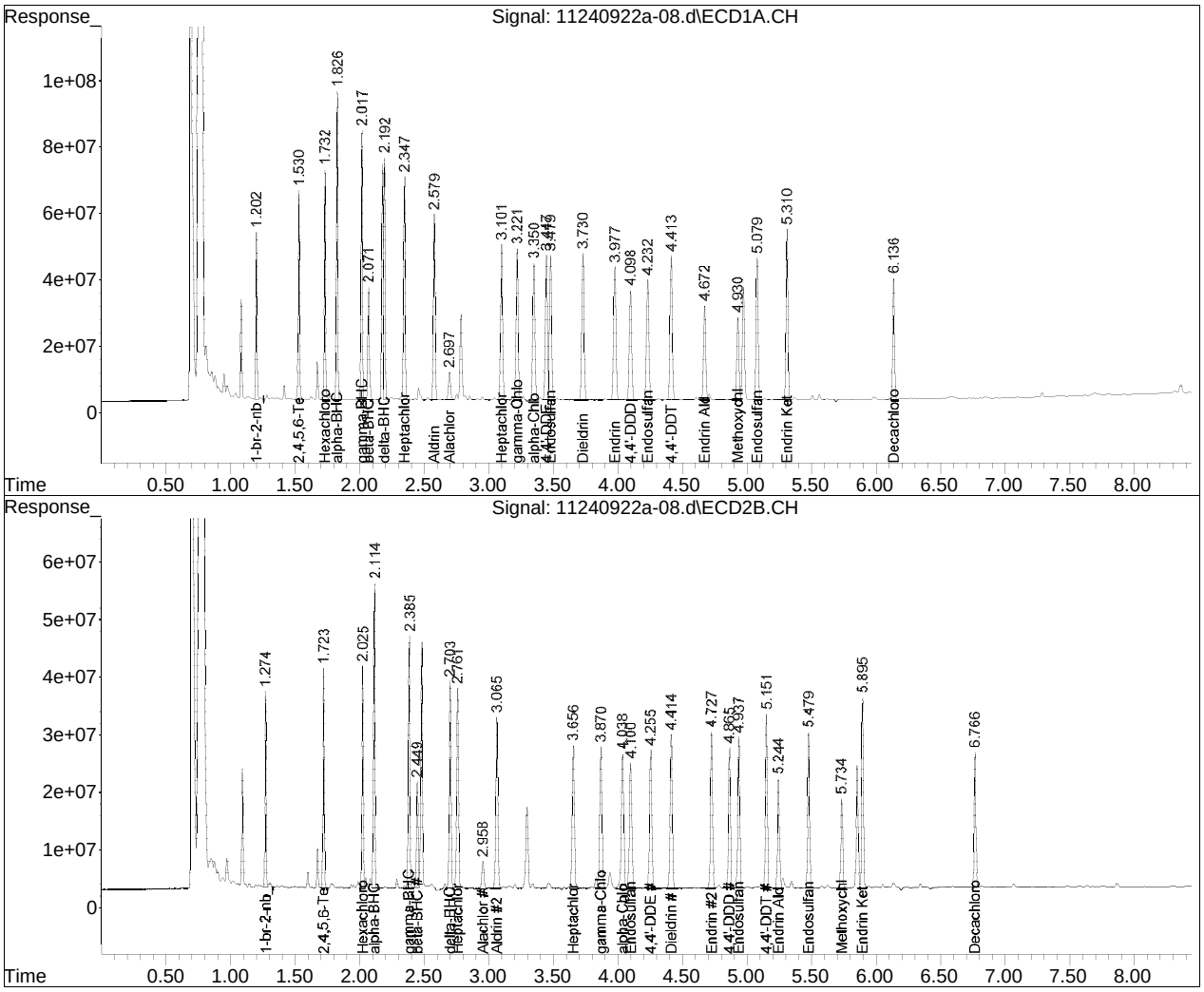
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only1\2024\240922a\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-08.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  10:45
Operator : PEST11:emr
Sample : WG1974576-2,42,,
Misc : WG1974788,WG1974576,ical21365 (Sig #1); WG1974788,WG1974587,ical21
ALS Vial : 8 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:12 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

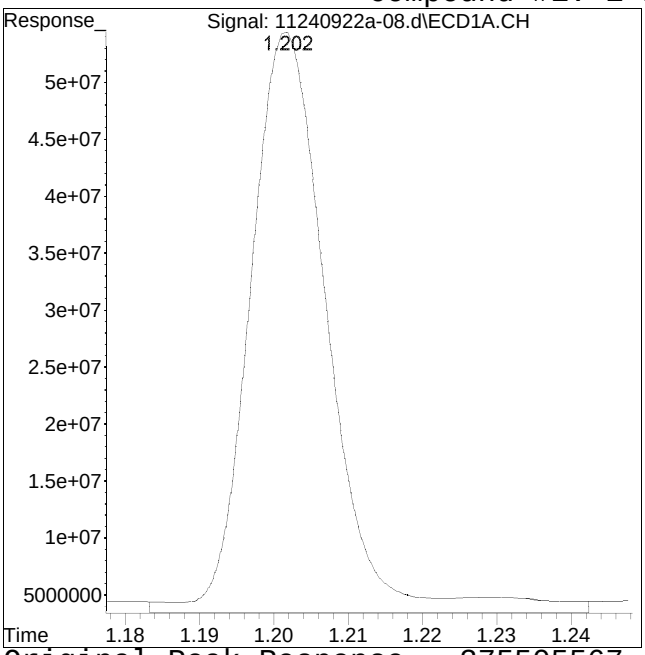
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

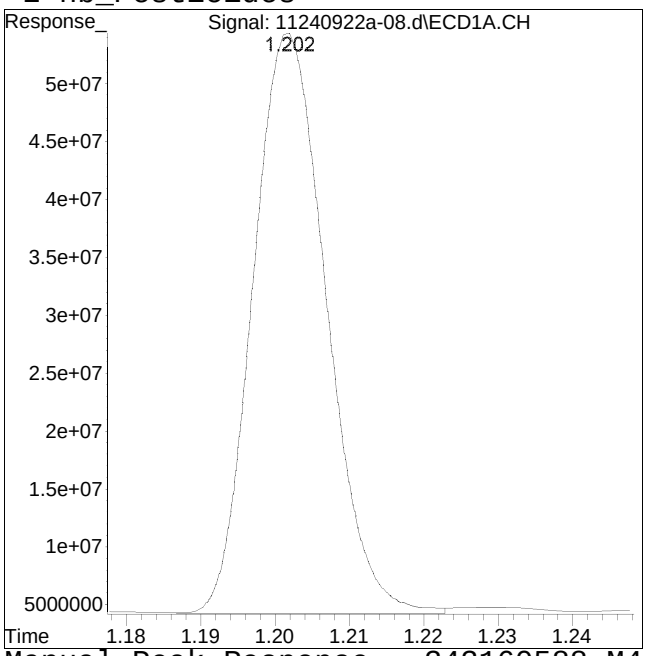


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #1: 1-br-2-nb_Pesticides



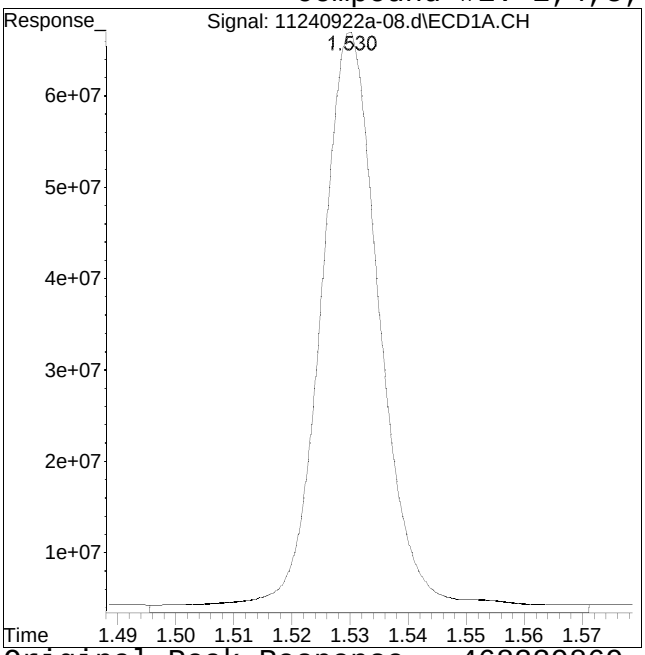




Original Peak Response = 375505567 Manual Peak Response = 343160588 M4
M4 = Poor automated baseline construction.

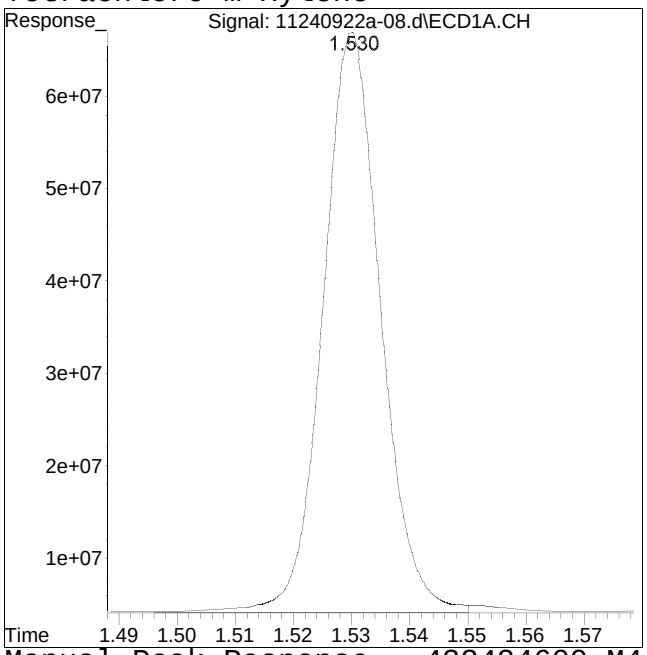
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 468339869



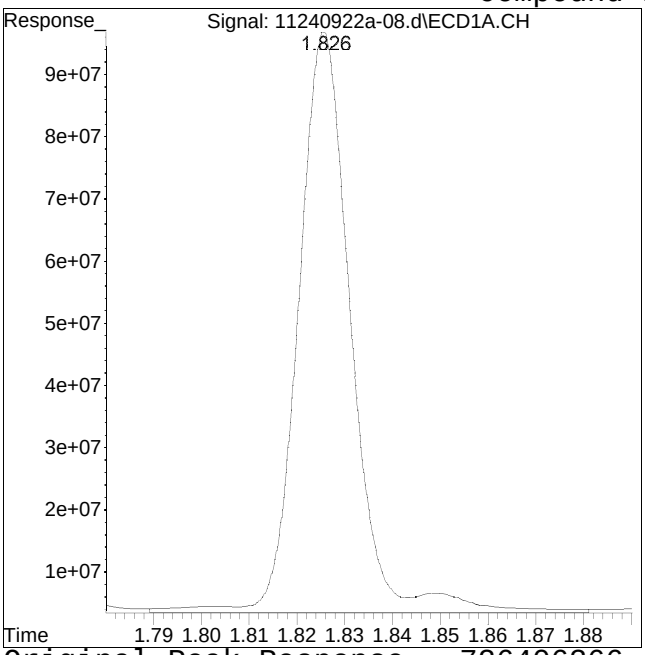

Manual Peak Response = 432424600 M4

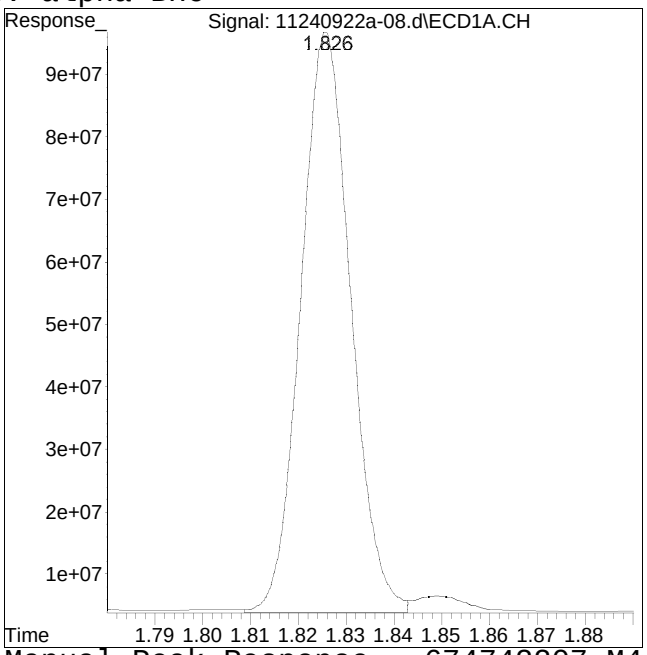
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #4: alpha-BHC



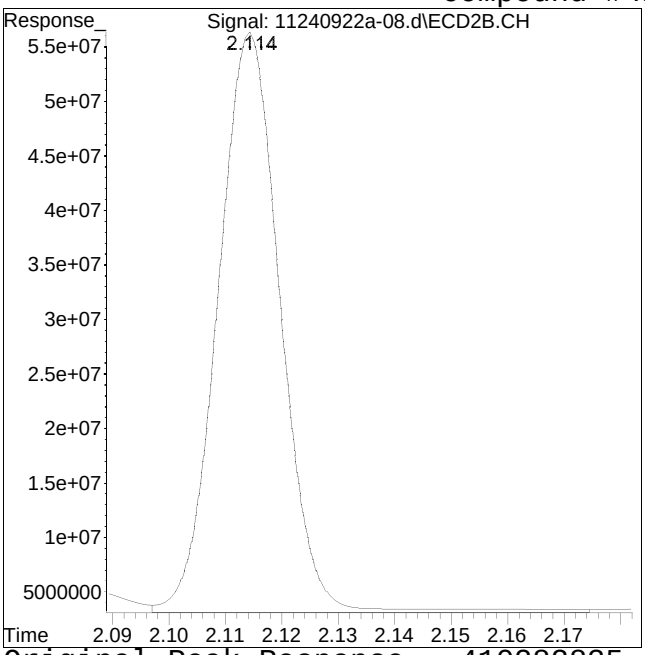



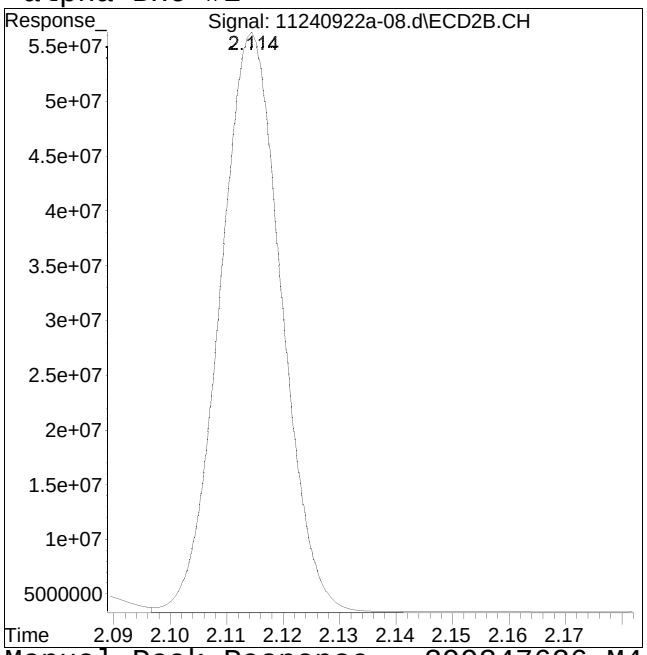

Original Peak Response = 726406366 Manual Peak Response = 674742207 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #42: alpha-BHC #2



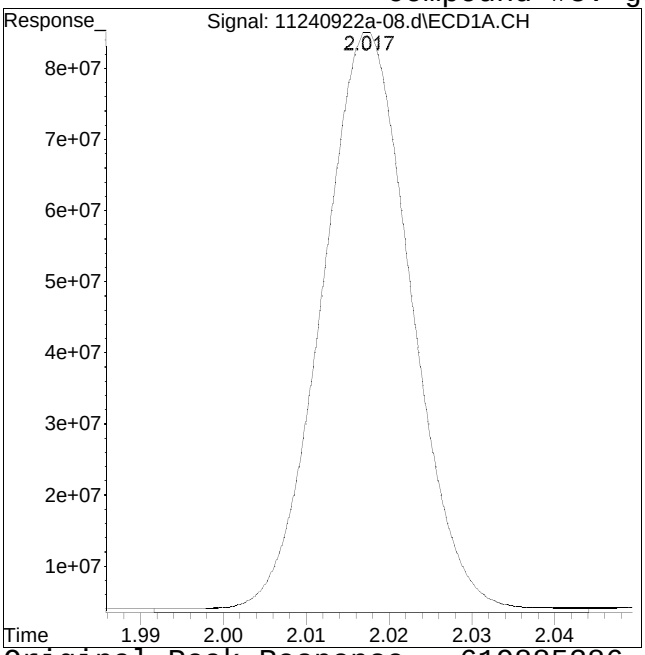



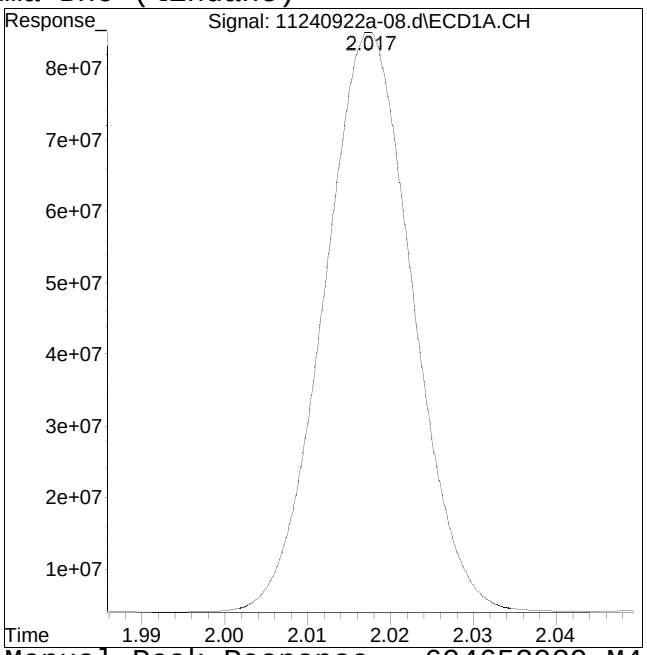

Original Peak Response = 410282835 Manual Peak Response = 399347626 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #5: gamma-BHC (lindane)



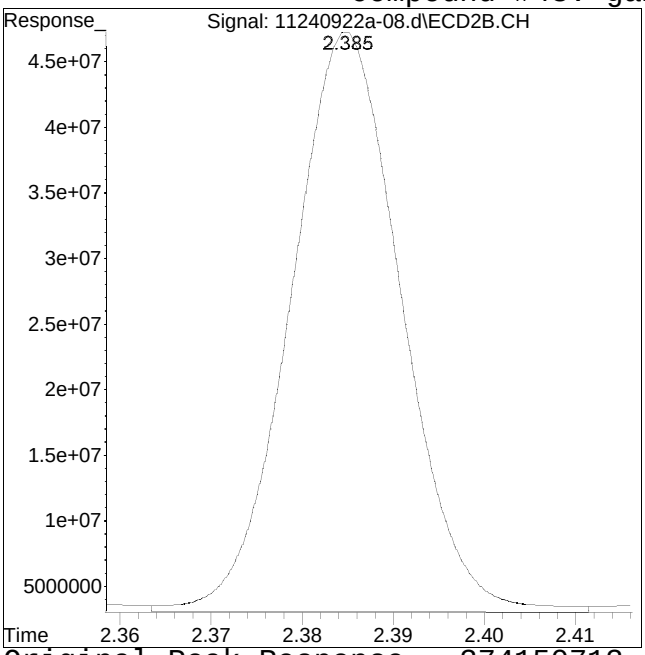




Original Peak Response = 619885386 Manual Peak Response = 604652929 M4
M4 = Poor automated baseline construction.

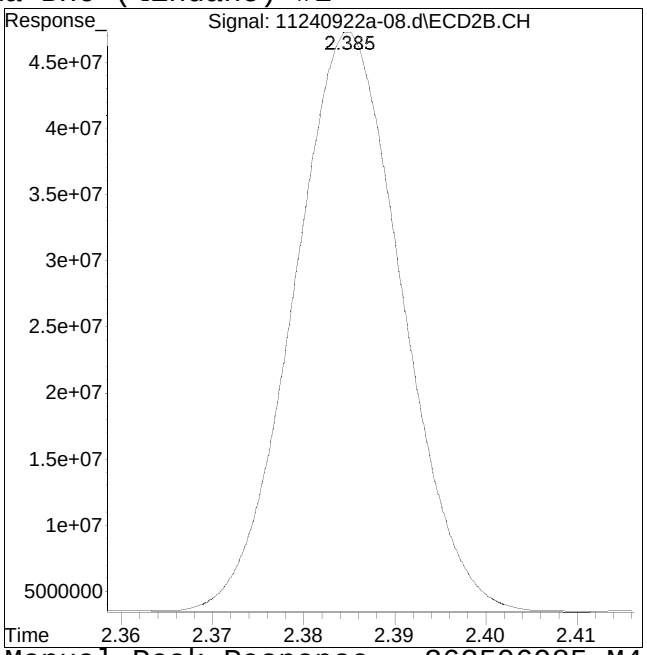
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #43: gamma-BHC (lindane) #2




Original Peak Response = 374150713



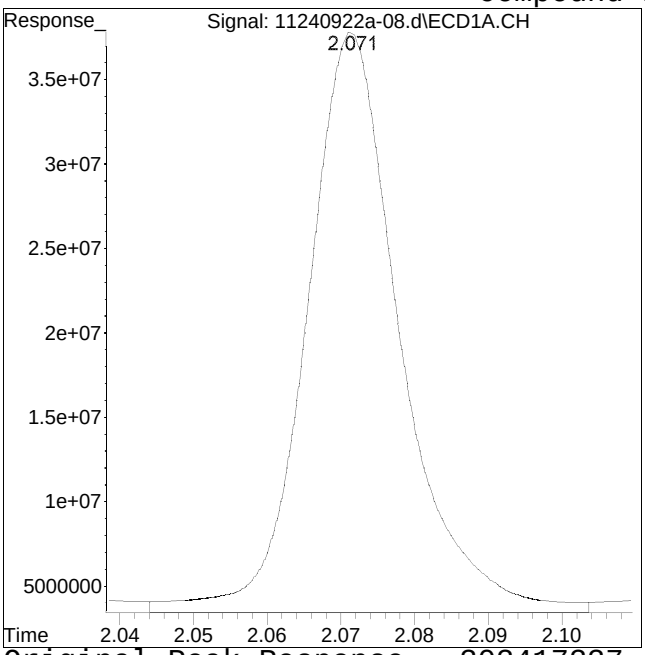

Manual Peak Response = 362506985 M4

M4 = Poor automated baseline construction.

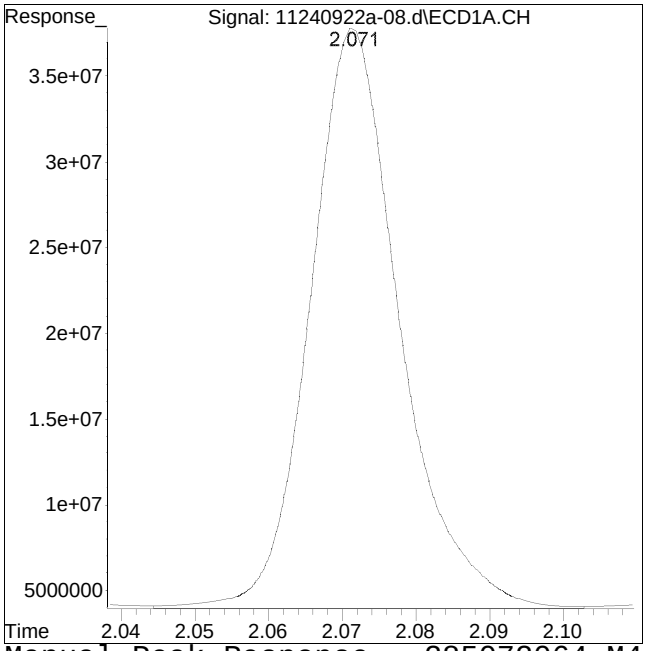
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #6: beta-BHC




Original Peak Response = 303417337



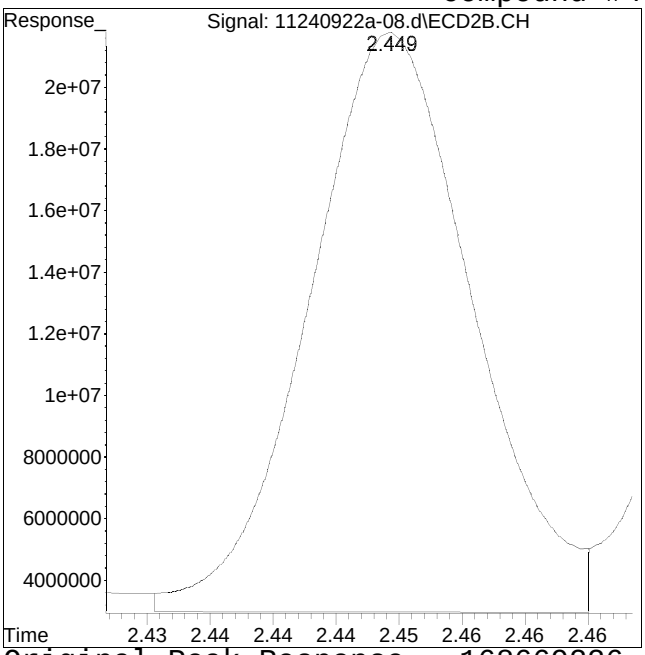

Manual Peak Response = 285072064 M4

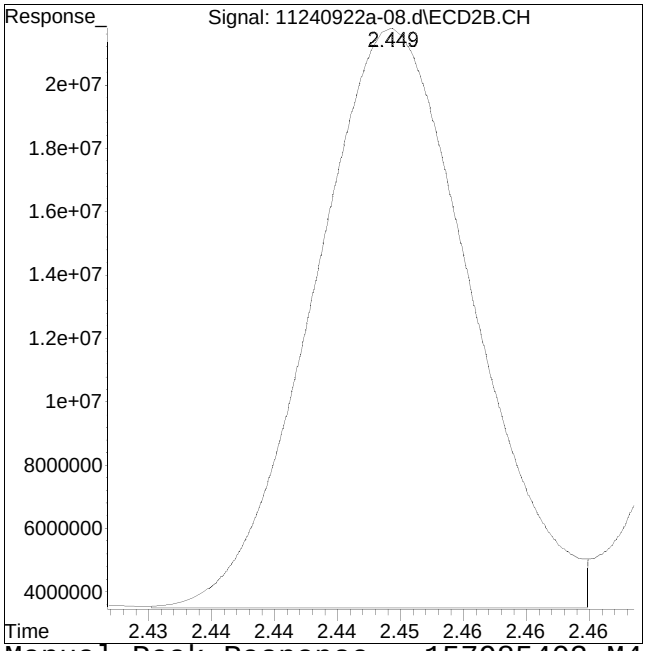
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #44: beta-BHC #2



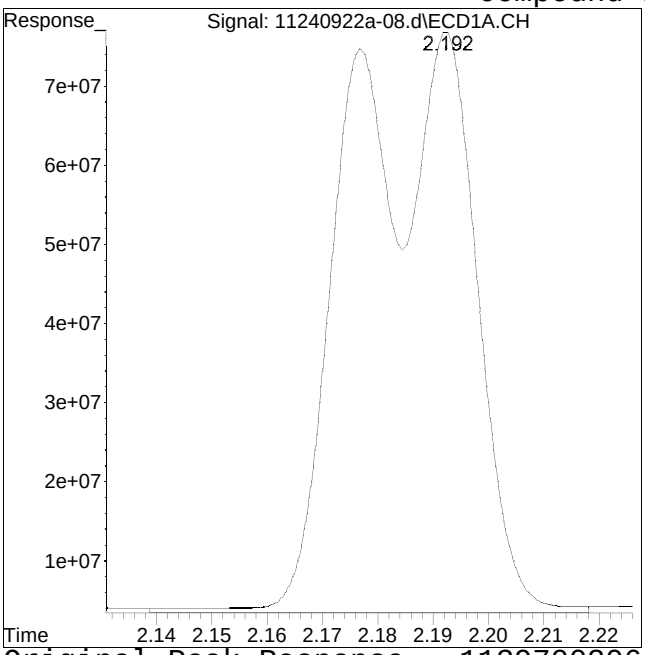



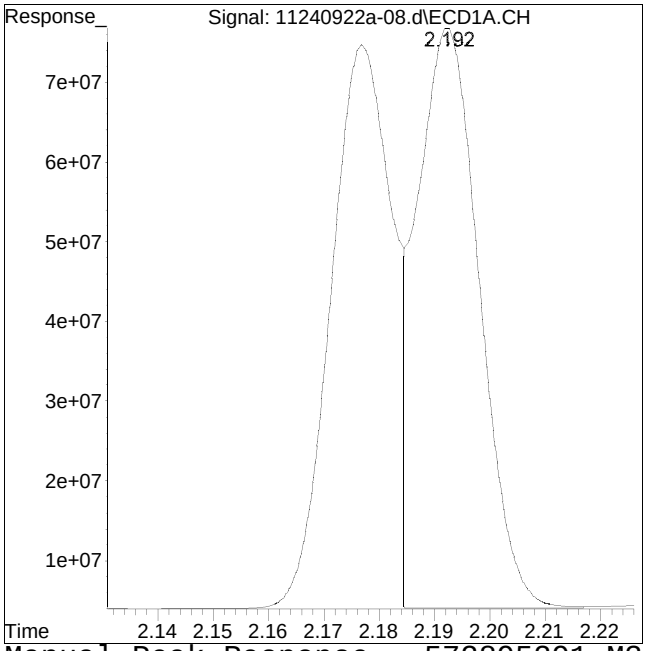

Original Peak Response = 168669226 Manual Peak Response = 157985403 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #7: delta-BHC



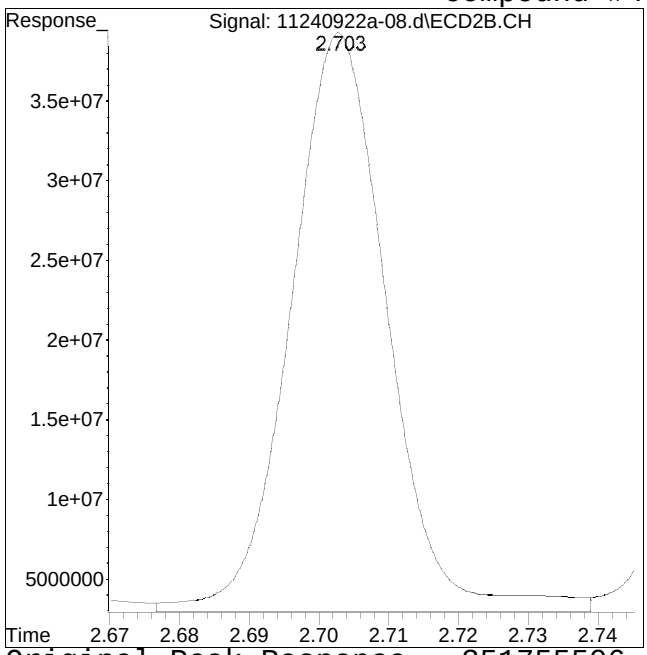




Original Peak Response = 1139700306 Manual Peak Response = 572895291 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

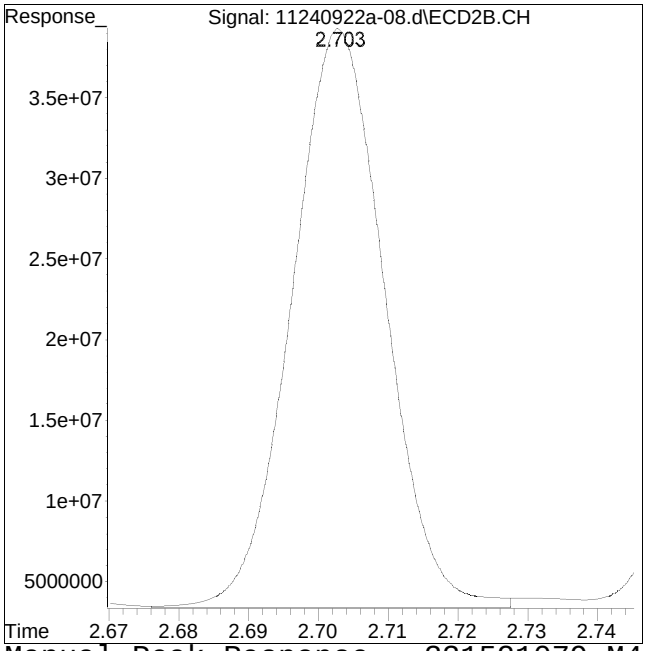
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #45: delta-BHC #2




Original Peak Response = 351755506



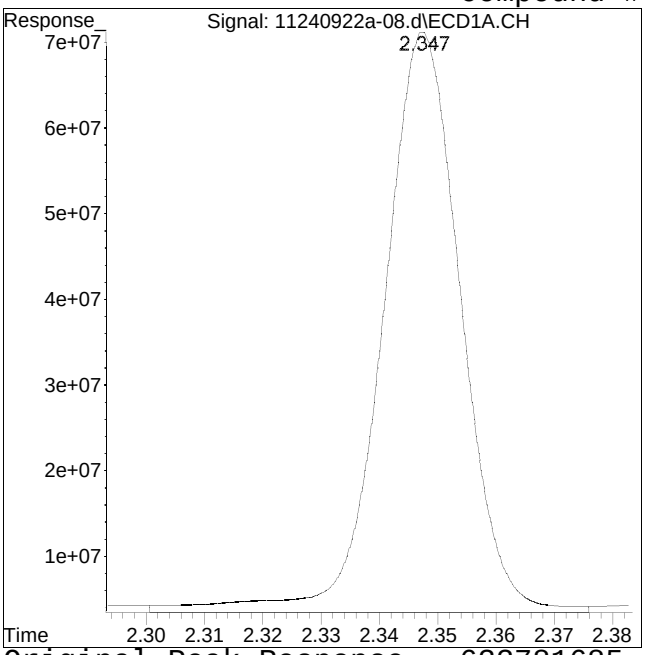

Manual Peak Response = 331521079 M4

M4 = Poor automated baseline construction.

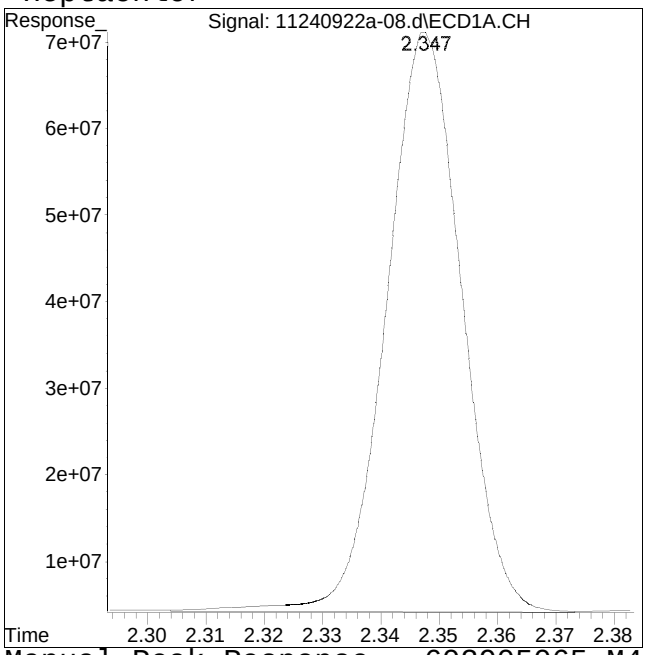
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #8: Heptachlor




Original Peak Response = 633781685



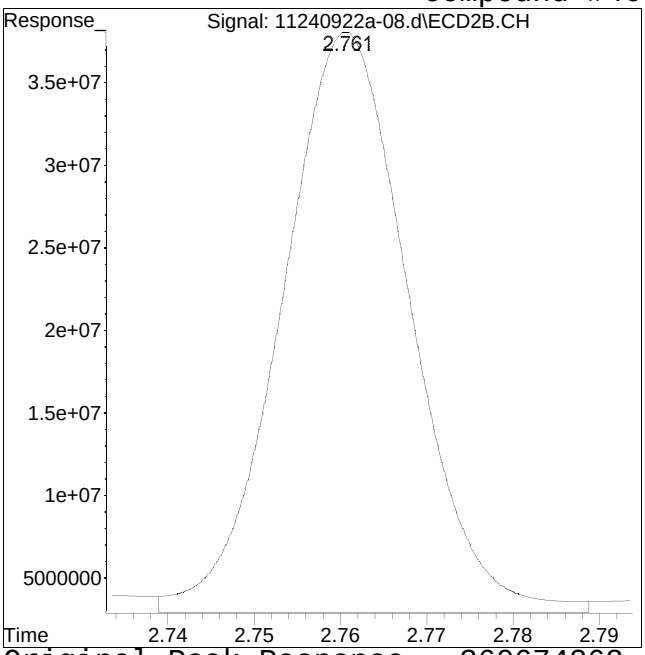

Manual Peak Response = 602905065 M4

M4 = Poor automated baseline construction.

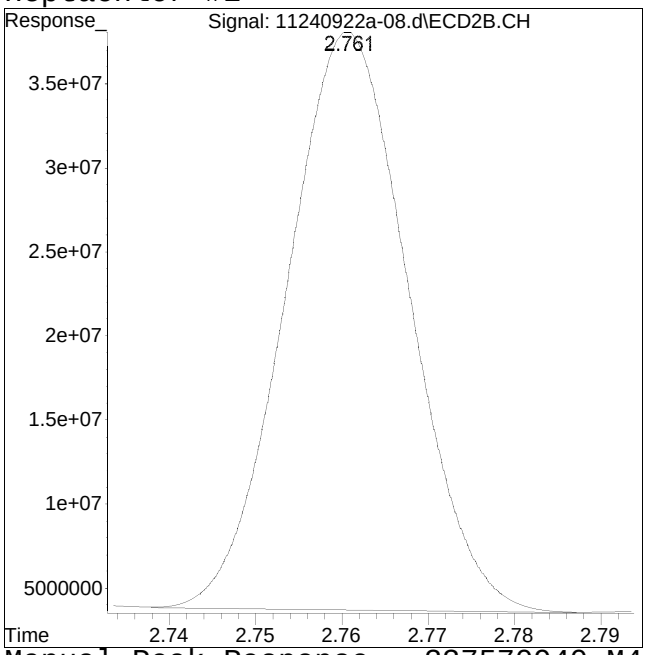
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #46: Heptachlor #2




Original Peak Response = 360674262



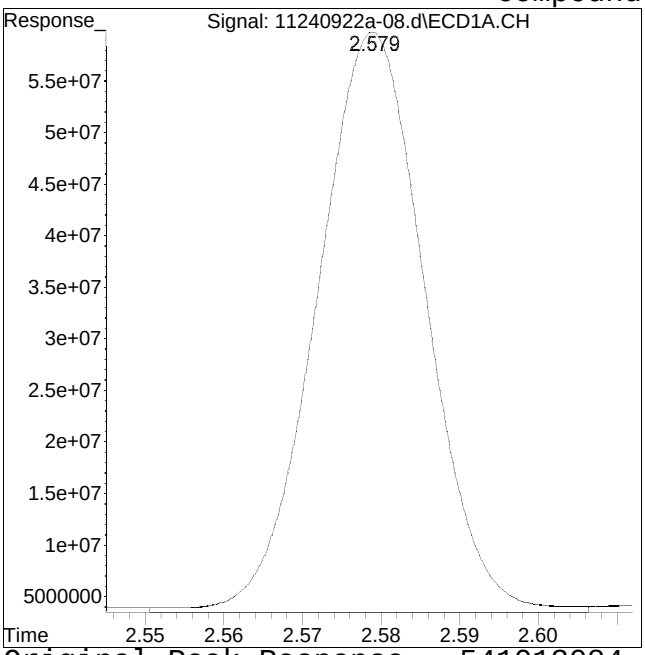

Manual Peak Response = 337570940 M4

M4 = Poor automated baseline construction.

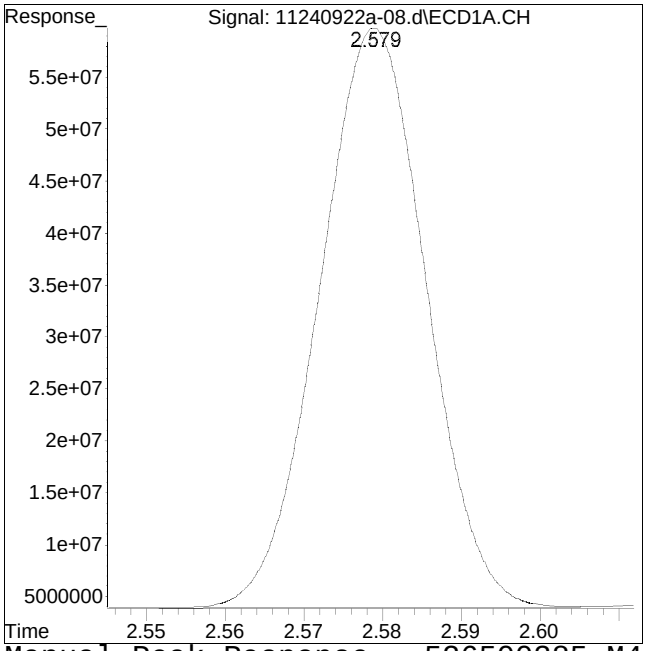
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #9: Aldrin




Original Peak Response = 541013084



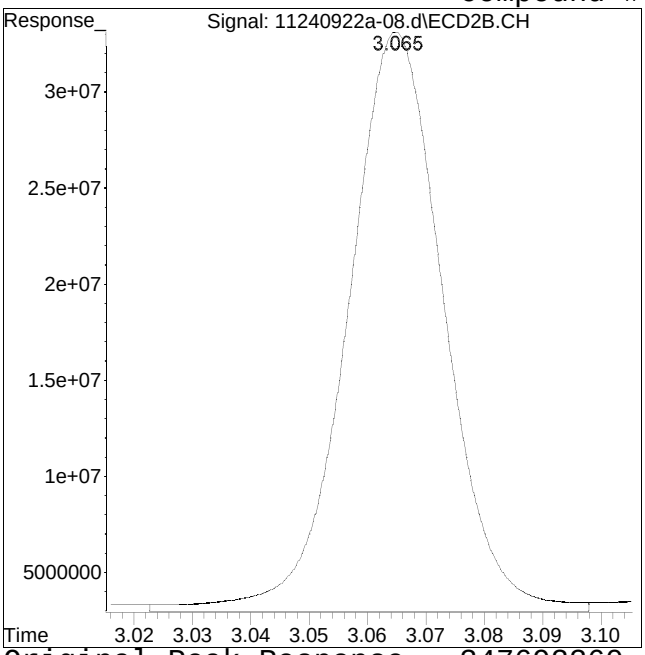

Manual Peak Response = 526500385 M4

M4 = Poor automated baseline construction.

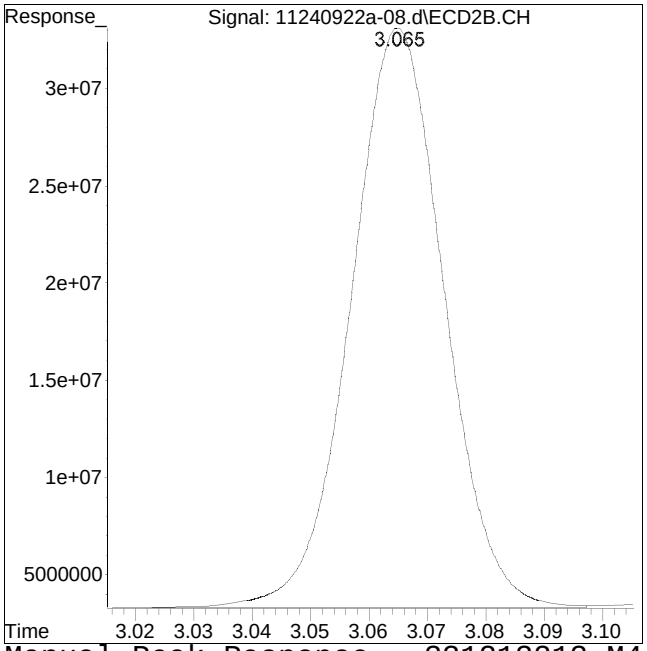
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #47: Aldrin #2




Original Peak Response = 347692360

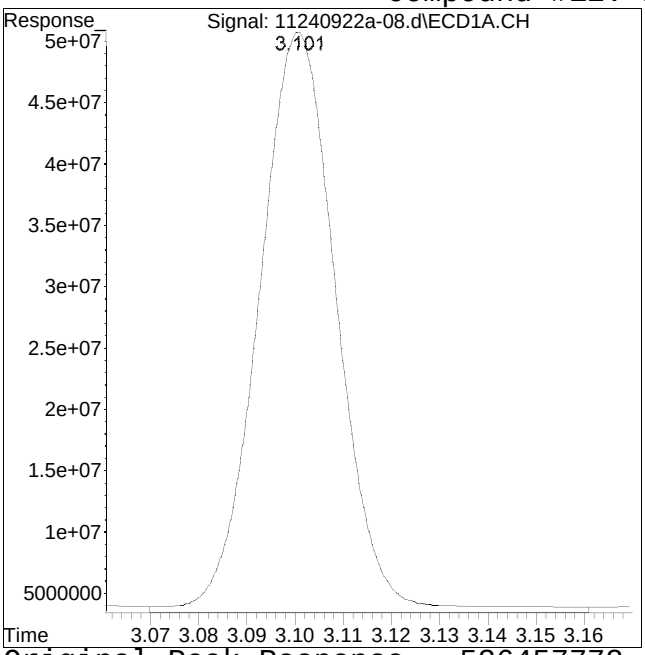


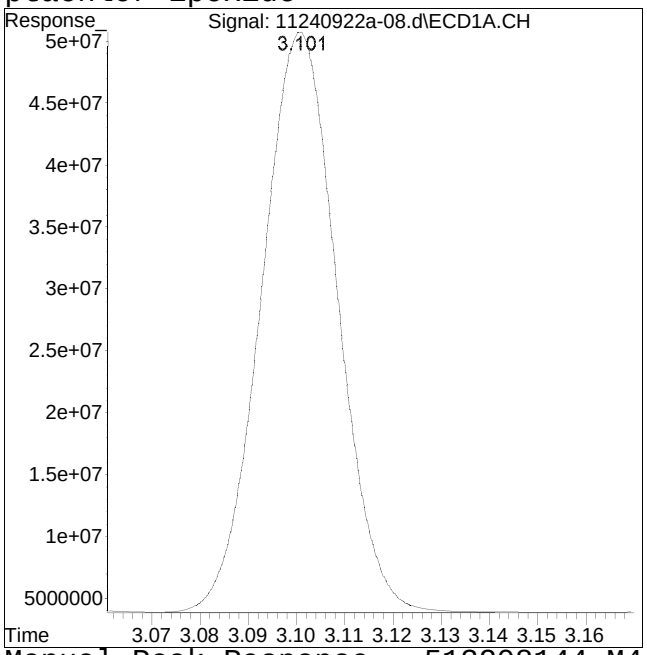

Manual Peak Response = 331213213 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #12: Heptachlor Epoxide



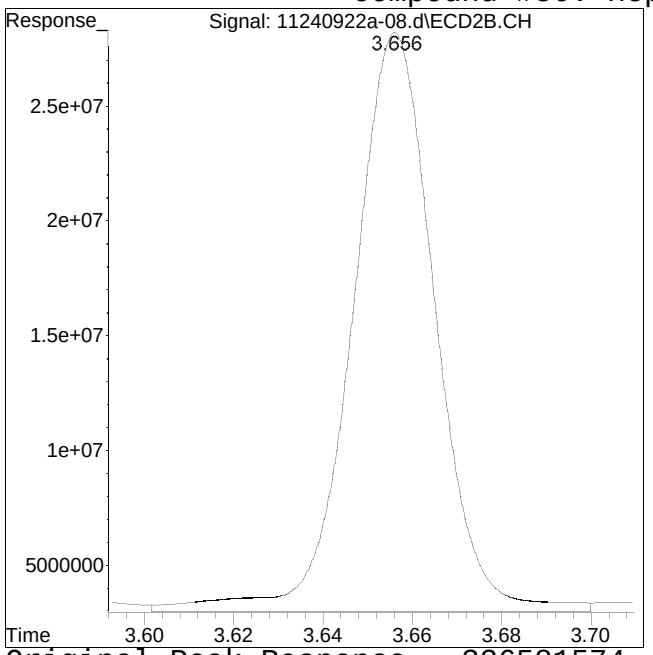



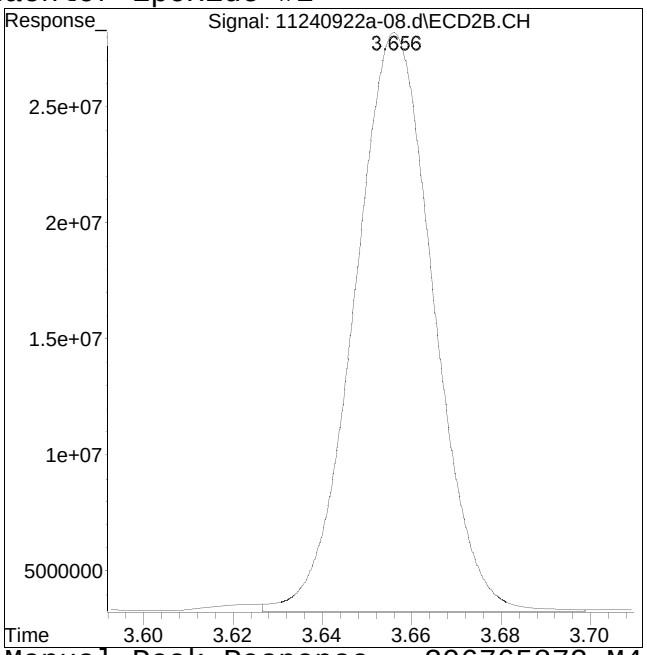

Original Peak Response = 536457772 Manual Peak Response = 513208144 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #50: Heptachlor Epoxide #2



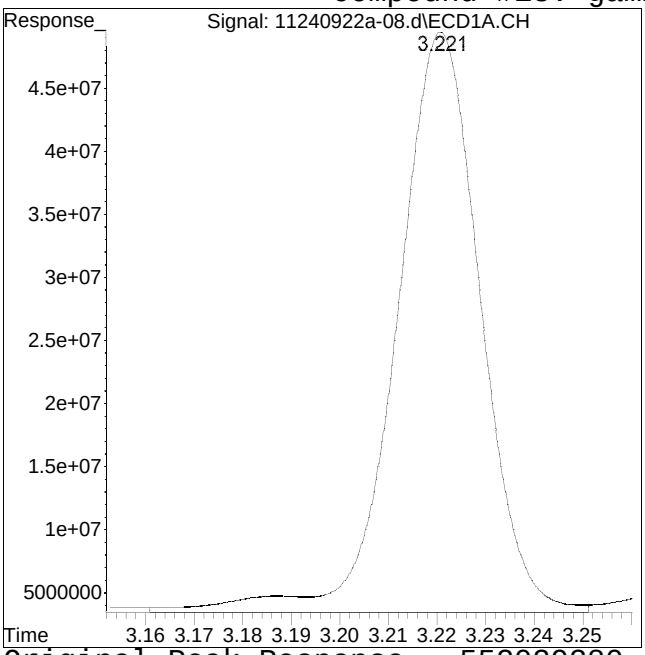



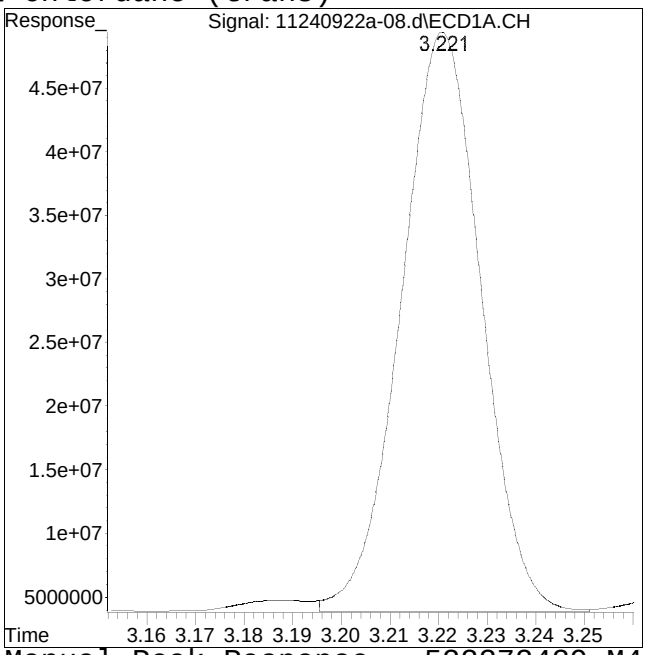

Original Peak Response = 326581574 Manual Peak Response = 306765872 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #13: gamma-Chlordane (trans)



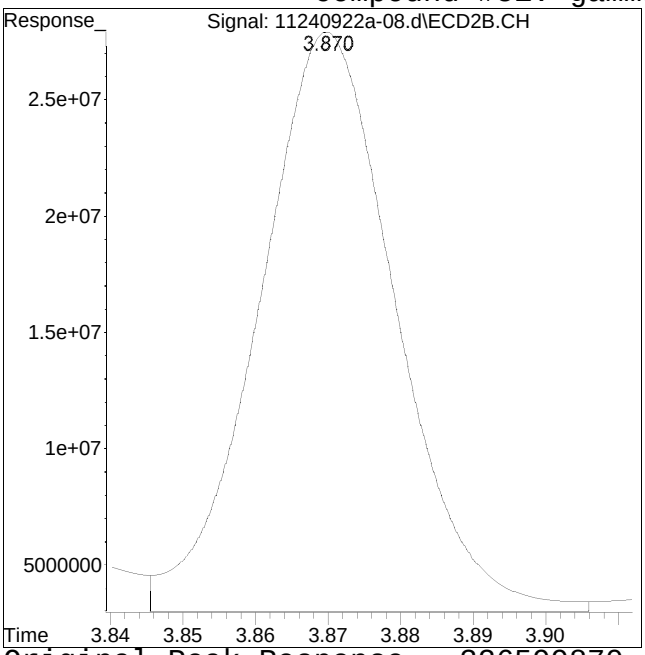




Original Peak Response = 552029380 Manual Peak Response = 522372429 M4
M4 = Poor automated baseline construction.

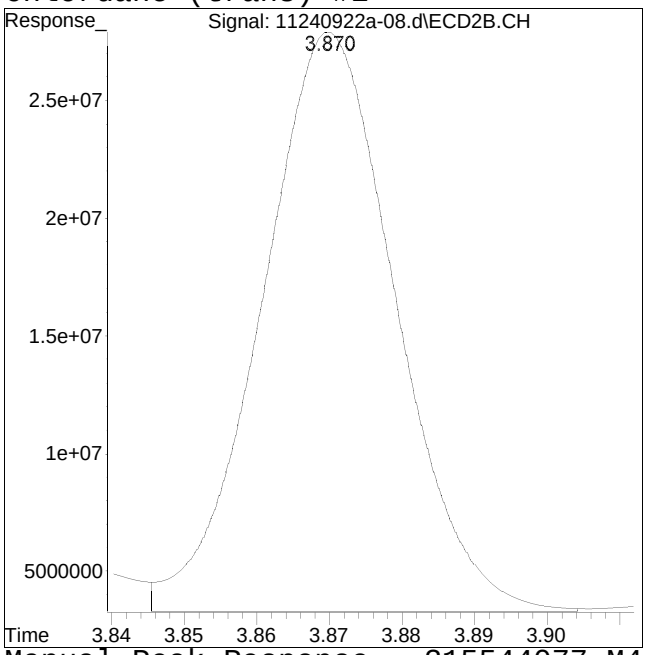
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 326599870



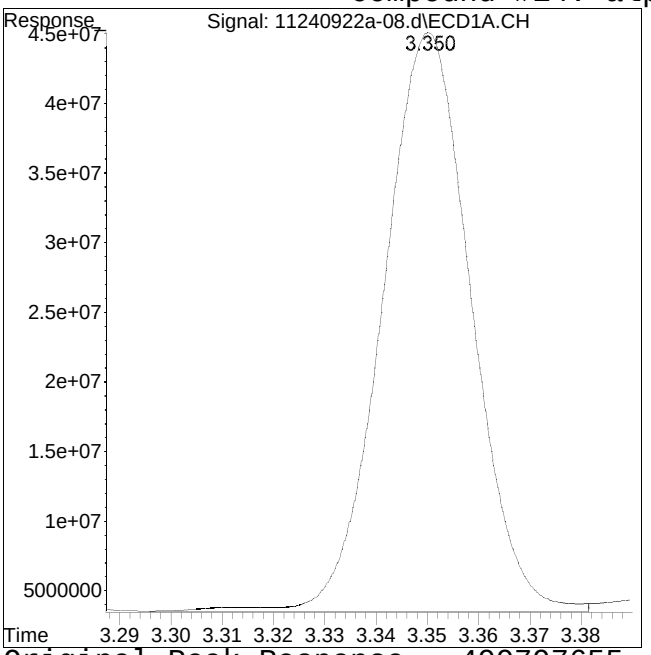

Manual Peak Response = 315544077 M4

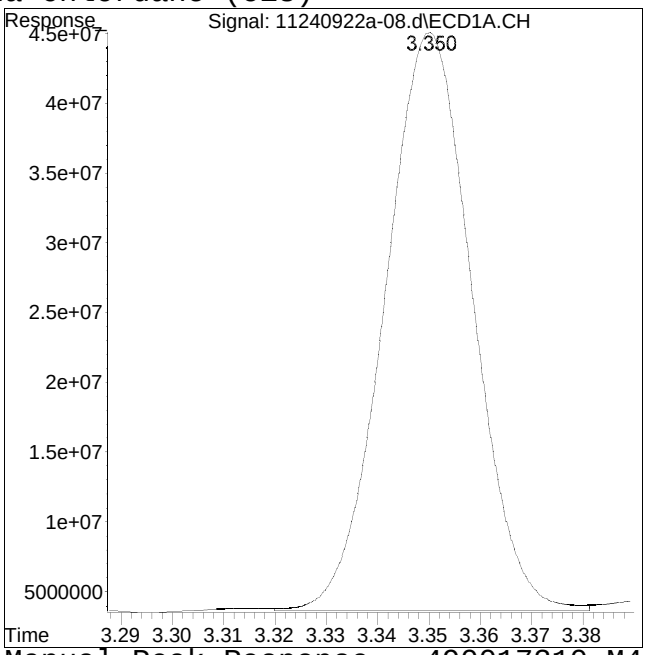
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #14: alpha-Chlordane (cis)



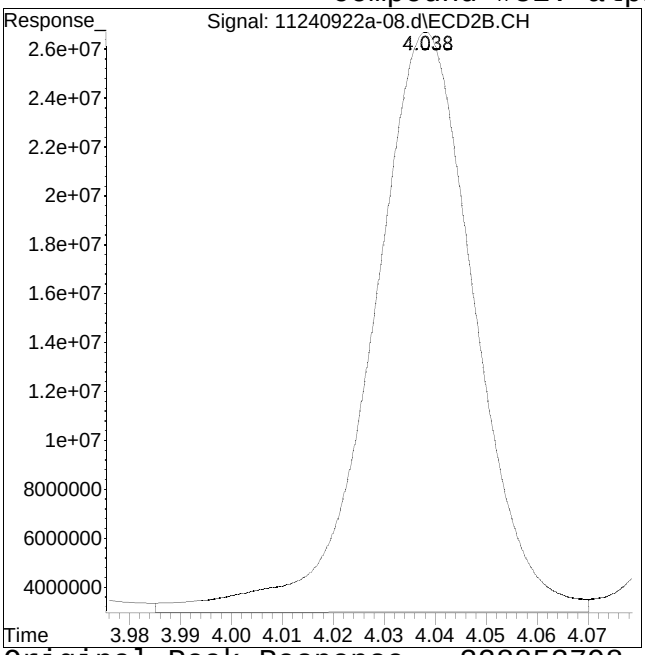




Original Peak Response = 499797655 Manual Peak Response = 490017310 M4
M4 = Poor automated baseline construction.

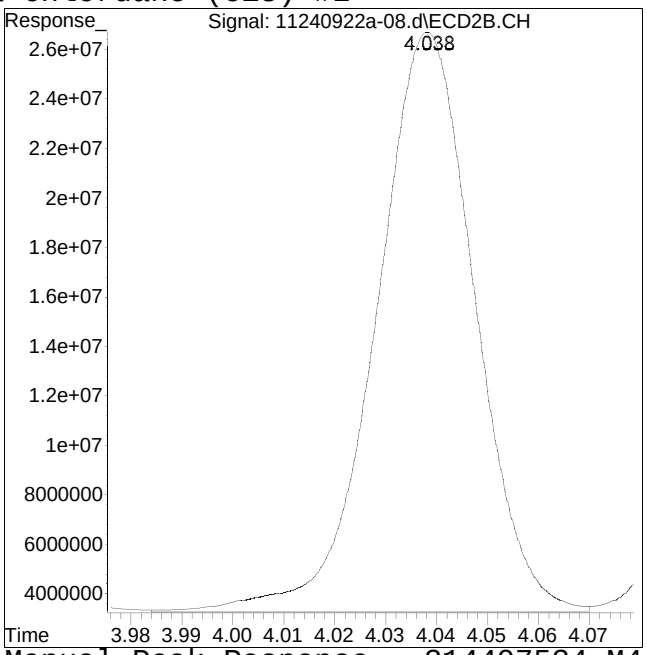
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 328853798



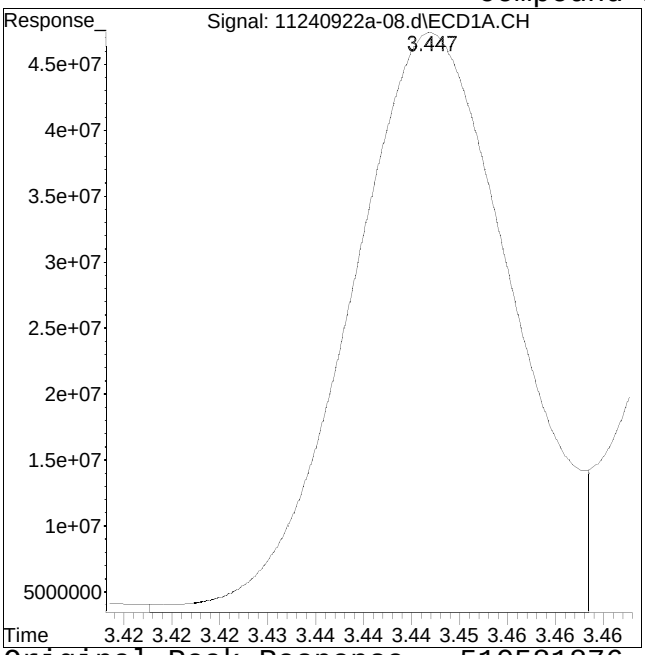

Manual Peak Response = 314407534 M4

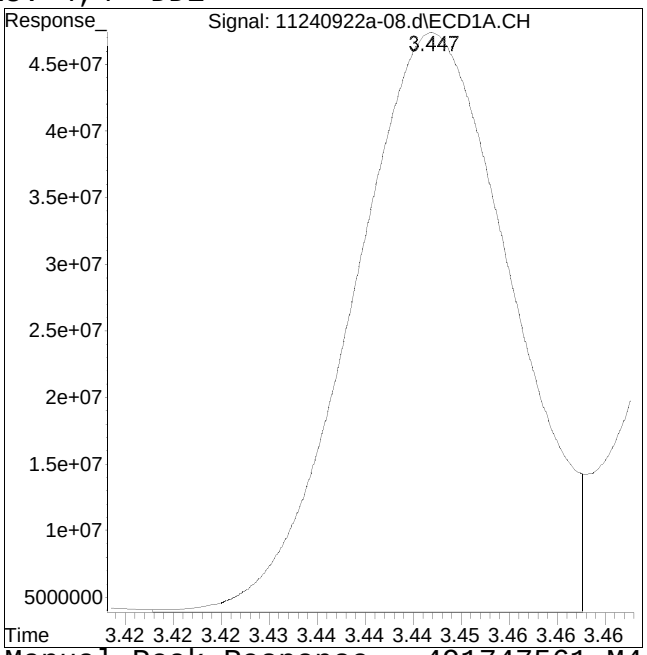
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #15: 4,4'-DDE



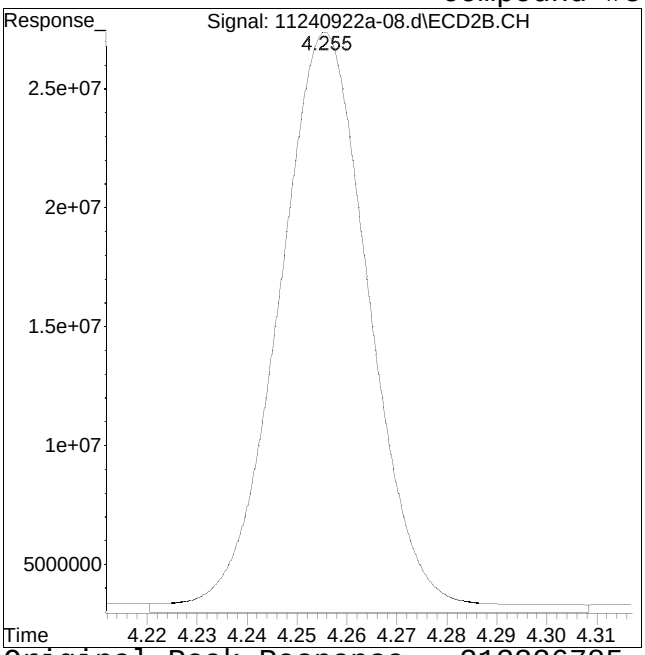




Original Peak Response = 510581876 Manual Peak Response = 491747561 M4
M4 = Poor automated baseline construction.

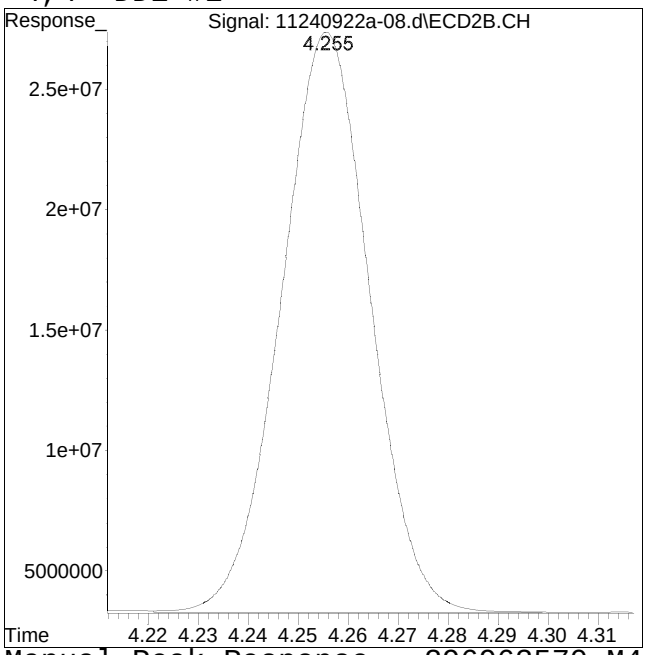
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #53: 4,4'-DDE #2




Original Peak Response = 313326785



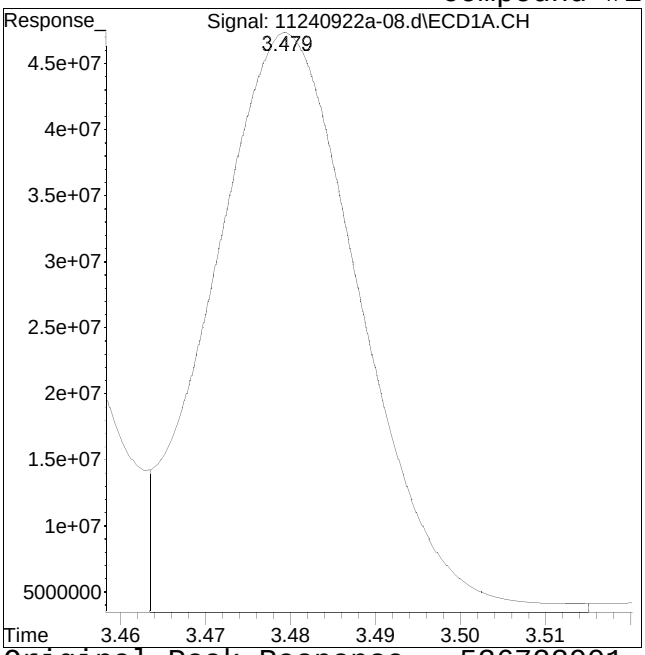

Manual Peak Response = 296963570 M4

M4 = Poor automated baseline construction.

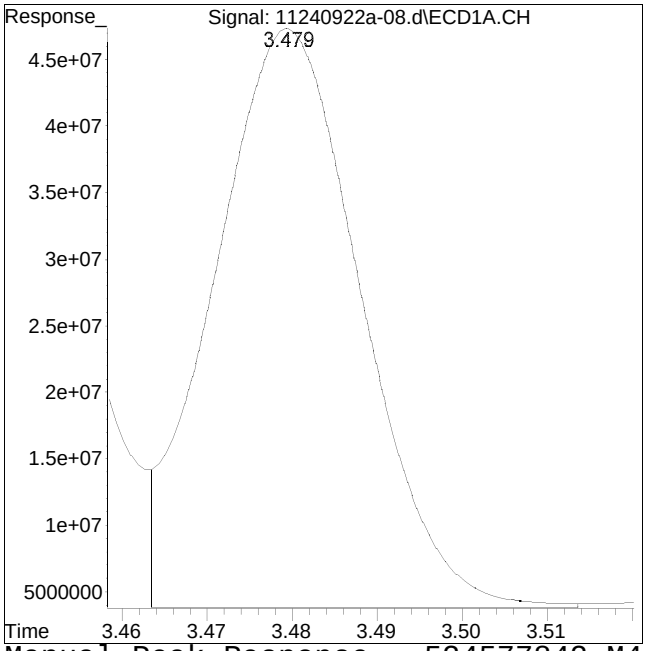
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #16: Endosulfan I




Original Peak Response = 536722901



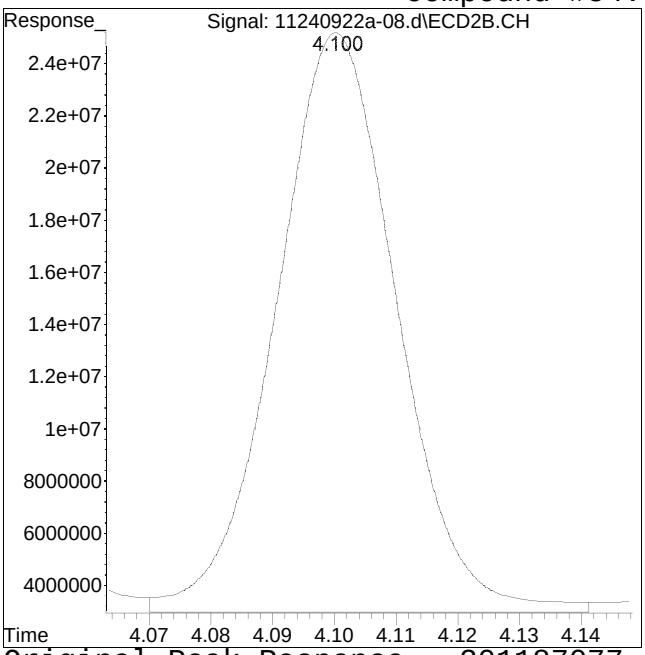

Manual Peak Response = 524577842 M4

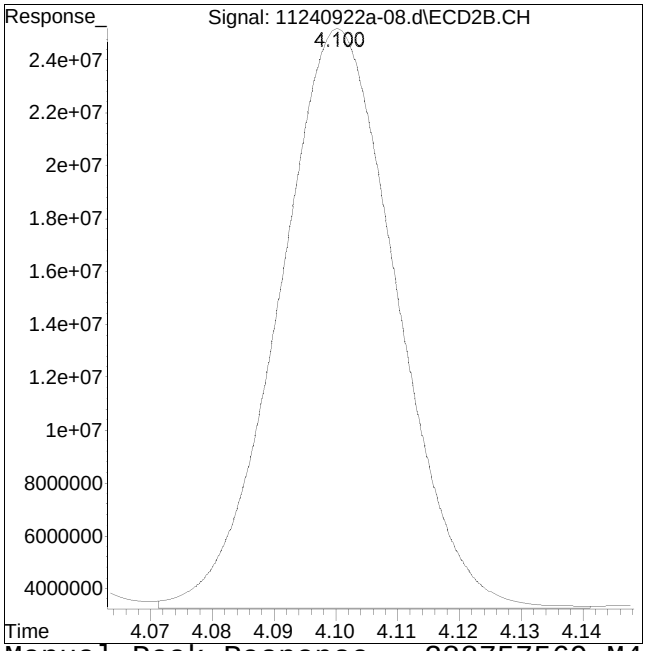
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #54: Endosulfan I #2



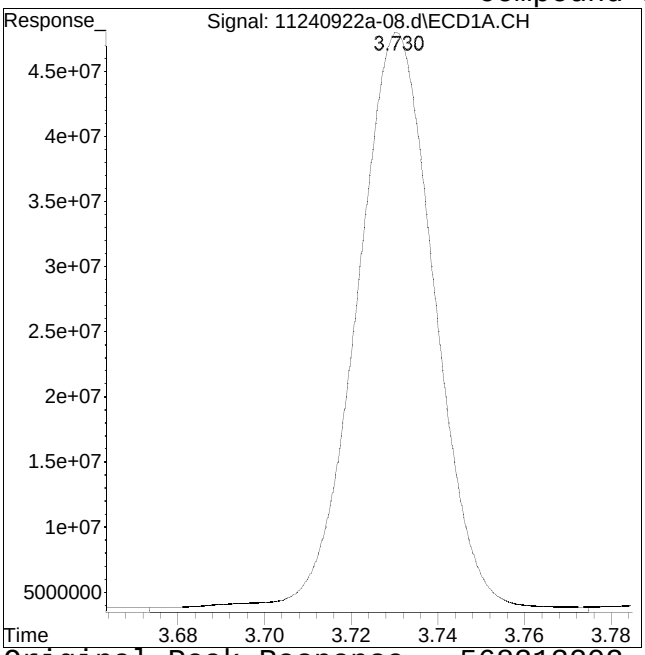




Original Peak Response = 301187077 Manual Peak Response = 288757569 M4
M4 = Poor automated baseline construction.

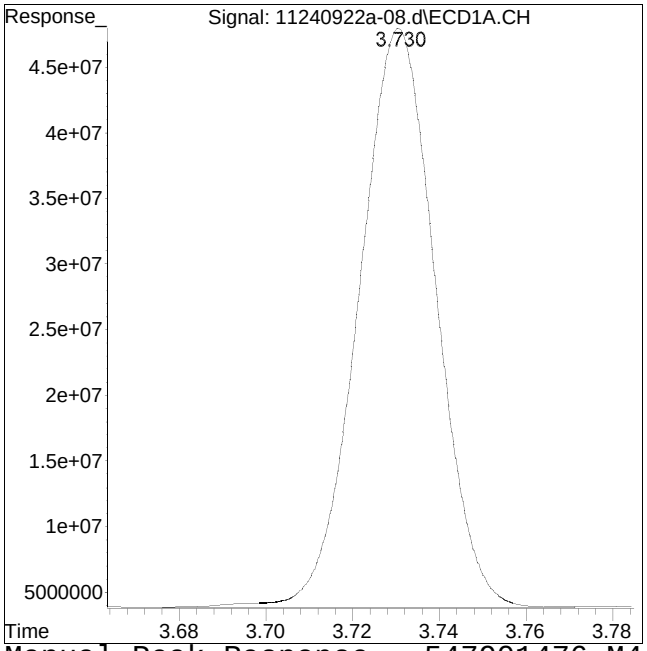
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #17: Dieldrin




Original Peak Response = 568313202



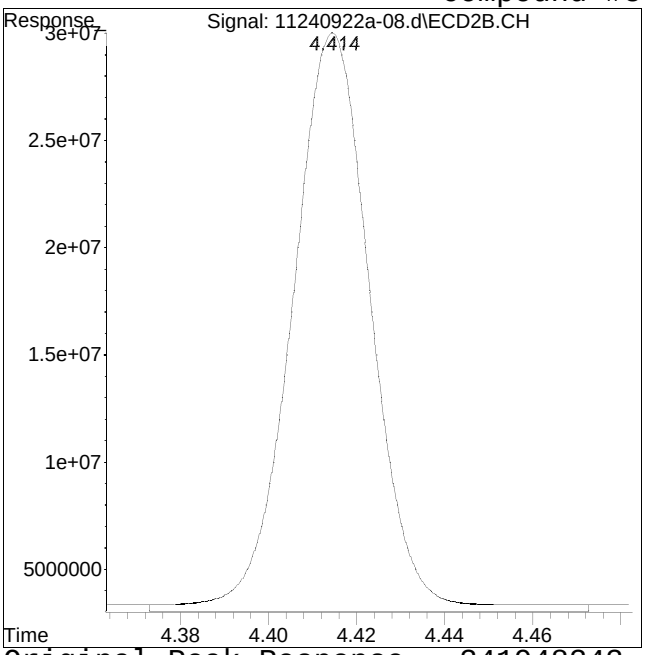

Manual Peak Response = 547901476 M4

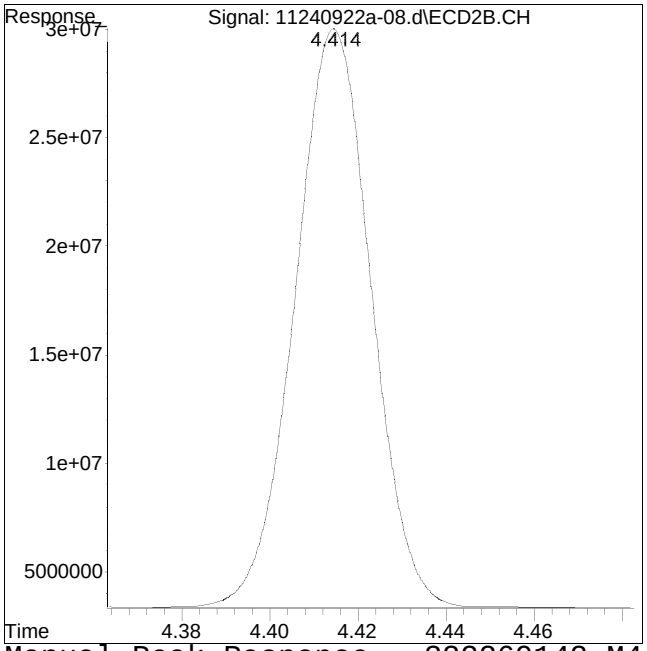
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #55: Dieldrin #2



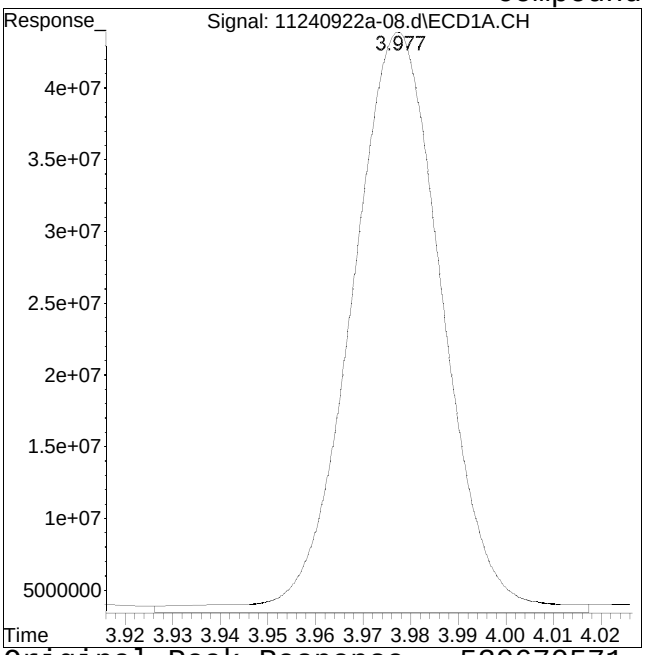




Original Peak Response = 341948343 Manual Peak Response = 322269142 M4
M4 = Poor automated baseline construction.

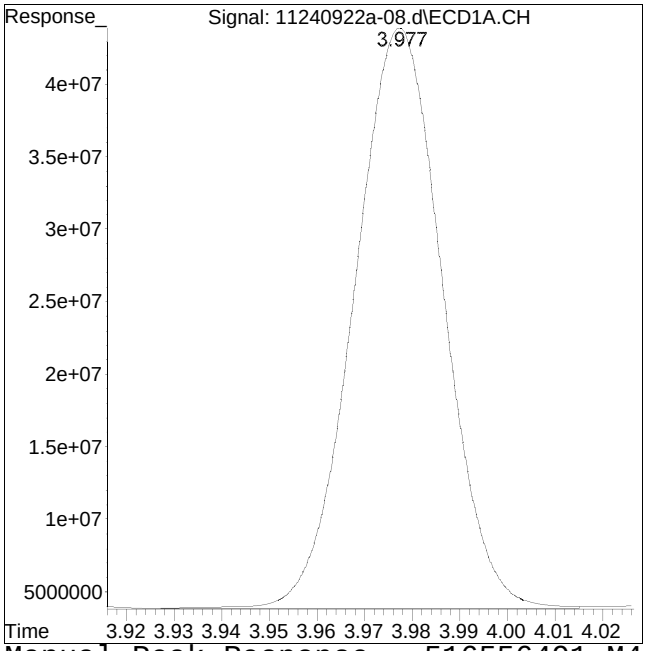
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #18: Endrin




Original Peak Response = 539670571



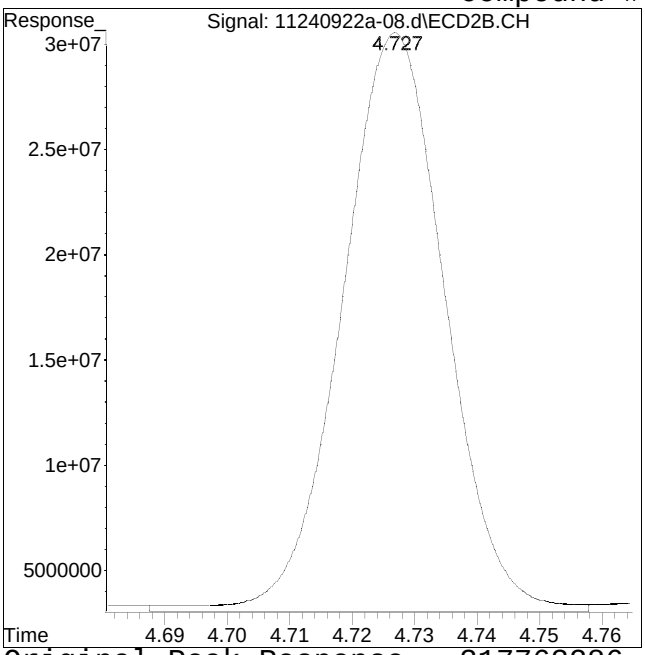

Manual Peak Response = 516556491 M4

M4 = Poor automated baseline construction.

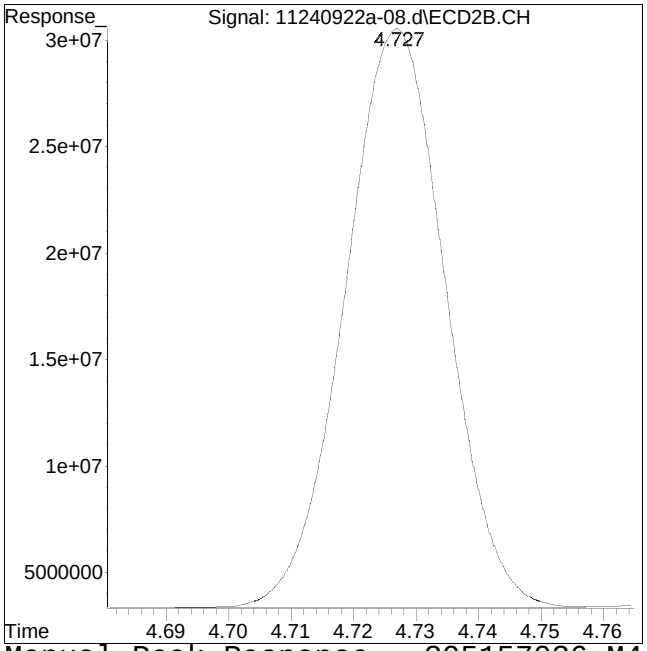
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #56: Endrin #2




Original Peak Response = 317763286



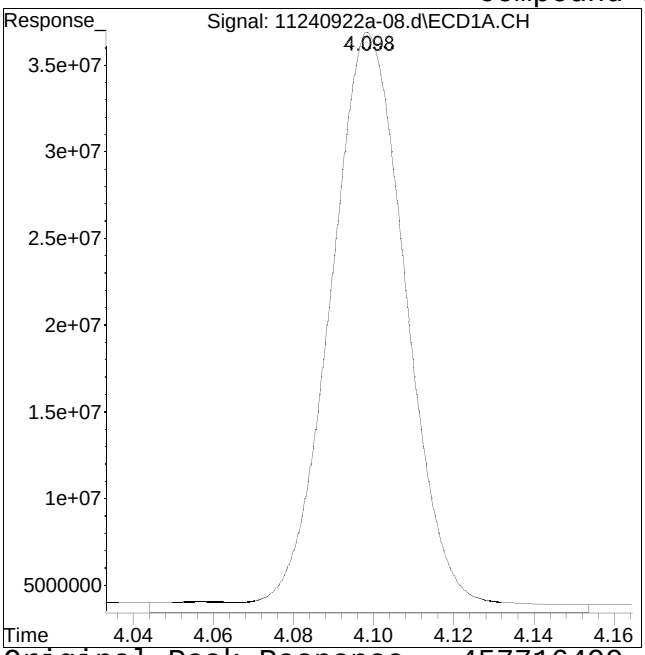

Manual Peak Response = 305157036 M4

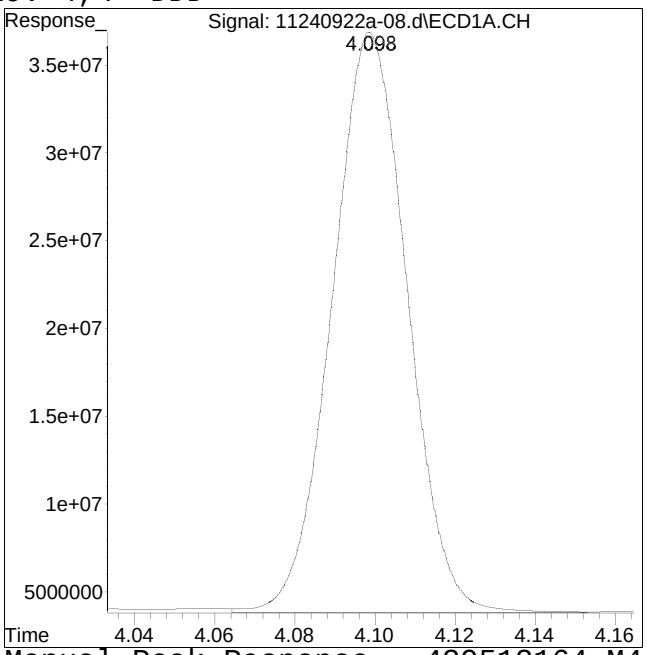
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #19: 4,4'-DDD



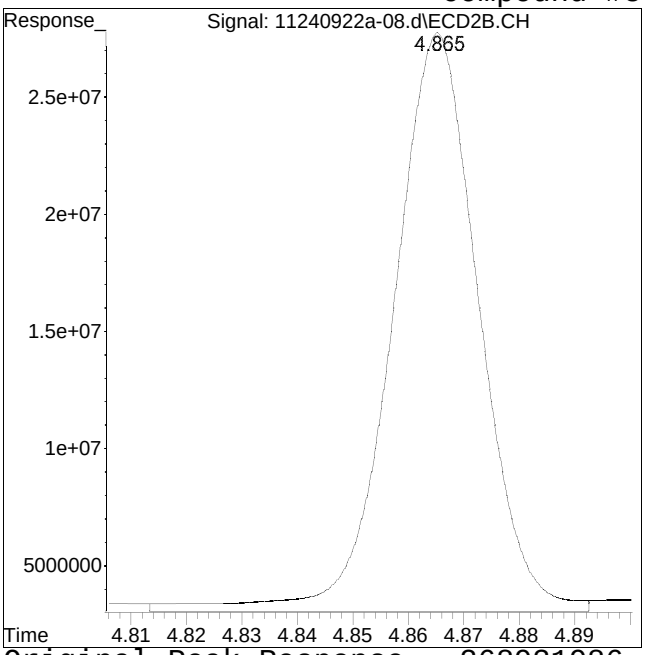




Original Peak Response = 457716499 Manual Peak Response = 429512164 M4
M4 = Poor automated baseline construction.

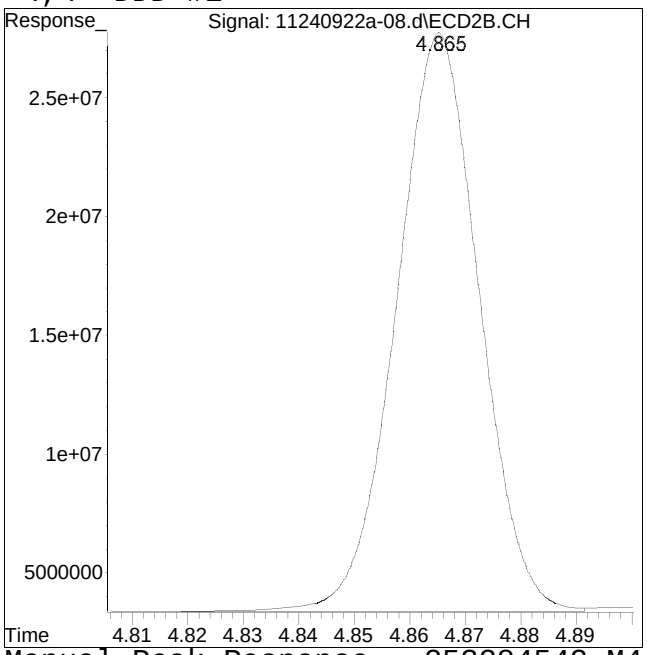
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #57: 4,4'-DDD #2




Original Peak Response = 268931986



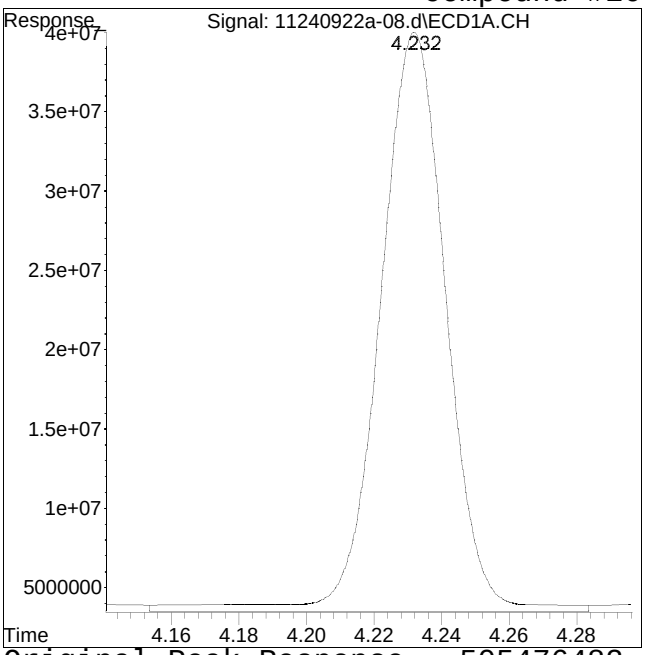

Manual Peak Response = 253284542 M4

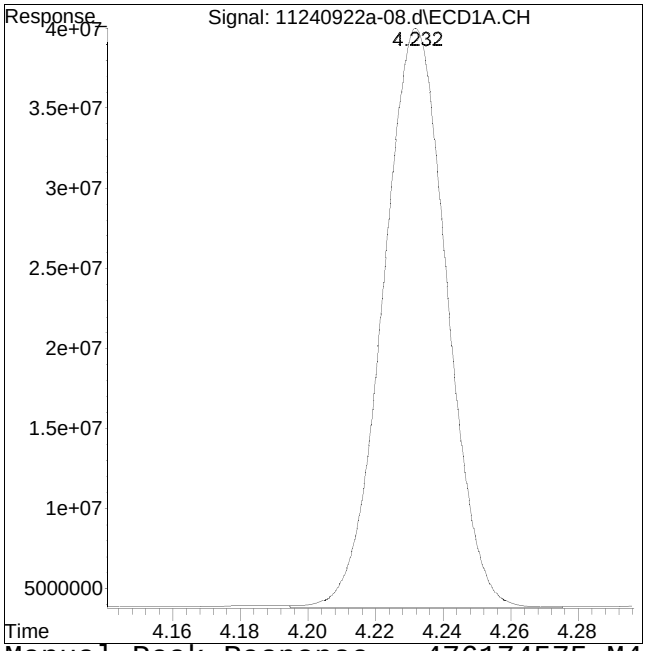
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #20: Endosulfan II



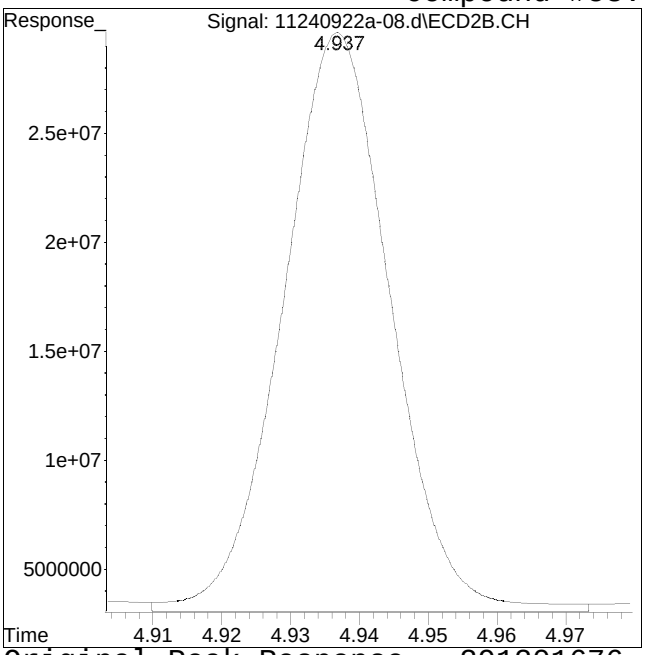




Original Peak Response = 505476482 Manual Peak Response = 476174575 M4
M4 = Poor automated baseline construction.

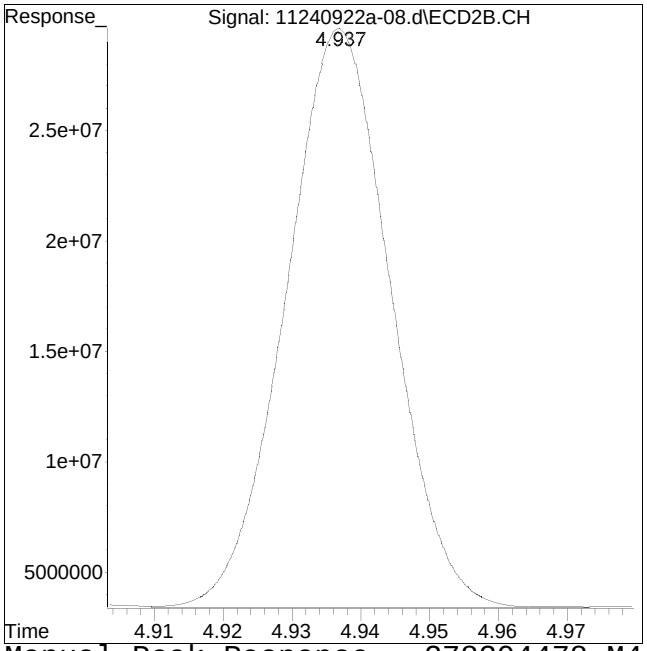
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #58: Endosulfan II #2




Original Peak Response = 291201676



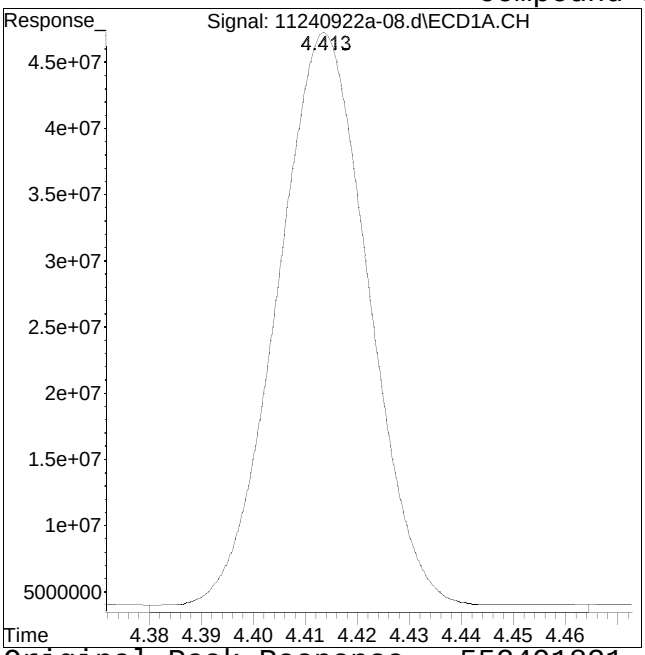

Manual Peak Response = 278304478 M4

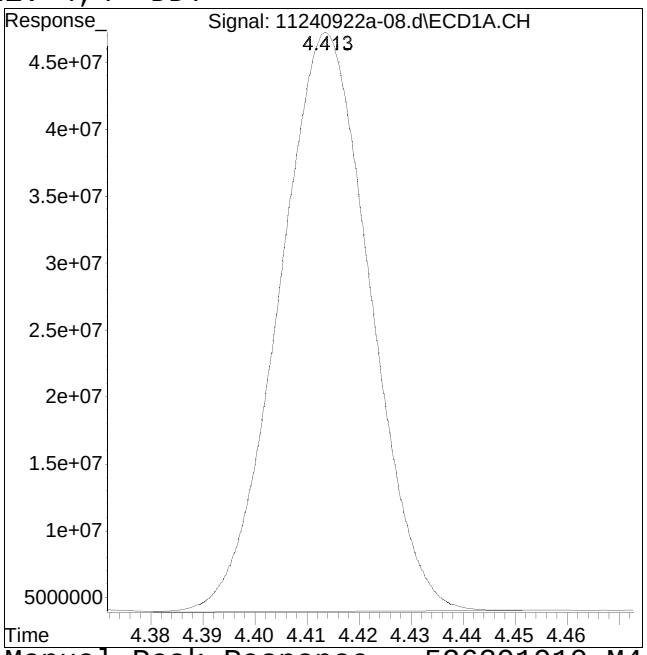
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT



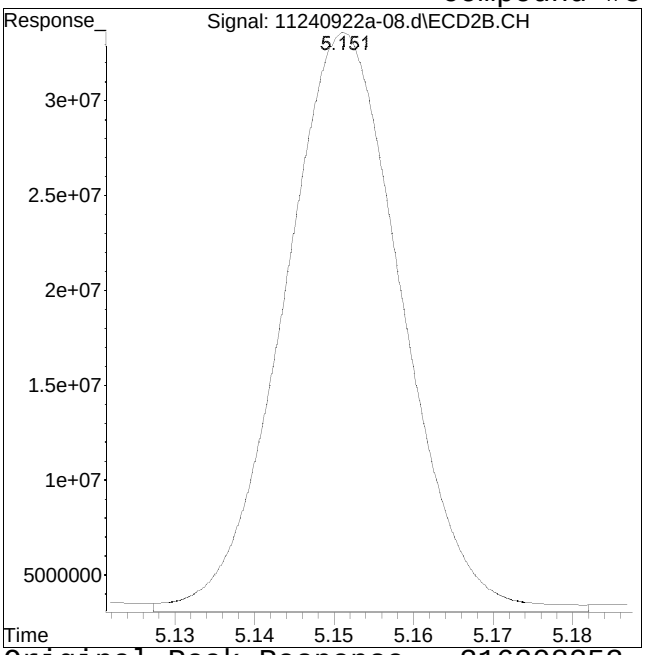




Original Peak Response = 552491821 Manual Peak Response = 526391910 M4
M4 = Poor automated baseline construction.

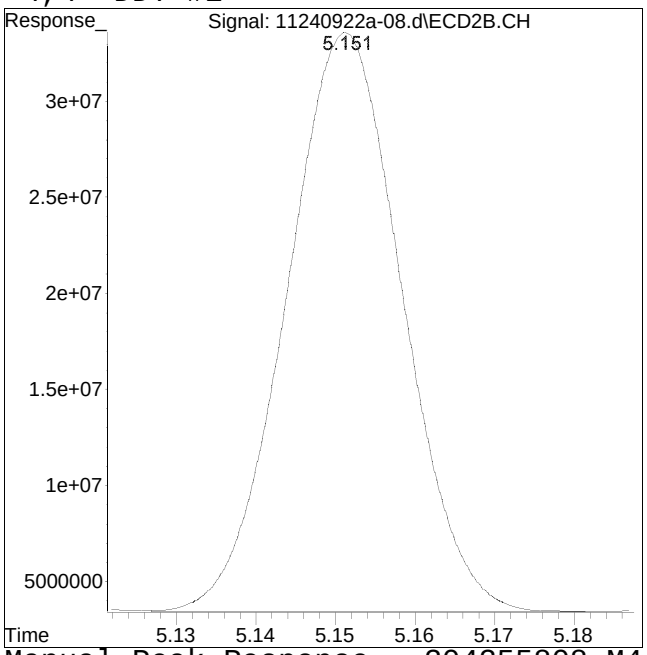
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #59: 4,4'-DDT #2




Original Peak Response = 316208353



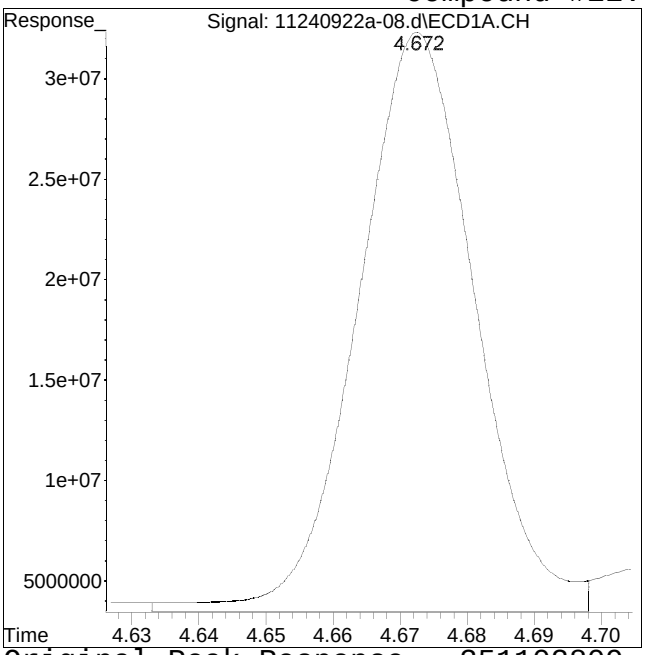

Manual Peak Response = 304355808 M4

M4 = Poor automated baseline construction.

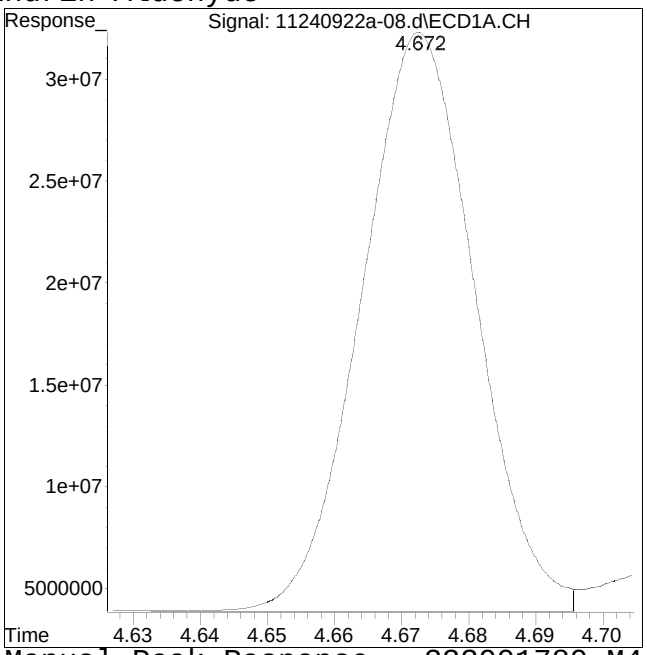
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #22: Endrin Aldehyde




Original Peak Response = 351102809



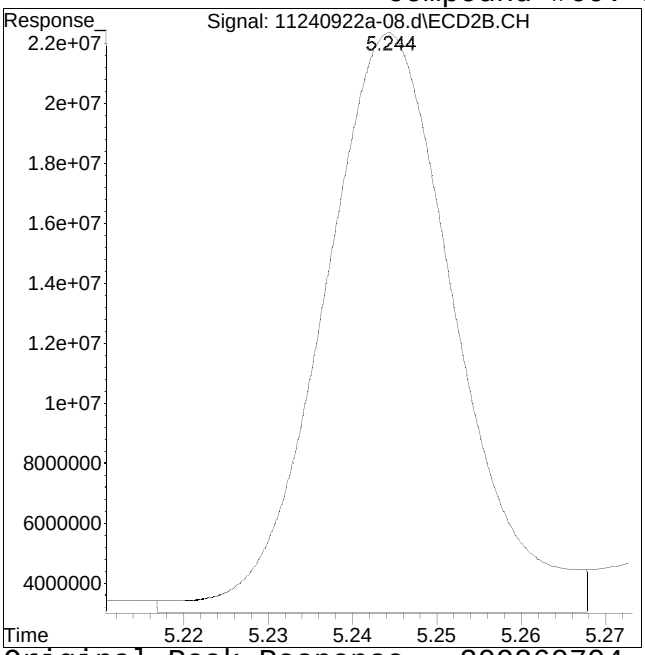

Manual Peak Response = 333901780 M4

M4 = Poor automated baseline construction.

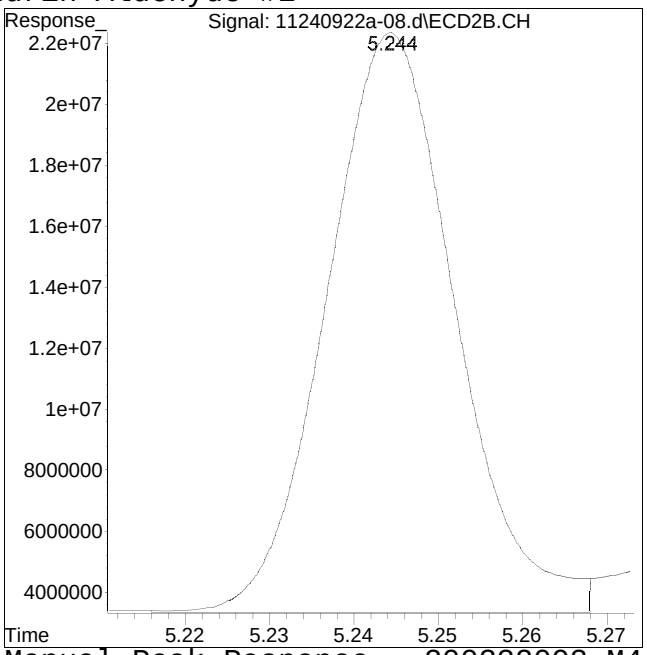
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #60: Endrin Aldehyde #2




Original Peak Response = 209260704

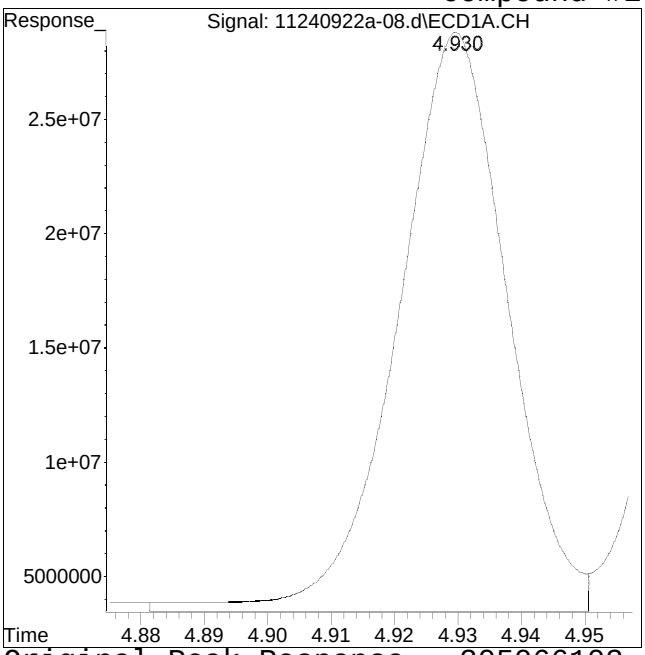



Manual Peak Response = 200332093 M4
M4 = Poor automated baseline construction.

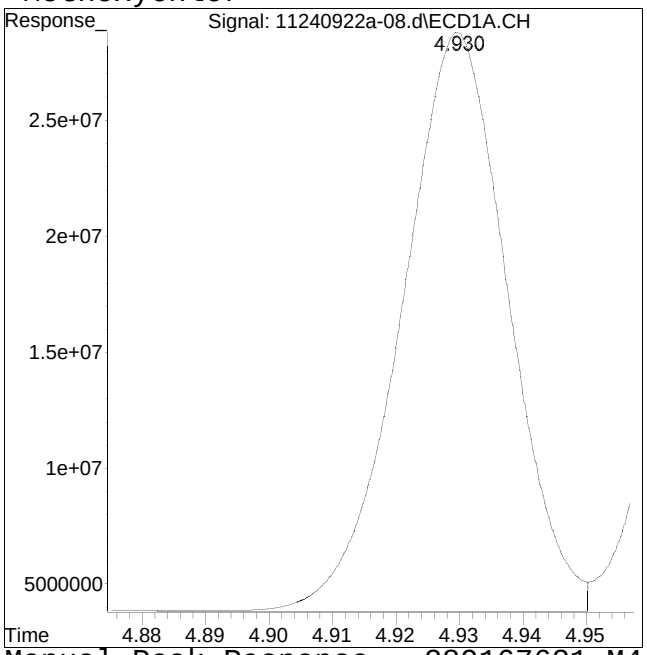
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #23: Methoxychlor




Original Peak Response = 305066103



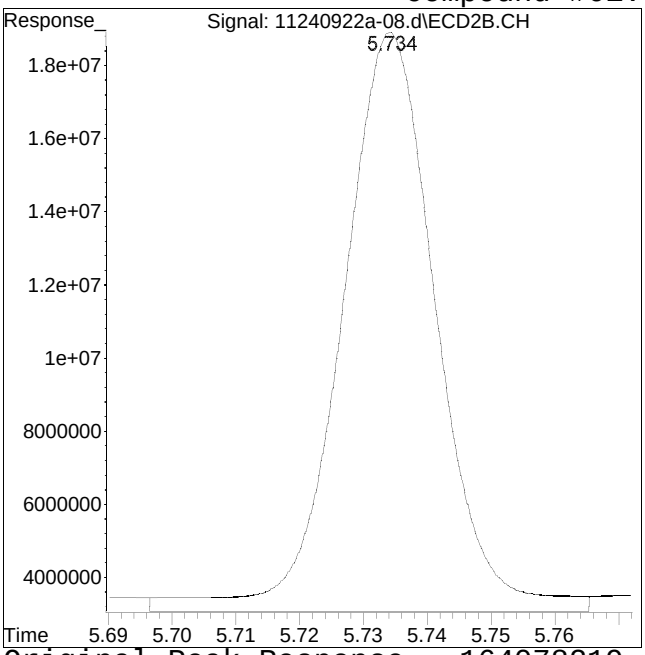

Manual Peak Response = 289167621 M4

M4 = Poor automated baseline construction.

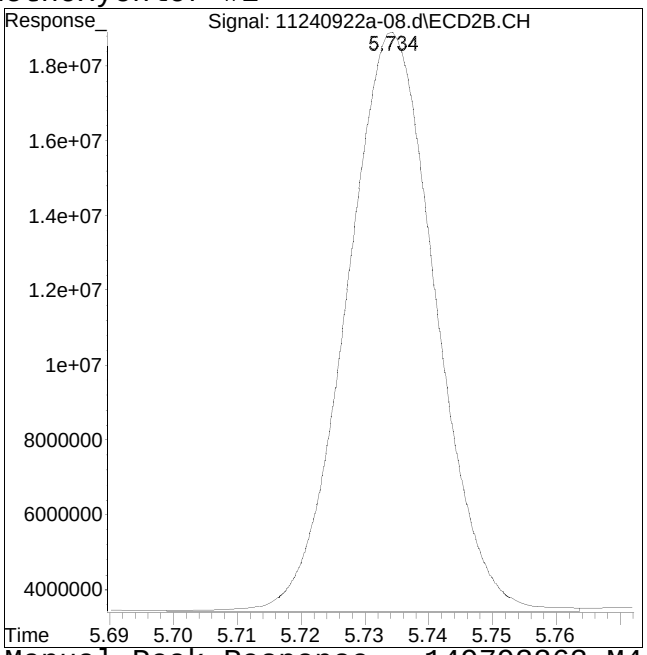
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #61: Methoxychlor #2




Original Peak Response = 164078219



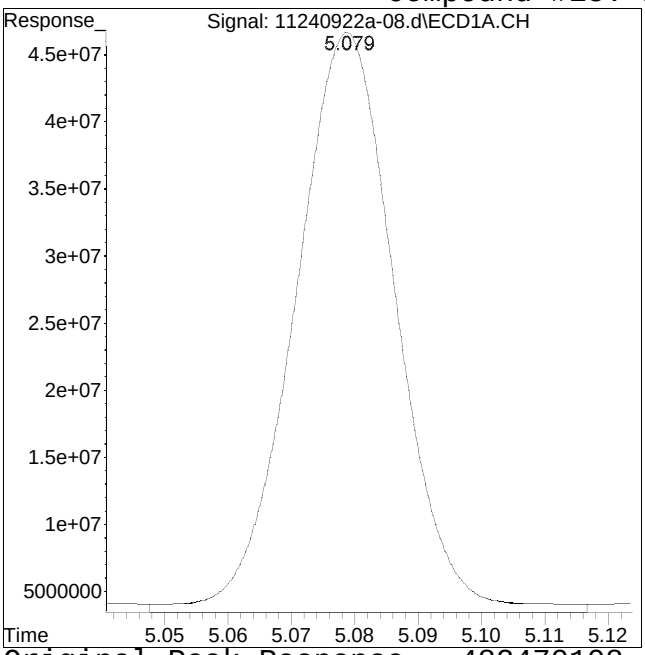

Manual Peak Response = 149793363 M4

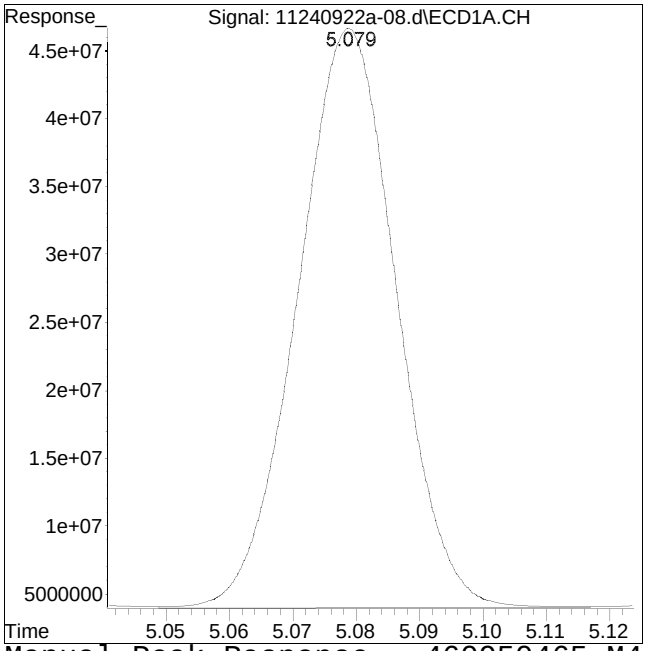
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #25: Endosulfan Sulfate



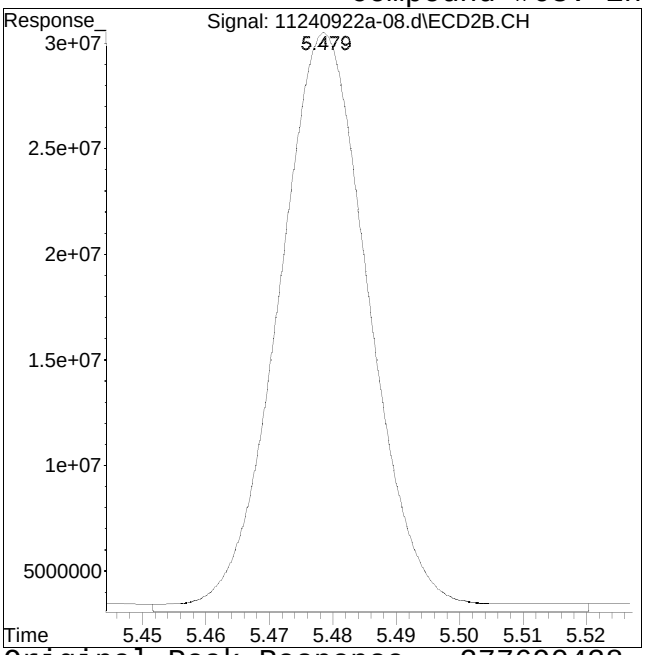




Original Peak Response = 482470108 Manual Peak Response = 460950465 M4
M4 = Poor automated baseline construction.

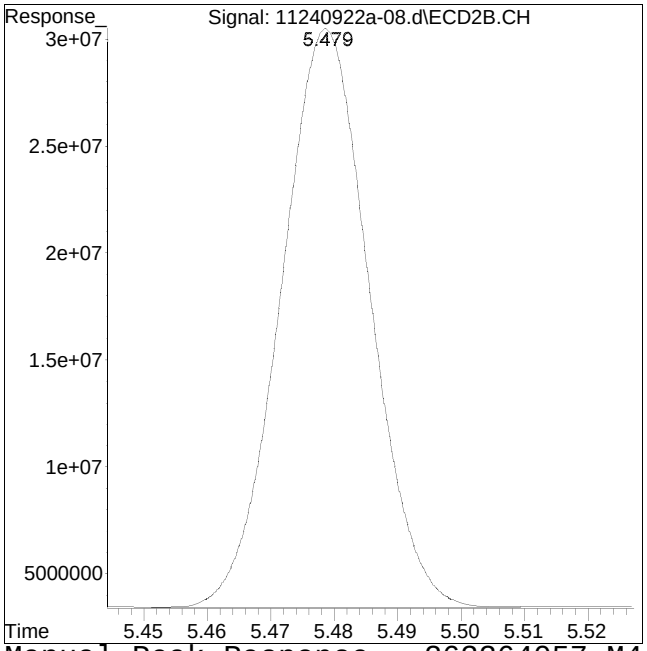
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #63: Endosulfan Sulfate #2




Original Peak Response = 277690438



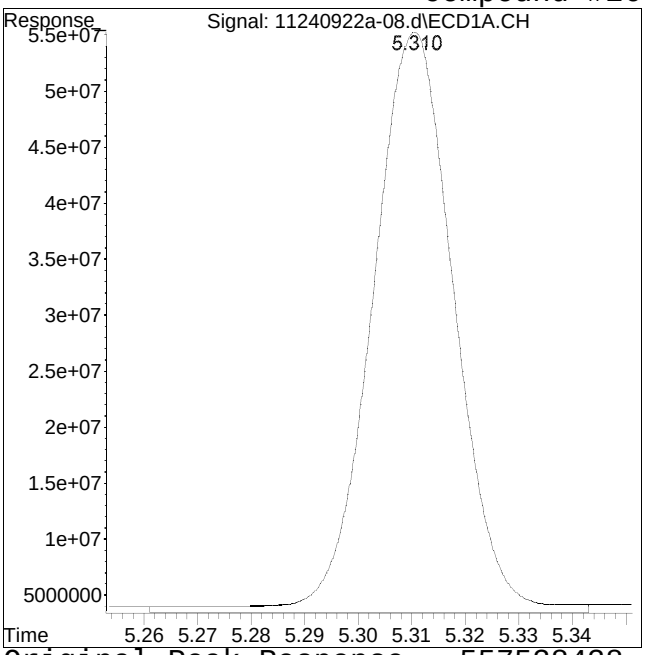

Manual Peak Response = 263364057 M4

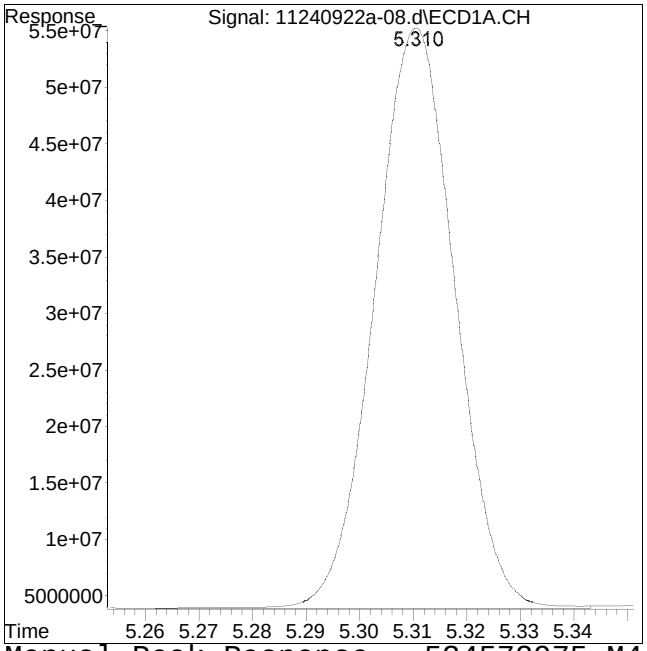
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #26: Endrin Ketone



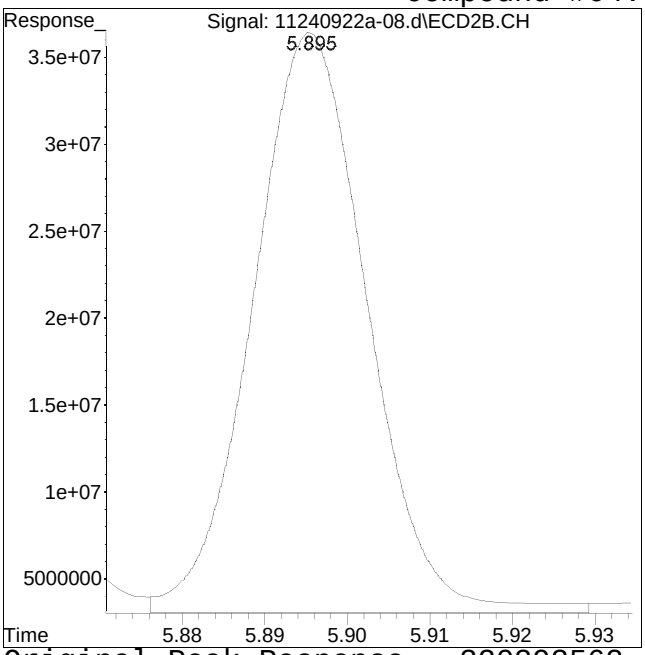



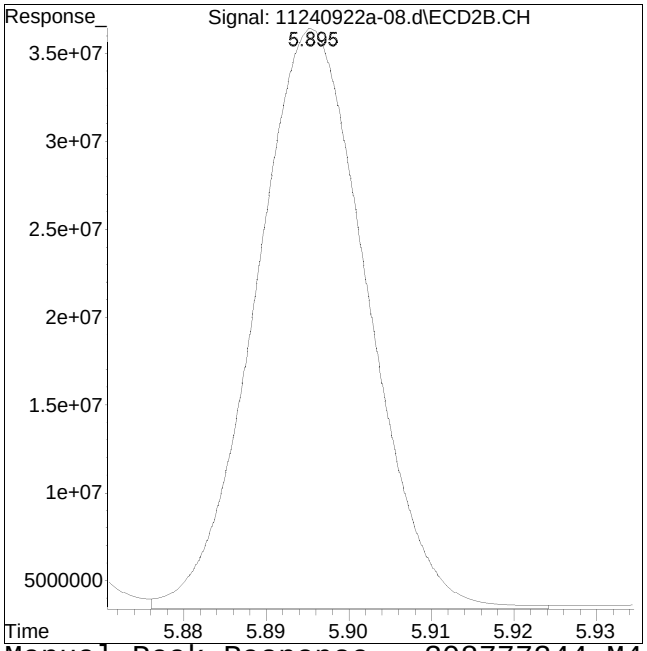

Original Peak Response = 557538438 Manual Peak Response = 534572975 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #64: Endrin Ketone #2



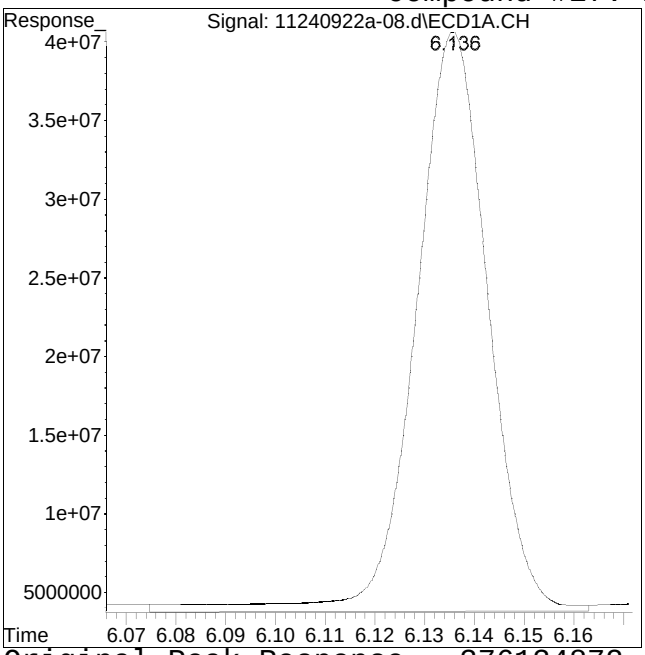



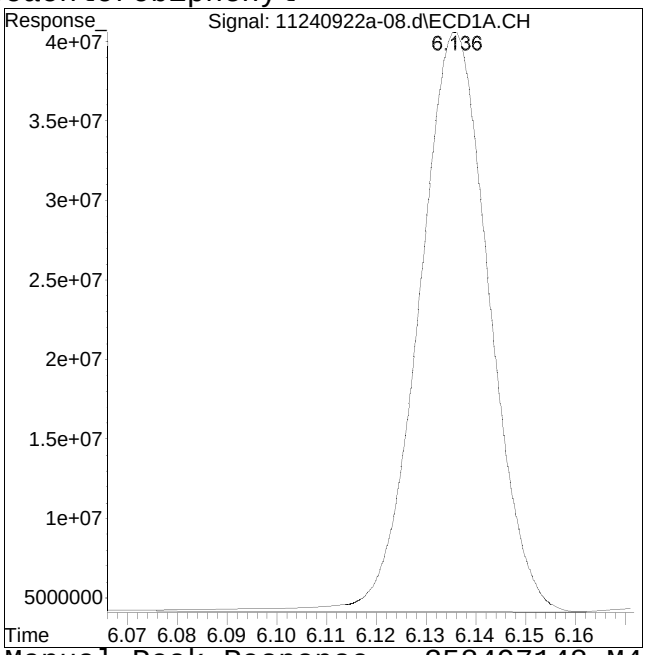

Original Peak Response = 320393562 Manual Peak Response = 308777344 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



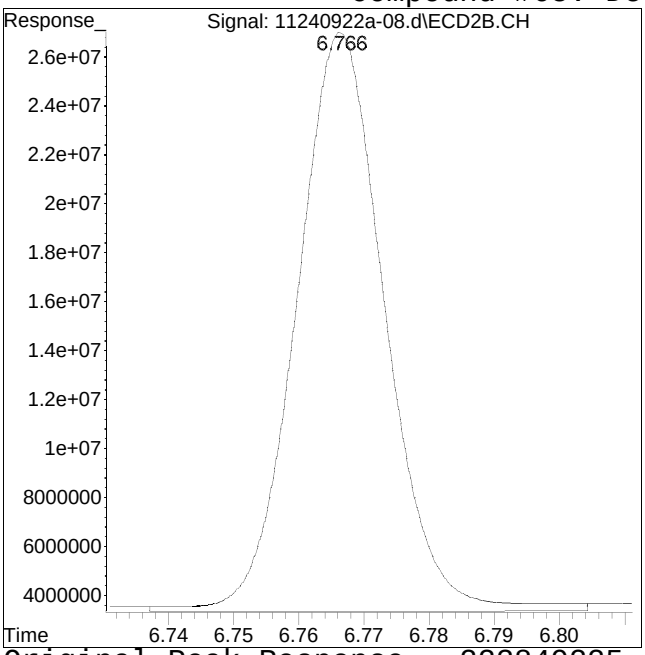



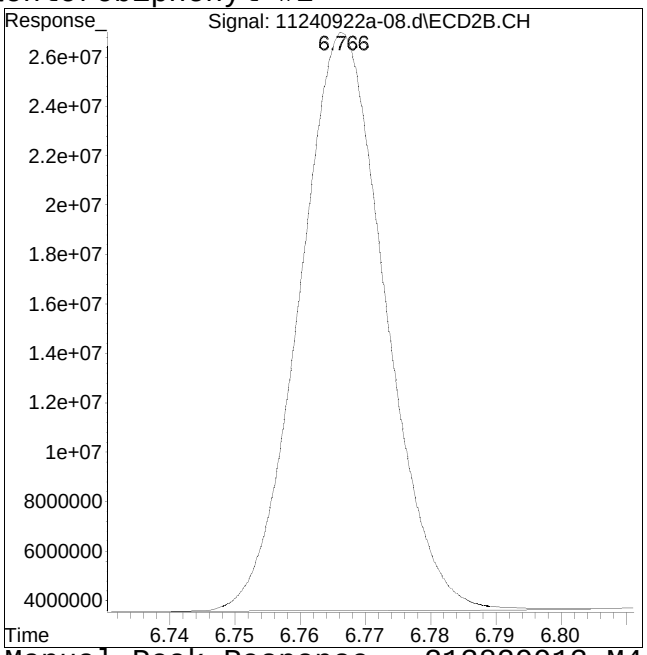

Original Peak Response = 376134872 Manual Peak Response = 358497148 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-08.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:45 Instrument : Pest 11
Sample : WG1974576-2,42,, Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 223849225 Manual Peak Response = 213829913 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 10:57
Operator : PEST11:emr
Sample : WG1974576-3,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:14 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| | Compound | | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 1.201 | 1.274 | 330.8E6 | 212.4E6 | 25.000M4 | 25.000 |
| | Standard Area 1 : #1 = 280061320 | | | | | Recovery = 118.12% | | |
| | Standard Area 1 : #2 = 198070219 | | | | | Recovery = 107.22% | | |
| System Monitoring Compounds | | | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 1.530 | 1.723 | 401.3E6 | 243.5E6 | 29.188M4 | 25.740M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 58.38% | 51.48% |
| 27) | s | Decachlorobi | 6.135 | 6.766 | 362.5E6 | 205.9E6 | 23.558M4 | 22.870M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 47.12% | 45.74% |
| Target Compounds | | | | | | | | |
| 4) | t | alpha-BHC | 1.826 | 2.114 | 654.6E6 | 390.3E6 | 33.871M4 | 28.363M4 |
| 5) | t | gamma-BHC (l | 2.017 | 2.385 | 591.3E6 | 355.5E6 | 32.026M4 | 27.187M4 |
| 6) | t | beta-BHC | 2.071 | 2.450 | 274.3E6 | 158.9E6 | 33.020M4 | 29.397M4 |
| 7) | t | delta-BHC | 2.192 | 2.703 | 543.1E6 | 314.2E6 | 29.870M3 | 24.290M4 |
| 8) | t | Heptachlor | 2.348 | 2.761 | 582.8E6 | 332.1E6 | 33.340M4 | 24.470M4 |
| 9) | t | Aldrin | 2.579 | 3.065 | 505.0E6 | 316.3E6 | 30.949M4 | 25.951M4 |
| 12) | t | Heptachlor E | 3.101 | 3.657 | 501.1E6 | 295.9E6 | 31.945M4 | 24.439M4 |
| 13) | t | gamma-Chlord | 3.221 | 3.870 | 508.3E6 | 303.2E6 | 35.670M4 | 27.215M4 |
| 14) | t | alpha-Chlord | 3.350 | 4.038 | 454.6E6 | 298.7E6 | 28.247M4 | 24.318M4 |
| 15) | t | 4,4'-DDE | 3.448 | 4.256 | 484.2E6 | 288.2E6 | 30.712M4 | 25.267M4 |
| 16) | t | Endosulfan I | 3.480 | 4.101 | 487.3E6 | 279.0E6 | 32.993M4 | 24.658M4 |
| 17) | t | Dieldrin | 3.731 | 4.414 | 528.1E6 | 315.8E6 | 35.155M4 | 28.007M4 |
| 18) | t | Endrin | 3.977 | 4.727 | 502.9E6 | 295.5E6 | 32.969M4 | 25.828M4 |
| 19) | t | 4,4'-DDD | 4.099 | 4.865 | 414.4E6 | 246.9E6 | 33.773M4 | 26.820M4 |
| 20) | t | Endosulfan I | 4.232 | 4.937 | 456.2E6 | 267.1E6 | 32.772M4 | 25.913M4 |
| 21) | t | 4,4'-DDT | 4.413 | 5.151 | 513.4E6 | 300.0E6 | 36.656M4 | 28.251M4 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 10:57
Operator : PEST11:emr
Sample : WG1974576-3,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:14 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 22) t Endrin Aldeh | 4.673 | 5.244 | 321.2E6 | 188.8E6 | 27.385M4 | 23.597M4 |
| 23) t Methoxychlor | 4.930 | 5.734 | 273.4E6 | 144.6E6 | 34.905M4 | 24.168M4 |
| 25) t Endosulfan S | 5.078 | 5.478 | 438.8E6 | 250.3E6 | 32.847M4 | 24.577M4 |
| 26) t Endrin Keton | 5.311 | 5.895 | 511.9E6 | 298.3E6 | 32.697M4 | 27.852M4 |
| Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average chlordane-1 | | | | | 0.000 | 0.000 |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |

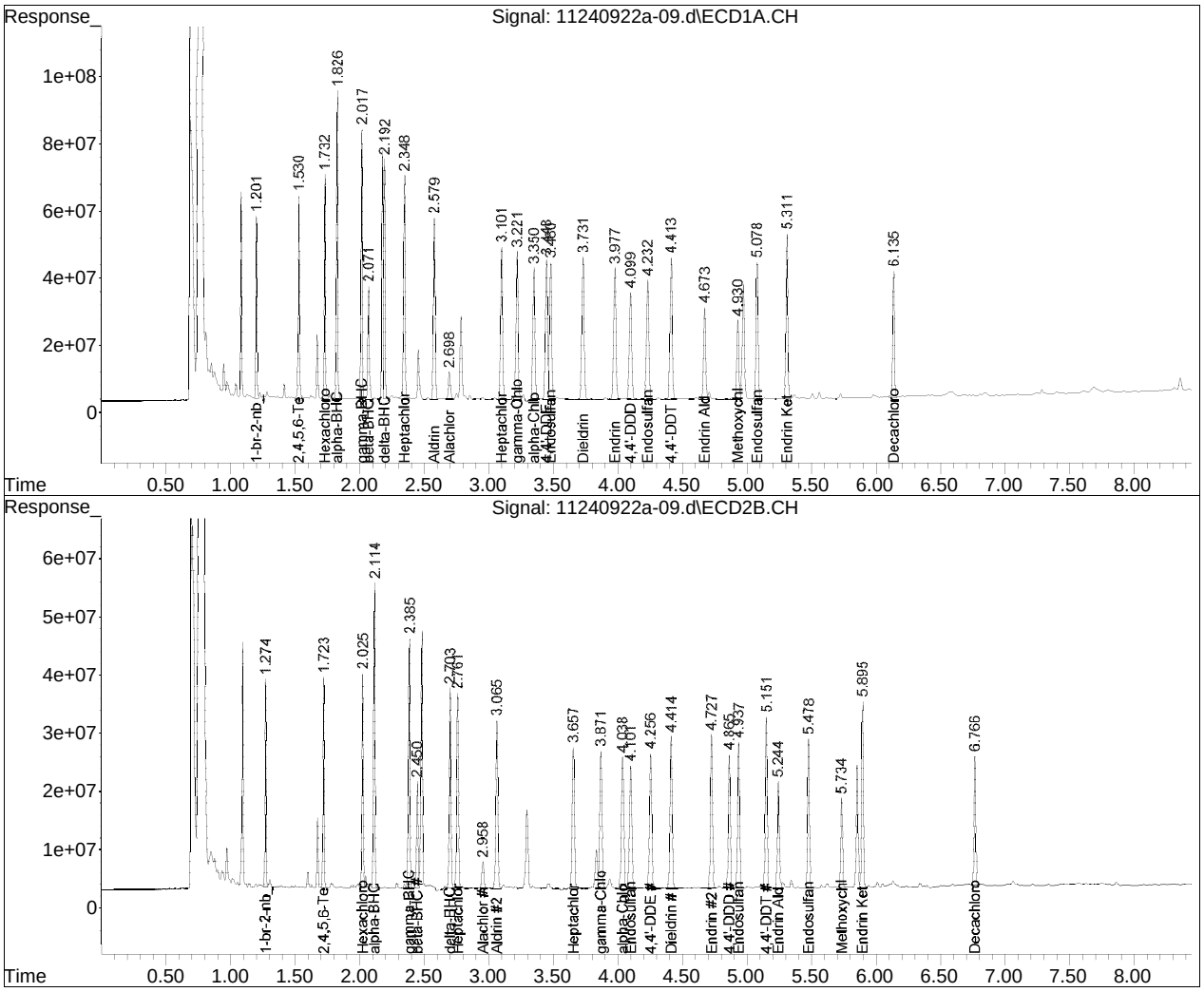
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only1\2024\240922a\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-09.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  10:57
Operator : PEST11:emr
Sample : WG1974576-3,42,,
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 9 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:14 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

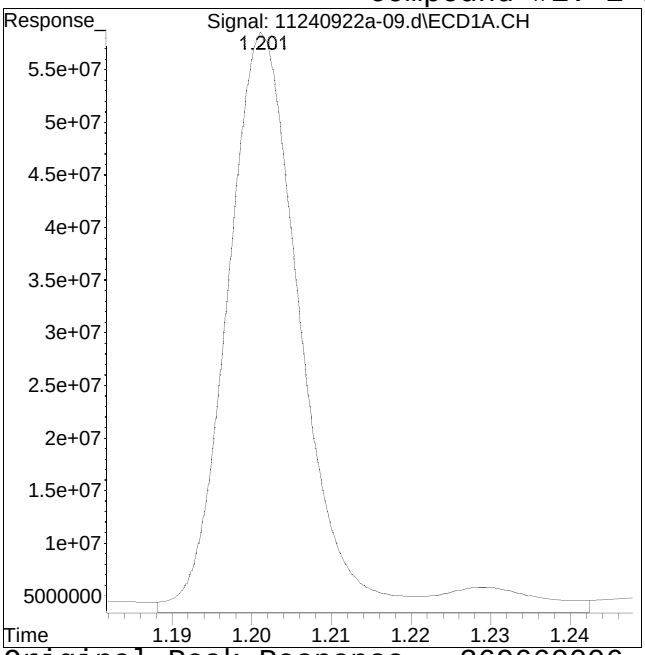
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

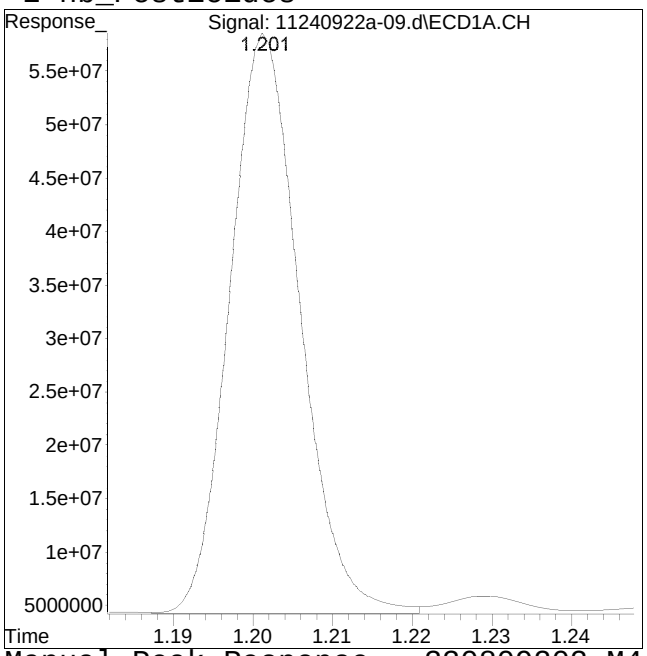


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #1: 1-br-2-nb_Pesticides



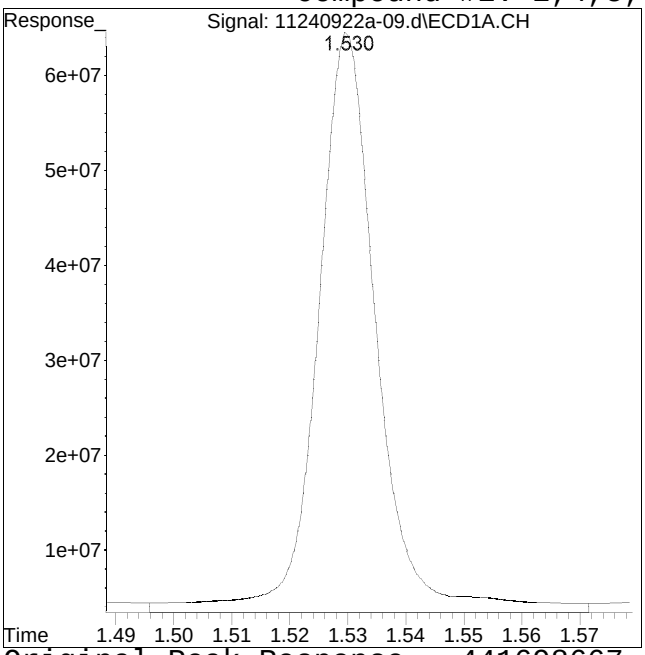




Original Peak Response = 369660006 Manual Peak Response = 330809202 M4
M4 = Poor automated baseline construction.

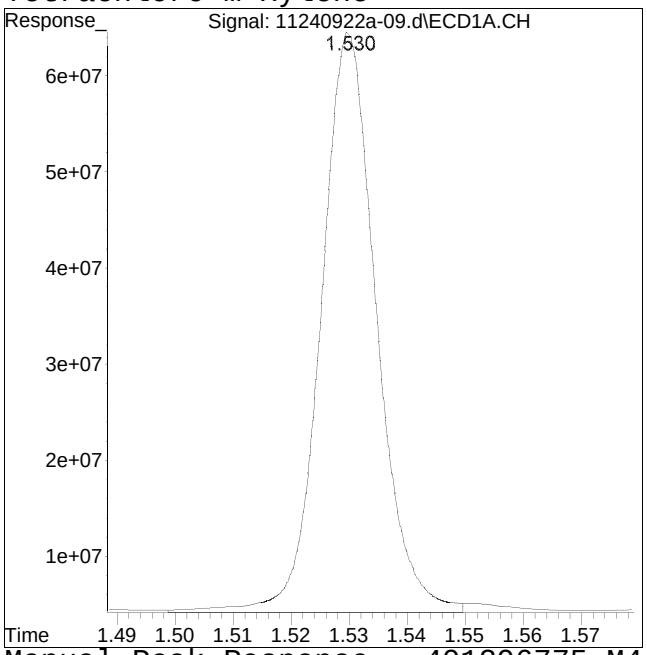
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #2: 2,4,5,6-Tetrachloro-m-xylene




Original Peak Response = 441698667



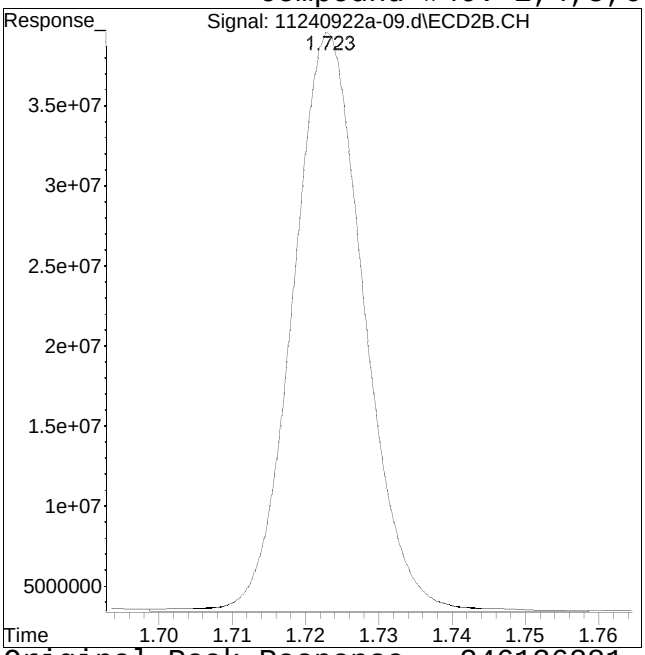

Manual Peak Response = 401296775 M4

M4 = Poor automated baseline construction.

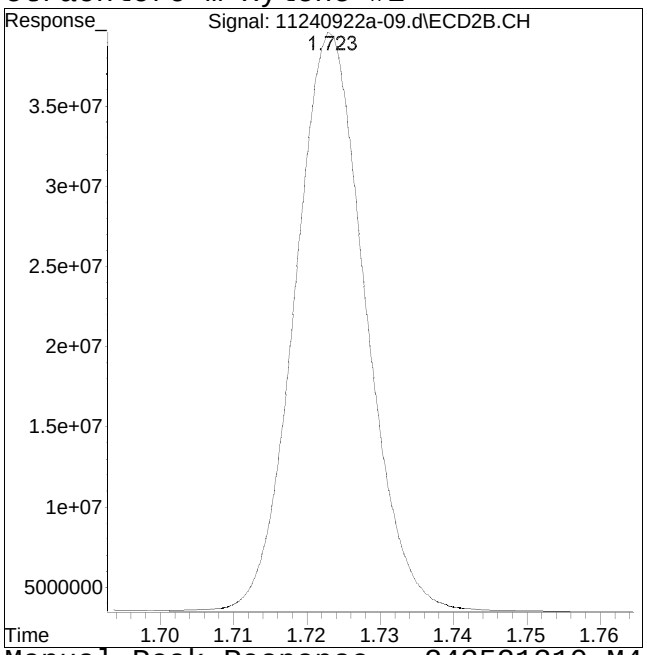
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 246136281



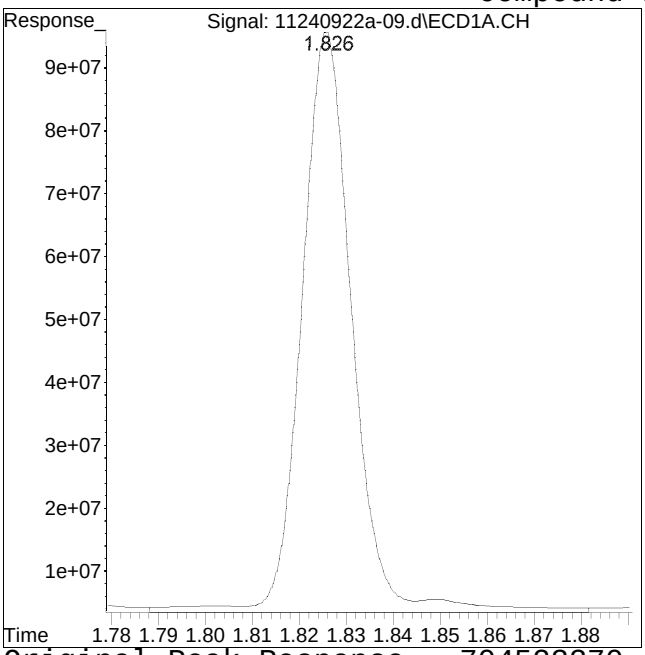

Manual Peak Response = 243521310 M4

M4 = Poor automated baseline construction.

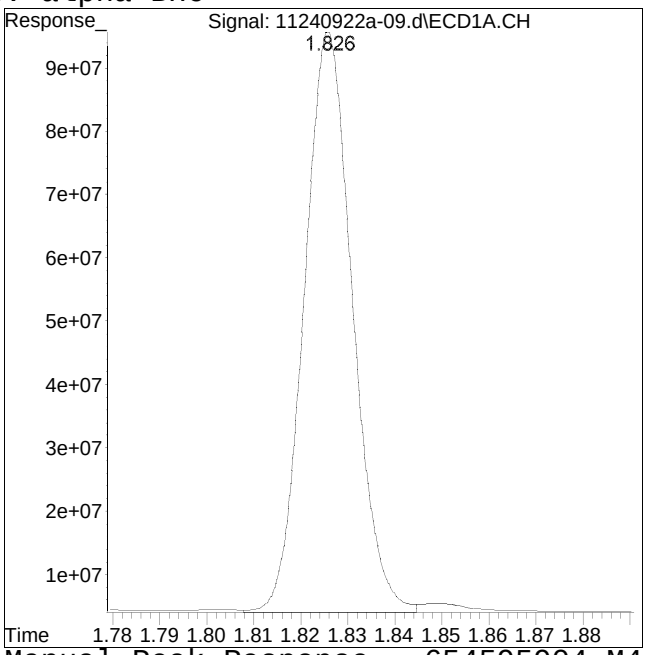
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #4: alpha-BHC




Original Peak Response = 704523370



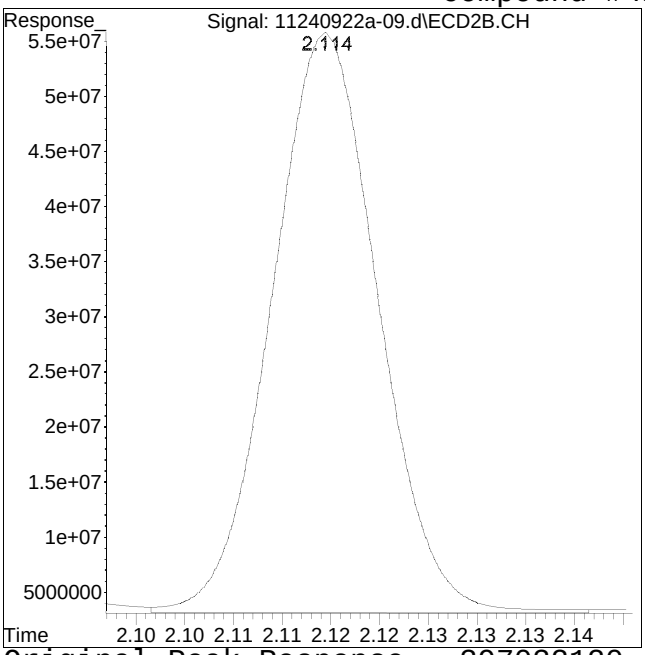

Manual Peak Response = 654595904 M4

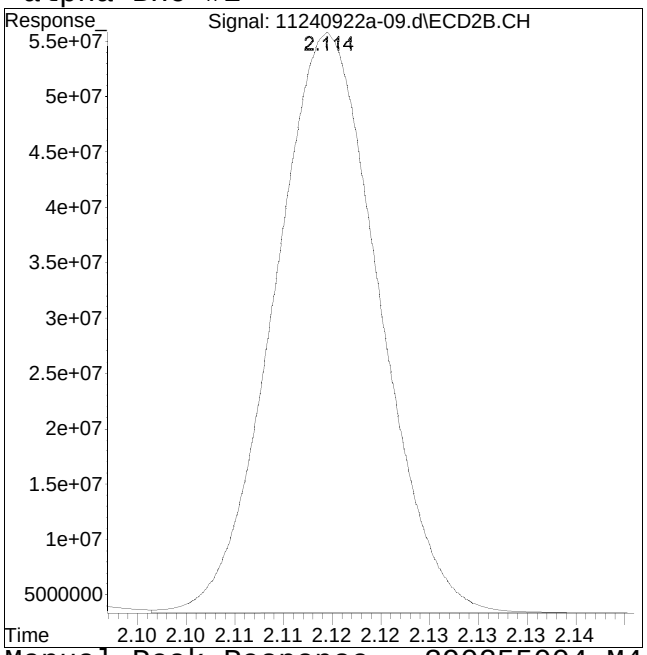
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #42: alpha-BHC #2



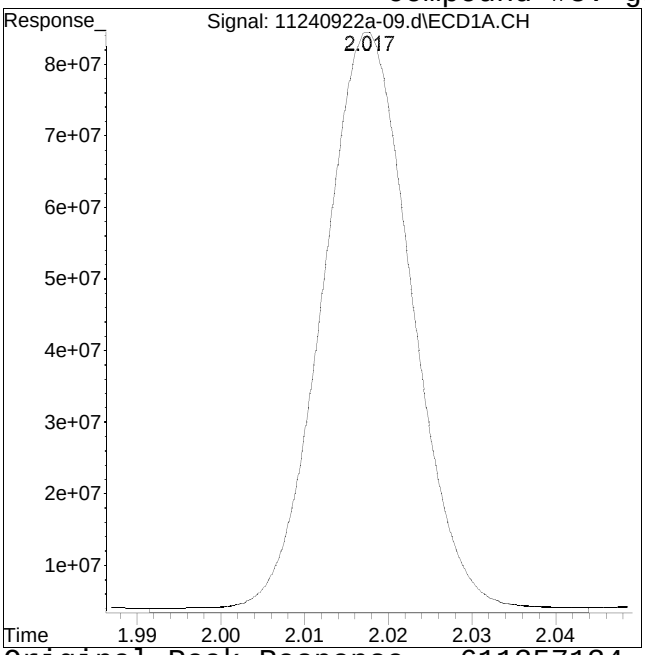




Original Peak Response = 397032120 Manual Peak Response = 390255004 M4
M4 = Poor automated baseline construction.

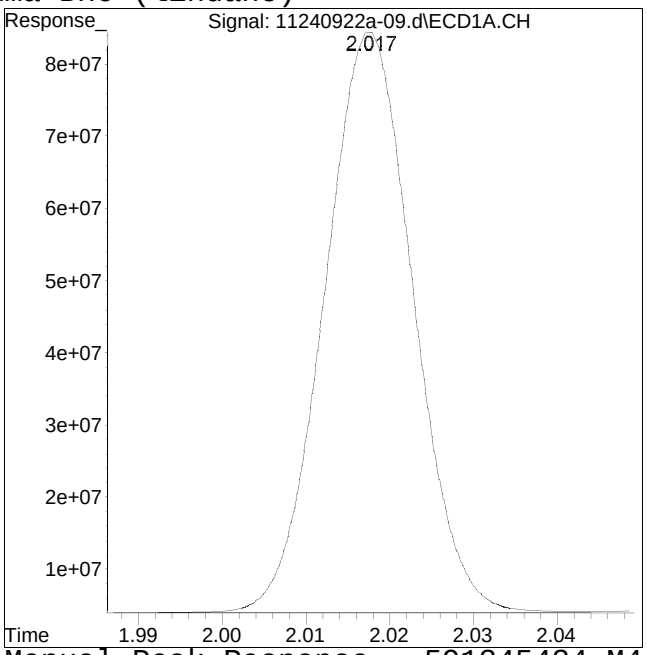
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #5: gamma-BHC (lindane)




Original Peak Response = 611357134



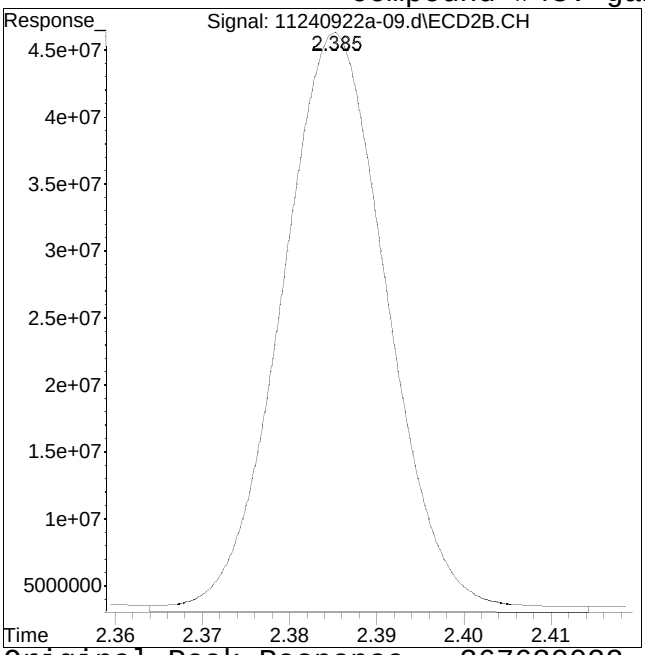

Manual Peak Response = 591345434 M4

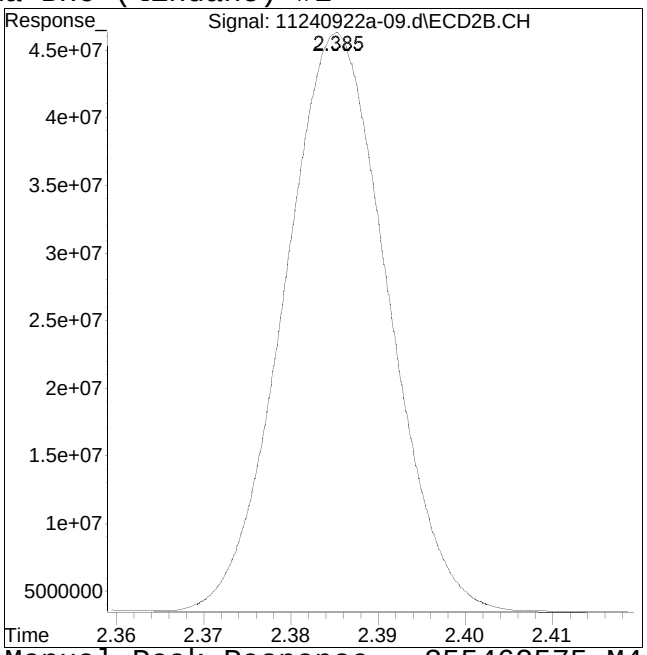
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #43: gamma-BHC (lindane) #2



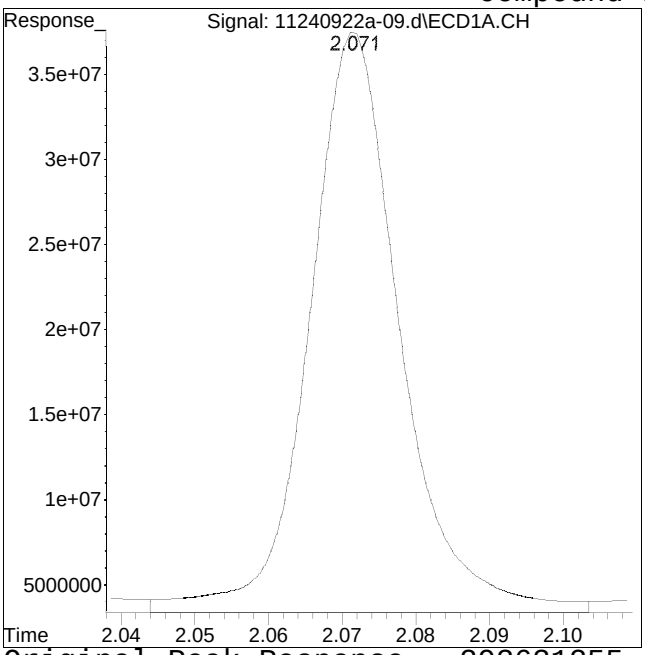




Original Peak Response = 367630022 Manual Peak Response = 355462575 M4
M4 = Poor automated baseline construction.

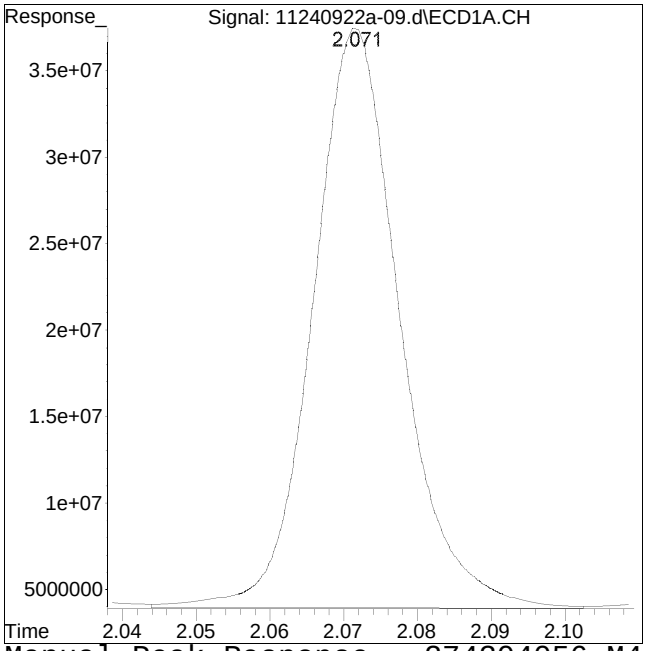
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #6: beta-BHC




Original Peak Response = 293631255



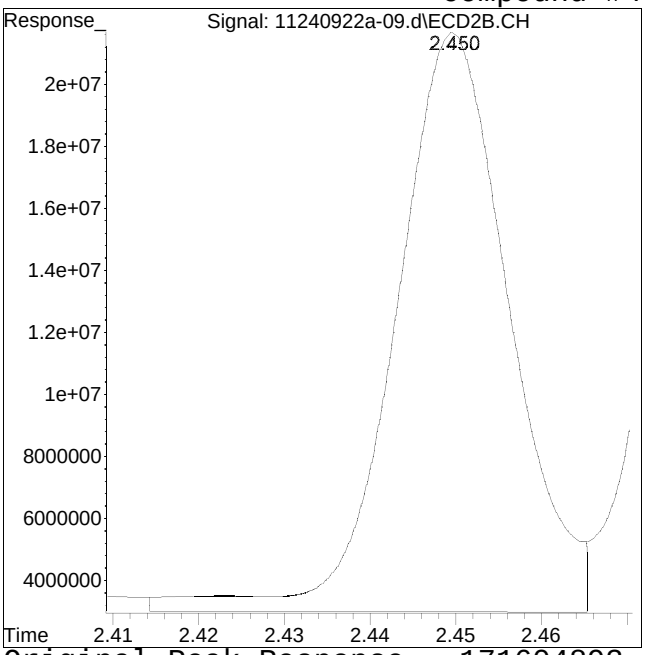

Manual Peak Response = 274304056 M4

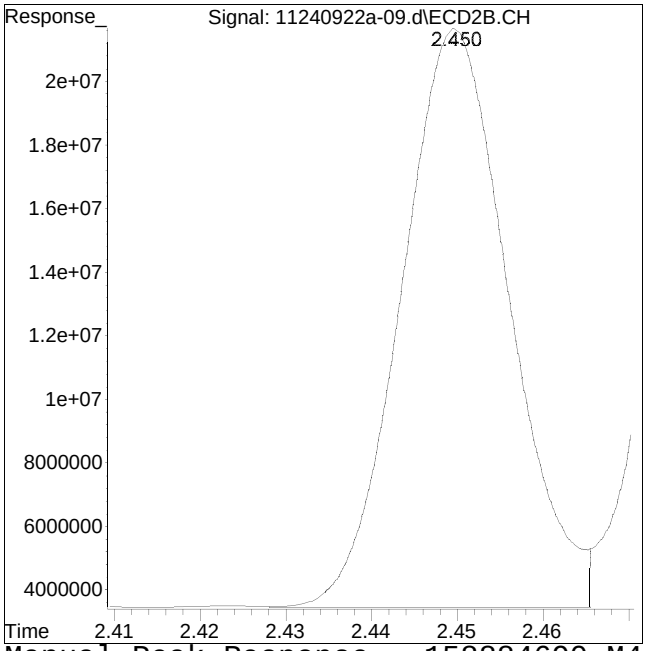
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #44: beta-BHC #2



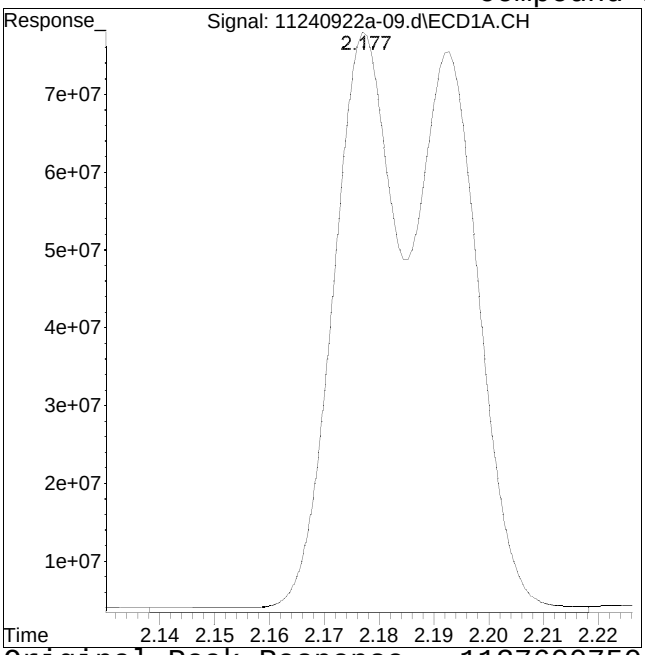



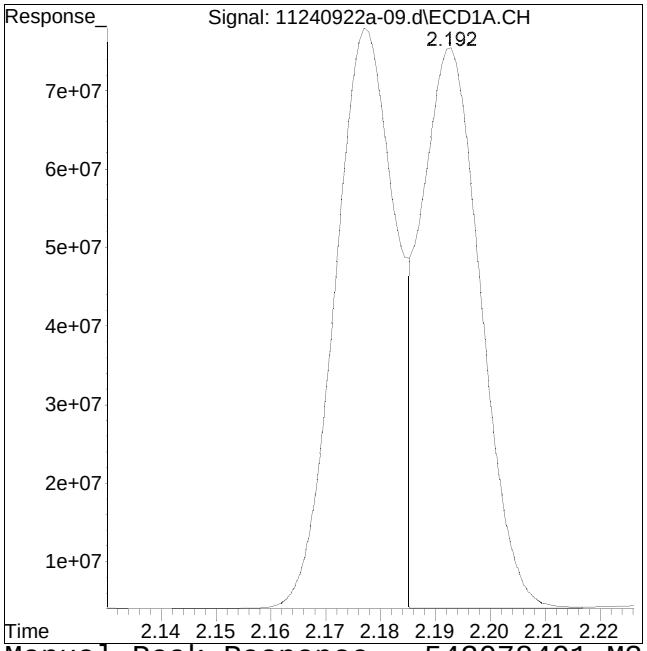

Original Peak Response = 171604893 Manual Peak Response = 158884690 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #7: delta-BHC



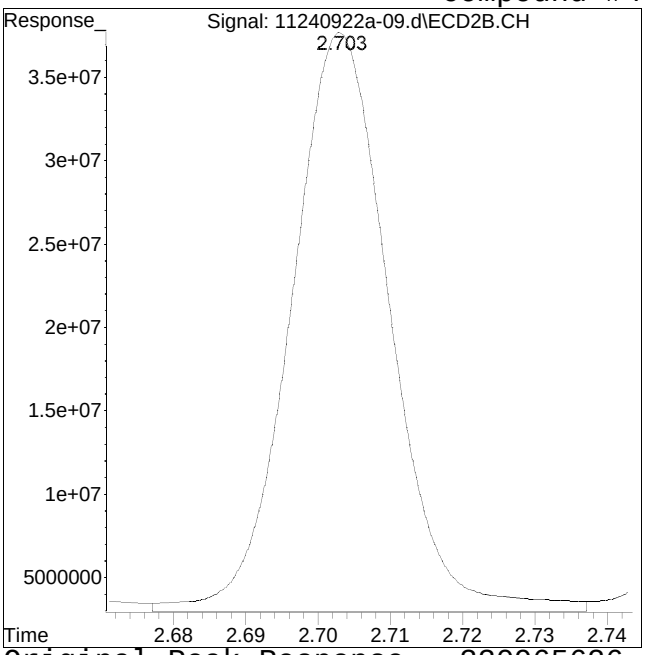



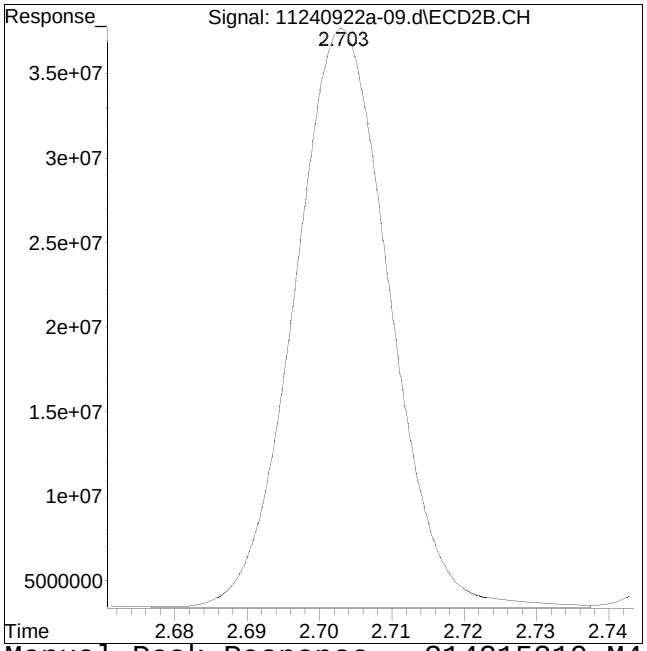

Original Peak Response = 1137600750 Manual Peak Response = 543078401 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #45: delta-BHC #2



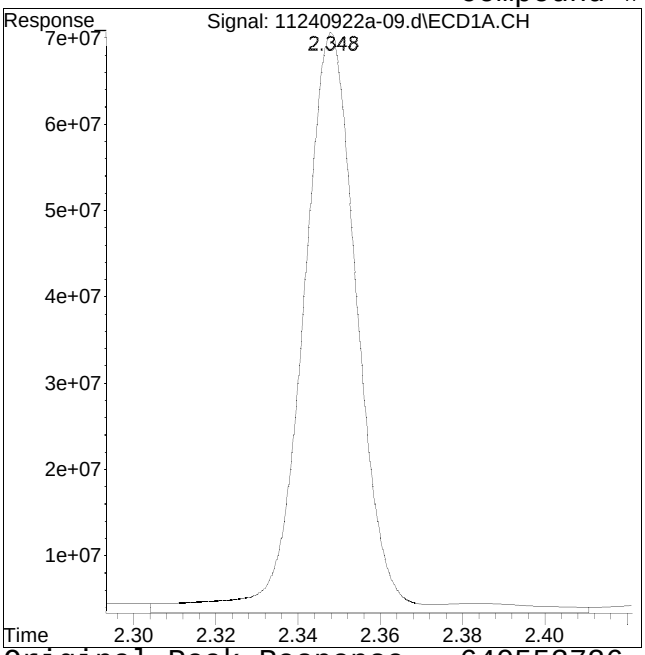



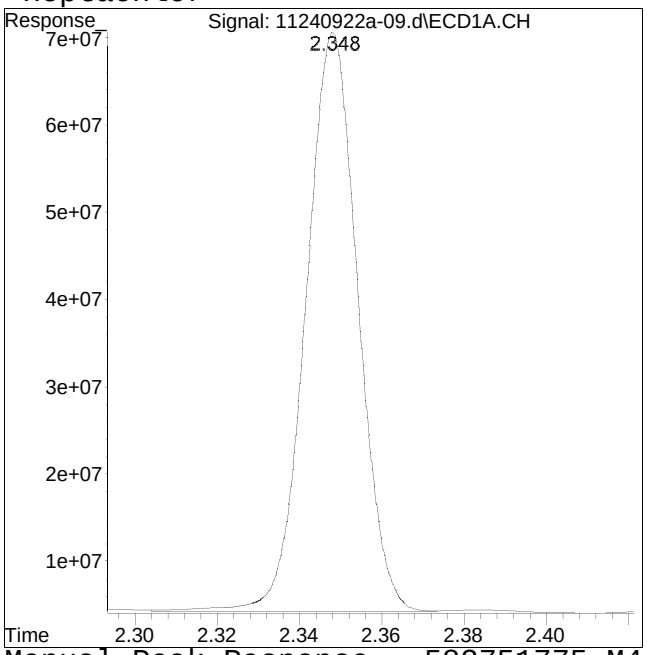

Original Peak Response = 330965626 Manual Peak Response = 314215210 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #8: Heptachlor



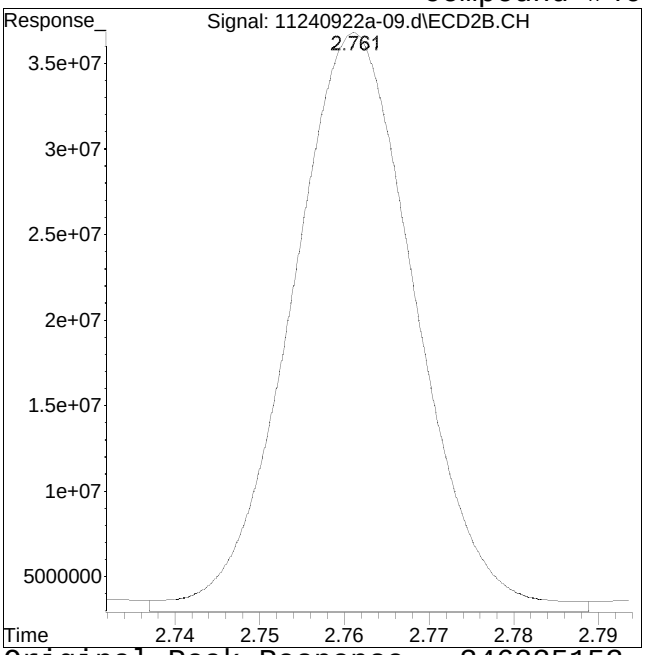



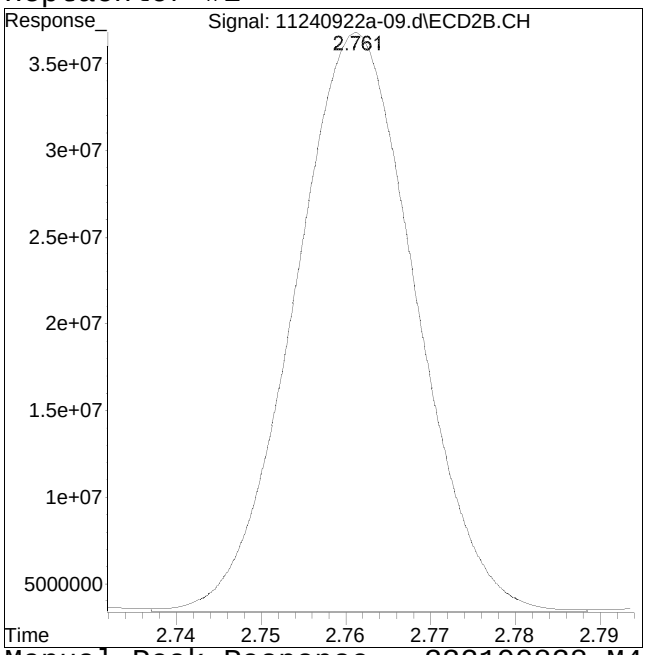

Original Peak Response = 640553726 Manual Peak Response = 582751775 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #46: Heptachlor #2



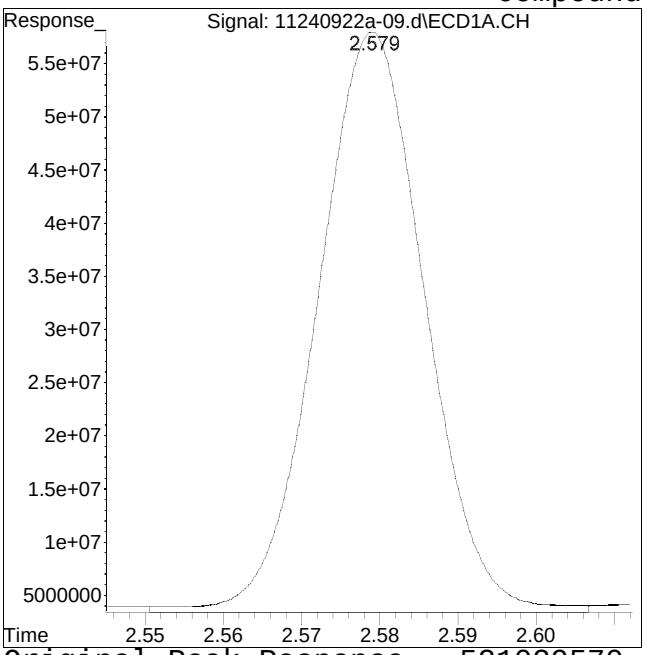



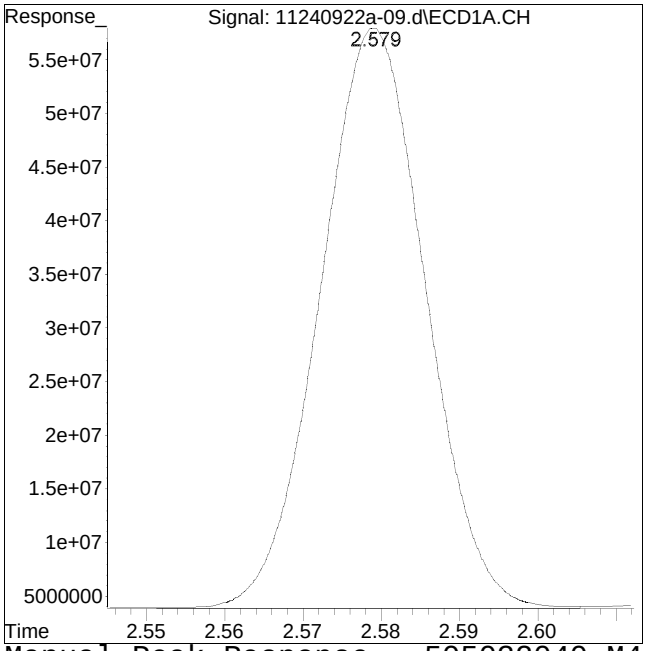

Original Peak Response = 346225153 Manual Peak Response = 332100838 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #9: Aldrin



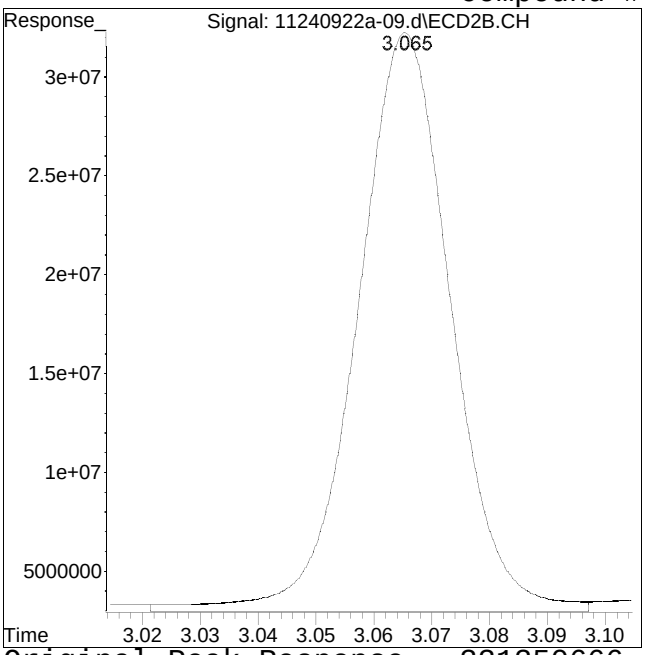




Original Peak Response = 521029570 Manual Peak Response = 505032040 M4
M4 = Poor automated baseline construction.

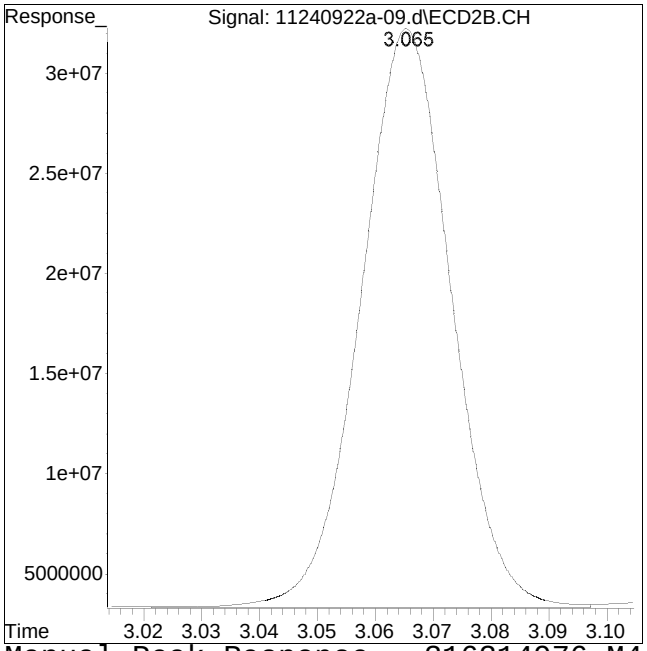
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #47: Aldrin #2




Original Peak Response = 331350666

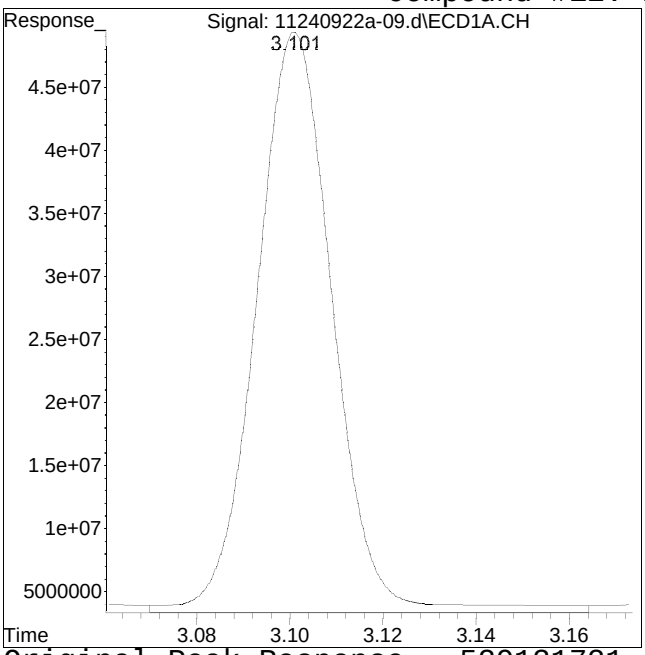



Manual Peak Response = 316314976 M4
M4 = Poor automated baseline construction.

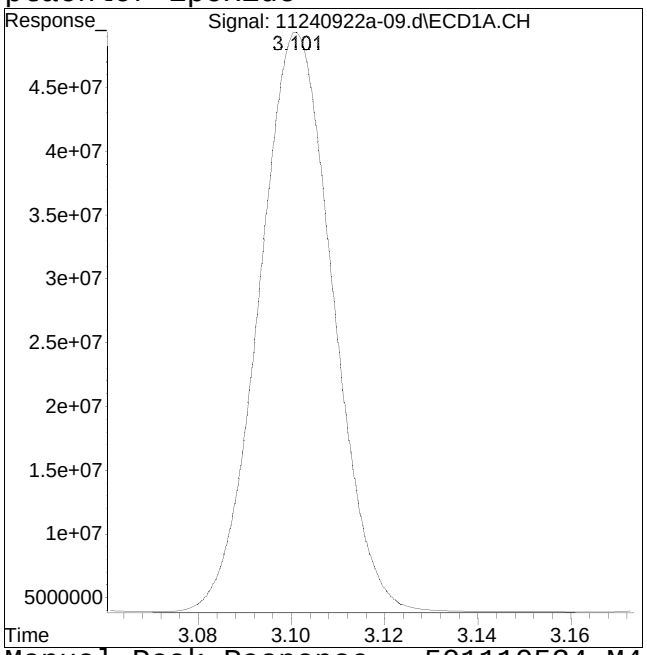
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #12: Heptachlor Epoxide




Original Peak Response = 529131721



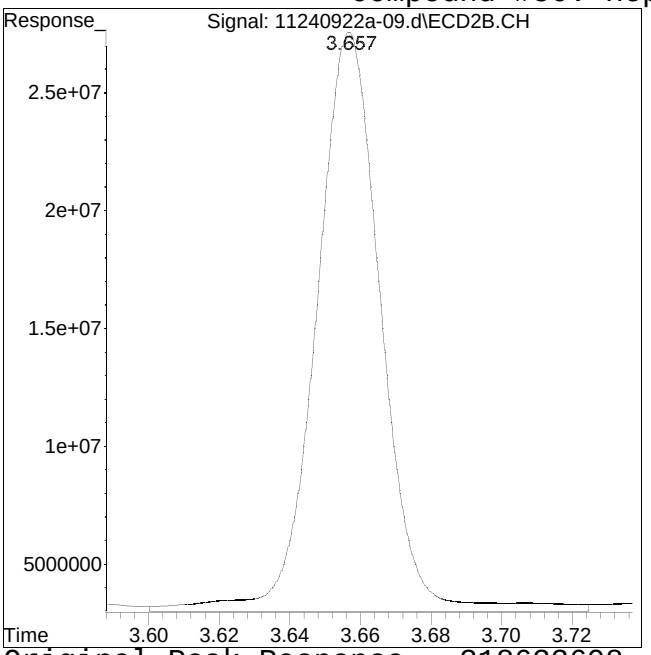

Manual Peak Response = 501110534 M4

M4 = Poor automated baseline construction.

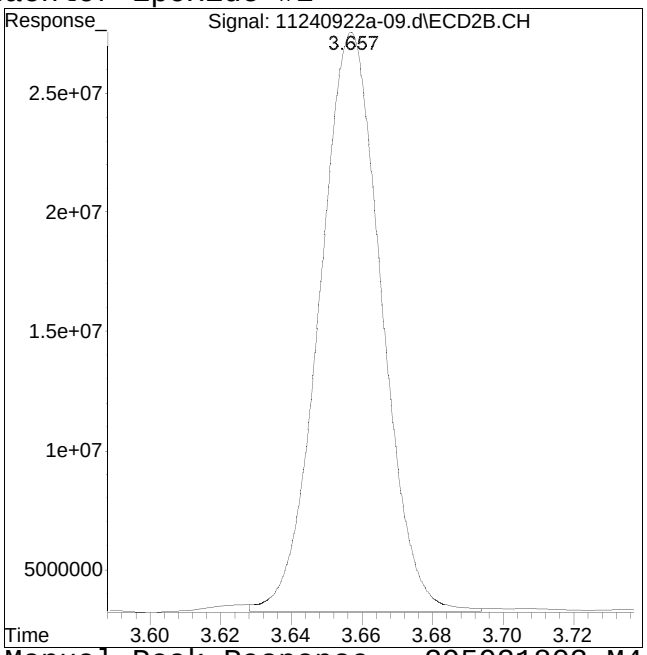
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #50: Heptachlor Epoxide #2




Original Peak Response = 318633698



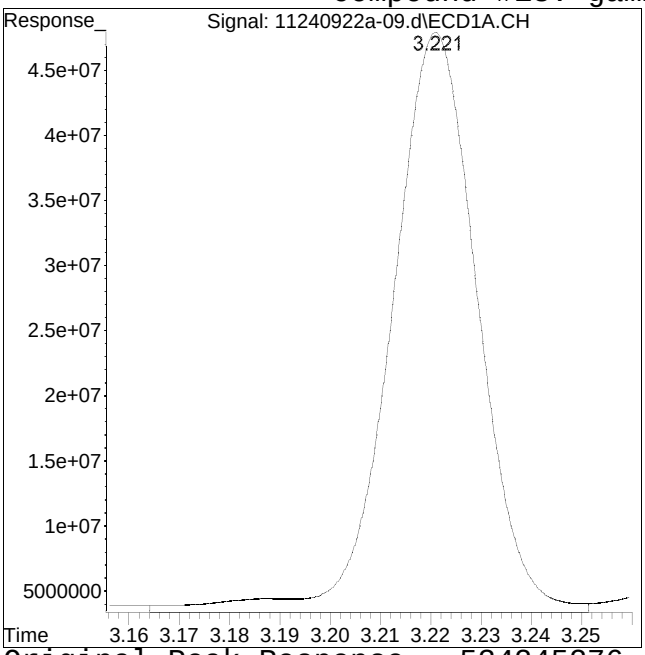

Manual Peak Response = 295921803 M4

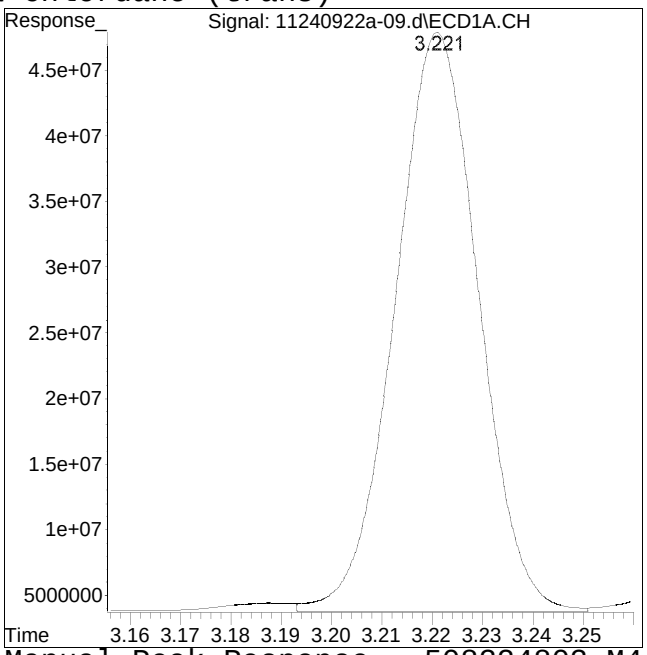
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #13: gamma-Chlordane (trans)



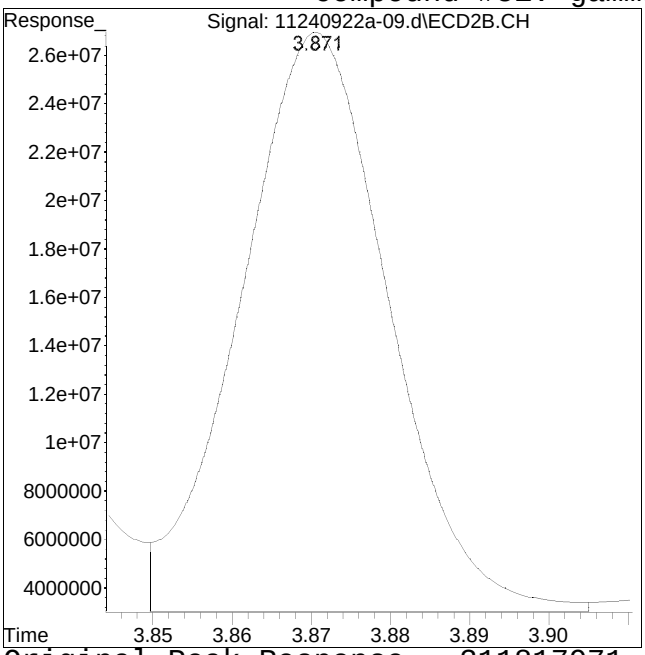



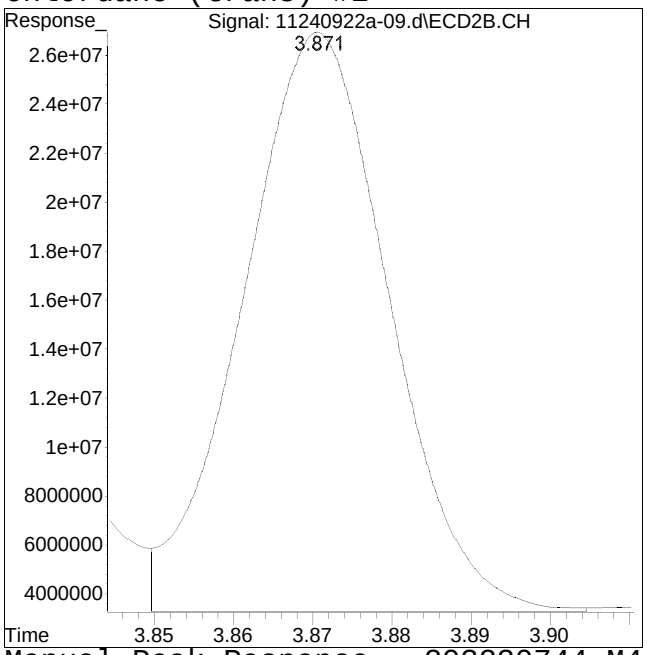

Original Peak Response = 534245276 Manual Peak Response = 508324803 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #51: gamma-Chlordane (trans) #2



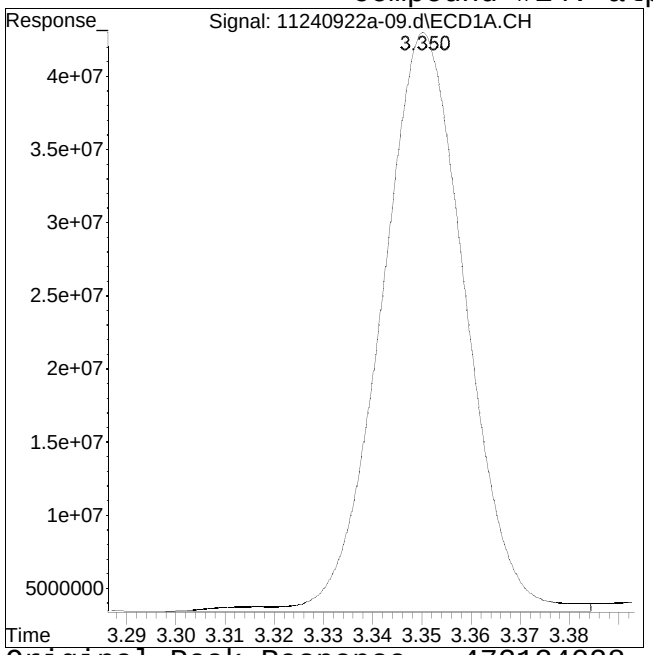




Original Peak Response = 311817971 Manual Peak Response = 303230744 M4
M4 = Poor automated baseline construction.

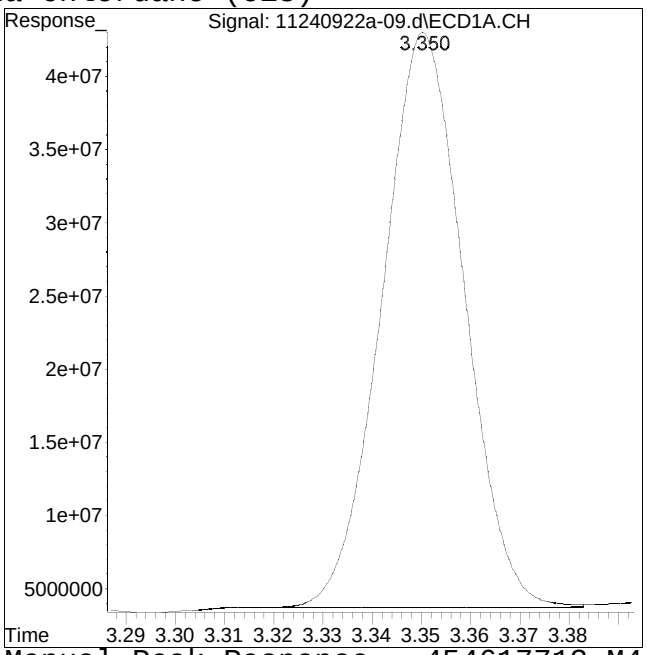
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #14: alpha-Chlordane (cis)




Original Peak Response = 472124028



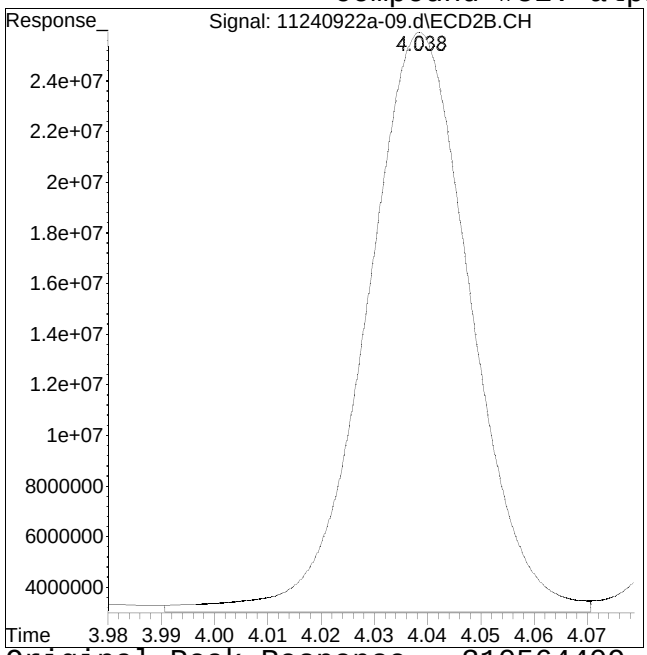

Manual Peak Response = 454617713 M4

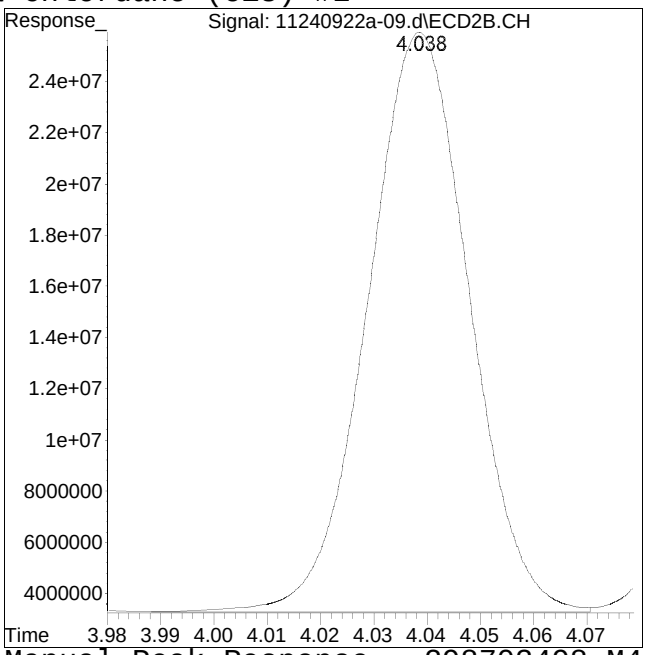
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #52: alpha-Chlordane (cis) #2



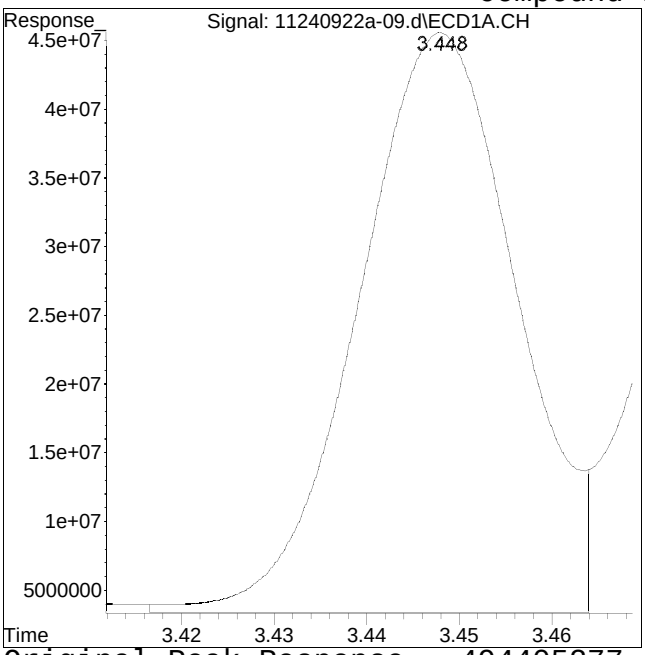



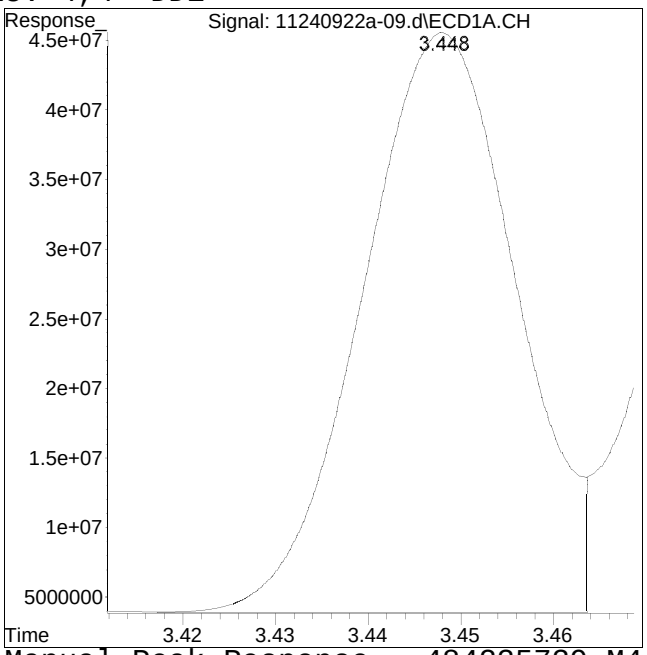

Original Peak Response = 310564409 Manual Peak Response = 298703498 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #15: 4,4'-DDE



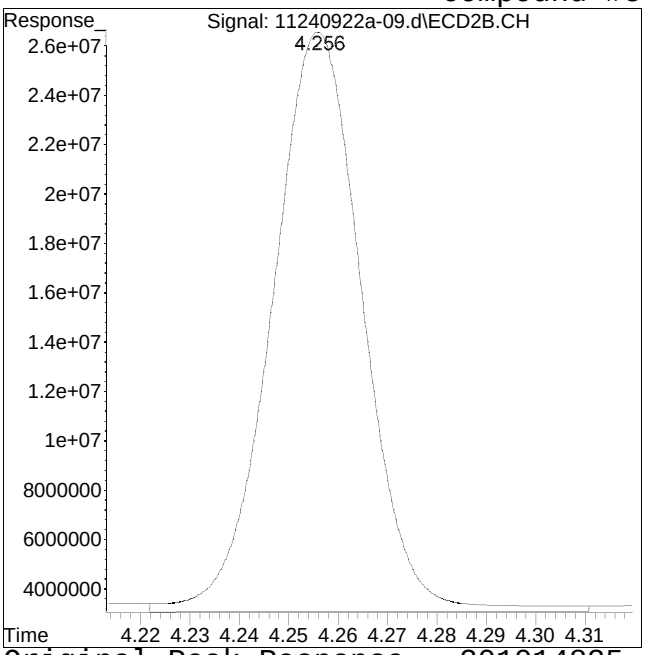



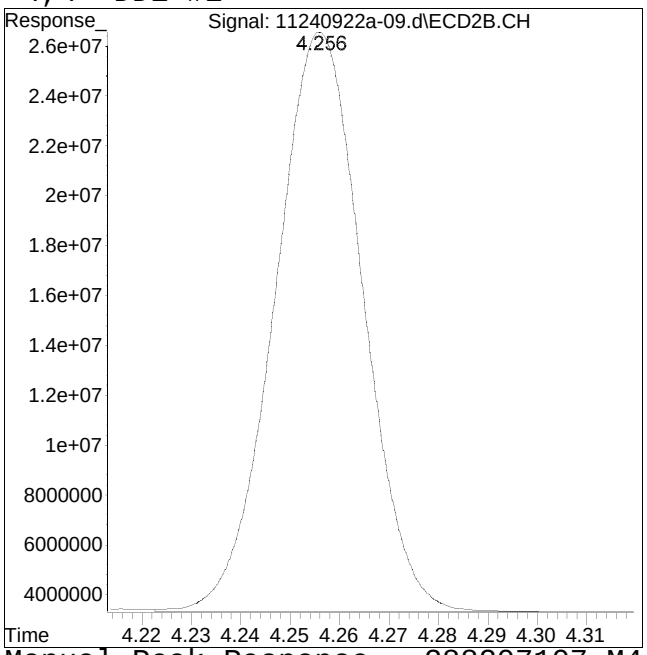

Original Peak Response = 494405277 Manual Peak Response = 484235739 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #53: 4,4'-DDE #2



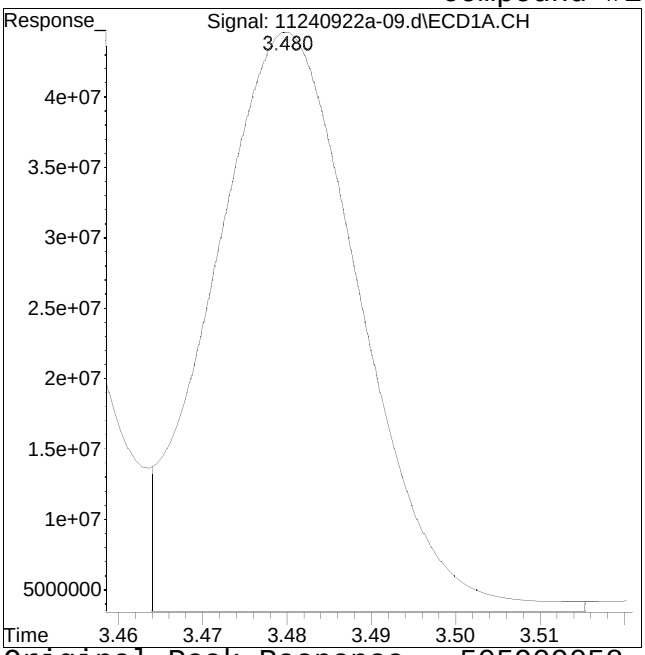




Original Peak Response = 301014835 Manual Peak Response = 288207107 M4
M4 = Poor automated baseline construction.

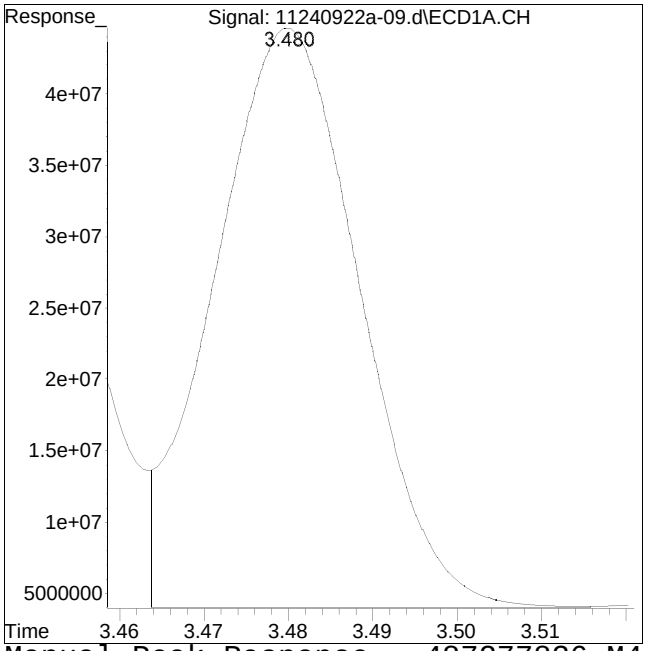
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #16: Endosulfan I




Original Peak Response = 505909058



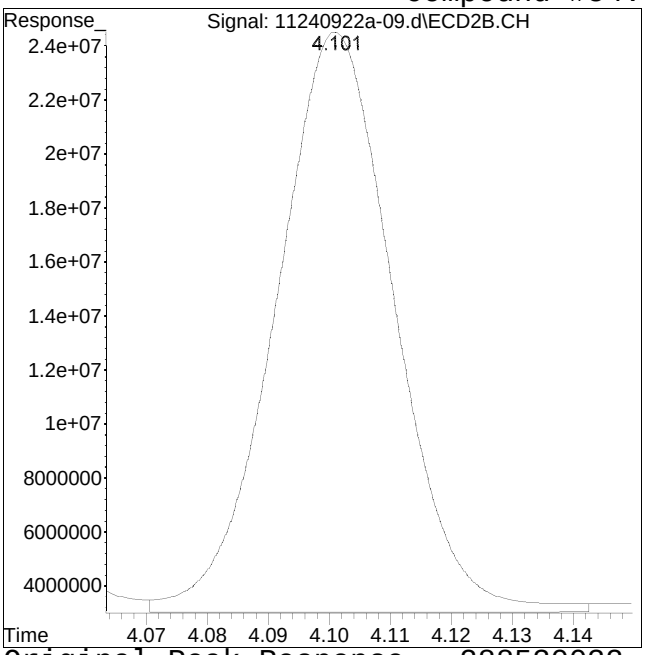

Manual Peak Response = 487277836 M4

M4 = Poor automated baseline construction.

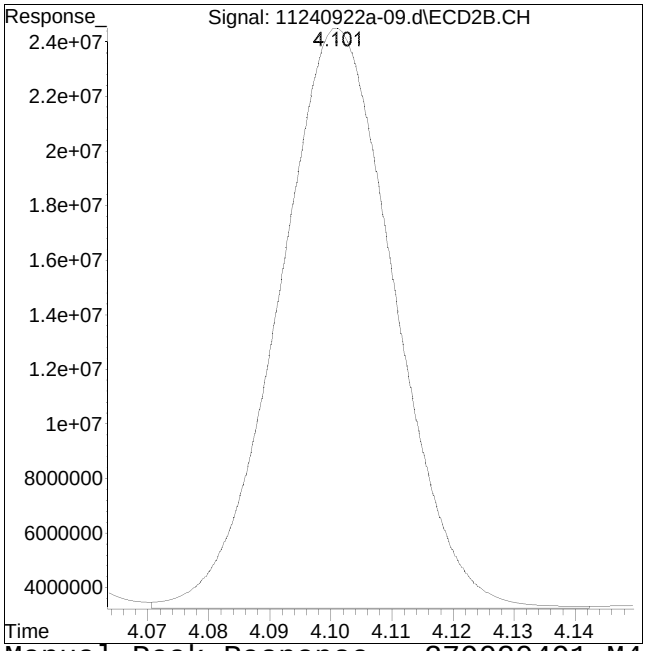
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #54: Endosulfan I #2




Original Peak Response = 288530032



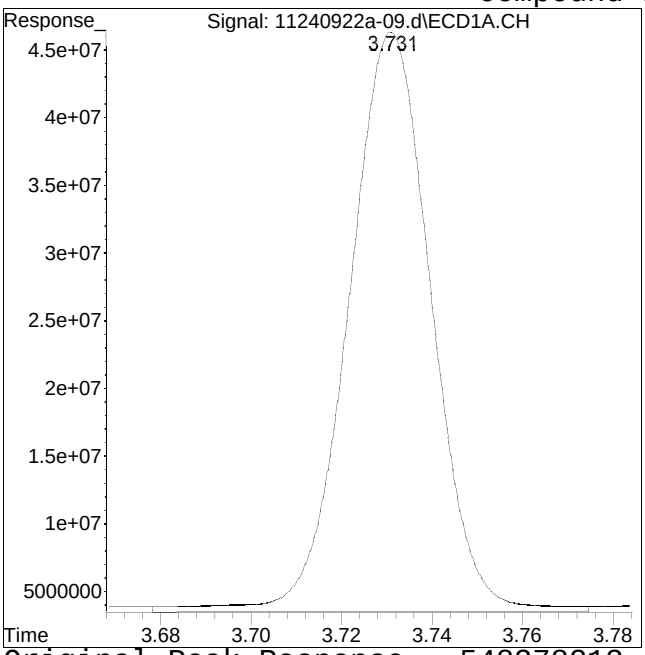

Manual Peak Response = 279020491 M4

M4 = Poor automated baseline construction.

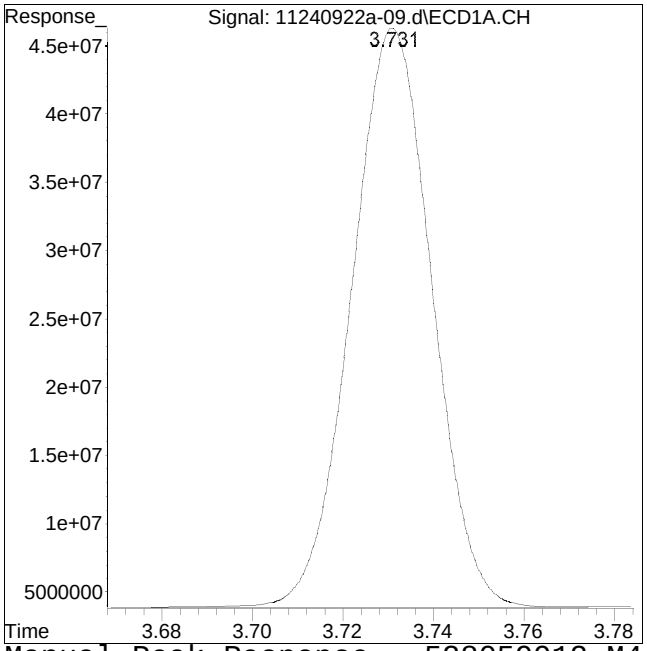
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #17: Dieldrin




Original Peak Response = 548378213



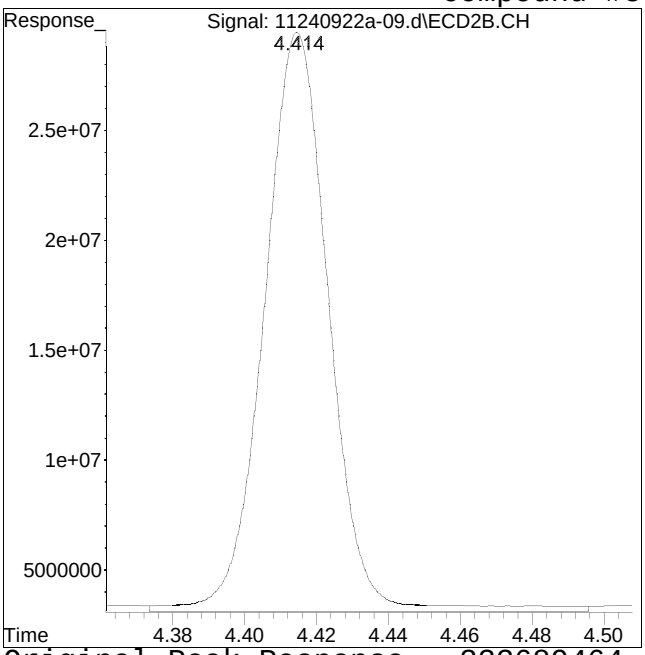

Manual Peak Response = 528059912 M4

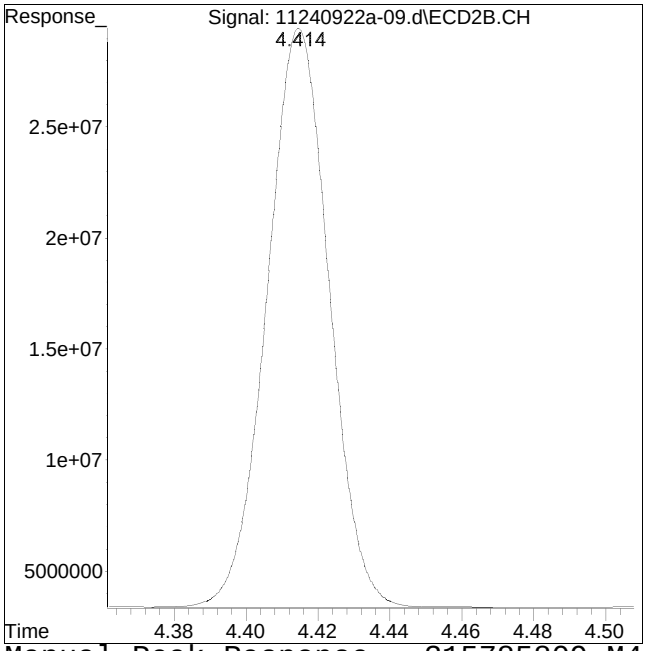
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #55: Dieldrin #2



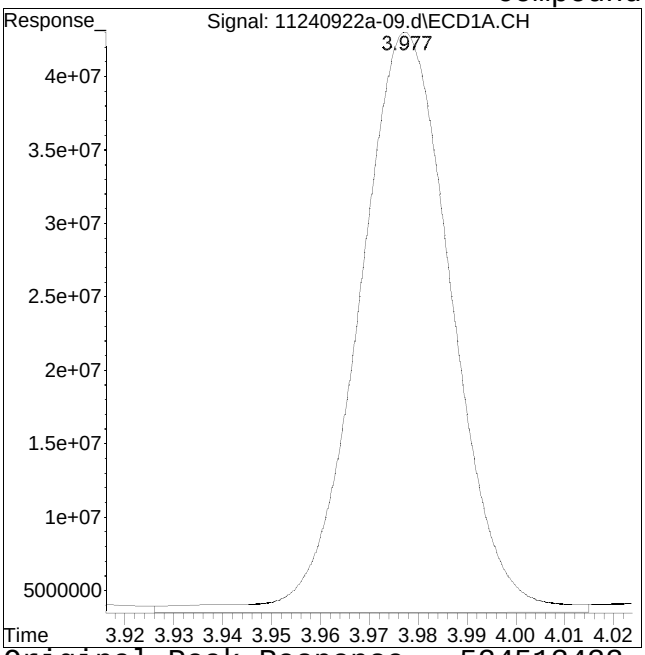




Original Peak Response = 333689464 Manual Peak Response = 315785809 M4
M4 = Poor automated baseline construction.

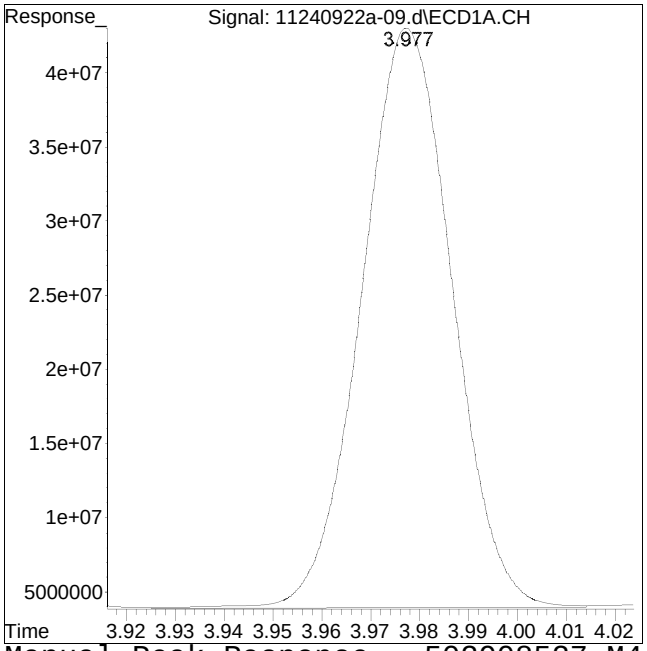
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #18: Endrin




Original Peak Response = 524513433



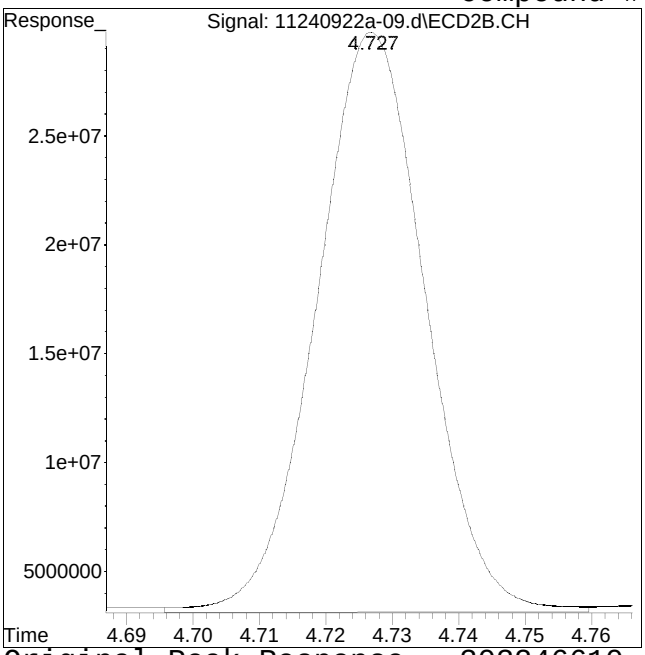

Manual Peak Response = 502908527 M4

M4 = Poor automated baseline construction.

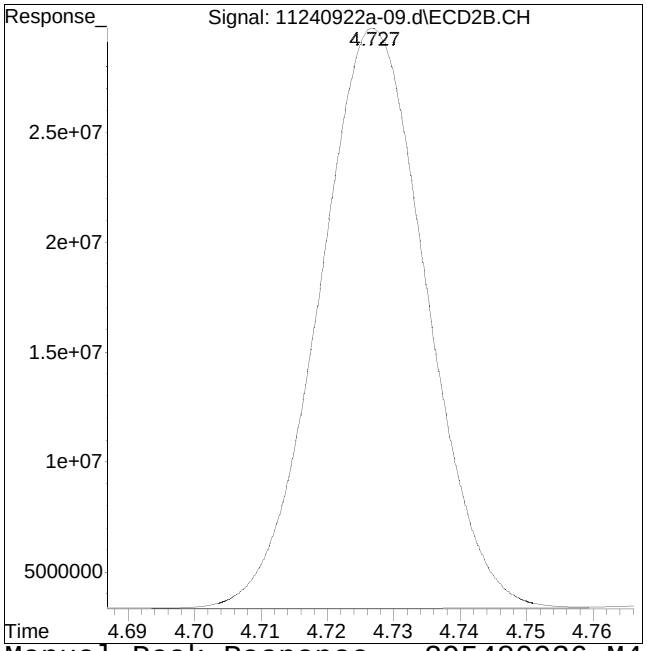
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #56: Endrin #2




Original Peak Response = 303246610



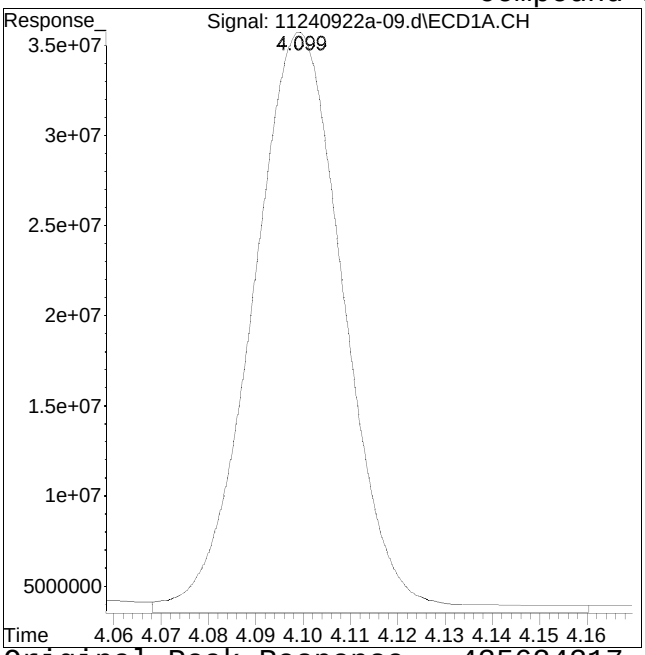

Manual Peak Response = 295480936 M4

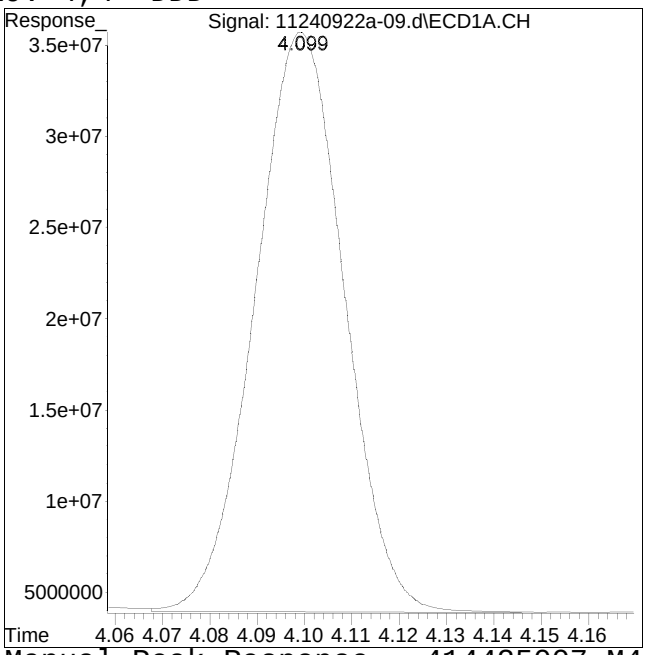
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #19: 4,4'-DDD



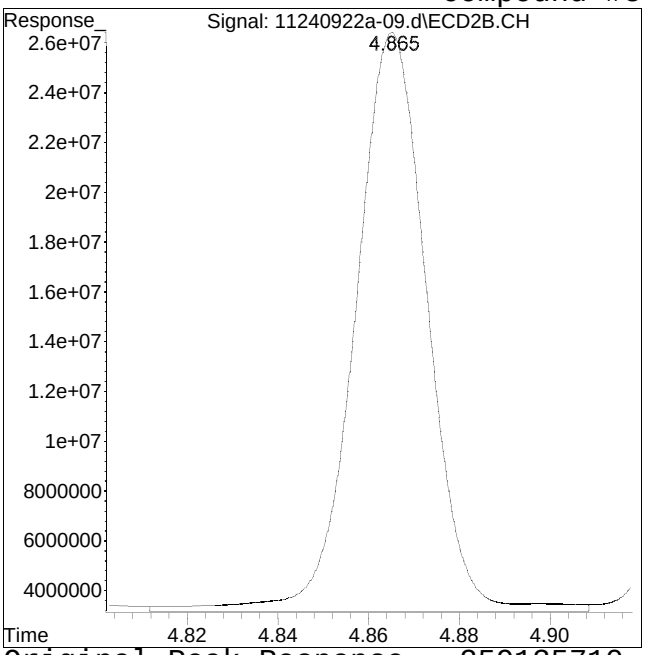




Original Peak Response = 435624317 Manual Peak Response = 414425007 M4
M4 = Poor automated baseline construction.

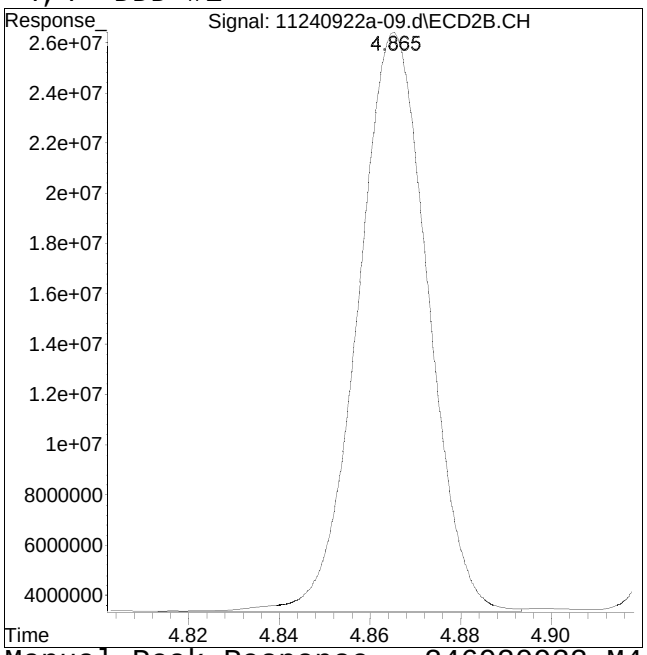
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #57: 4,4'-DDD #2




Original Peak Response = 259135710



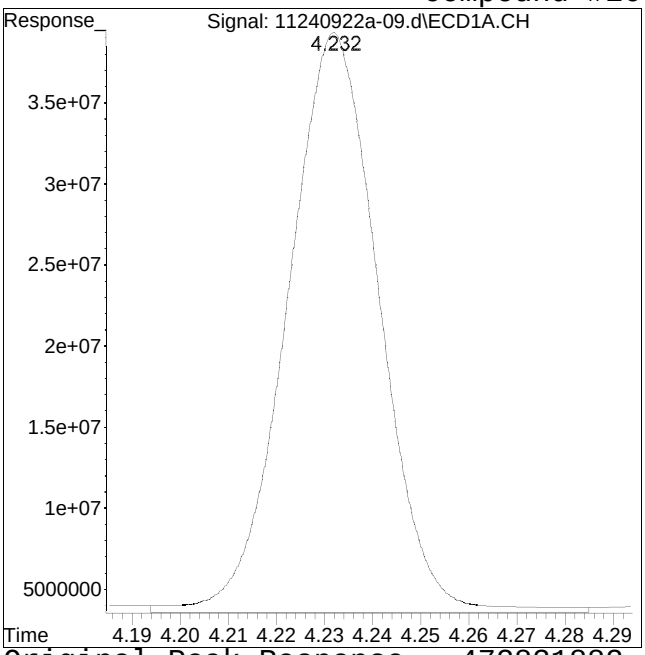

Manual Peak Response = 246920922 M4

M4 = Poor automated baseline construction.

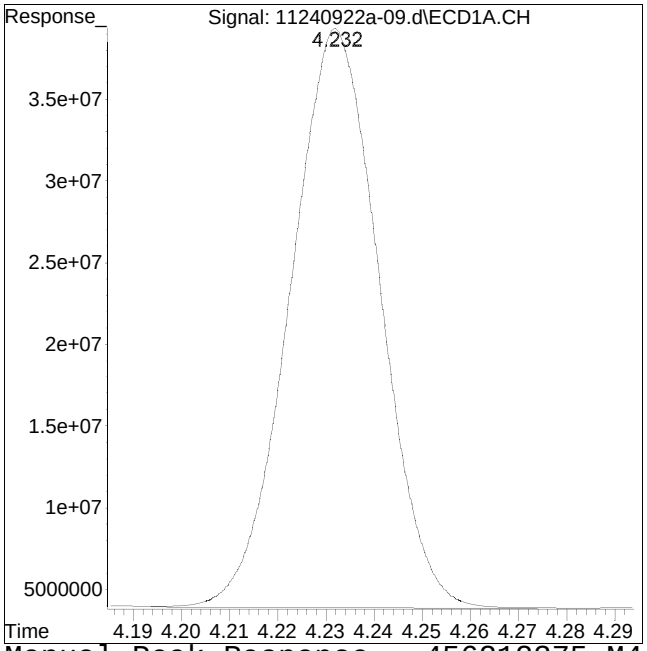
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #20: Endosulfan II




Original Peak Response = 472831882



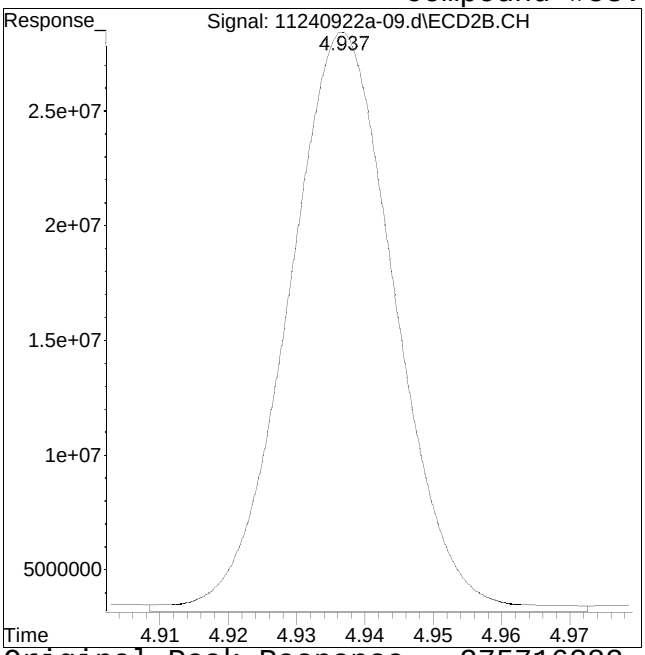

Manual Peak Response = 456212375 M4

M4 = Poor automated baseline construction.

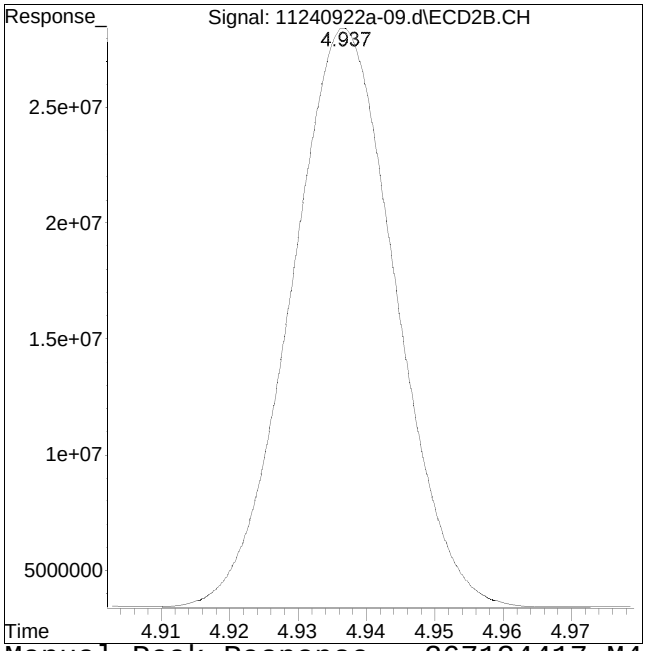
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #58: Endosulfan II #2




Original Peak Response = 275716283

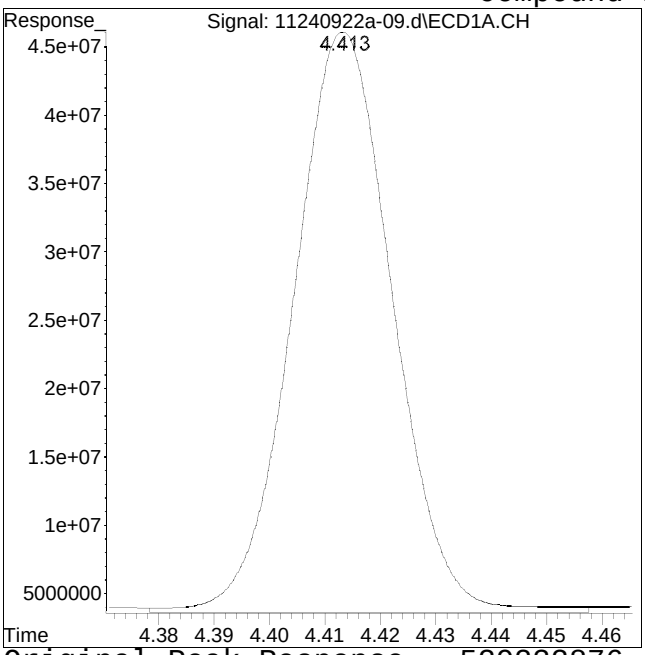


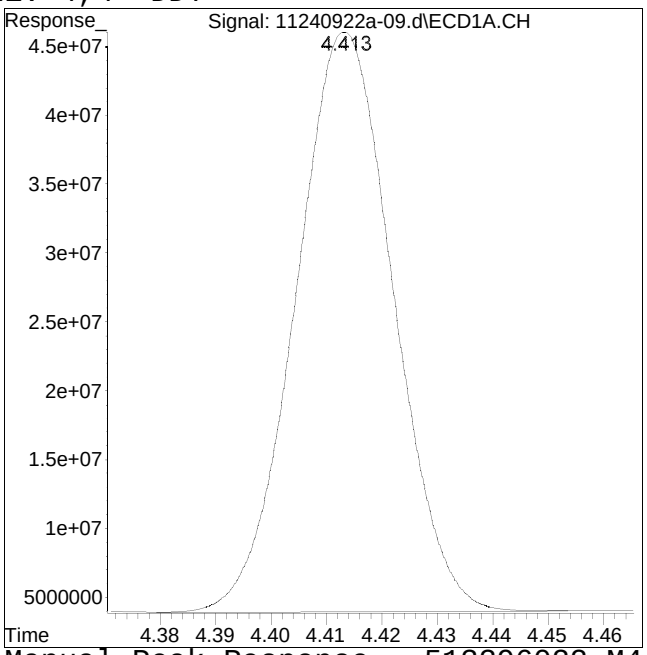

Manual Peak Response = 267134417 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT



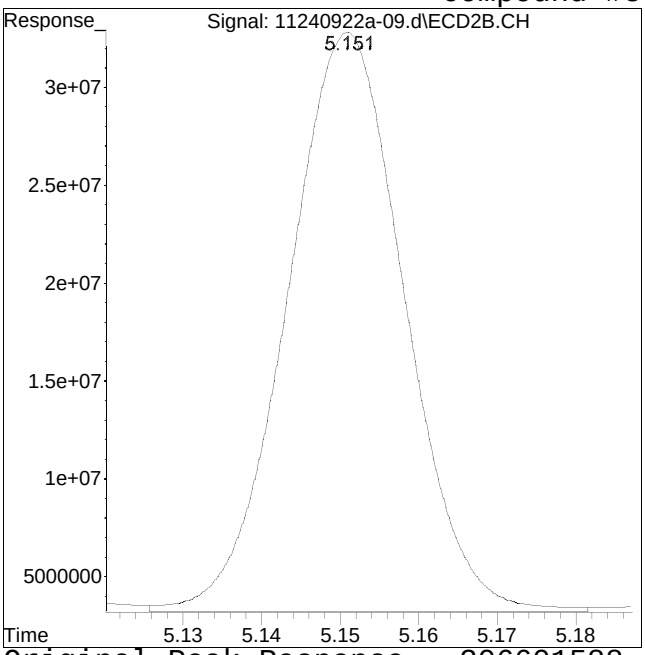



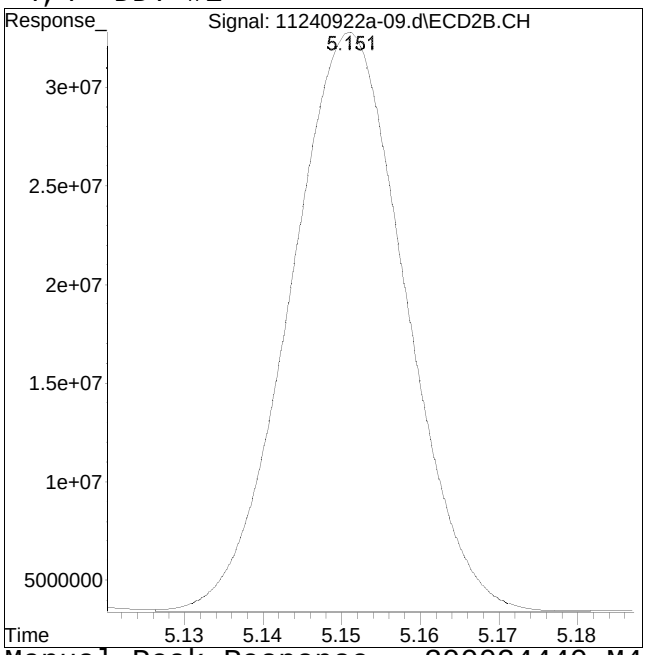

Original Peak Response = 529232876 Manual Peak Response = 513396022 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #59: 4,4'-DDT #2



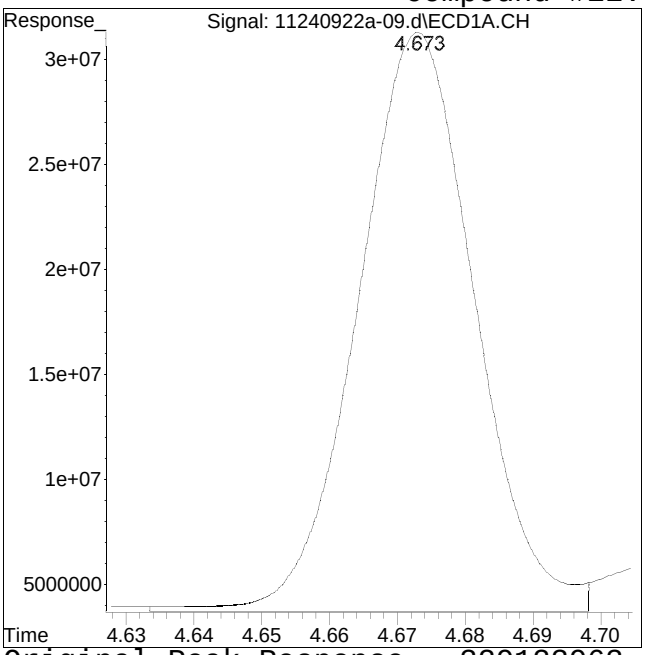




Original Peak Response = 306601588 Manual Peak Response = 300024440 M4
M4 = Poor automated baseline construction.

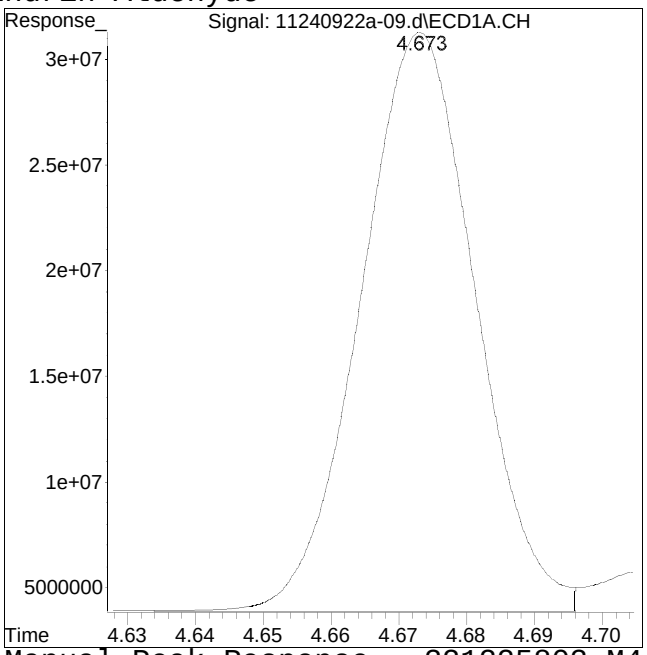
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #22: Endrin Aldehyde




Original Peak Response = 329123963



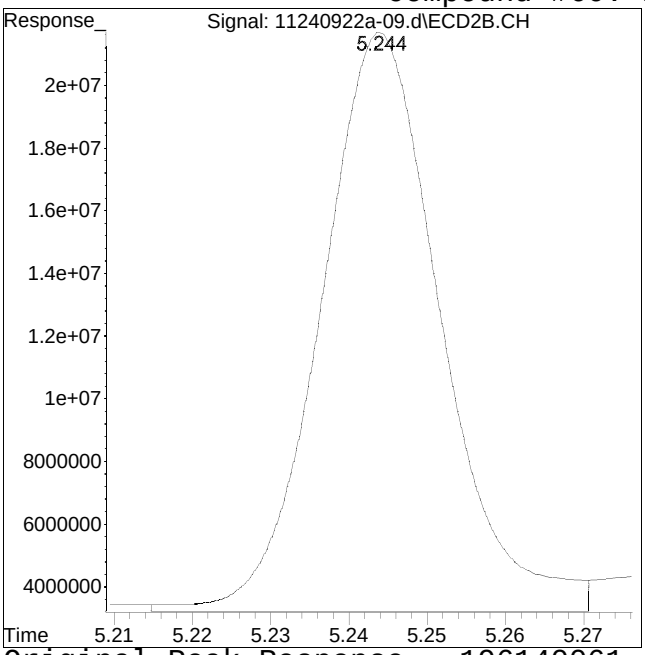

Manual Peak Response = 321225803 M4

M4 = Poor automated baseline construction.

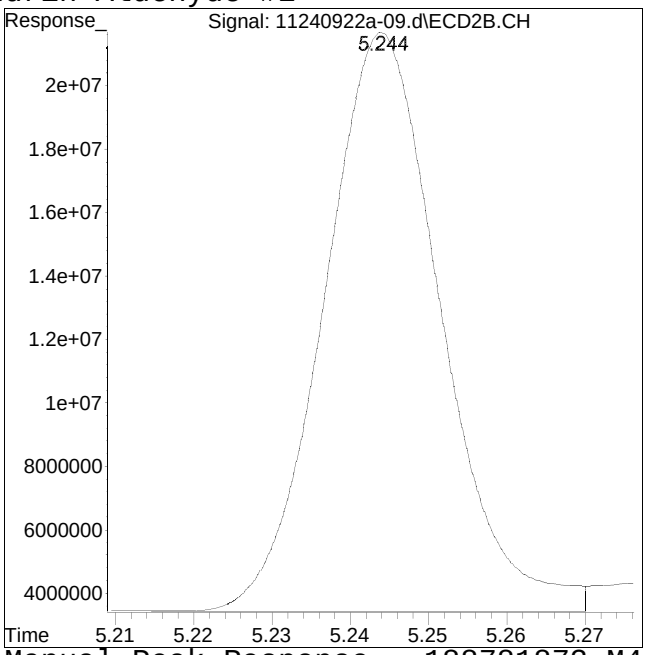
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #60: Endrin Aldehyde #2




Original Peak Response = 196140061



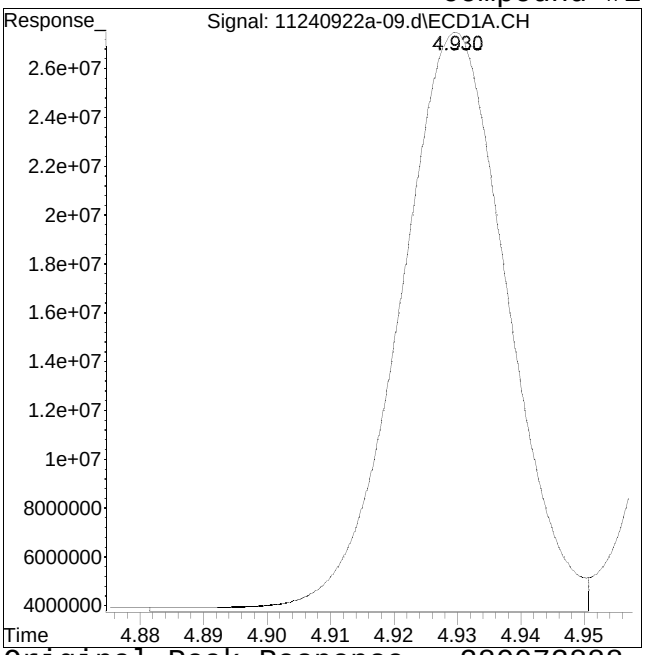

Manual Peak Response = 188781873 M4

M4 = Poor automated baseline construction.

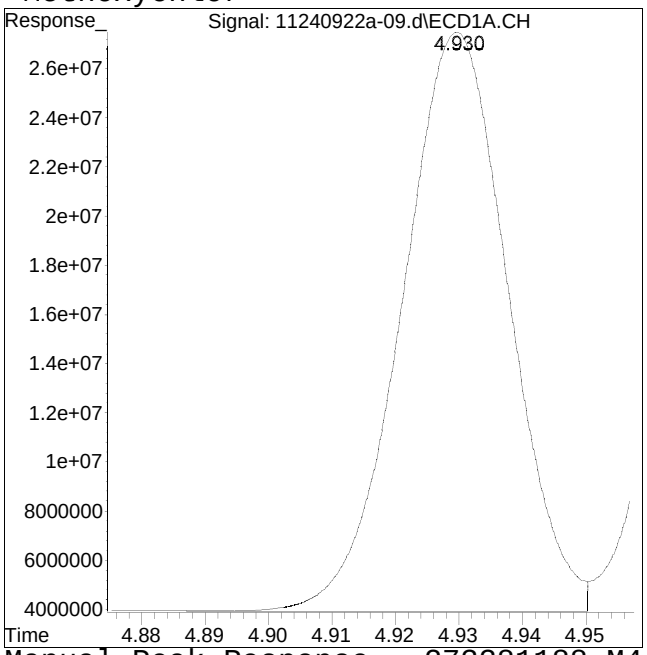
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

## Compound #23: Methoxychlor




Original Peak Response = 280073888



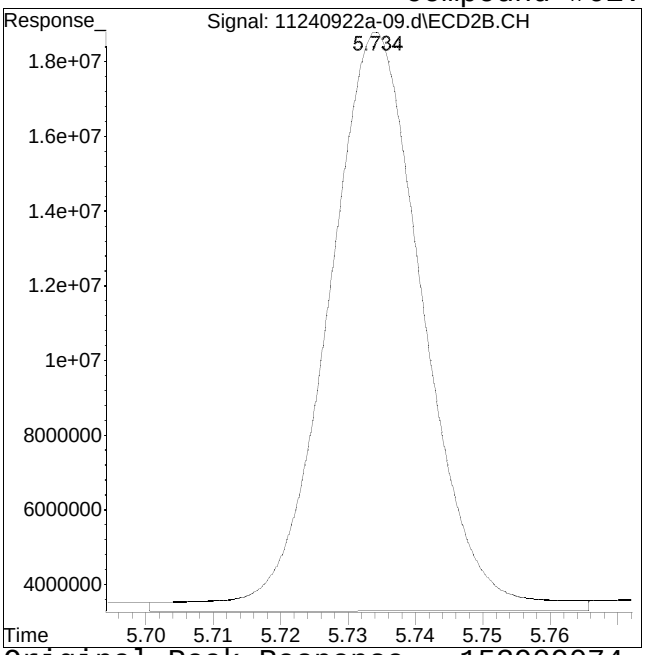

Manual Peak Response = 273381188 M4

M4 = Poor automated baseline construction.

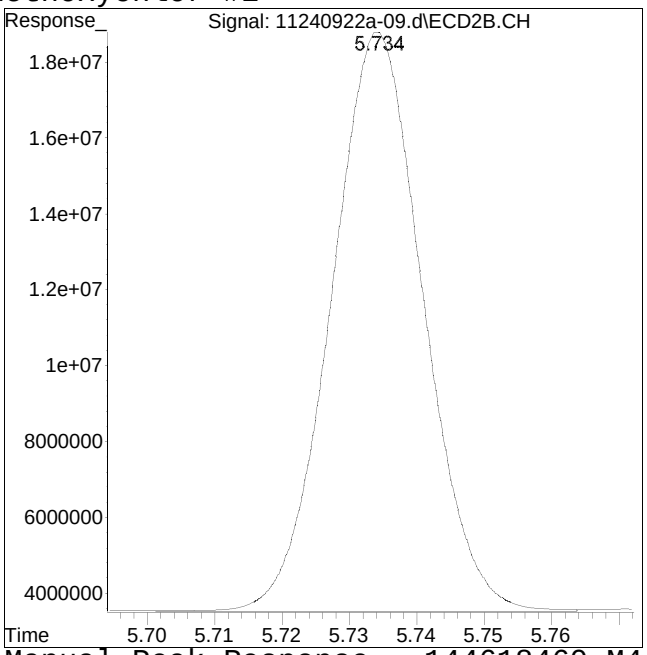
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #61: Methoxychlor #2




Original Peak Response = 153909074



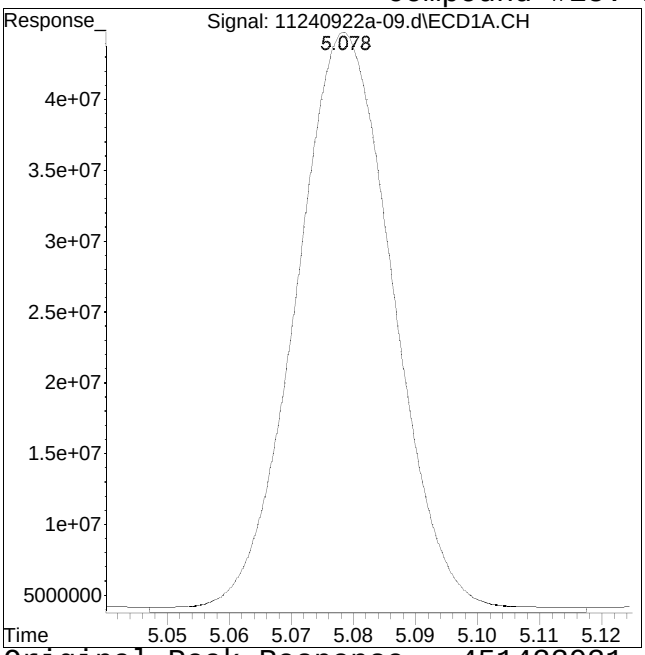

Manual Peak Response = 144618460 M4

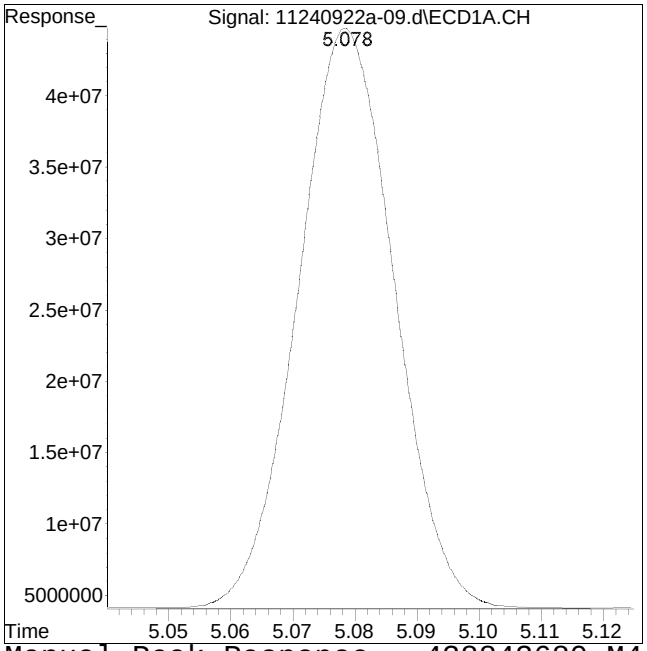
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #25: Endosulfan Sulfate



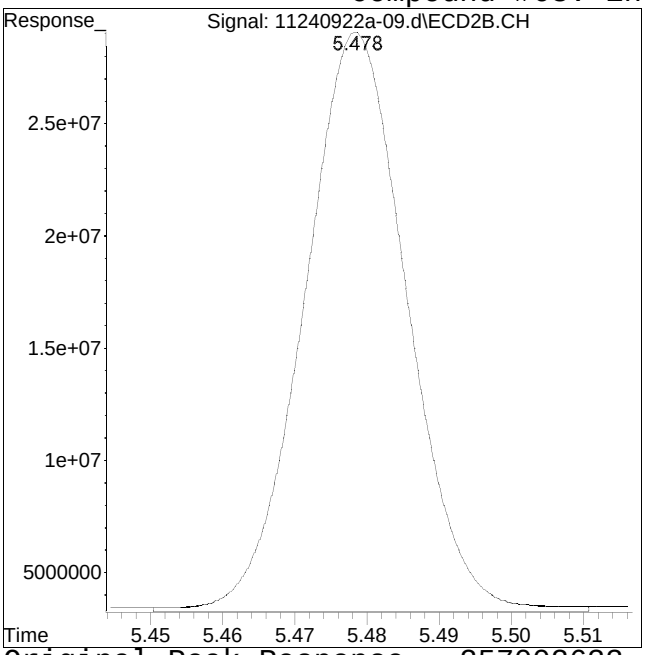



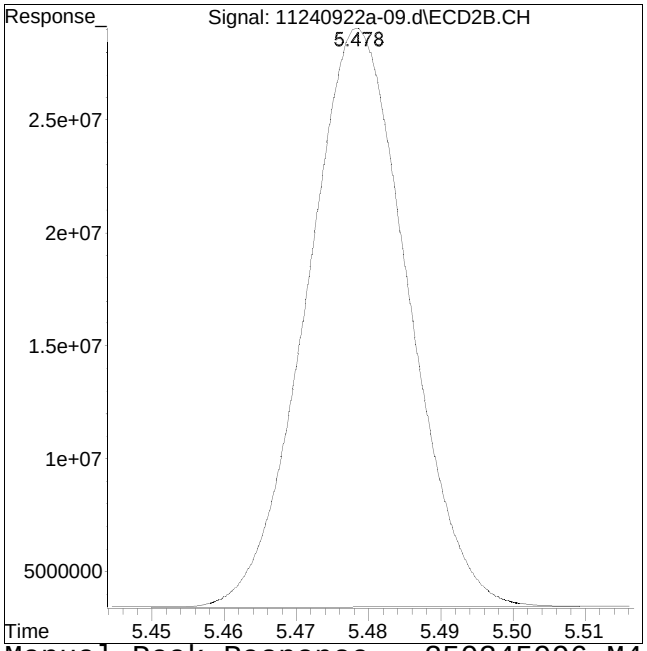

Original Peak Response = 451433931 Manual Peak Response = 438843680 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #63: Endosulfan Sulfate #2



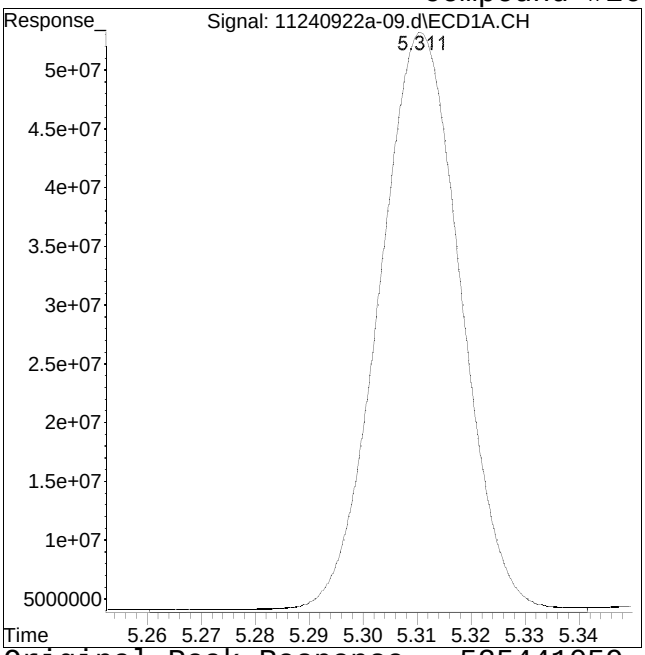



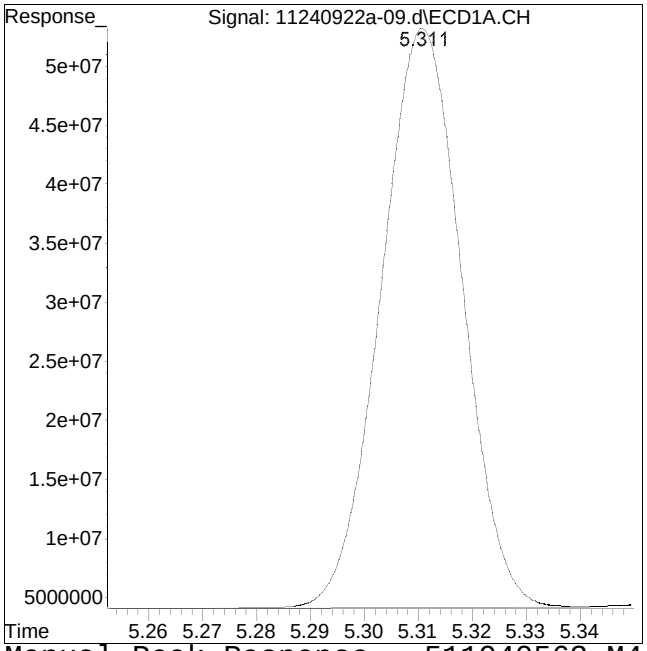

Original Peak Response = 257002633 Manual Peak Response = 250345996 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #26: Endrin Ketone



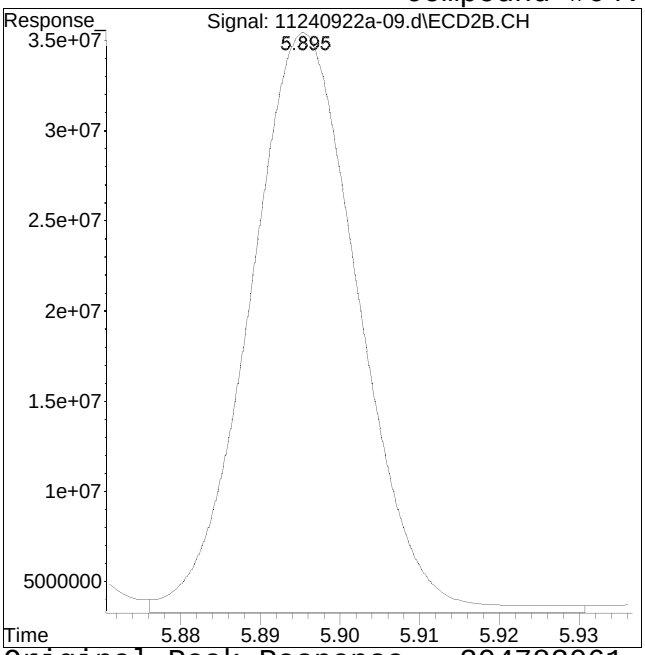




Original Peak Response = 525441059 Manual Peak Response = 511940563 M4
M4 = Poor automated baseline construction.

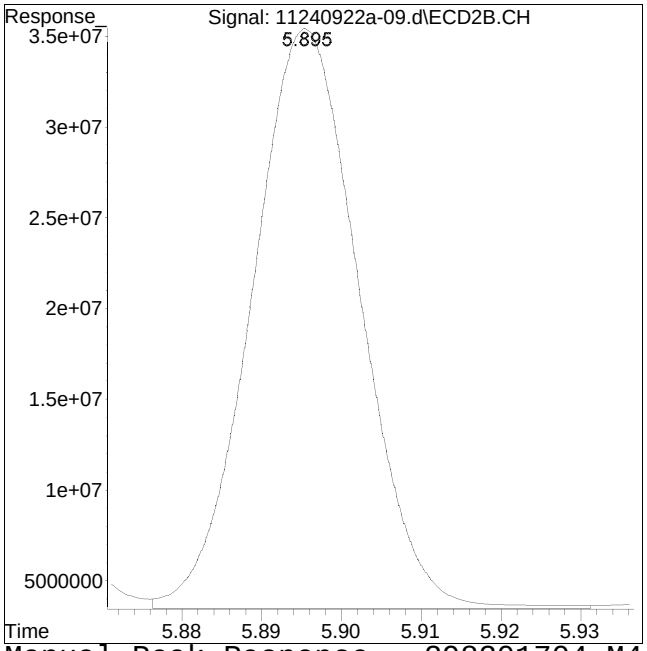
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #64: Endrin Ketone #2




Original Peak Response = 304783061



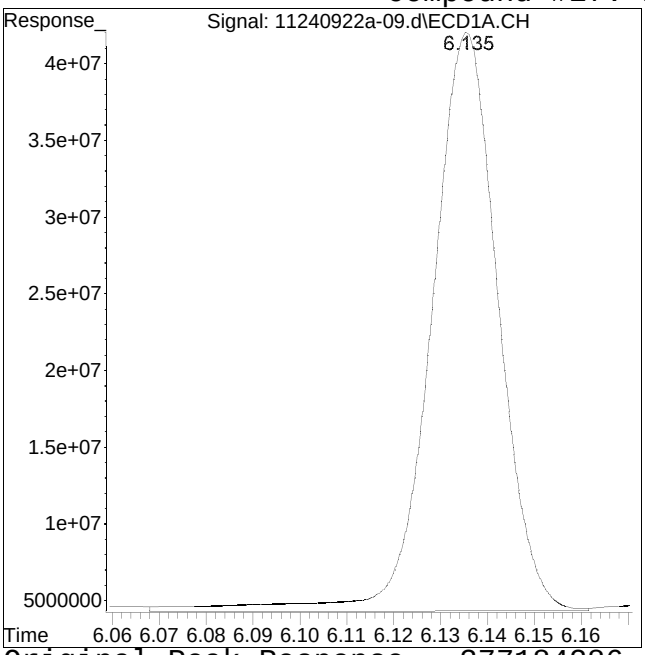

Manual Peak Response = 298301704 M4

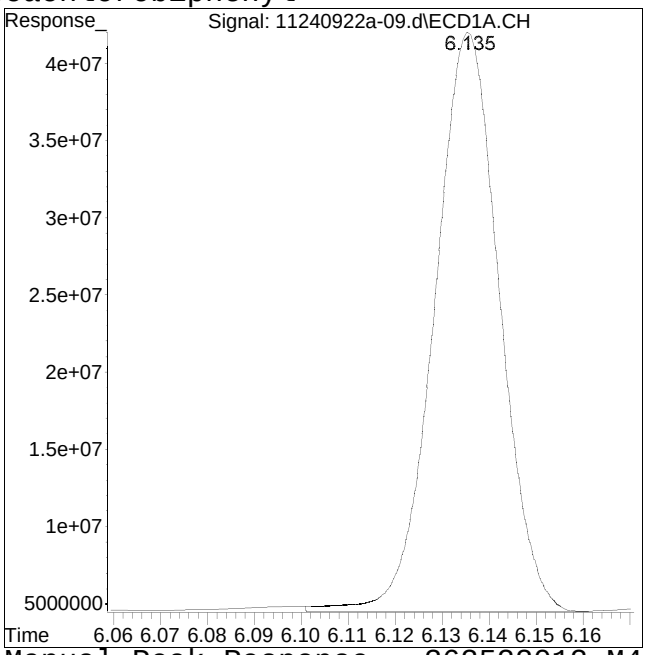
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



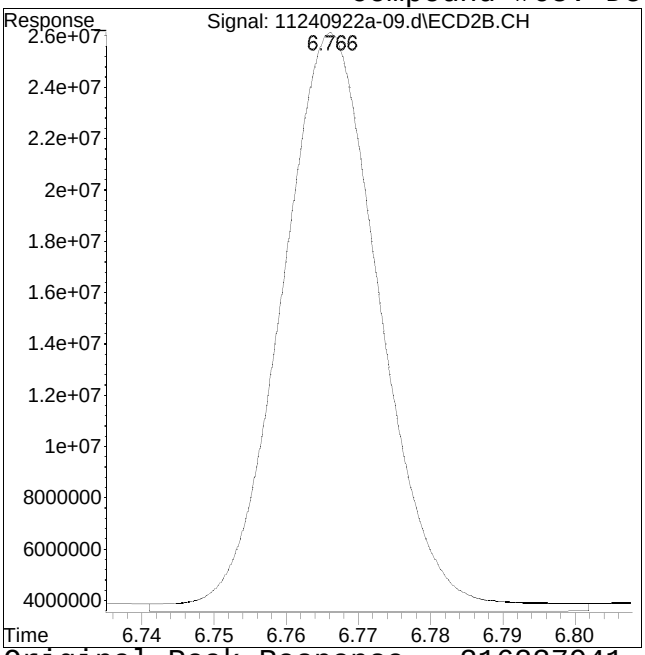




Original Peak Response = 377184286 Manual Peak Response = 362522012 M4
M4 = Poor automated baseline construction.

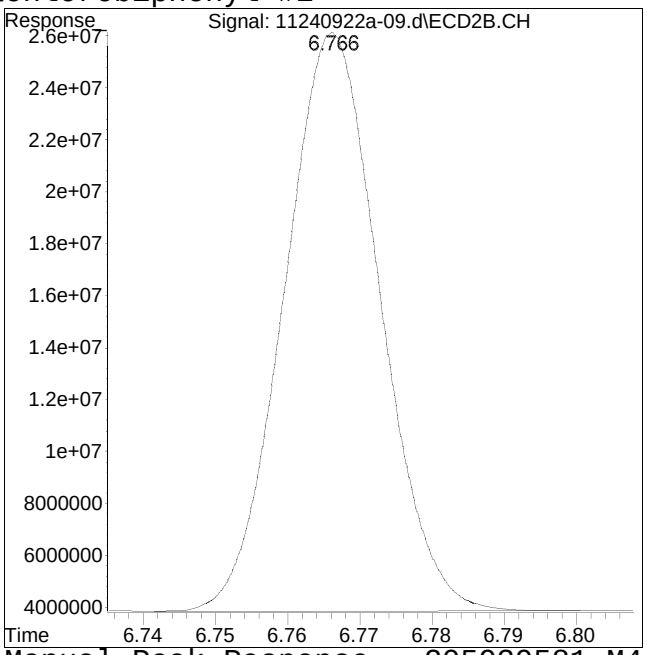
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-09.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 10:57 Instrument : Pest 11
Sample : WG1974576-3,42,, Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 216237941




Manual Peak Response = 205939581 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:08
Operator : PEST11:emr
Sample : WG1974576-4,42,, ms
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:29 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| | Compound | | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 1.202 | 1.275 | 346.0E6 | 207.4E6 | 25.000M4 | 25.000M4 |
| | Standard Area 1 : #1 = 280061320 | | | | | Recovery = 123.54% | | |
| | Standard Area 1 : #2 = 198070219 | | | | | Recovery = 104.73% | | |
| System Monitoring Compounds | | | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 1.531 | 1.724 | 417.0E6 | 248.0E6 | 29.001M4 | 26.833M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 58.00% | 53.67% |
| 27) | s | Decachlorobi | 6.136 | 6.767 | 403.4E6 | 211.3E6 | 25.061M4 | 24.025M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 50.12% | 48.05% |
| Target Compounds | | | | | | | | |
| 4) | t | alpha-BHC | 1.827 | 2.116 | 637.3E6 | 377.5E6 | 31.529M4 | 28.092M4 |
| 5) | t | gamma-BHC (l | 2.018 | 2.386 | 598.9E6 | 342.6E6 | 31.013M4 | 26.827M4 |
| 6) | t | beta-BHC | 2.073 | 2.451 | 265.3E6 | 151.0E6 | 30.538M4 | 28.593M4 |
| 7) | t | delta-BHC | 2.194 | 2.704 | 551.6E6 | 299.4E6 | 29.009M4 | 23.692M4 |
| 8) | t | Heptachlor | 2.349 | 2.762 | 595.4E6 | 323.9E6 | 32.571M4 | 24.434M4 |
| 9) | t | Aldrin | 2.580 | 3.066 | 517.8E6 | 299.1E6 | 30.339M4 | 25.125M4 |
| 12) | t | Heptachlor E | 3.102 | 3.658 | 510.5E6 | 287.4E6 | 31.115M4 | 24.302M4 |
| 13) | t | gamma-Chlord | 3.222 | 3.872 | 520.9E6 | 293.5E6 | 34.949M4 | 26.970M4 |
| 14) | t | alpha-Chlord | 3.351 | 4.040 | 494.0E6 | 290.4E6 | 29.348M4 | 24.202M4 |
| 15) | t | 4,4'-DDE | 3.449 | 4.257 | 507.8E6 | 282.2E6 | 30.790M4 | 25.327M4 |
| 16) | t | Endosulfan I | 3.481 | 4.102 | 480.6E6 | 269.8E6 | 31.113M4 | 24.414M4 |
| 17) | t | Dieldrin | 3.732 | 4.416 | 537.6E6 | 304.8E6 | 34.223M4 | 27.677M4 |
| 18) | t | Endrin | 3.979 | 4.729 | 515.8E6 | 288.9E6 | 32.331M4 | 25.851 |
| 19) | t | 4,4'-DDD | 4.100 | 4.867 | 427.5E6 | 235.5E6 | 33.307M4 | 26.186 |
| 20) | t | Endosulfan I | 4.233 | 4.939 | 465.3E6 | 258.1E6 | 31.958M4 | 25.634 |
| 21) | t | 4,4'-DDT | 4.415 | 5.153 | 466.4E6 | 258.8E6 | 31.840M4 | 24.950 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:08
Operator : PEST11:emr
Sample : WG1974576-4,42,, ms
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:29 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 22) t Endrin Aldeh | 4.674 | 5.245 | 316.2E6 | 181.5E6 | 25.776M4 | 23.216M4 |
| 23) t Methoxychlor | 4.931 | 5.735 | 278.4E6 | 143.5E6 | 33.991 | 24.549M4 |
| 25) t Endosulfan S | 5.079 | 5.480 | 446.5E6 | 241.4E6 | 31.957M4 | 24.258 |
| 26) t Endrin Keton | 5.311 | 5.897 | 524.8E6 | 290.9E6 | 32.046M4 | 27.805 |
| Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average chlordane-1 | | | | | 0.000 | 0.000 |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |

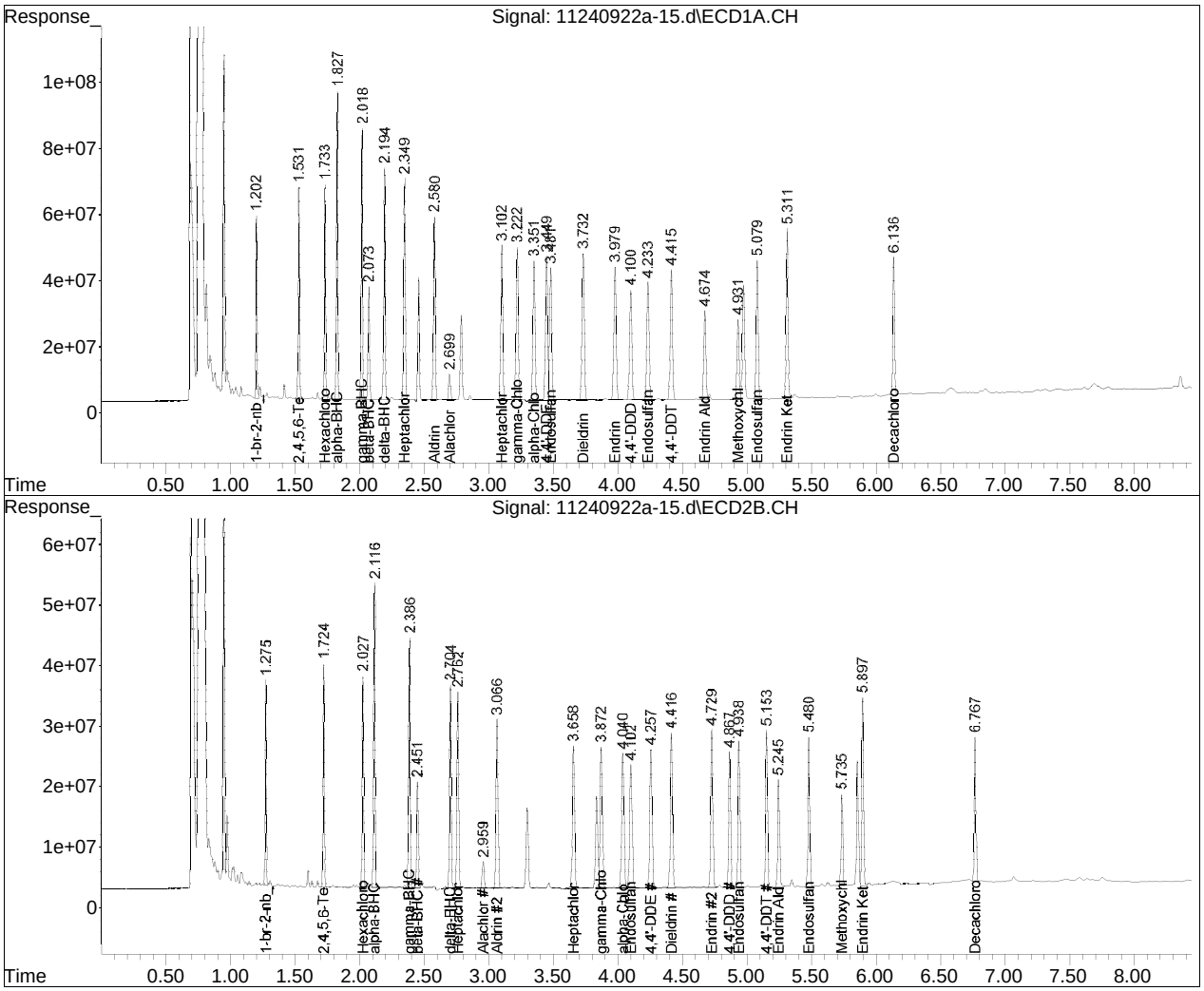
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only1\2024\240922a\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-15.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  12:08
Operator : PEST11:emr
Sample : WG1974576-4,42,, ms
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 15 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:29 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

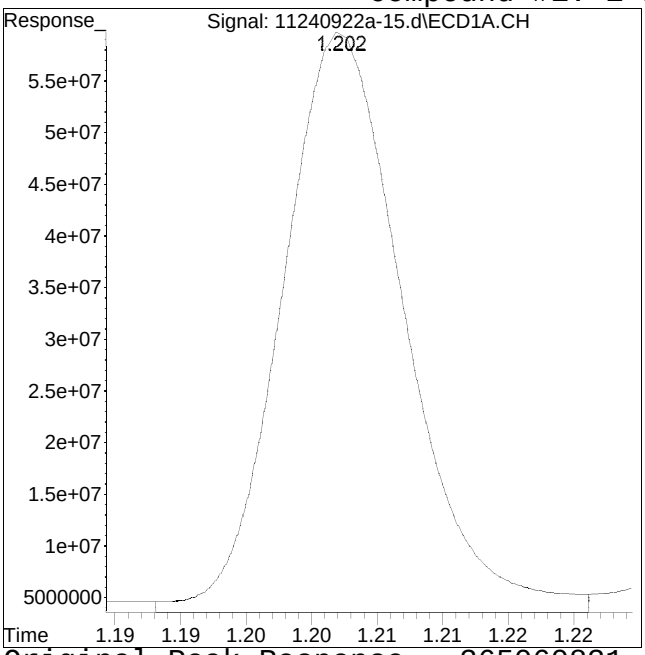
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :

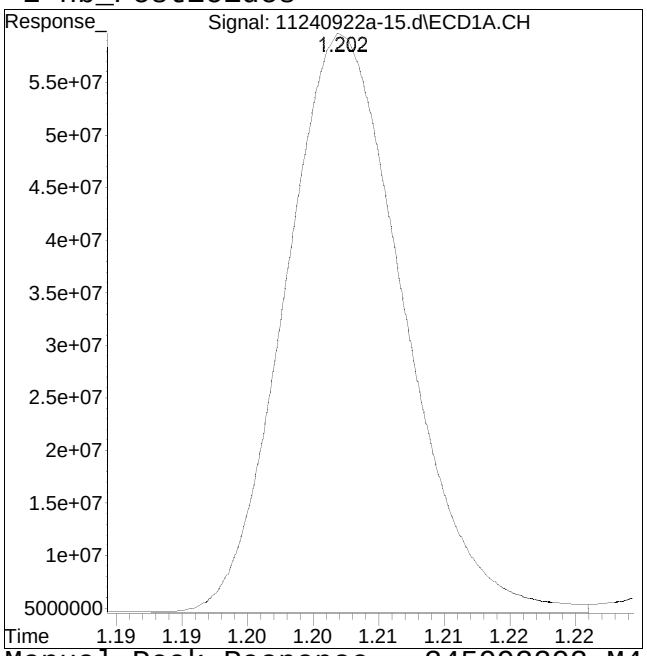


Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #1: 1-br-2-nb_Pesticides



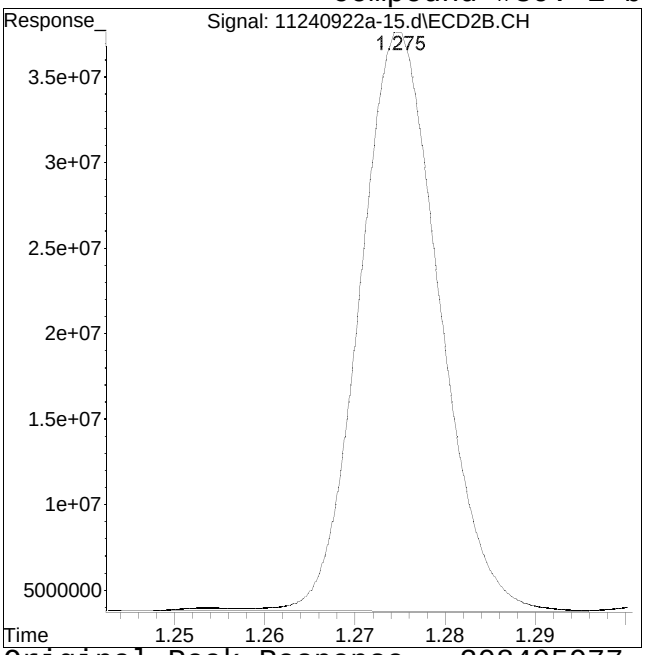



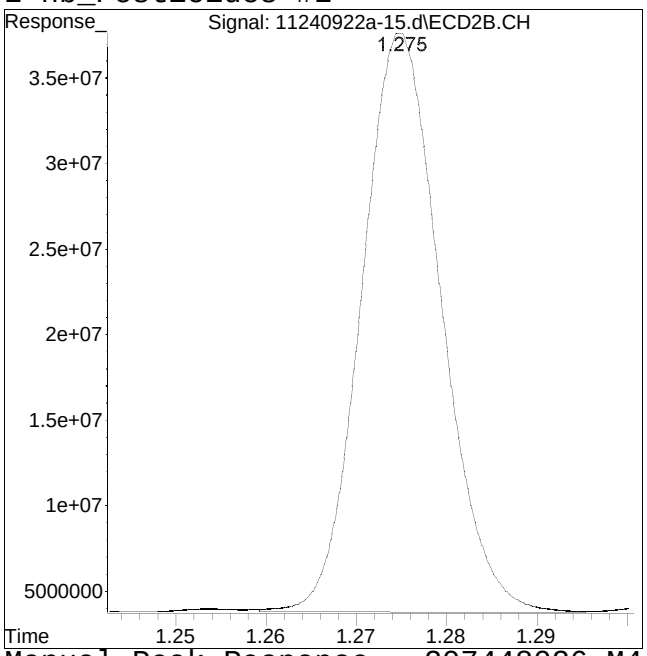

Original Peak Response = 365060831 Manual Peak Response = 345993292 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #39: 1-br-2-nb_Pesticides #2



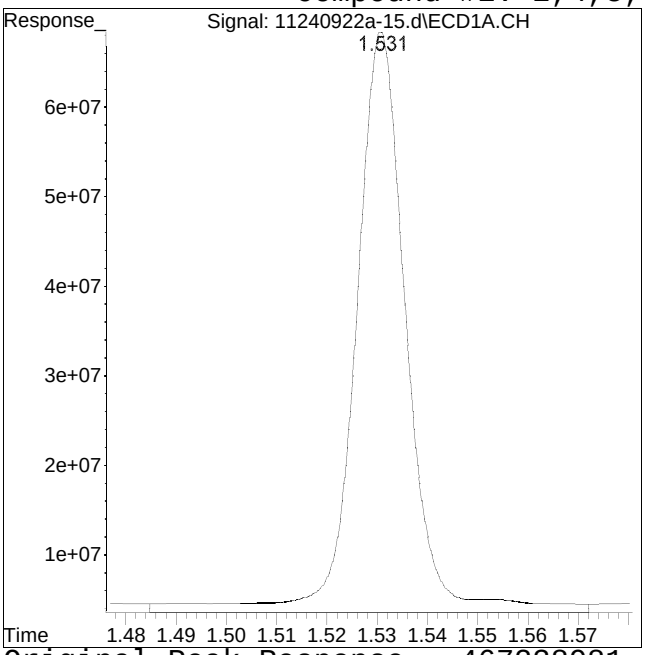



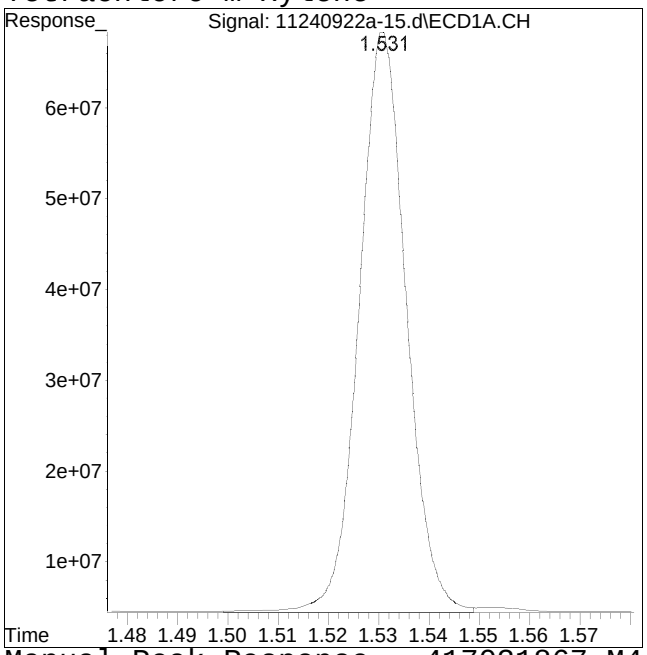

Original Peak Response = 208495977 Manual Peak Response = 207448026 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



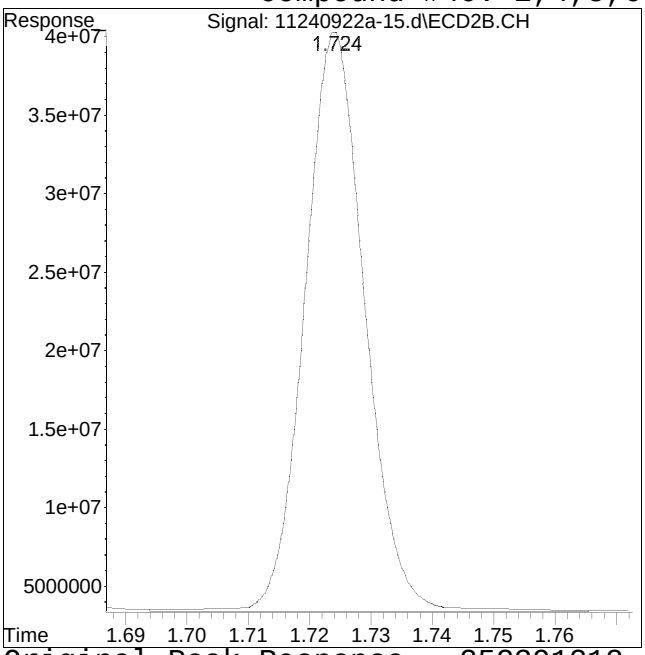




Original Peak Response = 467238981 Manual Peak Response = 417031867 M4
M4 = Poor automated baseline construction.

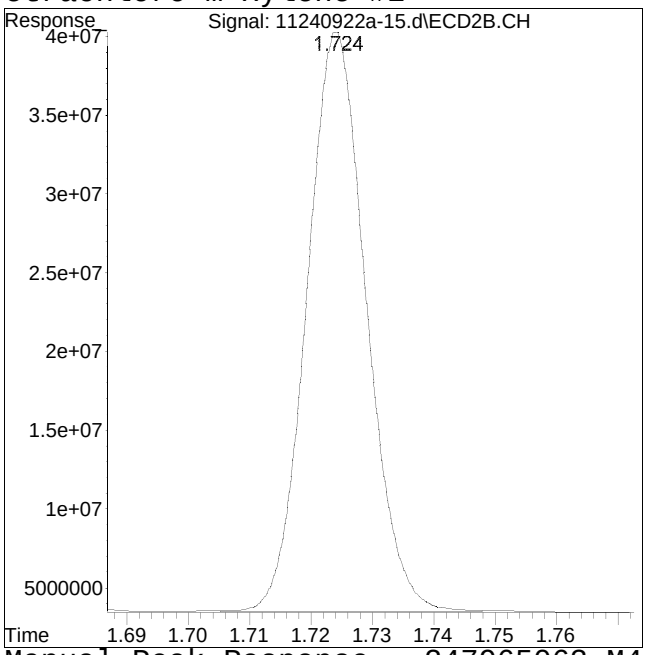
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 252391212



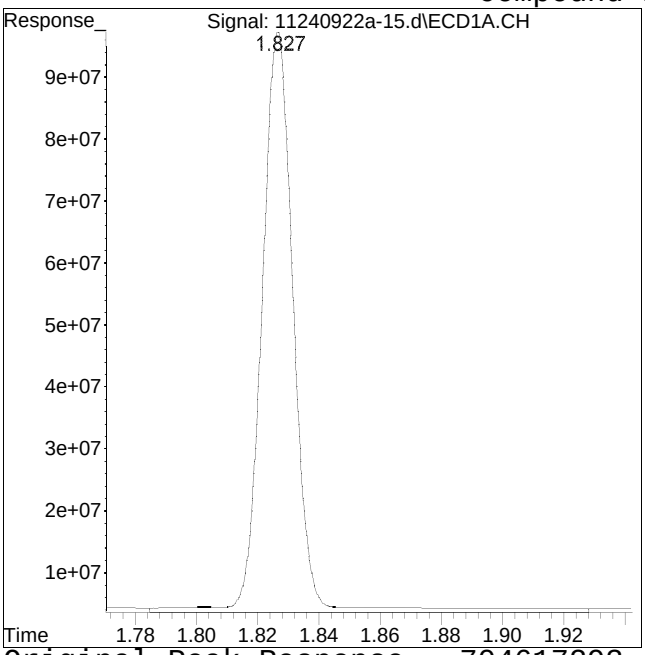

Manual Peak Response = 247965063 M4

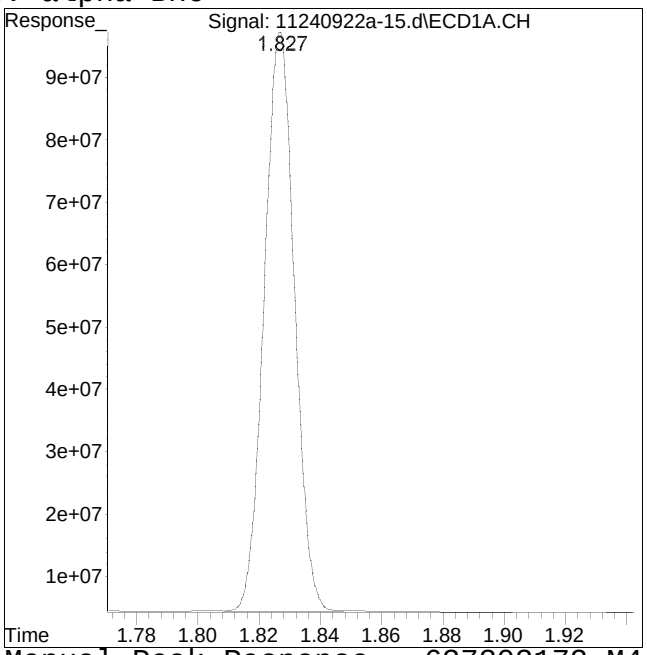
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #4: alpha-BHC



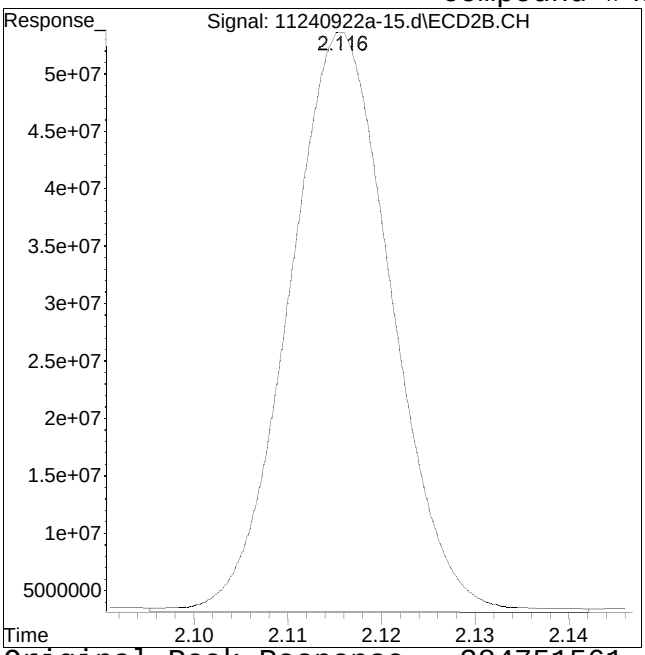




Original Peak Response = 704617293 Manual Peak Response = 637303172 M4
M4 = Poor automated baseline construction.

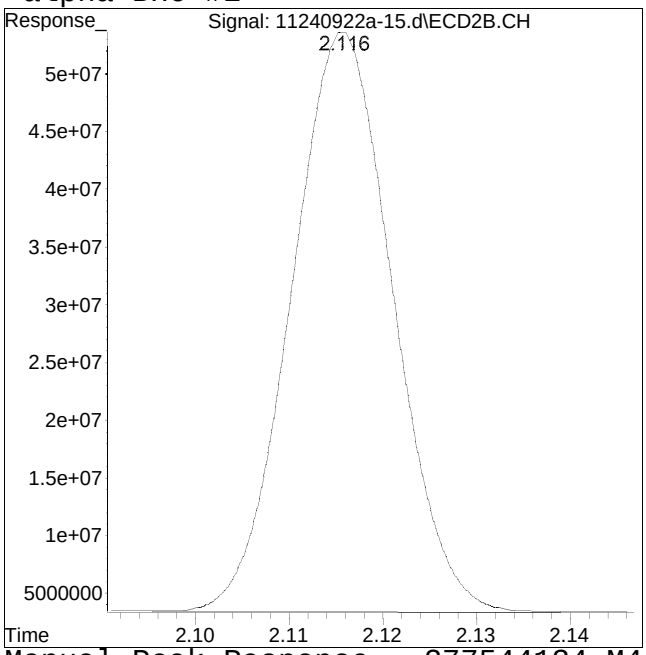
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #42: alpha-BHC #2




Original Peak Response = 384751561



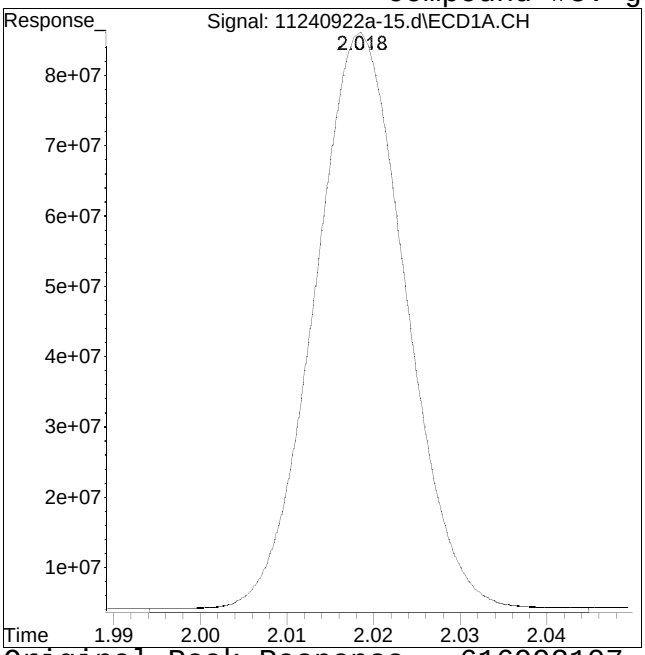

Manual Peak Response = 377544134 M4

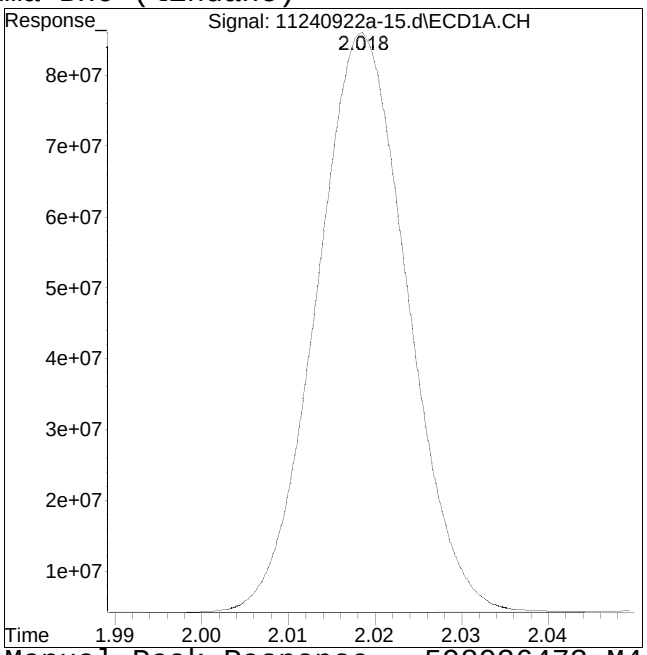
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #5: gamma-BHC (lindane)



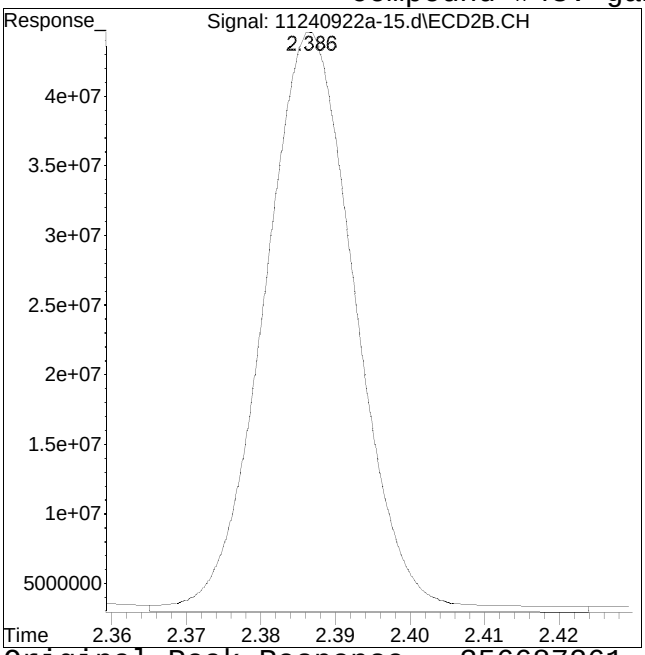



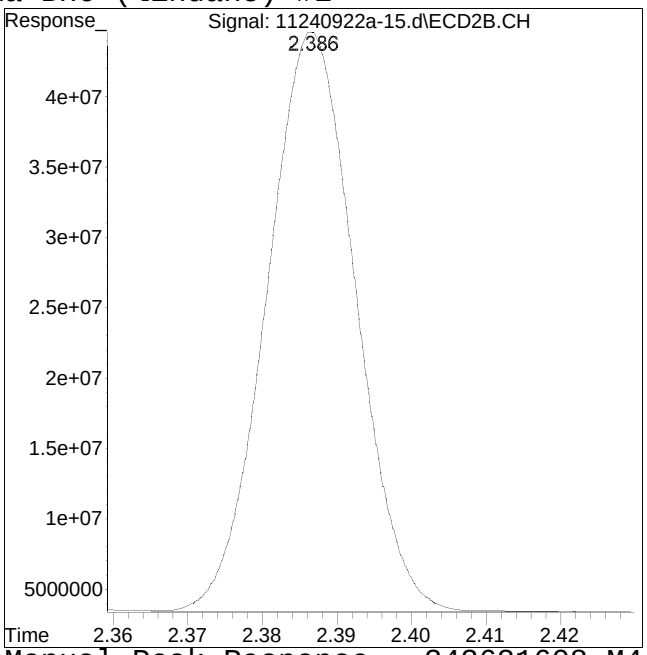

Original Peak Response = 616992107 Manual Peak Response = 598936473 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #43: gamma-BHC (lindane) #2



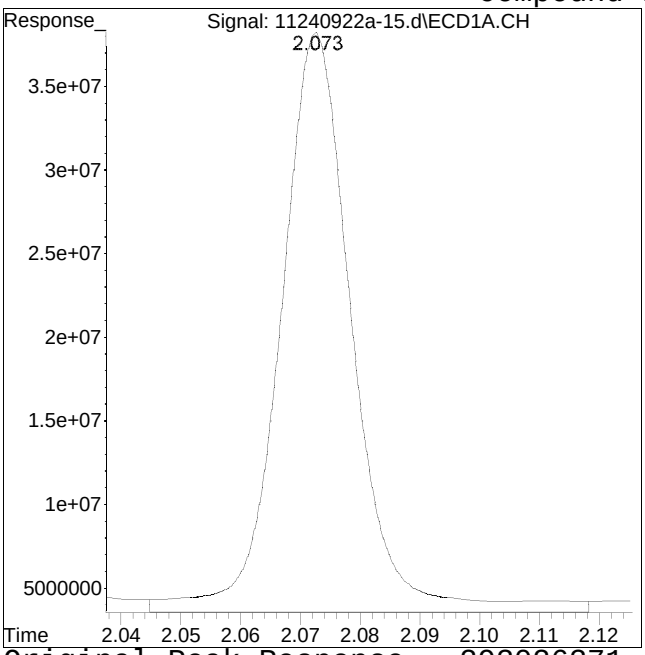




Original Peak Response = 356687261 Manual Peak Response = 342621608 M4
M4 = Poor automated baseline construction.

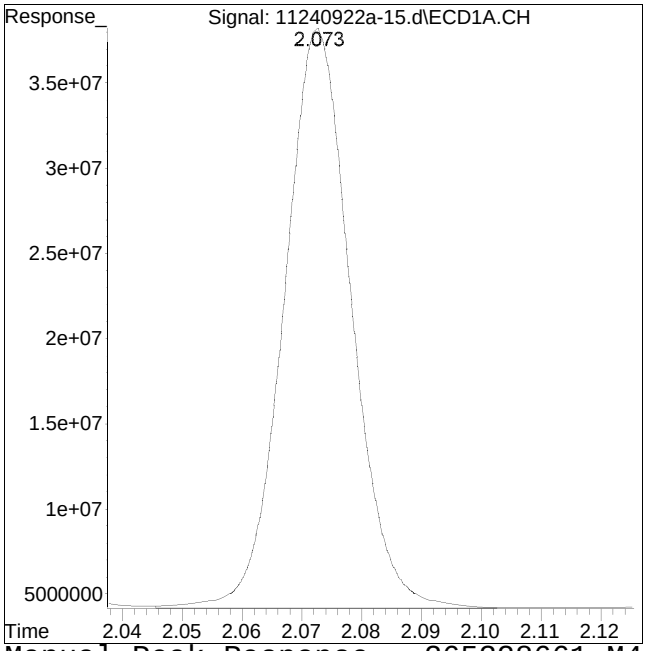
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #6: beta-BHC




Original Peak Response = 293026371



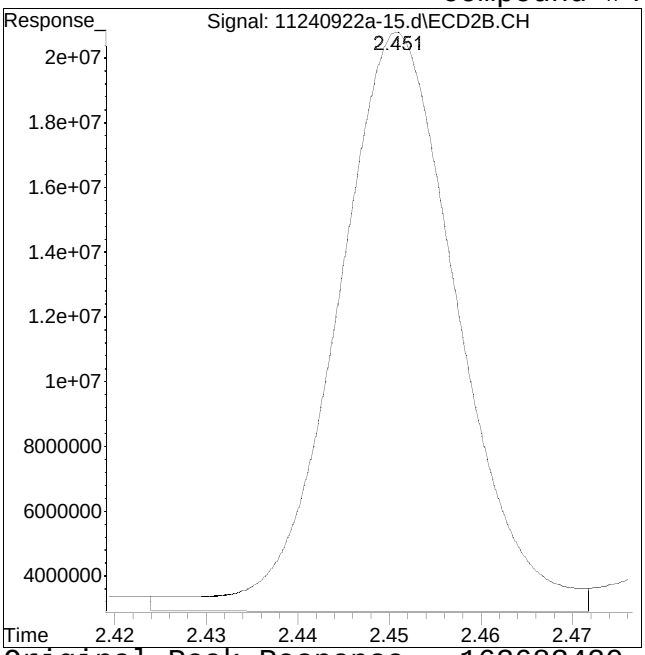

Manual Peak Response = 265328661 M4

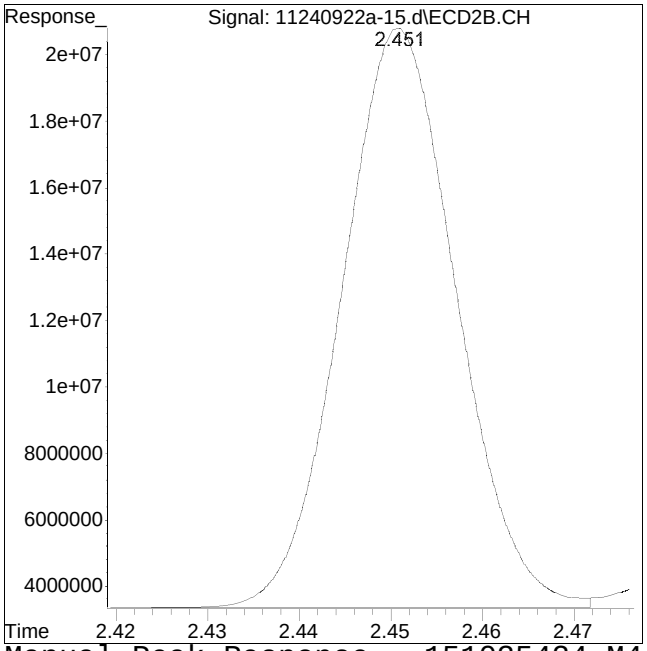
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #44: beta-BHC #2



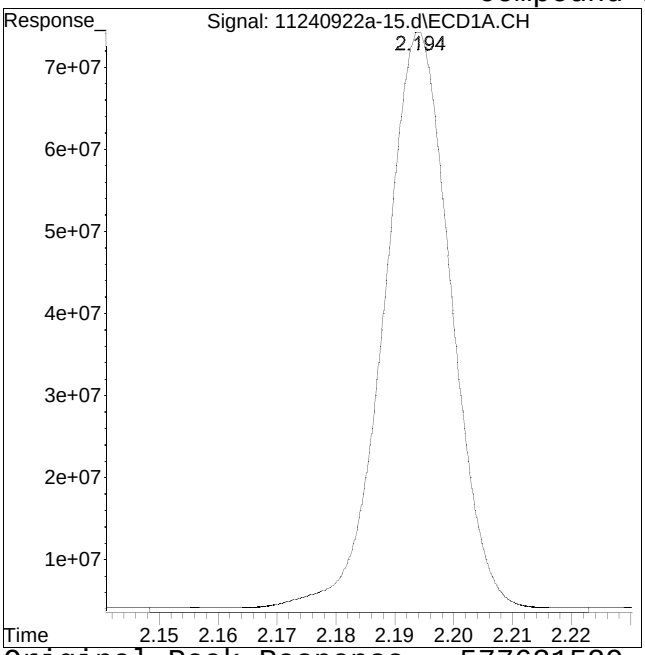



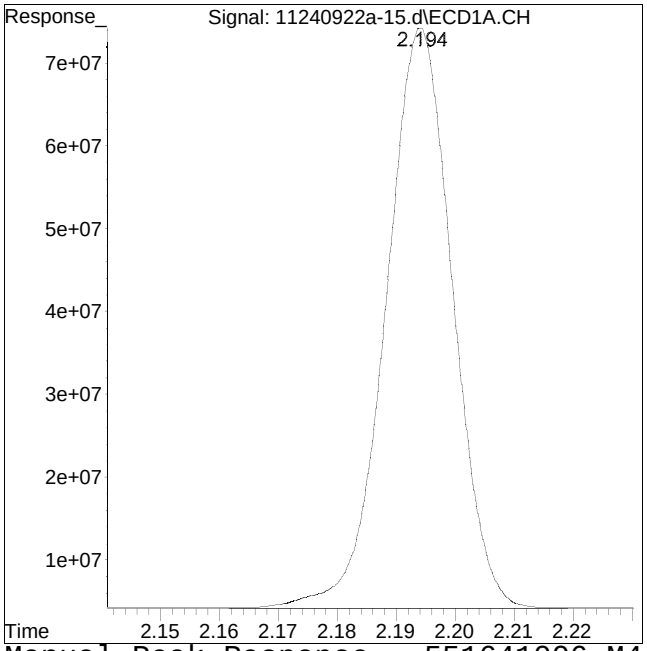

Original Peak Response = 163683420 Manual Peak Response = 151035424 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #7: delta-BHC



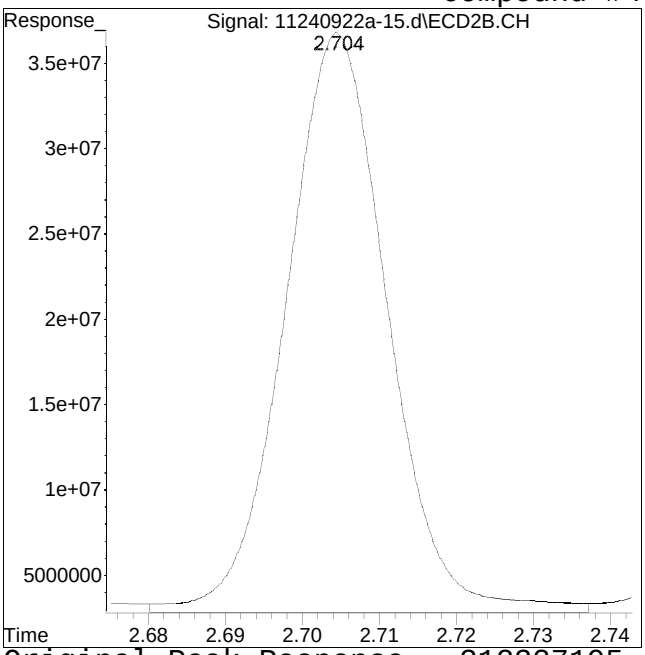




Original Peak Response = 577631529 Manual Peak Response = 551641006 M4
M4 = Poor automated baseline construction.

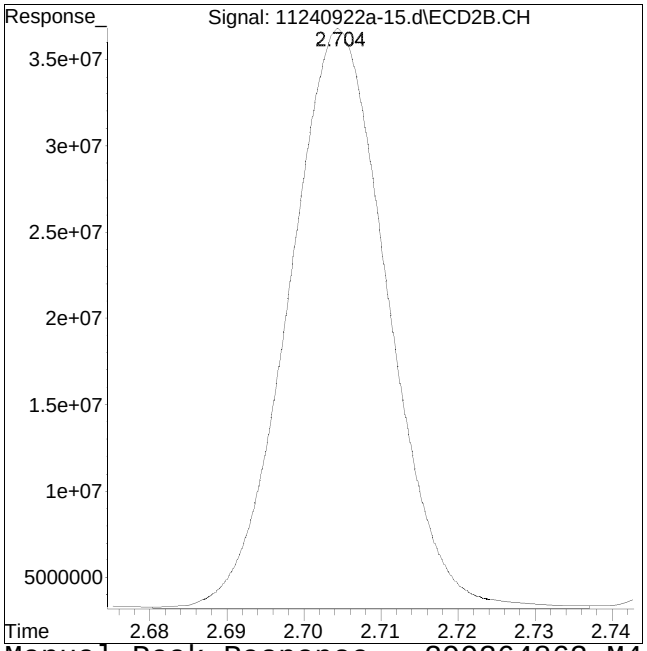
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #45: delta-BHC #2




Original Peak Response = 312327195

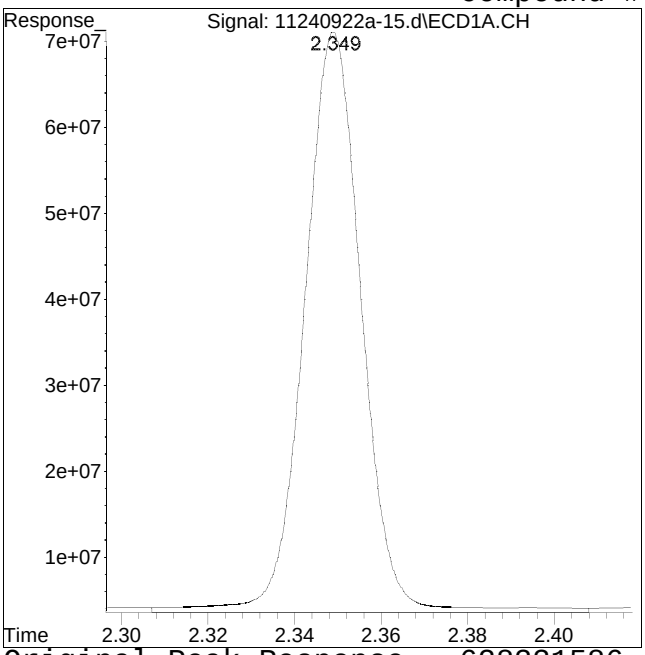


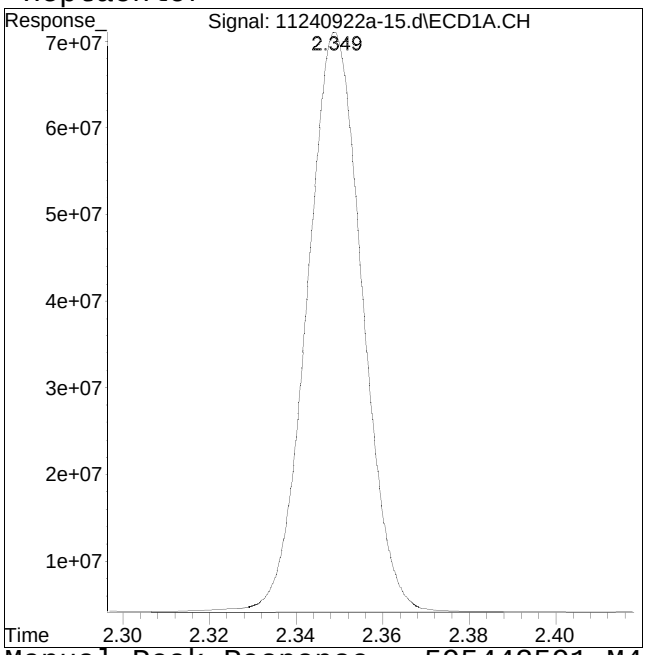

Manual Peak Response = 299364863 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #8: Heptachlor



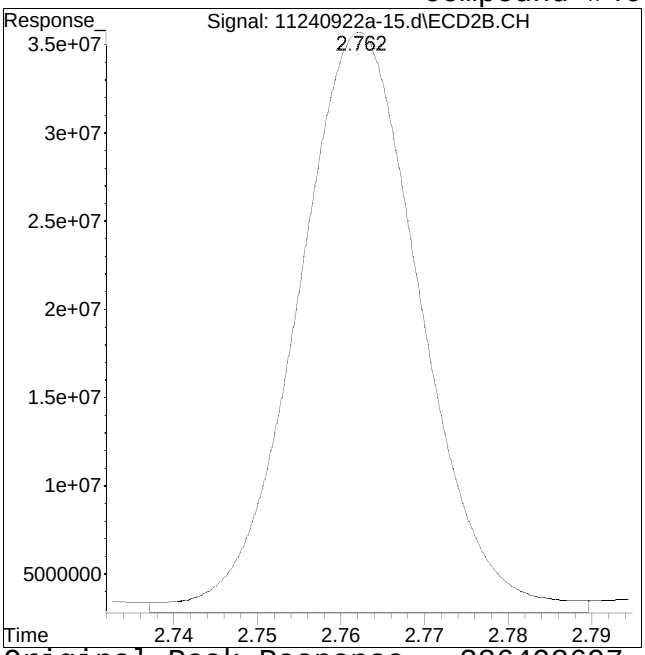




Original Peak Response = 628331586 Manual Peak Response = 595442591 M4
M4 = Poor automated baseline construction.

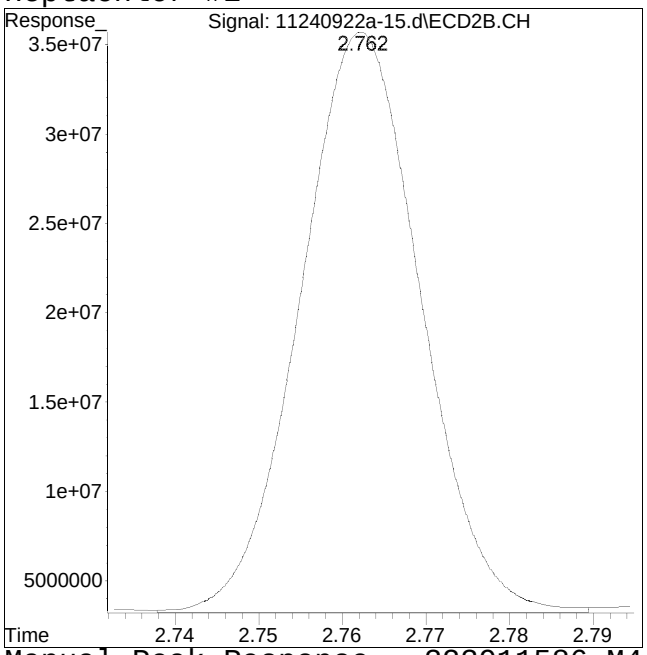
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #46: Heptachlor #2




Original Peak Response = 336493697

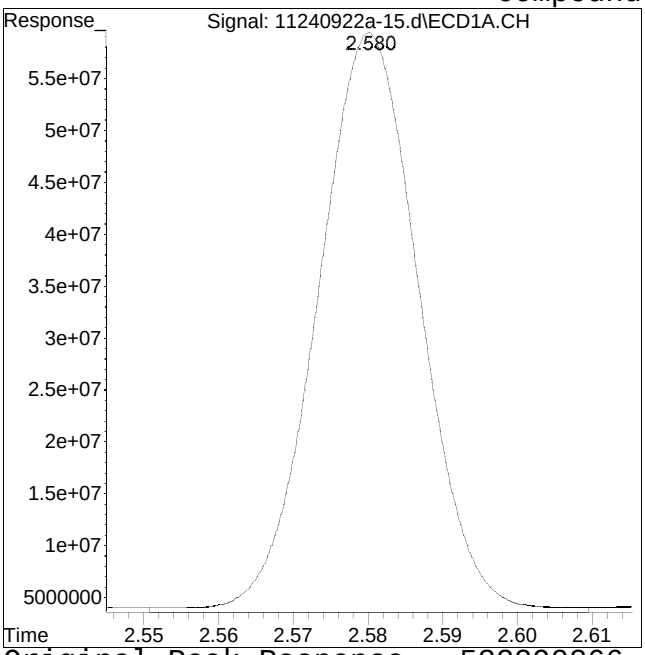


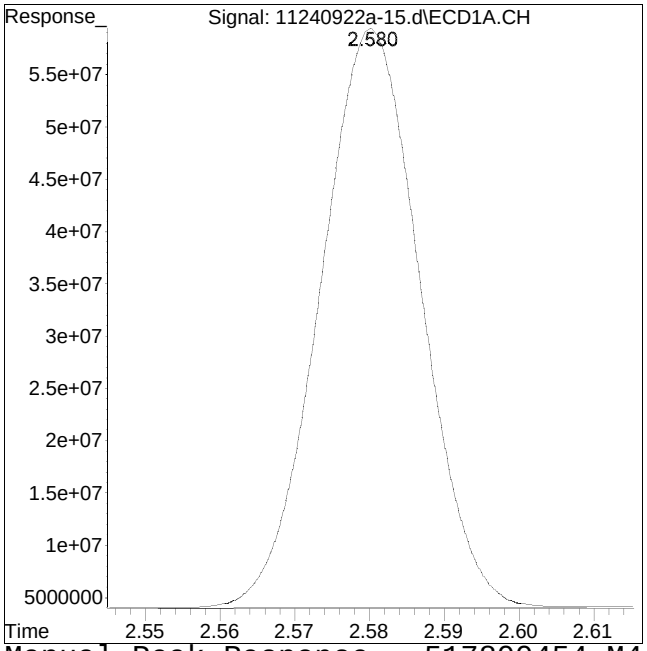

Manual Peak Response = 323911586 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #9: Aldrin



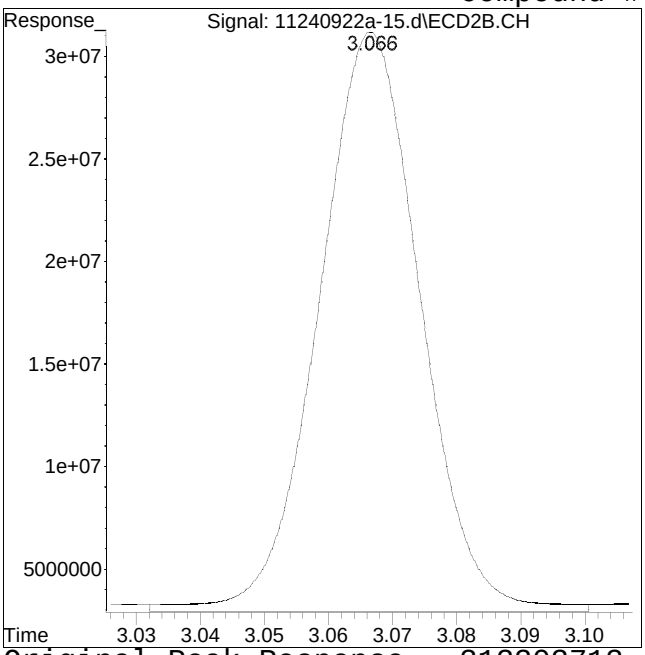




Original Peak Response = 532290266 Manual Peak Response = 517800454 M4
M4 = Poor automated baseline construction.

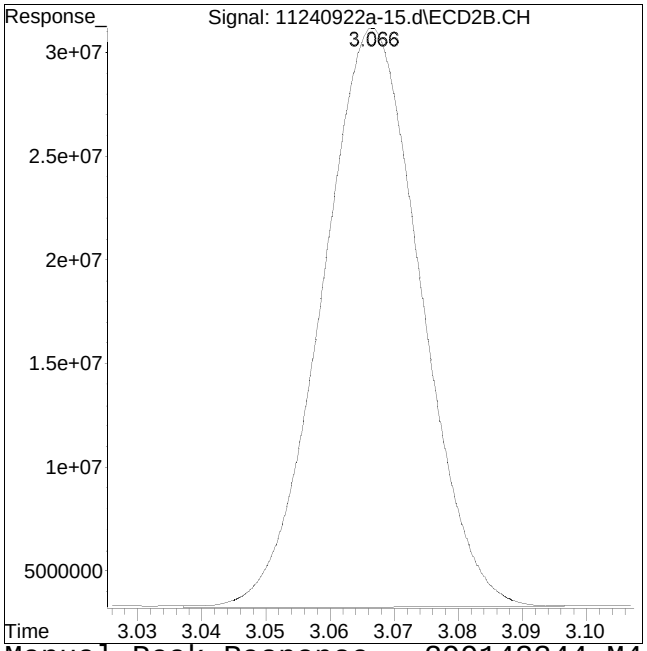
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #47: Aldrin #2




Original Peak Response = 313303713



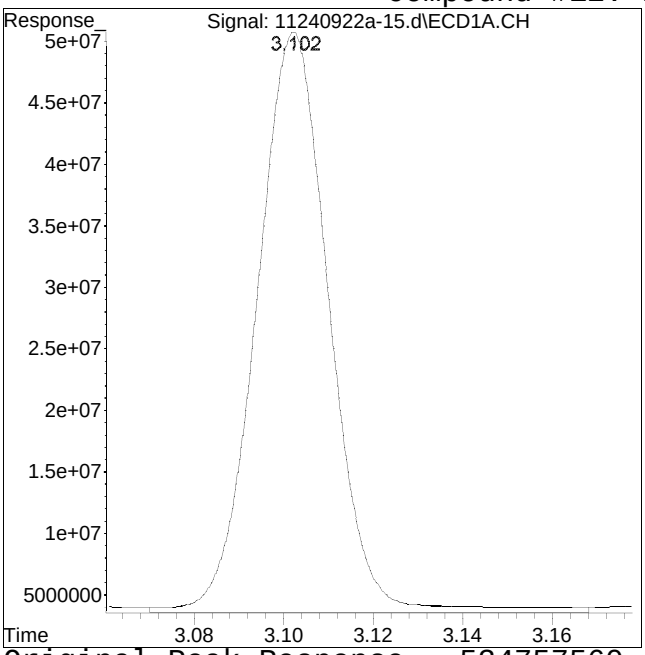

Manual Peak Response = 299143344 M4

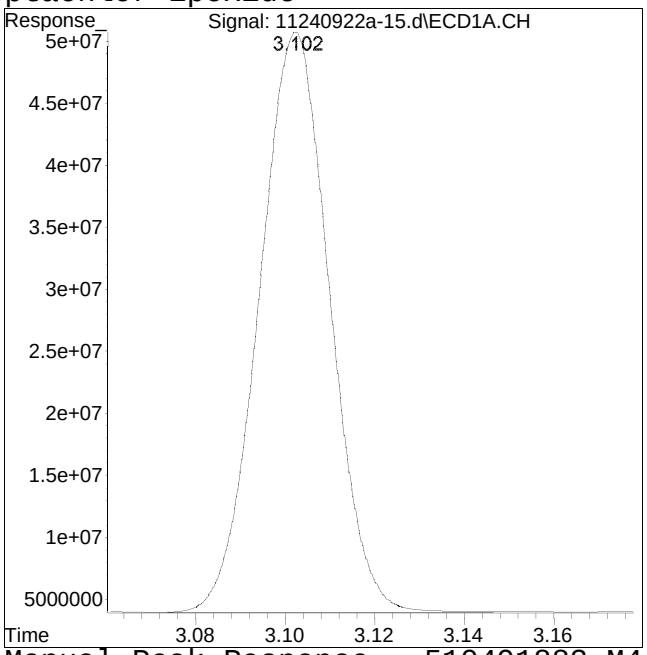
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #12: Heptachlor Epoxide



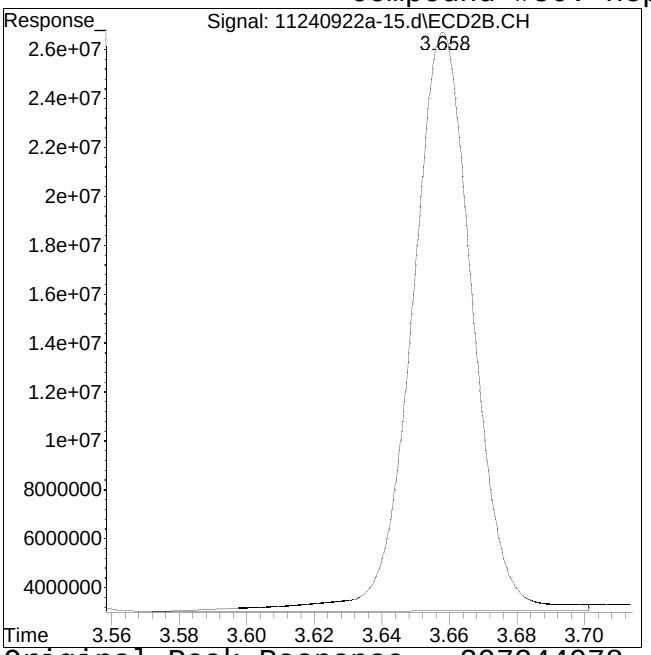




Original Peak Response = 534757560 Manual Peak Response = 510491883 M4
M4 = Poor automated baseline construction.

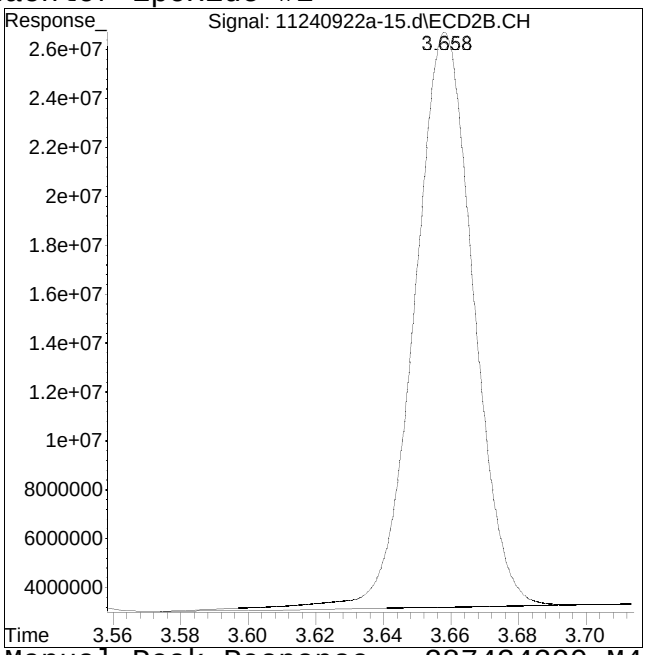
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #50: Heptachlor Epoxide #2




Original Peak Response = 297244978



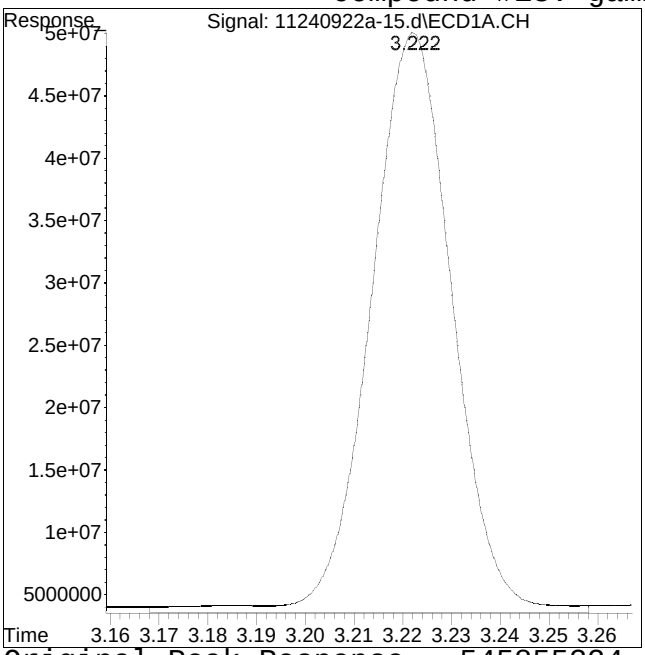

Manual Peak Response = 287434290 M4

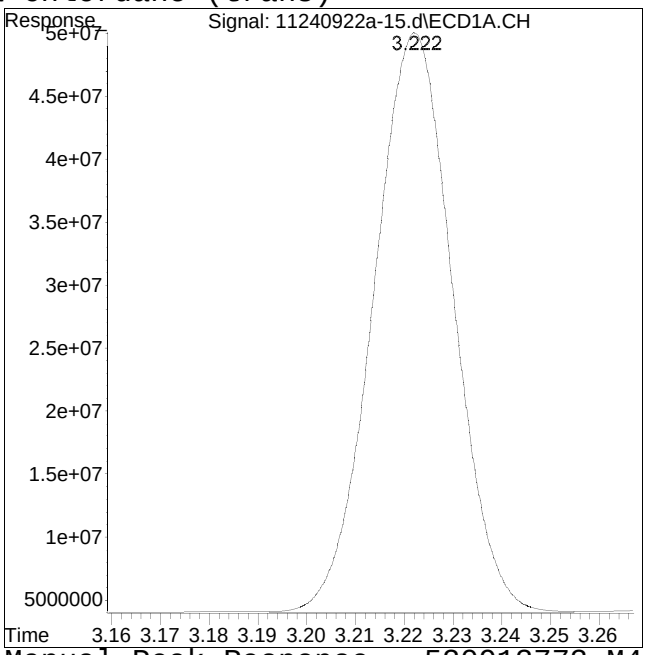
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #13: gamma-Chlordane (trans)



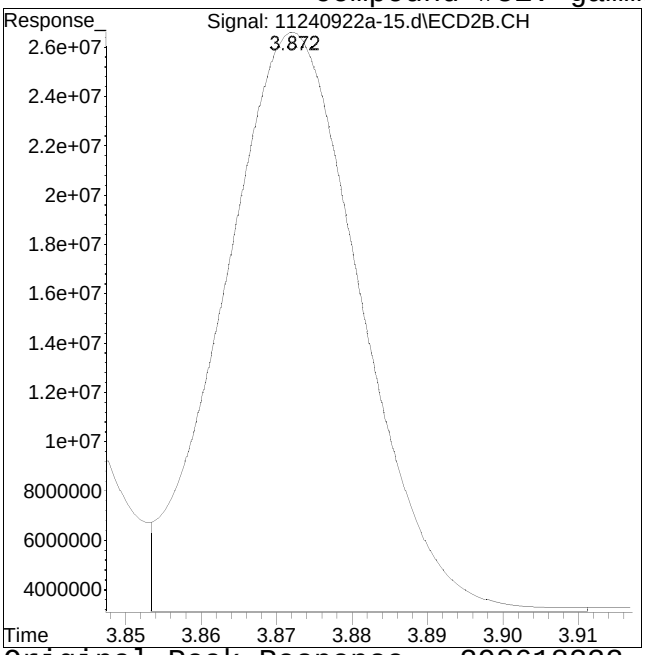




Original Peak Response = 545855324 Manual Peak Response = 520913773 M4
M4 = Poor automated baseline construction.

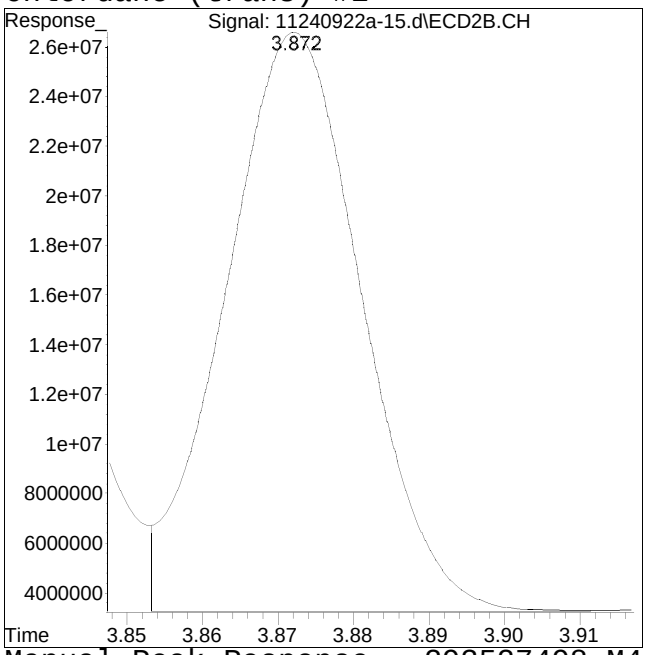
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #51: gamma-Chlordane (trans) #2




Original Peak Response = 298618332



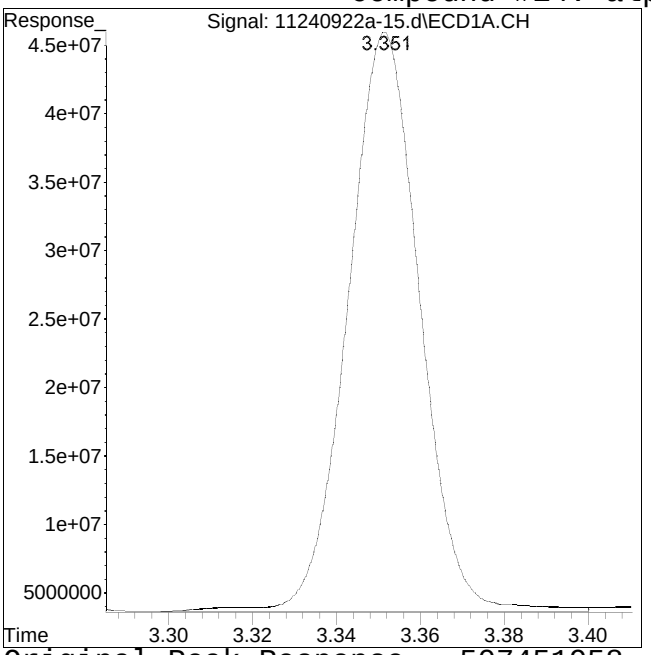

Manual Peak Response = 293527498 M4

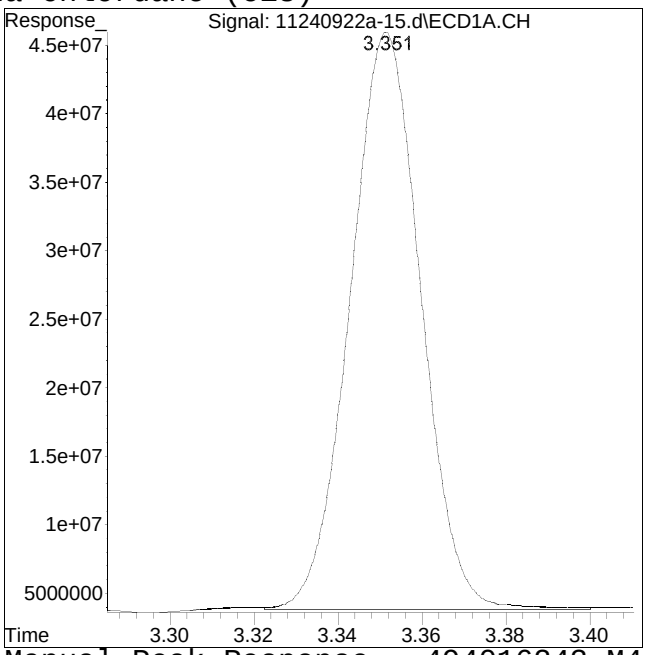
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #14: alpha-Chlordane (cis)



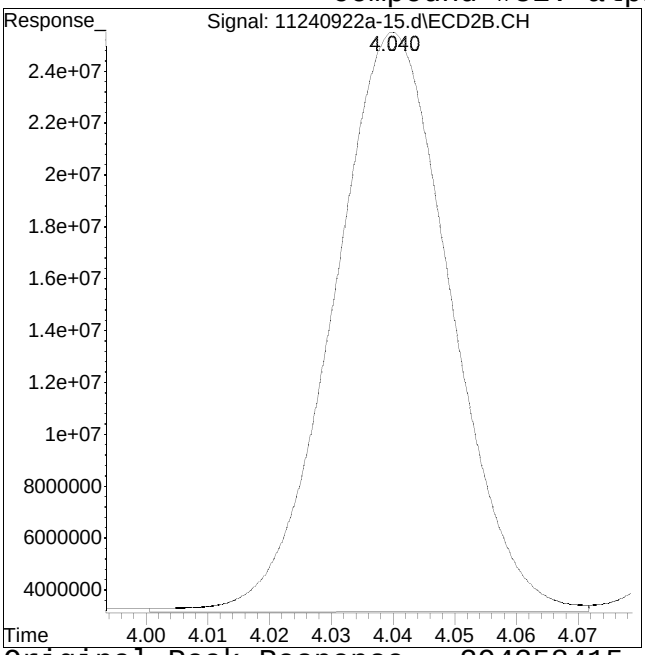




Original Peak Response = 507451958 Manual Peak Response = 494016243 M4
M4 = Poor automated baseline construction.

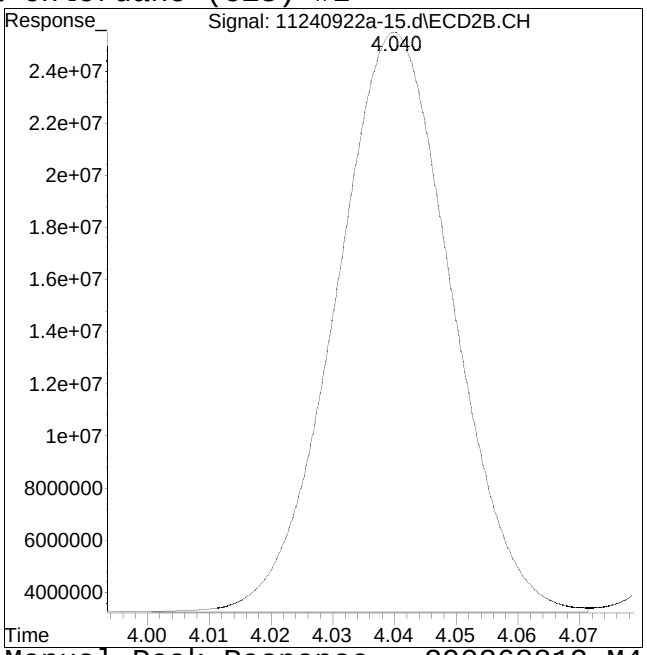
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #52: alpha-Chlordane (cis) #2




Original Peak Response = 294358415



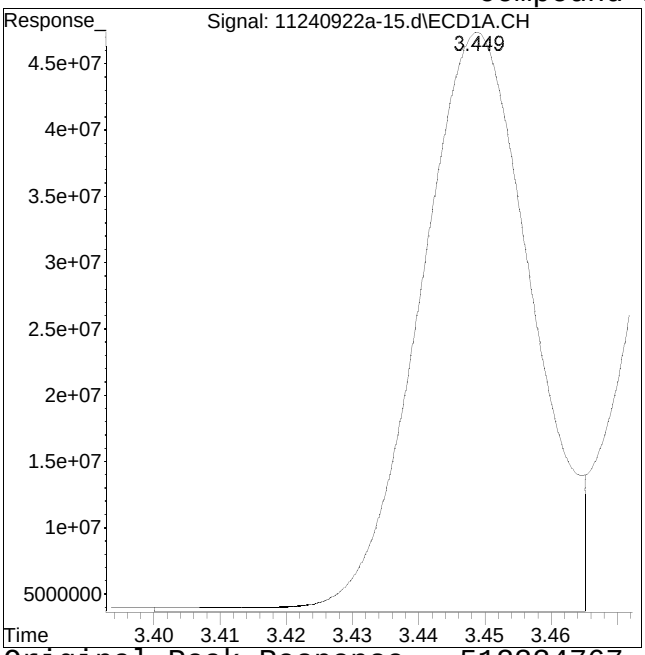

Manual Peak Response = 290368812 M4

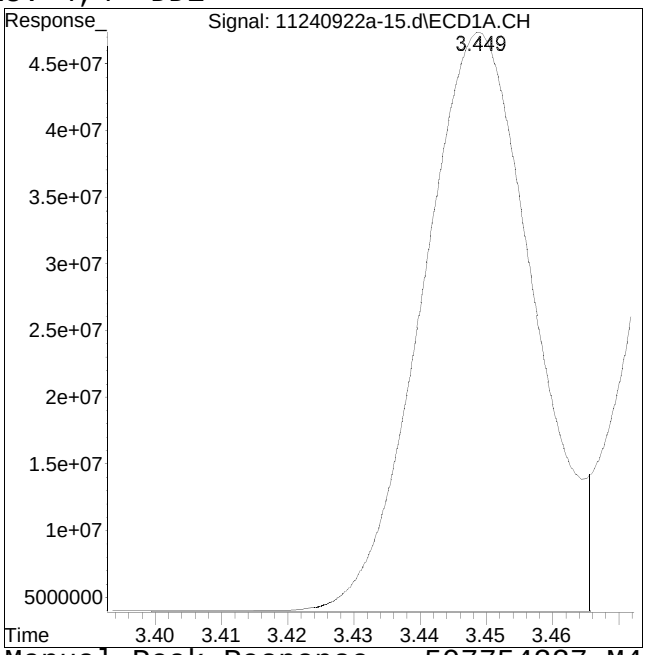
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #15: 4,4'-DDE



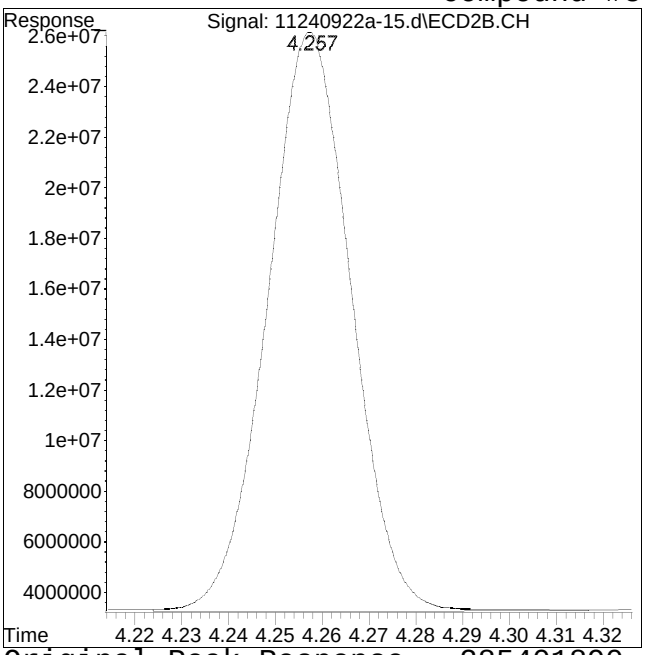



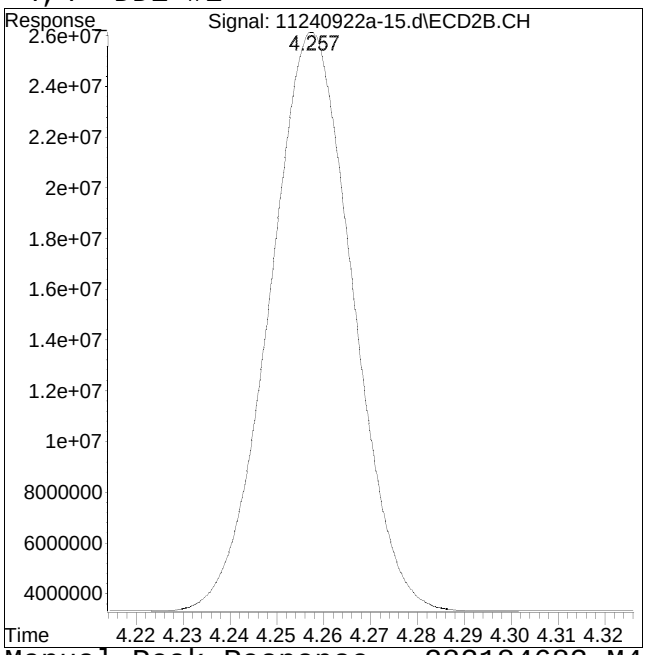

Original Peak Response = 512334767 Manual Peak Response = 507754327 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #53: 4,4'-DDE #2



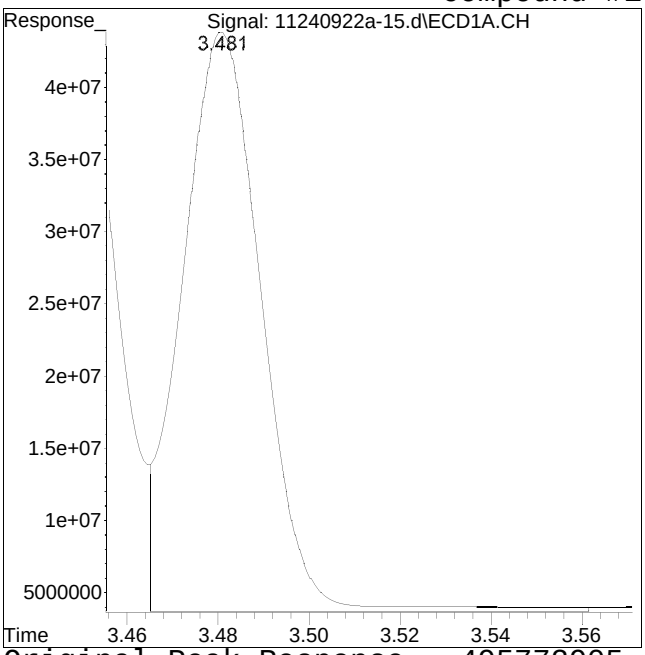




Original Peak Response = 285401890 Manual Peak Response = 282184683 M4
M4 = Poor automated baseline construction.

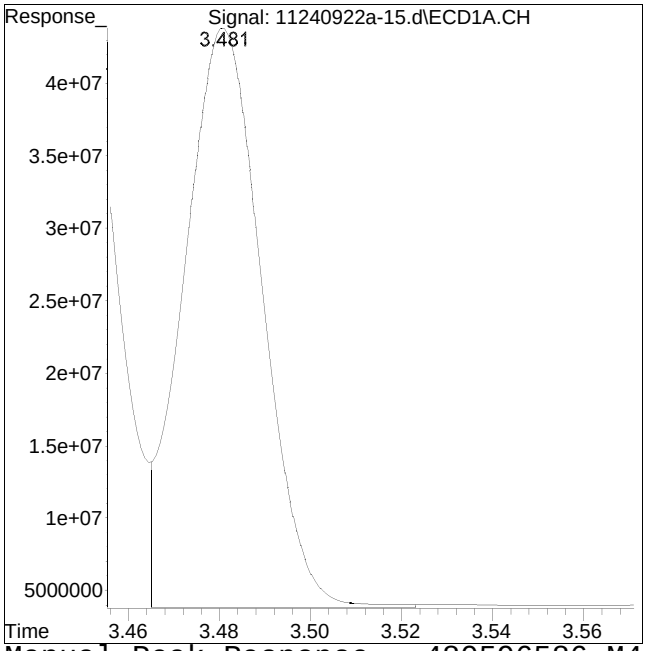
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #16: Endosulfan I




Original Peak Response = 495772905



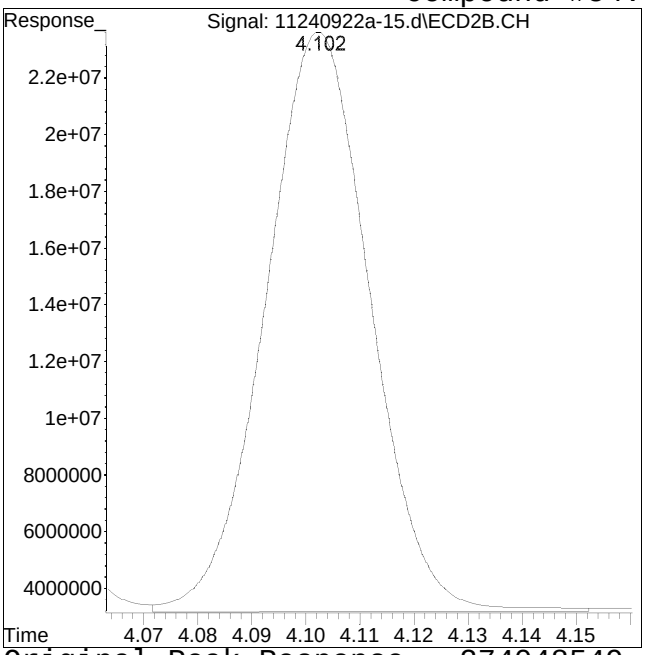

Manual Peak Response = 480596586 M4

M4 = Poor automated baseline construction.

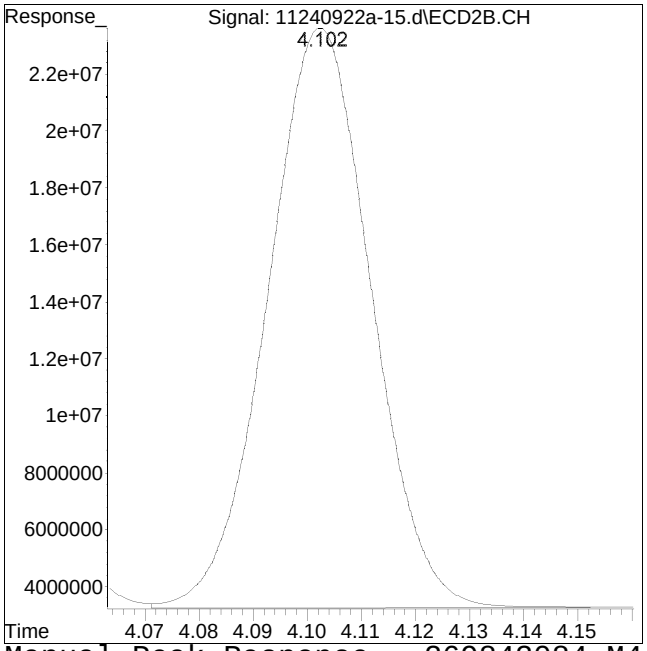
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #54: Endosulfan I #2




Original Peak Response = 274048549



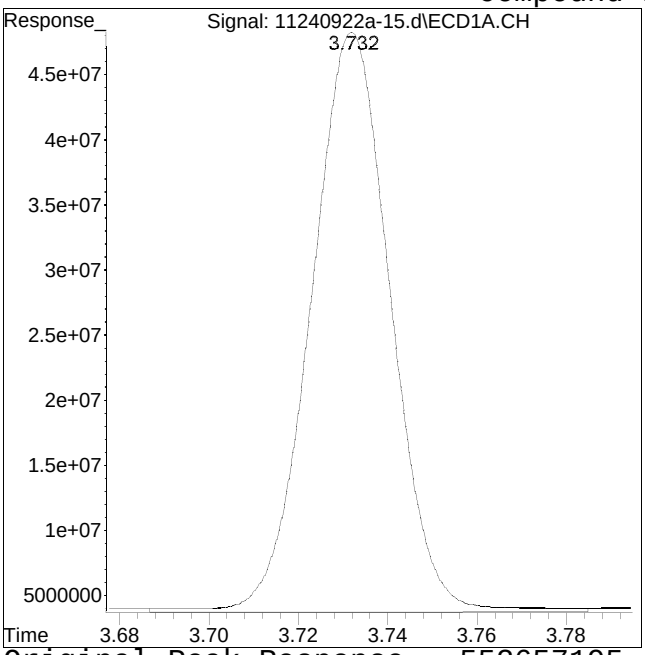

Manual Peak Response = 269843084 M4

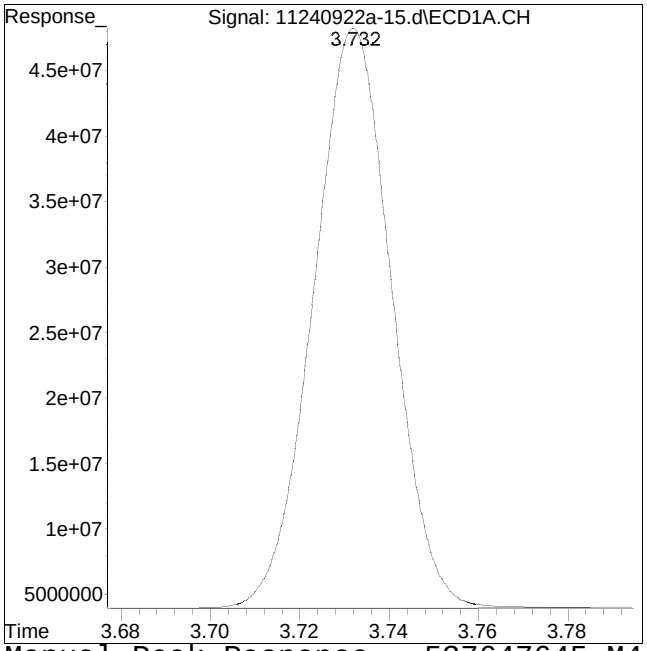
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #17: Dieldrin



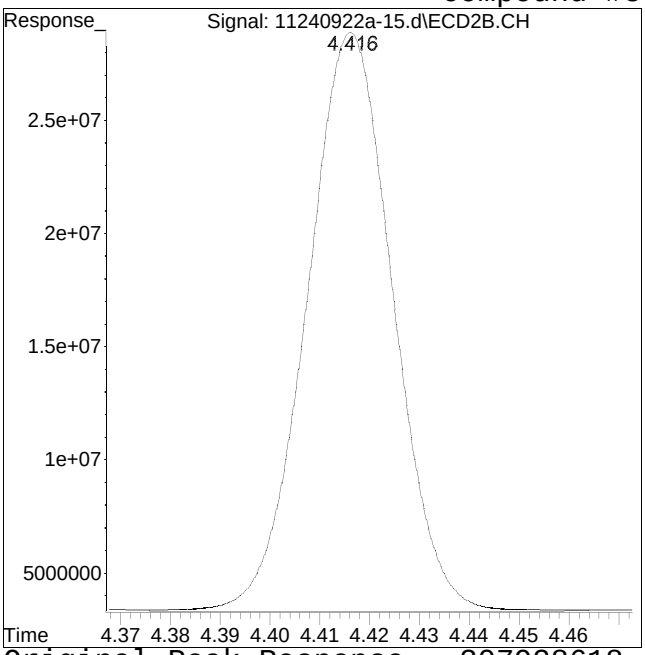




Original Peak Response = 552657195 Manual Peak Response = 537647645 M4
M4 = Poor automated baseline construction.

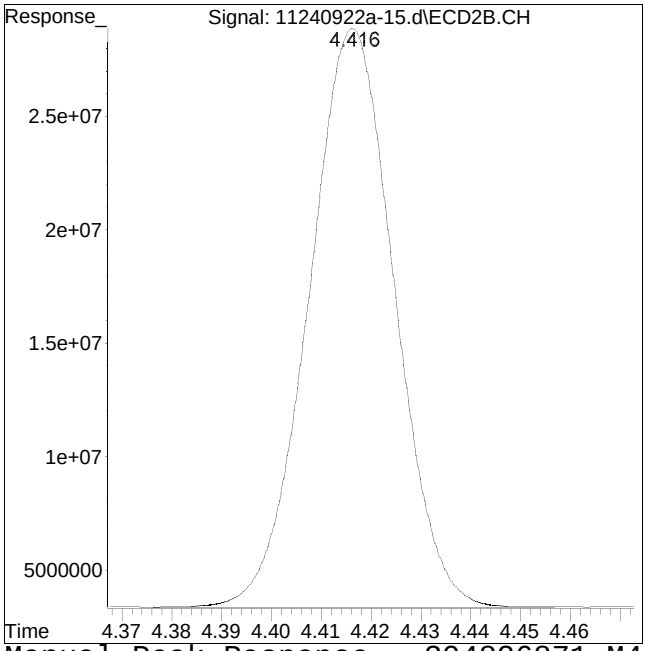
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #55: Dieldrin #2




Original Peak Response = 307928618



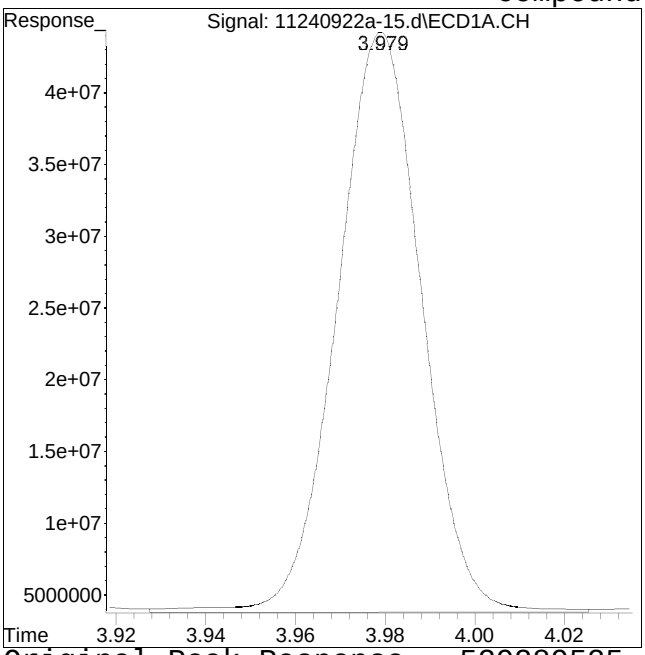

Manual Peak Response = 304826871 M4

M4 = Poor automated baseline construction.

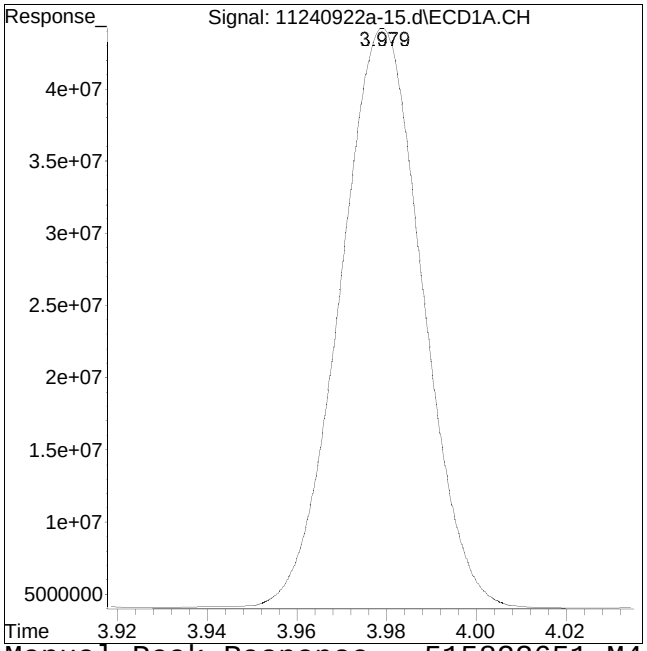
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #18: Endrin




Original Peak Response = 529289525



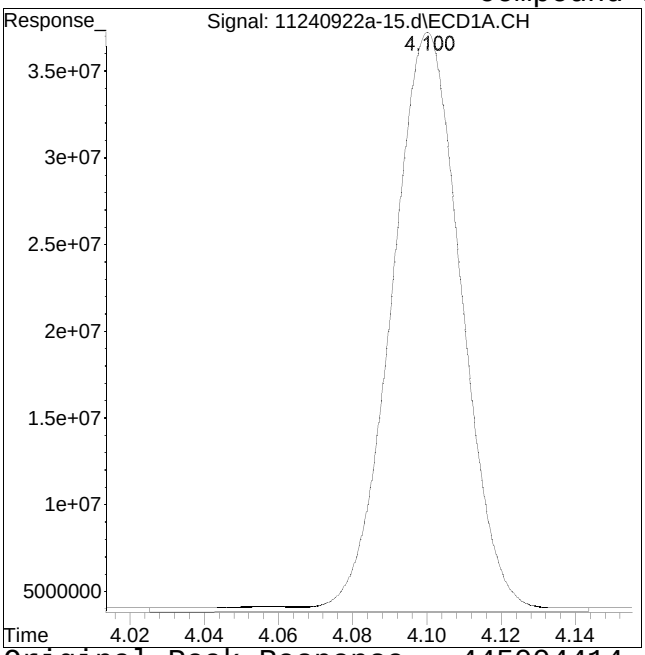

Manual Peak Response = 515823651 M4

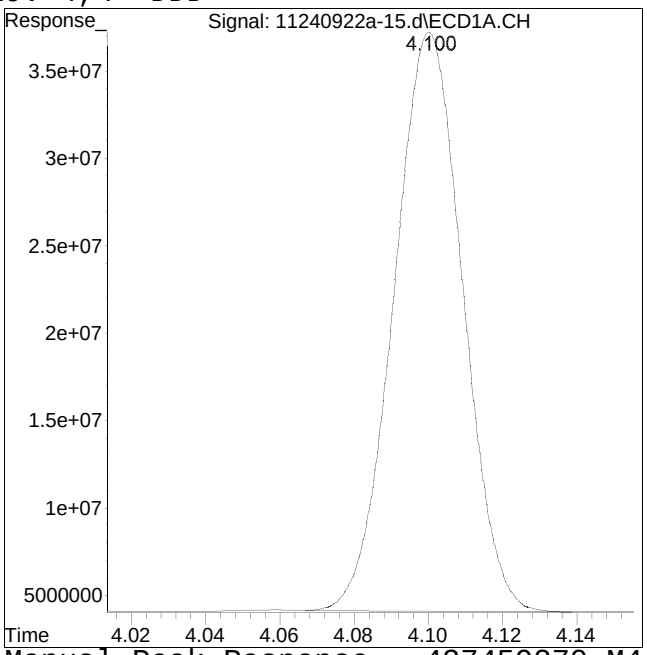
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #19: 4,4'-DDD



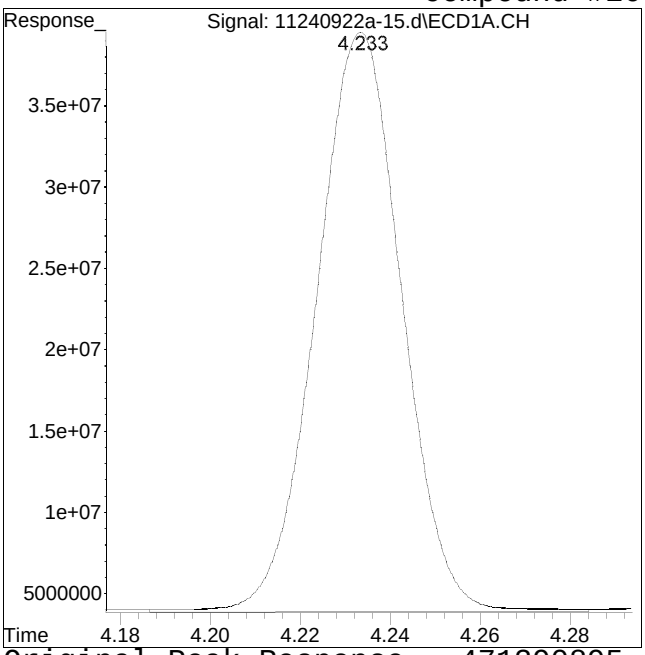




Original Peak Response = 445004414 Manual Peak Response = 427459270 M4
M4 = Poor automated baseline construction.

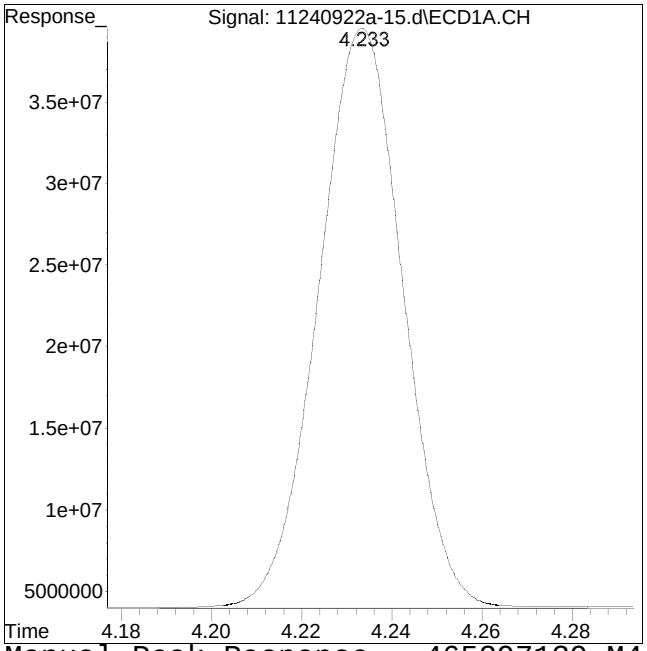
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #20: Endosulfan II




Original Peak Response = 471390895



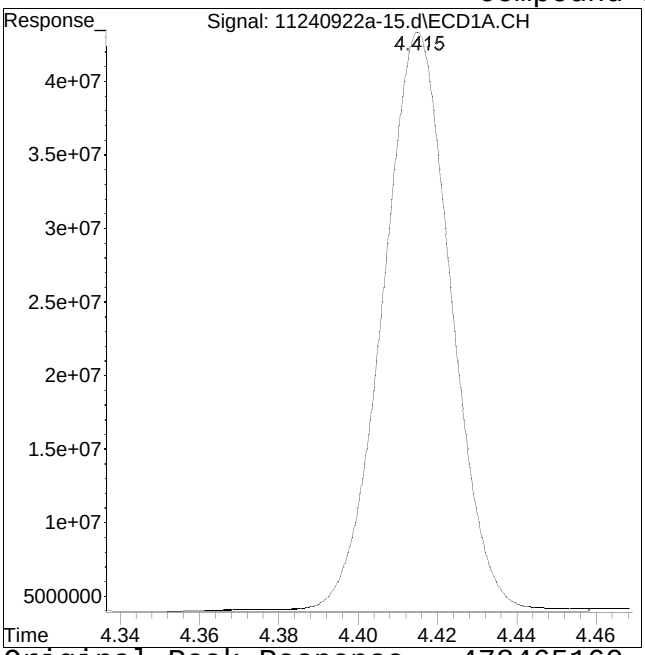

Manual Peak Response = 465297139 M4

M4 = Poor automated baseline construction.

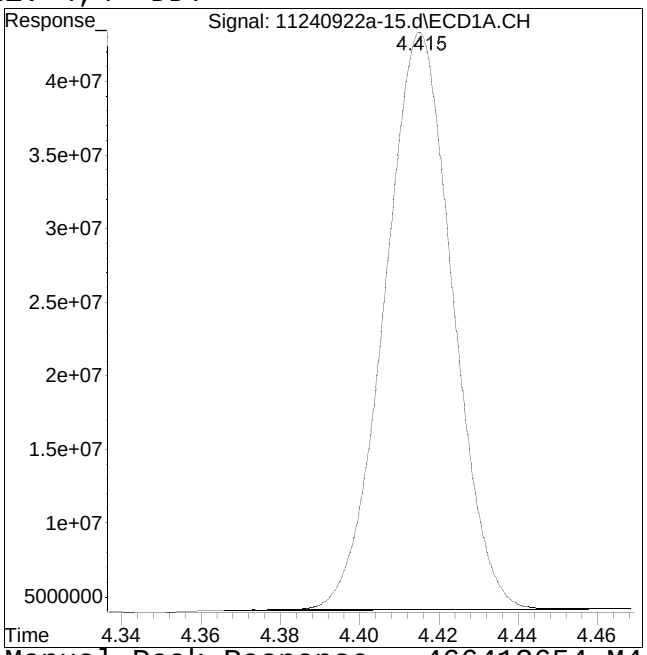
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT




Original Peak Response = 478465160



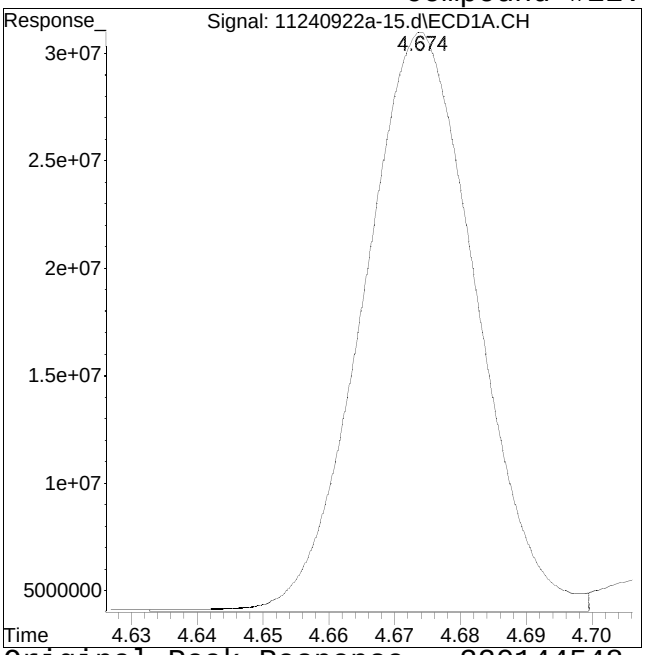

Manual Peak Response = 466412654 M4

M4 = Poor automated baseline construction.

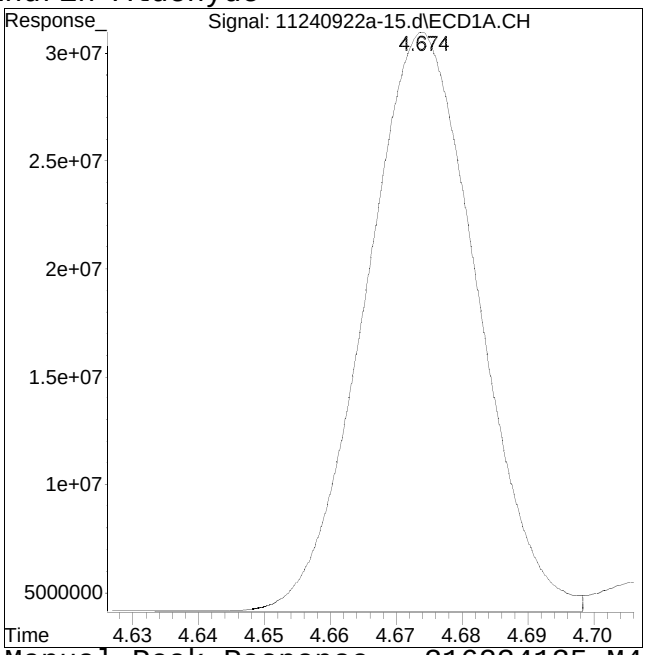
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #22: Endrin Aldehyde




Original Peak Response = 320144548



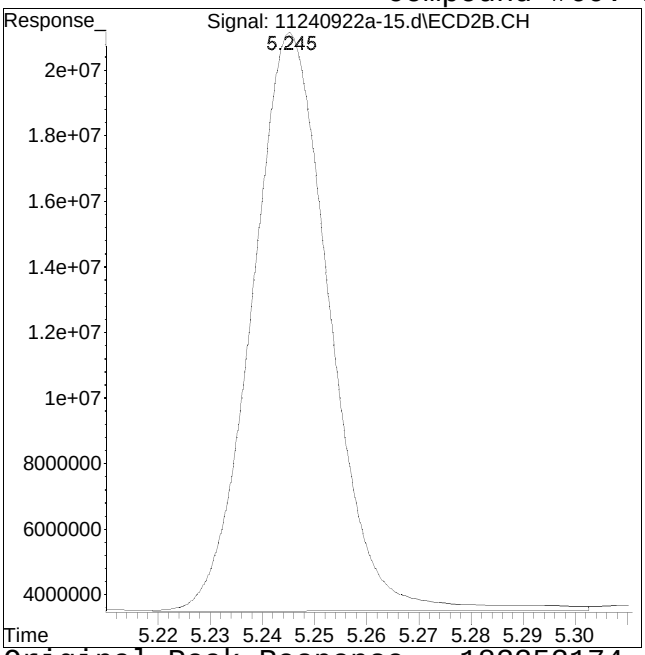

Manual Peak Response = 316234135 M4

M4 = Poor automated baseline construction.

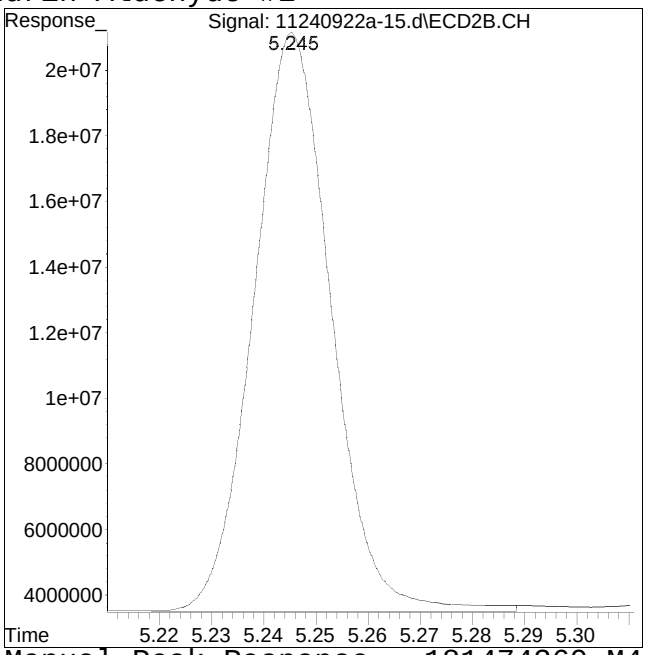
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #60: Endrin Aldehyde #2




Original Peak Response = 183352174



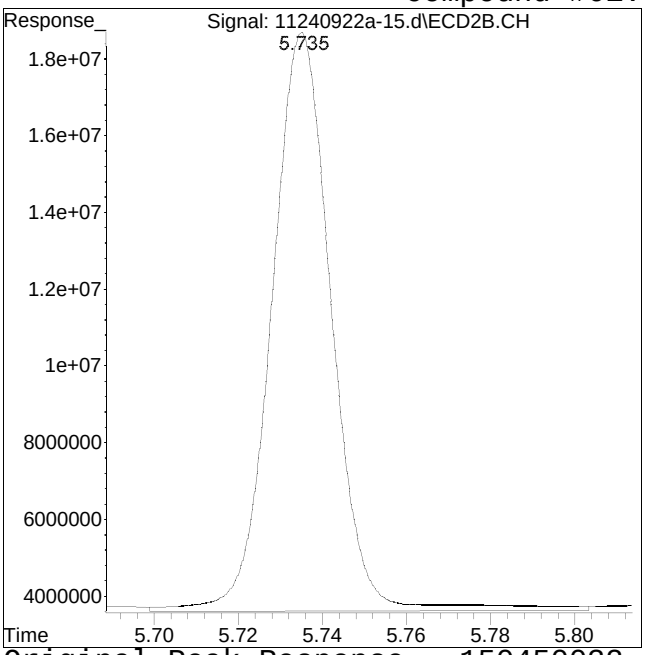

Manual Peak Response = 181474360 M4

M4 = Poor automated baseline construction.

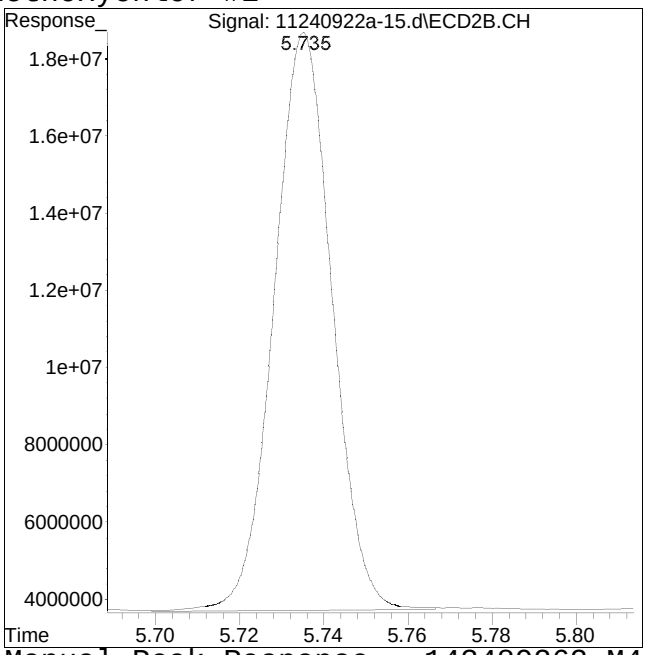
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #61: Methoxychlor #2




Original Peak Response = 150450032



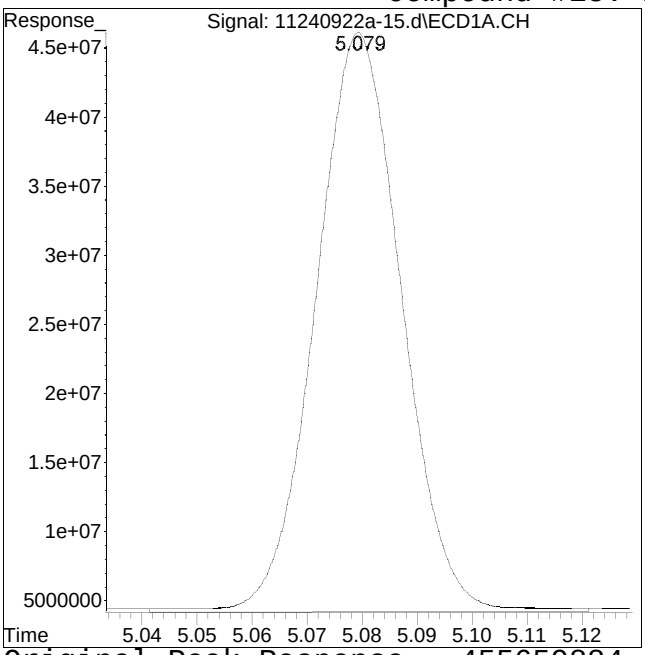

Manual Peak Response = 143489262 M4

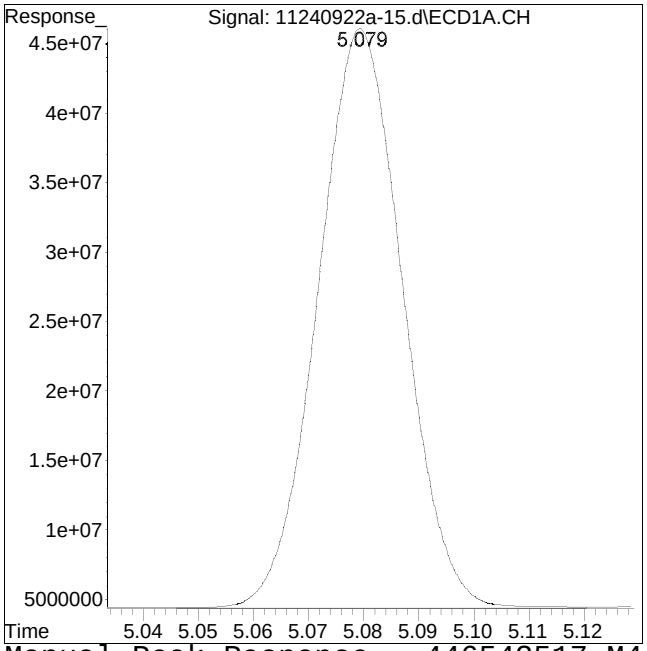
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #25: Endosulfan Sulfate



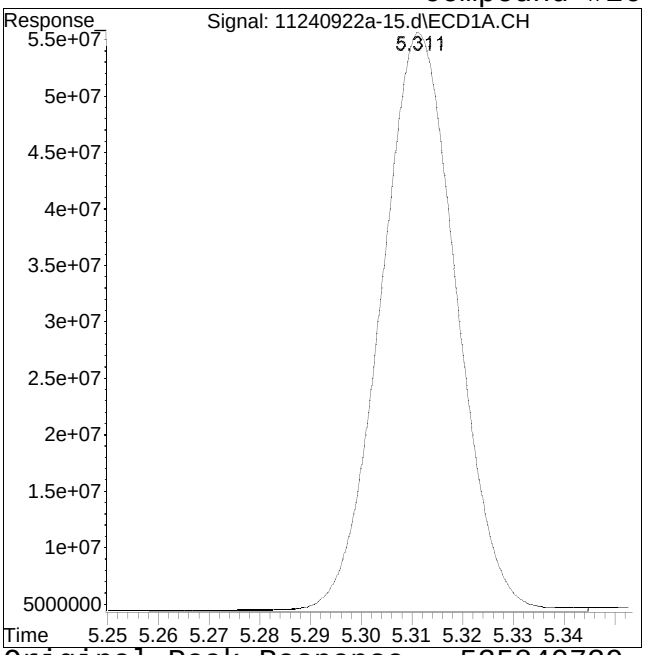



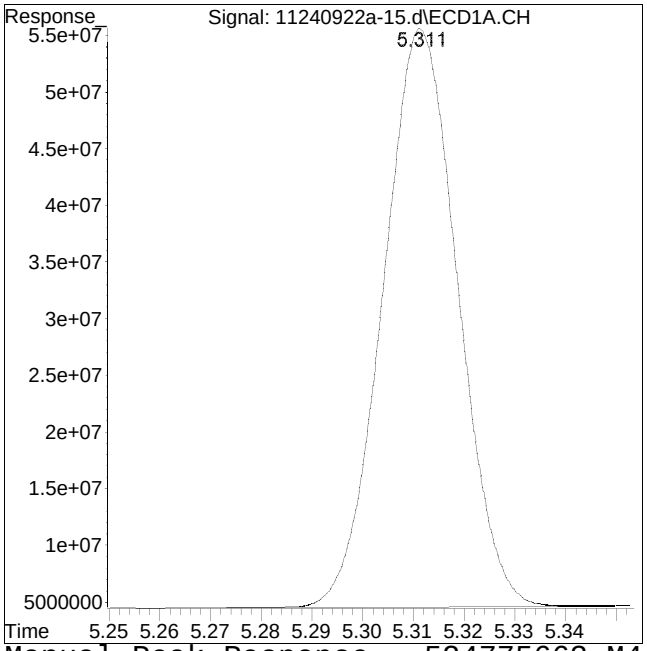

Original Peak Response = 455659884 Manual Peak Response = 446543517 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

## Compound #26: Endrin Ketone



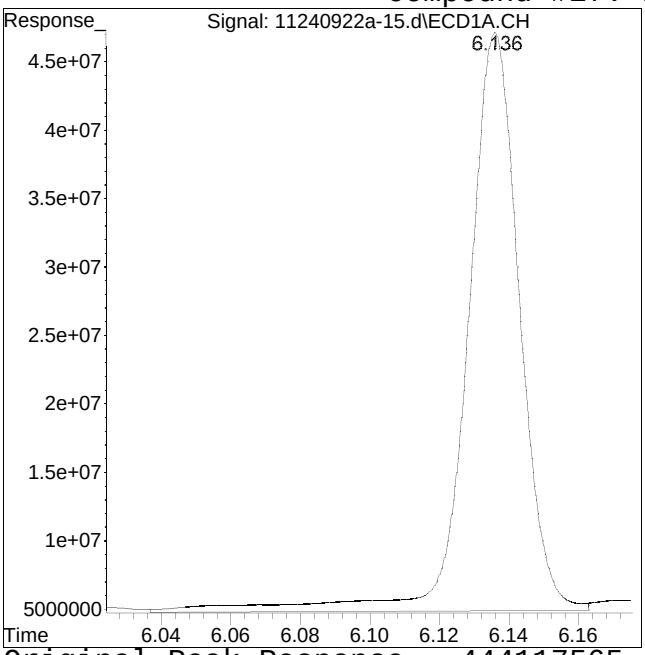



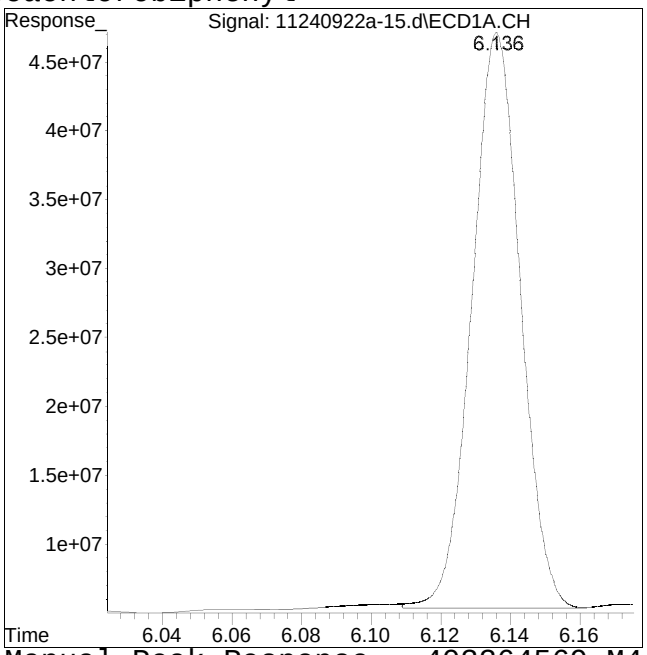

Original Peak Response = 535840739 Manual Peak Response = 524775663 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #27: Decachlorobiphenyl



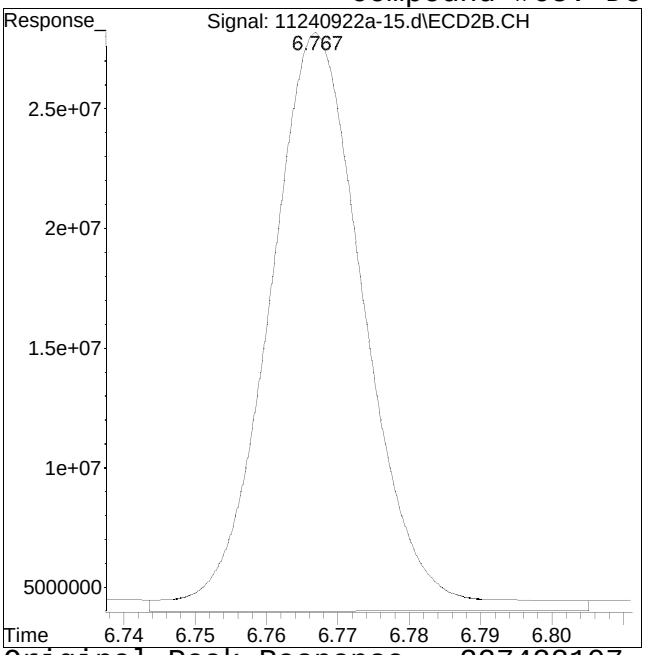



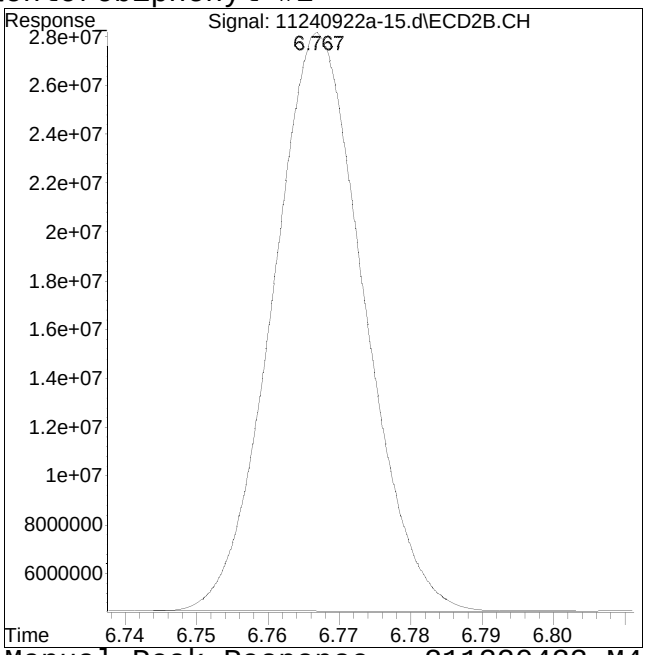

Original Peak Response = 444117565 Manual Peak Response = 403364569 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-15.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:08 Instrument : Pest 11
Sample : WG1974576-4,42,, ms Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 227422107 Manual Peak Response = 211320433 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:20
Operator : PEST11:emr
Sample : WG1974576-5,42,, msd
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:31 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| | Compound | | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | | |
| 1) | i | 1-br-2-nb_Pe | 1.202 | 1.274 | 349.1E6 | 205.8E6 | 25.000M4 | 25.000M4 |
| | Standard Area 1 : #1 = 280061320 | | | | | Recovery = 124.66% | | |
| | Standard Area 1 : #2 = 198070219 | | | | | Recovery = 103.88% | | |
| System Monitoring Compounds | | | | | | | | |
| 2) | s | 2,4,5,6-Tetr | 1.530 | 1.724 | 431.8E6 | 260.8E6 | 29.762M4 | 28.457M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 59.52% | 56.91% |
| 27) | s | Decachlorobi | 6.136 | 6.767 | 431.2E6 | 224.1E6 | 26.553M4 | 25.684M4 |
| | Spiked Amount | | 50.000 | Range 30 - 150 | | Recovery = | 53.11% | 51.37% |
| Target Compounds | | | | | | | | |
| 4) | t | alpha-BHC | 1.826 | 2.115 | 690.9E6 | 408.7E6 | 33.874M4 | 30.662M4 |
| 5) | t | gamma-BHC (l | 2.018 | 2.386 | 652.1E6 | 371.0E6 | 33.464M4 | 29.290M4 |
| 6) | t | beta-BHC | 2.072 | 2.450 | 290.6E6 | 164.0E6 | 33.143M4 | 31.361M4 |
| 7) | t | delta-BHC | 2.193 | 2.704 | 591.9E6 | 319.6E6 | 30.849M4 | 25.498M4 |
| 8) | t | Heptachlor | 2.348 | 2.762 | 653.2E6 | 351.4E6 | 35.410M4 | 26.727M4 |
| 9) | t | Aldrin | 2.579 | 3.066 | 565.2E6 | 327.4E6 | 32.817M4 | 27.725M4 |
| 12) | t | Heptachlor E | 3.101 | 3.658 | 556.6E6 | 305.0E6 | 33.619M4 | 26.000M4 |
| 13) | t | gamma-Chlord | 3.222 | 3.872 | 571.1E6 | 317.9E6 | 37.975M4 | 29.447 |
| 14) | t | alpha-Chlord | 3.350 | 4.040 | 536.9E6 | 313.4E6 | 31.612M4 | 26.333 |
| 15) | t | 4,4'-DDE | 3.448 | 4.257 | 546.6E6 | 303.9E6 | 32.849M4 | 27.500 |
| 16) | t | Endosulfan I | 3.480 | 4.103 | 516.0E6 | 291.5E6 | 33.106M4 | 26.595 |
| 17) | t | Dieldrin | 3.731 | 4.416 | 587.7E6 | 332.0E6 | 37.074M4 | 30.395 |
| 18) | t | Endrin | 3.978 | 4.728 | 562.4E6 | 313.3E6 | 34.935M4 | 28.271 |
| 19) | t | 4,4'-DDD | 4.099 | 4.867 | 465.3E6 | 261.9E6 | 35.926M4 | 29.363 |
| 20) | t | Endosulfan I | 4.232 | 4.938 | 499.4E6 | 276.1E6 | 33.996M4 | 27.649 |
| 21) | t | 4,4'-DDT | 4.414 | 5.153 | 510.5E6 | 279.2E6 | 34.537M4 | 27.134 |

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Sep 2024 12:20
Operator : PEST11:emr
Sample : WG1974576-5,42,, msd
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:31 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest11\2024\240922a\11240922a-03.d
Sub List : LCS_MS - spk only

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ug/l | ug/l |
|---|---|---|---|---|---|---|
| 22) t Endrin Aldeh | 4.673 | 5.246 | 331.1E6 | 191.4E6 | 26.746M4 | 24.710 |
| 23) t Methoxychlor | 4.930 | 5.735 | 295.2E6 | 153.3E6 | 35.718M4 | 26.437M4 |
| 25) t Endosulfan S | 5.079 | 5.480 | 477.2E6 | 257.6E6 | 33.844M4 | 26.109 |
| 26) t Endrin Keton | 5.311 | 5.897 | 569.7E6 | 309.9E6 | 34.481 | 29.870 |
| Sum chlordane-1 | | | 0 | 0 | N.D. | N.D. |
| Average chlordane-1 | | | | | 0.000 | 0.000 |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |
| SemiQuant Compounds - Not Calibrated on this Instrument | | | | | | |
| Sum toxaphene-2 | | | 0 | 0 | N.D. | N.D. |
| Average toxaphene-2 | | | | | 0.000 | 0.000 |

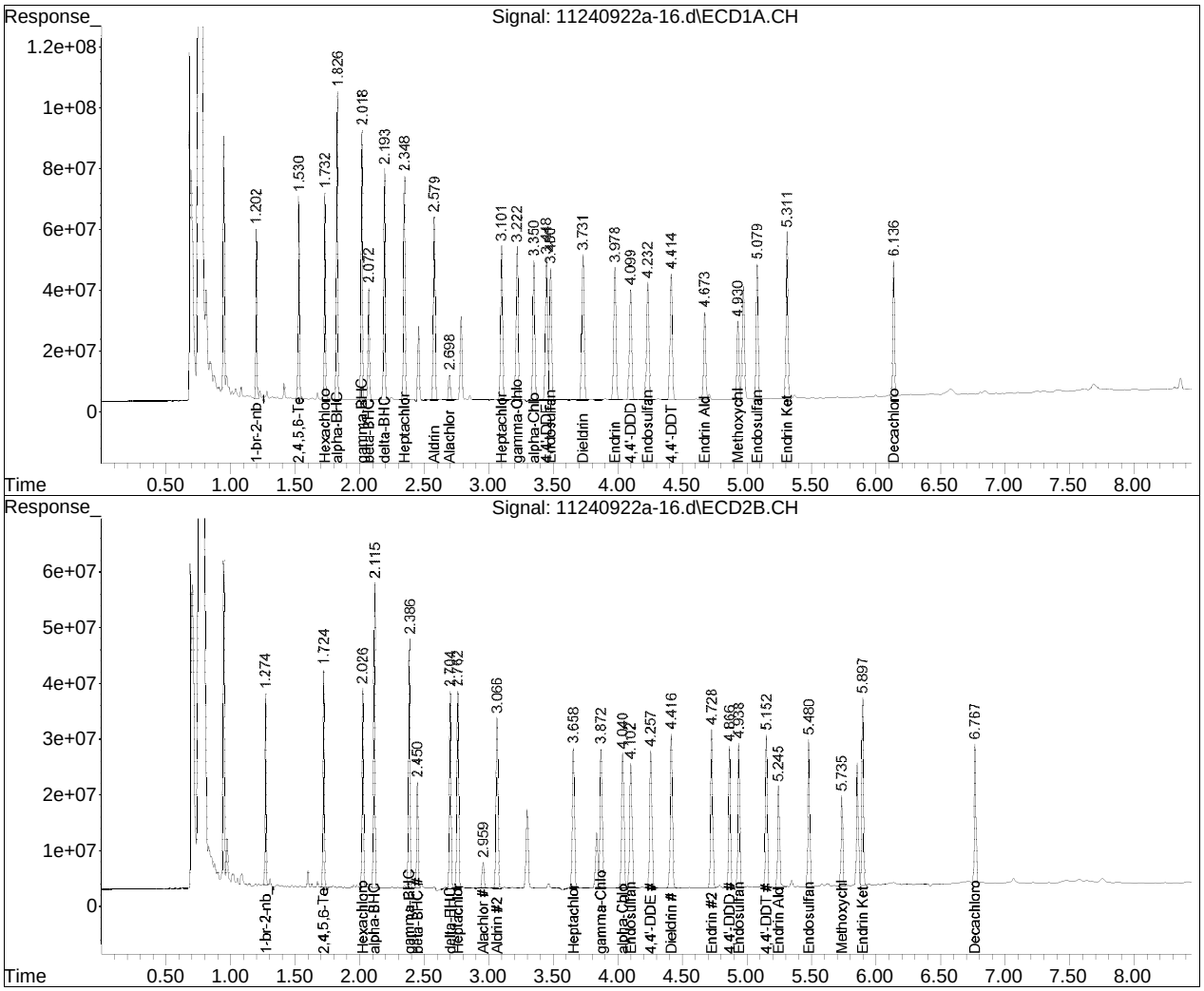
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only1\2024\240922a\11240922a-03.d•

Data Path : I:\PEST\Pest11\2024\240922a\
Data File : 11240922a-16.d
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On : 22 Sep 2024  12:20
Operator : PEST11:emr
Sample : WG1974576-5,42,, msd
Misc : WG1974788,WG1974576,ical21365
ALS Vial : 16 (Sig #1); 0 (Sig #2)  Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 22 15:27:31 2024
Quant Method : I:\PEST\Pest11\2024\240922a\pest11_08_01_24_ugL_ICAL21365.M
Quant Title : pest
QLast Update : Sat Sep 21 13:32:57 2024
Response via : Initial Calibration
Integrator: ChemStation  6890 Scale Mode: Large solvent peaks clipped

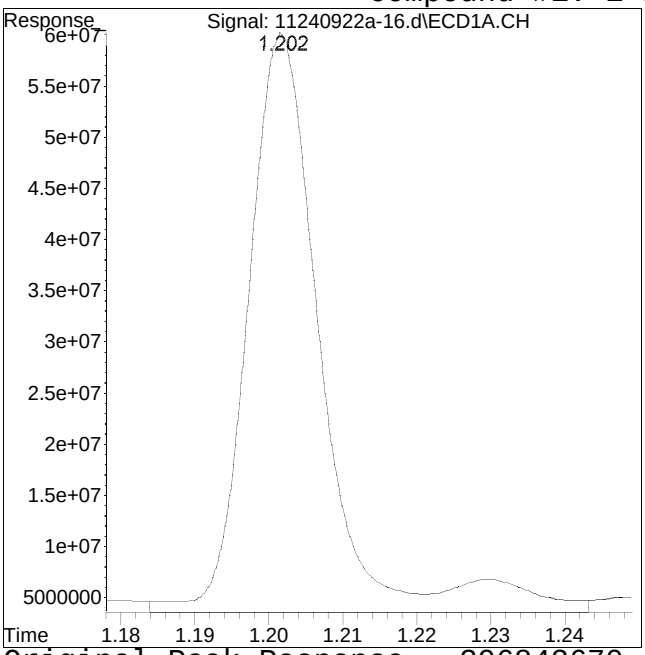
Volume Inj. :
Signal #1 Phase :  Signal #2 Phase:
Signal #1 Info :  Signal #2 Info :



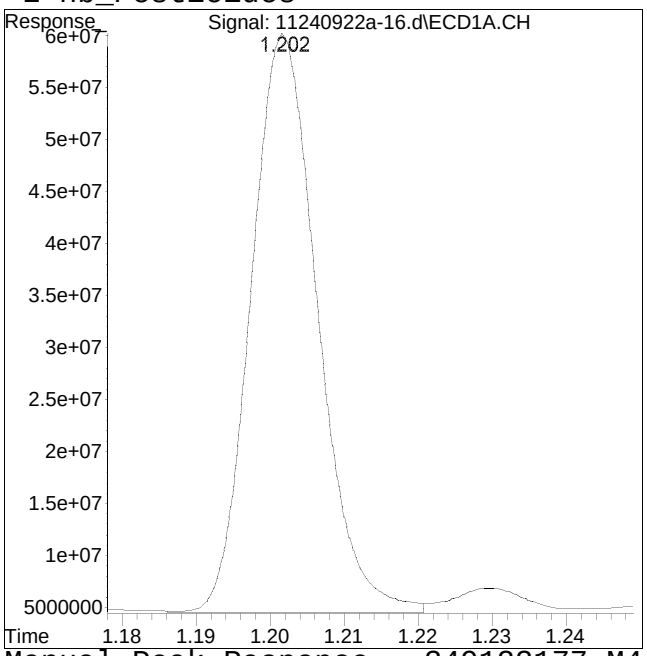
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #1: 1-br-2-nb_Pesticides




Original Peak Response = 396842670



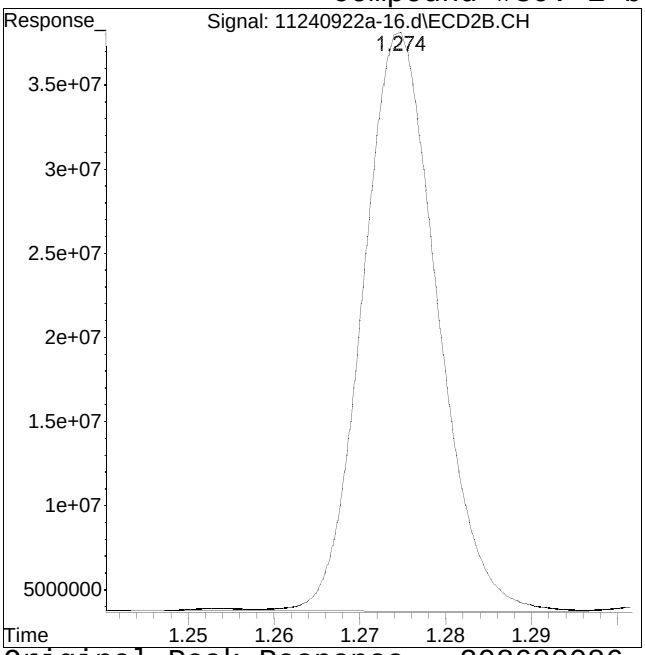

Manual Peak Response = 349123177 M4

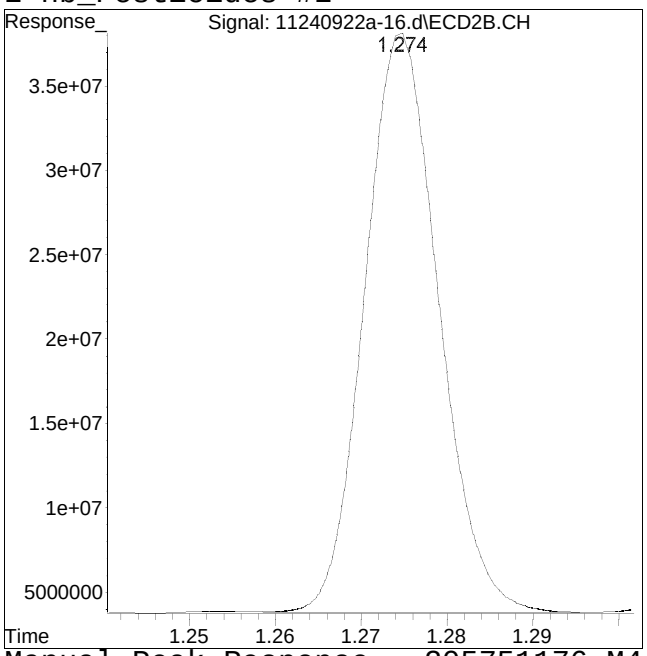
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #39: 1-br-2-nb_Pesticides #2



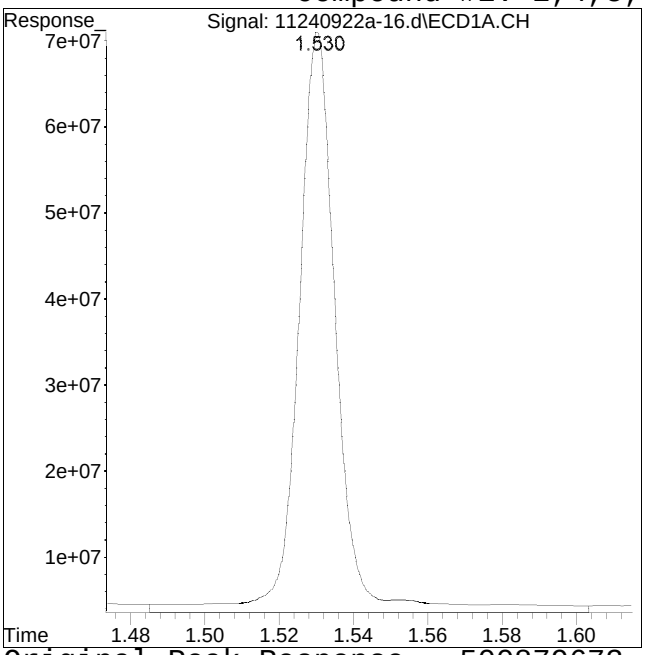



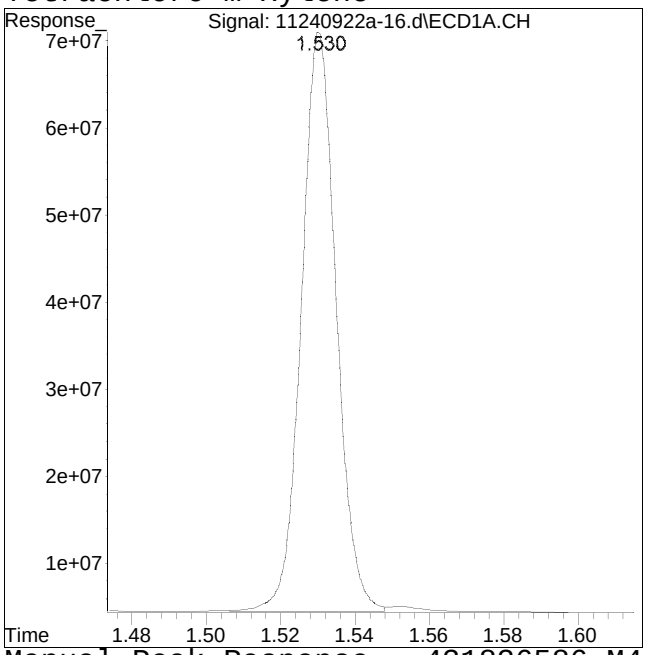

Original Peak Response = 208680086 Manual Peak Response = 205751176 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



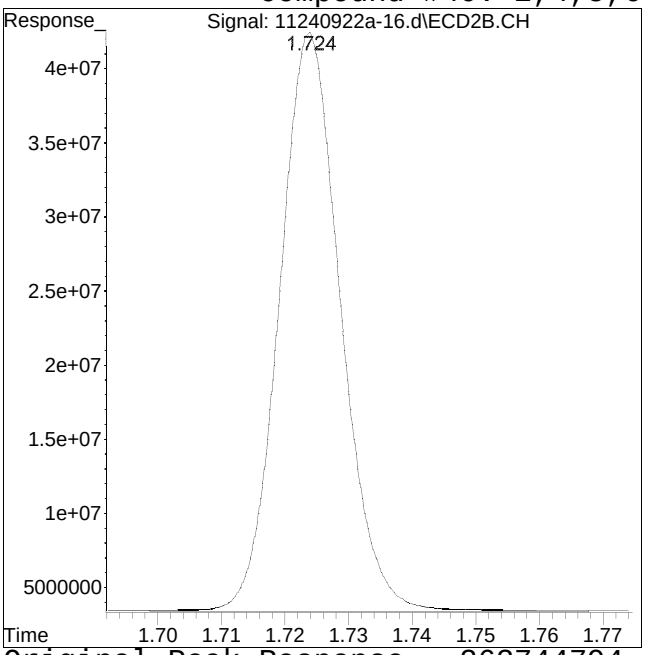




Original Peak Response = 500879673 Manual Peak Response = 431836586 M4
M4 = Poor automated baseline construction.

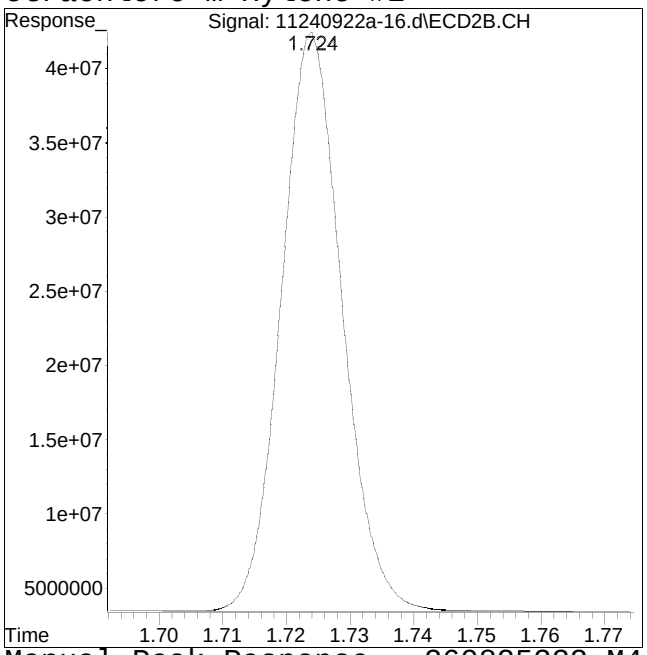
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2




Original Peak Response = 263744794



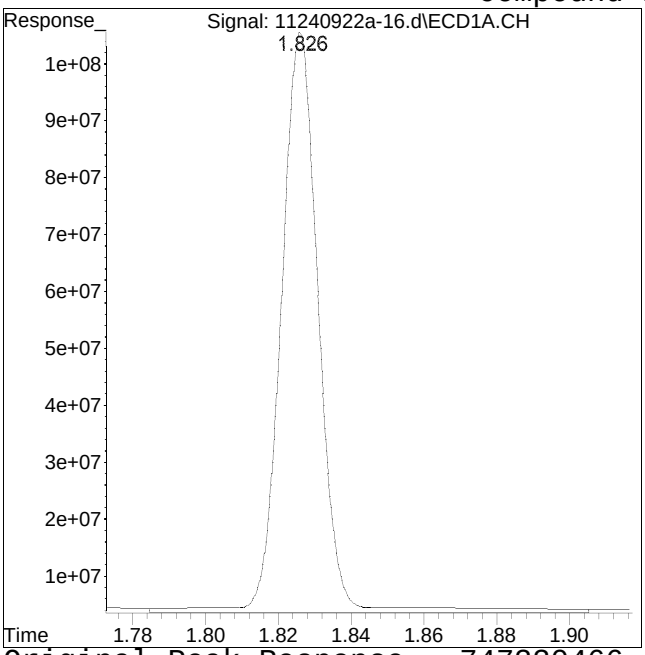

Manual Peak Response = 260825322 M4

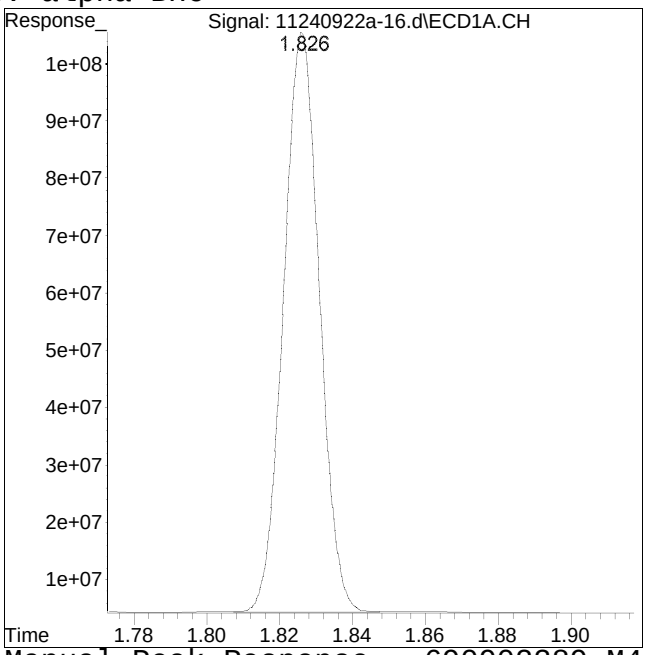
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #4: alpha-BHC



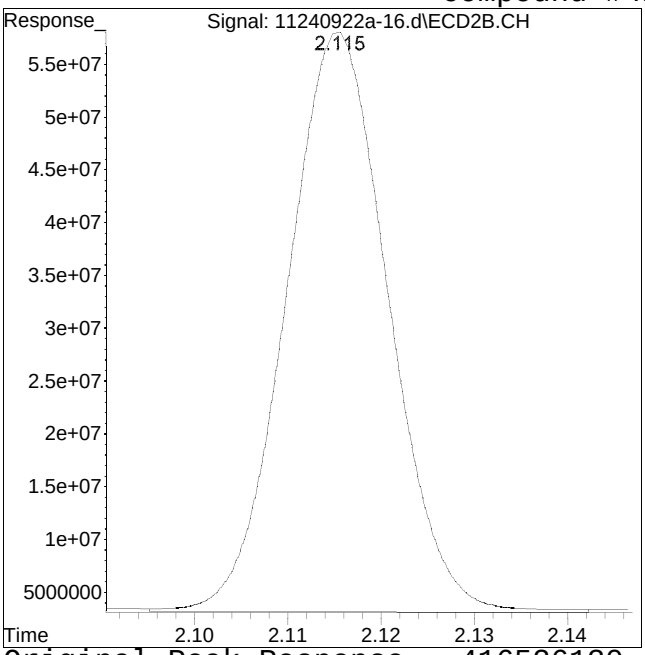



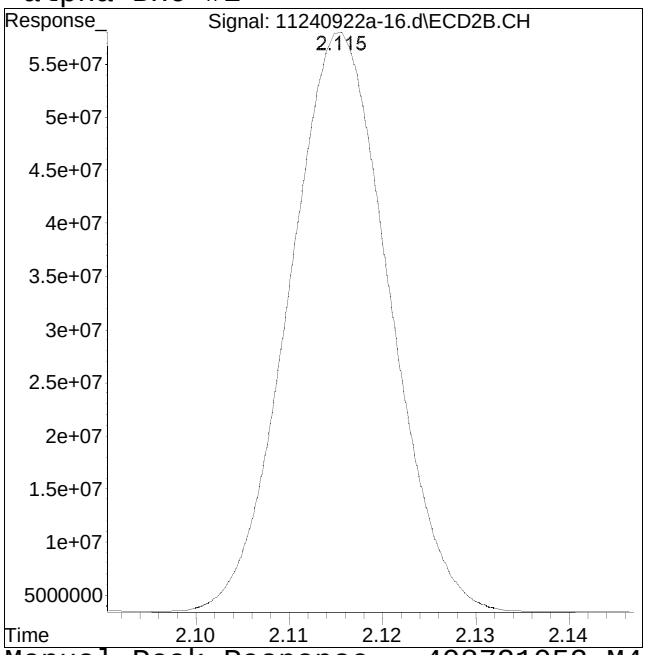

Original Peak Response = 747330466 Manual Peak Response = 690902389 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #42: alpha-BHC #2



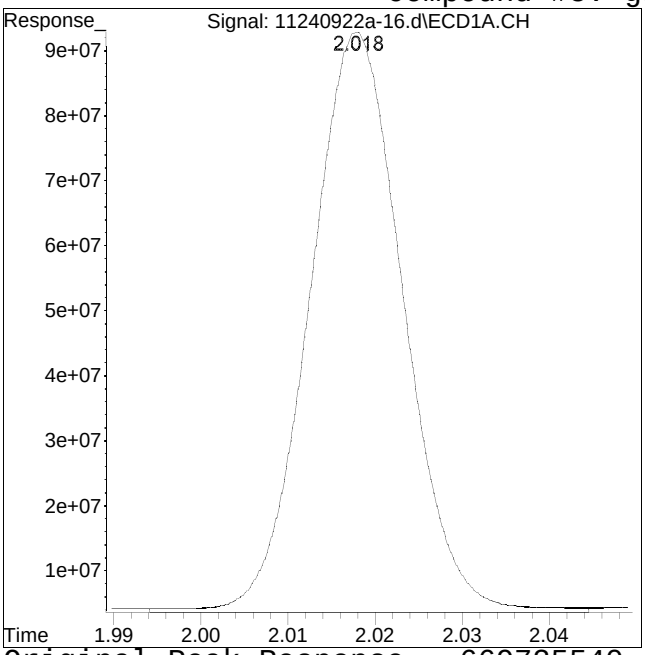




Original Peak Response = 416526130 Manual Peak Response = 408721052 M4
M4 = Poor automated baseline construction.

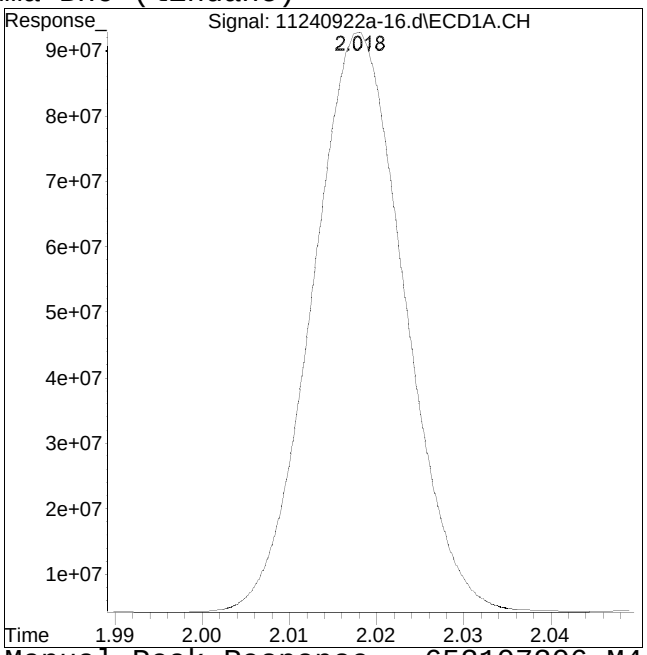
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #5: gamma-BHC (lindane)




Original Peak Response = 669725540



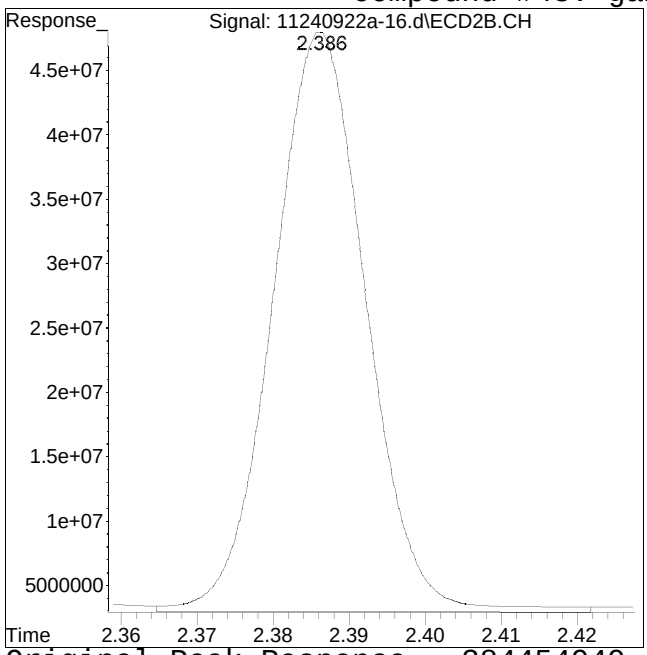

Manual Peak Response = 652107306 M4

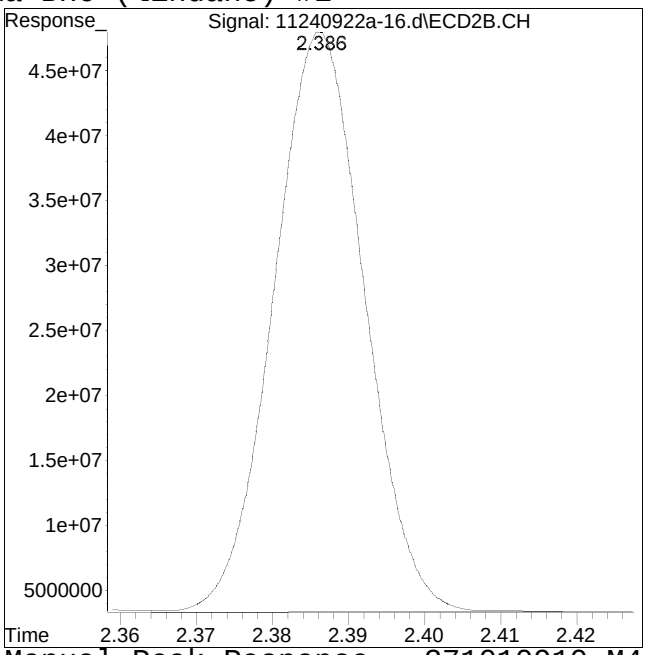
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #43: gamma-BHC (lindane) #2



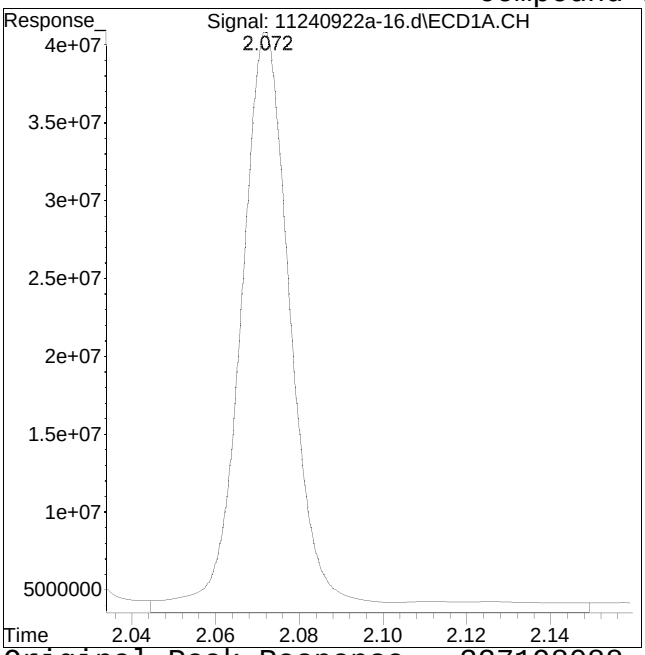




Original Peak Response = 384454949 Manual Peak Response = 371010910 M4
M4 = Poor automated baseline construction.

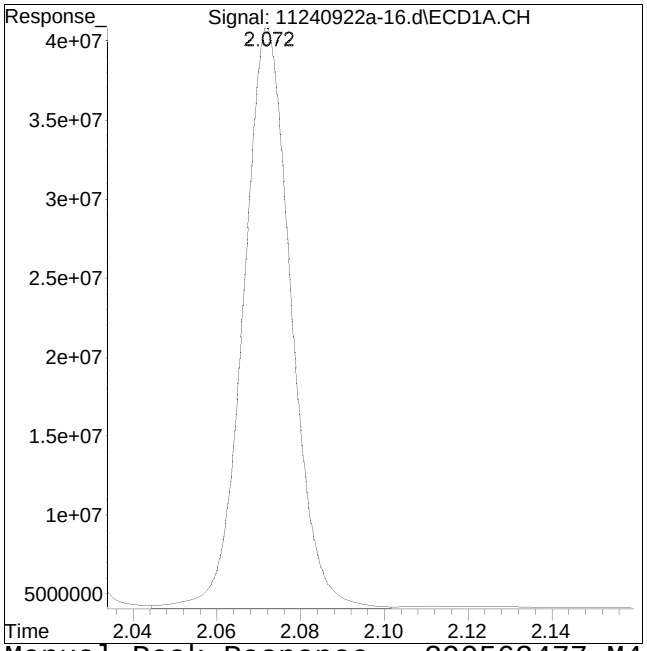
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #6: beta-BHC




Original Peak Response = 327198088

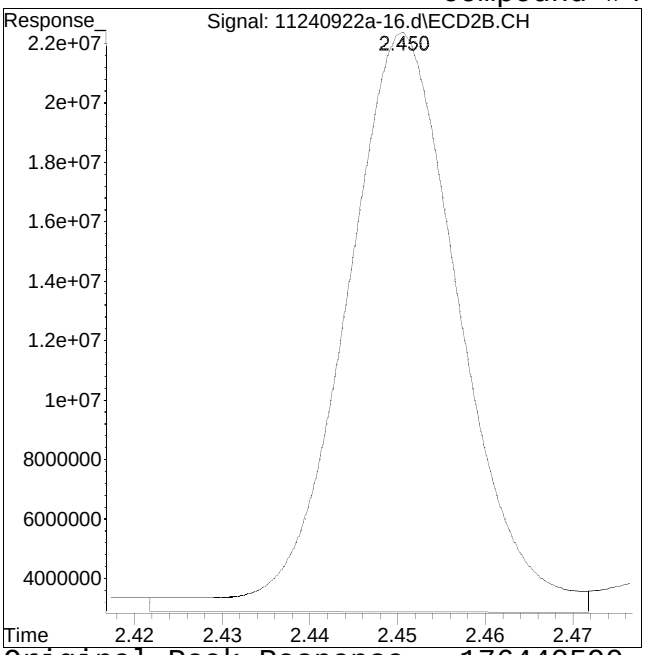



Manual Peak Response = 290563477 M4
M4 = Poor automated baseline construction.

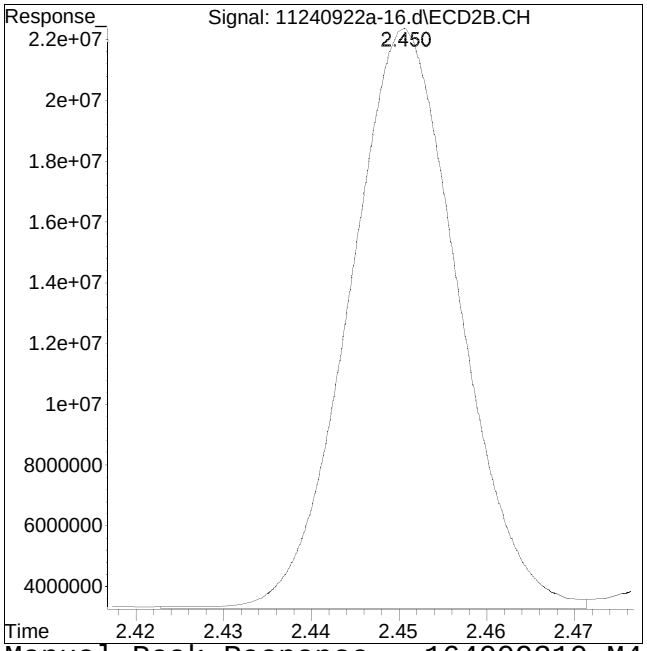
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #44: beta-BHC #2




Original Peak Response = 176440590



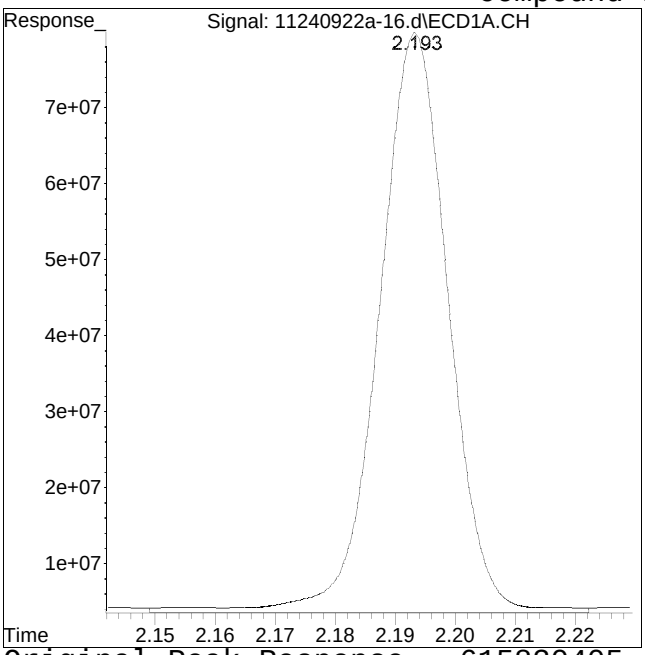

Manual Peak Response = 164009310 M4

M4 = Poor automated baseline construction.

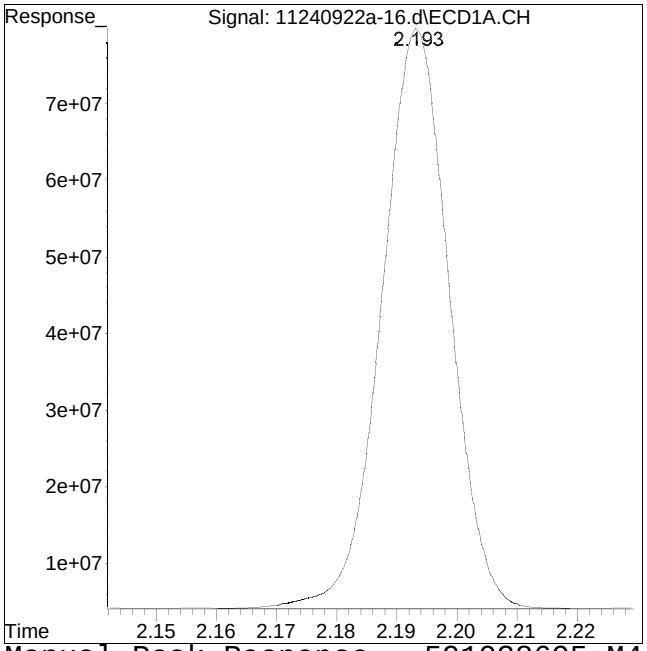
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #7: delta-BHC




Original Peak Response = 615830405



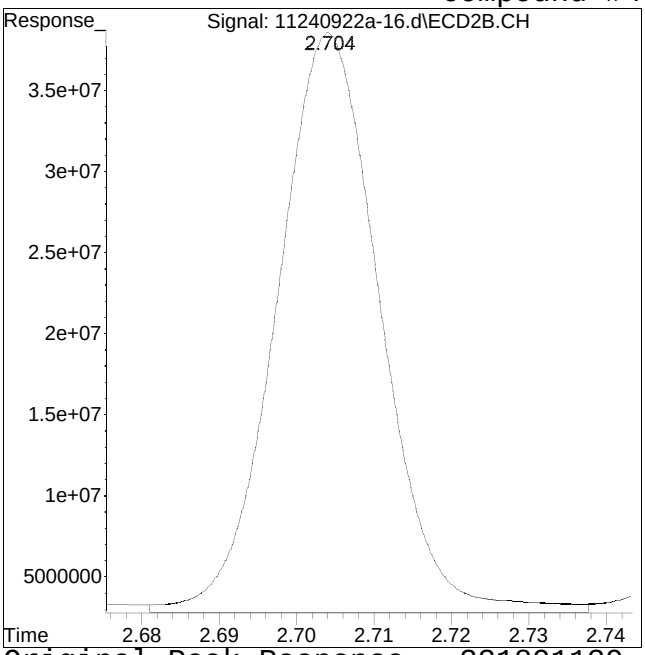

Manual Peak Response = 591938695 M4

M4 = Poor automated baseline construction.

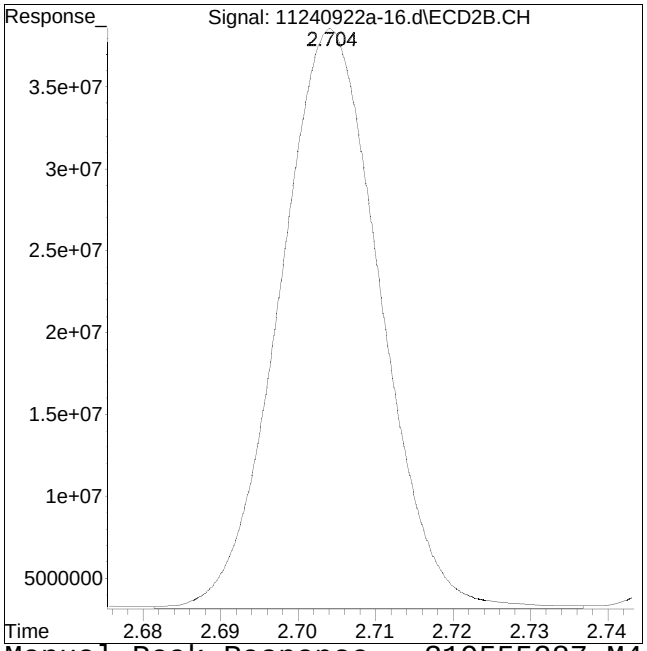
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #45: delta-BHC #2




Original Peak Response = 331891139

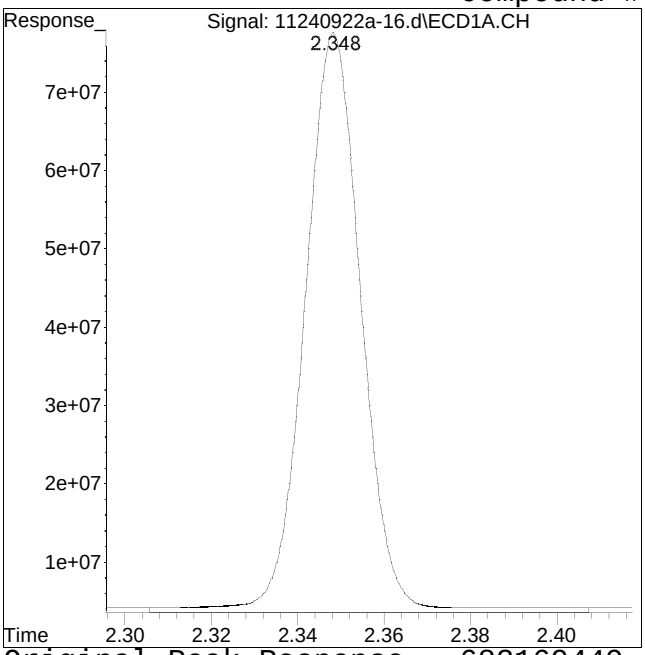


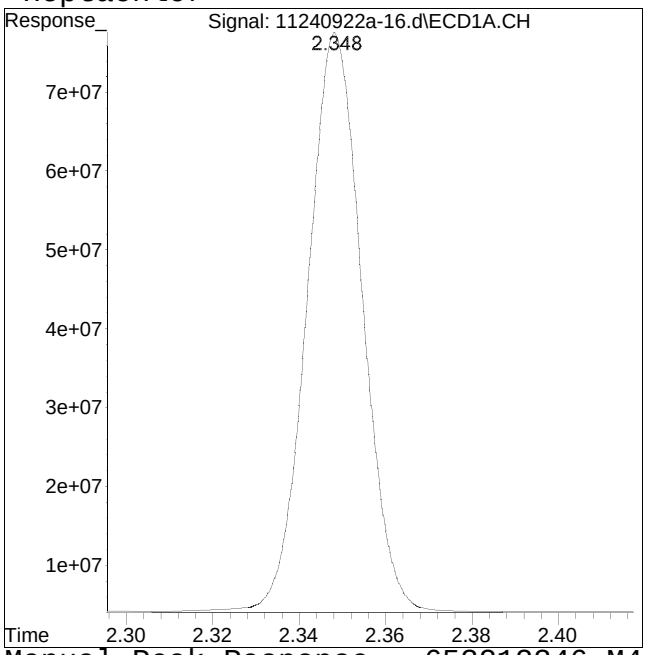

Manual Peak Response = 319555287 M4
M4 = Poor automated baseline construction.

# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #8: Heptachlor



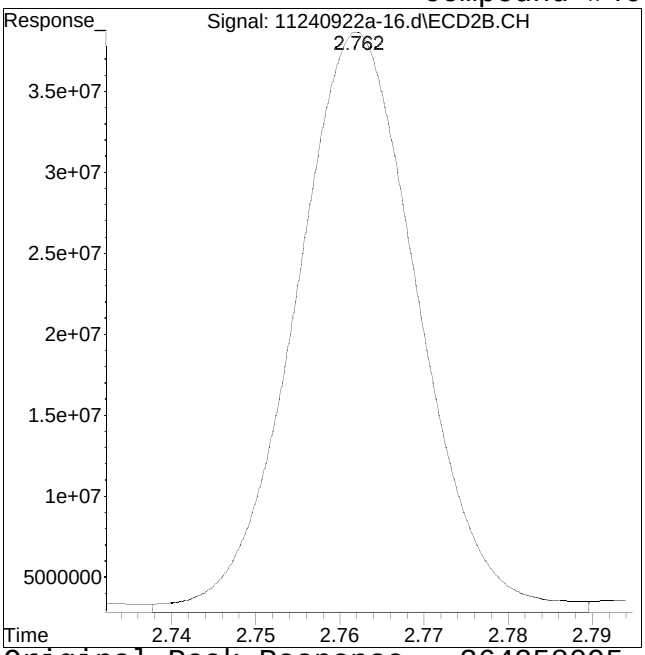



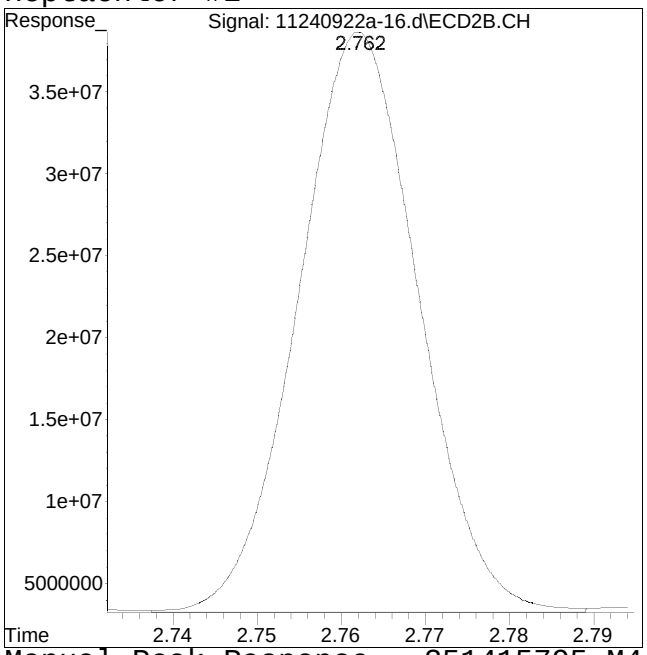

Original Peak Response = 683169449 Manual Peak Response = 653212346 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #46: Heptachlor #2



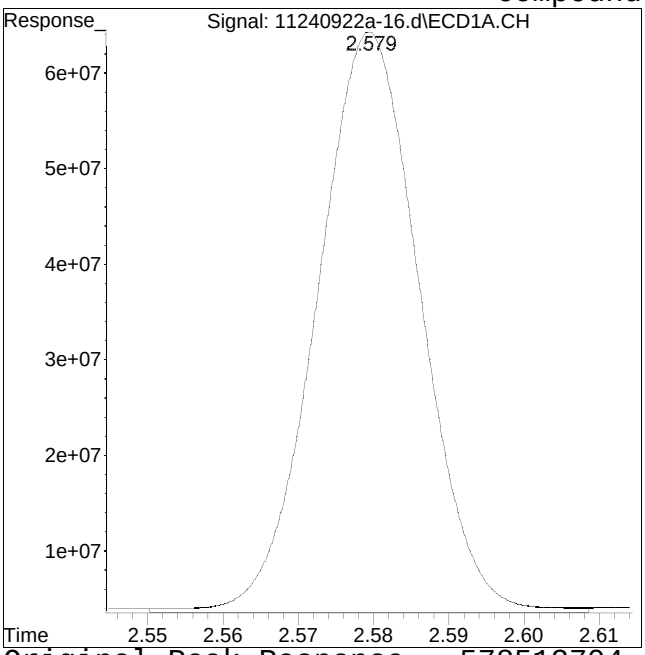



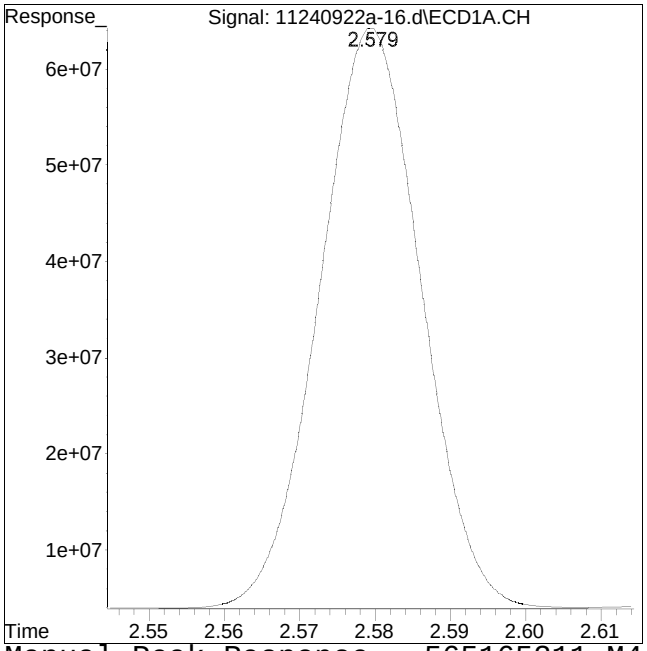

Original Peak Response = 364258095 Manual Peak Response = 351415795 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #9: Aldrin



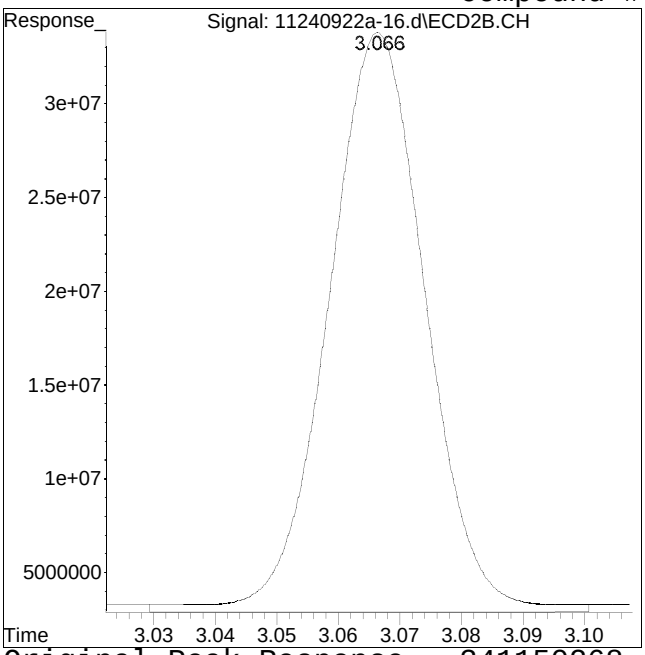



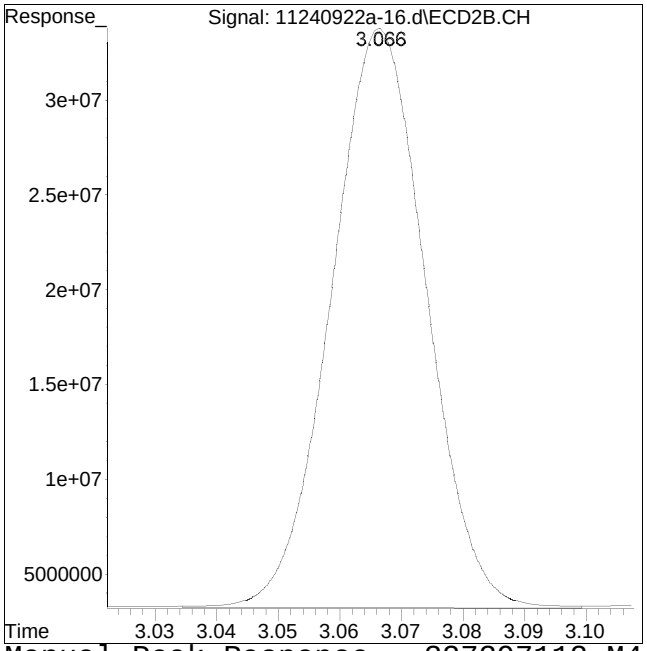

Original Peak Response = 578512704 Manual Peak Response = 565165211 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #47: Aldrin #2



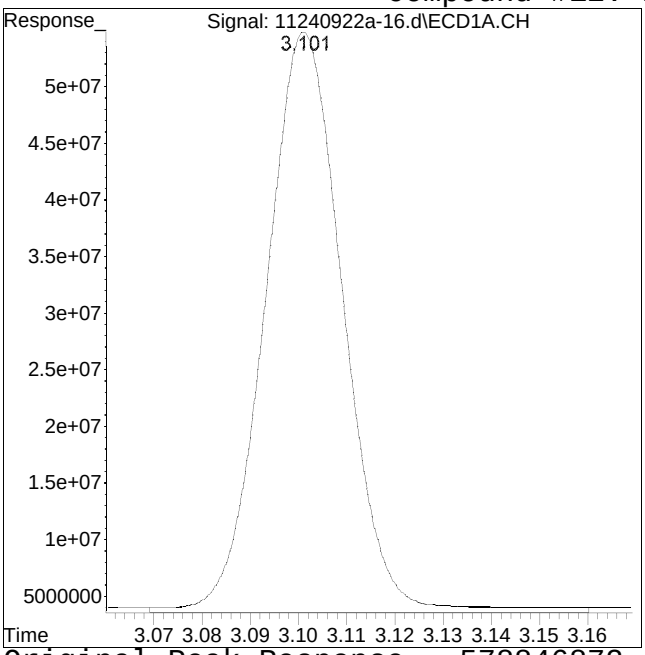



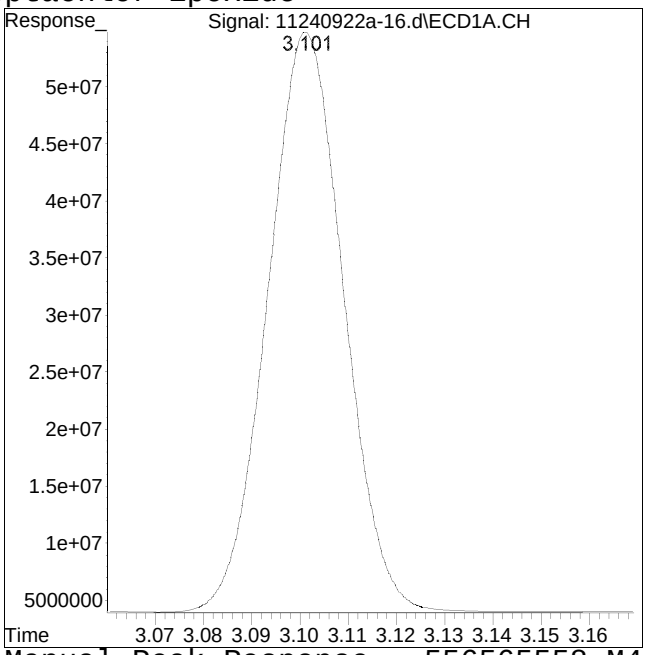

Original Peak Response = 341150268 Manual Peak Response = 327397112 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #12: Heptachlor Epoxide



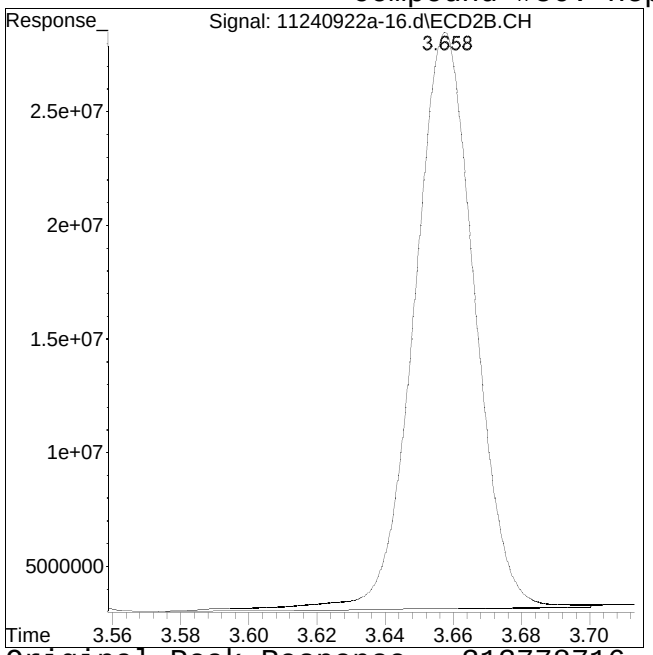




Original Peak Response = 578846872 Manual Peak Response = 556565558 M4
M4 = Poor automated baseline construction.

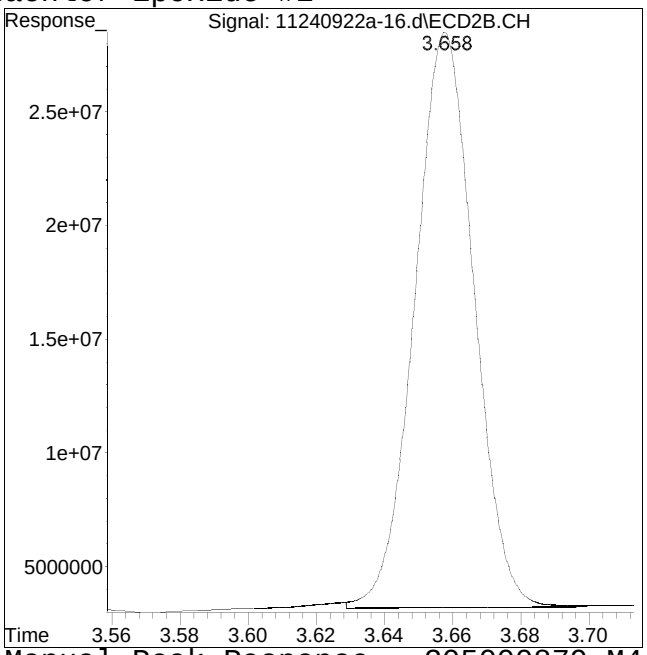
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #50: Heptachlor Epoxide #2




Original Peak Response = 313778716



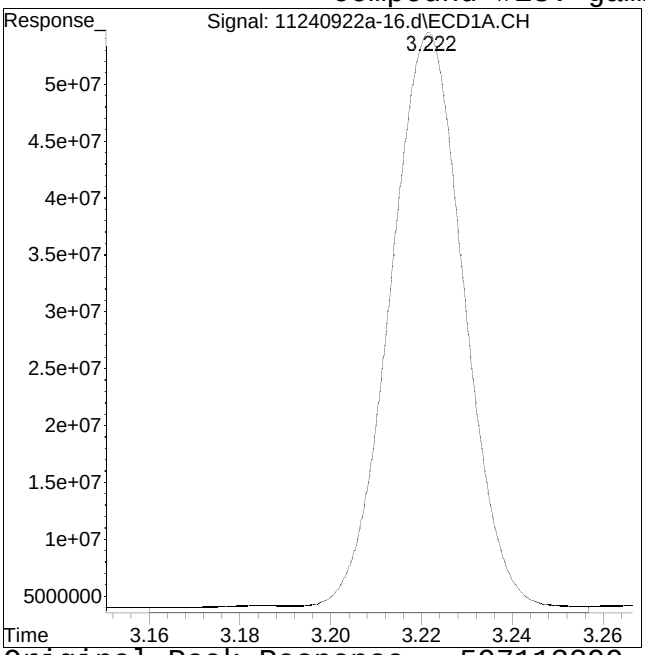

Manual Peak Response = 305000879 M4

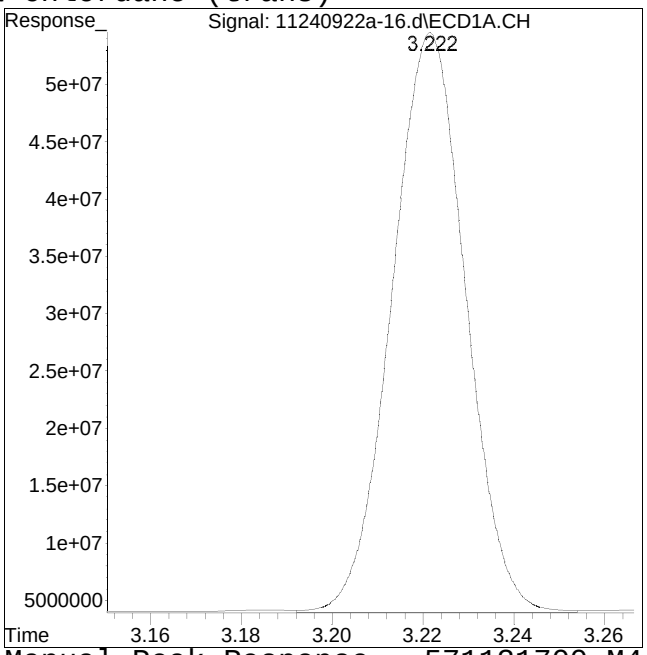
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #13: gamma-Chlordane (trans)



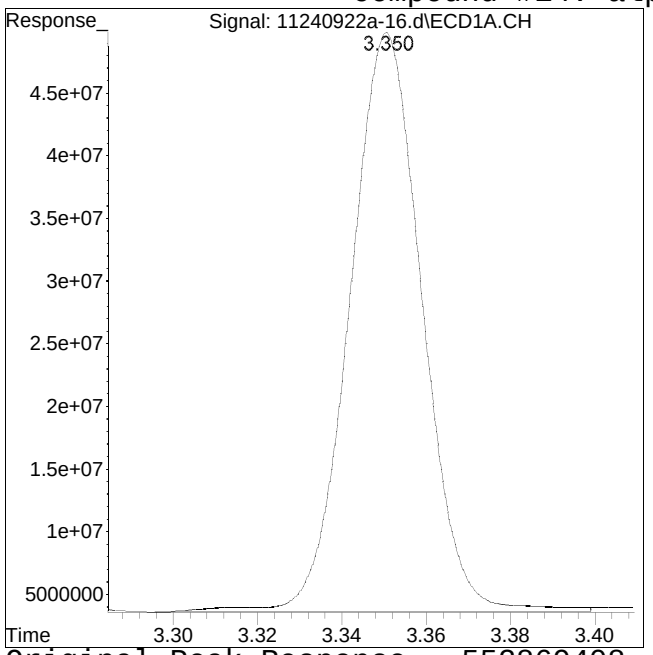




Original Peak Response = 597113299 Manual Peak Response = 571131700 M4
M4 = Poor automated baseline construction.

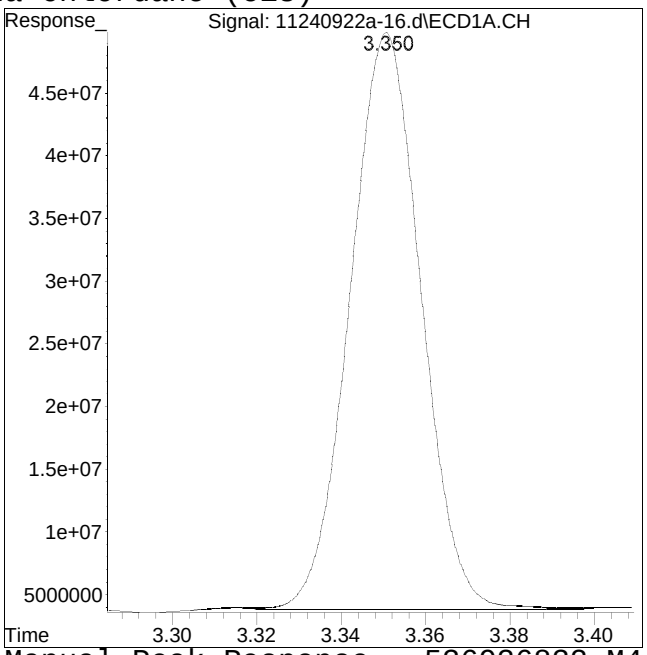
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #14: alpha-Chlordane (cis)




Original Peak Response = 552869408



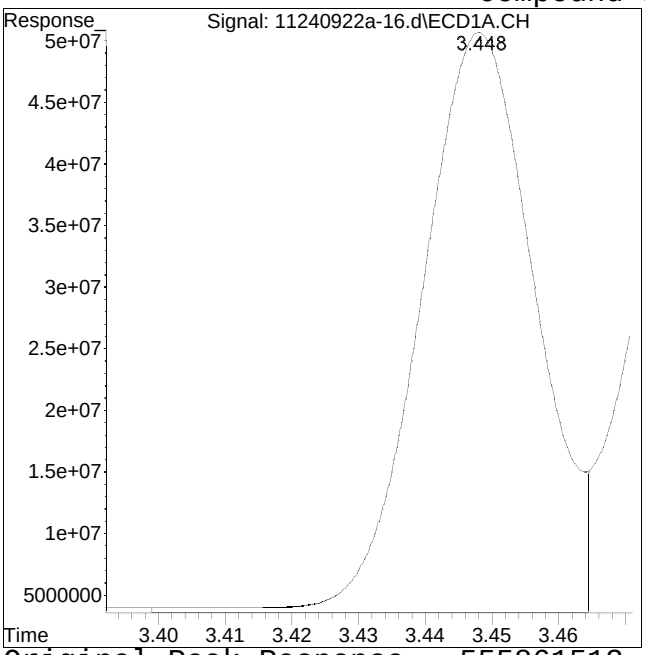

Manual Peak Response = 536936832 M4

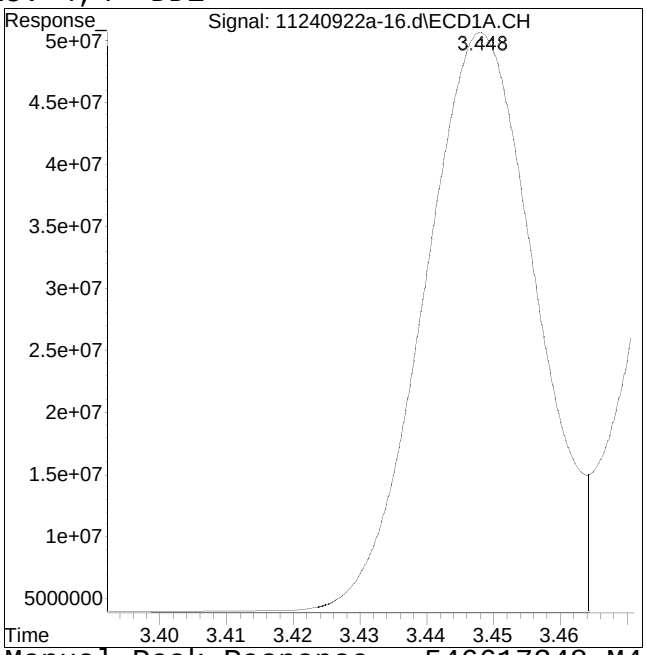
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #15: 4,4'-DDE



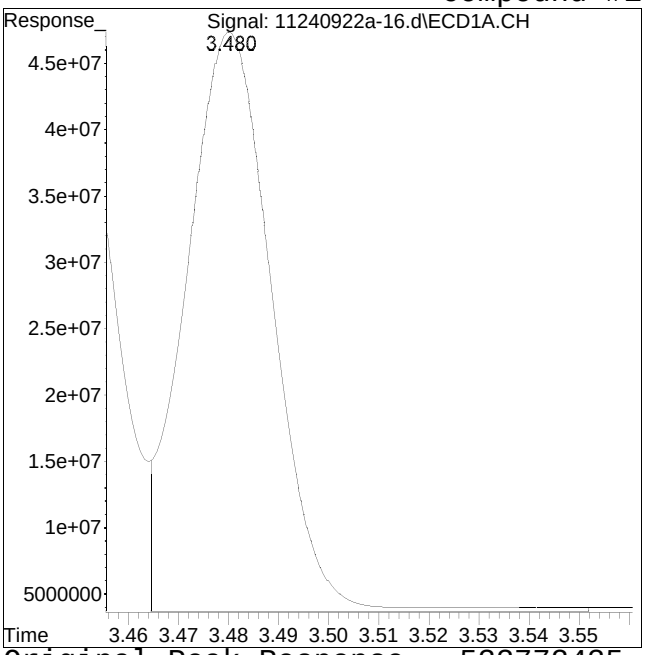




Original Peak Response = 555861513 Manual Peak Response = 546617348 M4
M4 = Poor automated baseline construction.

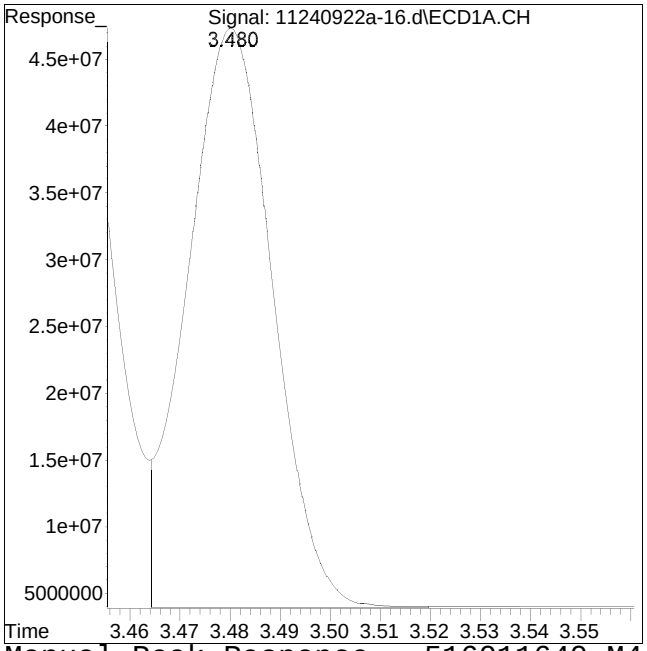
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #16: Endosulfan I




Original Peak Response = 533772435



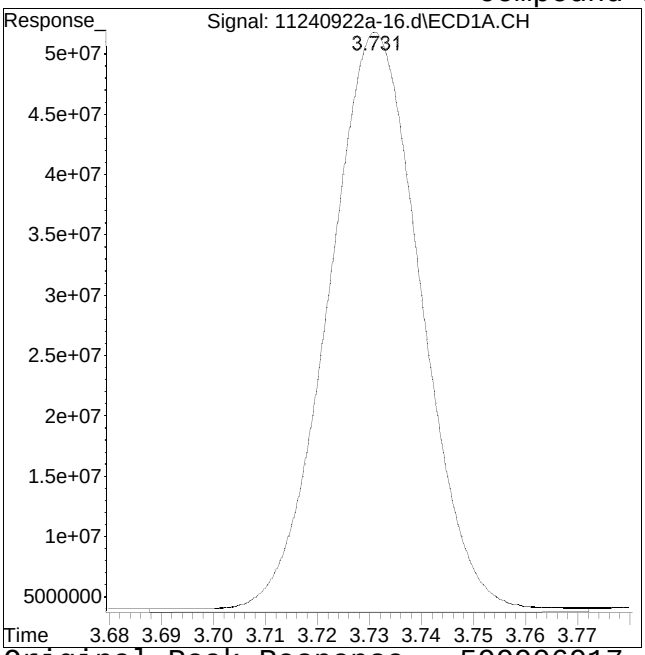

Manual Peak Response = 516011640 M4

M4 = Poor automated baseline construction.

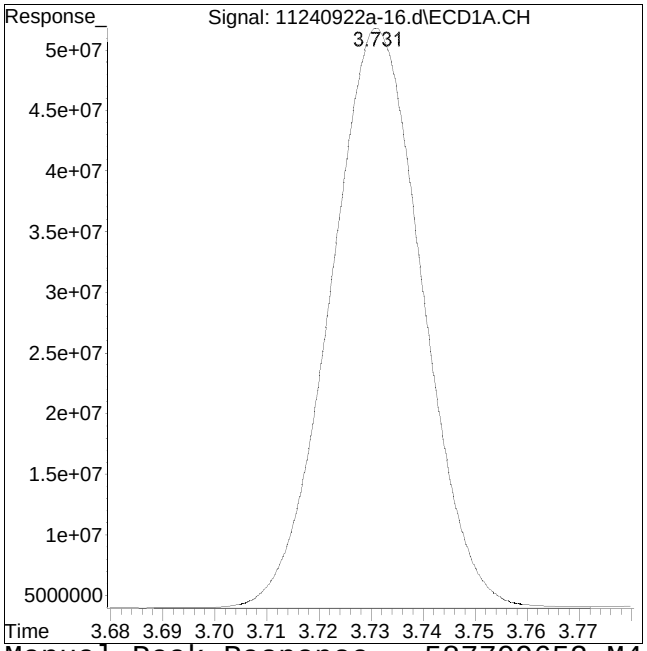
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #17: Dieldrin




Original Peak Response = 599906917



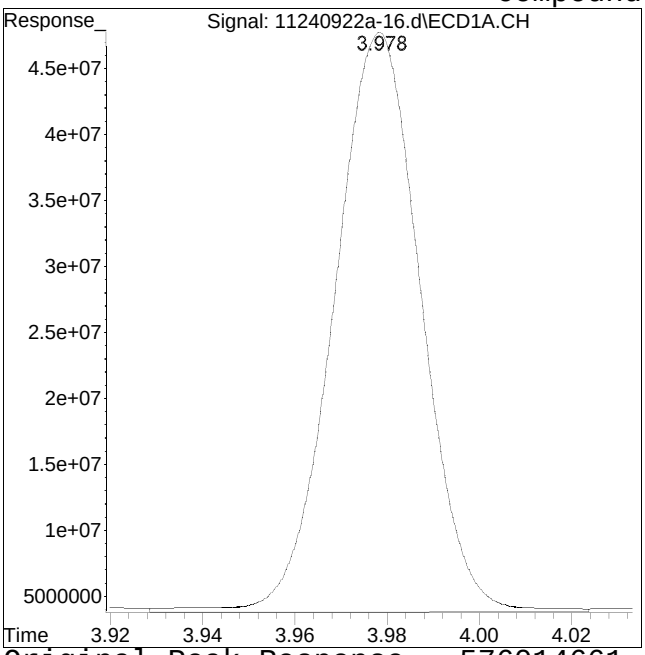

Manual Peak Response = 587709652 M4

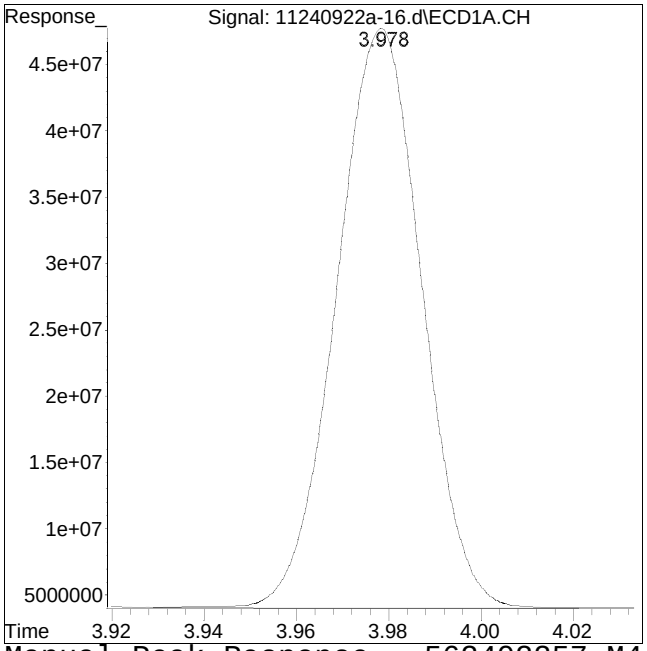
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #18: Endrin



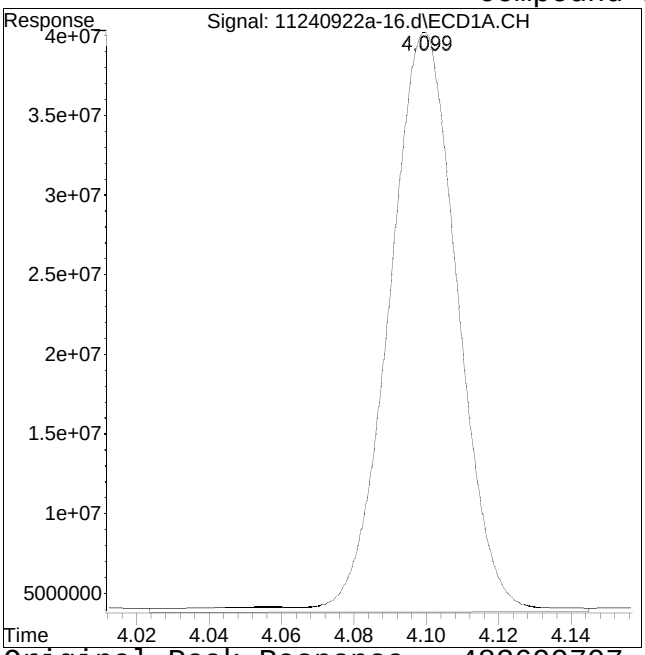



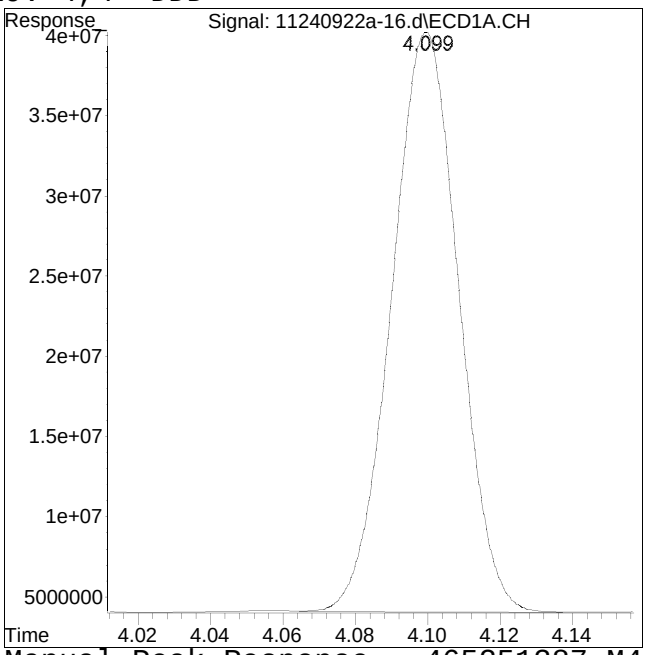

Original Peak Response = 576014661 Manual Peak Response = 562402257 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #19: 4,4'-DDD



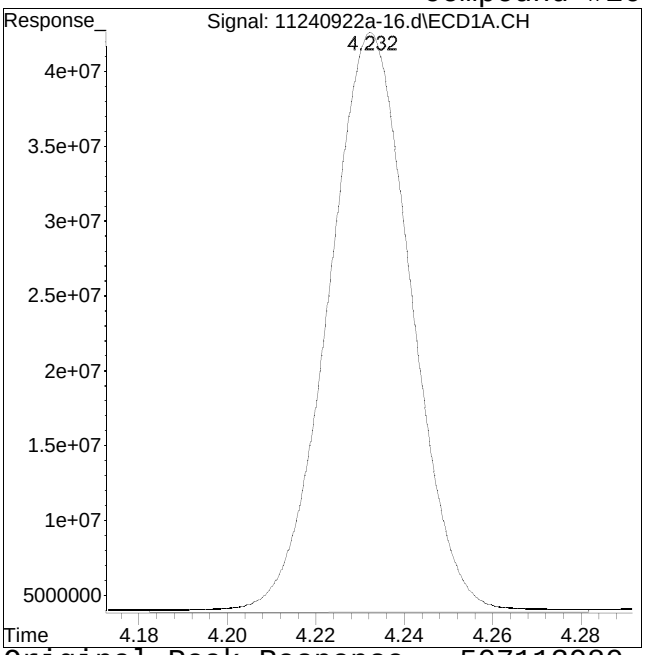




Original Peak Response = 483699707 Manual Peak Response = 465251387 M4
M4 = Poor automated baseline construction.

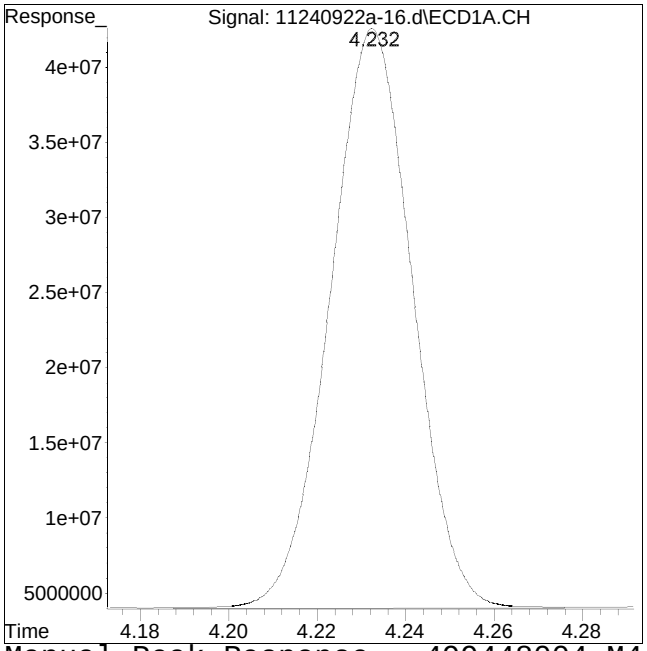
Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #20: Endosulfan II




Original Peak Response = 507113980



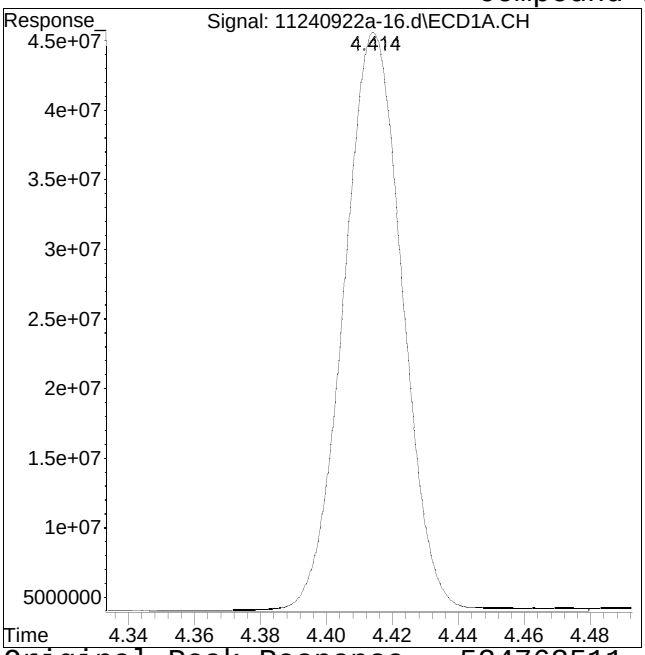

Manual Peak Response = 499448004 M4

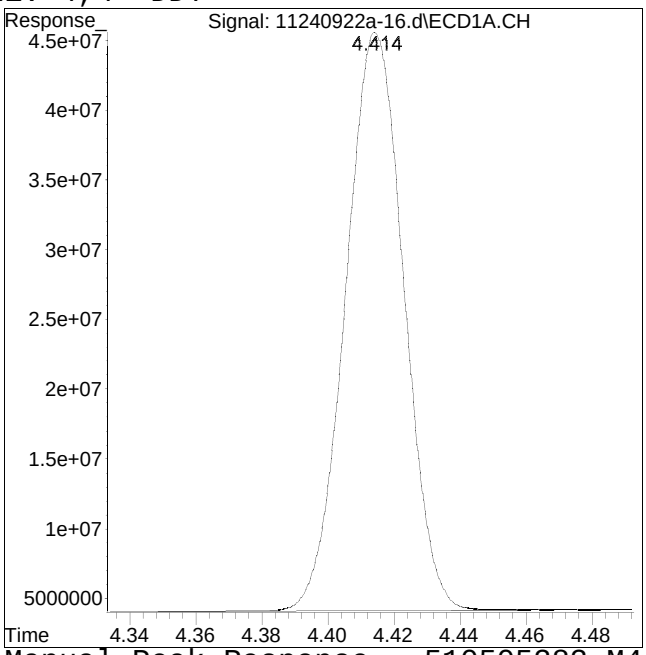
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #21: 4,4'-DDT



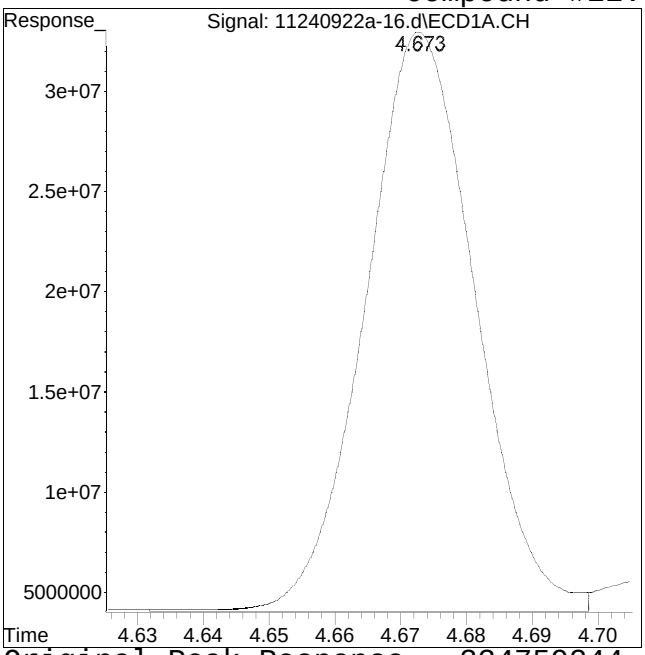




Original Peak Response = 524763511 Manual Peak Response = 510505383 M4
M4 = Poor automated baseline construction.

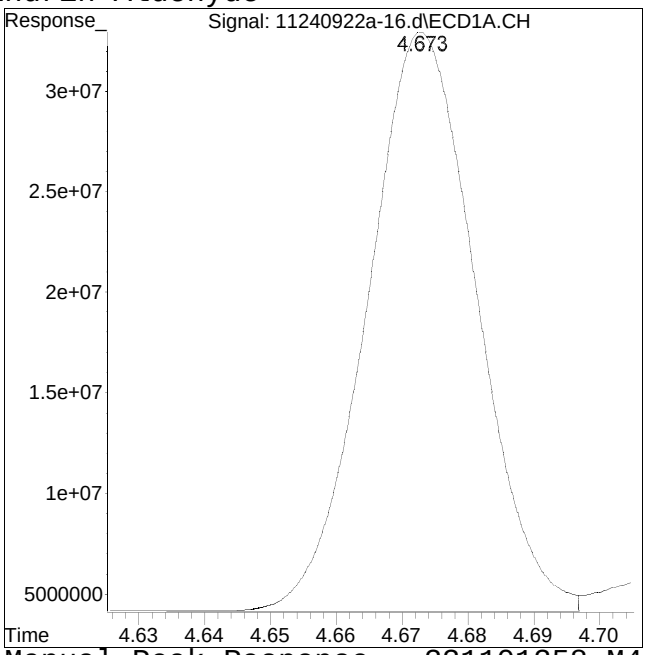
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #22: Endrin Aldehyde




Original Peak Response = 334759244



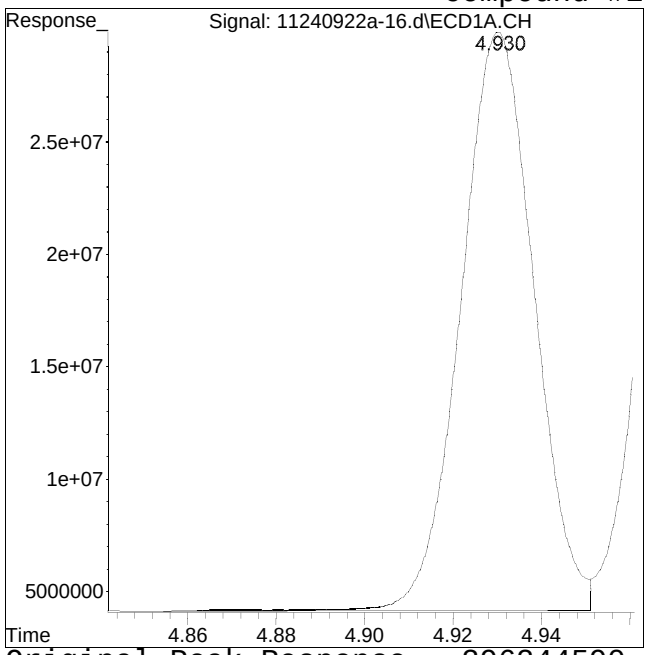

Manual Peak Response = 331101358 M4

M4 = Poor automated baseline construction.

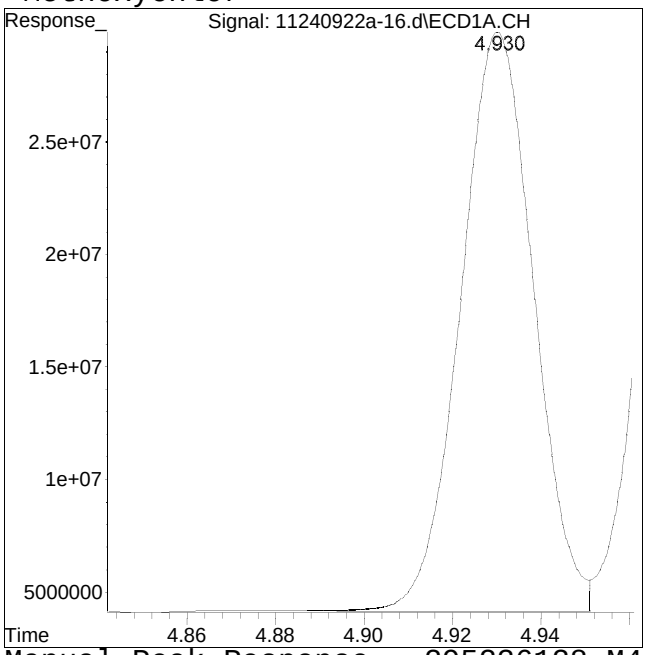
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #23: Methoxychlor




Original Peak Response = 296244590



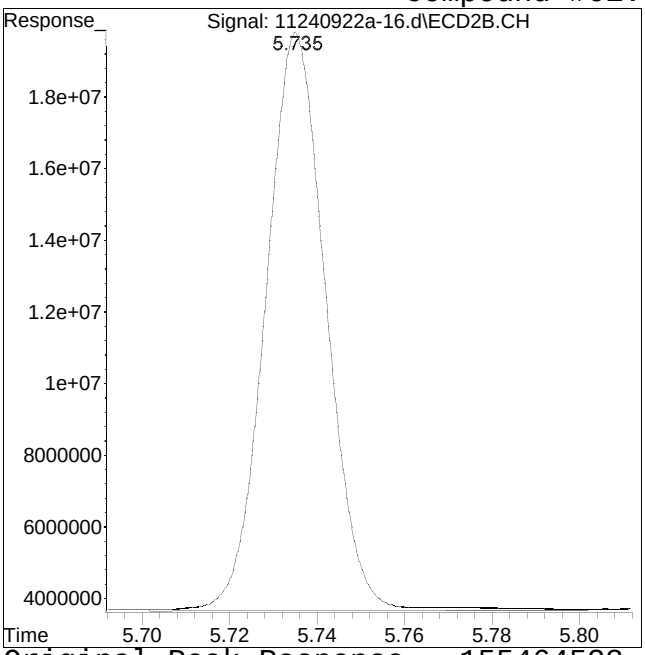

Manual Peak Response = 295236128 M4

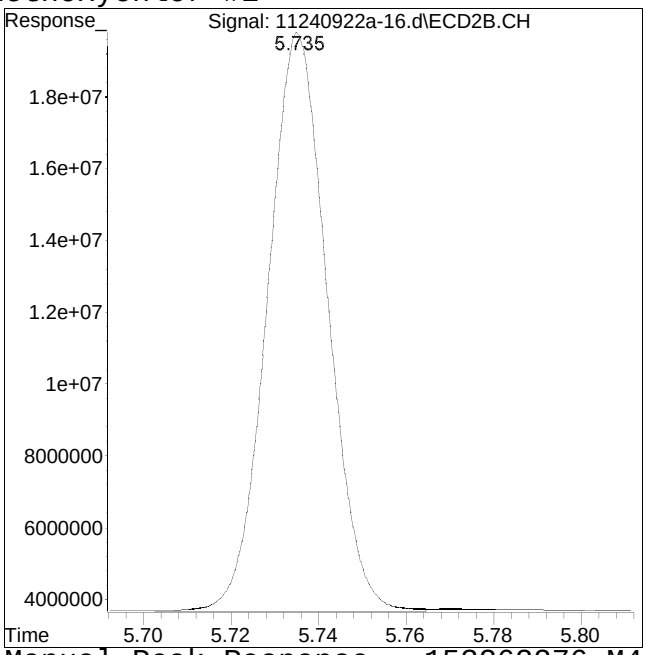
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #61: Methoxychlor #2



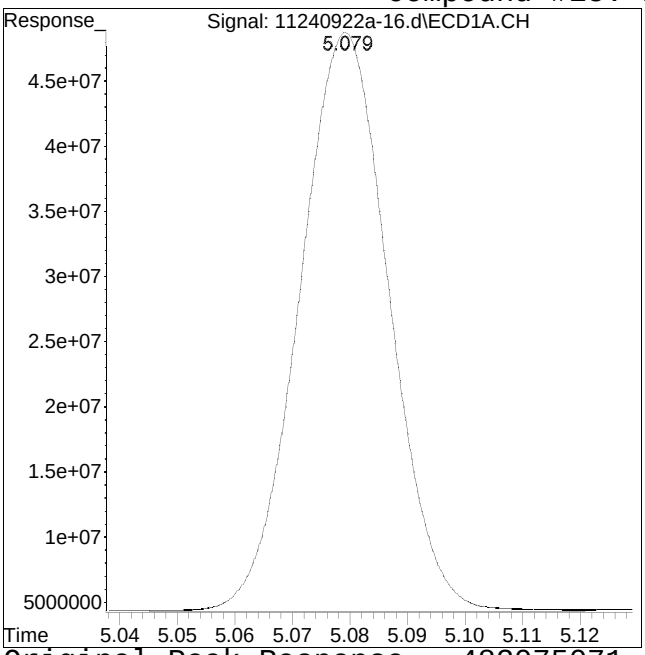




Original Peak Response = 155464523 Manual Peak Response = 153262276 M4
M4 = Poor automated baseline construction.

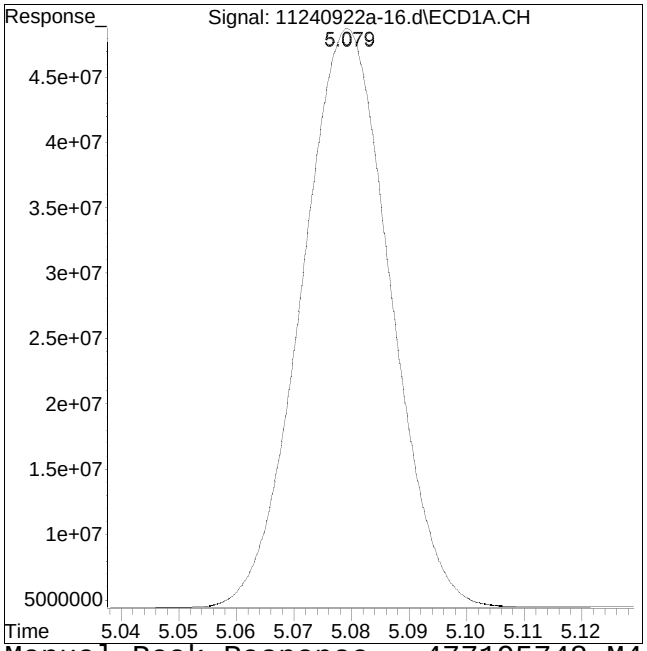
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #25: Endosulfan Sulfate




Original Peak Response = 483075071



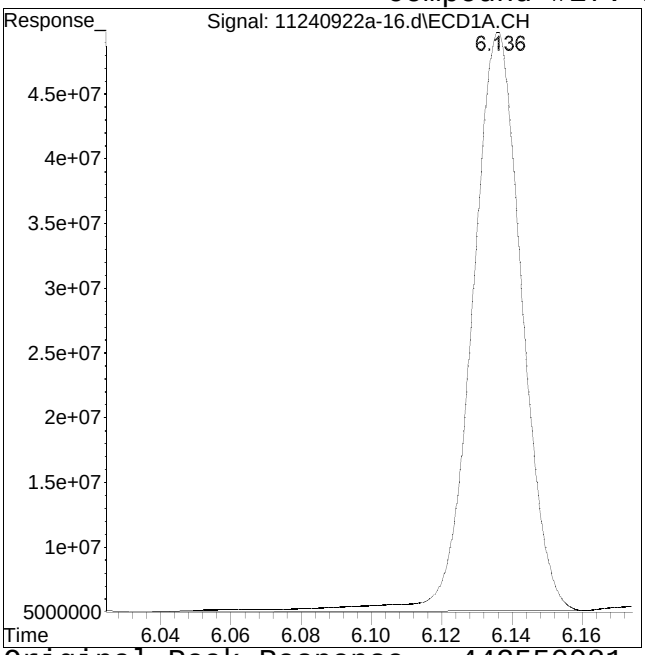

Manual Peak Response = 477195748 M4

M4 = Poor automated baseline construction.

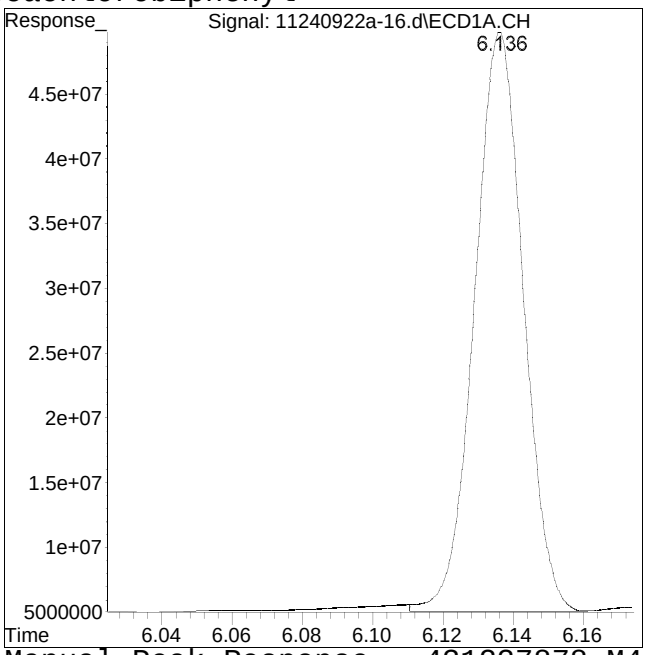
# Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

## Compound #27: Decachlorobiphenyl




Original Peak Response = 442550981



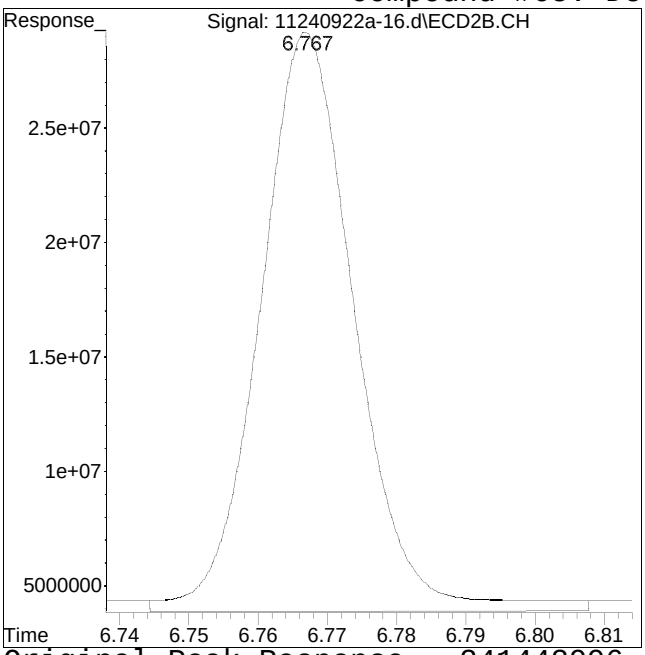

Manual Peak Response = 431237878 M4

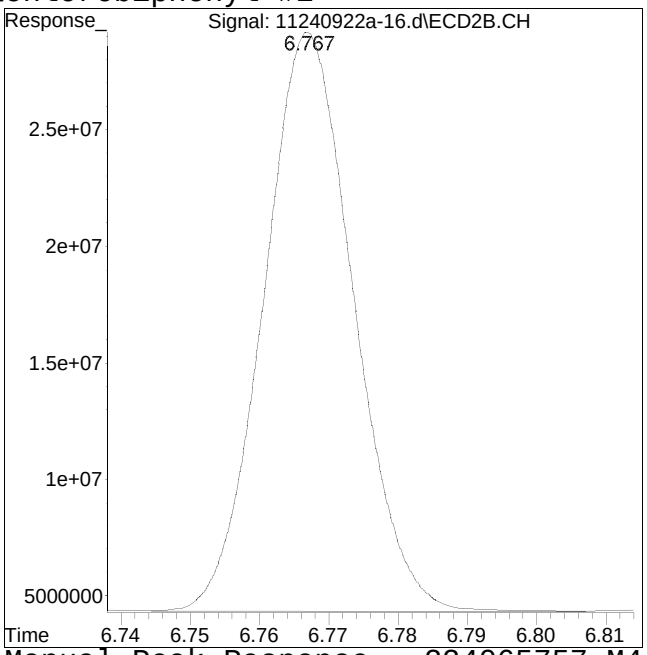
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest11\2024\240922QMethod : pest11_08_01_24_ugL_ICAL
Data File : 11240922a-16.d Operator : PEST11:emr
Date Inj'd : 9/22/2024 12:20 Instrument : Pest 11
Sample : WG1974576-5,42,, msd Quant Date : 9/22/2024 3:27 pm

Compound #65: Decachlorobiphenyl #2




Original Peak Response = 241442996 Manual Peak Response = 224065757 M4
M4 = Poor automated baseline construction.

# Calculation of PCB Aroclors & Pesticides

Aqueous Concentration Formula:
Amt * DF*(Vt/Vp)*(1000/Vo)*(Ve/1000)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Vo = Volume of Sample (mL)
Ve = Extraction Lab Final Volume (mL)

Soil Concentration Formula:
Amt * DF * (Vt/Vp)*(1000/Wt)*(Ve/1000)* (100/TS)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Wt = Weight of Sample (g)
Ve = Extraction Lab Final Volume (mL)
TS = Total Solids

Dep.: PEST
Inst: Pest_20
Date: **07/22/24**
Run: **ical**

Method
GC: pest

Seq: WG1950439
IS: pp11660

| Vial | Data File | Sample CCAL | notes | screen | initials |
|---|---|---|---|---|---|
| 1 | 20240722i-01 | blank,42e,,pp 11660 - | | | |
| 2 | 20240722i-02 | pem-01,42e,,pp 11667 - | | | EJL 7/23 |
| 3 | 20240722i-03 | il1pest,42e,,pp 11687 L0.0005 | | | EJL 7/23 |
| 4 | 20240722i-04 | il2pest,42e,,pp 11686 L0.001 | | | EJL 7/23 |
| 5 | 20240722i-05 | il3pest,42e,,pp 11685 L0.002 | | | EJL 7/23 |
| 6 | 20240722i-06 | il4pest,42e,,pp 11684 L0.003 | | | EJL 7/23 |
| 7 | 20240722i-07 | il5pest,42e,,pp 11683 L0.004 | | | EJL 7/23 |
| 8 | 20240722i-08 | il7pest,42e,,pp 11682 L0.01 | | | EJL 7/23 |
| 9 | 20240722i-09 | il8pest,42e,,pp 11681 L0.05 | | | EJL 7/23 |
| 10 | 20240722i-10 | il9pest,42e,,pp 11680 L0.1 | | | EJL 7/23 |
| 11 | 20240722i-11 | il10pest,42e,,pp 11679 L0.2 | | | EJL 7/23 |
| 12 | 20240722i-12 | il11pest,42e,,pp 11678 L0.4 | | | EJL 7/23 |
| 13 | 20240722i-13 | cicvpest,42e,,pp 11675 L0.05ICV | | | EJL 7/23 |
| 14 | 20240722i-14 | il3chlor,42e,,pp 11694 L0.01 | | | EJL 7/23 |
| 15 | 20240722i-15 | il4chlor,42e,,pp 11693 L0.02 | | | EJL 7/23 |
| 16 | 20240722i-16 | il5chlor,42e,,pp 11692 L0.1 | | | EJL 7/23 |
| 17 | 20240722i-17 | il7chlor,42e,,pp 11691 L0.5 | | | EJL 7/23 |
| 18 | 20240722i-18 | il8chlor,42e,,pp 11690 L1.0 | | | EJL 7/23 |
| 19 | 20240722i-19 | il9chlor,42e,,pp 11689 L2.0 | | | EJL 7/23 |
| 20 | 20240722i-20 | il10chlor,42e,,pp 11688 L5.0 | Level removed | | EJL 7/23 |
| 21 | 20240722i-21 | cicvchlor,42e,,pp 11670 L1.0ICV | | | EJL 7/23 |
| 22 | 20240722i-22 | il3tox,42e,,pp 11703 L0.02 | | | EJL 7/23 |
| 23 | 20240722i-23 | il4tox,42e,,pp 11702 L0.1 | | | EJL 7/23 |
| 24 | 20240722i-24 | il7tox,42e,,pp 11701 L1.0 | | | EJL 7/23 |
| 25 | 20240722i-25 | il8tox,42e,,pp 11700 L2.0 | | | EJL 7/23 |
| 26 | 20240722i-26 | il9tox,42e,,pp 11695 L5.0 | | | EJL 7/23 |
| 27 | 20240722i-27 | cicvtox,42e,,pp 11668 L2.0ICV | | | EJL 7/23 |

Dep.: PEST
Inst: PEST_11
Date: **08/01/24**
Run: ical

Method
GC: pest

Seq: WG1955254
IS: pp11660

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | 11240801i-01 | blank,42e,,pp 11660 - | | | | |
| 2 | 11240801i-02 | pem-01,42e,,pp 11667 - | | | | EJL 8/2 |
| 3 | 11240801i-03 | il1pest,42e,,pp 11687 L0.0005 | | | | EJL 8/2 |
| 4 | 11240801i-04 | il2pest,42e,,pp 11686 L0.001 | | | | EJL 8/2 |
| 5 | 11240801i-05 | il3pest,42e,,pp 11685 L0.002 | | | | EJL 8/2 |
| 6 | 11240801i-06 | il4pest,42e,,pp 11684 L0.003 | | | | EJL 8/2 |
| 7 | 11240801i-07 | il5pest,42e,,pp 11683 L0.004 | | | | EJL 8/2 |
| 8 | 11240801i-08 | il7pest,42e,,pp 11682 L0.01 | | | | EJL 8/2 |
| 9 | 11240801i-09 | il8pest,42e,,pp 11681 L0.05 | | | | EJL 8/2 |
| 10 | 11240801i-10 | il9pest,42e,,pp 11680 L0.1 | | | | EJL 8/2 |
| 11 | 11240801i-11 | il10pest,42e,,pp 11679 L0.2 | | | | EJL 8/2 |
| 12 | 11240801i-12 | il11pest,42e,,pp 11678 L0.4 | | | | EJL 8/2 |
| 13 | 11240801i-13 | cicvpest,42e,,pp 11675 L0.05ICV | | | | EJL 8/2 |
| 14 | 11240801i-14 | il3chlor,42e,,pp 11694 L0.01 | | | | EJL 8/2 |
| 15 | 11240801i-15 | il4chlor,42e,,pp 11693 L0.02 | | | | EJL 8/2 |
| 16 | 11240801i-16 | il5chlor,42e,,pp 11692 L0.1 | | | | EJL 8/2 |
| 17 | 11240801i-17 | il7chlor,42e,,pp 11691 L0.5 | | | | EJL 8/2 |
| 18 | 11240801i-18 | il8chlor,42e,,pp 11690 L1.0 | | | | EJL 8/2 |
| 19 | 11240801i-19 | il9chlor,42e,,pp 11689 L2.0 | | | | EJL 8/2 |
| 20 | 11240801i-20 | il10chlor,42e,,pp 11688 L5.0 | | | | EJL 8/2 |
| 21 | 11240801i-21 | cicvchlor,42e,,pp 11670 L1.0ICV | | | | EJL 8/2 |
| 22 | 11240801i-22 | il3tox,42e,,pp 11703 L0.02 | | | | EJL 8/2 |
| 23 | 11240801i-23 | il4tox,42e,,pp 11702 L0.1 | | | | EJL 8/2 |
| 24 | 11240801i-24 | il7tox,42e,,pp 11701 L1.0 | | | | EJL 8/2 |
| 25 | 11240801i-25 | il8tox,42e,,pp 11700 L2.0 | | | | EJL 8/2 |
| 26 | 11240801i-26 | il9tox,42e,,pp 11695 L5.0 | | | | EJL 8/2 |
| 27 | 11240801i-27 | cicvtox,42e,,pp 11668 L2.0ICV | | | EJL | EJL 8/2 |

Dep.: PEST
Inst: PEST_11
Date: **09/22/24**
Run: a

Method
GC: pest

Seq: wg1974788
IS: pp11660

| Vial | Data File | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | 11240922a-01 | blank | | | | |
| 2 | 11240922a-02 | deg11573 9:23 | | | | EJL 9/22 |
| 3 | 11240922a-03 | pest11675 A: g-chlor, Dield high, B: Many low | | | | EJL 9/22 |
| 4 | 11240922a-04 | chlor11670 20% | | | | EJL 9/22 |
| 5 | 11240922a-05 | tox11668 20% | | | | EJL 9/22 |
| 6 | 11240922a-06 | blank | | | | |
| 7 | 11240922a-07 | WG1974576-1,42,, | glassware cracked, oprep re-ex'd | | | |
| 8 | 11240922a-08 | WG1974576-2,42,, | | EJL | | EMR 9/23 |
| 9 | 11240922a-09 | WG1974576-3,42,, | | | | EMR 9/23 |
| 10 | 11240922a-10 | L2453695-01,42,,,R3C | rr DDT | | | |
| 11 | 11240922a-11 | L2453695-02,42,,,R3C | rr DDT | | | |
| 12 | 11240922a-12 | L2453695-03,42,,,R3C | rr DDT | | | |
| 13 | 11240922a-13 | WG1974576-1,42,, re for cracked glassware | | | | EMR 9/23 |
| 14 | 11240922a-14 | L2453053-01,42,, p | | | | EMR 9/23 |
| 15 | 11240922a-15 | WG1974576-4,42,, ms | | | | EMR 9/23 |
| 16 | 11240922a-16 | WG1974576-5,42,, msd | | | | EMR 9/23 |
| 17 | 11240922a-17 | L2453053-02,42,, | | | | EMR 9/23 |
| 18 | 11240922a-18 | L2453053-03,42,, | | | | EMR 9/23 |
| 19 | 11240922a-19 | L2453053-04,42,, | rr DDT | | | |
| 20 | 11240922a-20 | L2453053-05,42,, | rr DDT | | | |
| 21 | 11240922a-21 | WG1974587-1,42,, ct | many U hits | | | |
| 22 | 11240922a-22 | WG1974587-2,42,, ct | | | | |
| 23 | 11240922a-23 | WG1974587-3,42,, ct | | | | |
| 24 | 11240922a-24 | L2453149-01,42,, ct p | | | | |
| 25 | 11240922a-25 | WG1974587-4,42,, ct ms | | | | |
| 26 | 11240922a-26 | WG1974587-5,42,, ct msd | | | | |
| 27 | 11240922a-27 | L2453149-02,42,, ct | | | | |
| 28 | 11240922a-28 | L2453149-03,42,, ct | | | ejl | |
| 29 | 11240922a-29 | L2453149-04,42,, ct | | | ejl | |

Dep.: PEST
Inst: PEST_20
Date: **09/22/24**
Run: a

Method
GC: pest

Seq: wg1974790
IS: pp11660

| Vial | data file | Sample | CCAL/Notes | Screen | Verified | initials |
|---|---|---|---|---|---|---|
| 1 | 20240922a-01 | blank | | | | |
| 2 | 20240922a-02 | deg11573 9:24 | | | | EJL 9/22 |
| 3 | 20240922a-03 | pest11675 20% | | | | EJL 9/22 |
| 4 | 20240922a-04 | chlor11670 10% | | | | EJL 9/22 |
| 5 | 20240922a-05 | tox11668 15% | | | | EJL 9/22 |
| 6 | 20240922a-06 | blank | | | | |
| 7 | 20240922a-07 | WG1974433-1,42,, | | | | EMR 9/23 |
| 8 | 20240922a-08 | WG1974433-2,42,, | | | | EMR 9/23 |
| 9 | 20240922a-09 | WG1974433-3,42,, | | | | EMR 9/23 |
| 10 | 20240922a-10 | L2453062-01,42,,,R3E | | | | EMR 9/23 |
| 11 | 20240922a-11 | L2453062-02,42,,,R3E | | | | EMR 9/23 |
| 12 | 20240922a-12 | L2453062-03,42,,,R3E | | | | EMR 9/23 |
| 13 | 20240922a-13 | L2453062-04,42,,,R3E | | | | EMR 9/23 |
| 14 | 20240922a-14 | L2453062-05,42,,,R3E | | | | EMR 9/23 |
| 15 | 20240922a-15 | L2453726-01,42,,,R5C | | | | EMR 9/23 |
| 16 | 20240922a-16 | L2453726-02,42,,,R5C | 100x heptachlor agt chlor | | | EMR 9/23 |
| 17 | 20240922a-17 | L2453726-03,42,,,R5C p | | | | EMR 9/23 |
| 18 | 20240922a-18 | WG1974433-4,42,, ms | | | | EMR 9/23 |
| 19 | 20240922a-19 | WG1974433-5,42,, msd | | | | EMR 9/23 |
| 20 | 20240922a-20 | L2453726-04,42,,,R5C | 50x agt chlor | | | EMR 9/23 |
| 21 | 20240922a-21 | L2454083-01,42,,,R3C | | | | EMR 9/23 |
| 22 | 20240922a-22 | L2454083-02,42,,,R3C | | | | EMR 9/23 |
| 23 | 20240922a-23 | L2454074-13,42,,,R1A | | | | EMR 9/23 |
| 24 | 20240922a-24 | L2453680-02,42,,,R1B | | | | EMR 9/23 |
| 25 | 20240922a-25 | L2452908-31d,42,10, agt | | | | EMR 9/23 |
| 26 | 20240922a-26 | L2452908-01d,42,20, agt | | | | EMR 9/23 |
| 27 | 20240922a-27 | L2452908-09d,42,20, agt | not needed | | | |
| 28 | 20240922a-28 | L2452908-10d,42,20, agt | | | | EMR 9/23 |
| 29 | 20240922a-29 | L2452908-35d,42,20, agt | | | | EMR 9/23 |
| 30 | 20240922a-30 | L2452908-06d,42,50, agt | | | | EMR 9/23 |
| 31 | 20240922a-31 | L2452908-08d,42,50, agt | | | | EMR 9/23 |
| 32 | 20240922a-32 | pest11675 | a gamna chlor high | | ejl | EMR 9/23 |
| 33 | 20240922a-33 | L2453695-01,42,,,R3C rr | rerunning for DDT | | | EMR 9/23 |
| 34 | 20240922a-34 | L2453695-02,42,,,R3C rr | ^ | | | EMR 9/23 |
| 35 | 20240922a-35 | L2453695-03,42,,,R3C rr | ^ | | | EMR 9/23 |
| 36 | 20240922a-36 | L2453053-04,42,, rr | ^ | | | EMR 9/23 |
| 37 | 20240922a-37 | L2453053-05,42,, rr | ^ | | ejl | EMR 9/23 |

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 23 2024, 03:36 pm

Work Group: WG1974576  for Department: 2 Organic Preparation

Created: 21-SEP-24  Due:  Operator: JRS/RET

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 | MW-1SR | S | NYTCL-8081 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.120 |
| L2453053-02 | MW-1DR2 | S | NYTCL-8081 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.120 |
| L2453053-03 | MW-11S | S | NYTCL-8081 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.120 |
| L2453053-04 | MW-11D | S | NYTCL-8081 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.120 |
| L2453053-05 | DUP_091624 | S | NYTCL-8081 | WATER | DONE | U | 0923 | 0923 | S0 | Amber-A.120 |
| L2453335-01 | HRP-MW5A-091724 | S | NYTCL-8081 | WATER | DONE | U | 0924 | 0924 | S0 | Amber-A.120 |
| L2453335-02 | HRP-MW5B-091724 | S | NYTCL-8081 | WATER | DONE | U | 0924 | 0924 | S0 | Amber-A.120 |
| L2453335-03 | MW-21B-091724 | S | NYTCL-8081 | WATER | DONE | U | 0924 | 0924 | S0 | Amber-A.120 |
| L2453335-04 | MW-21A-091724 | S | NYTCL-8081 | WATER | DONE | U | 0924 | 0924 | S0 | Amber-A.120 |
| L2453695-01 | 2024 0918 MW-3 | S | NYTCL-8081 | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.120 |
| L2453695-02 | 2024 0918 MW-2 | S | NYTCL-8081 | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.120 |
| L2453695-03 | 2024 0918 MW-1 | S | NYTCL-8081 | WATER | DONE | U | 0925 | 0923 | 3C | Amber-A.120 |
| WG1974576-1 | Laboratory Method Bl | S | NYTCL-8081 | WATER | DONE | U | | | | |
| WG1974576-2 | Laboratory Control S | S | NYTCL-8081 | WATER | DONE | U | | | | |
| WG1974576-3 | LCS Duplicate | S | NYTCL-8081 | WATER | DONE | U | | | | |
| WG1974576-4 | Matrix Spike | S | NYTCL-8081 | WATER | DONE | U | | | | |
| WG1974576-5 | Matrix Spike Duplica | S | NYTCL-8081 | WATER | DONE | U | | | | |

Comments:

| | |
|---|---|
| WG1974576-3 | WG1974576-2 |
| WG1974576-4 | L2453053-01 |
| WG1974576-5 | L2453053-01 |

# ORGANIC ELN REPORT

**Workgroup:** WG1974576

**Prep Method:** EPA 3510C
**Solvent Type:** DCM
**Surrogate Type:** Pesticide/PCB
**Spike Type:** Pesticide
**Spike Verify by:** JRS/NBD
**Lims Spikelot:** PEST_LVI
**Lot #:** EJ049
**Lot #:** PP11735-AZ, 02/06/2025
**Lot #:** PP11617-AS, 12/17/2024

**Additional Reagents/Stds**

| | |
|---|---|
| Na2SO4 | 241169 |

**Conc.Method:** S-EVAP/N-EVAP
**Solvent Type:** Hexane
**Lot #:** EJ061

**Additional Reagents/Stds**

***Cleanup 1***

**Cleanup Method 1:**
**Cleanup Method 2:**
**Solvent Type:**
**Lot #:**

**Additional Reagents/Stds**

| Sample/ Type | Extraction: Extract Date | Analyst | Sample Vol ml | Ph | Surr Amt ml | Spike Amt ml | Concentration: Conc Date | Analyst | Final Vol ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453053-02 SAMP | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453053-03 SAMP | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453053-04 SAMP | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453053-05 SAMP | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453335-01 SAMP | 09/22/24 10:37 | Ryan Trenholm | 140 | >5,<9 | .25 | | 09/22/24 21:45 | Paolo Roffo | 1 | C / A / #1 |
| L2453335-02 SAMP | 09/22/24 10:37 | Ryan Trenholm | 140 | >5,<9 | .25 | | 09/22/24 21:45 | Paolo Roffo | 1 | C / A / #1 |



Reported: 23-SEP-24 03:36 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974576**

| Sample/ Type | Extraction: Extract Date | Analyst | Sample Vol ml | Ph | Surr Amt ml | Spike Amt ml | Concentration: Conc Date | Analyst | Final Vol ml | Conc Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453335-03 SAMP | 09/22/24 10:37 | Ryan Trenholm | 140 | >5,<9 | .25 | | 09/22/24 21:45 | Paolo Roffo | 1 | C / A / #1 |
| L2453335-04 SAMP | 09/22/24 10:37 | Ryan Trenholm | 140 | >5,<9 | .25 | | 09/22/24 21:45 | Paolo Roffo | 1 | C / A / #1 |
| L2453695-01 WATER | 09/21/24 10:41 | Jackson Subbarao | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| L2453695-02 WATER | 09/21/24 13:10 | Nicholas Dunn | 100 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| | **LIMITED VOL.USED VOL. FROM RVT CONTAINER** | | | | | | | | | |
| L2453695-03 WATER | 09/21/24 10:41 | Jackson Subbarao | 140 | >5,<9 | .25 | | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| WG1974576-1 BLANK | 09/22/24 07:30 | Jackson Subbarao | 140 | >5,<9 | .25 | | 09/22/24 08:45 | Georgia Mckinstry | 1 | C / A / #1 |
| WG1974576-2 LCS | 09/21/24 10:41 | Jackson Subbarao | 140 | >5,<9 | .25 | .25 | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| WG1974576-3 LCSD | 09/21/24 10:41 | Jackson Subbarao | 140 | >5,<9 | .25 | .25 | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |
| WG1974576-4 MS | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | .25 | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |



Reported: 23-SEP-24 03:36 PM

# ORGANIC ELN REPORT

**Workgroup: WG1974576**

| Sample/ Type | Extraction | | | | | | Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Extract Date | Analyst | Sample Vol **ml** | Ph | Surr Amt **ml** | Spike Amt **ml** | Conc Date | Analyst | Final Vol **ml** | Conc Unit |
| WG1974576-5 MSD | 09/21/24 13:31 | Nicholas Dunn | 140 | >5,<9 | .25 | .25 | 09/22/24 07:05 | Rabbi Kyei-Baffour | 1 | C / A / #1 |



Reported: 23-SEP-24 03:36 PM

# Metals

# Inorganic Data
# ( ICP Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 22:48 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : DMC |
| **Lab File ID** | : WG1974083.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | 0.0030 | 0.0050 | 0.0019 | J |
| 7440-39-3 | Barium, Total | 0.0238 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 10.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | 0.0076 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 2.80 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.48 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.108 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 0.964 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 8.02 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0081 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 22:52 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : DMC |
| **Lab File ID** | : WG1974083.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0275 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 31.6 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0773 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 8.99 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0100 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.22 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | 0.0061 | 0.0100 | 0.0035 | J |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 3.55 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0035 | 0.0050 | 0.0021 | J |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 22:56 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : DMC |
| **Lab File ID** | : WG1974083.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0276 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 16.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | 0.0025 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 3.43 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.67 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.215 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 0.915 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 7.46 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 23:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : DMC |
| **Lab File ID** | : WG1974083.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0242 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 10.6 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | 0.0071 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 2.84 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.52 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.109 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 0.971 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 8.13 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0083 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 14:51 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0210 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 17.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 0.0691 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 3.02 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0492 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.70 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 2.27 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 14:32 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0235 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 10.2 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | 0.0068 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 2.62 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.45 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.105 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 0.969 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 8.11 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0072 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 14:38 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0255 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 29.3 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 0.0090 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 8.54 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.19 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 3.73 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0037 | 0.0050 | 0.0021 | J |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 14:45 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0252 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 14.8 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | 0.0018 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 2.90 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.44 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.206 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 0.840 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 7.18 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 15:39 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0233 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 10.2 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | 0.0068 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 2.55 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.52 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.104 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 0.945 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 7.97 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0070 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974186-17 | **Date Collected** | : NA |
| **Client ID** | : WG1974186-17BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 14:19 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0021 | 0.0100 | 0.0021 | J |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974186-22 | **Date Collected** | : |
| **Client ID** | : Serial Dilution | **Date Received** | : |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 15:16 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 5 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-70-2 | Calcium, Dissolved | 16.0 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Dissolved | 3.04 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 13:36 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0222 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 18.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0706 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 3.20 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0487 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.90 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 2.41 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973830-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973830-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 13:04 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973830-6 | **Date Collected** | : |
| **Client ID** | : Serial Dilution | **Date Received** | : |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 14:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 5 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : TAA |
| **Lab File ID** | : WG1973931.pdf | **Instrument ID** | : TRACE4 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7440-70-2 | Calcium, Total | 18.4 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Total | 3.28 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:49 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : JMF |
| **Lab File ID** | : WG1975024.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : JMF |
| **Lab File ID** | : WG1975024.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:57 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : JMF |
| **Lab File ID** | : WG1975024.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | 0.0672 | 0.100 | 0.0318 | J |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 14:01 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 19,200.7 | **Analyst** | : JMF |
| **Lab File ID** | : WG1975024.pdf | **Instrument ID** | : TRACE9 |
| **Sample Amount** | : 50ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 3005A | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878261-1 | | | | | | | | | |
| **Date Analyzed** : | 09/20/24 06:24 | | | | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | 0.500 | 0.5020 | 100 | | | | | | | |
| Arsenic | 0.500 | 0.4730 | 95 | | | | | | | |
| Barium | 0.500 | 0.4920 | 98 | | | | | | | |
| Beryllium | 0.500 | 0.5000 | 100 | | | | | | | |
| Cadmium | 0.500 | 0.4990 | 100 | | | | | | | |
| Calcium | 0.500 | 0.4840 | 97 | | | | | | | |
| Chromium | 0.500 | 0.4840 | 97 | | | | | | | |
| Cobalt | 0.500 | 0.5040 | 101 | | | | | | | |
| Copper | 0.500 | 0.4850 | 97 | | | | | | | |
| Iron | 0.500 | 0.4990 | 100 | | | | | | | |
| Lead | 0.500 | 0.4910 | 98 | | | | | | | |
| Magnesium | 0.500 | 0.4820 | 96 | | | | | | | |
| Manganese | 0.500 | 0.4810 | 96 | | | | | | | |
| Nickel | 0.500 | 0.5010 | 100 | | | | | | | |
| Potassium | 5.00 | 5.0900 | 102 | | | | | | | |
| Selenium | 0.500 | 0.4920 | 98 | | | | | | | |
| Silver | 0.500 | 0.5040 | 101 | | | | | | | |
| Sodium | 10.0 | 9.8200 | 98 | | | | | | | |
| Thallium | 0.500 | 0.4910 | 98 | | | | | | | |
| Vanadium | 0.500 | 0.4820 | 96 | | | | | | | |
| Zinc | 0.500 | 0.5020 | 100 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878261-3 | | | R1878261-6 | | | R1878261-8 | | R1878261-10 | |
| **Date Analyzed**: | 09/20/24 06:39 | | | 09/20/24 08:10 | | | 09/20/24 09:01 | | 09/20/24 09:58 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | 0.500 | 0.5030 | 101 | 0.5000 | 0.502 | 100 | 0.498 | 100 | 0.502 | 100 |
| Arsenic | 0.500 | 0.4760 | 95 | 0.5000 | 0.476 | 95 | 0.474 | 95 | 0.474 | 95 |
| Barium | 0.500 | 0.4940 | 99 | 0.5000 | 0.493 | 99 | 0.490 | 98 | 0.491 | 98 |
| Beryllium | 0.500 | 0.5060 | 101 | 0.5000 | 0.502 | 100 | 0.500 | 100 | 0.500 | 100 |
| Cadmium | 0.500 | 0.4990 | 100 | 0.5000 | 0.495 | 99 | 0.495 | 99 | 0.491 | 98 |
| Calcium | 0.500 | 0.4960 | 99 | 0.5000 | 0.491 | 98 | 0.487 | 97 | 0.485 | 97 |
| Chromium | 0.500 | 0.4890 | 98 | 0.5000 | 0.483 | 97 | 0.481 | 96 | 0.480 | 96 |
| Cobalt | 0.500 | 0.5100 | 102 | 0.5000 | 0.504 | 101 | 0.504 | 101 | 0.498 | 100 |
| Copper | 0.500 | 0.4940 | 99 | 0.5000 | 0.485 | 97 | 0.484 | 97 | 0.488 | 98 |
| Iron | 0.500 | 0.5010 | 100 | 0.5000 | 0.502 | 100 | 0.502 | 100 | 0.492 | 98 |
| Lead | 0.500 | 0.4980 | 100 | 0.5000 | 0.489 | 98 | 0.490 | 98 | 0.487 | 97 |
| Magnesium | 0.500 | 0.4890 | 98 | 0.5000 | 0.481 | 96 | 0.477 | 95 | 0.478 | 96 |
| Manganese | 0.500 | 0.4860 | 97 | 0.5000 | 0.483 | 97 | 0.481 | 96 | 0.480 | 96 |
| Nickel | 0.500 | 0.5060 | 101 | 0.5000 | 0.502 | 100 | 0.500 | 100 | 0.498 | 100 |
| Potassium | 5.00 | 5.1300 | 103 | 5.0000 | 5.10 | 102 | 5.10 | 102 | 5.07 | 101 |
| Selenium | 0.500 | 0.4900 | 98 | 0.5000 | 0.490 | 98 | 0.488 | 98 | 0.490 | 98 |
| Silver | 0.500 | 0.5060 | 101 | 0.5000 | 0.502 | 100 | 0.499 | 100 | 0.503 | 101 |
| Sodium | 10.0 | 9.9100 | 99 | 10.0000 | 9.73 | 97 | 9.68 | 97 | 9.66 | 97 |
| Thallium | 0.500 | 0.5010 | 100 | 0.5000 | 0.490 | 98 | 0.492 | 98 | 0.491 | 98 |
| Vanadium | 0.500 | 0.4890 | 98 | 0.5000 | 0.479 | 96 | 0.478 | 96 | 0.476 | 95 |
| Zinc | 0.500 | 0.5040 | 101 | 0.5000 | 0.502 | 100 | 0.499 | 100 | 0.495 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-12 | | | R1878261-14 | | R1878261-16 | |
| **Date Analyzed :** | | | | 09/20/24 10:52 | | | 09/20/24 11:42 | | 09/20/24 12:27 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.500 | 100 | 0.505 | 101 | 0.502 | 100 |
| Arsenic | | | | 0.5000 | 0.472 | 94 | 0.478 | 96 | 0.483 | 97 |
| Barium | | | | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.491 | 98 |
| Beryllium | | | | 0.5000 | 0.499 | 100 | 0.501 | 100 | 0.503 | 101 |
| Cadmium | | | | 0.5000 | 0.488 | 98 | 0.495 | 99 | 0.496 | 99 |
| Calcium | | | | 0.5000 | 0.486 | 97 | 0.485 | 97 | 0.488 | 98 |
| Chromium | | | | 0.5000 | 0.480 | 96 | 0.484 | 97 | 0.486 | 97 |
| Cobalt | | | | 0.5000 | 0.498 | 100 | 0.504 | 101 | 0.504 | 101 |
| Copper | | | | 0.5000 | 0.488 | 98 | 0.494 | 99 | 0.491 | 98 |
| Iron | | | | 0.5000 | 0.493 | 99 | 0.494 | 99 | 0.500 | 100 |
| Lead | | | | 0.5000 | 0.486 | 97 | 0.492 | 98 | 0.493 | 99 |
| Magnesium | | | | 0.5000 | 0.477 | 95 | 0.485 | 97 | 0.487 | 97 |
| Manganese | | | | 0.5000 | 0.479 | 96 | 0.479 | 96 | 0.480 | 96 |
| Nickel | | | | 0.5000 | 0.498 | 100 | 0.503 | 101 | 0.504 | 101 |
| Potassium | | | | 5.0000 | 5.08 | 102 | 5.06 | 101 | 5.11 | 102 |
| Selenium | | | | 0.5000 | 0.487 | 97 | 0.490 | 98 | 0.491 | 98 |
| Silver | | | | 0.5000 | 0.501 | 100 | 0.507 | 101 | 0.507 | 101 |
| Sodium | | | | 10.0000 | 9.62 | 96 | 9.63 | 96 | 9.71 | 97 |
| Thallium | | | | 0.5000 | 0.487 | 97 | 0.495 | 99 | 0.496 | 99 |
| Vanadium | | | | 0.5000 | 0.476 | 95 | 0.481 | 96 | 0.482 | 96 |
| Zinc | | | | 0.5000 | 0.497 | 99 | 0.498 | 100 | 0.499 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-18 | | | R1878261-20 | | R1878261-22 | |
| **Date Analyzed :** | | | | 09/20/24 13:19 | | | 09/20/24 14:13 | | 09/20/24 15:09 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.504 | 101 | 0.501 | 100 | 0.503 | 101 |
| Arsenic | | | | 0.5000 | 0.476 | 95 | 0.472 | 94 | 0.476 | 95 |
| Barium | | | | 0.5000 | 0.491 | 98 | 0.481 | 96 | 0.492 | 98 |
| Beryllium | | | | 0.5000 | 0.501 | 100 | 0.490 | 98 | 0.500 | 100 |
| Cadmium | | | | 0.5000 | 0.491 | 98 | 0.488 | 98 | 0.489 | 98 |
| Calcium | | | | 0.5000 | 0.484 | 97 | 0.472 | 94 | 0.483 | 97 |
| Chromium | | | | 0.5000 | 0.482 | 96 | 0.481 | 96 | 0.479 | 96 |
| Cobalt | | | | 0.5000 | 0.500 | 100 | 0.498 | 100 | 0.497 | 99 |
| Copper | | | | 0.5000 | 0.490 | 98 | 0.489 | 98 | 0.491 | 98 |
| Iron | | | | 0.5000 | 0.493 | 99 | 0.482 | 96 | 0.493 | 99 |
| Lead | | | | 0.5000 | 0.491 | 98 | 0.488 | 98 | 0.491 | 98 |
| Magnesium | | | | 0.5000 | 0.478 | 96 | 0.479 | 96 | 0.476 | 95 |
| Manganese | | | | 0.5000 | 0.478 | 96 | 0.467 | 93 | 0.476 | 95 |
| Nickel | | | | 0.5000 | 0.500 | 100 | 0.499 | 100 | 0.498 | 100 |
| Potassium | | | | 5.0000 | 5.08 | 102 | 4.97 | 99 | 5.09 | 102 |
| Selenium | | | | 0.5000 | 0.492 | 98 | 0.489 | 98 | 0.486 | 97 |
| Silver | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.503 | 101 |
| Sodium | | | | 10.0000 | 9.68 | 97 | 9.43 | 94 | 9.61 | 96 |
| Thallium | | | | 0.5000 | 0.492 | 98 | 0.489 | 98 | 0.492 | 98 |
| Vanadium | | | | 0.5000 | 0.479 | 96 | 0.478 | 96 | 0.478 | 96 |
| Zinc | | | | 0.5000 | 0.496 | 99 | 0.495 | 99 | 0.493 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-24 | | | R1878261-26 | | R1878261-28 | |
| **Date Analyzed :** | | | | 09/20/24 16:01 | | | 09/20/24 16:51 | | 09/20/24 17:30 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.500 | 100 | 0.497 | 99 | 0.481 | 96 |
| Arsenic | | | | 0.5000 | 0.472 | 94 | 0.471 | 94 | 0.457 | 91 |
| Barium | | | | 0.5000 | 0.490 | 98 | 0.486 | 97 | 0.474 | 95 |
| Beryllium | | | | 0.5000 | 0.497 | 99 | 0.496 | 99 | 0.481 | 96 |
| Cadmium | | | | 0.5000 | 0.490 | 98 | 0.486 | 97 | 0.473 | 95 |
| Calcium | | | | 0.5000 | 0.478 | 96 | 0.478 | 96 | 0.464 | 93 |
| Chromium | | | | 0.5000 | 0.479 | 96 | 0.476 | 95 | 0.468 | 94 |
| Cobalt | | | | 0.5000 | 0.499 | 100 | 0.497 | 99 | 0.485 | 97 |
| Copper | | | | 0.5000 | 0.488 | 98 | 0.485 | 97 | 0.475 | 95 |
| Iron | | | | 0.5000 | 0.491 | 98 | 0.484 | 97 | 0.470 | 94 |
| Lead | | | | 0.5000 | 0.490 | 98 | 0.485 | 97 | 0.474 | 95 |
| Magnesium | | | | 0.5000 | 0.479 | 96 | 0.477 | 95 | 0.465 | 93 |
| Manganese | | | | 0.5000 | 0.475 | 95 | 0.476 | 95 | 0.460 | 92 |
| Nickel | | | | 0.5000 | 0.499 | 100 | 0.496 | 99 | 0.483 | 97 |
| Potassium | | | | 5.0000 | 5.04 | 101 | 5.06 | 101 | 4.96 | 99 |
| Selenium | | | | 0.5000 | 0.489 | 98 | 0.482 | 96 | 0.472 | 94 |
| Silver | | | | 0.5000 | 0.500 | 100 | 0.498 | 100 | 0.488 | 98 |
| Sodium | | | | 10.0000 | 9.57 | 96 | 9.77 | 98 | 9.60 | 96 |
| Thallium | | | | 0.5000 | 0.490 | 98 | 0.486 | 97 | 0.473 | 95 |
| Vanadium | | | | 0.5000 | 0.477 | 95 | 0.476 | 95 | 0.465 | 93 |
| Zinc | | | | 0.5000 | 0.494 | 99 | 0.492 | 98 | 0.482 | 96 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-30 | | | R1878261-32 | | R1878261-34 | |
| **Date Analyzed:** | | | | 09/20/24 18:21 | | | 09/20/24 19:15 | | 09/20/24 20:03 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.496 | 99 | 0.498 | 100 | 0.497 | 99 |
| Arsenic | | | | 0.5000 | 0.467 | 93 | 0.476 | 95 | 0.473 | 95 |
| Barium | | | | 0.5000 | 0.483 | 97 | 0.491 | 98 | 0.491 | 98 |
| Beryllium | | | | 0.5000 | 0.489 | 98 | 0.502 | 100 | 0.498 | 100 |
| Cadmium | | | | 0.5000 | 0.487 | 97 | 0.491 | 98 | 0.489 | 98 |
| Calcium | | | | 0.5000 | 0.473 | 95 | 0.493 | 99 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.474 | 95 | 0.483 | 97 | 0.477 | 95 |
| Cobalt | | | | 0.5000 | 0.496 | 99 | 0.501 | 100 | 0.498 | 100 |
| Copper | | | | 0.5000 | 0.483 | 97 | 0.489 | 98 | 0.484 | 97 |
| Iron | | | | 0.5000 | 0.481 | 96 | 0.499 | 100 | 0.490 | 98 |
| Lead | | | | 0.5000 | 0.481 | 96 | 0.494 | 99 | 0.487 | 97 |
| Magnesium | | | | 0.5000 | 0.476 | 95 | 0.490 | 98 | 0.487 | 97 |
| Manganese | | | | 0.5000 | 0.467 | 93 | 0.480 | 96 | 0.477 | 95 |
| Nickel | | | | 0.5000 | 0.492 | 98 | 0.500 | 100 | 0.492 | 98 |
| Potassium | | | | 5.0000 | 4.96 | 99 | 5.07 | 101 | 5.06 | 101 |
| Selenium | | | | 0.5000 | 0.476 | 95 | 0.494 | 99 | 0.481 | 96 |
| Silver | | | | 0.5000 | 0.497 | 99 | 0.504 | 101 | 0.500 | 100 |
| Sodium | | | | 10.0000 | 9.47 | 95 | 9.67 | 97 | 9.66 | 97 |
| Thallium | | | | 0.5000 | 0.478 | 96 | 0.494 | 99 | 0.486 | 97 |
| Vanadium | | | | 0.5000 | 0.473 | 95 | 0.480 | 96 | 0.478 | 96 |
| Zinc | | | | 0.5000 | 0.487 | 97 | 0.496 | 99 | 0.490 | 98 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-36 | | | R1878261-38 | | R1878261-40 | |
| **Date Analyzed :** | | | | 09/20/24 20:52 | | | 09/20/24 21:46 | | 09/20/24 22:36 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.496 | 99 | 0.487 | 97 | 0.489 | 98 |
| Arsenic | | | | 0.5000 | 0.470 | 94 | 0.461 | 92 | 0.462 | 92 |
| Barium | | | | 0.5000 | 0.493 | 99 | 0.479 | 96 | 0.481 | 96 |
| Beryllium | | | | 0.5000 | 0.497 | 99 | 0.486 | 97 | 0.486 | 97 |
| Cadmium | | | | 0.5000 | 0.490 | 98 | 0.479 | 96 | 0.478 | 96 |
| Calcium | | | | 0.5000 | 0.488 | 98 | 0.470 | 94 | 0.474 | 95 |
| Chromium | | | | 0.5000 | 0.480 | 96 | 0.469 | 94 | 0.472 | 94 |
| Cobalt | | | | 0.5000 | 0.499 | 100 | 0.489 | 98 | 0.489 | 98 |
| Copper | | | | 0.5000 | 0.485 | 97 | 0.475 | 95 | 0.479 | 96 |
| Iron | | | | 0.5000 | 0.499 | 100 | 0.480 | 96 | 0.477 | 95 |
| Lead | | | | 0.5000 | 0.484 | 97 | 0.477 | 95 | 0.479 | 96 |
| Magnesium | | | | 0.5000 | 0.480 | 96 | 0.469 | 94 | 0.468 | 94 |
| Manganese | | | | 0.5000 | 0.475 | 95 | 0.464 | 93 | 0.466 | 93 |
| Nickel | | | | 0.5000 | 0.493 | 99 | 0.482 | 96 | 0.489 | 98 |
| Potassium | | | | 5.0000 | 5.07 | 101 | 4.94 | 99 | 4.95 | 99 |
| Selenium | | | | 0.5000 | 0.481 | 96 | 0.474 | 95 | 0.478 | 96 |
| Silver | | | | 0.5000 | 0.500 | 100 | 0.490 | 98 | 0.491 | 98 |
| Sodium | | | | 10.0000 | 9.64 | 96 | 9.37 | 94 | 9.47 | 95 |
| Thallium | | | | 0.5000 | 0.483 | 97 | 0.476 | 95 | 0.478 | 96 |
| Vanadium | | | | 0.5000 | 0.478 | 96 | 0.470 | 94 | 0.470 | 94 |
| Zinc | | | | 0.5000 | 0.490 | 98 | 0.481 | 96 | 0.485 | 97 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878261-42 | | | R1878261-44 | | | |
| **Date Analyzed :** | | | | 09/20/24 23:04 | | | 09/20/24 23:12 | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | | | | 0.5000 | 0.489 | 98 | 0.490 | 98 | | |
| Arsenic | | | | 0.5000 | 0.460 | 92 | 0.465 | 93 | | |
| Barium | | | | 0.5000 | 0.483 | 97 | 0.487 | 97 | | |
| Beryllium | | | | 0.5000 | 0.488 | 98 | 0.494 | 99 | | |
| Cadmium | | | | 0.5000 | 0.480 | 96 | 0.478 | 96 | | |
| Calcium | | | | 0.5000 | 0.473 | 95 | 0.478 | 96 | | |
| Chromium | | | | 0.5000 | 0.469 | 94 | 0.472 | 94 | | |
| Cobalt | | | | 0.5000 | 0.490 | 98 | 0.489 | 98 | | |
| Copper | | | | 0.5000 | 0.477 | 95 | 0.480 | 96 | | |
| Iron | | | | 0.5000 | 0.480 | 96 | 0.482 | 96 | | |
| Lead | | | | 0.5000 | 0.476 | 95 | 0.481 | 96 | | |
| Magnesium | | | | 0.5000 | 0.468 | 94 | 0.472 | 94 | | |
| Manganese | | | | 0.5000 | 0.467 | 93 | 0.474 | 95 | | |
| Nickel | | | | 0.5000 | 0.485 | 97 | 0.487 | 97 | | |
| Potassium | | | | 5.0000 | 4.99 | 100 | 5.02 | 100 | | |
| Selenium | | | | 0.5000 | 0.476 | 95 | 0.476 | 95 | | |
| Silver | | | | 0.5000 | 0.490 | 98 | 0.493 | 99 | | |
| Sodium | | | | 10.0000 | 9.46 | 95 | 9.58 | 96 | | |
| Thallium | | | | 0.5000 | 0.476 | 95 | 0.480 | 96 | | |
| Vanadium | | | | 0.5000 | 0.469 | 94 | 0.473 | 95 | | |
| Zinc | | | | 0.5000 | 0.482 | 96 | 0.484 | 97 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878315-1 | | | | | | | | | |
| **Date Analyzed** : | 09/19/24 17:52 | | | | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | 0.500 | 0.4990 | 100 | | | | | | | |
| Antimony | 0.500 | 0.5150 | 103 | | | | | | | |
| Arsenic | 0.500 | 0.4960 | 99 | | | | | | | |
| Barium | 0.500 | 0.4930 | 99 | | | | | | | |
| Beryllium | 0.500 | 0.5010 | 100 | | | | | | | |
| Cadmium | 0.500 | 0.5050 | 101 | | | | | | | |
| Calcium | 0.500 | 0.4990 | 100 | | | | | | | |
| Chromium | 0.500 | 0.4910 | 98 | | | | | | | |
| Cobalt | 0.500 | 0.5140 | 103 | | | | | | | |
| Copper | 0.500 | 0.4830 | 97 | | | | | | | |
| Iron | 0.500 | 0.4920 | 98 | | | | | | | |
| Lead | 0.500 | 0.5180 | 104 | | | | | | | |
| Magnesium | 0.500 | 0.5070 | 101 | | | | | | | |
| Manganese | 0.500 | 0.4930 | 99 | | | | | | | |
| Nickel | 0.500 | 0.5110 | 102 | | | | | | | |
| Potassium | 5.00 | 5.1800 | 104 | | | | | | | |
| Selenium | 0.500 | 0.5140 | 103 | | | | | | | |
| Silver | 0.500 | 0.5120 | 102 | | | | | | | |
| Sodium | 10.0 | 9.7600 | 98 | | | | | | | |
| Thallium | 0.500 | 0.5270 | 105 | | | | | | | |
| Vanadium | 0.500 | 0.4870 | 97 | | | | | | | |
| Zinc | 0.500 | 0.5140 | 103 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | R1878315-3 | | | R1878315-6 | | | R1878315-8 | | R1878315-10 | |
| **Date Analyzed :** | 09/19/24 18:04 | | | 09/20/24 10:28 | | | 09/20/24 11:37 | | 09/20/24 12:49 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | 0.500 | 0.6320 | 126 | 0.5000 | 0.506 | 101 | 0.507 | 101 | 0.500 | 100 |
| Antimony | 0.500 | 0.5160 | 103 | 0.5000 | 0.509 | 102 | 0.509 | 102 | 0.510 | 102 |
| Arsenic | 0.500 | 0.4950 | 99 | 0.5000 | 0.503 | 101 | 0.498 | 100 | 0.493 | 99 |
| Barium | 0.500 | 0.4980 | 100 | 0.5000 | 0.494 | 99 | 0.497 | 99 | 0.494 | 99 |
| Beryllium | 0.500 | 0.5080 | 102 | 0.5000 | 0.510 | 102 | 0.508 | 102 | 0.498 | 100 |
| Cadmium | 0.500 | 0.5000 | 100 | 0.5000 | 0.518 | 104 | 0.511 | 102 | 0.492 | 98 |
| Calcium | 0.500 | 0.5130 | 103 | 0.5000 | 0.511 | 102 | 0.512 | 102 | 0.497 | 99 |
| Chromium | 0.500 | 0.4910 | 98 | 0.5000 | 0.513 | 103 | 0.506 | 101 | 0.490 | 98 |
| Cobalt | 0.500 | 0.5150 | 103 | 0.5000 | 0.518 | 104 | 0.515 | 103 | 0.505 | 101 |
| Copper | 0.500 | 0.4890 | 98 | 0.5000 | 0.483 | 97 | 0.482 | 96 | 0.484 | 97 |
| Iron | 0.500 | 0.5060 | 101 | 0.5000 | 0.507 | 101 | 0.505 | 101 | 0.526 | 105 |
| Lead | 0.500 | 0.5160 | 103 | 0.5000 | 0.522 | 104 | 0.518 | 104 | 0.508 | 102 |
| Magnesium | 0.500 | 0.5040 | 101 | 0.5000 | 0.518 | 104 | 0.510 | 102 | 0.502 | 100 |
| Manganese | 0.500 | 0.4970 | 99 | 0.5000 | 0.502 | 100 | 0.499 | 100 | 0.485 | 97 |
| Nickel | 0.500 | 0.5120 | 102 | 0.5000 | 0.519 | 104 | 0.514 | 103 | 0.503 | 101 |
| Potassium | 5.00 | 5.1900 | 104 | 5.0000 | 5.20 | 104 | 5.16 | 103 | 5.17 | 103 |
| Selenium | 0.500 | 0.5050 | 101 | 0.5000 | 0.514 | 103 | 0.512 | 102 | 0.511 | 102 |
| Silver | 0.500 | 0.5060 | 101 | 0.5000 | 0.515 | 103 | 0.511 | 102 | 0.507 | 101 |
| Sodium | 10.0 | 9.9600 | 100 | 10.0000 | 9.85 | 98 | 9.81 | 98 | 9.86 | 99 |
| Thallium | 0.500 | 0.5260 | 105 | 0.5000 | 0.526 | 105 | 0.522 | 104 | 0.520 | 104 |
| Vanadium | 0.500 | 0.4890 | 98 | 0.5000 | 0.504 | 101 | 0.500 | 100 | 0.488 | 98 |
| Zinc | 0.500 | 0.5070 | 101 | 0.5000 | 0.530 | 106 | 0.522 | 104 | 0.527 | 105 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | | R1878315-12 | | | R1878315-14 | | R1878315-16 | |
| **Date Analyzed :** | | | | 09/20/24 14:07 | | | 09/20/24 15:22 | | 09/20/24 15:49 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | | | | 0.5000 | 0.502 | 100 | 0.500 | 100 | 0.494 | 99 |
| Antimony | | | | 0.5000 | 0.517 | 103 | 0.506 | 101 | 0.504 | 101 |
| Arsenic | | | | 0.5000 | 0.504 | 101 | 0.492 | 98 | 0.490 | 98 |
| Barium | | | | 0.5000 | 0.492 | 98 | 0.487 | 97 | 0.486 | 97 |
| Beryllium | | | | 0.5000 | 0.502 | 100 | 0.498 | 100 | 0.495 | 99 |
| Cadmium | | | | 0.5000 | 0.505 | 101 | 0.493 | 99 | 0.494 | 99 |
| Calcium | | | | 0.5000 | 0.498 | 100 | 0.493 | 99 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.495 | 99 | 0.489 | 98 | 0.485 | 97 |
| Cobalt | | | | 0.5000 | 0.515 | 103 | 0.503 | 101 | 0.503 | 101 |
| Copper | | | | 0.5000 | 0.487 | 97 | 0.478 | 96 | 0.478 | 96 |
| Iron | | | | 0.5000 | 0.529 | 106 | 0.525 | 105 | 0.521 | 104 |
| Lead | | | | 0.5000 | 0.522 | 104 | 0.510 | 102 | 0.508 | 102 |
| Magnesium | | | | 0.5000 | 0.502 | 100 | 0.492 | 98 | 0.498 | 100 |
| Manganese | | | | 0.5000 | 0.491 | 98 | 0.486 | 97 | 0.484 | 97 |
| Nickel | | | | 0.5000 | 0.518 | 104 | 0.505 | 101 | 0.502 | 100 |
| Potassium | | | | 5.0000 | 5.26 | 105 | 5.18 | 104 | 5.14 | 103 |
| Selenium | | | | 0.5000 | 0.523 | 105 | 0.511 | 102 | 0.508 | 102 |
| Silver | | | | 0.5000 | 0.509 | 102 | 0.499 | 100 | 0.503 | 101 |
| Sodium | | | | 10.0000 | 9.88 | 99 | 9.81 | 98 | 9.72 | 97 |
| Thallium | | | | 0.5000 | 0.531 | 106 | 0.518 | 104 | 0.517 | 103 |
| Vanadium | | | | 0.5000 | 0.490 | 98 | 0.485 | 97 | 0.481 | 96 |
| Zinc | | | | 0.5000 | 0.536 | 107 | 0.523 | 105 | 0.522 | 104 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878315-1 | | | | | | | | | |
| **Date Analyzed** : | 09/19/24 17:52 | | | | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | 0.500 | 0.4990 | 100 | | | | | | | |
| Antimony | 0.500 | 0.5150 | 103 | | | | | | | |
| Arsenic | 0.500 | 0.4960 | 99 | | | | | | | |
| Barium | 0.500 | 0.4930 | 99 | | | | | | | |
| Beryllium | 0.500 | 0.5010 | 100 | | | | | | | |
| Cadmium | 0.500 | 0.5050 | 101 | | | | | | | |
| Calcium | 0.500 | 0.4990 | 100 | | | | | | | |
| Chromium | 0.500 | 0.4910 | 98 | | | | | | | |
| Cobalt | 0.500 | 0.5140 | 103 | | | | | | | |
| Copper | 0.500 | 0.4830 | 97 | | | | | | | |
| Iron | 0.500 | 0.4920 | 98 | | | | | | | |
| Lead | 0.500 | 0.5180 | 104 | | | | | | | |
| Magnesium | 0.500 | 0.5070 | 101 | | | | | | | |
| Manganese | 0.500 | 0.4930 | 99 | | | | | | | |
| Nickel | 0.500 | 0.5110 | 102 | | | | | | | |
| Potassium | 5.00 | 5.1800 | 104 | | | | | | | |
| Selenium | 0.500 | 0.5140 | 103 | | | | | | | |
| Silver | 0.500 | 0.5120 | 102 | | | | | | | |
| Sodium | 10.0 | 9.7600 | 98 | | | | | | | |
| Thallium | 0.500 | 0.5270 | 105 | | | | | | | |
| Vanadium | 0.500 | 0.4870 | 97 | | | | | | | |
| Zinc | 0.500 | 0.5140 | 103 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878315-3 | | | R1878315-6 | | | R1878315-8 | | R1878315-10 | |
| **Date Analyzed**: | 09/19/24 18:04 | | | 09/20/24 10:28 | | | 09/20/24 11:37 | | 09/20/24 12:49 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | 0.500 | 0.6320 | 126 | 0.5000 | 0.506 | 101 | 0.507 | 101 | 0.500 | 100 |
| Antimony | 0.500 | 0.5160 | 103 | 0.5000 | 0.509 | 102 | 0.509 | 102 | 0.510 | 102 |
| Arsenic | 0.500 | 0.4950 | 99 | 0.5000 | 0.503 | 101 | 0.498 | 100 | 0.493 | 99 |
| Barium | 0.500 | 0.4980 | 100 | 0.5000 | 0.494 | 99 | 0.497 | 99 | 0.494 | 99 |
| Beryllium | 0.500 | 0.5080 | 102 | 0.5000 | 0.510 | 102 | 0.508 | 102 | 0.498 | 100 |
| Cadmium | 0.500 | 0.5000 | 100 | 0.5000 | 0.518 | 104 | 0.511 | 102 | 0.492 | 98 |
| Calcium | 0.500 | 0.5130 | 103 | 0.5000 | 0.511 | 102 | 0.512 | 102 | 0.497 | 99 |
| Chromium | 0.500 | 0.4910 | 98 | 0.5000 | 0.513 | 103 | 0.506 | 101 | 0.490 | 98 |
| Cobalt | 0.500 | 0.5150 | 103 | 0.5000 | 0.518 | 104 | 0.515 | 103 | 0.505 | 101 |
| Copper | 0.500 | 0.4890 | 98 | 0.5000 | 0.483 | 97 | 0.482 | 96 | 0.484 | 97 |
| Iron | 0.500 | 0.5060 | 101 | 0.5000 | 0.507 | 101 | 0.505 | 101 | 0.526 | 105 |
| Lead | 0.500 | 0.5160 | 103 | 0.5000 | 0.522 | 104 | 0.518 | 104 | 0.508 | 102 |
| Magnesium | 0.500 | 0.5040 | 101 | 0.5000 | 0.518 | 104 | 0.510 | 102 | 0.502 | 100 |
| Manganese | 0.500 | 0.4970 | 99 | 0.5000 | 0.502 | 100 | 0.499 | 100 | 0.485 | 97 |
| Nickel | 0.500 | 0.5120 | 102 | 0.5000 | 0.519 | 104 | 0.514 | 103 | 0.503 | 101 |
| Potassium | 5.00 | 5.1900 | 104 | 5.0000 | 5.20 | 104 | 5.16 | 103 | 5.17 | 103 |
| Selenium | 0.500 | 0.5050 | 101 | 0.5000 | 0.514 | 103 | 0.512 | 102 | 0.511 | 102 |
| Silver | 0.500 | 0.5060 | 101 | 0.5000 | 0.515 | 103 | 0.511 | 102 | 0.507 | 101 |
| Sodium | 10.0 | 9.9600 | 100 | 10.0000 | 9.85 | 98 | 9.81 | 98 | 9.86 | 99 |
| Thallium | 0.500 | 0.5260 | 105 | 0.5000 | 0.526 | 105 | 0.522 | 104 | 0.520 | 104 |
| Vanadium | 0.500 | 0.4890 | 98 | 0.5000 | 0.504 | 101 | 0.500 | 100 | 0.488 | 98 |
| Zinc | 0.500 | 0.5070 | 101 | 0.5000 | 0.530 | 106 | 0.522 | 104 | 0.527 | 105 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | | R1878315-12 | | | | | | |
| **Date Analyzed** : | | | | 09/20/24 14:07 | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | | | | 0.5000 | 0.502 | 100 | | | | |
| Antimony | | | | 0.5000 | 0.517 | 103 | | | | |
| Arsenic | | | | 0.5000 | 0.504 | 101 | | | | |
| Barium | | | | 0.5000 | 0.492 | 98 | | | | |
| Beryllium | | | | 0.5000 | 0.502 | 100 | | | | |
| Cadmium | | | | 0.5000 | 0.505 | 101 | | | | |
| Calcium | | | | 0.5000 | 0.498 | 100 | | | | |
| Chromium | | | | 0.5000 | 0.495 | 99 | | | | |
| Cobalt | | | | 0.5000 | 0.515 | 103 | | | | |
| Copper | | | | 0.5000 | 0.487 | 97 | | | | |
| Iron | | | | 0.5000 | 0.529 | 106 | | | | |
| Lead | | | | 0.5000 | 0.522 | 104 | | | | |
| Magnesium | | | | 0.5000 | 0.502 | 100 | | | | |
| Manganese | | | | 0.5000 | 0.491 | 98 | | | | |
| Nickel | | | | 0.5000 | 0.518 | 104 | | | | |
| Potassium | | | | 5.0000 | 5.26 | 105 | | | | |
| Selenium | | | | 0.5000 | 0.523 | 105 | | | | |
| Silver | | | | 0.5000 | 0.509 | 102 | | | | |
| Sodium | | | | 10.0000 | 9.88 | 99 | | | | |
| Thallium | | | | 0.5000 | 0.531 | 106 | | | | |
| Vanadium | | | | 0.5000 | 0.490 | 98 | | | | |
| Zinc | | | | 0.5000 | 0.536 | 107 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | : | R1879184-5 | | | | | | | | | |
| Date Analyzed | : | 09/23/24 10:05 | | | | | | | | | |
| **Parameter** | | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | | 0.500 | 0.4910 | 98 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1879184-7 | | | R1879184-10 | | | R1879184-12 | | R1879184-14 | |
| **Date Analyzed** : | 09/23/24 10:13 | | | 09/23/24 11:46 | | | 09/23/24 12:48 | | 09/23/24 13:36 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Aluminum | 0.500 | 0.4740 | 95 | 0.5000 | 0.514 | 103 | 0.483 | 97 | 0.480 | 96 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | | R1879184-16 | | | | | | |
| **Date Analyzed** : | | | | 09/23/24 14:24 | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| **Aluminum** | | | | 0.5000 | 0.488 | 98 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | R1878261-2 | | R1878261-7 | | R1878261-9 | | R1878261-11 | | | |
| **Date Analyzed :** | 09/20/24 06:28 | | 09/20/24 08:14 | | 09/20/24 09:05 | | 09/20/24 10:01 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00354 | J | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878261-4 | | R1878261-13 | | R1878261-15 | | R1878261-17 | | | |
| **Date Analyzed** : | 09/20/24 06:43 | | 09/20/24 10:56 | | 09/20/24 11:46 | | 09/20/24 12:30 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1878261-19 | | R1878261-21 | | R1878261-23 | | | |
| **Date Analyzed** : | | | 09/20/24 13:23 | | 09/20/24 14:17 | | 09/20/24 15:13 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00218 | J | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1878261-25 | | R1878261-27 | | R1878261-29 | | | |
| **Date Analyzed** : | | | 09/20/24 16:05 | | 09/20/24 16:55 | | 09/20/24 17:34 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00334 | J | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1878261-31 | | R1878261-33 | | R1878261-35 | | | |
| **Date Analyzed** : | | | 09/20/24 18:25 | | 09/20/24 19:19 | | 09/20/24 20:07 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1878261-37 | | R1878261-39 | | R1878261-41 | | | |
| **Date Analyzed** : | | | 09/20/24 20:56 | | 09/20/24 21:50 | | 09/20/24 22:40 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | | | 0.00710 | U | 0.00821 | J | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00226 | J | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1878261-43 | | R1878261-45 | | | | | |
| **Date Analyzed** : | | | 09/20/24 23:08 | | 09/20/24 23:16 | | | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Antimony | | | 0.00710 | U | 0.00710 | U | | | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | | | | |
| Barium | | | 0.00210 | U | 0.00210 | U | | | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | | | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | | | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | | | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | | | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | | | | |
| Copper | | | 0.00220 | U | 0.00220 | U | | | | |
| Iron | | | 0.00900 | U | 0.00900 | U | | | | |
| Lead | | | 0.00270 | U | 0.00270 | U | | | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | | | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | | | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | | | | |
| Potassium | | | 0.237 | U | 0.237 | U | | | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | | | | |
| Silver | | | 0.00280 | U | 0.00280 | U | | | | |
| Sodium | | | 0.120 | U | 0.120 | U | | | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | | | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | | | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1878315-2 | | R1878315-7 | | R1878315-9 | | R1878315-11 | | WG1974186-17 | |
| Date Analyzed : | 09/19/24 17:58 | | 09/20/24 10:34 | | 09/20/24 11:43 | | 09/20/24 12:55 | | 09/20/24 14:19 | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | J |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878315-4 | | R1878315-13 | | R1878315-15 | | R1878315-17 | | | |
| **Date Analyzed** : | 09/19/24 18:10 | | 09/20/24 14:13 | | 09/20/24 15:28 | | 09/20/24 15:55 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | R1878315-2 | | R1878315-7 | | R1878315-9 | | R1878315-11 | | WG1973830-1 | |
| **Date Analyzed :** | 09/19/24 17:58 | | 09/20/24 10:34 | | 09/20/24 11:43 | | 09/20/24 12:55 | | 09/20/24 13:04 | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1878315-4 | | R1878315-13 | | | | | | | |
| **Date Analyzed** : | 09/19/24 18:10 | | 09/20/24 14:13 | | | | | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | | | | | | |
| Antimony | 0.00710 | U | 0.00710 | U | | | | | | |
| Arsenic | 0.00190 | U | 0.00190 | U | | | | | | |
| Barium | 0.00210 | U | 0.00210 | U | | | | | | |
| Beryllium | 0.000900 | U | 0.000900 | U | | | | | | |
| Cadmium | 0.00100 | U | 0.00100 | U | | | | | | |
| Calcium | 0.0350 | U | 0.0350 | U | | | | | | |
| Chromium | 0.00210 | U | 0.00210 | U | | | | | | |
| Cobalt | 0.00170 | U | 0.00170 | U | | | | | | |
| Copper | 0.00220 | U | 0.00220 | U | | | | | | |
| Iron | 0.00900 | U | 0.00900 | U | | | | | | |
| Lead | 0.00270 | U | 0.00270 | U | | | | | | |
| Magnesium | 0.0153 | U | 0.0153 | U | | | | | | |
| Manganese | 0.00160 | U | 0.00160 | U | | | | | | |
| Nickel | 0.00240 | U | 0.00240 | U | | | | | | |
| Potassium | 0.237 | U | 0.237 | U | | | | | | |
| Selenium | 0.00350 | U | 0.00350 | U | | | | | | |
| Silver | 0.00280 | U | 0.00280 | U | | | | | | |
| Sodium | 0.120 | U | 0.120 | U | | | | | | |
| Thallium | 0.00250 | U | 0.00250 | U | | | | | | |
| Vanadium | 0.00200 | U | 0.00200 | U | | | | | | |
| Zinc | 0.00210 | U | 0.00210 | U | | | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | R1879184-6 | | R1879184-11 | | R1879184-13 | | R1879184-15 | | | |
| **Date Analyzed** : | 09/23/24 10:09 | | 09/23/24 11:50 | | 09/23/24 12:52 | | 09/23/24 13:40 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| **Aluminum** | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | | |

| | | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | R1879184-8 | | R1879184-17 | | | | | | | |
| **Date Analyzed** | : | 09/23/24 10:17 | | 09/23/24 14:28 | | | | | | | |
| **Parameter** | | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| **Aluminum** | | 0.0318 | U | 0.0318 | U | | | | | | |

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Concentration Units** | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | R1878261-5 | | | | | | | |
| **Analysis Date :** | | | 09/20/24 06:51 | | | | | | | |
| **Analyte** | **Sol. A** | **Sol. AB** | **Sol. A** | **%R** | **Sol. AB** | **%R** | **Sol. A** | **%R** | **Sol. AB** | **%R** |
| Antimony | | | -0.0118 | | | | | | | |
| Arsenic | | | -0.000331 | | | | | | | |
| Barium | | | 0.00157 | | | | | | | |
| Beryllium | | | 0.0000842 | | | | | | | |
| Cadmium | | | -0.000169 | | | | | | | |
| Calcium | 500 | | 532. | 106 | | | | | | |
| Chromium | | | -0.000807 | | | | | | | |
| Cobalt | | | -0.000647 | | | | | | | |
| Copper | | | 0.000564 | | | | | | | |
| Iron | 200 | | 188. | 94 | | | | | | |
| Lead | | | -0.00334 | | | | | | | |
| Magnesium | 500 | | 494. | 99 | | | | | | |
| Manganese | | | -0.000544 | | | | | | | |
| Nickel | | | -0.000240 | | | | | | | |
| Potassium | | | -0.0159 | | | | | | | |
| Selenium | | | 0.00389 | | | | | | | |
| Silver | | | 0.00388 | | | | | | | |
| Sodium | | | -0.0251 | | | | | | | |
| Thallium | | | 0.00321 | | | | | | | |
| Vanadium | | | 0.000399 | | | | | | | |
| Zinc | | | 0.00101 | | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

**ICSA:** 80-120%

**ICSAB:** 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Concentration Units** | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | R1878315-5 | | | | | | | |
| **Analysis Date :** | | | 09/19/24 18:32 | | | | | | | |
| **Analyte** | **Sol. A** | **Sol. AB** | **Sol. A** | **%R** | **Sol. AB** | **%R** | **Sol. A** | **%R** | **Sol. AB** | **%R** |
| Aluminum | 500 | | 514. | 103 | | | | | | |
| Antimony | | | -0.0126 | | | | | | | |
| Arsenic | | | -0.0000672 | | | | | | | |
| Barium | | | 0.000490 | | | | | | | |
| Beryllium | | | -0.000468 | | | | | | | |
| Cadmium | | | 0.0000741 | | | | | | | |
| Calcium | 500 | | 558. | 112 | | | | | | |
| Chromium | | | 0.00137 | | | | | | | |
| Cobalt | | | 0.00109 | | | | | | | |
| Copper | | | 0.0000740 | | | | | | | |
| Iron | 200 | | 183. | 92 | | | | | | |
| Lead | | | 0.00761 | | | | | | | |
| Magnesium | 500 | | 471. | 94 | | | | | | |
| Manganese | | | 0.00172 | | | | | | | |
| Nickel | | | 0.00686 | | | | | | | |
| Potassium | | | -0.0312 | | | | | | | |
| Selenium | | | -0.00160 | | | | | | | |
| Silver | | | 0.000931 | | | | | | | |
| Sodium | | | 0.0244 | | | | | | | |
| Thallium | | | -0.000366 | | | | | | | |
| Vanadium | | | -0.00245 | | | | | | | |
| Zinc | | | -0.00839 | | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

**ICSA:** 80-120%

**ICSAB:** 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Concentration Units** | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID :** | | | R1878315-5 | | | | | | | |
| **Analysis Date :** | | | 09/19/24 18:32 | | | | | | | |
| **Analyte** | **Sol. A** | **Sol. AB** | **Sol. A** | **%R** | **Sol. AB** | **%R** | **Sol. A** | **%R** | **Sol. AB** | **%R** |
| Aluminum | 500 | | 514. | 103 | | | | | | |
| Antimony | | | -0.0126 | | | | | | | |
| Arsenic | | | -0.0000672 | | | | | | | |
| Barium | | | 0.000490 | | | | | | | |
| Beryllium | | | -0.000468 | | | | | | | |
| Cadmium | | | 0.0000741 | | | | | | | |
| Calcium | 500 | | 558. | 112 | | | | | | |
| Chromium | | | 0.00137 | | | | | | | |
| Cobalt | | | 0.00109 | | | | | | | |
| Copper | | | 0.0000740 | | | | | | | |
| Iron | 200 | | 183. | 92 | | | | | | |
| Lead | | | 0.00761 | | | | | | | |
| Magnesium | 500 | | 471. | 94 | | | | | | |
| Manganese | | | 0.00172 | | | | | | | |
| Nickel | | | 0.00686 | | | | | | | |
| Potassium | | | -0.0312 | | | | | | | |
| Selenium | | | -0.00160 | | | | | | | |
| Silver | | | 0.000931 | | | | | | | |
| Sodium | | | 0.0244 | | | | | | | |
| Thallium | | | -0.000366 | | | | | | | |
| Vanadium | | | -0.00245 | | | | | | | |
| Zinc | | | -0.00839 | | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

**ICSA:** 80-120%

**ICSAB:** 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Concentration Units** | : mg/l |

| | | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | | R1879184-9 | | | | | | | |
| **Analysis Date** | : | | 09/23/24 10:27 | | | | | | | |
| **Analyte** | **Sol. A** | **Sol. AB** | **Sol. A** | **%R** | **Sol. AB** | **%R** | **Sol. A** | **%R** | **Sol. AB** | **%R** |
| **Aluminum** | 500 | | 481. | 96 | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

**ICSA:** 80-120%

**ICSAB:** 80-120%

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1974186-19 | **MS Analysis Date** | : 09/20/24 14:57 |
| **Matrix Spike Dup** | : WG1974186-20 | **MSD Analysis Date** | : 09/20/24 15:03 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | ND | 2 | 1.94 | 97 | 2 | 2.04 | 102 | 5 | 75-125 | 20 |
| Antimony, Dissolved | ND | 0.5 | 0.497 | 99 | 0.5 | 0.520 | 104 | 5 | 75-125 | 20 |
| Arsenic, Dissolved | ND | 0.12 | 0.122 | 102 | 0.12 | 0.124 | 103 | 2 | 75-125 | 20 |
| Barium, Dissolved | 0.0210 | 2 | 1.92 | 95 | 2 | 2.03 | 100 | 6 | 75-125 | 20 |
| Beryllium, Dissolved | ND | 0.05 | 0.0486 | 97 | 0.05 | 0.0510 | 102 | 5 | 75-125 | 20 |
| Cadmium, Dissolved | ND | 0.053 | 0.0514 | 97 | 0.053 | 0.0534 | 101 | 4 | 75-125 | 20 |
| Calcium, Dissolved | 17.0 | 10 | 26.7 | 97 | 10 | 28.0 | 110 | 5 | 75-125 | 20 |
| Chromium, Dissolved | ND | 0.2 | 0.192 | 96 | 0.2 | 0.202 | 101 | 5 | 75-125 | 20 |
| Cobalt, Dissolved | ND | 0.5 | 0.482 | 96 | 0.5 | 0.501 | 100 | 4 | 75-125 | 20 |
| Copper, Dissolved | ND | 0.25 | 0.245 | 98 | 0.25 | 0.256 | 102 | 4 | 75-125 | 20 |
| Iron, Dissolved | 0.0691 | 1 | 1.04 | 97 | 1 | 1.09 | 102 | 5 | 75-125 | 20 |
| Lead, Dissolved | ND | 0.53 | 0.535 | 101 | 0.53 | 0.549 | 104 | 3 | 75-125 | 20 |
| Magnesium, Dissolved | 3.02 | 10 | 13.0 | 100 | 10 | 13.4 | 104 | 3 | 75-125 | 20 |
| Manganese, Dissolved | 0.0492 | 0.5 | 0.530 | 96 | 0.5 | 0.556 | 101 | 5 | 75-125 | 20 |
| Nickel, Dissolved | ND | 0.5 | 0.492 | 98 | 0.5 | 0.511 | 102 | 4 | 75-125 | 20 |
| Potassium, Dissolved | 1.70J | 10 | 12.4 | 124 | 10 | 12.7 | 127 Q | 2 | 75-125 | 20 |
| Selenium, Dissolved | ND | 0.12 | 0.126 | 105 | 0.12 | 0.130 | 108 | 3 | 75-125 | 20 |
| Silver, Dissolved | ND | 0.05 | 0.0501 | 100 | 0.05 | 0.0524 | 105 | 4 | 75-125 | 20 |
| Sodium, Dissolved | 2.27 | 10 | 12.7 | 104 | 10 | 13.1 | 108 | 3 | 75-125 | 20 |
| Thallium, Dissolved | ND | 0.12 | 0.121 | 101 | 0.12 | 0.124 | 103 | 2 | 75-125 | 20 |
| Vanadium, Dissolved | ND | 0.5 | 0.477 | 95 | 0.5 | 0.503 | 101 | 5 | 75-125 | 20 |
| Zinc, Dissolved | ND | 0.5 | 0.486 | 97 | 0.5 | 0.506 | 101 | 4 | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1973830-3 | **MS Analysis Date** | : 09/20/24 13:42 |
| **Matrix Spike Dup** | : WG1973830-4 | **MSD Analysis Date** | : 09/20/24 13:48 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | ND | 2 | 2.02 | 101 | 2 | 2.01 | 100 | 0 | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.517 | 103 | 0.5 | 0.515 | 103 | 0 | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.123 | 102 | 0.12 | 0.122 | 102 | 1 | 75-125 | 20 |
| Barium, Total | 0.0222 | 2 | 2.01 | 99 | 2 | 2.02 | 100 | 0 | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0499 | 100 | 0.05 | 0.0497 | 99 | 0 | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0525 | 99 | 0.053 | 0.0522 | 98 | 1 | 75-125 | 20 |
| Calcium, Total | 18.0 | 10 | 28.9 | 109 | 10 | 28.0 | 100 | 3 | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.197 | 98 | 0.2 | 0.196 | 98 | 1 | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.494 | 99 | 0.5 | 0.492 | 98 | 0 | 75-125 | 20 |
| Copper, Total | ND | 0.25 | 0.256 | 102 | 0.25 | 0.255 | 102 | 0 | 75-125 | 20 |
| Iron, Total | 0.0706 | 1 | 1.07 | 100 | 1 | 1.15 | 108 | 7 | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.545 | 103 | 0.53 | 0.535 | 101 | 2 | 75-125 | 20 |
| Magnesium, Total | 3.20 | 10 | 13.9 | 107 | 10 | 13.4 | 102 | 4 | 75-125 | 20 |
| Manganese, Total | 0.0487 | 0.5 | 0.547 | 100 | 0.5 | 0.542 | 99 | 1 | 75-125 | 20 |
| Nickel, Total | ND | 0.5 | 0.495 | 99 | 0.5 | 0.494 | 99 | 0 | 75-125 | 20 |
| Potassium, Total | 1.90J | 10 | 12.7 | 127 Q | 10 | 12.5 | 125 | 2 | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.126 | 105 | 0.12 | 0.125 | 104 | 1 | 75-125 | 20 |
| Silver, Total | ND | 0.05 | 0.0530 | 106 | 0.05 | 0.0521 | 104 | 2 | 75-125 | 20 |
| Sodium, Total | 2.41 | 10 | 13.1 | 107 | 10 | 12.8 | 104 | 2 | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.124 | 103 | 0.12 | 0.122 | 102 | 2 | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.494 | 99 | 0.5 | 0.490 | 98 | 1 | 75-125 | 20 |
| Zinc, Total | ND | 0.5 | 0.494 | 99 | 0.5 | 0.494 | 99 | 0 | 75-125 | 20 |

# Form 5b
# Post Digest Spike Recovery

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Post Spike** | : WG1974186-21 | **PS Analysis Date** | : 09/20/24 15:10 |

| | | Post Spike Sample | | | |
|---|---|---|---|---|---|
| | Sample Conc. | Spike Added | Spike Conc. | %R | Recovery |
| Parameter | (mg/l) | (mg/l) | (mg/l) | | Limits |
| Potassium, Dissolved | 1.70J | 10 | 12.5 | 125 | 75-125 |

# Form 5b
# Post Digest Spike Recovery

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Post Spike** | : WG1973830-5 | **PS Analysis Date** | : 09/20/24 13:54 |

| | | Post Spike Sample | | | |
|---|---|---|---|---|---|
| | Sample Conc. | Spike Added | Spike Conc. | %R | Recovery |
| Parameter | (mg/l) | (mg/l) | (mg/l) | | Limits |
| Potassium, Total | 1.90J | 10 | 12.2 | 122 | 75-125 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1974186-18 | **LCS Analysis Date** | : 09/20/24 14:26 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | 2.00 | 2.01 | 100. | | | | | 85-115 | 20 |
| Antimony, Dissolved | 0.500 | 0.512 | 102. | | | | | 85-115 | 20 |
| Arsenic, Dissolved | 0.120 | 0.121 | 101. | | | | | 85-115 | 20 |
| Barium, Dissolved | 2.00 | 1.97 | 98. | | | | | 85-115 | 20 |
| Beryllium, Dissolved | 0.0500 | 0.0498 | 100. | | | | | 85-115 | 20 |
| Cadmium, Dissolved | 0.0530 | 0.0534 | 101. | | | | | 85-115 | 20 |
| Calcium, Dissolved | 10.0 | 10.1 | 101. | | | | | 85-115 | 20 |
| Chromium, Dissolved | 0.200 | 0.198 | 99. | | | | | 85-115 | 20 |
| Cobalt, Dissolved | 0.500 | 0.502 | 100. | | | | | 85-115 | 20 |
| Copper, Dissolved | 0.250 | 0.253 | 101. | | | | | 85-115 | 20 |
| Iron, Dissolved | 1.00 | 1.00 | 100. | | | | | 85-115 | 20 |
| Lead, Dissolved | 0.530 | 0.548 | 103. | | | | | 85-115 | 20 |
| Magnesium, Dissolved | 10.0 | 10.3 | 103. | | | | | 85-115 | 20 |
| Manganese, Dissolved | 0.500 | 0.500 | 100. | | | | | 85-115 | 20 |
| Nickel, Dissolved | 0.500 | 0.509 | 102. | | | | | 85-115 | 20 |
| Potassium, Dissolved | 10.0 | 10.7 | 107. | | | | | 85-115 | 20 |
| Selenium, Dissolved | 0.120 | 0.123 | 102. | | | | | 85-115 | 20 |
| Silver, Dissolved | 0.0500 | 0.0520 | 104. | | | | | 85-115 | 20 |
| Sodium, Dissolved | 10.0 | 10.5 | 105. | | | | | 85-115 | 20 |
| Thallium, Dissolved | 0.120 | 0.123 | 102. | | | | | 85-115 | 20 |
| Vanadium, Dissolved | 0.500 | 0.494 | 99. | | | | | 85-115 | 20 |
| Zinc, Dissolved | 0.500 | 0.503 | 101. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973830-2 | **LCS Analysis Date** | : 09/20/24 13:10 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 2.00 | 2.00 | 100. | | | | | 85-115 | 20 |
| Antimony, Total | 0.500 | 0.516 | 103. | | | | | 85-115 | 20 |
| Arsenic, Total | 0.120 | 0.118 | 98. | | | | | 85-115 | 20 |
| Barium, Total | 2.00 | 1.98 | 99. | | | | | 85-115 | 20 |
| Beryllium, Total | 0.0500 | 0.0496 | 99. | | | | | 85-115 | 20 |
| Cadmium, Total | 0.0530 | 0.0531 | 100. | | | | | 85-115 | 20 |
| Calcium, Total | 10.0 | 9.90 | 99. | | | | | 85-115 | 20 |
| Chromium, Total | 0.200 | 0.198 | 99. | | | | | 85-115 | 20 |
| Cobalt, Total | 0.500 | 0.503 | 101. | | | | | 85-115 | 20 |
| Copper, Total | 0.250 | 0.254 | 102. | | | | | 85-115 | 20 |
| Iron, Total | 1.00 | 1.00 | 100. | | | | | 85-115 | 20 |
| Lead, Total | 0.530 | 0.535 | 101. | | | | | 85-115 | 20 |
| Magnesium, Total | 10.0 | 10.1 | 101. | | | | | 85-115 | 20 |
| Manganese, Total | 0.500 | 0.499 | 100. | | | | | 85-115 | 20 |
| Nickel, Total | 0.500 | 0.508 | 102. | | | | | 85-115 | 20 |
| Potassium, Total | 10.0 | 10.5 | 105. | | | | | 85-115 | 20 |
| Selenium, Total | 0.120 | 0.120 | 100. | | | | | 85-115 | 20 |
| Silver, Total | 0.0500 | 0.0524 | 105. | | | | | 85-115 | 20 |
| Sodium, Total | 10.0 | 10.3 | 103. | | | | | 85-115 | 20 |
| Thallium, Total | 0.120 | 0.121 | 101. | | | | | 85-115 | 20 |
| Vanadium, Total | 0.500 | 0.494 | 99. | | | | | 85-115 | 20 |
| Zinc, Total | 0.500 | 0.499 | 100. | | | | | 85-115 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/20/24 14:51 |
| **Serial Dilution ID** | : WG1974186-22 | **Analysis Date** | : 09/20/24 15:16 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Dissolved | 17.0 | 16.0 | 6 | 20 |
| Magnesium, Dissolved | 3.02 | 3.04 | 1 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/20/24 13:36 |
| **Serial Dilution ID** | : WG1973830-6 | **Analysis Date** | : 09/20/24 14:00 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Total | 18.0 | 18.4 | 2 | 20 |
| Magnesium, Total | 3.20 | 3.28 | 2 | 20 |

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | __ |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000020 | -0.0000310 | -0.0000090 | |
| Antimony | 206.83 | -0.0000020 | 0.0000040 | -0.0000110 | -0.0000050 | |
| Arsenic | 189.04 | 0.0000090 | -0.0000010 | -0.0000700 | 0.0000000 | |
| Barium | 455.40 | -0.0000040 | -0.0000020 | -0.0000110 | -0.0000010 | |
| Beryllium | 313.40 | -0.0000020 | -0.0000020 | -0.0000050 | 0.0000000 | |
| Cadmium | 214.44 | 0.0000000 | -0.0000030 | 0.0000000 | -0.0000010 | |
| Calcium | 315.89 | 0.0000780 | 0.0000000 | -0.0000170 | 0.0000710 | |
| Chromium | 267.72 | 0.0000050 | -0.0000020 | 0.0000120 | 0.0000000 | |
| Cobalt | 228.62 | -0.0000120 | -0.0000060 | -0.0000250 | -0.0000020 | |
| Copper | 324.75 | -0.0000030 | -0.0000020 | -0.0000040 | 0.0000110 | |
| Iron | 259.94 | 0.0000180 | -0.0000120 | 0.0000000 | -0.0000030 | |
| Lead | 220.35 | 0.0001100 | -0.0000010 | 0.0000180 | -0.0000010 | |
| Magnesium | 279.08 | -0.0000540 | -0.0000280 | 0.0000190 | 0.0000000 | |
| Manganese | 257.61 | -0.0000030 | -0.0000020 | -0.0000080 | 0.0000020 | |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0000130 | -0.0000050 | -0.0000240 | -0.0000020 | |
| Potassium | 766.49 | -0.0012590 | -0.0007040 | -0.0028490 | -0.0002350 | |
| Selenium | 196.09 | -0.0000200 | 0.0000000 | -0.0000290 | -0.0000010 | |
| Silver | 328.07 | -0.0000040 | -0.0000020 | -0.0000090 | -0.0000010 | |
| Sodium | 589.59 | -0.0006160 | -0.0005220 | -0.0020960 | -0.0001600 | |
| Thallium | 190.86 | -0.0000060 | -0.0000040 | -0.0000050 | -0.0000010 | |
| Vanadium | 292.40 | -0.0000050 | -0.0000030 | 0.0000100 | -0.0000020 | |
| Zinc | 206.20 | 0.0002750 | 0.0000030 | -0.0007990 | -0.0000040 | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022950 | -0.0018570 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0003900 | -0.0000120 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000210 | -0.0001780 | -0.0001730 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002050 | -0.0002030 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000860 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0020880 | -0.0018790 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002010 | -0.0003100 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004810 | -0.0004970 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002330 | -0.0002260 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0012310 | -0.0009570 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001700 | -0.0001850 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022440 | -0.0017830 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001950 | -0.0002020 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0005490 | -0.0005200 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0522980 | -0.0517110 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000060 | 0.0000030 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001740 | -0.0001560 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0417330 | -0.0407400 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002650 | -0.0002240 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | -0.0002040 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000320 | -0.0009250 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | -0.0020320 | -0.0005350 | -0.0005960 | 0.0000000 | -0.0003930 |
| Antimony | 206.83 | 0.0049920 | -0.0001600 | -0.0001410 | 0.0000000 | -0.0001780 |
| Arsenic | 189.04 | 0.0002670 | -0.0001290 | -0.0000570 | 0.0000000 | -0.0000030 |
| Barium | 455.40 | -0.0002000 | -0.0000500 | -0.0000660 | 0.0000000 | -0.0000350 |
| Beryllium | 313.40 | -0.0000900 | -0.0000220 | -0.0000300 | 0.0000000 | -0.0000110 |
| Cadmium | 214.44 | -0.0000290 | -0.0000520 | -0.0000680 | 0.0000000 | -0.0000270 |
| Calcium | 315.89 | -0.0020720 | 0.0009940 | -0.0005720 | 0.0000000 | -0.0000920 |
| Chromium | 267.72 | 0.0000000 | -0.0000480 | -0.0000690 | 0.0000000 | 0.0001140 |
| Cobalt | 228.62 | -0.0005870 | 0.0000000 | -0.0001660 | 0.0000000 | -0.0000740 |
| Copper | 324.75 | -0.0002130 | -0.0000490 | 0.0000000 | 0.0000000 | 0.0000300 |
| Iron | 259.94 | -0.0010370 | -0.0002940 | -0.0003760 | 0.0000000 | -0.0001890 |
| Lead | 220.35 | -0.0001960 | -0.0003260 | 0.0002710 | 0.0000000 | 0.0000640 |
| Magnesium | 279.08 | -0.0024620 | -0.0005640 | -0.0008730 | 0.0000000 | -0.0069760 |
| Manganese | 257.61 | -0.0002060 | -0.0000480 | -0.0000750 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0005230 | -0.0002210 | -0.0001810 | 0.0000000 | -0.0000730 |
| Potassium | 766.49 | -0.0512430 | -0.0126240 | -0.0178480 | 0.0000000 | -0.0089880 |
| Selenium | 196.09 | -0.0000520 | 0.0000530 | -0.0000240 | 0.0000000 | 0.0003780 |
| Silver | 328.07 | -0.0001430 | -0.0000370 | -0.0000450 | 0.0000000 | 0.0001940 |
| Sodium | 589.59 | -0.0407180 | -0.0097580 | -0.0137660 | 0.0000000 | -0.0070470 |
| Thallium | 190.86 | -0.0000390 | 0.0020440 | -0.0000840 | -0.0000200 | 0.0003990 |
| Vanadium | 292.40 | -0.0002210 | -0.0000500 | -0.0000650 | 0.0000000 | 0.0001060 |
| Zinc | 206.20 | -0.0012900 | 0.0000070 | 0.0003430 | 0.0001200 | -0.0001520 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
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ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
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ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
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ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
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ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | 0.0001500 | 0.0000000 | -0.0004550 | 0.0000000 | 0.0038670 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000380 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0001750 | 0.0000000 | 0.0002100 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | -0.0000350 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000100 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0017890 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0011610 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Comments:

| EPA 200.7, EPA 6010D | | Linear Dynamic Range | | | | | |
|---|---|---|---|---|---|---|---|
| | | All values are in mg/L and are 90% of the established LDR concentration. | | | | | |
| Instrument ID: | | Trace 4 | Trace 5 | Trace 6 | Trace 7 | Trace 8 | Trace 9 |
| 2023 Complete | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ag | Silver | 36 | 27 | 9 | 13 | 90 | 45 |
| Al | Aluminum | 900 | 540 | 450 | 900 | 900 | 900 |
| As | Arsenic | 90 | 54 | 90 | 72 | 180 | 90 |
| B | Boron | 90 | 90 | 9 | 45 | 90 | 54 |
| Ba | Barium | 90 | 27 | 18 | 13 | 135 | 27 |
| Be | Beryllium | 27 | 36 | 9 | 9 | 11 | 31 |
| Ca | Calcium | 450 | 900 | 675 | 900 | 900 | 900 |
| Cd | Cadmium | 11 | 9 | 9 | 11 | 27 | 18 |
| Co | Cobalt | 90 | 63 | 45 | 22 | 135 | 90 |
| Cr | Chromium | 45 | 63 | 9 | 45 | 157 | 90 |
| Cu | Copper | 90 | 54 | 45 | 45 | 90 | 67 |
| Fe | Iron | 630 | 900 | 450 | 450 | 540 | 540 |
| K | Potassium | 900 | 900 | 675 | 720 | 900 | 900 |
| Mg | Magnesium | 450 | 900 | 360 | 900 | 900 | 900 |
| Mn | Manganese | 90 | 31 | 90 | 67 | 90 | 90 |
| Mo | Molybdenum | 45 | 36 | 9 | 22 | 67 | 45 |
| Na | Sodium | 675 | 900 | 450 | 405 | 630 | 900 |
| Ni | Nickel | 90 | 45 | 45 | 22 | 135 | 90 |
| Pb | Lead | 180 | 180 | 90 | 90 | 225 | 90 |
| S | Sulfur | - | 90 | - | - | - | - |
| Sb | Antimony | 22 | 45 | 45 | 4.5 | 90 | 45 |
| Se | Selenium | 27 | 27 | 45 | 22 | 15 | 45 |
| Si | Silica | 45 | 90 | 22 | 22 | 90 | 45 |
| Sn | Tin | 45 | 45 | 13 | 22 | 72 | 45 |
| Sr | Strontium | 45 | 45 | 9 | 9 | 67 | 45 |
| Ti | Titanium | 45 | 90 | 9 | 90 | 72 | 45 |
| Tl | Thallium | 45 | 90 | 45 | 22 | 135 | 45 |
| V | Vanadium | 90 | 90 | 90 | 90 | 112 | 45 |
| Zn | Zinc | 45 | 27 | 45 | 22 | 63 | 22 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-02 | 09/20/24 08:00 | - | 50 |
| L2453053-03 | 09/20/24 08:00 | - | 50 |
| L2453053-04 | 09/20/24 08:00 | - | 50 |
| L2453053-05 | 09/20/24 08:00 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-01 | 09/20/24 09:46 | - | 50 |
| L2453053-02 | 09/20/24 09:46 | - | 50 |
| L2453053-03 | 09/20/24 09:46 | - | 50 |
| L2453053-04 | 09/20/24 09:46 | - | 50 |
| L2453053-05 | 09/20/24 09:46 | - | 50 |
| WG1974186-17 | 09/20/24 09:46 | - | 50 |
| WG1974186-18 | 09/20/24 09:46 | - | 50 |
| WG1974186-19 | 09/20/24 09:46 | - | 50 |
| WG1974186-20 | 09/20/24 09:46 | - | 50 |
| WG1974186-21 | 09/20/24 09:46 | - | 50 |
| WG1974186-22 | 09/20/24 09:46 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-01 | 09/20/24 08:00 | - | 50 |
| WG1973830-1 | 09/20/24 08:00 | - | 50 |
| WG1973830-2 | 09/20/24 08:00 | - | 50 |
| WG1973830-3 | 09/20/24 08:00 | - | 50 |
| WG1973830-4 | 09/20/24 08:00 | - | 50 |
| WG1973830-5 | 09/20/24 08:00 | - | 50 |
| WG1973830-6 | 09/20/24 08:00 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-02 | 09/20/24 08:00 | - | 50 |
| L2453053-03 | 09/20/24 08:00 | - | 50 |
| L2453053-04 | 09/20/24 08:00 | - | 50 |
| L2453053-05 | 09/20/24 08:00 | - | 50 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/20/24 06:24 | **End Date** | : 09/20/24 23:16 |

| Sample Number | Dilution Factor | Analysis Time | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1878261-1 ICV | 1 | 06:24:34 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-2 ICB | 1 | 06:28:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-3 ICV | 1 | 06:39:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-4 ICB | 1 | 06:43:15 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-5 ICSA | 1 | 06:51:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-6 CCV | 1 | 08:10:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-7 CCB | 1 | 08:14:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-8 CCV | 1 | 09:01:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-9 CCB | 1 | 09:05:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-10 CCV | 1 | 09:58:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-11 CCB | 1 | 10:01:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-12 CCV | 1 | 10:52:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-13 CCB | 1 | 10:56:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-14 CCV | 1 | 11:42:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-15 CCB | 1 | 11:46:44 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-16 CCV | 1 | 12:27:01 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-17 CCB | 1 | 12:30:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-18 CCV | 1 | 13:19:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-19 CCB | 1 | 13:23:01 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-20 CCV | 1 | 14:13:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-21 CCB | 1 | 14:17:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-22 CCV | 1 | 15:09:44 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-23 CCB | 1 | 15:13:38 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-24 CCV | 1 | 16:01:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-25 CCB | 1 | 16:05:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-26 CCV | 1 | 16:51:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-27 CCB | 1 | 16:55:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/20/24 06:24 | **End Date** | : 09/20/24 23:16 |

| Sample Number | Dilution Factor | Analysis Time | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1878261-28 CCV | 1 | 17:30:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-29 CCB | 1 | 17:34:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-30 CCV | 1 | 18:21:38 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-31 CCB | 1 | 18:25:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-32 CCV | 1 | 19:15:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-33 CCB | 1 | 19:19:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-34 CCV | 1 | 20:03:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-35 CCB | 1 | 20:07:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-36 CCV | 1 | 20:52:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-37 CCB | 1 | 20:56:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-38 CCV | 1 | 21:46:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-39 CCB | 1 | 21:50:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-40 CCV | 1 | 22:36:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-41 CCB | 1 | 22:40:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-02 | 1 | 22:48:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-03 | 1 | 22:52:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-04 | 1 | 22:56:15 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-05 | 1 | 23:00:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-42 CCV | 1 | 23:04:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-43 CCB | 1 | 23:08:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-44 CCV | 1 | 23:12:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878261-45 CCB | 1 | 23:16:01 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/19/24 17:52 | **End Date** | : 09/20/24 15:55 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1878315-1 ICV | 1 | 17:52:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-2 ICB | 1 | 17:58:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-3 ICV | 1 | 18:04:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-4 ICB | 1 | 18:10:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-5 ICSA | 1 | 18:32:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-6 CCV | 1 | 10:28:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-7 CCB | 1 | 10:34:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-8 CCV | 1 | 11:37:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-9 CCB | 1 | 11:43:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-10 CCV | 1 | 12:49:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-11 CCB | 1 | 12:55:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-12 CCV | 1 | 14:07:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-13 CCB | 1 | 14:13:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1974186-17 BLANK | 1 | 14:19:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1974186-18 LCS | 1 | 14:26:11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-02 | 1 | 14:32:24 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-03 | 1 | 14:38:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-04 | 1 | 14:45:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-01 | 1 | 14:51:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1974186-19 MS | 1 | 14:57:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1974186-20 MSD | 1 | 15:03:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1974186-21 PS | 1 | 15:10:01 | | | | | | | | | | | | | | | | X | | | | | | |
| WG1974186-22 SERDIL | 5 | 15:16:11 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1878315-14 CCV | 1 | 15:22:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-15 CCB | 1 | 15:28:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-05 | 1 | 15:39:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-16 CCV | 1 | 15:49:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/19/24 17:52 | **End Date** | : 09/20/24 15:55 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1878315-17 CCB | 1 | 15:55:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE4 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/19/24 17:52 | **End Date** | : 09/20/24 14:13 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1878315-1 ICV | 1 | 17:52:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-2 ICB | 1 | 17:58:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-3 ICV | 1 | 18:04:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-4 ICB | 1 | 18:10:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-5 ICSA | 1 | 18:32:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-6 CCV | 1 | 10:28:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-7 CCB | 1 | 10:34:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-8 CCV | 1 | 11:37:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-9 CCB | 1 | 11:43:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-10 CCV | 1 | 12:49:27 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-11 CCB | 1 | 12:55:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1973830-1 BLANK | 1 | 13:04:24 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1973830-2 LCS | 1 | 13:10:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2453053-01 | 1 | 13:36:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1973830-3 MS | 1 | 13:42:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1973830-4 MSD | 1 | 13:48:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG1973830-5 PS | 1 | 13:54:46 | | | | | | | | | | | | | | | | X | | | | | | |
| WG1973830-6 SERDIL | 5 | 14:00:56 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1878315-12 CCV | 1 | 14:07:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1878315-13 CCB | 1 | 14:13:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 09/23/24 10:05 | **End Date** | : 09/23/24 14:28 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total |
|---|---|---|---|
| R1879184-5 ICV | 1 | 10:05:38 | X |
| R1879184-6 ICB | 1 | 10:09:32 | X |
| R1879184-7 ICV | 1 | 10:13:26 | X |
| R1879184-8 ICB | 1 | 10:17:23 | X |
| R1879184-9 ICSA | 1 | 10:27:05 | X |
| R1879184-10 CCV | 1 | 11:46:45 | X |
| R1879184-11 CCB | 1 | 11:50:54 | X |
| R1879184-12 CCV | 1 | 12:48:35 | X |
| R1879184-13 CCB | 1 | 12:52:29 | X |
| R1879184-14 CCV | 1 | 13:36:31 | X |
| R1879184-15 CCB | 1 | 13:40:25 | X |
| L2453053-02 | 1 | 13:49:26 | X |
| L2453053-03 | 1 | 13:53:21 | X |
| L2453053-04 | 1 | 13:57:16 | X |
| L2453053-05 | 1 | 14:01:12 | X |
| R1879184-16 CCV | 1 | 14:24:31 | X |
| R1879184-17 CCB | 1 | 14:28:26 | X |

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2960-2
**Page:** 1

**METALS by 200.7, 6010C (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 7429-90-5 | 0.1 | 0.0318 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Antimony | 7440-36-0 | 0.05 | 0.0071 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Arsenic | 7440-38-2 | 0.005 | 0.0019 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Barium | 7440-39-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Beryllium | 7440-41-7 | 0.005 | 0.0009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cadmium | 7440-43-9 | 0.005 | 0.001 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Calcium | 7440-70-2 | 0.1 | 0.035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Chromium | 7440-47-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cobalt | 7440-48-4 | 0.02 | 0.0017 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Copper | 7440-50-8 | 0.01 | 0.0022 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Iron | 7439-89-6 | 0.05 | 0.009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Lead | 7439-92-1 | 0.01 | 0.0027 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Magnesium | 7439-95-4 | 0.1 | 0.0153 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Manganese | 7439-96-5 | 0.01 | 0.0016 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Nickel | 7440-02-0 | 0.025 | 0.0024 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Potassium | 7440-09-7 | 2.5 | 0.237 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Selenium | 7782-49-2 | 0.01 | 0.0035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Silver | 7440-22-4 | 0.007 | 0.0028 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Sodium | 7440-23-5 | 2 | 0.12 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Thallium | 7440-28-0 | 0.02 | 0.0025 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Vanadium | 7440-62-2 | 0.01 | 0.002 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Zinc | 7440-66-6 | 0.05 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2962-1
**Page:** 1

**METALS by 6010C (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 7429-90-5 | 4 | 1.08 | mg/kg | 48-151 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Antimony, Total | 7440-36-0 | 2 | 0.152 | mg/kg | 1-208 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Arsenic, Total | 7440-38-2 | 0.4 | 0.0832 | mg/kg | 79-121 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Barium, Total | 7440-39-3 | 0.4 | 0.0696 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Beryllium, Total | 7440-41-7 | 0.2 | 0.0132 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cadmium, Total | 7440-43-9 | 0.4 | 0.0392 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Calcium, Total | 7440-70-2 | 4 | 1.4 | mg/kg | 81-119 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Chromium, Total | 7440-47-3 | 0.4 | 0.0384 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cobalt, Total | 7440-48-4 | 0.8 | 0.0664 | mg/kg | 84-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Copper, Total | 7440-50-8 | 0.4 | 0.1032 | mg/kg | 81-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Iron, Total | 7439-89-6 | 2 | 0.3612 | mg/kg | 45-155 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Lead, Total | 7439-92-1 | 2 | 0.1072 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Magnesium, Total | 7439-95-4 | 4 | 0.616 | mg/kg | 76-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Manganese, Total | 7439-96-5 | 0.4 | 0.0636 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Nickel, Total | 7440-02-0 | 1 | 0.0968 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Potassium, Total | 7440-09-7 | 100 | 5.76 | mg/kg | 71-129 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Selenium, Total | 7782-49-2 | 0.8 | 0.1032 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Silver, Total | 7440-22-4 | 0.4 | 0.1132 | mg/kg | 75-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Sodium, Total | 7440-23-5 | 80 | 1.26 | mg/kg | 72-127 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Thallium, Total | 7440-28-0 | 0.8 | 0.126 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Vanadium, Total | 7440-62-2 | 0.4 | 0.0812 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Zinc, Total | 7440-66-6 | 2 | 0.1172 | mg/kg | 82-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor.*** ***(Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: Blank DMC Trace9
Analysis started at: 9/20/2024 6:16:48 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.1 % | 1.8 % | -159.1 % | -1.0 % | 0.0 % | -1.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -2.6 % | 0.2 % | 5.0 % | -0.1 % | 0.3 % | -0.1 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -2.1 % | -0.3 % | -1.2 % | 0.0 % | 0.2 % | 0.8 % | -1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.8 % | 0.1 % | 0.4 % | 15.1 % | -0.8 % | 1.2 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 1.6 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICAL
Analysis started at: 9/20/2024 6:20:41 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0002 ppm | 24.9567 ppm | 1.0018 ppm | 0.9944 ppm | 0.9992 ppm | 0.9990 ppm | 9.9693 ppm |
| Concentration per Run 2 | 0.9938 ppm | 24.9489 ppm | 0.9972 ppm | 0.9977 ppm | 0.9987 ppm | 0.9991 ppm | 10.0077 ppm |
| Concentration per Run 3 | 1.0060 ppm | 25.0944 ppm | 1.0010 ppm | 1.0080 ppm | 1.0022 ppm | 1.0018 ppm | 10.0230 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 0.2 % | 0.7 % | 0.2 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9947 ppm | 0.9990 ppm | 0.9976 ppm | 0.9943 ppm | 24.9347 ppm | 35.0153 ppm | 1.0010 ppm |
| Concentration per Run 2 | 0.9943 ppm | 0.9995 ppm | 0.9980 ppm | 0.9999 ppm | 25.0010 ppm | 35.0181 ppm | 1.0004 ppm |
| Concentration per Run 3 | 1.0111 ppm | 1.0016 ppm | 1.0044 ppm | 1.0057 ppm | 25.0643 ppm | 34.9666 ppm | 0.9987 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 0.4 % | 0.6 % | 0.3 % | 0.1 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0422 ppm | 0.9986 ppm | 0.9918 ppm | 25.0052 ppm | 0.9969 ppm | 0.9976 ppm | 0.9972 ppm |
| Concentration per Run 2 | 9.9235 ppm | 1.0017 ppm | 0.9996 ppm | 24.9159 ppm | 0.9989 ppm | 0.9981 ppm | 0.9996 ppm |
| Concentration per Run 3 | 10.0343 ppm | 0.9997 ppm | 1.0087 ppm | 25.0789 ppm | 1.0042 ppm | 1.0043 ppm | 1.0032 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.8 % | 0.3 % | 0.4 % | 0.4 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9942 ppm | 9.9571 ppm | 0.9950 ppm | 1.0001 ppm | 1.0024 ppm | 0.9989 ppm | 1.0009 ppm |
| Concentration per Run 2 | 0.9970 ppm | 9.9632 ppm | 0.9974 ppm | 1.0015 ppm | 0.9942 ppm | 0.9975 ppm | 0.9987 ppm |
| Concentration per Run 3 | 1.0088 ppm | 10.0797 ppm | 1.0075 ppm | 0.9984 ppm | 1.0034 ppm | 1.0037 ppm | 1.0004 ppm |
| Concentration RSD | 0.8 % | 0.7 % | 0.7 % | 0.2 % | 0.5 % | 0.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 104.8737 % | 102.0123 % | 98.9505 % | 102.8080 % | 101.2400 % | 100.9323 % |
| Concentration per Run 1 | 0.9959 ppm | 104.9990 % | 101.8556 % | 99.1429 % | 102.7464 % | 100.8464 % | 100.8085 % |
| Concentration per Run 2 | 1.0004 ppm | 104.6613 % | 101.7715 % | 100.0436 % | 102.7035 % | 101.3053 % | 101.9219 % |
| Concentration per Run 3 | 1.0037 ppm | 104.9608 % | 102.4098 % | 97.6649 % | 102.9742 % | 101.5682 % | 100.0665 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.3 % | 1.2 % | 0.1 % | 0.4 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICV
Analysis started at: 9/20/2024 6:24:34 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5038 ppm | 0.4635 ppm | 0.4734 ppm | 0.4914 ppm | 0.4924 ppm | 0.4997 ppm | 0.4842 ppm |
| Concentration per Run 1 | 0.5035 ppm | 0.4658 ppm | 0.4736 ppm | 0.4931 ppm | 0.4945 ppm | 0.4989 ppm | 0.4832 ppm |
| Concentration per Run 2 | 0.5047 ppm | 0.4573 ppm | 0.4744 ppm | 0.4922 ppm | 0.4908 ppm | 0.4998 ppm | 0.4845 ppm |
| Concentration per Run 3 | 0.5031 ppm | 0.4673 ppm | 0.4723 ppm | 0.4890 ppm | 0.4920 ppm | 0.5003 ppm | 0.4847 ppm |
| Recovery Percentage 1 | 100.754 % | 92.691 % | 94.686 % | 98.284 % | 98.489 % | 99.933 % | 96.833 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.2 % | 0.4 % | 0.4 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4995 ppm | 0.5043 ppm | 0.4838 ppm | 0.4854 ppm | 0.4992 ppm | 5.0931 ppm | 0.4884 ppm |
| Concentration per Run 1 | 0.5002 ppm | 0.5054 ppm | 0.4851 ppm | 0.4889 ppm | 0.4995 ppm | 5.1093 ppm | 0.4898 ppm |
| Concentration per Run 2 | 0.4971 ppm | 0.5048 ppm | 0.4855 ppm | 0.4845 ppm | 0.4974 ppm | 5.0813 ppm | 0.4879 ppm |
| Concentration per Run 3 | 0.5011 ppm | 0.5028 ppm | 0.4809 ppm | 0.4827 ppm | 0.5008 ppm | 5.0886 ppm | 0.4876 ppm |
| Recovery Percentage 1 | 99.896 % | 100.866 % | 96.766 % | 97.077 % | 99.840 % | 101.861 % | 97.685 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.5 % | 0.7 % | 0.3 % | 0.3 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4820 ppm | 0.4812 ppm | 0.4861 ppm | 9.8237 ppm | 0.5009 ppm | 0.4907 ppm | 0.5016 ppm |
| Concentration per Run 1 | 0.4817 ppm | 0.4800 ppm | 0.4863 ppm | 9.8004 ppm | 0.5029 ppm | 0.4912 ppm | 0.5134 ppm |
| Concentration per Run 2 | 0.4833 ppm | 0.4809 ppm | 0.4869 ppm | 9.8661 ppm | 0.5026 ppm | 0.4901 ppm | 0.4955 ppm |
| Concentration per Run 3 | 0.4812 ppm | 0.4827 ppm | 0.4850 ppm | 9.8046 ppm | 0.4971 ppm | 0.4909 ppm | 0.4961 ppm |
| Recovery Percentage 1 | 96.407 % | 96.240 % | 97.217 % | 98.237 % | 100.177 % | 98.143 % | 100.328 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.7 % | 0.1 % | 2.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4920 ppm | 5.3489 ppm | 0.4748 ppm | 0.4689 ppm | 0.4915 ppm | 0.4909 ppm | 0.4819 ppm |
| Concentration per Run 1 | 0.4929 ppm | 5.3492 ppm | 0.4798 ppm | 0.4715 ppm | 0.4908 ppm | 0.4931 ppm | 0.4834 ppm |
| Concentration per Run 2 | 0.4913 ppm | 5.3470 ppm | 0.4743 ppm | 0.4655 ppm | 0.4928 ppm | 0.4896 ppm | 0.4809 ppm |
| Concentration per Run 3 | 0.4917 ppm | 5.3505 ppm | 0.4703 ppm | 0.4698 ppm | 0.4910 ppm | 0.4900 ppm | 0.4813 ppm |
| Recovery Percentage 1 | 98.393 % | 101.884 % | 94.959 % | 93.789 % | 98.308 % | 98.180 % | 96.376 % |
| Concentration RSD | 0.2 % | 0.0 % | 1.0 % | 0.7 % | 0.2 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5018 ppm | 105.4378 % | 103.0426 % | 103.7885 % | 104.1804 % | 102.4715 % | 103.6157 % |
| Concentration per Run 1 | 0.5040 ppm | 105.0661 % | 103.3375 % | 103.1446 % | 103.8768 % | 102.6974 % | 103.0918 % |
| Concentration per Run 2 | 0.5021 ppm | 105.5362 % | 102.7225 % | 103.7934 % | 104.3234 % | 102.1650 % | 103.4290 % |
| Concentration per Run 3 | 0.4994 ppm | 105.7110 % | 103.0677 % | 104.4273 % | 104.3410 % | 102.5522 % | 104.3263 % |
| Recovery Percentage 1 | 100.370 % | | | | | | |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 0.6 % | 0.3 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICB
Analysis started at: 9/20/2024 6:28:27 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0050 ppm | -0.0011 ppm | 0.0028 ppm | -0.0001 ppm | 0.0001 ppm | 0.0032 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0049 ppm | -0.0037 ppm | 0.0038 ppm | 0.0000 ppm | 0.0000 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0170 ppm | 0.0009 ppm | 0.0026 ppm | -0.0001 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0070 ppm | -0.0006 ppm | 0.0020 ppm | -0.0001 ppm | 0.0001 ppm | 0.0049 ppm |
| Recovery Percentage 1 | 10.657 % | -4.951 % | -22.608 % | 9.364 % | -0.811 % | 1.619 % | 3.217 % |
| Concentration RSD | 41.3 % | 243.0 % | 208.0 % | 32.7 % | 68.2 % | 67.5 % | 49.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0002 ppm | -0.0002 ppm | -0.0003 ppm | -0.0003 ppm | -0.0042 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0002 ppm | -0.0002 ppm | -0.0004 ppm | -0.0011 ppm | 0.0268 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0001 ppm | -0.0005 ppm | -0.0001 ppm | 0.0008 ppm | -0.0085 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0006 ppm | 0.0000 ppm | -0.0005 ppm | -0.0007 ppm | -0.0310 ppm | 0.0025 ppm |
| Recovery Percentage 1 | 3.708 % | -0.886 % | -2.454 % | -3.489 % | -0.674 % | -0.169 % | 27.976 % |
| Concentration RSD | 125.2 % | 237.6 % | 99.1 % | 61.6 % | 293.9 % | 690.8 % | 70.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 0.0002 ppm | 0.0024 ppm | -0.0486 ppm | -0.0005 ppm | -0.0015 ppm | 0.0045 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.0001 ppm | 0.0029 ppm | -0.0519 ppm | -0.0017 ppm | -0.0022 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.0031 ppm | 0.0001 ppm | 0.0023 ppm | -0.0491 ppm | -0.0001 ppm | -0.0010 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0019 ppm | 0.0002 ppm | 0.0020 ppm | -0.0448 ppm | 0.0002 ppm | -0.0012 ppm | 0.0060 ppm |
| Recovery Percentage 1 | 2.897 % | 1.707 % | 4.808 % | -2.430 % | -2.039 % | -14.510 % | 9.042 % |
| Concentration RSD | 31.6 % | 24.6 % | 17.5 % | 7.3 % | 201.0 % | 42.7 % | 47.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | -0.0042 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0025 ppm | -0.0062 ppm | -0.0003 ppm | 0.0000 ppm | 0.0003 ppm | -0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0039 ppm | 0.0007 ppm | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0021 ppm | -0.0024 ppm | 0.0012 ppm | 0.0000 ppm | 0.0001 ppm | -0.0010 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 15.101 % | -0.837 % | 1.083 % | -0.467 % | 1.336 % | -2.064 % | -3.497 % |
| Concentration RSD | 92.3 % | 45.9 % | 146.3 % | 165.2 % | 86.7 % | 121.2 % | 26.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 104.4199 % | 101.0874 % | 103.3217 % | 104.6942 % | 101.3741 % | 104.0055 % |
| Concentration per Run 1 | 0.0005 ppm | 104.4158 % | 100.9625 % | 103.3208 % | 104.7298 % | 101.1992 % | 104.0001 % |
| Concentration per Run 2 | 0.0004 ppm | 103.9357 % | 101.0151 % | 103.9349 % | 104.2864 % | 101.1229 % | 104.5855 % |
| Concentration per Run 3 | 0.0006 ppm | 104.9082 % | 101.2847 % | 102.7094 % | 105.0662 % | 101.8003 % | 103.4309 % |
| Recovery Percentage 1 | 10.258 % | | | | | | |
| Concentration RSD | 26.0 % | 0.5 % | 0.2 % | 0.6 % | 0.4 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICV
Analysis started at: 9/20/2024 6:39:12 AM
Rack 0
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5059 ppm | 0.4702 ppm | 0.4755 ppm | 0.4893 ppm | 0.4943 ppm | 0.5063 ppm | 0.4960 ppm |
| Concentration per Run 1 | 0.5027 ppm | 0.4637 ppm | 0.4763 ppm | 0.4875 ppm | 0.4969 ppm | 0.5071 ppm | 0.4943 ppm |
| Concentration per Run 2 | 0.5061 ppm | 0.4746 ppm | 0.4734 ppm | 0.4833 ppm | 0.4935 ppm | 0.5074 ppm | 0.4999 ppm |
| Concentration per Run 3 | 0.5090 ppm | 0.4722 ppm | 0.4770 ppm | 0.4971 ppm | 0.4925 ppm | 0.5045 ppm | 0.4940 ppm |
| Recovery Percentage 1 | 101.190 % | 94.036 % | 95.108 % | 97.861 % | 98.862 % | 101.269 % | 99.210 % |
| Concentration RSD | 0.6 % | 1.2 % | 0.4 % | 1.4 % | 0.5 % | 0.3 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4992 ppm | 0.5103 ppm | 0.4895 ppm | 0.4937 ppm | 0.5009 ppm | 5.1293 ppm | 0.5031 ppm |
| Concentration per Run 1 | 0.4999 ppm | 0.5088 ppm | 0.4885 ppm | 0.4908 ppm | 0.5018 ppm | 5.1578 ppm | 0.5026 ppm |
| Concentration per Run 2 | 0.4956 ppm | 0.5071 ppm | 0.4894 ppm | 0.4927 ppm | 0.4992 ppm | 5.1135 ppm | 0.5028 ppm |
| Concentration per Run 3 | 0.5020 ppm | 0.5150 ppm | 0.4906 ppm | 0.4976 ppm | 0.5018 ppm | 5.1164 ppm | 0.5039 ppm |
| Recovery Percentage 1 | 99.837 % | 102.064 % | 97.897 % | 98.737 % | 100.188 % | 102.585 % | 100.620 % |
| Concentration RSD | 0.7 % | 0.8 % | 0.2 % | 0.7 % | 0.3 % | 0.5 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4887 ppm | 0.4866 ppm | 0.4945 ppm | 9.9136 ppm | 0.5065 ppm | 0.4983 ppm | 0.5028 ppm |
| Concentration per Run 1 | 0.4856 ppm | 0.4870 ppm | 0.4909 ppm | 9.9285 ppm | 0.5036 ppm | 0.4981 ppm | 0.5014 ppm |
| Concentration per Run 2 | 0.4907 ppm | 0.4885 ppm | 0.4951 ppm | 9.9535 ppm | 0.5069 ppm | 0.4983 ppm | 0.5066 ppm |
| Concentration per Run 3 | 0.4898 ppm | 0.4842 ppm | 0.4976 ppm | 9.8588 ppm | 0.5090 ppm | 0.4986 ppm | 0.5004 ppm |
| Recovery Percentage 1 | 97.739 % | 97.317 % | 98.905 % | 99.136 % | 101.302 % | 99.664 % | 100.559 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.7 % | 0.5 % | 0.5 % | 0.0 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4896 ppm | 5.5316 ppm | 0.5154 ppm | 0.4972 ppm | 0.4985 ppm | 0.5010 ppm | 0.4888 ppm |
| Concentration per Run 1 | 0.4947 ppm | 5.5087 ppm | 0.5098 ppm | 0.4951 ppm | 0.4974 ppm | 0.5014 ppm | 0.4875 ppm |
| Concentration per Run 2 | 0.4839 ppm | 5.4972 ppm | 0.5138 ppm | 0.5003 ppm | 0.4987 ppm | 0.4996 ppm | 0.4886 ppm |
| Concentration per Run 3 | 0.4903 ppm | 5.5888 ppm | 0.5227 ppm | 0.4960 ppm | 0.4992 ppm | 0.5019 ppm | 0.4903 ppm |
| Recovery Percentage 1 | 97.930 % | 105.364 % | 103.086 % | 99.431 % | 99.690 % | 100.197 % | 97.761 % |
| Concentration RSD | 1.1 % | 0.9 % | 1.3 % | 0.6 % | 0.2 % | 0.2 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5045 ppm | 106.0596 % | 102.9031 % | 103.9262 % | 104.7116 % | 102.2236 % | 104.1620 % |
| Concentration per Run 1 | 0.5044 ppm | 106.4062 % | 102.7867 % | 103.4105 % | 104.9994 % | 102.4773 % | 103.5505 % |
| Concentration per Run 2 | 0.5015 ppm | 105.3875 % | 102.7136 % | 103.9578 % | 103.9880 % | 102.1452 % | 104.4875 % |
| Concentration per Run 3 | 0.5075 ppm | 106.3851 % | 103.2090 % | 104.4104 % | 105.1474 % | 102.0482 % | 104.4480 % |
| Recovery Percentage 1 | 100.892 % | | | | | | |
| Concentration RSD | 0.6 % | 0.5 % | 0.3 % | 0.5 % | 0.6 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICB
Analysis started at: 9/20/2024 6:43:15 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0003 ppm | 0.0010 ppm | 0.0020 ppm | -0.0001 ppm | 0.0001 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0001 ppm | 0.0013 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0008 ppm | 0.0009 ppm | 0.0034 ppm | -0.0002 ppm | 0.0001 ppm | 0.0074 ppm |
| Concentration per Run 3 | 0.0007 ppm | -0.0018 ppm | 0.0008 ppm | 0.0026 ppm | -0.0001 ppm | 0.0000 ppm | -0.0030 ppm |
| Recovery Percentage 1 | 16.119 % | -0.300 % | 19.850 % | 6.535 % | -1.161 % | 1.289 % | 1.692 % |
| Concentration RSD | 29.8 % | 455.7 % | 23.8 % | 95.6 % | 42.2 % | 77.8 % | 311.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | -0.0002 ppm | -0.0013 ppm | 0.0029 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | -0.0005 ppm | -0.0005 ppm | -0.0003 ppm | 0.0049 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | -0.0010 ppm | 0.0003 ppm | -0.0020 ppm | 0.0052 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | -0.0004 ppm | -0.0005 ppm | -0.0015 ppm | -0.0014 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 0.188 % | -0.279 % | -6.119 % | -2.112 % | -2.552 % | 0.115 % | 13.340 % |
| Concentration RSD | 374.8 % | 951.6 % | 48.6 % | 211.6 % | 66.5 % | 130.2 % | 116.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0000 ppm | 0.0011 ppm | -0.0709 ppm | -0.0002 ppm | -0.0001 ppm | 0.0055 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0013 ppm | -0.0726 ppm | -0.0006 ppm | -0.0011 ppm | 0.0069 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0000 ppm | 0.0013 ppm | -0.0703 ppm | -0.0003 ppm | 0.0000 ppm | 0.0066 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0000 ppm | 0.0008 ppm | -0.0698 ppm | 0.0003 ppm | 0.0008 ppm | 0.0030 ppm |
| Recovery Percentage 1 | 0.802 % | -0.054 % | 2.275 % | -3.544 % | -0.717 % | -1.016 % | 10.947 % |
| Concentration RSD | 90.2 % | 821.0 % | 24.8 % | 2.2 % | 255.8 % | 895.2 % | 39.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0027 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0027 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | -0.0005 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0012 ppm | -0.0038 ppm | 0.0007 ppm | -0.0001 ppm | -0.0003 ppm | -0.0012 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0018 ppm | -0.0016 ppm | -0.0009 ppm | -0.0001 ppm | 0.0002 ppm | 0.0003 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 1.026 % | -0.537 % | -0.285 % | -0.817 % | -0.595 % | -2.236 % | -3.813 % |
| Concentration RSD | 1,503.0 % | 42.1 % | 559.3 % | 59.0 % | 366.8 % | 173.5 % | 39.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 104.5431 % | 101.2708 % | 104.2823 % | 104.9669 % | 101.7781 % | 104.4528 % |
| Concentration per Run 1 | 0.0004 ppm | 104.9124 % | 101.9150 % | 104.7220 % | 105.4618 % | 102.0611 % | 105.0528 % |
| Concentration per Run 2 | 0.0004 ppm | 104.1260 % | 100.9001 % | 104.1051 % | 104.3884 % | 101.7340 % | 104.4057 % |
| Concentration per Run 3 | 0.0005 ppm | 104.5908 % | 100.9973 % | 104.0198 % | 105.0506 % | 101.5393 % | 103.9000 % |
| Recovery Percentage 1 | 8.574 % | | | | | | |
| Concentration RSD | 13.8 % | 0.4 % | 0.6 % | 0.4 % | 0.5 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LLOQ
Analysis started at: 9/20/2024 6:47:09 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0061 ppm | 0.1103 ppm | 0.0048 ppm | 0.0324 ppm | 0.0101 ppm | 0.0051 ppm | 0.1039 ppm |
| Concentration per Run 1 | 0.0059 ppm | 0.1040 ppm | 0.0051 ppm | 0.0325 ppm | 0.0103 ppm | 0.0052 ppm | 0.1072 ppm |
| Concentration per Run 2 | 0.0059 ppm | 0.1159 ppm | 0.0037 ppm | 0.0321 ppm | 0.0100 ppm | 0.0051 ppm | 0.1018 ppm |
| Concentration per Run 3 | 0.0066 ppm | 0.1110 ppm | 0.0055 ppm | 0.0325 ppm | 0.0101 ppm | 0.0052 ppm | 0.1027 ppm |
| Recovery Percentage 1 | 122.233 % | 110.319 % | 95.144 % | 107.846 % | 101.228 % | 102.805 % | 103.885 % |
| Concentration RSD | 6.5 % | 5.4 % | 20.0 % | 0.8 % | 1.3 % | 1.2 % | 2.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 0.0206 ppm | 0.0092 ppm | 0.0103 ppm | 0.0506 ppm | 2.6439 ppm | 0.0110 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0205 ppm | 0.0096 ppm | 0.0102 ppm | 0.0483 ppm | 2.6670 ppm | 0.0103 ppm |
| Concentration per Run 2 | 0.0041 ppm | 0.0203 ppm | 0.0094 ppm | 0.0104 ppm | 0.0520 ppm | 2.6525 ppm | 0.0107 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.0209 ppm | 0.0088 ppm | 0.0103 ppm | 0.0514 ppm | 2.6121 ppm | 0.0121 ppm |
| Recovery Percentage 1 | 101.570 % | 102.777 % | 92.344 % | 103.027 % | 101.121 % | 105.755 % | 110.468 % |
| Concentration RSD | 1.8 % | 1.6 % | 4.4 % | 0.6 % | 3.8 % | 1.1 % | 8.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1043 ppm | 0.0106 ppm | 0.0524 ppm | 2.0034 ppm | 0.0199 ppm | 0.0079 ppm | 0.0558 ppm |
| Concentration per Run 1 | 0.1053 ppm | 0.0103 ppm | 0.0523 ppm | 2.0060 ppm | 0.0198 ppm | 0.0079 ppm | 0.0513 ppm |
| Concentration per Run 2 | 0.1022 ppm | 0.0108 ppm | 0.0522 ppm | 1.9983 ppm | 0.0200 ppm | 0.0073 ppm | 0.0570 ppm |
| Concentration per Run 3 | 0.1053 ppm | 0.0108 ppm | 0.0527 ppm | 2.0059 ppm | 0.0199 ppm | 0.0084 ppm | 0.0590 ppm |
| Recovery Percentage 1 | 104.294 % | 106.250 % | 104.765 % | 100.170 % | 99.496 % | 78.703 % | 111.508 % |
| Concentration RSD | 1.7 % | 2.3 % | 0.5 % | 0.2 % | 0.6 % | 7.0 % | 7.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0128 ppm | 0.5297 ppm | 0.0519 ppm | 0.0100 ppm | 0.0511 ppm | 0.0205 ppm | 0.0096 ppm |
| Concentration per Run 1 | 0.0127 ppm | 0.5308 ppm | 0.0515 ppm | 0.0100 ppm | 0.0510 ppm | 0.0179 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.0135 ppm | 0.5221 ppm | 0.0518 ppm | 0.0099 ppm | 0.0510 ppm | 0.0219 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0122 ppm | 0.5363 ppm | 0.0524 ppm | 0.0100 ppm | 0.0513 ppm | 0.0218 ppm | 0.0099 ppm |
| Recovery Percentage 1 | 128.012 % | 105.942 % | 103.869 % | 99.709 % | 102.193 % | 102.608 % | 96.136 % |
| Concentration RSD | 5.0 % | 1.4 % | 0.9 % | 0.3 % | 0.3 % | 11.0 % | 2.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 106.2231 % | 102.9765 % | 104.5260 % | 105.1626 % | 103.1471 % | 104.5340 % |
| Concentration per Run 1 | 0.0059 ppm | 106.4076 % | 102.8723 % | 104.7500 % | 105.3928 % | 102.7252 % | 104.8962 % |
| Concentration per Run 2 | 0.0058 ppm | 106.3426 % | 102.9466 % | 103.5615 % | 105.1105 % | 103.4301 % | 103.3955 % |
| Concentration per Run 3 | 0.0058 ppm | 105.9192 % | 103.1105 % | 105.2664 % | 104.9846 % | 103.2860 % | 105.3104 % |
| Recovery Percentage 1 | 116.423 % | | | | | | |
| Concentration RSD | 1.0 % | 0.2 % | 0.1 % | 0.8 % | 0.2 % | 0.4 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: ICSA
Analysis started at: 9/20/2024 6:51:03 AM
Rack 0
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 520.9080 [SIC 500] | -0.0003 ppm | -0.0070 ppm | 0.0016 ppm | 0.0001 ppm | 532.2463 ppm |
| Concentration per Run 1 | 0.0042 ppm | 522.9515 ppm | -0.0014 ppm | -0.0062 ppm | 0.0016 ppm | 0.0001 ppm | 534.7638 ppm |
| Concentration per Run 2 | 0.0037 ppm | 520.3002 ppm | 0.0010 ppm | -0.0073 ppm | 0.0016 ppm | 0.0001 ppm | 532.4831 ppm |
| Concentration per Run 3 | 0.0037 ppm | 519.4723 ppm | -0.0006 ppm | -0.0074 ppm | 0.0015 ppm | 0.0001 ppm | 529.4921 ppm |
| Recovery Percentage 1 | 55.360 % | | -6.618 % | -23.214 % | 15.662 % | 2.104 % | |
| Concentration RSD | 6.7 % | 0.3 % | 368.2 % | 9.7 % | 5.8 % | 20.9 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0006 ppm | -0.0008 ppm | 0.0006 ppm | 188.4157 ppm | -0.0159 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0015 ppm | -0.0009 ppm | 0.0004 ppm | 188.7105 ppm | -0.0207 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0003 ppm | -0.0012 ppm | 0.0006 ppm | 187.6885 ppm | -0.0113 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0001 ppm | -0.0003 ppm | 0.0007 ppm | 188.8479 ppm | -0.0156 ppm | -0.0010 ppm |
| Recovery Percentage 1 | -3.374 % | -3.235 % | -8.071 % | 5.638 % | | -0.636 % | 14.196 % |
| Concentration RSD | 163.6 % | 115.6 % | 55.8 % | 31.6 % | 0.3 % | 29.7 % | 223.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 494.0297 ppm | -0.0005 ppm | -0.0011 ppm | -0.0251 ppm | -0.0002 ppm | -0.0033 ppm | -0.0118 ppm |
| Concentration per Run 1 | 493.8388 ppm | -0.0005 ppm | -0.0002 ppm | -0.0146 ppm | -0.0012 ppm | -0.0031 ppm | -0.0184 ppm |
| Concentration per Run 2 | 493.8395 ppm | -0.0009 ppm | -0.0010 ppm | -0.0369 ppm | -0.0007 ppm | -0.0036 ppm | -0.0101 ppm |
| Concentration per Run 3 | 494.4108 ppm | -0.0003 ppm | -0.0022 ppm | -0.0238 ppm | 0.0012 ppm | -0.0034 ppm | -0.0069 ppm |
| Recovery Percentage 1 | | -5.441 % | -2.286 % | -1.256 % | -0.959 % | -33.380 % | -23.638 % |
| Concentration RSD | 0.1 % | 54.4 % | 89.0 % | 44.6 % | 532.5 % | 7.4 % | 50.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 0.0091 ppm | -0.0004 ppm | -0.0007 ppm | 0.0004 ppm | 0.0032 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0066 ppm | 0.0083 ppm | -0.0010 ppm | -0.0007 ppm | 0.0005 ppm | 0.0033 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0137 ppm | 0.0018 ppm | -0.0006 ppm | 0.0006 ppm | 0.0036 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.0053 ppm | -0.0019 ppm | -0.0008 ppm | 0.0001 ppm | 0.0028 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 38.882 % | 1.822 % | -0.752 % | -7.098 % | 4.035 % | 16.068 % | 3.989 % |
| Concentration RSD | 68.8 % | 46.7 % | 506.6 % | 15.8 % | 73.4 % | 13.2 % | 19.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 91.7704 % | 98.4513 % | 80.0567 % | 89.8013 % | 98.9302 % | 91.5565 % |
| Concentration per Run 1 | 0.0014 ppm | 92.3339 % | 98.3983 % | 79.4929 % | 90.2708 % | 99.4103 % | 91.1141 % |
| Concentration per Run 2 | 0.0010 ppm | 91.9912 % | 98.5285 % | 80.6116 % | 90.0053 % | 98.8553 % | 91.9322 % |
| Concentration per Run 3 | 0.0007 ppm | 90.9862 % | 98.4271 % | 80.0658 % | 89.1277 % | 98.5249 % | 91.6232 % |
| Recovery Percentage 1 | 20.132 % | | | | | | |
| Concentration RSD | 35.3 % | 0.8 % | 0.1 % | 0.7 % | 0.7 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: SIC Multi
Analysis started at: 9/20/2024 6:54:58 AM
Rack 0
Vial 7
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0443 ppm | -0.0032 ppm | 0.0113 ppm | 0.0004 ppm | -0.0001 ppm | 0.0268 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0512 ppm | -0.0027 ppm | 0.0127 ppm | 0.0004 ppm | -0.0001 ppm | 0.0274 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0418 ppm | -0.0006 ppm | 0.0081 ppm | 0.0004 ppm | 0.0000 ppm | 0.0253 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0398 ppm | -0.0063 ppm | 0.0130 ppm | 0.0004 ppm | -0.0002 ppm | 0.0276 ppm |
| Recovery Percentage 1 | 13.376 % | 44.275 % | -63.942 % | 37.576 % | 4.133 % | -2.746 % | 26.754 % |
| Concentration RSD | 47.7 % | 13.8 % | 91.5 % | 24.1 % | 12.4 % | 105.5 % | 4.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0051 ppm | 19.9317 ppm | -0.0029 ppm | 0.0146 ppm | -0.0055 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0058 ppm | 19.9425 ppm | -0.0027 ppm | 0.0142 ppm | -0.0157 ppm | -0.0012 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0042 ppm | 19.9362 ppm | -0.0030 ppm | 0.0137 ppm | -0.0082 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0054 ppm | 19.9165 ppm | -0.0030 ppm | 0.0158 ppm | 0.0073 ppm | 0.0024 ppm |
| Recovery Percentage 1 | -7.476 % | -25.689 % | 199,316.965 % | -29.054 % | 29.113 % | -0.221 % | 5.703 % |
| Concentration RSD | 60.6 % | 16.1 % | 0.1 % | 6.3 % | 7.3 % | 212.0 % | 651.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0132 ppm | 19.9531 ppm | -0.0008 ppm | -0.1028 ppm | -0.0008 ppm | -0.0016 ppm | -0.0148 ppm |
| Concentration per Run 1 | 0.0153 ppm | 19.8648 ppm | -0.0012 ppm | -0.1036 ppm | 0.0001 ppm | -0.0012 ppm | -0.0126 ppm |
| Concentration per Run 2 | 0.0119 ppm | 20.0769 ppm | -0.0008 ppm | -0.1063 ppm | 0.0001 ppm | -0.0011 ppm | -0.0177 ppm |
| Concentration per Run 3 | 0.0123 ppm | 19.9175 ppm | -0.0004 ppm | -0.0983 ppm | -0.0027 ppm | -0.0023 ppm | -0.0141 ppm |
| Recovery Percentage 1 | 13.163 % | 199,530.760 % | -1.634 % | -5.138 % | -3.369 % | -15.553 % | -29.568 % |
| Concentration RSD | 14.0 % | 0.6 % | 48.3 % | 4.0 % | 195.1 % | 43.8 % | 17.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 0.2292 ppm | 0.0033 ppm | 0.0000 ppm | 19.6233 ppm | 0.0074 ppm | 9.8961 ppm |
| Concentration per Run 1 | 0.0081 ppm | 0.1883 ppm | 0.0035 ppm | 0.0001 ppm | 19.5381 ppm | 0.0049 ppm | 9.9005 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.2343 ppm | 0.0034 ppm | -0.0001 ppm | 19.6248 ppm | 0.0089 ppm | 9.8974 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.2649 ppm | 0.0029 ppm | -0.0001 ppm | 19.7071 ppm | 0.0082 ppm | 9.8904 ppm |
| Recovery Percentage 1 | 58.951 % | 45.839 % | 6.550 % | -0.213 % | 196,233.319 % | 36.814 % | 98,960.854 % |
| Concentration RSD | 32.5 % | 16.8 % | 9.7 % | 613.7 % | 0.4 % | 28.9 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 105.6832 % | 103.3011 % | 115.0355 % | 104.3661 % | 102.5745 % | 104.8979 % |
| Concentration per Run 1 | -0.0013 ppm | 104.8447 % | 104.0627 % | 114.9053 % | 103.5917 % | 102.5021 % | 105.3113 % |
| Concentration per Run 2 | -0.0012 ppm | 106.5592 % | 102.3695 % | 114.8932 % | 105.1863 % | 102.0646 % | 104.3639 % |
| Concentration per Run 3 | -0.0010 ppm | 105.6455 % | 103.4710 % | 115.3080 % | 104.3202 % | 103.1568 % | 105.0185 % |
| Recovery Percentage 1 | -23.079 % | | | | | | |
| Concentration RSD | 9.1 % | 0.8 % | 0.8 % | 0.2 % | 0.8 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LDR Check
Analysis started at: 9/20/2024 6:58:54 AM
Rack 0
Vial 8
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 0.0446 ppm | 22.8615 ppm | 23.6907 [SIC 20] | 19.2142 ppm | 4.9194 ppm | 0.0863 ppm |
| Concentration per Run 1 | 0.0034 ppm | 0.0449 ppm | 22.8847 ppm | 23.7644 ppm | 19.2343 ppm | 4.8997 ppm | 0.0829 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.0444 ppm | 22.9227 ppm | 23.7244 ppm | 19.1567 ppm | 4.9296 ppm | 0.0851 ppm |
| Concentration per Run 3 | 0.0038 ppm | 0.0445 ppm | 22.7772 ppm | 23.5833 ppm | 19.2515 ppm | 4.9291 ppm | 0.0907 ppm |
| Recovery Percentage 1 | | | 114.308 % | 118.454 % | 96.071 % | | |
| Concentration RSD | 5.6 % | 0.5 % | 0.3 % | 0.4 % | 0.3 % | 0.3 % | 4.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9552 ppm | 4.9876 ppm | 0.0022 ppm | 18.9193 ppm | 0.0324 ppm | 511.5148 ppm | 18.6760 ppm |
| Concentration per Run 1 | 4.9357 ppm | 4.9751 ppm | 0.0024 ppm | 18.8177 ppm | 0.0335 ppm | 509.0670 ppm | 18.6104 ppm |
| Concentration per Run 2 | 4.9899 ppm | 5.0099 ppm | 0.0020 ppm | 18.9723 ppm | 0.0320 ppm | 511.1438 ppm | 18.6875 ppm |
| Concentration per Run 3 | 4.9401 ppm | 4.9778 ppm | 0.0022 ppm | 18.9678 ppm | 0.0317 ppm | 514.3336 ppm | 18.7302 ppm |
| Recovery Percentage 1 | 99.105 % | 99.752 % | | 94.596 % | | 102.303 % | 93.380 % |
| Concentration RSD | 0.6 % | 0.4 % | 8.3 % | 0.5 % | 3.1 % | 0.5 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0319 ppm | 0.0029 ppm | 5.1928 [SIC 20] | 470.8605 ppm | 9.6962 ppm | 51.3811 ppm | 4.9883 ppm |
| Concentration per Run 1 | 0.0331 ppm | 0.0032 ppm | 5.1353 ppm | 470.0534 ppm | 9.7561 ppm | 51.2697 ppm | 4.9466 ppm |
| Concentration per Run 2 | 0.0320 ppm | 0.0027 ppm | 5.2131 ppm | 470.3214 ppm | 9.6723 ppm | 51.7061 ppm | 5.0051 ppm |
| Concentration per Run 3 | 0.0307 ppm | 0.0029 ppm | 5.2300 ppm | 472.2067 ppm | 9.6602 ppm | 51.1675 ppm | 5.0133 ppm |
| Recovery Percentage 1 | | 0.000 % | 103.856 % | 94.172 % | 96.962 % | 102.762 % | 99.767 % |
| Concentration RSD | 3.9 % | 8.3 % | 1.0 % | 0.2 % | 0.5 % | 0.6 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1875 [SIC 20] | 20.8916 [SIC 50] | 9.8633 ppm | 4.7783 ppm | 0.0206 ppm | 4.7526 ppm | 0.0028 ppm |
| Concentration per Run 1 | 5.1898 ppm | 20.7786 ppm | 9.8889 ppm | 4.7775 ppm | 0.0228 ppm | 4.7518 ppm | 0.0026 ppm |
| Concentration per Run 2 | 5.2153 ppm | 20.9738 ppm | 9.8799 ppm | 4.7578 ppm | 0.0205 ppm | 4.7717 ppm | 0.0027 ppm |
| Concentration per Run 3 | 5.1573 ppm | 20.9224 ppm | 9.8211 ppm | 4.7996 ppm | 0.0185 ppm | 4.7344 ppm | 0.0031 ppm |
| Recovery Percentage 1 | 103.749 % | 104.458 % | 98.633 % | 95.566 % | 0.000 % | 95.052 % | 0.000 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.4 % | 10.4 % | 0.4 % | 8.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.0031 [SIC 50] | 94.9641 % | 100.0559 % | 85.0035 % | 93.1535 % | 99.4955 % | 89.8518 % |
| Concentration per Run 1 | 20.0791 ppm | 94.0822 % | 100.5326 % | 85.4781 % | 92.2214 % | 100.5651 % | 90.2974 % |
| Concentration per Run 2 | 20.0179 ppm | 95.5909 % | 100.0559 % | 84.5647 % | 93.7533 % | 99.1976 % | 89.5137 % |
| Concentration per Run 3 | 19.9125 ppm | 95.2192 % | 99.5791 % | 84.9678 % | 93.4859 % | 98.7236 % | 89.7444 % |
| Recovery Percentage 1 | 100.016 % | | | | | | |
| Concentration RSD | 0.4 % | 0.8 % | 0.5 % | 0.5 % | 0.9 % | 1.0 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: xLLOQ 0.005ppm
Analysis started at: 9/20/2024 7:15:53 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0064 ppm | 0.1368 ppm | 0.0078 ppm | 0.0084 ppm | 0.0051 ppm | 0.0051 ppm | 0.0676 ppm |
| Concentration per Run 1 | 0.0069 ppm | 0.1361 ppm | 0.0081 ppm | 0.0110 ppm | 0.0050 ppm | 0.0050 ppm | 0.0664 ppm |
| Concentration per Run 2 | 0.0062 ppm | 0.1433 ppm | 0.0101 ppm | 0.0064 ppm | 0.0050 ppm | 0.0051 ppm | 0.0686 ppm |
| Concentration per Run 3 | 0.0063 ppm | 0.1309 ppm | 0.0051 ppm | 0.0077 ppm | 0.0053 ppm | 0.0051 ppm | 0.0676 ppm |
| Recovery Percentage 1 | 128.976 % | 0.000 % | 155.308 % | 0.000 % | 0.000 % | 101.789 % | 0.000 % |
| Concentration RSD | 5.5 % | 4.6 % | 31.9 % | 28.8 % | 2.7 % | 1.0 % | 1.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0054 ppm | 0.0059 ppm | 0.0048 ppm | 0.0050 ppm | 0.1304 ppm | 0.1959 ppm | 0.0067 ppm |
| Concentration per Run 1 | 0.0055 ppm | 0.0060 ppm | 0.0049 ppm | 0.0051 ppm | 0.1293 ppm | 0.1736 ppm | 0.0078 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0060 ppm | 0.0049 ppm | 0.0048 ppm | 0.1326 ppm | 0.2103 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.0054 ppm | 0.0057 ppm | 0.0046 ppm | 0.0051 ppm | 0.1294 ppm | 0.2039 ppm | 0.0069 ppm |
| Recovery Percentage 1 | 108.725 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.4 % | 3.0 % | 3.7 % | 4.1 % | 1.5 % | 10.0 % | 18.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0529 ppm | 0.0054 ppm | 0.0058 ppm | 0.0355 ppm | 0.0047 ppm | 0.0048 ppm | 0.0091 ppm |
| Concentration per Run 1 | 0.0536 ppm | 0.0053 ppm | 0.0056 ppm | 0.0337 ppm | 0.0055 ppm | 0.0057 ppm | 0.0108 ppm |
| Concentration per Run 2 | 0.0551 ppm | 0.0054 ppm | 0.0056 ppm | 0.0388 ppm | 0.0041 ppm | 0.0040 ppm | 0.0116 ppm |
| Concentration per Run 3 | 0.0500 ppm | 0.0055 ppm | 0.0062 ppm | 0.0339 ppm | 0.0045 ppm | 0.0046 ppm | 0.0049 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 5.0 % | 2.0 % | 6.4 % | 8.2 % | 15.2 % | 17.3 % | 40.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0097 ppm | 0.0517 ppm | 0.0067 ppm | 0.0051 ppm | 0.0052 ppm | 0.0047 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0077 ppm | 0.0512 ppm | 0.0062 ppm | 0.0050 ppm | 0.0053 ppm | 0.0045 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0092 ppm | 0.0490 ppm | 0.0063 ppm | 0.0051 ppm | 0.0051 ppm | 0.0051 ppm | 0.0049 ppm |
| Concentration per Run 3 | 0.0122 ppm | 0.0551 ppm | 0.0075 ppm | 0.0051 ppm | 0.0053 ppm | 0.0045 ppm | 0.0048 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 23.5 % | 6.0 % | 10.5 % | 0.9 % | 1.7 % | 8.2 % | 5.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0062 ppm | 105.2366 % | 102.3659 % | 104.0534 % | 105.2688 % | 102.4165 % | 104.6939 % |
| Concentration per Run 1 | 0.0064 ppm | 105.7449 % | 103.3470 % | 103.8664 % | 105.8520 % | 103.4829 % | 104.5181 % |
| Concentration per Run 2 | 0.0059 ppm | 104.7028 % | 102.9570 % | 104.1878 % | 104.5494 % | 102.6680 % | 104.8717 % |
| Concentration per Run 3 | 0.0064 ppm | 105.2620 % | 100.7936 % | 104.1061 % | 105.4049 % | 101.0986 % | 104.6920 % |
| Recovery Percentage 1 | 124.987 % | | | | | | |
| Concentration RSD | 4.3 % | 0.5 % | 1.3 % | 0.2 % | 0.6 % | 1.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LLOQ 0.01ppm Pb Se
Analysis started at: 9/20/2024 7:19:53 AM
Rack 1
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0110 ppm | 0.2472 ppm | **0.0122 ppm** | **0.0128 ppm** | 0.0101 ppm | 0.0098 ppm | 0.1218 ppm |
| Concentration per Run 1 | 0.0111 ppm | 0.2450 ppm | 0.0117 ppm | 0.0135 ppm | 0.0101 ppm | 0.0097 ppm | 0.1218 ppm |
| Concentration per Run 2 | 0.0107 ppm | 0.2457 ppm | 0.0123 ppm | 0.0123 ppm | 0.0100 ppm | 0.0098 ppm | 0.1220 ppm |
| Concentration per Run 3 | 0.0110 ppm | 0.2510 ppm | 0.0126 ppm | 0.0126 ppm | 0.0101 ppm | 0.0097 ppm | 0.1216 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 121.667 % | 128.138 % | 100.654 % | 0.000 % | 0.000 % |
| Concentration RSD | 2.0 % | 1.3 % | **3.8 %** | **4.6 %** | 0.4 % | 0.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 0.0102 ppm | 0.0091 ppm | 0.0098 ppm | 0.2565 ppm | 0.3629 ppm | **0.0123 ppm** |
| Concentration per Run 1 | 0.0102 ppm | 0.0099 ppm | 0.0092 ppm | 0.0098 ppm | 0.2568 ppm | 0.3496 ppm | 0.0140 ppm |
| Concentration per Run 2 | 0.0102 ppm | 0.0103 ppm | 0.0087 ppm | 0.0099 ppm | 0.2573 ppm | 0.3545 ppm | 0.0119 ppm |
| Concentration per Run 3 | 0.0102 ppm | 0.0102 ppm | 0.0094 ppm | 0.0096 ppm | 0.2554 ppm | 0.3845 ppm | 0.0110 ppm |
| Recovery Percentage 1 | 0.000 % | 101.577 % | 90.887 % | 97.899 % | 0.000 % | 0.000 % | 122.960 % |
| Concentration RSD | 0.1 % | 1.9 % | 4.1 % | 1.5 % | 0.4 % | 5.2 % | **12.4 %** |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1034 ppm | 0.0100 ppm | 0.0109 ppm | 0.1539 ppm | 0.0101 ppm | 0.0081 ppm | 0.0170 ppm |
| Concentration per Run 1 | 0.1015 ppm | 0.0099 ppm | 0.0110 ppm | 0.1556 ppm | 0.0093 ppm | 0.0082 ppm | 0.0206 ppm |
| Concentration per Run 2 | 0.1035 ppm | 0.0101 ppm | 0.0108 ppm | 0.1585 ppm | 0.0113 ppm | 0.0078 ppm | 0.0149 ppm |
| Concentration per Run 3 | 0.1051 ppm | 0.0099 ppm | 0.0109 ppm | 0.1476 ppm | 0.0098 ppm | 0.0082 ppm | 0.0155 ppm |
| Recovery Percentage 1 | 0.000 % | 99.548 % | 0.000 % | 0.000 % | 101.341 % | 80.840 % | 0.000 % |
| Concentration RSD | 1.7 % | 1.1 % | 0.9 % | 3.7 % | 10.2 % | 3.1 % | 18.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0108 ppm | 0.0933 ppm | 0.0111 ppm | 0.0096 ppm | 0.0095 ppm | 0.0096 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.0082 ppm | 0.0902 ppm | 0.0107 ppm | 0.0097 ppm | 0.0097 ppm | 0.0098 ppm | 0.0099 ppm |
| Concentration per Run 2 | 0.0114 ppm | 0.0941 ppm | 0.0105 ppm | 0.0096 ppm | 0.0094 ppm | 0.0092 ppm | 0.0093 ppm |
| Concentration per Run 3 | 0.0129 ppm | 0.0956 ppm | 0.0122 ppm | 0.0096 ppm | 0.0093 ppm | 0.0097 ppm | 0.0092 ppm |
| Recovery Percentage 1 | 108.153 % | 0.000 % | 111.285 % | 96.192 % | 94.958 % | 95.795 % | 94.496 % |
| Concentration RSD | 22.0 % | 3.0 % | 8.1 % | 0.9 % | 2.2 % | 3.6 % | 3.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0107 ppm | 104.9158 % | 101.5702 % | 103.5883 % | 104.6986 % | 101.6497 % | 103.9791 % |
| Concentration per Run 1 | 0.0109 ppm | 104.7183 % | 100.5805 % | 104.0354 % | 104.4319 % | 101.1405 % | 104.7329 % |
| Concentration per Run 2 | 0.0108 ppm | 105.0725 % | 101.1670 % | 103.6794 % | 104.9220 % | 100.6899 % | 103.6005 % |
| Concentration per Run 3 | 0.0103 ppm | 104.9566 % | 102.9631 % | 103.0502 % | 104.7418 % | 103.1186 % | 103.6040 % |
| Recovery Percentage 1 | 106.794 % | | | | | | |
| Concentration RSD | 3.2 % | 0.2 % | 1.2 % | 0.5 % | 0.2 % | 1.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: zLLOQ 0.05ppm
Analysis started at: 9/20/2024 7:23:44 AM
Rack 1
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0521 ppm | 0.0427 ppm | 0.0456 ppm | 0.0543 ppm | 0.0502 ppm | 0.0502 ppm | 0.0545 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.0513 ppm | 0.0470 ppm | 0.0554 ppm | 0.0502 ppm | 0.0503 ppm | 0.0548 ppm |
| Concentration per Run 2 | 0.0521 ppm | 0.0389 ppm | 0.0452 ppm | 0.0541 ppm | 0.0501 ppm | 0.0500 ppm | 0.0572 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.0380 ppm | 0.0447 ppm | 0.0534 ppm | 0.0502 ppm | 0.0501 ppm | 0.0515 ppm |
| Recovery Percentage 1 | 0.000 % | 85.456 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 109.019 % |
| Concentration RSD | 0.3 % | 17.4 % | 2.7 % | 1.9 % | 0.1 % | 0.3 % | 5.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0508 ppm | 0.0515 ppm | 0.0484 ppm | 0.0483 ppm | 0.0485 ppm | **0.5198 ppm** | 0.0521 ppm |
| Concentration per Run 1 | 0.0513 ppm | 0.0520 ppm | 0.0480 ppm | 0.0484 ppm | 0.0477 ppm | 0.5327 ppm | 0.0526 ppm |
| Concentration per Run 2 | 0.0501 ppm | 0.0515 ppm | 0.0488 ppm | 0.0484 ppm | 0.0495 ppm | 0.5354 ppm | 0.0526 ppm |
| Concentration per Run 3 | 0.0509 ppm | 0.0510 ppm | 0.0485 ppm | 0.0483 ppm | 0.0482 ppm | 0.4914 ppm | 0.0510 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 96.947 % | 20.794 % | 0.000 % |
| Concentration RSD | 1.2 % | 1.0 % | 0.8 % | 0.1 % | 1.9 % | **4.7 %** | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0507 ppm | 0.0485 ppm | 0.0492 ppm | 0.8791 ppm | 0.0506 ppm | 0.0491 ppm | 0.0567 ppm |
| Concentration per Run 1 | 0.0507 ppm | 0.0481 ppm | 0.0494 ppm | 0.8788 ppm | 0.0512 ppm | 0.0496 ppm | 0.0638 ppm |
| Concentration per Run 2 | 0.0526 ppm | 0.0487 ppm | 0.0495 ppm | 0.8817 ppm | 0.0506 ppm | 0.0491 ppm | 0.0518 ppm |
| Concentration per Run 3 | 0.0486 ppm | 0.0486 ppm | 0.0488 ppm | 0.8767 ppm | 0.0500 ppm | 0.0485 ppm | 0.0546 ppm |
| Recovery Percentage 1 | 101.312 % | 0.000 % | 98.458 % | 87.908 % | 0.000 % | 0.000 % | 113.471 % |
| Concentration RSD | 3.9 % | 0.6 % | 0.7 % | 0.3 % | 1.1 % | 1.2 % | 11.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0494 ppm | 0.5302 ppm | 0.0483 ppm | 0.0476 ppm | 0.0487 ppm | **0.0487 ppm** | 0.0478 ppm |
| Concentration per Run 1 | 0.0498 ppm | 0.5304 ppm | 0.0485 ppm | 0.0477 ppm | 0.0487 ppm | 0.0489 ppm | 0.0481 ppm |
| Concentration per Run 2 | 0.0490 ppm | 0.5298 ppm | 0.0481 ppm | 0.0475 ppm | 0.0489 ppm | 0.0485 ppm | 0.0476 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.5303 ppm | 0.0482 ppm | 0.0475 ppm | 0.0485 ppm | 0.0488 ppm | 0.0477 ppm |
| Recovery Percentage 1 | 0.000 % | 106.038 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 0.8 % | 0.1 % | 0.5 % | 0.2 % | 0.4 % | 0.4 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0516 ppm | 106.3695 % | 102.1740 % | 105.7969 % | 105.5655 % | 101.6938 % | 105.2377 % |
| Concentration per Run 1 | 0.0520 ppm | 106.3604 % | 102.3077 % | 105.4167 % | 105.6348 % | 102.2850 % | 105.2963 % |
| Concentration per Run 2 | 0.0514 ppm | 105.6658 % | 101.3972 % | 105.4638 % | 104.8019 % | 100.7247 % | 104.5403 % |
| Concentration per Run 3 | 0.0514 ppm | 107.0822 % | 102.8172 % | 106.5101 % | 106.2598 % | 102.0716 % | 105.8765 % |
| Recovery Percentage 1 | 103.177 % | | | | | | |
| Concentration RSD | 0.6 % | 0.7 % | 0.7 % | 0.6 % | 0.7 % | 0.8 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LDR 20 As pass
Analysis started at: 9/20/2024 7:27:36 AM
Rack 1
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0007 ppm | 20.2512 ppm | 0.0024 ppm | -0.0001 ppm | 0.0000 ppm | 0.0055 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0019 ppm | 20.3717 ppm | 0.0032 ppm | -0.0002 ppm | 0.0000 ppm | 0.0100 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0025 ppm | 20.1173 ppm | 0.0024 ppm | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0014 ppm | 20.2645 ppm | 0.0014 ppm | -0.0002 ppm | 0.0000 ppm | 0.0045 ppm |
| Concentration RSD | 44.8 % | 349.0 % | 0.6 % | 37.9 % | 67.7 % | 267.9 % | 73.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0002 ppm | -0.0004 ppm | -0.0002 ppm | 0.0023 ppm | 0.0257 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0004 ppm | -0.0006 ppm | -0.0004 ppm | 0.0010 ppm | 0.0586 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0004 ppm | -0.0004 ppm | -0.0001 ppm | 0.0026 ppm | -0.0021 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0005 ppm | -0.0003 ppm | -0.0002 ppm | 0.0032 ppm | 0.0205 ppm | 0.0025 ppm |
| Concentration RSD | 22.7 % | 328.4 % | 35.6 % | 58.1 % | 49.6 % | 119.5 % | 128.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.0000 ppm | 0.0004 ppm | -0.1144 ppm | -0.0010 ppm | -0.0016 ppm | 0.0061 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.1100 ppm | -0.0009 ppm | -0.0004 ppm | 0.0040 ppm |
| Concentration per Run 2 | 0.0049 ppm | 0.0003 ppm | 0.0007 ppm | -0.1195 ppm | -0.0010 ppm | -0.0010 ppm | 0.0086 ppm |
| Concentration per Run 3 | 0.0010 ppm | -0.0002 ppm | 0.0007 ppm | -0.1138 ppm | -0.0010 ppm | -0.0034 ppm | 0.0057 ppm |
| Concentration RSD | 144.7 % | 568.2 % | 90.7 % | 4.2 % | 5.1 % | 100.3 % | 38.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | -0.0004 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0013 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0024 ppm | -0.0034 ppm | 0.0006 ppm | 0.0001 ppm | 0.0003 ppm | -0.0006 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0014 ppm | 0.0008 ppm | -0.0001 ppm | -0.0001 ppm | -0.0021 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0012 ppm | 0.0009 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | -0.0012 ppm | -0.0002 ppm |
| Concentration RSD | 67.1 % | 707.8 % | 24.6 % | 210.0 % | 427.9 % | 56.5 % | 34.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 105.7763 % | 101.6132 % | 105.0887 % | 105.0411 % | 101.4019 % | 104.6223 % |
| Concentration per Run 1 | 0.0012 ppm | 106.2030 % | 101.0849 % | 105.2411 % | 105.5537 % | 100.9362 % | 104.9935 % |
| Concentration per Run 2 | 0.0009 ppm | 106.1588 % | 102.3242 % | 104.6498 % | 105.5039 % | 102.2014 % | 103.7725 % |
| Concentration per Run 3 | 0.0012 ppm | 104.9672 % | 101.4304 % | 105.3753 % | 104.0657 % | 101.0683 % | 105.1009 % |
| Concentration RSD | 14.3 % | 0.7 % | 0.6 % | 0.4 % | 0.8 % | 0.7 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LDR 20 B pass
Analysis started at: 9/20/2024 7:31:28 AM
Rack 1
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0018 ppm | -0.0007 ppm | 20.2751 [SIC 20] | 0.0002 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0021 ppm | -0.0018 ppm | 20.3896 ppm | 0.0002 ppm | 0.0000 ppm | 0.0109 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0016 ppm | 0.0003 ppm | 20.2565 ppm | 0.0003 ppm | 0.0000 ppm | 0.0087 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0018 ppm | -0.0006 ppm | 20.1790 ppm | 0.0001 ppm | 0.0000 ppm | 0.0056 ppm |
| Concentration RSD | 36.0 % | 15.9 % | 141.2 % | 0.5 % | 64.4 % | 70.9 % | 32.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | -0.0005 ppm | -0.0015 ppm | -0.0016 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | -0.0010 ppm | -0.0003 ppm | -0.0009 ppm | 0.0166 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | -0.0006 ppm | -0.0005 ppm | -0.0022 ppm | 0.0025 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | -0.0004 ppm | -0.0006 ppm | -0.0016 ppm | -0.0240 ppm | 0.0016 ppm |
| Concentration RSD | 152.6 % | 57,812.8 % | 47.7 % | 27.5 % | 41.8 % | 1,275.7 % | 50.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.0000 ppm | 0.0001 ppm | -0.1352 ppm | -0.0009 ppm | -0.0005 ppm | 0.0056 ppm |
| Concentration per Run 1 | -0.0020 ppm | -0.0001 ppm | 0.0002 ppm | -0.1363 ppm | 0.0005 ppm | -0.0004 ppm | 0.0062 ppm |
| Concentration per Run 2 | 0.0071 ppm | 0.0001 ppm | -0.0005 ppm | -0.1426 ppm | -0.0010 ppm | -0.0005 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.0045 ppm | 0.0000 ppm | 0.0006 ppm | -0.1268 ppm | -0.0021 ppm | -0.0006 ppm | 0.0052 ppm |
| Concentration RSD | 145.6 % | 267.4 % | 626.2 % | 5.9 % | 152.7 % | 20.6 % | 9.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | -0.0056 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0026 ppm | -0.0061 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0009 ppm | -0.0042 ppm | -0.0004 ppm | -0.0001 ppm | 0.0001 ppm | 0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0064 ppm | 0.0003 ppm | 0.0001 ppm | 0.0001 ppm | -0.0013 ppm | -0.0005 ppm |
| Concentration RSD | 90.3 % | 22.0 % | 616.2 % | 315.2 % | 29.4 % | 442.3 % | 68.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 106.0304 % | 102.3916 % | 104.9163 % | 106.2581 % | 102.9576 % | 105.6679 % |
| Concentration per Run 1 | 0.0009 ppm | 104.0405 % | 103.9711 % | 104.5101 % | 104.5600 % | 104.5142 % | 105.4795 % |
| Concentration per Run 2 | 0.0004 ppm | 106.1303 % | 101.0598 % | 104.5428 % | 106.3896 % | 101.8553 % | 105.6349 % |
| Concentration per Run 3 | 0.0006 ppm | 107.9205 % | 102.1439 % | 105.6959 % | 107.8247 % | 102.5032 % | 105.8893 % |
| Concentration RSD | 36.7 % | 1.8 % | 1.4 % | 0.6 % | 1.5 % | 1.3 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: IEC 20 Ti, +Si
Analysis started at: 9/20/2024 7:35:21 AM
Rack 1
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0054 ppm | -0.0031 ppm | 0.0196 ppm | 0.0000 ppm | 0.0001 ppm | 0.0087 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0054 ppm | -0.0032 ppm | 0.0215 ppm | 0.0001 ppm | -0.0002 ppm | 0.0092 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0132 ppm | -0.0033 ppm | 0.0203 ppm | 0.0000 ppm | 0.0004 ppm | 0.0081 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0085 ppm | -0.0027 ppm | 0.0170 ppm | 0.0000 ppm | 0.0002 ppm | 0.0087 ppm |
| Recovery Percentage 1 | -8.730 % | 5.441 % | -61.455 % | 65.273 % | 0.380 % | 3.481 % | 8.659 % |
| Concentration RSD | 84.7 % | 178.2 % | 10.1 % | 12.0 % | 176.5 % | 206.8 % | 6.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0035 ppm | 0.0007 ppm | -0.0017 ppm | -0.0022 ppm | -0.0021 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0037 ppm | 0.0009 ppm | -0.0018 ppm | -0.0024 ppm | -0.0031 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0036 ppm | 0.0005 ppm | -0.0016 ppm | -0.0029 ppm | -0.0149 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0031 ppm | 0.0005 ppm | -0.0015 ppm | -0.0012 ppm | 0.0117 ppm | 0.0023 ppm |
| Recovery Percentage 1 | 1.997 % | -17.380 % | 6.557 % | -16.624 % | -4.359 % | -0.085 % | 36.259 % |
| Concentration RSD | 153.7 % | 9.1 % | 36.7 % | 9.4 % | 40.0 % | 626.3 % | 44.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0112 ppm | -0.0001 ppm | 0.0002 ppm | -0.1361 ppm | -0.0009 ppm | -0.0012 ppm | 0.0085 ppm |
| Concentration per Run 1 | -0.0107 ppm | -0.0002 ppm | -0.0001 ppm | -0.1355 ppm | -0.0009 ppm | -0.0015 ppm | 0.0119 ppm |
| Concentration per Run 2 | -0.0110 ppm | -0.0003 ppm | -0.0001 ppm | -0.1366 ppm | -0.0010 ppm | -0.0018 ppm | 0.0058 ppm |
| Concentration per Run 3 | -0.0118 ppm | 0.0002 ppm | 0.0009 ppm | -0.1363 ppm | -0.0008 ppm | -0.0004 ppm | 0.0079 ppm |
| Recovery Percentage 1 | -11.179 % | -0.947 % | 0.431 % | -6.807 % | -3.495 % | -12.467 % | 17.059 % |
| Concentration RSD | 4.7 % | 290.9 % | 257.6 % | 0.4 % | 12.1 % | 60.0 % | 36.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0135 ppm | 0.0052 ppm | 0.0000 ppm | 19.3906 ppm | -0.0006 ppm | -0.0025 ppm |
| Concentration per Run 1 | 0.0034 ppm | -0.0468 ppm | 0.0063 ppm | 0.0001 ppm | 19.4490 ppm | 0.0002 ppm | -0.0026 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0046 ppm | 0.0048 ppm | 0.0000 ppm | 19.4002 ppm | 0.0015 ppm | -0.0024 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0108 ppm | 0.0045 ppm | -0.0001 ppm | 19.3227 ppm | -0.0035 ppm | -0.0025 ppm |
| Recovery Percentage 1 | 11.803 % | -2.706 % | 10.392 % | 0.098 % | 193,905.946 % | -3.073 % | -24.972 % |
| Concentration RSD | 181.9 % | 220.4 % | 18.4 % | 648.0 % | 0.3 % | 420.1 % | 3.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 107.3425 % | 102.8917 % | 118.0182 % | 106.1943 % | 102.3631 % | 105.7865 % |
| Concentration per Run 1 | 0.0007 ppm | 106.6302 % | 102.8399 % | 117.9018 % | 105.2547 % | 102.3990 % | 105.5570 % |
| Concentration per Run 2 | 0.0006 ppm | 107.4977 % | 102.7650 % | 117.6585 % | 106.5202 % | 101.9128 % | 105.4786 % |
| Concentration per Run 3 | 0.0005 ppm | 107.8996 % | 103.0702 % | 118.4942 % | 106.8078 % | 102.7776 % | 106.3239 % |
| Recovery Percentage 1 | 11.587 % | | | | | | |
| Concentration RSD | 19.6 % | 0.6 % | 0.2 % | 0.4 % | 0.8 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LDR 500 Fe pass
Analysis started at: 9/20/2024 7:39:14 AM
Rack 1
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0057 ppm | -0.0087 ppm | 0.0093 ppm | 0.0004 ppm | 0.0000 ppm | 0.0053 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0144 ppm | -0.0105 ppm | 0.0077 ppm | 0.0003 ppm | 0.0000 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0093 ppm | -0.0076 ppm | 0.0087 ppm | 0.0006 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0021 ppm | -0.0067 ppm | -0.0080 ppm | 0.0114 ppm | 0.0004 ppm | 0.0000 ppm | 0.0073 ppm |
| Concentration RSD | 159.4 % | 194.9 % | 18.1 % | 20.3 % | 33.3 % | 267.1 % | 39.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0036 ppm | -0.0013 ppm | -0.0017 ppm | 498.4651 ppm | -0.0739 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0040 ppm | -0.0014 ppm | -0.0027 ppm | 500.7966 ppm | -0.0622 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0030 ppm | -0.0009 ppm | -0.0013 ppm | 499.5485 ppm | -0.0900 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0038 ppm | -0.0015 ppm | -0.0012 ppm | 495.0503 ppm | -0.0695 ppm | 0.0023 ppm |
| Concentration RSD | 68.6 % | 14.4 % | 24.2 % | 49.3 % | 0.6 % | 19.5 % | 157.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0027 ppm | -0.0027 ppm | -0.1369 ppm | -0.0025 ppm | -0.0008 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0041 ppm | -0.0025 ppm | -0.0032 ppm | -0.1366 ppm | -0.0022 ppm | -0.0005 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0028 ppm | -0.0030 ppm | -0.1365 ppm | -0.0029 ppm | 0.0001 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0029 ppm | -0.0019 ppm | -0.1375 ppm | -0.0024 ppm | -0.0020 ppm | 0.0041 ppm |
| Concentration RSD | 216.9 % | 6.6 % | 25.6 % | 0.4 % | 14.0 % | 127.1 % | 128.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0014 ppm | 0.0012 ppm | 0.0003 ppm | 0.0054 ppm | 0.0019 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0033 ppm | -0.0041 ppm | -0.0002 ppm | 0.0004 ppm | 0.0056 ppm | 0.0025 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0028 ppm | 0.0004 ppm | 0.0016 ppm | 0.0002 ppm | 0.0055 ppm | 0.0037 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0019 ppm | -0.0006 ppm | 0.0023 ppm | 0.0004 ppm | 0.0050 ppm | -0.0005 ppm | 0.0017 ppm |
| Concentration RSD | 696.3 % | 167.1 % | 103.3 % | 34.5 % | 6.3 % | 114.8 % | 23.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 103.2646 % | 101.8336 % | 92.8783 % | 101.8893 % | 101.7358 % | 101.4289 % |
| Concentration per Run 1 | -0.0007 ppm | 103.1876 % | 100.7643 % | 92.9673 % | 101.7336 % | 100.5845 % | 101.6519 % |
| Concentration per Run 2 | -0.0009 ppm | 103.0168 % | 101.8118 % | 92.9011 % | 101.3904 % | 101.8267 % | 101.5937 % |
| Concentration per Run 3 | -0.0006 ppm | 103.5894 % | 102.9248 % | 92.7667 % | 102.5437 % | 102.7962 % | 101.0412 % |
| Concentration RSD | 23.1 % | 0.3 % | 1.1 % | 0.1 % | 0.6 % | 1.1 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LDR 1000 Ca pass
Analysis started at: 9/20/2024 7:43:07 AM
Rack 1
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0078 ppm | 0.0000 ppm | 0.0070 ppm | 0.0009 ppm | 0.0000 ppm | 916.5410 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0130 ppm | -0.0004 ppm | 0.0057 ppm | 0.0005 ppm | 0.0000 ppm | 916.3159 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0063 ppm | 0.0002 ppm | 0.0084 ppm | 0.0010 ppm | 0.0000 ppm | 919.1464 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0168 ppm | 0.0003 ppm | 0.0068 ppm | 0.0010 ppm | 0.0000 ppm | 914.1608 ppm |
| Concentration RSD | 170.5 % | 157.9 % | 2,649.0 % | 19.6 % | 35.3 % | 1,454.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | -0.0007 ppm | 0.0003 ppm | 0.0067 ppm | 0.0037 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0004 ppm | -0.0009 ppm | 0.0004 ppm | 0.0076 ppm | -0.0121 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0000 ppm | -0.0004 ppm | 0.0002 ppm | 0.0067 ppm | 0.0089 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0004 ppm | -0.0009 ppm | 0.0004 ppm | 0.0058 ppm | 0.0143 ppm | 0.0006 ppm |
| Concentration RSD | 197.9 % | 7,177.9 % | 39.7 % | 33.3 % | 13.7 % | 376.0 % | 189.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0066 ppm | 0.0003 ppm | 0.0005 ppm | -0.1384 ppm | 0.0002 ppm | -0.0001 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0044 ppm | 0.0003 ppm | 0.0000 ppm | -0.1379 ppm | -0.0011 ppm | -0.0002 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0065 ppm | 0.0004 ppm | 0.0013 ppm | -0.1383 ppm | 0.0014 ppm | 0.0006 ppm | 0.0060 ppm |
| Concentration per Run 3 | 0.0087 ppm | 0.0003 ppm | 0.0000 ppm | -0.1389 ppm | 0.0001 ppm | -0.0007 ppm | 0.0028 ppm |
| Concentration RSD | 32.7 % | 10.0 % | 165.7 % | 0.4 % | 840.2 % | 820.0 % | 85.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0110 ppm | 0.0000 ppm | -0.0016 ppm | 0.0033 ppm | -0.0003 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.0121 ppm | 0.0010 ppm | -0.0016 ppm | 0.0033 ppm | 0.0005 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0024 ppm | 0.0101 ppm | 0.0000 ppm | -0.0015 ppm | 0.0034 ppm | -0.0022 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0037 ppm | 0.0107 ppm | -0.0010 ppm | -0.0015 ppm | 0.0033 ppm | 0.0010 ppm | 0.0007 ppm |
| Concentration RSD | 327.9 % | 9.4 % | 6,498.3 % | 4.0 % | 1.9 % | 676.1 % | 24.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 94.4550 % | 98.5635 % | 83.8921 % | 93.8065 % | 98.3085 % | 93.3398 % |
| Concentration per Run 1 | 0.0027 ppm | 95.4194 % | 98.9573 % | 83.9187 % | 94.5162 % | 99.3561 % | 93.4613 % |
| Concentration per Run 2 | 0.0030 ppm | 94.1771 % | 97.4501 % | 83.5361 % | 93.4698 % | 96.7743 % | 93.0516 % |
| Concentration per Run 3 | 0.0028 ppm | 93.7684 % | 99.2830 % | 84.2216 % | 93.4335 % | 98.7952 % | 93.5065 % |
| Concentration RSD | 4.6 % | 0.9 % | 1.0 % | 0.4 % | 0.7 % | 1.4 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LLOQ 0.005ppm Ag
Analysis started at: 9/20/2024 7:58:28 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0060 ppm | -0.0014 ppm | 0.0040 ppm | 0.0073 ppm | 0.0050 ppm | 0.0052 ppm | 0.0126 ppm |
| Concentration per Run 1 | 0.0055 ppm | -0.0072 ppm | 0.0041 ppm | 0.0057 ppm | 0.0047 ppm | 0.0051 ppm | 0.0122 ppm |
| Concentration per Run 2 | 0.0064 ppm | -0.0015 ppm | 0.0039 ppm | 0.0085 ppm | 0.0050 ppm | 0.0052 ppm | 0.0140 ppm |
| Concentration per Run 3 | 0.0061 ppm | 0.0043 ppm | 0.0042 ppm | 0.0075 ppm | 0.0052 ppm | 0.0052 ppm | 0.0118 ppm |
| Recovery Percentage 1 | 120.233 % | 0.000 % | 80.800 % | 0.000 % | 0.000 % | 103.614 % | 0.000 % |
| Concentration RSD | 7.5 % | 399.5 % | 4.1 % | 19.8 % | 4.7 % | 1.0 % | 9.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 0.0056 ppm | 0.0049 ppm | 0.0053 ppm | 0.0039 ppm | 0.0678 ppm | 0.0065 ppm |
| Concentration per Run 1 | 0.0049 ppm | 0.0052 ppm | 0.0042 ppm | 0.0047 ppm | 0.0032 ppm | 0.0631 ppm | 0.0064 ppm |
| Concentration per Run 2 | 0.0056 ppm | 0.0058 ppm | 0.0052 ppm | 0.0060 ppm | 0.0040 ppm | 0.0475 ppm | 0.0061 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.0057 ppm | 0.0054 ppm | 0.0053 ppm | 0.0045 ppm | 0.0928 ppm | 0.0070 ppm |
| Recovery Percentage 1 | 106.744 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 6.8 % | 5.3 % | 12.4 % | 11.9 % | 16.1 % | 34.0 % | 7.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0066 ppm | 0.0050 ppm | 0.0057 ppm | -0.0322 ppm | 0.0044 ppm | 0.0043 ppm | 0.0076 ppm |
| Concentration per Run 1 | 0.0057 ppm | 0.0051 ppm | 0.0046 ppm | -0.0207 ppm | 0.0029 ppm | 0.0040 ppm | 0.0105 ppm |
| Concentration per Run 2 | 0.0059 ppm | 0.0048 ppm | 0.0067 ppm | -0.0320 ppm | 0.0054 ppm | 0.0050 ppm | 0.0099 ppm |
| Concentration per Run 3 | 0.0081 ppm | 0.0051 ppm | 0.0057 ppm | -0.0440 ppm | 0.0050 ppm | 0.0040 ppm | 0.0025 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 20.4 % | 3.2 % | 17.9 % | 36.1 % | 30.3 % | 12.8 % | 58.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0543 ppm | 0.0041 ppm | 0.0051 ppm | 0.0055 ppm | 0.0047 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0048 ppm | 0.0459 ppm | 0.0045 ppm | 0.0052 ppm | 0.0050 ppm | 0.0053 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0066 ppm | 0.0645 ppm | 0.0037 ppm | 0.0050 ppm | 0.0058 ppm | 0.0037 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.0034 ppm | 0.0525 ppm | 0.0042 ppm | 0.0051 ppm | 0.0058 ppm | 0.0051 ppm | 0.0050 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 32.7 % | 17.4 % | 9.5 % | 1.9 % | 8.0 % | 18.4 % | 10.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0062 ppm | 102.7358 % | 101.9064 % | 100.9874 % | 101.6664 % | 101.6548 % | 100.7923 % |
| Concentration per Run 1 | 0.0056 ppm | 112.3694 % | 102.4729 % | 101.1708 % | 109.3846 % | 102.3240 % | 100.9848 % |
| Concentration per Run 2 | 0.0068 ppm | 96.4538 % | 101.2219 % | 101.2790 % | 95.6426 % | 100.6770 % | 101.0875 % |
| Concentration per Run 3 | 0.0063 ppm | 99.3843 % | 102.0244 % | 100.5126 % | 99.9720 % | 101.9636 % | 100.3047 % |
| Recovery Percentage 1 | 124.139 % | | | | | | |
| Concentration RSD | 9.9 % | 8.2 % | 0.6 % | 0.4 % | 6.9 % | 0.9 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 8:10:26 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5019 ppm | 0.4726 ppm | 0.4756 ppm | 0.4903 ppm | 0.4928 ppm | 0.5019 ppm | 0.4910 ppm |
| Concentration per Run 1 | 0.5000 ppm | 0.4680 ppm | 0.4765 ppm | 0.4843 ppm | 0.4922 ppm | 0.5014 ppm | 0.4839 ppm |
| Concentration per Run 2 | 0.5023 ppm | 0.4750 ppm | 0.4733 ppm | 0.4954 ppm | 0.4964 ppm | 0.5027 ppm | 0.4956 ppm |
| Concentration per Run 3 | 0.5033 ppm | 0.4750 ppm | 0.4769 ppm | 0.4911 ppm | 0.4897 ppm | 0.5015 ppm | 0.4935 ppm |
| Recovery Percentage 1 | 100.375 % | 94.529 % | 95.112 % | 98.057 % | 98.556 % | 100.378 % | 98.196 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.4 % | 1.1 % | 0.7 % | 0.1 % | 1.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4954 ppm | 0.5036 ppm | 0.4835 ppm | 0.4846 ppm | 0.5020 ppm | 5.0967 ppm | 0.4912 ppm |
| Concentration per Run 1 | 0.4989 ppm | 0.5062 ppm | 0.4813 ppm | 0.4849 ppm | 0.5029 ppm | 5.1023 ppm | 0.4911 ppm |
| Concentration per Run 2 | 0.4933 ppm | 0.5025 ppm | 0.4840 ppm | 0.4845 ppm | 0.5060 ppm | 5.0897 ppm | 0.4951 ppm |
| Concentration per Run 3 | 0.4940 ppm | 0.5022 ppm | 0.4851 ppm | 0.4845 ppm | 0.4973 ppm | 5.0981 ppm | 0.4873 ppm |
| Recovery Percentage 1 | 99.079 % | 100.723 % | 96.693 % | 96.928 % | 100.409 % | 101.934 % | 98.231 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.4 % | 0.1 % | 0.9 % | 0.1 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4809 ppm | 0.4827 ppm | 0.4842 ppm | 9.7317 ppm | 0.5016 ppm | 0.4893 ppm | 0.5020 ppm |
| Concentration per Run 1 | 0.4773 ppm | 0.4810 ppm | 0.4793 ppm | 9.7344 ppm | 0.4970 ppm | 0.4907 ppm | 0.5053 ppm |
| Concentration per Run 2 | 0.4850 ppm | 0.4834 ppm | 0.4859 ppm | 9.7643 ppm | 0.5028 ppm | 0.4895 ppm | 0.5023 ppm |
| Concentration per Run 3 | 0.4803 ppm | 0.4837 ppm | 0.4873 ppm | 9.6962 ppm | 0.5049 ppm | 0.4878 ppm | 0.4984 ppm |
| Recovery Percentage 1 | 96.178 % | 96.546 % | 96.833 % | 97.317 % | 100.318 % | 97.868 % | 100.396 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.9 % | 0.4 % | 0.8 % | 0.3 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4904 ppm | 5.2934 ppm | 0.4745 ppm | 0.4729 ppm | 0.4916 ppm | 0.4897 ppm | 0.4793 ppm |
| Concentration per Run 1 | 0.4928 ppm | 5.2716 ppm | 0.4702 ppm | 0.4734 ppm | 0.4896 ppm | 0.4930 ppm | 0.4786 ppm |
| Concentration per Run 2 | 0.4853 ppm | 5.2935 ppm | 0.4768 ppm | 0.4761 ppm | 0.4922 ppm | 0.4881 ppm | 0.4793 ppm |
| Concentration per Run 3 | 0.4932 ppm | 5.3149 ppm | 0.4765 ppm | 0.4692 ppm | 0.4931 ppm | 0.4881 ppm | 0.4799 ppm |
| Recovery Percentage 1 | 98.088 % | 100.826 % | 94.900 % | 94.582 % | 98.327 % | 97.942 % | 95.853 % |
| Concentration RSD | 0.9 % | 0.4 % | 0.8 % | 0.7 % | 0.4 % | 0.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5019 ppm | 105.7120 % | 100.9405 % | 103.1308 % | 104.4160 % | 100.2852 % | 103.1923 % |
| Concentration per Run 1 | 0.4991 ppm | 105.8429 % | 102.0028 % | 103.3809 % | 104.5047 % | 101.5187 % | 103.6890 % |
| Concentration per Run 2 | 0.5034 ppm | 105.5234 % | 100.4275 % | 103.9873 % | 104.3811 % | 99.8475 % | 103.6532 % |
| Concentration per Run 3 | 0.5031 ppm | 105.7698 % | 100.3911 % | 102.0241 % | 104.3621 % | 99.4894 % | 102.2347 % |
| Recovery Percentage 1 | 100.374 % | | | | | | |
| Concentration RSD | 0.5 % | 0.2 % | 0.9 % | 1.0 % | 0.1 % | 1.1 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 8:14:25 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | -0.0018 ppm | -0.0007 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | -0.0018 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0077 ppm | -0.0020 ppm | 0.0031 ppm | -0.0002 ppm | 0.0000 ppm | -0.0034 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0046 ppm | -0.0003 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0022 ppm | 0.0004 ppm | 0.0017 ppm | -0.0002 ppm | 0.0000 ppm | -0.0015 ppm |
| Recovery Percentage 1 | 13.863 % | -1.797 % | -13.272 % | 6.048 % | -1.043 % | 0.334 % | -1.766 % |
| Concentration RSD | 36.4 % | 341.9 % | 185.2 % | 67.2 % | 165.6 % | 305.4 % | 87.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | -0.0005 ppm | -0.0002 ppm | -0.0002 ppm | -0.0011 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0006 ppm | -0.0005 ppm | -0.0004 ppm | 0.0008 ppm | -0.0089 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | -0.0005 ppm | -0.0005 ppm | -0.0014 ppm | -0.0060 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | -0.0004 ppm | 0.0001 ppm | -0.0001 ppm | 0.0117 ppm | 0.0021 ppm |
| Recovery Percentage 1 | 1.225 % | 0.820 % | -4.902 % | -2.402 % | -0.470 % | -0.043 % | 22.033 % |
| Concentration RSD | 82.4 % | 261.7 % | 13.3 % | 142.8 % | 468.3 % | 1,041.5 % | 77.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.0001 ppm | 0.0017 ppm | -0.1484 ppm | -0.0004 ppm | -0.0002 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0019 ppm | -0.0001 ppm | 0.0018 ppm | -0.1478 ppm | 0.0002 ppm | 0.0000 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0034 ppm | 0.0003 ppm | 0.0022 ppm | -0.1465 ppm | -0.0006 ppm | -0.0002 ppm | 0.0073 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0002 ppm | 0.0013 ppm | -0.1509 ppm | -0.0009 ppm | -0.0004 ppm | 0.0025 ppm |
| Recovery Percentage 1 | 1.850 % | 1.332 % | 3.483 % | -7.422 % | -1.766 % | -1.860 % | 8.655 % |
| Concentration RSD | 85.1 % | 123.9 % | 26.3 % | 1.5 % | 126.4 % | 124.4 % | 59.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | -0.0041 ppm | 0.0012 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0022 ppm | -0.0027 ppm | 0.0012 ppm | 0.0000 ppm | 0.0003 ppm | -0.0003 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0017 ppm | -0.0045 ppm | 0.0010 ppm | 0.0001 ppm | -0.0002 ppm | 0.0016 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0039 ppm | -0.0051 ppm | 0.0013 ppm | 0.0000 ppm | -0.0003 ppm | -0.0004 ppm | -0.0006 ppm |
| Recovery Percentage 1 | 14.633 % | -0.815 % | 2.302 % | 0.274 % | -0.550 % | 1.428 % | -4.153 % |
| Concentration RSD | 196.4 % | 31.1 % | 12.2 % | 249.6 % | 600.7 % | 412.0 % | 51.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 104.3471 % | 100.4039 % | 103.2445 % | 104.8952 % | 101.1136 % | 103.6497 % |
| Concentration per Run 1 | 0.0003 ppm | 103.6196 % | 99.7306 % | 103.2725 % | 104.0280 % | 100.7714 % | 104.0716 % |
| Concentration per Run 2 | 0.0005 ppm | 104.7516 % | 100.6583 % | 102.9561 % | 105.6922 % | 101.5073 % | 103.0973 % |
| Concentration per Run 3 | 0.0003 ppm | 104.6700 % | 100.8228 % | 103.5049 % | 104.9655 % | 101.0622 % | 103.7801 % |
| Recovery Percentage 1 | 7.446 % | | | | | | |
| Concentration RSD | 27.3 % | 0.6 % | 0.6 % | 0.3 % | 0.8 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-1 WG1973886
Analysis started at: 9/20/2024 8:22:41 AM
Rack 1
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0140 ppm | 0.0014 ppm | 0.0035 ppm | 0.0001 ppm | 0.0000 ppm | 0.0155 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0176 ppm | 0.0033 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0168 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0152 ppm | 0.0009 ppm | 0.0053 ppm | 0.0001 ppm | 0.0000 ppm | 0.0112 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0091 ppm | 0.0000 ppm | 0.0028 ppm | 0.0000 ppm | 0.0000 ppm | 0.0187 ppm |
| Recovery Percentage 1 | 10.417 % | 13.980 % | 27.928 % | 11.749 % | 0.843 % | 0.198 % | 15.547 % |
| Concentration RSD | 36.9 % | 31.2 % | 122.0 % | 42.9 % | 99.6 % | 108.1 % | 25.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0002 ppm | -0.0037 ppm | 0.0339 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0006 ppm | -0.0008 ppm | 0.0005 ppm | -0.0054 ppm | 0.0309 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0006 ppm | -0.0007 ppm | 0.0000 ppm | -0.0017 ppm | 0.0544 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0001 ppm | -0.0004 ppm | 0.0002 ppm | -0.0041 ppm | 0.0165 ppm | 0.0007 ppm |
| Recovery Percentage 1 | -1.600 % | -0.233 % | -6.218 % | 2.185 % | -7.423 % | 1.357 % | 16.917 % |
| Concentration RSD | 233.3 % | 1,226.6 % | 26.1 % | 118.0 % | 51.1 % | 56.4 % | 41.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 0.0002 ppm | 0.0005 ppm | 136.3035 ppm | -0.0008 ppm | 0.0003 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0052 ppm | 0.0001 ppm | 0.0004 ppm | 136.5653 ppm | 0.0001 ppm | 0.0014 ppm | 0.0107 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0004 ppm | 0.0002 ppm | 136.3701 ppm | -0.0012 ppm | -0.0018 ppm | 0.0036 ppm |
| Concentration per Run 3 | 0.0065 ppm | 0.0001 ppm | 0.0008 ppm | 135.9751 ppm | -0.0012 ppm | 0.0012 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 4.567 % | 1.937 % | 0.910 % | 6,815.175 % | -3.149 % | 2.650 % | 10.087 % |
| Concentration RSD | 49.9 % | 82.0 % | 66.4 % | 0.2 % | 94.8 % | 687.2 % | 101.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0159 ppm | 0.0009 ppm | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.0167 ppm | 0.0009 ppm | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0148 ppm | 0.0010 ppm | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0162 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0007 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 11.264 % | 3.182 % | 1.700 % | -0.277 % | -1.537 % | 1.523 % | -4.880 % |
| Concentration RSD | 162.3 % | 6.3 % | 23.9 % | 245.6 % | 68.7 % | 146.8 % | 24.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 101.7562 % | 101.0782 % | 96.1800 % | 99.7473 % | 100.5449 % | 100.8521 % |
| Concentration per Run 1 | 0.0013 ppm | 101.7151 % | 100.2571 % | 96.5017 % | 99.6880 % | 100.2628 % | 101.3567 % |
| Concentration per Run 2 | 0.0014 ppm | 102.7630 % | 101.8671 % | 96.3007 % | 100.6455 % | 101.3594 % | 100.7903 % |
| Concentration per Run 3 | 0.0013 ppm | 100.7905 % | 101.1102 % | 95.7377 % | 98.9083 % | 100.0126 % | 100.4094 % |
| Recovery Percentage 1 | 26.116 % | | | | | | |
| Concentration RSD | 4.7 % | 1.0 % | 0.8 % | 0.4 % | 0.9 % | 0.7 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-2 WG1973886
Analysis started at: 9/20/2024 8:26:41 AM
Rack 1
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0463 ppm | 1.8564 ppm | 0.1180 ppm | 0.9310 ppm | 1.8913 ppm | 0.0482 ppm | 9.7931 ppm |
| Concentration per Run 1 | 0.0456 ppm | 1.8605 ppm | 0.1187 ppm | 0.9253 ppm | 1.8879 ppm | 0.0483 ppm | 9.7501 ppm |
| Concentration per Run 2 | 0.0462 ppm | 1.8588 ppm | 0.1209 ppm | 0.9280 ppm | 1.8876 ppm | 0.0481 ppm | 9.8280 ppm |
| Concentration per Run 3 | 0.0469 ppm | 1.8498 ppm | 0.1145 ppm | 0.9397 ppm | 1.8983 ppm | 0.0481 ppm | 9.8011 ppm |
| Concentration RSD | 1.3 % | 0.3 % | 2.7 % | 0.8 % | 0.3 % | 0.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0504 ppm | 0.4713 ppm | 0.1867 ppm | 0.2354 ppm | 0.9575 ppm | 9.9703 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0508 ppm | 0.4720 ppm | 0.1863 ppm | 0.2339 ppm | 0.9627 ppm | 9.9510 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.0510 ppm | 0.4748 ppm | 0.1865 ppm | 0.2348 ppm | 0.9549 ppm | 9.9503 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.4672 ppm | 0.1875 ppm | 0.2375 ppm | 0.9548 ppm | 10.0097 ppm | 0.0008 ppm |
| Concentration RSD | 1.6 % | 0.8 % | 0.3 % | 0.8 % | 0.5 % | 0.3 % | 66.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.3178 ppm | 0.4715 ppm | 0.9997 ppm | 143.1254 ppm | 0.4694 ppm | 0.5025 ppm | 0.4711 ppm |
| Concentration per Run 1 | 9.2810 ppm | 0.4710 ppm | 0.9965 ppm | 142.0095 ppm | 0.4683 ppm | 0.5021 ppm | 0.4746 ppm |
| Concentration per Run 2 | 9.3059 ppm | 0.4720 ppm | 0.9978 ppm | 143.3967 ppm | 0.4704 ppm | 0.5001 ppm | 0.4677 ppm |
| Concentration per Run 3 | 9.3663 ppm | 0.4716 ppm | 1.0047 ppm | 143.9699 ppm | 0.4695 ppm | 0.5052 ppm | 0.4710 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 0.4 % | 0.7 % | 0.2 % | 0.5 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1131 ppm | 1.0458 ppm | 0.9551 ppm | 0.9290 ppm | 0.9902 ppm | 0.1097 ppm | 0.4813 ppm |
| Concentration per Run 1 | 0.1108 ppm | 1.0450 ppm | 0.9511 ppm | 0.9255 ppm | 0.9854 ppm | 0.1114 ppm | 0.4796 ppm |
| Concentration per Run 2 | 0.1160 ppm | 1.0442 ppm | 0.9490 ppm | 0.9253 ppm | 0.9880 ppm | 0.1085 ppm | 0.4807 ppm |
| Concentration per Run 3 | 0.1123 ppm | 1.0482 ppm | 0.9652 ppm | 0.9363 ppm | 0.9973 ppm | 0.1093 ppm | 0.4835 ppm |
| Concentration RSD | 2.4 % | 0.2 % | 0.9 % | 0.7 % | 0.6 % | 1.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4816 ppm | 101.5661 % | 101.9987 % | 96.1718 % | 99.7781 % | 100.8070 % | 100.4479 % |
| Concentration per Run 1 | 0.4806 ppm | 102.0191 % | 102.5008 % | 96.1980 % | 100.2056 % | 101.3410 % | 100.1408 % |
| Concentration per Run 2 | 0.4800 ppm | 101.7982 % | 101.4700 % | 96.1104 % | 100.0169 % | 100.6796 % | 100.2395 % |
| Concentration per Run 3 | 0.4842 ppm | 100.8809 % | 102.0253 % | 96.2070 % | 99.1117 % | 100.4003 % | 100.9633 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.5 % | 0.1 % | 0.6 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452741-01 WG1973886
Analysis started at: 9/20/2024 8:30:35 AM
Rack 1
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0443 ppm | 0.0013 ppm | 0.0058 ppm | 0.0667 ppm | 0.0001 ppm | 31.0145 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0309 ppm | 0.0010 ppm | 0.0064 ppm | 0.0665 ppm | 0.0000 ppm | 30.9440 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0437 ppm | 0.0014 ppm | 0.0056 ppm | 0.0671 ppm | 0.0001 ppm | 31.1082 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0582 ppm | 0.0016 ppm | 0.0052 ppm | 0.0666 ppm | 0.0001 ppm | 30.9914 ppm |
| Concentration RSD | 63.1 % | 30.9 % | 24.1 % | 10.4 % | 0.5 % | 24.9 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0034 ppm | -0.0011 ppm | 0.0010 ppm | 0.2006 ppm | 0.7136 ppm | 0.0034 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0040 ppm | -0.0012 ppm | 0.0011 ppm | 0.1988 ppm | 0.7392 ppm | 0.0034 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0031 ppm | -0.0014 ppm | 0.0010 ppm | 0.2040 ppm | 0.7019 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0030 ppm | -0.0006 ppm | 0.0011 ppm | 0.1989 ppm | 0.6996 ppm | 0.0028 ppm |
| Concentration RSD | 67.3 % | 17.3 % | 40.6 % | 6.6 % | 1.5 % | 3.1 % | 15.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8103 ppm | 0.4233 ppm | 0.0030 ppm | 135.6148 ppm | 0.0029 ppm | 0.0147 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.8127 ppm | 0.4222 ppm | 0.0030 ppm | 134.5609 ppm | 0.0034 ppm | 0.0146 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.8086 ppm | 0.4245 ppm | 0.0029 ppm | 136.0131 ppm | 0.0032 ppm | 0.0150 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.8095 ppm | 0.4233 ppm | 0.0031 ppm | 136.2703 ppm | 0.0022 ppm | 0.0145 ppm | 0.0029 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 2.7 % | 0.7 % | 21.5 % | 1.5 % | 34.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.7042 ppm | -0.0001 ppm | 0.0909 ppm | 0.0005 ppm | -0.0013 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0034 ppm | 0.7064 ppm | -0.0006 ppm | 0.0909 ppm | 0.0003 ppm | -0.0028 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.7063 ppm | -0.0001 ppm | 0.0906 ppm | 0.0004 ppm | -0.0011 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0034 ppm | 0.6999 ppm | 0.0004 ppm | 0.0913 ppm | 0.0007 ppm | -0.0002 ppm | -0.0006 ppm |
| Concentration RSD | 37.2 % | 0.5 % | 625.2 % | 0.4 % | 46.6 % | 98.0 % | 80.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0559 ppm | 102.0380 % | 102.0970 % | 94.9894 % | 100.4372 % | 101.8207 % | 100.2498 % |
| Concentration per Run 1 | 0.0560 ppm | 102.1931 % | 102.8059 % | 94.7529 % | 100.6556 % | 102.4754 % | 99.6267 % |
| Concentration per Run 2 | 0.0559 ppm | 102.6004 % | 101.4612 % | 95.3661 % | 100.9200 % | 101.4596 % | 100.8761 % |
| Concentration per Run 3 | 0.0557 ppm | 101.3205 % | 102.0238 % | 94.8492 % | 99.7361 % | 101.5271 % | 100.2468 % |
| Concentration RSD | 0.3 % | 0.6 % | 0.7 % | 0.3 % | 0.6 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452771-02 WG1973886
Analysis started at: 9/20/2024 8:34:27 AM
Rack 1
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0006 ppm | -0.0006 ppm | 0.0066 ppm | 0.0973 ppm | 0.0000 ppm | 69.6303 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0025 ppm | -0.0028 ppm | 0.0071 ppm | 0.0977 ppm | 0.0000 ppm | 69.6828 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0032 ppm | 0.0002 ppm | 0.0060 ppm | 0.0974 ppm | 0.0000 ppm | 69.7463 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0012 ppm | 0.0008 ppm | 0.0066 ppm | 0.0968 ppm | 0.0001 ppm | 69.4619 ppm |
| Concentration RSD | 54.0 % | 460.8 % | 314.1 % | 8.4 % | 0.5 % | 329.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0018 ppm | -0.0009 ppm | -0.0003 ppm | -0.0007 ppm | 0.3277 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0017 ppm | -0.0005 ppm | 0.0000 ppm | 0.0002 ppm | 0.3387 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0021 ppm | -0.0010 ppm | -0.0003 ppm | -0.0012 ppm | 0.3274 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0014 ppm | -0.0013 ppm | -0.0005 ppm | -0.0011 ppm | 0.3170 ppm | 0.0019 ppm |
| Concentration RSD | 103.7 % | 20.7 % | 44.9 % | 91.8 % | 116.4 % | 3.3 % | 21.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2883 ppm | 0.4692 ppm | 0.0004 ppm | 127.9732 ppm | 0.0008 ppm | -0.0009 ppm | 0.0035 ppm |
| Concentration per Run 1 | 3.2853 ppm | 0.4690 ppm | 0.0004 ppm | 127.5680 ppm | 0.0002 ppm | -0.0015 ppm | 0.0072 ppm |
| Concentration per Run 2 | 3.2861 ppm | 0.4717 ppm | 0.0002 ppm | 128.2406 ppm | 0.0013 ppm | 0.0003 ppm | 0.0047 ppm |
| Concentration per Run 3 | 3.2936 ppm | 0.4669 ppm | 0.0004 ppm | 128.1111 ppm | 0.0009 ppm | -0.0014 ppm | -0.0014 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 37.0 % | 0.3 % | 67.1 % | 113.4 % | 127.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.2642 ppm | 0.0004 ppm | 0.1683 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0022 ppm | 0.2650 ppm | -0.0008 ppm | 0.1690 ppm | 0.0002 ppm | 0.0017 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0032 ppm | 0.2611 ppm | 0.0011 ppm | 0.1686 ppm | 0.0007 ppm | -0.0013 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.2665 ppm | 0.0008 ppm | 0.1674 ppm | 0.0003 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration RSD | 451.0 % | 1.1 % | 286.9 % | 0.5 % | 56.8 % | 1,008.0 % | 223.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 102.8273 % | 102.8522 % | 95.6422 % | 101.2175 % | 102.2915 % | 101.2415 % |
| Concentration per Run 1 | 0.0021 ppm | 102.2902 % | 101.7943 % | 96.1082 % | 100.4254 % | 101.2331 % | 101.9862 % |
| Concentration per Run 2 | 0.0020 ppm | 103.4311 % | 103.1420 % | 95.1774 % | 102.0724 % | 102.6837 % | 100.2925 % |
| Concentration per Run 3 | 0.0021 ppm | 102.7605 % | 103.6202 % | 95.6409 % | 101.1546 % | 102.9576 % | 101.4458 % |
| Concentration RSD | 1.2 % | 0.6 % | 0.9 % | 0.5 % | 0.8 % | 0.9 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-11 WG1973886
Analysis started at: 9/20/2024 8:38:20 AM
Rack 1
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0930 ppm | 0.0016 ppm | 0.0052 ppm | 0.0241 ppm | 0.0000 ppm | 71.0841 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0970 ppm | 0.0003 ppm | 0.0065 ppm | 0.0242 ppm | 0.0000 ppm | 71.0704 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0857 ppm | 0.0024 ppm | 0.0046 ppm | 0.0243 ppm | 0.0000 ppm | 71.3922 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0964 ppm | 0.0021 ppm | 0.0045 ppm | 0.0239 ppm | 0.0000 ppm | 70.7897 ppm |
| Concentration RSD | 26.2 % | 6.8 % | 69.1 % | 22.2 % | 0.9 % | 203.7 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0004 ppm | -0.0002 ppm | 0.0061 ppm | -0.0011 ppm | 1.5143 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0002 ppm | 0.0003 ppm | 0.0059 ppm | -0.0012 ppm | 1.5238 ppm | 0.0036 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0003 ppm | -0.0003 ppm | 0.0063 ppm | -0.0016 ppm | 1.5235 ppm | 0.0025 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0007 ppm | -0.0005 ppm | 0.0061 ppm | -0.0006 ppm | 1.4956 ppm | 0.0006 ppm |
| Concentration RSD | 16.0 % | 78.4 % | 239.7 % | 3.3 % | 43.1 % | 1.1 % | 67.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0226 ppm | 0.0003 ppm | 0.0018 ppm | 129.8059 ppm | 0.0005 ppm | -0.0018 ppm | 0.0062 ppm |
| Concentration per Run 1 | 0.0231 ppm | 0.0002 ppm | 0.0018 ppm | 129.7516 ppm | 0.0004 ppm | -0.0010 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.0229 ppm | 0.0005 ppm | 0.0014 ppm | 130.3378 ppm | 0.0008 ppm | -0.0021 ppm | 0.0077 ppm |
| Concentration per Run 3 | 0.0217 ppm | 0.0002 ppm | 0.0020 ppm | 129.3283 ppm | 0.0002 ppm | -0.0023 ppm | 0.0053 ppm |
| Concentration RSD | 3.4 % | 53.9 % | 17.8 % | 0.4 % | 62.0 % | 38.5 % | 21.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.6873 ppm | 0.0007 ppm | 0.1621 ppm | 0.0000 ppm | -0.0009 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.6888 ppm | 0.0017 ppm | 0.1624 ppm | 0.0000 ppm | 0.0001 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.6860 ppm | 0.0001 ppm | 0.1625 ppm | 0.0001 ppm | -0.0029 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.6871 ppm | 0.0003 ppm | 0.1615 ppm | -0.0002 ppm | 0.0001 ppm | 0.0023 ppm |
| Concentration RSD | 323.1 % | 0.2 % | 125.6 % | 0.3 % | 486.4 % | 191.4 % | 12.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 100.8920 % | 102.0063 % | 94.4131 % | 99.1657 % | 101.2722 % | 99.8687 % |
| Concentration per Run 1 | 0.0009 ppm | 100.8181 % | 102.9518 % | 94.1332 % | 98.9814 % | 102.2842 % | 99.6551 % |
| Concentration per Run 2 | 0.0007 ppm | 100.5483 % | 101.4948 % | 94.5206 % | 99.2545 % | 100.7102 % | 99.7011 % |
| Concentration per Run 3 | 0.0005 ppm | 101.3095 % | 101.5722 % | 94.5855 % | 99.2613 % | 100.8222 % | 100.2499 % |
| Concentration RSD | 27.6 % | 0.4 % | 0.8 % | 0.3 % | 0.2 % | 0.9 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452771-01 WG1973886
Analysis started at: 9/20/2024 8:42:13 AM
Rack 1
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | -0.0013 ppm | -0.0007 ppm | 0.0070 ppm | 0.1440 ppm | 0.0000 ppm | 74.4258 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0008 ppm | -0.0010 ppm | 0.0063 ppm | 0.1438 ppm | 0.0001 ppm | 74.2180 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0021 ppm | 0.0002 ppm | 0.0081 ppm | 0.1441 ppm | 0.0000 ppm | 74.3037 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0053 ppm | -0.0011 ppm | 0.0067 ppm | 0.1439 ppm | 0.0000 ppm | 74.7558 ppm |
| Concentration RSD | 26.9 % | 283.8 % | 113.6 % | 13.3 % | 0.1 % | 315.8 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0002 ppm | -0.0010 ppm | 0.0004 ppm | 0.0018 ppm | 0.4214 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | -0.0003 ppm | 0.0004 ppm | 0.0013 ppm | 0.4248 ppm | 0.0034 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0004 ppm | -0.0014 ppm | 0.0001 ppm | 0.0021 ppm | 0.4312 ppm | 0.0034 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0001 ppm | -0.0013 ppm | 0.0008 ppm | 0.0019 ppm | 0.4082 ppm | 0.0014 ppm |
| Concentration RSD | 28.3 % | 87.6 % | 60.7 % | 83.1 % | 23.7 % | 2.8 % | 42.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.1974 ppm | 0.4777 ppm | 0.0001 ppm | 134.0060 ppm | 0.0009 ppm | -0.0004 ppm | 0.0039 ppm |
| Concentration per Run 1 | 3.1848 ppm | 0.4777 ppm | 0.0004 ppm | 133.4899 ppm | 0.0013 ppm | -0.0001 ppm | 0.0056 ppm |
| Concentration per Run 2 | 3.1999 ppm | 0.4777 ppm | 0.0003 ppm | 134.2710 ppm | 0.0004 ppm | -0.0004 ppm | 0.0050 ppm |
| Concentration per Run 3 | 3.2075 ppm | 0.4779 ppm | -0.0004 ppm | 134.2570 ppm | 0.0010 ppm | -0.0006 ppm | 0.0012 ppm |
| Concentration RSD | 0.4 % | 0.0 % | 366.5 % | 0.3 % | 50.6 % | 71.2 % | 60.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 1.0868 ppm | 0.0003 ppm | 0.1660 ppm | 0.0005 ppm | 0.0002 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0033 ppm | 1.0876 ppm | 0.0007 ppm | 0.1657 ppm | 0.0005 ppm | 0.0004 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0016 ppm | 1.0776 ppm | 0.0009 ppm | 0.1662 ppm | 0.0008 ppm | -0.0008 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0004 ppm | 1.0953 ppm | -0.0005 ppm | 0.1660 ppm | 0.0003 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration RSD | 345.5 % | 0.8 % | 212.9 % | 0.1 % | 54.7 % | 516.7 % | 106.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 101.8247 % | 101.5387 % | 93.7284 % | 100.0279 % | 101.1490 % | 99.2574 % |
| Concentration per Run 1 | 0.0025 ppm | 102.1683 % | 101.5256 % | 93.7316 % | 100.6421 % | 100.6595 % | 99.0207 % |
| Concentration per Run 2 | 0.0024 ppm | 102.0386 % | 101.1763 % | 93.7515 % | 100.1357 % | 101.1141 % | 99.3218 % |
| Concentration per Run 3 | 0.0027 ppm | 101.2672 % | 101.9140 % | 93.7021 % | 99.3058 % | 101.6734 % | 99.4297 % |
| Concentration RSD | 6.5 % | 0.5 % | 0.4 % | 0.0 % | 0.7 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-3 WG1973886
Analysis started at: 9/20/2024 8:46:07 AM
Rack 1
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0455 ppm | 1.8559 ppm | 0.1160 ppm | 0.9139 ppm | 2.0081 ppm | 0.0475 ppm | 82.7753 ppm |
| Concentration per Run 1 | 0.0455 ppm | 1.8506 ppm | 0.1136 ppm | 0.9158 ppm | 2.0096 ppm | 0.0475 ppm | 82.6758 ppm |
| Concentration per Run 2 | 0.0458 ppm | 1.8569 ppm | 0.1147 ppm | 0.9162 ppm | 2.0095 ppm | 0.0477 ppm | 82.6782 ppm |
| Concentration per Run 3 | 0.0452 ppm | 1.8603 ppm | 0.1198 ppm | 0.9098 ppm | 2.0052 ppm | 0.0474 ppm | 82.9720 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 2.8 % | 0.4 % | 0.1 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 0.4572 ppm | 0.1824 ppm | 0.2308 ppm | 0.9488 ppm | 10.2600 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0487 ppm | 0.4570 ppm | 0.1832 ppm | 0.2305 ppm | 0.9516 ppm | 10.2592 ppm | 0.0040 ppm |
| Concentration per Run 2 | 0.0479 ppm | 0.4531 ppm | 0.1827 ppm | 0.2309 ppm | 0.9461 ppm | 10.2717 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0493 ppm | 0.4615 ppm | 0.1814 ppm | 0.2311 ppm | 0.9489 ppm | 10.2491 ppm | 0.0048 ppm |
| Concentration RSD | 1.4 % | 0.9 % | 0.5 % | 0.1 % | 0.3 % | 0.1 % | 38.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.3020 ppm | 0.9383 ppm | 0.9874 ppm | 140.5990 ppm | 0.4561 ppm | 0.4966 ppm | 0.4590 ppm |
| Concentration per Run 1 | 12.3006 ppm | 0.9399 ppm | 0.9876 ppm | 140.8143 ppm | 0.4558 ppm | 0.4946 ppm | 0.4598 ppm |
| Concentration per Run 2 | 12.2240 ppm | 0.9361 ppm | 0.9796 ppm | 140.6108 ppm | 0.4573 ppm | 0.4967 ppm | 0.4552 ppm |
| Concentration per Run 3 | 12.3815 ppm | 0.9388 ppm | 0.9949 ppm | 140.3718 ppm | 0.4552 ppm | 0.4983 ppm | 0.4621 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.8 % | 0.2 % | 0.2 % | 0.4 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1157 ppm | 2.1173 ppm | 0.9317 ppm | 1.0836 ppm | 0.9789 ppm | 0.1079 ppm | 0.4758 ppm |
| Concentration per Run 1 | 0.1119 ppm | 2.1139 ppm | 0.9345 ppm | 1.0835 ppm | 0.9797 ppm | 0.1085 ppm | 0.4750 ppm |
| Concentration per Run 2 | 0.1182 ppm | 2.1084 ppm | 0.9321 ppm | 1.0838 ppm | 0.9729 ppm | 0.1070 ppm | 0.4749 ppm |
| Concentration per Run 3 | 0.1170 ppm | 2.1297 ppm | 0.9283 ppm | 1.0834 ppm | 0.9841 ppm | 0.1081 ppm | 0.4777 ppm |
| Concentration RSD | 2.9 % | 0.5 % | 0.3 % | 0.0 % | 0.6 % | 0.7 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4671 ppm | 101.4183 % | 101.1165 % | 94.3281 % | 99.4661 % | 100.8029 % | 99.8177 % |
| Concentration per Run 1 | 0.4696 ppm | 101.1085 % | 101.2031 % | 94.7343 % | 99.0503 % | 101.2172 % | 100.0010 % |
| Concentration per Run 2 | 0.4653 ppm | 101.5530 % | 101.1650 % | 95.1324 % | 99.7344 % | 100.7654 % | 100.5413 % |
| Concentration per Run 3 | 0.4664 ppm | 101.5933 % | 100.9814 % | 93.1174 % | 99.6138 % | 100.4262 % | 98.9107 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.1 % | 1.1 % | 0.4 % | 0.4 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-4 WG1973886
Analysis started at: 9/20/2024 8:50:01 AM
Rack 1
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0032 ppm | -0.0004 ppm | 0.0081 ppm | 0.1398 ppm | 0.0000 ppm | 72.4982 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0139 ppm | 0.0022 ppm | 0.0079 ppm | 0.1391 ppm | 0.0000 ppm | 72.1856 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0070 ppm | -0.0016 ppm | 0.0081 ppm | 0.1402 ppm | 0.0001 ppm | 72.7151 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0164 ppm | -0.0017 ppm | 0.0082 ppm | 0.1400 ppm | 0.0000 ppm | 72.5938 ppm |
| Concentration RSD | 54.2 % | 490.7 % | 570.4 % | 1.6 % | 0.4 % | 92.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0001 ppm | -0.0012 ppm | -0.0001 ppm | 0.0048 ppm | 0.3963 ppm | 0.0034 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0003 ppm | -0.0006 ppm | -0.0001 ppm | 0.0046 ppm | 0.4231 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0006 ppm | -0.0012 ppm | -0.0005 ppm | 0.0056 ppm | 0.3968 ppm | 0.0042 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0000 ppm | -0.0017 ppm | 0.0003 ppm | 0.0041 ppm | 0.3691 ppm | 0.0032 ppm |
| Concentration RSD | 48.5 % | 416.8 % | 43.4 % | 432.7 % | 16.4 % | 6.8 % | 23.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.1260 ppm | 0.4652 ppm | 0.0033 ppm | 130.2470 ppm | 0.0004 ppm | -0.0010 ppm | 0.0071 ppm |
| Concentration per Run 1 | 3.1430 ppm | 0.4645 ppm | 0.0038 ppm | 129.4661 ppm | 0.0003 ppm | -0.0029 ppm | 0.0067 ppm |
| Concentration per Run 2 | 3.1101 ppm | 0.4653 ppm | 0.0032 ppm | 130.7743 ppm | 0.0011 ppm | -0.0006 ppm | 0.0071 ppm |
| Concentration per Run 3 | 3.1250 ppm | 0.4659 ppm | 0.0028 ppm | 130.5006 ppm | -0.0002 ppm | 0.0006 ppm | 0.0076 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 15.2 % | 0.5 % | 150.7 % | 186.1 % | 6.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 1.0639 ppm | 0.0003 ppm | 0.1614 ppm | 0.0004 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0022 ppm | 1.0725 ppm | 0.0000 ppm | 0.1609 ppm | 0.0000 ppm | -0.0004 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0059 ppm | 1.0539 ppm | 0.0002 ppm | 0.1617 ppm | 0.0008 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0002 ppm | 1.0653 ppm | 0.0006 ppm | 0.1615 ppm | 0.0004 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration RSD | 104.3 % | 0.9 % | 112.7 % | 0.3 % | 92.8 % | 39.9 % | 20.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 101.9540 % | 102.6942 % | 94.1385 % | 100.1643 % | 102.2287 % | 99.7413 % |
| Concentration per Run 1 | 0.0025 ppm | 102.4028 % | 104.0809 % | 94.1980 % | 100.3919 % | 103.4491 % | 99.6039 % |
| Concentration per Run 2 | 0.0026 ppm | 102.0457 % | 102.2247 % | 94.6920 % | 100.5568 % | 101.5979 % | 100.2457 % |
| Concentration per Run 3 | 0.0031 ppm | 101.4134 % | 101.7771 % | 93.5254 % | 99.5442 % | 101.6390 % | 99.3744 % |
| Concentration RSD | 12.1 % | 0.5 % | 1.2 % | 0.6 % | 0.5 % | 1.0 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-5 WG1973886
Analysis started at: 9/20/2024 8:53:53 AM
Rack 1
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0473 ppm | 1.9216 ppm | 0.1231 ppm | 0.9633 ppm | 2.0845 ppm | 0.0497 ppm | 82.2635 ppm |
| Concentration per Run 1 | 0.0477 ppm | 1.9273 ppm | 0.1228 ppm | 0.9597 ppm | 2.0896 ppm | 0.0497 ppm | 82.4991 ppm |
| Concentration per Run 2 | 0.0470 ppm | 1.9274 ppm | 0.1225 ppm | 0.9691 ppm | 2.0798 ppm | 0.0498 ppm | 82.2237 ppm |
| Concentration per Run 3 | 0.0473 ppm | 1.9100 ppm | 0.1239 ppm | 0.9611 ppm | 2.0840 ppm | 0.0497 ppm | 82.0675 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 0.6 % | 0.5 % | 0.2 % | 0.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0507 ppm | 0.4787 ppm | 0.1915 ppm | 0.2414 ppm | 0.9904 ppm | 10.7683 ppm | 0.0028 ppm |
| Concentration per Run 1 | 0.0509 ppm | 0.4798 ppm | 0.1906 ppm | 0.2395 ppm | 0.9894 ppm | 10.7919 ppm | 0.0033 ppm |
| Concentration per Run 2 | 0.0508 ppm | 0.4814 ppm | 0.1921 ppm | 0.2434 ppm | 0.9888 ppm | 10.7507 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0505 ppm | 0.4749 ppm | 0.1917 ppm | 0.2414 ppm | 0.9931 ppm | 10.7623 ppm | 0.0030 ppm |
| Concentration RSD | 0.4 % | 0.7 % | 0.4 % | 0.8 % | 0.2 % | 0.2 % | 19.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7014 ppm | 0.9570 ppm | 1.0377 ppm | 139.8471 ppm | 0.4801 ppm | 0.5269 ppm | 0.4697 ppm |
| Concentration per Run 1 | 12.6994 ppm | 0.9602 ppm | 1.0307 ppm | 140.3938 ppm | 0.4818 ppm | 0.5259 ppm | 0.4656 ppm |
| Concentration per Run 2 | 12.7017 ppm | 0.9565 ppm | 1.0418 ppm | 139.8582 ppm | 0.4808 ppm | 0.5283 ppm | 0.4721 ppm |
| Concentration per Run 3 | 12.7030 ppm | 0.9541 ppm | 1.0407 ppm | 139.2893 ppm | 0.4776 ppm | 0.5267 ppm | 0.4714 ppm |
| Concentration RSD | 0.0 % | 0.3 % | 0.6 % | 0.4 % | 0.5 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1231 ppm | 2.0055 ppm | 0.9876 ppm | 1.1269 ppm | 1.0342 ppm | 0.1156 ppm | 0.4972 ppm |
| Concentration per Run 1 | 0.1258 ppm | 1.9965 ppm | 0.9852 ppm | 1.1298 ppm | 1.0392 ppm | 0.1147 ppm | 0.4967 ppm |
| Concentration per Run 2 | 0.1227 ppm | 2.0131 ppm | 0.9954 ppm | 1.1259 ppm | 1.0286 ppm | 0.1158 ppm | 0.4977 ppm |
| Concentration per Run 3 | 0.1208 ppm | 2.0069 ppm | 0.9821 ppm | 1.1249 ppm | 1.0349 ppm | 0.1164 ppm | 0.4970 ppm |
| Concentration RSD | 2.1 % | 0.4 % | 0.7 % | 0.2 % | 0.5 % | 0.7 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4907 ppm | 101.1779 % | 102.7677 % | 93.0718 % | 99.3077 % | 102.3288 % | 98.6603 % |
| Concentration per Run 1 | 0.4911 ppm | 100.4246 % | 102.7251 % | 93.5499 % | 98.3298 % | 102.6950 % | 98.7242 % |
| Concentration per Run 2 | 0.4918 ppm | 100.9654 % | 103.6318 % | 92.7456 % | 99.2492 % | 103.0751 % | 98.8505 % |
| Concentration per Run 3 | 0.4893 ppm | 102.1437 % | 101.9462 % | 92.9200 % | 100.3442 % | 101.2161 % | 98.4063 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.8 % | 0.5 % | 1.0 % | 1.0 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973886-6D5 WG1973886
Analysis started at: 9/20/2024 8:57:45 AM
Rack 1
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0061 ppm | 0.0009 ppm | 0.0035 ppm | 0.0295 ppm | 0.0000 ppm | 15.7098 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0103 ppm | 0.0015 ppm | 0.0049 ppm | 0.0297 ppm | 0.0000 ppm | 15.7292 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0074 ppm | -0.0007 ppm | 0.0038 ppm | 0.0295 ppm | 0.0000 ppm | 15.7192 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0006 ppm | 0.0018 ppm | 0.0017 ppm | 0.0294 ppm | 0.0000 ppm | 15.6810 ppm |
| Concentration RSD | 11.4 % | 81.6 % | 160.0 % | 46.7 % | 0.6 % | 223.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | -0.0008 ppm | -0.0001 ppm | -0.0009 ppm | 0.0943 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0008 ppm | -0.0002 ppm | 0.0004 ppm | -0.0026 ppm | 0.0805 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | -0.0008 ppm | -0.0002 ppm | -0.0007 ppm | 0.0774 ppm | 0.0024 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | -0.0013 ppm | -0.0004 ppm | 0.0006 ppm | 0.1251 ppm | 0.0008 ppm |
| Concentration RSD | 138.1 % | 378.1 % | 69.9 % | 574.0 % | 173.7 % | 28.3 % | 49.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6867 ppm | 0.1002 ppm | 0.0024 ppm | 28.0381 ppm | -0.0001 ppm | -0.0011 ppm | 0.0071 ppm |
| Concentration per Run 1 | 0.6856 ppm | 0.1002 ppm | 0.0029 ppm | 28.0041 ppm | 0.0006 ppm | -0.0013 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.6864 ppm | 0.1000 ppm | 0.0020 ppm | 27.9397 ppm | -0.0005 ppm | -0.0020 ppm | 0.0132 ppm |
| Concentration per Run 3 | 0.6882 ppm | 0.1005 ppm | 0.0023 ppm | 28.1705 ppm | -0.0004 ppm | 0.0001 ppm | 0.0059 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 19.4 % | 0.4 % | 563.6 % | 98.6 % | 79.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.2291 ppm | 0.0006 ppm | 0.0344 ppm | 0.0003 ppm | -0.0005 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.2262 ppm | -0.0002 ppm | 0.0346 ppm | 0.0001 ppm | -0.0019 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.2331 ppm | 0.0003 ppm | 0.0342 ppm | 0.0005 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.2282 ppm | 0.0016 ppm | 0.0343 ppm | 0.0003 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration RSD | 822.8 % | 1.6 % | 173.7 % | 0.6 % | 60.2 % | 252.2 % | 80.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 104.2341 % | 102.4875 % | 101.7221 % | 103.1834 % | 102.3787 % | 103.4523 % |
| Concentration per Run 1 | 0.0009 ppm | 103.5396 % | 102.3650 % | 101.6559 % | 102.3154 % | 102.2253 % | 103.4811 % |
| Concentration per Run 2 | 0.0009 ppm | 104.8399 % | 102.5328 % | 102.0988 % | 103.7884 % | 102.5328 % | 103.8213 % |
| Concentration per Run 3 | 0.0012 ppm | 104.3230 % | 102.5647 % | 101.4116 % | 103.4465 % | 102.3781 % | 103.0544 % |
| Concentration RSD | 14.8 % | 0.6 % | 0.1 % | 0.3 % | 0.7 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 9:01:37 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4988 ppm | 0.4694 ppm | 0.4745 ppm | 0.4921 ppm | 0.4901 ppm | 0.5005 ppm | 0.4869 ppm |
| Concentration per Run 1 | 0.5009 ppm | 0.4660 ppm | 0.4764 ppm | 0.4926 ppm | 0.4939 ppm | 0.5014 ppm | 0.4818 ppm |
| Concentration per Run 2 | 0.4994 ppm | 0.4554 ppm | 0.4738 ppm | 0.4972 ppm | 0.4870 ppm | 0.4996 ppm | 0.4886 ppm |
| Concentration per Run 3 | 0.4960 ppm | 0.4868 ppm | 0.4733 ppm | 0.4865 ppm | 0.4893 ppm | 0.5004 ppm | 0.4903 ppm |
| Recovery Percentage 1 | 99.754 % | 93.879 % | 94.896 % | 98.418 % | 98.015 % | 100.093 % | 97.378 % |
| Concentration RSD | 0.5 % | 3.4 % | 0.3 % | 1.1 % | 0.7 % | 0.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4949 ppm | 0.5042 ppm | 0.4808 ppm | 0.4845 ppm | 0.5019 ppm | 5.0961 ppm | 0.4899 ppm |
| Concentration per Run 1 | 0.4941 ppm | 0.5056 ppm | 0.4815 ppm | 0.4868 ppm | 0.5065 ppm | 5.1063 ppm | 0.4896 ppm |
| Concentration per Run 2 | 0.5019 ppm | 0.5058 ppm | 0.4816 ppm | 0.4869 ppm | 0.4990 ppm | 5.1269 ppm | 0.4953 ppm |
| Concentration per Run 3 | 0.4886 ppm | 0.5012 ppm | 0.4794 ppm | 0.4797 ppm | 0.5001 ppm | 5.0551 ppm | 0.4849 ppm |
| Recovery Percentage 1 | 98.979 % | 100.838 % | 96.166 % | 96.894 % | 100.374 % | 101.922 % | 97.986 % |
| Concentration RSD | 1.3 % | 0.5 % | 0.3 % | 0.9 % | 0.8 % | 0.7 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4769 ppm | 0.4812 ppm | 0.4833 ppm | 9.6757 ppm | 0.5002 ppm | 0.4905 ppm | 0.4976 ppm |
| Concentration per Run 1 | 0.4785 ppm | 0.4808 ppm | 0.4813 ppm | 9.7049 ppm | 0.5013 ppm | 0.4892 ppm | 0.4974 ppm |
| Concentration per Run 2 | 0.4779 ppm | 0.4797 ppm | 0.4845 ppm | 9.6673 ppm | 0.5010 ppm | 0.4938 ppm | 0.5026 ppm |
| Concentration per Run 3 | 0.4744 ppm | 0.4832 ppm | 0.4841 ppm | 9.6548 ppm | 0.4984 ppm | 0.4886 ppm | 0.4930 ppm |
| Recovery Percentage 1 | 95.384 % | 96.248 % | 96.657 % | 96.757 % | 100.049 % | 98.106 % | 99.528 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.3 % | 0.3 % | 0.6 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4885 ppm | 5.2975 ppm | 0.4755 ppm | 0.4696 ppm | 0.4891 ppm | 0.4918 ppm | 0.4781 ppm |
| Concentration per Run 1 | 0.4903 ppm | 5.3012 ppm | 0.4756 ppm | 0.4728 ppm | 0.4902 ppm | 0.4900 ppm | 0.4789 ppm |
| Concentration per Run 2 | 0.4849 ppm | 5.3300 ppm | 0.4800 ppm | 0.4653 ppm | 0.4896 ppm | 0.4924 ppm | 0.4784 ppm |
| Concentration per Run 3 | 0.4902 ppm | 5.2612 ppm | 0.4711 ppm | 0.4706 ppm | 0.4875 ppm | 0.4928 ppm | 0.4768 ppm |
| Recovery Percentage 1 | 97.698 % | 100.905 % | 95.110 % | 93.915 % | 97.820 % | 98.352 % | 95.613 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.9 % | 0.8 % | 0.3 % | 0.3 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4992 ppm | 105.9176 % | 102.2405 % | 103.6399 % | 104.7532 % | 101.7285 % | 103.9067 % |
| Concentration per Run 1 | 0.5005 ppm | 105.5489 % | 102.5493 % | 104.0066 % | 104.4246 % | 102.1974 % | 104.0519 % |
| Concentration per Run 2 | 0.5017 ppm | 105.0323 % | 101.9687 % | 102.9256 % | 104.0370 % | 101.4636 % | 103.4568 % |
| Concentration per Run 3 | 0.4953 ppm | 107.1716 % | 102.2034 % | 103.9875 % | 105.7980 % | 101.5245 % | 104.2115 % |
| Recovery Percentage 1 | 99.831 % | | | | | | |
| Concentration RSD | 0.7 % | 1.1 % | 0.3 % | 0.6 % | 0.9 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 9:05:31 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0022 ppm | 0.0008 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0081 ppm | 0.0022 ppm | 0.0019 ppm | 0.0001 ppm | 0.0001 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0016 ppm | -0.0010 ppm | -0.0004 ppm | 0.0016 ppm | 0.0001 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0007 ppm | -0.0007 ppm | 0.0007 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 13.846 % | 2.156 % | 16.451 % | 4.297 % | 0.457 % | 1.167 % | 1.382 % |
| Concentration RSD | 57.6 % | 238.1 % | 157.0 % | 58.2 % | 47.1 % | 76.7 % | 214.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0001 ppm | -0.0005 ppm | -0.0005 ppm | 0.0003 ppm | -0.0190 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0005 ppm | -0.0003 ppm | -0.0006 ppm | -0.0003 ppm | -0.0149 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm | -0.0010 ppm | -0.0113 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0002 ppm | -0.0010 ppm | -0.0006 ppm | 0.0020 ppm | -0.0306 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 3.114 % | 0.564 % | -5.372 % | -4.854 % | 0.523 % | -0.758 % | 17.654 % |
| Concentration RSD | 9.1 % | 316.6 % | 73.0 % | 41.1 % | 607.9 % | 54.0 % | 123.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0001 ppm | 0.0018 ppm | -0.1638 ppm | -0.0005 ppm | -0.0001 ppm | 0.0044 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | 0.0021 ppm | -0.1664 ppm | -0.0008 ppm | -0.0008 ppm | 0.0053 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0001 ppm | 0.0022 ppm | -0.1578 ppm | 0.0002 ppm | 0.0005 ppm | 0.0043 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0002 ppm | 0.0010 ppm | -0.1672 ppm | -0.0009 ppm | 0.0000 ppm | 0.0036 ppm |
| Recovery Percentage 1 | -0.459 % | 0.800 % | 3.523 % | -8.191 % | -1.969 % | -1.029 % | 8.791 % |
| Concentration RSD | 75.0 % | 215.3 % | 38.1 % | 3.2 % | 124.4 % | 646.3 % | 19.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | -0.0012 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0017 ppm | -0.0012 ppm | 0.0013 ppm | -0.0001 ppm | 0.0002 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0049 ppm | -0.0024 ppm | 0.0012 ppm | 0.0000 ppm | -0.0001 ppm | 0.0010 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 35.372 % | -0.244 % | 1.534 % | -0.420 % | 0.262 % | 4.651 % | -2.601 % |
| Concentration RSD | 46.6 % | 97.7 % | 111.3 % | 66.8 % | 616.9 % | 56.1 % | 35.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 104.3957 % | 100.5228 % | 103.7062 % | 104.8160 % | 101.1134 % | 104.4759 % |
| Concentration per Run 1 | 0.0003 ppm | 104.4559 % | 100.6406 % | 103.5988 % | 104.8219 % | 101.6662 % | 104.6399 % |
| Concentration per Run 2 | 0.0004 ppm | 104.3587 % | 100.6627 % | 104.7610 % | 104.7592 % | 101.5284 % | 105.4561 % |
| Concentration per Run 3 | 0.0001 ppm | 104.3726 % | 100.2651 % | 102.7589 % | 104.8670 % | 100.1454 % | 103.3317 % |
| Recovery Percentage 1 | 4.889 % | | | | | | |
| Concentration RSD | 68.8 % | 0.1 % | 0.2 % | 1.0 % | 0.1 % | 0.8 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974109-1 WG1974109
Analysis started at: 9/20/2024 9:18:50 AM
Rack 1
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0100 ppm | 0.0004 ppm | 0.0042 ppm | 0.0001 ppm | 0.0000 ppm | 0.0290 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0103 ppm | -0.0009 ppm | 0.0043 ppm | 0.0000 ppm | 0.0000 ppm | 0.0268 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0025 ppm | 0.0031 ppm | 0.0049 ppm | 0.0000 ppm | 0.0000 ppm | 0.0303 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0173 ppm | -0.0011 ppm | 0.0035 ppm | 0.0003 ppm | 0.0000 ppm | 0.0301 ppm |
| Recovery Percentage 1 | 13.089 % | 10.025 % | 7.850 % | 14.081 % | 0.882 % | 0.469 % | 29.047 % |
| Concentration RSD | 30.9 % | 73.8 % | 607.9 % | 15.8 % | 205.0 % | 61.4 % | 6.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0007 ppm | -0.0010 ppm | 0.0001 ppm | -0.0034 ppm | 0.0254 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0003 ppm | -0.0012 ppm | -0.0003 ppm | -0.0020 ppm | 0.0394 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0016 ppm | -0.0010 ppm | 0.0003 ppm | -0.0048 ppm | 0.0232 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0002 ppm | -0.0034 ppm | 0.0134 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 3.049 % | -3.250 % | -9.563 % | 0.753 % | -6.734 % | 1.014 % | 25.435 % |
| Concentration RSD | 78.5 % | 133.3 % | 30.1 % | 400.5 % | 41.9 % | 51.7 % | 134.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 0.0000 ppm | 0.0007 ppm | -0.0407 ppm | -0.0014 ppm | -0.0017 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0048 ppm | -0.0001 ppm | 0.0011 ppm | -0.0392 ppm | -0.0010 ppm | -0.0013 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.0024 ppm | 0.0001 ppm | 0.0003 ppm | -0.0369 ppm | -0.0012 ppm | -0.0012 ppm | 0.0060 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.0000 ppm | 0.0007 ppm | -0.0460 ppm | -0.0020 ppm | -0.0026 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 3.932 % | -0.033 % | 1.395 % | -2.035 % | -5.619 % | -16.727 % | 8.564 % |
| Concentration RSD | 34.6 % | 2,332.4 % | 59.6 % | 11.7 % | 34.4 % | 45.7 % | 40.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 0.0147 ppm | 0.0007 ppm | 0.0000 ppm | -0.0002 ppm | -0.0026 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.0127 ppm | 0.0005 ppm | 0.0000 ppm | -0.0001 ppm | -0.0025 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.0141 ppm | 0.0008 ppm | -0.0001 ppm | -0.0004 ppm | -0.0029 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.0174 ppm | 0.0008 ppm | 0.0001 ppm | -0.0002 ppm | -0.0024 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 23.120 % | 2.946 % | 1.378 % | 0.160 % | -2.434 % | -13.012 % | -3.238 % |
| Concentration RSD | 115.2 % | 16.5 % | 27.9 % | 604.2 % | 70.8 % | 9.7 % | 28.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 104.7305 % | 106.7504 % | 101.4251 % | 104.0394 % | 107.5698 % | 103.1318 % |
| Concentration per Run 1 | 0.0007 ppm | 104.9318 % | 107.5677 % | 101.5704 % | 104.2324 % | 108.3321 % | 103.7199 % |
| Concentration per Run 2 | 0.0005 ppm | 104.1492 % | 105.1217 % | 100.7615 % | 103.4573 % | 106.0137 % | 102.1949 % |
| Concentration per Run 3 | 0.0008 ppm | 105.1104 % | 107.5618 % | 101.9433 % | 104.4284 % | 108.3636 % | 103.4807 % |
| Recovery Percentage 1 | 13.481 % | | | | | | |
| Concentration RSD | 17.8 % | 0.5 % | 1.3 % | 0.6 % | 0.5 % | 1.3 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974109-2 WG1974109
Analysis started at: 9/20/2024 9:23:02 AM
Rack 1
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0963 ppm | 3.7825 ppm | 0.1151 ppm | 0.9586 ppm | 3.8432 ppm | 0.0982 ppm | 10.0055 ppm |
| Concentration per Run 1 | 0.0966 ppm | 3.7929 ppm | 0.1143 ppm | 0.9555 ppm | 3.8474 ppm | 0.0984 ppm | 10.0278 ppm |
| Concentration per Run 2 | 0.0953 ppm | 3.7764 ppm | 0.1171 ppm | 0.9566 ppm | 3.8330 ppm | 0.0978 ppm | 9.9870 ppm |
| Concentration per Run 3 | 0.0969 ppm | 3.7781 ppm | 0.1139 ppm | 0.9637 ppm | 3.8494 ppm | 0.0983 ppm | 10.0015 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 1.5 % | 0.5 % | 0.2 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0979 ppm | 0.9636 ppm | 0.3803 ppm | 0.4925 ppm | 1.9416 ppm | 10.1431 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0975 ppm | 0.9593 ppm | 0.3807 ppm | 0.4911 ppm | 1.9445 ppm | 10.1773 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0977 ppm | 0.9661 ppm | 0.3784 ppm | 0.4931 ppm | 1.9378 ppm | 10.1017 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0985 ppm | 0.9654 ppm | 0.3817 ppm | 0.4934 ppm | 1.9426 ppm | 10.1503 ppm | 0.0011 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.3 % | 0.2 % | 0.4 % | 249.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.7898 ppm | 0.9746 ppm | 1.0076 ppm | 10.0380 ppm | 0.9635 ppm | 0.5165 ppm | 0.9675 ppm |
| Concentration per Run 1 | 9.7784 ppm | 0.9786 ppm | 1.0008 ppm | 10.0571 ppm | 0.9605 ppm | 0.5173 ppm | 0.9635 ppm |
| Concentration per Run 2 | 9.7589 ppm | 0.9733 ppm | 1.0088 ppm | 10.0461 ppm | 0.9604 ppm | 0.5266 ppm | 0.9660 ppm |
| Concentration per Run 3 | 9.8320 ppm | 0.9720 ppm | 1.0134 ppm | 10.0107 ppm | 0.9698 ppm | 0.5057 ppm | 0.9728 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 0.6 % | 0.2 % | 0.6 % | 2.0 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1123 ppm | 1.0845 ppm | 0.9709 ppm | 0.9588 ppm | 1.0014 ppm | 0.1162 ppm | 0.9656 ppm |
| Concentration per Run 1 | 0.1107 ppm | 1.0827 ppm | 0.9660 ppm | 0.9604 ppm | 1.0028 ppm | 0.1161 ppm | 0.9604 ppm |
| Concentration per Run 2 | 0.1144 ppm | 1.0804 ppm | 0.9706 ppm | 0.9569 ppm | 0.9975 ppm | 0.1181 ppm | 0.9648 ppm |
| Concentration per Run 3 | 0.1117 ppm | 1.0904 ppm | 0.9763 ppm | 0.9589 ppm | 1.0038 ppm | 0.1146 ppm | 0.9716 ppm |
| Concentration RSD | 1.7 % | 0.5 % | 0.5 % | 0.2 % | 0.3 % | 1.5 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9495 ppm | 107.1541 % | 106.1637 % | 102.3218 % | 105.5933 % | 106.3938 % | 104.2332 % |
| Concentration per Run 1 | 0.9424 ppm | 107.9204 % | 105.7941 % | 102.6813 % | 105.9845 % | 106.1617 % | 105.3590 % |
| Concentration per Run 2 | 0.9507 ppm | 107.2177 % | 106.6278 % | 100.6840 % | 106.0819 % | 106.9710 % | 102.4102 % |
| Concentration per Run 3 | 0.9554 ppm | 106.3241 % | 106.0691 % | 103.6002 % | 104.7135 % | 106.0487 % | 104.9302 % |
| Concentration RSD | 0.7 % | 0.7 % | 0.4 % | 1.5 % | 0.7 % | 0.5 % | 1.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-01 WG1974109
Analysis started at: 9/20/2024 9:26:57 AM
Rack 1
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.1315 ppm | 0.0019 ppm | 0.0093 ppm | 0.0761 ppm | 0.0001 ppm | 134.7932 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.1363 ppm | 0.0021 ppm | 0.0088 ppm | 0.0762 ppm | 0.0001 ppm | 134.4927 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.1249 ppm | 0.0028 ppm | 0.0092 ppm | 0.0764 ppm | 0.0002 ppm | 135.1429 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.1332 ppm | 0.0008 ppm | 0.0100 ppm | 0.0757 ppm | 0.0001 ppm | 134.7439 ppm |
| Concentration RSD | 11.4 % | 4.5 % | 52.6 % | 6.9 % | 0.4 % | 33.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0038 ppm | 0.0003 ppm | 0.0009 ppm | 0.6611 ppm | 1.3640 ppm | 0.0047 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0037 ppm | 0.0003 ppm | 0.0006 ppm | 0.6637 ppm | 1.3779 ppm | 0.0050 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0039 ppm | 0.0002 ppm | 0.0010 ppm | 0.6635 ppm | 1.3744 ppm | 0.0046 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0039 ppm | 0.0003 ppm | 0.0012 ppm | 0.6560 ppm | 1.3398 ppm | 0.0047 ppm |
| Concentration RSD | 40.6 % | 3.0 % | 16.3 % | 28.3 % | 0.7 % | 1.5 % | 4.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.0975 ppm | 0.2750 ppm | 0.0032 ppm | 0.8573 ppm | 0.0057 ppm | 0.0353 ppm | 0.0055 ppm |
| Concentration per Run 1 | 6.0991 ppm | 0.2743 ppm | 0.0035 ppm | 0.8555 ppm | 0.0054 ppm | 0.0356 ppm | 0.0017 ppm |
| Concentration per Run 2 | 6.1000 ppm | 0.2765 ppm | 0.0030 ppm | 0.8606 ppm | 0.0055 ppm | 0.0356 ppm | 0.0057 ppm |
| Concentration per Run 3 | 6.0932 ppm | 0.2743 ppm | 0.0032 ppm | 0.8559 ppm | 0.0060 ppm | 0.0347 ppm | 0.0092 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 6.8 % | 0.3 % | 5.9 % | 1.4 % | 68.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 14.0720 ppm | 0.0005 ppm | 0.2414 ppm | 0.0017 ppm | -0.0008 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0009 ppm | 14.0613 ppm | 0.0009 ppm | 0.2411 ppm | 0.0018 ppm | -0.0005 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0035 ppm | 14.0964 ppm | 0.0003 ppm | 0.2422 ppm | 0.0015 ppm | -0.0014 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0039 ppm | 14.0582 ppm | 0.0003 ppm | 0.2410 ppm | 0.0018 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration RSD | 60.0 % | 0.2 % | 62.4 % | 0.3 % | 9.9 % | 65.4 % | 17.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0874 ppm | 105.4447 % | 106.0170 % | 98.9013 % | 104.4166 % | 106.3664 % | 104.1610 % |
| Concentration per Run 1 | 0.0872 ppm | 104.9344 % | 105.8183 % | 98.9135 % | 103.6413 % | 106.0233 % | 104.2323 % |
| Concentration per Run 2 | 0.0874 ppm | 105.7991 % | 105.1096 % | 98.7459 % | 104.9785 % | 105.8263 % | 104.0913 % |
| Concentration per Run 3 | 0.0875 ppm | 105.6006 % | 107.1230 % | 99.0446 % | 104.6301 % | 107.2496 % | 104.1594 % |
| Concentration RSD | 0.1 % | 0.4 % | 1.0 % | 0.2 % | 0.7 % | 0.7 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974109-3 WG1974109
Analysis started at: 9/20/2024 9:30:51 AM
Rack 1
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0942 ppm | 3.8815 ppm | 0.1164 ppm | 0.9444 ppm | 3.8725 ppm | 0.0982 ppm | 144.6949 ppm |
| Concentration per Run 1 | 0.0949 ppm | 3.8930 ppm | 0.1120 ppm | 0.9507 ppm | 3.8802 ppm | 0.0985 ppm | 144.9112 ppm |
| Concentration per Run 2 | 0.0940 ppm | 3.8752 ppm | 0.1224 ppm | 0.9381 ppm | 3.8756 ppm | 0.0984 ppm | 144.8170 ppm |
| Concentration per Run 3 | 0.0937 ppm | 3.8761 ppm | 0.1148 ppm | 0.9443 ppm | 3.8617 ppm | 0.0978 ppm | 144.3564 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 4.6 % | 0.7 % | 0.2 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0938 ppm | 0.9168 ppm | 0.3734 ppm | 0.4822 ppm | 2.5676 ppm | 11.4056 ppm | 0.0044 ppm |
| Concentration per Run 1 | 0.0935 ppm | 0.9169 ppm | 0.3745 ppm | 0.4856 ppm | 2.5780 ppm | 11.4688 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0928 ppm | 0.9117 ppm | 0.3721 ppm | 0.4808 ppm | 2.5711 ppm | 11.4180 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.0949 ppm | 0.9218 ppm | 0.3735 ppm | 0.4802 ppm | 2.5536 ppm | 11.3300 ppm | 0.0037 ppm |
| Concentration RSD | 1.1 % | 0.5 % | 0.3 % | 0.6 % | 0.5 % | 0.6 % | 19.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.2359 ppm | 1.2302 ppm | 0.9844 ppm | 10.9643 ppm | 0.9157 ppm | 0.5388 ppm | 0.9454 ppm |
| Concentration per Run 1 | 15.2822 ppm | 1.2301 ppm | 0.9870 ppm | 10.9823 ppm | 0.9206 ppm | 0.5058 ppm | 0.9506 ppm |
| Concentration per Run 2 | 15.2277 ppm | 1.2332 ppm | 0.9804 ppm | 10.9618 ppm | 0.9137 ppm | 0.5634 ppm | 0.9417 ppm |
| Concentration per Run 3 | 15.1977 ppm | 1.2273 ppm | 0.9859 ppm | 10.9487 ppm | 0.9128 ppm | 0.5472 ppm | 0.9440 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.5 % | 5.5 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1156 ppm | 15.2247 ppm | 0.9405 ppm | 1.1768 ppm | 0.9733 ppm | 0.1136 ppm | 0.9522 ppm |
| Concentration per Run 1 | 0.1094 ppm | 15.3100 ppm | 0.9444 ppm | 1.1756 ppm | 0.9756 ppm | 0.1068 ppm | 0.9522 ppm |
| Concentration per Run 2 | 0.1220 ppm | 15.1693 ppm | 0.9362 ppm | 1.1791 ppm | 0.9740 ppm | 0.1189 ppm | 0.9504 ppm |
| Concentration per Run 3 | 0.1155 ppm | 15.1947 ppm | 0.9409 ppm | 1.1756 ppm | 0.9702 ppm | 0.1151 ppm | 0.9541 ppm |
| Concentration RSD | 5.5 % | 0.5 % | 0.4 % | 0.2 % | 0.3 % | 5.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9999 ppm | 105.0047 % | 104.4597 % | 97.2774 % | 104.2579 % | 105.1122 % | 103.1182 % |
| Concentration per Run 1 | 1.0019 ppm | 105.4864 % | 104.0749 % | 102.8426 % | 104.7374 % | 104.8507 % | 108.8410 % |
| Concentration per Run 2 | 0.9986 ppm | 105.2459 % | 105.0738 % | 93.2614 % | 104.3219 % | 105.5428 % | 98.9255 % |
| Concentration per Run 3 | 0.9992 ppm | 104.2818 % | 104.2303 % | 95.7281 % | 103.7143 % | 104.9432 % | 101.5882 % |
| Concentration RSD | 0.2 % | 0.6 % | 0.5 % | 5.1 % | 0.5 % | 0.4 % | 5.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974109-4 WG1974109
Analysis started at: 9/20/2024 9:34:43 AM
Rack 1
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.1405 ppm | 0.0010 ppm | 0.0088 ppm | 0.0755 ppm | 0.0001 ppm | 134.6572 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.1371 ppm | 0.0026 ppm | 0.0093 ppm | 0.0758 ppm | 0.0002 ppm | 134.8596 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.1418 ppm | -0.0023 ppm | 0.0078 ppm | 0.0751 ppm | 0.0001 ppm | 134.6391 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.1427 ppm | 0.0028 ppm | 0.0093 ppm | 0.0757 ppm | 0.0002 ppm | 134.4729 ppm |
| Concentration RSD | 44.4 % | 2.1 % | 275.3 % | 10.0 % | 0.5 % | 20.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0039 ppm | 0.0008 ppm | 0.0010 ppm | 0.6563 ppm | 1.3681 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0040 ppm | 0.0014 ppm | 0.0014 ppm | 0.6557 ppm | 1.4028 ppm | 0.0031 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0040 ppm | 0.0005 ppm | 0.0007 ppm | 0.6546 ppm | 1.3510 ppm | 0.0034 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0038 ppm | 0.0007 ppm | 0.0008 ppm | 0.6585 ppm | 1.3505 ppm | 0.0038 ppm |
| Concentration RSD | 45.1 % | 3.1 % | 55.4 % | 42.6 % | 0.3 % | 2.2 % | 10.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.0749 ppm | 0.2752 ppm | 0.0017 ppm | 0.8508 ppm | 0.0059 ppm | 0.0361 ppm | 0.0061 ppm |
| Concentration per Run 1 | 6.0758 ppm | 0.2754 ppm | 0.0015 ppm | 0.8581 ppm | 0.0063 ppm | 0.0347 ppm | 0.0045 ppm |
| Concentration per Run 2 | 6.0675 ppm | 0.2749 ppm | 0.0018 ppm | 0.8495 ppm | 0.0057 ppm | 0.0377 ppm | 0.0101 ppm |
| Concentration per Run 3 | 6.0813 ppm | 0.2752 ppm | 0.0016 ppm | 0.8447 ppm | 0.0058 ppm | 0.0359 ppm | 0.0037 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 8.5 % | 0.8 % | 5.7 % | 4.2 % | 56.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 13.9586 ppm | 0.0002 ppm | 0.2400 ppm | 0.0017 ppm | -0.0014 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0015 ppm | 13.9433 ppm | 0.0003 ppm | 0.2398 ppm | 0.0019 ppm | -0.0017 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0005 ppm | 13.9585 ppm | 0.0005 ppm | 0.2387 ppm | 0.0015 ppm | -0.0014 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0030 ppm | 13.9739 ppm | -0.0002 ppm | 0.2414 ppm | 0.0018 ppm | -0.0011 ppm | 0.0008 ppm |
| Concentration RSD | 132.8 % | 0.1 % | 148.8 % | 0.5 % | 11.1 % | 22.8 % | 30.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0876 ppm | 106.9025 % | 106.3887 % | 98.5314 % | 106.0687 % | 106.5897 % | 104.0278 % |
| Concentration per Run 1 | 0.0879 ppm | 106.4124 % | 106.4462 % | 98.3044 % | 105.5771 % | 106.4377 % | 103.8064 % |
| Concentration per Run 2 | 0.0878 ppm | 107.1025 % | 106.8077 % | 98.4557 % | 106.0018 % | 107.1878 % | 103.7638 % |
| Concentration per Run 3 | 0.0872 ppm | 107.1927 % | 105.9121 % | 98.8343 % | 106.6273 % | 106.1437 % | 104.5131 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.4 % | 0.3 % | 0.5 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-12 WG1973886
Analysis started at: 9/20/2024 9:38:35 AM
Rack 1
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.1377 ppm | -0.0003 ppm | 0.0027 ppm | 0.0645 ppm | 0.0000 ppm | 79.6166 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.1440 ppm | 0.0004 ppm | 0.0058 ppm | 0.0644 ppm | -0.0001 ppm | 79.3771 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.1402 ppm | -0.0007 ppm | 0.0006 ppm | 0.0647 ppm | 0.0000 ppm | 79.7310 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.1288 ppm | -0.0008 ppm | 0.0016 ppm | 0.0645 ppm | 0.0000 ppm | 79.7418 ppm |
| Concentration RSD | 75.5 % | 5.7 % | 194.6 % | 102.0 % | 0.2 % | 2,321.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0003 ppm | -0.0006 ppm | 0.0040 ppm | 0.0005 ppm | 1.6178 ppm | 0.0017 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0002 ppm | -0.0006 ppm | 0.0040 ppm | -0.0002 ppm | 1.6476 ppm | 0.0036 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0004 ppm | -0.0006 ppm | 0.0040 ppm | 0.0005 ppm | 1.6135 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0002 ppm | -0.0005 ppm | 0.0039 ppm | 0.0011 ppm | 1.5923 ppm | 0.0013 ppm |
| Concentration RSD | 42.1 % | 40.4 % | 8.0 % | 1.7 % | 133.9 % | 1.7 % | 104.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0001 ppm | 0.0022 ppm | 129.6149 ppm | 0.0007 ppm | -0.0009 ppm | 0.0071 ppm |
| Concentration per Run 1 | 0.0048 ppm | 0.0002 ppm | 0.0022 ppm | 128.8456 ppm | 0.0006 ppm | -0.0024 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0001 ppm | 0.0021 ppm | 129.6558 ppm | 0.0007 ppm | 0.0005 ppm | 0.0095 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0000 ppm | 0.0024 ppm | 130.3434 ppm | 0.0008 ppm | -0.0008 ppm | 0.0051 ppm |
| Concentration RSD | 83.1 % | 88.4 % | 7.0 % | 0.6 % | 13.6 % | 161.6 % | 31.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.2555 ppm | 0.0008 ppm | 0.2420 ppm | -0.0002 ppm | -0.0014 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.2584 ppm | 0.0006 ppm | 0.2416 ppm | -0.0001 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.2561 ppm | 0.0011 ppm | 0.2421 ppm | -0.0001 ppm | -0.0004 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.2522 ppm | 0.0008 ppm | 0.2423 ppm | -0.0005 ppm | -0.0035 ppm | -0.0002 ppm |
| Concentration RSD | 85.4 % | 1.2 % | 30.6 % | 0.1 % | 91.3 % | 124.1 % | 40.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 104.8571 % | 105.8763 % | 96.4460 % | 103.3834 % | 105.4432 % | 102.0540 % |
| Concentration per Run 1 | 0.0009 ppm | 105.4050 % | 106.0620 % | 96.1503 % | 104.3432 % | 105.2813 % | 101.7091 % |
| Concentration per Run 2 | 0.0007 ppm | 104.7370 % | 105.9692 % | 96.1818 % | 103.2198 % | 105.5157 % | 101.7840 % |
| Concentration per Run 3 | 0.0008 ppm | 104.4292 % | 105.5976 % | 97.0061 % | 102.5872 % | 105.5325 % | 102.6691 % |
| Concentration RSD | 15.1 % | 0.5 % | 0.2 % | 0.5 % | 0.9 % | 0.1 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-13 WG1973886
Analysis started at: 9/20/2024 9:42:29 AM
Rack 1
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.1424 ppm | 0.0006 ppm | 0.0038 ppm | 0.0190 ppm | 0.0000 ppm | 77.3656 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.1408 ppm | 0.0007 ppm | 0.0051 ppm | 0.0191 ppm | 0.0000 ppm | 76.9562 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.1458 ppm | 0.0009 ppm | 0.0037 ppm | 0.0189 ppm | 0.0000 ppm | 77.4815 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.1407 ppm | 0.0001 ppm | 0.0025 ppm | 0.0189 ppm | 0.0000 ppm | 77.6590 ppm |
| Concentration RSD | 7.1 % | 2.0 % | 79.1 % | 34.2 % | 0.7 % | 35.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | 0.0007 ppm | 0.0049 ppm | -0.0013 ppm | 1.1652 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0000 ppm | 0.0007 ppm | 0.0052 ppm | -0.0022 ppm | 1.2079 ppm | 0.0030 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0001 ppm | 0.0004 ppm | 0.0044 ppm | -0.0004 ppm | 1.1468 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0011 ppm | 0.0009 ppm | 0.0050 ppm | -0.0013 ppm | 1.1407 ppm | 0.0024 ppm |
| Concentration RSD | 17.2 % | 204.3 % | 43.4 % | 8.2 % | 70.2 % | 3.2 % | 84.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0077 ppm | 0.0000 ppm | 0.0010 ppm | 131.6219 ppm | 0.0003 ppm | -0.0013 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0075 ppm | 0.0000 ppm | 0.0011 ppm | 131.6177 ppm | 0.0002 ppm | -0.0018 ppm | 0.0037 ppm |
| Concentration per Run 2 | 0.0065 ppm | -0.0001 ppm | 0.0009 ppm | 131.9177 ppm | 0.0006 ppm | -0.0005 ppm | 0.0049 ppm |
| Concentration per Run 3 | 0.0089 ppm | 0.0001 ppm | 0.0010 ppm | 131.3301 ppm | 0.0001 ppm | -0.0017 ppm | -0.0011 ppm |
| Concentration RSD | 15.7 % | 559.5 % | 11.2 % | 0.2 % | 88.0 % | 52.4 % | 125.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.5151 ppm | 0.0004 ppm | 0.1898 ppm | -0.0001 ppm | -0.0009 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.5169 ppm | -0.0005 ppm | 0.1901 ppm | -0.0002 ppm | 0.0009 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0034 ppm | 0.5132 ppm | 0.0009 ppm | 0.1905 ppm | 0.0000 ppm | -0.0020 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0032 ppm | 0.5153 ppm | 0.0009 ppm | 0.1888 ppm | 0.0000 ppm | -0.0016 ppm | 0.0006 ppm |
| Concentration RSD | 625.3 % | 0.4 % | 192.6 % | 0.5 % | 203.8 % | 174.8 % | 2.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 104.1516 % | 105.7691 % | 97.2681 % | 102.3565 % | 105.7922 % | 102.8113 % |
| Concentration per Run 1 | 0.0008 ppm | 104.7118 % | 105.8312 % | 97.2696 % | 102.7134 % | 106.0544 % | 102.6710 % |
| Concentration per Run 2 | 0.0009 ppm | 103.9992 % | 105.4587 % | 97.5999 % | 102.2482 % | 105.3993 % | 103.5126 % |
| Concentration per Run 3 | 0.0007 ppm | 103.7438 % | 106.0173 % | 96.9347 % | 102.1080 % | 105.9229 % | 102.2502 % |
| Concentration RSD | 12.3 % | 0.5 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-15 WG1973886
Analysis started at: 9/20/2024 9:46:23 AM
Rack 1
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.1302 ppm | 0.0003 ppm | 0.0055 ppm | 0.0169 ppm | 0.0000 ppm | 76.1334 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.1282 ppm | 0.0031 ppm | 0.0043 ppm | 0.0171 ppm | 0.0001 ppm | 76.3203 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.1363 ppm | -0.0011 ppm | 0.0062 ppm | 0.0168 ppm | 0.0000 ppm | 76.2303 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.1261 ppm | -0.0011 ppm | 0.0059 ppm | 0.0167 ppm | 0.0000 ppm | 75.8496 ppm |
| Concentration RSD | 18.6 % | 4.1 % | 798.8 % | 19.1 % | 1.1 % | 455.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0000 ppm | 0.0035 ppm | 0.0052 ppm | -0.0005 ppm | 1.1553 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | 0.0035 ppm | 0.0056 ppm | 0.0012 ppm | 1.1841 ppm | 0.0032 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0003 ppm | 0.0036 ppm | 0.0047 ppm | 0.0001 ppm | 1.1617 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0003 ppm | 0.0034 ppm | 0.0052 ppm | -0.0027 ppm | 1.1202 ppm | -0.0001 ppm |
| Concentration RSD | 58.1 % | 763.3 % | 3.1 % | 8.6 % | 430.3 % | 2.8 % | 108.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0078 ppm | 0.0001 ppm | 0.0006 ppm | 133.9235 ppm | 0.0002 ppm | -0.0010 ppm | 0.0041 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.0000 ppm | 0.0009 ppm | 134.1476 ppm | 0.0008 ppm | -0.0002 ppm | 0.0066 ppm |
| Concentration per Run 2 | 0.0088 ppm | 0.0001 ppm | 0.0000 ppm | 133.9702 ppm | -0.0004 ppm | -0.0021 ppm | 0.0048 ppm |
| Concentration per Run 3 | 0.0096 ppm | 0.0002 ppm | 0.0008 ppm | 133.6527 ppm | 0.0003 ppm | -0.0006 ppm | 0.0009 ppm |
| Concentration RSD | 30.6 % | 95.8 % | 85.5 % | 0.2 % | 317.7 % | 99.5 % | 71.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.6216 ppm | 0.0002 ppm | 0.1710 ppm | 0.0001 ppm | -0.0004 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.6232 ppm | 0.0007 ppm | 0.1715 ppm | 0.0001 ppm | -0.0012 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.6200 ppm | 0.0009 ppm | 0.1711 ppm | 0.0002 ppm | -0.0013 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0062 ppm | 0.6216 ppm | -0.0009 ppm | 0.1704 ppm | 0.0000 ppm | 0.0015 ppm | 0.0008 ppm |
| Concentration RSD | 95.8 % | 0.3 % | 432.5 % | 0.3 % | 117.4 % | 436.5 % | 32.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 105.1390 % | 105.8684 % | 96.9606 % | 103.4774 % | 105.7853 % | 102.6394 % |
| Concentration per Run 1 | 0.0008 ppm | 105.2861 % | 104.9146 % | 97.1349 % | 103.7502 % | 105.3392 % | 102.8763 % |
| Concentration per Run 2 | 0.0006 ppm | 104.6084 % | 105.7385 % | 96.3937 % | 102.9332 % | 105.6239 % | 102.2630 % |
| Concentration per Run 3 | 0.0006 ppm | 105.5224 % | 106.9522 % | 97.3531 % | 103.7487 % | 106.3930 % | 102.7787 % |
| Concentration RSD | 17.7 % | 0.5 % | 1.0 % | 0.5 % | 0.5 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-04 WG1974109
Analysis started at: 9/20/2024 9:50:17 AM
Rack 1
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.2310 ppm | 0.0012 ppm | 0.0107 ppm | 0.1167 ppm | 0.0001 ppm | 132.8307 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.2333 ppm | -0.0010 ppm | 0.0118 ppm | 0.1166 ppm | 0.0001 ppm | 132.8420 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.2263 ppm | 0.0015 ppm | 0.0113 ppm | 0.1167 ppm | 0.0002 ppm | 133.0606 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.2334 ppm | 0.0029 ppm | 0.0089 ppm | 0.1168 ppm | 0.0001 ppm | 132.5896 ppm |
| Concentration RSD | 107.9 % | 1.8 % | 170.0 % | 14.6 % | 0.1 % | 24.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0032 ppm | 0.0006 ppm | 0.0023 ppm | 1.5787 ppm | 1.2193 ppm | 0.0044 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0037 ppm | 0.0005 ppm | 0.0020 ppm | 1.5793 ppm | 1.2275 ppm | 0.0065 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0028 ppm | 0.0009 ppm | 0.0028 ppm | 1.5826 ppm | 1.2184 ppm | 0.0037 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0033 ppm | 0.0003 ppm | 0.0022 ppm | 1.5743 ppm | 1.2118 ppm | 0.0031 ppm |
| Concentration RSD | 74.3 % | 15.0 % | 52.6 % | 17.1 % | 0.3 % | 0.6 % | 41.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.6983 ppm | 0.2832 ppm | 0.0005 ppm | 0.6880 ppm | 0.0088 ppm | 0.0436 ppm | 0.0055 ppm |
| Concentration per Run 1 | 5.6514 ppm | 0.2836 ppm | 0.0008 ppm | 0.6844 ppm | 0.0099 ppm | 0.0436 ppm | 0.0083 ppm |
| Concentration per Run 2 | 5.7356 ppm | 0.2826 ppm | 0.0004 ppm | 0.7016 ppm | 0.0085 ppm | 0.0431 ppm | 0.0040 ppm |
| Concentration per Run 3 | 5.7079 ppm | 0.2834 ppm | 0.0004 ppm | 0.6780 ppm | 0.0081 ppm | 0.0441 ppm | 0.0042 ppm |
| Concentration RSD | 0.8 % | 0.2 % | 48.0 % | 1.8 % | 10.7 % | 1.2 % | 44.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 8.4413 ppm | -0.0003 ppm | 0.2617 ppm | 0.0010 ppm | -0.0013 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0013 ppm | 8.3617 ppm | -0.0002 ppm | 0.2618 ppm | 0.0012 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0049 ppm | 8.4583 ppm | 0.0000 ppm | 0.2619 ppm | 0.0010 ppm | -0.0011 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0043 ppm | 8.5040 ppm | -0.0006 ppm | 0.2615 ppm | 0.0008 ppm | -0.0017 ppm | -0.0002 ppm |
| Concentration RSD | 54.6 % | 0.9 % | 105.5 % | 0.1 % | 23.9 % | 31.1 % | 23.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1633 ppm | 107.3318 % | 106.7193 % | 99.7967 % | 106.6772 % | 107.4995 % | 105.5654 % |
| Concentration per Run 1 | 0.1618 ppm | 107.6538 % | 107.2907 % | 100.0763 % | 107.1328 % | 107.8824 % | 105.9196 % |
| Concentration per Run 2 | 0.1643 ppm | 107.4371 % | 106.8859 % | 100.5457 % | 106.5399 % | 108.2285 % | 106.4666 % |
| Concentration per Run 3 | 0.1640 ppm | 106.9044 % | 105.9812 % | 98.7682 % | 106.3590 % | 106.3876 % | 104.3099 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.6 % | 0.9 % | 0.4 % | 0.9 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-05 WG1974109
Analysis started at: 9/20/2024 9:54:10 AM
Rack 1
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0121 ppm | 0.0008 ppm | 0.0122 ppm | 0.0670 ppm | 0.0000 ppm | 179.0420 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0115 ppm | 0.0011 ppm | 0.0101 ppm | 0.0672 ppm | 0.0000 ppm | 179.1337 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0138 ppm | 0.0000 ppm | 0.0137 ppm | 0.0671 ppm | 0.0000 ppm | 178.8906 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0111 ppm | 0.0013 ppm | 0.0129 ppm | 0.0666 ppm | 0.0000 ppm | 179.1015 ppm |
| Concentration RSD | 28.4 % | 11.7 % | 90.6 % | 15.4 % | 0.5 % | 70.7 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0006 ppm | 0.0006 ppm | 0.0031 ppm | -0.0035 ppm | 1.5477 ppm | 0.0060 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0002 ppm | 0.0009 ppm | 0.0034 ppm | -0.0039 ppm | 1.5618 ppm | 0.0082 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0007 ppm | 0.0002 ppm | 0.0029 ppm | -0.0043 ppm | 1.5606 ppm | 0.0052 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0012 ppm | 0.0007 ppm | 0.0030 ppm | -0.0023 ppm | 1.5209 ppm | 0.0046 ppm |
| Concentration RSD | 28.0 % | 121.3 % | 64.3 % | 7.4 % | 31.4 % | 1.5 % | 31.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.9307 ppm | 0.0994 ppm | 0.0011 ppm | 0.9512 ppm | 0.0036 ppm | -0.0004 ppm | 0.0041 ppm |
| Concentration per Run 1 | 6.9174 ppm | 0.0992 ppm | 0.0015 ppm | 0.9598 ppm | 0.0039 ppm | -0.0018 ppm | 0.0062 ppm |
| Concentration per Run 2 | 6.9534 ppm | 0.0993 ppm | 0.0007 ppm | 0.9444 ppm | 0.0029 ppm | 0.0016 ppm | 0.0036 ppm |
| Concentration per Run 3 | 6.9213 ppm | 0.0998 ppm | 0.0012 ppm | 0.9494 ppm | 0.0039 ppm | -0.0010 ppm | 0.0024 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 32.6 % | 0.8 % | 15.9 % | 425.1 % | 46.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 3.5879 ppm | 0.0002 ppm | 0.2980 ppm | 0.0001 ppm | -0.0024 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0015 ppm | 3.5926 ppm | 0.0013 ppm | 0.2994 ppm | 0.0002 ppm | -0.0010 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0037 ppm | 3.5930 ppm | -0.0004 ppm | 0.2981 ppm | -0.0002 ppm | -0.0024 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0037 ppm | 3.5782 ppm | -0.0003 ppm | 0.2966 ppm | 0.0003 ppm | -0.0038 ppm | 0.0006 ppm |
| Concentration RSD | 42.2 % | 0.2 % | 450.5 % | 0.5 % | 206.5 % | 58.2 % | 10.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 105.7776 % | 106.1379 % | 98.4236 % | 104.2515 % | 106.3515 % | 103.6159 % |
| Concentration per Run 1 | 0.0031 ppm | 107.0255 % | 106.4752 % | 98.3583 % | 105.3708 % | 106.8499 % | 103.6456 % |
| Concentration per Run 2 | 0.0034 ppm | 104.6840 % | 105.9312 % | 98.4948 % | 103.3184 % | 106.1778 % | 103.6187 % |
| Concentration per Run 3 | 0.0030 ppm | 105.6232 % | 106.0074 % | 98.4177 % | 104.0653 % | 106.0269 % | 103.5834 % |
| Concentration RSD | 6.5 % | 1.1 % | 0.3 % | 0.1 % | 1.0 % | 0.4 % | 0.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 9:58:02 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5035 ppm | 0.4753 ppm | 0.4739 ppm | 0.4898 ppm | 0.4914 ppm | 0.5000 ppm | 0.4848 ppm |
| Concentration per Run 1 | 0.4999 ppm | 0.4749 ppm | 0.4756 ppm | 0.4881 ppm | 0.4906 ppm | 0.4987 ppm | 0.4846 ppm |
| Concentration per Run 2 | 0.5052 ppm | 0.4691 ppm | 0.4761 ppm | 0.4903 ppm | 0.4924 ppm | 0.5005 ppm | 0.4862 ppm |
| Concentration per Run 3 | 0.5054 ppm | 0.4819 ppm | 0.4699 ppm | 0.4911 ppm | 0.4913 ppm | 0.5008 ppm | 0.4836 ppm |
| Recovery Percentage 1 | 100.699 % | 95.056 % | 94.777 % | 97.970 % | 98.286 % | 100.000 % | 96.964 % |
| Concentration RSD | 0.6 % | 1.4 % | 0.7 % | 0.3 % | 0.2 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4913 ppm | 0.4984 ppm | 0.4799 ppm | 0.4880 ppm | 0.4922 ppm | 5.0664 ppm | 0.4915 ppm |
| Concentration per Run 1 | 0.4854 ppm | 0.4966 ppm | 0.4775 ppm | 0.4867 ppm | 0.4940 ppm | 5.0980 ppm | 0.4912 ppm |
| Concentration per Run 2 | 0.4935 ppm | 0.4978 ppm | 0.4804 ppm | 0.4881 ppm | 0.4934 ppm | 5.0623 ppm | 0.4928 ppm |
| Concentration per Run 3 | 0.4949 ppm | 0.5008 ppm | 0.4817 ppm | 0.4893 ppm | 0.4891 ppm | 5.0389 ppm | 0.4904 ppm |
| Recovery Percentage 1 | 98.254 % | 99.676 % | 95.970 % | 97.602 % | 98.437 % | 101.328 % | 98.298 % |
| Concentration RSD | 1.1 % | 0.4 % | 0.5 % | 0.3 % | 0.5 % | 0.6 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4776 ppm | 0.4796 ppm | 0.4805 ppm | 9.6587 ppm | 0.4976 ppm | 0.4871 ppm | 0.5015 ppm |
| Concentration per Run 1 | 0.4745 ppm | 0.4790 ppm | 0.4772 ppm | 9.5589 ppm | 0.4939 ppm | 0.4868 ppm | 0.4986 ppm |
| Concentration per Run 2 | 0.4782 ppm | 0.4795 ppm | 0.4816 ppm | 9.7125 ppm | 0.5000 ppm | 0.4887 ppm | 0.5007 ppm |
| Concentration per Run 3 | 0.4801 ppm | 0.4802 ppm | 0.4826 ppm | 9.7046 ppm | 0.4989 ppm | 0.4858 ppm | 0.5053 ppm |
| Recovery Percentage 1 | 95.521 % | 95.914 % | 96.091 % | 96.587 % | 99.524 % | 97.422 % | 100.303 % |
| Concentration RSD | 0.6 % | 0.1 % | 0.6 % | 0.9 % | 0.7 % | 0.3 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4901 ppm | 5.3206 ppm | 0.4716 ppm | 0.4711 ppm | 0.4880 ppm | 0.4908 ppm | 0.4756 ppm |
| Concentration per Run 1 | 0.4930 ppm | 5.2717 ppm | 0.4720 ppm | 0.4699 ppm | 0.4855 ppm | 0.4903 ppm | 0.4749 ppm |
| Concentration per Run 2 | 0.4868 ppm | 5.3368 ppm | 0.4669 ppm | 0.4721 ppm | 0.4879 ppm | 0.4893 ppm | 0.4764 ppm |
| Concentration per Run 3 | 0.4905 ppm | 5.3533 ppm | 0.4758 ppm | 0.4714 ppm | 0.4907 ppm | 0.4928 ppm | 0.4755 ppm |
| Recovery Percentage 1 | 98.016 % | 101.345 % | 94.315 % | 94.229 % | 97.608 % | 98.158 % | 95.118 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.9 % | 0.2 % | 0.5 % | 0.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4949 ppm | 110.1546 % | 105.2641 % | 107.9545 % | 108.9812 % | 104.8160 % | 107.9217 % |
| Concentration per Run 1 | 0.4920 ppm | 110.0589 % | 105.1247 % | 108.1266 % | 109.0054 % | 104.5385 % | 108.2823 % |
| Concentration per Run 2 | 0.4950 ppm | 110.6046 % | 105.3684 % | 107.9739 % | 109.2919 % | 105.2019 % | 107.8383 % |
| Concentration per Run 3 | 0.4976 ppm | 109.8001 % | 105.2991 % | 107.7629 % | 108.6463 % | 104.7075 % | 107.6444 % |
| Recovery Percentage 1 | 98.973 % | | | | | | |
| Concentration RSD | 0.6 % | 0.4 % | 0.1 % | 0.2 % | 0.3 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 10:01:56 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0019 ppm | 0.0009 ppm | 0.0021 ppm | -0.0001 ppm | 0.0000 ppm | 0.0030 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0037 ppm | 0.0013 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.0009 ppm | -0.0043 ppm | 0.0005 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | 0.0055 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0063 ppm | 0.0009 ppm | 0.0036 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 12.643 % | 1.916 % | 18.155 % | 6.844 % | -0.709 % | 0.017 % | 2.972 % |
| Concentration RSD | 32.1 % | 287.6 % | 44.0 % | 88.1 % | 334.5 % | 3,234.3 % | 97.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0001 ppm | -0.0001 ppm | -0.0006 ppm | -0.0012 ppm | -0.0129 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0000 ppm | -0.0004 ppm | -0.0008 ppm | 0.0006 ppm | -0.0133 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0001 ppm | 0.0003 ppm | -0.0005 ppm | -0.0010 ppm | -0.0046 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm | -0.0005 ppm | -0.0032 ppm | -0.0207 ppm | 0.0019 ppm |
| Recovery Percentage 1 | 3.614 % | -0.302 % | -1.116 % | -5.739 % | -2.411 % | -0.514 % | 33.427 % |
| Concentration RSD | 52.9 % | 361.4 % | 350.2 % | 29.1 % | 160.7 % | 62.6 % | 10.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0001 ppm | 0.0008 ppm | -0.1724 ppm | -0.0004 ppm | -0.0008 ppm | 0.0033 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0001 ppm | 0.0008 ppm | -0.1673 ppm | 0.0002 ppm | -0.0016 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0001 ppm | 0.0005 ppm | -0.1789 ppm | -0.0007 ppm | -0.0014 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.0000 ppm | 0.0011 ppm | -0.1709 ppm | -0.0006 ppm | 0.0007 ppm | 0.0025 ppm |
| Recovery Percentage 1 | 0.789 % | 0.565 % | 1.614 % | -8.618 % | -1.446 % | -7.740 % | 6.577 % |
| Concentration RSD | 96.4 % | 114.7 % | 38.7 % | 3.4 % | 138.5 % | 162.2 % | 27.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0027 ppm | 0.0004 ppm | -0.0001 ppm | 0.0002 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0016 ppm | -0.0011 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0028 ppm | -0.0023 ppm | 0.0009 ppm | -0.0001 ppm | -0.0002 ppm | -0.0024 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0048 ppm | 0.0004 ppm | -0.0001 ppm | 0.0006 ppm | 0.0005 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 11.560 % | -0.545 % | 0.757 % | -0.866 % | 1.758 % | -2.855 % | -2.371 % |
| Concentration RSD | 164.7 % | 68.7 % | 133.4 % | 21.2 % | 209.5 % | 279.9 % | 74.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 108.6903 % | 105.3248 % | 107.0858 % | 110.0184 % | 106.4512 % | 107.6883 % |
| Concentration per Run 1 | 0.0002 ppm | 109.1610 % | 104.9261 % | 107.3106 % | 110.9302 % | 105.9733 % | 107.9261 % |
| Concentration per Run 2 | 0.0007 ppm | 108.4384 % | 106.0415 % | 107.6327 % | 110.0019 % | 106.8314 % | 108.2376 % |
| Concentration per Run 3 | 0.0004 ppm | 108.4715 % | 105.0069 % | 106.3140 % | 109.1233 % | 106.5487 % | 106.9012 % |
| Recovery Percentage 1 | 8.306 % | | | | | | |
| Concentration RSD | 59.1 % | 0.4 % | 0.6 % | 0.6 % | 0.8 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973896-1 WG1973896
Analysis started at: 9/20/2024 10:13:02 AM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0156 ppm | -0.0014 ppm | 0.0011 ppm | -0.0001 ppm | 0.0000 ppm | 0.0140 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0116 ppm | 0.0007 ppm | 0.0013 ppm | -0.0003 ppm | 0.0000 ppm | 0.0211 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0123 ppm | -0.0030 ppm | 0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0076 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0229 ppm | -0.0020 ppm | 0.0014 ppm | -0.0001 ppm | 0.0001 ppm | 0.0134 ppm |
| Recovery Percentage 1 | 10.042 % | 15.586 % | -28.242 % | 3.748 % | -0.596 % | 0.978 % | 14.050 % |
| Concentration RSD | 74.9 % | 40.6 % | 137.5 % | 38.9 % | 391.5 % | 43.2 % | 48.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0007 ppm | -0.0011 ppm | -0.0002 ppm | -0.0003 ppm | -0.0136 ppm | 0.0017 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0003 ppm | -0.0014 ppm | -0.0006 ppm | -0.0004 ppm | -0.0250 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0017 ppm | -0.0011 ppm | -0.0001 ppm | -0.0014 ppm | -0.0191 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | -0.0008 ppm | 0.0000 ppm | 0.0008 ppm | 0.0032 ppm | 0.0017 ppm |
| Recovery Percentage 1 | -0.860 % | -3.688 % | -11.163 % | -2.346 % | -0.650 % | -0.545 % | 33.564 % |
| Concentration RSD | 277.4 % | 111.7 % | 27.0 % | 123.6 % | 346.7 % | 109.3 % | 3.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | -0.0001 ppm | -0.0002 ppm | -0.1392 ppm | -0.0013 ppm | -0.0021 ppm | 0.0069 ppm |
| Concentration per Run 1 | 0.0033 ppm | -0.0002 ppm | 0.0000 ppm | -0.1435 ppm | -0.0005 ppm | -0.0022 ppm | 0.0103 ppm |
| Concentration per Run 2 | 0.0043 ppm | -0.0001 ppm | -0.0002 ppm | -0.1375 ppm | -0.0009 ppm | -0.0013 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0043 ppm | 0.0002 ppm | -0.0005 ppm | -0.1365 ppm | -0.0024 ppm | -0.0027 ppm | 0.0101 ppm |
| Recovery Percentage 1 | 3.971 % | -0.568 % | -0.460 % | -6.959 % | -5.122 % | -20.747 % | 13.763 % |
| Concentration RSD | 13.7 % | 350.9 % | 115.8 % | 2.7 % | 78.1 % | 35.5 % | 83.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0128 ppm | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm | -0.0020 ppm | -0.0006 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0114 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | -0.0016 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0035 ppm | 0.0126 ppm | -0.0014 ppm | 0.0000 ppm | 0.0002 ppm | -0.0026 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0142 ppm | 0.0002 ppm | 0.0000 ppm | 0.0003 ppm | -0.0020 ppm | -0.0010 ppm |
| Recovery Percentage 1 | 13.425 % | 2.551 % | -0.599 % | -0.076 % | 2.277 % | -10.221 % | -5.669 % |
| Concentration RSD | 195.8 % | 11.0 % | 313.7 % | 277.5 % | 25.2 % | 25.8 % | 84.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 104.8117 % | 105.3135 % | 100.9181 % | 104.2002 % | 106.3010 % | 102.9486 % |
| Concentration per Run 1 | 0.0005 ppm | 104.2064 % | 105.7339 % | 101.0320 % | 103.8196 % | 106.3424 % | 103.1266 % |
| Concentration per Run 2 | 0.0007 ppm | 105.4936 % | 104.1757 % | 100.4069 % | 104.6794 % | 105.5764 % | 102.5499 % |
| Concentration per Run 3 | 0.0003 ppm | 104.7352 % | 106.0310 % | 101.3154 % | 104.1015 % | 106.9843 % | 103.1693 % |
| Recovery Percentage 1 | 10.122 % | | | | | | |
| Concentration RSD | 34.0 % | 0.6 % | 0.9 % | 0.5 % | 0.4 % | 0.7 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973896-2 WG1973896
Analysis started at: 9/20/2024 10:17:16 AM
Rack 1
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0474 ppm | 1.8501 ppm | 0.1102 ppm | 0.9312 ppm | 1.8813 ppm | 0.0475 ppm | 9.7309 ppm |
| Concentration per Run 1 | 0.0477 ppm | 1.8603 ppm | 0.1100 ppm | 0.9341 ppm | 1.8864 ppm | 0.0475 ppm | 9.7216 ppm |
| Concentration per Run 2 | 0.0476 ppm | 1.8405 ppm | 0.1098 ppm | 0.9277 ppm | 1.8858 ppm | 0.0474 ppm | 9.7746 ppm |
| Concentration per Run 3 | 0.0468 ppm | 1.8495 ppm | 0.1108 ppm | 0.9318 ppm | 1.8718 ppm | 0.0475 ppm | 9.6966 ppm |
| Concentration RSD | 1.0 % | 0.5 % | 0.5 % | 0.3 % | 0.4 % | 0.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0491 ppm | 0.4680 ppm | 0.1856 ppm | 0.2400 ppm | 0.9524 ppm | 9.8674 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0490 ppm | 0.4668 ppm | 0.1857 ppm | 0.2389 ppm | 0.9538 ppm | 9.9132 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0490 ppm | 0.4673 ppm | 0.1852 ppm | 0.2400 ppm | 0.9529 ppm | 9.8786 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0493 ppm | 0.4699 ppm | 0.1860 ppm | 0.2410 ppm | 0.9506 ppm | 9.8103 ppm | 0.0012 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.5 % | 69.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5355 ppm | 0.4718 ppm | 0.9877 ppm | 9.7072 ppm | 0.4704 ppm | 0.5001 ppm | 0.4659 ppm |
| Concentration per Run 1 | 9.5345 ppm | 0.4706 ppm | 0.9817 ppm | 9.6889 ppm | 0.4721 ppm | 0.4997 ppm | 0.4665 ppm |
| Concentration per Run 2 | 9.5665 ppm | 0.4726 ppm | 0.9883 ppm | 9.7498 ppm | 0.4689 ppm | 0.5020 ppm | 0.4691 ppm |
| Concentration per Run 3 | 9.5055 ppm | 0.4721 ppm | 0.9930 ppm | 9.6829 ppm | 0.4703 ppm | 0.4986 ppm | 0.4621 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.6 % | 0.4 % | 0.3 % | 0.3 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1108 ppm | 1.0277 ppm | 0.9456 ppm | 0.9285 ppm | 0.9779 ppm | 0.1137 ppm | 0.4718 ppm |
| Concentration per Run 1 | 0.1095 ppm | 1.0254 ppm | 0.9468 ppm | 0.9308 ppm | 0.9777 ppm | 0.1134 ppm | 0.4722 ppm |
| Concentration per Run 2 | 0.1145 ppm | 1.0287 ppm | 0.9404 ppm | 0.9313 ppm | 0.9835 ppm | 0.1140 ppm | 0.4717 ppm |
| Concentration per Run 3 | 0.1086 ppm | 1.0290 ppm | 0.9497 ppm | 0.9235 ppm | 0.9724 ppm | 0.1138 ppm | 0.4715 ppm |
| Concentration RSD | 2.9 % | 0.2 % | 0.5 % | 0.5 % | 0.6 % | 0.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4648 ppm | 108.3922 % | 105.8573 % | 104.8207 % | 107.3561 % | 105.8007 % | 106.8186 % |
| Concentration per Run 1 | 0.4654 ppm | 108.0790 % | 105.0529 % | 105.3339 % | 106.8558 % | 104.9573 % | 107.2103 % |
| Concentration per Run 2 | 0.4651 ppm | 109.3417 % | 105.8489 % | 104.7822 % | 108.1668 % | 106.2537 % | 106.7489 % |
| Concentration per Run 3 | 0.4639 ppm | 107.7560 % | 106.6699 % | 104.3460 % | 107.0457 % | 106.1912 % | 106.4966 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.8 % | 0.5 % | 0.7 % | 0.7 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453207-09 WG1973896
Analysis started at: 9/20/2024 10:21:11 AM
Rack 1
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0289 ppm | -0.0015 ppm | 0.0026 ppm | 0.0336 ppm | 0.0000 ppm | 171.0589 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0280 ppm | -0.0030 ppm | 0.0038 ppm | 0.0339 ppm | 0.0000 ppm | 170.8876 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0269 ppm | -0.0021 ppm | 0.0006 ppm | 0.0334 ppm | 0.0001 ppm | 171.0043 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0317 ppm | 0.0007 ppm | 0.0034 ppm | 0.0333 ppm | 0.0000 ppm | 171.2848 ppm |
| Concentration RSD | 34.9 % | 8.7 % | 134.5 % | 66.2 % | 1.0 % | 139.9 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0003 ppm | 0.0025 ppm | 0.0006 ppm | -0.0027 ppm | 2.8157 ppm | 0.0039 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0000 ppm | 0.0026 ppm | 0.0005 ppm | -0.0027 ppm | 2.8439 ppm | 0.0042 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0002 ppm | 0.0026 ppm | 0.0006 ppm | -0.0012 ppm | 2.7722 ppm | 0.0049 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0006 ppm | 0.0023 ppm | 0.0006 ppm | -0.0041 ppm | 2.8310 ppm | 0.0025 ppm |
| Concentration RSD | 20.2 % | 115.3 % | 6.0 % | 16.5 % | 53.9 % | 1.4 % | 32.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0160 ppm | 0.0000 ppm | 0.0025 ppm | 2.3126 ppm | -0.0004 ppm | -0.0015 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0158 ppm | 0.0002 ppm | 0.0024 ppm | 2.3178 ppm | -0.0005 ppm | -0.0015 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0148 ppm | 0.0000 ppm | 0.0028 ppm | 2.3165 ppm | -0.0011 ppm | -0.0012 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0175 ppm | -0.0001 ppm | 0.0024 ppm | 2.3036 ppm | 0.0005 ppm | -0.0019 ppm | 0.0030 ppm |
| Concentration RSD | 8.6 % | 344.4 % | 8.8 % | 0.3 % | 219.3 % | 23.2 % | 164.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 0.3849 ppm | 0.0004 ppm | 0.4049 ppm | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0055 ppm | 0.3865 ppm | 0.0011 ppm | 0.4045 ppm | 0.0003 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.3852 ppm | 0.0001 ppm | 0.4007 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0035 ppm | 0.3829 ppm | -0.0001 ppm | 0.4094 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration RSD | 45.5 % | 0.5 % | 175.7 % | 1.1 % | 173.7 % | 438.2 % | 9.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 106.2171 % | 106.0515 % | 98.0384 % | 105.0184 % | 105.9477 % | 103.2492 % |
| Concentration per Run 1 | 0.0005 ppm | 106.8084 % | 105.4138 % | 97.7634 % | 105.6368 % | 105.1223 % | 102.8514 % |
| Concentration per Run 2 | 0.0004 ppm | 106.0087 % | 107.0653 % | 98.0252 % | 104.8297 % | 106.9744 % | 103.2324 % |
| Concentration per Run 3 | 0.0008 ppm | 105.8342 % | 105.6754 % | 98.3266 % | 104.5886 % | 105.7464 % | 103.6638 % |
| Concentration RSD | 29.3 % | 0.5 % | 0.8 % | 0.3 % | 0.5 % | 0.9 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973896-3 WG1973896
Analysis started at: 9/20/2024 10:25:05 AM
Rack 1
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0470 ppm | 1.8927 ppm | 0.1183 ppm | 0.9189 ppm | 1.9187 ppm | 0.0470 ppm | 191.9297 ppm |
| Concentration per Run 1 | 0.0469 ppm | 1.9026 ppm | 0.1187 ppm | 0.9175 ppm | 1.9126 ppm | 0.0469 ppm | 191.5123 ppm |
| Concentration per Run 2 | 0.0475 ppm | 1.8967 ppm | 0.1182 ppm | 0.9166 ppm | 1.9236 ppm | 0.0470 ppm | 192.3151 ppm |
| Concentration per Run 3 | 0.0467 ppm | 1.8789 ppm | 0.1179 ppm | 0.9226 ppm | 1.9200 ppm | 0.0470 ppm | 191.9616 ppm |
| Concentration RSD | 1.0 % | 0.7 % | 0.3 % | 0.4 % | 0.3 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0475 ppm | 0.4509 ppm | 0.1838 ppm | 0.2358 ppm | 0.9357 ppm | 13.0299 ppm | 0.0045 ppm |
| Concentration per Run 1 | 0.0473 ppm | 0.4491 ppm | 0.1844 ppm | 0.2350 ppm | 0.9323 ppm | 13.0166 ppm | 0.0052 ppm |
| Concentration per Run 2 | 0.0474 ppm | 0.4504 ppm | 0.1834 ppm | 0.2371 ppm | 0.9371 ppm | 13.0616 ppm | 0.0038 ppm |
| Concentration per Run 3 | 0.0478 ppm | 0.4533 ppm | 0.1836 ppm | 0.2352 ppm | 0.9376 ppm | 13.0114 ppm | 0.0045 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 0.3 % | 0.5 % | 0.3 % | 0.2 % | 15.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.1757 ppm | 0.4653 ppm | 0.9788 ppm | 12.4645 ppm | 0.4486 ppm | 0.5050 ppm | 0.4671 ppm |
| Concentration per Run 1 | 9.1810 ppm | 0.4648 ppm | 0.9723 ppm | 12.4754 ppm | 0.4510 ppm | 0.5046 ppm | 0.4646 ppm |
| Concentration per Run 2 | 9.1756 ppm | 0.4657 ppm | 0.9793 ppm | 12.4800 ppm | 0.4458 ppm | 0.5046 ppm | 0.4707 ppm |
| Concentration per Run 3 | 9.1703 ppm | 0.4655 ppm | 0.9848 ppm | 12.4381 ppm | 0.4490 ppm | 0.5060 ppm | 0.4659 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.6 % | 0.2 % | 0.6 % | 0.2 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1147 ppm | 1.4541 ppm | 0.9201 ppm | 1.3611 ppm | 0.9692 ppm | 0.1108 ppm | 0.4710 ppm |
| Concentration per Run 1 | 0.1105 ppm | 1.4500 ppm | 0.9206 ppm | 1.3581 ppm | 0.9724 ppm | 0.1131 ppm | 0.4705 ppm |
| Concentration per Run 2 | 0.1145 ppm | 1.4591 ppm | 0.9164 ppm | 1.3639 ppm | 0.9672 ppm | 0.1080 ppm | 0.4712 ppm |
| Concentration per Run 3 | 0.1190 ppm | 1.4531 ppm | 0.9233 ppm | 1.3614 ppm | 0.9680 ppm | 0.1114 ppm | 0.4713 ppm |
| Concentration RSD | 3.7 % | 0.3 % | 0.4 % | 0.2 % | 0.3 % | 2.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4492 ppm | 106.3241 % | 104.9307 % | 97.2301 % | 105.0495 % | 104.7764 % | 102.3292 % |
| Concentration per Run 1 | 0.4506 ppm | 106.1125 % | 105.7905 % | 96.6610 % | 104.5436 % | 105.4005 % | 101.8151 % |
| Concentration per Run 2 | 0.4464 ppm | 107.0772 % | 104.2690 % | 98.0541 % | 106.0765 % | 104.2886 % | 103.3171 % |
| Concentration per Run 3 | 0.4506 ppm | 105.7825 % | 104.7326 % | 96.9752 % | 104.5283 % | 104.6402 % | 101.8553 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.7 % | 0.8 % | 0.8 % | 0.5 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973896-4 WG1973896
Analysis started at: 9/20/2024 10:29:01 AM
Rack 1
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0222 ppm | **0.0033 ppm** | 0.0040 ppm | 0.0362 ppm | 0.0000 ppm | 184.6533 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0259 ppm | 0.0008 ppm | 0.0047 ppm | 0.0360 ppm | 0.0000 ppm | 184.5921 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0131 ppm | 0.0058 ppm | 0.0038 ppm | 0.0363 ppm | 0.0000 ppm | 183.7171 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0277 ppm | 0.0031 ppm | 0.0036 ppm | 0.0362 ppm | 0.0000 ppm | 185.6505 ppm |
| Concentration RSD | 57.6 % | 35.9 % | **77.2 %** | 14.3 % | 0.4 % | 263.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0003 ppm | 0.0029 ppm | 0.0005 ppm | -0.0017 ppm | 3.0506 ppm | 0.0047 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0002 ppm | 0.0034 ppm | 0.0003 ppm | -0.0013 ppm | 3.0418 ppm | 0.0062 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0003 ppm | 0.0028 ppm | 0.0009 ppm | -0.0022 ppm | 3.0675 ppm | 0.0052 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0007 ppm | 0.0026 ppm | 0.0004 ppm | -0.0016 ppm | 3.0425 ppm | 0.0028 ppm |
| Concentration RSD | 14.0 % | 152.1 % | 13.3 % | 54.6 % | 26.5 % | 0.5 % | 36.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0192 ppm | 0.0002 ppm | 0.0027 ppm | 2.5059 ppm | -0.0011 ppm | -0.0005 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0197 ppm | 0.0003 ppm | 0.0030 ppm | 2.5054 ppm | -0.0015 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0192 ppm | 0.0000 ppm | 0.0028 ppm | 2.5031 ppm | -0.0010 ppm | 0.0002 ppm | 0.0053 ppm |
| Concentration per Run 3 | 0.0188 ppm | 0.0002 ppm | 0.0024 ppm | 2.5092 ppm | -0.0007 ppm | -0.0018 ppm | 0.0088 ppm |
| Concentration RSD | 2.2 % | 105.4 % | 10.5 % | 0.1 % | 41.8 % | 211.5 % | 84.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.4106 ppm | 0.0003 ppm | 0.4363 ppm | 0.0000 ppm | -0.0024 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.4049 ppm | 0.0008 ppm | 0.4332 ppm | 0.0006 ppm | -0.0025 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.4121 ppm | 0.0007 ppm | 0.4371 ppm | -0.0004 ppm | -0.0026 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0062 ppm | 0.4147 ppm | -0.0007 ppm | 0.4385 ppm | -0.0003 ppm | -0.0021 ppm | -0.0003 ppm |
| Concentration RSD | 38.4 % | 1.2 % | 276.2 % | 0.6 % | 4,994.0 % | 11.6 % | 375.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 105.9280 % | 105.5564 % | 97.3083 % | 104.4813 % | 105.4771 % | 102.4874 % |
| Concentration per Run 1 | 0.0005 ppm | 106.3590 % | 105.3793 % | 97.5626 % | 105.0712 % | 105.3061 % | 102.8493 % |
| Concentration per Run 2 | 0.0005 ppm | 105.5768 % | 106.2469 % | 97.4772 % | 104.1101 % | 105.9668 % | 102.5363 % |
| Concentration per Run 3 | 0.0006 ppm | 105.8482 % | 105.0429 % | 96.8850 % | 104.2626 % | 105.1583 % | 102.0767 % |
| Concentration RSD | 11.7 % | 0.4 % | 0.6 % | 0.4 % | 0.5 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453207-10 WG1973896
Analysis started at: 9/20/2024 10:32:53 AM
Rack 1
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0215 ppm | 0.0009 ppm | 0.0048 ppm | 0.0279 ppm | 0.0000 ppm | 185.7030 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0274 ppm | 0.0030 ppm | 0.0056 ppm | 0.0277 ppm | 0.0000 ppm | 185.2455 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0255 ppm | 0.0007 ppm | 0.0058 ppm | 0.0280 ppm | -0.0001 ppm | 186.6330 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0116 ppm | -0.0010 ppm | 0.0029 ppm | 0.0280 ppm | 0.0000 ppm | 185.2306 ppm |
| Concentration RSD | 72.3 % | 40.3 % | 227.1 % | 33.6 % | 0.6 % | 126.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0006 ppm | 0.0050 ppm | 0.0008 ppm | -0.0020 ppm | 3.2867 ppm | 0.0047 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0009 ppm | 0.0047 ppm | 0.0008 ppm | -0.0012 ppm | 3.3237 ppm | 0.0048 ppm |
| Concentration per Run 2 | -0.0010 ppm | -0.0003 ppm | 0.0054 ppm | 0.0011 ppm | -0.0036 ppm | 3.3093 ppm | 0.0052 ppm |
| Concentration per Run 3 | -0.0008 ppm | -0.0006 ppm | 0.0049 ppm | 0.0006 ppm | -0.0013 ppm | 3.2271 ppm | 0.0042 ppm |
| Concentration RSD | 10.9 % | 51.7 % | 6.9 % | 29.2 % | 67.8 % | 1.6 % | 11.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0327 ppm | 0.0001 ppm | 0.0017 ppm | 2.3645 ppm | -0.0008 ppm | -0.0011 ppm | 0.0044 ppm |
| Concentration per Run 1 | 0.0329 ppm | 0.0003 ppm | 0.0019 ppm | 2.3452 ppm | -0.0008 ppm | -0.0002 ppm | 0.0049 ppm |
| Concentration per Run 2 | 0.0337 ppm | 0.0000 ppm | 0.0017 ppm | 2.3872 ppm | -0.0009 ppm | -0.0014 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0316 ppm | 0.0000 ppm | 0.0017 ppm | 2.3611 ppm | -0.0007 ppm | -0.0018 ppm | 0.0082 ppm |
| Concentration RSD | 3.2 % | 145.4 % | 5.9 % | 0.9 % | 14.6 % | 77.1 % | 93.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.7494 ppm | -0.0001 ppm | 0.4088 ppm | 0.0003 ppm | -0.0009 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0026 ppm | 0.7530 ppm | 0.0004 ppm | 0.4099 ppm | 0.0001 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0037 ppm | 0.7500 ppm | 0.0002 ppm | 0.4095 ppm | 0.0003 ppm | -0.0014 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.7452 ppm | -0.0007 ppm | 0.4070 ppm | 0.0005 ppm | -0.0011 ppm | 0.0005 ppm |
| Concentration RSD | 431.9 % | 0.5 % | 1,026.9 % | 0.4 % | 60.7 % | 63.4 % | 42.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 106.5785 % | 106.4927 % | 98.0456 % | 105.2276 % | 106.2206 % | 103.3462 % |
| Concentration per Run 1 | 0.0007 ppm | 105.9947 % | 106.6264 % | 98.3392 % | 104.4760 % | 105.7729 % | 103.4186 % |
| Concentration per Run 2 | 0.0003 ppm | 107.3590 % | 104.7547 % | 97.3134 % | 106.0698 % | 104.6407 % | 103.1190 % |
| Concentration per Run 3 | 0.0002 ppm | 106.3820 % | 108.0969 % | 98.4842 % | 105.1369 % | 108.2481 % | 103.5009 % |
| Concentration RSD | 65.3 % | 0.7 % | 1.6 % | 0.7 % | 0.8 % | 1.7 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-14 WG1974109
Analysis started at: 9/20/2024 10:36:45 AM
Rack 1
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0143 ppm | 0.0030 ppm | 0.0091 ppm | 0.0440 ppm | 0.0000 ppm | 178.9486 ppm |
| Concentration per Run 1 | 0.0014 ppm | -0.0218 ppm | 0.0030 ppm | 0.0079 ppm | 0.0443 ppm | 0.0000 ppm | 178.1158 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0161 ppm | 0.0029 ppm | 0.0099 ppm | 0.0436 ppm | 0.0001 ppm | 179.5044 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0051 ppm | 0.0031 ppm | 0.0096 ppm | 0.0441 ppm | 0.0000 ppm | 179.2256 ppm |
| Concentration RSD | 61.4 % | 59.1 % | 3.3 % | 12.2 % | 0.8 % | 195.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 0.0005 ppm | 0.0002 ppm | 0.0101 ppm | -0.0029 ppm | 1.5894 ppm | 0.0038 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0008 ppm | 0.0003 ppm | 0.0102 ppm | -0.0050 ppm | 1.5965 ppm | 0.0051 ppm |
| Concentration per Run 2 | -0.0010 ppm | 0.0001 ppm | -0.0002 ppm | 0.0100 ppm | -0.0021 ppm | 1.6012 ppm | 0.0031 ppm |
| Concentration per Run 3 | -0.0011 ppm | 0.0006 ppm | 0.0005 ppm | 0.0100 ppm | -0.0016 ppm | 1.5704 ppm | 0.0032 ppm |
| Concentration RSD | 12.3 % | 79.9 % | 176.0 % | 0.9 % | 62.0 % | 1.0 % | 29.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.3756 ppm | 0.0003 ppm | 0.0017 ppm | 1.0623 ppm | 0.0019 ppm | -0.0021 ppm | 0.0053 ppm |
| Concentration per Run 1 | 4.3744 ppm | 0.0004 ppm | 0.0018 ppm | 1.0595 ppm | 0.0028 ppm | -0.0031 ppm | 0.0044 ppm |
| Concentration per Run 2 | 4.3588 ppm | 0.0001 ppm | 0.0019 ppm | 1.0668 ppm | 0.0014 ppm | -0.0010 ppm | 0.0060 ppm |
| Concentration per Run 3 | 4.3937 ppm | 0.0005 ppm | 0.0014 ppm | 1.0605 ppm | 0.0014 ppm | -0.0020 ppm | 0.0055 ppm |
| Concentration RSD | 0.4 % | 62.8 % | 14.3 % | 0.4 % | 41.7 % | 50.4 % | 15.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 1.5009 ppm | -0.0001 ppm | 0.3199 ppm | 0.0001 ppm | -0.0011 ppm | 0.0053 ppm |
| Concentration per Run 1 | 0.0024 ppm | 1.5025 ppm | -0.0001 ppm | 0.3199 ppm | 0.0004 ppm | -0.0039 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0047 ppm | 1.4987 ppm | -0.0002 ppm | 0.3192 ppm | 0.0000 ppm | 0.0012 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0075 ppm | 1.5016 ppm | 0.0002 ppm | 0.3208 ppm | 0.0000 ppm | -0.0008 ppm | 0.0055 ppm |
| Concentration RSD | 51.6 % | 0.1 % | 397.8 % | 0.2 % | 210.3 % | 225.2 % | 3.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 105.7983 % | 104.9104 % | 98.1737 % | 104.3789 % | 104.6321 % | 103.1152 % |
| Concentration per Run 1 | 0.0004 ppm | 106.7896 % | 105.9412 % | 97.7527 % | 105.1040 % | 104.9481 % | 102.8200 % |
| Concentration per Run 2 | 0.0004 ppm | 105.7602 % | 104.7181 % | 99.0554 % | 104.5812 % | 105.2118 % | 104.3008 % |
| Concentration per Run 3 | 0.0005 ppm | 104.8450 % | 104.0719 % | 97.7131 % | 103.4516 % | 103.7365 % | 102.2249 % |
| Concentration RSD | 12.3 % | 0.9 % | 0.9 % | 0.8 % | 0.8 % | 0.8 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-16 WG1974109
Analysis started at: 9/20/2024 10:40:39 AM
Rack 1
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | -0.0120 ppm | 0.0034 ppm | 0.0083 ppm | 0.0382 ppm | 0.0000 ppm | 177.6472 ppm |
| Concentration per Run 1 | 0.0012 ppm | -0.0103 ppm | 0.0046 ppm | 0.0090 ppm | 0.0381 ppm | 0.0000 ppm | 177.4705 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0144 ppm | 0.0030 ppm | 0.0079 ppm | 0.0383 ppm | 0.0000 ppm | 178.1278 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0114 ppm | 0.0026 ppm | 0.0080 ppm | 0.0382 ppm | 0.0000 ppm | 177.3433 ppm |
| Concentration RSD | 28.3 % | 17.7 % | 30.4 % | 7.0 % | 0.3 % | 307.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0005 ppm | -0.0006 ppm | 0.0008 ppm | -0.0022 ppm | 1.6715 ppm | 0.0051 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0011 ppm | -0.0008 ppm | 0.0007 ppm | -0.0022 ppm | 1.6871 ppm | 0.0065 ppm |
| Concentration per Run 2 | -0.0009 ppm | -0.0003 ppm | -0.0007 ppm | 0.0012 ppm | -0.0021 ppm | 1.6829 ppm | 0.0047 ppm |
| Concentration per Run 3 | -0.0008 ppm | -0.0002 ppm | -0.0004 ppm | 0.0005 ppm | -0.0022 ppm | 1.6445 ppm | 0.0042 ppm |
| Concentration RSD | 6.0 % | 100.4 % | 37.8 % | 46.1 % | 2.6 % | 1.4 % | 23.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.8989 ppm | 0.0002 ppm | 0.0031 ppm | 0.9325 ppm | 0.0002 ppm | -0.0018 ppm | 0.0048 ppm |
| Concentration per Run 1 | 3.8910 ppm | 0.0002 ppm | 0.0031 ppm | 0.9350 ppm | -0.0002 ppm | -0.0009 ppm | 0.0078 ppm |
| Concentration per Run 2 | 3.8950 ppm | 0.0000 ppm | 0.0026 ppm | 0.9325 ppm | 0.0006 ppm | -0.0033 ppm | -0.0007 ppm |
| Concentration per Run 3 | 3.9105 ppm | 0.0004 ppm | 0.0035 ppm | 0.9300 ppm | 0.0003 ppm | -0.0013 ppm | 0.0071 ppm |
| Concentration RSD | 0.3 % | 93.0 % | 13.9 % | 0.3 % | 194.3 % | 70.7 % | 99.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 1.2330 ppm | 0.0007 ppm | 0.3161 ppm | -0.0001 ppm | -0.0011 ppm | 0.0073 ppm |
| Concentration per Run 1 | 0.0037 ppm | 1.2325 ppm | 0.0017 ppm | 0.3145 ppm | 0.0002 ppm | -0.0014 ppm | 0.0074 ppm |
| Concentration per Run 2 | 0.0019 ppm | 1.2298 ppm | -0.0004 ppm | 0.3179 ppm | 0.0002 ppm | 0.0003 ppm | 0.0071 ppm |
| Concentration per Run 3 | 0.0004 ppm | 1.2367 ppm | 0.0009 ppm | 0.3159 ppm | -0.0008 ppm | -0.0022 ppm | 0.0074 ppm |
| Concentration RSD | 85.4 % | 0.3 % | 149.4 % | 0.5 % | 470.9 % | 115.1 % | 2.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 106.1740 % | 105.8544 % | 98.9595 % | 104.8994 % | 105.8560 % | 104.0764 % |
| Concentration per Run 1 | 0.0020 ppm | 106.5869 % | 106.1711 % | 99.3613 % | 105.2458 % | 106.1282 % | 104.5346 % |
| Concentration per Run 2 | 0.0024 ppm | 105.9222 % | 105.3094 % | 99.1108 % | 104.6981 % | 105.6866 % | 103.9749 % |
| Concentration per Run 3 | 0.0021 ppm | 106.0129 % | 106.0827 % | 98.4065 % | 104.7542 % | 105.7530 % | 103.7197 % |
| Concentration RSD | 8.8 % | 0.3 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-18 WG1974109
Analysis started at: 9/20/2024 10:44:32 AM
Rack 1
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0258 ppm | 0.0011 ppm | 0.0069 ppm | 0.0651 ppm | 0.0000 ppm | 191.1288 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0280 ppm | 0.0018 ppm | 0.0069 ppm | 0.0654 ppm | 0.0000 ppm | 191.5242 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0314 ppm | 0.0004 ppm | 0.0045 ppm | 0.0649 ppm | 0.0000 ppm | 191.3615 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0180 ppm | 0.0012 ppm | 0.0094 ppm | 0.0650 ppm | 0.0000 ppm | 190.5008 ppm |
| Concentration RSD | 7.2 % | 27.1 % | 58.7 % | 34.9 % | 0.4 % | 285.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0005 ppm | -0.0002 ppm | 0.0047 ppm | -0.0030 ppm | 3.5282 ppm | 0.0053 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0006 ppm | -0.0007 ppm | 0.0048 ppm | -0.0033 ppm | 3.5407 ppm | 0.0064 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0000 ppm | 0.0002 ppm | 0.0047 ppm | -0.0031 ppm | 3.5454 ppm | 0.0056 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0008 ppm | -0.0003 ppm | 0.0045 ppm | -0.0027 ppm | 3.4985 ppm | 0.0039 ppm |
| Concentration RSD | 6.9 % | 90.6 % | 189.4 % | 3.2 % | 10.8 % | 0.7 % | 24.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0963 ppm | 0.0001 ppm | 0.0033 ppm | 1.9127 ppm | 0.0019 ppm | -0.0018 ppm | 0.0045 ppm |
| Concentration per Run 1 | 0.0930 ppm | 0.0001 ppm | 0.0034 ppm | 1.9218 ppm | 0.0022 ppm | -0.0015 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0969 ppm | 0.0003 ppm | 0.0035 ppm | 1.9168 ppm | 0.0023 ppm | -0.0016 ppm | 0.0068 ppm |
| Concentration per Run 3 | 0.0990 ppm | 0.0000 ppm | 0.0029 ppm | 1.8996 ppm | 0.0013 ppm | -0.0024 ppm | 0.0028 ppm |
| Concentration RSD | 3.2 % | 93.0 % | 9.8 % | 0.6 % | 29.9 % | 27.3 % | 46.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 0.7881 ppm | -0.0013 ppm | 0.4125 ppm | -0.0001 ppm | -0.0019 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0034 ppm | 0.7832 ppm | -0.0009 ppm | 0.4137 ppm | 0.0000 ppm | -0.0031 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0059 ppm | 0.7923 ppm | -0.0015 ppm | 0.4114 ppm | 0.0000 ppm | -0.0012 ppm | 0.0032 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.7887 ppm | -0.0014 ppm | 0.4124 ppm | -0.0002 ppm | -0.0015 ppm | 0.0032 ppm |
| Concentration RSD | 69.1 % | 0.6 % | 24.8 % | 0.3 % | 178.7 % | 54.6 % | 5.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 106.6011 % | 106.2658 % | 98.4416 % | 105.1491 % | 106.2737 % | 103.5550 % |
| Concentration per Run 1 | 0.0004 ppm | 107.0745 % | 106.6507 % | 98.2985 % | 105.8182 % | 107.0346 % | 103.3207 % |
| Concentration per Run 2 | 0.0004 ppm | 106.0464 % | 105.1916 % | 98.9654 % | 104.4704 % | 105.0767 % | 103.9798 % |
| Concentration per Run 3 | 0.0004 ppm | 106.6823 % | 106.9549 % | 98.0608 % | 105.1586 % | 106.7098 % | 103.3646 % |
| Concentration RSD | 1.6 % | 0.5 % | 0.9 % | 0.5 % | 0.6 % | 1.0 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453269-19 WG1974109
Analysis started at: 9/20/2024 10:48:26 AM
Rack 1
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0865 ppm | 0.0012 ppm | 0.0122 ppm | 0.0987 ppm | 0.0001 ppm | 149.0344 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0738 ppm | 0.0000 ppm | 0.0118 ppm | 0.0991 ppm | 0.0001 ppm | 148.4885 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0894 ppm | 0.0001 ppm | 0.0130 ppm | 0.0988 ppm | 0.0001 ppm | 149.3985 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0962 ppm | 0.0035 ppm | 0.0119 ppm | 0.0983 ppm | 0.0001 ppm | 149.2163 ppm |
| Concentration RSD | 87.6 % | 13.3 % | 171.7 % | 5.6 % | 0.4 % | 30.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0036 ppm | 0.0008 ppm | 0.0013 ppm | 0.7585 ppm | 1.5040 ppm | 0.0053 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0044 ppm | 0.0007 ppm | 0.0014 ppm | 0.7630 ppm | 1.5396 ppm | 0.0075 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0031 ppm | 0.0005 ppm | 0.0012 ppm | 0.7596 ppm | 1.4826 ppm | 0.0030 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0032 ppm | 0.0013 ppm | 0.0013 ppm | 0.7529 ppm | 1.4899 ppm | 0.0054 ppm |
| Concentration RSD | 48.4 % | 20.4 % | 47.2 % | 8.2 % | 0.7 % | 2.1 % | 42.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2812 ppm | 0.2605 ppm | 0.0002 ppm | 0.8739 ppm | 0.0085 ppm | 0.0484 ppm | 0.0042 ppm |
| Concentration per Run 1 | 6.2839 ppm | 0.2600 ppm | -0.0003 ppm | 0.8767 ppm | 0.0093 ppm | 0.0485 ppm | 0.0041 ppm |
| Concentration per Run 2 | 6.2853 ppm | 0.2604 ppm | 0.0000 ppm | 0.8762 ppm | 0.0078 ppm | 0.0495 ppm | 0.0048 ppm |
| Concentration per Run 3 | 6.2743 ppm | 0.2609 ppm | 0.0007 ppm | 0.8687 ppm | 0.0083 ppm | 0.0473 ppm | 0.0038 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 307.3 % | 0.5 % | 8.6 % | 2.2 % | 12.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 10.0856 ppm | -0.0002 ppm | 0.2794 ppm | 0.0010 ppm | -0.0006 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0034 ppm | 10.0769 ppm | 0.0005 ppm | 0.2804 ppm | 0.0006 ppm | -0.0015 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0030 ppm | 10.1089 ppm | -0.0006 ppm | 0.2803 ppm | 0.0010 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0007 ppm | 10.0711 ppm | -0.0005 ppm | 0.2775 ppm | 0.0013 ppm | -0.0002 ppm | 0.0006 ppm |
| Concentration RSD | 119.9 % | 0.2 % | 280.1 % | 0.6 % | 39.7 % | 153.0 % | 18.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2470 ppm | 106.8257 % | 107.1073 % | 98.8675 % | 105.9565 % | 107.2511 % | 104.4425 % |
| Concentration per Run 1 | 0.2464 ppm | 108.1048 % | 106.8478 % | 98.8473 % | 107.1434 % | 107.0133 % | 104.3639 % |
| Concentration per Run 2 | 0.2477 ppm | 106.2078 % | 108.0088 % | 98.9251 % | 105.4620 % | 108.1968 % | 104.6640 % |
| Concentration per Run 3 | 0.2470 ppm | 106.1645 % | 106.4653 % | 98.8301 % | 105.2641 % | 106.5433 % | 104.2995 % |
| Concentration RSD | 0.3 % | 1.0 % | 0.8 % | 0.1 % | 1.0 % | 0.8 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 10:52:20 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 0.4649 ppm | 0.4716 ppm | 0.4923 ppm | 0.4924 ppm | 0.4987 ppm | 0.4856 ppm |
| Concentration per Run 1 | 0.5003 ppm | 0.4656 ppm | 0.4714 ppm | 0.4924 ppm | 0.4885 ppm | 0.4959 ppm | 0.4895 ppm |
| Concentration per Run 2 | 0.5027 ppm | 0.4583 ppm | 0.4669 ppm | 0.4903 ppm | 0.4973 ppm | 0.5023 ppm | 0.4825 ppm |
| Concentration per Run 3 | 0.5011 ppm | 0.4710 ppm | 0.4766 ppm | 0.4943 ppm | 0.4916 ppm | 0.4978 ppm | 0.4848 ppm |
| Recovery Percentage 1 | 100.274 % | 92.989 % | 94.323 % | 98.465 % | 98.486 % | 99.739 % | 97.118 % |
| Concentration RSD | 0.3 % | 1.4 % | 1.0 % | 0.4 % | 0.9 % | 0.7 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4876 ppm | 0.4977 ppm | 0.4803 ppm | 0.4884 ppm | 0.4929 ppm | 5.0820 ppm | 0.4919 ppm |
| Concentration per Run 1 | 0.4823 ppm | 0.4945 ppm | 0.4810 ppm | 0.4884 ppm | 0.4941 ppm | 5.0819 ppm | 0.4940 ppm |
| Concentration per Run 2 | 0.4870 ppm | 0.4973 ppm | 0.4793 ppm | 0.4871 ppm | 0.4934 ppm | 5.1104 ppm | 0.4897 ppm |
| Concentration per Run 3 | 0.4935 ppm | 0.5012 ppm | 0.4805 ppm | 0.4897 ppm | 0.4912 ppm | 5.0537 ppm | 0.4919 ppm |
| Recovery Percentage 1 | 97.524 % | 99.534 % | 96.051 % | 97.674 % | 98.585 % | 101.640 % | 98.376 % |
| Concentration RSD | 1.2 % | 0.7 % | 0.2 % | 0.3 % | 0.3 % | 0.6 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4769 ppm | 0.4789 ppm | 0.4801 ppm | 9.6151 ppm | 0.4976 ppm | 0.4865 ppm | 0.5002 ppm |
| Concentration per Run 1 | 0.4763 ppm | 0.4779 ppm | 0.4790 ppm | 9.5405 ppm | 0.4992 ppm | 0.4860 ppm | 0.4963 ppm |
| Concentration per Run 2 | 0.4787 ppm | 0.4797 ppm | 0.4764 ppm | 9.6896 ppm | 0.4967 ppm | 0.4848 ppm | 0.4993 ppm |
| Concentration per Run 3 | 0.4756 ppm | 0.4790 ppm | 0.4849 ppm | 9.6150 ppm | 0.4969 ppm | 0.4889 ppm | 0.5051 ppm |
| Recovery Percentage 1 | 95.375 % | 95.774 % | 96.023 % | 96.151 % | 99.514 % | 97.309 % | 100.049 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.9 % | 0.8 % | 0.3 % | 0.4 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4870 ppm | 5.3091 ppm | 0.4739 ppm | 0.4720 ppm | 0.4870 ppm | 0.4867 ppm | 0.4762 ppm |
| Concentration per Run 1 | 0.4838 ppm | 5.2985 ppm | 0.4782 ppm | 0.4689 ppm | 0.4863 ppm | 0.4893 ppm | 0.4756 ppm |
| Concentration per Run 2 | 0.4839 ppm | 5.3062 ppm | 0.4711 ppm | 0.4758 ppm | 0.4877 ppm | 0.4830 ppm | 0.4754 ppm |
| Concentration per Run 3 | 0.4934 ppm | 5.3228 ppm | 0.4724 ppm | 0.4712 ppm | 0.4870 ppm | 0.4878 ppm | 0.4777 ppm |
| Recovery Percentage 1 | 97.410 % | 101.126 % | 94.775 % | 94.400 % | 97.400 % | 97.344 % | 95.239 % |
| Concentration RSD | 1.1 % | 0.2 % | 0.8 % | 0.7 % | 0.1 % | 0.7 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4971 ppm | 108.9168 % | 105.6570 % | 108.0637 % | 107.8831 % | 105.2084 % | 108.0784 % |
| Concentration per Run 1 | 0.4991 ppm | 108.7791 % | 106.4602 % | 107.5259 % | 108.0411 % | 105.7462 % | 107.7234 % |
| Concentration per Run 2 | 0.4945 ppm | 109.6126 % | 105.7065 % | 109.1523 % | 108.2529 % | 105.5420 % | 108.5476 % |
| Concentration per Run 3 | 0.4975 ppm | 108.3587 % | 104.8044 % | 107.5127 % | 107.3554 % | 104.3368 % | 107.9643 % |
| Recovery Percentage 1 | 99.411 % | | | | | | |
| Concentration RSD | 0.5 % | 0.6 % | 0.8 % | 0.9 % | 0.4 % | 0.7 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 10:56:14 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0058 ppm | 0.0000 ppm | 0.0019 ppm | -0.0002 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0014 ppm | -0.0068 ppm | -0.0019 ppm | 0.0019 ppm | -0.0002 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.0161 ppm | 0.0020 ppm | 0.0016 ppm | -0.0003 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0081 ppm | 0.0000 ppm | 0.0021 ppm | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 19.748 % | 5.802 % | 0.545 % | 6.254 % | -1.839 % | 0.468 % | 1.742 % |
| Concentration RSD | 16.5 % | 200.5 % | 7,277.9 % | 12.9 % | 79.0 % | 140.8 % | 77.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm | -0.0015 ppm | -0.0022 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | -0.0004 ppm | -0.0011 ppm | -0.0020 ppm | 0.0046 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | -0.0005 ppm | -0.0008 ppm | 0.0055 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | -0.0018 ppm | -0.0169 ppm | 0.0034 ppm |
| Recovery Percentage 1 | 1.413 % | 0.290 % | -0.156 % | -5.508 % | -3.098 % | -0.090 % | 31.349 % |
| Concentration RSD | 132.5 % | 953.4 % | 2,063.8 % | 99.0 % | 43.2 % | 567.2 % | 99.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0001 ppm | 0.0013 ppm | -0.1837 ppm | -0.0003 ppm | -0.0016 ppm | 0.0031 ppm |
| Concentration per Run 1 | -0.0013 ppm | 0.0000 ppm | 0.0014 ppm | -0.1871 ppm | -0.0008 ppm | -0.0014 ppm | 0.0058 ppm |
| Concentration per Run 2 | 0.0017 ppm | -0.0003 ppm | 0.0012 ppm | -0.1798 ppm | -0.0009 ppm | -0.0022 ppm | -0.0030 ppm |
| Concentration per Run 3 | -0.0023 ppm | 0.0000 ppm | 0.0014 ppm | -0.1842 ppm | 0.0007 ppm | -0.0012 ppm | 0.0067 ppm |
| Recovery Percentage 1 | -0.618 % | -1.038 % | 2.603 % | -9.185 % | -1.371 % | -16.085 % | 6.286 % |
| Concentration RSD | 341.7 % | 150.4 % | 6.9 % | 2.0 % | 252.4 % | 34.3 % | 171.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0027 ppm | 0.0005 ppm | 0.0000 ppm | -0.0003 ppm | -0.0013 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0014 ppm | -0.0017 ppm | 0.0013 ppm | 0.0000 ppm | -0.0003 ppm | -0.0014 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0023 ppm | -0.0025 ppm | 0.0003 ppm | 0.0000 ppm | -0.0006 ppm | -0.0010 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0019 ppm | -0.0041 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0014 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -5.762 % | -0.549 % | 1.030 % | 0.380 % | -3.446 % | -6.403 % | -3.743 % |
| Concentration RSD | 383.5 % | 44.3 % | 137.3 % | 138.7 % | 59.6 % | 16.1 % | 66.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 108.8202 % | 105.4779 % | 107.9743 % | 110.1839 % | 106.6941 % | 108.7342 % |
| Concentration per Run 1 | 0.0002 ppm | 108.4969 % | 105.4615 % | 107.8004 % | 110.3249 % | 106.4551 % | 108.7236 % |
| Concentration per Run 2 | 0.0003 ppm | 108.6913 % | 105.5956 % | 107.2903 % | 110.0107 % | 107.1295 % | 108.0407 % |
| Concentration per Run 3 | 0.0005 ppm | 109.2723 % | 105.3767 % | 108.8323 % | 110.2161 % | 106.4977 % | 109.4383 % |
| Recovery Percentage 1 | 6.856 % | | | | | | |
| Concentration RSD | 44.3 % | 0.4 % | 0.1 % | 0.7 % | 0.1 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-1 WG1974073
Analysis started at: 9/20/2024 11:03:34 AM
Rack 1
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0148 ppm | -0.0001 ppm | 0.0022 ppm | 0.0000 ppm | 0.0000 ppm | 0.0317 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0152 ppm | 0.0011 ppm | 0.0042 ppm | -0.0001 ppm | 0.0000 ppm | 0.0317 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0084 ppm | -0.0030 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0286 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0208 ppm | 0.0017 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0348 ppm |
| Recovery Percentage 1 | 15.330 % | 14.828 % | -1.520 % | 7.287 % | 0.228 % | 0.221 % | 31.714 % |
| Concentration RSD | 24.3 % | 41.8 % | 3,372.1 % | 101.2 % | 451.4 % | 311.9 % | 9.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0002 ppm | -0.0008 ppm | 0.0003 ppm | 0.0401 ppm | -0.0143 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0001 ppm | -0.0004 ppm | 0.0005 ppm | 0.0390 ppm | -0.0162 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0008 ppm | -0.0008 ppm | -0.0002 ppm | 0.0410 ppm | -0.0247 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0005 ppm | -0.0012 ppm | 0.0004 ppm | 0.0404 ppm | -0.0018 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 4.400 % | -0.777 % | -8.076 % | 2.704 % | 80.269 % | -0.570 % | 24.625 % |
| Concentration RSD | 72.4 % | 409.5 % | 51.4 % | 136.2 % | 2.6 % | 81.5 % | 8.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0108 ppm | 0.0015 ppm | -0.0002 ppm | -0.1780 ppm | -0.0008 ppm | -0.0009 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0095 ppm | 0.0017 ppm | -0.0004 ppm | -0.1819 ppm | -0.0014 ppm | -0.0007 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0119 ppm | 0.0015 ppm | 0.0001 ppm | -0.1755 ppm | -0.0003 ppm | -0.0018 ppm | 0.0050 ppm |
| Concentration per Run 3 | 0.0109 ppm | 0.0014 ppm | -0.0003 ppm | -0.1765 ppm | -0.0007 ppm | -0.0002 ppm | -0.0024 ppm |
| Recovery Percentage 1 | 10.786 % | 15.327 % | -0.373 % | -8.899 % | -3.152 % | -8.922 % | 3.343 % |
| Concentration RSD | 11.2 % | 10.1 % | 139.6 % | 1.9 % | 71.5 % | 90.7 % | 225.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0079 ppm | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | -0.0001 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0029 ppm | 0.0066 ppm | 0.0005 ppm | -0.0001 ppm | 0.0009 ppm | 0.0005 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0028 ppm | 0.0099 ppm | 0.0004 ppm | 0.0000 ppm | 0.0006 ppm | -0.0008 ppm | -0.0010 ppm |
| Concentration per Run 3 | -0.0016 ppm | 0.0073 ppm | -0.0009 ppm | -0.0002 ppm | 0.0009 ppm | -0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -4.909 % | 1.585 % | -0.034 % | -0.957 % | 7.720 % | -0.684 % | -5.440 % |
| Concentration RSD | 611.3 % | 21.8 % | 4,615.7 % | 123.8 % | 21.0 % | 490.6 % | 85.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 106.0351 % | 105.8747 % | 103.9349 % | 105.3265 % | 106.4919 % | 104.2259 % |
| Concentration per Run 1 | 0.0042 ppm | 105.2308 % | 104.6696 % | 103.6229 % | 104.5812 % | 105.2771 % | 103.9877 % |
| Concentration per Run 2 | 0.0041 ppm | 106.2447 % | 106.5872 % | 103.9778 % | 105.5868 % | 107.4449 % | 104.2804 % |
| Concentration per Run 3 | 0.0038 ppm | 106.6298 % | 106.3674 % | 104.2041 % | 105.8116 % | 106.7536 % | 104.4096 % |
| Recovery Percentage 1 | 80.873 % | | | | | | |
| Concentration RSD | 6.0 % | 0.7 % | 1.0 % | 0.3 % | 0.6 % | 1.0 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-2D2 WG1974073
Analysis started at: 9/20/2024 11:07:45 AM
Rack 1
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 1.9469 ppm | 0.1167 ppm | 0.9721 ppm | 1.9872 ppm | 0.0509 ppm | 9.8669 ppm |
| Concentration per Run 1 | 0.0521 ppm | 1.9521 ppm | 0.1178 ppm | 0.9663 ppm | 1.9844 ppm | 0.0509 ppm | 9.8499 ppm |
| Concentration per Run 2 | 0.0524 ppm | 1.9424 ppm | 0.1135 ppm | 0.9724 ppm | 1.9880 ppm | 0.0509 ppm | 9.8729 ppm |
| Concentration per Run 3 | 0.0519 ppm | 1.9460 ppm | 0.1187 ppm | 0.9777 ppm | 1.9893 ppm | 0.0510 ppm | 9.8778 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 2.4 % | 0.6 % | 0.1 % | 0.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0517 ppm | 0.5004 ppm | 0.1965 ppm | 0.2521 ppm | 1.0217 ppm | 10.1015 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0520 ppm | 0.5002 ppm | 0.1971 ppm | 0.2510 ppm | 1.0226 ppm | 10.0729 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0518 ppm | 0.5004 ppm | 0.1951 ppm | 0.2517 ppm | 1.0193 ppm | 10.1233 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0513 ppm | 0.5006 ppm | 0.1974 ppm | 0.2535 ppm | 1.0233 ppm | 10.1084 ppm | 0.0016 ppm |
| Concentration RSD | 0.6 % | 0.0 % | 0.7 % | 0.5 % | 0.2 % | 0.3 % | 39.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8321 ppm | 0.5031 ppm | 0.9838 ppm | 9.7869 ppm | 0.5019 ppm | 0.5284 ppm | 0.4977 ppm |
| Concentration per Run 1 | 9.8253 ppm | 0.5031 ppm | 0.9773 ppm | 9.7779 ppm | 0.5008 ppm | 0.5265 ppm | 0.4938 ppm |
| Concentration per Run 2 | 9.8097 ppm | 0.5030 ppm | 0.9860 ppm | 9.7947 ppm | 0.5015 ppm | 0.5285 ppm | 0.4970 ppm |
| Concentration per Run 3 | 9.8614 ppm | 0.5031 ppm | 0.9882 ppm | 9.7879 ppm | 0.5036 ppm | 0.5302 ppm | 0.5022 ppm |
| Concentration RSD | 0.3 % | 0.0 % | 0.6 % | 0.1 % | 0.3 % | 0.3 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1203 ppm | 0.5097 ppm | 0.9561 ppm | 0.9543 ppm | 0.9946 ppm | 0.1195 ppm | 0.4963 ppm |
| Concentration per Run 1 | 0.1215 ppm | 0.5104 ppm | 0.9511 ppm | 0.9578 ppm | 0.9936 ppm | 0.1181 ppm | 0.4955 ppm |
| Concentration per Run 2 | 0.1211 ppm | 0.5070 ppm | 0.9582 ppm | 0.9526 ppm | 0.9917 ppm | 0.1193 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.1182 ppm | 0.5116 ppm | 0.9590 ppm | 0.9526 ppm | 0.9985 ppm | 0.1211 ppm | 0.4983 ppm |
| Concentration RSD | 1.5 % | 0.5 % | 0.5 % | 0.3 % | 0.4 % | 1.2 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4966 ppm | 108.4182 % | 106.2650 % | 105.2271 % | 107.2229 % | 106.1800 % | 106.3183 % |
| Concentration per Run 1 | 0.4957 ppm | 107.9229 % | 107.4539 % | 105.4834 % | 106.7015 % | 107.6283 % | 106.4713 % |
| Concentration per Run 2 | 0.4969 ppm | 108.9104 % | 105.5140 % | 104.9488 % | 107.6068 % | 105.3419 % | 106.2007 % |
| Concentration per Run 3 | 0.4972 ppm | 108.4213 % | 105.8271 % | 105.2490 % | 107.3602 % | 105.5699 % | 106.2830 % |
| Concentration RSD | 0.2 % | 0.5 % | 1.0 % | 0.3 % | 0.4 % | 1.2 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-02D2 WG1974073
Analysis started at: 9/20/2024 11:11:38 AM
Rack 1
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 46.5598 ppm | 0.0048 ppm | -0.0029 ppm | 0.6359 ppm | 0.0012 ppm | 133.4760 ppm |
| Concentration per Run 1 | 0.0014 ppm | 46.6080 ppm | 0.0059 ppm | -0.0025 ppm | 0.6385 ppm | 0.0012 ppm | 133.6242 ppm |
| Concentration per Run 2 | 0.0014 ppm | 46.5733 ppm | 0.0047 ppm | -0.0014 ppm | 0.6335 ppm | 0.0011 ppm | 133.3083 ppm |
| Concentration per Run 3 | 0.0028 ppm | 46.4982 ppm | 0.0040 ppm | -0.0050 ppm | 0.6356 ppm | 0.0013 ppm | 133.4955 ppm |
| Concentration RSD | 42.0 % | 0.1 % | 20.3 % | 62.9 % | 0.4 % | 6.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0510 ppm | 0.1637 ppm | 0.1601 ppm | 117.8758 ppm | 22.3792 ppm | 0.0495 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0501 ppm | 0.1642 ppm | 0.1598 ppm | 117.6222 ppm | 22.4345 ppm | 0.0514 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0510 ppm | 0.1635 ppm | 0.1606 ppm | 117.9406 ppm | 22.4201 ppm | 0.0479 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0519 ppm | 0.1634 ppm | 0.1599 ppm | 118.0644 ppm | 22.2831 ppm | 0.0491 ppm |
| Concentration RSD | 46.4 % | 1.8 % | 0.3 % | 0.3 % | 0.2 % | 0.4 % | 3.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 72.0326 ppm | 1.4228 ppm | 0.0019 ppm | 3.4489 ppm | 0.1093 ppm | 0.0192 ppm | 0.0037 ppm |
| Concentration per Run 1 | 72.0987 ppm | 1.4254 ppm | 0.0019 ppm | 3.4518 ppm | 0.1095 ppm | 0.0185 ppm | 0.0024 ppm |
| Concentration per Run 2 | 71.9911 ppm | 1.4212 ppm | 0.0019 ppm | 3.4437 ppm | 0.1091 ppm | 0.0195 ppm | 0.0061 ppm |
| Concentration per Run 3 | 72.0079 ppm | 1.4218 ppm | 0.0020 ppm | 3.4512 ppm | 0.1091 ppm | 0.0196 ppm | 0.0025 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 3.1 % | 0.1 % | 0.2 % | 3.2 % | 56.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 25.3598 [SIC 50] | 0.0059 ppm | 0.1625 ppm | 5.3782 ppm | 0.0044 ppm | 0.2046 ppm |
| Concentration per Run 1 | 0.0043 ppm | 25.5460 ppm | 0.0052 ppm | 0.1625 ppm | 5.3838 ppm | 0.0061 ppm | 0.2053 ppm |
| Concentration per Run 2 | 0.0015 ppm | 25.0407 ppm | 0.0055 ppm | 0.1623 ppm | 5.3740 ppm | 0.0033 ppm | 0.2050 ppm |
| Concentration per Run 3 | -0.0014 ppm | 25.4926 ppm | 0.0069 ppm | 0.1626 ppm | 5.3766 ppm | 0.0038 ppm | 0.2033 ppm |
| Concentration RSD | 195.6 % | 1.1 % | 16.0 % | 0.1 % | 0.1 % | 33.8 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2018 ppm | 107.6532 % | 108.2546 % | 100.2615 % | 117.8446 % | 120.4218 % | 116.6340 % |
| Concentration per Run 1 | 0.2022 ppm | 107.9544 % | 108.6768 % | 101.1602 % | 118.2549 % | 120.9227 % | 117.2738 % |
| Concentration per Run 2 | 0.2021 ppm | 107.7071 % | 108.5076 % | 99.5040 % | 118.0230 % | 120.8539 % | 115.6766 % |
| Concentration per Run 3 | 0.2012 ppm | 107.2982 % | 107.5794 % | 100.1204 % | 117.2558 % | 119.4887 % | 116.9516 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.5 % | 0.8 % | 0.4 % | 0.7 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-03D2 WG1974073
Analysis started at: 9/20/2024 11:15:32 AM
Rack 1
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 84.6779 ppm | 0.0078 ppm | 0.0015 ppm | 1.0345 ppm | 0.0023 ppm | 228.6847 ppm |
| Concentration per Run 1 | 0.0019 ppm | 85.1785 ppm | 0.0075 ppm | 0.0011 ppm | 1.0330 ppm | 0.0023 ppm | 229.0211 ppm |
| Concentration per Run 2 | 0.0021 ppm | 84.4832 ppm | 0.0079 ppm | 0.0036 ppm | 1.0344 ppm | 0.0023 ppm | 228.4602 ppm |
| Concentration per Run 3 | 0.0010 ppm | 84.3720 ppm | 0.0079 ppm | -0.0002 ppm | 1.0362 ppm | 0.0023 ppm | 228.5728 ppm |
| Concentration RSD | 34.7 % | 0.5 % | 2.9 % | 126.7 % | 0.2 % | 1.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0953 ppm | 0.2339 ppm | 0.2114 ppm | 184.3907 ppm | 43.2176 ppm | 0.1096 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0954 ppm | 0.2336 ppm | 0.2112 ppm | 183.5708 ppm | 43.1370 ppm | 0.1090 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0950 ppm | 0.2350 ppm | 0.2124 ppm | 184.6018 ppm | 43.0847 ppm | 0.1101 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0955 ppm | 0.2331 ppm | 0.2105 ppm | 184.9994 ppm | 43.4310 ppm | 0.1096 ppm |
| Concentration RSD | 6.0 % | 0.3 % | 0.4 % | 0.5 % | 0.4 % | 0.4 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 140.4950 ppm | 2.1458 ppm | 0.0012 ppm | 2.8351 ppm | 0.1559 ppm | 0.0300 ppm | -0.0010 ppm |
| Concentration per Run 1 | 140.3065 ppm | 2.1541 ppm | 0.0012 ppm | 2.9100 ppm | 0.1544 ppm | 0.0302 ppm | -0.0008 ppm |
| Concentration per Run 2 | 140.7093 ppm | 2.1410 ppm | 0.0012 ppm | 2.7848 ppm | 0.1579 ppm | 0.0305 ppm | 0.0010 ppm |
| Concentration per Run 3 | 140.4691 ppm | 2.1422 ppm | 0.0010 ppm | 2.8103 ppm | 0.1554 ppm | 0.0295 ppm | -0.0032 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 10.0 % | 2.3 % | 1.1 % | 1.6 % | 207.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 22.9867 [SIC 50] | 0.0111 ppm | 0.2117 ppm | 9.8276 ppm | 0.0108 ppm | 0.3186 ppm |
| Concentration per Run 1 | 0.0052 ppm | 23.8627 ppm | 0.0121 ppm | 0.2119 ppm | 9.7982 ppm | 0.0113 ppm | 0.3186 ppm |
| Concentration per Run 2 | 0.0063 ppm | 23.3085 ppm | 0.0108 ppm | 0.2115 ppm | 9.8847 ppm | 0.0113 ppm | 0.3195 ppm |
| Concentration per Run 3 | 0.0060 ppm | 21.7889 ppm | 0.0105 ppm | 0.2116 ppm | 9.7998 ppm | 0.0097 ppm | 0.3176 ppm |
| Concentration RSD | 9.8 % | 4.7 % | 7.5 % | 0.1 % | 0.5 % | 8.9 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4117 ppm | 107.2793 % | 109.8478 % | 100.0657 % | 121.2391 % | 126.0466 % | 119.8863 % |
| Concentration per Run 1 | 0.4109 ppm | 107.6119 % | 111.2083 % | 99.7235 % | 121.7155 % | 127.9463 % | 120.4777 % |
| Concentration per Run 2 | 0.4122 ppm | 107.0304 % | 109.0975 % | 100.5300 % | 121.1532 % | 125.3161 % | 120.0801 % |
| Concentration per Run 3 | 0.4119 ppm | 107.1955 % | 109.2377 % | 99.9438 % | 120.8485 % | 124.8772 % | 119.1012 % |
| Concentration RSD | 0.2 % | 0.3 % | 1.1 % | 0.4 % | 0.4 % | 1.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-04D2 WG1974073
Analysis started at: 9/20/2024 11:19:27 AM
Rack 1
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 49.3667 ppm | 0.0050 ppm | -0.0024 ppm | 0.6743 ppm | 0.0010 ppm | 124.5390 ppm |
| Concentration per Run 1 | 0.0026 ppm | 49.5267 ppm | 0.0002 ppm | -0.0010 ppm | 0.6767 ppm | 0.0011 ppm | 124.8910 ppm |
| Concentration per Run 2 | 0.0014 ppm | 49.1512 ppm | 0.0052 ppm | -0.0034 ppm | 0.6698 ppm | 0.0010 ppm | 123.8362 ppm |
| Concentration per Run 3 | 0.0011 ppm | 49.4221 ppm | 0.0096 ppm | -0.0028 ppm | 0.6764 ppm | 0.0009 ppm | 124.8897 ppm |
| Concentration RSD | 45.9 % | 0.4 % | 94.4 % | 50.9 % | 0.6 % | 6.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0550 ppm | 0.1828 ppm | 0.1726 ppm | 130.8176 ppm | 25.4311 ppm | 0.0592 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0552 ppm | 0.1831 ppm | 0.1731 ppm | 131.3476 ppm | 25.4624 ppm | 0.0613 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0545 ppm | 0.1835 ppm | 0.1725 ppm | 129.8421 ppm | 25.3714 ppm | 0.0577 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0554 ppm | 0.1817 ppm | 0.1721 ppm | 131.2631 ppm | 25.4596 ppm | 0.0586 ppm |
| Concentration RSD | 46.6 % | 0.9 % | 0.5 % | 0.3 % | 0.6 % | 0.2 % | 3.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 75.2863 ppm | 1.5372 ppm | 0.0011 ppm | 2.9533 ppm | 0.1145 ppm | 0.0196 ppm | -0.0014 ppm |
| Concentration per Run 1 | 75.3157 ppm | 1.5356 ppm | 0.0012 ppm | 3.0085 ppm | 0.1151 ppm | 0.0196 ppm | -0.0018 ppm |
| Concentration per Run 2 | 75.2962 ppm | 1.5356 ppm | 0.0012 ppm | 2.9285 ppm | 0.1131 ppm | 0.0181 ppm | -0.0008 ppm |
| Concentration per Run 3 | 75.2469 ppm | 1.5403 ppm | 0.0009 ppm | 2.9229 ppm | 0.1153 ppm | 0.0209 ppm | -0.0016 ppm |
| Concentration RSD | 0.0 % | 0.2 % | 14.3 % | 1.6 % | 1.1 % | 7.2 % | 40.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 18.1658 ppm | 0.0043 ppm | 0.1449 ppm | 5.4301 ppm | 0.0057 ppm | 0.2259 ppm |
| Concentration per Run 1 | 0.0058 ppm | 18.1647 ppm | 0.0055 ppm | 0.1454 ppm | 5.4506 ppm | 0.0057 ppm | 0.2258 ppm |
| Concentration per Run 2 | 0.0012 ppm | 18.0900 ppm | 0.0042 ppm | 0.1440 ppm | 5.4480 ppm | 0.0050 ppm | 0.2260 ppm |
| Concentration per Run 3 | 0.0000 ppm | 18.2428 ppm | 0.0033 ppm | 0.1455 ppm | 5.3918 ppm | 0.0065 ppm | 0.2259 ppm |
| Concentration RSD | 131.7 % | 0.4 % | 25.2 % | 0.6 % | 0.6 % | 13.2 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2323 ppm | 107.1635 % | 108.9370 % | 100.6785 % | 115.8339 % | 119.6463 % | 114.9851 % |
| Concentration per Run 1 | 0.2325 ppm | 106.3788 % | 108.7842 % | 100.8804 % | 115.3144 % | 119.8474 % | 114.7215 % |
| Concentration per Run 2 | 0.2328 ppm | 107.6962 % | 110.2595 % | 101.3304 % | 116.5508 % | 120.0950 % | 116.0413 % |
| Concentration per Run 3 | 0.2317 ppm | 107.4155 % | 107.7672 % | 99.8249 % | 115.6365 % | 118.9966 % | 114.1926 % |
| Concentration RSD | 0.3 % | 0.6 % | 1.2 % | 0.8 % | 0.6 % | 0.5 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-01D2 WG1974073
Analysis started at: 9/20/2024 11:23:21 AM
Rack 1
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 67.4700 ppm | **0.0066 ppm** | 0.0078 ppm | 0.7554 ppm | 0.0020 ppm | 220.6140 ppm |
| Concentration per Run 1 | 0.0014 ppm | 67.4442 ppm | 0.0044 ppm | 0.0089 ppm | 0.7526 ppm | 0.0020 ppm | 220.7567 ppm |
| Concentration per Run 2 | 0.0010 ppm | 67.5793 ppm | 0.0097 ppm | 0.0073 ppm | 0.7590 ppm | 0.0019 ppm | 220.9602 ppm |
| Concentration per Run 3 | 0.0017 ppm | 67.3865 ppm | 0.0058 ppm | 0.0073 ppm | 0.7546 ppm | 0.0020 ppm | 220.1252 ppm |
| Concentration RSD | 27.1 % | 0.1 % | **41.5 %** | 12.2 % | 0.4 % | 3.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0544 ppm | 0.1771 ppm | 0.1541 ppm | 138.2690 ppm | 29.4225 ppm | 0.0786 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0556 ppm | 0.1783 ppm | 0.1541 ppm | 138.4320 ppm | 29.4412 ppm | 0.0801 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0539 ppm | 0.1762 ppm | 0.1542 ppm | 138.2538 ppm | 29.5747 ppm | 0.0786 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0538 ppm | 0.1769 ppm | 0.1541 ppm | 138.1211 ppm | 29.2516 ppm | 0.0772 ppm |
| Concentration RSD | 32.2 % | 1.8 % | 0.6 % | 0.1 % | 0.1 % | 0.6 % | 1.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 119.1611 ppm | 2.0035 ppm | 0.0013 ppm | 3.7140 ppm | 0.1211 ppm | 0.0339 ppm | -0.0010 ppm |
| Concentration per Run 1 | 119.6370 ppm | 1.9990 ppm | 0.0016 ppm | 3.7224 ppm | 0.1207 ppm | 0.0353 ppm | -0.0041 ppm |
| Concentration per Run 2 | 119.0274 ppm | 2.0141 ppm | 0.0010 ppm | 3.7100 ppm | 0.1206 ppm | 0.0331 ppm | 0.0031 ppm |
| Concentration per Run 3 | 118.8190 ppm | 1.9973 ppm | 0.0012 ppm | 3.7095 ppm | 0.1220 ppm | 0.0334 ppm | -0.0019 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 24.2 % | 0.2 % | 0.6 % | 3.5 % | 377.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 13.9293 ppm | 0.0070 ppm | 0.2910 ppm | 7.3204 ppm | 0.0062 ppm | 0.2406 ppm |
| Concentration per Run 1 | 0.0051 ppm | 14.1382 ppm | 0.0083 ppm | 0.2916 ppm | 7.3584 ppm | 0.0064 ppm | 0.2408 ppm |
| Concentration per Run 2 | 0.0006 ppm | 13.7025 ppm | 0.0065 ppm | 0.2916 ppm | 7.2964 ppm | 0.0070 ppm | 0.2407 ppm |
| Concentration per Run 3 | 0.0030 ppm | 13.9472 ppm | 0.0061 ppm | 0.2897 ppm | 7.3062 ppm | 0.0053 ppm | 0.2404 ppm |
| Concentration RSD | 76.2 % | 1.6 % | 16.8 % | 0.4 % | 0.5 % | 14.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3443 ppm | 106.4064 % | 108.6101 % | 99.1139 % | 119.9070 % | 124.5201 % | 118.9321 % |
| Concentration per Run 1 | 0.3455 ppm | 106.2270 % | 108.7639 % | 98.8839 % | 119.9346 % | 124.6647 % | 118.6593 % |
| Concentration per Run 2 | 0.3437 ppm | 106.6476 % | 108.4709 % | 99.1057 % | 120.0735 % | 124.6504 % | 119.2726 % |
| Concentration per Run 3 | 0.3437 ppm | 106.3446 % | 108.5955 % | 99.3521 % | 119.7128 % | 124.2450 % | 118.8645 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.2 % | 0.2 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-3D2 WG1974073
Analysis started at: 9/20/2024 11:27:14 AM
Rack 1
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 68.6236 ppm | 0.1217 ppm | 0.8966 ppm | 2.5149 ppm | 0.0498 ppm | 218.9093 ppm |
| Concentration per Run 1 | 0.0506 ppm | 68.7645 ppm | 0.1207 ppm | 0.8990 ppm | 2.5218 ppm | 0.0500 ppm | 219.4192 ppm |
| Concentration per Run 2 | 0.0502 ppm | 68.5346 ppm | 0.1225 ppm | 0.8998 ppm | 2.5046 ppm | 0.0498 ppm | 218.3910 ppm |
| Concentration per Run 3 | 0.0495 ppm | 68.5717 ppm | 0.1220 ppm | 0.8910 ppm | 2.5182 ppm | 0.0497 ppm | 218.9179 ppm |
| Concentration RSD | 1.1 % | 0.2 % | 0.8 % | 0.5 % | 0.4 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0475 ppm | 0.4981 ppm | 0.3506 ppm | 0.3805 ppm | 136.7666 ppm | 36.4238 ppm | 0.0782 ppm |
| Concentration per Run 1 | 0.0477 ppm | 0.4992 ppm | 0.3498 ppm | 0.3788 ppm | 137.3745 ppm | 36.4248 ppm | 0.0795 ppm |
| Concentration per Run 2 | 0.0475 ppm | 0.4983 ppm | 0.3502 ppm | 0.3835 ppm | 136.6851 ppm | 36.4052 ppm | 0.0770 ppm |
| Concentration per Run 3 | 0.0472 ppm | 0.4968 ppm | 0.3517 ppm | 0.3792 ppm | 136.2402 ppm | 36.4413 ppm | 0.0781 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 0.3 % | 0.7 % | 0.4 % | 0.0 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 121.9691 ppm | 2.5066 ppm | 0.9276 ppm | 13.1145 ppm | 0.5471 ppm | 0.5254 ppm | 0.4496 ppm |
| Concentration per Run 1 | 122.1207 ppm | 2.5142 ppm | 0.9202 ppm | 13.1654 ppm | 0.5465 ppm | 0.5243 ppm | 0.4466 ppm |
| Concentration per Run 2 | 121.8024 ppm | 2.4994 ppm | 0.9311 ppm | 13.1991 ppm | 0.5453 ppm | 0.5267 ppm | 0.4530 ppm |
| Concentration per Run 3 | 121.9842 ppm | 2.5062 ppm | 0.9317 ppm | 12.9790 ppm | 0.5497 ppm | 0.5253 ppm | 0.4493 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.7 % | 0.9 % | 0.4 % | 0.2 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1099 ppm | 13.4589 ppm | 0.8790 ppm | 1.1814 ppm | 8.2244 ppm | 0.1155 ppm | 0.7101 ppm |
| Concentration per Run 1 | 0.1081 ppm | 13.4649 ppm | 0.8782 ppm | 1.1820 ppm | 8.2120 ppm | 0.1152 ppm | 0.7095 ppm |
| Concentration per Run 2 | 0.1100 ppm | 13.3984 ppm | 0.8788 ppm | 1.1803 ppm | 8.2438 ppm | 0.1139 ppm | 0.7110 ppm |
| Concentration per Run 3 | 0.1117 ppm | 13.5133 ppm | 0.8802 ppm | 1.1819 ppm | 8.2174 ppm | 0.1174 ppm | 0.7099 ppm |
| Concentration RSD | 1.7 % | 0.4 % | 0.1 % | 0.1 % | 0.2 % | 1.5 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7805 ppm | 105.6629 % | 109.7811 % | 98.8401 % | 120.3582 % | 127.4199 % | 119.9734 % |
| Concentration per Run 1 | 0.7817 ppm | 105.8733 % | 109.7967 % | 99.6747 % | 120.6760 % | 127.1271 % | 121.0141 % |
| Concentration per Run 2 | 0.7807 ppm | 105.2991 % | 109.8783 % | 98.1376 % | 120.1870 % | 128.2751 % | 119.0720 % |
| Concentration per Run 3 | 0.7790 ppm | 105.8162 % | 109.6684 % | 98.7080 % | 120.2116 % | 126.8574 % | 119.8341 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.1 % | 0.8 % | 0.2 % | 0.6 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-4D2 WG1974073
Analysis started at: 9/20/2024 11:31:08 AM
Rack 1
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 65.8396 ppm | 0.0093 ppm | 0.0065 ppm | 0.6833 ppm | 0.0021 ppm | 210.4410 ppm |
| Concentration per Run 1 | 0.0011 ppm | 65.5552 ppm | 0.0085 ppm | 0.0061 ppm | 0.6850 ppm | 0.0021 ppm | 209.6543 ppm |
| Concentration per Run 2 | 0.0013 ppm | 65.9888 ppm | 0.0105 ppm | 0.0071 ppm | 0.6818 ppm | 0.0020 ppm | 210.6784 ppm |
| Concentration per Run 3 | 0.0013 ppm | 65.9749 ppm | 0.0088 ppm | 0.0064 ppm | 0.6832 ppm | 0.0022 ppm | 210.9902 ppm |
| Concentration RSD | 11.8 % | 0.4 % | 11.6 % | 7.6 % | 0.2 % | 3.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0529 ppm | 0.1725 ppm | 0.1589 ppm | 136.4563 ppm | 27.9859 ppm | 0.0777 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0529 ppm | 0.1723 ppm | 0.1583 ppm | 137.0131 ppm | 28.0075 ppm | 0.0776 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0534 ppm | 0.1734 ppm | 0.1596 ppm | 135.8061 ppm | 28.0011 ppm | 0.0785 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0524 ppm | 0.1718 ppm | 0.1588 ppm | 136.5496 ppm | 27.9490 ppm | 0.0771 ppm |
| Concentration RSD | 44.0 % | 1.0 % | 0.5 % | 0.4 % | 0.4 % | 0.1 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 114.8266 ppm | 1.9515 ppm | 0.0016 ppm | 3.5548 ppm | 0.1103 ppm | 0.0341 ppm | 0.0036 ppm |
| Concentration per Run 1 | 114.9775 ppm | 1.9444 ppm | 0.0018 ppm | 3.5337 ppm | 0.1096 ppm | 0.0344 ppm | 0.0088 ppm |
| Concentration per Run 2 | 115.0200 ppm | 1.9514 ppm | 0.0021 ppm | 3.5421 ppm | 0.1123 ppm | 0.0342 ppm | -0.0011 ppm |
| Concentration per Run 3 | 114.4823 ppm | 1.9588 ppm | 0.0009 ppm | 3.5884 ppm | 0.1090 ppm | 0.0338 ppm | 0.0030 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 36.3 % | 0.8 % | 1.6 % | 0.9 % | 139.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 13.6101 ppm | 0.0074 ppm | 0.2960 ppm | 7.0935 ppm | 0.0071 ppm | 0.2352 ppm |
| Concentration per Run 1 | 0.0038 ppm | 13.7009 ppm | 0.0067 ppm | 0.2972 ppm | 7.0873 ppm | 0.0071 ppm | 0.2355 ppm |
| Concentration per Run 2 | 0.0004 ppm | 13.9505 ppm | 0.0085 ppm | 0.2945 ppm | 7.1271 ppm | 0.0059 ppm | 0.2345 ppm |
| Concentration per Run 3 | 0.0031 ppm | 13.1789 ppm | 0.0071 ppm | 0.2964 ppm | 7.0661 ppm | 0.0081 ppm | 0.2355 ppm |
| Concentration RSD | 75.3 % | 2.9 % | 12.7 % | 0.5 % | 0.4 % | 15.3 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3496 ppm | 107.5640 % | 110.4226 % | 99.5581 % | 121.3202 % | 126.9954 % | 120.3739 % |
| Concentration per Run 1 | 0.3488 ppm | 107.1165 % | 109.8300 % | 99.9138 % | 120.8765 % | 125.8924 % | 121.0551 % |
| Concentration per Run 2 | 0.3513 ppm | 107.7993 % | 111.0581 % | 99.6878 % | 121.0508 % | 127.9833 % | 120.4561 % |
| Concentration per Run 3 | 0.3487 ppm | 107.7762 % | 110.3796 % | 99.0726 % | 122.0333 % | 127.1105 % | 119.6104 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.6 % | 0.4 % | 0.5 % | 0.8 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-5D2 WG1974073
Analysis started at: 9/20/2024 11:35:01 AM
Rack 1
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0478 ppm | 68.0336 ppm | 0.1215 ppm | 0.9259 ppm | 2.5961 ppm | 0.0491 ppm | 224.9639 ppm |
| Concentration per Run 1 | 0.0480 ppm | 68.0050 ppm | 0.1240 ppm | 0.9234 ppm | 2.5999 ppm | 0.0495 ppm | 224.8193 ppm |
| Concentration per Run 2 | 0.0479 ppm | 68.1226 ppm | 0.1211 ppm | 0.9263 ppm | 2.5843 ppm | 0.0489 ppm | 225.1871 ppm |
| Concentration per Run 3 | 0.0475 ppm | 67.9734 ppm | 0.1195 ppm | 0.9281 ppm | 2.6041 ppm | 0.0490 ppm | 224.8854 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 1.9 % | 0.3 % | 0.4 % | 0.6 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0470 ppm | 0.4877 ppm | 0.3540 ppm | 0.3842 ppm | 136.5378 ppm | 38.8718 ppm | 0.0768 ppm |
| Concentration per Run 1 | 0.0474 ppm | 0.4900 ppm | 0.3543 ppm | 0.3853 ppm | 136.9491 ppm | 38.9053 ppm | 0.0784 ppm |
| Concentration per Run 2 | 0.0477 ppm | 0.4902 ppm | 0.3538 ppm | 0.3834 ppm | 136.1197 ppm | 38.8198 ppm | 0.0767 ppm |
| Concentration per Run 3 | 0.0458 ppm | 0.4829 ppm | 0.3539 ppm | 0.3839 ppm | 136.5445 ppm | 38.8901 ppm | 0.0754 ppm |
| Concentration RSD | 2.2 % | 0.9 % | 0.1 % | 0.3 % | 0.3 % | 0.1 % | 2.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 125.7312 ppm | 2.4123 ppm | 0.9301 ppm | 13.6920 ppm | 0.5492 ppm | 0.5125 ppm | 0.4124 ppm |
| Concentration per Run 1 | 125.9850 ppm | 2.4165 ppm | 0.9243 ppm | 13.5991 ppm | 0.5496 ppm | 0.5116 ppm | 0.4035 ppm |
| Concentration per Run 2 | 126.3190 ppm | 2.3990 ppm | 0.9312 ppm | 13.8104 ppm | 0.5497 ppm | 0.5139 ppm | 0.4125 ppm |
| Concentration per Run 3 | 124.8896 ppm | 2.4213 ppm | 0.9346 ppm | 13.6666 ppm | 0.5483 ppm | 0.5121 ppm | 0.4214 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.6 % | 0.8 % | 0.1 % | 0.2 % | 2.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1131 ppm | 14.7407 ppm | 0.9061 ppm | 1.2125 ppm | 8.1534 ppm | 0.1156 ppm | 0.7041 ppm |
| Concentration per Run 1 | 0.1150 ppm | 15.0142 ppm | 0.9067 ppm | 1.2118 ppm | 8.1632 ppm | 0.1166 ppm | 0.7049 ppm |
| Concentration per Run 2 | 0.1099 ppm | 14.7400 ppm | 0.9055 ppm | 1.2140 ppm | 8.1724 ppm | 0.1152 ppm | 0.7052 ppm |
| Concentration per Run 3 | 0.1143 ppm | 14.4679 ppm | 0.9061 ppm | 1.2118 ppm | 8.1247 ppm | 0.1148 ppm | 0.7022 ppm |
| Concentration RSD | 2.5 % | 1.9 % | 0.1 % | 0.1 % | 0.3 % | 0.8 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7738 ppm | 105.8805 % | 108.4779 % | 98.4680 % | 119.1056 % | 124.3039 % | 117.5836 % |
| Concentration per Run 1 | 0.7752 ppm | 106.0196 % | 108.7896 % | 98.1074 % | 119.1125 % | 125.0624 % | 117.5049 % |
| Concentration per Run 2 | 0.7744 ppm | 106.0536 % | 108.2011 % | 98.5619 % | 119.0635 % | 123.9709 % | 117.3612 % |
| Concentration per Run 3 | 0.7717 ppm | 105.5684 % | 108.4431 % | 98.7348 % | 119.1406 % | 123.8784 % | 117.8847 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.3 % | 0.0 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974073-6D10 WG1974073
Analysis started at: 9/20/2024 11:38:55 AM
Rack 1
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 13.8749 ppm | 0.0017 ppm | 0.0026 ppm | 0.1570 ppm | 0.0004 ppm | 46.9187 ppm |
| Concentration per Run 1 | 0.0008 ppm | 13.8138 ppm | 0.0001 ppm | 0.0044 ppm | 0.1562 ppm | 0.0005 ppm | 46.8335 ppm |
| Concentration per Run 2 | 0.0009 ppm | 13.8874 ppm | 0.0043 ppm | 0.0016 ppm | 0.1567 ppm | 0.0004 ppm | 47.1353 ppm |
| Concentration per Run 3 | 0.0014 ppm | 13.9235 ppm | 0.0006 ppm | 0.0019 ppm | 0.1581 ppm | 0.0004 ppm | 46.7872 ppm |
| Concentration RSD | 30.3 % | 0.4 % | 136.2 % | 58.4 % | 0.6 % | 11.5 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0120 ppm | 0.0373 ppm | 0.0322 ppm | 29.8064 ppm | 6.0285 ppm | 0.0164 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0117 ppm | 0.0382 ppm | 0.0323 ppm | 29.6524 ppm | 5.9812 ppm | 0.0161 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0123 ppm | 0.0370 ppm | 0.0321 ppm | 29.8075 ppm | 5.9948 ppm | 0.0163 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0121 ppm | 0.0368 ppm | 0.0324 ppm | 29.9594 ppm | 6.1095 ppm | 0.0167 ppm |
| Concentration RSD | 437.0 % | 2.5 % | 2.0 % | 0.5 % | 0.5 % | 1.2 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.5098 ppm | 0.4206 ppm | 0.0012 ppm | 0.6088 ppm | 0.0264 ppm | 0.0067 ppm | 0.0075 ppm |
| Concentration per Run 1 | 25.5459 ppm | 0.4200 ppm | 0.0010 ppm | 0.6078 ppm | 0.0259 ppm | 0.0067 ppm | 0.0033 ppm |
| Concentration per Run 2 | 25.4963 ppm | 0.4209 ppm | 0.0013 ppm | 0.6077 ppm | 0.0275 ppm | 0.0066 ppm | 0.0121 ppm |
| Concentration per Run 3 | 25.4871 ppm | 0.4209 ppm | 0.0012 ppm | 0.6108 ppm | 0.0258 ppm | 0.0068 ppm | 0.0072 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 14.2 % | 0.3 % | 3.6 % | 1.8 % | 58.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 3.3459 ppm | 0.0040 ppm | 0.0599 ppm | 1.5452 ppm | -0.0001 ppm | 0.0499 ppm |
| Concentration per Run 1 | -0.0012 ppm | 3.3056 ppm | 0.0054 ppm | 0.0598 ppm | 1.5474 ppm | -0.0012 ppm | 0.0505 ppm |
| Concentration per Run 2 | 0.0030 ppm | 3.2671 ppm | 0.0031 ppm | 0.0598 ppm | 1.5492 ppm | 0.0001 ppm | 0.0493 ppm |
| Concentration per Run 3 | -0.0001 ppm | 3.4650 ppm | 0.0036 ppm | 0.0601 ppm | 1.5390 ppm | 0.0007 ppm | 0.0498 ppm |
| Concentration RSD | 390.4 % | 3.1 % | 28.9 % | 0.3 % | 0.4 % | 779.8 % | 1.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0756 ppm | 107.8298 % | 106.3348 % | 104.4959 % | 110.2015 % | 111.3410 % | 109.9518 % |
| Concentration per Run 1 | 0.0755 ppm | 107.5198 % | 107.0149 % | 104.1612 % | 110.3950 % | 111.6544 % | 109.5962 % |
| Concentration per Run 2 | 0.0756 ppm | 106.9840 % | 106.8771 % | 103.6973 % | 109.4176 % | 110.9384 % | 109.3611 % |
| Concentration per Run 3 | 0.0758 ppm | 108.9858 % | 105.1123 % | 105.6292 % | 110.7920 % | 111.4303 % | 110.8980 % |
| Concentration RSD | 0.3 % | 1.0 % | 1.0 % | 1.0 % | 0.6 % | 0.3 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 11:42:50 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5071 ppm | 0.4728 ppm | 0.4781 ppm | 0.4953 ppm | 0.4881 ppm | 0.5010 ppm | 0.4850 ppm |
| Concentration per Run 1 | 0.5072 ppm | 0.4724 ppm | 0.4761 ppm | 0.4920 ppm | 0.4850 ppm | 0.5022 ppm | 0.4865 ppm |
| Concentration per Run 2 | 0.5051 ppm | 0.4688 ppm | 0.4771 ppm | 0.4974 ppm | 0.4888 ppm | 0.4996 ppm | 0.4844 ppm |
| Concentration per Run 3 | 0.5092 ppm | 0.4772 ppm | 0.4812 ppm | 0.4965 ppm | 0.4905 ppm | 0.5011 ppm | 0.4841 ppm |
| Recovery Percentage 1 | 101.430 % | 94.558 % | 95.630 % | 99.062 % | 97.627 % | 100.200 % | 96.996 % |
| Concentration RSD | 0.4 % | 0.9 % | 0.6 % | 0.6 % | 0.6 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4952 ppm | 0.5044 ppm | 0.4839 ppm | 0.4936 ppm | 0.4939 ppm | 5.0625 ppm | 0.4917 ppm |
| Concentration per Run 1 | 0.4938 ppm | 0.5044 ppm | 0.4847 ppm | 0.4931 ppm | 0.4917 ppm | 5.0590 ppm | 0.4902 ppm |
| Concentration per Run 2 | 0.4965 ppm | 0.5033 ppm | 0.4835 ppm | 0.4924 ppm | 0.4967 ppm | 5.0548 ppm | 0.4923 ppm |
| Concentration per Run 3 | 0.4955 ppm | 0.5055 ppm | 0.4834 ppm | 0.4953 ppm | 0.4933 ppm | 5.0737 ppm | 0.4928 ppm |
| Recovery Percentage 1 | 99.048 % | 100.877 % | 96.773 % | 98.718 % | 98.780 % | 101.250 % | 98.349 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.3 % | 0.5 % | 0.2 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4846 ppm | 0.4787 ppm | 0.4864 ppm | 9.6272 ppm | 0.5031 ppm | 0.4919 ppm | 0.5048 ppm |
| Concentration per Run 1 | 0.4864 ppm | 0.4818 ppm | 0.4826 ppm | 9.6638 ppm | 0.5034 ppm | 0.4969 ppm | 0.5049 ppm |
| Concentration per Run 2 | 0.4846 ppm | 0.4765 ppm | 0.4874 ppm | 9.6028 ppm | 0.5033 ppm | 0.4886 ppm | 0.5019 ppm |
| Concentration per Run 3 | 0.4829 ppm | 0.4779 ppm | 0.4893 ppm | 9.6149 ppm | 0.5025 ppm | 0.4901 ppm | 0.5076 ppm |
| Recovery Percentage 1 | 96.927 % | 95.746 % | 97.285 % | 96.272 % | 100.619 % | 98.377 % | 100.966 % |
| Concentration RSD | 0.4 % | 0.6 % | 0.7 % | 0.3 % | 0.1 % | 0.9 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4896 ppm | 5.3947 ppm | 0.4770 ppm | 0.4713 ppm | 0.4937 ppm | 0.4948 ppm | 0.4811 ppm |
| Concentration per Run 1 | 0.4873 ppm | 5.3955 ppm | 0.4766 ppm | 0.4702 ppm | 0.4937 ppm | 0.4946 ppm | 0.4803 ppm |
| Concentration per Run 2 | 0.4897 ppm | 5.3947 ppm | 0.4773 ppm | 0.4710 ppm | 0.4936 ppm | 0.4926 ppm | 0.4813 ppm |
| Concentration per Run 3 | 0.4918 ppm | 5.3941 ppm | 0.4770 ppm | 0.4728 ppm | 0.4939 ppm | 0.4972 ppm | 0.4818 ppm |
| Recovery Percentage 1 | 97.921 % | 102.757 % | 95.396 % | 94.270 % | 98.749 % | 98.962 % | 96.226 % |
| Concentration RSD | 0.5 % | 0.0 % | 0.1 % | 0.3 % | 0.0 % | 0.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4982 ppm | 109.7154 % | 107.0684 % | 107.3442 % | 108.9423 % | 107.3206 % | 107.4495 % |
| Concentration per Run 1 | 0.4977 ppm | 109.9087 % | 107.0289 % | 107.2090 % | 109.1520 % | 107.0734 % | 107.5696 % |
| Concentration per Run 2 | 0.5008 ppm | 109.1225 % | 107.6235 % | 108.1419 % | 108.2113 % | 107.9944 % | 107.9667 % |
| Concentration per Run 3 | 0.4962 ppm | 110.1151 % | 106.5529 % | 106.6817 % | 109.4637 % | 106.8942 % | 106.8121 % |
| Recovery Percentage 1 | 99.648 % | | | | | | |
| Concentration RSD | 0.5 % | 0.5 % | 0.5 % | 0.7 % | 0.6 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 11:46:44 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0054 ppm | 0.0015 ppm | 0.0028 ppm | -0.0001 ppm | 0.0001 ppm | 0.0032 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0019 ppm | 0.0009 ppm | 0.0045 ppm | 0.0001 ppm | 0.0001 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0076 ppm | 0.0017 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | 0.0065 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0066 ppm | 0.0018 ppm | 0.0021 ppm | -0.0001 ppm | 0.0001 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 16.999 % | 5.365 % | 29.351 % | 9.327 % | -0.625 % | 2.368 % | 3.193 % |
| Concentration RSD | 11.6 % | 57.5 % | 35.1 % | 52.4 % | 195.9 % | 47.4 % | 109.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0002 ppm | -0.0100 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | -0.0003 ppm | 0.0002 ppm | -0.0005 ppm | -0.0199 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0008 ppm | -0.0013 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | -0.0009 ppm | -0.0003 ppm | 0.0002 ppm | -0.0087 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 2.307 % | -0.234 % | -3.237 % | -0.715 % | 0.361 % | -0.400 % | 24.107 % |
| Concentration RSD | 24.3 % | 263.9 % | 175.3 % | 360.2 % | 372.9 % | 94.0 % | 47.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0002 ppm | 0.0010 ppm | -0.1922 ppm | 0.0000 ppm | -0.0004 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0002 ppm | 0.0011 ppm | -0.1970 ppm | 0.0003 ppm | 0.0003 ppm | -0.0015 ppm |
| Concentration per Run 2 | -0.0012 ppm | -0.0002 ppm | 0.0009 ppm | -0.1920 ppm | 0.0007 ppm | -0.0002 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | 0.0011 ppm | -0.1878 ppm | -0.0010 ppm | -0.0014 ppm | 0.0046 ppm |
| Recovery Percentage 1 | -0.159 % | -1.835 % | 2.073 % | -9.612 % | -0.084 % | -4.338 % | 3.393 % |
| Concentration RSD | 613.5 % | 16.5 % | 8.1 % | 2.4 % | 4,220.7 % | 206.4 % | 181.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 0.0023 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | -0.0009 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0030 ppm | 0.0011 ppm | 0.0000 ppm | -0.0001 ppm | 0.0009 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0021 ppm | 0.0003 ppm | 0.0000 ppm | -0.0002 ppm | -0.0017 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0035 ppm | 0.0018 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0018 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -16.897 % | 0.462 % | 0.555 % | 0.069 % | -1.055 % | -4.270 % | -1.505 % |
| Concentration RSD | 95.0 % | 28.2 % | 287.1 % | 673.6 % | 100.8 % | 182.8 % | 30.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 109.7029 % | 106.5924 % | 107.0942 % | 110.9180 % | 107.4363 % | 108.0456 % |
| Concentration per Run 1 | 0.0004 ppm | 109.2209 % | 105.5304 % | 106.1926 % | 110.7389 % | 107.0122 % | 107.0832 % |
| Concentration per Run 2 | 0.0003 ppm | 109.6877 % | 107.3284 % | 107.6394 % | 110.6857 % | 107.8329 % | 108.3133 % |
| Concentration per Run 3 | 0.0002 ppm | 110.2001 % | 106.9185 % | 107.4506 % | 111.3294 % | 107.4639 % | 108.7403 % |
| Recovery Percentage 1 | 5.740 % | | | | | | |
| Concentration RSD | 32.7 % | 0.4 % | 0.9 % | 0.7 % | 0.3 % | 0.4 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-05D2 WG1974073
Analysis started at: 9/20/2024 11:51:49 AM
Rack 1
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 63.4077 ppm | 0.0067 ppm | 0.0047 ppm | 0.6640 ppm | 0.0020 ppm | 116.0430 ppm |
| Concentration per Run 1 | 0.0016 ppm | 63.6339 ppm | 0.0068 ppm | 0.0032 ppm | 0.6645 ppm | 0.0020 ppm | 116.4255 ppm |
| Concentration per Run 2 | 0.0018 ppm | 63.6139 ppm | 0.0044 ppm | 0.0057 ppm | 0.6644 ppm | 0.0019 ppm | 116.2454 ppm |
| Concentration per Run 3 | 0.0020 ppm | 62.9754 ppm | 0.0089 ppm | 0.0051 ppm | 0.6632 ppm | 0.0020 ppm | 115.4581 ppm |
| Concentration RSD | 11.0 % | 0.6 % | 33.4 % | 27.7 % | 0.1 % | 1.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0524 ppm | 0.1636 ppm | 0.1382 ppm | 139.0516 ppm | 25.1036 ppm | 0.0734 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0515 ppm | 0.1599 ppm | 0.1350 ppm | 139.0631 ppm | 25.1639 ppm | 0.0738 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0530 ppm | 0.1662 ppm | 0.1396 ppm | 138.8258 ppm | 25.1342 ppm | 0.0731 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0527 ppm | 0.1647 ppm | 0.1399 ppm | 139.2660 ppm | 25.0127 ppm | 0.0734 ppm |
| Concentration RSD | 46.5 % | 1.5 % | 2.0 % | 2.0 % | 0.2 % | 0.3 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 84.7044 ppm | 1.9690 ppm | 0.0011 ppm | 3.4528 ppm | 0.1105 ppm | 0.0402 ppm | 0.0005 ppm |
| Concentration per Run 1 | 82.6130 ppm | 1.9768 ppm | 0.0006 ppm | 3.4668 ppm | 0.1082 ppm | 0.0417 ppm | 0.0016 ppm |
| Concentration per Run 2 | 85.7615 ppm | 1.9724 ppm | 0.0011 ppm | 3.4383 ppm | 0.1114 ppm | 0.0396 ppm | 0.0029 ppm |
| Concentration per Run 3 | 85.7388 ppm | 1.9579 ppm | 0.0015 ppm | 3.4533 ppm | 0.1120 ppm | 0.0392 ppm | -0.0030 ppm |
| Concentration RSD | 2.1 % | 0.5 % | 38.8 % | 0.4 % | 1.9 % | 3.4 % | 604.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 8.2362 ppm | 0.0070 ppm | 0.1226 ppm | 6.8774 ppm | 0.0062 ppm | 0.2319 ppm |
| Concentration per Run 1 | 0.0001 ppm | 7.9360 ppm | 0.0074 ppm | 0.1226 ppm | 6.7168 ppm | 0.0074 ppm | 0.2258 ppm |
| Concentration per Run 2 | 0.0009 ppm | 8.2067 ppm | 0.0057 ppm | 0.1226 ppm | 6.9725 ppm | 0.0054 ppm | 0.2359 ppm |
| Concentration per Run 3 | -0.0013 ppm | 8.5658 ppm | 0.0080 ppm | 0.1227 ppm | 6.9430 ppm | 0.0058 ppm | 0.2339 ppm |
| Concentration RSD | 1,373.0 % | 3.8 % | 17.3 % | 0.1 % | 2.0 % | 16.6 % | 2.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3266 ppm | 105.2393 % | 110.7077 % | 99.1365 % | 118.3019 % | 126.8896 % | 117.1373 % |
| Concentration per Run 1 | 0.3191 ppm | 107.4688 % | 109.2637 % | 99.1715 % | 120.3452 % | 125.6471 % | 117.6772 % |
| Concentration per Run 2 | 0.3301 ppm | 103.9967 % | 110.5455 % | 98.7809 % | 116.6125 % | 126.9139 % | 116.4852 % |
| Concentration per Run 3 | 0.3306 ppm | 104.2523 % | 112.3138 % | 99.4569 % | 117.9482 % | 128.1079 % | 117.2494 % |
| Concentration RSD | 2.0 % | 1.8 % | 1.4 % | 0.3 % | 1.6 % | 1.0 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-06D2 WG1974073
Analysis started at: 9/20/2024 11:55:53 AM
Rack 1
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 114.8122 ppm | 0.0072 ppm | 0.0033 ppm | 1.0474 ppm | 0.0038 ppm | 280.8085 ppm |
| Concentration per Run 1 | 0.0022 ppm | 114.5050 ppm | 0.0079 ppm | 0.0037 ppm | 1.0477 ppm | 0.0039 ppm | 280.2901 ppm |
| Concentration per Run 2 | 0.0015 ppm | 114.9598 ppm | 0.0060 ppm | 0.0065 ppm | 1.0458 ppm | 0.0038 ppm | 281.4722 ppm |
| Concentration per Run 3 | 0.0018 ppm | 114.9718 ppm | 0.0077 ppm | -0.0003 ppm | 1.0489 ppm | 0.0038 ppm | 280.6633 ppm |
| Concentration RSD | 18.8 % | 0.2 % | 14.2 % | 104.6 % | 0.1 % | 0.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0815 ppm | 0.2485 ppm | 0.2047 ppm | 208.4531 ppm | 55.3233 ppm | 0.1562 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0819 ppm | 0.2487 ppm | 0.2045 ppm | 208.4044 ppm | 55.3008 ppm | 0.1573 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0815 ppm | 0.2479 ppm | 0.2052 ppm | 208.6878 ppm | 55.2250 ppm | 0.1560 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0810 ppm | 0.2489 ppm | 0.2045 ppm | 208.2672 ppm | 55.4441 ppm | 0.1554 ppm |
| Concentration RSD | 104.5 % | 0.6 % | 0.2 % | 0.2 % | 0.1 % | 0.2 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 194.1974 ppm | 2.3514 ppm | 0.0011 ppm | 8.2290 ppm | 0.1732 ppm | 0.0386 ppm | -0.0025 ppm |
| Concentration per Run 1 | 194.6742 ppm | 2.3494 ppm | 0.0009 ppm | 8.1887 ppm | 0.1736 ppm | 0.0383 ppm | 0.0003 ppm |
| Concentration per Run 2 | 193.6756 ppm | 2.3579 ppm | 0.0016 ppm | 8.2623 ppm | 0.1723 ppm | 0.0394 ppm | -0.0062 ppm |
| Concentration per Run 3 | 194.2423 ppm | 2.3471 ppm | 0.0007 ppm | 8.2359 ppm | 0.1738 ppm | 0.0382 ppm | -0.0017 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 42.4 % | 0.5 % | 0.5 % | 1.7 % | 131.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 15.9591 ppm | 0.0152 ppm | 0.2057 ppm | 13.5566 ppm | 0.0151 ppm | 0.3678 ppm |
| Concentration per Run 1 | 0.0000 ppm | 15.9471 ppm | 0.0149 ppm | 0.2062 ppm | 13.6057 ppm | 0.0138 ppm | 0.3671 ppm |
| Concentration per Run 2 | 0.0069 ppm | 15.8605 ppm | 0.0149 ppm | 0.2051 ppm | 13.5051 ppm | 0.0141 ppm | 0.3682 ppm |
| Concentration per Run 3 | -0.0012 ppm | 16.0697 ppm | 0.0157 ppm | 0.2057 ppm | 13.5591 ppm | 0.0174 ppm | 0.3682 ppm |
| Concentration RSD | 231.4 % | 0.7 % | 2.9 % | 0.3 % | 0.4 % | 13.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6509 ppm | 107.6580 % | 112.1644 % | 101.6517 % | 121.4558 % | 128.9249 % | 120.2140 % |
| Concentration per Run 1 | 0.6521 ppm | 107.3392 % | 111.8896 % | 102.6210 % | 120.9298 % | 128.2348 % | 120.9691 % |
| Concentration per Run 2 | 0.6501 ppm | 107.5747 % | 111.4309 % | 101.0642 % | 121.6844 % | 127.9589 % | 120.0255 % |
| Concentration per Run 3 | 0.6504 ppm | 108.0600 % | 113.1726 % | 101.2698 % | 121.7532 % | 130.5811 % | 119.6475 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.8 % | 0.8 % | 0.4 % | 1.1 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-07D2 WG1974073
Analysis started at: 9/20/2024 11:59:46 AM
Rack 1
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 78.9904 ppm | 0.0091 ppm | -0.0028 ppm | 1.3129 ppm | 0.0017 ppm | 158.6980 ppm |
| Concentration per Run 1 | 0.0020 ppm | 78.7748 ppm | 0.0094 ppm | -0.0009 ppm | 1.3173 ppm | 0.0016 ppm | 158.7435 ppm |
| Concentration per Run 2 | 0.0016 ppm | 79.3439 ppm | 0.0102 ppm | -0.0025 ppm | 1.3136 ppm | 0.0017 ppm | 159.5758 ppm |
| Concentration per Run 3 | 0.0015 ppm | 78.8526 ppm | 0.0076 ppm | -0.0048 ppm | 1.3078 ppm | 0.0018 ppm | 157.7749 ppm |
| Concentration RSD | 16.7 % | 0.4 % | 14.9 % | 70.8 % | 0.4 % | 4.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0651 ppm | 0.2733 ppm | 0.2069 ppm | 173.1823 ppm | 41.1985 ppm | 0.0849 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0643 ppm | 0.2715 ppm | 0.2072 ppm | 173.1825 ppm | 41.0871 ppm | 0.0855 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0653 ppm | 0.2747 ppm | 0.2055 ppm | 173.1721 ppm | 41.3922 ppm | 0.0842 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0658 ppm | 0.2739 ppm | 0.2080 ppm | 173.1922 ppm | 41.1160 ppm | 0.0852 ppm |
| Concentration RSD | 200.7 % | 1.2 % | 0.6 % | 0.6 % | 0.0 % | 0.4 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 111.3624 ppm | 1.9100 ppm | 0.0005 ppm | 2.7348 ppm | 0.1553 ppm | 0.0241 ppm | -0.0006 ppm |
| Concentration per Run 1 | 110.9515 ppm | 1.9023 ppm | 0.0001 ppm | 2.7290 ppm | 0.1539 ppm | 0.0242 ppm | -0.0013 ppm |
| Concentration per Run 2 | 111.5482 ppm | 1.9171 ppm | 0.0007 ppm | 2.7522 ppm | 0.1565 ppm | 0.0238 ppm | 0.0013 ppm |
| Concentration per Run 3 | 111.5874 ppm | 1.9107 ppm | 0.0005 ppm | 2.7234 ppm | 0.1557 ppm | 0.0243 ppm | -0.0019 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 65.6 % | 0.6 % | 0.9 % | 1.2 % | 265.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0063 ppm | 23.1016 [SIC 50] | 0.0084 ppm | 0.1877 ppm | 9.6902 ppm | 0.0091 ppm | 0.3573 ppm |
| Concentration per Run 1 | 0.0040 ppm | 23.2863 ppm | 0.0076 ppm | 0.1881 ppm | 9.6056 ppm | 0.0089 ppm | 0.3566 ppm |
| Concentration per Run 2 | 0.0043 ppm | 22.7496 ppm | 0.0092 ppm | 0.1878 ppm | 9.7057 ppm | 0.0081 ppm | 0.3570 ppm |
| Concentration per Run 3 | 0.0108 ppm | 23.2688 ppm | 0.0085 ppm | 0.1871 ppm | 9.7591 ppm | 0.0104 ppm | 0.3584 ppm |
| Concentration RSD | 60.4 % | 1.3 % | 9.7 % | 0.3 % | 0.8 % | 12.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4457 ppm | 108.7020 % | 111.7562 % | 102.8168 % | 121.5143 % | 126.5510 % | 121.0488 % |
| Concentration per Run 1 | 0.4456 ppm | 109.1243 % | 111.8806 % | 103.2869 % | 122.0395 % | 127.4045 % | 121.1598 % |
| Concentration per Run 2 | 0.4466 ppm | 108.7171 % | 110.4207 % | 102.3409 % | 121.3204 % | 125.7200 % | 120.6478 % |
| Concentration per Run 3 | 0.4450 ppm | 108.2647 % | 112.9672 % | 102.8225 % | 121.1831 % | 126.5285 % | 121.3389 % |
| Concentration RSD | 0.2 % | 0.4 % | 1.1 % | 0.5 % | 0.4 % | 0.7 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-08D2 WG1974073
Analysis started at: 9/20/2024 12:03:39 PM
Rack 1
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 92.6213 ppm | 0.0064 ppm | -0.0041 ppm | 1.6166 ppm | 0.0016 ppm | 127.3237 ppm |
| Concentration per Run 1 | 0.0017 ppm | 92.6027 ppm | 0.0066 ppm | -0.0034 ppm | 1.6156 ppm | 0.0017 ppm | 127.2523 ppm |
| Concentration per Run 2 | 0.0019 ppm | 93.0038 ppm | 0.0059 ppm | -0.0066 ppm | 1.6175 ppm | 0.0016 ppm | 127.5598 ppm |
| Concentration per Run 3 | 0.0016 ppm | 92.2573 ppm | 0.0067 ppm | -0.0022 ppm | 1.6166 ppm | 0.0016 ppm | 127.1589 ppm |
| Concentration RSD | 11.3 % | 0.4 % | 6.8 % | 55.2 % | 0.1 % | 5.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0801 ppm | 0.3334 ppm | 0.2323 ppm | 187.3265 ppm | 54.4359 ppm | 0.0925 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0799 ppm | 0.3330 ppm | 0.2307 ppm | 187.4119 ppm | 54.3662 ppm | 0.0937 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0809 ppm | 0.3324 ppm | 0.2329 ppm | 187.2004 ppm | 54.4526 ppm | 0.0923 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0794 ppm | 0.3347 ppm | 0.2332 ppm | 187.3672 ppm | 54.4890 ppm | 0.0916 ppm |
| Concentration RSD | 74.2 % | 0.9 % | 0.4 % | 0.6 % | 0.1 % | 0.1 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.9649 ppm | 2.2790 ppm | 0.0021 ppm | 3.5191 ppm | 0.1835 ppm | 0.0208 ppm | -0.0019 ppm |
| Concentration per Run 1 | 98.9439 ppm | 2.2855 ppm | 0.0012 ppm | 3.5341 ppm | 0.1832 ppm | 0.0199 ppm | -0.0024 ppm |
| Concentration per Run 2 | 98.6326 ppm | 2.2767 ppm | 0.0027 ppm | 3.5564 ppm | 0.1820 ppm | 0.0223 ppm | -0.0017 ppm |
| Concentration per Run 3 | 99.3182 ppm | 2.2748 ppm | 0.0023 ppm | 3.4668 ppm | 0.1854 ppm | 0.0202 ppm | -0.0017 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 36.5 % | 1.3 % | 0.9 % | 6.5 % | 22.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 23.5030 [SIC 50] | 0.0093 ppm | 0.1771 ppm | 11.8246 ppm | 0.0110 ppm | 0.4051 ppm |
| Concentration per Run 1 | 0.0029 ppm | 23.2295 ppm | 0.0081 ppm | 0.1770 ppm | 11.8361 ppm | 0.0109 ppm | 0.4044 ppm |
| Concentration per Run 2 | -0.0015 ppm | 23.7743 ppm | 0.0105 ppm | 0.1778 ppm | 11.7710 ppm | 0.0114 ppm | 0.4057 ppm |
| Concentration per Run 3 | 0.0044 ppm | 23.5054 ppm | 0.0092 ppm | 0.1766 ppm | 11.8666 ppm | 0.0107 ppm | 0.4053 ppm |
| Concentration RSD | 157.7 % | 1.2 % | 12.9 % | 0.4 % | 0.4 % | 3.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4208 ppm | 109.5333 % | 112.1557 % | 104.4480 % | 121.6980 % | 126.9668 % | 120.6645 % |
| Concentration per Run 1 | 0.4206 ppm | 110.1489 % | 111.6511 % | 104.7313 % | 122.2634 % | 126.6930 % | 121.0983 % |
| Concentration per Run 2 | 0.4187 ppm | 109.5665 % | 112.4250 % | 104.0041 % | 122.0773 % | 127.6184 % | 120.2432 % |
| Concentration per Run 3 | 0.4232 ppm | 108.8845 % | 112.3908 % | 104.6087 % | 120.7531 % | 126.5889 % | 120.6520 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.4 % | 0.4 % | 0.7 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-09D2 WG1974073
Analysis started at: 9/20/2024 12:07:32 PM
Rack 1
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 65.8077 ppm | 0.0087 ppm | 0.0040 ppm | 0.6726 ppm | 0.0024 ppm | 235.8335 ppm |
| Concentration per Run 1 | 0.0019 ppm | 65.6223 ppm | 0.0083 ppm | 0.0048 ppm | 0.6723 ppm | 0.0023 ppm | 235.5986 ppm |
| Concentration per Run 2 | 0.0014 ppm | 66.0094 ppm | 0.0112 ppm | 0.0030 ppm | 0.6736 ppm | 0.0025 ppm | 236.4886 ppm |
| Concentration per Run 3 | 0.0015 ppm | 65.7916 ppm | 0.0066 ppm | 0.0042 ppm | 0.6719 ppm | 0.0024 ppm | 235.4134 ppm |
| Concentration RSD | 14.2 % | 0.3 % | 26.7 % | 24.0 % | 0.1 % | 4.7 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0519 ppm | 0.1696 ppm | 0.1516 ppm | 133.9451 ppm | 30.8824 ppm | 0.0823 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0516 ppm | 0.1703 ppm | 0.1518 ppm | 133.5955 ppm | 30.7559 ppm | 0.0831 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0521 ppm | 0.1689 ppm | 0.1512 ppm | 134.2666 ppm | 31.0005 ppm | 0.0822 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0520 ppm | 0.1696 ppm | 0.1519 ppm | 133.9733 ppm | 30.8909 ppm | 0.0815 ppm |
| Concentration RSD | 57.5 % | 0.5 % | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 1.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 144.6977 ppm | 1.6005 ppm | 0.0002 ppm | 3.8475 ppm | 0.1062 ppm | 0.0264 ppm | -0.0026 ppm |
| Concentration per Run 1 | 145.3915 ppm | 1.5993 ppm | 0.0000 ppm | 3.8471 ppm | 0.1079 ppm | 0.0269 ppm | -0.0035 ppm |
| Concentration per Run 2 | 144.3525 ppm | 1.6024 ppm | 0.0004 ppm | 3.8579 ppm | 0.1069 ppm | 0.0266 ppm | -0.0021 ppm |
| Concentration per Run 3 | 144.3490 ppm | 1.5999 ppm | 0.0002 ppm | 3.8373 ppm | 0.1039 ppm | 0.0258 ppm | -0.0021 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 87.4 % | 0.3 % | 2.0 % | 2.3 % | 32.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 7.4118 ppm | 0.0071 ppm | 0.1801 ppm | 7.6548 ppm | 0.0058 ppm | 0.2359 ppm |
| Concentration per Run 1 | 0.0018 ppm | 7.7006 ppm | 0.0066 ppm | 0.1799 ppm | 7.7076 ppm | 0.0058 ppm | 0.2363 ppm |
| Concentration per Run 2 | -0.0040 ppm | 7.3488 ppm | 0.0088 ppm | 0.1804 ppm | 7.6088 ppm | 0.0049 ppm | 0.2355 ppm |
| Concentration per Run 3 | 0.0035 ppm | 7.1859 ppm | 0.0059 ppm | 0.1801 ppm | 7.6479 ppm | 0.0067 ppm | 0.2357 ppm |
| Concentration RSD | 894.9 % | 3.5 % | 20.9 % | 0.1 % | 0.6 % | 16.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4477 ppm | 106.5719 % | 109.7719 % | 99.0791 % | 119.7447 % | 125.4322 % | 118.6135 % |
| Concentration per Run 1 | 0.4529 ppm | 106.7326 % | 110.4649 % | 99.7874 % | 120.2262 % | 126.2554 % | 119.5336 % |
| Concentration per Run 2 | 0.4475 ppm | 107.1354 % | 109.2340 % | 98.9667 % | 120.0531 % | 124.7899 % | 118.4952 % |
| Concentration per Run 3 | 0.4425 ppm | 105.8478 % | 109.6168 % | 98.4832 % | 118.9547 % | 125.2512 % | 117.8119 % |
| Concentration RSD | 1.2 % | 0.6 % | 0.6 % | 0.7 % | 0.6 % | 0.6 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-10D2 WG1974073
Analysis started at: 9/20/2024 12:11:25 PM
Rack 1
Vial 54
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 76.1686 ppm | 0.0057 ppm | -0.0078 ppm | 1.3174 ppm | 0.0014 ppm | 135.8169 ppm |
| Concentration per Run 1 | 0.0021 ppm | 76.4418 ppm | 0.0054 ppm | -0.0085 ppm | 1.3196 ppm | 0.0013 ppm | 135.6638 ppm |
| Concentration per Run 2 | 0.0015 ppm | 75.8212 ppm | 0.0043 ppm | -0.0066 ppm | 1.3163 ppm | 0.0016 ppm | 135.2812 ppm |
| Concentration per Run 3 | 0.0020 ppm | 76.2427 ppm | 0.0072 ppm | -0.0082 ppm | 1.3162 ppm | 0.0013 ppm | 136.5059 ppm |
| Concentration RSD | 19.0 % | 0.4 % | 26.2 % | 13.4 % | 0.1 % | 14.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0679 ppm | 0.2896 ppm | 0.2991 ppm | 159.3212 ppm | 41.5474 ppm | 0.0738 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0677 ppm | 0.2885 ppm | 0.2987 ppm | 158.2952 ppm | 41.5733 ppm | 0.0724 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0671 ppm | 0.2881 ppm | 0.2987 ppm | 160.3956 ppm | 41.3981 ppm | 0.0753 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0689 ppm | 0.2922 ppm | 0.3000 ppm | 159.2727 ppm | 41.6709 ppm | 0.0738 ppm |
| Concentration RSD | 451.8 % | 1.4 % | 0.8 % | 0.3 % | 0.7 % | 0.3 % | 2.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 91.3459 ppm | 2.0566 ppm | 0.0020 ppm | 4.7934 ppm | 0.1604 ppm | 0.0198 ppm | 0.0018 ppm |
| Concentration per Run 1 | 91.0589 ppm | 2.0631 ppm | 0.0020 ppm | 4.8535 ppm | 0.1590 ppm | 0.0194 ppm | -0.0009 ppm |
| Concentration per Run 2 | 91.2090 ppm | 2.0437 ppm | 0.0024 ppm | 4.7608 ppm | 0.1606 ppm | 0.0207 ppm | 0.0013 ppm |
| Concentration per Run 3 | 91.7696 ppm | 2.0630 ppm | 0.0017 ppm | 4.7660 ppm | 0.1615 ppm | 0.0194 ppm | 0.0051 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 16.1 % | 1.1 % | 0.8 % | 3.9 % | 164.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 40.0011 [SIC 50] | 0.0067 ppm | 0.1759 ppm | 9.2032 ppm | 0.0088 ppm | 0.3354 ppm |
| Concentration per Run 1 | 0.0002 ppm | 40.5860 ppm | 0.0065 ppm | 0.1755 ppm | 9.1943 ppm | 0.0073 ppm | 0.3350 ppm |
| Concentration per Run 2 | -0.0010 ppm | 39.4080 ppm | 0.0064 ppm | 0.1765 ppm | 9.1610 ppm | 0.0104 ppm | 0.3363 ppm |
| Concentration per Run 3 | 0.0012 ppm | 40.0092 ppm | 0.0072 ppm | 0.1758 ppm | 9.2544 ppm | 0.0085 ppm | 0.3349 ppm |
| Concentration RSD | 923.4 % | 1.5 % | 6.8 % | 0.3 % | 0.5 % | 17.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3158 ppm | 108.6877 % | 110.2882 % | 102.4808 % | 122.2078 % | 125.9582 % | 120.4759 % |
| Concentration per Run 1 | 0.3152 ppm | 108.5608 % | 110.3976 % | 102.8002 % | 123.0596 % | 127.5006 % | 121.1332 % |
| Concentration per Run 2 | 0.3136 ppm | 109.4235 % | 109.8543 % | 102.7386 % | 122.0813 % | 124.6521 % | 120.7393 % |
| Concentration per Run 3 | 0.3184 ppm | 108.0788 % | 110.6125 % | 101.9034 % | 121.4826 % | 125.7220 % | 119.5551 % |
| Concentration RSD | 0.8 % | 0.6 % | 0.4 % | 0.5 % | 0.7 % | 1.1 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-11D2 WG1974073
Analysis started at: 9/20/2024 12:15:19 PM
Rack 1
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 85.5807 ppm | 0.0091 ppm | -0.0015 ppm | 1.3025 ppm | 0.0020 ppm | 173.0372 ppm |
| Concentration per Run 1 | 0.0018 ppm | 85.6847 ppm | 0.0091 ppm | -0.0007 ppm | 1.2986 ppm | 0.0020 ppm | 173.4336 ppm |
| Concentration per Run 2 | 0.0023 ppm | 85.4730 ppm | 0.0091 ppm | -0.0034 ppm | 1.3051 ppm | 0.0020 ppm | 172.6081 ppm |
| Concentration per Run 3 | 0.0018 ppm | 85.5843 ppm | 0.0092 ppm | -0.0005 ppm | 1.3038 ppm | 0.0021 ppm | 173.0700 ppm |
| Concentration RSD | 14.0 % | 0.1 % | 0.3 % | 107.1 % | 0.3 % | 1.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0690 ppm | 0.2672 ppm | 0.2017 ppm | 182.1011 ppm | 45.2840 ppm | 0.0987 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0680 ppm | 0.2670 ppm | 0.2000 ppm | 182.0094 ppm | 45.1577 ppm | 0.0988 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0707 ppm | 0.2686 ppm | 0.2025 ppm | 182.3116 ppm | 45.4166 ppm | 0.0982 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0682 ppm | 0.2660 ppm | 0.2025 ppm | 181.9823 ppm | 45.2778 ppm | 0.0992 ppm |
| Concentration RSD | 101.1 % | 2.2 % | 0.5 % | 0.7 % | 0.1 % | 0.3 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 118.8387 ppm | 2.0714 ppm | 0.0008 ppm | 3.5470 ppm | 0.1595 ppm | 0.0333 ppm | 0.0010 ppm |
| Concentration per Run 1 | 118.4657 ppm | 2.0727 ppm | 0.0006 ppm | 3.5513 ppm | 0.1599 ppm | 0.0321 ppm | 0.0033 ppm |
| Concentration per Run 2 | 119.2364 ppm | 2.0618 ppm | 0.0004 ppm | 3.5501 ppm | 0.1608 ppm | 0.0333 ppm | 0.0001 ppm |
| Concentration per Run 3 | 118.8139 ppm | 2.0796 ppm | 0.0014 ppm | 3.5396 ppm | 0.1576 ppm | 0.0345 ppm | -0.0004 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 67.6 % | 0.2 % | 1.0 % | 3.6 % | 202.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 18.0864 ppm | 0.0095 ppm | 0.1884 ppm | 10.0425 ppm | 0.0096 ppm | 0.3498 ppm |
| Concentration per Run 1 | 0.0041 ppm | 18.0090 ppm | 0.0094 ppm | 0.1883 ppm | 10.0222 ppm | 0.0107 ppm | 0.3501 ppm |
| Concentration per Run 2 | 0.0018 ppm | 18.3012 ppm | 0.0099 ppm | 0.1884 ppm | 10.0721 ppm | 0.0092 ppm | 0.3500 ppm |
| Concentration per Run 3 | 0.0004 ppm | 17.9489 ppm | 0.0093 ppm | 0.1884 ppm | 10.0333 ppm | 0.0090 ppm | 0.3491 ppm |
| Concentration RSD | 90.4 % | 1.0 % | 3.2 % | 0.0 % | 0.3 % | 9.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4518 ppm | 109.0438 % | 111.8808 % | 102.6942 % | 122.7783 % | 128.2865 % | 122.0222 % |
| Concentration per Run 1 | 0.4493 ppm | 108.7006 % | 111.8397 % | 102.0748 % | 121.9897 % | 128.6916 % | 122.2335 % |
| Concentration per Run 2 | 0.4545 ppm | 109.2867 % | 111.2577 % | 103.5741 % | 123.7475 % | 127.3521 % | 122.4151 % |
| Concentration per Run 3 | 0.4514 ppm | 109.1441 % | 112.5449 % | 102.4337 % | 122.5977 % | 128.8158 % | 121.4180 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.6 % | 0.8 % | 0.7 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-12D2 WG1974073
Analysis started at: 9/20/2024 12:19:13 PM
Rack 1
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 68.6127 ppm | 0.0074 ppm | 0.0031 ppm | 0.7085 ppm | 0.0022 ppm | 145.3920 ppm |
| Concentration per Run 1 | 0.0018 ppm | 68.8455 ppm | 0.0097 ppm | 0.0027 ppm | 0.7074 ppm | 0.0021 ppm | 145.8438 ppm |
| Concentration per Run 2 | 0.0014 ppm | 68.2618 ppm | 0.0057 ppm | 0.0029 ppm | 0.7055 ppm | 0.0022 ppm | 144.3805 ppm |
| Concentration per Run 3 | 0.0014 ppm | 68.7308 ppm | 0.0068 ppm | 0.0037 ppm | 0.7125 ppm | 0.0022 ppm | 145.9517 ppm |
| Concentration RSD | 15.5 % | 0.5 % | 28.2 % | 17.5 % | 0.5 % | 1.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0577 ppm | 0.1734 ppm | 0.1487 ppm | 145.5808 ppm | 27.1804 ppm | 0.0813 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0584 ppm | 0.1743 ppm | 0.1486 ppm | 145.4507 ppm | 27.1755 ppm | 0.0818 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0585 ppm | 0.1733 ppm | 0.1487 ppm | 144.4040 ppm | 27.0706 ppm | 0.0806 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0564 ppm | 0.1725 ppm | 0.1489 ppm | 146.8877 ppm | 27.2952 ppm | 0.0815 ppm |
| Concentration RSD | 560.2 % | 2.1 % | 0.5 % | 0.1 % | 0.9 % | 0.4 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.0340 ppm | 2.1997 ppm | 0.0010 ppm | 3.3047 ppm | 0.1165 ppm | 0.0339 ppm | 0.0019 ppm |
| Concentration per Run 1 | 99.0378 ppm | 2.1986 ppm | 0.0011 ppm | 3.3192 ppm | 0.1178 ppm | 0.0320 ppm | 0.0004 ppm |
| Concentration per Run 2 | 99.2837 ppm | 2.1905 ppm | 0.0007 ppm | 3.2876 ppm | 0.1168 ppm | 0.0342 ppm | 0.0009 ppm |
| Concentration per Run 3 | 98.7804 ppm | 2.2100 ppm | 0.0011 ppm | 3.3074 ppm | 0.1149 ppm | 0.0355 ppm | 0.0044 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 22.6 % | 0.5 % | 1.3 % | 5.2 % | 115.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 10.2187 ppm | 0.0078 ppm | 0.1475 ppm | 7.3391 ppm | 0.0076 ppm | 0.2415 ppm |
| Concentration per Run 1 | 0.0010 ppm | 10.5445 ppm | 0.0080 ppm | 0.1474 ppm | 7.3777 ppm | 0.0082 ppm | 0.2414 ppm |
| Concentration per Run 2 | 0.0007 ppm | 10.0993 ppm | 0.0091 ppm | 0.1462 ppm | 7.3249 ppm | 0.0076 ppm | 0.2419 ppm |
| Concentration per Run 3 | -0.0010 ppm | 10.0122 ppm | 0.0064 ppm | 0.1488 ppm | 7.3148 ppm | 0.0069 ppm | 0.2413 ppm |
| Concentration RSD | 511.1 % | 2.8 % | 17.0 % | 0.9 % | 0.5 % | 9.0 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3434 ppm | 109.0252 % | 110.6087 % | 101.5137 % | 124.1889 % | 128.3552 % | 122.6829 % |
| Concentration per Run 1 | 0.3442 ppm | 110.1926 % | 110.0892 % | 101.5436 % | 125.5464 % | 128.3119 % | 122.2006 % |
| Concentration per Run 2 | 0.3435 ppm | 108.3862 % | 111.5565 % | 101.6121 % | 123.2808 % | 128.5696 % | 123.7675 % |
| Concentration per Run 3 | 0.3425 ppm | 108.4967 % | 110.1805 % | 101.3855 % | 123.7395 % | 128.1840 % | 122.0807 % |
| Concentration RSD | 0.2 % | 0.9 % | 0.7 % | 0.1 % | 1.0 % | 0.2 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454074-13D2 WG1974073
Analysis started at: 9/20/2024 12:23:07 PM
Rack 1
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 84.6901 ppm | 0.0082 ppm | -0.0057 ppm | 1.3879 ppm | 0.0014 ppm | 143.2267 ppm |
| Concentration per Run 1 | 0.0009 ppm | 84.4037 ppm | 0.0101 ppm | -0.0067 ppm | 1.3842 ppm | 0.0014 ppm | 142.4761 ppm |
| Concentration per Run 2 | 0.0019 ppm | 84.6999 ppm | 0.0069 ppm | -0.0057 ppm | 1.3898 ppm | 0.0015 ppm | 143.8544 ppm |
| Concentration per Run 3 | 0.0015 ppm | 84.9666 ppm | 0.0077 ppm | -0.0048 ppm | 1.3898 ppm | 0.0014 ppm | 143.3495 ppm |
| Concentration RSD | 35.5 % | 0.3 % | 19.6 % | 16.5 % | 0.2 % | 6.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0714 ppm | 0.3147 ppm | 0.2277 ppm | 172.1111 ppm | 47.6092 ppm | 0.0850 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0717 ppm | 0.3123 ppm | 0.2278 ppm | 171.3273 ppm | 47.2816 ppm | 0.0836 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0720 ppm | 0.3143 ppm | 0.2276 ppm | 173.0993 ppm | 47.6528 ppm | 0.0852 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0705 ppm | 0.3174 ppm | 0.2277 ppm | 171.9066 ppm | 47.8933 ppm | 0.0863 ppm |
| Concentration RSD | 55.3 % | 1.1 % | 0.8 % | 0.0 % | 0.5 % | 0.6 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.2815 ppm | 2.2934 ppm | 0.0001 ppm | 4.4013 ppm | 0.1726 ppm | 0.0205 ppm | 0.0025 ppm |
| Concentration per Run 1 | 99.8015 ppm | 2.2719 ppm | 0.0005 ppm | 4.3813 ppm | 0.1713 ppm | 0.0210 ppm | 0.0085 ppm |
| Concentration per Run 2 | 100.5867 ppm | 2.3081 ppm | -0.0003 ppm | 4.4441 ppm | 0.1715 ppm | 0.0195 ppm | -0.0043 ppm |
| Concentration per Run 3 | 100.4563 ppm | 2.3003 ppm | 0.0001 ppm | 4.3786 ppm | 0.1750 ppm | 0.0211 ppm | 0.0032 ppm |
| Concentration RSD | 0.4 % | 0.8 % | 308.6 % | 0.8 % | 1.2 % | 4.1 % | 259.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 32.1694 [SIC 50] | 0.0089 ppm | 0.1879 ppm | 11.1248 ppm | 0.0107 ppm | 0.3669 ppm |
| Concentration per Run 1 | 0.0044 ppm | 32.2124 ppm | 0.0079 ppm | 0.1872 ppm | 11.0776 ppm | 0.0110 ppm | 0.3667 ppm |
| Concentration per Run 2 | 0.0038 ppm | 32.1063 ppm | 0.0096 ppm | 0.1881 ppm | 11.1426 ppm | 0.0083 ppm | 0.3666 ppm |
| Concentration per Run 3 | 0.0057 ppm | 32.1895 ppm | 0.0093 ppm | 0.1884 ppm | 11.1541 ppm | 0.0127 ppm | 0.3673 ppm |
| Concentration RSD | 20.1 % | 0.2 % | 10.2 % | 0.3 % | 0.4 % | 20.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3808 ppm | 109.9068 % | 113.5193 % | 103.6687 % | 121.3291 % | 128.2942 % | 119.7869 % |
| Concentration per Run 1 | 0.3786 ppm | 110.6289 % | 113.7527 % | 104.3454 % | 122.0448 % | 128.9795 % | 120.9074 % |
| Concentration per Run 2 | 0.3804 ppm | 109.5243 % | 112.6642 % | 103.0078 % | 120.8843 % | 127.1985 % | 118.9304 % |
| Concentration per Run 3 | 0.3835 ppm | 109.5673 % | 114.1411 % | 103.6528 % | 121.0581 % | 128.7046 % | 119.5229 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.7 % | 0.6 % | 0.5 % | 0.7 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 12:27:01 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5070 ppm | 0.4866 ppm | 0.4828 ppm | 0.4922 ppm | 0.4912 ppm | 0.5029 ppm | 0.4885 ppm |
| Concentration per Run 1 | 0.5043 ppm | 0.4825 ppm | 0.4790 ppm | 0.4938 ppm | 0.4921 ppm | 0.5020 ppm | 0.4878 ppm |
| Concentration per Run 2 | 0.5067 ppm | 0.4994 ppm | 0.4810 ppm | 0.4892 ppm | 0.4896 ppm | 0.5027 ppm | 0.4885 ppm |
| Concentration per Run 3 | 0.5099 ppm | 0.4778 ppm | 0.4884 ppm | 0.4937 ppm | 0.4919 ppm | 0.5041 ppm | 0.4893 ppm |
| Recovery Percentage 1 | 101.396 % | 97.310 % | 96.559 % | 98.447 % | 98.242 % | 100.586 % | 97.704 % |
| Concentration RSD | 0.6 % | 2.3 % | 1.0 % | 0.5 % | 0.3 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4962 ppm | 0.5042 ppm | 0.4866 ppm | 0.4912 ppm | 0.5002 ppm | 5.1084 ppm | 0.4937 ppm |
| Concentration per Run 1 | 0.4981 ppm | 0.5045 ppm | 0.4880 ppm | 0.4867 ppm | 0.5068 ppm | 5.1417 ppm | 0.4921 ppm |
| Concentration per Run 2 | 0.5002 ppm | 0.5066 ppm | 0.4831 ppm | 0.4930 ppm | 0.4965 ppm | 5.0836 ppm | 0.4958 ppm |
| Concentration per Run 3 | 0.4903 ppm | 0.5016 ppm | 0.4887 ppm | 0.4939 ppm | 0.4972 ppm | 5.0999 ppm | 0.4933 ppm |
| Recovery Percentage 1 | 99.235 % | 100.844 % | 97.319 % | 98.235 % | 100.032 % | 102.168 % | 98.749 % |
| Concentration RSD | 1.1 % | 0.5 % | 0.6 % | 0.8 % | 1.2 % | 0.6 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4867 ppm | 0.4806 ppm | 0.4883 ppm | 9.7138 ppm | 0.5040 ppm | 0.4934 ppm | 0.5026 ppm |
| Concentration per Run 1 | 0.4889 ppm | 0.4804 ppm | 0.4860 ppm | 9.6950 ppm | 0.5061 ppm | 0.4949 ppm | 0.5040 ppm |
| Concentration per Run 2 | 0.4841 ppm | 0.4800 ppm | 0.4886 ppm | 9.7489 ppm | 0.5004 ppm | 0.4908 ppm | 0.5034 ppm |
| Concentration per Run 3 | 0.4871 ppm | 0.4814 ppm | 0.4903 ppm | 9.6976 ppm | 0.5056 ppm | 0.4944 ppm | 0.5003 ppm |
| Recovery Percentage 1 | 97.344 % | 96.116 % | 97.657 % | 97.138 % | 100.810 % | 98.674 % | 100.520 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.4 % | 0.3 % | 0.6 % | 0.5 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4906 ppm | 5.4029 ppm | 0.4776 ppm | 0.4734 ppm | 0.4975 ppm | 0.4957 ppm | 0.4816 ppm |
| Concentration per Run 1 | 0.4879 ppm | 5.3584 ppm | 0.4805 ppm | 0.4742 ppm | 0.4988 ppm | 0.4924 ppm | 0.4821 ppm |
| Concentration per Run 2 | 0.4855 ppm | 5.4210 ppm | 0.4740 ppm | 0.4720 ppm | 0.4950 ppm | 0.4947 ppm | 0.4818 ppm |
| Concentration per Run 3 | 0.4984 ppm | 5.4292 ppm | 0.4784 ppm | 0.4739 ppm | 0.4986 ppm | 0.5001 ppm | 0.4807 ppm |
| Recovery Percentage 1 | 98.121 % | 102.912 % | 95.529 % | 94.674 % | 99.492 % | 99.145 % | 96.310 % |
| Concentration RSD | 1.4 % | 0.7 % | 0.7 % | 0.2 % | 0.4 % | 0.8 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4995 ppm | 110.1999 % | 106.9441 % | 108.1506 % | 109.3422 % | 107.1109 % | 108.4808 % |
| Concentration per Run 1 | 0.5016 ppm | 110.0240 % | 106.7112 % | 108.7969 % | 108.8895 % | 106.6935 % | 108.6438 % |
| Concentration per Run 2 | 0.4955 ppm | 110.9519 % | 106.7337 % | 107.4594 % | 110.5264 % | 106.7320 % | 107.8746 % |
| Concentration per Run 3 | 0.5013 ppm | 109.6238 % | 107.3873 % | 108.1955 % | 108.6108 % | 107.9070 % | 108.9240 % |
| Recovery Percentage 1 | 99.893 % | | | | | | |
| Concentration RSD | 0.7 % | 0.6 % | 0.4 % | 0.6 % | 0.9 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 12:30:56 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0101 ppm | 0.0016 ppm | 0.0020 ppm | 0.0000 ppm | 0.0001 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0060 ppm | 0.0003 ppm | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0156 ppm | 0.0039 ppm | 0.0044 ppm | 0.0000 ppm | 0.0000 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0087 ppm | 0.0005 ppm | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0015 ppm |
| Recovery Percentage 1 | 15.432 % | 10.072 % | 31.054 % | 6.513 % | -0.196 % | 1.947 % | 2.316 % |
| Concentration RSD | 23.8 % | 49.0 % | 129.4 % | 114.0 % | 779.5 % | 47.8 % | 52.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | -0.0004 ppm | 0.0002 ppm | -0.0076 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | -0.0002 ppm | -0.0019 ppm | 0.0046 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0005 ppm | -0.0003 ppm | -0.0008 ppm | 0.0022 ppm | -0.0161 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | -0.0113 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 0.353 % | -0.994 % | -1.645 % | -3.554 % | 0.396 % | -0.305 % | 16.201 % |
| Concentration RSD | 131.1 % | 180.8 % | 59.6 % | 123.0 % | 1,052.2 % | 142.3 % | 102.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0001 ppm | 0.0008 ppm | -0.1900 ppm | -0.0003 ppm | -0.0007 ppm | 0.0021 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0002 ppm | 0.0007 ppm | -0.1852 ppm | -0.0013 ppm | -0.0004 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0002 ppm | 0.0006 ppm | -0.1878 ppm | 0.0003 ppm | -0.0017 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0017 ppm | -0.0002 ppm | 0.0011 ppm | -0.1971 ppm | 0.0001 ppm | -0.0001 ppm | 0.0060 ppm |
| Recovery Percentage 1 | -0.917 % | -0.551 % | 1.579 % | -9.502 % | -1.385 % | -7.220 % | 4.229 % |
| Concentration RSD | 77.9 % | 401.3 % | 30.6 % | 3.3 % | 251.8 % | 123.9 % | 157.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0025 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0010 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0065 ppm | -0.0004 ppm | 0.0000 ppm | 0.0002 ppm | -0.0003 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0016 ppm | -0.0005 ppm | 0.0001 ppm | 0.0002 ppm | -0.0021 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0007 ppm | -0.0006 ppm | -0.0001 ppm | -0.0002 ppm | -0.0007 ppm | -0.0006 ppm |
| Recovery Percentage 1 | 5.955 % | 0.499 % | -1.014 % | 0.012 % | 0.775 % | -4.951 % | -4.081 % |
| Concentration RSD | 75.5 % | 148.2 % | 22.4 % | 7,140.5 % | 259.6 % | 95.3 % | 42.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 111.0961 % | 108.2707 % | 109.2826 % | 112.1125 % | 109.5521 % | 110.1136 % |
| Concentration per Run 1 | 0.0003 ppm | 112.0491 % | 108.4098 % | 109.7469 % | 113.6084 % | 109.8953 % | 110.7971 % |
| Concentration per Run 2 | 0.0003 ppm | 111.2712 % | 108.2516 % | 108.7379 % | 111.7897 % | 109.3708 % | 109.7737 % |
| Concentration per Run 3 | 0.0004 ppm | 109.9682 % | 108.1506 % | 109.3630 % | 110.9393 % | 109.3902 % | 109.7700 % |
| Recovery Percentage 1 | 6.943 % | | | | | | |
| Concentration RSD | 25.5 % | 0.9 % | 0.1 % | 0.5 % | 1.2 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973923-1 WG1973923
Analysis started at: 9/20/2024 12:39:45 PM
Rack 1
Vial 58
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0074 ppm | -0.0006 ppm | 0.0026 ppm | -0.0001 ppm | 0.0000 ppm | 0.0126 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0133 ppm | 0.0011 ppm | 0.0026 ppm | -0.0001 ppm | 0.0001 ppm | 0.0127 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0035 ppm | -0.0025 ppm | 0.0034 ppm | -0.0001 ppm | 0.0000 ppm | 0.0133 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0053 ppm | -0.0004 ppm | 0.0020 ppm | -0.0002 ppm | 0.0000 ppm | 0.0120 ppm |
| Recovery Percentage 1 | 17.432 % | 7.384 % | -12.025 % | 8.807 % | -1.175 % | 0.603 % | 12.647 % |
| Concentration RSD | 19.9 % | 71.0 % | 298.8 % | 27.8 % | 49.6 % | 243.9 % | 5.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0005 ppm | -0.0011 ppm | -0.0003 ppm | -0.0022 ppm | -0.0063 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0000 ppm | -0.0012 ppm | -0.0003 ppm | -0.0047 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0012 ppm | -0.0009 ppm | -0.0005 ppm | 0.0006 ppm | -0.0111 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | -0.0011 ppm | -0.0003 ppm | -0.0026 ppm | -0.0082 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 1.351 % | -2.334 % | -10.812 % | -3.387 % | -4.495 % | -0.252 % | 14.941 % |
| Concentration RSD | 192.0 % | 144.7 % | 15.9 % | 40.0 % | 119.0 % | 94.8 % | 34.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.0000 ppm | 0.0000 ppm | -0.1973 ppm | -0.0009 ppm | -0.0017 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.1989 ppm | -0.0017 ppm | -0.0015 ppm | -0.0021 ppm |
| Concentration per Run 2 | 0.0038 ppm | -0.0001 ppm | 0.0008 ppm | -0.1974 ppm | -0.0003 ppm | -0.0016 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0001 ppm | -0.0007 ppm | -0.1957 ppm | -0.0006 ppm | -0.0019 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 1.884 % | -0.339 % | 0.055 % | -9.866 % | -3.466 % | -16.692 % | 2.400 % |
| Concentration RSD | 89.9 % | 349.3 % | 2,590.8 % | 0.8 % | 89.4 % | 13.7 % | 331.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.0061 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.0176 ppm | -0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0018 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0005 ppm | 0.0007 ppm | -0.0001 ppm | -0.0003 ppm | 0.0006 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0003 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0027 ppm | -0.0006 ppm |
| Recovery Percentage 1 | 22.205 % | 1.226 % | 0.568 % | -0.461 % | -0.303 % | -0.472 % | -6.124 % |
| Concentration RSD | 46.5 % | 161.7 % | 155.2 % | 134.3 % | 828.4 % | 2,516.8 % | 41.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 104.5303 % | 107.4722 % | 104.6889 % | 105.9314 % | 108.2894 % | 105.1178 % |
| Concentration per Run 1 | 0.0007 ppm | 104.1983 % | 107.8188 % | 104.5301 % | 106.0002 % | 108.4529 % | 104.7658 % |
| Concentration per Run 2 | 0.0002 ppm | 104.9807 % | 105.9925 % | 104.6539 % | 106.4642 % | 106.8165 % | 105.6713 % |
| Concentration per Run 3 | 0.0005 ppm | 104.4119 % | 108.6053 % | 104.8827 % | 105.3299 % | 109.5989 % | 104.9162 % |
| Recovery Percentage 1 | 9.073 % | | | | | | |
| Concentration RSD | 46.7 % | 0.4 % | 1.2 % | 0.2 % | 0.5 % | 1.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973923-2 WG1973923
Analysis started at: 9/20/2024 12:43:56 PM
Rack 1
Vial 59
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0544 ppm | 2.0288 ppm | 0.1220 ppm | 1.0345 ppm | 2.0542 ppm | 0.0521 ppm | 10.5496 ppm |
| Concentration per Run 1 | 0.0550 ppm | 2.0246 ppm | 0.1213 ppm | 1.0373 ppm | 2.0630 ppm | 0.0521 ppm | 10.5229 ppm |
| Concentration per Run 2 | 0.0537 ppm | 2.0284 ppm | 0.1229 ppm | 1.0227 ppm | 2.0418 ppm | 0.0521 ppm | 10.5439 ppm |
| Concentration per Run 3 | 0.0544 ppm | 2.0334 ppm | 0.1217 ppm | 1.0436 ppm | 2.0578 ppm | 0.0522 ppm | 10.5821 ppm |
| Concentration RSD | 1.2 % | 0.2 % | 0.7 % | 1.0 % | 0.5 % | 0.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0547 ppm | 0.5160 ppm | 0.2017 ppm | 0.2589 ppm | 1.0418 ppm | 10.7735 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0542 ppm | 0.5128 ppm | 0.2032 ppm | 0.2584 ppm | 1.0444 ppm | 10.7777 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0554 ppm | 0.5190 ppm | 0.2005 ppm | 0.2575 ppm | 1.0393 ppm | 10.7072 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0546 ppm | 0.5163 ppm | 0.2012 ppm | 0.2608 ppm | 1.0417 ppm | 10.8358 ppm | 0.0014 ppm |
| Concentration RSD | 1.1 % | 0.6 % | 0.7 % | 0.7 % | 0.2 % | 0.6 % | 320.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.4117 ppm | 0.5164 ppm | 1.0057 ppm | 10.5530 ppm | 0.5166 ppm | 0.5417 ppm | 0.4603 ppm |
| Concentration per Run 1 | 10.4636 ppm | 0.5154 ppm | 1.0000 ppm | 10.5910 ppm | 0.5191 ppm | 0.5403 ppm | 0.4469 ppm |
| Concentration per Run 2 | 10.4590 ppm | 0.5159 ppm | 1.0046 ppm | 10.5116 ppm | 0.5127 ppm | 0.5421 ppm | 0.4632 ppm |
| Concentration per Run 3 | 10.3126 ppm | 0.5181 ppm | 1.0125 ppm | 10.5563 ppm | 0.5181 ppm | 0.5429 ppm | 0.4706 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 0.6 % | 0.4 % | 0.7 % | 0.2 % | 2.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1239 ppm | 1.0208 ppm | 0.9994 ppm | 1.0113 ppm | 1.0443 ppm | 0.1235 ppm | 0.5127 ppm |
| Concentration per Run 1 | 0.1225 ppm | 1.0221 ppm | 0.9996 ppm | 1.0140 ppm | 1.0536 ppm | 0.1226 ppm | 0.5136 ppm |
| Concentration per Run 2 | 0.1264 ppm | 1.0226 ppm | 0.9943 ppm | 1.0066 ppm | 1.0433 ppm | 0.1239 ppm | 0.5123 ppm |
| Concentration per Run 3 | 0.1228 ppm | 1.0177 ppm | 1.0042 ppm | 1.0131 ppm | 1.0359 ppm | 0.1241 ppm | 0.5122 ppm |
| Concentration RSD | 1.7 % | 0.3 % | 0.5 % | 0.4 % | 0.9 % | 0.7 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5158 ppm | 109.8982 % | 107.6192 % | 106.6132 % | 109.3237 % | 107.7792 % | 107.4551 % |
| Concentration per Run 1 | 0.5181 ppm | 109.6754 % | 108.5742 % | 106.1929 % | 109.6248 % | 108.8900 % | 107.0874 % |
| Concentration per Run 2 | 0.5140 ppm | 110.3113 % | 108.5168 % | 106.5665 % | 109.3049 % | 108.2970 % | 107.1141 % |
| Concentration per Run 3 | 0.5151 ppm | 109.7079 % | 105.7667 % | 107.0802 % | 109.0413 % | 106.1506 % | 108.1636 % |
| Concentration RSD | 0.4 % | 0.3 % | 1.5 % | 0.4 % | 0.3 % | 1.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973923-3 WG1973923
Analysis started at: 9/20/2024 12:47:51 PM
Rack 1
Vial 60
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0532 ppm | 1.9727 ppm | 0.1199 ppm | 1.0120 ppm | 2.0106 ppm | 0.0509 ppm | 10.2790 ppm |
| Concentration per Run 1 | 0.0529 ppm | 1.9805 ppm | 0.1199 ppm | 1.0113 ppm | 2.0138 ppm | 0.0509 ppm | 10.3368 ppm |
| Concentration per Run 2 | 0.0532 ppm | 1.9710 ppm | 0.1205 ppm | 1.0129 ppm | 2.0083 ppm | 0.0509 ppm | 10.2369 ppm |
| Concentration per Run 3 | 0.0534 ppm | 1.9664 ppm | 0.1194 ppm | 1.0118 ppm | 2.0097 ppm | 0.0510 ppm | 10.2634 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 0.5 % | 0.1 % | 0.1 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0536 ppm | 0.5047 ppm | 0.1981 ppm | 0.2548 ppm | 1.0148 ppm | 10.5713 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0533 ppm | 0.5037 ppm | 0.1977 ppm | 0.2544 ppm | 1.0198 ppm | 10.5897 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0533 ppm | 0.5035 ppm | 0.1978 ppm | 0.2549 ppm | 1.0060 ppm | 10.5733 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0543 ppm | 0.5070 ppm | 0.1988 ppm | 0.2552 ppm | 1.0186 ppm | 10.5510 ppm | 0.0009 ppm |
| Concentration RSD | 1.1 % | 0.4 % | 0.3 % | 0.2 % | 0.8 % | 0.2 % | 106.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2398 ppm | 0.5025 ppm | 0.9915 ppm | 10.3388 ppm | 0.5057 ppm | 0.5367 ppm | 0.4516 ppm |
| Concentration per Run 1 | 10.2434 ppm | 0.5049 ppm | 0.9826 ppm | 10.3866 ppm | 0.5083 ppm | 0.5371 ppm | 0.4439 ppm |
| Concentration per Run 2 | 10.2081 ppm | 0.5008 ppm | 0.9895 ppm | 10.3606 ppm | 0.5042 ppm | 0.5344 ppm | 0.4502 ppm |
| Concentration per Run 3 | 10.2679 ppm | 0.5018 ppm | 1.0023 ppm | 10.2692 ppm | 0.5045 ppm | 0.5387 ppm | 0.4608 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 1.0 % | 0.6 % | 0.5 % | 0.4 % | 1.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1216 ppm | 1.0070 ppm | 0.9868 ppm | 0.9892 ppm | 1.0340 ppm | 0.1218 ppm | 0.5034 ppm |
| Concentration per Run 1 | 0.1186 ppm | 1.0108 ppm | 0.9835 ppm | 0.9892 ppm | 1.0389 ppm | 0.1211 ppm | 0.5033 ppm |
| Concentration per Run 2 | 0.1231 ppm | 0.9923 ppm | 0.9879 ppm | 0.9884 ppm | 1.0283 ppm | 0.1235 ppm | 0.5038 ppm |
| Concentration per Run 3 | 0.1229 ppm | 1.0180 ppm | 0.9891 ppm | 0.9901 ppm | 1.0349 ppm | 0.1207 ppm | 0.5030 ppm |
| Concentration RSD | 2.1 % | 1.3 % | 0.3 % | 0.1 % | 0.5 % | 1.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5054 ppm | 110.5136 % | 108.7160 % | 107.4314 % | 109.8928 % | 109.0149 % | 108.3153 % |
| Concentration per Run 1 | 0.5068 ppm | 110.5412 % | 107.7100 % | 107.7830 % | 110.0575 % | 108.3501 % | 108.6778 % |
| Concentration per Run 2 | 0.5050 ppm | 110.6939 % | 109.2670 % | 106.6946 % | 110.2933 % | 109.4977 % | 107.5410 % |
| Concentration per Run 3 | 0.5045 ppm | 110.3056 % | 109.1709 % | 107.8165 % | 109.3277 % | 109.1968 % | 108.7271 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.8 % | 0.6 % | 0.5 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452806-01 WG1973923
Analysis started at: 9/20/2024 12:51:46 PM
Rack 2
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0013 ppm | 0.0137 ppm | 0.0446 ppm | 0.0900 ppm | 0.0000 ppm | 40.9493 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0017 ppm | 0.0130 ppm | 0.0432 ppm | 0.0906 ppm | 0.0000 ppm | 40.7104 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0072 ppm | 0.0146 ppm | 0.0444 ppm | 0.0894 ppm | 0.0000 ppm | 40.9532 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0016 ppm | 0.0135 ppm | 0.0464 ppm | 0.0900 ppm | 0.0000 ppm | 41.1844 ppm |
| Concentration RSD | 27.3 % | 386.2 % | 6.0 % | 3.6 % | 0.6 % | 137.6 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0069 ppm | -0.0009 ppm | 0.0005 ppm | 53.9183 ppm | 2.2540 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0065 ppm | -0.0009 ppm | 0.0005 ppm | 53.9185 ppm | 2.2503 ppm | 0.0024 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0067 ppm | -0.0012 ppm | 0.0005 ppm | 53.7917 ppm | 2.2609 ppm | 0.0019 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0074 ppm | -0.0007 ppm | 0.0004 ppm | 54.0449 ppm | 2.2509 ppm | 0.0012 ppm |
| Concentration RSD | 29.9 % | 6.8 % | 29.6 % | 13.2 % | 0.2 % | 0.3 % | 33.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 23.1007 ppm | 3.9498 ppm | 0.0043 ppm | 50.3636 ppm | 0.0114 ppm | -0.0008 ppm | 0.0094 ppm |
| Concentration per Run 1 | 23.1824 ppm | 3.9465 ppm | 0.0043 ppm | 50.3043 ppm | 0.0121 ppm | -0.0025 ppm | 0.0110 ppm |
| Concentration per Run 2 | 23.1183 ppm | 3.9409 ppm | 0.0044 ppm | 50.2757 ppm | 0.0115 ppm | 0.0000 ppm | 0.0079 ppm |
| Concentration per Run 3 | 23.0015 ppm | 3.9621 ppm | 0.0040 ppm | 50.5108 ppm | 0.0107 ppm | 0.0000 ppm | 0.0094 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 5.1 % | 0.3 % | 6.1 % | 179.4 % | 16.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 8.7282 ppm | 0.0067 ppm | 0.3078 ppm | 0.0001 ppm | 0.0012 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0014 ppm | 8.7488 ppm | 0.0068 ppm | 0.3088 ppm | 0.0002 ppm | 0.0013 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0048 ppm | 8.6943 ppm | 0.0053 ppm | 0.3070 ppm | 0.0001 ppm | 0.0020 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0049 ppm | 8.7416 ppm | 0.0079 ppm | 0.3077 ppm | 0.0000 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration RSD | 129.1 % | 0.3 % | 19.5 % | 0.3 % | 142.4 % | 61.6 % | 129.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 107.8142 % | 107.1645 % | 102.1345 % | 106.7769 % | 107.0332 % | 106.2541 % |
| Concentration per Run 1 | 0.0019 ppm | 107.8970 % | 108.2887 % | 101.9497 % | 107.2486 % | 107.9758 % | 106.3049 % |
| Concentration per Run 2 | 0.0022 ppm | 107.4923 % | 106.6201 % | 102.4446 % | 106.1401 % | 106.5645 % | 106.9705 % |
| Concentration per Run 3 | 0.0022 ppm | 108.0533 % | 106.5847 % | 102.0092 % | 106.9419 % | 106.5593 % | 105.4868 % |
| Concentration RSD | 6.9 % | 0.3 % | 0.9 % | 0.3 % | 0.5 % | 0.8 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452806-05 WG1973923
Analysis started at: 9/20/2024 12:55:41 PM
Rack 2
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0864 ppm | 0.0016 ppm | 0.0286 ppm | 0.0292 ppm | 0.0001 ppm | 6.0136 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0903 ppm | 0.0015 ppm | 0.0264 ppm | 0.0289 ppm | 0.0001 ppm | 6.0158 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0893 ppm | 0.0008 ppm | 0.0285 ppm | 0.0295 ppm | 0.0001 ppm | 6.0317 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0795 ppm | 0.0025 ppm | 0.0308 ppm | 0.0292 ppm | 0.0000 ppm | 5.9934 ppm |
| Concentration RSD | 8.7 % | 6.9 % | 52.3 % | 7.6 % | 0.9 % | 40.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0001 ppm | -0.0011 ppm | 0.0036 ppm | 0.0026 ppm | 1.6106 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0003 ppm | -0.0011 ppm | 0.0036 ppm | 0.0022 ppm | 1.5794 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0008 ppm | -0.0009 ppm | 0.0034 ppm | 0.0016 ppm | 1.6269 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0007 ppm | -0.0011 ppm | 0.0038 ppm | 0.0041 ppm | 1.6255 ppm | 0.0012 ppm |
| Concentration RSD | 46.0 % | 1,064.5 % | 11.8 % | 5.3 % | 49.1 % | 1.7 % | 59.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.0673 ppm | 0.1802 ppm | 0.0005 ppm | 39.9683 ppm | 0.0030 ppm | -0.0006 ppm | 0.0000 ppm |
| Concentration per Run 1 | 3.0918 ppm | 0.1803 ppm | 0.0003 ppm | 40.0673 ppm | 0.0032 ppm | -0.0008 ppm | 0.0051 ppm |
| Concentration per Run 2 | 3.0411 ppm | 0.1813 ppm | 0.0005 ppm | 40.0693 ppm | 0.0025 ppm | 0.0001 ppm | -0.0016 ppm |
| Concentration per Run 3 | 3.0690 ppm | 0.1791 ppm | 0.0008 ppm | 39.7684 ppm | 0.0031 ppm | -0.0012 ppm | -0.0035 ppm |
| Concentration RSD | 0.8 % | 0.6 % | 51.8 % | 0.4 % | 12.6 % | 105.0 % | 96,108.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 4.9585 ppm | 0.0012 ppm | 0.0419 ppm | -0.0001 ppm | -0.0008 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0023 ppm | 4.9983 ppm | 0.0006 ppm | 0.0419 ppm | -0.0004 ppm | -0.0019 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0018 ppm | 4.9240 ppm | 0.0016 ppm | 0.0422 ppm | 0.0002 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0016 ppm | 4.9531 ppm | 0.0013 ppm | 0.0417 ppm | -0.0002 ppm | -0.0002 ppm | -0.0006 ppm |
| Concentration RSD | 307.9 % | 0.8 % | 41.2 % | 0.5 % | 280.6 % | 121.1 % | 72.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0126 ppm | 106.8583 % | 106.8738 % | 104.9126 % | 108.2035 % | 107.3974 % | 107.3583 % |
| Concentration per Run 1 | 0.0129 ppm | 106.9827 % | 106.7411 % | 104.3935 % | 109.1556 % | 107.6382 % | 106.7044 % |
| Concentration per Run 2 | 0.0124 ppm | 106.6421 % | 106.4493 % | 104.4544 % | 107.8954 % | 107.1688 % | 107.1256 % |
| Concentration per Run 3 | 0.0124 ppm | 106.9501 % | 107.4311 % | 105.8898 % | 107.5594 % | 107.3853 % | 108.2450 % |
| Concentration RSD | 2.4 % | 0.2 % | 0.5 % | 0.8 % | 0.8 % | 0.2 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-02 WG1973936
Analysis started at: 9/20/2024 12:59:35 PM
Rack 2
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0088 ppm | 0.0012 ppm | 0.0109 ppm | 0.0120 ppm | 0.0000 ppm | 33.1093 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0151 ppm | 0.0009 ppm | 0.0103 ppm | 0.0119 ppm | 0.0000 ppm | 33.2202 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0076 ppm | 0.0012 ppm | 0.0104 ppm | 0.0124 ppm | 0.0000 ppm | 34.2732 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0035 ppm | 0.0015 ppm | 0.0119 ppm | 0.0116 ppm | 0.0000 ppm | 31.8346 ppm |
| Concentration RSD | 19.6 % | 67.3 % | 27.7 % | 8.4 % | 3.2 % | 15.0 % | 3.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | -0.0010 ppm | 0.0003 ppm | 0.0040 ppm | 2.1799 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | -0.0011 ppm | 0.0002 ppm | 0.0028 ppm | 2.2115 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0009 ppm | -0.0012 ppm | 0.0007 ppm | 0.0044 ppm | 2.2286 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | -0.0008 ppm | 0.0001 ppm | 0.0048 ppm | 2.0996 ppm | 0.0017 ppm |
| Concentration RSD | 164.5 % | 82.0 % | 17.1 % | 93.4 % | 27.0 % | 3.2 % | 25.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7803 ppm | 0.0007 ppm | 0.0002 ppm | 6.8669 ppm | -0.0002 ppm | -0.0012 ppm | 0.0005 ppm |
| Concentration per Run 1 | 2.7959 ppm | 0.0007 ppm | 0.0003 ppm | 6.9163 ppm | -0.0003 ppm | -0.0013 ppm | 0.0004 ppm |
| Concentration per Run 2 | 2.7740 ppm | 0.0006 ppm | 0.0000 ppm | 7.0787 ppm | -0.0006 ppm | -0.0014 ppm | 0.0000 ppm |
| Concentration per Run 3 | 2.7712 ppm | 0.0007 ppm | 0.0005 ppm | 6.6057 ppm | 0.0003 ppm | -0.0009 ppm | 0.0012 ppm |
| Concentration RSD | 0.5 % | 8.1 % | 110.7 % | 3.5 % | 254.8 % | 20.0 % | 117.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 3.6896 ppm | 0.0009 ppm | 0.1323 ppm | -0.0004 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0003 ppm | 3.7013 ppm | 0.0017 ppm | 0.1334 ppm | -0.0004 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0005 ppm | 3.6816 ppm | 0.0005 ppm | 0.1364 ppm | -0.0006 ppm | -0.0006 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0019 ppm | 3.6860 ppm | 0.0004 ppm | 0.1272 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration RSD | 92.4 % | 0.3 % | 86.4 % | 3.5 % | 85.9 % | 351.7 % | 185.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 108.6840 % | 113.1580 % | 105.7861 % | 110.3937 % | 112.9030 % | 108.1119 % |
| Concentration per Run 1 | 0.0007 ppm | 108.1860 % | 113.0529 % | 106.3592 % | 110.7051 % | 113.2276 % | 108.8797 % |
| Concentration per Run 2 | 0.0008 ppm | 109.2060 % | 109.3401 % | 105.3391 % | 110.8362 % | 108.7723 % | 107.8894 % |
| Concentration per Run 3 | 0.0007 ppm | 108.6601 % | 117.0809 % | 105.6601 % | 109.6399 % | 116.7090 % | 107.5667 % |
| Concentration RSD | 3.0 % | 0.5 % | 3.4 % | 0.5 % | 0.6 % | 3.5 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-3 WG1973936
Analysis started at: 9/20/2024 1:03:29 PM
Rack 2
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 1.9742 ppm | 0.1216 ppm | 1.0363 ppm | 1.9972 ppm | 0.0510 ppm | 44.3950 ppm |
| Concentration per Run 1 | 0.0523 ppm | 1.9850 ppm | 0.1209 ppm | 1.0356 ppm | 1.9969 ppm | 0.0511 ppm | 44.4848 ppm |
| Concentration per Run 2 | 0.0523 ppm | 1.9745 ppm | 0.1204 ppm | 1.0254 ppm | 2.0060 ppm | 0.0510 ppm | 44.4677 ppm |
| Concentration per Run 3 | 0.0536 ppm | 1.9632 ppm | 0.1234 ppm | 1.0480 ppm | 1.9886 ppm | 0.0508 ppm | 44.2326 ppm |
| Concentration RSD | 1.4 % | 0.6 % | 1.3 % | 1.1 % | 0.4 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 0.4940 ppm | 0.1954 ppm | 0.2518 ppm | 1.0125 ppm | 12.7793 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0537 ppm | 0.4978 ppm | 0.1969 ppm | 0.2536 ppm | 1.0162 ppm | 12.7919 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.0525 ppm | 0.4944 ppm | 0.1929 ppm | 0.2511 ppm | 1.0093 ppm | 12.7935 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0524 ppm | 0.4898 ppm | 0.1965 ppm | 0.2505 ppm | 1.0121 ppm | 12.7524 ppm | 0.0028 ppm |
| Concentration RSD | 1.4 % | 0.8 % | 1.1 % | 0.7 % | 0.3 % | 0.2 % | 17.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7683 ppm | 0.4980 ppm | 0.9497 ppm | 17.5381 ppm | 0.4892 ppm | 0.5265 ppm | 0.4059 ppm |
| Concentration per Run 1 | 12.8161 ppm | 0.4989 ppm | 0.9416 ppm | 17.4907 ppm | 0.4909 ppm | 0.5277 ppm | 0.3939 ppm |
| Concentration per Run 2 | 12.7367 ppm | 0.4981 ppm | 0.9471 ppm | 17.6443 ppm | 0.4841 ppm | 0.5263 ppm | 0.4058 ppm |
| Concentration per Run 3 | 12.7519 ppm | 0.4970 ppm | 0.9604 ppm | 17.4794 ppm | 0.4926 ppm | 0.5254 ppm | 0.4180 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 1.0 % | 0.5 % | 0.9 % | 0.2 % | 3.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1239 ppm | 4.7105 ppm | 0.9558 ppm | 1.1182 ppm | 1.0254 ppm | 0.1201 ppm | 0.5016 ppm |
| Concentration per Run 1 | 0.1273 ppm | 4.7162 ppm | 0.9559 ppm | 1.1178 ppm | 1.0300 ppm | 0.1175 ppm | 0.5037 ppm |
| Concentration per Run 2 | 0.1222 ppm | 4.6922 ppm | 0.9449 ppm | 1.1221 ppm | 1.0177 ppm | 0.1208 ppm | 0.5005 ppm |
| Concentration per Run 3 | 0.1221 ppm | 4.7231 ppm | 0.9665 ppm | 1.1146 ppm | 1.0286 ppm | 0.1219 ppm | 0.5005 ppm |
| Concentration RSD | 2.4 % | 0.3 % | 1.1 % | 0.3 % | 0.7 % | 1.9 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4966 ppm | 107.5147 % | 107.9086 % | 104.6282 % | 107.1268 % | 108.0115 % | 106.7641 % |
| Concentration per Run 1 | 0.4974 ppm | 107.6437 % | 108.5274 % | 104.6008 % | 107.8560 % | 108.7145 % | 106.4735 % |
| Concentration per Run 2 | 0.4924 ppm | 107.8853 % | 106.6312 % | 104.6112 % | 107.4233 % | 106.6634 % | 106.9086 % |
| Concentration per Run 3 | 0.5001 ppm | 107.0151 % | 108.5672 % | 104.6727 % | 106.1011 % | 108.6565 % | 106.9103 % |
| Concentration RSD | 0.8 % | 0.4 % | 1.0 % | 0.0 % | 0.9 % | 1.1 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-4 WG1973936
Analysis started at: 9/20/2024 1:07:23 PM
Rack 2
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0014 ppm | 0.0013 ppm | 0.0125 ppm | 0.0129 ppm | 0.0000 ppm | 35.2718 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0032 ppm | 0.0044 ppm | 0.0118 ppm | 0.0129 ppm | 0.0000 ppm | 35.3233 ppm |
| Concentration per Run 2 | 0.0016 ppm | -0.0043 ppm | -0.0013 ppm | 0.0121 ppm | 0.0130 ppm | 0.0001 ppm | 35.2665 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0030 ppm | 0.0009 ppm | 0.0137 ppm | 0.0129 ppm | 0.0000 ppm | 35.2256 ppm |
| Concentration RSD | 48.3 % | 288.5 % | 215.5 % | 7.9 % | 0.4 % | 163.8 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0008 ppm | 0.0005 ppm | 0.0076 ppm | 2.3074 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0007 ppm | 0.0005 ppm | 0.0080 ppm | 2.3382 ppm | 0.0026 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0002 ppm | -0.0007 ppm | 0.0004 ppm | 0.0076 ppm | 2.2825 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0006 ppm | -0.0011 ppm | 0.0008 ppm | 0.0071 ppm | 2.3015 ppm | 0.0016 ppm |
| Concentration RSD | 101.3 % | 161.4 % | 27.3 % | 38.1 % | 6.1 % | 1.2 % | 31.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8319 ppm | 0.0008 ppm | 0.0030 ppm | 7.3667 ppm | -0.0005 ppm | -0.0017 ppm | 0.0056 ppm |
| Concentration per Run 1 | 2.8629 ppm | 0.0007 ppm | 0.0030 ppm | 7.3996 ppm | -0.0005 ppm | -0.0010 ppm | 0.0054 ppm |
| Concentration per Run 2 | 2.8265 ppm | 0.0008 ppm | 0.0035 ppm | 7.3885 ppm | -0.0008 ppm | -0.0023 ppm | 0.0077 ppm |
| Concentration per Run 3 | 2.8064 ppm | 0.0008 ppm | 0.0025 ppm | 7.3119 ppm | -0.0001 ppm | -0.0018 ppm | 0.0036 ppm |
| Concentration RSD | 1.0 % | 7.9 % | 15.7 % | 0.6 % | 70.7 % | 37.6 % | 37.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 3.7649 ppm | 0.0069 ppm | 0.1409 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0034 ppm | 3.8102 ppm | 0.0072 ppm | 0.1410 ppm | 0.0003 ppm | -0.0012 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0034 ppm | 3.7629 ppm | 0.0067 ppm | 0.1404 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0007 ppm | 3.7215 ppm | 0.0068 ppm | 0.1414 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration RSD | 1,361.1 % | 1.2 % | 3.8 % | 0.4 % | 116.4 % | 86.6 % | 64.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 106.9695 % | 106.0375 % | 104.5172 % | 108.5024 % | 106.2156 % | 106.6747 % |
| Concentration per Run 1 | 0.0014 ppm | 105.7091 % | 107.0915 % | 103.2721 % | 108.5430 % | 107.6584 % | 105.8423 % |
| Concentration per Run 2 | 0.0009 ppm | 107.9395 % | 106.1365 % | 105.3195 % | 109.0011 % | 106.3207 % | 107.1974 % |
| Concentration per Run 3 | 0.0008 ppm | 107.2600 % | 104.8846 % | 104.9600 % | 107.9632 % | 104.6678 % | 106.9845 % |
| Concentration RSD | 33.2 % | 1.1 % | 1.0 % | 1.0 % | 0.5 % | 1.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-5 WG1973936
Analysis started at: 9/20/2024 1:11:17 PM
Rack 2
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0508 ppm | 1.9673 ppm | 0.1210 ppm | 1.0391 ppm | 1.9922 ppm | 0.0509 ppm | 44.0131 ppm |
| Concentration per Run 1 | 0.0507 ppm | 1.9831 ppm | 0.1187 ppm | 1.0456 ppm | 1.9948 ppm | 0.0510 ppm | 43.8972 ppm |
| Concentration per Run 2 | 0.0506 ppm | 1.9661 ppm | 0.1245 ppm | 1.0373 ppm | 1.9870 ppm | 0.0508 ppm | 44.1173 ppm |
| Concentration per Run 3 | 0.0510 ppm | 1.9526 ppm | 0.1198 ppm | 1.0343 ppm | 1.9947 ppm | 0.0508 ppm | 44.0248 ppm |
| Concentration RSD | 0.3 % | 0.8 % | 2.6 % | 0.6 % | 0.2 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 0.4911 ppm | 0.1951 ppm | 0.2511 ppm | 1.0093 ppm | 12.7631 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0532 ppm | 0.4922 ppm | 0.1959 ppm | 0.2521 ppm | 1.0067 ppm | 12.8168 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0528 ppm | 0.4910 ppm | 0.1950 ppm | 0.2524 ppm | 1.0114 ppm | 12.7206 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0523 ppm | 0.4902 ppm | 0.1945 ppm | 0.2487 ppm | 1.0099 ppm | 12.7518 ppm | 0.0019 ppm |
| Concentration RSD | 0.8 % | 0.2 % | 0.3 % | 0.8 % | 0.2 % | 0.4 % | 18.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7806 ppm | 0.4971 ppm | 0.9466 ppm | 17.5168 ppm | 0.4919 ppm | 0.5273 ppm | 0.3580 ppm |
| Concentration per Run 1 | 12.8026 ppm | 0.4955 ppm | 0.9377 ppm | 17.5171 ppm | 0.4918 ppm | 0.5311 ppm | 0.3377 ppm |
| Concentration per Run 2 | 12.7775 ppm | 0.4982 ppm | 0.9437 ppm | 17.5605 ppm | 0.4943 ppm | 0.5278 ppm | 0.3610 ppm |
| Concentration per Run 3 | 12.7616 ppm | 0.4974 ppm | 0.9583 ppm | 17.4729 ppm | 0.4895 ppm | 0.5230 ppm | 0.3752 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 1.1 % | 0.3 % | 0.5 % | 0.8 % | 5.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1211 ppm | 4.6234 ppm | 0.9644 ppm | 1.1199 ppm | 1.0305 ppm | 0.1182 ppm | 0.4980 ppm |
| Concentration per Run 1 | 0.1213 ppm | 4.6352 ppm | 0.9636 ppm | 1.1217 ppm | 1.0334 ppm | 0.1191 ppm | 0.4997 ppm |
| Concentration per Run 2 | 0.1226 ppm | 4.6252 ppm | 0.9656 ppm | 1.1165 ppm | 1.0285 ppm | 0.1192 ppm | 0.4986 ppm |
| Concentration per Run 3 | 0.1195 ppm | 4.6098 ppm | 0.9641 ppm | 1.1214 ppm | 1.0296 ppm | 0.1164 ppm | 0.4957 ppm |
| Concentration RSD | 1.2 % | 0.3 % | 0.1 % | 0.3 % | 0.2 % | 1.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4985 ppm | 108.2290 % | 106.8361 % | 103.3629 % | 108.0930 % | 106.9010 % | 105.1371 % |
| Concentration per Run 1 | 0.4993 ppm | 108.1896 % | 107.0536 % | 103.9886 % | 108.5965 % | 107.0969 % | 106.2508 % |
| Concentration per Run 2 | 0.5003 ppm | 108.4200 % | 106.6856 % | 103.5193 % | 108.2136 % | 106.7223 % | 105.2696 % |
| Concentration per Run 3 | 0.4959 ppm | 108.0773 % | 106.7693 % | 102.5806 % | 107.4689 % | 106.8838 % | 103.8910 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.2 % | 0.7 % | 0.5 % | 0.2 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-6D5 WG1973936
Analysis started at: 9/20/2024 1:15:12 PM
Rack 2
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0097 ppm | -0.0004 ppm | 0.0035 ppm | 0.0027 ppm | 0.0000 ppm | 7.0063 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0100 ppm | 0.0035 ppm | 0.0012 ppm | 0.0027 ppm | 0.0000 ppm | 6.9743 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0064 ppm | -0.0046 ppm | 0.0029 ppm | 0.0027 ppm | 0.0000 ppm | 7.0207 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0128 ppm | -0.0001 ppm | 0.0064 ppm | 0.0026 ppm | 0.0000 ppm | 7.0240 ppm |
| Concentration RSD | 21.5 % | 33.1 % | 1,084.1 % | 75.8 % | 2.0 % | 2,463.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | -0.0002 ppm | -0.0002 ppm | 0.0020 ppm | 0.4665 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0004 ppm | -0.0001 ppm | -0.0004 ppm | 0.0037 ppm | 0.4347 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | -0.0004 ppm | -0.0001 ppm | 0.0007 ppm | 0.4859 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0006 ppm | -0.0002 ppm | 0.0000 ppm | 0.0017 ppm | 0.4788 ppm | -0.0015 ppm |
| Concentration RSD | 398.0 % | 50.2 % | 52.0 % | 98.3 % | 74.4 % | 5.9 % | 353.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5532 ppm | 0.0003 ppm | 0.0024 ppm | 1.2897 ppm | 0.0000 ppm | -0.0016 ppm | 0.0106 ppm |
| Concentration per Run 1 | 0.5542 ppm | 0.0004 ppm | 0.0024 ppm | 1.2954 ppm | 0.0003 ppm | -0.0011 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.5562 ppm | 0.0005 ppm | 0.0026 ppm | 1.2847 ppm | 0.0005 ppm | -0.0010 ppm | 0.0108 ppm |
| Concentration per Run 3 | 0.5493 ppm | 0.0000 ppm | 0.0023 ppm | 1.2891 ppm | -0.0008 ppm | -0.0026 ppm | 0.0180 ppm |
| Concentration RSD | 0.6 % | 83.5 % | 7.2 % | 0.4 % | 55,044.0 % | 55.3 % | 69.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.7281 ppm | 0.0164 ppm | 0.0278 ppm | 0.0000 ppm | -0.0013 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.7360 ppm | 0.0179 ppm | 0.0277 ppm | 0.0007 ppm | -0.0011 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.7293 ppm | 0.0163 ppm | 0.0278 ppm | -0.0001 ppm | -0.0014 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0020 ppm | 0.7190 ppm | 0.0150 ppm | 0.0279 ppm | -0.0006 ppm | -0.0014 ppm | -0.0002 ppm |
| Concentration RSD | 1,536.4 % | 1.2 % | 8.8 % | 0.3 % | 77,413.9 % | 11.9 % | 24.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 109.5196 % | 106.2632 % | 107.6386 % | 109.4240 % | 106.2940 % | 107.6921 % |
| Concentration per Run 1 | 0.0007 ppm | 108.9830 % | 107.0982 % | 108.2301 % | 109.1966 % | 106.8880 % | 108.6804 % |
| Concentration per Run 2 | 0.0006 ppm | 109.7479 % | 105.4648 % | 106.9720 % | 109.3318 % | 105.3415 % | 106.7170 % |
| Concentration per Run 3 | 0.0007 ppm | 109.8279 % | 106.2267 % | 107.7138 % | 109.7437 % | 106.6523 % | 107.6789 % |
| Concentration RSD | 11.6 % | 0.4 % | 0.8 % | 0.6 % | 0.3 % | 0.8 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 1:19:07 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5038 ppm | 0.4746 ppm | 0.4759 ppm | 0.4922 ppm | 0.4910 ppm | 0.5008 ppm | 0.4837 ppm |
| Concentration per Run 1 | 0.5033 ppm | 0.4791 ppm | 0.4734 ppm | 0.4916 ppm | 0.4921 ppm | 0.5008 ppm | 0.4832 ppm |
| Concentration per Run 2 | 0.5039 ppm | 0.4649 ppm | 0.4760 ppm | 0.4934 ppm | 0.4882 ppm | 0.5007 ppm | 0.4817 ppm |
| Concentration per Run 3 | 0.5043 ppm | 0.4797 ppm | 0.4783 ppm | 0.4916 ppm | 0.4926 ppm | 0.5008 ppm | 0.4860 ppm |
| Recovery Percentage 1 | 100.770 % | 94.911 % | 95.178 % | 98.444 % | 98.195 % | 100.157 % | 96.732 % |
| Concentration RSD | 0.1 % | 1.8 % | 0.5 % | 0.2 % | 0.5 % | 0.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4909 ppm | 0.5000 ppm | 0.4819 ppm | 0.4898 ppm | 0.4927 ppm | 5.0830 ppm | 0.4944 ppm |
| Concentration per Run 1 | 0.4878 ppm | 0.4989 ppm | 0.4816 ppm | 0.4917 ppm | 0.4932 ppm | 5.1144 ppm | 0.4953 ppm |
| Concentration per Run 2 | 0.4917 ppm | 0.5005 ppm | 0.4829 ppm | 0.4876 ppm | 0.4907 ppm | 5.0481 ppm | 0.4905 ppm |
| Concentration per Run 3 | 0.4932 ppm | 0.5005 ppm | 0.4814 ppm | 0.4901 ppm | 0.4943 ppm | 5.0865 ppm | 0.4974 ppm |
| Recovery Percentage 1 | 98.179 % | 99.993 % | 96.388 % | 97.959 % | 98.547 % | 101.660 % | 98.878 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.2 % | 0.4 % | 0.4 % | 0.7 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4777 ppm | 0.4783 ppm | 0.4832 ppm | 9.6788 ppm | 0.4997 ppm | 0.4913 ppm | 0.5045 ppm |
| Concentration per Run 1 | 0.4775 ppm | 0.4781 ppm | 0.4800 ppm | 9.6381 ppm | 0.5010 ppm | 0.4930 ppm | 0.5069 ppm |
| Concentration per Run 2 | 0.4790 ppm | 0.4786 ppm | 0.4860 ppm | 9.6490 ppm | 0.5003 ppm | 0.4896 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.4766 ppm | 0.4782 ppm | 0.4835 ppm | 9.7494 ppm | 0.4979 ppm | 0.4913 ppm | 0.5080 ppm |
| Recovery Percentage 1 | 95.545 % | 95.661 % | 96.631 % | 96.788 % | 99.949 % | 98.259 % | 100.897 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.6 % | 0.6 % | 0.3 % | 0.4 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4921 ppm | 5.3415 ppm | 0.4798 ppm | 0.4727 ppm | 0.4901 ppm | 0.4923 ppm | 0.4791 ppm |
| Concentration per Run 1 | 0.4926 ppm | 5.3161 ppm | 0.4789 ppm | 0.4733 ppm | 0.4878 ppm | 0.4896 ppm | 0.4797 ppm |
| Concentration per Run 2 | 0.4933 ppm | 5.3457 ppm | 0.4801 ppm | 0.4717 ppm | 0.4924 ppm | 0.4930 ppm | 0.4787 ppm |
| Concentration per Run 3 | 0.4903 ppm | 5.3627 ppm | 0.4804 ppm | 0.4733 ppm | 0.4903 ppm | 0.4943 ppm | 0.4790 ppm |
| Recovery Percentage 1 | 98.415 % | 101.743 % | 95.963 % | 94.550 % | 98.028 % | 98.462 % | 95.824 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.2 % | 0.2 % | 0.5 % | 0.5 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4955 ppm | 110.0604 % | 106.7168 % | 106.8986 % | 109.1224 % | 106.7586 % | 106.8828 % |
| Concentration per Run 1 | 0.4966 ppm | 110.0982 % | 106.3364 % | 106.5855 % | 109.2877 % | 105.9273 % | 106.6713 % |
| Concentration per Run 2 | 0.4949 ppm | 110.3832 % | 108.1065 % | 106.6235 % | 109.4574 % | 108.3418 % | 106.6835 % |
| Concentration per Run 3 | 0.4951 ppm | 109.6998 % | 105.7074 % | 107.4869 % | 108.6222 % | 106.0068 % | 107.2937 % |
| Recovery Percentage 1 | 99.105 % | | | | | | |
| Concentration RSD | 0.2 % | 0.3 % | 1.2 % | 0.5 % | 0.4 % | 1.3 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 1:23:01 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0076 ppm | 0.0022 ppm | 0.0024 ppm | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0067 ppm | 0.0012 ppm | 0.0040 ppm | -0.0003 ppm | 0.0000 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0064 ppm | 0.0028 ppm | 0.0016 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0098 ppm | 0.0026 ppm | 0.0017 ppm | -0.0001 ppm | 0.0001 ppm | 0.0015 ppm |
| Recovery Percentage 1 | 9.988 % | 7.639 % | 43.529 % | 8.130 % | -1.173 % | 1.501 % | 0.980 % |
| Concentration RSD | 40.6 % | 24.8 % | 40.2 % | 57.2 % | 165.6 % | 28.7 % | 69.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm | -0.0024 ppm | -0.0085 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0006 ppm | -0.0014 ppm | -0.0246 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0005 ppm | -0.0002 ppm | -0.0003 ppm | -0.0053 ppm | 0.0065 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0002 ppm | -0.0003 ppm | 0.0000 ppm | -0.0004 ppm | -0.0074 ppm | -0.0010 ppm |
| Recovery Percentage 1 | 2.668 % | 0.680 % | -2.810 % | -3.007 % | -4.824 % | -0.340 % | -0.216 % |
| Concentration RSD | 61.4 % | 254.2 % | 18.0 % | 90.9 % | 107.4 % | 183.1 % | 8,392.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0002 ppm | 0.0013 ppm | -0.1905 ppm | -0.0001 ppm | -0.0014 ppm | 0.0067 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0004 ppm | 0.0013 ppm | -0.1855 ppm | 0.0006 ppm | -0.0019 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0021 ppm | -0.0003 ppm | 0.0009 ppm | -0.1914 ppm | -0.0002 ppm | -0.0014 ppm | 0.0068 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | 0.0016 ppm | -0.1945 ppm | -0.0008 ppm | -0.0010 ppm | 0.0080 ppm |
| Recovery Percentage 1 | 0.848 % | -2.378 % | 2.532 % | -9.525 % | -0.445 % | -14.317 % | 13.472 % |
| Concentration RSD | 136.7 % | 67.9 % | 24.8 % | 2.4 % | 642.0 % | 31.6 % | 19.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0033 ppm | 0.0018 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0013 ppm | -0.0058 ppm | 0.0023 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0012 ppm | 0.0008 ppm | -0.0001 ppm | 0.0000 ppm | -0.0008 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0013 ppm | -0.0028 ppm | 0.0023 ppm | 0.0002 ppm | 0.0001 ppm | 0.0005 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 9.018 % | -0.651 % | 3.652 % | -0.124 % | 0.550 % | 0.519 % | -3.111 % |
| Concentration RSD | 78.6 % | 71.1 % | 46.3 % | 1,217.6 % | 127.4 % | 804.2 % | 16.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 110.5516 % | 106.8355 % | 107.9121 % | 111.3337 % | 107.6759 % | 108.8616 % |
| Concentration per Run 1 | 0.0003 ppm | 110.1583 % | 106.9472 % | 107.7037 % | 111.3404 % | 107.4063 % | 108.7984 % |
| Concentration per Run 2 | 0.0001 ppm | 111.1155 % | 107.1254 % | 108.5573 % | 111.2734 % | 108.1867 % | 109.6282 % |
| Concentration per Run 3 | 0.0003 ppm | 110.3812 % | 106.4339 % | 107.4755 % | 111.3874 % | 107.4346 % | 108.1581 % |
| Recovery Percentage 1 | 4.609 % | | | | | | |
| Concentration RSD | 44.3 % | 0.5 % | 0.3 % | 0.5 % | 0.1 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-1 WG1973936
Analysis started at: 9/20/2024 1:34:26 PM
Rack 2
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0037 ppm | 0.0018 ppm | 0.0016 ppm | 0.0000 ppm | 0.0000 ppm | 0.0113 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0028 ppm | 0.0029 ppm | 0.0014 ppm | -0.0001 ppm | 0.0000 ppm | 0.0143 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0103 ppm | 0.0009 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0135 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0185 ppm | 0.0017 ppm | 0.0020 ppm | 0.0001 ppm | 0.0000 ppm | 0.0060 ppm |
| Recovery Percentage 1 | 16.413 % | 3.667 % | 36.410 % | 5.267 % | 0.095 % | 0.269 % | 11.261 % |
| Concentration RSD | 54.0 % | 393.4 % | 55.1 % | 25.4 % | 1,000.5 % | 19.9 % | 40.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | -0.0011 ppm | 0.0000 ppm | -0.0037 ppm | -0.0176 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0001 ppm | -0.0006 ppm | 0.0006 ppm | -0.0034 ppm | -0.0174 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0004 ppm | -0.0012 ppm | -0.0004 ppm | -0.0035 ppm | 0.0041 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0003 ppm | -0.0014 ppm | -0.0002 ppm | -0.0042 ppm | -0.0393 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -0.486 % | -1.269 % | -10.573 % | 0.266 % | -7.380 % | -0.702 % | 9.695 % |
| Concentration RSD | 801.5 % | 48.5 % | 38.3 % | 1,934.1 % | 12.1 % | 123.7 % | 56.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | -0.0002 ppm | -0.0003 ppm | -0.2046 ppm | -0.0008 ppm | -0.0005 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0039 ppm | -0.0003 ppm | -0.0003 ppm | -0.2004 ppm | -0.0003 ppm | -0.0005 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0020 ppm | -0.0002 ppm | -0.0002 ppm | -0.2085 ppm | -0.0008 ppm | -0.0011 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0000 ppm | -0.0005 ppm | -0.2048 ppm | -0.0013 ppm | 0.0001 ppm | 0.0023 ppm |
| Recovery Percentage 1 | 2.470 % | -1.626 % | -0.636 % | -10.229 % | -3.197 % | -5.010 % | 3.130 % |
| Concentration RSD | 51.2 % | 76.2 % | 62.1 % | 2.0 % | 61.9 % | 122.2 % | 48.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0038 ppm | -0.0005 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0028 ppm | -0.0011 ppm | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0021 ppm | -0.0023 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0035 ppm | -0.0062 ppm | -0.0004 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.975 % | -0.758 % | -0.981 % | -0.214 % | -0.817 % | -0.119 % | -4.332 % |
| Concentration RSD | 3,048.7 % | 56.1 % | 107.2 % | 446.5 % | 250.4 % | 1,252.3 % | 72.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 104.7809 % | 105.8739 % | 104.8983 % | 106.5626 % | 106.2633 % | 105.2586 % |
| Concentration per Run 1 | 0.0012 ppm | 104.6452 % | 105.8333 % | 104.5348 % | 107.1073 % | 106.2538 % | 105.4428 % |
| Concentration per Run 2 | 0.0006 ppm | 104.3973 % | 106.5448 % | 105.1378 % | 105.9767 % | 106.4916 % | 105.0452 % |
| Concentration per Run 3 | 0.0012 ppm | 105.3002 % | 105.2436 % | 105.0221 % | 106.6038 % | 106.0444 % | 105.2877 % |
| Recovery Percentage 1 | 19.531 % | | | | | | |
| Concentration RSD | 32.4 % | 0.4 % | 0.6 % | 0.3 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-2 WG1973936
Analysis started at: 9/20/2024 1:38:37 PM
Rack 2
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 2.0045 ppm | 0.1187 ppm | 1.0106 ppm | 2.0228 ppm | 0.0512 ppm | 10.3931 ppm |
| Concentration per Run 1 | 0.0539 ppm | 2.0222 ppm | 0.1182 ppm | 1.0057 ppm | 2.0162 ppm | 0.0512 ppm | 10.4060 ppm |
| Concentration per Run 2 | 0.0531 ppm | 1.9974 ppm | 0.1180 ppm | 1.0162 ppm | 2.0314 ppm | 0.0514 ppm | 10.3849 ppm |
| Concentration per Run 3 | 0.0521 ppm | 1.9938 ppm | 0.1198 ppm | 1.0100 ppm | 2.0208 ppm | 0.0510 ppm | 10.3884 ppm |
| Concentration RSD | 1.6 % | 0.8 % | 0.8 % | 0.5 % | 0.4 % | 0.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0538 ppm | 0.5073 ppm | 0.1985 ppm | 0.2546 ppm | 1.0256 ppm | 10.6444 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0538 ppm | 0.5102 ppm | 0.1983 ppm | 0.2542 ppm | 1.0275 ppm | 10.6297 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0540 ppm | 0.5077 ppm | 0.1992 ppm | 0.2548 ppm | 1.0280 ppm | 10.6659 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0536 ppm | 0.5041 ppm | 0.1979 ppm | 0.2548 ppm | 1.0214 ppm | 10.6377 ppm | 0.0010 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 0.3 % | 0.1 % | 0.4 % | 0.2 % | 50.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1886 ppm | 0.5087 ppm | 0.9876 ppm | 10.3731 ppm | 0.5081 ppm | 0.5340 ppm | 0.4345 ppm |
| Concentration per Run 1 | 10.1920 ppm | 0.5101 ppm | 0.9744 ppm | 10.3325 ppm | 0.5075 ppm | 0.5305 ppm | 0.4203 ppm |
| Concentration per Run 2 | 10.1872 ppm | 0.5091 ppm | 0.9924 ppm | 10.4055 ppm | 0.5094 ppm | 0.5338 ppm | 0.4390 ppm |
| Concentration per Run 3 | 10.1866 ppm | 0.5068 ppm | 0.9959 ppm | 10.3812 ppm | 0.5072 ppm | 0.5379 ppm | 0.4444 ppm |
| Concentration RSD | 0.0 % | 0.3 % | 1.2 % | 0.4 % | 0.2 % | 0.7 % | 2.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1241 ppm | 1.0002 ppm | 0.9855 ppm | 0.9950 ppm | 1.0281 ppm | 0.1223 ppm | 0.5044 ppm |
| Concentration per Run 1 | 0.1225 ppm | 1.0000 ppm | 0.9784 ppm | 0.9924 ppm | 1.0258 ppm | 0.1219 ppm | 0.5053 ppm |
| Concentration per Run 2 | 0.1242 ppm | 0.9977 ppm | 0.9923 ppm | 0.9967 ppm | 1.0348 ppm | 0.1220 ppm | 0.5053 ppm |
| Concentration per Run 3 | 0.1255 ppm | 1.0030 ppm | 0.9859 ppm | 0.9958 ppm | 1.0236 ppm | 0.1229 ppm | 0.5026 ppm |
| Concentration RSD | 1.2 % | 0.3 % | 0.7 % | 0.2 % | 0.6 % | 0.5 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5085 ppm | 109.1298 % | 106.8307 % | 106.2949 % | 108.7059 % | 107.0728 % | 107.3315 % |
| Concentration per Run 1 | 0.5074 ppm | 109.8041 % | 106.9766 % | 107.3383 % | 109.9293 % | 107.2519 % | 108.4804 % |
| Concentration per Run 2 | 0.5111 ppm | 107.9165 % | 106.3380 % | 105.9610 % | 107.2793 % | 106.7208 % | 106.9118 % |
| Concentration per Run 3 | 0.5071 ppm | 109.6688 % | 107.1774 % | 105.5855 % | 108.9093 % | 107.2458 % | 106.6023 % |
| Concentration RSD | 0.4 % | 1.0 % | 0.4 % | 0.9 % | 1.2 % | 0.3 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-08 WG1973936
Analysis started at: 9/20/2024 1:42:31 PM
Rack 2
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0017 ppm | 0.0008 ppm | 0.0025 ppm | 0.0001 ppm | 0.0000 ppm | 0.0299 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0086 ppm | 0.0017 ppm | 0.0033 ppm | 0.0002 ppm | 0.0001 ppm | 0.0366 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0064 ppm | 0.0014 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0286 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0073 ppm | -0.0008 ppm | 0.0016 ppm | -0.0001 ppm | 0.0000 ppm | 0.0245 ppm |
| Concentration RSD | 46.7 % | 530.9 % | 172.7 % | 34.8 % | 210.4 % | 124.0 % | 20.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0012 ppm | -0.0002 ppm | 0.0061 ppm | -0.0107 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0003 ppm | -0.0015 ppm | -0.0002 ppm | 0.0066 ppm | -0.0302 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0005 ppm | -0.0013 ppm | -0.0006 ppm | 0.0063 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0004 ppm | -0.0008 ppm | 0.0001 ppm | 0.0053 ppm | -0.0015 ppm | 0.0017 ppm |
| Concentration RSD | 283.8 % | 479.1 % | 29.9 % | 141.6 % | 11.6 % | 157.9 % | 99.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.0005 ppm | 0.0020 ppm | -0.1989 ppm | -0.0012 ppm | -0.0013 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.0006 ppm | 0.0021 ppm | -0.1963 ppm | -0.0016 ppm | -0.0007 ppm | 0.0069 ppm |
| Concentration per Run 2 | 0.0063 ppm | 0.0004 ppm | 0.0021 ppm | -0.1987 ppm | -0.0013 ppm | -0.0017 ppm | 0.0065 ppm |
| Concentration per Run 3 | 0.0029 ppm | 0.0006 ppm | 0.0017 ppm | -0.2017 ppm | -0.0007 ppm | -0.0016 ppm | 0.0014 ppm |
| Concentration RSD | 40.8 % | 23.6 % | 9.4 % | 1.4 % | 38.1 % | 39.8 % | 61.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0039 ppm | 0.0044 ppm | 0.0000 ppm | -0.0002 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0041 ppm | 0.0068 ppm | 0.0000 ppm | -0.0003 ppm | -0.0014 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0034 ppm | 0.0033 ppm | 0.0002 ppm | -0.0004 ppm | -0.0010 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0023 ppm | -0.0042 ppm | 0.0030 ppm | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm | -0.0003 ppm |
| Concentration RSD | 110.0 % | 11.7 % | 48.6 % | 312.4 % | 157.4 % | 221.8 % | 20.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 107.9412 % | 106.5158 % | 107.9805 % | 110.5550 % | 107.1740 % | 108.4059 % |
| Concentration per Run 1 | 0.0007 ppm | 106.4056 % | 106.7003 % | 107.4141 % | 109.9176 % | 107.7606 % | 108.5952 % |
| Concentration per Run 2 | 0.0006 ppm | 108.6648 % | 106.0846 % | 108.5410 % | 111.3656 % | 106.8056 % | 108.5878 % |
| Concentration per Run 3 | 0.0009 ppm | 108.7533 % | 106.7625 % | 107.9863 % | 110.3818 % | 106.9557 % | 108.0346 % |
| Concentration RSD | 18.7 % | 1.2 % | 0.4 % | 0.5 % | 0.7 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-11 WG1973936
Analysis started at: 9/20/2024 1:46:26 PM
Rack 2
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0082 ppm | -0.0002 ppm | 0.0182 ppm | 0.0188 ppm | 0.0000 ppm | 23.7016 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0084 ppm | -0.0002 ppm | 0.0190 ppm | 0.0188 ppm | 0.0000 ppm | 23.7191 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0128 ppm | -0.0003 ppm | 0.0182 ppm | 0.0188 ppm | 0.0000 ppm | 23.7420 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0035 ppm | -0.0001 ppm | 0.0174 ppm | 0.0188 ppm | 0.0000 ppm | 23.6437 ppm |
| Concentration RSD | 9.7 % | 56.4 % | 37.8 % | 4.3 % | 0.2 % | 523.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0002 ppm | -0.0008 ppm | 0.0000 ppm | 0.0704 ppm | 2.2440 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0004 ppm | -0.0006 ppm | 0.0002 ppm | 0.0693 ppm | 2.2468 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0005 ppm | -0.0008 ppm | 0.0003 ppm | 0.0703 ppm | 2.2641 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0006 ppm | -0.0011 ppm | -0.0005 ppm | 0.0717 ppm | 2.2212 ppm | 0.0000 ppm |
| Concentration RSD | 84.8 % | 251.1 % | 30.5 % | 1,261.4 % | 1.7 % | 1.0 % | 177.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7000 ppm | 0.0594 ppm | 0.0003 ppm | 17.3223 ppm | -0.0003 ppm | -0.0009 ppm | 0.0006 ppm |
| Concentration per Run 1 | 2.7088 ppm | 0.0593 ppm | 0.0003 ppm | 17.2708 ppm | -0.0009 ppm | -0.0010 ppm | 0.0018 ppm |
| Concentration per Run 2 | 2.7107 ppm | 0.0596 ppm | 0.0002 ppm | 17.2854 ppm | 0.0007 ppm | -0.0022 ppm | -0.0017 ppm |
| Concentration per Run 3 | 2.6807 ppm | 0.0592 ppm | 0.0004 ppm | 17.4109 ppm | -0.0008 ppm | 0.0004 ppm | 0.0017 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 37.3 % | 0.4 % | 255.4 % | 140.5 % | 329.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 4.3206 ppm | 0.0004 ppm | 0.1006 ppm | -0.0001 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0025 ppm | 4.3344 ppm | 0.0008 ppm | 0.1002 ppm | -0.0004 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0009 ppm | 4.3445 ppm | -0.0006 ppm | 0.1009 ppm | 0.0001 ppm | -0.0008 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0048 ppm | 4.2830 ppm | 0.0011 ppm | 0.1006 ppm | -0.0001 ppm | 0.0010 ppm | -0.0004 ppm |
| Concentration RSD | 134.2 % | 0.8 % | 225.1 % | 0.4 % | 228.2 % | 551.5 % | 130.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 108.2763 % | 106.8144 % | 106.4675 % | 110.2068 % | 106.9602 % | 108.7801 % |
| Concentration per Run 1 | 0.0008 ppm | 108.2157 % | 106.8923 % | 106.3049 % | 111.2305 % | 106.5235 % | 108.7186 % |
| Concentration per Run 2 | 0.0012 ppm | 108.3420 % | 106.7701 % | 106.5428 % | 110.2011 % | 106.9949 % | 109.2811 % |
| Concentration per Run 3 | 0.0012 ppm | 108.2711 % | 106.7808 % | 106.5548 % | 109.1889 % | 107.3622 % | 108.3406 % |
| Concentration RSD | 20.9 % | 0.1 % | 0.1 % | 0.1 % | 0.9 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-14 WG1973936
Analysis started at: 9/20/2024 1:50:20 PM
Rack 2
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0020 ppm | -0.0001 ppm | 0.0057 ppm | 0.0103 ppm | 0.0000 ppm | 23.7796 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0055 ppm | -0.0002 ppm | 0.0049 ppm | 0.0103 ppm | 0.0000 ppm | 23.7925 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0064 ppm | -0.0001 ppm | 0.0054 ppm | 0.0103 ppm | 0.0000 ppm | 23.8439 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0051 ppm | 0.0001 ppm | 0.0068 ppm | 0.0103 ppm | 0.0000 ppm | 23.7024 ppm |
| Concentration RSD | 25.8 % | 329.1 % | 205.0 % | 17.3 % | 0.2 % | 178.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0008 ppm | 0.0002 ppm | -0.0027 ppm | 1.7326 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0004 ppm | -0.0005 ppm | 0.0003 ppm | -0.0045 ppm | 1.7481 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | -0.0015 ppm | 0.0001 ppm | -0.0004 ppm | 1.7480 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0003 ppm | -0.0033 ppm | 1.7015 ppm | 0.0008 ppm |
| Concentration RSD | 696.9 % | 2,735.7 % | 70.8 % | 36.8 % | 77.9 % | 1.6 % | 51.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.6874 ppm | 0.0004 ppm | 0.0006 ppm | 6.9489 ppm | -0.0006 ppm | -0.0018 ppm | 0.0026 ppm |
| Concentration per Run 1 | 2.7072 ppm | 0.0003 ppm | 0.0011 ppm | 6.9541 ppm | 0.0002 ppm | -0.0029 ppm | 0.0001 ppm |
| Concentration per Run 2 | 2.6861 ppm | 0.0003 ppm | 0.0010 ppm | 6.9404 ppm | -0.0008 ppm | -0.0002 ppm | 0.0038 ppm |
| Concentration per Run 3 | 2.6690 ppm | 0.0005 ppm | -0.0003 ppm | 6.9522 ppm | -0.0013 ppm | -0.0022 ppm | 0.0040 ppm |
| Concentration RSD | 0.7 % | 28.4 % | 128.0 % | 0.1 % | 115.2 % | 77.5 % | 84.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 4.1353 ppm | 0.0013 ppm | 0.0749 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0005 ppm | 4.1694 ppm | 0.0010 ppm | 0.0752 ppm | -0.0004 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0024 ppm | 4.1290 ppm | 0.0018 ppm | 0.0746 ppm | -0.0001 ppm | -0.0016 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0061 ppm | 4.1075 ppm | 0.0010 ppm | 0.0749 ppm | -0.0002 ppm | 0.0011 ppm | -0.0002 ppm |
| Concentration RSD | 124.4 % | 0.8 % | 34.9 % | 0.4 % | 50.8 % | 3,778.5 % | 83.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 107.9818 % | 106.7313 % | 106.5622 % | 109.9692 % | 106.9631 % | 108.4469 % |
| Concentration per Run 1 | 0.0007 ppm | 107.3507 % | 106.9243 % | 105.8207 % | 110.1948 % | 107.3836 % | 108.1031 % |
| Concentration per Run 2 | 0.0007 ppm | 107.3146 % | 107.0305 % | 106.4724 % | 109.2809 % | 107.1594 % | 108.3271 % |
| Concentration per Run 3 | 0.0010 ppm | 109.2799 % | 106.2390 % | 107.3935 % | 110.4318 % | 106.3465 % | 108.9105 % |
| Concentration RSD | 23.2 % | 1.0 % | 0.4 % | 0.7 % | 0.6 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-05 WG1973936
Analysis started at: 9/20/2024 1:54:15 PM
Rack 2
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0071 ppm | 0.0007 ppm | 0.0113 ppm | 0.0130 ppm | 0.0000 ppm | 35.2138 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0024 ppm | -0.0005 ppm | 0.0124 ppm | 0.0129 ppm | 0.0000 ppm | 35.1506 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0141 ppm | 0.0014 ppm | 0.0129 ppm | 0.0130 ppm | 0.0000 ppm | 35.1439 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0097 ppm | 0.0012 ppm | 0.0086 ppm | 0.0131 ppm | 0.0000 ppm | 35.3469 ppm |
| Concentration RSD | 38.7 % | 119.8 % | 147.9 % | 20.9 % | 0.8 % | 62.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | -0.0011 ppm | 0.0000 ppm | 0.0041 ppm | 2.2907 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0001 ppm | -0.0013 ppm | 0.0003 ppm | 0.0020 ppm | 2.3165 ppm | 0.0024 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0004 ppm | -0.0012 ppm | -0.0002 ppm | 0.0038 ppm | 2.2646 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | 0.0000 ppm | 0.0066 ppm | 2.2911 ppm | 0.0036 ppm |
| Concentration RSD | 1,268.5 % | 115.7 % | 29.2 % | 961.2 % | 56.6 % | 1.1 % | 48.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8118 ppm | 0.0008 ppm | 0.0005 ppm | 7.2909 ppm | -0.0002 ppm | -0.0014 ppm | 0.0052 ppm |
| Concentration per Run 1 | 2.8298 ppm | 0.0007 ppm | 0.0005 ppm | 7.3082 ppm | 0.0000 ppm | -0.0013 ppm | 0.0032 ppm |
| Concentration per Run 2 | 2.8012 ppm | 0.0007 ppm | 0.0006 ppm | 7.2981 ppm | -0.0004 ppm | -0.0022 ppm | 0.0074 ppm |
| Concentration per Run 3 | 2.8044 ppm | 0.0010 ppm | 0.0004 ppm | 7.2666 ppm | -0.0004 ppm | -0.0008 ppm | 0.0051 ppm |
| Concentration RSD | 0.6 % | 20.4 % | 19.8 % | 0.3 % | 102.2 % | 49.7 % | 39.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 3.7226 ppm | 0.0002 ppm | 0.1400 ppm | -0.0002 ppm | -0.0014 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 3.7463 ppm | -0.0005 ppm | 0.1400 ppm | -0.0003 ppm | -0.0018 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0023 ppm | 3.7162 ppm | 0.0008 ppm | 0.1400 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0019 ppm | 3.7053 ppm | 0.0002 ppm | 0.1400 ppm | -0.0003 ppm | -0.0023 ppm | -0.0001 ppm |
| Concentration RSD | 1,506.3 % | 0.6 % | 337.5 % | 0.0 % | 48.5 % | 74.8 % | 508.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 108.0246 % | 105.4605 % | 106.1942 % | 109.6437 % | 105.2934 % | 108.1091 % |
| Concentration per Run 1 | 0.0012 ppm | 107.9511 % | 105.8061 % | 106.0368 % | 110.8883 % | 105.9406 % | 108.5861 % |
| Concentration per Run 2 | 0.0013 ppm | 107.6674 % | 106.0066 % | 105.5295 % | 108.9209 % | 105.4374 % | 107.3498 % |
| Concentration per Run 3 | 0.0008 ppm | 108.4554 % | 104.5687 % | 107.0164 % | 109.1220 % | 104.5023 % | 108.3916 % |
| Concentration RSD | 26.0 % | 0.4 % | 0.7 % | 0.7 % | 1.0 % | 0.7 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-7 WG1973936
Analysis started at: 9/20/2024 1:58:10 PM
Rack 2
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 1.9803 ppm | 0.1213 ppm | 1.0428 ppm | 2.0304 ppm | 0.0514 ppm | 45.1833 ppm |
| Concentration per Run 1 | 0.0529 ppm | 1.9758 ppm | 0.1215 ppm | 1.0498 ppm | 2.0276 ppm | 0.0513 ppm | 45.1488 ppm |
| Concentration per Run 2 | 0.0528 ppm | 1.9737 ppm | 0.1214 ppm | 1.0511 ppm | 2.0371 ppm | 0.0516 ppm | 45.4317 ppm |
| Concentration per Run 3 | 0.0531 ppm | 1.9915 ppm | 0.1209 ppm | 1.0276 ppm | 2.0265 ppm | 0.0512 ppm | 44.9695 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 0.3 % | 1.3 % | 0.3 % | 0.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0536 ppm | 0.5008 ppm | 0.1976 ppm | 0.2541 ppm | 1.0191 ppm | 12.9477 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0538 ppm | 0.5033 ppm | 0.1991 ppm | 0.2536 ppm | 1.0235 ppm | 12.9327 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.0540 ppm | 0.5023 ppm | 0.1979 ppm | 0.2550 ppm | 1.0228 ppm | 13.0041 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0531 ppm | 0.4967 ppm | 0.1959 ppm | 0.2537 ppm | 1.0109 ppm | 12.9063 ppm | 0.0009 ppm |
| Concentration RSD | 1.0 % | 0.7 % | 0.8 % | 0.3 % | 0.7 % | 0.4 % | 51.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.9362 ppm | 0.5035 ppm | 0.9545 ppm | 17.7941 ppm | 0.4989 ppm | 0.5277 ppm | 0.4168 ppm |
| Concentration per Run 1 | 13.0369 ppm | 0.5039 ppm | 0.9456 ppm | 17.8549 ppm | 0.5023 ppm | 0.5297 ppm | 0.4085 ppm |
| Concentration per Run 2 | 12.9243 ppm | 0.5049 ppm | 0.9617 ppm | 17.7737 ppm | 0.5048 ppm | 0.5272 ppm | 0.4189 ppm |
| Concentration per Run 3 | 12.8473 ppm | 0.5016 ppm | 0.9564 ppm | 17.7536 ppm | 0.4897 ppm | 0.5262 ppm | 0.4231 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 0.9 % | 0.3 % | 1.6 % | 0.3 % | 1.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1229 ppm | 4.8103 ppm | 0.9647 ppm | 1.1308 ppm | 1.0346 ppm | 0.1193 ppm | 0.5067 ppm |
| Concentration per Run 1 | 0.1246 ppm | 4.8332 ppm | 0.9672 ppm | 1.1303 ppm | 1.0426 ppm | 0.1190 ppm | 0.5084 ppm |
| Concentration per Run 2 | 0.1201 ppm | 4.8226 ppm | 0.9689 ppm | 1.1341 ppm | 1.0359 ppm | 0.1188 ppm | 0.5083 ppm |
| Concentration per Run 3 | 0.1239 ppm | 4.7752 ppm | 0.9580 ppm | 1.1281 ppm | 1.0252 ppm | 0.1201 ppm | 0.5033 ppm |
| Concentration RSD | 2.0 % | 0.6 % | 0.6 % | 0.3 % | 0.8 % | 0.6 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5069 ppm | 107.7382 % | 106.6520 % | 103.9226 % | 107.7258 % | 106.4652 % | 105.5487 % |
| Concentration per Run 1 | 0.5111 ppm | 107.1543 % | 106.0134 % | 104.1417 % | 107.5817 % | 105.9408 % | 106.1884 % |
| Concentration per Run 2 | 0.5087 ppm | 107.0775 % | 105.9438 % | 103.4089 % | 107.1006 % | 105.6308 % | 104.9720 % |
| Concentration per Run 3 | 0.5008 ppm | 108.9828 % | 107.9988 % | 104.2173 % | 108.4952 % | 107.8242 % | 105.4859 % |
| Concentration RSD | 1.1 % | 1.0 % | 1.1 % | 0.4 % | 0.7 % | 1.1 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-8 WG1973936
Analysis started at: 9/20/2024 2:02:05 PM
Rack 2
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0025 ppm | -0.0010 ppm | 0.0118 ppm | 0.0127 ppm | 0.0000 ppm | 34.8224 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0048 ppm | 0.0011 ppm | 0.0107 ppm | 0.0127 ppm | 0.0000 ppm | 34.9538 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0077 ppm | -0.0045 ppm | 0.0128 ppm | 0.0128 ppm | 0.0001 ppm | 34.8410 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0049 ppm | 0.0004 ppm | 0.0119 ppm | 0.0127 ppm | 0.0000 ppm | 34.6724 ppm |
| Concentration RSD | 59.5 % | 263.4 % | 309.7 % | 8.9 % | 0.6 % | 61.0 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0006 ppm | -0.0010 ppm | 0.0005 ppm | 0.0052 ppm | 2.2663 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0004 ppm | -0.0012 ppm | 0.0005 ppm | 0.0033 ppm | 2.2701 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | -0.0007 ppm | 0.0004 ppm | 0.0079 ppm | 2.2626 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0018 ppm | -0.0013 ppm | 0.0005 ppm | 0.0044 ppm | 2.2662 ppm | 0.0020 ppm |
| Concentration RSD | 99.2 % | 211.8 % | 31.3 % | 9.6 % | 46.2 % | 0.2 % | 66.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7782 ppm | 0.0007 ppm | 0.0027 ppm | 7.2360 ppm | -0.0001 ppm | -0.0013 ppm | 0.0040 ppm |
| Concentration per Run 1 | 2.7979 ppm | 0.0007 ppm | 0.0031 ppm | 7.2481 ppm | -0.0006 ppm | -0.0010 ppm | 0.0061 ppm |
| Concentration per Run 2 | 2.7887 ppm | 0.0007 ppm | 0.0025 ppm | 7.2367 ppm | -0.0005 ppm | -0.0011 ppm | 0.0010 ppm |
| Concentration per Run 3 | 2.7480 ppm | 0.0007 ppm | 0.0026 ppm | 7.2233 ppm | 0.0007 ppm | -0.0018 ppm | 0.0050 ppm |
| Concentration RSD | 1.0 % | 5.8 % | 11.4 % | 0.2 % | 535.5 % | 35.8 % | 67.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 3.6960 ppm | 0.0078 ppm | 0.1381 ppm | 0.0000 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0025 ppm | 3.7064 ppm | 0.0076 ppm | 0.1392 ppm | 0.0002 ppm | 0.0015 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0022 ppm | 3.7178 ppm | 0.0083 ppm | 0.1377 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0013 ppm | 3.6639 ppm | 0.0074 ppm | 0.1375 ppm | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration RSD | 476.1 % | 0.8 % | 5.8 % | 0.7 % | 688.7 % | 279.2 % | 287.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 107.6358 % | 105.7846 % | 105.1602 % | 109.3047 % | 105.9925 % | 106.9990 % |
| Concentration per Run 1 | 0.0006 ppm | 107.3007 % | 105.9844 % | 105.9898 % | 110.0717 % | 106.2618 % | 107.7849 % |
| Concentration per Run 2 | 0.0005 ppm | 107.6423 % | 105.7894 % | 104.9553 % | 108.8765 % | 106.1593 % | 107.3566 % |
| Concentration per Run 3 | 0.0006 ppm | 107.9643 % | 105.5800 % | 104.5354 % | 108.9659 % | 105.5565 % | 105.8555 % |
| Concentration RSD | 8.4 % | 0.3 % | 0.2 % | 0.7 % | 0.6 % | 0.4 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-9 WG1973936
Analysis started at: 9/20/2024 2:06:01 PM
Rack 2
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 1.9573 ppm | 0.1166 ppm | 1.0268 ppm | 2.0051 ppm | 0.0509 ppm | 44.0129 ppm |
| Concentration per Run 1 | 0.0500 ppm | 1.9644 ppm | 0.1166 ppm | 1.0367 ppm | 1.9967 ppm | 0.0508 ppm | 44.1102 ppm |
| Concentration per Run 2 | 0.0493 ppm | 1.9507 ppm | 0.1179 ppm | 1.0199 ppm | 2.0070 ppm | 0.0509 ppm | 44.0679 ppm |
| Concentration per Run 3 | 0.0492 ppm | 1.9569 ppm | 0.1153 ppm | 1.0237 ppm | 2.0117 ppm | 0.0510 ppm | 43.8607 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 1.1 % | 0.9 % | 0.4 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0524 ppm | 0.4919 ppm | 0.1924 ppm | 0.2494 ppm | 1.0131 ppm | 12.8163 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0526 ppm | 0.4919 ppm | 0.1938 ppm | 0.2512 ppm | 1.0080 ppm | 12.7809 ppm | 0.0045 ppm |
| Concentration per Run 2 | 0.0527 ppm | 0.4912 ppm | 0.1917 ppm | 0.2491 ppm | 1.0128 ppm | 12.8063 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0518 ppm | 0.4927 ppm | 0.1918 ppm | 0.2479 ppm | 1.0186 ppm | 12.8618 ppm | 0.0009 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.6 % | 0.7 % | 0.5 % | 0.3 % | 150.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.6406 ppm | 0.4980 ppm | 0.9319 ppm | 17.5760 ppm | 0.4872 ppm | 0.5202 ppm | 0.3539 ppm |
| Concentration per Run 1 | 12.7531 ppm | 0.4974 ppm | 0.9246 ppm | 17.5857 ppm | 0.4927 ppm | 0.5187 ppm | 0.3397 ppm |
| Concentration per Run 2 | 12.6011 ppm | 0.4971 ppm | 0.9306 ppm | 17.5698 ppm | 0.4821 ppm | 0.5207 ppm | 0.3541 ppm |
| Concentration per Run 3 | 12.5677 ppm | 0.4995 ppm | 0.9404 ppm | 17.5726 ppm | 0.4868 ppm | 0.5213 ppm | 0.3678 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 0.9 % | 0.0 % | 1.1 % | 0.3 % | 4.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1210 ppm | 4.5778 ppm | 0.9591 ppm | 1.1218 ppm | 1.0198 ppm | 0.1179 ppm | 0.4960 ppm |
| Concentration per Run 1 | 0.1168 ppm | 4.6082 ppm | 0.9660 ppm | 1.1182 ppm | 1.0289 ppm | 0.1187 ppm | 0.4991 ppm |
| Concentration per Run 2 | 0.1216 ppm | 4.5672 ppm | 0.9522 ppm | 1.1219 ppm | 1.0122 ppm | 0.1186 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.1246 ppm | 4.5579 ppm | 0.9591 ppm | 1.1253 ppm | 1.0183 ppm | 0.1163 ppm | 0.4938 ppm |
| Concentration RSD | 3.3 % | 0.6 % | 0.7 % | 0.3 % | 0.8 % | 1.1 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4955 ppm | 108.3776 % | 106.3676 % | 104.1101 % | 108.6218 % | 106.0307 % | 105.9723 % |
| Concentration per Run 1 | 0.5001 ppm | 107.7745 % | 106.2684 % | 104.8150 % | 108.7514 % | 106.1450 % | 106.7884 % |
| Concentration per Run 2 | 0.4906 ppm | 108.5572 % | 107.5472 % | 102.7811 % | 108.7848 % | 107.2283 % | 104.5800 % |
| Concentration per Run 3 | 0.4958 ppm | 108.8011 % | 105.2872 % | 104.7343 % | 108.3293 % | 104.7188 % | 106.5484 % |
| Concentration RSD | 1.0 % | 0.5 % | 1.1 % | 1.1 % | 0.2 % | 1.2 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1973936-10D5 WG1973936
Analysis started at: 9/20/2024 2:09:55 PM
Rack 2
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0012 ppm | 0.0001 ppm | 0.0061 ppm | 0.0026 ppm | 0.0000 ppm | 6.8954 ppm |
| Concentration per Run 1 | 0.0012 ppm | -0.0088 ppm | 0.0005 ppm | 0.0062 ppm | 0.0026 ppm | 0.0000 ppm | 6.9062 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0017 ppm | -0.0005 ppm | 0.0056 ppm | 0.0026 ppm | 0.0000 ppm | 6.8769 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0036 ppm | 0.0002 ppm | 0.0064 ppm | 0.0025 ppm | 0.0000 ppm | 6.9031 ppm |
| Concentration RSD | 46.6 % | 567.6 % | 876.7 % | 7.2 % | 0.9 % | 192.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0006 ppm | -0.0005 ppm | -0.0001 ppm | 0.0008 ppm | 0.4487 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0007 ppm | 0.0001 ppm | -0.0001 ppm | 0.0005 ppm | 0.4524 ppm | 0.0015 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | -0.0007 ppm | 0.0002 ppm | 0.0020 ppm | 0.4536 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0004 ppm | -0.0008 ppm | -0.0004 ppm | 0.0001 ppm | 0.4401 ppm | -0.0003 ppm |
| Concentration RSD | 468.8 % | 29.1 % | 110.4 % | 254.5 % | 120.7 % | 1.7 % | 151.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5479 ppm | 0.0001 ppm | 0.0024 ppm | 1.2664 ppm | -0.0002 ppm | -0.0014 ppm | 0.0069 ppm |
| Concentration per Run 1 | 0.5558 ppm | -0.0001 ppm | 0.0030 ppm | 1.2739 ppm | 0.0004 ppm | -0.0012 ppm | 0.0083 ppm |
| Concentration per Run 2 | 0.5444 ppm | 0.0002 ppm | 0.0020 ppm | 1.2588 ppm | -0.0008 ppm | -0.0015 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.5433 ppm | 0.0002 ppm | 0.0021 ppm | 1.2665 ppm | -0.0003 ppm | -0.0015 ppm | 0.0072 ppm |
| Concentration RSD | 1.3 % | 164.3 % | 22.8 % | 0.6 % | 267.4 % | 12.4 % | 20.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.7199 ppm | 0.0176 ppm | 0.0274 ppm | 0.0003 ppm | -0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.7237 ppm | 0.0185 ppm | 0.0275 ppm | 0.0001 ppm | 0.0009 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0036 ppm | 0.7187 ppm | 0.0168 ppm | 0.0270 ppm | 0.0003 ppm | -0.0013 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.7173 ppm | 0.0175 ppm | 0.0276 ppm | 0.0005 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration RSD | 717.0 % | 0.5 % | 4.8 % | 1.1 % | 78.9 % | 503.9 % | 14.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 109.6924 % | 106.2664 % | 108.3982 % | 110.0881 % | 105.9779 % | 108.2318 % |
| Concentration per Run 1 | 0.0010 ppm | 109.0450 % | 106.0781 % | 108.1167 % | 110.2314 % | 105.7755 % | 108.0471 % |
| Concentration per Run 2 | 0.0011 ppm | 109.6851 % | 107.2366 % | 108.2050 % | 109.7776 % | 106.8869 % | 107.8059 % |
| Concentration per Run 3 | 0.0007 ppm | 110.3470 % | 105.4845 % | 108.8731 % | 110.2552 % | 105.2712 % | 108.8424 % |
| Concentration RSD | 21.7 % | 0.6 % | 0.8 % | 0.4 % | 0.2 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 2:13:50 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5030 ppm | 0.4587 ppm | 0.4718 ppm | 0.4882 ppm | 0.4815 ppm | 0.4902 ppm | 0.4723 ppm |
| Concentration per Run 1 | 0.5033 ppm | 0.4588 ppm | 0.4722 ppm | 0.4885 ppm | 0.4789 ppm | 0.4856 ppm | 0.4680 ppm |
| Concentration per Run 2 | 0.5046 ppm | 0.4582 ppm | 0.4712 ppm | 0.4906 ppm | 0.4869 ppm | 0.4933 ppm | 0.4739 ppm |
| Concentration per Run 3 | 0.5011 ppm | 0.4590 ppm | 0.4719 ppm | 0.4855 ppm | 0.4786 ppm | 0.4916 ppm | 0.4751 ppm |
| Recovery Percentage 1 | 100.599 % | 91.737 % | 94.351 % | 97.638 % | 96.292 % | 98.036 % | 94.466 % |
| Concentration RSD | 0.4 % | 0.1 % | 0.1 % | 0.5 % | 1.0 % | 0.8 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4879 ppm | 0.4982 ppm | 0.4807 ppm | 0.4891 ppm | 0.4817 ppm | 4.9710 ppm | 0.4842 ppm |
| Concentration per Run 1 | 0.4869 ppm | 0.4974 ppm | 0.4813 ppm | 0.4903 ppm | 0.4816 ppm | 4.9513 ppm | 0.4864 ppm |
| Concentration per Run 2 | 0.4906 ppm | 0.4997 ppm | 0.4800 ppm | 0.4881 ppm | 0.4855 ppm | 5.0098 ppm | 0.4841 ppm |
| Concentration per Run 3 | 0.4862 ppm | 0.4976 ppm | 0.4808 ppm | 0.4890 ppm | 0.4779 ppm | 4.9519 ppm | 0.4820 ppm |
| Recovery Percentage 1 | 97.588 % | 99.647 % | 96.137 % | 97.821 % | 96.334 % | 99.420 % | 96.831 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.1 % | 0.2 % | 0.8 % | 0.7 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4792 ppm | 0.4671 ppm | 0.4793 ppm | 9.4295 ppm | 0.4987 ppm | 0.4884 ppm | 0.5014 ppm |
| Concentration per Run 1 | 0.4801 ppm | 0.4645 ppm | 0.4768 ppm | 9.4374 ppm | 0.4988 ppm | 0.4857 ppm | 0.4953 ppm |
| Concentration per Run 2 | 0.4779 ppm | 0.4685 ppm | 0.4791 ppm | 9.4256 ppm | 0.4985 ppm | 0.4879 ppm | 0.5105 ppm |
| Concentration per Run 3 | 0.4794 ppm | 0.4683 ppm | 0.4819 ppm | 9.4254 ppm | 0.4987 ppm | 0.4915 ppm | 0.4983 ppm |
| Recovery Percentage 1 | 95.832 % | 93.420 % | 95.856 % | 94.295 % | 99.737 % | 97.677 % | 100.271 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.5 % | 0.1 % | 0.0 % | 0.6 % | 1.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4895 ppm | 5.3222 ppm | 0.4779 ppm | 0.4619 ppm | 0.4882 ppm | 0.4887 ppm | 0.4776 ppm |
| Concentration per Run 1 | 0.4901 ppm | 5.2994 ppm | 0.4776 ppm | 0.4599 ppm | 0.4892 ppm | 0.4876 ppm | 0.4778 ppm |
| Concentration per Run 2 | 0.4908 ppm | 5.3399 ppm | 0.4774 ppm | 0.4665 ppm | 0.4888 ppm | 0.4863 ppm | 0.4772 ppm |
| Concentration per Run 3 | 0.4875 ppm | 5.3272 ppm | 0.4788 ppm | 0.4594 ppm | 0.4868 ppm | 0.4922 ppm | 0.4776 ppm |
| Recovery Percentage 1 | 97.895 % | 101.374 % | 95.583 % | 92.389 % | 97.646 % | 97.740 % | 95.511 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.2 % | 0.9 % | 0.3 % | 0.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4952 ppm | 110.5165 % | 108.7157 % | 108.3920 % | 109.5963 % | 107.7988 % | 108.4926 % |
| Concentration per Run 1 | 0.4955 ppm | 110.2678 % | 110.0259 % | 108.3246 % | 109.3763 % | 108.6594 % | 108.1908 % |
| Concentration per Run 2 | 0.4946 ppm | 111.0574 % | 108.5762 % | 109.3832 % | 110.0564 % | 107.6414 % | 109.5607 % |
| Concentration per Run 3 | 0.4955 ppm | 110.2243 % | 107.5449 % | 107.4682 % | 109.3561 % | 107.0956 % | 107.7265 % |
| Recovery Percentage 1 | 99.040 % | | | | | | |
| Concentration RSD | 0.1 % | 0.4 % | 1.1 % | 0.9 % | 0.4 % | 0.7 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 2:17:45 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0026 ppm | 0.0004 ppm | 0.0012 ppm | -0.0002 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0078 ppm | -0.0024 ppm | 0.0025 ppm | 0.0000 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0074 ppm | 0.0031 ppm | 0.0011 ppm | -0.0003 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0075 ppm | 0.0006 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 10.003 % | -2.639 % | 8.829 % | 3.982 % | -1.732 % | 0.497 % | 1.079 % |
| Concentration RSD | 80.4 % | 328.7 % | 623.1 % | 102.0 % | 100.3 % | 126.1 % | 10.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | -0.0006 ppm | -0.0001 ppm | -0.0021 ppm | -0.0191 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | -0.0007 ppm | -0.0004 ppm | -0.0013 ppm | -0.0010 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0006 ppm | -0.0005 ppm | 0.0001 ppm | -0.0028 ppm | -0.0299 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | -0.0006 ppm | -0.0001 ppm | -0.0024 ppm | -0.0265 ppm | 0.0018 ppm |
| Recovery Percentage 1 | -1.540 % | -0.212 % | -5.710 % | -1.112 % | -4.296 % | -0.765 % | 11.422 % |
| Concentration RSD | 41.4 % | 1,161.7 % | 17.9 % | 225.1 % | 36.5 % | 82.6 % | 201.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.0000 ppm | 0.0009 ppm | -0.1897 ppm | -0.0005 ppm | -0.0010 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0021 ppm | 0.0001 ppm | 0.0011 ppm | -0.1925 ppm | 0.0000 ppm | -0.0010 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0029 ppm | 0.0001 ppm | 0.0009 ppm | -0.1893 ppm | -0.0006 ppm | -0.0010 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0001 ppm | 0.0007 ppm | -0.1871 ppm | -0.0010 ppm | -0.0009 ppm | 0.0054 ppm |
| Recovery Percentage 1 | -1.516 % | 0.307 % | 1.827 % | -9.483 % | -2.163 % | -9.828 % | 6.982 % |
| Concentration RSD | 114.9 % | 265.9 % | 27.1 % | 1.4 % | 86.3 % | 10.3 % | 103.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0038 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0033 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | -0.0016 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0026 ppm | -0.0065 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0033 ppm | -0.0016 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 2.762 % | -0.756 % | 1.683 % | -0.056 % | -0.370 % | -3.558 % | -2.427 % |
| Concentration RSD | 1,063.2 % | 65.8 % | 101.3 % | 868.1 % | 89.7 % | 136.6 % | 14.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 109.0769 % | 106.2985 % | 108.5433 % | 110.1622 % | 107.0676 % | 109.1665 % |
| Concentration per Run 1 | 0.0003 ppm | 109.4368 % | 106.6855 % | 108.8033 % | 109.8695 % | 107.6629 % | 109.6330 % |
| Concentration per Run 2 | 0.0005 ppm | 109.1741 % | 105.3410 % | 108.5178 % | 110.6245 % | 106.2294 % | 108.7575 % |
| Concentration per Run 3 | 0.0007 ppm | 108.6198 % | 106.8691 % | 108.3089 % | 109.9925 % | 107.3104 % | 109.1091 % |
| Recovery Percentage 1 | 9.913 % | | | | | | |
| Concentration RSD | 37.5 % | 0.4 % | 0.8 % | 0.2 % | 0.4 % | 0.7 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-17 WG1973936
Analysis started at: 9/20/2024 2:30:16 PM
Rack 2
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0060 ppm | 0.0001 ppm | 0.0082 ppm | 0.0169 ppm | 0.0000 ppm | 21.9317 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0036 ppm | 0.0007 ppm | 0.0085 ppm | 0.0169 ppm | 0.0000 ppm | 21.9426 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0024 ppm | -0.0010 ppm | 0.0082 ppm | 0.0170 ppm | 0.0000 ppm | 21.8772 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0121 ppm | 0.0005 ppm | 0.0079 ppm | 0.0168 ppm | 0.0000 ppm | 21.9753 ppm |
| Concentration RSD | 29.6 % | 87.1 % | 975.5 % | 3.8 % | 0.7 % | 50.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | -0.0007 ppm | 0.0001 ppm | -0.0032 ppm | 1.8697 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0003 ppm | -0.0008 ppm | 0.0002 ppm | -0.0022 ppm | 1.8437 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0004 ppm | -0.0009 ppm | 0.0003 ppm | -0.0022 ppm | 1.8635 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | -0.0003 ppm | -0.0051 ppm | 1.9020 ppm | 0.0016 ppm |
| Concentration RSD | 309.0 % | 106.3 % | 22.7 % | 386.1 % | 53.5 % | 1.6 % | 96.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.0740 ppm | 0.0008 ppm | 0.0003 ppm | 11.9176 ppm | -0.0003 ppm | -0.0008 ppm | 0.0025 ppm |
| Concentration per Run 1 | 3.0894 ppm | 0.0008 ppm | 0.0001 ppm | 11.9467 ppm | -0.0005 ppm | -0.0010 ppm | -0.0003 ppm |
| Concentration per Run 2 | 3.0771 ppm | 0.0010 ppm | 0.0006 ppm | 11.8775 ppm | 0.0002 ppm | -0.0008 ppm | 0.0060 ppm |
| Concentration per Run 3 | 3.0553 ppm | 0.0007 ppm | 0.0001 ppm | 11.9287 ppm | -0.0005 ppm | -0.0005 ppm | 0.0018 ppm |
| Concentration RSD | 0.6 % | 15.9 % | 114.2 % | 0.3 % | 136.1 % | 37.5 % | 130.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 4.5873 ppm | 0.0008 ppm | 0.0760 ppm | -0.0002 ppm | -0.0014 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0015 ppm | 4.6165 ppm | 0.0000 ppm | 0.0762 ppm | -0.0001 ppm | -0.0011 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0046 ppm | 4.5982 ppm | 0.0006 ppm | 0.0759 ppm | -0.0002 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0011 ppm | 4.5473 ppm | 0.0018 ppm | 0.0761 ppm | -0.0003 ppm | -0.0021 ppm | 0.0000 ppm |
| Concentration RSD | 217.0 % | 0.8 % | 117.7 % | 0.2 % | 47.0 % | 46.2 % | 106.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 104.0016 % | 104.6083 % | 102.5466 % | 104.1386 % | 104.4607 % | 103.7487 % |
| Concentration per Run 1 | 0.0008 ppm | 104.3633 % | 105.2461 % | 102.8759 % | 105.3284 % | 105.2245 % | 104.1749 % |
| Concentration per Run 2 | 0.0012 ppm | 103.0713 % | 105.3441 % | 102.4233 % | 102.8201 % | 105.0782 % | 103.7874 % |
| Concentration per Run 3 | 0.0012 ppm | 104.5704 % | 103.2346 % | 102.3405 % | 104.2673 % | 103.0794 % | 103.2839 % |
| Concentration RSD | 21.4 % | 0.8 % | 1.1 % | 0.3 % | 1.2 % | 1.1 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452756-20 WG1973936
Analysis started at: 9/20/2024 2:34:28 PM
Rack 2
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0039 ppm | -0.0002 ppm | 0.0088 ppm | 0.1490 ppm | 0.0000 ppm | 38.9096 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0044 ppm | -0.0017 ppm | 0.0097 ppm | 0.1490 ppm | 0.0000 ppm | 39.0331 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0127 ppm | -0.0010 ppm | 0.0091 ppm | 0.1480 ppm | 0.0000 ppm | 38.5061 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0053 ppm | 0.0020 ppm | 0.0077 ppm | 0.1500 ppm | 0.0001 ppm | 39.1898 ppm |
| Concentration RSD | 1.5 % | 230.0 % | 904.2 % | 11.8 % | 0.7 % | 84.0 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0003 ppm | -0.0010 ppm | 0.0004 ppm | 0.0611 ppm | 2.8304 ppm | 0.0049 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0011 ppm | -0.0009 ppm | 0.0002 ppm | 0.0599 ppm | 2.8290 ppm | 0.0064 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0006 ppm | -0.0014 ppm | 0.0003 ppm | 0.0618 ppm | 2.8301 ppm | 0.0042 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0008 ppm | -0.0007 ppm | 0.0005 ppm | 0.0616 ppm | 2.8322 ppm | 0.0041 ppm |
| Concentration RSD | 42.6 % | 325.2 % | 35.0 % | 35.9 % | 1.7 % | 0.1 % | 26.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.4421 ppm | 0.2053 ppm | 0.0004 ppm | 19.7666 ppm | -0.0004 ppm | -0.0017 ppm | 0.0030 ppm |
| Concentration per Run 1 | 9.6001 ppm | 0.2050 ppm | 0.0000 ppm | 19.8619 ppm | -0.0007 ppm | -0.0009 ppm | 0.0021 ppm |
| Concentration per Run 2 | 9.3322 ppm | 0.2048 ppm | 0.0007 ppm | 19.5701 ppm | 0.0000 ppm | -0.0016 ppm | 0.0055 ppm |
| Concentration per Run 3 | 9.3942 ppm | 0.2061 ppm | 0.0006 ppm | 19.8678 ppm | -0.0006 ppm | -0.0026 ppm | 0.0013 ppm |
| Concentration RSD | 1.5 % | 0.3 % | 79.6 % | 0.9 % | 79.8 % | 50.9 % | 75.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 8.0975 ppm | -0.0003 ppm | 0.1522 ppm | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0021 ppm | 8.2313 ppm | 0.0002 ppm | 0.1523 ppm | -0.0002 ppm | -0.0009 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0031 ppm | 8.0094 ppm | -0.0001 ppm | 0.1510 ppm | 0.0001 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0028 ppm | 8.0517 ppm | -0.0010 ppm | 0.1534 ppm | -0.0001 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration RSD | 511.1 % | 1.5 % | 208.1 % | 0.8 % | 280.2 % | 174.4 % | 300.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 106.0642 % | 106.1743 % | 104.0344 % | 107.8703 % | 106.5739 % | 106.8459 % |
| Concentration per Run 1 | 0.0006 ppm | 104.9605 % | 106.2915 % | 103.7540 % | 107.8131 % | 106.7614 % | 107.0421 % |
| Concentration per Run 2 | 0.0010 ppm | 105.5397 % | 106.7406 % | 104.1756 % | 107.3509 % | 106.6063 % | 106.7107 % |
| Concentration per Run 3 | 0.0005 ppm | 107.6923 % | 105.4908 % | 104.1735 % | 108.4470 % | 106.3539 % | 106.7850 % |
| Concentration RSD | 44.1 % | 1.4 % | 0.6 % | 0.2 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-02 WG1973936
Analysis started at: 9/20/2024 2:38:22 PM
Rack 2
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0003 ppm | 0.0008 ppm | 0.0105 ppm | 0.0141 ppm | 0.0000 ppm | 31.9712 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0013 ppm | 0.0007 ppm | 0.0092 ppm | 0.0142 ppm | 0.0000 ppm | 31.9297 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0008 ppm | 0.0010 ppm | 0.0116 ppm | 0.0141 ppm | 0.0000 ppm | 32.0117 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0003 ppm | 0.0006 ppm | 0.0107 ppm | 0.0140 ppm | 0.0000 ppm | 31.9721 ppm |
| Concentration RSD | 2.4 % | 395.4 % | 28.7 % | 11.5 % | 0.9 % | 179.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | -0.0009 ppm | 0.0001 ppm | -0.0018 ppm | 1.7704 ppm | 0.0025 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0003 ppm | -0.0004 ppm | 0.0003 ppm | -0.0031 ppm | 1.8070 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | -0.0010 ppm | 0.0000 ppm | -0.0011 ppm | 1.7280 ppm | 0.0017 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0003 ppm | -0.0013 ppm | -0.0001 ppm | -0.0011 ppm | 1.7763 ppm | 0.0027 ppm |
| Concentration RSD | 344.8 % | 566.4 % | 46.8 % | 286.4 % | 67.0 % | 2.2 % | 30.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2543 ppm | 0.0003 ppm | 0.0005 ppm | 11.0973 ppm | -0.0002 ppm | -0.0004 ppm | 0.0023 ppm |
| Concentration per Run 1 | 1.2625 ppm | 0.0003 ppm | 0.0002 ppm | 11.0479 ppm | 0.0005 ppm | -0.0008 ppm | 0.0007 ppm |
| Concentration per Run 2 | 1.2557 ppm | 0.0003 ppm | 0.0010 ppm | 11.1434 ppm | -0.0006 ppm | -0.0007 ppm | 0.0031 ppm |
| Concentration per Run 3 | 1.2448 ppm | 0.0004 ppm | 0.0001 ppm | 11.1006 ppm | -0.0005 ppm | 0.0003 ppm | 0.0032 ppm |
| Concentration RSD | 0.7 % | 27.0 % | 113.0 % | 0.4 % | 288.4 % | 159.2 % | 61.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 3.8516 ppm | -0.0007 ppm | 0.1245 ppm | -0.0003 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0012 ppm | 3.8773 ppm | -0.0006 ppm | 0.1244 ppm | -0.0006 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0045 ppm | 3.8504 ppm | -0.0010 ppm | 0.1248 ppm | -0.0002 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0012 ppm | 3.8270 ppm | -0.0007 ppm | 0.1241 ppm | -0.0002 ppm | -0.0004 ppm | 0.0003 ppm |
| Concentration RSD | 84.1 % | 0.7 % | 27.7 % | 0.3 % | 70.5 % | 339.5 % | 181.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 107.7841 % | 107.0051 % | 105.6976 % | 109.6126 % | 106.9886 % | 107.4846 % |
| Concentration per Run 1 | 0.0005 ppm | 106.6854 % | 107.5094 % | 105.7296 % | 109.4669 % | 107.5655 % | 107.9474 % |
| Concentration per Run 2 | 0.0007 ppm | 108.6343 % | 106.9118 % | 106.6966 % | 110.2890 % | 106.8573 % | 107.8810 % |
| Concentration per Run 3 | 0.0001 ppm | 108.0325 % | 106.5942 % | 104.6666 % | 109.0820 % | 106.5430 % | 106.6254 % |
| Concentration RSD | 64.5 % | 0.9 % | 0.4 % | 1.0 % | 0.6 % | 0.5 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-05 WG1973936
Analysis started at: 9/20/2024 2:42:17 PM
Rack 2
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0026 ppm | 0.0004 ppm | 0.0100 ppm | 0.0142 ppm | 0.0000 ppm | 31.8826 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0007 ppm | 0.0011 ppm | 0.0103 ppm | 0.0142 ppm | 0.0001 ppm | 31.8394 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0067 ppm | 0.0000 ppm | 0.0104 ppm | 0.0141 ppm | 0.0000 ppm | 31.8169 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0016 ppm | 0.0002 ppm | 0.0092 ppm | 0.0143 ppm | 0.0000 ppm | 31.9914 ppm |
| Concentration RSD | 39.7 % | 149.3 % | 126.4 % | 6.8 % | 0.9 % | 70.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | -0.0011 ppm | -0.0001 ppm | -0.0018 ppm | 1.7473 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0003 ppm | -0.0006 ppm | 0.0003 ppm | -0.0020 ppm | 1.7647 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0006 ppm | -0.0010 ppm | -0.0004 ppm | -0.0017 ppm | 1.7522 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0004 ppm | -0.0017 ppm | -0.0001 ppm | -0.0016 ppm | 1.7250 ppm | 0.0017 ppm |
| Concentration RSD | 101.7 % | 951.8 % | 51.7 % | 582.7 % | 12.1 % | 1.2 % | 34.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2436 ppm | 0.0004 ppm | 0.0004 ppm | 11.0246 ppm | 0.0001 ppm | -0.0019 ppm | 0.0017 ppm |
| Concentration per Run 1 | 1.2594 ppm | 0.0002 ppm | 0.0008 ppm | 11.0777 ppm | -0.0002 ppm | -0.0018 ppm | 0.0031 ppm |
| Concentration per Run 2 | 1.2391 ppm | 0.0007 ppm | 0.0006 ppm | 10.9497 ppm | -0.0005 ppm | -0.0022 ppm | -0.0005 ppm |
| Concentration per Run 3 | 1.2323 ppm | 0.0004 ppm | -0.0002 ppm | 11.0463 ppm | 0.0010 ppm | -0.0017 ppm | 0.0026 ppm |
| Concentration RSD | 1.1 % | 52.4 % | 131.3 % | 0.6 % | 646.7 % | 12.8 % | 110.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 3.7887 ppm | 0.0000 ppm | 0.1241 ppm | 0.0001 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0021 ppm | 3.8261 ppm | 0.0012 ppm | 0.1244 ppm | 0.0002 ppm | -0.0010 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0015 ppm | 3.7818 ppm | -0.0008 ppm | 0.1238 ppm | 0.0000 ppm | -0.0007 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0008 ppm | 3.7583 ppm | -0.0004 ppm | 0.1241 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration RSD | 158.9 % | 0.9 % | 421,040.1 % | 0.3 % | 168.6 % | 84.4 % | 71.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 107.3872 % | 106.4140 % | 105.4143 % | 109.1483 % | 106.9466 % | 107.6941 % |
| Concentration per Run 1 | 0.0007 ppm | 106.6636 % | 107.0346 % | 105.8495 % | 109.3741 % | 107.9545 % | 108.1932 % |
| Concentration per Run 2 | 0.0006 ppm | 107.6615 % | 106.8094 % | 106.3670 % | 109.2263 % | 106.5753 % | 108.5665 % |
| Concentration per Run 3 | 0.0007 ppm | 107.8365 % | 105.3980 % | 104.0263 % | 108.8446 % | 106.3098 % | 106.3225 % |
| Concentration RSD | 7.6 % | 0.6 % | 0.8 % | 1.2 % | 0.3 % | 0.8 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-08 WG1973936
Analysis started at: 9/20/2024 2:46:12 PM
Rack 2
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0093 ppm | 0.0007 ppm | 0.0016 ppm | 0.0001 ppm | 0.0000 ppm | 0.0135 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0095 ppm | 0.0000 ppm | 0.0021 ppm | 0.0000 ppm | 0.0000 ppm | 0.0146 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0123 ppm | 0.0015 ppm | 0.0015 ppm | 0.0003 ppm | 0.0001 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0062 ppm | 0.0006 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0155 ppm |
| Concentration RSD | 27.1 % | 32.7 % | 107.8 % | 31.4 % | 251.5 % | 270.2 % | 20.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0011 ppm | 0.0001 ppm | -0.0019 ppm | -0.0141 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0008 ppm | -0.0013 ppm | 0.0001 ppm | -0.0034 ppm | -0.0080 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | -0.0009 ppm | -0.0002 ppm | -0.0018 ppm | -0.0302 ppm | -0.0016 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0012 ppm | -0.0010 ppm | 0.0005 ppm | -0.0005 ppm | -0.0042 ppm | 0.0028 ppm |
| Concentration RSD | 451.5 % | 1,386.2 % | 18.9 % | 275.9 % | 78.4 % | 99.3 % | 34,714.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0000 ppm | -0.0001 ppm | -0.2044 ppm | -0.0009 ppm | -0.0013 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0001 ppm | 0.0001 ppm | -0.2020 ppm | -0.0001 ppm | -0.0021 ppm | -0.0026 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | -0.2011 ppm | -0.0014 ppm | -0.0019 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0001 ppm | -0.0004 ppm | -0.2102 ppm | -0.0011 ppm | 0.0003 ppm | 0.0015 ppm |
| Concentration RSD | 104.7 % | 498.3 % | 366.9 % | 2.4 % | 77.1 % | 105.8 % | 1,304.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | -0.0035 ppm | -0.0011 ppm | 0.0001 ppm | 0.0000 ppm | -0.0011 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0011 ppm | -0.0039 ppm | 0.0001 ppm | 0.0002 ppm | 0.0000 ppm | -0.0005 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0019 ppm | -0.0022 ppm | -0.0009 ppm | 0.0001 ppm | -0.0003 ppm | -0.0013 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0022 ppm | -0.0043 ppm | -0.0023 ppm | 0.0000 ppm | 0.0003 ppm | -0.0016 ppm | -0.0007 ppm |
| Concentration RSD | 185.6 % | 32.9 % | 111.9 % | 108.2 % | 2,403.3 % | 50.0 % | 71.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 108.9849 % | 106.5690 % | 108.0232 % | 111.7689 % | 107.4645 % | 108.8009 % |
| Concentration per Run 1 | 0.0008 ppm | 108.2782 % | 106.7544 % | 108.9417 % | 112.2859 % | 108.0011 % | 110.0268 % |
| Concentration per Run 2 | 0.0007 ppm | 110.1077 % | 106.8687 % | 108.3381 % | 112.9014 % | 107.8489 % | 108.9014 % |
| Concentration per Run 3 | 0.0007 ppm | 108.5687 % | 106.0840 % | 106.7899 % | 110.1194 % | 106.5433 % | 107.4746 % |
| Concentration RSD | 5.7 % | 0.9 % | 0.4 % | 1.0 % | 1.3 % | 0.7 % | 1.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-11 WG1973936
Analysis started at: 9/20/2024 2:50:07 PM
Rack 2
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0081 ppm | -0.0011 ppm | 0.0062 ppm | 0.0159 ppm | 0.0000 ppm | 16.8653 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0133 ppm | -0.0009 ppm | 0.0065 ppm | 0.0160 ppm | 0.0000 ppm | 16.8844 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0055 ppm | -0.0028 ppm | 0.0043 ppm | 0.0159 ppm | 0.0000 ppm | 16.8848 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0056 ppm | 0.0004 ppm | 0.0077 ppm | 0.0160 ppm | 0.0000 ppm | 16.8265 ppm |
| Concentration RSD | 41.6 % | 55.5 % | 149.1 % | 28.2 % | 0.4 % | 69.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | -0.0010 ppm | 0.0006 ppm | 0.0115 ppm | 1.7505 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0006 ppm | -0.0007 ppm | 0.0000 ppm | 0.0103 ppm | 1.7820 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | -0.0013 ppm | 0.0008 ppm | 0.0122 ppm | 1.7469 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | -0.0011 ppm | 0.0011 ppm | 0.0121 ppm | 1.7226 ppm | -0.0002 ppm |
| Concentration RSD | 636.4 % | 151.0 % | 29.6 % | 89.5 % | 9.5 % | 1.7 % | 149.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5697 ppm | 0.0046 ppm | -0.0002 ppm | 7.4117 ppm | -0.0013 ppm | -0.0014 ppm | 0.0038 ppm |
| Concentration per Run 1 | 1.5858 ppm | 0.0047 ppm | -0.0002 ppm | 7.4077 ppm | -0.0010 ppm | -0.0035 ppm | 0.0034 ppm |
| Concentration per Run 2 | 1.5611 ppm | 0.0045 ppm | -0.0004 ppm | 7.4131 ppm | -0.0018 ppm | 0.0000 ppm | -0.0007 ppm |
| Concentration per Run 3 | 1.5622 ppm | 0.0047 ppm | 0.0000 ppm | 7.4144 ppm | -0.0012 ppm | -0.0006 ppm | 0.0087 ppm |
| Concentration RSD | 0.9 % | 1.7 % | 132.8 % | 0.0 % | 30.3 % | 131.9 % | 123.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 2.1683 ppm | -0.0002 ppm | 0.0673 ppm | -0.0003 ppm | 0.0001 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0016 ppm | 2.1828 ppm | 0.0007 ppm | 0.0677 ppm | -0.0006 ppm | 0.0010 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 2.1637 ppm | -0.0007 ppm | 0.0670 ppm | -0.0005 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0011 ppm | 2.1585 ppm | -0.0006 ppm | 0.0672 ppm | 0.0003 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration RSD | 1,048.2 % | 0.6 % | 375.2 % | 0.5 % | 164.4 % | 504.3 % | 40.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 107.8547 % | 106.5245 % | 106.3730 % | 109.9772 % | 107.2605 % | 107.7629 % |
| Concentration per Run 1 | 0.0007 ppm | 106.4317 % | 106.3315 % | 106.4757 % | 109.4576 % | 107.1302 % | 107.7299 % |
| Concentration per Run 2 | 0.0006 ppm | 109.2621 % | 106.1780 % | 106.2574 % | 111.2515 % | 106.8027 % | 107.7958 % |
| Concentration per Run 3 | 0.0003 ppm | 107.8704 % | 107.0641 % | 106.3858 % | 109.2224 % | 107.8485 % | 107.7630 % |
| Concentration RSD | 34.0 % | 1.3 % | 0.4 % | 0.1 % | 1.0 % | 0.5 % | 0.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-14 WG1973936
Analysis started at: 9/20/2024 2:54:02 PM
Rack 2
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0075 ppm | -0.0002 ppm | 0.0052 ppm | 0.0090 ppm | 0.0000 ppm | 11.3876 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0025 ppm | -0.0016 ppm | 0.0058 ppm | 0.0090 ppm | 0.0000 ppm | 11.4479 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0044 ppm | -0.0007 ppm | 0.0041 ppm | 0.0088 ppm | 0.0001 ppm | 11.4010 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0157 ppm | 0.0018 ppm | 0.0056 ppm | 0.0090 ppm | 0.0000 ppm | 11.3139 ppm |
| Concentration RSD | 52.6 % | 95.3 % | 845.7 % | 17.4 % | 1.2 % | 42.4 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0003 ppm | -0.0010 ppm | 0.0003 ppm | 0.0160 ppm | 1.3991 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0008 ppm | -0.0009 ppm | 0.0004 ppm | 0.0179 ppm | 1.4074 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | -0.0013 ppm | 0.0004 ppm | 0.0145 ppm | 1.3977 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm | 0.0157 ppm | 1.3922 ppm | 0.0026 ppm |
| Concentration RSD | 53.0 % | 172.3 % | 29.8 % | 58.1 % | 10.8 % | 0.6 % | 26.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5485 ppm | 0.0038 ppm | 0.0002 ppm | 4.4560 ppm | -0.0009 ppm | -0.0019 ppm | 0.0038 ppm |
| Concentration per Run 1 | 1.5620 ppm | 0.0040 ppm | -0.0001 ppm | 4.4766 ppm | 0.0002 ppm | -0.0016 ppm | 0.0040 ppm |
| Concentration per Run 2 | 1.5545 ppm | 0.0038 ppm | 0.0002 ppm | 4.4660 ppm | -0.0022 ppm | -0.0026 ppm | 0.0047 ppm |
| Concentration per Run 3 | 1.5290 ppm | 0.0037 ppm | 0.0006 ppm | 4.4253 ppm | -0.0007 ppm | -0.0014 ppm | 0.0027 ppm |
| Concentration RSD | 1.1 % | 4.0 % | 155.3 % | 0.6 % | 133.1 % | 35.5 % | 27.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 2.8807 ppm | -0.0003 ppm | 0.0498 ppm | -0.0002 ppm | -0.0003 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0013 ppm | 2.8966 ppm | -0.0003 ppm | 0.0500 ppm | -0.0004 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0023 ppm | 2.8936 ppm | -0.0008 ppm | 0.0500 ppm | -0.0001 ppm | -0.0001 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0027 ppm | 2.8518 ppm | 0.0001 ppm | 0.0495 ppm | 0.0001 ppm | -0.0012 ppm | -0.0003 ppm |
| Concentration RSD | 33.6 % | 0.9 % | 129.4 % | 0.7 % | 160.8 % | 278.7 % | 48.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 109.1548 % | 106.5556 % | 108.5940 % | 111.1661 % | 107.1488 % | 109.5770 % |
| Concentration per Run 1 | 0.0004 ppm | 109.5517 % | 105.4818 % | 108.0994 % | 112.4696 % | 106.4680 % | 109.2473 % |
| Concentration per Run 2 | 0.0007 ppm | 108.1864 % | 106.5588 % | 109.3639 % | 110.1815 % | 106.9740 % | 110.4558 % |
| Concentration per Run 3 | 0.0002 ppm | 109.7263 % | 107.6261 % | 108.3187 % | 110.8471 % | 108.0043 % | 109.0278 % |
| Concentration RSD | 59.6 % | 0.8 % | 1.0 % | 0.6 % | 1.1 % | 0.7 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-17 WG1973936
Analysis started at: 9/20/2024 2:57:58 PM
Rack 2
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0041 ppm | 0.0004 ppm | 0.0064 ppm | 0.0134 ppm | 0.0000 ppm | 14.6359 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0107 ppm | 0.0030 ppm | 0.0060 ppm | 0.0133 ppm | 0.0000 ppm | 14.6490 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0006 ppm | -0.0009 ppm | 0.0046 ppm | 0.0135 ppm | 0.0000 ppm | 14.6411 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0009 ppm | -0.0008 ppm | 0.0084 ppm | 0.0133 ppm | 0.0000 ppm | 14.6177 ppm |
| Concentration RSD | 26.7 % | 141.7 % | 548.0 % | 30.3 % | 0.6 % | 44.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0003 ppm | 0.0177 ppm | 1.6119 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0006 ppm | 0.0001 ppm | 0.0002 ppm | 0.0175 ppm | 1.6068 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0008 ppm | -0.0010 ppm | 0.0001 ppm | 0.0159 ppm | 1.6140 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | -0.0010 ppm | 0.0005 ppm | 0.0196 ppm | 1.6149 ppm | 0.0025 ppm |
| Concentration RSD | 125.7 % | 6,628.4 % | 105.9 % | 73.4 % | 10.5 % | 0.3 % | 38.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5381 ppm | 0.0083 ppm | 0.0003 ppm | 6.5109 ppm | -0.0007 ppm | -0.0010 ppm | 0.0026 ppm |
| Concentration per Run 1 | 1.5607 ppm | 0.0083 ppm | 0.0002 ppm | 6.5041 ppm | -0.0011 ppm | -0.0004 ppm | 0.0025 ppm |
| Concentration per Run 2 | 1.5319 ppm | 0.0083 ppm | 0.0003 ppm | 6.5100 ppm | -0.0002 ppm | -0.0007 ppm | 0.0008 ppm |
| Concentration per Run 3 | 1.5216 ppm | 0.0083 ppm | 0.0004 ppm | 6.5186 ppm | -0.0007 ppm | -0.0019 ppm | 0.0044 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 47.9 % | 0.1 % | 61.4 % | 78.6 % | 72.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | 2.3124 ppm | -0.0005 ppm | 0.0592 ppm | -0.0003 ppm | -0.0008 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0037 ppm | 2.3307 ppm | -0.0013 ppm | 0.0591 ppm | 0.0000 ppm | -0.0028 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 2.3094 ppm | 0.0006 ppm | 0.0595 ppm | -0.0003 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0021 ppm | 2.2970 ppm | -0.0007 ppm | 0.0591 ppm | -0.0008 ppm | 0.0010 ppm | -0.0004 ppm |
| Concentration RSD | 96.3 % | 0.7 % | 204.7 % | 0.3 % | 116.9 % | 248.3 % | 126.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 109.0189 % | 108.2676 % | 108.2635 % | 111.4460 % | 108.9646 % | 109.7391 % |
| Concentration per Run 1 | 0.0005 ppm | 107.5125 % | 108.8325 % | 107.8107 % | 110.7753 % | 109.6204 % | 109.5572 % |
| Concentration per Run 2 | 0.0003 ppm | 109.8423 % | 108.2031 % | 109.4455 % | 112.1453 % | 108.7674 % | 111.1557 % |
| Concentration per Run 3 | 0.0006 ppm | 109.7020 % | 107.7671 % | 107.5345 % | 111.4173 % | 108.5058 % | 108.5044 % |
| Concentration RSD | 27.6 % | 1.2 % | 0.5 % | 1.0 % | 0.6 % | 0.5 % | 1.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-20 WG1973936
Analysis started at: 9/20/2024 3:01:53 PM
Rack 2
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0103 ppm | 0.0001 ppm | 0.0062 ppm | 0.0140 ppm | 0.0000 ppm | 15.4073 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0081 ppm | 0.0011 ppm | 0.0068 ppm | 0.0140 ppm | 0.0000 ppm | 15.4851 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0227 ppm | -0.0005 ppm | 0.0066 ppm | 0.0139 ppm | 0.0000 ppm | 15.4540 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0000 ppm | -0.0003 ppm | 0.0052 ppm | 0.0139 ppm | 0.0000 ppm | 15.2828 ppm |
| Concentration RSD | 14.0 % | 112.2 % | 770.0 % | 13.6 % | 0.5 % | 424.6 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0012 ppm | 0.0005 ppm | 0.0177 ppm | 1.6451 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0006 ppm | -0.0014 ppm | 0.0005 ppm | 0.0178 ppm | 1.6811 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | -0.0011 ppm | 0.0005 ppm | 0.0180 ppm | 1.6260 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | -0.0012 ppm | 0.0005 ppm | 0.0172 ppm | 1.6282 ppm | 0.0005 ppm |
| Concentration RSD | 909.9 % | 503.2 % | 11.7 % | 6.6 % | 2.5 % | 1.9 % | 46.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5882 ppm | 0.0058 ppm | -0.0001 ppm | 7.4178 ppm | -0.0006 ppm | -0.0024 ppm | 0.0007 ppm |
| Concentration per Run 1 | 1.6140 ppm | 0.0059 ppm | 0.0004 ppm | 7.4610 ppm | -0.0009 ppm | -0.0033 ppm | 0.0017 ppm |
| Concentration per Run 2 | 1.5811 ppm | 0.0058 ppm | -0.0003 ppm | 7.4601 ppm | -0.0004 ppm | -0.0017 ppm | -0.0006 ppm |
| Concentration per Run 3 | 1.5696 ppm | 0.0057 ppm | -0.0004 ppm | 7.3323 ppm | -0.0005 ppm | -0.0022 ppm | 0.0009 ppm |
| Concentration RSD | 1.4 % | 1.9 % | 449.4 % | 1.0 % | 38.7 % | 34.1 % | 168.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 2.1180 ppm | -0.0012 ppm | 0.0619 ppm | -0.0002 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0011 ppm | 2.1412 ppm | -0.0010 ppm | 0.0623 ppm | -0.0006 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0035 ppm | 2.1179 ppm | -0.0031 ppm | 0.0624 ppm | -0.0001 ppm | -0.0005 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0003 ppm | 2.0950 ppm | 0.0004 ppm | 0.0611 ppm | 0.0002 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration RSD | 101.9 % | 1.1 % | 142.7 % | 1.2 % | 220.3 % | 147.2 % | 7.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 108.8955 % | 105.0350 % | 107.6955 % | 111.1290 % | 105.1263 % | 109.2411 % |
| Concentration per Run 1 | 0.0008 ppm | 108.2121 % | 104.9060 % | 108.3948 % | 112.1003 % | 102.1426 % | 110.0357 % |
| Concentration per Run 2 | 0.0007 ppm | 109.0487 % | 104.4743 % | 106.8254 % | 110.9309 % | 105.7929 % | 108.4796 % |
| Concentration per Run 3 | 0.0004 ppm | 109.4259 % | 105.7248 % | 107.8663 % | 110.3556 % | 107.4434 % | 109.2079 % |
| Concentration RSD | 36.4 % | 0.6 % | 0.6 % | 0.7 % | 0.8 % | 2.6 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452762-23 WG1973936
Analysis started at: 9/20/2024 3:05:48 PM
Rack 2
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0119 ppm | 0.0002 ppm | 0.0035 ppm | 0.0062 ppm | 0.0000 ppm | 12.5420 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0122 ppm | 0.0012 ppm | 0.0029 ppm | 0.0061 ppm | 0.0000 ppm | 12.5678 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0197 ppm | -0.0010 ppm | 0.0041 ppm | 0.0063 ppm | 0.0000 ppm | 12.5621 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0039 ppm | 0.0004 ppm | 0.0035 ppm | 0.0063 ppm | 0.0000 ppm | 12.4961 ppm |
| Concentration RSD | 7.0 % | 66.6 % | 531.2 % | 16.9 % | 1.5 % | 483.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0009 ppm | 0.0001 ppm | 0.0047 ppm | 0.7325 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0006 ppm | -0.0012 ppm | 0.0003 ppm | 0.0056 ppm | 0.7087 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0008 ppm | -0.0004 ppm | 0.0001 ppm | 0.0039 ppm | 0.7539 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | -0.0011 ppm | 0.0000 ppm | 0.0045 ppm | 0.7348 ppm | 0.0002 ppm |
| Concentration RSD | 1,201.4 % | 1,635.6 % | 49.5 % | 147.9 % | 18.3 % | 3.1 % | 87.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8072 ppm | 0.0025 ppm | 0.0004 ppm | 0.8385 ppm | 0.0001 ppm | -0.0012 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.8172 ppm | 0.0026 ppm | 0.0002 ppm | 0.8372 ppm | -0.0005 ppm | -0.0014 ppm | 0.0040 ppm |
| Concentration per Run 2 | 0.8032 ppm | 0.0024 ppm | 0.0007 ppm | 0.8406 ppm | 0.0013 ppm | -0.0015 ppm | 0.0073 ppm |
| Concentration per Run 3 | 0.8014 ppm | 0.0026 ppm | 0.0003 ppm | 0.8376 ppm | -0.0006 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration RSD | 1.1 % | 3.2 % | 66.5 % | 0.2 % | 1,646.9 % | 40.3 % | 102.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 2.7450 ppm | -0.0004 ppm | 0.0512 ppm | -0.0002 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0023 ppm | 2.7764 ppm | -0.0012 ppm | 0.0512 ppm | -0.0002 ppm | -0.0012 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0025 ppm | 2.7272 ppm | 0.0000 ppm | 0.0514 ppm | -0.0001 ppm | 0.0007 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0019 ppm | 2.7315 ppm | -0.0001 ppm | 0.0509 ppm | -0.0003 ppm | -0.0013 ppm | -0.0004 ppm |
| Concentration RSD | 476.9 % | 1.0 % | 156.1 % | 0.5 % | 47.8 % | 185.0 % | 780.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 108.7300 % | 107.2456 % | 108.6271 % | 110.9948 % | 107.6554 % | 109.5719 % |
| Concentration per Run 1 | 0.0003 ppm | 107.4212 % | 107.0888 % | 108.0072 % | 110.4971 % | 107.8890 % | 109.3155 % |
| Concentration per Run 2 | 0.0006 ppm | 108.9643 % | 107.7198 % | 108.3459 % | 111.3123 % | 108.3654 % | 109.4513 % |
| Concentration per Run 3 | 0.0006 ppm | 109.8043 % | 106.9282 % | 109.5283 % | 111.1751 % | 106.7118 % | 109.9487 % |
| Concentration RSD | 41.1 % | 1.1 % | 0.4 % | 0.7 % | 0.4 % | 0.8 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 3:09:44 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5028 ppm | 0.4656 ppm | 0.4755 ppm | 0.4903 ppm | 0.4924 ppm | 0.5004 ppm | 0.4826 ppm |
| Concentration per Run 1 | 0.5037 ppm | 0.4783 ppm | 0.4764 ppm | 0.4900 ppm | 0.4939 ppm | 0.5028 ppm | 0.4848 ppm |
| Concentration per Run 2 | 0.5008 ppm | 0.4587 ppm | 0.4765 ppm | 0.4905 ppm | 0.4887 ppm | 0.5008 ppm | 0.4814 ppm |
| Concentration per Run 3 | 0.5040 ppm | 0.4598 ppm | 0.4737 ppm | 0.4906 ppm | 0.4945 ppm | 0.4976 ppm | 0.4818 ppm |
| Recovery Percentage 1 | 100.565 % | 93.118 % | 95.105 % | 98.066 % | 98.475 % | 100.084 % | 96.528 % |
| Concentration RSD | 0.3 % | 2.4 % | 0.3 % | 0.1 % | 0.6 % | 0.5 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4888 ppm | 0.4970 ppm | 0.4789 ppm | 0.4907 ppm | 0.4934 ppm | 5.0941 ppm | 0.4916 ppm |
| Concentration per Run 1 | 0.4881 ppm | 0.4990 ppm | 0.4775 ppm | 0.4912 ppm | 0.4939 ppm | 5.1508 ppm | 0.4921 ppm |
| Concentration per Run 2 | 0.4866 ppm | 0.4955 ppm | 0.4786 ppm | 0.4913 ppm | 0.4914 ppm | 5.0686 ppm | 0.4896 ppm |
| Concentration per Run 3 | 0.4917 ppm | 0.4966 ppm | 0.4805 ppm | 0.4898 ppm | 0.4949 ppm | 5.0628 ppm | 0.4931 ppm |
| Recovery Percentage 1 | 97.756 % | 99.409 % | 95.777 % | 98.148 % | 98.683 % | 101.881 % | 98.324 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.3 % | 0.2 % | 0.4 % | 1.0 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4766 ppm | 0.4759 ppm | 0.4800 ppm | 9.6149 ppm | 0.4977 ppm | 0.4909 ppm | 0.5029 ppm |
| Concentration per Run 1 | 0.4768 ppm | 0.4764 ppm | 0.4761 ppm | 9.5840 ppm | 0.4956 ppm | 0.4911 ppm | 0.5002 ppm |
| Concentration per Run 2 | 0.4753 ppm | 0.4753 ppm | 0.4814 ppm | 9.6340 ppm | 0.4970 ppm | 0.4920 ppm | 0.5046 ppm |
| Concentration per Run 3 | 0.4777 ppm | 0.4761 ppm | 0.4824 ppm | 9.6268 ppm | 0.5006 ppm | 0.4895 ppm | 0.5039 ppm |
| Recovery Percentage 1 | 95.319 % | 95.188 % | 95.994 % | 96.149 % | 99.545 % | 98.177 % | 100.581 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.7 % | 0.3 % | 0.5 % | 0.3 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4864 ppm | 5.3004 ppm | 0.4716 ppm | 0.4723 ppm | 0.4872 ppm | 0.4925 ppm | 0.4783 ppm |
| Concentration per Run 1 | 0.4840 ppm | 5.2965 ppm | 0.4698 ppm | 0.4734 ppm | 0.4866 ppm | 0.4914 ppm | 0.4786 ppm |
| Concentration per Run 2 | 0.4883 ppm | 5.2941 ppm | 0.4721 ppm | 0.4698 ppm | 0.4859 ppm | 0.4946 ppm | 0.4782 ppm |
| Concentration per Run 3 | 0.4867 ppm | 5.3105 ppm | 0.4728 ppm | 0.4736 ppm | 0.4890 ppm | 0.4916 ppm | 0.4781 ppm |
| Recovery Percentage 1 | 97.274 % | 100.959 % | 94.313 % | 94.454 % | 97.431 % | 98.501 % | 95.660 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.3 % | 0.5 % | 0.3 % | 0.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4929 ppm | 110.1258 % | 106.9285 % | 107.8508 % | 109.3795 % | 106.6116 % | 107.9910 % |
| Concentration per Run 1 | 0.4921 ppm | 110.8011 % | 106.9779 % | 107.6062 % | 110.1365 % | 106.8596 % | 107.8996 % |
| Concentration per Run 2 | 0.4946 ppm | 110.0190 % | 107.2794 % | 107.9034 % | 109.5722 % | 106.9297 % | 107.9547 % |
| Concentration per Run 3 | 0.4918 ppm | 109.5574 % | 106.5281 % | 108.0428 % | 108.4300 % | 106.0455 % | 108.1187 % |
| Recovery Percentage 1 | 98.570 % | | | | | | |
| Concentration RSD | 0.3 % | 0.6 % | 0.4 % | 0.2 % | 0.8 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 3:13:38 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0008 ppm | 0.0007 ppm | 0.0016 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0019 ppm | 0.0017 ppm | 0.0033 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0032 ppm | 0.0006 ppm | 0.0015 ppm | -0.0001 ppm | 0.0001 ppm | -0.0027 ppm |
| Concentration per Run 3 | 0.0016 ppm | -0.0026 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0022 ppm |
| Recovery Percentage 1 | 19.277 % | 0.819 % | 13.003 % | 5.492 % | -0.514 % | 1.299 % | -0.023 % |
| Concentration RSD | 16.9 % | 371.1 % | 151.2 % | 99.0 % | 93.7 % | 37.9 % | 10,708.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0000 ppm | -0.0003 ppm | -0.0006 ppm | -0.0017 ppm | -0.0185 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0001 ppm | -0.0002 ppm | -0.0006 ppm | -0.0019 ppm | -0.0096 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | -0.0004 ppm | -0.0006 ppm | -0.0014 ppm | -0.0382 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0004 ppm | -0.0002 ppm | -0.0006 ppm | -0.0018 ppm | -0.0079 ppm | 0.0014 ppm |
| Recovery Percentage 1 | 3.685 % | 0.105 % | -2.762 % | -6.011 % | -3.376 % | -0.742 % | 14.427 % |
| Concentration RSD | 17.7 % | 1,447.3 % | 47.9 % | 4.2 % | 15.1 % | 91.8 % | 178.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0002 ppm | 0.0012 ppm | -0.1935 ppm | -0.0003 ppm | -0.0015 ppm | 0.0048 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0002 ppm | 0.0010 ppm | -0.1933 ppm | -0.0004 ppm | -0.0005 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0000 ppm | 0.0013 ppm | -0.1939 ppm | -0.0001 ppm | -0.0032 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0003 ppm | 0.0012 ppm | -0.1935 ppm | -0.0003 ppm | -0.0009 ppm | 0.0033 ppm |
| Recovery Percentage 1 | 0.688 % | 1.520 % | 2.377 % | -9.677 % | -1.108 % | -15.146 % | 9.628 % |
| Concentration RSD | 66.4 % | 96.8 % | 11.8 % | 0.2 % | 69.0 % | 96.9 % | 28.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0042 ppm | 0.0008 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0048 ppm | -0.0034 ppm | 0.0016 ppm | -0.0001 ppm | -0.0003 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0021 ppm | -0.0049 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0021 ppm | -0.0007 ppm |
| Concentration per Run 3 | -0.0034 ppm | -0.0043 ppm | 0.0003 ppm | -0.0001 ppm | -0.0004 ppm | 0.0019 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 11.760 % | -0.842 % | 1.538 % | -0.385 % | -2.636 % | 0.006 % | -4.235 % |
| Concentration RSD | 354.5 % | 18.9 % | 97.9 % | 268.5 % | 49.6 % | 174,764.9 % | 48.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 110.4931 % | 106.3233 % | 109.0361 % | 111.8627 % | 107.1126 % | 109.6658 % |
| Concentration per Run 1 | 0.0003 ppm | 109.6330 % | 107.3610 % | 109.6681 % | 111.5025 % | 108.1214 % | 110.2283 % |
| Concentration per Run 2 | 0.0002 ppm | 111.1790 % | 105.2208 % | 109.2787 % | 112.2800 % | 105.8696 % | 109.7145 % |
| Concentration per Run 3 | 0.0004 ppm | 110.6672 % | 106.3882 % | 108.1616 % | 111.8055 % | 107.3469 % | 109.0547 % |
| Recovery Percentage 1 | 5.778 % | | | | | | |
| Concentration RSD | 47.9 % | 0.7 % | 1.0 % | 0.7 % | 0.4 % | 1.1 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: Test FM 1045 AJT
Analysis started at: 9/20/2024 3:22:26 PM
Rack 2
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0160 ppm | 0.1195 ppm | 0.9774 ppm | 0.0104 ppm | 0.0000 ppm | 9.8171 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0225 ppm | 0.1204 ppm | 0.9675 ppm | 0.0104 ppm | 0.0000 ppm | 9.8191 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0043 ppm | 0.1178 ppm | 0.9854 ppm | 0.0106 ppm | -0.0001 ppm | 9.8558 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0212 ppm | 0.1204 ppm | 0.9794 ppm | 0.0104 ppm | 0.0000 ppm | 9.7765 ppm |
| Concentration RSD | 28.4 % | 63.6 % | 1.2 % | 0.9 % | 1.1 % | 698.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | -0.0006 ppm | -0.0009 ppm | -0.0001 ppm | 0.0042 ppm | 10.1229 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0005 ppm | -0.0010 ppm | 0.0001 ppm | 0.0026 ppm | 10.1516 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0029 ppm | -0.0005 ppm | -0.0004 ppm | 0.0003 ppm | 0.0044 ppm | 10.1508 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0030 ppm | -0.0007 ppm | -0.0013 ppm | -0.0005 ppm | 0.0058 ppm | 10.0662 ppm | -0.0007 ppm |
| Concentration RSD | 2.4 % | 22.7 % | 49.7 % | 637.6 % | 38.5 % | 0.5 % | 1,514.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8520 ppm | 0.0002 ppm | 0.9400 ppm | 9.7819 ppm | -0.0006 ppm | 0.5246 ppm | 0.0067 ppm |
| Concentration per Run 1 | 9.8279 ppm | 0.0003 ppm | 0.9305 ppm | 9.7737 ppm | -0.0010 ppm | 0.5263 ppm | 0.0058 ppm |
| Concentration per Run 2 | 9.8528 ppm | 0.0001 ppm | 0.9398 ppm | 9.7785 ppm | 0.0003 ppm | 0.5211 ppm | 0.0073 ppm |
| Concentration per Run 3 | 9.8751 ppm | 0.0003 ppm | 0.9497 ppm | 9.7935 ppm | -0.0009 ppm | 0.5264 ppm | 0.0070 ppm |
| Concentration RSD | 0.2 % | 64.2 % | 1.0 % | 0.1 % | 132.2 % | 0.6 % | 12.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1215 ppm | 0.4155 ppm | 0.9268 ppm | 0.9536 ppm | 0.9822 ppm | 0.1164 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.1200 ppm | 0.4196 ppm | 0.9232 ppm | 0.9568 ppm | 0.9818 ppm | 0.1157 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.1191 ppm | 0.4175 ppm | 0.9277 ppm | 0.9510 ppm | 0.9820 ppm | 0.1159 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.1255 ppm | 0.4094 ppm | 0.9296 ppm | 0.9530 ppm | 0.9830 ppm | 0.1177 ppm | -0.0007 ppm |
| Concentration RSD | 2.9 % | 1.3 % | 0.4 % | 0.3 % | 0.1 % | 0.9 % | 35.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 106.0342 % | 106.5831 % | 103.1780 % | 103.3448 % | 106.5454 % | 102.5315 % |
| Concentration per Run 1 | 0.0009 ppm | 105.6364 % | 107.0583 % | 103.0082 % | 102.8542 % | 106.5674 % | 102.7188 % |
| Concentration per Run 2 | 0.0006 ppm | 106.5078 % | 105.2274 % | 103.9716 % | 103.8452 % | 105.1597 % | 103.1622 % |
| Concentration per Run 3 | 0.0009 ppm | 105.9585 % | 107.4637 % | 102.5543 % | 103.3349 % | 107.9092 % | 101.7134 % |
| Concentration RSD | 21.8 % | 0.4 % | 1.1 % | 0.7 % | 0.5 % | 1.3 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: Test FM 0925 AJT
Analysis started at: 9/20/2024 3:26:40 PM
Rack 2
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0146 ppm | 0.1170 ppm | 0.9725 ppm | 0.0106 ppm | 0.0000 ppm | 9.8985 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0135 ppm | 0.1188 ppm | 0.9792 ppm | 0.0105 ppm | 0.0000 ppm | 9.8764 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0128 ppm | 0.1149 ppm | 0.9729 ppm | 0.0108 ppm | 0.0000 ppm | 9.9454 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0175 ppm | 0.1172 ppm | 0.9655 ppm | 0.0105 ppm | 0.0000 ppm | 9.8737 ppm |
| Concentration RSD | 17.3 % | 17.6 % | 1.7 % | 0.7 % | 1.5 % | 109.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 0.0001 ppm | -0.0014 ppm | -0.0001 ppm | 0.0080 ppm | 10.2553 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0001 ppm | -0.0012 ppm | -0.0001 ppm | 0.0099 ppm | 10.2572 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0029 ppm | 0.0001 ppm | -0.0014 ppm | 0.0001 ppm | 0.0056 ppm | 10.2116 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0029 ppm | 0.0002 ppm | -0.0015 ppm | -0.0003 ppm | 0.0086 ppm | 10.2970 ppm | -0.0011 ppm |
| Concentration RSD | 1.9 % | 309.0 % | 10.4 % | 183.5 % | 27.5 % | 0.4 % | 146.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.9255 ppm | 0.0003 ppm | 0.9511 ppm | 9.8838 ppm | -0.0004 ppm | 0.5312 ppm | 0.0054 ppm |
| Concentration per Run 1 | 10.0182 ppm | 0.0003 ppm | 0.9447 ppm | 9.9256 ppm | -0.0010 ppm | 0.5314 ppm | 0.0021 ppm |
| Concentration per Run 2 | 9.8885 ppm | 0.0004 ppm | 0.9495 ppm | 9.9340 ppm | -0.0002 ppm | 0.5292 ppm | 0.0092 ppm |
| Concentration per Run 3 | 9.8698 ppm | 0.0001 ppm | 0.9592 ppm | 9.7917 ppm | -0.0001 ppm | 0.5329 ppm | 0.0050 ppm |
| Concentration RSD | 0.8 % | 56.7 % | 0.8 % | 0.8 % | 106.2 % | 0.3 % | 65.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1191 ppm | 0.4138 ppm | 0.9456 ppm | 0.9651 ppm | 1.0085 ppm | 0.1199 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.1212 ppm | 0.4204 ppm | 0.9473 ppm | 0.9668 ppm | 1.0130 ppm | 0.1200 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.1175 ppm | 0.4121 ppm | 0.9445 ppm | 0.9599 ppm | 1.0093 ppm | 0.1192 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.1187 ppm | 0.4089 ppm | 0.9449 ppm | 0.9686 ppm | 1.0031 ppm | 0.1204 ppm | -0.0007 ppm |
| Concentration RSD | 1.6 % | 1.4 % | 0.2 % | 0.5 % | 0.5 % | 0.5 % | 66.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 109.6496 % | 108.0658 % | 106.5117 % | 109.3365 % | 108.2576 % | 107.0019 % |
| Concentration per Run 1 | 0.0017 ppm | 109.1793 % | 109.1409 % | 106.4156 % | 109.1122 % | 109.1766 % | 106.9707 % |
| Concentration per Run 2 | 0.0017 ppm | 109.4653 % | 108.1340 % | 106.3937 % | 108.9874 % | 108.4813 % | 106.7507 % |
| Concentration per Run 3 | 0.0015 ppm | 110.3042 % | 106.9225 % | 106.7257 % | 109.9098 % | 107.1150 % | 107.2842 % |
| Concentration RSD | 8.0 % | 0.5 % | 1.0 % | 0.2 % | 0.5 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452896-01 WG1973936
Analysis started at: 9/20/2024 3:30:35 PM
Rack 2
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | -0.0013 ppm | 0.0004 ppm | 0.0053 ppm | 0.0340 ppm | 0.0000 ppm | 7.1229 ppm |
| Concentration per Run 1 | 0.0012 ppm | -0.0052 ppm | -0.0007 ppm | 0.0061 ppm | 0.0341 ppm | 0.0000 ppm | 7.1200 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0071 ppm | 0.0031 ppm | 0.0039 ppm | 0.0340 ppm | 0.0001 ppm | 7.1387 ppm |
| Concentration per Run 3 | 0.0015 ppm | -0.0056 ppm | -0.0013 ppm | 0.0061 ppm | 0.0337 ppm | 0.0001 ppm | 7.1099 ppm |
| Concentration RSD | 15.9 % | 573.9 % | 673.0 % | 24.1 % | 0.6 % | 159.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0092 ppm | -0.0013 ppm | 0.0030 ppm | 0.0026 ppm | 0.7333 ppm | 0.0138 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0093 ppm | -0.0015 ppm | 0.0033 ppm | 0.0010 ppm | 0.7495 ppm | 0.0132 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0091 ppm | -0.0015 ppm | 0.0029 ppm | 0.0040 ppm | 0.7297 ppm | 0.0141 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0090 ppm | -0.0009 ppm | 0.0028 ppm | 0.0026 ppm | 0.7208 ppm | 0.0140 ppm |
| Concentration RSD | 856.4 % | 1.4 % | 29.0 % | 8.6 % | 59.1 % | 2.0 % | 3.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4869 ppm | 3.8598 ppm | 0.0018 ppm | 0.2704 ppm | 0.0085 ppm | -0.0015 ppm | 0.0014 ppm |
| Concentration per Run 1 | 4.5200 ppm | 3.8532 ppm | 0.0019 ppm | 0.2772 ppm | 0.0089 ppm | -0.0013 ppm | -0.0007 ppm |
| Concentration per Run 2 | 4.4807 ppm | 3.8647 ppm | 0.0013 ppm | 0.2666 ppm | 0.0090 ppm | -0.0011 ppm | 0.0023 ppm |
| Concentration per Run 3 | 4.4599 ppm | 3.8614 ppm | 0.0022 ppm | 0.2673 ppm | 0.0076 ppm | -0.0023 ppm | 0.0025 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 25.6 % | 2.2 % | 9.1 % | 42.2 % | 133.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 2.9328 ppm | 0.0069 ppm | 0.0117 ppm | -0.0002 ppm | -0.0009 ppm | -0.0006 ppm |
| Concentration per Run 1 | -0.0027 ppm | 2.9646 ppm | 0.0062 ppm | 0.0116 ppm | -0.0005 ppm | -0.0008 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 2.9188 ppm | 0.0072 ppm | 0.0118 ppm | 0.0000 ppm | -0.0007 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0003 ppm | 2.9151 ppm | 0.0075 ppm | 0.0118 ppm | -0.0002 ppm | -0.0011 ppm | -0.0006 ppm |
| Concentration RSD | 211.0 % | 0.9 % | 9.6 % | 1.0 % | 116.4 % | 30.0 % | 15.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0197 ppm | 109.2017 % | 107.1505 % | 107.8916 % | 111.1226 % | 107.4195 % | 108.8998 % |
| Concentration per Run 1 | 0.0201 ppm | 109.4388 % | 107.1714 % | 107.5868 % | 112.4606 % | 107.7044 % | 108.7803 % |
| Concentration per Run 2 | 0.0194 ppm | 108.5075 % | 106.3375 % | 108.6236 % | 110.6680 % | 106.6835 % | 109.8447 % |
| Concentration per Run 3 | 0.0196 ppm | 109.6589 % | 107.9426 % | 107.4644 % | 110.2391 % | 107.8704 % | 108.0745 % |
| Concentration RSD | 1.9 % | 0.6 % | 0.7 % | 0.6 % | 1.1 % | 0.6 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452177-01d2 WG1974073
Analysis started at: 9/20/2024 3:34:30 PM
Rack 2
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 141.4927 ppm | 0.0580 ppm | 0.0301 ppm | 1.0762 ppm | 0.0068 ppm | 103.6695 ppm |
| Concentration per Run 1 | 0.0038 ppm | 141.2589 ppm | 0.0570 ppm | 0.0294 ppm | 1.0752 ppm | 0.0068 ppm | 103.3671 ppm |
| Concentration per Run 2 | 0.0034 ppm | 141.5624 ppm | 0.0586 ppm | 0.0305 ppm | 1.0743 ppm | 0.0069 ppm | 103.8111 ppm |
| Concentration per Run 3 | 0.0027 ppm | 141.6569 ppm | 0.0583 ppm | 0.0303 ppm | 1.0792 ppm | 0.0068 ppm | 103.8302 ppm |
| Concentration RSD | 16.2 % | 0.1 % | 1.5 % | 1.9 % | 0.2 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.1204 ppm | 0.2088 ppm | 0.2895 ppm | 276.7292 ppm | 8.8973 ppm | 0.2798 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.1208 ppm | 0.2088 ppm | 0.2901 ppm | 276.8568 ppm | 8.9082 ppm | 0.2818 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.1213 ppm | 0.2085 ppm | 0.2893 ppm | 276.6214 ppm | 8.8544 ppm | 0.2785 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.1190 ppm | 0.2092 ppm | 0.2890 ppm | 276.7094 ppm | 8.9292 ppm | 0.2793 ppm |
| Concentration RSD | 20.5 % | 1.0 % | 0.2 % | 0.2 % | 0.0 % | 0.4 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.7814 ppm | 5.3258 ppm | 0.0149 ppm | 2.9296 ppm | 0.3277 ppm | 0.1202 ppm | 0.0042 ppm |
| Concentration per Run 1 | 97.0247 ppm | 5.3181 ppm | 0.0150 ppm | 2.9249 ppm | 0.3281 ppm | 0.1195 ppm | 0.0100 ppm |
| Concentration per Run 2 | 96.5087 ppm | 5.3401 ppm | 0.0144 ppm | 2.9243 ppm | 0.3295 ppm | 0.1205 ppm | 0.0049 ppm |
| Concentration per Run 3 | 96.8106 ppm | 5.3193 ppm | 0.0152 ppm | 2.9396 ppm | 0.3253 ppm | 0.1205 ppm | -0.0023 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 3.0 % | 0.3 % | 0.6 % | 0.5 % | 147.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 5.2512 ppm | 0.0121 ppm | 0.2630 ppm | 0.6671 ppm | 0.0053 ppm | 0.2355 ppm |
| Concentration per Run 1 | 0.0053 ppm | 5.2533 ppm | 0.0121 ppm | 0.2626 ppm | 0.6703 ppm | 0.0047 ppm | 0.2352 ppm |
| Concentration per Run 2 | -0.0015 ppm | 5.2958 ppm | 0.0126 ppm | 0.2631 ppm | 0.6648 ppm | 0.0078 ppm | 0.2352 ppm |
| Concentration per Run 3 | 0.0040 ppm | 5.2047 ppm | 0.0117 ppm | 0.2634 ppm | 0.6662 ppm | 0.0035 ppm | 0.2360 ppm |
| Concentration RSD | 139.3 % | 0.9 % | 3.6 % | 0.2 % | 0.4 % | 41.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7548 ppm | 113.5261 % | 115.8664 % | 100.4532 % | 141.9362 % | 147.3788 % | 141.0728 % |
| Concentration per Run 1 | 0.7549 ppm | 114.0724 % | 115.0428 % | 101.1144 % | 143.0136 % | 146.2226 % | 141.5767 % |
| Concentration per Run 2 | 0.7560 ppm | 112.7303 % | 116.6373 % | 99.7076 % | 141.3472 % | 148.0669 % | 140.1235 % |
| Concentration per Run 3 | 0.7535 ppm | 113.7756 % | 115.9190 % | 100.5375 % | 141.4478 % | 147.8468 % | 141.5181 % |
| Concentration RSD | 0.2 % | 0.6 % | 0.7 % | 0.7 % | 0.7 % | 0.7 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453062-01d2 WG1974073
Analysis started at: 9/20/2024 3:38:25 PM
Rack 2
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 81.5342 ppm | 0.0354 ppm | 0.0121 ppm | 0.2223 ppm | 0.0039 ppm | 12.3803 ppm |
| Concentration per Run 1 | 0.0028 ppm | 81.4039 ppm | 0.0345 ppm | 0.0118 ppm | 0.2224 ppm | 0.0039 ppm | 12.3648 ppm |
| Concentration per Run 2 | 0.0017 ppm | 81.5441 ppm | 0.0377 ppm | 0.0134 ppm | 0.2227 ppm | 0.0039 ppm | 12.3811 ppm |
| Concentration per Run 3 | 0.0026 ppm | 81.6545 ppm | 0.0340 ppm | 0.0111 ppm | 0.2217 ppm | 0.0038 ppm | 12.3950 ppm |
| Concentration RSD | 24.5 % | 0.2 % | 5.7 % | 9.7 % | 0.2 % | 1.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0575 ppm | 0.1050 ppm | 0.1280 ppm | 147.1837 ppm | 4.3068 ppm | 0.0993 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0580 ppm | 0.1049 ppm | 0.1278 ppm | 147.2331 ppm | 4.3157 ppm | 0.1003 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0572 ppm | 0.1046 ppm | 0.1274 ppm | 147.4390 ppm | 4.2989 ppm | 0.0986 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0572 ppm | 0.1056 ppm | 0.1287 ppm | 146.8788 ppm | 4.3057 ppm | 0.0989 ppm |
| Concentration RSD | 13.3 % | 0.8 % | 0.5 % | 0.5 % | 0.2 % | 0.2 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.1638 ppm | 3.2943 ppm | 0.0084 ppm | 0.0568 ppm | 0.1206 ppm | 0.0559 ppm | 0.0002 ppm |
| Concentration per Run 1 | 21.1742 ppm | 3.2967 ppm | 0.0076 ppm | 0.0537 ppm | 0.1206 ppm | 0.0550 ppm | 0.0045 ppm |
| Concentration per Run 2 | 21.1157 ppm | 3.3005 ppm | 0.0086 ppm | 0.0629 ppm | 0.1204 ppm | 0.0568 ppm | 0.0039 ppm |
| Concentration per Run 3 | 21.2013 ppm | 3.2856 ppm | 0.0089 ppm | 0.0537 ppm | 0.1207 ppm | 0.0559 ppm | -0.0078 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 8.2 % | 9.3 % | 0.1 % | 1.6 % | 3,366.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 4.2997 ppm | 0.0056 ppm | 0.0518 ppm | 0.8316 ppm | 0.0023 ppm | 0.1666 ppm |
| Concentration per Run 1 | 0.0003 ppm | 4.3643 ppm | 0.0059 ppm | 0.0521 ppm | 0.8288 ppm | 0.0046 ppm | 0.1661 ppm |
| Concentration per Run 2 | -0.0016 ppm | 4.2369 ppm | 0.0052 ppm | 0.0518 ppm | 0.8351 ppm | 0.0017 ppm | 0.1666 ppm |
| Concentration per Run 3 | 0.0029 ppm | 4.2978 ppm | 0.0056 ppm | 0.0516 ppm | 0.8309 ppm | 0.0006 ppm | 0.1669 ppm |
| Concentration RSD | 421.9 % | 1.5 % | 5.8 % | 0.4 % | 0.4 % | 90.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3007 ppm | 114.1306 % | 114.7627 % | 105.9877 % | 144.0553 % | 146.3558 % | 142.8466 % |
| Concentration per Run 1 | 0.3006 ppm | 114.6754 % | 114.9791 % | 105.7936 % | 144.9471 % | 146.5039 % | 142.6667 % |
| Concentration per Run 2 | 0.3004 ppm | 114.6271 % | 114.8465 % | 105.7829 % | 144.5574 % | 146.6450 % | 142.6046 % |
| Concentration per Run 3 | 0.3012 ppm | 113.0892 % | 114.4624 % | 106.3867 % | 142.6613 % | 145.9185 % | 143.2685 % |
| Concentration RSD | 0.1 % | 0.8 % | 0.2 % | 0.3 % | 0.8 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453062-02d2 WG1974073
Analysis started at: 9/20/2024 3:42:19 PM
Rack 2
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 51.6504 ppm | 0.0321 ppm | 0.0098 ppm | 0.1169 ppm | 0.0029 ppm | 7.2386 ppm |
| Concentration per Run 1 | 0.0026 ppm | 51.8476 ppm | 0.0328 ppm | 0.0092 ppm | 0.1174 ppm | 0.0029 ppm | 7.2385 ppm |
| Concentration per Run 2 | 0.0025 ppm | 51.5537 ppm | 0.0324 ppm | 0.0107 ppm | 0.1165 ppm | 0.0029 ppm | 7.2282 ppm |
| Concentration per Run 3 | 0.0021 ppm | 51.5498 ppm | 0.0313 ppm | 0.0095 ppm | 0.1168 ppm | 0.0029 ppm | 7.2491 ppm |
| Concentration RSD | 10.6 % | 0.3 % | 2.4 % | 8.0 % | 0.4 % | 0.5 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0420 ppm | 0.0624 ppm | 0.0956 ppm | 124.2098 ppm | 3.3880 ppm | 0.0725 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0417 ppm | 0.0624 ppm | 0.0959 ppm | 124.0274 ppm | 3.4244 ppm | 0.0739 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0418 ppm | 0.0621 ppm | 0.0948 ppm | 124.0526 ppm | 3.3931 ppm | 0.0719 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0424 ppm | 0.0628 ppm | 0.0960 ppm | 124.5495 ppm | 3.3465 ppm | 0.0719 ppm |
| Concentration RSD | 8.5 % | 0.8 % | 0.6 % | 0.7 % | 0.2 % | 1.2 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.8013 ppm | 2.8996 ppm | 0.0026 ppm | -0.0017 ppm | 0.0862 ppm | 0.0376 ppm | 0.0041 ppm |
| Concentration per Run 1 | 15.7162 ppm | 2.9171 ppm | 0.0025 ppm | 0.0034 ppm | 0.0858 ppm | 0.0380 ppm | 0.0011 ppm |
| Concentration per Run 2 | 15.8305 ppm | 2.8732 ppm | 0.0023 ppm | -0.0107 ppm | 0.0854 ppm | 0.0363 ppm | 0.0057 ppm |
| Concentration per Run 3 | 15.8572 ppm | 2.9086 ppm | 0.0028 ppm | 0.0023 ppm | 0.0874 ppm | 0.0386 ppm | 0.0056 ppm |
| Concentration RSD | 0.5 % | 0.8 % | 8.4 % | 475.3 % | 1.2 % | 3.3 % | 63.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0036 ppm | 4.3016 ppm | 0.0050 ppm | 0.0310 ppm | 0.8121 ppm | 0.0009 ppm | 0.1344 ppm |
| Concentration per Run 1 | 0.0023 ppm | 4.2909 ppm | 0.0046 ppm | 0.0314 ppm | 0.8135 ppm | -0.0007 ppm | 0.1337 ppm |
| Concentration per Run 2 | 0.0054 ppm | 4.2545 ppm | 0.0066 ppm | 0.0311 ppm | 0.8035 ppm | 0.0013 ppm | 0.1346 ppm |
| Concentration per Run 3 | 0.0030 ppm | 4.3594 ppm | 0.0037 ppm | 0.0306 ppm | 0.8192 ppm | 0.0020 ppm | 0.1349 ppm |
| Concentration RSD | 45.6 % | 1.2 % | 29.9 % | 1.4 % | 1.0 % | 168.1 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2840 ppm | 116.0662 % | 114.9550 % | 108.7596 % | **151.6121 %** | **152.0644 %** | **151.2268 %** |
| Concentration per Run 1 | 0.2830 ppm | 116.7279 % | 115.9672 % | 109.3492 % | **152.7200 %** | **153.5018 %** | **151.8506 %** |
| Concentration per Run 2 | 0.2839 ppm | 115.3058 % | 114.7268 % | 108.7359 % | **150.1001 %** | **151.7276 %** | **151.5024 %** |
| Concentration per Run 3 | 0.2852 ppm | 116.1649 % | 114.1708 % | 108.1938 % | **152.0161 %** | **150.9636 %** | **150.3273 %** |
| Concentration RSD | 0.4 % | 0.6 % | 0.8 % | 0.5 % | **0.9 %** | **0.9 %** | **0.5 %** |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453062-03d2 WG1974073
Analysis started at: 9/20/2024 3:46:14 PM
Rack 2
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 46.5965 ppm | 0.0314 ppm | 0.0128 ppm | 0.1294 ppm | 0.0026 ppm | 10.0271 ppm |
| Concentration per Run 1 | 0.0019 ppm | 46.6374 ppm | 0.0312 ppm | 0.0141 ppm | 0.1298 ppm | 0.0026 ppm | 10.0165 ppm |
| Concentration per Run 2 | 0.0014 ppm | 46.5945 ppm | 0.0335 ppm | 0.0128 ppm | 0.1291 ppm | 0.0026 ppm | 10.0302 ppm |
| Concentration per Run 3 | 0.0021 ppm | 46.5577 ppm | 0.0295 ppm | 0.0115 ppm | 0.1292 ppm | 0.0026 ppm | 10.0346 ppm |
| Concentration RSD | 18.3 % | 0.1 % | 6.3 % | 9.9 % | 0.3 % | 1.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0429 ppm | 0.0590 ppm | 0.0986 ppm | 111.8357 ppm | 4.2536 ppm | 0.0746 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0440 ppm | 0.0586 ppm | 0.0991 ppm | 111.9666 ppm | 4.2901 ppm | 0.0760 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0433 ppm | 0.0590 ppm | 0.0991 ppm | 111.9077 ppm | 4.2399 ppm | 0.0744 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0415 ppm | 0.0593 ppm | 0.0976 ppm | 111.6327 ppm | 4.2308 ppm | 0.0734 ppm |
| Concentration RSD | 9.9 % | 3.1 % | 0.6 % | 0.9 % | 0.2 % | 0.8 % | 1.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.5794 ppm | 2.9096 ppm | 0.0017 ppm | -0.0286 ppm | 0.0942 ppm | 0.0655 ppm | -0.0004 ppm |
| Concentration per Run 1 | 16.5568 ppm | 2.9229 ppm | 0.0020 ppm | -0.0286 ppm | 0.0937 ppm | 0.0657 ppm | 0.0003 ppm |
| Concentration per Run 2 | 16.6413 ppm | 2.9246 ppm | 0.0019 ppm | -0.0339 ppm | 0.0951 ppm | 0.0664 ppm | -0.0002 ppm |
| Concentration per Run 3 | 16.5401 ppm | 2.8812 ppm | 0.0012 ppm | -0.0233 ppm | 0.0937 ppm | 0.0645 ppm | -0.0012 ppm |
| Concentration RSD | 0.3 % | 0.8 % | 26.2 % | 18.5 % | 0.9 % | 1.4 % | 217.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 4.4487 ppm | 0.0034 ppm | 0.0508 ppm | 0.6107 ppm | 0.0015 ppm | 0.1183 ppm |
| Concentration per Run 1 | 0.0056 ppm | 4.4409 ppm | 0.0034 ppm | 0.0508 ppm | 0.6082 ppm | 0.0015 ppm | 0.1182 ppm |
| Concentration per Run 2 | 0.0046 ppm | 4.4716 ppm | 0.0030 ppm | 0.0507 ppm | 0.6128 ppm | 0.0007 ppm | 0.1185 ppm |
| Concentration per Run 3 | -0.0003 ppm | 4.4335 ppm | 0.0038 ppm | 0.0507 ppm | 0.6110 ppm | 0.0023 ppm | 0.1183 ppm |
| Concentration RSD | 96.5 % | 0.5 % | 11.5 % | 0.1 % | 0.4 % | 52.8 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2763 ppm | 112.4483 % | 111.3090 % | 106.2092 % | 135.3330 % | 136.1415 % | 134.5311 % |
| Concentration per Run 1 | 0.2774 ppm | 112.2466 % | 111.2903 % | 106.7204 % | 135.5586 % | 136.4723 % | 134.9074 % |
| Concentration per Run 2 | 0.2757 ppm | 113.1457 % | 111.5463 % | 106.0637 % | 135.8694 % | 136.2446 % | 134.3249 % |
| Concentration per Run 3 | 0.2757 ppm | 111.9526 % | 111.0903 % | 105.8435 % | 134.5710 % | 135.7077 % | 134.3609 % |
| Concentration RSD | 0.4 % | 0.6 % | 0.2 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453062-04d2 WG1974073
Analysis started at: 9/20/2024 3:50:09 PM
Rack 2
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 90.1721 ppm | 0.0395 ppm | 0.0089 ppm | 0.3218 ppm | 0.0047 ppm | 5.4295 ppm |
| Concentration per Run 1 | 0.0024 ppm | 90.0893 ppm | 0.0408 ppm | 0.0077 ppm | 0.3208 ppm | 0.0047 ppm | 5.4346 ppm |
| Concentration per Run 2 | 0.0024 ppm | 90.3200 ppm | 0.0399 ppm | 0.0102 ppm | 0.3217 ppm | 0.0047 ppm | 5.4268 ppm |
| Concentration per Run 3 | 0.0018 ppm | 90.1072 ppm | 0.0379 ppm | 0.0088 ppm | 0.3229 ppm | 0.0047 ppm | 5.4273 ppm |
| Concentration RSD | 15.0 % | 0.1 % | 3.7 % | 14.4 % | 0.3 % | 0.7 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0572 ppm | 0.1032 ppm | 0.1117 ppm | 158.8848 ppm | 4.7700 ppm | 0.1144 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0570 ppm | 0.1036 ppm | 0.1120 ppm | 158.5379 ppm | 4.7608 ppm | 0.1144 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0577 ppm | 0.1034 ppm | 0.1118 ppm | 158.6607 ppm | 4.7687 ppm | 0.1147 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0570 ppm | 0.1024 ppm | 0.1115 ppm | 159.4560 ppm | 4.7807 ppm | 0.1142 ppm |
| Concentration RSD | 13.3 % | 0.7 % | 0.6 % | 0.2 % | 0.3 % | 0.2 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.9252 ppm | 3.3010 ppm | 0.0040 ppm | 0.2040 ppm | 0.1245 ppm | 0.0563 ppm | -0.0006 ppm |
| Concentration per Run 1 | 21.0102 ppm | 3.3008 ppm | 0.0035 ppm | 0.2020 ppm | 0.1248 ppm | 0.0550 ppm | -0.0021 ppm |
| Concentration per Run 2 | 20.9898 ppm | 3.3051 ppm | 0.0044 ppm | 0.2054 ppm | 0.1234 ppm | 0.0566 ppm | 0.0007 ppm |
| Concentration per Run 3 | 20.7755 ppm | 3.2970 ppm | 0.0040 ppm | 0.2046 ppm | 0.1252 ppm | 0.0573 ppm | -0.0003 ppm |
| Concentration RSD | 0.6 % | 0.1 % | 11.7 % | 0.9 % | 0.8 % | 2.1 % | 252.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 4.6559 ppm | 0.0059 ppm | 0.0407 ppm | 0.9488 ppm | 0.0022 ppm | 0.1683 ppm |
| Concentration per Run 1 | 0.0010 ppm | 4.7498 ppm | 0.0062 ppm | 0.0406 ppm | 0.9462 ppm | 0.0043 ppm | 0.1684 ppm |
| Concentration per Run 2 | 0.0016 ppm | 4.6134 ppm | 0.0070 ppm | 0.0409 ppm | 0.9532 ppm | 0.0015 ppm | 0.1683 ppm |
| Concentration per Run 3 | 0.0063 ppm | 4.6046 ppm | 0.0045 ppm | 0.0406 ppm | 0.9471 ppm | 0.0007 ppm | 0.1681 ppm |
| Concentration RSD | 98.7 % | 1.7 % | 21.3 % | 0.3 % | 0.4 % | 86.9 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3627 ppm | 114.2196 % | 113.1135 % | 106.4851 % | 144.9335 % | 145.5271 % | 144.8024 % |
| Concentration per Run 1 | 0.3620 ppm | 115.0937 % | 114.0365 % | 106.7133 % | 146.1465 % | 146.5082 % | 145.2322 % |
| Concentration per Run 2 | 0.3631 ppm | 113.9302 % | 112.8693 % | 105.4398 % | 144.3228 % | 145.4227 % | 143.3423 % |
| Concentration per Run 3 | 0.3630 ppm | 113.6350 % | 112.4345 % | 107.3021 % | 144.3312 % | 144.6505 % | 145.8327 % |
| Concentration RSD | 0.2 % | 0.7 % | 0.7 % | 0.9 % | 0.7 % | 0.6 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453062-05d2 WG1974073
Analysis started at: 9/20/2024 3:54:05 PM
Rack 2
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 90.3494 ppm | 0.0741 ppm | 0.0092 ppm | 0.3003 ppm | 0.0051 ppm | 9.5911 ppm |
| Concentration per Run 1 | 0.0017 ppm | 90.3321 ppm | 0.0737 ppm | 0.0079 ppm | 0.3000 ppm | 0.0052 ppm | 9.5996 ppm |
| Concentration per Run 2 | 0.0024 ppm | 90.3378 ppm | 0.0715 ppm | 0.0083 ppm | 0.2986 ppm | 0.0051 ppm | 9.6104 ppm |
| Concentration per Run 3 | 0.0035 ppm | 90.3782 ppm | 0.0771 ppm | 0.0113 ppm | 0.3023 ppm | 0.0050 ppm | 9.5632 ppm |
| Concentration RSD | 35.9 % | 0.0 % | 3.7 % | 20.2 % | 0.6 % | 1.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0788 ppm | 0.1244 ppm | 0.2024 ppm | 227.7258 ppm | 4.7727 ppm | 0.1556 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0784 ppm | 0.1243 ppm | 0.2015 ppm | 227.3509 ppm | 4.7638 ppm | 0.1545 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0794 ppm | 0.1240 ppm | 0.2029 ppm | 227.1112 ppm | 4.7744 ppm | 0.1538 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0787 ppm | 0.1248 ppm | 0.2029 ppm | 228.7153 ppm | 4.7799 ppm | 0.1584 ppm |
| Concentration RSD | 12.3 % | 0.7 % | 0.4 % | 0.4 % | 0.4 % | 0.2 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 33.9387 ppm | 2.8543 ppm | 0.0061 ppm | 0.0797 ppm | 0.1784 ppm | 0.0997 ppm | 0.0008 ppm |
| Concentration per Run 1 | 33.6252 ppm | 2.8733 ppm | 0.0061 ppm | 0.0792 ppm | 0.1790 ppm | 0.0989 ppm | 0.0021 ppm |
| Concentration per Run 2 | 34.0754 ppm | 2.8576 ppm | 0.0054 ppm | 0.0858 ppm | 0.1778 ppm | 0.0992 ppm | -0.0013 ppm |
| Concentration per Run 3 | 34.1155 ppm | 2.8319 ppm | 0.0070 ppm | 0.0741 ppm | 0.1786 ppm | 0.1010 ppm | 0.0017 ppm |
| Concentration RSD | 0.8 % | 0.7 % | 13.0 % | 7.3 % | 0.3 % | 1.1 % | 232.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 4.4256 ppm | 0.0051 ppm | 0.0722 ppm | 0.6805 ppm | 0.0027 ppm | 0.2105 ppm |
| Concentration per Run 1 | 0.0069 ppm | 4.4625 ppm | 0.0043 ppm | 0.0724 ppm | 0.6871 ppm | 0.0026 ppm | 0.2107 ppm |
| Concentration per Run 2 | 0.0027 ppm | 4.4015 ppm | 0.0055 ppm | 0.0721 ppm | 0.6793 ppm | 0.0008 ppm | 0.2101 ppm |
| Concentration per Run 3 | 0.0008 ppm | 4.4128 ppm | 0.0055 ppm | 0.0722 ppm | 0.6753 ppm | 0.0046 ppm | 0.2108 ppm |
| Concentration RSD | 89.5 % | 0.7 % | 14.0 % | 0.2 % | 0.9 % | 70.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3934 ppm | 114.2572 % | 114.3480 % | 106.1832 % | **156.3148 %** | **158.0806 %** | **156.8034 %** |
| Concentration per Run 1 | 0.3943 ppm | 114.7137 % | 114.5763 % | 106.2997 % | **156.1795 %** | **158.8064 %** | **156.0234 %** |
| Concentration per Run 2 | 0.3923 ppm | 114.8245 % | 114.8705 % | 107.0409 % | **156.8837 %** | **159.1521 %** | **157.9626 %** |
| Concentration per Run 3 | 0.3935 ppm | 113.2335 % | 113.5971 % | 105.2089 % | **155.8811 %** | **156.2834 %** | **156.4242 %** |
| Concentration RSD | 0.3 % | 0.8 % | 0.6 % | 0.9 % | **0.3 %** | **1.0 %** | **0.7 %** |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454057-01d2 WG1974073
Analysis started at: 9/20/2024 3:58:01 PM
Rack 2
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0081 ppm | 69.7674 ppm | 0.1288 ppm | 0.0362 ppm | 1.4616 ppm | 0.0046 ppm | 58.6521 ppm |
| Concentration per Run 1 | 0.0084 ppm | 69.9894 ppm | 0.1265 ppm | 0.0338 ppm | 1.4665 ppm | 0.0045 ppm | 59.0153 ppm |
| Concentration per Run 2 | 0.0083 ppm | 69.4615 ppm | 0.1277 ppm | 0.0387 ppm | 1.4608 ppm | 0.0045 ppm | 58.3072 ppm |
| Concentration per Run 3 | 0.0076 ppm | 69.8511 ppm | 0.1323 ppm | 0.0362 ppm | 1.4573 ppm | 0.0046 ppm | 58.6339 ppm |
| Concentration RSD | 4.8 % | 0.4 % | 2.4 % | 6.8 % | 0.3 % | 0.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0927 ppm | 0.0642 ppm | 0.3475 ppm | 0.8806 ppm | 201.7032 ppm | 4.8501 ppm | 0.1518 ppm |
| Concentration per Run 1 | 0.0935 ppm | 0.0647 ppm | 0.3494 ppm | 0.8803 ppm | 202.1111 ppm | 4.9054 ppm | 0.1537 ppm |
| Concentration per Run 2 | 0.0925 ppm | 0.0645 ppm | 0.3453 ppm | 0.8823 ppm | 201.5969 ppm | 4.8033 ppm | 0.1502 ppm |
| Concentration per Run 3 | 0.0922 ppm | 0.0635 ppm | 0.3478 ppm | 0.8791 ppm | 201.4017 ppm | 4.8416 ppm | 0.1514 ppm |
| Concentration RSD | 0.7 % | 1.0 % | 0.6 % | 0.2 % | 0.2 % | 1.1 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 39.1735 ppm | 1.9866 ppm | 0.0223 ppm | 0.3791 ppm | 0.2315 ppm | 124.0956 ppm | 1.0406 ppm |
| Concentration per Run 1 | 39.1985 ppm | 1.9963 ppm | 0.0224 ppm | 0.3820 ppm | 0.2334 ppm | 123.4901 ppm | 1.0453 ppm |
| Concentration per Run 2 | 39.0759 ppm | 1.9817 ppm | 0.0221 ppm | 0.3804 ppm | 0.2304 ppm | 124.2806 ppm | 1.0468 ppm |
| Concentration per Run 3 | 39.2462 ppm | 1.9818 ppm | 0.0223 ppm | 0.3749 ppm | 0.2308 ppm | 124.5162 ppm | 1.0297 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 0.7 % | 1.0 % | 0.7 % | 0.4 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 7.2485 ppm | 0.1489 ppm | 0.2136 ppm | 0.5647 ppm | 0.0003 ppm | 0.3033 ppm |
| Concentration per Run 1 | 0.0001 ppm | 7.1846 ppm | 0.1486 ppm | 0.2145 ppm | 0.5604 ppm | -0.0019 ppm | 0.3046 ppm |
| Concentration per Run 2 | 0.0041 ppm | 7.2676 ppm | 0.1501 ppm | 0.2129 ppm | 0.5605 ppm | 0.0014 ppm | 0.3021 ppm |
| Concentration per Run 3 | 0.0052 ppm | 7.2935 ppm | 0.1479 ppm | 0.2132 ppm | 0.5733 ppm | 0.0013 ppm | 0.3033 ppm |
| Concentration RSD | 84.6 % | 0.8 % | 0.8 % | 0.4 % | 1.3 % | 699.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8581 ppm | 111.4895 % | 113.1811 % | 102.1462 % | 125.4022 % | 129.1421 % | 124.1428 % |
| Concentration per Run 1 | 9.8752 ppm | 110.7332 % | 112.3869 % | 102.3684 % | 124.7905 % | 128.6025 % | 123.9782 % |
| Concentration per Run 2 | 9.8620 ppm | 111.7796 % | 114.5123 % | 101.4376 % | 125.6192 % | 129.9804 % | 123.5542 % |
| Concentration per Run 3 | 9.8370 ppm | 111.9558 % | 112.6440 % | 102.6328 % | 125.7968 % | 128.8434 % | 124.8959 % |
| Concentration RSD | 0.2 % | 0.6 % | 1.0 % | 0.6 % | 0.4 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 4:01:57 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5004 ppm | 0.4667 ppm | 0.4720 ppm | 0.4867 ppm | 0.4897 ppm | 0.4968 ppm | 0.4781 ppm |
| Concentration per Run 1 | 0.4987 ppm | 0.4716 ppm | 0.4735 ppm | 0.4836 ppm | 0.4851 ppm | 0.4953 ppm | 0.4782 ppm |
| Concentration per Run 2 | 0.5001 ppm | 0.4680 ppm | 0.4730 ppm | 0.4895 ppm | 0.4898 ppm | 0.4970 ppm | 0.4753 ppm |
| Concentration per Run 3 | 0.5024 ppm | 0.4606 ppm | 0.4694 ppm | 0.4871 ppm | 0.4943 ppm | 0.4982 ppm | 0.4807 ppm |
| Recovery Percentage 1 | 100.085 % | 93.346 % | 94.391 % | 97.346 % | 97.946 % | 99.364 % | 95.616 % |
| Concentration RSD | 0.4 % | 1.2 % | 0.5 % | 0.6 % | 0.9 % | 0.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4897 ppm | 0.4988 ppm | 0.4791 ppm | 0.4884 ppm | 0.4914 ppm | 5.0396 ppm | 0.4857 ppm |
| Concentration per Run 1 | 0.4926 ppm | 0.5020 ppm | 0.4763 ppm | 0.4883 ppm | 0.4899 ppm | 5.0517 ppm | 0.4795 ppm |
| Concentration per Run 2 | 0.4886 ppm | 0.4974 ppm | 0.4793 ppm | 0.4876 ppm | 0.4928 ppm | 5.0436 ppm | 0.4851 ppm |
| Concentration per Run 3 | 0.4878 ppm | 0.4969 ppm | 0.4816 ppm | 0.4894 ppm | 0.4915 ppm | 5.0235 ppm | 0.4923 ppm |
| Recovery Percentage 1 | 97.939 % | 99.758 % | 95.816 % | 97.685 % | 98.279 % | 100.792 % | 97.132 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.6 % | 0.2 % | 0.3 % | 0.3 % | 1.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4791 ppm | 0.4747 ppm | 0.4785 ppm | 9.5704 ppm | 0.4988 ppm | 0.4899 ppm | 0.5003 ppm |
| Concentration per Run 1 | 0.4782 ppm | 0.4730 ppm | 0.4768 ppm | 9.5034 ppm | 0.4973 ppm | 0.4924 ppm | 0.5057 ppm |
| Concentration per Run 2 | 0.4793 ppm | 0.4743 ppm | 0.4774 ppm | 9.5519 ppm | 0.4990 ppm | 0.4916 ppm | 0.4978 ppm |
| Concentration per Run 3 | 0.4797 ppm | 0.4767 ppm | 0.4813 ppm | 9.6559 ppm | 0.5002 ppm | 0.4856 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 95.817 % | 94.939 % | 95.702 % | 95.704 % | 99.762 % | 97.970 % | 100.065 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.5 % | 0.8 % | 0.3 % | 0.7 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4888 ppm | 5.3048 ppm | 0.4714 ppm | 0.4692 ppm | 0.4865 ppm | 0.4896 ppm | 0.4766 ppm |
| Concentration per Run 1 | 0.4928 ppm | 5.2713 ppm | 0.4724 ppm | 0.4657 ppm | 0.4831 ppm | 0.4900 ppm | 0.4788 ppm |
| Concentration per Run 2 | 0.4909 ppm | 5.3162 ppm | 0.4722 ppm | 0.4695 ppm | 0.4873 ppm | 0.4904 ppm | 0.4747 ppm |
| Concentration per Run 3 | 0.4826 ppm | 5.3269 ppm | 0.4696 ppm | 0.4722 ppm | 0.4891 ppm | 0.4883 ppm | 0.4764 ppm |
| Recovery Percentage 1 | 97.756 % | 101.044 % | 94.279 % | 93.833 % | 97.296 % | 97.913 % | 95.325 % |
| Concentration RSD | 1.1 % | 0.6 % | 0.3 % | 0.7 % | 0.6 % | 0.2 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4937 ppm | 111.6158 % | 107.9329 % | 108.2424 % | 111.0019 % | 107.2670 % | 108.5425 % |
| Concentration per Run 1 | 0.4918 ppm | 111.6544 % | 109.4213 % | 107.5977 % | 111.3260 % | 108.3141 % | 107.9576 % |
| Concentration per Run 2 | 0.4938 ppm | 112.1780 % | 106.5859 % | 108.6578 % | 111.7800 % | 105.7422 % | 108.7053 % |
| Concentration per Run 3 | 0.4956 ppm | 111.0150 % | 107.7915 % | 108.4718 % | 109.8997 % | 107.7446 % | 108.9647 % |
| Recovery Percentage 1 | 98.749 % | | | | | | |
| Concentration RSD | 0.4 % | 0.5 % | 1.3 % | 0.5 % | 0.9 % | 1.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 4:05:52 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0021 ppm | 0.0033 ppm | 0.0029 ppm | -0.0001 ppm | 0.0000 ppm | 0.0058 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0043 ppm | 0.0030 ppm | 0.0023 ppm | -0.0001 ppm | 0.0000 ppm | 0.0077 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0022 ppm | 0.0026 ppm | 0.0039 ppm | -0.0001 ppm | 0.0001 ppm | 0.0066 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0042 ppm | 0.0044 ppm | 0.0023 ppm | 0.0000 ppm | 0.0001 ppm | 0.0033 ppm |
| Recovery Percentage 1 | 11.919 % | -2.111 % | 66.771 % | 9.506 % | -0.525 % | 1.225 % | 5.835 % |
| Concentration RSD | 20.2 % | 176.5 % | 28.9 % | 31.4 % | 93.8 % | 192.7 % | 39.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm | -0.0003 ppm | -0.0274 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | -0.0011 ppm | -0.0003 ppm | 0.0008 ppm | -0.0156 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0002 ppm | -0.0008 ppm | 0.0002 ppm | -0.0018 ppm | -0.0266 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | -0.0401 ppm | -0.0006 ppm |
| Recovery Percentage 1 | 2.445 % | 0.432 % | -6.273 % | -0.815 % | -0.563 % | -1.097 % | 12.382 % |
| Concentration RSD | 50.7 % | 264.5 % | 88.9 % | 322.9 % | 491.0 % | 44.8 % | 177.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0000 ppm | 0.0007 ppm | -0.1931 ppm | -0.0007 ppm | 0.0003 ppm | 0.0067 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0001 ppm | 0.0012 ppm | -0.1924 ppm | -0.0011 ppm | 0.0007 ppm | 0.0071 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0002 ppm | 0.0005 ppm | -0.1893 ppm | -0.0001 ppm | -0.0003 ppm | 0.0077 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0002 ppm | 0.0003 ppm | -0.1975 ppm | -0.0008 ppm | 0.0003 ppm | 0.0054 ppm |
| Recovery Percentage 1 | 1.003 % | 0.207 % | 1.336 % | -9.653 % | -2.698 % | 2.609 % | 13.460 % |
| Concentration RSD | 71.4 % | 959.1 % | 74.3 % | 2.2 % | 73.1 % | 191.5 % | 17.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0025 ppm | 0.0003 ppm | -0.0001 ppm | -0.0002 ppm | -0.0007 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0022 ppm | -0.0008 ppm | -0.0005 ppm | 0.0000 ppm | -0.0002 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0045 ppm | 0.0010 ppm | -0.0001 ppm | -0.0003 ppm | -0.0007 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0023 ppm | 0.0003 ppm | -0.0001 ppm | 0.0000 ppm | -0.0010 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 9.150 % | -0.501 % | 0.555 % | -0.515 % | -1.680 % | -3.645 % | -4.467 % |
| Concentration RSD | 129.7 % | 75.3 % | 266.2 % | 168.8 % | 71.0 % | 31.5 % | 10.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 109.9208 % | 105.4787 % | 108.8776 % | 111.1141 % | 105.7948 % | 109.6184 % |
| Concentration per Run 1 | 0.0002 ppm | 109.9209 % | 104.8739 % | 109.3982 % | 111.3657 % | 105.2152 % | 109.7594 % |
| Concentration per Run 2 | 0.0004 ppm | 110.1298 % | 105.7692 % | 108.4556 % | 111.3266 % | 106.3724 % | 109.3448 % |
| Concentration per Run 3 | 0.0003 ppm | 109.7117 % | 105.7929 % | 108.7790 % | 110.6501 % | 105.7969 % | 109.7511 % |
| Recovery Percentage 1 | 6.077 % | | | | | | |
| Concentration RSD | 23.3 % | 0.2 % | 0.5 % | 0.4 % | 0.4 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-1 WG1974175
Analysis started at: 9/20/2024 4:12:06 PM
Rack 2
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0033 ppm | 0.0001 ppm | 0.0018 ppm | 0.0000 ppm | 0.0000 ppm | 0.0110 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0027 ppm | 0.0000 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0135 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0056 ppm | 0.0018 ppm | 0.0029 ppm | 0.0001 ppm | 0.0000 ppm | 0.0073 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0017 ppm | -0.0014 ppm | 0.0013 ppm | -0.0002 ppm | 0.0000 ppm | 0.0123 ppm |
| Recovery Percentage 1 | 12.252 % | 3.340 % | 2.650 % | 6.092 % | -0.306 % | -0.004 % | 11.016 % |
| Concentration RSD | 28.7 % | 60.3 % | 1,196.6 % | 52.6 % | 558.2 % | 18,980.5 % | 29.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0004 ppm | -0.0004 ppm | 0.0000 ppm | -0.0031 ppm | -0.0231 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | -0.0045 ppm | -0.0235 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | -0.0004 ppm | -0.0003 ppm | -0.0025 ppm | -0.0381 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0009 ppm | -0.0005 ppm | 0.0000 ppm | -0.0022 ppm | -0.0079 ppm | 0.0006 ppm |
| Recovery Percentage 1 | -1.859 % | -2.075 % | -3.574 % | -0.428 % | -6.162 % | -0.925 % | 15.188 % |
| Concentration RSD | 135.4 % | 118.5 % | 28.4 % | 684.9 % | 41.6 % | 65.3 % | 103.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0001 ppm | 0.0002 ppm | -0.2008 ppm | -0.0010 ppm | -0.0012 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0000 ppm | -0.0005 ppm | -0.1985 ppm | -0.0007 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | 0.0000 ppm | -0.2014 ppm | -0.0008 ppm | -0.0034 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0017 ppm | -0.0001 ppm | 0.0011 ppm | -0.2024 ppm | -0.0014 ppm | 0.0000 ppm | 0.0059 ppm |
| Recovery Percentage 1 | 1.223 % | -1.065 % | 0.395 % | -10.039 % | -3.815 % | -11.848 % | 3.720 % |
| Concentration RSD | 73.5 % | 74.3 % | 403.0 % | 1.0 % | 37.7 % | 162.4 % | 187.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0034 ppm | -0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0023 ppm | -0.0023 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0050 ppm | -0.0022 ppm | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0031 ppm | 0.0029 ppm | -0.0008 ppm | -0.0001 ppm | 0.0000 ppm | 0.0009 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 7.523 % | 0.679 % | -3.497 % | -0.289 % | -0.124 % | 0.823 % | -3.751 % |
| Concentration RSD | 266.1 % | 42.7 % | 48.9 % | 200.1 % | 869.4 % | 448.4 % | 54.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 105.0615 % | 105.0393 % | 105.3889 % | 103.9600 % | 104.5183 % | 104.1781 % |
| Concentration per Run 1 | 0.0004 ppm | 105.5307 % | 105.6328 % | 105.1022 % | 104.5042 % | 105.5842 % | 104.0936 % |
| Concentration per Run 2 | 0.0004 ppm | 103.9064 % | 104.5780 % | 105.1169 % | 102.6520 % | 103.9961 % | 103.6694 % |
| Concentration per Run 3 | 0.0005 ppm | 105.7473 % | 104.9070 % | 105.9477 % | 104.7237 % | 103.9744 % | 104.7714 % |
| Recovery Percentage 1 | 9.148 % | | | | | | |
| Concentration RSD | 17.4 % | 1.0 % | 0.5 % | 0.5 % | 1.1 % | 0.9 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-2 WG1974175
Analysis started at: 9/20/2024 4:16:18 PM
Rack 2
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0520 ppm | 1.9594 ppm | 0.1173 ppm | 0.9924 ppm | 2.0122 ppm | 0.0506 ppm | 10.4469 ppm |
| Concentration per Run 1 | 0.0521 ppm | 1.9652 ppm | 0.1163 ppm | 0.9962 ppm | 2.0151 ppm | 0.0507 ppm | 10.4479 ppm |
| Concentration per Run 2 | 0.0522 ppm | 1.9563 ppm | 0.1198 ppm | 0.9863 ppm | 2.0197 ppm | 0.0506 ppm | 10.4643 ppm |
| Concentration per Run 3 | 0.0518 ppm | 1.9565 ppm | 0.1158 ppm | 0.9947 ppm | 2.0017 ppm | 0.0505 ppm | 10.4285 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 1.9 % | 0.5 % | 0.5 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 0.5015 ppm | 0.1971 ppm | 0.2517 ppm | 1.0082 ppm | 10.4542 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0533 ppm | 0.5077 ppm | 0.1967 ppm | 0.2537 ppm | 1.0126 ppm | 10.4314 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0523 ppm | 0.4984 ppm | 0.1972 ppm | 0.2503 ppm | 1.0095 ppm | 10.5251 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0527 ppm | 0.4982 ppm | 0.1974 ppm | 0.2511 ppm | 1.0025 ppm | 10.4060 ppm | -0.0013 ppm |
| Concentration RSD | 0.9 % | 1.1 % | 0.2 % | 0.7 % | 0.5 % | 0.6 % | 764.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0116 ppm | 0.5013 ppm | 0.9641 ppm | 10.2723 ppm | 0.5005 ppm | 0.5237 ppm | 0.4426 ppm |
| Concentration per Run 1 | 9.9618 ppm | 0.5007 ppm | 0.9624 ppm | 10.2744 ppm | 0.5021 ppm | 0.5229 ppm | 0.4407 ppm |
| Concentration per Run 2 | 10.0330 ppm | 0.5021 ppm | 0.9618 ppm | 10.3589 ppm | 0.4982 ppm | 0.5259 ppm | 0.4346 ppm |
| Concentration per Run 3 | 10.0402 ppm | 0.5010 ppm | 0.9682 ppm | 10.1836 ppm | 0.5012 ppm | 0.5222 ppm | 0.4523 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.4 % | 0.9 % | 0.4 % | 0.4 % | 2.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1200 ppm | 1.0044 ppm | 0.9704 ppm | 0.9790 ppm | 1.0082 ppm | 0.1193 ppm | 0.4995 ppm |
| Concentration per Run 1 | 0.1226 ppm | 1.0051 ppm | 0.9737 ppm | 0.9786 ppm | 1.0016 ppm | 0.1193 ppm | 0.5019 ppm |
| Concentration per Run 2 | 0.1162 ppm | 1.0064 ppm | 0.9722 ppm | 0.9825 ppm | 1.0071 ppm | 0.1206 ppm | 0.4981 ppm |
| Concentration per Run 3 | 0.1213 ppm | 1.0018 ppm | 0.9651 ppm | 0.9758 ppm | 1.0160 ppm | 0.1179 ppm | 0.4984 ppm |
| Concentration RSD | 2.8 % | 0.2 % | 0.5 % | 0.3 % | 0.7 % | 1.1 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5019 ppm | 110.9577 % | 108.1718 % | 107.9653 % | 110.6745 % | 107.8942 % | 108.6159 % |
| Concentration per Run 1 | 0.5036 ppm | 111.0404 % | 108.3742 % | 107.6248 % | 111.5463 % | 107.7592 % | 108.2353 % |
| Concentration per Run 2 | 0.5007 ppm | 111.5000 % | 107.5833 % | 107.2037 % | 111.0012 % | 107.3042 % | 108.0614 % |
| Concentration per Run 3 | 0.5013 ppm | 110.3327 % | 108.5579 % | 109.0676 % | 109.4760 % | 108.6192 % | 109.5512 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.5 % | 0.9 % | 1.0 % | 0.6 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454057-01d8 WG1974073
Analysis started at: 9/20/2024 4:20:13 PM
Rack 2
Vial 54
Comment Pb over LDR

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 16.3879 ppm | 0.0298 ppm | 0.0107 ppm | 0.3438 ppm | 0.0011 ppm | 14.0640 ppm |
| Concentration per Run 1 | 0.0030 ppm | 16.4316 ppm | 0.0318 ppm | 0.0118 ppm | 0.3454 ppm | 0.0011 ppm | 14.1248 ppm |
| Concentration per Run 2 | 0.0028 ppm | 16.3597 ppm | 0.0278 ppm | 0.0110 ppm | 0.3429 ppm | 0.0011 ppm | 14.0136 ppm |
| Concentration per Run 3 | 0.0026 ppm | 16.3724 ppm | 0.0298 ppm | 0.0092 ppm | 0.3432 ppm | 0.0010 ppm | 14.0537 ppm |
| Concentration RSD | 8.0 % | 0.2 % | 6.7 % | 12.6 % | 0.4 % | 2.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0229 ppm | 0.0161 ppm | 0.0822 ppm | 0.2035 ppm | 49.4371 ppm | 1.1223 ppm | 0.0377 ppm |
| Concentration per Run 1 | 0.0226 ppm | 0.0158 ppm | 0.0823 ppm | 0.2036 ppm | 49.6484 ppm | 1.1401 ppm | 0.0396 ppm |
| Concentration per Run 2 | 0.0229 ppm | 0.0163 ppm | 0.0817 ppm | 0.2038 ppm | 49.6251 ppm | 1.1026 ppm | 0.0364 ppm |
| Concentration per Run 3 | 0.0231 ppm | 0.0162 ppm | 0.0827 ppm | 0.2031 ppm | 49.0378 ppm | 1.1244 ppm | 0.0372 ppm |
| Concentration RSD | 1.1 % | 1.7 % | 0.6 % | 0.2 % | 0.7 % | 1.7 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.4262 ppm | 0.4681 ppm | 0.0075 ppm | -0.0618 ppm | 0.0571 ppm | 29.3419 ppm | 0.2503 ppm |
| Concentration per Run 1 | 9.3714 ppm | 0.4700 ppm | 0.0078 ppm | -0.0633 ppm | 0.0571 ppm | 29.4618 ppm | 0.2446 ppm |
| Concentration per Run 2 | 9.4341 ppm | 0.4669 ppm | 0.0075 ppm | -0.0617 ppm | 0.0577 ppm | 29.3685 ppm | 0.2526 ppm |
| Concentration per Run 3 | 9.4732 ppm | 0.4673 ppm | 0.0072 ppm | -0.0604 ppm | 0.0566 ppm | 29.1953 ppm | 0.2536 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 3.7 % | 2.3 % | 1.0 % | 0.5 % | 2.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 1.4349 ppm | 0.0452 ppm | 0.0498 ppm | 0.1249 ppm | 0.0010 ppm | 0.0702 ppm |
| Concentration per Run 1 | 0.0005 ppm | 1.4622 ppm | 0.0461 ppm | 0.0502 ppm | 0.1221 ppm | 0.0013 ppm | 0.0704 ppm |
| Concentration per Run 2 | 0.0031 ppm | 1.4001 ppm | 0.0449 ppm | 0.0497 ppm | 0.1226 ppm | 0.0004 ppm | 0.0701 ppm |
| Concentration per Run 3 | 0.0021 ppm | 1.4423 ppm | 0.0445 ppm | 0.0494 ppm | 0.1299 ppm | 0.0013 ppm | 0.0702 ppm |
| Concentration RSD | 70.1 % | 2.2 % | 1.8 % | 0.8 % | 3.5 % | 54.0 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.4504 ppm | 112.3198 % | 110.8319 % | 107.9693 % | 115.0677 % | 114.3322 % | 113.6077 % |
| Concentration per Run 1 | 2.4529 ppm | 112.7142 % | 110.4993 % | 108.1352 % | 115.6633 % | 114.1696 % | 113.7343 % |
| Concentration per Run 2 | 2.4459 ppm | 111.9963 % | 111.0274 % | 107.8921 % | 114.9111 % | 114.6390 % | 113.8825 % |
| Concentration per Run 3 | 2.4525 ppm | 112.2490 % | 110.9689 % | 107.8807 % | 114.6287 % | 114.1880 % | 113.2064 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.1 % | 0.5 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-02 WG1974175
Analysis started at: 9/20/2024 4:24:09 PM
Rack 2
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.2849 ppm | 0.0029 ppm | 0.3811 ppm | 0.0282 ppm | 0.0000 ppm | 55.6115 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.2900 ppm | 0.0047 ppm | 0.3824 ppm | 0.0281 ppm | 0.0000 ppm | 55.5105 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.2796 ppm | 0.0018 ppm | 0.3842 ppm | 0.0284 ppm | 0.0001 ppm | 55.6165 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.2850 ppm | 0.0022 ppm | 0.3767 ppm | 0.0280 ppm | 0.0001 ppm | 55.7075 ppm |
| Concentration RSD | 55.3 % | 1.8 % | 54.8 % | 1.0 % | 0.8 % | 102.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0007 ppm | 0.0000 ppm | 0.0023 ppm | 0.5084 ppm | 36.5813 ppm | 0.0171 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0010 ppm | 0.0001 ppm | 0.0027 ppm | 0.5099 ppm | 36.5210 ppm | 0.0165 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0005 ppm | 0.0000 ppm | 0.0018 ppm | 0.5077 ppm | 36.6614 ppm | 0.0175 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0025 ppm | 0.5074 ppm | 36.5615 ppm | 0.0173 ppm |
| Concentration RSD | 72.5 % | 44.9 % | 545.6 % | 21.0 % | 0.3 % | 0.2 % | 3.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 113.5852 ppm | 0.0668 ppm | 0.0018 ppm | 907.7517 [SIC 500] | 0.0001 ppm | 0.0008 ppm | 0.0073 ppm |
| Concentration per Run 1 | 114.2845 ppm | 0.0663 ppm | 0.0016 ppm | 901.5171 ppm | -0.0001 ppm | 0.0008 ppm | 0.0070 ppm |
| Concentration per Run 2 | 113.4804 ppm | 0.0675 ppm | 0.0019 ppm | 909.7844 ppm | 0.0001 ppm | 0.0012 ppm | -0.0001 ppm |
| Concentration per Run 3 | 112.9909 ppm | 0.0667 ppm | 0.0020 ppm | 911.9537 ppm | 0.0004 ppm | 0.0005 ppm | 0.0149 ppm |
| Concentration RSD | 0.6 % | 0.9 % | 9.4 % | 0.6 % | 175.3 % | 41.1 % | 103.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 1.3657 ppm | 0.0003 ppm | 0.7627 ppm | 0.0064 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0024 ppm | 1.3678 ppm | 0.0001 ppm | 0.7585 ppm | 0.0066 ppm | -0.0008 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0008 ppm | 1.3744 ppm | 0.0009 ppm | 0.7634 ppm | 0.0071 ppm | 0.0014 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0037 ppm | 1.3548 ppm | -0.0001 ppm | 0.7662 ppm | 0.0055 ppm | 0.0005 ppm | 0.0008 ppm |
| Concentration RSD | 423.9 % | 0.7 % | 162.2 % | 0.5 % | 12.6 % | 297.1 % | 43.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 98.8761 % | 104.8997 % | 89.9644 % | 98.2488 % | 104.8069 % | 99.9376 % |
| Concentration per Run 1 | 0.0040 ppm | 99.2156 % | 104.8640 % | 89.6312 % | 99.1500 % | 104.8263 % | 99.3343 % |
| Concentration per Run 2 | 0.0039 ppm | 98.3365 % | 104.8464 % | 89.5496 % | 97.7459 % | 104.6277 % | 99.6667 % |
| Concentration per Run 3 | 0.0039 ppm | 99.0762 % | 104.9887 % | 90.7124 % | 97.8504 % | 104.9667 % | 100.8119 % |
| Concentration RSD | 0.9 % | 0.5 % | 0.1 % | 0.7 % | 0.8 % | 0.2 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-03 WG1974175
Analysis started at: 9/20/2024 4:28:04 PM
Rack 2
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.2129 ppm | 0.0013 ppm | 0.3702 ppm | 0.0280 ppm | 0.0001 ppm | 54.6297 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.2193 ppm | 0.0015 ppm | 0.3774 ppm | 0.0279 ppm | 0.0000 ppm | 54.6026 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.2128 ppm | -0.0010 ppm | 0.3671 ppm | 0.0279 ppm | 0.0001 ppm | 54.4336 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.2065 ppm | 0.0034 ppm | 0.3662 ppm | 0.0282 ppm | 0.0001 ppm | 54.8529 ppm |
| Concentration RSD | 69.3 % | 3.0 % | 168.6 % | 1.7 % | 0.6 % | 43.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0004 ppm | 0.0006 ppm | 0.0023 ppm | 0.3812 ppm | 35.4150 ppm | 0.0188 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0005 ppm | 0.0010 ppm | 0.0028 ppm | 0.3823 ppm | 35.3344 ppm | 0.0201 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0018 ppm | 0.3790 ppm | 35.4157 ppm | 0.0173 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0009 ppm | 0.0004 ppm | 0.0023 ppm | 0.3824 ppm | 35.4947 ppm | 0.0189 ppm |
| Concentration RSD | 8.8 % | 99.3 % | 47.4 % | 22.7 % | 0.5 % | 0.2 % | 7.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 111.0053 ppm | 0.0596 ppm | 0.0018 ppm | **878.3483 [SIC 500]** | 0.0008 ppm | -0.0011 ppm | 0.0046 ppm |
| Concentration per Run 1 | 112.0206 ppm | 0.0594 ppm | 0.0013 ppm | 876.2851 ppm | 0.0008 ppm | -0.0011 ppm | 0.0057 ppm |
| Concentration per Run 2 | 110.6764 ppm | 0.0597 ppm | 0.0021 ppm | 876.5920 ppm | 0.0020 ppm | -0.0003 ppm | 0.0039 ppm |
| Concentration per Run 3 | 110.3190 ppm | 0.0598 ppm | 0.0019 ppm | 882.1679 ppm | -0.0005 ppm | -0.0018 ppm | 0.0042 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 23.8 % | 0.4 % | 165.3 % | 70.8 % | 21.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 1.2992 ppm | -0.0009 ppm | 0.7416 ppm | 0.0045 ppm | 0.0019 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0006 ppm | 1.3182 ppm | -0.0002 ppm | 0.7421 ppm | 0.0043 ppm | 0.0019 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0064 ppm | 1.2964 ppm | -0.0015 ppm | 0.7385 ppm | 0.0046 ppm | 0.0018 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0006 ppm | 1.2831 ppm | -0.0009 ppm | 0.7443 ppm | 0.0047 ppm | 0.0019 ppm | 0.0008 ppm |
| Concentration RSD | 173.9 % | 1.4 % | 70.0 % | 0.4 % | 5.1 % | 3.4 % | 4.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 96.8831 % | 103.7559 % | 88.5847 % | 96.3784 % | 103.6208 % | 98.4364 % |
| Concentration per Run 1 | 0.0033 ppm | 96.3152 % | 104.4674 % | 88.4594 % | 96.5093 % | 104.4071 % | 98.2779 % |
| Concentration per Run 2 | 0.0030 ppm | 96.9740 % | 103.4472 % | 88.8682 % | 96.4045 % | 103.3569 % | 98.4592 % |
| Concentration per Run 3 | 0.0027 ppm | 97.3601 % | 103.3532 % | 88.4265 % | 96.2214 % | 103.0985 % | 98.5722 % |
| Concentration RSD | 10.4 % | 0.5 % | 0.6 % | 0.3 % | 0.2 % | 0.7 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-01 WG1974175
Analysis started at: 9/20/2024 4:31:59 PM
Rack 2
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.3149 ppm | 0.0019 ppm | 0.4254 ppm | 0.0284 ppm | 0.0000 ppm | 59.4134 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.3140 ppm | 0.0011 ppm | 0.4318 ppm | 0.0286 ppm | 0.0001 ppm | 59.3370 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.3130 ppm | -0.0004 ppm | 0.4192 ppm | 0.0283 ppm | 0.0000 ppm | 59.4118 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.3178 ppm | 0.0052 ppm | 0.4252 ppm | 0.0284 ppm | 0.0000 ppm | 59.4913 ppm |
| Concentration RSD | 51.1 % | 0.8 % | 149.2 % | 1.5 % | 0.4 % | 239.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0004 ppm | 0.0013 ppm | 0.0027 ppm | 0.6010 ppm | 40.5602 ppm | 0.0206 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0006 ppm | 0.0010 ppm | 0.0029 ppm | 0.6050 ppm | 40.5261 ppm | 0.0210 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0006 ppm | 0.0011 ppm | 0.0026 ppm | 0.5974 ppm | 40.6086 ppm | 0.0212 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0000 ppm | 0.0018 ppm | 0.0025 ppm | 0.6007 ppm | 40.5460 ppm | 0.0196 ppm |
| Concentration RSD | 68.2 % | 93.4 % | 35.3 % | 6.8 % | 0.6 % | 0.1 % | 4.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 126.6624 ppm | 0.0798 ppm | 0.0018 ppm | 1,010.2461 [SIC 500] | 0.0015 ppm | 0.0005 ppm | 0.0014 ppm |
| Concentration per Run 1 | 127.9824 ppm | 0.0792 ppm | 0.0015 ppm | 1,009.0477 ppm | 0.0026 ppm | 0.0004 ppm | -0.0017 ppm |
| Concentration per Run 2 | 126.4397 ppm | 0.0796 ppm | 0.0016 ppm | 1,011.1737 ppm | 0.0007 ppm | 0.0010 ppm | 0.0044 ppm |
| Concentration per Run 3 | 125.5652 ppm | 0.0805 ppm | 0.0025 ppm | 1,010.5170 ppm | 0.0012 ppm | 0.0001 ppm | 0.0015 ppm |
| Concentration RSD | 1.0 % | 0.8 % | 31.4 % | 0.1 % | 66.8 % | 89.5 % | 216.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 1.4207 ppm | -0.0017 ppm | 0.8346 ppm | 0.0067 ppm | 0.0021 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0028 ppm | 1.4403 ppm | -0.0016 ppm | 0.8360 ppm | 0.0059 ppm | 0.0015 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0016 ppm | 1.4200 ppm | -0.0013 ppm | 0.8332 ppm | 0.0060 ppm | 0.0028 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0002 ppm | 1.4020 ppm | -0.0021 ppm | 0.8344 ppm | 0.0083 ppm | 0.0019 ppm | 0.0006 ppm |
| Concentration RSD | 506.1 % | 1.3 % | 23.3 % | 0.2 % | 19.8 % | 32.2 % | 55.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 96.7445 % | 103.4536 % | 87.7209 % | 96.4212 % | 103.6325 % | 97.6725 % |
| Concentration per Run 1 | 0.0045 ppm | 96.5647 % | 103.0460 % | 87.8452 % | 96.6846 % | 103.3418 % | 98.0308 % |
| Concentration per Run 2 | 0.0045 ppm | 97.3089 % | 103.9070 % | 87.7010 % | 96.8399 % | 104.1514 % | 97.4891 % |
| Concentration per Run 3 | 0.0041 ppm | 96.3601 % | 103.4077 % | 87.6167 % | 95.7391 % | 103.4042 % | 97.4977 % |
| Concentration RSD | 6.1 % | 0.5 % | 0.4 % | 0.1 % | 0.6 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-3 WG1974175
Analysis started at: 9/20/2024 4:35:55 PM
Rack 2
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 2.3270 ppm | 0.1365 ppm | 1.3441 ppm | 1.9980 ppm | 0.0496 ppm | 67.7095 ppm |
| Concentration per Run 1 | 0.0504 ppm | 2.3285 ppm | 0.1349 ppm | 1.3463 ppm | 1.9865 ppm | 0.0493 ppm | 67.6054 ppm |
| Concentration per Run 2 | 0.0519 ppm | 2.3356 ppm | 0.1373 ppm | 1.3422 ppm | 1.9964 ppm | 0.0495 ppm | 67.6222 ppm |
| Concentration per Run 3 | 0.0507 ppm | 2.3168 ppm | 0.1375 ppm | 1.3437 ppm | 2.0112 ppm | 0.0498 ppm | 67.9008 ppm |
| Concentration RSD | 1.6 % | 0.4 % | 1.0 % | 0.2 % | 0.6 % | 0.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0511 ppm | 0.4768 ppm | 0.1932 ppm | 0.2392 ppm | 1.6004 ppm | 50.2640 ppm | 0.0205 ppm |
| Concentration per Run 1 | 0.0514 ppm | 0.4792 ppm | 0.1929 ppm | 0.2404 ppm | 1.5976 ppm | 50.0865 ppm | 0.0228 ppm |
| Concentration per Run 2 | 0.0514 ppm | 0.4769 ppm | 0.1931 ppm | 0.2383 ppm | 1.6034 ppm | 50.0291 ppm | 0.0198 ppm |
| Concentration per Run 3 | 0.0506 ppm | 0.4742 ppm | 0.1937 ppm | 0.2388 ppm | 1.6003 ppm | 50.6765 ppm | 0.0190 ppm |
| Concentration RSD | 1.0 % | 0.5 % | 0.2 % | 0.5 % | 0.2 % | 0.7 % | 9.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 133.1060 ppm | 0.5650 ppm | 0.9424 ppm | 992.6503 [SIC 500] | 0.4766 ppm | 0.5154 ppm | 0.4915 ppm |
| Concentration per Run 1 | 133.2703 ppm | 0.5645 ppm | 0.9289 ppm | 992.6555 ppm | 0.4780 ppm | 0.5137 ppm | 0.4880 ppm |
| Concentration per Run 2 | 133.4874 ppm | 0.5641 ppm | 0.9474 ppm | 991.3122 ppm | 0.4749 ppm | 0.5151 ppm | 0.4988 ppm |
| Concentration per Run 3 | 132.5603 ppm | 0.5664 ppm | 0.9509 ppm | 993.9834 ppm | 0.4770 ppm | 0.5174 ppm | 0.4876 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 1.3 % | 0.1 % | 0.3 % | 0.4 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1277 ppm | 2.4967 ppm | 0.9204 ppm | 1.7758 ppm | 1.0162 ppm | 0.1091 ppm | 0.5041 ppm |
| Concentration per Run 1 | 0.1265 ppm | 2.5080 ppm | 0.9173 ppm | 1.7682 ppm | 1.0148 ppm | 0.1101 ppm | 0.5045 ppm |
| Concentration per Run 2 | 0.1264 ppm | 2.4990 ppm | 0.9196 ppm | 1.7794 ppm | 1.0218 ppm | 0.1091 ppm | 0.5051 ppm |
| Concentration per Run 3 | 0.1300 ppm | 2.4832 ppm | 0.9243 ppm | 1.7799 ppm | 1.0119 ppm | 0.1079 ppm | 0.5026 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 0.4 % | 0.4 % | 0.5 % | 1.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5026 ppm | 97.7619 % | 104.2994 % | 89.1474 % | 96.5112 % | 104.0225 % | 98.1636 % |
| Concentration per Run 1 | 0.5020 ppm | 97.8577 % | 104.0314 % | 89.2855 % | 97.0726 % | 103.7825 % | 98.4997 % |
| Concentration per Run 2 | 0.5042 ppm | 97.8838 % | 104.5350 % | 88.7900 % | 96.4018 % | 104.3398 % | 97.6338 % |
| Concentration per Run 3 | 0.5017 ppm | 97.5442 % | 104.3318 % | 89.3666 % | 96.0591 % | 103.9451 % | 98.3573 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.2 % | 0.4 % | 0.5 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-4 WG1974175
Analysis started at: 9/20/2024 4:39:50 PM
Rack 2
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.3500 ppm | 0.0022 ppm | 0.4223 ppm | 0.0285 ppm | 0.0000 ppm | 58.3453 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.3424 ppm | 0.0017 ppm | 0.4234 ppm | 0.0287 ppm | 0.0001 ppm | 57.9798 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.3585 ppm | 0.0007 ppm | 0.4174 ppm | 0.0285 ppm | 0.0001 ppm | 58.3380 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.3492 ppm | 0.0042 ppm | 0.4261 ppm | 0.0282 ppm | 0.0000 ppm | 58.7182 ppm |
| Concentration RSD | 52.6 % | 2.3 % | 84.5 % | 1.0 % | 0.8 % | 32.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0005 ppm | 0.0008 ppm | 0.0025 ppm | 0.6707 ppm | 40.2236 ppm | 0.0200 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0001 ppm | 0.0006 ppm | 0.0025 ppm | 0.6754 ppm | 40.1930 ppm | 0.0206 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0014 ppm | 0.0006 ppm | 0.0024 ppm | 0.6667 ppm | 40.2300 ppm | 0.0194 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | 0.0012 ppm | 0.0025 ppm | 0.6700 ppm | 40.2479 ppm | 0.0201 ppm |
| Concentration RSD | 54.1 % | 175.9 % | 38.5 % | 3.5 % | 0.7 % | 0.1 % | 3.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 126.1371 ppm | 0.0795 ppm | 0.0036 ppm | 992.6812 [SIC 500] | 0.0013 ppm | 0.0002 ppm | 0.0049 ppm |
| Concentration per Run 1 | 126.6491 ppm | 0.0793 ppm | 0.0028 ppm | 985.3971 ppm | 0.0016 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration per Run 2 | 125.9929 ppm | 0.0797 ppm | 0.0040 ppm | 994.3935 ppm | 0.0015 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 3 | 125.7693 ppm | 0.0796 ppm | 0.0039 ppm | 998.2531 ppm | 0.0007 ppm | 0.0003 ppm | 0.0054 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 17.9 % | 0.7 % | 38.9 % | 110.0 % | 87.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 1.5067 ppm | 0.0057 ppm | 0.8262 ppm | 0.0087 ppm | 0.0009 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0045 ppm | 1.4928 ppm | 0.0070 ppm | 0.8270 ppm | 0.0080 ppm | 0.0025 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0021 ppm | 1.5401 ppm | 0.0048 ppm | 0.8232 ppm | 0.0090 ppm | 0.0004 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0004 ppm | 1.4871 ppm | 0.0052 ppm | 0.8285 ppm | 0.0091 ppm | -0.0003 ppm | 0.0008 ppm |
| Concentration RSD | 118.1 % | 1.9 % | 20.7 % | 0.3 % | 7.3 % | 172.3 % | 36.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 96.6850 % | 104.8675 % | 88.3701 % | 95.9756 % | 104.3863 % | 98.3803 % |
| Concentration per Run 1 | 0.0049 ppm | 96.0196 % | 105.7727 % | 87.2323 % | 95.8375 % | 104.8415 % | 97.3960 % |
| Concentration per Run 2 | 0.0044 ppm | 97.0240 % | 104.9487 % | 88.9796 % | 96.2195 % | 104.8089 % | 99.0804 % |
| Concentration per Run 3 | 0.0045 ppm | 97.0114 % | 103.8811 % | 88.8985 % | 95.8697 % | 103.5085 % | 98.6644 % |
| Concentration RSD | 5.8 % | 0.6 % | 0.9 % | 1.1 % | 0.2 % | 0.7 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-5 WG1974175
Analysis started at: 9/20/2024 4:43:45 PM
Rack 2
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0491 ppm | 2.2953 ppm | 0.1353 ppm | 1.3508 ppm | 1.9952 ppm | 0.0497 ppm | 67.3878 ppm |
| Concentration per Run 1 | 0.0493 ppm | 2.3003 ppm | 0.1320 ppm | 1.3559 ppm | 1.9910 ppm | 0.0494 ppm | 67.3137 ppm |
| Concentration per Run 2 | 0.0493 ppm | 2.2948 ppm | 0.1375 ppm | 1.3548 ppm | 1.9945 ppm | 0.0498 ppm | 67.5394 ppm |
| Concentration per Run 3 | 0.0488 ppm | 2.2908 ppm | 0.1363 ppm | 1.3419 ppm | 2.0001 ppm | 0.0499 ppm | 67.3104 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 2.1 % | 0.6 % | 0.2 % | 0.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0505 ppm | 0.4732 ppm | 0.1930 ppm | 0.2394 ppm | 1.5709 ppm | 49.9885 ppm | 0.0199 ppm |
| Concentration per Run 1 | 0.0516 ppm | 0.4776 ppm | 0.1936 ppm | 0.2406 ppm | 1.5663 ppm | 49.9894 ppm | 0.0217 ppm |
| Concentration per Run 2 | 0.0504 ppm | 0.4739 ppm | 0.1936 ppm | 0.2402 ppm | 1.5669 ppm | 49.8503 ppm | 0.0186 ppm |
| Concentration per Run 3 | 0.0494 ppm | 0.4679 ppm | 0.1919 ppm | 0.2374 ppm | 1.5794 ppm | 50.1257 ppm | 0.0195 ppm |
| Concentration RSD | 2.1 % | 1.0 % | 0.5 % | 0.7 % | 0.5 % | 0.3 % | 7.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 131.5242 ppm | 0.5659 ppm | 0.9514 ppm | 982.9809 [SIC 500] | 0.4759 ppm | 0.5200 ppm | 0.3716 ppm |
| Concentration per Run 1 | 131.8725 ppm | 0.5643 ppm | 0.9412 ppm | 979.7566 ppm | 0.4797 ppm | 0.5165 ppm | 0.3594 ppm |
| Concentration per Run 2 | 131.6003 ppm | 0.5661 ppm | 0.9525 ppm | 986.2409 ppm | 0.4758 ppm | 0.5220 ppm | 0.3652 ppm |
| Concentration per Run 3 | 131.0999 ppm | 0.5673 ppm | 0.9606 ppm | 982.9451 ppm | 0.4721 ppm | 0.5215 ppm | 0.3901 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.0 % | 0.3 % | 0.8 % | 0.6 % | 4.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1297 ppm | 2.3046 ppm | 0.9491 ppm | 1.7833 ppm | 1.0299 ppm | 0.1090 ppm | 0.5020 ppm |
| Concentration per Run 1 | 0.1349 ppm | 2.3249 ppm | 0.9522 ppm | 1.7762 ppm | 1.0320 ppm | 0.1091 ppm | 0.5048 ppm |
| Concentration per Run 2 | 0.1281 ppm | 2.3099 ppm | 0.9519 ppm | 1.7835 ppm | 1.0301 ppm | 0.1091 ppm | 0.5005 ppm |
| Concentration per Run 3 | 0.1260 ppm | 2.2790 ppm | 0.9434 ppm | 1.7902 ppm | 1.0277 ppm | 0.1089 ppm | 0.5007 ppm |
| Concentration RSD | 3.6 % | 1.0 % | 0.5 % | 0.4 % | 0.2 % | 0.1 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5001 ppm | 97.5785 % | 104.1902 % | 88.4758 % | 96.3727 % | 103.8686 % | 97.2550 % |
| Concentration per Run 1 | 0.5025 ppm | 96.5605 % | 104.0810 % | 88.8410 % | 95.8512 % | 103.5586 % | 97.4195 % |
| Concentration per Run 2 | 0.5018 ppm | 97.8711 % | 104.4302 % | 88.5102 % | 96.6274 % | 104.7078 % | 97.5418 % |
| Concentration per Run 3 | 0.4961 ppm | 98.3041 % | 104.0594 % | 88.0761 % | 96.6396 % | 103.3395 % | 96.8036 % |
| Concentration RSD | 0.7 % | 0.9 % | 0.2 % | 0.4 % | 0.5 % | 0.7 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974175-6d5 WG1974175
Analysis started at: 9/20/2024 4:47:40 PM
Rack 2
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0721 ppm | 0.0011 ppm | 0.0879 ppm | 0.0057 ppm | 0.0001 ppm | 11.7113 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0819 ppm | -0.0001 ppm | 0.0896 ppm | 0.0058 ppm | 0.0001 ppm | 11.7329 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0698 ppm | 0.0028 ppm | 0.0887 ppm | 0.0055 ppm | 0.0000 ppm | 11.6577 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0646 ppm | 0.0007 ppm | 0.0852 ppm | 0.0058 ppm | 0.0001 ppm | 11.7434 ppm |
| Concentration RSD | 10.7 % | 12.3 % | 130.5 % | 2.6 % | 3.5 % | 26.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.1177 ppm | 7.7962 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0001 ppm | 0.0007 ppm | 0.1158 ppm | 7.8556 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | -0.0004 ppm | 0.0008 ppm | 0.1182 ppm | 7.7886 ppm | 0.0055 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | 0.0002 ppm | 0.0002 ppm | 0.1192 ppm | 7.7444 ppm | 0.0039 ppm |
| Concentration RSD | 824.3 % | 305.9 % | 793.3 % | 62.5 % | 1.5 % | 0.7 % | 18.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 24.7474 ppm | 0.0158 ppm | 0.0025 ppm | 199.7070 ppm | 0.0001 ppm | -0.0006 ppm | 0.0108 ppm |
| Concentration per Run 1 | 24.8665 ppm | 0.0156 ppm | 0.0026 ppm | 200.0822 ppm | -0.0005 ppm | -0.0009 ppm | 0.0107 ppm |
| Concentration per Run 2 | 24.8490 ppm | 0.0155 ppm | 0.0026 ppm | 198.7549 ppm | 0.0007 ppm | 0.0004 ppm | 0.0143 ppm |
| Concentration per Run 3 | 24.5266 ppm | 0.0163 ppm | 0.0022 ppm | 200.2840 ppm | 0.0002 ppm | -0.0014 ppm | 0.0074 ppm |
| Concentration RSD | 0.8 % | 2.4 % | 9.1 % | 0.4 % | 480.8 % | 144.4 % | 32.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.2601 ppm | 0.0106 ppm | 0.1627 ppm | 0.0013 ppm | 0.0013 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.2650 ppm | 0.0113 ppm | 0.1624 ppm | 0.0014 ppm | 0.0019 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.2604 ppm | 0.0113 ppm | 0.1627 ppm | 0.0010 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0049 ppm | 0.2549 ppm | 0.0092 ppm | 0.1631 ppm | 0.0015 ppm | 0.0022 ppm | -0.0002 ppm |
| Concentration RSD | 424.3 % | 1.9 % | 11.4 % | 0.2 % | 19.8 % | 91.6 % | 208.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 107.1587 % | 108.2472 % | 100.1302 % | 106.3583 % | 108.0118 % | 105.6499 % |
| Concentration per Run 1 | 0.0015 ppm | 107.6611 % | 107.9532 % | 101.0134 % | 106.7711 % | 107.7756 % | 106.5246 % |
| Concentration per Run 2 | 0.0014 ppm | 106.0700 % | 108.6442 % | 99.5868 % | 105.4784 % | 108.0458 % | 105.0339 % |
| Concentration per Run 3 | 0.0012 ppm | 107.7452 % | 108.1442 % | 99.7904 % | 106.8254 % | 108.2139 % | 105.3913 % |
| Concentration RSD | 10.9 % | 0.9 % | 0.3 % | 0.8 % | 0.7 % | 0.2 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 4:51:36 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4978 ppm | 0.4687 ppm | 0.4708 ppm | 0.4868 ppm | 0.4864 ppm | 0.4959 ppm | 0.4781 ppm |
| Concentration per Run 1 | 0.4962 ppm | 0.4676 ppm | 0.4704 ppm | 0.4888 ppm | 0.4879 ppm | 0.4976 ppm | 0.4758 ppm |
| Concentration per Run 2 | 0.4975 ppm | 0.4564 ppm | 0.4733 ppm | 0.4836 ppm | 0.4901 ppm | 0.4961 ppm | 0.4817 ppm |
| Concentration per Run 3 | 0.4998 ppm | 0.4821 ppm | 0.4687 ppm | 0.4881 ppm | 0.4813 ppm | 0.4940 ppm | 0.4767 ppm |
| Recovery Percentage 1 | 99.563 % | 93.738 % | 94.158 % | 97.367 % | 97.287 % | 99.181 % | 95.610 % |
| Concentration RSD | 0.4 % | 2.8 % | 0.5 % | 0.6 % | 0.9 % | 0.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4863 ppm | 0.4970 ppm | 0.4766 ppm | 0.4846 ppm | 0.4837 ppm | 5.0594 ppm | 0.4863 ppm |
| Concentration per Run 1 | 0.4823 ppm | 0.4939 ppm | 0.4738 ppm | 0.4814 ppm | 0.4859 ppm | 5.1064 ppm | 0.4877 ppm |
| Concentration per Run 2 | 0.4869 ppm | 0.4973 ppm | 0.4755 ppm | 0.4844 ppm | 0.4817 ppm | 5.0636 ppm | 0.4878 ppm |
| Concentration per Run 3 | 0.4898 ppm | 0.4999 ppm | 0.4806 ppm | 0.4881 ppm | 0.4835 ppm | 5.0083 ppm | 0.4834 ppm |
| Recovery Percentage 1 | 97.268 % | 99.406 % | 95.319 % | 96.930 % | 96.739 % | 101.189 % | 97.264 % |
| Concentration RSD | 0.8 % | 0.6 % | 0.7 % | 0.7 % | 0.4 % | 1.0 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4770 ppm | 0.4755 ppm | 0.4763 ppm | 9.7668 ppm | 0.4963 ppm | 0.4855 ppm | 0.4972 ppm |
| Concentration per Run 1 | 0.4754 ppm | 0.4750 ppm | 0.4728 ppm | 9.7622 ppm | 0.4955 ppm | 0.4879 ppm | 0.4924 ppm |
| Concentration per Run 2 | 0.4768 ppm | 0.4755 ppm | 0.4757 ppm | 9.7911 ppm | 0.4947 ppm | 0.4866 ppm | 0.4961 ppm |
| Concentration per Run 3 | 0.4789 ppm | 0.4760 ppm | 0.4803 ppm | 9.7471 ppm | 0.4985 ppm | 0.4819 ppm | 0.5032 ppm |
| Recovery Percentage 1 | 95.405 % | 95.101 % | 95.254 % | 97.668 % | 99.255 % | 97.098 % | 99.449 % |
| Concentration RSD | 0.4 % | 0.1 % | 0.8 % | 0.2 % | 0.4 % | 0.6 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4825 ppm | 5.2620 ppm | 0.4722 ppm | 0.4673 ppm | 0.4845 ppm | 0.4857 ppm | 0.4760 ppm |
| Concentration per Run 1 | 0.4825 ppm | 5.2245 ppm | 0.4716 ppm | 0.4675 ppm | 0.4827 ppm | 0.4870 ppm | 0.4737 ppm |
| Concentration per Run 2 | 0.4817 ppm | 5.2583 ppm | 0.4694 ppm | 0.4705 ppm | 0.4849 ppm | 0.4859 ppm | 0.4764 ppm |
| Concentration per Run 3 | 0.4832 ppm | 5.3033 ppm | 0.4756 ppm | 0.4639 ppm | 0.4860 ppm | 0.4841 ppm | 0.4779 ppm |
| Recovery Percentage 1 | 96.492 % | 100.229 % | 94.435 % | 93.455 % | 96.901 % | 97.140 % | 95.205 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.7 % | 0.7 % | 0.3 % | 0.3 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4921 ppm | 111.2857 % | 107.7629 % | 108.9535 % | 110.4247 % | 107.5766 % | 108.7601 % |
| Concentration per Run 1 | 0.4912 ppm | 111.2791 % | 107.7653 % | 108.1771 % | 110.2559 % | 107.5624 % | 108.1041 % |
| Concentration per Run 2 | 0.4899 ppm | 111.5506 % | 107.3070 % | 109.0655 % | 110.6934 % | 107.3651 % | 109.2569 % |
| Concentration per Run 3 | 0.4950 ppm | 111.0274 % | 108.2165 % | 109.6180 % | 110.3247 % | 107.8021 % | 108.9193 % |
| Recovery Percentage 1 | 98.410 % | | | | | | |
| Concentration RSD | 0.5 % | 0.2 % | 0.4 % | 0.7 % | 0.2 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 4:55:30 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | -0.0012 ppm | 0.0002 ppm | 0.0020 ppm | -0.0001 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0029 ppm | -0.0024 ppm | 0.0021 ppm | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0118 ppm | 0.0019 ppm | 0.0037 ppm | -0.0002 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0052 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0011 ppm |
| Recovery Percentage 1 | 13.859 % | -1.236 % | 3.868 % | 6.594 % | -1.049 % | -0.370 % | 0.393 % |
| Concentration RSD | 26.4 % | 749.3 % | 1,188.8 % | 91.1 % | 126.0 % | 106.2 % | 329.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0003 ppm | -0.0009 ppm | -0.0001 ppm | -0.0015 ppm | 0.0246 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0008 ppm | -0.0005 ppm | -0.0023 ppm | 0.0040 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0006 ppm | -0.0008 ppm | 0.0004 ppm | -0.0016 ppm | 0.0281 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0007 ppm | -0.0009 ppm | -0.0002 ppm | -0.0004 ppm | 0.0416 ppm | 0.0015 ppm |
| Recovery Percentage 1 | 1.198 % | -1.563 % | -8.592 % | -1.263 % | -2.901 % | 0.982 % | 23.461 % |
| Concentration RSD | 271.5 % | 184.1 % | 8.7 % | 362.0 % | 65.3 % | 77.4 % | 30.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0000 ppm | 0.0010 ppm | -0.0819 ppm | -0.0008 ppm | -0.0006 ppm | 0.0040 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0002 ppm | 0.0010 ppm | -0.0735 ppm | -0.0004 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0016 ppm | -0.0001 ppm | 0.0012 ppm | -0.0875 ppm | -0.0013 ppm | -0.0010 ppm | 0.0049 ppm |
| Concentration per Run 3 | 0.0016 ppm | -0.0002 ppm | 0.0009 ppm | -0.0847 ppm | -0.0009 ppm | -0.0011 ppm | 0.0072 ppm |
| Recovery Percentage 1 | -0.538 % | -0.184 % | 2.078 % | -4.095 % | -3.342 % | -6.046 % | 7.939 % |
| Concentration RSD | 351.8 % | 1,180.6 % | 19.0 % | 9.0 % | 52.3 % | 121.8 % | 93.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0048 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0067 ppm | 0.0006 ppm | 0.0000 ppm | -0.0002 ppm | -0.0012 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0020 ppm | -0.0042 ppm | 0.0010 ppm | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0010 ppm | -0.0035 ppm | 0.0012 ppm | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -8.924 % | -0.957 % | 1.870 % | -0.176 % | -0.491 % | -1.155 % | -2.547 % |
| Concentration RSD | 130.5 % | 35.0 % | 32.2 % | 149.9 % | 674.8 % | 358.0 % | 33.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 111.0022 % | 108.4152 % | 109.2505 % | 112.0237 % | 108.8569 % | 110.0260 % |
| Concentration per Run 1 | -0.0001 ppm | 110.4397 % | 107.9109 % | 109.0373 % | 111.7527 % | 108.9233 % | 109.9101 % |
| Concentration per Run 2 | 0.0003 ppm | 111.3035 % | 108.3371 % | 109.1524 % | 112.2963 % | 108.6169 % | 110.1631 % |
| Concentration per Run 3 | 0.0004 ppm | 111.2634 % | 108.9976 % | 109.5617 % | 112.0220 % | 109.0304 % | 110.0049 % |
| Recovery Percentage 1 | 4.306 % | | | | | | |
| Concentration RSD | 112.0 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-04 WG1974175
Analysis started at: 9/20/2024 5:03:05 PM
Rack 2
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.4745 ppm | 0.0032 ppm | 0.4203 ppm | 0.0284 ppm | 0.0000 ppm | 57.8279 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.4804 ppm | 0.0019 ppm | 0.4210 ppm | 0.0282 ppm | 0.0000 ppm | 57.7759 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.4807 ppm | 0.0023 ppm | 0.4218 ppm | 0.0288 ppm | 0.0001 ppm | 57.8142 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.4626 ppm | 0.0054 ppm | 0.4180 ppm | 0.0281 ppm | 0.0001 ppm | 57.8935 ppm |
| Concentration RSD | 36.5 % | 2.2 % | 59.6 % | 0.5 % | 1.2 % | 220.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0004 ppm | 0.0006 ppm | 0.0028 ppm | 0.9241 ppm | 39.5137 ppm | 0.0203 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0008 ppm | 0.0003 ppm | 0.0032 ppm | 0.9267 ppm | 39.5152 ppm | 0.0213 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0001 ppm | 0.0005 ppm | 0.0026 ppm | 0.9254 ppm | 39.6250 ppm | 0.0206 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | 0.0009 ppm | 0.0024 ppm | 0.9201 ppm | 39.4009 ppm | 0.0188 ppm |
| Concentration RSD | 37.7 % | 87.6 % | 54.6 % | 15.7 % | 0.4 % | 0.3 % | 6.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 123.8697 ppm | 0.0958 ppm | 0.0019 ppm | 979.1291 [SIC 500] | 0.0010 ppm | 0.0011 ppm | 0.0071 ppm |
| Concentration per Run 1 | 123.5736 ppm | 0.0959 ppm | 0.0022 ppm | 980.5339 ppm | 0.0014 ppm | 0.0033 ppm | 0.0074 ppm |
| Concentration per Run 2 | 124.1740 ppm | 0.0959 ppm | 0.0017 ppm | 974.4480 ppm | 0.0013 ppm | 0.0000 ppm | 0.0060 ppm |
| Concentration per Run 3 | 123.8615 ppm | 0.0954 ppm | 0.0019 ppm | 982.4055 ppm | 0.0005 ppm | 0.0000 ppm | 0.0080 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 13.9 % | 0.4 % | 49.6 % | 176.4 % | 14.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 1.6131 ppm | 0.0001 ppm | 0.8124 ppm | 0.0091 ppm | 0.0006 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0014 ppm | 1.6368 ppm | 0.0002 ppm | 0.8117 ppm | 0.0090 ppm | 0.0004 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0028 ppm | 1.5875 ppm | 0.0007 ppm | 0.8141 ppm | 0.0088 ppm | -0.0002 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0036 ppm | 1.6149 ppm | -0.0006 ppm | 0.8116 ppm | 0.0096 ppm | 0.0017 ppm | 0.0010 ppm |
| Concentration RSD | 448.8 % | 1.5 % | 512.8 % | 0.2 % | 4.9 % | 151.8 % | 6.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 94.4556 % | 103.5765 % | 86.9237 % | 91.3018 % | 102.3105 % | 94.5376 % |
| Concentration per Run 1 | 0.0061 ppm | 94.7797 % | 103.3392 % | 87.5590 % | 91.7359 % | 102.5890 % | 95.1553 % |
| Concentration per Run 2 | 0.0058 ppm | 93.7636 % | 103.9903 % | 86.6181 % | 90.7460 % | 102.3996 % | 94.3902 % |
| Concentration per Run 3 | 0.0059 ppm | 94.8234 % | 103.4000 % | 86.5939 % | 91.4236 % | 101.9431 % | 94.0672 % |
| Concentration RSD | 2.5 % | 0.6 % | 0.3 % | 0.6 % | 0.6 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-05 WG1974175
Analysis started at: 9/20/2024 5:07:17 PM
Rack 2
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.4663 ppm | 0.0020 ppm | 0.4319 ppm | 0.0295 ppm | 0.0000 ppm | 60.4493 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.4566 ppm | 0.0029 ppm | 0.4329 ppm | 0.0297 ppm | 0.0000 ppm | 60.4351 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.4536 ppm | 0.0024 ppm | 0.4369 ppm | 0.0293 ppm | 0.0001 ppm | 60.5602 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.4887 ppm | 0.0005 ppm | 0.4258 ppm | 0.0294 ppm | 0.0000 ppm | 60.3526 ppm |
| Concentration RSD | 8.7 % | 4.2 % | 65.8 % | 1.3 % | 0.7 % | 48.7 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0004 ppm | 0.0011 ppm | 0.0031 ppm | 0.8955 ppm | 41.4299 ppm | 0.0212 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0004 ppm | 0.0012 ppm | 0.0031 ppm | 0.8922 ppm | 41.5709 ppm | 0.0209 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0001 ppm | 0.0015 ppm | 0.0033 ppm | 0.8945 ppm | 41.3753 ppm | 0.0206 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0006 ppm | 0.0006 ppm | 0.0030 ppm | 0.8999 ppm | 41.3435 ppm | 0.0219 ppm |
| Concentration RSD | 81.3 % | 64.6 % | 40.5 % | 5.0 % | 0.4 % | 0.3 % | 3.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 129.7726 ppm | 0.0956 ppm | 0.0021 ppm | 1,024.5972 [SIC 500] | 0.0016 ppm | 0.0011 ppm | 0.0070 ppm |
| Concentration per Run 1 | 130.2921 ppm | 0.0958 ppm | 0.0023 ppm | 1,020.5983 ppm | 0.0015 ppm | -0.0005 ppm | 0.0044 ppm |
| Concentration per Run 2 | 130.1445 ppm | 0.0956 ppm | 0.0023 ppm | 1,027.6042 ppm | 0.0021 ppm | 0.0011 ppm | 0.0061 ppm |
| Concentration per Run 3 | 128.8813 ppm | 0.0955 ppm | 0.0016 ppm | 1,025.5890 ppm | 0.0011 ppm | 0.0027 ppm | 0.0106 ppm |
| Concentration RSD | 0.6 % | 0.1 % | 20.4 % | 0.4 % | 31.9 % | 144.3 % | 45.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 1.6298 ppm | -0.0004 ppm | 0.8468 ppm | 0.0092 ppm | 0.0009 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0023 ppm | 1.6142 ppm | -0.0014 ppm | 0.8452 ppm | 0.0099 ppm | 0.0021 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0017 ppm | 1.6446 ppm | 0.0004 ppm | 0.8471 ppm | 0.0092 ppm | -0.0009 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0037 ppm | 1.6305 ppm | -0.0001 ppm | 0.8482 ppm | 0.0084 ppm | 0.0015 ppm | 0.0007 ppm |
| Concentration RSD | 4,224.5 % | 0.9 % | 242.4 % | 0.2 % | 8.2 % | 181.5 % | 20.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 95.4124 % | 102.6431 % | 86.8837 % | 94.8224 % | 102.4834 % | 96.8132 % |
| Concentration per Run 1 | 0.0054 ppm | 95.1227 % | 101.5352 % | 86.8054 % | 94.9515 % | 101.4294 % | 96.9194 % |
| Concentration per Run 2 | 0.0058 ppm | 94.7576 % | 102.9660 % | 86.8862 % | 94.4319 % | 103.0405 % | 96.9658 % |
| Concentration per Run 3 | 0.0054 ppm | 96.3570 % | 103.4280 % | 86.9596 % | 95.0838 % | 102.9802 % | 96.5544 % |
| Concentration RSD | 4.3 % | 0.9 % | 1.0 % | 0.1 % | 0.4 % | 0.9 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-06 WG1974175
Analysis started at: 9/20/2024 5:11:13 PM
Rack 2
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.3439 ppm | 0.0004 ppm | 0.3867 ppm | 0.0293 ppm | 0.0000 ppm | 58.7722 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.3392 ppm | 0.0003 ppm | 0.3921 ppm | 0.0295 ppm | 0.0000 ppm | 58.8134 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.3494 ppm | 0.0004 ppm | 0.3850 ppm | 0.0293 ppm | 0.0000 ppm | 58.4526 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.3430 ppm | 0.0005 ppm | 0.3832 ppm | 0.0291 ppm | 0.0001 ppm | 59.0504 ppm |
| Concentration RSD | 113.1 % | 1.5 % | 17.7 % | 1.2 % | 0.7 % | 394.1 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0008 ppm | 0.0006 ppm | 0.0024 ppm | 0.6205 ppm | 36.9299 ppm | 0.0185 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0001 ppm | 0.0011 ppm | 0.0026 ppm | 0.6220 ppm | 36.8834 ppm | 0.0176 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0024 ppm | 0.6215 ppm | 36.9585 ppm | 0.0191 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0016 ppm | 0.0005 ppm | 0.0024 ppm | 0.6179 ppm | 36.9478 ppm | 0.0188 ppm |
| Concentration RSD | 89.1 % | 91.3 % | 100.8 % | 4.2 % | 0.4 % | 0.1 % | 4.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 115.2341 ppm | 0.0730 ppm | 0.0014 ppm | 911.2612 [SIC 500] | 0.0014 ppm | -0.0001 ppm | 0.0051 ppm |
| Concentration per Run 1 | 115.9385 ppm | 0.0733 ppm | 0.0014 ppm | 912.2962 ppm | 0.0025 ppm | 0.0013 ppm | 0.0037 ppm |
| Concentration per Run 2 | 115.4747 ppm | 0.0728 ppm | 0.0013 ppm | 909.0855 ppm | 0.0009 ppm | 0.0000 ppm | 0.0044 ppm |
| Concentration per Run 3 | 114.2891 ppm | 0.0730 ppm | 0.0016 ppm | 912.4018 ppm | 0.0010 ppm | -0.0016 ppm | 0.0073 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 8.4 % | 0.2 % | 63.5 % | 1,197.5 % | 37.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 1.4871 ppm | -0.0008 ppm | 0.7699 ppm | 0.0077 ppm | 0.0006 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0002 ppm | 1.4971 ppm | -0.0014 ppm | 0.7677 ppm | 0.0063 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0019 ppm | 1.4883 ppm | -0.0005 ppm | 0.7691 ppm | 0.0081 ppm | 0.0008 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0010 ppm | 1.4758 ppm | -0.0005 ppm | 0.7728 ppm | 0.0085 ppm | 0.0008 ppm | 0.0002 ppm |
| Concentration RSD | 403.5 % | 0.7 % | 66.5 % | 0.3 % | 15.6 % | 71.1 % | 89.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0045 ppm | 95.6952 % | 103.3475 % | 88.2627 % | 95.4426 % | 103.0695 % | 97.8736 % |
| Concentration per Run 1 | 0.0048 ppm | 94.0917 % | 103.1366 % | 88.2652 % | 94.7371 % | 103.0604 % | 98.2275 % |
| Concentration per Run 2 | 0.0046 ppm | 96.3676 % | 103.3126 % | 87.7016 % | 95.9990 % | 102.9558 % | 97.1278 % |
| Concentration per Run 3 | 0.0042 ppm | 96.6264 % | 103.5932 % | 88.8212 % | 95.5918 % | 103.1922 % | 98.2654 % |
| Concentration RSD | 6.7 % | 1.5 % | 0.2 % | 0.6 % | 0.7 % | 0.1 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-10 WG1974175
Analysis started at: 9/20/2024 5:15:10 PM
Rack 2
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.3313 ppm | 0.0024 ppm | 0.5731 ppm | 0.0280 ppm | 0.0000 ppm | 71.7025 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.3471 ppm | 0.0046 ppm | 0.5803 ppm | 0.0279 ppm | 0.0001 ppm | 71.9436 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.3305 ppm | 0.0021 ppm | 0.5674 ppm | 0.0278 ppm | 0.0000 ppm | 71.4521 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.3163 ppm | 0.0005 ppm | 0.5717 ppm | 0.0284 ppm | 0.0000 ppm | 71.7117 ppm |
| Concentration RSD | 190.3 % | 4.6 % | 85.9 % | 1.1 % | 1.3 % | 18.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0004 ppm | 0.0007 ppm | 0.0023 ppm | 0.6342 ppm | 55.0493 ppm | 0.0265 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0009 ppm | 0.0013 ppm | 0.0026 ppm | 0.6388 ppm | 54.7112 ppm | 0.0279 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0006 ppm | 0.0001 ppm | 0.0018 ppm | 0.6235 ppm | 55.1608 ppm | 0.0267 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0002 ppm | 0.0007 ppm | 0.0024 ppm | 0.6403 ppm | 55.2759 ppm | 0.0250 ppm |
| Concentration RSD | 10.7 % | 132.1 % | 86.5 % | 18.0 % | 1.5 % | 0.5 % | 5.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 172.9420 ppm | 0.0951 ppm | 0.0024 ppm | 1,337.5967 [SIC 500] | 0.0009 ppm | 0.0004 ppm | 0.0008 ppm |
| Concentration per Run 1 | 174.4842 ppm | 0.0951 ppm | 0.0024 ppm | 1,346.6822 ppm | 0.0013 ppm | 0.0001 ppm | 0.0024 ppm |
| Concentration per Run 2 | 172.5138 ppm | 0.0947 ppm | 0.0024 ppm | 1,330.6073 ppm | 0.0012 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 3 | 171.8281 ppm | 0.0954 ppm | 0.0024 ppm | 1,335.5006 ppm | 0.0003 ppm | 0.0010 ppm | -0.0007 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 0.6 % | 0.6 % | 62.1 % | 158.0 % | 207.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 1.4611 ppm | 0.0003 ppm | 1.0859 ppm | 0.0071 ppm | 0.0015 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0034 ppm | 1.4751 ppm | 0.0000 ppm | 1.0883 ppm | 0.0070 ppm | 0.0013 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0065 ppm | 1.4567 ppm | 0.0002 ppm | 1.0751 ppm | 0.0066 ppm | 0.0022 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0040 ppm | 1.4516 ppm | 0.0008 ppm | 1.0943 ppm | 0.0079 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration RSD | 35.1 % | 0.8 % | 136.3 % | 0.9 % | 9.5 % | 42.3 % | 44.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 95.1144 % | 104.4156 % | 85.7105 % | 94.5563 % | 103.7792 % | 96.0640 % |
| Concentration per Run 1 | 0.0048 ppm | 94.3331 % | 104.0955 % | 85.4986 % | 94.1310 % | 104.0030 % | 96.0655 % |
| Concentration per Run 2 | 0.0045 ppm | 95.5528 % | 104.6057 % | 85.9133 % | 95.0629 % | 103.6884 % | 96.2599 % |
| Concentration per Run 3 | 0.0044 ppm | 95.4574 % | 104.5455 % | 85.7196 % | 94.4751 % | 103.6463 % | 95.8666 % |
| Concentration RSD | 4.4 % | 0.7 % | 0.3 % | 0.2 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-11 WG1974175
Analysis started at: 9/20/2024 5:19:07 PM
Rack 2
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.3735 ppm | 0.0015 ppm | 0.5662 ppm | 0.0274 ppm | 0.0001 ppm | 70.9278 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.3679 ppm | 0.0004 ppm | 0.5664 ppm | 0.0274 ppm | 0.0000 ppm | 71.1518 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.3738 ppm | 0.0044 ppm | 0.5684 ppm | 0.0271 ppm | 0.0001 ppm | 70.9147 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.3787 ppm | -0.0002 ppm | 0.5638 ppm | 0.0276 ppm | 0.0001 ppm | 70.7167 ppm |
| Concentration RSD | 153.7 % | 1.5 % | 163.3 % | 0.4 % | 0.8 % | 47.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0009 ppm | 0.0006 ppm | 0.0026 ppm | 0.7371 ppm | 55.0534 ppm | 0.0258 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0006 ppm | 0.0006 ppm | 0.0025 ppm | 0.7386 ppm | 55.1688 ppm | 0.0259 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0011 ppm | 0.0009 ppm | 0.0025 ppm | 0.7345 ppm | 55.0670 ppm | 0.0256 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0010 ppm | 0.0002 ppm | 0.0027 ppm | 0.7381 ppm | 54.9244 ppm | 0.0259 ppm |
| Concentration RSD | 28.4 % | 31.8 % | 57.6 % | 5.1 % | 0.3 % | 0.2 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 172.6044 ppm | 0.0978 ppm | 0.0015 ppm | 1,339.8560 [SIC 500] | 0.0012 ppm | -0.0006 ppm | 0.0030 ppm |
| Concentration per Run 1 | 173.4341 ppm | 0.0983 ppm | 0.0026 ppm | 1,340.3226 ppm | 0.0018 ppm | -0.0005 ppm | 0.0026 ppm |
| Concentration per Run 2 | 172.7406 ppm | 0.0972 ppm | 0.0010 ppm | 1,342.5876 ppm | 0.0010 ppm | 0.0002 ppm | 0.0049 ppm |
| Concentration per Run 3 | 171.6386 ppm | 0.0979 ppm | 0.0008 ppm | 1,336.6579 ppm | 0.0009 ppm | -0.0015 ppm | 0.0015 ppm |
| Concentration RSD | 0.5 % | 0.6 % | 65.9 % | 0.2 % | 38.3 % | 149.8 % | 57.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 1.4976 ppm | -0.0012 ppm | 1.0829 ppm | 0.0077 ppm | 0.0003 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0070 ppm | 1.5006 ppm | -0.0014 ppm | 1.0868 ppm | 0.0075 ppm | 0.0016 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0007 ppm | 1.5055 ppm | -0.0017 ppm | 1.0831 ppm | 0.0076 ppm | -0.0022 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0013 ppm | 1.4866 ppm | -0.0005 ppm | 1.0789 ppm | 0.0079 ppm | 0.0016 ppm | 0.0011 ppm |
| Concentration RSD | 274.7 % | 0.7 % | 49.1 % | 0.4 % | 2.6 % | 644.9 % | 21.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 95.6117 % | 104.6292 % | 85.8187 % | 94.7984 % | 104.0987 % | 96.3282 % |
| Concentration per Run 1 | 0.0050 ppm | 95.4815 % | 104.4976 % | 85.6717 % | 95.4390 % | 104.5301 % | 96.2032 % |
| Concentration per Run 2 | 0.0050 ppm | 95.4871 % | 104.4977 % | 86.3877 % | 94.4175 % | 103.9124 % | 97.2369 % |
| Concentration per Run 3 | 0.0053 ppm | 95.8666 % | 104.8922 % | 85.3966 % | 94.5387 % | 103.8536 % | 95.5445 % |
| Concentration RSD | 3.5 % | 0.2 % | 0.2 % | 0.6 % | 0.6 % | 0.4 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-12 WG1974175
Analysis started at: 9/20/2024 5:23:04 PM
Rack 2
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.1897 ppm | 0.0042 ppm | 0.5788 ppm | 0.0270 ppm | 0.0000 ppm | 71.6308 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.1865 ppm | 0.0058 ppm | 0.5799 ppm | 0.0271 ppm | 0.0000 ppm | 71.4215 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.1945 ppm | 0.0018 ppm | 0.5756 ppm | 0.0271 ppm | 0.0000 ppm | 71.8804 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.1880 ppm | 0.0050 ppm | 0.5807 ppm | 0.0269 ppm | 0.0001 ppm | 71.5906 ppm |
| Concentration RSD | 44.9 % | 2.2 % | 50.1 % | 0.5 % | 0.5 % | 118.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0007 ppm | 0.0005 ppm | 0.0019 ppm | 0.3434 ppm | 55.8290 ppm | 0.0257 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0002 ppm | 0.0008 ppm | 0.0019 ppm | 0.3474 ppm | 56.1990 ppm | 0.0262 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0006 ppm | 0.0002 ppm | 0.0020 ppm | 0.3398 ppm | 55.7419 ppm | 0.0260 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0014 ppm | 0.0006 ppm | 0.0019 ppm | 0.3430 ppm | 55.5462 ppm | 0.0248 ppm |
| Concentration RSD | 68.7 % | 88.4 % | 59.5 % | 2.1 % | 1.1 % | 0.6 % | 3.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 173.7685 ppm | 0.0792 ppm | 0.0017 ppm | 1,344.8005 [SIC 500] | 0.0010 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration per Run 1 | 174.8021 ppm | 0.0794 ppm | 0.0018 ppm | 1,342.9379 ppm | 0.0011 ppm | -0.0007 ppm | 0.0022 ppm |
| Concentration per Run 2 | 173.3895 ppm | 0.0789 ppm | 0.0021 ppm | 1,347.3390 ppm | 0.0005 ppm | 0.0006 ppm | -0.0013 ppm |
| Concentration per Run 3 | 173.1138 ppm | 0.0794 ppm | 0.0013 ppm | 1,344.1247 ppm | 0.0013 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 23.5 % | 0.2 % | 42.4 % | 380.7 % | 601.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 1.2403 ppm | -0.0005 ppm | 1.0937 ppm | 0.0049 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0036 ppm | 1.2532 ppm | -0.0001 ppm | 1.0964 ppm | 0.0047 ppm | -0.0016 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0003 ppm | 1.2359 ppm | 0.0011 ppm | 1.0907 ppm | 0.0061 ppm | 0.0018 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0012 ppm | 1.2317 ppm | -0.0025 ppm | 1.0940 ppm | 0.0038 ppm | -0.0018 ppm | 0.0007 ppm |
| Concentration RSD | 97.7 % | 0.9 % | 371.4 % | 0.3 % | 23.2 % | 374.2 % | 12.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 94.0016 % | 102.3378 % | 85.2063 % | 93.5906 % | 101.9905 % | 95.1685 % |
| Concentration per Run 1 | 0.0032 ppm | 94.2077 % | 102.4234 % | 85.2074 % | 94.2589 % | 102.0234 % | 94.8378 % |
| Concentration per Run 2 | 0.0033 ppm | 93.6136 % | 102.4268 % | 85.1461 % | 93.0411 % | 101.8095 % | 95.4003 % |
| Concentration per Run 3 | 0.0031 ppm | 94.1833 % | 102.1632 % | 85.2652 % | 93.4717 % | 102.1385 % | 95.2674 % |
| Concentration RSD | 3.4 % | 0.4 % | 0.1 % | 0.1 % | 0.7 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2454090-13 WG1974175
Analysis started at: 9/20/2024 5:26:59 PM
Rack 2
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0020 ppm | 0.0000 ppm | 0.0015 ppm | 0.0000 ppm | 0.0000 ppm | 0.0670 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0089 ppm | 0.0007 ppm | 0.0014 ppm | 0.0001 ppm | 0.0000 ppm | 0.0683 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0066 ppm | -0.0002 ppm | 0.0026 ppm | -0.0001 ppm | 0.0000 ppm | 0.0667 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0084 ppm | -0.0006 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0660 ppm |
| Concentration RSD | 37.3 % | 468.6 % | 3,150.3 % | 74.6 % | 1,012.0 % | 879.0 % | 1.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | -0.0003 ppm | -0.0036 ppm | 0.0613 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | -0.0005 ppm | -0.0008 ppm | -0.0033 ppm | 0.0675 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | -0.0004 ppm | -0.0045 ppm | 0.0712 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | -0.0030 ppm | 0.0451 ppm | 0.0015 ppm |
| Concentration RSD | 106.6 % | 65.4 % | 6,580.6 % | 154.6 % | 22.4 % | 23.0 % | 49.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0633 ppm | 0.0002 ppm | 0.0002 ppm | 0.4813 ppm | 0.0001 ppm | -0.0010 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0653 ppm | 0.0002 ppm | 0.0004 ppm | 0.4786 ppm | 0.0000 ppm | -0.0020 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0637 ppm | 0.0002 ppm | -0.0002 ppm | 0.4806 ppm | 0.0008 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0610 ppm | 0.0003 ppm | 0.0002 ppm | 0.4848 ppm | -0.0004 ppm | -0.0008 ppm | 0.0055 ppm |
| Concentration RSD | 3.4 % | 28.9 % | 177.1 % | 0.7 % | 528.6 % | 100.6 % | 151.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.0027 ppm | -0.0011 ppm | 0.0004 ppm | -0.0002 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0028 ppm | 0.0052 ppm | -0.0010 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0035 ppm | 0.0012 ppm | -0.0008 ppm | 0.0003 ppm | -0.0001 ppm | -0.0010 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0030 ppm | 0.0018 ppm | -0.0014 ppm | 0.0003 ppm | -0.0004 ppm | -0.0004 ppm | -0.0003 ppm |
| Concentration RSD | 277.1 % | 80.1 % | 32.1 % | 12.1 % | 161.7 % | 99.8 % | 38.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 110.0290 % | 105.7633 % | 109.9422 % | 112.4937 % | 106.0955 % | 110.2658 % |
| Concentration per Run 1 | 0.0009 ppm | 109.6054 % | 105.1176 % | 109.4457 % | 113.4007 % | 105.4862 % | 110.5758 % |
| Concentration per Run 2 | 0.0009 ppm | 110.4834 % | 106.5536 % | 110.0904 % | 112.6178 % | 106.7402 % | 110.2704 % |
| Concentration per Run 3 | 0.0012 ppm | 109.9982 % | 105.6189 % | 110.2904 % | 111.4626 % | 106.0601 % | 109.9513 % |
| Concentration RSD | 17.6 % | 0.4 % | 0.7 % | 0.4 % | 0.9 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 5:30:56 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4883 ppm | 0.4509 ppm | 0.4571 ppm | 0.4730 ppm | 0.4738 ppm | 0.4812 ppm | 0.4642 ppm |
| Concentration per Run 1 | 0.4874 ppm | 0.4562 ppm | 0.4569 ppm | 0.4701 ppm | 0.4725 ppm | 0.4820 ppm | 0.4648 ppm |
| Concentration per Run 2 | 0.4897 ppm | 0.4454 ppm | 0.4568 ppm | 0.4755 ppm | 0.4739 ppm | 0.4805 ppm | 0.4616 ppm |
| Concentration per Run 3 | 0.4879 ppm | 0.4511 ppm | 0.4576 ppm | 0.4733 ppm | 0.4750 ppm | 0.4810 ppm | 0.4661 ppm |
| Recovery Percentage 1 | 97.667 % | 90.182 % | 91.416 % | 94.599 % | 94.758 % | 96.235 % | 92.839 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.1 % | 0.6 % | 0.3 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4734 ppm | 0.4851 ppm | 0.4676 ppm | 0.4747 ppm | 0.4695 ppm | 4.9639 ppm | 0.4731 ppm |
| Concentration per Run 1 | 0.4729 ppm | 0.4864 ppm | 0.4664 ppm | 0.4768 ppm | 0.4702 ppm | 5.0044 ppm | 0.4744 ppm |
| Concentration per Run 2 | 0.4716 ppm | 0.4834 ppm | 0.4673 ppm | 0.4731 ppm | 0.4724 ppm | 4.9388 ppm | 0.4742 ppm |
| Concentration per Run 3 | 0.4758 ppm | 0.4856 ppm | 0.4693 ppm | 0.4741 ppm | 0.4660 ppm | 4.9483 ppm | 0.4707 ppm |
| Recovery Percentage 1 | 94.687 % | 97.024 % | 93.530 % | 94.937 % | 93.904 % | 99.277 % | 94.614 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 0.7 % | 0.7 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4653 ppm | 0.4602 ppm | 0.4636 ppm | 9.5997 ppm | 0.4834 ppm | 0.4736 ppm | 0.4811 ppm |
| Concentration per Run 1 | 0.4667 ppm | 0.4616 ppm | 0.4629 ppm | 9.5785 ppm | 0.4803 ppm | 0.4724 ppm | 0.4805 ppm |
| Concentration per Run 2 | 0.4655 ppm | 0.4591 ppm | 0.4614 ppm | 9.5924 ppm | 0.4864 ppm | 0.4737 ppm | 0.4796 ppm |
| Concentration per Run 3 | 0.4636 ppm | 0.4598 ppm | 0.4665 ppm | 9.6283 ppm | 0.4836 ppm | 0.4746 ppm | 0.4831 ppm |
| Recovery Percentage 1 | 93.056 % | 92.035 % | 92.723 % | 95.997 % | 96.682 % | 94.720 % | 96.211 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.6 % | 0.3 % | 0.6 % | 0.2 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4719 ppm | 5.1402 ppm | 0.4622 ppm | 0.4528 ppm | 0.4744 ppm | 0.4734 ppm | 0.4649 ppm |
| Concentration per Run 1 | 0.4697 ppm | 5.1182 ppm | 0.4617 ppm | 0.4515 ppm | 0.4726 ppm | 0.4705 ppm | 0.4660 ppm |
| Concentration per Run 2 | 0.4713 ppm | 5.1410 ppm | 0.4645 ppm | 0.4524 ppm | 0.4747 ppm | 0.4745 ppm | 0.4628 ppm |
| Concentration per Run 3 | 0.4747 ppm | 5.1614 ppm | 0.4604 ppm | 0.4543 ppm | 0.4758 ppm | 0.4750 ppm | 0.4659 ppm |
| Recovery Percentage 1 | 94.377 % | 97.908 % | 92.438 % | 90.555 % | 94.875 % | 94.670 % | 92.975 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.5 % | 0.3 % | 0.3 % | 0.5 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4825 ppm | 113.4382 % | 110.2783 % | 111.6550 % | 112.3569 % | 109.7173 % | 111.6915 % |
| Concentration per Run 1 | 0.4823 ppm | 114.6376 % | 109.5323 % | 111.6038 % | 113.8665 % | 109.0323 % | 111.4588 % |
| Concentration per Run 2 | 0.4838 ppm | 113.4595 % | 110.8708 % | 112.6693 % | 111.9583 % | 110.0034 % | 112.8824 % |
| Concentration per Run 3 | 0.4814 ppm | 112.2174 % | 110.4318 % | 110.6919 % | 111.2458 % | 110.1162 % | 110.7333 % |
| Recovery Percentage 1 | 96.499 % | | | | | | |
| Concentration RSD | 0.3 % | 1.1 % | 0.6 % | 0.9 % | 1.2 % | 0.5 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 5:34:51 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | -0.0017 ppm | 0.0012 ppm | 0.0021 ppm | -0.0001 ppm | 0.0000 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0093 ppm | 0.0039 ppm | 0.0020 ppm | -0.0002 ppm | 0.0001 ppm | -0.0068 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0006 ppm | 0.0002 ppm | 0.0023 ppm | -0.0002 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0047 ppm | -0.0006 ppm | 0.0020 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 14.594 % | -1.726 % | 23.092 % | 7.003 % | -0.973 % | 0.923 % | -1.211 % |
| Concentration RSD | 5.8 % | 410.4 % | 206.1 % | 7.8 % | 186.8 % | 33.1 % | 423.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0003 ppm | -0.0002 ppm | -0.0004 ppm | -0.0025 ppm | 0.0230 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0008 ppm | 0.0002 ppm | -0.0003 ppm | -0.0006 ppm | 0.0152 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0002 ppm | -0.0007 ppm | -0.0005 ppm | -0.0046 ppm | 0.0389 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | -0.0002 ppm | -0.0004 ppm | -0.0022 ppm | 0.0148 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 1.215 % | -1.315 % | -2.210 % | -4.018 % | -4.986 % | 0.918 % | 20.026 % |
| Concentration RSD | 217.9 % | 209.3 % | 196.6 % | 27.6 % | 80.6 % | 60.2 % | 35.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0001 ppm | 0.0008 ppm | 0.0304 ppm | -0.0007 ppm | -0.0016 ppm | 0.0058 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0000 ppm | 0.0012 ppm | 0.0406 ppm | -0.0006 ppm | -0.0019 ppm | 0.0035 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0001 ppm | 0.0009 ppm | 0.0276 ppm | -0.0006 ppm | -0.0014 ppm | 0.0084 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0003 ppm | 0.0004 ppm | 0.0230 ppm | -0.0009 ppm | -0.0015 ppm | 0.0056 ppm |
| Recovery Percentage 1 | 1.347 % | 0.897 % | 1.597 % | 1.519 % | -2.741 % | -15.716 % | 11.589 % |
| Concentration RSD | 82.3 % | 222.8 % | 50.2 % | 30.0 % | 26.9 % | 16.4 % | 42.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0014 ppm | 0.0007 ppm | 0.0000 ppm | 0.0001 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0016 ppm | -0.0017 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | -0.0022 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0017 ppm | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0002 ppm | -0.0010 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0025 ppm | 0.0010 ppm | 0.0001 ppm | 0.0002 ppm | 0.0007 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 8.431 % | -0.289 % | 1.373 % | -0.199 % | 1.443 % | -4.204 % | -0.889 % |
| Concentration RSD | 160.6 % | 86.5 % | 67.2 % | 414.2 % | 64.2 % | 172.1 % | 61.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 111.3265 % | 106.7568 % | 109.6057 % | 112.4560 % | 107.3956 % | 110.1557 % |
| Concentration per Run 1 | -0.0001 ppm | 111.7763 % | 106.7529 % | 109.9601 % | 112.8339 % | 107.3603 % | 110.6844 % |
| Concentration per Run 2 | 0.0003 ppm | 111.3202 % | 106.3614 % | 110.1209 % | 112.7954 % | 107.1259 % | 110.2272 % |
| Concentration per Run 3 | 0.0005 ppm | 110.8830 % | 107.1560 % | 108.7361 % | 111.7387 % | 107.7005 % | 109.5555 % |
| Recovery Percentage 1 | 3.924 % | | | | | | |
| Concentration RSD | 151.4 % | 0.4 % | 0.4 % | 0.7 % | 0.6 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-1 WG1974077
Analysis started at: 9/20/2024 5:41:58 PM
Rack 2
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0015 ppm | 0.0004 ppm | 0.0012 ppm | 0.0002 ppm | 0.0000 ppm | 0.0281 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0031 ppm | 0.0008 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0274 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0009 ppm | -0.0005 ppm | 0.0023 ppm | 0.0003 ppm | 0.0000 ppm | 0.0291 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0005 ppm | 0.0008 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0277 ppm |
| Recovery Percentage 1 | 13.482 % | 1.483 % | 7.127 % | 4.071 % | 1.579 % | 0.292 % | 28.064 % |
| Concentration RSD | 30.5 % | 94.8 % | 204.0 % | 94.5 % | 66.9 % | 313.2 % | 3.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | -0.0007 ppm | 0.0001 ppm | 0.0199 ppm | 0.0406 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | -0.0007 ppm | 0.0001 ppm | 0.0189 ppm | 0.0471 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0006 ppm | -0.0005 ppm | -0.0004 ppm | 0.0203 ppm | 0.0659 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | 0.0007 ppm | 0.0206 ppm | 0.0087 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 0.161 % | 1.364 % | -6.852 % | 1.458 % | 39.893 % | 1.623 % | 11.324 % |
| Concentration RSD | 1,525.9 % | 126.8 % | 20.5 % | 368.4 % | 4.4 % | 71.8 % | 90.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 0.0007 ppm | -0.0002 ppm | 0.0074 ppm | -0.0008 ppm | -0.0008 ppm | 0.0046 ppm |
| Concentration per Run 1 | 0.0099 ppm | 0.0008 ppm | 0.0003 ppm | 0.0086 ppm | -0.0012 ppm | -0.0009 ppm | 0.0062 ppm |
| Concentration per Run 2 | 0.0066 ppm | 0.0008 ppm | 0.0000 ppm | 0.0103 ppm | -0.0006 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0059 ppm | 0.0005 ppm | -0.0010 ppm | 0.0034 ppm | -0.0007 ppm | -0.0015 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 7.441 % | 7.034 % | -0.405 % | 0.370 % | -3.336 % | -7.785 % | 9.256 % |
| Concentration RSD | 28.8 % | 19.7 % | 335.9 % | 48.8 % | 40.6 % | 100.5 % | 29.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.0108 ppm | 0.0015 ppm | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.0092 ppm | 0.0007 ppm | -0.0002 ppm | -0.0002 ppm | -0.0012 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0041 ppm | 0.0121 ppm | 0.0012 ppm | 0.0000 ppm | 0.0004 ppm | -0.0017 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.0111 ppm | 0.0025 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 32.246 % | 2.163 % | 2.933 % | -0.490 % | 0.936 % | -3.716 % | -4.735 % |
| Concentration RSD | 40.3 % | 13.6 % | 64.3 % | 214.6 % | 311.3 % | 161.6 % | 23.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 107.1361 % | 107.8117 % | 105.0546 % | 105.7619 % | 107.7061 % | 105.1811 % |
| Concentration per Run 1 | 0.0022 ppm | 107.3507 % | 109.3845 % | 104.6551 % | 105.9794 % | 109.3694 % | 105.0394 % |
| Concentration per Run 2 | 0.0025 ppm | 106.4345 % | 106.1282 % | 104.9908 % | 105.0269 % | 105.9289 % | 104.9018 % |
| Concentration per Run 3 | 0.0021 ppm | 107.6230 % | 107.9225 % | 105.5179 % | 106.2794 % | 107.8200 % | 105.6020 % |
| Recovery Percentage 1 | 45.477 % | | | | | | |
| Concentration RSD | 9.3 % | 0.6 % | 1.5 % | 0.4 % | 0.6 % | 1.6 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-2d2 WG1974077
Analysis started at: 9/20/2024 5:46:12 PM
Rack 2
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0512 ppm | 1.9014 ppm | 0.1142 ppm | 0.9433 ppm | 1.9482 ppm | 0.0496 ppm | 9.6774 ppm |
| Concentration per Run 1 | 0.0511 ppm | 1.8897 ppm | 0.1142 ppm | 0.9416 ppm | 1.9411 ppm | 0.0496 ppm | 9.6217 ppm |
| Concentration per Run 2 | 0.0513 ppm | 1.9056 ppm | 0.1135 ppm | 0.9430 ppm | 1.9542 ppm | 0.0496 ppm | 9.7079 ppm |
| Concentration per Run 3 | 0.0511 ppm | 1.9088 ppm | 0.1151 ppm | 0.9455 ppm | 1.9493 ppm | 0.0498 ppm | 9.7027 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 0.7 % | 0.2 % | 0.3 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 0.4864 ppm | 0.1914 ppm | 0.2462 ppm | 0.9962 ppm | 9.9298 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0505 ppm | 0.4888 ppm | 0.1917 ppm | 0.2468 ppm | 0.9935 ppm | 9.9102 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0499 ppm | 0.4858 ppm | 0.1916 ppm | 0.2446 ppm | 0.9998 ppm | 9.9677 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0501 ppm | 0.4844 ppm | 0.1908 ppm | 0.2473 ppm | 0.9952 ppm | 9.9115 ppm | 0.0021 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.3 % | 0.6 % | 0.3 % | 0.3 % | 125.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5611 ppm | 0.4923 ppm | 0.9468 ppm | 9.7684 ppm | 0.4878 ppm | 0.5155 ppm | 0.4934 ppm |
| Concentration per Run 1 | 9.5803 ppm | 0.4899 ppm | 0.9437 ppm | 9.6864 ppm | 0.4861 ppm | 0.5171 ppm | 0.4881 ppm |
| Concentration per Run 2 | 9.5628 ppm | 0.4938 ppm | 0.9508 ppm | 9.8201 ppm | 0.4885 ppm | 0.5141 ppm | 0.4954 ppm |
| Concentration per Run 3 | 9.5403 ppm | 0.4934 ppm | 0.9459 ppm | 9.7988 ppm | 0.4888 ppm | 0.5153 ppm | 0.4966 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 0.4 % | 0.7 % | 0.3 % | 0.3 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1167 ppm | 0.4928 ppm | 0.9288 ppm | 0.9295 ppm | 0.9676 ppm | 0.1154 ppm | 0.4864 ppm |
| Concentration per Run 1 | 0.1199 ppm | 0.4931 ppm | 0.9283 ppm | 0.9252 ppm | 0.9663 ppm | 0.1149 ppm | 0.4887 ppm |
| Concentration per Run 2 | 0.1132 ppm | 0.4923 ppm | 0.9297 ppm | 0.9312 ppm | 0.9699 ppm | 0.1160 ppm | 0.4863 ppm |
| Concentration per Run 3 | 0.1170 ppm | 0.4931 ppm | 0.9285 ppm | 0.9321 ppm | 0.9664 ppm | 0.1154 ppm | 0.4843 ppm |
| Concentration RSD | 2.9 % | 0.1 % | 0.1 % | 0.4 % | 0.2 % | 0.5 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4854 ppm | 110.5518 % | 107.7578 % | 106.6576 % | 109.4485 % | 107.9197 % | 107.5961 % |
| Concentration per Run 1 | 0.4855 ppm | 110.9216 % | 108.3760 % | 106.7257 % | 110.0015 % | 108.4040 % | 107.7041 % |
| Concentration per Run 2 | 0.4862 ppm | 110.1384 % | 107.1294 % | 105.5692 % | 108.9579 % | 107.4807 % | 106.7118 % |
| Concentration per Run 3 | 0.4843 ppm | 110.5953 % | 107.7681 % | 107.6779 % | 109.3862 % | 107.8745 % | 108.3722 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.6 % | 1.0 % | 0.5 % | 0.4 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: eL2452998-01d2 WG1974077
Analysis started at: 9/20/2024 5:50:07 PM
Rack 3
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 121.7050 ppm | 0.0151 ppm | 0.0094 ppm | 0.1200 ppm | 0.0115 ppm | **1,193.5986 [SIC 1000]** |
| Concentration per Run 1 | 0.0013 ppm | 121.0284 ppm | 0.0168 ppm | 0.0102 ppm | 0.1202 ppm | 0.0116 ppm | 1,190.6831 ppm |
| Concentration per Run 2 | 0.0010 ppm | 122.1836 ppm | 0.0111 ppm | 0.0072 ppm | 0.1198 ppm | 0.0114 ppm | 1,195.2747 ppm |
| Concentration per Run 3 | 0.0005 ppm | 121.9029 ppm | 0.0172 ppm | 0.0107 ppm | 0.1200 ppm | 0.0115 ppm | 1,194.8381 ppm |
| Concentration RSD | 39.0 % | 0.5 % | 22.7 % | 20.3 % | 0.2 % | 0.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | 0.0309 ppm | 0.1201 ppm | 0.0634 ppm | 135.7425 ppm | 4.5614 ppm | 0.1007 ppm |
| Concentration per Run 1 | -0.0029 ppm | 0.0304 ppm | 0.1189 ppm | 0.0641 ppm | 136.1628 ppm | 4.5842 ppm | 0.1007 ppm |
| Concentration per Run 2 | -0.0030 ppm | 0.0310 ppm | 0.1202 ppm | 0.0626 ppm | 135.3411 ppm | 4.5714 ppm | 0.0984 ppm |
| Concentration per Run 3 | -0.0026 ppm | 0.0314 ppm | 0.1212 ppm | 0.0634 ppm | 135.7236 ppm | 4.5285 ppm | 0.1029 ppm |
| Concentration RSD | 7.1 % | 1.5 % | 1.0 % | 1.2 % | 0.3 % | 0.6 % | 2.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | **918.9490 [SIC 500]** | 4.3118 ppm | 0.0004 ppm | 0.7153 ppm | 0.0366 ppm | 0.0266 ppm | 0.0029 ppm |
| Concentration per Run 1 | 915.3215 ppm | 4.3319 ppm | 0.0006 ppm | 0.7063 ppm | 0.0363 ppm | 0.0271 ppm | -0.0014 ppm |
| Concentration per Run 2 | 919.6038 ppm | 4.2948 ppm | 0.0002 ppm | 0.7172 ppm | 0.0358 ppm | 0.0251 ppm | 0.0013 ppm |
| Concentration per Run 3 | 921.9215 ppm | 4.3085 ppm | 0.0005 ppm | 0.7223 ppm | 0.0378 ppm | 0.0274 ppm | 0.0089 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 53.2 % | 1.1 % | 2.9 % | 4.9 % | 181.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 8.1354 ppm | 0.0066 ppm | 0.5482 ppm | 3.6918 ppm | 0.0062 ppm | 0.2574 ppm |
| Concentration per Run 1 | 0.0036 ppm | 8.1528 ppm | 0.0060 ppm | 0.5479 ppm | 3.6780 ppm | 0.0062 ppm | 0.2575 ppm |
| Concentration per Run 2 | 0.0024 ppm | 8.1176 ppm | 0.0068 ppm | 0.5471 ppm | 3.6819 ppm | 0.0064 ppm | 0.2582 ppm |
| Concentration per Run 3 | 0.0034 ppm | 8.1358 ppm | 0.0070 ppm | 0.5494 ppm | 3.7156 ppm | 0.0059 ppm | 0.2567 ppm |
| Concentration RSD | 20.8 % | 0.2 % | 7.7 % | 0.2 % | 0.6 % | 3.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2301 ppm | 95.1237 % | 104.2410 % | 82.4860 % | 107.7827 % | 120.7057 % | 107.5133 % |
| Concentration per Run 1 | 0.2291 ppm | 95.0167 % | 104.4478 % | 82.2887 % | 107.7451 % | 120.3596 % | 107.1983 % |
| Concentration per Run 2 | 0.2305 ppm | 95.4740 % | 104.2685 % | 82.7084 % | 108.2042 % | 121.4873 % | 107.8553 % |
| Concentration per Run 3 | 0.2308 ppm | 94.8804 % | 104.0068 % | 82.4609 % | 107.3988 % | 120.2702 % | 107.4862 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.2 % | 0.3 % | 0.4 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453024-01d2 WG1974077
Analysis started at: 9/20/2024 5:54:04 PM
Rack 3
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 17.8918 ppm | 0.0265 ppm | 0.0375 ppm | 0.0680 ppm | 0.0030 ppm | 9.2919 ppm |
| Concentration per Run 1 | 0.0008 ppm | 17.9108 ppm | 0.0272 ppm | 0.0368 ppm | 0.0678 ppm | 0.0031 ppm | 9.3055 ppm |
| Concentration per Run 2 | 0.0007 ppm | 17.8971 ppm | 0.0271 ppm | 0.0370 ppm | 0.0682 ppm | 0.0030 ppm | 9.2870 ppm |
| Concentration per Run 3 | 0.0013 ppm | 17.8677 ppm | 0.0252 ppm | 0.0386 ppm | 0.0682 ppm | 0.0030 ppm | 9.2834 ppm |
| Concentration RSD | 33.3 % | 0.1 % | 4.1 % | 2.7 % | 0.4 % | 3.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0105 ppm | 0.1240 ppm | 0.0176 ppm | 80.1101 ppm | 5.7200 ppm | 0.0090 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0114 ppm | 0.1239 ppm | 0.0171 ppm | 79.8480 ppm | 5.7761 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0102 ppm | 0.1235 ppm | 0.0181 ppm | 80.0950 ppm | 5.6962 ppm | 0.0088 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0101 ppm | 0.1244 ppm | 0.0178 ppm | 80.3872 ppm | 5.6878 ppm | 0.0087 ppm |
| Concentration RSD | 30.0 % | 6.8 % | 0.4 % | 2.9 % | 0.3 % | 0.9 % | 3.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5177 ppm | 0.3189 ppm | 0.0053 ppm | 0.6730 ppm | 0.0181 ppm | 0.0232 ppm | 0.0029 ppm |
| Concentration per Run 1 | 5.5140 ppm | 0.3194 ppm | 0.0056 ppm | 0.6741 ppm | 0.0179 ppm | 0.0231 ppm | 0.0022 ppm |
| Concentration per Run 2 | 5.5078 ppm | 0.3190 ppm | 0.0051 ppm | 0.6732 ppm | 0.0181 ppm | 0.0230 ppm | 0.0023 ppm |
| Concentration per Run 3 | 5.5315 ppm | 0.3182 ppm | 0.0052 ppm | 0.6716 ppm | 0.0184 ppm | 0.0236 ppm | 0.0041 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 5.6 % | 0.2 % | 1.3 % | 1.4 % | 36.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 2.9401 ppm | 0.0025 ppm | 0.0266 ppm | 0.4358 ppm | 0.0001 ppm | 0.1736 ppm |
| Concentration per Run 1 | -0.0026 ppm | 2.9341 ppm | 0.0018 ppm | 0.0266 ppm | 0.4356 ppm | 0.0008 ppm | 0.1736 ppm |
| Concentration per Run 2 | 0.0047 ppm | 2.9226 ppm | 0.0030 ppm | 0.0267 ppm | 0.4349 ppm | -0.0002 ppm | 0.1730 ppm |
| Concentration per Run 3 | 0.0016 ppm | 2.9636 ppm | 0.0027 ppm | 0.0266 ppm | 0.4369 ppm | -0.0002 ppm | 0.1742 ppm |
| Concentration RSD | 298.9 % | 0.7 % | 25.0 % | 0.3 % | 0.2 % | 410.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1323 ppm | 112.4989 % | 109.3730 % | 107.6413 % | 116.5364 % | 114.2866 % | 114.8460 % |
| Concentration per Run 1 | 0.1317 ppm | 112.1461 % | 108.8232 % | 107.8558 % | 116.1372 % | 113.8557 % | 114.9696 % |
| Concentration per Run 2 | 0.1323 ppm | 113.7577 % | 110.3670 % | 107.5062 % | 117.6056 % | 115.3501 % | 114.9561 % |
| Concentration per Run 3 | 0.1331 ppm | 111.5929 % | 108.9288 % | 107.5620 % | 115.8665 % | 113.6539 % | 114.6122 % |
| Concentration RSD | 0.5 % | 1.0 % | 0.8 % | 0.2 % | 0.8 % | 0.8 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453024-02d2 WG1974077
Analysis started at: 9/20/2024 5:58:01 PM
Rack 3
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 33.0430 ppm | 0.0826 ppm | 0.0476 ppm | 0.0703 ppm | 0.0087 ppm | 7.7307 ppm |
| Concentration per Run 1 | 0.0014 ppm | 33.0844 ppm | 0.0815 ppm | 0.0476 ppm | 0.0702 ppm | 0.0087 ppm | 7.7382 ppm |
| Concentration per Run 2 | 0.0028 ppm | 32.9453 ppm | 0.0825 ppm | 0.0478 ppm | 0.0703 ppm | 0.0088 ppm | 7.7009 ppm |
| Concentration per Run 3 | 0.0015 ppm | 33.0993 ppm | 0.0837 ppm | 0.0473 ppm | 0.0704 ppm | 0.0087 ppm | 7.7530 ppm |
| Concentration RSD | 42.0 % | 0.3 % | 1.3 % | 0.6 % | 0.1 % | 0.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0241 ppm | 0.5094 ppm | 0.0511 ppm | 233.2295 ppm | 7.1805 ppm | 0.0104 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0240 ppm | 0.5090 ppm | 0.0509 ppm | 232.6255 ppm | 7.1667 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0244 ppm | 0.5108 ppm | 0.0510 ppm | 233.5248 ppm | 7.2036 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0240 ppm | 0.5084 ppm | 0.0514 ppm | 233.5381 ppm | 7.1711 ppm | 0.0114 ppm |
| Concentration RSD | 45.9 % | 1.0 % | 0.2 % | 0.5 % | 0.2 % | 0.3 % | 8.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8329 ppm | 0.6449 ppm | 0.0120 ppm | 0.8457 ppm | 0.0485 ppm | 0.0478 ppm | 0.0040 ppm |
| Concentration per Run 1 | 2.8333 ppm | 0.6431 ppm | 0.0119 ppm | 0.8482 ppm | 0.0487 ppm | 0.0489 ppm | 0.0049 ppm |
| Concentration per Run 2 | 2.8325 ppm | 0.6440 ppm | 0.0122 ppm | 0.8421 ppm | 0.0484 ppm | 0.0469 ppm | 0.0033 ppm |
| Concentration per Run 3 | 2.8329 ppm | 0.6476 ppm | 0.0117 ppm | 0.8466 ppm | 0.0483 ppm | 0.0476 ppm | 0.0039 ppm |
| Concentration RSD | 0.0 % | 0.4 % | 2.1 % | 0.4 % | 0.5 % | 2.1 % | 19.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 2.1123 ppm | 0.0156 ppm | 0.0533 ppm | 0.6081 ppm | 0.0018 ppm | 0.4745 ppm |
| Concentration per Run 1 | 0.0000 ppm | 2.1199 ppm | 0.0162 ppm | 0.0533 ppm | 0.6091 ppm | 0.0019 ppm | 0.4725 ppm |
| Concentration per Run 2 | 0.0029 ppm | 2.1083 ppm | 0.0151 ppm | 0.0534 ppm | 0.6099 ppm | 0.0026 ppm | 0.4759 ppm |
| Concentration per Run 3 | 0.0036 ppm | 2.1085 ppm | 0.0155 ppm | 0.0533 ppm | 0.6053 ppm | 0.0009 ppm | 0.4751 ppm |
| Concentration RSD | 87.3 % | 0.3 % | 3.4 % | 0.1 % | 0.4 % | 45.2 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2467 ppm | 113.8201 % | 112.8004 % | 106.6110 % | 115.6412 % | 115.5053 % | 115.2981 % |
| Concentration per Run 1 | 0.2473 ppm | 114.4374 % | 112.8566 % | 106.3806 % | 116.3310 % | 115.6948 % | 114.9943 % |
| Concentration per Run 2 | 0.2477 ppm | 113.1597 % | 113.0765 % | 106.4909 % | 114.7931 % | 115.2448 % | 115.4526 % |
| Concentration per Run 3 | 0.2452 ppm | 113.8632 % | 112.4682 % | 106.9614 % | 115.7994 % | 115.5762 % | 115.4473 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.3 % | 0.3 % | 0.7 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453726-03d2 WG1974077
Analysis started at: 9/20/2024 6:01:58 PM
Rack 2
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 136.3770 ppm | 0.0367 ppm | 0.0071 ppm | 0.4162 ppm | 0.0043 ppm | 9.5658 ppm |
| Concentration per Run 1 | 0.0016 ppm | 136.4241 ppm | 0.0391 ppm | 0.0077 ppm | 0.4170 ppm | 0.0043 ppm | 9.5744 ppm |
| Concentration per Run 2 | 0.0019 ppm | 135.9945 ppm | 0.0370 ppm | 0.0092 ppm | 0.4152 ppm | 0.0043 ppm | 9.5272 ppm |
| Concentration per Run 3 | 0.0015 ppm | 136.7124 ppm | 0.0341 ppm | 0.0043 ppm | 0.4166 ppm | 0.0042 ppm | 9.5958 ppm |
| Concentration RSD | 13.5 % | 0.3 % | 6.9 % | 35.0 % | 0.2 % | 0.7 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0671 ppm | 0.1955 ppm | 0.1170 ppm | 163.0618 ppm | 5.1936 ppm | 0.1145 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0675 ppm | 0.1951 ppm | 0.1175 ppm | 163.8323 ppm | 5.1652 ppm | 0.1163 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0673 ppm | 0.1953 ppm | 0.1165 ppm | 162.6950 ppm | 5.2271 ppm | 0.1147 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0664 ppm | 0.1960 ppm | 0.1169 ppm | 162.6582 ppm | 5.1886 ppm | 0.1125 ppm |
| Concentration RSD | 177.5 % | 0.9 % | 0.2 % | 0.4 % | 0.4 % | 0.6 % | 1.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 33.0895 ppm | 2.2000 ppm | 0.0048 ppm | 0.3007 ppm | 0.1271 ppm | 0.0824 ppm | -0.0001 ppm |
| Concentration per Run 1 | 33.0669 ppm | 2.2011 ppm | 0.0041 ppm | 0.3032 ppm | 0.1285 ppm | 0.0820 ppm | -0.0011 ppm |
| Concentration per Run 2 | 33.0794 ppm | 2.1851 ppm | 0.0050 ppm | 0.2961 ppm | 0.1257 ppm | 0.0820 ppm | 0.0018 ppm |
| Concentration per Run 3 | 33.1223 ppm | 2.2139 ppm | 0.0053 ppm | 0.3026 ppm | 0.1270 ppm | 0.0833 ppm | -0.0010 ppm |
| Concentration RSD | 0.1 % | 0.7 % | 13.6 % | 1.3 % | 1.1 % | 1.0 % | 1,453.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | 2.5157 ppm | 0.0070 ppm | 0.1065 ppm | 3.3471 ppm | 0.0028 ppm | 0.2922 ppm |
| Concentration per Run 1 | -0.0050 ppm | 2.5239 ppm | 0.0073 ppm | 0.1066 ppm | 3.3231 ppm | 0.0020 ppm | 0.2918 ppm |
| Concentration per Run 2 | 0.0027 ppm | 2.4867 ppm | 0.0069 ppm | 0.1064 ppm | 3.3541 ppm | 0.0045 ppm | 0.2931 ppm |
| Concentration per Run 3 | -0.0035 ppm | 2.5364 ppm | 0.0069 ppm | 0.1066 ppm | 3.3641 ppm | 0.0019 ppm | 0.2916 ppm |
| Concentration RSD | 208.9 % | 1.0 % | 3.5 % | 0.1 % | 0.6 % | 53.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3162 ppm | 115.6136 % | 116.0576 % | 107.9969 % | 123.0699 % | 124.8406 % | 122.4723 % |
| Concentration per Run 1 | 0.3155 ppm | 116.1360 % | 116.0475 % | 108.5589 % | 123.4886 % | 124.8620 % | 122.9293 % |
| Concentration per Run 2 | 0.3166 ppm | 115.1654 % | 116.2855 % | 107.5838 % | 122.9808 % | 124.6105 % | 122.3474 % |
| Concentration per Run 3 | 0.3165 ppm | 115.5394 % | 115.8397 % | 107.8481 % | 122.7403 % | 125.0494 % | 122.1402 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.2 % | 0.5 % | 0.3 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-3d2 WG1974077
Analysis started at: 9/20/2024 6:05:53 PM
Rack 2
Vial 58
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0500 ppm | 135.5726 ppm | 0.1433 ppm | 0.8177 ppm | 2.2533 ppm | 0.0513 ppm | 18.8018 ppm |
| Concentration per Run 1 | 0.0499 ppm | 135.5731 ppm | 0.1436 ppm | 0.8132 ppm | 2.2433 ppm | 0.0512 ppm | 18.6630 ppm |
| Concentration per Run 2 | 0.0497 ppm | 135.5143 ppm | 0.1410 ppm | 0.8177 ppm | 2.2542 ppm | 0.0512 ppm | 18.8813 ppm |
| Concentration per Run 3 | 0.0504 ppm | 135.6304 ppm | 0.1452 ppm | 0.8221 ppm | 2.2622 ppm | 0.0515 ppm | 18.8612 ppm |
| Concentration RSD | 0.7 % | 0.0 % | 1.5 % | 0.5 % | 0.4 % | 0.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 0.5173 ppm | 0.3716 ppm | 0.3481 ppm | 160.9260 ppm | 14.3383 ppm | 0.1105 ppm |
| Concentration per Run 1 | 0.0476 ppm | 0.5089 ppm | 0.3709 ppm | 0.3458 ppm | 160.0476 ppm | 14.3221 ppm | 0.1101 ppm |
| Concentration per Run 2 | 0.0504 ppm | 0.5221 ppm | 0.3707 ppm | 0.3472 ppm | 160.6298 ppm | 14.3331 ppm | 0.1111 ppm |
| Concentration per Run 3 | 0.0500 ppm | 0.5210 ppm | 0.3732 ppm | 0.3511 ppm | 162.1008 ppm | 14.3597 ppm | 0.1104 ppm |
| Concentration RSD | 3.1 % | 1.4 % | 0.4 % | 0.8 % | 0.7 % | 0.1 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 41.3056 ppm | 2.5160 ppm | 0.8990 ppm | 9.5116 ppm | 0.5750 ppm | 0.5669 ppm | 0.4334 ppm |
| Concentration per Run 1 | 41.2017 ppm | 2.5179 ppm | 0.8877 ppm | 9.4038 ppm | 0.5746 ppm | 0.5676 ppm | 0.4281 ppm |
| Concentration per Run 2 | 41.3941 ppm | 2.5125 ppm | 0.9029 ppm | 9.5640 ppm | 0.5724 ppm | 0.5646 ppm | 0.4381 ppm |
| Concentration per Run 3 | 41.3209 ppm | 2.5176 ppm | 0.9065 ppm | 9.5670 ppm | 0.5779 ppm | 0.5686 ppm | 0.4339 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 1.1 % | 1.0 % | 0.5 % | 0.4 % | 1.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1066 ppm | 3.6052 ppm | 0.8806 ppm | 0.9936 ppm | 4.1014 ppm | 0.1135 ppm | 0.7522 ppm |
| Concentration per Run 1 | 0.1063 ppm | 3.5809 ppm | 0.8774 ppm | 0.9901 ppm | 4.1049 ppm | 0.1131 ppm | 0.7498 ppm |
| Concentration per Run 2 | 0.1058 ppm | 3.6287 ppm | 0.8830 ppm | 0.9918 ppm | 4.0927 ppm | 0.1130 ppm | 0.7535 ppm |
| Concentration per Run 3 | 0.1076 ppm | 3.6062 ppm | 0.8813 ppm | 0.9989 ppm | 4.1066 ppm | 0.1142 ppm | 0.7533 ppm |
| Concentration RSD | 0.9 % | 0.7 % | 0.3 % | 0.5 % | 0.2 % | 0.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7698 ppm | 114.0194 % | 115.6820 % | 106.9989 % | 119.0714 % | 121.8625 % | 119.0236 % |
| Concentration per Run 1 | 0.7667 ppm | 115.6630 % | 115.9105 % | 106.6779 % | 120.8088 % | 122.2975 % | 118.5011 % |
| Concentration per Run 2 | 0.7710 ppm | 113.2451 % | 115.4985 % | 107.7405 % | 118.0369 % | 121.5884 % | 119.6084 % |
| Concentration per Run 3 | 0.7718 ppm | 113.1501 % | 115.6370 % | 106.5783 % | 118.3685 % | 121.7017 % | 118.9614 % |
| Concentration RSD | 0.4 % | 1.2 % | 0.2 % | 0.6 % | 1.3 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-4d2 WG1974077
Analysis started at: 9/20/2024 6:09:49 PM
Rack 2
Vial 59
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0484 ppm | 133.2611 ppm | 0.1396 ppm | 0.7881 ppm | 2.1518 ppm | 0.0492 ppm | 18.0874 ppm |
| Concentration per Run 1 | 0.0490 ppm | 133.5752 ppm | 0.1424 ppm | 0.7856 ppm | 2.1575 ppm | 0.0491 ppm | 18.1205 ppm |
| Concentration per Run 2 | 0.0479 ppm | 132.9749 ppm | 0.1387 ppm | 0.7881 ppm | 2.1407 ppm | 0.0493 ppm | 18.0719 ppm |
| Concentration per Run 3 | 0.0485 ppm | 133.2333 ppm | 0.1376 ppm | 0.7907 ppm | 2.1573 ppm | 0.0493 ppm | 18.0699 ppm |
| Concentration RSD | 1.1 % | 0.2 % | 1.8 % | 0.3 % | 0.4 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0478 ppm | 0.5046 ppm | 0.3629 ppm | 0.3459 ppm | 158.0217 ppm | 13.8846 ppm | 0.1094 ppm |
| Concentration per Run 1 | 0.0474 ppm | 0.5025 ppm | 0.3640 ppm | 0.3461 ppm | 158.2735 ppm | 13.9470 ppm | 0.1099 ppm |
| Concentration per Run 2 | 0.0481 ppm | 0.5054 ppm | 0.3615 ppm | 0.3442 ppm | 157.0345 ppm | 13.8191 ppm | 0.1080 ppm |
| Concentration per Run 3 | 0.0480 ppm | 0.5060 ppm | 0.3632 ppm | 0.3472 ppm | 158.7570 ppm | 13.8878 ppm | 0.1102 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 0.4 % | 0.4 % | 0.6 % | 0.5 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 40.5261 ppm | 2.5568 ppm | 0.8697 ppm | 9.1277 ppm | 0.5551 ppm | 0.5488 ppm | 0.4230 ppm |
| Concentration per Run 1 | 40.5881 ppm | 2.5630 ppm | 0.8618 ppm | 9.1620 ppm | 0.5565 ppm | 0.5462 ppm | 0.4226 ppm |
| Concentration per Run 2 | 40.4442 ppm | 2.5554 ppm | 0.8673 ppm | 9.0995 ppm | 0.5543 ppm | 0.5518 ppm | 0.4232 ppm |
| Concentration per Run 3 | 40.5460 ppm | 2.5518 ppm | 0.8798 ppm | 9.1214 ppm | 0.5546 ppm | 0.5483 ppm | 0.4231 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 1.1 % | 0.3 % | 0.2 % | 0.5 % | 0.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1024 ppm | 3.1867 ppm | 0.8473 ppm | 0.9504 ppm | 4.0280 ppm | 0.1074 ppm | 0.7329 ppm |
| Concentration per Run 1 | 0.1029 ppm | 3.1789 ppm | 0.8475 ppm | 0.9518 ppm | 4.0347 ppm | 0.1075 ppm | 0.7304 ppm |
| Concentration per Run 2 | 0.1039 ppm | 3.1827 ppm | 0.8418 ppm | 0.9457 ppm | 4.0178 ppm | 0.1080 ppm | 0.7327 ppm |
| Concentration per Run 3 | 0.1003 ppm | 3.1985 ppm | 0.8528 ppm | 0.9538 ppm | 4.0315 ppm | 0.1066 ppm | 0.7357 ppm |
| Concentration RSD | 1.8 % | 0.3 % | 0.6 % | 0.4 % | 0.2 % | 0.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7545 ppm | 115.7933 % | 117.9609 % | 108.7614 % | 123.0328 % | 126.7400 % | 123.2033 % |
| Concentration per Run 1 | 0.7524 ppm | 115.6442 % | 119.0996 % | 109.0604 % | 122.7583 % | 128.1234 % | 123.4952 % |
| Concentration per Run 2 | 0.7548 ppm | 116.3377 % | 117.5733 % | 108.4575 % | 123.2059 % | 125.7695 % | 122.8739 % |
| Concentration per Run 3 | 0.7564 ppm | 115.3981 % | 117.2099 % | 108.7663 % | 123.1342 % | 126.3270 % | 123.2407 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.9 % | 0.3 % | 0.2 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-5d2 WG1974077
Analysis started at: 9/20/2024 6:13:45 PM
Rack 2
Vial 60
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0469 ppm | 134.7697 ppm | 0.1446 ppm | 0.9030 ppm | 2.2281 ppm | 0.0506 ppm | 18.7146 ppm |
| Concentration per Run 1 | 0.0469 ppm | 134.8428 ppm | 0.1425 ppm | 0.9065 ppm | 2.2343 ppm | 0.0507 ppm | 18.7028 ppm |
| Concentration per Run 2 | 0.0469 ppm | 134.5404 ppm | 0.1469 ppm | 0.8977 ppm | 2.2339 ppm | 0.0506 ppm | 18.6757 ppm |
| Concentration per Run 3 | 0.0470 ppm | 134.9260 ppm | 0.1443 ppm | 0.9048 ppm | 2.2162 ppm | 0.0503 ppm | 18.7654 ppm |
| Concentration RSD | 0.0 % | 0.2 % | 1.5 % | 0.5 % | 0.5 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 0.5153 ppm | 0.3698 ppm | 0.3470 ppm | 158.5444 ppm | 14.7662 ppm | 0.1093 ppm |
| Concentration per Run 1 | 0.0491 ppm | 0.5147 ppm | 0.3707 ppm | 0.3474 ppm | 159.0388 ppm | 14.8891 ppm | 0.1128 ppm |
| Concentration per Run 2 | 0.0499 ppm | 0.5153 ppm | 0.3684 ppm | 0.3473 ppm | 158.8942 ppm | 14.6996 ppm | 0.1079 ppm |
| Concentration per Run 3 | 0.0494 ppm | 0.5160 ppm | 0.3702 ppm | 0.3462 ppm | 157.7000 ppm | 14.7101 ppm | 0.1071 ppm |
| Concentration RSD | 0.8 % | 0.1 % | 0.3 % | 0.2 % | 0.5 % | 0.7 % | 2.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 41.2651 ppm | 2.5823 ppm | 0.9223 ppm | 9.9715 ppm | 0.5709 ppm | 0.5576 ppm | 0.4508 ppm |
| Concentration per Run 1 | 41.3450 ppm | 2.5797 ppm | 0.9167 ppm | 9.9914 ppm | 0.5717 ppm | 0.5575 ppm | 0.4552 ppm |
| Concentration per Run 2 | 41.0940 ppm | 2.5836 ppm | 0.9188 ppm | 9.9113 ppm | 0.5678 ppm | 0.5566 ppm | 0.4456 ppm |
| Concentration per Run 3 | 41.3562 ppm | 2.5836 ppm | 0.9313 ppm | 10.0119 ppm | 0.5732 ppm | 0.5588 ppm | 0.4517 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 0.9 % | 0.5 % | 0.5 % | 0.2 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1149 ppm | 3.3136 ppm | 0.9165 ppm | 1.0123 ppm | 4.1833 ppm | 0.1113 ppm | 0.7397 ppm |
| Concentration per Run 1 | 0.1130 ppm | 3.2868 ppm | 0.9186 ppm | 1.0122 ppm | 4.1846 ppm | 0.1110 ppm | 0.7396 ppm |
| Concentration per Run 2 | 0.1141 ppm | 3.2837 ppm | 0.9139 ppm | 1.0153 ppm | 4.1657 ppm | 0.1126 ppm | 0.7387 ppm |
| Concentration per Run 3 | 0.1177 ppm | 3.3705 ppm | 0.9171 ppm | 1.0095 ppm | 4.1996 ppm | 0.1103 ppm | 0.7407 ppm |
| Concentration RSD | 2.1 % | 1.5 % | 0.3 % | 0.3 % | 0.4 % | 1.1 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7573 ppm | 115.3059 % | 116.2849 % | 108.4531 % | 122.4378 % | 125.1765 % | 122.3340 % |
| Concentration per Run 1 | 0.7590 ppm | 115.5050 % | 115.2550 % | 108.9694 % | 122.5588 % | 123.8442 % | 122.6389 % |
| Concentration per Run 2 | 0.7520 ppm | 115.9837 % | 116.3218 % | 108.1621 % | 123.3921 % | 125.0098 % | 122.0677 % |
| Concentration per Run 3 | 0.7610 ppm | 114.4290 % | 117.2779 % | 108.2277 % | 121.3625 % | 126.6755 % | 122.2956 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.9 % | 0.4 % | 0.8 % | 1.1 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974077-6d10 WG1974077
Analysis started at: 9/20/2024 6:17:41 PM
Rack 3
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 29.1583 ppm | 0.0085 ppm | 0.0044 ppm | 0.0882 ppm | 0.0009 ppm | 2.0411 ppm |
| Concentration per Run 1 | 0.0010 ppm | 29.0725 ppm | 0.0086 ppm | 0.0053 ppm | 0.0882 ppm | 0.0009 ppm | 2.0367 ppm |
| Concentration per Run 2 | 0.0015 ppm | 29.2298 ppm | 0.0091 ppm | 0.0024 ppm | 0.0885 ppm | 0.0009 ppm | 2.0354 ppm |
| Concentration per Run 3 | 0.0013 ppm | 29.1726 ppm | 0.0078 ppm | 0.0056 ppm | 0.0880 ppm | 0.0009 ppm | 2.0512 ppm |
| Concentration RSD | 18.6 % | 0.3 % | 7.7 % | 40.2 % | 0.3 % | 2.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0139 ppm | 0.0413 ppm | 0.0248 ppm | 35.8521 ppm | 1.1005 ppm | 0.0248 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0137 ppm | 0.0414 ppm | 0.0246 ppm | 35.7671 ppm | 1.1054 ppm | 0.0254 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0141 ppm | 0.0409 ppm | 0.0249 ppm | 35.9195 ppm | 1.1098 ppm | 0.0242 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0139 ppm | 0.0417 ppm | 0.0250 ppm | 35.8696 ppm | 1.0864 ppm | 0.0249 ppm |
| Concentration RSD | 446.0 % | 1.3 % | 0.9 % | 0.8 % | 0.2 % | 1.1 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.1910 ppm | 0.4727 ppm | 0.0022 ppm | -0.0528 ppm | 0.0275 ppm | 0.0165 ppm | 0.0055 ppm |
| Concentration per Run 1 | 7.1966 ppm | 0.4726 ppm | 0.0017 ppm | -0.0560 ppm | 0.0281 ppm | 0.0171 ppm | 0.0104 ppm |
| Concentration per Run 2 | 7.2123 ppm | 0.4715 ppm | 0.0025 ppm | -0.0467 ppm | 0.0266 ppm | 0.0162 ppm | 0.0006 ppm |
| Concentration per Run 3 | 7.1640 ppm | 0.4740 ppm | 0.0024 ppm | -0.0555 ppm | 0.0278 ppm | 0.0162 ppm | 0.0056 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 21.0 % | 9.9 % | 2.8 % | 3.0 % | 88.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.5700 ppm | 0.0033 ppm | 0.0225 ppm | 0.7150 ppm | -0.0006 ppm | 0.0611 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.5514 ppm | 0.0038 ppm | 0.0226 ppm | 0.7117 ppm | 0.0000 ppm | 0.0610 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.5628 ppm | 0.0025 ppm | 0.0227 ppm | 0.7182 ppm | -0.0010 ppm | 0.0612 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.5958 ppm | 0.0036 ppm | 0.0222 ppm | 0.7151 ppm | -0.0008 ppm | 0.0611 ppm |
| Concentration RSD | 81.9 % | 4.0 % | 20.5 % | 1.1 % | 0.5 % | 89.0 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0694 ppm | 112.1245 % | 109.2680 % | 108.7199 % | 113.2524 % | 110.8686 % | 112.1776 % |
| Concentration per Run 1 | 0.0695 ppm | 112.6354 % | 109.3598 % | 108.7002 % | 113.9530 % | 110.6761 % | 112.3375 % |
| Concentration per Run 2 | 0.0690 ppm | 113.1290 % | 108.6486 % | 107.6075 % | 113.9460 % | 110.1123 % | 110.9052 % |
| Concentration per Run 3 | 0.0698 ppm | 110.6090 % | 109.7958 % | 109.8522 % | 111.8582 % | 111.8175 % | 113.2901 % |
| Concentration RSD | 0.5 % | 1.2 % | 0.5 % | 1.0 % | 1.1 % | 0.8 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 6:21:38 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4969 ppm | 0.4603 ppm | 0.4671 ppm | 0.4843 ppm | 0.4829 ppm | 0.4888 ppm | 0.4734 ppm |
| Concentration per Run 1 | 0.4977 ppm | 0.4703 ppm | 0.4655 ppm | 0.4805 ppm | 0.4808 ppm | 0.4879 ppm | 0.4734 ppm |
| Concentration per Run 2 | 0.4982 ppm | 0.4577 ppm | 0.4664 ppm | 0.4854 ppm | 0.4814 ppm | 0.4889 ppm | 0.4688 ppm |
| Concentration per Run 3 | 0.4947 ppm | 0.4529 ppm | 0.4695 ppm | 0.4868 ppm | 0.4864 ppm | 0.4897 ppm | 0.4778 ppm |
| Recovery Percentage 1 | 99.380 % | 92.057 % | 93.422 % | 96.850 % | 96.578 % | 97.770 % | 94.671 % |
| Concentration RSD | 0.4 % | 1.9 % | 0.4 % | 0.7 % | 0.6 % | 0.2 % | 1.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4870 ppm | 0.4957 ppm | 0.4744 ppm | 0.4829 ppm | 0.4815 ppm | 4.9640 ppm | 0.4804 ppm |
| Concentration per Run 1 | 0.4897 ppm | 0.4979 ppm | 0.4749 ppm | 0.4838 ppm | 0.4839 ppm | 4.9520 ppm | 0.4817 ppm |
| Concentration per Run 2 | 0.4906 ppm | 0.4984 ppm | 0.4755 ppm | 0.4817 ppm | 0.4823 ppm | 4.9410 ppm | 0.4769 ppm |
| Concentration per Run 3 | 0.4808 ppm | 0.4908 ppm | 0.4727 ppm | 0.4833 ppm | 0.4782 ppm | 4.9989 ppm | 0.4826 ppm |
| Recovery Percentage 1 | 97.406 % | 99.146 % | 94.871 % | 96.588 % | 96.292 % | 99.280 % | 96.082 % |
| Concentration RSD | 1.1 % | 0.9 % | 0.3 % | 0.2 % | 0.6 % | 0.6 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4757 ppm | 0.4672 ppm | 0.4748 ppm | 9.4718 ppm | 0.4923 ppm | 0.4812 ppm | 0.4964 ppm |
| Concentration per Run 1 | 0.4778 ppm | 0.4690 ppm | 0.4742 ppm | 9.4712 ppm | 0.4927 ppm | 0.4798 ppm | 0.4974 ppm |
| Concentration per Run 2 | 0.4752 ppm | 0.4662 ppm | 0.4755 ppm | 9.4545 ppm | 0.4935 ppm | 0.4823 ppm | 0.4928 ppm |
| Concentration per Run 3 | 0.4740 ppm | 0.4664 ppm | 0.4748 ppm | 9.4896 ppm | 0.4908 ppm | 0.4816 ppm | 0.4991 ppm |
| Recovery Percentage 1 | 95.136 % | 93.438 % | 94.970 % | 94.718 % | 98.465 % | 96.244 % | 99.288 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.1 % | 0.2 % | 0.3 % | 0.3 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4763 ppm | 5.2568 ppm | 0.4652 ppm | 0.4640 ppm | 0.4836 ppm | 0.4783 ppm | 0.4734 ppm |
| Concentration per Run 1 | 0.4772 ppm | 5.2619 ppm | 0.4669 ppm | 0.4623 ppm | 0.4838 ppm | 0.4763 ppm | 0.4744 ppm |
| Concentration per Run 2 | 0.4752 ppm | 5.2702 ppm | 0.4682 ppm | 0.4640 ppm | 0.4851 ppm | 0.4789 ppm | 0.4744 ppm |
| Concentration per Run 3 | 0.4765 ppm | 5.2384 ppm | 0.4604 ppm | 0.4658 ppm | 0.4819 ppm | 0.4798 ppm | 0.4714 ppm |
| Recovery Percentage 1 | 95.254 % | 100.130 % | 93.036 % | 92.805 % | 96.724 % | 95.663 % | 94.677 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.9 % | 0.4 % | 0.3 % | 0.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4871 ppm | 111.7539 % | 109.8754 % | 110.2034 % | 110.9587 % | 110.0301 % | 110.5162 % |
| Concentration per Run 1 | 0.4867 ppm | 111.6490 % | 109.4339 % | 110.7938 % | 110.8253 % | 109.8134 % | 111.3993 % |
| Concentration per Run 2 | 0.4875 ppm | 111.5226 % | 110.4368 % | 110.7317 % | 110.6046 % | 110.2596 % | 110.7764 % |
| Concentration per Run 3 | 0.4872 ppm | 112.0900 % | 109.7555 % | 109.0848 % | 111.4462 % | 110.0172 % | 109.3728 % |
| Recovery Percentage 1 | 97.425 % | | | | | | |
| Concentration RSD | 0.1 % | 0.3 % | 0.5 % | 0.9 % | 0.4 % | 0.2 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 6:25:33 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0046 ppm | -0.0001 ppm | 0.0025 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0012 ppm | -0.0035 ppm | 0.0009 ppm | 0.0031 ppm | 0.0000 ppm | 0.0000 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0115 ppm | 0.0009 ppm | 0.0028 ppm | 0.0000 ppm | 0.0000 ppm | -0.0038 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0057 ppm | -0.0022 ppm | 0.0016 ppm | -0.0002 ppm | 0.0001 ppm | -0.0009 ppm |
| Recovery Percentage 1 | 14.733 % | 4.568 % | -2.868 % | 8.283 % | -0.477 % | 0.915 % | -0.020 % |
| Concentration RSD | 24.5 % | 165.1 % | 1,259.4 % | 32.2 % | 191.0 % | 87.6 % | 21,637.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0004 ppm | -0.0005 ppm | -0.0001 ppm | -0.0007 ppm | -0.0129 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0006 ppm | -0.0004 ppm | -0.0003 ppm | 0.0017 ppm | -0.0188 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0003 ppm | -0.0009 ppm | -0.0001 ppm | -0.0025 ppm | 0.0051 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0000 ppm | -0.0012 ppm | -0.0250 ppm | 0.0020 ppm |
| Recovery Percentage 1 | 3.188 % | 1.862 % | -5.296 % | -1.167 % | -1.361 % | -0.515 % | 35.897 % |
| Concentration RSD | 46.6 % | 61.9 % | 60.9 % | 167.7 % | 311.3 % | 123.4 % | 38.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | -0.0002 ppm | 0.0006 ppm | -0.1430 ppm | -0.0006 ppm | -0.0016 ppm | 0.0062 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.0000 ppm | 0.0006 ppm | -0.1442 ppm | -0.0009 ppm | -0.0019 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0018 ppm | -0.0004 ppm | 0.0005 ppm | -0.1476 ppm | 0.0007 ppm | -0.0017 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0010 ppm | -0.0001 ppm | 0.0006 ppm | -0.1372 ppm | -0.0014 ppm | -0.0013 ppm | 0.0055 ppm |
| Recovery Percentage 1 | 1.637 % | -1.670 % | 1.128 % | -7.149 % | -2.201 % | -16.321 % | 12.399 % |
| Concentration RSD | 33.3 % | 121.9 % | 4.0 % | 3.7 % | 196.5 % | 19.2 % | 10.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | -0.0035 ppm | 0.0008 ppm | 0.0000 ppm | -0.0002 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0051 ppm | -0.0060 ppm | 0.0015 ppm | 0.0000 ppm | -0.0003 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0022 ppm | -0.0002 ppm | -0.0001 ppm | -0.0001 ppm | -0.0010 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0023 ppm | 0.0010 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 21.760 % | -0.697 % | 1.547 % | -0.183 % | -1.588 % | -2.501 % | -4.798 % |
| Concentration RSD | 118.2 % | 62.1 % | 110.6 % | 348.3 % | 74.4 % | 147.4 % | 81.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 109.5016 % | 105.4431 % | 107.5295 % | 110.6108 % | 106.1302 % | 108.3172 % |
| Concentration per Run 1 | 0.0001 ppm | 109.7690 % | 106.4439 % | 107.7410 % | 111.1367 % | 107.4960 % | 109.0468 % |
| Concentration per Run 2 | 0.0003 ppm | 109.1664 % | 104.8602 % | 108.0749 % | 110.2556 % | 105.1697 % | 108.5427 % |
| Concentration per Run 3 | 0.0006 ppm | 109.5693 % | 105.0251 % | 106.7726 % | 110.4400 % | 105.7250 % | 107.3622 % |
| Recovery Percentage 1 | 6.854 % | | | | | | |
| Concentration RSD | 67.7 % | 0.3 % | 0.8 % | 0.6 % | 0.4 % | 1.1 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453024-03d2 WG1974077
Analysis started at: 9/20/2024 6:36:01 PM
Rack 3
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 33.6711 ppm | 0.0712 ppm | 0.0598 ppm | 0.0636 ppm | 0.0116 ppm | 12.1259 ppm |
| Concentration per Run 1 | 0.0021 ppm | 33.6407 ppm | 0.0732 ppm | 0.0611 ppm | 0.0636 ppm | 0.0116 ppm | 12.1167 ppm |
| Concentration per Run 2 | 0.0018 ppm | 33.7285 ppm | 0.0698 ppm | 0.0598 ppm | 0.0637 ppm | 0.0117 ppm | 12.1586 ppm |
| Concentration per Run 3 | 0.0015 ppm | 33.6442 ppm | 0.0704 ppm | 0.0585 ppm | 0.0635 ppm | 0.0116 ppm | 12.1023 ppm |
| Concentration RSD | 16.6 % | 0.1 % | 2.6 % | 2.1 % | 0.1 % | 0.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0272 ppm | 0.5096 ppm | 0.0426 ppm | 295.8542 ppm | 8.6040 ppm | 0.0124 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0266 ppm | 0.5100 ppm | 0.0428 ppm | 294.7676 ppm | 8.5635 ppm | 0.0125 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0272 ppm | 0.5091 ppm | 0.0428 ppm | 295.8587 ppm | 8.6467 ppm | 0.0112 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0277 ppm | 0.5097 ppm | 0.0423 ppm | 296.9363 ppm | 8.6018 ppm | 0.0136 ppm |
| Concentration RSD | 19.7 % | 2.0 % | 0.1 % | 0.6 % | 0.4 % | 0.5 % | 9.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.3799 ppm | 0.4257 ppm | 0.0177 ppm | 3.8713 ppm | 0.0511 ppm | 0.0532 ppm | 0.0036 ppm |
| Concentration per Run 1 | 8.3998 ppm | 0.4247 ppm | 0.0178 ppm | 3.8711 ppm | 0.0512 ppm | 0.0526 ppm | 0.0039 ppm |
| Concentration per Run 2 | 8.3577 ppm | 0.4273 ppm | 0.0173 ppm | 3.8844 ppm | 0.0513 ppm | 0.0552 ppm | 0.0018 ppm |
| Concentration per Run 3 | 8.3823 ppm | 0.4251 ppm | 0.0179 ppm | 3.8583 ppm | 0.0507 ppm | 0.0518 ppm | 0.0051 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 2.0 % | 0.3 % | 0.7 % | 3.3 % | 45.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 1.8072 ppm | 0.0039 ppm | 0.0256 ppm | 0.6461 ppm | 0.0015 ppm | 0.3921 ppm |
| Concentration per Run 1 | 0.0027 ppm | 1.7960 ppm | 0.0039 ppm | 0.0253 ppm | 0.6470 ppm | 0.0017 ppm | 0.3928 ppm |
| Concentration per Run 2 | 0.0023 ppm | 1.8239 ppm | 0.0041 ppm | 0.0257 ppm | 0.6447 ppm | 0.0018 ppm | 0.3915 ppm |
| Concentration per Run 3 | 0.0015 ppm | 1.8016 ppm | 0.0038 ppm | 0.0257 ppm | 0.6466 ppm | 0.0008 ppm | 0.3921 ppm |
| Concentration RSD | 28.5 % | 0.8 % | 4.3 % | 0.9 % | 0.2 % | 40.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3547 ppm | 114.1555 % | 113.7848 % | 104.7439 % | 122.8982 % | 123.9565 % | 121.4255 % |
| Concentration per Run 1 | 0.3548 ppm | 114.3162 % | 114.7577 % | 105.0299 % | 122.8675 % | 125.2725 % | 122.0984 % |
| Concentration per Run 2 | 0.3552 ppm | 113.2442 % | 113.7649 % | 104.6693 % | 121.8629 % | 124.0145 % | 121.5481 % |
| Concentration per Run 3 | 0.3542 ppm | 114.9060 % | 112.8319 % | 104.5324 % | 123.9640 % | 122.5826 % | 120.6298 % |
| Concentration RSD | 0.1 % | 0.7 % | 0.8 % | 0.2 % | 0.9 % | 1.1 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-01d2 WG1974077
Analysis started at: 9/20/2024 6:40:03 PM
Rack 3
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 72.4985 ppm | 0.0446 ppm | 0.0348 ppm | 0.7027 ppm | 0.0036 ppm | 180.3921 ppm |
| Concentration per Run 1 | 0.0026 ppm | 72.8116 ppm | 0.0450 ppm | 0.0330 ppm | 0.7037 ppm | 0.0035 ppm | 181.1786 ppm |
| Concentration per Run 2 | 0.0032 ppm | 71.9308 ppm | 0.0433 ppm | 0.0356 ppm | 0.7001 ppm | 0.0036 ppm | 179.1798 ppm |
| Concentration per Run 3 | 0.0026 ppm | 72.7530 ppm | 0.0453 ppm | 0.0358 ppm | 0.7045 ppm | 0.0035 ppm | 180.8180 ppm |
| Concentration RSD | 11.5 % | 0.7 % | 2.4 % | 4.5 % | 0.3 % | 1.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0512 ppm | 0.1978 ppm | 0.3261 ppm | 145.0503 ppm | 9.7281 ppm | 0.0740 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0508 ppm | 0.1988 ppm | 0.3254 ppm | 145.2241 ppm | 9.7763 ppm | 0.0757 ppm |
| Concentration per Run 2 | 0.0019 ppm | 0.0509 ppm | 0.1969 ppm | 0.3268 ppm | 145.0834 ppm | 9.6781 ppm | 0.0731 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0518 ppm | 0.1977 ppm | 0.3261 ppm | 144.8436 ppm | 9.7298 ppm | 0.0731 ppm |
| Concentration RSD | 7.2 % | 1.1 % | 0.5 % | 0.2 % | 0.1 % | 0.5 % | 2.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 44.6299 ppm | 2.3864 ppm | 0.0057 ppm | 3.8672 ppm | 0.1452 ppm | 0.6752 ppm | 0.0021 ppm |
| Concentration per Run 1 | 44.5945 ppm | 2.4075 ppm | 0.0054 ppm | 3.8681 ppm | 0.1461 ppm | 0.6801 ppm | 0.0018 ppm |
| Concentration per Run 2 | 44.7074 ppm | 2.3603 ppm | 0.0062 ppm | 3.8592 ppm | 0.1446 ppm | 0.6691 ppm | -0.0005 ppm |
| Concentration per Run 3 | 44.5878 ppm | 2.3915 ppm | 0.0057 ppm | 3.8742 ppm | 0.1449 ppm | 0.6765 ppm | 0.0052 ppm |
| Concentration RSD | 0.2 % | 1.0 % | 7.1 % | 0.2 % | 0.6 % | 0.8 % | 134.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0034 ppm | 12.4296 ppm | 0.0622 ppm | 0.5382 ppm | 3.2776 ppm | 0.0031 ppm | 0.2437 ppm |
| Concentration per Run 1 | 0.0018 ppm | 12.5169 ppm | 0.0639 ppm | 0.5388 ppm | 3.2791 ppm | 0.0004 ppm | 0.2435 ppm |
| Concentration per Run 2 | 0.0040 ppm | 12.4460 ppm | 0.0616 ppm | 0.5365 ppm | 3.2809 ppm | 0.0044 ppm | 0.2433 ppm |
| Concentration per Run 3 | 0.0046 ppm | 12.3259 ppm | 0.0611 ppm | 0.5394 ppm | 3.2728 ppm | 0.0043 ppm | 0.2442 ppm |
| Concentration RSD | 42.7 % | 0.8 % | 2.4 % | 0.3 % | 0.1 % | 74.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7722 ppm | 110.3075 % | 111.8717 % | 101.5731 % | 123.5575 % | 127.4734 % | 123.1764 % |
| Concentration per Run 1 | 0.7741 ppm | 110.0305 % | 110.6960 % | 101.5222 % | 122.7885 % | 126.8141 % | 123.1634 % |
| Concentration per Run 2 | 0.7713 ppm | 109.8963 % | 112.4171 % | 101.6835 % | 123.3411 % | 127.0795 % | 123.7327 % |
| Concentration per Run 3 | 0.7713 ppm | 110.9959 % | 112.5020 % | 101.5135 % | 124.5429 % | 128.5267 % | 122.6332 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.9 % | 0.1 % | 0.7 % | 0.7 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-02d2 WG1974077
Analysis started at: 9/20/2024 6:44:00 PM
Rack 3
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0168 ppm | 33.1348 ppm | 0.2407 ppm | 0.0770 ppm | 2.7345 ppm | 0.0029 ppm | 70.0479 ppm |
| Concentration per Run 1 | 0.0166 ppm | 33.1708 ppm | 0.2426 ppm | 0.0775 ppm | 2.7178 ppm | 0.0029 ppm | 70.1957 ppm |
| Concentration per Run 2 | 0.0174 ppm | 33.2163 ppm | 0.2386 ppm | 0.0764 ppm | 2.7361 ppm | 0.0028 ppm | 70.1020 ppm |
| Concentration per Run 3 | 0.0166 ppm | 33.0172 ppm | 0.2408 ppm | 0.0772 ppm | 2.7497 ppm | 0.0029 ppm | 69.8458 ppm |
| Concentration RSD | 2.7 % | 0.3 % | 0.8 % | 0.7 % | 0.6 % | 2.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0293 ppm | 0.0534 ppm | 0.3225 ppm | 2.1683 ppm | 215.6719 ppm | 3.5497 ppm | 0.0566 ppm |
| Concentration per Run 1 | 0.0292 ppm | 0.0540 ppm | 0.3218 ppm | 2.1573 ppm | 214.5813 ppm | 3.5915 ppm | 0.0559 ppm |
| Concentration per Run 2 | 0.0297 ppm | 0.0535 ppm | 0.3233 ppm | 2.1797 ppm | 215.6342 ppm | 3.5317 ppm | 0.0574 ppm |
| Concentration per Run 3 | 0.0291 ppm | 0.0527 ppm | 0.3225 ppm | 2.1680 ppm | 216.8001 ppm | 3.5260 ppm | 0.0564 ppm |
| Concentration RSD | 1.1 % | 1.1 % | 0.2 % | 0.5 % | 0.5 % | 1.0 % | 1.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.2943 ppm | 46.6567 [SIC 100] | 0.0438 ppm | 2.4265 ppm | 0.2132 ppm | 8.3525 ppm | 0.0585 ppm |
| Concentration per Run 1 | 11.2922 ppm | 46.6184 ppm | 0.0441 ppm | 2.4327 ppm | 0.2159 ppm | 8.3719 ppm | 0.0559 ppm |
| Concentration per Run 2 | 11.2865 ppm | 46.5846 ppm | 0.0436 ppm | 2.4173 ppm | 0.2121 ppm | 8.3247 ppm | 0.0617 ppm |
| Concentration per Run 3 | 11.3042 ppm | 46.7672 ppm | 0.0437 ppm | 2.4296 ppm | 0.2116 ppm | 8.3609 ppm | 0.0579 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.6 % | 0.3 % | 1.1 % | 0.3 % | 5.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0424 ppm | 5.7003 ppm | 1.4012 ppm | 0.4867 ppm | 0.9372 ppm | 0.0031 ppm | 0.1881 ppm |
| Concentration per Run 1 | 0.0394 ppm | 5.6837 ppm | 1.4080 ppm | 0.4844 ppm | 0.9376 ppm | 0.0006 ppm | 0.1881 ppm |
| Concentration per Run 2 | 0.0428 ppm | 5.7329 ppm | 1.4011 ppm | 0.4857 ppm | 0.9342 ppm | 0.0049 ppm | 0.1882 ppm |
| Concentration per Run 3 | 0.0450 ppm | 5.6845 ppm | 1.3947 ppm | 0.4899 ppm | 0.9398 ppm | 0.0039 ppm | 0.1882 ppm |
| Concentration RSD | 6.6 % | 0.5 % | 0.5 % | 0.6 % | 0.3 % | 70.9 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.6652 ppm | 111.9857 % | 111.5704 % | 102.5827 % | 119.5590 % | 120.0032 % | 118.4637 % |
| Concentration per Run 1 | 19.7507 ppm | 111.3887 % | 112.6183 % | 102.1799 % | 118.6510 % | 121.6673 % | 118.4484 % |
| Concentration per Run 2 | 19.6737 ppm | 112.2937 % | 110.6770 % | 102.6892 % | 120.2758 % | 119.5612 % | 118.0913 % |
| Concentration per Run 3 | 19.5713 ppm | 112.2747 % | 111.4160 % | 102.8792 % | 119.7503 % | 118.7812 % | 118.8516 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.9 % | 0.4 % | 0.7 % | 1.2 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-03d2 WG1974077
Analysis started at: 9/20/2024 6:47:56 PM
Rack 3
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 60.3359 ppm | 0.0797 ppm | 0.0611 ppm | 1.7051 ppm | 0.0031 ppm | 273.2489 ppm |
| Concentration per Run 1 | 0.0027 ppm | 60.1481 ppm | 0.0781 ppm | 0.0619 ppm | 1.7044 ppm | 0.0031 ppm | 273.8136 ppm |
| Concentration per Run 2 | 0.0033 ppm | 60.3629 ppm | 0.0813 ppm | 0.0632 ppm | 1.7067 ppm | 0.0030 ppm | 272.9919 ppm |
| Concentration per Run 3 | 0.0022 ppm | 60.4967 ppm | 0.0797 ppm | 0.0582 ppm | 1.7041 ppm | 0.0031 ppm | 272.9410 ppm |
| Concentration RSD | 21.1 % | 0.3 % | 2.0 % | 4.3 % | 0.1 % | 2.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.0382 ppm | 0.2091 ppm | 0.7519 ppm | 120.0167 ppm | 8.0975 ppm | 0.0587 ppm |
| Concentration per Run 1 | 0.0027 ppm | 0.0379 ppm | 0.2095 ppm | 0.7501 ppm | 119.9234 ppm | 8.0694 ppm | 0.0599 ppm |
| Concentration per Run 2 | 0.0030 ppm | 0.0391 ppm | 0.2086 ppm | 0.7519 ppm | 119.4883 ppm | 8.1173 ppm | 0.0582 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0376 ppm | 0.2093 ppm | 0.7538 ppm | 120.6384 ppm | 8.1056 ppm | 0.0580 ppm |
| Concentration RSD | 4.6 % | 2.1 % | 0.2 % | 0.2 % | 0.5 % | 0.3 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 33.7045 ppm | 1.8518 ppm | 0.0139 ppm | 3.7889 ppm | 0.1200 ppm | 6.3308 ppm | 0.0166 ppm |
| Concentration per Run 1 | 33.7786 ppm | 1.8504 ppm | 0.0140 ppm | 3.7969 ppm | 0.1197 ppm | 6.3444 ppm | 0.0176 ppm |
| Concentration per Run 2 | 33.6606 ppm | 1.8506 ppm | 0.0138 ppm | 3.7864 ppm | 0.1206 ppm | 6.3195 ppm | 0.0161 ppm |
| Concentration per Run 3 | 33.6744 ppm | 1.8545 ppm | 0.0140 ppm | 3.7836 ppm | 0.1197 ppm | 6.3285 ppm | 0.0162 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.7 % | 0.2 % | 0.4 % | 0.2 % | 4.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0077 ppm | 26.3223 [SIC 50] | 0.2034 ppm | 0.8856 ppm | 2.6133 ppm | 0.0028 ppm | 0.1678 ppm |
| Concentration per Run 1 | 0.0025 ppm | 26.3219 ppm | 0.2024 ppm | 0.8850 ppm | 2.6093 ppm | 0.0042 ppm | 0.1680 ppm |
| Concentration per Run 2 | 0.0106 ppm | 26.2508 ppm | 0.2040 ppm | 0.8834 ppm | 2.6177 ppm | 0.0018 ppm | 0.1681 ppm |
| Concentration per Run 3 | 0.0100 ppm | 26.3941 ppm | 0.2037 ppm | 0.8884 ppm | 2.6128 ppm | 0.0024 ppm | 0.1673 ppm |
| Concentration RSD | 58.9 % | 0.3 % | 0.4 % | 0.3 % | 0.2 % | 44.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5518 ppm | 109.6056 % | 112.5653 % | 99.6060 % | 119.3997 % | 125.1383 % | 118.5000 % |
| Concentration per Run 1 | 1.5511 ppm | 109.9940 % | 112.2081 % | 99.7521 % | 119.6963 % | 124.8887 % | 118.9802 % |
| Concentration per Run 2 | 1.5531 ppm | 109.5824 % | 113.2858 % | 98.9479 % | 119.4814 % | 125.8626 % | 117.6900 % |
| Concentration per Run 3 | 1.5511 ppm | 109.2404 % | 112.2021 % | 100.1179 % | 119.0214 % | 124.6637 % | 118.8299 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.6 % | 0.6 % | 0.3 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: eL2453039-04d2 WG1974077
Analysis started at: 9/20/2024 6:51:53 PM
Rack 3
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0130 ppm | 41.5465 ppm | 0.2645 ppm | 0.3973 ppm | 2.7179 ppm | 0.0044 ppm | 90.4938 ppm |
| Concentration per Run 1 | 0.0124 ppm | 41.6415 ppm | 0.2636 ppm | 0.3986 ppm | 2.7146 ppm | 0.0044 ppm | 90.8108 ppm |
| Concentration per Run 2 | 0.0139 ppm | 41.5917 ppm | 0.2626 ppm | 0.3975 ppm | 2.7282 ppm | 0.0044 ppm | 90.6718 ppm |
| Concentration per Run 3 | 0.0129 ppm | 41.4063 ppm | 0.2673 ppm | 0.3958 ppm | 2.7109 ppm | 0.0044 ppm | 89.9989 ppm |
| Concentration RSD | 6.0 % | 0.3 % | 0.9 % | 0.4 % | 0.3 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0274 ppm | 0.0988 ppm | 0.2524 ppm | 5.6796 ppm | 871.7936 [SIC 600] | 4.6033 ppm | 0.0739 ppm |
| Concentration per Run 1 | 0.0276 ppm | 0.0986 ppm | 0.2502 ppm | 5.6697 ppm | 873.2054 ppm | 4.5861 ppm | 0.0755 ppm |
| Concentration per Run 2 | 0.0277 ppm | 0.0993 ppm | 0.2545 ppm | 5.6767 ppm | 868.4012 ppm | 4.6548 ppm | 0.0732 ppm |
| Concentration per Run 3 | 0.0269 ppm | 0.0983 ppm | 0.2524 ppm | 5.6924 ppm | 873.7742 ppm | 4.5691 ppm | 0.0731 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 0.9 % | 0.2 % | 0.3 % | 1.0 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.7226 ppm | 5.7654 ppm | 0.0430 ppm | 4.6769 ppm | 0.2576 ppm | 16.0248 ppm | 0.1555 ppm |
| Concentration per Run 1 | 8.7248 ppm | 5.7823 ppm | 0.0433 ppm | 4.6985 ppm | 0.2559 ppm | 16.1291 ppm | 0.1513 ppm |
| Concentration per Run 2 | 8.7258 ppm | 5.7496 ppm | 0.0426 ppm | 4.6836 ppm | 0.2567 ppm | 15.9668 ppm | 0.1580 ppm |
| Concentration per Run 3 | 8.7172 ppm | 5.7641 ppm | 0.0432 ppm | 4.6484 ppm | 0.2602 ppm | 15.9786 ppm | 0.1573 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.9 % | 0.5 % | 0.9 % | 0.6 % | 2.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0400 ppm | 4.2485 ppm | 10.1001 [SIC 20] | 0.5780 ppm | 1.0135 ppm | 0.0048 ppm | 0.2412 ppm |
| Concentration per Run 1 | 0.0423 ppm | 4.2407 ppm | 10.0989 ppm | 0.5792 ppm | 1.0130 ppm | 0.0062 ppm | 0.2403 ppm |
| Concentration per Run 2 | 0.0369 ppm | 4.2578 ppm | 10.1223 ppm | 0.5772 ppm | 1.0166 ppm | 0.0030 ppm | 0.2406 ppm |
| Concentration per Run 3 | 0.0408 ppm | 4.2468 ppm | 10.0790 ppm | 0.5777 ppm | 1.0109 ppm | 0.0054 ppm | 0.2427 ppm |
| Concentration RSD | 6.9 % | 0.2 % | 0.2 % | 0.2 % | 0.3 % | 33.8 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.2350 ppm | 109.7965 % | 111.9445 % | 92.3847 % | 118.6404 % | 123.2016 % | 117.6232 % |
| Concentration per Run 1 | 14.2288 ppm | 109.4348 % | 111.3270 % | 92.1771 % | 118.1073 % | 122.8739 % | 117.3411 % |
| Concentration per Run 2 | 14.2713 ppm | 109.4700 % | 111.4118 % | 92.0098 % | 118.2177 % | 122.9156 % | 116.9460 % |
| Concentration per Run 3 | 14.2050 ppm | 110.4846 % | 113.0949 % | 92.9672 % | 119.5961 % | 123.8153 % | 118.5824 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.9 % | 0.6 % | 0.7 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-05d2 WG1974077
Analysis started at: 9/20/2024 6:55:49 PM
Rack 3
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 79.4856 ppm | 0.0608 ppm | 0.0213 ppm | 1.1037 ppm | 0.0041 ppm | 179.8552 ppm |
| Concentration per Run 1 | 0.0020 ppm | 79.2476 ppm | 0.0598 ppm | 0.0207 ppm | 1.1069 ppm | 0.0041 ppm | 180.5585 ppm |
| Concentration per Run 2 | 0.0029 ppm | 79.6390 ppm | 0.0615 ppm | 0.0210 ppm | 1.0991 ppm | 0.0041 ppm | 180.3142 ppm |
| Concentration per Run 3 | 0.0022 ppm | 79.5702 ppm | 0.0610 ppm | 0.0220 ppm | 1.1053 ppm | 0.0041 ppm | 178.6929 ppm |
| Concentration RSD | 19.8 % | 0.3 % | 1.4 % | 3.2 % | 0.4 % | 0.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 0.0497 ppm | 0.1962 ppm | 0.7160 ppm | 128.8692 ppm | 8.0476 ppm | 0.0784 ppm |
| Concentration per Run 1 | 0.0041 ppm | 0.0499 ppm | 0.1952 ppm | 0.7097 ppm | 129.2496 ppm | 8.1116 ppm | 0.0805 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0493 ppm | 0.1972 ppm | 0.7204 ppm | 128.5748 ppm | 7.9809 ppm | 0.0773 ppm |
| Concentration per Run 3 | 0.0043 ppm | 0.0499 ppm | 0.1961 ppm | 0.7180 ppm | 128.7833 ppm | 8.0503 ppm | 0.0775 ppm |
| Concentration RSD | 2.8 % | 0.7 % | 0.5 % | 0.8 % | 0.3 % | 0.8 % | 2.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 39.1383 ppm | 2.5472 ppm | 0.0468 ppm | 2.8059 ppm | 0.1445 ppm | 1.6769 ppm | 0.1072 ppm |
| Concentration per Run 1 | 39.1463 ppm | 2.5588 ppm | 0.0464 ppm | 2.8173 ppm | 0.1427 ppm | 1.6772 ppm | 0.1012 ppm |
| Concentration per Run 2 | 39.1832 ppm | 2.5502 ppm | 0.0480 ppm | 2.8130 ppm | 0.1447 ppm | 1.6784 ppm | 0.1109 ppm |
| Concentration per Run 3 | 39.0855 ppm | 2.5326 ppm | 0.0462 ppm | 2.7875 ppm | 0.1461 ppm | 1.6750 ppm | 0.1095 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 2.1 % | 0.6 % | 1.2 % | 0.1 % | 4.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 21.6755 [SIC 50] | 0.0585 ppm | 0.3945 ppm | 3.6013 ppm | 0.0039 ppm | 0.2177 ppm |
| Concentration per Run 1 | 0.0044 ppm | 21.6856 ppm | 0.0592 ppm | 0.3943 ppm | 3.5947 ppm | 0.0039 ppm | 0.2172 ppm |
| Concentration per Run 2 | 0.0078 ppm | 21.7586 ppm | 0.0587 ppm | 0.3933 ppm | 3.6076 ppm | 0.0043 ppm | 0.2174 ppm |
| Concentration per Run 3 | 0.0028 ppm | 21.5822 ppm | 0.0577 ppm | 0.3960 ppm | 3.6016 ppm | 0.0035 ppm | 0.2186 ppm |
| Concentration RSD | 51.0 % | 0.4 % | 1.4 % | 0.3 % | 0.2 % | 9.6 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7305 ppm | 111.8729 % | 113.0017 % | 103.0951 % | 131.6996 % | 134.9553 % | 131.0449 % |
| Concentration per Run 1 | 2.7099 ppm | 111.6341 % | 111.7517 % | 103.7872 % | 130.7651 % | 133.5927 % | 131.9688 % |
| Concentration per Run 2 | 2.7352 ppm | 111.6776 % | 113.7193 % | 103.4225 % | 132.0489 % | 136.3038 % | 131.9192 % |
| Concentration per Run 3 | 2.7465 ppm | 112.3071 % | 113.5341 % | 102.0757 % | 132.2848 % | 134.9694 % | 129.2467 % |
| Concentration RSD | 0.7 % | 0.3 % | 1.0 % | 0.9 % | 0.6 % | 1.0 % | 1.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-06d2 WG1974077
Analysis started at: 9/20/2024 6:59:45 PM
Rack 3
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 83.0031 ppm | 0.0546 ppm | 0.0169 ppm | 0.7873 ppm | 0.0039 ppm | 142.1540 ppm |
| Concentration per Run 1 | 0.0028 ppm | 83.2829 ppm | 0.0547 ppm | 0.0145 ppm | 0.7876 ppm | 0.0039 ppm | 142.7241 ppm |
| Concentration per Run 2 | 0.0030 ppm | 83.0877 ppm | 0.0545 ppm | 0.0182 ppm | 0.7894 ppm | 0.0039 ppm | 141.7673 ppm |
| Concentration per Run 3 | 0.0029 ppm | 82.6386 ppm | 0.0546 ppm | 0.0180 ppm | 0.7850 ppm | 0.0038 ppm | 141.9705 ppm |
| Concentration RSD | 3.6 % | 0.4 % | 0.2 % | 12.3 % | 0.3 % | 1.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 0.0591 ppm | 0.1810 ppm | 1.0427 ppm | 147.7181 ppm | 8.4898 ppm | 0.0931 ppm |
| Concentration per Run 1 | 0.0072 ppm | 0.0584 ppm | 0.1804 ppm | 1.0370 ppm | 147.3049 ppm | 8.4938 ppm | 0.0936 ppm |
| Concentration per Run 2 | 0.0074 ppm | 0.0592 ppm | 0.1809 ppm | 1.0493 ppm | 148.1612 ppm | 8.5090 ppm | 0.0932 ppm |
| Concentration per Run 3 | 0.0075 ppm | 0.0596 ppm | 0.1816 ppm | 1.0417 ppm | 147.6882 ppm | 8.4666 ppm | 0.0925 ppm |
| Concentration RSD | 2.1 % | 1.1 % | 0.3 % | 0.6 % | 0.3 % | 0.3 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 34.5882 ppm | 2.7850 ppm | 0.0080 ppm | 2.9546 ppm | 0.1653 ppm | 1.7508 ppm | 0.0228 ppm |
| Concentration per Run 1 | 34.5985 ppm | 2.7908 ppm | 0.0085 ppm | 2.9529 ppm | 0.1648 ppm | 1.7562 ppm | 0.0233 ppm |
| Concentration per Run 2 | 34.5254 ppm | 2.7769 ppm | 0.0079 ppm | 2.9575 ppm | 0.1662 ppm | 1.7437 ppm | 0.0203 ppm |
| Concentration per Run 3 | 34.6405 ppm | 2.7873 ppm | 0.0077 ppm | 2.9533 ppm | 0.1650 ppm | 1.7525 ppm | 0.0248 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 4.8 % | 0.1 % | 0.5 % | 0.4 % | 10.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 13.8536 ppm | 0.0477 ppm | 0.3959 ppm | 3.4357 ppm | 0.0032 ppm | 0.2711 ppm |
| Concentration per Run 1 | 0.0076 ppm | 13.8936 ppm | 0.0468 ppm | 0.3964 ppm | 3.4423 ppm | 0.0030 ppm | 0.2713 ppm |
| Concentration per Run 2 | 0.0043 ppm | 13.8766 ppm | 0.0489 ppm | 0.3960 ppm | 3.4219 ppm | 0.0032 ppm | 0.2715 ppm |
| Concentration per Run 3 | 0.0028 ppm | 13.7908 ppm | 0.0472 ppm | 0.3952 ppm | 3.4430 ppm | 0.0034 ppm | 0.2706 ppm |
| Concentration RSD | 50.3 % | 0.4 % | 2.4 % | 0.2 % | 0.3 % | 7.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6606 ppm | 113.1753 % | 114.5779 % | 103.8362 % | 130.0284 % | 133.7134 % | 128.5870 % |
| Concentration per Run 1 | 4.6593 ppm | 113.5965 % | 113.9686 % | 103.9596 % | 130.4031 % | 133.3033 % | 128.6188 % |
| Concentration per Run 2 | 4.6402 ppm | 113.2701 % | 114.9826 % | 103.5913 % | 130.5147 % | 133.5941 % | 128.4033 % |
| Concentration per Run 3 | 4.6824 ppm | 112.6591 % | 114.7825 % | 103.9578 % | 129.1675 % | 134.2426 % | 128.7389 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.5 % | 0.2 % | 0.6 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453065-01d2 WG1974077
Analysis started at: 9/20/2024 7:03:42 PM
Rack 3
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 89.7415 ppm | 0.0650 ppm | 0.0474 ppm | 0.8447 ppm | 0.0045 ppm | 794.4861 ppm |
| Concentration per Run 1 | 0.0056 ppm | 89.3406 ppm | 0.0678 ppm | 0.0467 ppm | 0.8437 ppm | 0.0045 ppm | 791.8370 ppm |
| Concentration per Run 2 | 0.0056 ppm | 89.8911 ppm | 0.0587 ppm | 0.0473 ppm | 0.8447 ppm | 0.0045 ppm | 794.3435 ppm |
| Concentration per Run 3 | 0.0052 ppm | 89.9927 ppm | 0.0686 ppm | 0.0481 ppm | 0.8459 ppm | 0.0045 ppm | 797.2776 ppm |
| Concentration RSD | 4.6 % | 0.4 % | 8.5 % | 1.5 % | 0.1 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0029 ppm | 0.0768 ppm | 0.2197 ppm | 0.3423 ppm | 178.4546 ppm | 8.1024 ppm | 0.2803 ppm |
| Concentration per Run 1 | -0.0029 ppm | 0.0758 ppm | 0.2192 ppm | 0.3416 ppm | 177.6496 ppm | 8.0953 ppm | 0.2828 ppm |
| Concentration per Run 2 | -0.0029 ppm | 0.0764 ppm | 0.2205 ppm | 0.3427 ppm | 179.2395 ppm | 8.0809 ppm | 0.2799 ppm |
| Concentration per Run 3 | -0.0028 ppm | 0.0782 ppm | 0.2196 ppm | 0.3426 ppm | 178.4747 ppm | 8.1311 ppm | 0.2783 ppm |
| Concentration RSD | 2.6 % | 1.6 % | 0.3 % | 0.2 % | 0.4 % | 0.3 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 302.8562 ppm | 3.8070 ppm | 0.0111 ppm | 0.9467 ppm | 0.2001 ppm | 1.0547 ppm | -0.0002 ppm |
| Concentration per Run 1 | 302.6281 ppm | 3.7930 ppm | 0.0105 ppm | 0.9434 ppm | 0.1999 ppm | 1.0579 ppm | 0.0046 ppm |
| Concentration per Run 2 | 303.2599 ppm | 3.8210 ppm | 0.0121 ppm | 0.9547 ppm | 0.1999 ppm | 1.0447 ppm | -0.0012 ppm |
| Concentration per Run 3 | 302.6807 ppm | 3.8070 ppm | 0.0109 ppm | 0.9421 ppm | 0.2005 ppm | 1.0616 ppm | -0.0041 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 7.6 % | 0.7 % | 0.2 % | 0.8 % | 2,000.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0095 ppm | 4.0861 ppm | 0.0868 ppm | 1.0124 ppm | 0.8883 ppm | 0.0030 ppm | 0.2831 ppm |
| Concentration per Run 1 | 0.0094 ppm | 4.0544 ppm | 0.0866 ppm | 1.0098 ppm | 0.8878 ppm | 0.0049 ppm | 0.2826 ppm |
| Concentration per Run 2 | 0.0093 ppm | 4.0741 ppm | 0.0857 ppm | 1.0148 ppm | 0.8894 ppm | 0.0014 ppm | 0.2834 ppm |
| Concentration per Run 3 | 0.0099 ppm | 4.1298 ppm | 0.0881 ppm | 1.0127 ppm | 0.8876 ppm | 0.0028 ppm | 0.2832 ppm |
| Concentration RSD | 3.4 % | 1.0 % | 1.4 % | 0.2 % | 0.1 % | 57.2 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6719 ppm | 102.4831 % | 108.9070 % | 87.3118 % | 127.3812 % | 138.7510 % | 125.3347 % |
| Concentration per Run 1 | 0.6692 ppm | 103.3552 % | 109.7988 % | 87.4740 % | 128.3118 % | 139.7795 % | 125.7583 % |
| Concentration per Run 2 | 0.6717 ppm | 102.0451 % | 109.1677 % | 87.1503 % | 126.9870 % | 138.8302 % | 124.8687 % |
| Concentration per Run 3 | 0.6748 ppm | 102.0491 % | 107.7544 % | 87.3112 % | 126.8449 % | 137.6432 % | 125.3772 % |
| Concentration RSD | 0.4 % | 0.7 % | 1.0 % | 0.2 % | 0.6 % | 0.8 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453065-02d2 WG1974077
Analysis started at: 9/20/2024 7:07:38 PM
Rack 3
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1427 ppm | 110.7058 ppm | 0.0848 ppm | 0.0400 ppm | 1.6558 ppm | 0.0057 ppm | 193.2701 ppm |
| Concentration per Run 1 | 0.1434 ppm | 110.9833 ppm | 0.0863 ppm | 0.0384 ppm | 1.6578 ppm | 0.0057 ppm | 193.6227 ppm |
| Concentration per Run 2 | 0.1427 ppm | 110.6329 ppm | 0.0833 ppm | 0.0411 ppm | 1.6547 ppm | 0.0057 ppm | 193.1233 ppm |
| Concentration per Run 3 | 0.1421 ppm | 110.5011 ppm | 0.0849 ppm | 0.0405 ppm | 1.6548 ppm | 0.0056 ppm | 193.0642 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 1.8 % | 3.6 % | 0.1 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0924 ppm | 0.1756 ppm | 0.6988 ppm | 204.8744 ppm | 8.5878 ppm | 0.3028 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0924 ppm | 0.1772 ppm | 0.6956 ppm | 204.6226 ppm | 8.6126 ppm | 0.3051 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0929 ppm | 0.1754 ppm | 0.7003 ppm | 204.7960 ppm | 8.5915 ppm | 0.3035 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0919 ppm | 0.1742 ppm | 0.7006 ppm | 205.2046 ppm | 8.5593 ppm | 0.2998 ppm |
| Concentration RSD | 18.0 % | 0.5 % | 0.9 % | 0.4 % | 0.1 % | 0.3 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 89.7851 ppm | 4.6486 ppm | 0.0157 ppm | 0.4364 ppm | 0.2288 ppm | 4.8308 ppm | 0.0049 ppm |
| Concentration per Run 1 | 90.4827 ppm | 4.6519 ppm | 0.0156 ppm | 0.4390 ppm | 0.2297 ppm | 4.8338 ppm | 0.0087 ppm |
| Concentration per Run 2 | 89.9134 ppm | 4.6459 ppm | 0.0158 ppm | 0.4373 ppm | 0.2298 ppm | 4.8402 ppm | 0.0052 ppm |
| Concentration per Run 3 | 88.9592 ppm | 4.6482 ppm | 0.0158 ppm | 0.4329 ppm | 0.2267 ppm | 4.8184 ppm | 0.0008 ppm |
| Concentration RSD | 0.9 % | 0.1 % | 0.7 % | 0.7 % | 0.8 % | 0.2 % | 80.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0103 ppm | 3.1863 ppm | 0.0967 ppm | 0.5414 ppm | 0.7309 ppm | 0.0035 ppm | 0.1985 ppm |
| Concentration per Run 1 | 0.0091 ppm | 3.2593 ppm | 0.0970 ppm | 0.5416 ppm | 0.7333 ppm | 0.0026 ppm | 0.1983 ppm |
| Concentration per Run 2 | 0.0104 ppm | 3.1366 ppm | 0.0956 ppm | 0.5401 ppm | 0.7322 ppm | 0.0052 ppm | 0.1985 ppm |
| Concentration per Run 3 | 0.0115 ppm | 3.1630 ppm | 0.0975 ppm | 0.5424 ppm | 0.7273 ppm | 0.0026 ppm | 0.1988 ppm |
| Concentration RSD | 11.7 % | 2.0 % | 1.0 % | 0.2 % | 0.4 % | 44.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5596 ppm | 109.5279 % | 111.9437 % | 97.7644 % | 144.8166 % | 151.1249 % | 143.2113 % |
| Concentration per Run 1 | 1.5703 ppm | 109.9422 % | 111.5736 % | 97.4489 % | 144.9887 % | 150.5326 % | 143.2709 % |
| Concentration per Run 2 | 1.5555 ppm | 109.9605 % | 111.8867 % | 97.2737 % | 146.0623 % | 151.0647 % | 142.5891 % |
| Concentration per Run 3 | 1.5529 ppm | 108.6809 % | 112.3706 % | 98.5707 % | 143.3987 % | 151.7774 % | 143.7739 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.4 % | 0.7 % | 0.9 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453065-03d2 WG1974077
Analysis started at: 9/20/2024 7:11:35 PM
Rack 3
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 83.3356 ppm | 0.0622 ppm | 0.0305 ppm | 0.7950 ppm | 0.0042 ppm | 524.6434 ppm |
| Concentration per Run 1 | 0.0047 ppm | 83.2978 ppm | 0.0639 ppm | 0.0312 ppm | 0.7890 ppm | 0.0042 ppm | 525.1881 ppm |
| Concentration per Run 2 | 0.0046 ppm | 83.6513 ppm | 0.0627 ppm | 0.0323 ppm | 0.7988 ppm | 0.0042 ppm | 523.6786 ppm |
| Concentration per Run 3 | 0.0045 ppm | 83.0578 ppm | 0.0599 ppm | 0.0279 ppm | 0.7973 ppm | 0.0042 ppm | 525.0634 ppm |
| Concentration RSD | 2.1 % | 0.4 % | 3.3 % | 7.6 % | 0.7 % | 0.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0712 ppm | 0.2228 ppm | 0.2628 ppm | 166.9767 ppm | 6.9611 ppm | 0.2366 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0700 ppm | 0.2227 ppm | 0.2626 ppm | 166.1368 ppm | 7.0017 ppm | 0.2371 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0712 ppm | 0.2222 ppm | 0.2620 ppm | 167.1445 ppm | 6.9643 ppm | 0.2351 ppm |
| Concentration per Run 3 | -0.0012 ppm | 0.0725 ppm | 0.2234 ppm | 0.2637 ppm | 167.6488 ppm | 6.9173 ppm | 0.2375 ppm |
| Concentration RSD | 5.5 % | 1.8 % | 0.3 % | 0.3 % | 0.5 % | 0.6 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 146.3943 ppm | 3.4037 ppm | 0.0089 ppm | 0.5181 ppm | 0.1809 ppm | 0.6592 ppm | 0.0087 ppm |
| Concentration per Run 1 | 146.2366 ppm | 3.4062 ppm | 0.0080 ppm | 0.5250 ppm | 0.1805 ppm | 0.6565 ppm | 0.0121 ppm |
| Concentration per Run 2 | 146.6697 ppm | 3.3980 ppm | 0.0094 ppm | 0.5117 ppm | 0.1811 ppm | 0.6587 ppm | 0.0115 ppm |
| Concentration per Run 3 | 146.2765 ppm | 3.4071 ppm | 0.0092 ppm | 0.5175 ppm | 0.1812 ppm | 0.6625 ppm | 0.0026 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 8.4 % | 1.3 % | 0.2 % | 0.5 % | 60.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | 2.8951 ppm | 0.0456 ppm | 0.7161 ppm | 0.7156 ppm | 0.0031 ppm | 0.3641 ppm |
| Concentration per Run 1 | 0.0073 ppm | 2.8631 ppm | 0.0445 ppm | 0.7115 ppm | 0.7139 ppm | 0.0029 ppm | 0.3637 ppm |
| Concentration per Run 2 | 0.0068 ppm | 2.9435 ppm | 0.0452 ppm | 0.7180 ppm | 0.7153 ppm | 0.0022 ppm | 0.3641 ppm |
| Concentration per Run 3 | 0.0064 ppm | 2.8787 ppm | 0.0469 ppm | 0.7188 ppm | 0.7177 ppm | 0.0041 ppm | 0.3644 ppm |
| Concentration RSD | 6.5 % | 1.5 % | 2.7 % | 0.6 % | 0.3 % | 31.1 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6814 ppm | 106.7612 % | 111.3616 % | 93.3194 % | 129.9081 % | 138.8980 % | 129.1816 % |
| Concentration per Run 1 | 0.6806 ppm | 107.0896 % | 112.1649 % | 93.4900 % | 130.4007 % | 140.2652 % | 129.1251 % |
| Concentration per Run 2 | 0.6810 ppm | 107.2071 % | 110.8914 % | 93.5914 % | 130.2641 % | 137.6026 % | 129.7074 % |
| Concentration per Run 3 | 0.6825 ppm | 105.9869 % | 111.0287 % | 92.8768 % | 129.0594 % | 138.8263 % | 128.7124 % |
| Concentration RSD | 0.1 % | 0.6 % | 0.6 % | 0.4 % | 0.6 % | 1.0 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 7:15:32 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5042 ppm | 0.4792 ppm | 0.4764 ppm | 0.4854 ppm | 0.4912 ppm | 0.5018 ppm | 0.4930 ppm |
| Concentration per Run 1 | 0.5046 ppm | 0.4776 ppm | 0.4717 ppm | 0.4819 ppm | 0.4874 ppm | 0.4985 ppm | 0.4899 ppm |
| Concentration per Run 2 | 0.5024 ppm | 0.4839 ppm | 0.4772 ppm | 0.4866 ppm | 0.4932 ppm | 0.5034 ppm | 0.4966 ppm |
| Concentration per Run 3 | 0.5055 ppm | 0.4762 ppm | 0.4804 ppm | 0.4877 ppm | 0.4931 ppm | 0.5034 ppm | 0.4925 ppm |
| Recovery Percentage 1 | 100.833 % | 95.846 % | 95.285 % | 97.079 % | 98.249 % | 100.353 % | 98.597 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.9 % | 0.6 % | 0.7 % | 0.6 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4908 ppm | 0.5006 ppm | 0.4834 ppm | 0.4887 ppm | 0.4993 ppm | 5.0692 ppm | 0.4906 ppm |
| Concentration per Run 1 | 0.4956 ppm | 0.5029 ppm | 0.4825 ppm | 0.4869 ppm | 0.4967 ppm | 5.0463 ppm | 0.4876 ppm |
| Concentration per Run 2 | 0.4911 ppm | 0.5021 ppm | 0.4857 ppm | 0.4904 ppm | 0.5012 ppm | 5.0882 ppm | 0.4907 ppm |
| Concentration per Run 3 | 0.4858 ppm | 0.4968 ppm | 0.4819 ppm | 0.4888 ppm | 0.5001 ppm | 5.0731 ppm | 0.4934 ppm |
| Recovery Percentage 1 | 98.169 % | 100.123 % | 96.674 % | 97.739 % | 99.864 % | 101.384 % | 98.111 % |
| Concentration RSD | 1.0 % | 0.7 % | 0.4 % | 0.4 % | 0.5 % | 0.4 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4897 ppm | 0.4803 ppm | 0.4818 ppm | 9.6708 ppm | 0.4999 ppm | 0.4938 ppm | 0.4983 ppm |
| Concentration per Run 1 | 0.4922 ppm | 0.4791 ppm | 0.4804 ppm | 9.6391 ppm | 0.4969 ppm | 0.4914 ppm | 0.4989 ppm |
| Concentration per Run 2 | 0.4885 ppm | 0.4815 ppm | 0.4850 ppm | 9.7299 ppm | 0.5039 ppm | 0.4935 ppm | 0.4979 ppm |
| Concentration per Run 3 | 0.4884 ppm | 0.4803 ppm | 0.4800 ppm | 9.6434 ppm | 0.4991 ppm | 0.4963 ppm | 0.4982 ppm |
| Recovery Percentage 1 | 97.939 % | 96.058 % | 96.360 % | 96.708 % | 99.988 % | 98.755 % | 99.668 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.6 % | 0.5 % | 0.7 % | 0.5 % | 0.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4939 ppm | 5.3621 ppm | 0.4740 ppm | 0.4761 ppm | 0.4927 ppm | 0.4937 ppm | 0.4797 ppm |
| Concentration per Run 1 | 0.4901 ppm | 5.3309 ppm | 0.4764 ppm | 0.4747 ppm | 0.4934 ppm | 0.4918 ppm | 0.4799 ppm |
| Concentration per Run 2 | 0.4945 ppm | 5.3800 ppm | 0.4737 ppm | 0.4788 ppm | 0.4918 ppm | 0.4950 ppm | 0.4796 ppm |
| Concentration per Run 3 | 0.4971 ppm | 5.3752 ppm | 0.4718 ppm | 0.4749 ppm | 0.4929 ppm | 0.4943 ppm | 0.4796 ppm |
| Recovery Percentage 1 | 98.783 % | 102.134 % | 94.796 % | 95.227 % | 98.544 % | 98.744 % | 95.944 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.5 % | 0.5 % | 0.2 % | 0.3 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4961 ppm | 111.1171 % | 108.2922 % | 108.3536 % | 110.3232 % | 108.4927 % | 108.8890 % |
| Concentration per Run 1 | 0.4958 ppm | 110.7914 % | 109.2850 % | 109.4542 % | 110.1042 % | 109.4353 % | 110.0962 % |
| Concentration per Run 2 | 0.4983 ppm | 110.4421 % | 107.9108 % | 107.6914 % | 109.9152 % | 108.4986 % | 108.2281 % |
| Concentration per Run 3 | 0.4943 ppm | 112.1179 % | 107.6808 % | 107.9152 % | 110.9502 % | 107.5441 % | 108.3427 % |
| Recovery Percentage 1 | 99.224 % | | | | | | |
| Concentration RSD | 0.4 % | 0.8 % | 0.8 % | 0.9 % | 0.5 % | 0.9 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 7:19:28 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0090 ppm | -0.0001 ppm | 0.0016 ppm | 0.0000 ppm | 0.0001 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0029 ppm | -0.0011 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0059 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0101 ppm | 0.0010 ppm | 0.0014 ppm | -0.0001 ppm | 0.0001 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0140 ppm | -0.0002 ppm | 0.0018 ppm | 0.0001 ppm | 0.0001 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 16.598 % | 8.999 % | -1.944 % | 5.253 % | 0.188 % | 1.749 % | 3.695 % |
| Concentration RSD | 14.8 % | 63.0 % | 1,066.4 % | 13.2 % | 369.9 % | 68.2 % | 62.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0002 ppm | -0.0004 ppm | -0.0004 ppm | 0.0003 ppm | 0.0026 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0001 ppm | -0.0005 ppm | -0.0004 ppm | -0.0013 ppm | -0.0154 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | -0.0001 ppm | 0.0006 ppm | -0.0123 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0004 ppm | -0.0004 ppm | -0.0007 ppm | 0.0015 ppm | 0.0354 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 2.685 % | -0.977 % | -4.481 % | -4.129 % | 0.545 % | 0.103 % | 5.861 % |
| Concentration RSD | 36.4 % | 91.1 % | 15.5 % | 69.5 % | 526.5 % | 1,109.8 % | 423.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | -0.0001 ppm | 0.0002 ppm | -0.1691 ppm | -0.0011 ppm | -0.0005 ppm | 0.0052 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0000 ppm | 0.0005 ppm | -0.1673 ppm | -0.0006 ppm | -0.0013 ppm | 0.0040 ppm |
| Concentration per Run 2 | 0.0036 ppm | -0.0002 ppm | 0.0005 ppm | -0.1704 ppm | -0.0012 ppm | -0.0001 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.0021 ppm | -0.0001 ppm | -0.0002 ppm | -0.1696 ppm | -0.0015 ppm | -0.0001 ppm | 0.0060 ppm |
| Recovery Percentage 1 | 2.716 % | -1.043 % | 0.493 % | -8.455 % | -4.400 % | -5.113 % | 10.422 % |
| Concentration RSD | 29.5 % | 72.1 % | 169.9 % | 1.0 % | 41.7 % | 127.5 % | 20.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0011 ppm | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0012 ppm | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm | 0.0011 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0022 ppm | 0.0005 ppm | 0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0017 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0016 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | -0.0005 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 13.397 % | 0.213 % | 0.124 % | -0.546 % | 0.255 % | -1.854 % | -2.229 % |
| Concentration RSD | 243.3 % | 51.3 % | 306.7 % | 225.2 % | 688.9 % | 371.6 % | 187.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 110.1744 % | 105.3483 % | 108.9155 % | 111.5526 % | 106.6667 % | 109.8305 % |
| Concentration per Run 1 | 0.0000 ppm | 109.8857 % | 105.8889 % | 109.8183 % | 111.5484 % | 106.9592 % | 110.8311 % |
| Concentration per Run 2 | 0.0001 ppm | 110.4152 % | 104.9978 % | 108.6732 % | 111.8099 % | 106.6439 % | 109.7441 % |
| Concentration per Run 3 | 0.0000 ppm | 110.2221 % | 105.1583 % | 108.2551 % | 111.2996 % | 106.3970 % | 108.9162 % |
| Recovery Percentage 1 | 0.319 % | | | | | | |
| Concentration RSD | 652.9 % | 0.2 % | 0.5 % | 0.7 % | 0.2 % | 0.3 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453065-04d2 WG1974077
Analysis started at: 9/20/2024 7:23:46 PM
Rack 3
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 67.0584 ppm | 0.0584 ppm | 0.0322 ppm | 1.2931 ppm | 0.0031 ppm | 637.3834 ppm |
| Concentration per Run 1 | 0.0008 ppm | 66.9551 ppm | 0.0566 ppm | 0.0310 ppm | 1.2948 ppm | 0.0031 ppm | 638.0483 ppm |
| Concentration per Run 2 | 0.0019 ppm | 67.1741 ppm | 0.0604 ppm | 0.0328 ppm | 1.2931 ppm | 0.0031 ppm | 636.8241 ppm |
| Concentration per Run 3 | 0.0018 ppm | 67.0460 ppm | 0.0582 ppm | 0.0329 ppm | 1.2913 ppm | 0.0031 ppm | 637.2777 ppm |
| Concentration RSD | 39.2 % | 0.2 % | 3.3 % | 3.4 % | 0.1 % | 0.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | 0.0811 ppm | 0.1047 ppm | 0.1615 ppm | 138.9542 ppm | 6.1411 ppm | 0.1861 ppm |
| Concentration per Run 1 | -0.0026 ppm | 0.0820 ppm | 0.1047 ppm | 0.1611 ppm | 138.8207 ppm | 6.1498 ppm | 0.1869 ppm |
| Concentration per Run 2 | -0.0025 ppm | 0.0813 ppm | 0.1040 ppm | 0.1624 ppm | 139.2938 ppm | 6.1345 ppm | 0.1871 ppm |
| Concentration per Run 3 | -0.0026 ppm | 0.0801 ppm | 0.1054 ppm | 0.1610 ppm | 138.7481 ppm | 6.1389 ppm | 0.1843 ppm |
| Concentration RSD | 1.7 % | 1.2 % | 0.7 % | 0.5 % | 0.2 % | 0.1 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 247.2349 ppm | 3.3997 ppm | 0.0050 ppm | 0.6665 ppm | 0.1700 ppm | 0.0745 ppm | 0.0043 ppm |
| Concentration per Run 1 | 247.3502 ppm | 3.3981 ppm | 0.0046 ppm | 0.6756 ppm | 0.1699 ppm | 0.0732 ppm | -0.0010 ppm |
| Concentration per Run 2 | 247.6531 ppm | 3.4035 ppm | 0.0049 ppm | 0.6650 ppm | 0.1700 ppm | 0.0740 ppm | 0.0052 ppm |
| Concentration per Run 3 | 246.7012 ppm | 3.3974 ppm | 0.0055 ppm | 0.6588 ppm | 0.1702 ppm | 0.0763 ppm | 0.0086 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 9.1 % | 1.3 % | 0.1 % | 2.1 % | 114.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 5.3985 ppm | 0.0026 ppm | 0.8455 ppm | 0.6941 ppm | 0.0020 ppm | 0.1273 ppm |
| Concentration per Run 1 | 0.0046 ppm | 5.4061 ppm | 0.0033 ppm | 0.8498 ppm | 0.6928 ppm | 0.0008 ppm | 0.1276 ppm |
| Concentration per Run 2 | 0.0055 ppm | 5.3968 ppm | 0.0030 ppm | 0.8454 ppm | 0.6932 ppm | 0.0027 ppm | 0.1275 ppm |
| Concentration per Run 3 | 0.0037 ppm | 5.3925 ppm | 0.0016 ppm | 0.8412 ppm | 0.6964 ppm | 0.0026 ppm | 0.1269 ppm |
| Concentration RSD | 19.5 % | 0.1 % | 34.4 % | 0.5 % | 0.3 % | 50.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3035 ppm | 104.6362 % | 109.3604 % | 90.8964 % | 126.6827 % | 134.9856 % | 125.6807 % |
| Concentration per Run 1 | 0.3040 ppm | 104.8521 % | 109.9243 % | 90.4542 % | 127.0610 % | 136.1284 % | 124.3855 % |
| Concentration per Run 2 | 0.3047 ppm | 103.9176 % | 109.9189 % | 91.1109 % | 125.7979 % | 135.6981 % | 125.7697 % |
| Concentration per Run 3 | 0.3018 ppm | 105.1390 % | 108.2381 % | 91.1240 % | 127.1893 % | 133.1301 % | 126.8868 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.9 % | 0.4 % | 0.6 % | 1.2 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453695-05d2 WG1974077
Analysis started at: 9/20/2024 7:27:43 PM
Rack 3
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 42.1230 ppm | 0.0420 ppm | 0.0477 ppm | 0.2891 ppm | 0.0027 ppm | 670.4479 ppm |
| Concentration per Run 1 | 0.0019 ppm | 42.2112 ppm | 0.0413 ppm | 0.0472 ppm | 0.2895 ppm | 0.0027 ppm | 672.3272 ppm |
| Concentration per Run 2 | 0.0019 ppm | 41.9516 ppm | 0.0413 ppm | 0.0493 ppm | 0.2897 ppm | 0.0026 ppm | 667.8601 ppm |
| Concentration per Run 3 | 0.0011 ppm | 42.2061 ppm | 0.0435 ppm | 0.0465 ppm | 0.2881 ppm | 0.0028 ppm | 671.1565 ppm |
| Concentration RSD | 28.4 % | 0.4 % | 3.0 % | 3.1 % | 0.3 % | 2.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 0.0409 ppm | 0.0775 ppm | 0.2215 ppm | 110.8701 ppm | 6.4365 ppm | 0.1020 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0411 ppm | 0.0776 ppm | 0.2223 ppm | 111.0531 ppm | 6.4853 ppm | 0.1007 ppm |
| Concentration per Run 2 | -0.0017 ppm | 0.0405 ppm | 0.0775 ppm | 0.2206 ppm | 110.6283 ppm | 6.4244 ppm | 0.1041 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0412 ppm | 0.0775 ppm | 0.2218 ppm | 110.9288 ppm | 6.3998 ppm | 0.1013 ppm |
| Concentration RSD | 5.5 % | 0.9 % | 0.0 % | 0.4 % | 0.2 % | 0.7 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 122.4098 ppm | 3.0018 ppm | 0.0107 ppm | 0.7736 ppm | 0.1433 ppm | 0.1255 ppm | 0.0022 ppm |
| Concentration per Run 1 | 122.3130 ppm | 3.0067 ppm | 0.0105 ppm | 0.7706 ppm | 0.1415 ppm | 0.1262 ppm | 0.0029 ppm |
| Concentration per Run 2 | 122.3533 ppm | 2.9932 ppm | 0.0100 ppm | 0.7822 ppm | 0.1443 ppm | 0.1246 ppm | -0.0007 ppm |
| Concentration per Run 3 | 122.5632 ppm | 3.0054 ppm | 0.0115 ppm | 0.7679 ppm | 0.1441 ppm | 0.1257 ppm | 0.0044 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 7.1 % | 1.0 % | 1.1 % | 0.6 % | 119.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 4.6371 ppm | 0.0048 ppm | 0.8839 ppm | 0.4612 ppm | 0.0031 ppm | 0.0961 ppm |
| Concentration per Run 1 | 0.0039 ppm | 4.6269 ppm | 0.0062 ppm | 0.8838 ppm | 0.4604 ppm | 0.0039 ppm | 0.0957 ppm |
| Concentration per Run 2 | 0.0070 ppm | 4.6087 ppm | 0.0032 ppm | 0.8830 ppm | 0.4604 ppm | 0.0013 ppm | 0.0961 ppm |
| Concentration per Run 3 | 0.0022 ppm | 4.6758 ppm | 0.0050 ppm | 0.8847 ppm | 0.4629 ppm | 0.0041 ppm | 0.0964 ppm |
| Concentration RSD | 56.1 % | 0.7 % | 31.6 % | 0.1 % | 0.3 % | 51.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5913 ppm | 105.9090 % | 111.1746 % | 92.5180 % | 125.9635 % | 135.1734 % | 124.4983 % |
| Concentration per Run 1 | 0.5890 ppm | 106.1276 % | 110.7492 % | 92.2728 % | 126.2668 % | 135.2357 % | 123.9431 % |
| Concentration per Run 2 | 0.5931 ppm | 105.2864 % | 111.2827 % | 92.7076 % | 125.1379 % | 134.9790 % | 124.9281 % |
| Concentration per Run 3 | 0.5920 ppm | 106.3130 % | 111.4920 % | 92.5736 % | 126.4857 % | 135.3054 % | 124.6238 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 0.6 % | 0.1 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: eL2453695-06d2 WG1974077
Analysis started at: 9/20/2024 7:31:40 PM
Rack 3
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 67.4481 ppm | 0.0392 ppm | 0.1218 ppm | 0.7194 ppm | 0.0109 ppm | 1,179.4048 [SIC 1000] |
| Concentration per Run 1 | 0.0012 ppm | 67.4238 ppm | 0.0365 ppm | 0.1211 ppm | 0.7196 ppm | 0.0109 ppm | 1,181.6171 ppm |
| Concentration per Run 2 | 0.0015 ppm | 67.4649 ppm | 0.0390 ppm | 0.1233 ppm | 0.7212 ppm | 0.0108 ppm | 1,177.7354 ppm |
| Concentration per Run 3 | 0.0014 ppm | 67.4555 ppm | 0.0420 ppm | 0.1210 ppm | 0.7174 ppm | 0.0108 ppm | 1,178.8620 ppm |
| Concentration RSD | 10.8 % | 0.0 % | 7.0 % | 1.1 % | 0.3 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0116 ppm | 0.0719 ppm | 0.1094 ppm | 58.1632 ppm | 7.1164 ppm | 0.0654 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0114 ppm | 0.0717 ppm | 0.1097 ppm | 58.1407 ppm | 7.1316 ppm | 0.0680 ppm |
| Concentration per Run 2 | 0.0019 ppm | 0.0117 ppm | 0.0724 ppm | 0.1087 ppm | 58.1193 ppm | 7.1823 ppm | 0.0633 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0118 ppm | 0.0716 ppm | 0.1098 ppm | 58.2297 ppm | 7.0354 ppm | 0.0648 ppm |
| Concentration RSD | 6.3 % | 2.0 % | 0.6 % | 0.5 % | 0.1 % | 1.0 % | 3.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 473.1363 ppm | 9.0542 ppm | 0.0046 ppm | 2.0384 ppm | 0.0466 ppm | 0.7799 ppm | 0.0030 ppm |
| Concentration per Run 1 | 471.4245 ppm | 9.0551 ppm | 0.0042 ppm | 2.0498 ppm | 0.0466 ppm | 0.7824 ppm | 0.0063 ppm |
| Concentration per Run 2 | 473.7775 ppm | 9.0516 ppm | 0.0045 ppm | 2.0349 ppm | 0.0473 ppm | 0.7783 ppm | 0.0005 ppm |
| Concentration per Run 3 | 474.2070 ppm | 9.0558 ppm | 0.0050 ppm | 2.0305 ppm | 0.0458 ppm | 0.7792 ppm | 0.0022 ppm |
| Concentration RSD | 0.3 % | 0.0 % | 9.0 % | 0.5 % | 1.6 % | 0.3 % | 97.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0119 ppm | 37.6291 [SIC 50] | 0.0080 ppm | 0.7531 ppm | 1.3501 ppm | 0.0014 ppm | 0.0486 ppm |
| Concentration per Run 1 | 0.0091 ppm | 37.6175 ppm | 0.0072 ppm | 0.7517 ppm | 1.3438 ppm | 0.0020 ppm | 0.0485 ppm |
| Concentration per Run 2 | 0.0138 ppm | 37.5684 ppm | 0.0088 ppm | 0.7540 ppm | 1.3540 ppm | 0.0007 ppm | 0.0487 ppm |
| Concentration per Run 3 | 0.0128 ppm | 37.7015 ppm | 0.0082 ppm | 0.7535 ppm | 1.3526 ppm | 0.0015 ppm | 0.0486 ppm |
| Concentration RSD | 20.8 % | 0.2 % | 9.7 % | 0.2 % | 0.4 % | 47.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.0014 ppm | 98.9897 % | 106.6033 % | 83.5596 % | 133.7191 % | 147.5001 % | 130.9685 % |
| Concentration per Run 1 | 1.9895 ppm | 99.8872 % | 106.1555 % | 83.6487 % | 134.9915 % | 146.9708 % | 131.5985 % |
| Concentration per Run 2 | 2.0083 ppm | 98.9140 % | 106.2821 % | 83.6645 % | 133.3902 % | 146.9767 % | 131.0459 % |
| Concentration per Run 3 | 2.0065 ppm | 98.1678 % | 107.3723 % | 83.3656 % | 132.7756 % | 148.5527 % | 130.2611 % |
| Concentration RSD | 0.5 % | 0.9 % | 0.6 % | 0.2 % | 0.9 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453726-01d2 WG1974077
Analysis started at: 9/20/2024 7:35:37 PM
Rack 3
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 138.2569 ppm | 0.0412 ppm | 0.0123 ppm | 0.5806 ppm | 0.0043 ppm | 32.9726 ppm |
| Concentration per Run 1 | 0.0028 ppm | 138.3461 ppm | 0.0399 ppm | 0.0119 ppm | 0.5826 ppm | 0.0043 ppm | 33.0338 ppm |
| Concentration per Run 2 | 0.0022 ppm | 138.3063 ppm | 0.0403 ppm | 0.0142 ppm | 0.5774 ppm | 0.0043 ppm | 32.9164 ppm |
| Concentration per Run 3 | 0.0022 ppm | 138.1184 ppm | 0.0433 ppm | 0.0107 ppm | 0.5817 ppm | 0.0044 ppm | 32.9675 ppm |
| Concentration RSD | 15.3 % | 0.1 % | 4.4 % | 14.2 % | 0.5 % | 1.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0765 ppm | 0.2969 ppm | 0.1783 ppm | 209.5094 ppm | 4.6857 ppm | 0.1112 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0769 ppm | 0.2988 ppm | 0.1783 ppm | 209.5994 ppm | 4.6880 ppm | 0.1117 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0757 ppm | 0.2965 ppm | 0.1780 ppm | 208.7171 ppm | 4.6741 ppm | 0.1109 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0770 ppm | 0.2954 ppm | 0.1786 ppm | 210.2117 ppm | 4.6950 ppm | 0.1110 ppm |
| Concentration RSD | 8.3 % | 0.9 % | 0.6 % | 0.2 % | 0.4 % | 0.2 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 40.2902 ppm | 2.4614 ppm | 0.0041 ppm | 0.7150 ppm | 0.1643 ppm | 0.4585 ppm | -0.0034 ppm |
| Concentration per Run 1 | 40.4216 ppm | 2.4597 ppm | 0.0035 ppm | 0.7234 ppm | 0.1655 ppm | 0.4574 ppm | 0.0031 ppm |
| Concentration per Run 2 | 40.2753 ppm | 2.4587 ppm | 0.0048 ppm | 0.7078 ppm | 0.1632 ppm | 0.4592 ppm | -0.0070 ppm |
| Concentration per Run 3 | 40.1736 ppm | 2.4659 ppm | 0.0040 ppm | 0.7138 ppm | 0.1642 ppm | 0.4590 ppm | -0.0065 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 15.9 % | 1.1 % | 0.7 % | 0.2 % | 165.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 3.6583 ppm | 0.0106 ppm | 0.1265 ppm | 3.6239 ppm | 0.0039 ppm | 0.3638 ppm |
| Concentration per Run 1 | 0.0023 ppm | 3.6945 ppm | 0.0116 ppm | 0.1266 ppm | 3.6438 ppm | 0.0043 ppm | 0.3633 ppm |
| Concentration per Run 2 | -0.0039 ppm | 3.6260 ppm | 0.0107 ppm | 0.1263 ppm | 3.6302 ppm | 0.0048 ppm | 0.3635 ppm |
| Concentration per Run 3 | 0.0051 ppm | 3.6544 ppm | 0.0095 ppm | 0.1266 ppm | 3.5976 ppm | 0.0027 ppm | 0.3645 ppm |
| Concentration RSD | 392.6 % | 0.9 % | 9.6 % | 0.2 % | 0.7 % | 27.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5657 ppm | 116.2458 % | 115.4394 % | 108.3148 % | 126.9932 % | 127.8185 % | 127.1737 % |
| Concentration per Run 1 | 0.5666 ppm | 116.5812 % | 115.3306 % | 108.6930 % | 127.1242 % | 128.3097 % | 127.3125 % |
| Concentration per Run 2 | 0.5645 ppm | 115.9989 % | 115.8521 % | 108.1207 % | 126.3727 % | 128.5167 % | 127.3665 % |
| Concentration per Run 3 | 0.5660 ppm | 116.1573 % | 115.1355 % | 108.1306 % | 127.4828 % | 126.6290 % | 126.8422 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.3 % | 0.4 % | 0.8 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453726-02d2 WG1974077
Analysis started at: 9/20/2024 7:39:34 PM
Rack 3
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 101.7357 ppm | 0.0226 ppm | 0.0109 ppm | 0.6441 ppm | 0.0052 ppm | 20.2862 ppm |
| Concentration per Run 1 | 0.0028 ppm | 101.5756 ppm | 0.0231 ppm | 0.0105 ppm | 0.6409 ppm | 0.0052 ppm | 20.2257 ppm |
| Concentration per Run 2 | 0.0016 ppm | 101.7126 ppm | 0.0218 ppm | 0.0111 ppm | 0.6450 ppm | 0.0052 ppm | 20.2999 ppm |
| Concentration per Run 3 | 0.0027 ppm | 101.9187 ppm | 0.0229 ppm | 0.0110 ppm | 0.6464 ppm | 0.0051 ppm | 20.3331 ppm |
| Concentration RSD | 27.6 % | 0.2 % | 3.2 % | 2.8 % | 0.4 % | 0.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0539 ppm | 0.1776 ppm | 0.1089 ppm | 128.8712 ppm | 2.4317 ppm | 0.0787 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0532 ppm | 0.1787 ppm | 0.1084 ppm | 128.7965 ppm | 2.4482 ppm | 0.0790 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0549 ppm | 0.1766 ppm | 0.1093 ppm | 128.6972 ppm | 2.4228 ppm | 0.0777 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0536 ppm | 0.1776 ppm | 0.1090 ppm | 129.1199 ppm | 2.4240 ppm | 0.0793 ppm |
| Concentration RSD | 17.2 % | 1.7 % | 0.6 % | 0.4 % | 0.2 % | 0.6 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.5725 ppm | 3.5659 ppm | 0.0025 ppm | 0.2645 ppm | 0.0917 ppm | 0.1245 ppm | -0.0008 ppm |
| Concentration per Run 1 | 22.5408 ppm | 3.5627 ppm | 0.0025 ppm | 0.2646 ppm | 0.0917 ppm | 0.1240 ppm | 0.0010 ppm |
| Concentration per Run 2 | 22.5209 ppm | 3.5610 ppm | 0.0018 ppm | 0.2637 ppm | 0.0911 ppm | 0.1228 ppm | 0.0016 ppm |
| Concentration per Run 3 | 22.6560 ppm | 3.5739 ppm | 0.0030 ppm | 0.2650 ppm | 0.0922 ppm | 0.1266 ppm | -0.0050 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 23.9 % | 0.3 % | 0.6 % | 1.5 % | 448.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 5.2598 ppm | 0.0068 ppm | 0.2118 ppm | 1.9297 ppm | 0.0022 ppm | 0.1908 ppm |
| Concentration per Run 1 | 0.0001 ppm | 5.2936 ppm | 0.0068 ppm | 0.2116 ppm | 1.9294 ppm | 0.0034 ppm | 0.1899 ppm |
| Concentration per Run 2 | 0.0048 ppm | 5.1932 ppm | 0.0066 ppm | 0.2122 ppm | 1.9261 ppm | 0.0018 ppm | 0.1915 ppm |
| Concentration per Run 3 | 0.0001 ppm | 5.2927 ppm | 0.0070 ppm | 0.2116 ppm | 1.9338 ppm | 0.0015 ppm | 0.1910 ppm |
| Concentration RSD | 163.0 % | 1.1 % | 2.8 % | 0.2 % | 0.2 % | 45.8 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2793 ppm | 110.6311 % | 109.6478 % | 103.7761 % | **159.7793 %** | **161.5455 %** | **160.0032 %** |
| Concentration per Run 1 | 0.2784 ppm | 110.5527 % | 109.5366 % | 103.6829 % | **158.9843 %** | **161.0954 %** | **159.8415 %** |
| Concentration per Run 2 | 0.2795 ppm | 110.4710 % | 110.1020 % | 103.7892 % | **160.5297 %** | **162.7151 %** | **160.3511 %** |
| Concentration per Run 3 | 0.2799 ppm | 110.8696 % | 109.3048 % | 103.8560 % | **159.8240 %** | **160.8260 %** | **159.8170 %** |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.1 % | **0.5 %** | **0.6 %** | **0.2 %** |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453726-04d2 WG1974077
Analysis started at: 9/20/2024 7:43:31 PM
Rack 3
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 109.5710 ppm | 0.0257 ppm | 0.0116 ppm | 0.7126 ppm | 0.0060 ppm | 19.0931 ppm |
| Concentration per Run 1 | 0.0026 ppm | 109.6819 ppm | 0.0260 ppm | 0.0106 ppm | 0.7084 ppm | 0.0060 ppm | 19.0740 ppm |
| Concentration per Run 2 | 0.0025 ppm | 109.0311 ppm | 0.0245 ppm | 0.0121 ppm | 0.7099 ppm | 0.0060 ppm | 19.0332 ppm |
| Concentration per Run 3 | 0.0023 ppm | 110.0001 ppm | 0.0266 ppm | 0.0120 ppm | 0.7195 ppm | 0.0060 ppm | 19.1719 ppm |
| Concentration RSD | 5.6 % | 0.5 % | 4.1 % | 7.2 % | 0.8 % | 0.6 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0543 ppm | 0.1769 ppm | 0.0741 ppm | 129.5688 ppm | 2.4271 ppm | 0.0798 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0538 ppm | 0.1780 ppm | 0.0738 ppm | 128.9700 ppm | 2.4671 ppm | 0.0788 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0549 ppm | 0.1763 ppm | 0.0742 ppm | 129.3164 ppm | 2.4185 ppm | 0.0791 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0543 ppm | 0.1763 ppm | 0.0745 ppm | 130.4202 ppm | 2.3958 ppm | 0.0816 ppm |
| Concentration RSD | 16.7 % | 1.0 % | 0.6 % | 0.4 % | 0.6 % | 1.5 % | 1.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.5075 ppm | 3.9644 ppm | 0.0027 ppm | 0.2347 ppm | 0.0962 ppm | 0.0692 ppm | 0.0050 ppm |
| Concentration per Run 1 | 22.5606 ppm | 3.9558 ppm | 0.0022 ppm | 0.2350 ppm | 0.0965 ppm | 0.0688 ppm | 0.0008 ppm |
| Concentration per Run 2 | 22.5097 ppm | 3.9661 ppm | 0.0035 ppm | 0.2348 ppm | 0.0963 ppm | 0.0700 ppm | 0.0082 ppm |
| Concentration per Run 3 | 22.4521 ppm | 3.9713 ppm | 0.0026 ppm | 0.2343 ppm | 0.0958 ppm | 0.0689 ppm | 0.0062 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 24.5 % | 0.1 % | 0.4 % | 1.0 % | 76.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0064 ppm | 6.8047 ppm | 0.0056 ppm | 0.2206 ppm | 1.9431 ppm | 0.0027 ppm | 0.1855 ppm |
| Concentration per Run 1 | 0.0060 ppm | 6.7934 ppm | 0.0058 ppm | 0.2198 ppm | 1.9537 ppm | 0.0039 ppm | 0.1858 ppm |
| Concentration per Run 2 | 0.0053 ppm | 6.8394 ppm | 0.0052 ppm | 0.2199 ppm | 1.9381 ppm | 0.0014 ppm | 0.1858 ppm |
| Concentration per Run 3 | 0.0079 ppm | 6.7813 ppm | 0.0058 ppm | 0.2220 ppm | 1.9374 ppm | 0.0027 ppm | 0.1848 ppm |
| Concentration RSD | 21.1 % | 0.5 % | 5.4 % | 0.6 % | 0.5 % | 46.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2562 ppm | 112.4196 % | 111.7052 % | 104.8749 % | **172.0983 %** | **174.7878 %** | **171.8578 %** |
| Concentration per Run 1 | 0.2570 ppm | 112.9275 % | 113.0219 % | 105.8857 % | **172.9584 %** | **177.3405 %** | **173.5924 %** |
| Concentration per Run 2 | 0.2567 ppm | 112.4790 % | 111.1695 % | 104.9261 % | **172.2217 %** | **172.7210 %** | **171.8523 %** |
| Concentration per Run 3 | 0.2550 ppm | 111.8522 % | 110.9243 % | 103.8128 % | **171.1150 %** | **174.3018 %** | **170.1288 %** |
| Concentration RSD | 0.4 % | 0.5 % | 1.0 % | 1.0 % | **0.5 %** | **1.3 %** | **1.0 %** |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452998-01d4 WG1974077
Analysis started at: 9/20/2024 7:47:29 PM
Rack 3
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 61.9223 ppm | 0.0080 ppm | 0.0052 ppm | 0.0609 ppm | 0.0061 ppm | 633.6860 ppm |
| Concentration per Run 1 | 0.0009 ppm | 61.8836 ppm | 0.0065 ppm | 0.0067 ppm | 0.0607 ppm | 0.0061 ppm | 634.8540 ppm |
| Concentration per Run 2 | 0.0013 ppm | 62.2971 ppm | 0.0094 ppm | 0.0039 ppm | 0.0608 ppm | 0.0060 ppm | 630.8989 ppm |
| Concentration per Run 3 | 0.0010 ppm | 61.5861 ppm | 0.0081 ppm | 0.0049 ppm | 0.0613 ppm | 0.0061 ppm | 635.3051 ppm |
| Concentration RSD | 17.8 % | 0.6 % | 18.2 % | 27.4 % | 0.6 % | 0.8 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.0162 ppm | 0.0611 ppm | 0.0326 ppm | 72.0465 ppm | 2.2510 ppm | 0.0505 ppm |
| Concentration per Run 1 | -0.0011 ppm | 0.0159 ppm | 0.0608 ppm | 0.0327 ppm | 71.6988 ppm | 2.2769 ppm | 0.0519 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.0156 ppm | 0.0618 ppm | 0.0325 ppm | 72.6238 ppm | 2.1980 ppm | 0.0496 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0169 ppm | 0.0607 ppm | 0.0327 ppm | 71.8168 ppm | 2.2781 ppm | 0.0500 ppm |
| Concentration RSD | 15.4 % | 4.2 % | 1.0 % | 0.4 % | 0.7 % | 2.0 % | 2.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 496.0831 ppm | 2.2670 ppm | -0.0008 ppm | 0.1413 ppm | 0.0175 ppm | 0.0118 ppm | 0.0004 ppm |
| Concentration per Run 1 | 496.4828 ppm | 2.2614 ppm | -0.0009 ppm | 0.1477 ppm | 0.0180 ppm | 0.0102 ppm | -0.0009 ppm |
| Concentration per Run 2 | 495.1127 ppm | 2.2681 ppm | -0.0005 ppm | 0.1431 ppm | 0.0179 ppm | 0.0143 ppm | -0.0016 ppm |
| Concentration per Run 3 | 496.6538 ppm | 2.2716 ppm | -0.0010 ppm | 0.1330 ppm | 0.0168 ppm | 0.0108 ppm | 0.0038 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 34.5 % | 5.3 % | 3.9 % | 18.6 % | 658.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 4.1084 ppm | 0.0028 ppm | 0.2816 ppm | 1.9003 ppm | 0.0053 ppm | 0.1308 ppm |
| Concentration per Run 1 | 0.0029 ppm | 4.1007 ppm | 0.0026 ppm | 0.2814 ppm | 1.9007 ppm | 0.0053 ppm | 0.1310 ppm |
| Concentration per Run 2 | 0.0017 ppm | 4.1296 ppm | 0.0017 ppm | 0.2807 ppm | 1.8983 ppm | 0.0033 ppm | 0.1308 ppm |
| Concentration per Run 3 | 0.0027 ppm | 4.0949 ppm | 0.0040 ppm | 0.2828 ppm | 1.9018 ppm | 0.0072 ppm | 0.1307 ppm |
| Concentration RSD | 25.9 % | 0.5 % | 42.7 % | 0.4 % | 0.1 % | 37.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1220 ppm | 99.1523 % | 104.1172 % | 87.2078 % | 105.5644 % | 112.6825 % | 105.0667 % |
| Concentration per Run 1 | 0.1232 ppm | 98.9431 % | 104.3111 % | 87.3775 % | 105.2295 % | 113.4829 % | 105.7653 % |
| Concentration per Run 2 | 0.1216 ppm | 99.5382 % | 104.1103 % | 87.3748 % | 106.1983 % | 112.3697 % | 105.5254 % |
| Concentration per Run 3 | 0.1212 ppm | 98.9757 % | 103.9302 % | 86.8711 % | 105.2655 % | 112.1951 % | 103.9094 % |
| Concentration RSD | 0.9 % | 0.3 % | 0.2 % | 0.3 % | 0.5 % | 0.6 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-02d8 WG1974077
Analysis started at: 9/20/2024 7:51:26 PM
Rack 3
Vial 22
Comment Mn above LDR

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 8.2490 ppm | 0.0594 ppm | 0.0191 ppm | 0.6875 ppm | 0.0007 ppm | 17.8091 ppm |
| Concentration per Run 1 | 0.0054 ppm | 8.2426 ppm | 0.0583 ppm | 0.0167 ppm | 0.6847 ppm | 0.0007 ppm | 17.7510 ppm |
| Concentration per Run 2 | 0.0046 ppm | 8.2615 ppm | 0.0576 ppm | 0.0209 ppm | 0.6878 ppm | 0.0007 ppm | 17.9192 ppm |
| Concentration per Run 3 | 0.0046 ppm | 8.2429 ppm | 0.0623 ppm | 0.0198 ppm | 0.6899 ppm | 0.0007 ppm | 17.7571 ppm |
| Concentration RSD | 9.1 % | 0.1 % | 4.3 % | 11.6 % | 0.4 % | 3.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 0.0132 ppm | 0.0812 ppm | 0.5359 ppm | 56.3928 ppm | 0.8886 ppm | 0.0153 ppm |
| Concentration per Run 1 | 0.0075 ppm | 0.0135 ppm | 0.0815 ppm | 0.5322 ppm | 56.0793 ppm | 0.8858 ppm | 0.0164 ppm |
| Concentration per Run 2 | 0.0074 ppm | 0.0130 ppm | 0.0812 ppm | 0.5383 ppm | 56.4300 ppm | 0.8787 ppm | 0.0146 ppm |
| Concentration per Run 3 | 0.0073 ppm | 0.0132 ppm | 0.0808 ppm | 0.5373 ppm | 56.6692 ppm | 0.9012 ppm | 0.0150 ppm |
| Concentration RSD | 0.9 % | 1.5 % | 0.5 % | 0.6 % | 0.5 % | 1.3 % | 6.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8925 ppm | 12.0227 ppm | 0.0107 ppm | 0.4764 ppm | 0.0549 ppm | 2.0335 ppm | 0.0191 ppm |
| Concentration per Run 1 | 2.9017 ppm | 11.9299 ppm | 0.0109 ppm | 0.4784 ppm | 0.0550 ppm | 2.0219 ppm | 0.0193 ppm |
| Concentration per Run 2 | 2.8917 ppm | 12.0517 ppm | 0.0108 ppm | 0.4799 ppm | 0.0552 ppm | 2.0350 ppm | 0.0207 ppm |
| Concentration per Run 3 | 2.8841 ppm | 12.0865 ppm | 0.0104 ppm | 0.4707 ppm | 0.0546 ppm | 2.0435 ppm | 0.0174 ppm |
| Concentration RSD | 0.3 % | 0.7 % | 2.4 % | 1.0 % | 0.5 % | 0.5 % | 8.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0128 ppm | 1.4190 ppm | 0.3538 ppm | 0.1218 ppm | 0.2344 ppm | 0.0004 ppm | 0.0462 ppm |
| Concentration per Run 1 | 0.0119 ppm | 1.4275 ppm | 0.3530 ppm | 0.1214 ppm | 0.2373 ppm | 0.0003 ppm | 0.0461 ppm |
| Concentration per Run 2 | 0.0143 ppm | 1.4071 ppm | 0.3557 ppm | 0.1216 ppm | 0.2316 ppm | -0.0003 ppm | 0.0465 ppm |
| Concentration per Run 3 | 0.0121 ppm | 1.4224 ppm | 0.3525 ppm | 0.1223 ppm | 0.2343 ppm | 0.0012 ppm | 0.0461 ppm |
| Concentration RSD | 10.6 % | 0.8 % | 0.5 % | 0.4 % | 1.2 % | 196.9 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2442 ppm | 112.6137 % | 108.1677 % | 108.0701 % | 113.6300 % | 109.9027 % | 112.2938 % |
| Concentration per Run 1 | 5.2551 ppm | 112.9643 % | 109.0982 % | 108.5852 % | 113.7903 % | 110.8252 % | 112.5723 % |
| Concentration per Run 2 | 5.2849 ppm | 112.6012 % | 107.7847 % | 107.8496 % | 113.8520 % | 109.9288 % | 112.0083 % |
| Concentration per Run 3 | 5.1928 ppm | 112.2757 % | 107.6203 % | 107.7757 % | 113.2476 % | 108.9542 % | 112.3009 % |
| Concentration RSD | 0.9 % | 0.3 % | 0.7 % | 0.4 % | 0.3 % | 0.9 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453039-04d4 WG1974077
Analysis started at: 9/20/2024 7:55:23 PM
Rack 3
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0084 ppm | 20.4033 ppm | 0.1216 ppm | 0.2033 ppm | 1.3369 ppm | 0.0022 ppm | 45.4018 ppm |
| Concentration per Run 1 | 0.0092 ppm | 20.4416 ppm | 0.1222 ppm | 0.2021 ppm | 1.3383 ppm | 0.0022 ppm | 45.4596 ppm |
| Concentration per Run 2 | 0.0085 ppm | 20.3270 ppm | 0.1242 ppm | 0.2046 ppm | 1.3341 ppm | 0.0022 ppm | 45.2823 ppm |
| Concentration per Run 3 | 0.0076 ppm | 20.4415 ppm | 0.1183 ppm | 0.2032 ppm | 1.3382 ppm | 0.0021 ppm | 45.4636 ppm |
| Concentration RSD | 9.5 % | 0.3 % | 2.5 % | 0.6 % | 0.2 % | 2.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0141 ppm | 0.0516 ppm | 0.1275 ppm | 2.8423 ppm | 467.2758 ppm | 2.2395 ppm | 0.0370 ppm |
| Concentration per Run 1 | 0.0144 ppm | 0.0525 ppm | 0.1286 ppm | 2.8491 ppm | 468.4739 ppm | 2.2745 ppm | 0.0380 ppm |
| Concentration per Run 2 | 0.0142 ppm | 0.0516 ppm | 0.1276 ppm | 2.8558 ppm | 466.6217 ppm | 2.2125 ppm | 0.0363 ppm |
| Concentration per Run 3 | 0.0138 ppm | 0.0508 ppm | 0.1263 ppm | 2.8222 ppm | 466.7318 ppm | 2.2314 ppm | 0.0367 ppm |
| Concentration RSD | 1.9 % | 1.7 % | 0.9 % | 0.6 % | 0.2 % | 1.4 % | 2.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.5212 ppm | 2.8905 ppm | 0.0210 ppm | 2.1789 ppm | 0.1321 ppm | 7.6811 ppm | 0.0798 ppm |
| Concentration per Run 1 | 4.5423 ppm | 2.8855 ppm | 0.0211 ppm | 2.1871 ppm | 0.1322 ppm | 7.6870 ppm | 0.0795 ppm |
| Concentration per Run 2 | 4.5324 ppm | 2.8972 ppm | 0.0207 ppm | 2.1779 ppm | 0.1329 ppm | 7.6742 ppm | 0.0763 ppm |
| Concentration per Run 3 | 4.4888 ppm | 2.8888 ppm | 0.0212 ppm | 2.1716 ppm | 0.1312 ppm | 7.6821 ppm | 0.0837 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 1.2 % | 0.4 % | 0.7 % | 0.1 % | 4.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0200 ppm | 2.2037 ppm | 5.1785 ppm | 0.2838 ppm | 0.5129 ppm | 0.0030 ppm | 0.1206 ppm |
| Concentration per Run 1 | 0.0186 ppm | 2.2235 ppm | 5.1828 ppm | 0.2852 ppm | 0.5155 ppm | 0.0045 ppm | 0.1204 ppm |
| Concentration per Run 2 | 0.0247 ppm | 2.2152 ppm | 5.2030 ppm | 0.2830 ppm | 0.5188 ppm | 0.0015 ppm | 0.1216 ppm |
| Concentration per Run 3 | 0.0166 ppm | 2.1724 ppm | 5.1495 ppm | 0.2832 ppm | 0.5045 ppm | 0.0030 ppm | 0.1199 ppm |
| Concentration RSD | 21.1 % | 1.2 % | 0.5 % | 0.4 % | 1.5 % | 49.7 % | 0.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.4975 ppm | 111.5094 % | 110.5961 % | 100.1393 % | 115.2154 % | 116.0789 % | 114.5368 % |
| Concentration per Run 1 | 7.5034 ppm | 111.8609 % | 111.2697 % | 99.9768 % | 115.4733 % | 117.4206 % | 114.4256 % |
| Concentration per Run 2 | 7.5259 ppm | 111.2188 % | 110.5942 % | 99.8519 % | 115.0535 % | 115.6372 % | 114.2388 % |
| Concentration per Run 3 | 7.4633 ppm | 111.4484 % | 109.9245 % | 100.5892 % | 115.1193 % | 115.1788 % | 114.9458 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.6 % | 0.4 % | 0.2 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453695-06d4 WG1974077
Analysis started at: 9/20/2024 7:59:21 PM
Rack 3
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 34.2029 ppm | 0.0199 ppm | 0.0635 ppm | 0.3710 ppm | 0.0057 ppm | 628.1806 ppm |
| Concentration per Run 1 | 0.0018 ppm | 34.1652 ppm | 0.0180 ppm | 0.0648 ppm | 0.3717 ppm | 0.0057 ppm | 629.5289 ppm |
| Concentration per Run 2 | 0.0008 ppm | 34.3820 ppm | 0.0215 ppm | 0.0603 ppm | 0.3724 ppm | 0.0057 ppm | 629.8199 ppm |
| Concentration per Run 3 | 0.0013 ppm | 34.0613 ppm | 0.0202 ppm | 0.0654 ppm | 0.3690 ppm | 0.0056 ppm | 625.1928 ppm |
| Concentration RSD | 38.5 % | 0.5 % | 9.0 % | 4.3 % | 0.5 % | 0.7 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0066 ppm | 0.0371 ppm | 0.0568 ppm | 30.7127 ppm | 3.6221 ppm | 0.0323 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0065 ppm | 0.0370 ppm | 0.0573 ppm | 30.8504 ppm | 3.6324 ppm | 0.0336 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0074 ppm | 0.0369 ppm | 0.0560 ppm | 30.7487 ppm | 3.6378 ppm | 0.0316 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0061 ppm | 0.0375 ppm | 0.0572 ppm | 30.5390 ppm | 3.5961 ppm | 0.0318 ppm |
| Concentration RSD | 6.3 % | 9.9 % | 0.9 % | 1.3 % | 0.5 % | 0.6 % | 3.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 248.3169 ppm | 4.7412 ppm | 0.0025 ppm | 0.9443 ppm | 0.0246 ppm | 0.4046 ppm | 0.0023 ppm |
| Concentration per Run 1 | 249.2230 ppm | 4.7353 ppm | 0.0024 ppm | 0.9464 ppm | 0.0239 ppm | 0.4038 ppm | 0.0063 ppm |
| Concentration per Run 2 | 247.5311 ppm | 4.7612 ppm | 0.0022 ppm | 0.9456 ppm | 0.0241 ppm | 0.4050 ppm | 0.0039 ppm |
| Concentration per Run 3 | 248.1966 ppm | 4.7272 ppm | 0.0029 ppm | 0.9408 ppm | 0.0258 ppm | 0.4050 ppm | -0.0032 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 15.0 % | 0.3 % | 4.2 % | 0.2 % | 213.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0061 ppm | 19.2910 ppm | 0.0192 ppm | 0.3868 ppm | 0.6976 ppm | 0.0015 ppm | 0.0249 ppm |
| Concentration per Run 1 | 0.0083 ppm | 19.3116 ppm | 0.0206 ppm | 0.3865 ppm | 0.6994 ppm | 0.0016 ppm | 0.0253 ppm |
| Concentration per Run 2 | 0.0043 ppm | 19.3481 ppm | 0.0189 ppm | 0.3878 ppm | 0.6937 ppm | 0.0015 ppm | 0.0254 ppm |
| Concentration per Run 3 | 0.0057 ppm | 19.2134 ppm | 0.0180 ppm | 0.3859 ppm | 0.6998 ppm | 0.0013 ppm | 0.0241 ppm |
| Concentration RSD | 32.7 % | 0.4 % | 7.1 % | 0.3 % | 0.5 % | 13.7 % | 2.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0506 ppm | 101.0063 % | 105.1871 % | 88.4866 % | 118.9748 % | 125.7195 % | 117.4681 % |
| Concentration per Run 1 | 1.0511 ppm | 100.7593 % | 104.5861 % | 87.7401 % | 118.8029 % | 124.9475 % | 116.5076 % |
| Concentration per Run 2 | 1.0438 ppm | 100.9852 % | 104.7850 % | 89.2705 % | 118.8595 % | 125.6822 % | 118.5104 % |
| Concentration per Run 3 | 1.0569 ppm | 101.2742 % | 106.1903 % | 88.4491 % | 119.2620 % | 126.5288 % | 117.3863 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.8 % | 0.9 % | 0.2 % | 0.6 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 8:03:18 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4995 ppm | 0.4645 ppm | 0.4728 ppm | 0.4838 ppm | 0.4910 ppm | 0.4982 ppm | 0.4898 ppm |
| Concentration per Run 1 | 0.4991 ppm | 0.4660 ppm | 0.4739 ppm | 0.4805 ppm | 0.4920 ppm | 0.4978 ppm | 0.4901 ppm |
| Concentration per Run 2 | 0.4986 ppm | 0.4557 ppm | 0.4727 ppm | 0.4867 ppm | 0.4916 ppm | 0.4986 ppm | 0.4858 ppm |
| Concentration per Run 3 | 0.5009 ppm | 0.4720 ppm | 0.4717 ppm | 0.4841 ppm | 0.4894 ppm | 0.4982 ppm | 0.4936 ppm |
| Recovery Percentage 1 | 99.906 % | 92.908 % | 94.553 % | 96.757 % | 98.196 % | 99.645 % | 97.970 % |
| Concentration RSD | 0.2 % | 1.8 % | 0.2 % | 0.6 % | 0.3 % | 0.1 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4886 ppm | 0.4977 ppm | 0.4771 ppm | 0.4835 ppm | 0.4906 ppm | 5.0596 ppm | 0.4920 ppm |
| Concentration per Run 1 | 0.4913 ppm | 0.4971 ppm | 0.4761 ppm | 0.4808 ppm | 0.4881 ppm | 5.1064 ppm | 0.4935 ppm |
| Concentration per Run 2 | 0.4853 ppm | 0.4974 ppm | 0.4770 ppm | 0.4844 ppm | 0.4945 ppm | 5.0292 ppm | 0.4910 ppm |
| Concentration per Run 3 | 0.4892 ppm | 0.4986 ppm | 0.4784 ppm | 0.4853 ppm | 0.4892 ppm | 5.0431 ppm | 0.4917 ppm |
| Recovery Percentage 1 | 97.723 % | 99.540 % | 95.427 % | 96.702 % | 98.120 % | 101.191 % | 98.408 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.2 % | 0.5 % | 0.7 % | 0.8 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4866 ppm | 0.4771 ppm | 0.4715 ppm | 9.6574 ppm | 0.4919 ppm | 0.4870 ppm | 0.4969 ppm |
| Concentration per Run 1 | 0.4910 ppm | 0.4778 ppm | 0.4661 ppm | 9.7076 ppm | 0.4915 ppm | 0.4863 ppm | 0.4940 ppm |
| Concentration per Run 2 | 0.4831 ppm | 0.4747 ppm | 0.4708 ppm | 9.5771 ppm | 0.4874 ppm | 0.4863 ppm | 0.4980 ppm |
| Concentration per Run 3 | 0.4858 ppm | 0.4789 ppm | 0.4775 ppm | 9.6875 ppm | 0.4970 ppm | 0.4884 ppm | 0.4987 ppm |
| Recovery Percentage 1 | 97.321 % | 95.423 % | 94.295 % | 96.574 % | 98.388 % | 97.404 % | 99.378 % |
| Concentration RSD | 0.8 % | 0.5 % | 1.2 % | 0.7 % | 1.0 % | 0.3 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4811 ppm | 5.3916 ppm | 0.4716 ppm | 0.4695 ppm | 0.4866 ppm | 0.4859 ppm | 0.4778 ppm |
| Concentration per Run 1 | 0.4807 ppm | 5.3745 ppm | 0.4702 ppm | 0.4720 ppm | 0.4868 ppm | 0.4855 ppm | 0.4766 ppm |
| Concentration per Run 2 | 0.4784 ppm | 5.3643 ppm | 0.4696 ppm | 0.4687 ppm | 0.4847 ppm | 0.4838 ppm | 0.4786 ppm |
| Concentration per Run 3 | 0.4844 ppm | 5.4360 ppm | 0.4750 ppm | 0.4679 ppm | 0.4884 ppm | 0.4885 ppm | 0.4781 ppm |
| Recovery Percentage 1 | 96.229 % | 102.697 % | 94.316 % | 93.904 % | 97.328 % | 97.185 % | 95.556 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.6 % | 0.5 % | 0.4 % | 0.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4904 ppm | 111.7099 % | 107.1049 % | 109.4068 % | 110.5586 % | 106.4807 % | 109.4335 % |
| Concentration per Run 1 | 0.4886 ppm | 112.1273 % | 107.3773 % | 109.1591 % | 110.8370 % | 107.4178 % | 109.1739 % |
| Concentration per Run 2 | 0.4894 ppm | 111.1294 % | 107.1506 % | 109.2783 % | 110.0637 % | 105.2700 % | 109.2851 % |
| Concentration per Run 3 | 0.4932 ppm | 111.8730 % | 106.7869 % | 109.7830 % | 110.7751 % | 106.7543 % | 109.8414 % |
| Recovery Percentage 1 | 98.080 % | | | | | | |
| Concentration RSD | 0.5 % | 0.5 % | 0.3 % | 0.3 % | 0.4 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 8:07:14 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0072 ppm | 0.0007 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | 0.0041 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0023 ppm | -0.0007 ppm | 0.0014 ppm | -0.0001 ppm | 0.0000 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0125 ppm | 0.0010 ppm | 0.0029 ppm | -0.0002 ppm | 0.0000 ppm | 0.0063 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0069 ppm | 0.0018 ppm | 0.0012 ppm | -0.0001 ppm | 0.0000 ppm | 0.0037 ppm |
| Recovery Percentage 1 | 11.880 % | -7.239 % | 14.222 % | 6.112 % | -1.406 % | 0.505 % | 4.109 % |
| Concentration RSD | 49.2 % | 70.4 % | 179.1 % | 51.8 % | 58.9 % | 49.1 % | 50.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0004 ppm | -0.0008 ppm | -0.0004 ppm | -0.0017 ppm | -0.0312 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0008 ppm | -0.0002 ppm | -0.0007 ppm | -0.0014 ppm | -0.0489 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | -0.0008 ppm | -0.0005 ppm | -0.0032 ppm | -0.0422 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | -0.0013 ppm | 0.0001 ppm | -0.0006 ppm | -0.0025 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 2.055 % | 1.950 % | -7.605 % | -3.516 % | -3.471 % | -1.248 % | 12.103 % |
| Concentration RSD | 54.9 % | 101.1 % | 66.8 % | 122.2 % | 78.4 % | 80.5 % | 40.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0013 ppm | -0.1685 ppm | 0.0001 ppm | -0.0018 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0001 ppm | 0.0016 ppm | -0.1666 ppm | 0.0008 ppm | -0.0019 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0001 ppm | 0.0016 ppm | -0.1686 ppm | -0.0001 ppm | -0.0008 ppm | 0.0035 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0000 ppm | 0.0007 ppm | -0.1703 ppm | -0.0004 ppm | -0.0026 ppm | 0.0016 ppm |
| Recovery Percentage 1 | 0.055 % | 0.114 % | 2.569 % | -8.426 % | 0.388 % | -17.714 % | 7.108 % |
| Concentration RSD | 550.1 % | 728.2 % | 40.1 % | 1.1 % | 616.3 % | 50.7 % | 53.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0125 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0131 ppm | 0.0007 ppm | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0016 ppm | 0.0135 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | -0.0022 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0020 ppm | 0.0109 ppm | 0.0020 ppm | -0.0001 ppm | 0.0002 ppm | -0.0005 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -7.657 % | 2.497 % | 2.621 % | -0.061 % | -0.331 % | -4.522 % | -2.503 % |
| Concentration RSD | 231.4 % | 11.4 % | 49.8 % | 896.2 % | 864.3 % | 122.1 % | 67.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 110.5046 % | 105.6184 % | 109.8374 % | 111.6602 % | 106.1523 % | 110.4646 % |
| Concentration per Run 1 | 0.0002 ppm | 110.4653 % | 104.8452 % | 109.0293 % | 111.4668 % | 105.1199 % | 109.9004 % |
| Concentration per Run 2 | 0.0003 ppm | 111.5926 % | 106.4578 % | 109.7101 % | 112.9548 % | 107.2856 % | 109.9862 % |
| Concentration per Run 3 | 0.0004 ppm | 109.4558 % | 105.5522 % | 110.7727 % | 110.5590 % | 106.0513 % | 111.5071 % |
| Recovery Percentage 1 | 5.382 % | | | | | | |
| Concentration RSD | 36.3 % | 1.0 % | 0.8 % | 0.8 % | 1.1 % | 1.0 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: WG1974266-2 WG1974266
Analysis started at: 9/20/2024 8:20:38 PM
Rack 3
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0566 ppm | 2.1543 ppm | 0.1301 ppm | 1.0946 ppm | 2.1969 ppm | 0.0552 ppm | 11.1440 ppm |
| Concentration per Run 1 | 0.0567 ppm | 2.1449 ppm | 0.1319 ppm | 1.0899 ppm | 2.1912 ppm | 0.0551 ppm | 11.1520 ppm |
| Concentration per Run 2 | 0.0572 ppm | 2.1564 ppm | 0.1290 ppm | 1.0993 ppm | 2.1938 ppm | 0.0551 ppm | 11.1205 ppm |
| Concentration per Run 3 | 0.0560 ppm | 2.1615 ppm | 0.1294 ppm | 1.0947 ppm | 2.2058 ppm | 0.0554 ppm | 11.1597 ppm |
| Concentration RSD | 1.1 % | 0.4 % | 1.2 % | 0.4 % | 0.4 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0581 ppm | 0.5461 ppm | 0.2135 ppm | 0.2725 ppm | 1.1077 ppm | 11.4485 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0585 ppm | 0.5462 ppm | 0.2126 ppm | 0.2707 ppm | 1.1076 ppm | 11.4220 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0588 ppm | 0.5480 ppm | 0.2139 ppm | 0.2736 ppm | 1.1064 ppm | 11.4411 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0570 ppm | 0.5442 ppm | 0.2140 ppm | 0.2733 ppm | 1.1091 ppm | 11.4824 ppm | 0.0008 ppm |
| Concentration RSD | 1.6 % | 0.3 % | 0.4 % | 0.6 % | 0.1 % | 0.3 % | 57.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.0137 ppm | 0.5454 ppm | 1.0530 ppm | 11.2410 ppm | 0.5437 ppm | 0.5677 ppm | 0.4735 ppm |
| Concentration per Run 1 | 10.9921 ppm | 0.5454 ppm | 1.0394 ppm | 11.1946 ppm | 0.5424 ppm | 0.5668 ppm | 0.4636 ppm |
| Concentration per Run 2 | 11.0289 ppm | 0.5441 ppm | 1.0569 ppm | 11.2409 ppm | 0.5456 ppm | 0.5685 ppm | 0.4757 ppm |
| Concentration per Run 3 | 11.0202 ppm | 0.5468 ppm | 1.0625 ppm | 11.2875 ppm | 0.5433 ppm | 0.5678 ppm | 0.4813 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 1.1 % | 0.4 % | 0.3 % | 0.2 % | 1.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1305 ppm | 1.1302 ppm | 1.0582 ppm | 1.0715 ppm | 1.0949 ppm | 0.1272 ppm | 0.5444 ppm |
| Concentration per Run 1 | 0.1277 ppm | 1.1272 ppm | 1.0495 ppm | 1.0685 ppm | 1.0917 ppm | 0.1269 ppm | 0.5418 ppm |
| Concentration per Run 2 | 0.1312 ppm | 1.1369 ppm | 1.0685 ppm | 1.0720 ppm | 1.0989 ppm | 0.1261 ppm | 0.5469 ppm |
| Concentration per Run 3 | 0.1325 ppm | 1.1264 ppm | 1.0567 ppm | 1.0739 ppm | 1.0942 ppm | 0.1286 ppm | 0.5446 ppm |
| Concentration RSD | 1.9 % | 0.5 % | 0.9 % | 0.3 % | 0.3 % | 1.0 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5491 ppm | 107.1175 % | 108.1051 % | 104.4294 % | 104.8085 % | 107.5483 % | 104.0622 % |
| Concentration per Run 1 | 0.5460 ppm | 107.9284 % | 108.0871 % | 104.9024 % | 105.2840 % | 107.8506 % | 104.3109 % |
| Concentration per Run 2 | 0.5521 ppm | 106.3280 % | 108.7048 % | 104.2471 % | 104.1048 % | 107.7579 % | 104.3338 % |
| Concentration per Run 3 | 0.5492 ppm | 107.0960 % | 107.5236 % | 104.1387 % | 105.0366 % | 107.0365 % | 103.5420 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.5 % | 0.4 % | 0.6 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-01d2 WG1973818
Analysis started at: 9/20/2024 8:24:53 PM
Rack 3
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 42.5786 ppm | 0.0594 ppm | 0.0317 ppm | 0.0984 ppm | 0.0035 ppm | 0.6131 ppm |
| Concentration per Run 1 | 0.0017 ppm | 42.6182 ppm | 0.0582 ppm | 0.0334 ppm | 0.0992 ppm | 0.0035 ppm | 0.6149 ppm |
| Concentration per Run 2 | 0.0017 ppm | 42.4141 ppm | 0.0613 ppm | 0.0316 ppm | 0.0979 ppm | 0.0036 ppm | 0.6043 ppm |
| Concentration per Run 3 | 0.0013 ppm | 42.7033 ppm | 0.0587 ppm | 0.0301 ppm | 0.0983 ppm | 0.0035 ppm | 0.6202 ppm |
| Concentration RSD | 13.8 % | 0.3 % | 2.7 % | 5.2 % | 0.7 % | 1.9 % | 1.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0123 ppm | 0.3839 ppm | 0.0366 ppm | 157.4233 ppm | 4.4536 ppm | 0.0200 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0129 ppm | 0.3823 ppm | 0.0371 ppm | 158.4897 ppm | 4.4993 ppm | 0.0200 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0119 ppm | 0.3861 ppm | 0.0369 ppm | 156.8590 ppm | 4.4094 ppm | 0.0197 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0122 ppm | 0.3832 ppm | 0.0358 ppm | 156.9212 ppm | 4.4520 ppm | 0.0202 ppm |
| Concentration RSD | 27.7 % | 4.1 % | 0.5 % | 1.9 % | 0.6 % | 1.0 % | 1.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2198 ppm | 0.3161 ppm | 0.0027 ppm | 0.3296 ppm | 0.0239 ppm | 0.0522 ppm | 0.0062 ppm |
| Concentration per Run 1 | 3.2243 ppm | 0.3168 ppm | 0.0028 ppm | 0.3308 ppm | 0.0235 ppm | 0.0532 ppm | 0.0062 ppm |
| Concentration per Run 2 | 3.2210 ppm | 0.3145 ppm | 0.0028 ppm | 0.3288 ppm | 0.0237 ppm | 0.0518 ppm | 0.0048 ppm |
| Concentration per Run 3 | 3.2141 ppm | 0.3171 ppm | 0.0025 ppm | 0.3292 ppm | 0.0244 ppm | 0.0517 ppm | 0.0078 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 6.9 % | 0.3 % | 2.1 % | 1.6 % | 24.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 5.2819 ppm | 0.0129 ppm | 0.0142 ppm | 0.8496 ppm | 0.0010 ppm | 0.4136 ppm |
| Concentration per Run 1 | 0.0029 ppm | 5.3159 ppm | 0.0139 ppm | 0.0143 ppm | 0.8457 ppm | 0.0004 ppm | 0.4121 ppm |
| Concentration per Run 2 | -0.0005 ppm | 5.2880 ppm | 0.0127 ppm | 0.0143 ppm | 0.8512 ppm | -0.0007 ppm | 0.4143 ppm |
| Concentration per Run 3 | 0.0038 ppm | 5.2418 ppm | 0.0121 ppm | 0.0141 ppm | 0.8520 ppm | 0.0034 ppm | 0.4144 ppm |
| Concentration RSD | 108.9 % | 0.7 % | 7.4 % | 0.9 % | 0.4 % | 201.1 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1288 ppm | 117.1628 % | 115.1513 % | 111.4406 % | 121.8501 % | 120.6305 % | 121.5315 % |
| Concentration per Run 1 | 0.1285 ppm | 118.1605 % | 114.6388 % | 112.5054 % | 122.7066 % | 119.8842 % | 122.3928 % |
| Concentration per Run 2 | 0.1285 ppm | 116.6359 % | 116.4550 % | 111.3543 % | 121.1968 % | 122.3214 % | 121.7122 % |
| Concentration per Run 3 | 0.1295 ppm | 116.6920 % | 114.3601 % | 110.4622 % | 121.6470 % | 119.6859 % | 120.4895 % |
| Concentration RSD | 0.4 % | 0.7 % | 1.0 % | 0.9 % | 0.6 % | 1.2 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-02d2 WG1973818
Analysis started at: 9/20/2024 8:28:51 PM
Rack 3
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 43.3978 ppm | 0.0471 ppm | 0.0227 ppm | 0.2588 ppm | 0.0042 ppm | 3.3291 ppm |
| Concentration per Run 1 | 0.0020 ppm | 43.3705 ppm | 0.0478 ppm | 0.0236 ppm | 0.2590 ppm | 0.0042 ppm | 3.3382 ppm |
| Concentration per Run 2 | 0.0015 ppm | 43.3372 ppm | 0.0467 ppm | 0.0228 ppm | 0.2597 ppm | 0.0042 ppm | 3.3187 ppm |
| Concentration per Run 3 | 0.0018 ppm | 43.4858 ppm | 0.0467 ppm | 0.0216 ppm | 0.2577 ppm | 0.0042 ppm | 3.3305 ppm |
| Concentration RSD | 12.7 % | 0.2 % | 1.4 % | 4.4 % | 0.4 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0340 ppm | 0.1562 ppm | 0.0660 ppm | 156.9329 ppm | 3.6944 ppm | 0.0350 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0343 ppm | 0.1554 ppm | 0.0662 ppm | 156.6847 ppm | 3.7378 ppm | 0.0352 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0333 ppm | 0.1574 ppm | 0.0662 ppm | 157.2103 ppm | 3.6891 ppm | 0.0362 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0345 ppm | 0.1558 ppm | 0.0656 ppm | 156.9036 ppm | 3.6563 ppm | 0.0337 ppm |
| Concentration RSD | 8.1 % | 1.8 % | 0.7 % | 0.5 % | 0.2 % | 1.1 % | 3.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.2945 ppm | 0.6157 ppm | 0.0018 ppm | 0.4393 ppm | 0.0558 ppm | 0.0874 ppm | 0.0034 ppm |
| Concentration per Run 1 | 7.3095 ppm | 0.6141 ppm | 0.0023 ppm | 0.4396 ppm | 0.0544 ppm | 0.0868 ppm | 0.0053 ppm |
| Concentration per Run 2 | 7.2870 ppm | 0.6144 ppm | 0.0014 ppm | 0.4396 ppm | 0.0576 ppm | 0.0864 ppm | 0.0010 ppm |
| Concentration per Run 3 | 7.2869 ppm | 0.6186 ppm | 0.0016 ppm | 0.4387 ppm | 0.0554 ppm | 0.0889 ppm | 0.0038 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 27.0 % | 0.1 % | 2.9 % | 1.5 % | 65.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 5.4740 ppm | 0.0106 ppm | 0.0301 ppm | 1.3574 ppm | 0.0019 ppm | 0.3015 ppm |
| Concentration per Run 1 | -0.0019 ppm | 5.5150 ppm | 0.0107 ppm | 0.0304 ppm | 1.3565 ppm | 0.0027 ppm | 0.3023 ppm |
| Concentration per Run 2 | 0.0010 ppm | 5.4528 ppm | 0.0111 ppm | 0.0301 ppm | 1.3591 ppm | 0.0015 ppm | 0.3010 ppm |
| Concentration per Run 3 | 0.0018 ppm | 5.4540 ppm | 0.0101 ppm | 0.0298 ppm | 1.3565 ppm | 0.0016 ppm | 0.3012 ppm |
| Concentration RSD | 653.8 % | 0.6 % | 4.6 % | 1.0 % | 0.1 % | 33.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2671 ppm | 116.3417 % | 115.6652 % | 111.4874 % | 132.0506 % | 133.0170 % | 132.7101 % |
| Concentration per Run 1 | 0.2675 ppm | 117.7066 % | 115.4250 % | 112.3541 % | 133.8351 % | 132.8074 % | 133.5085 % |
| Concentration per Run 2 | 0.2687 ppm | 116.3607 % | 116.7306 % | 110.5307 % | 132.6097 % | 133.7057 % | 131.8913 % |
| Concentration per Run 3 | 0.2650 ppm | 114.9579 % | 114.8400 % | 111.5774 % | 129.7070 % | 132.5379 % | 132.7306 % |
| Concentration RSD | 0.7 % | 1.2 % | 0.8 % | 0.8 % | 1.6 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-03d2 WG1973818
Analysis started at: 9/20/2024 8:32:48 PM
Rack 3
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 69.9189 ppm | 0.2361 ppm | 0.1667 ppm | 0.4766 ppm | 0.0080 ppm | 46.1744 ppm |
| Concentration per Run 1 | 0.0024 ppm | 70.1706 ppm | 0.2349 ppm | 0.1657 ppm | 0.4795 ppm | 0.0080 ppm | 46.3141 ppm |
| Concentration per Run 2 | 0.0013 ppm | 69.9219 ppm | 0.2363 ppm | 0.1690 ppm | 0.4759 ppm | 0.0080 ppm | 46.1714 ppm |
| Concentration per Run 3 | 0.0032 ppm | 69.6641 ppm | 0.2370 ppm | 0.1655 ppm | 0.4744 ppm | 0.0079 ppm | 46.0375 ppm |
| Concentration RSD | 40.6 % | 0.4 % | 0.5 % | 1.2 % | 0.5 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0429 ppm | 1.0465 ppm | 4.4018 ppm | 482.3195 ppm | 7.0598 ppm | 0.0390 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0443 ppm | 1.0519 ppm | 4.3799 ppm | 483.6367 ppm | 7.0361 ppm | 0.0394 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0421 ppm | 1.0443 ppm | 4.4340 ppm | 481.6152 ppm | 7.0620 ppm | 0.0395 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0422 ppm | 1.0432 ppm | 4.3916 ppm | 481.7065 ppm | 7.0813 ppm | 0.0382 ppm |
| Concentration RSD | 14.5 % | 2.8 % | 0.4 % | 0.6 % | 0.2 % | 0.3 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.0521 ppm | 0.6892 ppm | 0.0030 ppm | 0.7195 ppm | 0.0937 ppm | 0.1999 ppm | 0.0021 ppm |
| Concentration per Run 1 | 12.0514 ppm | 0.6892 ppm | 0.0031 ppm | 0.7272 ppm | 0.0931 ppm | 0.1988 ppm | 0.0031 ppm |
| Concentration per Run 2 | 12.0677 ppm | 0.6892 ppm | 0.0026 ppm | 0.7217 ppm | 0.0953 ppm | 0.2014 ppm | 0.0013 ppm |
| Concentration per Run 3 | 12.0373 ppm | 0.6891 ppm | 0.0032 ppm | 0.7097 ppm | 0.0928 ppm | 0.1996 ppm | 0.0020 ppm |
| Concentration RSD | 0.1 % | 0.0 % | 11.4 % | 1.2 % | 1.5 % | 0.7 % | 41.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 8.8369 ppm | 0.0294 ppm | 0.1221 ppm | 1.4216 ppm | 0.0050 ppm | 0.8382 ppm |
| Concentration per Run 1 | 0.0070 ppm | 8.8831 ppm | 0.0291 ppm | 0.1227 ppm | 1.4250 ppm | 0.0051 ppm | 0.8362 ppm |
| Concentration per Run 2 | 0.0047 ppm | 8.8147 ppm | 0.0304 ppm | 0.1222 ppm | 1.4212 ppm | 0.0056 ppm | 0.8409 ppm |
| Concentration per Run 3 | 0.0025 ppm | 8.8129 ppm | 0.0288 ppm | 0.1215 ppm | 1.4187 ppm | 0.0044 ppm | 0.8374 ppm |
| Concentration RSD | 47.5 % | 0.5 % | 2.8 % | 0.5 % | 0.2 % | 12.5 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9977 ppm | 115.8790 % | 115.2385 % | 103.7295 % | 128.1801 % | 128.9068 % | 127.0153 % |
| Concentration per Run 1 | 1.0017 ppm | 115.3014 % | 114.9772 % | 103.8736 % | 127.2339 % | 128.9204 % | 127.4872 % |
| Concentration per Run 2 | 0.9986 ppm | 116.2358 % | 116.2344 % | 103.5730 % | 128.9474 % | 130.3278 % | 126.6592 % |
| Concentration per Run 3 | 0.9929 ppm | 116.0999 % | 114.5038 % | 103.7418 % | 128.3591 % | 127.4724 % | 126.8993 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.8 % | 0.1 % | 0.7 % | 1.1 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-04d2 WG1973818
Analysis started at: 9/20/2024 8:36:45 PM
Rack 3
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 32.3051 ppm | 0.0589 ppm | 0.0418 ppm | 0.2276 ppm | 0.0023 ppm | 8.5919 ppm |
| Concentration per Run 1 | 0.0017 ppm | 32.2914 ppm | 0.0583 ppm | 0.0425 ppm | 0.2269 ppm | 0.0023 ppm | 8.5960 ppm |
| Concentration per Run 2 | 0.0018 ppm | 32.3584 ppm | 0.0585 ppm | 0.0420 ppm | 0.2283 ppm | 0.0023 ppm | 8.5929 ppm |
| Concentration per Run 3 | 0.0019 ppm | 32.2654 ppm | 0.0598 ppm | 0.0411 ppm | 0.2278 ppm | 0.0023 ppm | 8.5868 ppm |
| Concentration RSD | 6.2 % | 0.1 % | 1.4 % | 1.7 % | 0.3 % | 1.6 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 0.0191 ppm | 0.2843 ppm | 0.2483 ppm | 125.2057 ppm | 2.5551 ppm | 0.0365 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.0191 ppm | 0.2837 ppm | 0.2492 ppm | 125.3091 ppm | 2.5749 ppm | 0.0363 ppm |
| Concentration per Run 2 | 0.0049 ppm | 0.0193 ppm | 0.2845 ppm | 0.2472 ppm | 125.0035 ppm | 2.5186 ppm | 0.0367 ppm |
| Concentration per Run 3 | 0.0045 ppm | 0.0188 ppm | 0.2847 ppm | 0.2484 ppm | 125.3045 ppm | 2.5718 ppm | 0.0367 ppm |
| Concentration RSD | 4.6 % | 1.6 % | 0.2 % | 0.4 % | 0.1 % | 1.2 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.6539 ppm | 0.5494 ppm | 0.0024 ppm | 0.1724 ppm | 0.0657 ppm | 0.1527 ppm | 0.0040 ppm |
| Concentration per Run 1 | 11.6536 ppm | 0.5486 ppm | 0.0023 ppm | 0.1698 ppm | 0.0675 ppm | 0.1515 ppm | 0.0078 ppm |
| Concentration per Run 2 | 11.6214 ppm | 0.5495 ppm | 0.0020 ppm | 0.1799 ppm | 0.0655 ppm | 0.1537 ppm | 0.0001 ppm |
| Concentration per Run 3 | 11.6868 ppm | 0.5500 ppm | 0.0028 ppm | 0.1674 ppm | 0.0641 ppm | 0.1530 ppm | 0.0041 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 16.3 % | 3.8 % | 2.6 % | 0.7 % | 95.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 5.9098 ppm | 0.0089 ppm | 0.0713 ppm | 2.2051 ppm | 0.0015 ppm | 0.2768 ppm |
| Concentration per Run 1 | 0.0050 ppm | 5.8986 ppm | 0.0086 ppm | 0.0713 ppm | 2.2044 ppm | 0.0023 ppm | 0.2770 ppm |
| Concentration per Run 2 | 0.0060 ppm | 5.9033 ppm | 0.0090 ppm | 0.0717 ppm | 2.2022 ppm | 0.0020 ppm | 0.2768 ppm |
| Concentration per Run 3 | 0.0046 ppm | 5.9276 ppm | 0.0089 ppm | 0.0709 ppm | 2.2087 ppm | 0.0003 ppm | 0.2766 ppm |
| Concentration RSD | 13.5 % | 0.3 % | 2.5 % | 0.6 % | 0.2 % | 72.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4593 ppm | 115.9010 % | 113.8344 % | 110.9548 % | 116.3506 % | 114.9551 % | 114.7579 % |
| Concentration per Run 1 | 0.4594 ppm | 116.0733 % | 112.9680 % | 110.5458 % | 116.7833 % | 114.1862 % | 114.5269 % |
| Concentration per Run 2 | 0.4576 ppm | 116.0113 % | 113.4216 % | 111.0504 % | 116.4329 % | 114.7551 % | 114.7282 % |
| Concentration per Run 3 | 0.4610 ppm | 115.6183 % | 115.1135 % | 111.2680 % | 115.8357 % | 115.9239 % | 115.0186 % |
| Concentration RSD | 0.4 % | 0.2 % | 1.0 % | 0.3 % | 0.4 % | 0.8 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-05d2 WG1973818
Analysis started at: 9/20/2024 8:40:43 PM
Rack 3
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 35.0212 ppm | 0.0558 ppm | 0.1309 ppm | 0.1924 ppm | 0.0041 ppm | 10.1833 ppm |
| Concentration per Run 1 | 0.0012 ppm | 34.9659 ppm | 0.0584 ppm | 0.1304 ppm | 0.1925 ppm | 0.0041 ppm | 10.1739 ppm |
| Concentration per Run 2 | 0.0015 ppm | 35.0801 ppm | 0.0548 ppm | 0.1318 ppm | 0.1923 ppm | 0.0041 ppm | 10.1975 ppm |
| Concentration per Run 3 | 0.0017 ppm | 35.0177 ppm | 0.0542 ppm | 0.1305 ppm | 0.1924 ppm | 0.0041 ppm | 10.1784 ppm |
| Concentration RSD | 18.5 % | 0.2 % | 4.1 % | 0.6 % | 0.0 % | 0.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0157 ppm | 0.3724 ppm | 0.0872 ppm | 122.5955 ppm | 8.1232 ppm | 0.0199 ppm |
| Concentration per Run 1 | 0.0023 ppm | 0.0161 ppm | 0.3702 ppm | 0.0867 ppm | 122.7442 ppm | 8.1138 ppm | 0.0190 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.0148 ppm | 0.3733 ppm | 0.0875 ppm | 122.3710 ppm | 8.1440 ppm | 0.0200 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0163 ppm | 0.3737 ppm | 0.0873 ppm | 122.6713 ppm | 8.1117 ppm | 0.0208 ppm |
| Concentration RSD | 6.8 % | 5.3 % | 0.5 % | 0.5 % | 0.2 % | 0.2 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.3568 ppm | 0.2957 ppm | 0.0025 ppm | 0.5231 ppm | 0.0769 ppm | 0.1576 ppm | 0.0054 ppm |
| Concentration per Run 1 | 6.3551 ppm | 0.2963 ppm | 0.0021 ppm | 0.5228 ppm | 0.0757 ppm | 0.1570 ppm | 0.0058 ppm |
| Concentration per Run 2 | 6.3762 ppm | 0.2954 ppm | 0.0027 ppm | 0.5241 ppm | 0.0775 ppm | 0.1567 ppm | 0.0077 ppm |
| Concentration per Run 3 | 6.3392 ppm | 0.2952 ppm | 0.0027 ppm | 0.5225 ppm | 0.0776 ppm | 0.1591 ppm | 0.0028 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 13.9 % | 0.2 % | 1.4 % | 0.8 % | 44.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 6.8513 ppm | 0.0119 ppm | 0.0568 ppm | 1.5794 ppm | 0.0033 ppm | 0.4208 ppm |
| Concentration per Run 1 | 0.0065 ppm | 6.8525 ppm | 0.0119 ppm | 0.0572 ppm | 1.5697 ppm | 0.0056 ppm | 0.4214 ppm |
| Concentration per Run 2 | 0.0009 ppm | 6.8655 ppm | 0.0122 ppm | 0.0565 ppm | 1.5867 ppm | 0.0028 ppm | 0.4208 ppm |
| Concentration per Run 3 | 0.0080 ppm | 6.8358 ppm | 0.0116 ppm | 0.0568 ppm | 1.5819 ppm | 0.0014 ppm | 0.4201 ppm |
| Concentration RSD | 72.2 % | 0.2 % | 2.5 % | 0.6 % | 0.6 % | 66.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2994 ppm | 115.0292 % | 112.0007 % | 109.3695 % | 116.9548 % | 114.3977 % | 115.1977 % |
| Concentration per Run 1 | 0.2988 ppm | 115.7691 % | 111.8511 % | 109.6026 % | 117.8247 % | 113.9631 % | 115.3119 % |
| Concentration per Run 2 | 0.2985 ppm | 115.1845 % | 112.1120 % | 109.2372 % | 116.9528 % | 114.9067 % | 115.4138 % |
| Concentration per Run 3 | 0.3009 ppm | 114.1339 % | 112.0389 % | 109.2686 % | 116.0869 % | 114.3233 % | 114.8673 % |
| Concentration RSD | 0.4 % | 0.7 % | 0.1 % | 0.2 % | 0.7 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453583-06d2 WG1973818
Analysis started at: 9/20/2024 8:44:41 PM
Rack 3
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 39.4689 ppm | 0.0891 ppm | 0.0673 ppm | 0.1648 ppm | 0.0038 ppm | 3.4362 ppm |
| Concentration per Run 1 | 0.0023 ppm | 39.3291 ppm | 0.0899 ppm | 0.0672 ppm | 0.1651 ppm | 0.0038 ppm | 3.4354 ppm |
| Concentration per Run 2 | 0.0021 ppm | 39.4511 ppm | 0.0898 ppm | 0.0659 ppm | 0.1642 ppm | 0.0038 ppm | 3.4305 ppm |
| Concentration per Run 3 | 0.0023 ppm | 39.6265 ppm | 0.0877 ppm | 0.0687 ppm | 0.1652 ppm | 0.0039 ppm | 3.4427 ppm |
| Concentration RSD | 5.3 % | 0.4 % | 1.4 % | 2.1 % | 0.3 % | 0.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.0146 ppm | 0.5009 ppm | 0.1363 ppm | 162.3305 ppm | 3.3891 ppm | 0.0343 ppm |
| Concentration per Run 1 | 0.0033 ppm | 0.0141 ppm | 0.5017 ppm | 0.1352 ppm | 161.7876 ppm | 3.3981 ppm | 0.0351 ppm |
| Concentration per Run 2 | 0.0029 ppm | 0.0143 ppm | 0.5023 ppm | 0.1377 ppm | 162.4614 ppm | 3.3601 ppm | 0.0333 ppm |
| Concentration per Run 3 | 0.0033 ppm | 0.0154 ppm | 0.4987 ppm | 0.1362 ppm | 162.7426 ppm | 3.4090 ppm | 0.0343 ppm |
| Concentration RSD | 8.1 % | 4.8 % | 0.4 % | 0.9 % | 0.3 % | 0.8 % | 2.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8732 ppm | 0.3247 ppm | 0.0022 ppm | 0.3666 ppm | 0.0310 ppm | 0.1489 ppm | 0.0048 ppm |
| Concentration per Run 1 | 5.8766 ppm | 0.3234 ppm | 0.0022 ppm | 0.3631 ppm | 0.0314 ppm | 0.1488 ppm | 0.0006 ppm |
| Concentration per Run 2 | 5.8739 ppm | 0.3256 ppm | 0.0023 ppm | 0.3689 ppm | 0.0310 ppm | 0.1495 ppm | 0.0055 ppm |
| Concentration per Run 3 | 5.8689 ppm | 0.3251 ppm | 0.0022 ppm | 0.3679 ppm | 0.0306 ppm | 0.1484 ppm | 0.0083 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 2.2 % | 0.8 % | 1.2 % | 0.4 % | 81.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 5.6632 ppm | 0.0171 ppm | 0.0282 ppm | 0.9810 ppm | 0.0013 ppm | 0.3216 ppm |
| Concentration per Run 1 | 0.0063 ppm | 5.6794 ppm | 0.0179 ppm | 0.0283 ppm | 0.9821 ppm | 0.0036 ppm | 0.3213 ppm |
| Concentration per Run 2 | 0.0003 ppm | 5.6550 ppm | 0.0165 ppm | 0.0281 ppm | 0.9816 ppm | 0.0001 ppm | 0.3219 ppm |
| Concentration per Run 3 | 0.0039 ppm | 5.6551 ppm | 0.0168 ppm | 0.0283 ppm | 0.9793 ppm | 0.0002 ppm | 0.3215 ppm |
| Concentration RSD | 86.4 % | 0.2 % | 4.3 % | 0.4 % | 0.2 % | 150.1 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4963 ppm | 117.5645 % | 114.6640 % | 109.6280 % | 124.2731 % | 122.1477 % | 121.4974 % |
| Concentration per Run 1 | 0.4957 ppm | 117.8925 % | 114.4658 % | 109.4576 % | 124.3918 % | 122.4687 % | 121.6401 % |
| Concentration per Run 2 | 0.4973 ppm | 117.9656 % | 114.8588 % | 109.6211 % | 125.2321 % | 121.7884 % | 121.4790 % |
| Concentration per Run 3 | 0.4959 ppm | 116.8354 % | 114.6674 % | 109.8053 % | 123.1953 % | 122.1861 % | 121.3732 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.2 % | 0.2 % | 0.8 % | 0.3 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453680-02d2 WG1973818
Analysis started at: 9/20/2024 8:48:38 PM
Rack 3
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 53.2123 ppm | 0.1367 ppm | 0.0441 ppm | 0.5510 ppm | 0.0037 ppm | 535.9867 ppm |
| Concentration per Run 1 | 0.0032 ppm | 53.3761 ppm | 0.1337 ppm | 0.0443 ppm | 0.5500 ppm | 0.0036 ppm | 535.7849 ppm |
| Concentration per Run 2 | 0.0026 ppm | 52.9978 ppm | 0.1374 ppm | 0.0421 ppm | 0.5505 ppm | 0.0037 ppm | 535.3808 ppm |
| Concentration per Run 3 | 0.0030 ppm | 53.2631 ppm | 0.1391 ppm | 0.0459 ppm | 0.5526 ppm | 0.0038 ppm | 536.7944 ppm |
| Concentration RSD | 9.1 % | 0.4 % | 2.0 % | 4.3 % | 0.2 % | 1.8 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0430 ppm | 0.2088 ppm | 0.5157 ppm | 366.8547 ppm | 5.0517 ppm | 0.0910 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0420 ppm | 0.2086 ppm | 0.5131 ppm | 365.1495 ppm | 5.0753 ppm | 0.0902 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0436 ppm | 0.2089 ppm | 0.5200 ppm | 365.9110 ppm | 5.0226 ppm | 0.0915 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0433 ppm | 0.2091 ppm | 0.5140 ppm | 369.5035 ppm | 5.0573 ppm | 0.0914 ppm |
| Concentration RSD | 3.6 % | 1.9 % | 0.1 % | 0.7 % | 0.6 % | 0.5 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.4570 ppm | 4.2053 ppm | 0.0117 ppm | 0.6680 ppm | 0.1132 ppm | 0.9144 ppm | 0.0166 ppm |
| Concentration per Run 1 | 102.6499 ppm | 4.2276 ppm | 0.0110 ppm | 0.6654 ppm | 0.1136 ppm | 0.9137 ppm | 0.0162 ppm |
| Concentration per Run 2 | 102.0890 ppm | 4.1959 ppm | 0.0123 ppm | 0.6701 ppm | 0.1119 ppm | 0.9237 ppm | 0.0185 ppm |
| Concentration per Run 3 | 102.6322 ppm | 4.1925 ppm | 0.0119 ppm | 0.6686 ppm | 0.1140 ppm | 0.9057 ppm | 0.0153 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 5.8 % | 0.4 % | 1.0 % | 1.0 % | 9.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | 11.7250 ppm | 0.0553 ppm | 0.7576 ppm | 3.4339 ppm | 0.0057 ppm | 0.2935 ppm |
| Concentration per Run 1 | 0.0047 ppm | 11.7330 ppm | 0.0536 ppm | 0.7570 ppm | 3.4625 ppm | 0.0063 ppm | 0.2919 ppm |
| Concentration per Run 2 | 0.0034 ppm | 11.7271 ppm | 0.0546 ppm | 0.7545 ppm | 3.4080 ppm | 0.0048 ppm | 0.2948 ppm |
| Concentration per Run 3 | 0.0123 ppm | 11.7150 ppm | 0.0577 ppm | 0.7612 ppm | 3.4312 ppm | 0.0060 ppm | 0.2938 ppm |
| Concentration RSD | 71.0 % | 0.1 % | 3.8 % | 0.4 % | 0.8 % | 13.7 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9984 ppm | 104.7438 % | 106.5901 % | 91.7394 % | 142.5853 % | 147.9708 % | 140.8370 % |
| Concentration per Run 1 | 0.9926 ppm | 106.1674 % | 107.3123 % | 91.4675 % | 144.1491 % | 149.3786 % | 140.2862 % |
| Concentration per Run 2 | 1.0000 ppm | 104.3201 % | 106.6416 % | 91.7397 % | 142.6930 % | 147.4424 % | 141.6196 % |
| Concentration per Run 3 | 1.0027 ppm | 103.7439 % | 105.8166 % | 92.0110 % | 140.9139 % | 147.0913 % | 140.6050 % |
| Concentration RSD | 0.5 % | 1.2 % | 0.7 % | 0.3 % | 1.1 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 8:52:36 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5005 ppm | 0.4688 ppm | 0.4704 ppm | 0.4822 ppm | 0.4927 ppm | 0.4972 ppm | 0.4877 ppm |
| Concentration per Run 1 | 0.5024 ppm | 0.4695 ppm | 0.4697 ppm | 0.4837 ppm | 0.4896 ppm | 0.4959 ppm | 0.4958 ppm |
| Concentration per Run 2 | 0.4988 ppm | 0.4625 ppm | 0.4673 ppm | 0.4796 ppm | 0.4961 ppm | 0.4977 ppm | 0.4836 ppm |
| Concentration per Run 3 | 0.5002 ppm | 0.4743 ppm | 0.4742 ppm | 0.4832 ppm | 0.4926 ppm | 0.4980 ppm | 0.4837 ppm |
| Recovery Percentage 1 | 100.094 % | 93.756 % | 94.081 % | 96.430 % | 98.549 % | 99.437 % | 97.540 % |
| Concentration RSD | 0.4 % | 1.3 % | 0.7 % | 0.5 % | 0.7 % | 0.2 % | 1.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4902 ppm | 0.4988 ppm | 0.4797 ppm | 0.4846 ppm | 0.4993 ppm | 5.0750 ppm | 0.4928 ppm |
| Concentration per Run 1 | 0.4835 ppm | 0.4968 ppm | 0.4819 ppm | 0.4843 ppm | 0.4986 ppm | 5.0864 ppm | 0.4933 ppm |
| Concentration per Run 2 | 0.4908 ppm | 0.4996 ppm | 0.4777 ppm | 0.4858 ppm | 0.4990 ppm | 5.0704 ppm | 0.4905 ppm |
| Concentration per Run 3 | 0.4961 ppm | 0.5001 ppm | 0.4795 ppm | 0.4837 ppm | 0.5003 ppm | 5.0680 ppm | 0.4945 ppm |
| Recovery Percentage 1 | 98.032 % | 99.764 % | 95.939 % | 96.923 % | 99.862 % | 101.499 % | 98.554 % |
| Concentration RSD | 1.3 % | 0.4 % | 0.4 % | 0.2 % | 0.2 % | 0.2 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4798 ppm | 0.4750 ppm | 0.4740 ppm | 9.6404 ppm | 0.4927 ppm | 0.4837 ppm | 0.4962 ppm |
| Concentration per Run 1 | 0.4801 ppm | 0.4749 ppm | 0.4703 ppm | 9.5812 ppm | 0.4960 ppm | 0.4808 ppm | 0.4979 ppm |
| Concentration per Run 2 | 0.4807 ppm | 0.4738 ppm | 0.4753 ppm | 9.6710 ppm | 0.4898 ppm | 0.4813 ppm | 0.4974 ppm |
| Concentration per Run 3 | 0.4785 ppm | 0.4764 ppm | 0.4765 ppm | 9.6691 ppm | 0.4922 ppm | 0.4890 ppm | 0.4933 ppm |
| Recovery Percentage 1 | 95.958 % | 95.008 % | 94.803 % | 96.404 % | 98.534 % | 96.741 % | 99.240 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.7 % | 0.5 % | 0.6 % | 0.9 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4812 ppm | 5.3553 ppm | 0.4660 ppm | 0.4678 ppm | 0.4882 ppm | 0.4835 ppm | 0.4777 ppm |
| Concentration per Run 1 | 0.4797 ppm | 5.3276 ppm | 0.4676 ppm | 0.4658 ppm | 0.4878 ppm | 0.4823 ppm | 0.4761 ppm |
| Concentration per Run 2 | 0.4776 ppm | 5.3717 ppm | 0.4640 ppm | 0.4686 ppm | 0.4877 ppm | 0.4808 ppm | 0.4785 ppm |
| Concentration per Run 3 | 0.4863 ppm | 5.3665 ppm | 0.4664 ppm | 0.4689 ppm | 0.4891 ppm | 0.4873 ppm | 0.4786 ppm |
| Recovery Percentage 1 | 96.245 % | 102.005 % | 93.205 % | 93.554 % | 97.639 % | 96.696 % | 95.539 % |
| Concentration RSD | 0.9 % | 0.5 % | 0.4 % | 0.4 % | 0.2 % | 0.7 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4897 ppm | 111.9665 % | 107.4301 % | 109.4947 % | 111.1890 % | 106.8860 % | 109.7328 % |
| Concentration per Run 1 | 0.4914 ppm | 112.1823 % | 107.1820 % | 110.4662 % | 111.4127 % | 106.9199 % | 110.8638 % |
| Concentration per Run 2 | 0.4886 ppm | 112.7958 % | 108.1950 % | 109.4300 % | 112.0846 % | 107.5127 % | 109.0984 % |
| Concentration per Run 3 | 0.4891 ppm | 110.9213 % | 106.9133 % | 108.5880 % | 110.0698 % | 106.2254 % | 109.2361 % |
| Recovery Percentage 1 | 97.942 % | | | | | | |
| Concentration RSD | 0.3 % | 0.9 % | 0.6 % | 0.9 % | 0.9 % | 0.6 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 8:56:32 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0015 ppm | -0.0005 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0028 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0025 ppm | 0.0002 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | -0.0024 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0043 ppm | -0.0009 ppm | 0.0019 ppm | -0.0002 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0024 ppm | -0.0009 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0072 ppm |
| Recovery Percentage 1 | 16.471 % | 1.455 % | -10.781 % | 2.284 % | -0.436 % | 0.101 % | 2.787 % |
| Concentration RSD | 18.8 % | 239.4 % | 118.8 % | 161.7 % | 508.1 % | 209.5 % | 173.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | -0.0007 ppm | -0.0008 ppm | 0.0016 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0003 ppm | -0.0007 ppm | -0.0004 ppm | -0.0015 ppm | -0.0005 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0003 ppm | -0.0007 ppm | -0.0006 ppm | -0.0011 ppm | 0.0038 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0004 ppm | -0.0002 ppm | -0.0010 ppm | 0.0004 ppm | 0.0013 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.150 % | -0.582 % | -5.508 % | -6.658 % | -1.506 % | 0.062 % | 27.056 % |
| Concentration RSD | 1,972.7 % | 312.4 % | 51.0 % | 43.8 % | 133.2 % | 139.7 % | 91.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0001 ppm | 0.0006 ppm | -0.1913 ppm | -0.0005 ppm | -0.0018 ppm | 0.0047 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0002 ppm | 0.0008 ppm | -0.1961 ppm | -0.0010 ppm | -0.0028 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0001 ppm | 0.0001 ppm | -0.1866 ppm | 0.0000 ppm | -0.0018 ppm | 0.0083 ppm |
| Concentration per Run 3 | -0.0015 ppm | -0.0001 ppm | 0.0009 ppm | -0.1912 ppm | -0.0006 ppm | -0.0009 ppm | 0.0017 ppm |
| Recovery Percentage 1 | 0.549 % | 0.835 % | 1.186 % | -9.565 % | -2.045 % | -18.421 % | 9.342 % |
| Concentration RSD | 369.0 % | 140.7 % | 72.8 % | 2.5 % | 94.7 % | 51.3 % | 71.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0033 ppm | 0.0003 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0069 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0028 ppm | -0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0003 ppm | 0.0014 ppm | -0.0001 ppm | 0.0000 ppm | -0.0007 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 3.929 % | 0.670 % | 0.651 % | -0.790 % | -0.572 % | -0.373 % | -3.754 % |
| Concentration RSD | 292.7 % | 99.1 % | 296.5 % | 88.7 % | 139.0 % | 852.8 % | 23.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 110.9111 % | 105.8731 % | 110.7528 % | 112.3220 % | 106.2757 % | 111.3251 % |
| Concentration per Run 1 | 0.0000 ppm | 111.0359 % | 105.6892 % | 110.8797 % | 112.6567 % | 106.7065 % | 111.5863 % |
| Concentration per Run 2 | 0.0002 ppm | 111.1303 % | 106.6114 % | 109.9772 % | 112.6321 % | 107.0827 % | 110.8530 % |
| Concentration per Run 3 | 0.0002 ppm | 110.5671 % | 105.3188 % | 111.4016 % | 111.6770 % | 105.0378 % | 111.5361 % |
| Recovery Percentage 1 | 2.730 % | | | | | | |
| Concentration RSD | 96.7 % | 0.3 % | 0.6 % | 0.7 % | 0.5 % | 1.0 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452987-01d2 WG1974088
Analysis started at: 9/20/2024 9:06:54 PM
Rack 3
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 96.5217 ppm | 0.0336 ppm | 0.0708 ppm | 0.6321 ppm | 0.0066 ppm | 557.3206 ppm |
| Concentration per Run 1 | 0.0023 ppm | 96.1379 ppm | 0.0326 ppm | 0.0710 ppm | 0.6295 ppm | 0.0066 ppm | 553.7739 ppm |
| Concentration per Run 2 | 0.0024 ppm | 96.9926 ppm | 0.0386 ppm | 0.0718 ppm | 0.6355 ppm | 0.0067 ppm | 559.6998 ppm |
| Concentration per Run 3 | 0.0019 ppm | 96.4345 ppm | 0.0296 ppm | 0.0697 ppm | 0.6313 ppm | 0.0066 ppm | 558.4881 ppm |
| Concentration RSD | 12.5 % | 0.4 % | 13.7 % | 1.5 % | 0.5 % | 0.8 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.0432 ppm | 0.1556 ppm | 0.1863 ppm | 117.1034 ppm | 10.4170 ppm | 0.0924 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0430 ppm | 0.1554 ppm | 0.1848 ppm | 116.7450 ppm | 10.3671 ppm | 0.0928 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.0429 ppm | 0.1550 ppm | 0.1878 ppm | 117.2256 ppm | 10.4987 ppm | 0.0925 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0437 ppm | 0.1565 ppm | 0.1862 ppm | 117.3396 ppm | 10.3853 ppm | 0.0918 ppm |
| Concentration RSD | 9.5 % | 1.0 % | 0.5 % | 0.8 % | 0.3 % | 0.7 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 74.3843 ppm | 3.5931 ppm | 0.0037 ppm | 2.1146 ppm | 0.1054 ppm | 0.2610 ppm | 0.0064 ppm |
| Concentration per Run 1 | 73.9604 ppm | 3.5859 ppm | 0.0041 ppm | 2.0920 ppm | 0.1061 ppm | 0.2634 ppm | 0.0080 ppm |
| Concentration per Run 2 | 74.1571 ppm | 3.5894 ppm | 0.0039 ppm | 2.1228 ppm | 0.1048 ppm | 0.2630 ppm | 0.0045 ppm |
| Concentration per Run 3 | 75.0353 ppm | 3.6038 ppm | 0.0030 ppm | 2.1289 ppm | 0.1052 ppm | 0.2566 ppm | 0.0068 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 15.8 % | 0.9 % | 0.6 % | 1.5 % | 27.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0070 ppm | 24.4563 [SIC 50] | 0.0335 ppm | 2.8370 ppm | 3.9425 ppm | 0.0044 ppm | 0.1491 ppm |
| Concentration per Run 1 | 0.0092 ppm | 24.4463 ppm | 0.0329 ppm | 2.8197 ppm | 3.9402 ppm | 0.0055 ppm | 0.1476 ppm |
| Concentration per Run 2 | 0.0032 ppm | 24.4458 ppm | 0.0336 ppm | 2.8520 ppm | 3.9071 ppm | 0.0045 ppm | 0.1505 ppm |
| Concentration per Run 3 | 0.0085 ppm | 24.4767 ppm | 0.0340 ppm | 2.8393 ppm | 3.9802 ppm | 0.0031 ppm | 0.1492 ppm |
| Concentration RSD | 46.7 % | 0.1 % | 1.7 % | 0.6 % | 0.9 % | 26.5 % | 1.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4387 ppm | 102.4122 % | 110.0024 % | 92.5670 % | 124.6770 % | 137.8864 % | 125.1011 % |
| Concentration per Run 1 | 0.4379 ppm | 102.7148 % | 110.7095 % | 92.8331 % | 124.6182 % | 138.3443 % | 125.5540 % |
| Concentration per Run 2 | 0.4402 ppm | 102.3229 % | 109.3271 % | 92.0125 % | 125.4119 % | 137.5110 % | 124.8043 % |
| Concentration per Run 3 | 0.4379 ppm | 102.1990 % | 109.9706 % | 92.8556 % | 124.0009 % | 137.8039 % | 124.9451 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.6 % | 0.5 % | 0.6 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-01d2 WG1974088
Analysis started at: 9/20/2024 9:11:13 PM
Rack 3
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 114.0416 ppm | 0.0596 ppm | 0.2865 ppm | 0.7411 ppm | 0.0204 ppm | 116.9077 ppm |
| Concentration per Run 1 | 0.0040 ppm | 114.6347 ppm | 0.0593 ppm | 0.2868 ppm | 0.7416 ppm | 0.0205 ppm | 117.5047 ppm |
| Concentration per Run 2 | 0.0040 ppm | 114.0791 ppm | 0.0592 ppm | 0.2857 ppm | 0.7432 ppm | 0.0204 ppm | 116.9641 ppm |
| Concentration per Run 3 | 0.0032 ppm | 113.4110 ppm | 0.0604 ppm | 0.2869 ppm | 0.7385 ppm | 0.0204 ppm | 116.2543 ppm |
| Concentration RSD | 11.6 % | 0.5 % | 1.1 % | 0.2 % | 0.3 % | 0.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0894 ppm | 1.6593 ppm | 0.9379 ppm | 289.6542 ppm | 9.8984 ppm | 0.1180 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.0904 ppm | 1.6589 ppm | 0.9333 ppm | 290.4564 ppm | 9.9075 ppm | 0.1201 ppm |
| Concentration per Run 2 | 0.0046 ppm | 0.0886 ppm | 1.6553 ppm | 0.9422 ppm | 289.7993 ppm | 9.9259 ppm | 0.1176 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0892 ppm | 1.6637 ppm | 0.9383 ppm | 288.7068 ppm | 9.8616 ppm | 0.1165 ppm |
| Concentration RSD | 7.4 % | 1.0 % | 0.3 % | 0.5 % | 0.3 % | 0.3 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 51.3725 ppm | 11.5107 ppm | 0.1330 ppm | 2.2080 ppm | 0.9372 ppm | 0.7167 ppm | 0.0019 ppm |
| Concentration per Run 1 | 51.4942 ppm | 11.5457 ppm | 0.1322 ppm | 2.2237 ppm | 0.9380 ppm | 0.7174 ppm | -0.0006 ppm |
| Concentration per Run 2 | 51.2362 ppm | 11.5143 ppm | 0.1321 ppm | 2.2081 ppm | 0.9323 ppm | 0.7165 ppm | 0.0023 ppm |
| Concentration per Run 3 | 51.3871 ppm | 11.4721 ppm | 0.1349 ppm | 2.1920 ppm | 0.9413 ppm | 0.7163 ppm | 0.0038 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.2 % | 0.7 % | 0.5 % | 0.1 % | 119.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 3.1129 ppm | 0.0613 ppm | 0.1922 ppm | 3.9431 ppm | 0.0043 ppm | 0.6804 ppm |
| Concentration per Run 1 | 0.0062 ppm | 3.1474 ppm | 0.0628 ppm | 0.1926 ppm | 3.9467 ppm | 0.0043 ppm | 0.6790 ppm |
| Concentration per Run 2 | 0.0042 ppm | 3.0956 ppm | 0.0608 ppm | 0.1923 ppm | 3.9318 ppm | 0.0055 ppm | 0.6807 ppm |
| Concentration per Run 3 | 0.0063 ppm | 3.0957 ppm | 0.0604 ppm | 0.1917 ppm | 3.9507 ppm | 0.0030 ppm | 0.6816 ppm |
| Concentration RSD | 21.3 % | 1.0 % | 2.1 % | 0.2 % | 0.3 % | 28.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.0436 ppm | 113.5709 % | 114.3739 % | 103.5281 % | 142.0378 % | 145.3632 % | 141.5148 % |
| Concentration per Run 1 | 5.0652 ppm | 113.8442 % | 113.8342 % | 103.0839 % | 141.8923 % | 145.4473 % | 141.2140 % |
| Concentration per Run 2 | 5.0065 ppm | 114.3507 % | 114.6311 % | 103.8715 % | 143.6391 % | 145.6619 % | 141.6317 % |
| Concentration per Run 3 | 5.0590 ppm | 112.5180 % | 114.6565 % | 103.6289 % | 140.5821 % | 144.9803 % | 141.6988 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.4 % | 0.4 % | 1.1 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-02d2 WG1974088
Analysis started at: 9/20/2024 9:15:10 PM
Rack 3
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 161.9740 ppm | 0.0385 ppm | 0.0221 ppm | 1.2077 ppm | 0.0083 ppm | 87.6757 ppm |
| Concentration per Run 1 | 0.0025 ppm | 162.4458 ppm | 0.0429 ppm | 0.0209 ppm | 1.2136 ppm | 0.0084 ppm | 87.9286 ppm |
| Concentration per Run 2 | 0.0021 ppm | 161.4467 ppm | 0.0356 ppm | 0.0214 ppm | 1.2046 ppm | 0.0083 ppm | 87.5592 ppm |
| Concentration per Run 3 | 0.0019 ppm | 162.0295 ppm | 0.0371 ppm | 0.0240 ppm | 1.2050 ppm | 0.0081 ppm | 87.5395 ppm |
| Concentration RSD | 15.6 % | 0.3 % | 10.0 % | 7.5 % | 0.4 % | 2.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0723 ppm | 0.2578 ppm | 0.2020 ppm | 225.2635 ppm | 43.7692 ppm | 0.1483 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0725 ppm | 0.2564 ppm | 0.2024 ppm | 226.9211 ppm | 43.8601 ppm | 0.1484 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0715 ppm | 0.2590 ppm | 0.2022 ppm | 225.2684 ppm | 43.5671 ppm | 0.1477 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0729 ppm | 0.2580 ppm | 0.2016 ppm | 223.6011 ppm | 43.8804 ppm | 0.1488 ppm |
| Concentration RSD | 31.2 % | 1.0 % | 0.5 % | 0.2 % | 0.7 % | 0.4 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 74.1653 ppm | 4.1358 ppm | 0.0047 ppm | 2.6238 ppm | 0.1463 ppm | 0.3092 ppm | 0.0035 ppm |
| Concentration per Run 1 | 73.9855 ppm | 4.1181 ppm | 0.0042 ppm | 2.6365 ppm | 0.1463 ppm | 0.3104 ppm | -0.0034 ppm |
| Concentration per Run 2 | 73.9895 ppm | 4.1396 ppm | 0.0052 ppm | 2.6167 ppm | 0.1461 ppm | 0.3067 ppm | 0.0049 ppm |
| Concentration per Run 3 | 74.5207 ppm | 4.1497 ppm | 0.0047 ppm | 2.6183 ppm | 0.1465 ppm | 0.3105 ppm | 0.0091 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 10.2 % | 0.4 % | 0.2 % | 0.7 % | 181.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 2.8639 ppm | 0.0215 ppm | 0.2478 ppm | 11.6783 ppm | 0.0105 ppm | 0.4555 ppm |
| Concentration per Run 1 | -0.0022 ppm | 2.8847 ppm | 0.0219 ppm | 0.2492 ppm | 11.6322 ppm | 0.0093 ppm | 0.4546 ppm |
| Concentration per Run 2 | -0.0016 ppm | 2.8197 ppm | 0.0213 ppm | 0.2478 ppm | 11.6671 ppm | 0.0118 ppm | 0.4561 ppm |
| Concentration per Run 3 | -0.0003 ppm | 2.8873 ppm | 0.0213 ppm | 0.2465 ppm | 11.7355 ppm | 0.0104 ppm | 0.4559 ppm |
| Concentration RSD | 70.2 % | 1.3 % | 1.7 % | 0.5 % | 0.5 % | 11.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7294 ppm | 115.9839 % | 118.3812 % | 111.9902 % | 145.6227 % | 151.5535 % | 146.8250 % |
| Concentration per Run 1 | 0.7288 ppm | 115.5374 % | 118.0547 % | 112.2269 % | 145.2539 % | 151.5577 % | 147.4269 % |
| Concentration per Run 2 | 0.7236 ppm | 116.1506 % | 118.4409 % | 112.0594 % | 145.7640 % | 151.3343 % | 146.2949 % |
| Concentration per Run 3 | 0.7357 ppm | 116.2638 % | 118.6480 % | 111.6842 % | 145.8504 % | 151.7685 % | 146.7533 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.3 % | 0.2 % | 0.2 % | 0.1 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-03d2 WG1974088
Analysis started at: 9/20/2024 9:19:08 PM
Rack 3
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 69.7084 ppm | 0.0554 ppm | 0.0242 ppm | 0.4635 ppm | 0.0042 ppm | 689.0310 ppm |
| Concentration per Run 1 | 0.0023 ppm | 69.7012 ppm | 0.0530 ppm | 0.0249 ppm | 0.4627 ppm | 0.0042 ppm | 689.7041 ppm |
| Concentration per Run 2 | 0.0022 ppm | 69.8499 ppm | 0.0577 ppm | 0.0251 ppm | 0.4646 ppm | 0.0042 ppm | 689.4617 ppm |
| Concentration per Run 3 | 0.0018 ppm | 69.5740 ppm | 0.0554 ppm | 0.0225 ppm | 0.4633 ppm | 0.0042 ppm | 687.9273 ppm |
| Concentration RSD | 11.6 % | 0.2 % | 4.2 % | 5.8 % | 0.2 % | 0.6 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0573 ppm | 0.3867 ppm | 0.4354 ppm | 165.2333 ppm | 7.4001 ppm | 0.0806 ppm |
| Concentration per Run 1 | -0.0014 ppm | 0.0569 ppm | 0.3828 ppm | 0.4333 ppm | 165.3744 ppm | 7.3777 ppm | 0.0819 ppm |
| Concentration per Run 2 | -0.0011 ppm | 0.0577 ppm | 0.3903 ppm | 0.4384 ppm | 165.3160 ppm | 7.4579 ppm | 0.0816 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0573 ppm | 0.3870 ppm | 0.4345 ppm | 165.0096 ppm | 7.3646 ppm | 0.0784 ppm |
| Concentration RSD | 18.3 % | 0.7 % | 1.0 % | 0.6 % | 0.1 % | 0.7 % | 2.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 411.3501 ppm | 4.0808 ppm | 0.0127 ppm | 0.7540 ppm | 0.1210 ppm | 0.4886 ppm | 0.0084 ppm |
| Concentration per Run 1 | 409.7927 ppm | 4.0834 ppm | 0.0129 ppm | 0.7575 ppm | 0.1218 ppm | 0.4872 ppm | 0.0078 ppm |
| Concentration per Run 2 | 411.9938 ppm | 4.0698 ppm | 0.0131 ppm | 0.7530 ppm | 0.1205 ppm | 0.4868 ppm | 0.0088 ppm |
| Concentration per Run 3 | 412.2637 ppm | 4.0892 ppm | 0.0121 ppm | 0.7515 ppm | 0.1205 ppm | 0.4917 ppm | 0.0085 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 4.0 % | 0.4 % | 0.6 % | 0.6 % | 6.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 5.1380 ppm | 0.0276 ppm | 0.3378 ppm | 2.3903 ppm | 0.0032 ppm | 0.2656 ppm |
| Concentration per Run 1 | 0.0018 ppm | 5.0827 ppm | 0.0275 ppm | 0.3381 ppm | 2.3706 ppm | 0.0030 ppm | 0.2654 ppm |
| Concentration per Run 2 | 0.0028 ppm | 5.1733 ppm | 0.0269 ppm | 0.3380 ppm | 2.3963 ppm | 0.0020 ppm | 0.2660 ppm |
| Concentration per Run 3 | 0.0104 ppm | 5.1579 ppm | 0.0282 ppm | 0.3374 ppm | 2.4041 ppm | 0.0045 ppm | 0.2654 ppm |
| Concentration RSD | 94.7 % | 0.9 % | 2.3 % | 0.1 % | 0.7 % | 39.0 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4815 ppm | 102.0483 % | 108.5949 % | 88.4626 % | 118.2094 % | 128.0070 % | 116.5120 % |
| Concentration per Run 1 | 1.4765 ppm | 103.6815 % | 107.9978 % | 88.7101 % | 120.1407 % | 127.2417 % | 116.4544 % |
| Concentration per Run 2 | 1.4855 ppm | 101.1765 % | 109.0379 % | 88.6405 % | 117.3481 % | 128.7779 % | 117.2924 % |
| Concentration per Run 3 | 1.4825 ppm | 101.2870 % | 108.7492 % | 88.0371 % | 117.1395 % | 128.0013 % | 115.7892 % |
| Concentration RSD | 0.3 % | 1.4 % | 0.5 % | 0.4 % | 1.4 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-04d2 WG1974088
Analysis started at: 9/20/2024 9:23:06 PM
Rack 3
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 87.1653 ppm | 0.0670 ppm | 0.0287 ppm | 0.5900 ppm | 0.0055 ppm | 372.1358 ppm |
| Concentration per Run 1 | 0.0028 ppm | 86.9648 ppm | 0.0684 ppm | 0.0302 ppm | 0.5884 ppm | 0.0055 ppm | 371.6131 ppm |
| Concentration per Run 2 | 0.0024 ppm | 87.1293 ppm | 0.0633 ppm | 0.0275 ppm | 0.5910 ppm | 0.0055 ppm | 372.4372 ppm |
| Concentration per Run 3 | 0.0012 ppm | 87.4017 ppm | 0.0692 ppm | 0.0285 ppm | 0.5904 ppm | 0.0055 ppm | 372.3573 ppm |
| Concentration RSD | 38.7 % | 0.3 % | 4.8 % | 4.6 % | 0.2 % | 0.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0585 ppm | 0.4456 ppm | 0.3260 ppm | 175.2056 ppm | 11.3419 ppm | 0.1129 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0591 ppm | 0.4456 ppm | 0.3261 ppm | 174.7569 ppm | 11.3311 ppm | 0.1131 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0574 ppm | 0.4462 ppm | 0.3248 ppm | 175.6205 ppm | 11.3923 ppm | 0.1137 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0589 ppm | 0.4451 ppm | 0.3271 ppm | 175.2394 ppm | 11.3023 ppm | 0.1120 ppm |
| Concentration RSD | 45.0 % | 1.6 % | 0.1 % | 0.3 % | 0.2 % | 0.4 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 211.7516 ppm | 6.2923 ppm | 0.0174 ppm | 0.8985 ppm | 0.1913 ppm | 2.2944 ppm | 0.0050 ppm |
| Concentration per Run 1 | 211.7808 ppm | 6.2692 ppm | 0.0169 ppm | 0.8994 ppm | 0.1910 ppm | 2.3013 ppm | 0.0058 ppm |
| Concentration per Run 2 | 211.6787 ppm | 6.2950 ppm | 0.0177 ppm | 0.9016 ppm | 0.1909 ppm | 2.2923 ppm | 0.0056 ppm |
| Concentration per Run 3 | 211.7953 ppm | 6.3128 ppm | 0.0178 ppm | 0.8945 ppm | 0.1920 ppm | 2.2896 ppm | 0.0037 ppm |
| Concentration RSD | 0.0 % | 0.3 % | 2.7 % | 0.4 % | 0.3 % | 0.3 % | 23.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 3.7298 ppm | 0.0283 ppm | 0.3677 ppm | 3.2084 ppm | 0.0048 ppm | 0.4065 ppm |
| Concentration per Run 1 | -0.0031 ppm | 3.7384 ppm | 0.0290 ppm | 0.3669 ppm | 3.2063 ppm | 0.0036 ppm | 0.4063 ppm |
| Concentration per Run 2 | 0.0048 ppm | 3.7108 ppm | 0.0278 ppm | 0.3687 ppm | 3.2158 ppm | 0.0048 ppm | 0.4060 ppm |
| Concentration per Run 3 | 0.0093 ppm | 3.7402 ppm | 0.0281 ppm | 0.3675 ppm | 3.2030 ppm | 0.0058 ppm | 0.4071 ppm |
| Concentration RSD | 172.8 % | 0.4 % | 2.3 % | 0.3 % | 0.2 % | 24.0 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9081 ppm | 107.2314 % | 110.4094 % | 95.1876 % | 126.0589 % | 131.6295 % | 124.2907 % |
| Concentration per Run 1 | 0.9029 ppm | 107.1089 % | 110.4229 % | 95.2516 % | 126.1181 % | 131.9883 % | 124.1058 % |
| Concentration per Run 2 | 0.9070 ppm | 107.6355 % | 109.0556 % | 95.4613 % | 126.3876 % | 129.4830 % | 125.0060 % |
| Concentration per Run 3 | 0.9145 ppm | 106.9498 % | 111.7496 % | 94.8499 % | 125.6711 % | 133.4173 % | 123.7604 % |
| Concentration RSD | 0.6 % | 0.3 % | 1.2 % | 0.3 % | 0.3 % | 1.5 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-05d2 WG1974088
Analysis started at: 9/20/2024 9:27:03 PM
Rack 3
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 103.8817 ppm | 0.0734 ppm | 0.0648 ppm | 0.7210 ppm | 0.0064 ppm | 372.4769 ppm |
| Concentration per Run 1 | 0.0030 ppm | 103.8759 ppm | 0.0739 ppm | 0.0650 ppm | 0.7206 ppm | 0.0064 ppm | 371.8736 ppm |
| Concentration per Run 2 | 0.0043 ppm | 103.7714 ppm | 0.0748 ppm | 0.0633 ppm | 0.7217 ppm | 0.0065 ppm | 371.6330 ppm |
| Concentration per Run 3 | 0.0048 ppm | 103.9977 ppm | 0.0715 ppm | 0.0661 ppm | 0.7208 ppm | 0.0064 ppm | 373.9242 ppm |
| Concentration RSD | 23.8 % | 0.1 % | 2.4 % | 2.2 % | 0.1 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0632 ppm | 1.4866 ppm | 0.4496 ppm | 297.9939 ppm | 13.2381 ppm | 0.1216 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0628 ppm | 1.4774 ppm | 0.4482 ppm | 297.3243 ppm | 13.2309 ppm | 0.1221 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0636 ppm | 1.4810 ppm | 0.4496 ppm | 298.6452 ppm | 13.2421 ppm | 0.1224 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0633 ppm | 1.5013 ppm | 0.4509 ppm | 298.0123 ppm | 13.2412 ppm | 0.1204 ppm |
| Concentration RSD | 21.3 % | 0.6 % | 0.9 % | 0.3 % | 0.2 % | 0.0 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 152.2822 ppm | 23.3067 [SIC 100] | 0.0604 ppm | 2.5775 ppm | 0.2432 ppm | 0.9891 ppm | 0.0011 ppm |
| Concentration per Run 1 | 151.1578 ppm | 23.2890 ppm | 0.0585 ppm | 2.5825 ppm | 0.2418 ppm | 0.9856 ppm | 0.0012 ppm |
| Concentration per Run 2 | 152.2044 ppm | 23.2208 ppm | 0.0612 ppm | 2.5767 ppm | 0.2410 ppm | 0.9884 ppm | 0.0028 ppm |
| Concentration per Run 3 | 153.4845 ppm | 23.4104 ppm | 0.0616 ppm | 2.5735 ppm | 0.2468 ppm | 0.9933 ppm | -0.0007 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 2.8 % | 0.2 % | 1.3 % | 0.4 % | 161.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0062 ppm | 5.4375 ppm | 0.0387 ppm | 0.5585 ppm | 3.7245 ppm | 0.0060 ppm | 1.0195 ppm |
| Concentration per Run 1 | 0.0041 ppm | 5.3512 ppm | 0.0391 ppm | 0.5574 ppm | 3.6988 ppm | 0.0058 ppm | 1.0208 ppm |
| Concentration per Run 2 | 0.0072 ppm | 5.4466 ppm | 0.0383 ppm | 0.5596 ppm | 3.7116 ppm | 0.0063 ppm | 1.0193 ppm |
| Concentration per Run 3 | 0.0072 ppm | 5.5148 ppm | 0.0387 ppm | 0.5584 ppm | 3.7632 ppm | 0.0057 ppm | 1.0184 ppm |
| Concentration RSD | 28.8 % | 1.5 % | 1.0 % | 0.2 % | 0.9 % | 5.5 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1993 ppm | 108.3373 % | 112.5650 % | 96.2413 % | 130.5607 % | 138.3675 % | 130.7824 % |
| Concentration per Run 1 | 1.1883 ppm | 109.0027 % | 112.4983 % | 96.9014 % | 131.5198 % | 138.1983 % | 132.0492 % |
| Concentration per Run 2 | 1.1967 ppm | 109.2300 % | 112.8715 % | 96.2281 % | 131.3780 % | 138.4468 % | 130.8534 % |
| Concentration per Run 3 | 1.2128 ppm | 106.7794 % | 112.3251 % | 95.5944 % | 128.7843 % | 138.4574 % | 129.4448 % |
| Concentration RSD | 1.0 % | 1.2 % | 0.2 % | 0.7 % | 1.2 % | 0.1 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453085-06d2 WG1974088
Analysis started at: 9/20/2024 9:31:01 PM
Rack 3
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 81.4201 ppm | 0.0432 ppm | 0.0287 ppm | 0.3227 ppm | 0.0024 ppm | 156.6051 ppm |
| Concentration per Run 1 | 0.0020 ppm | 81.4175 ppm | 0.0415 ppm | 0.0284 ppm | 0.3211 ppm | 0.0024 ppm | 156.3999 ppm |
| Concentration per Run 2 | 0.0013 ppm | 81.5529 ppm | 0.0433 ppm | 0.0295 ppm | 0.3225 ppm | 0.0025 ppm | 156.6593 ppm |
| Concentration per Run 3 | 0.0020 ppm | 81.2899 ppm | 0.0447 ppm | 0.0281 ppm | 0.3245 ppm | 0.0024 ppm | 156.7559 ppm |
| Concentration RSD | 22.4 % | 0.2 % | 3.8 % | 2.4 % | 0.5 % | 2.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0284 ppm | 0.2141 ppm | 0.1178 ppm | 125.1628 ppm | 7.7225 ppm | 0.0681 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0278 ppm | 0.2135 ppm | 0.1181 ppm | 124.5308 ppm | 7.6919 ppm | 0.0691 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0276 ppm | 0.2143 ppm | 0.1176 ppm | 125.2093 ppm | 7.7247 ppm | 0.0675 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0297 ppm | 0.2144 ppm | 0.1177 ppm | 125.7483 ppm | 7.7509 ppm | 0.0678 ppm |
| Concentration RSD | 295.4 % | 4.2 % | 0.2 % | 0.2 % | 0.5 % | 0.4 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 81.1426 ppm | 1.3094 ppm | 0.0070 ppm | 0.7240 ppm | 0.1173 ppm | 0.2230 ppm | 0.0038 ppm |
| Concentration per Run 1 | 81.1624 ppm | 1.3082 ppm | 0.0069 ppm | 0.7228 ppm | 0.1174 ppm | 0.2244 ppm | 0.0042 ppm |
| Concentration per Run 2 | 80.7949 ppm | 1.3114 ppm | 0.0067 ppm | 0.7228 ppm | 0.1176 ppm | 0.2229 ppm | 0.0012 ppm |
| Concentration per Run 3 | 81.4705 ppm | 1.3086 ppm | 0.0073 ppm | 0.7265 ppm | 0.1169 ppm | 0.2218 ppm | 0.0059 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 3.9 % | 0.3 % | 0.3 % | 0.6 % | 63.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 4.8638 ppm | 0.0090 ppm | 0.2368 ppm | 1.2767 ppm | 0.0025 ppm | 0.2533 ppm |
| Concentration per Run 1 | 0.0057 ppm | 4.8689 ppm | 0.0088 ppm | 0.2360 ppm | 1.2714 ppm | 0.0014 ppm | 0.2534 ppm |
| Concentration per Run 2 | -0.0007 ppm | 4.8329 ppm | 0.0088 ppm | 0.2362 ppm | 1.2799 ppm | 0.0032 ppm | 0.2533 ppm |
| Concentration per Run 3 | 0.0002 ppm | 4.8895 ppm | 0.0094 ppm | 0.2382 ppm | 1.2787 ppm | 0.0027 ppm | 0.2531 ppm |
| Concentration RSD | 202.7 % | 0.6 % | 3.9 % | 0.5 % | 0.4 % | 38.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4079 ppm | 111.9487 % | 113.1874 % | 102.2449 % | 118.0907 % | 120.8348 % | 117.5882 % |
| Concentration per Run 1 | 0.4062 ppm | 112.4617 % | 114.1173 % | 102.6908 % | 118.6430 % | 122.0394 % | 118.8791 % |
| Concentration per Run 2 | 0.4092 ppm | 111.8058 % | 113.4017 % | 101.9939 % | 118.0155 % | 120.7018 % | 117.1554 % |
| Concentration per Run 3 | 0.4084 ppm | 111.5786 % | 112.0433 % | 102.0501 % | 117.6136 % | 119.7633 % | 116.7300 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.9 % | 0.4 % | 0.4 % | 0.9 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453901-07d2 WG1974088
Analysis started at: 9/20/2024 9:34:59 PM
Rack 3
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 145.0980 ppm | 0.0357 ppm | 0.0349 ppm | 0.7813 ppm | 0.0102 ppm | 10.3848 ppm |
| Concentration per Run 1 | 0.0029 ppm | 144.8253 ppm | 0.0357 ppm | 0.0348 ppm | 0.7797 ppm | 0.0102 ppm | 10.3595 ppm |
| Concentration per Run 2 | 0.0025 ppm | 145.2539 ppm | 0.0349 ppm | 0.0337 ppm | 0.7795 ppm | 0.0102 ppm | 10.4030 ppm |
| Concentration per Run 3 | 0.0028 ppm | 145.2148 ppm | 0.0364 ppm | 0.0362 ppm | 0.7847 ppm | 0.0102 ppm | 10.3917 ppm |
| Concentration RSD | 8.8 % | 0.2 % | 2.1 % | 3.6 % | 0.4 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.1971 ppm | 0.2555 ppm | 0.1308 ppm | 306.3270 ppm | 11.1668 ppm | 0.2120 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.1981 ppm | 0.2556 ppm | 0.1304 ppm | 305.5284 ppm | 11.1680 ppm | 0.2132 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.1962 ppm | 0.2569 ppm | 0.1316 ppm | 306.6913 ppm | 11.1601 ppm | 0.2089 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.1971 ppm | 0.2539 ppm | 0.1304 ppm | 306.7612 ppm | 11.1725 ppm | 0.2138 ppm |
| Concentration RSD | 11.3 % | 0.5 % | 0.6 % | 0.5 % | 0.2 % | 0.1 % | 1.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 34.6680 ppm | 6.4272 ppm | 0.0037 ppm | 1.3617 ppm | 0.2155 ppm | 0.1723 ppm | 0.0004 ppm |
| Concentration per Run 1 | 34.5697 ppm | 6.4158 ppm | 0.0038 ppm | 1.3569 ppm | 0.2150 ppm | 0.1731 ppm | 0.0047 ppm |
| Concentration per Run 2 | 34.6984 ppm | 6.4420 ppm | 0.0034 ppm | 1.3615 ppm | 0.2161 ppm | 0.1733 ppm | -0.0042 ppm |
| Concentration per Run 3 | 34.7359 ppm | 6.4237 ppm | 0.0041 ppm | 1.3666 ppm | 0.2153 ppm | 0.1705 ppm | 0.0008 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 9.0 % | 0.4 % | 0.3 % | 0.9 % | 1,113.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 5.9031 ppm | 0.0100 ppm | 0.0928 ppm | 3.1127 ppm | 0.0050 ppm | 0.3947 ppm |
| Concentration per Run 1 | 0.0018 ppm | 5.8995 ppm | 0.0099 ppm | 0.0925 ppm | 3.1150 ppm | 0.0047 ppm | 0.3925 ppm |
| Concentration per Run 2 | 0.0037 ppm | 5.8994 ppm | 0.0102 ppm | 0.0930 ppm | 3.1169 ppm | 0.0053 ppm | 0.3958 ppm |
| Concentration per Run 3 | 0.0023 ppm | 5.9105 ppm | 0.0101 ppm | 0.0928 ppm | 3.1062 ppm | 0.0048 ppm | 0.3959 ppm |
| Concentration RSD | 38.7 % | 0.1 % | 1.6 % | 0.3 % | 0.2 % | 5.8 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5496 ppm | 119.7251 % | 120.1168 % | 109.6687 % | 170.9043 % | 173.9943 % | 171.2130 % |
| Concentration per Run 1 | 0.5485 ppm | 120.3216 % | 120.8718 % | 109.6308 % | 171.6658 % | 174.5775 % | 170.5456 % |
| Concentration per Run 2 | 0.5511 ppm | 119.5677 % | 120.4270 % | 109.5767 % | 170.4180 % | 174.5070 % | 171.0450 % |
| Concentration per Run 3 | 0.5491 ppm | 119.2861 % | 119.0516 % | 109.7988 % | 170.6291 % | 172.8986 % | 172.0484 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.8 % | 0.1 % | 0.4 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453901-08d2 WG1974088
Analysis started at: 9/20/2024 9:38:57 PM
Rack 3
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 197.8208 ppm | 0.0343 ppm | 0.0965 ppm | 0.7610 ppm | 0.0119 ppm | 9.5508 ppm |
| Concentration per Run 1 | 0.0032 ppm | 198.3343 ppm | 0.0343 ppm | 0.0974 ppm | 0.7622 ppm | 0.0118 ppm | 9.5856 ppm |
| Concentration per Run 2 | 0.0026 ppm | 197.2259 ppm | 0.0353 ppm | 0.0967 ppm | 0.7579 ppm | 0.0120 ppm | 9.5219 ppm |
| Concentration per Run 3 | 0.0029 ppm | 197.9023 ppm | 0.0333 ppm | 0.0956 ppm | 0.7629 ppm | 0.0118 ppm | 9.5448 ppm |
| Concentration RSD | 9.8 % | 0.3 % | 2.9 % | 0.9 % | 0.4 % | 0.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.2531 ppm | 0.3308 ppm | 0.0669 ppm | 438.9187 ppm | 20.0426 ppm | 0.4121 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.2523 ppm | 0.3318 ppm | 0.0670 ppm | 436.1287 ppm | 20.0645 ppm | 0.4138 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.2533 ppm | 0.3307 ppm | 0.0670 ppm | 440.9285 ppm | 20.0436 ppm | 0.4089 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.2537 ppm | 0.3299 ppm | 0.0667 ppm | 439.6990 ppm | 20.0197 ppm | 0.4134 ppm |
| Concentration RSD | 38.4 % | 0.3 % | 0.3 % | 0.3 % | 0.6 % | 0.1 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 64.4112 ppm | 6.1562 ppm | 0.0074 ppm | 1.0515 ppm | 0.3190 ppm | 0.2266 ppm | -0.0023 ppm |
| Concentration per Run 1 | 64.5274 ppm | 6.2007 ppm | 0.0070 ppm | 1.0467 ppm | 0.3199 ppm | 0.2281 ppm | 0.0002 ppm |
| Concentration per Run 2 | 64.3782 ppm | 6.1160 ppm | 0.0079 ppm | 1.0556 ppm | 0.3192 ppm | 0.2273 ppm | -0.0099 ppm |
| Concentration per Run 3 | 64.3279 ppm | 6.1520 ppm | 0.0073 ppm | 1.0523 ppm | 0.3179 ppm | 0.2244 ppm | 0.0028 ppm |
| Concentration RSD | 0.2 % | 0.7 % | 6.2 % | 0.4 % | 0.3 % | 0.9 % | 291.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 3.5869 ppm | 0.0107 ppm | 0.1097 ppm | 3.9730 ppm | 0.0061 ppm | 0.4222 ppm |
| Concentration per Run 1 | 0.0013 ppm | 3.5815 ppm | 0.0098 ppm | 0.1094 ppm | 3.9808 ppm | 0.0057 ppm | 0.4235 ppm |
| Concentration per Run 2 | -0.0029 ppm | 3.5990 ppm | 0.0107 ppm | 0.1099 ppm | 3.9701 ppm | 0.0073 ppm | 0.4213 ppm |
| Concentration per Run 3 | 0.0022 ppm | 3.5803 ppm | 0.0115 ppm | 0.1099 ppm | 3.9682 ppm | 0.0052 ppm | 0.4218 ppm |
| Concentration RSD | 1,401.2 % | 0.3 % | 8.1 % | 0.3 % | 0.2 % | 18.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8125 ppm | 118.0338 % | 119.6267 % | 107.3654 % | **164.3627 %** | **170.0025 %** | **166.6151 %** |
| Concentration per Run 1 | 0.8140 ppm | 117.9345 % | 120.0070 % | 107.6755 % | **165.0023 %** | **171.4286 %** | **167.1956 %** |
| Concentration per Run 2 | 0.8140 ppm | 117.6274 % | 119.9532 % | 107.0085 % | **163.8789 %** | **170.3452 %** | **165.7460 %** |
| Concentration per Run 3 | 0.8096 ppm | 118.5397 % | 118.9199 % | 107.4122 % | **164.2070 %** | **168.2337 %** | **166.9036 %** |
| Concentration RSD | 0.3 % | 0.4 % | 0.5 % | 0.3 % | **0.4 %** | **1.0 %** | **0.5 %** |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-01 WG1973178
Analysis started at: 9/20/2024 9:42:55 PM
Rack 3
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.6438 ppm | 0.0012 ppm | 0.0966 ppm | 0.0335 ppm | 0.0000 ppm | 37.4509 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.6498 ppm | 0.0000 ppm | 0.0983 ppm | 0.0336 ppm | 0.0000 ppm | 37.7389 ppm |
| Concentration per Run 2 | 0.0032 ppm | 0.6367 ppm | 0.0026 ppm | 0.0954 ppm | 0.0333 ppm | 0.0000 ppm | 37.3508 ppm |
| Concentration per Run 3 | 0.0032 ppm | 0.6451 ppm | 0.0009 ppm | 0.0962 ppm | 0.0337 ppm | 0.0000 ppm | 37.2631 ppm |
| Concentration RSD | 3.7 % | 1.0 % | 113.3 % | 1.6 % | 0.6 % | 17.5 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0006 ppm | 0.0086 ppm | 0.0366 ppm | 2.8646 ppm | 3.1870 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0011 ppm | 0.0089 ppm | 0.0363 ppm | 2.8634 ppm | 3.2267 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0004 ppm | 0.0082 ppm | 0.0369 ppm | 2.8483 ppm | 3.1533 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0003 ppm | 0.0086 ppm | 0.0366 ppm | 2.8821 ppm | 3.1810 ppm | 0.0013 ppm |
| Concentration RSD | 8.8 % | 78.6 % | 3.9 % | 0.9 % | 0.6 % | 1.2 % | 41.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7266 ppm | 0.0872 ppm | 0.0003 ppm | 10.1061 ppm | 0.0035 ppm | 0.0032 ppm | 0.0041 ppm |
| Concentration per Run 1 | 5.7684 ppm | 0.0878 ppm | 0.0000 ppm | 10.1738 ppm | 0.0038 ppm | 0.0039 ppm | 0.0040 ppm |
| Concentration per Run 2 | 5.6995 ppm | 0.0862 ppm | 0.0003 ppm | 10.0980 ppm | 0.0036 ppm | 0.0035 ppm | 0.0053 ppm |
| Concentration per Run 3 | 5.7120 ppm | 0.0877 ppm | 0.0008 ppm | 10.0466 ppm | 0.0030 ppm | 0.0022 ppm | 0.0031 ppm |
| Concentration RSD | 0.6 % | 1.1 % | 104.9 % | 0.6 % | 12.4 % | 27.0 % | 26.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 5.3039 ppm | -0.0011 ppm | 0.0793 ppm | 0.0357 ppm | 0.0006 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0020 ppm | 5.3191 ppm | -0.0021 ppm | 0.0792 ppm | 0.0361 ppm | -0.0005 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0004 ppm | 5.3022 ppm | -0.0007 ppm | 0.0789 ppm | 0.0358 ppm | 0.0011 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0010 ppm | 5.2905 ppm | -0.0004 ppm | 0.0797 ppm | 0.0352 ppm | 0.0014 ppm | 0.0019 ppm |
| Concentration RSD | 72.6 % | 0.3 % | 84.7 % | 0.5 % | 1.4 % | 157.7 % | 10.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0459 ppm | 110.1536 % | 105.7144 % | 107.5086 % | 110.6179 % | 105.5370 % | 109.5279 % |
| Concentration per Run 1 | 0.0465 ppm | 109.4863 % | 105.5565 % | 108.2494 % | 110.5058 % | 105.9495 % | 109.9897 % |
| Concentration per Run 2 | 0.0455 ppm | 111.3692 % | 105.8902 % | 106.8958 % | 111.8217 % | 105.5594 % | 108.8412 % |
| Concentration per Run 3 | 0.0459 ppm | 109.6053 % | 105.6967 % | 107.3805 % | 109.5263 % | 105.1021 % | 109.7528 % |
| Concentration RSD | 1.1 % | 1.0 % | 0.2 % | 0.6 % | 1.0 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 9:46:53 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4904 ppm | 0.4572 ppm | 0.4607 ppm | 0.4730 ppm | 0.4794 ppm | 0.4857 ppm | 0.4696 ppm |
| Concentration per Run 1 | 0.4905 ppm | 0.4600 ppm | 0.4594 ppm | 0.4737 ppm | 0.4840 ppm | 0.4856 ppm | 0.4680 ppm |
| Concentration per Run 2 | 0.4921 ppm | 0.4530 ppm | 0.4598 ppm | 0.4758 ppm | 0.4765 ppm | 0.4853 ppm | 0.4718 ppm |
| Concentration per Run 3 | 0.4886 ppm | 0.4586 ppm | 0.4630 ppm | 0.4696 ppm | 0.4778 ppm | 0.4863 ppm | 0.4690 ppm |
| Recovery Percentage 1 | 98.083 % | 91.441 % | 92.144 % | 94.605 % | 95.889 % | 97.148 % | 93.926 % |
| Concentration RSD | 0.4 % | 0.8 % | 0.4 % | 0.7 % | 0.8 % | 0.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4791 ppm | 0.4886 ppm | 0.4693 ppm | 0.4753 ppm | 0.4797 ppm | 4.9351 ppm | 0.4777 ppm |
| Concentration per Run 1 | 0.4785 ppm | 0.4900 ppm | 0.4707 ppm | 0.4755 ppm | 0.4818 ppm | 4.9365 ppm | 0.4804 ppm |
| Concentration per Run 2 | 0.4762 ppm | 0.4850 ppm | 0.4715 ppm | 0.4757 ppm | 0.4804 ppm | 4.9371 ppm | 0.4767 ppm |
| Concentration per Run 3 | 0.4825 ppm | 0.4908 ppm | 0.4658 ppm | 0.4746 ppm | 0.4767 ppm | 4.9316 ppm | 0.4760 ppm |
| Recovery Percentage 1 | 95.815 % | 97.725 % | 93.870 % | 95.058 % | 95.932 % | 98.702 % | 95.539 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.7 % | 0.1 % | 0.5 % | 0.1 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4692 ppm | 0.4639 ppm | 0.4637 ppm | 9.3739 ppm | 0.4821 ppm | 0.4772 ppm | 0.4868 ppm |
| Concentration per Run 1 | 0.4704 ppm | 0.4627 ppm | 0.4630 ppm | 9.3465 ppm | 0.4831 ppm | 0.4773 ppm | 0.4859 ppm |
| Concentration per Run 2 | 0.4696 ppm | 0.4654 ppm | 0.4638 ppm | 9.3610 ppm | 0.4843 ppm | 0.4780 ppm | 0.4895 ppm |
| Concentration per Run 3 | 0.4677 ppm | 0.4635 ppm | 0.4643 ppm | 9.4141 ppm | 0.4789 ppm | 0.4762 ppm | 0.4849 ppm |
| Recovery Percentage 1 | 93.848 % | 92.772 % | 92.743 % | 93.739 % | 96.422 % | 95.432 % | 97.356 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.4 % | 0.6 % | 0.2 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4738 ppm | 5.2545 ppm | 0.4577 ppm | 0.4575 ppm | 0.4778 ppm | 0.4757 ppm | 0.4697 ppm |
| Concentration per Run 1 | 0.4740 ppm | 5.2472 ppm | 0.4604 ppm | 0.4589 ppm | 0.4798 ppm | 0.4770 ppm | 0.4702 ppm |
| Concentration per Run 2 | 0.4695 ppm | 5.2528 ppm | 0.4587 ppm | 0.4562 ppm | 0.4789 ppm | 0.4734 ppm | 0.4678 ppm |
| Concentration per Run 3 | 0.4778 ppm | 5.2636 ppm | 0.4539 ppm | 0.4572 ppm | 0.4748 ppm | 0.4769 ppm | 0.4710 ppm |
| Recovery Percentage 1 | 94.753 % | 100.087 % | 91.534 % | 91.492 % | 95.568 % | 95.149 % | 93.934 % |
| Concentration RSD | 0.9 % | 0.2 % | 0.7 % | 0.3 % | 0.6 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4812 ppm | 113.9358 % | 109.6918 % | 110.6508 % | 113.2513 % | 109.1011 % | 110.7813 % |
| Concentration per Run 1 | 0.4833 ppm | 114.1933 % | 110.5687 % | 110.5666 % | 113.7275 % | 109.5477 % | 110.8342 % |
| Concentration per Run 2 | 0.4817 ppm | 113.9086 % | 109.0239 % | 110.5858 % | 112.7845 % | 108.4731 % | 111.0132 % |
| Concentration per Run 3 | 0.4785 ppm | 113.7055 % | 109.4827 % | 110.7999 % | 113.2421 % | 109.2824 % | 110.4964 % |
| Recovery Percentage 1 | 96.232 % | | | | | | |
| Concentration RSD | 0.5 % | 0.2 % | 0.7 % | 0.1 % | 0.4 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 9:50:50 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0024 ppm | 0.0023 ppm | 0.0015 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0038 ppm | 0.0013 ppm | 0.0035 ppm | 0.0000 ppm | 0.0000 ppm | 0.0065 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0173 ppm | 0.0002 ppm | 0.0022 ppm | 0.0001 ppm | 0.0001 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0140 ppm | 0.0053 ppm | -0.0011 ppm | -0.0003 ppm | 0.0000 ppm | -0.0046 ppm |
| Recovery Percentage 1 | 11.982 % | 2.366 % | 45.159 % | 5.137 % | -0.680 % | 0.561 % | 0.241 % |
| Concentration RSD | 55.5 % | 662.5 % | 118.7 % | 153.8 % | 265.5 % | 157.5 % | 2,349.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0005 ppm | -0.0007 ppm | -0.0006 ppm | -0.0033 ppm | -0.0262 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | -0.0004 ppm | -0.0044 ppm | -0.0199 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0001 ppm | -0.0005 ppm | -0.0005 ppm | -0.0027 ppm | -0.0275 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0011 ppm | -0.0008 ppm | -0.0008 ppm | -0.0028 ppm | -0.0312 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 0.343 % | 2.264 % | -6.531 % | -5.671 % | -6.604 % | -1.048 % | 24.264 % |
| Concentration RSD | 1,092.5 % | 122.9 % | 25.9 % | 33.5 % | 29.6 % | 22.1 % | 136.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0007 ppm | -0.1904 ppm | -0.0002 ppm | -0.0011 ppm | 0.0082 ppm |
| Concentration per Run 1 | 0.0028 ppm | -0.0002 ppm | 0.0006 ppm | -0.1948 ppm | -0.0004 ppm | -0.0005 ppm | 0.0117 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0001 ppm | 0.0007 ppm | -0.1916 ppm | -0.0001 ppm | -0.0019 ppm | 0.0077 ppm |
| Concentration per Run 3 | -0.0014 ppm | -0.0002 ppm | 0.0008 ppm | -0.1847 ppm | 0.0001 ppm | -0.0008 ppm | 0.0052 ppm |
| Recovery Percentage 1 | -0.036 % | -1.648 % | 1.359 % | -9.519 % | -0.606 % | -10.845 % | 16.413 % |
| Concentration RSD | 6,816.5 % | 54.6 % | 18.7 % | 2.7 % | 171.2 % | 67.3 % | 39.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0047 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0003 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | -0.0006 ppm | 0.0001 ppm | 0.0004 ppm | -0.0006 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0137 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0005 ppm | -0.0007 ppm |
| Recovery Percentage 1 | 0.458 % | 0.947 % | -0.072 % | -0.431 % | 2.380 % | -0.220 % | -2.947 % |
| Concentration RSD | 2,167.6 % | 164.8 % | 1,425.3 % | 391.5 % | 83.8 % | 1,270.5 % | 130.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 111.7994 % | 106.2173 % | 110.7111 % | 112.8451 % | 106.5197 % | 111.2666 % |
| Concentration per Run 1 | 0.0002 ppm | 112.0136 % | 105.9456 % | 110.7221 % | 113.5619 % | 106.4769 % | 111.2888 % |
| Concentration per Run 2 | 0.0001 ppm | 112.1754 % | 105.2473 % | 110.3585 % | 112.9957 % | 105.6513 % | 110.9232 % |
| Concentration per Run 3 | -0.0001 ppm | 111.2092 % | 107.4590 % | 111.0526 % | 111.9776 % | 107.4308 % | 111.5879 % |
| Recovery Percentage 1 | 1.581 % | | | | | | |
| Concentration RSD | 198.5 % | 0.5 % | 1.1 % | 0.3 % | 0.7 % | 0.8 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-03 WG1973178
Analysis started at: 9/20/2024 9:56:27 PM
Rack 3
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.4975 ppm | 0.0002 ppm | 0.0522 ppm | 0.2436 ppm | 0.0000 ppm | 123.1381 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.4947 ppm | -0.0005 ppm | 0.0530 ppm | 0.2438 ppm | 0.0000 ppm | 122.7513 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.4935 ppm | -0.0003 ppm | 0.0499 ppm | 0.2435 ppm | 0.0000 ppm | 123.3551 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.5044 ppm | 0.0012 ppm | 0.0536 ppm | 0.2437 ppm | 0.0000 ppm | 123.3078 ppm |
| Concentration RSD | 24.6 % | 1.2 % | 608.9 % | 3.8 % | 0.1 % | 136.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0163 ppm | 0.0027 ppm | 0.2784 ppm | 2.5992 ppm | 4.5384 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0159 ppm | 0.0029 ppm | 0.2771 ppm | 2.6124 ppm | 4.5482 ppm | 0.0098 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0172 ppm | 0.0024 ppm | 0.2796 ppm | 2.6009 ppm | 4.5314 ppm | 0.0095 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0159 ppm | 0.0028 ppm | 0.2784 ppm | 2.5844 ppm | 4.5357 ppm | 0.0091 ppm |
| Concentration RSD | 1.4 % | 4.5 % | 10.4 % | 0.4 % | 0.5 % | 0.2 % | 3.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 47.5086 ppm | 2.4685 ppm | 0.0000 ppm | 69.8466 ppm | 0.0035 ppm | 0.0005 ppm | 0.0043 ppm |
| Concentration per Run 1 | 47.6961 ppm | 2.4630 ppm | 0.0000 ppm | 69.6037 ppm | 0.0039 ppm | 0.0009 ppm | 0.0062 ppm |
| Concentration per Run 2 | 47.3605 ppm | 2.4693 ppm | 0.0003 ppm | 70.0858 ppm | 0.0027 ppm | 0.0006 ppm | 0.0024 ppm |
| Concentration per Run 3 | 47.4691 ppm | 2.4733 ppm | -0.0003 ppm | 69.8504 ppm | 0.0037 ppm | 0.0000 ppm | 0.0043 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 2,627.6 % | 0.3 % | 18.2 % | 86.7 % | 45.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 10.1927 ppm | -0.0004 ppm | 0.2373 ppm | 0.0512 ppm | 0.0009 ppm | 0.0041 ppm |
| Concentration per Run 1 | 0.0012 ppm | 10.2185 ppm | -0.0005 ppm | 0.2377 ppm | 0.0517 ppm | 0.0013 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0045 ppm | 10.1586 ppm | -0.0003 ppm | 0.2373 ppm | 0.0509 ppm | 0.0014 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0023 ppm | 10.2010 ppm | -0.0005 ppm | 0.2368 ppm | 0.0510 ppm | 0.0000 ppm | 0.0042 ppm |
| Concentration RSD | 63.2 % | 0.3 % | 27.0 % | 0.2 % | 0.8 % | 88.2 % | 3.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0171 ppm | 103.7174 % | 105.2621 % | 96.6925 % | 101.3967 % | 104.6705 % | 100.3905 % |
| Concentration per Run 1 | 0.0170 ppm | 104.0538 % | 104.7314 % | 97.1809 % | 101.6094 % | 104.3184 % | 100.8324 % |
| Concentration per Run 2 | 0.0171 ppm | 103.7275 % | 105.1994 % | 96.2710 % | 101.5275 % | 104.4944 % | 99.8152 % |
| Concentration per Run 3 | 0.0172 ppm | 103.3709 % | 105.8555 % | 96.6257 % | 101.0533 % | 105.1988 % | 100.5239 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.5 % | 0.5 % | 0.3 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-05 WG1973178
Analysis started at: 9/20/2024 10:00:41 PM
Rack 3
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0536 ppm | 0.0022 ppm | 0.4973 ppm | 0.1161 ppm | 0.0001 ppm | 104.0967 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0586 ppm | 0.0027 ppm | 0.5001 ppm | 0.1162 ppm | 0.0001 ppm | 104.0803 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0444 ppm | 0.0032 ppm | 0.4979 ppm | 0.1165 ppm | 0.0001 ppm | 104.0949 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0578 ppm | 0.0007 ppm | 0.4939 ppm | 0.1156 ppm | 0.0001 ppm | 104.1148 ppm |
| Concentration RSD | 80.9 % | 14.9 % | 58.5 % | 0.6 % | 0.4 % | 34.3 % | 0.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0040 ppm | 0.0001 ppm | 0.0252 ppm | 0.5334 ppm | 4.3479 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0038 ppm | 0.0000 ppm | 0.0256 ppm | 0.5300 ppm | 4.3749 ppm | 0.0031 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0042 ppm | 0.0002 ppm | 0.0251 ppm | 0.5364 ppm | 4.3465 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0040 ppm | 0.0002 ppm | 0.0247 ppm | 0.5339 ppm | 4.3224 ppm | 0.0005 ppm |
| Concentration RSD | 19.1 % | 5.2 % | 89.0 % | 1.8 % | 0.6 % | 0.6 % | 122.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.1619 ppm | 0.6227 ppm | 0.0018 ppm | 57.0321 ppm | 0.0031 ppm | 0.0000 ppm | 0.0065 ppm |
| Concentration per Run 1 | 18.2981 ppm | 0.6221 ppm | 0.0018 ppm | 57.0826 ppm | 0.0027 ppm | 0.0008 ppm | 0.0070 ppm |
| Concentration per Run 2 | 18.0720 ppm | 0.6234 ppm | 0.0017 ppm | 57.1591 ppm | 0.0033 ppm | 0.0014 ppm | 0.0088 ppm |
| Concentration per Run 3 | 18.1157 ppm | 0.6225 ppm | 0.0019 ppm | 56.8547 ppm | 0.0032 ppm | -0.0021 ppm | 0.0038 ppm |
| Concentration RSD | 0.7 % | 0.1 % | 6.0 % | 0.3 % | 10.6 % | 7,321.9 % | 38.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 6.7230 ppm | -0.0009 ppm | 0.1546 ppm | 0.0049 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0023 ppm | 6.7684 ppm | -0.0004 ppm | 0.1544 ppm | 0.0046 ppm | 0.0006 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0030 ppm | 6.7080 ppm | -0.0004 ppm | 0.1551 ppm | 0.0050 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0027 ppm | 6.6926 ppm | -0.0018 ppm | 0.1543 ppm | 0.0050 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration RSD | 372.2 % | 0.6 % | 92.9 % | 0.3 % | 4.6 % | 1,759.5 % | 36.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0048 ppm | 105.9162 % | 104.8998 % | 100.0286 % | 106.4467 % | 104.6148 % | 104.6313 % |
| Concentration per Run 1 | 0.0051 ppm | 105.1895 % | 105.9152 % | 99.7243 % | 106.5615 % | 105.5586 % | 104.5253 % |
| Concentration per Run 2 | 0.0046 ppm | 106.5610 % | 104.2032 % | 101.2179 % | 107.2904 % | 104.1351 % | 105.8898 % |
| Concentration per Run 3 | 0.0047 ppm | 105.9980 % | 104.5810 % | 99.1435 % | 105.4882 % | 104.1509 % | 103.4786 % |
| Concentration RSD | 5.2 % | 0.7 % | 0.9 % | 1.1 % | 0.9 % | 0.8 % | 1.2 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-06 WG1973178
Analysis started at: 9/20/2024 10:04:39 PM
Rack 3
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.1223 ppm | 0.0010 ppm | 0.0761 ppm | 0.0915 ppm | 0.0001 ppm | 127.9449 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.1199 ppm | 0.0022 ppm | 0.0744 ppm | 0.0919 ppm | 0.0000 ppm | 128.1508 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.1124 ppm | 0.0011 ppm | 0.0773 ppm | 0.0912 ppm | 0.0000 ppm | 127.4050 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.1344 ppm | -0.0005 ppm | 0.0766 ppm | 0.0912 ppm | 0.0001 ppm | 128.2788 ppm |
| Concentration RSD | 37.5 % | 9.2 % | 142.7 % | 2.0 % | 0.5 % | 97.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0012 ppm | -0.0004 ppm | 0.0061 ppm | 0.1508 ppm | 5.5408 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0009 ppm | -0.0008 ppm | 0.0064 ppm | 0.1489 ppm | 5.5610 ppm | 0.0015 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0013 ppm | -0.0005 ppm | 0.0057 ppm | 0.1515 ppm | 5.5501 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0013 ppm | 0.0000 ppm | 0.0062 ppm | 0.1520 ppm | 5.5113 ppm | 0.0013 ppm |
| Concentration RSD | 13.4 % | 23.0 % | 96.9 % | 6.2 % | 1.1 % | 0.5 % | 87.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 48.3253 ppm | 0.0050 ppm | 0.0008 ppm | 115.5369 ppm | 0.0003 ppm | -0.0002 ppm | 0.0045 ppm |
| Concentration per Run 1 | 48.4497 ppm | 0.0050 ppm | 0.0005 ppm | 115.4472 ppm | -0.0002 ppm | -0.0004 ppm | 0.0034 ppm |
| Concentration per Run 2 | 48.3984 ppm | 0.0048 ppm | 0.0006 ppm | 115.5388 ppm | 0.0007 ppm | -0.0002 ppm | 0.0058 ppm |
| Concentration per Run 3 | 48.1280 ppm | 0.0051 ppm | 0.0011 ppm | 115.6246 ppm | 0.0004 ppm | 0.0000 ppm | 0.0044 ppm |
| Concentration RSD | 0.4 % | 2.7 % | 40.1 % | 0.1 % | 149.6 % | 103.0 % | 26.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 5.1401 ppm | -0.0012 ppm | 0.2599 ppm | 0.0097 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0017 ppm | 5.1474 ppm | -0.0019 ppm | 0.2604 ppm | 0.0095 ppm | 0.0013 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0021 ppm | 5.1607 ppm | -0.0004 ppm | 0.2601 ppm | 0.0098 ppm | -0.0007 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0011 ppm | 5.1122 ppm | -0.0012 ppm | 0.2593 ppm | 0.0098 ppm | -0.0007 ppm | 0.0006 ppm |
| Concentration RSD | 197.7 % | 0.5 % | 64.4 % | 0.2 % | 1.9 % | 3,167.8 % | 7.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 105.4196 % | 105.0472 % | 98.2323 % | 105.3355 % | 104.8027 % | 104.0913 % |
| Concentration per Run 1 | 0.0032 ppm | 106.0749 % | 104.7780 % | 98.7233 % | 106.6670 % | 104.7218 % | 104.6814 % |
| Concentration per Run 2 | 0.0038 ppm | 104.9090 % | 105.4832 % | 97.7562 % | 104.7333 % | 105.2115 % | 103.9371 % |
| Concentration per Run 3 | 0.0029 ppm | 105.2750 % | 104.8805 % | 98.2174 % | 104.6062 % | 104.4747 % | 103.6554 % |
| Concentration RSD | 14.0 % | 0.6 % | 0.4 % | 0.5 % | 1.1 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-08 WG1973178
Analysis started at: 9/20/2024 10:08:37 PM
Rack 3
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0152 ppm | 0.1986 ppm | 0.0005 ppm | 0.2796 ppm | 0.0597 ppm | 0.0005 ppm | 109.3532 ppm |
| Concentration per Run 1 | 0.0156 ppm | 0.2101 ppm | -0.0019 ppm | 0.2828 ppm | 0.0599 ppm | 0.0005 ppm | 109.5658 ppm |
| Concentration per Run 2 | 0.0147 ppm | 0.1935 ppm | 0.0025 ppm | 0.2799 ppm | 0.0594 ppm | 0.0005 ppm | 109.4997 ppm |
| Concentration per Run 3 | 0.0152 ppm | 0.1923 ppm | 0.0008 ppm | 0.2761 ppm | 0.0599 ppm | 0.0005 ppm | 108.9941 ppm |
| Concentration RSD | 3.0 % | 5.0 % | 471.9 % | 1.2 % | 0.5 % | 3.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0073 ppm | 0.0042 ppm | 0.4942 ppm | 0.0286 ppm | 4.4763 ppm | 0.0136 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0078 ppm | 0.0043 ppm | 0.4969 ppm | 0.0293 ppm | 4.4963 ppm | 0.0160 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0068 ppm | 0.0041 ppm | 0.4942 ppm | 0.0296 ppm | 4.4737 ppm | 0.0122 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0071 ppm | 0.0043 ppm | 0.4914 ppm | 0.0271 ppm | 4.4590 ppm | 0.0124 ppm |
| Concentration RSD | 20.8 % | 7.3 % | 3.2 % | 0.6 % | 4.7 % | 0.4 % | 15.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.3999 ppm | 0.5148 ppm | 0.0004 ppm | 59.2715 ppm | 0.3072 ppm | -0.0004 ppm | 0.0047 ppm |
| Concentration per Run 1 | 19.4557 ppm | 0.5166 ppm | 0.0003 ppm | 59.4748 ppm | 0.3096 ppm | -0.0006 ppm | 0.0034 ppm |
| Concentration per Run 2 | 19.4270 ppm | 0.5137 ppm | 0.0005 ppm | 59.3686 ppm | 0.3063 ppm | 0.0001 ppm | 0.0024 ppm |
| Concentration per Run 3 | 19.3170 ppm | 0.5140 ppm | 0.0005 ppm | 58.9712 ppm | 0.3058 ppm | -0.0006 ppm | 0.0083 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 16.1 % | 0.4 % | 0.7 % | 114.3 % | 66.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 12.2634 ppm | -0.0005 ppm | 0.2729 ppm | 0.0005 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0023 ppm | 12.3142 ppm | -0.0014 ppm | 0.2737 ppm | 0.0007 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0008 ppm | 12.2611 ppm | -0.0002 ppm | 0.2715 ppm | 0.0003 ppm | 0.0016 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0048 ppm | 12.2149 ppm | 0.0000 ppm | 0.2735 ppm | 0.0005 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration RSD | 132.6 % | 0.4 % | 137.7 % | 0.4 % | 35.9 % | 506.5 % | 767.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1652 ppm | 107.3782 % | 107.1580 % | 101.8433 % | 108.8068 % | 107.7360 % | 107.8319 % |
| Concentration per Run 1 | 0.1654 ppm | 107.6352 % | 106.6697 % | 102.2367 % | 109.8833 % | 107.3785 % | 108.5462 % |
| Concentration per Run 2 | 0.1652 ppm | 107.2061 % | 106.7764 % | 102.2863 % | 108.5005 % | 107.6134 % | 108.0011 % |
| Concentration per Run 3 | 0.1650 ppm | 107.2933 % | 108.0279 % | 101.0070 % | 108.0366 % | 108.2160 % | 106.9484 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.7 % | 0.7 % | 0.9 % | 0.4 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-11 WG1973178
Analysis started at: 9/20/2024 10:12:35 PM
Rack 3
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.5902 ppm | 0.0000 ppm | 0.2581 ppm | 0.0273 ppm | 0.0003 ppm | 72.6855 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.5939 ppm | 0.0009 ppm | 0.2557 ppm | 0.0274 ppm | 0.0003 ppm | 72.4887 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.5949 ppm | -0.0006 ppm | 0.2594 ppm | 0.0274 ppm | 0.0003 ppm | 73.0215 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.5817 ppm | -0.0004 ppm | 0.2591 ppm | 0.0273 ppm | 0.0003 ppm | 72.5462 ppm |
| Concentration RSD | 13.0 % | 1.2 % | 2,904.2 % | 0.8 % | 0.3 % | 5.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0033 ppm | -0.0002 ppm | 0.0633 ppm | 0.1385 ppm | 4.9000 ppm | 0.0024 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0033 ppm | -0.0004 ppm | 0.0633 ppm | 0.1388 ppm | 4.9256 ppm | 0.0038 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0036 ppm | 0.0000 ppm | 0.0629 ppm | 0.1378 ppm | 4.8985 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0029 ppm | -0.0003 ppm | 0.0636 ppm | 0.1390 ppm | 4.8759 ppm | 0.0021 ppm |
| Concentration RSD | 8.2 % | 10.2 % | 78.2 % | 0.6 % | 0.4 % | 0.5 % | 52.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.3188 ppm | 0.4103 ppm | 0.0003 ppm | 41.2750 ppm | 0.0363 ppm | -0.0012 ppm | 0.0030 ppm |
| Concentration per Run 1 | 26.3971 ppm | 0.4104 ppm | 0.0001 ppm | 41.1944 ppm | 0.0365 ppm | -0.0023 ppm | 0.0056 ppm |
| Concentration per Run 2 | 26.3112 ppm | 0.4114 ppm | 0.0001 ppm | 41.4819 ppm | 0.0353 ppm | -0.0008 ppm | 0.0014 ppm |
| Concentration per Run 3 | 26.2482 ppm | 0.4091 ppm | 0.0008 ppm | 41.1488 ppm | 0.0370 ppm | -0.0004 ppm | 0.0021 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 115.6 % | 0.4 % | 2.4 % | 88.3 % | 74.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 7.1564 ppm | -0.0004 ppm | 0.1749 ppm | 0.0113 ppm | -0.0005 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0012 ppm | 7.1423 ppm | 0.0001 ppm | 0.1746 ppm | 0.0114 ppm | -0.0015 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0038 ppm | 7.1423 ppm | -0.0005 ppm | 0.1758 ppm | 0.0113 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 7.1845 ppm | -0.0007 ppm | 0.1744 ppm | 0.0113 ppm | -0.0005 ppm | -0.0001 ppm |
| Concentration RSD | 115.8 % | 0.3 % | 117.3 % | 0.4 % | 1.0 % | 221.5 % | 221.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0765 ppm | 108.6146 % | 108.6935 % | 104.3114 % | 109.0784 % | 108.3782 % | 108.3741 % |
| Concentration per Run 1 | 0.0767 ppm | 108.1234 % | 109.3991 % | 104.3096 % | 109.0159 % | 109.1449 % | 109.1320 % |
| Concentration per Run 2 | 0.0764 ppm | 109.5408 % | 107.4624 % | 103.8227 % | 110.1439 % | 107.3500 % | 107.5753 % |
| Concentration per Run 3 | 0.0765 ppm | 108.1797 % | 109.2190 % | 104.8018 % | 108.0755 % | 108.6398 % | 108.4151 % |
| Concentration RSD | 0.3 % | 0.7 % | 1.0 % | 0.5 % | 0.9 % | 0.9 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-12 WG1973178
Analysis started at: 9/20/2024 10:16:34 PM
Rack 3
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.1450 ppm | 0.0016 ppm | 0.0764 ppm | 0.0918 ppm | 0.0000 ppm | 128.4568 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.1445 ppm | 0.0004 ppm | 0.0770 ppm | 0.0915 ppm | 0.0000 ppm | 128.2244 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.1469 ppm | 0.0029 ppm | 0.0771 ppm | 0.0917 ppm | 0.0000 ppm | 128.7062 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.1435 ppm | 0.0016 ppm | 0.0752 ppm | 0.0921 ppm | 0.0000 ppm | 128.4397 ppm |
| Concentration RSD | 3.6 % | 1.2 % | 77.6 % | 1.4 % | 0.3 % | 47.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0013 ppm | -0.0005 ppm | 0.0066 ppm | 0.1644 ppm | 5.5635 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0011 ppm | -0.0004 ppm | 0.0065 ppm | 0.1654 ppm | 5.5801 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0014 ppm | -0.0002 ppm | 0.0069 ppm | 0.1618 ppm | 5.5421 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0014 ppm | -0.0009 ppm | 0.0065 ppm | 0.1660 ppm | 5.5681 ppm | 0.0000 ppm |
| Concentration RSD | 22.3 % | 13.6 % | 76.0 % | 3.8 % | 1.4 % | 0.3 % | 104.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 48.4287 ppm | 0.0054 ppm | 0.0008 ppm | 115.9790 ppm | 0.0010 ppm | -0.0004 ppm | 0.0013 ppm |
| Concentration per Run 1 | 48.5883 ppm | 0.0055 ppm | 0.0007 ppm | 115.9245 ppm | 0.0016 ppm | -0.0001 ppm | -0.0027 ppm |
| Concentration per Run 2 | 48.4986 ppm | 0.0056 ppm | 0.0005 ppm | 115.8713 ppm | 0.0009 ppm | -0.0022 ppm | 0.0056 ppm |
| Concentration per Run 3 | 48.1993 ppm | 0.0052 ppm | 0.0013 ppm | 116.1412 ppm | 0.0005 ppm | 0.0010 ppm | 0.0010 ppm |
| Concentration RSD | 0.4 % | 3.1 % | 53.8 % | 0.1 % | 58.7 % | 402.0 % | 314.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 5.1786 ppm | -0.0006 ppm | 0.2614 ppm | 0.0106 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0027 ppm | 5.1888 ppm | -0.0011 ppm | 0.2613 ppm | 0.0105 ppm | -0.0007 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0033 ppm | 5.1927 ppm | -0.0002 ppm | 0.2605 ppm | 0.0108 ppm | -0.0012 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0013 ppm | 5.1544 ppm | -0.0005 ppm | 0.2625 ppm | 0.0106 ppm | 0.0020 ppm | 0.0009 ppm |
| Concentration RSD | 163.9 % | 0.4 % | 71.4 % | 0.4 % | 1.2 % | 2,702.9 % | 48.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 105.1481 % | 104.9060 % | 97.1702 % | 105.1777 % | 104.6168 % | 103.6287 % |
| Concentration per Run 1 | 0.0037 ppm | 105.7427 % | 105.4776 % | 97.6683 % | 106.1983 % | 105.6914 % | 104.0825 % |
| Concentration per Run 2 | 0.0039 ppm | 105.0500 % | 105.4905 % | 96.3860 % | 105.0640 % | 104.9649 % | 103.1493 % |
| Concentration per Run 3 | 0.0038 ppm | 104.6514 % | 103.7500 % | 97.4563 % | 104.2709 % | 103.1942 % | 103.6543 % |
| Concentration RSD | 2.0 % | 0.5 % | 1.0 % | 0.7 % | 0.9 % | 1.2 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452968-14 WG1973178
Analysis started at: 9/20/2024 10:20:32 PM
Rack 3
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0048 ppm | 0.0007 ppm | 0.0009 ppm | 0.0002 ppm | 0.0000 ppm | 0.0689 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0021 ppm | 0.0002 ppm | 0.0010 ppm | 0.0002 ppm | 0.0000 ppm | 0.0702 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0036 ppm | 0.0006 ppm | 0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0710 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0087 ppm | 0.0013 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | 0.0656 ppm |
| Concentration RSD | 40.9 % | 71.8 % | 78.8 % | 87.4 % | 45.0 % | 874.2 % | 4.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | -0.0010 ppm | 0.0002 ppm | -0.0042 ppm | -0.0096 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | -0.0013 ppm | 0.0005 ppm | -0.0055 ppm | -0.0028 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0008 ppm | -0.0009 ppm | 0.0000 ppm | -0.0038 ppm | -0.0078 ppm | 0.0034 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0006 ppm | -0.0007 ppm | 0.0000 ppm | -0.0033 ppm | -0.0181 ppm | -0.0001 ppm |
| Concentration RSD | 598.9 % | 56.1 % | 30.4 % | 185.6 % | 27.2 % | 81.7 % | 160.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0124 ppm | 0.0001 ppm | -0.0003 ppm | 1.0853 ppm | -0.0013 ppm | -0.0010 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0116 ppm | 0.0002 ppm | -0.0011 ppm | 1.0878 ppm | -0.0015 ppm | -0.0011 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0131 ppm | 0.0000 ppm | 0.0004 ppm | 1.0881 ppm | -0.0009 ppm | -0.0010 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0127 ppm | 0.0002 ppm | -0.0002 ppm | 1.0799 ppm | -0.0015 ppm | -0.0010 ppm | 0.0072 ppm |
| Concentration RSD | 6.2 % | 83.0 % | 267.8 % | 0.4 % | 25.9 % | 10.0 % | 51.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0281 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | -0.0012 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0287 ppm | 0.0009 ppm | 0.0001 ppm | -0.0001 ppm | -0.0010 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0273 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0012 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.0282 ppm | -0.0010 ppm | 0.0000 ppm | 0.0004 ppm | -0.0014 ppm | -0.0002 ppm |
| Concentration RSD | 239.4 % | 2.6 % | 525.9 % | 65.9 % | 252.6 % | 17.4 % | 47.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 111.2190 % | 105.8983 % | 110.4918 % | 113.0246 % | 106.1549 % | 110.5882 % |
| Concentration per Run 1 | 0.0005 ppm | 112.1034 % | 105.4135 % | 109.9377 % | 114.5824 % | 105.9289 % | 110.5274 % |
| Concentration per Run 2 | 0.0004 ppm | 110.6259 % | 105.8125 % | 110.4861 % | 112.5072 % | 105.6653 % | 110.5550 % |
| Concentration per Run 3 | 0.0005 ppm | 110.9276 % | 106.4689 % | 111.0516 % | 111.9843 % | 106.8706 % | 110.6822 % |
| Concentration RSD | 15.4 % | 0.7 % | 0.5 % | 0.5 % | 1.2 % | 0.6 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452974-01 WG1973178
Analysis started at: 9/20/2024 10:24:31 PM
Rack 3
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.2343 ppm | -0.0003 ppm | 0.0626 ppm | 0.0890 ppm | 0.0000 ppm | 121.6337 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.2467 ppm | -0.0005 ppm | 0.0640 ppm | 0.0892 ppm | 0.0000 ppm | 121.8231 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.2343 ppm | 0.0000 ppm | 0.0615 ppm | 0.0893 ppm | 0.0000 ppm | 121.1367 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.2220 ppm | -0.0003 ppm | 0.0625 ppm | 0.0885 ppm | 0.0000 ppm | 121.9414 ppm |
| Concentration RSD | 26.7 % | 5.3 % | 94.4 % | 2.0 % | 0.5 % | 315.6 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0000 ppm | -0.0002 ppm | 0.0039 ppm | 0.5191 ppm | 5.5333 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0001 ppm | -0.0006 ppm | 0.0038 ppm | 0.5251 ppm | 5.6126 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0000 ppm | 0.0001 ppm | 0.0038 ppm | 0.5129 ppm | 5.5062 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0002 ppm | -0.0001 ppm | 0.0039 ppm | 0.5192 ppm | 5.4812 ppm | 0.0025 ppm |
| Concentration RSD | 33.5 % | 416.9 % | 208.0 % | 1.7 % | 1.2 % | 1.3 % | 38.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.1273 ppm | 0.3968 ppm | 0.0025 ppm | 68.2395 ppm | 0.0009 ppm | -0.0005 ppm | 0.0044 ppm |
| Concentration per Run 1 | 25.2543 ppm | 0.3974 ppm | 0.0031 ppm | 68.3062 ppm | 0.0009 ppm | -0.0001 ppm | 0.0060 ppm |
| Concentration per Run 2 | 25.1432 ppm | 0.3955 ppm | 0.0018 ppm | 68.0363 ppm | 0.0001 ppm | -0.0015 ppm | 0.0045 ppm |
| Concentration per Run 3 | 24.9842 ppm | 0.3975 ppm | 0.0026 ppm | 68.3761 ppm | 0.0019 ppm | 0.0000 ppm | 0.0026 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 26.0 % | 0.3 % | 96.5 % | 148.2 % | 38.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 7.6893 ppm | -0.0012 ppm | 0.3982 ppm | 0.0187 ppm | -0.0001 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0003 ppm | 7.7018 ppm | -0.0008 ppm | 0.4020 ppm | 0.0186 ppm | 0.0014 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0046 ppm | 7.7180 ppm | -0.0016 ppm | 0.3959 ppm | 0.0190 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0054 ppm | 7.6483 ppm | -0.0012 ppm | 0.3967 ppm | 0.0187 ppm | -0.0014 ppm | 0.0006 ppm |
| Concentration RSD | 94.9 % | 0.5 % | 34.6 % | 0.8 % | 1.2 % | 1,997.4 % | 14.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 106.1928 % | 105.3413 % | 100.3616 % | 107.1559 % | 105.4660 % | 105.7031 % |
| Concentration per Run 1 | 0.0055 ppm | 106.0862 % | 105.3483 % | 100.5373 % | 108.0729 % | 105.3980 % | 106.0696 % |
| Concentration per Run 2 | 0.0054 ppm | 106.7024 % | 105.2553 % | 99.6506 % | 107.2903 % | 105.4255 % | 105.4035 % |
| Concentration per Run 3 | 0.0055 ppm | 105.7899 % | 105.4204 % | 100.8969 % | 106.1046 % | 105.5745 % | 105.6361 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.1 % | 0.6 % | 0.9 % | 0.1 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452976-02 WG1973178
Analysis started at: 9/20/2024 10:28:29 PM
Rack 3
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0582 ppm | -0.0008 ppm | 0.0979 ppm | 0.0920 ppm | 0.0000 ppm | 57.6308 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0589 ppm | -0.0009 ppm | 0.0986 ppm | 0.0919 ppm | 0.0000 ppm | 57.5222 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0521 ppm | -0.0007 ppm | 0.0975 ppm | 0.0921 ppm | 0.0000 ppm | 57.7626 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0636 ppm | -0.0008 ppm | 0.0976 ppm | 0.0919 ppm | 0.0000 ppm | 57.6076 ppm |
| Concentration RSD | 29.4 % | 10.0 % | 12.2 % | 0.6 % | 0.1 % | 207.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0005 ppm | 0.0009 ppm | 0.0022 ppm | 0.1304 ppm | 3.7198 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0011 ppm | 0.0010 ppm | 0.0024 ppm | 0.1296 ppm | 3.7615 ppm | 0.0035 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0009 ppm | 0.0009 ppm | 0.0023 ppm | 0.1304 ppm | 3.7137 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0004 ppm | 0.0009 ppm | 0.0020 ppm | 0.1311 ppm | 3.6842 ppm | 0.0041 ppm |
| Concentration RSD | 1,591.7 % | 159.2 % | 5.9 % | 7.5 % | 0.6 % | 1.0 % | 38.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.3613 ppm | 0.2102 ppm | 0.0008 ppm | 136.7642 ppm | 0.0005 ppm | -0.0004 ppm | 0.0025 ppm |
| Concentration per Run 1 | 13.4773 ppm | 0.2103 ppm | 0.0002 ppm | 136.7027 ppm | 0.0003 ppm | -0.0004 ppm | 0.0005 ppm |
| Concentration per Run 2 | 13.3210 ppm | 0.2099 ppm | 0.0012 ppm | 137.1640 ppm | 0.0010 ppm | -0.0004 ppm | 0.0069 ppm |
| Concentration per Run 3 | 13.2856 ppm | 0.2104 ppm | 0.0009 ppm | 136.4258 ppm | 0.0003 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration RSD | 0.8 % | 0.1 % | 69.0 % | 0.3 % | 75.9 % | 14.8 % | 149.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 4.7033 ppm | -0.0008 ppm | 0.1336 ppm | 0.0047 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0013 ppm | 4.7470 ppm | -0.0003 ppm | 0.1336 ppm | 0.0050 ppm | 0.0003 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0027 ppm | 4.6716 ppm | -0.0011 ppm | 0.1339 ppm | 0.0048 ppm | -0.0012 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0025 ppm | 4.6912 ppm | -0.0010 ppm | 0.1332 ppm | 0.0044 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration RSD | 35.4 % | 0.8 % | 57.0 % | 0.3 % | 6.4 % | 1,995.5 % | 81.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 105.1900 % | 104.6236 % | 99.8459 % | 105.7323 % | 104.4504 % | 105.3766 % |
| Concentration per Run 1 | 0.0043 ppm | 104.3384 % | 104.7446 % | 99.9683 % | 105.4805 % | 104.4883 % | 105.6255 % |
| Concentration per Run 2 | 0.0043 ppm | 105.3308 % | 105.6778 % | 100.4064 % | 105.7750 % | 105.5724 % | 105.8343 % |
| Concentration per Run 3 | 0.0041 ppm | 105.9009 % | 103.4483 % | 99.1632 % | 105.9414 % | 103.2904 % | 104.6700 % |
| Concentration RSD | 2.9 % | 0.8 % | 1.1 % | 0.6 % | 0.2 % | 1.1 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452976-03 WG1973178
Analysis started at: 9/20/2024 10:32:28 PM
Rack 3
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.6727 ppm | 0.0023 ppm | 0.0933 ppm | 0.0874 ppm | 0.0001 ppm | 101.9170 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.6617 ppm | 0.0039 ppm | 0.0936 ppm | 0.0872 ppm | 0.0001 ppm | 101.5760 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.6825 ppm | 0.0027 ppm | 0.0920 ppm | 0.0874 ppm | 0.0000 ppm | 102.2331 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.6738 ppm | 0.0002 ppm | 0.0941 ppm | 0.0876 ppm | 0.0001 ppm | 101.9418 ppm |
| Concentration RSD | 18.8 % | 1.6 % | 84.2 % | 1.2 % | 0.2 % | 28.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0030 ppm | 0.0008 ppm | 0.0056 ppm | 1.0582 ppm | 4.5651 ppm | 0.0105 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0030 ppm | 0.0013 ppm | 0.0057 ppm | 1.0530 ppm | 4.5363 ppm | 0.0111 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0028 ppm | 0.0006 ppm | 0.0059 ppm | 1.0618 ppm | 4.5964 ppm | 0.0102 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0032 ppm | 0.0006 ppm | 0.0052 ppm | 1.0598 ppm | 4.5625 ppm | 0.0100 ppm |
| Concentration RSD | 77.0 % | 6.6 % | 51.0 % | 6.0 % | 0.4 % | 0.7 % | 5.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 37.0390 ppm | 1.3934 ppm | 0.0014 ppm | 148.3031 ppm | 0.0031 ppm | -0.0011 ppm | 0.0039 ppm |
| Concentration per Run 1 | 37.2593 ppm | 1.3880 ppm | 0.0015 ppm | 147.6800 ppm | 0.0037 ppm | -0.0024 ppm | 0.0046 ppm |
| Concentration per Run 2 | 37.0924 ppm | 1.3957 ppm | 0.0009 ppm | 148.9612 ppm | 0.0026 ppm | -0.0009 ppm | 0.0035 ppm |
| Concentration per Run 3 | 36.7654 ppm | 1.3965 ppm | 0.0019 ppm | 148.2681 ppm | 0.0030 ppm | -0.0001 ppm | 0.0037 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 33.1 % | 0.4 % | 18.9 % | 104.4 % | 14.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 7.1257 ppm | -0.0004 ppm | 0.2189 ppm | 0.0709 ppm | -0.0002 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0015 ppm | 7.1828 ppm | 0.0002 ppm | 0.2186 ppm | 0.0710 ppm | -0.0011 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0005 ppm | 7.1448 ppm | -0.0014 ppm | 0.2192 ppm | 0.0703 ppm | 0.0000 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0018 ppm | 7.0497 ppm | 0.0000 ppm | 0.2189 ppm | 0.0713 ppm | 0.0004 ppm | 0.0017 ppm |
| Concentration RSD | 2,339.8 % | 1.0 % | 239.8 % | 0.1 % | 0.8 % | 330.8 % | 7.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 104.7209 % | 105.8452 % | 98.1109 % | 104.9208 % | 105.6676 % | 104.7470 % |
| Concentration per Run 1 | 0.0107 ppm | 104.9250 % | 107.1416 % | 97.9567 % | 105.6981 % | 107.1916 % | 105.0446 % |
| Concentration per Run 2 | 0.0105 ppm | 104.0564 % | 105.7858 % | 98.2756 % | 104.3840 % | 105.5298 % | 104.8198 % |
| Concentration per Run 3 | 0.0106 ppm | 105.1811 % | 104.6082 % | 98.1003 % | 104.6802 % | 104.2813 % | 104.3768 % |
| Concentration RSD | 1.0 % | 0.6 % | 1.2 % | 0.2 % | 0.7 % | 1.4 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 10:36:26 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4908 ppm | 0.4572 ppm | 0.4622 ppm | 0.4760 ppm | 0.4814 ppm | 0.4865 ppm | 0.4740 ppm |
| Concentration per Run 1 | 0.4862 ppm | 0.4544 ppm | 0.4602 ppm | 0.4726 ppm | 0.4845 ppm | 0.4879 ppm | 0.4741 ppm |
| Concentration per Run 2 | 0.4952 ppm | 0.4537 ppm | 0.4628 ppm | 0.4769 ppm | 0.4811 ppm | 0.4849 ppm | 0.4720 ppm |
| Concentration per Run 3 | 0.4911 ppm | 0.4635 ppm | 0.4635 ppm | 0.4784 ppm | 0.4786 ppm | 0.4867 ppm | 0.4758 ppm |
| Recovery Percentage 1 | 98.166 % | 91.439 % | 92.432 % | 95.195 % | 96.277 % | 97.299 % | 94.798 % |
| Concentration RSD | 0.9 % | 1.2 % | 0.4 % | 0.6 % | 0.6 % | 0.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4782 ppm | 0.4890 ppm | 0.4720 ppm | 0.4795 ppm | 0.4770 ppm | 4.9541 ppm | 0.4800 ppm |
| Concentration per Run 1 | 0.4745 ppm | 0.4879 ppm | 0.4686 ppm | 0.4806 ppm | 0.4761 ppm | 4.9912 ppm | 0.4808 ppm |
| Concentration per Run 2 | 0.4776 ppm | 0.4880 ppm | 0.4748 ppm | 0.4803 ppm | 0.4775 ppm | 4.9153 ppm | 0.4813 ppm |
| Concentration per Run 3 | 0.4825 ppm | 0.4911 ppm | 0.4727 ppm | 0.4774 ppm | 0.4774 ppm | 4.9558 ppm | 0.4780 ppm |
| Recovery Percentage 1 | 95.640 % | 97.804 % | 94.410 % | 95.890 % | 95.399 % | 99.083 % | 96.008 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.7 % | 0.4 % | 0.2 % | 0.8 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4677 ppm | 0.4664 ppm | 0.4674 ppm | 9.4736 ppm | 0.4893 ppm | 0.4790 ppm | 0.4887 ppm |
| Concentration per Run 1 | 0.4667 ppm | 0.4686 ppm | 0.4633 ppm | 9.4875 ppm | 0.4871 ppm | 0.4778 ppm | 0.4904 ppm |
| Concentration per Run 2 | 0.4655 ppm | 0.4644 ppm | 0.4684 ppm | 9.4452 ppm | 0.4917 ppm | 0.4785 ppm | 0.4873 ppm |
| Concentration per Run 3 | 0.4709 ppm | 0.4662 ppm | 0.4705 ppm | 9.4882 ppm | 0.4892 ppm | 0.4807 ppm | 0.4884 ppm |
| Recovery Percentage 1 | 93.536 % | 93.278 % | 93.478 % | 94.736 % | 97.865 % | 95.805 % | 97.742 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.8 % | 0.3 % | 0.5 % | 0.3 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4782 ppm | 5.2597 ppm | 0.4636 ppm | 0.4598 ppm | 0.4776 ppm | 0.4783 ppm | 0.4699 ppm |
| Concentration per Run 1 | 0.4749 ppm | 5.1944 ppm | 0.4630 ppm | 0.4621 ppm | 0.4729 ppm | 0.4759 ppm | 0.4693 ppm |
| Concentration per Run 2 | 0.4767 ppm | 5.2793 ppm | 0.4643 ppm | 0.4598 ppm | 0.4799 ppm | 0.4789 ppm | 0.4691 ppm |
| Concentration per Run 3 | 0.4831 ppm | 5.3054 ppm | 0.4636 ppm | 0.4575 ppm | 0.4799 ppm | 0.4801 ppm | 0.4713 ppm |
| Recovery Percentage 1 | 95.644 % | 100.184 % | 92.727 % | 91.957 % | 95.512 % | 95.656 % | 93.978 % |
| Concentration RSD | 0.9 % | 1.1 % | 0.1 % | 0.5 % | 0.9 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4850 ppm | 112.1663 % | 108.4662 % | 109.7430 % | 111.6805 % | 108.0188 % | 110.0248 % |
| Concentration per Run 1 | 0.4810 ppm | 112.0046 % | 108.7000 % | 109.8267 % | 112.0375 % | 108.0816 % | 110.0819 % |
| Concentration per Run 2 | 0.4865 ppm | 112.7655 % | 107.9977 % | 109.2330 % | 111.9293 % | 107.9192 % | 109.2448 % |
| Concentration per Run 3 | 0.4876 ppm | 111.7287 % | 108.7008 % | 110.1693 % | 111.0747 % | 108.0557 % | 110.7476 % |
| Recovery Percentage 1 | 97.010 % | | | | | | |
| Concentration RSD | 0.7 % | 0.5 % | 0.4 % | 0.4 % | 0.5 % | 0.1 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 10:40:22 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0004 ppm | 0.0011 ppm | 0.0022 ppm | -0.0001 ppm | 0.0000 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0036 ppm | -0.0006 ppm | 0.0032 ppm | -0.0001 ppm | 0.0000 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0105 ppm | 0.0012 ppm | 0.0015 ppm | -0.0002 ppm | 0.0001 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0057 ppm | 0.0028 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | 0.0024 ppm |
| Recovery Percentage 1 | 9.850 % | 0.386 % | 22.944 % | 7.282 % | -1.269 % | 0.939 % | 2.246 % |
| Concentration RSD | 73.2 % | 2,295.2 % | 150.5 % | 41.9 % | 33.4 % | 171.8 % | 132.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | -0.0007 ppm | -0.0003 ppm | -0.0023 ppm | -0.0077 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | -0.0006 ppm | -0.0001 ppm | -0.0017 ppm | -0.0198 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | -0.0006 ppm | -0.0002 ppm | -0.0036 ppm | 0.0019 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | -0.0010 ppm | -0.0006 ppm | -0.0016 ppm | -0.0052 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -0.443 % | -1.653 % | -7.378 % | -2.798 % | -4.613 % | -0.309 % | 17.765 % |
| Concentration RSD | 181.3 % | 22.7 % | 31.3 % | 93.9 % | 49.5 % | 143.4 % | 28.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.0002 ppm | 0.0006 ppm | -0.1654 ppm | -0.0002 ppm | -0.0007 ppm | 0.0037 ppm |
| Concentration per Run 1 | -0.0018 ppm | -0.0002 ppm | 0.0009 ppm | -0.1677 ppm | 0.0003 ppm | -0.0012 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0022 ppm | -0.0002 ppm | 0.0003 ppm | -0.1668 ppm | -0.0003 ppm | -0.0007 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0019 ppm | -0.0003 ppm | 0.0008 ppm | -0.1617 ppm | -0.0007 ppm | -0.0003 ppm | 0.0031 ppm |
| Recovery Percentage 1 | -0.691 % | -2.199 % | 1.299 % | -8.270 % | -0.832 % | -7.329 % | 7.338 % |
| Concentration RSD | 330.9 % | 18.3 % | 52.3 % | 2.0 % | 243.0 % | 56.7 % | 35.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0004 ppm | 0.0011 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0018 ppm | 0.0020 ppm | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0032 ppm | -0.0029 ppm | 0.0009 ppm | 0.0001 ppm | 0.0001 ppm | 0.0009 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | -0.0003 ppm | 0.0009 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 12.453 % | -0.082 % | 2.108 % | 0.258 % | -1.090 % | 1.584 % | -0.034 % |
| Concentration RSD | 142.2 % | 588.8 % | 80.0 % | 283.0 % | 167.4 % | 312.6 % | 2,893.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 110.6092 % | 104.6424 % | 108.3205 % | 111.8070 % | 105.0153 % | 109.0900 % |
| Concentration per Run 1 | 0.0000 ppm | 109.4009 % | 105.5962 % | 108.6292 % | 110.7041 % | 105.7792 % | 109.6069 % |
| Concentration per Run 2 | 0.0003 ppm | 111.0785 % | 104.6326 % | 107.9921 % | 112.1808 % | 105.1695 % | 108.8667 % |
| Concentration per Run 3 | 0.0002 ppm | 111.3483 % | 103.6983 % | 108.3402 % | 112.5361 % | 104.0972 % | 108.7964 % |
| Recovery Percentage 1 | 3.957 % | | | | | | |
| Concentration RSD | 90.9 % | 1.0 % | 0.9 % | 0.3 % | 0.9 % | 0.8 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2452976-04 WG1973178
Analysis started at: 9/20/2024 10:44:19 PM
Rack 3
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.2707 ppm | -0.0004 ppm | 0.0978 ppm | 0.0708 ppm | 0.0000 ppm | 93.9954 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.2751 ppm | 0.0013 ppm | 0.0995 ppm | 0.0713 ppm | 0.0000 ppm | 94.9128 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.2693 ppm | -0.0005 ppm | 0.0978 ppm | 0.0712 ppm | 0.0000 ppm | 94.3599 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.2676 ppm | -0.0018 ppm | 0.0960 ppm | 0.0699 ppm | 0.0000 ppm | 92.7134 ppm |
| Concentration RSD | 34.5 % | 1.4 % | 426.9 % | 1.8 % | 1.1 % | 133.1 % | 1.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0057 ppm | -0.0001 ppm | 0.0055 ppm | 0.4185 ppm | 4.0621 ppm | 0.0101 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0053 ppm | -0.0002 ppm | 0.0052 ppm | 0.4206 ppm | 4.1113 ppm | 0.0105 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0066 ppm | 0.0002 ppm | 0.0056 ppm | 0.4207 ppm | 4.0884 ppm | 0.0108 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0051 ppm | -0.0004 ppm | 0.0055 ppm | 0.4143 ppm | 3.9866 ppm | 0.0090 ppm |
| Concentration RSD | 48.7 % | 14.2 % | 203.1 % | 3.6 % | 0.9 % | 1.6 % | 9.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 34.1612 ppm | 1.4857 ppm | 0.0020 ppm | 137.4025 ppm | 0.0043 ppm | 0.0001 ppm | 0.0051 ppm |
| Concentration per Run 1 | 34.5161 ppm | 1.4895 ppm | 0.0022 ppm | 138.3108 ppm | 0.0042 ppm | 0.0008 ppm | 0.0035 ppm |
| Concentration per Run 2 | 34.1793 ppm | 1.4946 ppm | 0.0021 ppm | 138.3873 ppm | 0.0044 ppm | -0.0008 ppm | 0.0094 ppm |
| Concentration per Run 3 | 33.7881 ppm | 1.4728 ppm | 0.0017 ppm | 135.5093 ppm | 0.0043 ppm | 0.0004 ppm | 0.0023 ppm |
| Concentration RSD | 1.1 % | 0.8 % | 12.2 % | 1.2 % | 2.7 % | 636.2 % | 75.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 6.3169 ppm | -0.0009 ppm | 0.2151 ppm | 0.0257 ppm | 0.0003 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0001 ppm | 6.3934 ppm | -0.0015 ppm | 0.2166 ppm | 0.0259 ppm | -0.0008 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0035 ppm | 6.2742 ppm | -0.0006 ppm | 0.2164 ppm | 0.0259 ppm | 0.0016 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0004 ppm | 6.2832 ppm | -0.0006 ppm | 0.2124 ppm | 0.0254 ppm | 0.0000 ppm | 0.0013 ppm |
| Concentration RSD | 154.5 % | 1.1 % | 58.7 % | 1.1 % | 1.1 % | 431.0 % | 11.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0131 ppm | 104.6394 % | 106.6513 % | 98.1834 % | 105.0556 % | 106.6546 % | 104.3390 % |
| Concentration per Run 1 | 0.0127 ppm | 102.7600 % | 105.6742 % | 98.5428 % | 104.0423 % | 106.0631 % | 104.8697 % |
| Concentration per Run 2 | 0.0133 ppm | 105.3367 % | 105.3498 % | 97.8821 % | 105.3092 % | 105.1716 % | 103.7905 % |
| Concentration per Run 3 | 0.0133 ppm | 105.8216 % | 108.9300 % | 98.1252 % | 105.8153 % | 108.7289 % | 104.3566 % |
| Concentration RSD | 2.7 % | 1.6 % | 1.9 % | 0.3 % | 0.9 % | 1.7 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453053-02 WG1973830
Analysis started at: 9/20/2024 10:48:17 PM
Rack 3
Vial 54
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0116 ppm | 0.0030 ppm | 0.0294 ppm | 0.0238 ppm | 0.0000 ppm | 10.4904 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0124 ppm | 0.0041 ppm | 0.0288 ppm | 0.0236 ppm | 0.0000 ppm | 10.4487 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0156 ppm | 0.0023 ppm | 0.0304 ppm | 0.0239 ppm | 0.0000 ppm | 10.5120 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0066 ppm | 0.0027 ppm | 0.0290 ppm | 0.0240 ppm | -0.0001 ppm | 10.5106 ppm |
| Concentration RSD | 34.4 % | 39.5 % | 31.4 % | 3.0 % | 0.7 % | 1,233.0 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0076 ppm | -0.0007 ppm | 0.0000 ppm | 2.8045 ppm | 0.9638 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0075 ppm | 0.0000 ppm | -0.0001 ppm | 2.7895 ppm | 0.9693 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0073 ppm | -0.0012 ppm | -0.0001 ppm | 2.8119 ppm | 0.9793 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0081 ppm | -0.0007 ppm | 0.0003 ppm | 2.8121 ppm | 0.9428 ppm | 0.0009 ppm |
| Concentration RSD | 102.0 % | 5.1 % | 92.3 % | 758.0 % | 0.5 % | 2.0 % | 18.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4855 ppm | 0.1079 ppm | 0.0002 ppm | 8.0219 ppm | 0.0020 ppm | -0.0010 ppm | 0.0042 ppm |
| Concentration per Run 1 | 4.5124 ppm | 0.1073 ppm | -0.0002 ppm | 7.9931 ppm | 0.0013 ppm | -0.0008 ppm | 0.0061 ppm |
| Concentration per Run 2 | 4.4758 ppm | 0.1083 ppm | 0.0001 ppm | 8.0278 ppm | 0.0024 ppm | -0.0017 ppm | 0.0021 ppm |
| Concentration per Run 3 | 4.4682 ppm | 0.1082 ppm | 0.0005 ppm | 8.0449 ppm | 0.0021 ppm | -0.0006 ppm | 0.0044 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 238.1 % | 0.3 % | 30.2 % | 57.2 % | 47.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 7.4517 ppm | -0.0008 ppm | 0.0389 ppm | 0.0003 ppm | -0.0009 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0059 ppm | 7.4466 ppm | -0.0003 ppm | 0.0387 ppm | 0.0004 ppm | -0.0006 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0016 ppm | 7.4806 ppm | -0.0019 ppm | 0.0390 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0014 ppm | 7.4279 ppm | -0.0001 ppm | 0.0390 ppm | 0.0004 ppm | -0.0021 ppm | -0.0004 ppm |
| Concentration RSD | 443.6 % | 0.4 % | 128.8 % | 0.4 % | 16.0 % | 138.1 % | 103.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0081 ppm | 112.1457 % | 108.8303 % | 110.0441 % | 113.6713 % | 108.6665 % | 111.5568 % |
| Concentration per Run 1 | 0.0085 ppm | 111.7335 % | 109.9811 % | 110.5381 % | 114.2034 % | 110.1304 % | 112.3462 % |
| Concentration per Run 2 | 0.0080 ppm | 112.5204 % | 107.7957 % | 109.9943 % | 113.9762 % | 107.7011 % | 111.5134 % |
| Concentration per Run 3 | 0.0079 ppm | 112.1833 % | 108.7142 % | 109.5997 % | 112.8343 % | 108.1681 % | 110.8109 % |
| Concentration RSD | 4.2 % | 0.4 % | 1.0 % | 0.4 % | 0.6 % | 1.2 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453053-03 WG1973830
Analysis started at: 9/20/2024 10:52:16 PM
Rack 3
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0433 ppm | 0.0008 ppm | 0.0143 ppm | 0.0275 ppm | 0.0000 ppm | 31.6044 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0451 ppm | 0.0018 ppm | 0.0145 ppm | 0.0274 ppm | 0.0000 ppm | 31.5887 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0430 ppm | -0.0014 ppm | 0.0143 ppm | 0.0274 ppm | 0.0000 ppm | 31.6335 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0418 ppm | 0.0018 ppm | 0.0141 ppm | 0.0278 ppm | 0.0001 ppm | 31.5910 ppm |
| Concentration RSD | 93.9 % | 3.9 % | 237.9 % | 1.4 % | 0.9 % | 520.9 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0009 ppm | 0.0773 ppm | 1.2233 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0009 ppm | 0.0000 ppm | 0.0012 ppm | 0.0768 ppm | 1.2307 ppm | 0.0029 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0003 ppm | -0.0001 ppm | 0.0005 ppm | 0.0789 ppm | 1.2402 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0009 ppm | 0.0762 ppm | 1.1988 ppm | 0.0018 ppm |
| Concentration RSD | 101.4 % | 247.4 % | 107.4 % | 38.6 % | 1.9 % | 1.8 % | 54.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.9902 ppm | 0.0100 ppm | 0.0001 ppm | 3.5500 ppm | -0.0003 ppm | -0.0006 ppm | 0.0035 ppm |
| Concentration per Run 1 | 9.0505 ppm | 0.0101 ppm | 0.0001 ppm | 3.5525 ppm | -0.0003 ppm | -0.0019 ppm | 0.0071 ppm |
| Concentration per Run 2 | 8.9655 ppm | 0.0098 ppm | 0.0000 ppm | 3.5469 ppm | -0.0008 ppm | 0.0013 ppm | 0.0021 ppm |
| Concentration per Run 3 | 8.9546 ppm | 0.0101 ppm | 0.0001 ppm | 3.5506 ppm | 0.0002 ppm | -0.0011 ppm | 0.0014 ppm |
| Concentration RSD | 0.6 % | 1.7 % | 80.6 % | 0.1 % | 171.4 % | 302.5 % | 87.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0061 ppm | 2.9396 ppm | -0.0009 ppm | 0.0622 ppm | 0.0015 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0026 ppm | 2.9656 ppm | -0.0026 ppm | 0.0625 ppm | 0.0012 ppm | -0.0017 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0116 ppm | 2.9169 ppm | -0.0003 ppm | 0.0619 ppm | 0.0015 ppm | 0.0007 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0042 ppm | 2.9364 ppm | 0.0004 ppm | 0.0621 ppm | 0.0019 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration RSD | 78.4 % | 0.8 % | 182.4 % | 0.6 % | 24.4 % | 2,942.5 % | 306.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 108.5914 % | 106.0315 % | 106.6807 % | 110.1411 % | 106.5726 % | 108.8879 % |
| Concentration per Run 1 | 0.0034 ppm | 108.0684 % | 107.0149 % | 107.0149 % | 110.5053 % | 107.7143 % | 109.2469 % |
| Concentration per Run 2 | 0.0036 ppm | 110.1640 % | 105.2906 % | 106.0836 % | 111.5916 % | 106.0406 % | 108.7095 % |
| Concentration per Run 3 | 0.0036 ppm | 107.5417 % | 105.7890 % | 106.9437 % | 108.3265 % | 105.9631 % | 108.7072 % |
| Concentration RSD | 2.7 % | 1.3 % | 0.8 % | 0.5 % | 1.5 % | 0.9 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453053-04 WG1973830
Analysis started at: 9/20/2024 10:56:15 PM
Rack 3
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0889 ppm | 0.0018 ppm | 0.0063 ppm | 0.0277 ppm | 0.0000 ppm | 16.0035 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0826 ppm | 0.0016 ppm | 0.0058 ppm | 0.0278 ppm | 0.0001 ppm | 15.9823 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0919 ppm | 0.0024 ppm | 0.0070 ppm | 0.0275 ppm | 0.0001 ppm | 16.0407 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0921 ppm | 0.0015 ppm | 0.0061 ppm | 0.0277 ppm | 0.0000 ppm | 15.9876 ppm |
| Concentration RSD | 9.4 % | 6.1 % | 25.2 % | 9.5 % | 0.4 % | 14.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0025 ppm | -0.0004 ppm | 0.0000 ppm | 3.4289 ppm | 0.9152 ppm | 0.0030 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0026 ppm | -0.0002 ppm | -0.0004 ppm | 3.4265 ppm | 0.9304 ppm | 0.0040 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0027 ppm | -0.0005 ppm | 0.0002 ppm | 3.4303 ppm | 0.9170 ppm | 0.0024 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0022 ppm | -0.0006 ppm | 0.0002 ppm | 3.4300 ppm | 0.8982 ppm | 0.0026 ppm |
| Concentration RSD | 67.7 % | 9.9 % | 53.8 % | 4,897.1 % | 0.1 % | 1.8 % | 29.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.6700 ppm | 0.2150 ppm | 0.0004 ppm | 7.4588 ppm | 0.0008 ppm | -0.0005 ppm | 0.0041 ppm |
| Concentration per Run 1 | 5.7037 ppm | 0.2152 ppm | 0.0006 ppm | 7.4748 ppm | 0.0006 ppm | -0.0004 ppm | 0.0030 ppm |
| Concentration per Run 2 | 5.6512 ppm | 0.2152 ppm | 0.0002 ppm | 7.4476 ppm | 0.0005 ppm | -0.0017 ppm | 0.0066 ppm |
| Concentration per Run 3 | 5.6552 ppm | 0.2146 ppm | 0.0005 ppm | 7.4540 ppm | 0.0012 ppm | 0.0004 ppm | 0.0026 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 49.4 % | 0.2 % | 45.5 % | 187.5 % | 54.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 9.6223 ppm | -0.0013 ppm | 0.0820 ppm | 0.0038 ppm | -0.0015 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0007 ppm | 9.6642 ppm | -0.0004 ppm | 0.0819 ppm | 0.0033 ppm | -0.0005 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0023 ppm | 9.6243 ppm | -0.0014 ppm | 0.0820 ppm | 0.0040 ppm | -0.0017 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0027 ppm | 9.5785 ppm | -0.0022 ppm | 0.0820 ppm | 0.0041 ppm | -0.0023 ppm | -0.0006 ppm |
| Concentration RSD | 129.0 % | 0.4 % | 69.5 % | 0.1 % | 11.6 % | 58.0 % | 318.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 109.9670 % | 107.0519 % | 108.4664 % | 110.7574 % | 107.0792 % | 110.0278 % |
| Concentration per Run 1 | 0.0015 ppm | 109.7229 % | 107.3736 % | 108.8721 % | 111.1817 % | 107.3967 % | 110.4806 % |
| Concentration per Run 2 | 0.0017 ppm | 109.6969 % | 106.8826 % | 108.7824 % | 110.9115 % | 107.2317 % | 110.2437 % |
| Concentration per Run 3 | 0.0013 ppm | 110.4812 % | 106.8994 % | 107.7447 % | 110.1792 % | 106.6091 % | 109.3589 % |
| Concentration RSD | 14.5 % | 0.4 % | 0.3 % | 0.6 % | 0.5 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: L2453053-05 WG1973830
Analysis started at: 9/20/2024 11:00:14 PM
Rack 3
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0046 ppm | 0.0011 ppm | 0.0310 ppm | 0.0242 ppm | 0.0000 ppm | 10.5866 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0053 ppm | 0.0014 ppm | 0.0313 ppm | 0.0243 ppm | 0.0000 ppm | 10.5712 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0027 ppm | 0.0017 ppm | 0.0317 ppm | 0.0242 ppm | 0.0000 ppm | 10.5772 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0058 ppm | 0.0002 ppm | 0.0300 ppm | 0.0241 ppm | 0.0000 ppm | 10.6113 ppm |
| Concentration RSD | 47.6 % | 35.8 % | 71.4 % | 2.9 % | 0.3 % | 295.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0072 ppm | -0.0004 ppm | 0.0001 ppm | 2.8356 ppm | 0.9714 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0072 ppm | -0.0001 ppm | 0.0004 ppm | 2.8224 ppm | 0.9995 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0072 ppm | -0.0007 ppm | -0.0002 ppm | 2.8410 ppm | 0.9562 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0072 ppm | -0.0005 ppm | 0.0001 ppm | 2.8434 ppm | 0.9585 ppm | 0.0006 ppm |
| Concentration RSD | 464.5 % | 0.4 % | 71.4 % | 229.4 % | 0.4 % | 2.5 % | 48.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.5165 ppm | 0.1086 ppm | -0.0001 ppm | 8.1298 ppm | 0.0022 ppm | -0.0025 ppm | 0.0017 ppm |
| Concentration per Run 1 | 4.5534 ppm | 0.1090 ppm | 0.0000 ppm | 8.1114 ppm | 0.0033 ppm | -0.0027 ppm | 0.0065 ppm |
| Concentration per Run 2 | 4.5091 ppm | 0.1079 ppm | -0.0001 ppm | 8.1451 ppm | 0.0019 ppm | -0.0013 ppm | -0.0021 ppm |
| Concentration per Run 3 | 4.4869 ppm | 0.1091 ppm | -0.0002 ppm | 8.1330 ppm | 0.0015 ppm | -0.0034 ppm | 0.0005 ppm |
| Concentration RSD | 0.7 % | 0.6 % | 92.7 % | 0.2 % | 42.9 % | 42.8 % | 266.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 7.4931 ppm | -0.0011 ppm | 0.0395 ppm | 0.0003 ppm | -0.0005 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0010 ppm | 7.5475 ppm | -0.0015 ppm | 0.0397 ppm | 0.0000 ppm | -0.0015 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0040 ppm | 7.4848 ppm | -0.0011 ppm | 0.0393 ppm | 0.0002 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0016 ppm | 7.4471 ppm | -0.0008 ppm | 0.0395 ppm | 0.0006 ppm | 0.0005 ppm | -0.0001 ppm |
| Concentration RSD | 161.9 % | 0.7 % | 32.1 % | 0.4 % | 108.8 % | 183.3 % | 84.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0083 ppm | 109.1279 % | 105.9939 % | 107.3951 % | 109.9093 % | 105.8449 % | 108.8066 % |
| Concentration per Run 1 | 0.0086 ppm | 108.7452 % | 106.9827 % | 107.9277 % | 109.9533 % | 107.0026 % | 109.0757 % |
| Concentration per Run 2 | 0.0084 ppm | 108.7620 % | 105.4917 % | 106.1679 % | 109.6459 % | 105.1084 % | 108.0956 % |
| Concentration per Run 3 | 0.0081 ppm | 109.8766 % | 105.5073 % | 108.0896 % | 110.1287 % | 105.4238 % | 109.2486 % |
| Concentration RSD | 2.8 % | 0.6 % | 0.8 % | 1.0 % | 0.2 % | 1.0 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 11:04:12 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4899 ppm | 0.4639 ppm | 0.4604 ppm | 0.4729 ppm | 0.4835 ppm | 0.4885 ppm | 0.4733 ppm |
| Concentration per Run 1 | 0.4905 ppm | 0.4675 ppm | 0.4653 ppm | 0.4695 ppm | 0.4814 ppm | 0.4865 ppm | 0.4746 ppm |
| Concentration per Run 2 | 0.4888 ppm | 0.4606 ppm | 0.4595 ppm | 0.4756 ppm | 0.4844 ppm | 0.4904 ppm | 0.4755 ppm |
| Concentration per Run 3 | 0.4905 ppm | 0.4635 ppm | 0.4564 ppm | 0.4738 ppm | 0.4846 ppm | 0.4886 ppm | 0.4697 ppm |
| Recovery Percentage 1 | 97.986 % | 92.773 % | 92.081 % | 94.589 % | 96.693 % | 97.697 % | 94.654 % |
| Concentration RSD | 0.2 % | 0.7 % | 1.0 % | 0.7 % | 0.4 % | 0.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4796 ppm | 0.4906 ppm | 0.4689 ppm | 0.4770 ppm | 0.4797 ppm | 4.9909 ppm | 0.4816 ppm |
| Concentration per Run 1 | 0.4780 ppm | 0.4883 ppm | 0.4691 ppm | 0.4753 ppm | 0.4806 ppm | 4.9761 ppm | 0.4795 ppm |
| Concentration per Run 2 | 0.4820 ppm | 0.4908 ppm | 0.4682 ppm | 0.4766 ppm | 0.4771 ppm | 5.0087 ppm | 0.4798 ppm |
| Concentration per Run 3 | 0.4788 ppm | 0.4926 ppm | 0.4695 ppm | 0.4790 ppm | 0.4815 ppm | 4.9880 ppm | 0.4855 ppm |
| Recovery Percentage 1 | 95.920 % | 98.119 % | 93.781 % | 95.394 % | 95.948 % | 99.819 % | 96.323 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.1 % | 0.4 % | 0.5 % | 0.3 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4677 ppm | 0.4673 ppm | 0.4665 ppm | 9.4616 ppm | 0.4852 ppm | 0.4764 ppm | 0.4894 ppm |
| Concentration per Run 1 | 0.4689 ppm | 0.4665 ppm | 0.4615 ppm | 9.4550 ppm | 0.4864 ppm | 0.4758 ppm | 0.4844 ppm |
| Concentration per Run 2 | 0.4665 ppm | 0.4692 ppm | 0.4676 ppm | 9.4937 ppm | 0.4861 ppm | 0.4778 ppm | 0.4939 ppm |
| Concentration per Run 3 | 0.4676 ppm | 0.4662 ppm | 0.4704 ppm | 9.4363 ppm | 0.4830 ppm | 0.4756 ppm | 0.4897 ppm |
| Recovery Percentage 1 | 93.540 % | 93.463 % | 93.300 % | 94.616 % | 97.036 % | 95.282 % | 97.875 % |
| Concentration RSD | 0.3 % | 0.3 % | 1.0 % | 0.3 % | 0.4 % | 0.3 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4763 ppm | 5.2437 ppm | 0.4601 ppm | 0.4636 ppm | 0.4770 ppm | 0.4764 ppm | 0.4694 ppm |
| Concentration per Run 1 | 0.4817 ppm | 5.2358 ppm | 0.4606 ppm | 0.4623 ppm | 0.4779 ppm | 0.4796 ppm | 0.4689 ppm |
| Concentration per Run 2 | 0.4696 ppm | 5.2542 ppm | 0.4602 ppm | 0.4654 ppm | 0.4764 ppm | 0.4751 ppm | 0.4700 ppm |
| Concentration per Run 3 | 0.4776 ppm | 5.2411 ppm | 0.4596 ppm | 0.4632 ppm | 0.4768 ppm | 0.4744 ppm | 0.4692 ppm |
| Recovery Percentage 1 | 95.255 % | 99.880 % | 92.021 % | 92.725 % | 95.403 % | 95.273 % | 93.872 % |
| Concentration RSD | 1.3 % | 0.2 % | 0.1 % | 0.4 % | 0.2 % | 0.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4824 ppm | 112.7082 % | 109.3793 % | 109.7536 % | 111.8943 % | 109.0287 % | 109.7244 % |
| Concentration per Run 1 | 0.4830 ppm | 112.5094 % | 109.7801 % | 109.2910 % | 111.9200 % | 109.3500 % | 109.6276 % |
| Concentration per Run 2 | 0.4828 ppm | 113.1930 % | 109.3437 % | 110.3919 % | 112.0384 % | 109.1295 % | 110.3085 % |
| Concentration per Run 3 | 0.4814 ppm | 112.4222 % | 109.0140 % | 109.5779 % | 111.7246 % | 108.6065 % | 109.2372 % |
| Recovery Percentage 1 | 96.478 % | | | | | | |
| Concentration RSD | 0.2 % | 0.4 % | 0.4 % | 0.5 % | 0.1 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 11:08:09 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | -0.0008 ppm | 0.0011 ppm | 0.0015 ppm | -0.0001 ppm | 0.0000 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0013 ppm | -0.0020 ppm | -0.0007 ppm | 0.0020 ppm | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0013 ppm | -0.0045 ppm | 0.0010 ppm | 0.0015 ppm | -0.0001 ppm | 0.0001 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0041 ppm | 0.0030 ppm | 0.0010 ppm | -0.0003 ppm | -0.0001 ppm | 0.0034 ppm |
| Recovery Percentage 1 | 18.200 % | -0.804 % | 21.183 % | 4.949 % | -1.436 % | 0.125 % | 2.189 % |
| Concentration RSD | 2.9 % | 554.9 % | 174.5 % | 35.2 % | 67.1 % | 1,970.7 % | 61.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0005 ppm | -0.0029 ppm | -0.0289 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0001 ppm | -0.0001 ppm | -0.0008 ppm | -0.0041 ppm | -0.0341 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0005 ppm | -0.0002 ppm | -0.0003 ppm | -0.0034 ppm | 0.0076 ppm | 0.0026 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | -0.0002 ppm | -0.0004 ppm | -0.0012 ppm | -0.0601 ppm | 0.0015 ppm |
| Recovery Percentage 1 | -0.642 % | 0.507 % | -1.662 % | -4.973 % | -5.772 % | -1.155 % | 29.006 % |
| Concentration RSD | 538.7 % | 328.1 % | 20.9 % | 51.1 % | 53.4 % | 118.1 % | 80.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0000 ppm | 0.0007 ppm | -0.1741 ppm | -0.0011 ppm | -0.0009 ppm | 0.0042 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0001 ppm | 0.0014 ppm | -0.1664 ppm | -0.0017 ppm | -0.0004 ppm | 0.0070 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0004 ppm | -0.1790 ppm | -0.0013 ppm | 0.0002 ppm | 0.0032 ppm |
| Concentration per Run 3 | -0.0026 ppm | 0.0000 ppm | 0.0004 ppm | -0.1769 ppm | -0.0004 ppm | -0.0027 ppm | 0.0024 ppm |
| Recovery Percentage 1 | -0.662 % | -0.414 % | 1.484 % | -8.704 % | -4.595 % | -9.445 % | 8.414 % |
| Concentration RSD | 272.0 % | 307.8 % | 75.9 % | 3.9 % | 55.3 % | 159.5 % | 57.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | -0.0013 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0036 ppm | -0.0010 ppm | -0.0004 ppm | -0.0002 ppm | 0.0004 ppm | 0.0008 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0016 ppm | -0.0027 ppm | 0.0013 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0022 ppm | -0.0001 ppm | -0.0003 ppm | 0.0001 ppm | -0.0001 ppm | -0.0009 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 24.531 % | -0.256 % | 0.403 % | -0.244 % | 0.610 % | 0.189 % | -1.342 % |
| Concentration RSD | 40.8 % | 101.8 % | 471.8 % | 632.3 % | 431.2 % | 2,309.8 % | 170.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 111.2305 % | 105.8876 % | 109.4769 % | 112.3377 % | 106.5369 % | 110.1299 % |
| Concentration per Run 1 | 0.0003 ppm | 111.4484 % | 105.9297 % | 109.4233 % | 112.7770 % | 106.6842 % | 109.6639 % |
| Concentration per Run 2 | 0.0004 ppm | 111.6424 % | 105.1521 % | 109.2857 % | 112.8079 % | 105.9575 % | 109.9750 % |
| Concentration per Run 3 | 0.0001 ppm | 110.6008 % | 106.5811 % | 109.7218 % | 111.4283 % | 106.9689 % | 110.7507 % |
| Recovery Percentage 1 | 5.856 % | | | | | | |
| Concentration RSD | 52.8 % | 0.5 % | 0.7 % | 0.2 % | 0.7 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCV
Analysis started at: 9/20/2024 11:12:05 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4933 ppm | 0.4669 ppm | 0.4649 ppm | 0.4785 ppm | 0.4871 ppm | 0.4942 ppm | 0.4778 ppm |
| Concentration per Run 1 | 0.4897 ppm | 0.4831 ppm | 0.4642 ppm | 0.4758 ppm | 0.4876 ppm | 0.4936 ppm | 0.4816 ppm |
| Concentration per Run 2 | 0.4943 ppm | 0.4610 ppm | 0.4654 ppm | 0.4801 ppm | 0.4893 ppm | 0.4952 ppm | 0.4790 ppm |
| Concentration per Run 3 | 0.4959 ppm | 0.4566 ppm | 0.4649 ppm | 0.4798 ppm | 0.4843 ppm | 0.4938 ppm | 0.4728 ppm |
| Recovery Percentage 1 | 98.655 % | 93.382 % | 92.973 % | 95.706 % | 97.412 % | 98.836 % | 95.565 % |
| Concentration RSD | 0.7 % | 3.0 % | 0.1 % | 0.5 % | 0.5 % | 0.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4785 ppm | 0.4892 ppm | 0.4721 ppm | 0.4798 ppm | 0.4820 ppm | 5.0177 ppm | 0.4858 ppm |
| Concentration per Run 1 | 0.4866 ppm | 0.4915 ppm | 0.4717 ppm | 0.4799 ppm | 0.4827 ppm | 4.9781 ppm | 0.4862 ppm |
| Concentration per Run 2 | 0.4705 ppm | 0.4831 ppm | 0.4736 ppm | 0.4784 ppm | 0.4804 ppm | 5.0559 ppm | 0.4859 ppm |
| Concentration per Run 3 | 0.4783 ppm | 0.4931 ppm | 0.4712 ppm | 0.4811 ppm | 0.4828 ppm | 5.0190 ppm | 0.4851 ppm |
| Recovery Percentage 1 | 95.694 % | 97.844 % | 94.428 % | 95.966 % | 96.394 % | 100.354 % | 97.151 % |
| Concentration RSD | 1.7 % | 1.1 % | 0.3 % | 0.3 % | 0.3 % | 0.8 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4722 ppm | 0.4736 ppm | 0.4689 ppm | 9.5785 ppm | 0.4873 ppm | 0.4812 ppm | 0.4901 ppm |
| Concentration per Run 1 | 0.4711 ppm | 0.4735 ppm | 0.4671 ppm | 9.6260 ppm | 0.4852 ppm | 0.4784 ppm | 0.4858 ppm |
| Concentration per Run 2 | 0.4706 ppm | 0.4741 ppm | 0.4680 ppm | 9.5302 ppm | 0.4901 ppm | 0.4825 ppm | 0.4899 ppm |
| Concentration per Run 3 | 0.4748 ppm | 0.4733 ppm | 0.4716 ppm | 9.5793 ppm | 0.4865 ppm | 0.4828 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 94.435 % | 94.729 % | 93.783 % | 95.785 % | 97.454 % | 96.246 % | 98.021 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.5 % | 0.5 % | 0.5 % | 0.5 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4759 ppm | 5.2452 ppm | 0.4620 ppm | 0.4664 ppm | 0.4797 ppm | 0.4805 ppm | 0.4730 ppm |
| Concentration per Run 1 | 0.4749 ppm | 5.2154 ppm | 0.4636 ppm | 0.4675 ppm | 0.4770 ppm | 0.4818 ppm | 0.4740 ppm |
| Concentration per Run 2 | 0.4779 ppm | 5.2515 ppm | 0.4589 ppm | 0.4665 ppm | 0.4795 ppm | 0.4789 ppm | 0.4713 ppm |
| Concentration per Run 3 | 0.4748 ppm | 5.2687 ppm | 0.4635 ppm | 0.4652 ppm | 0.4826 ppm | 0.4809 ppm | 0.4738 ppm |
| Recovery Percentage 1 | 95.175 % | 99.908 % | 92.393 % | 93.278 % | 95.938 % | 96.105 % | 94.607 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.6 % | 0.2 % | 0.6 % | 0.3 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4843 ppm | 112.1909 % | 106.8094 % | 109.0131 % | 111.1659 % | 106.7235 % | 109.0277 % |
| Concentration per Run 1 | 0.4855 ppm | 111.8472 % | 106.9158 % | 108.9746 % | 111.0105 % | 107.1725 % | 108.8270 % |
| Concentration per Run 2 | 0.4844 ppm | 112.6127 % | 105.7256 % | 109.1282 % | 111.2785 % | 105.4514 % | 109.4575 % |
| Concentration per Run 3 | 0.4832 ppm | 112.1128 % | 107.7867 % | 108.9364 % | 111.2087 % | 107.5466 % | 108.7987 % |
| Recovery Percentage 1 | 96.868 % | | | | | | |
| Concentration RSD | 0.2 % | 0.3 % | 1.0 % | 0.1 % | 0.1 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: CCB
Analysis started at: 9/20/2024 11:16:01 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0004 ppm | 0.0010 ppm | 0.0011 ppm | -0.0001 ppm | 0.0001 ppm | 0.0039 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0074 ppm | 0.0021 ppm | -0.0008 ppm | -0.0001 ppm | 0.0000 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0044 ppm | 0.0014 ppm | 0.0010 ppm | -0.0002 ppm | 0.0001 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0042 ppm | -0.0004 ppm | 0.0031 ppm | -0.0001 ppm | 0.0001 ppm | 0.0065 ppm |
| Recovery Percentage 1 | 7.260 % | 0.399 % | 19.968 % | 3.642 % | -1.124 % | 1.981 % | 3.863 % |
| Concentration RSD | 63.8 % | 1,697.3 % | 127.2 % | 176.9 % | 62.3 % | 39.2 % | 58.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0005 ppm | -0.0004 ppm | -0.0004 ppm | -0.0033 ppm | -0.0302 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0006 ppm | -0.0012 ppm | -0.0004 ppm | -0.0011 ppm | -0.0467 ppm | -0.0010 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | -0.0001 ppm | -0.0002 ppm | -0.0036 ppm | -0.0387 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | 0.0001 ppm | -0.0006 ppm | -0.0052 ppm | -0.0053 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 1.125 % | 2.647 % | -4.180 % | -3.844 % | -6.591 % | -1.210 % | 0.410 % |
| Concentration RSD | 181.4 % | 21.2 % | 155.9 % | 54.3 % | 61.3 % | 72.7 % | 4,317.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | -0.0001 ppm | 0.0005 ppm | -0.1730 ppm | -0.0005 ppm | -0.0017 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0017 ppm | -0.0001 ppm | 0.0007 ppm | -0.1704 ppm | 0.0000 ppm | -0.0010 ppm | 0.0049 ppm |
| Concentration per Run 2 | -0.0009 ppm | -0.0001 ppm | 0.0004 ppm | -0.1733 ppm | 0.0000 ppm | -0.0023 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0006 ppm | -0.0001 ppm | 0.0003 ppm | -0.1753 ppm | -0.0014 ppm | -0.0019 ppm | 0.0028 ppm |
| Recovery Percentage 1 | -1.074 % | -0.663 % | 0.911 % | -8.650 % | -1.859 % | -17.271 % | 7.001 % |
| Concentration RSD | 54.3 % | 8.5 % | 41.1 % | 1.4 % | 174.1 % | 39.9 % | 35.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0029 ppm | -0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0032 ppm | -0.0034 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | -0.0015 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0016 ppm | -0.0007 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0039 ppm | -0.0009 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -28.897 % | -0.334 % | -0.074 % | 0.155 % | 0.662 % | -1.616 % | -2.865 % |
| Concentration RSD | 39.9 % | 87.5 % | 430.5 % | 394.6 % | 362.1 % | 325.1 % | 69.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 109.2827 % | 104.1032 % | 107.5138 % | 110.2280 % | 104.5539 % | 108.2647 % |
| Concentration per Run 1 | 0.0001 ppm | 109.2745 % | 105.0814 % | 108.3497 % | 110.7287 % | 105.6673 % | 109.1477 % |
| Concentration per Run 2 | 0.0004 ppm | 110.1650 % | 104.1033 % | 107.5719 % | 110.8995 % | 104.6280 % | 108.0811 % |
| Concentration per Run 3 | 0.0003 ppm | 108.4085 % | 103.1248 % | 106.6199 % | 109.0559 % | 103.3665 % | 107.5652 % |
| Recovery Percentage 1 | 4.563 % | | | | | | |
| Concentration RSD | 62.1 % | 0.8 % | 0.9 % | 0.8 % | 0.9 % | 1.1 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 10:05:33 AM

LabBook: WG1974083_09202024T9.imexp

Sample: LLOQ
Analysis started at: 9/20/2024 11:19:58 PM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 0.0956 ppm | 0.0051 ppm | 0.0332 ppm | 0.0099 ppm | 0.0050 ppm | 0.1015 ppm |
| Concentration per Run 1 | 0.0061 ppm | 0.0911 ppm | 0.0061 ppm | 0.0342 ppm | 0.0098 ppm | 0.0050 ppm | 0.1022 ppm |
| Concentration per Run 2 | 0.0059 ppm | 0.0969 ppm | 0.0058 ppm | 0.0322 ppm | 0.0100 ppm | 0.0050 ppm | 0.0994 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.0988 ppm | 0.0033 ppm | 0.0331 ppm | 0.0100 ppm | 0.0050 ppm | 0.1028 ppm |
| Recovery Percentage 1 | 116.374 % | 95.570 % | 101.042 % | 110.644 % | 99.347 % | 100.224 % | 101.491 % |
| Concentration RSD | 5.5 % | 4.2 % | 30.8 % | 3.0 % | 1.5 % | 0.1 % | 1.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 0.0203 ppm | 0.0090 ppm | 0.0099 ppm | 0.0492 ppm | 2.6035 ppm | 0.0110 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0202 ppm | 0.0082 ppm | 0.0096 ppm | 0.0513 ppm | 2.6107 ppm | 0.0114 ppm |
| Concentration per Run 2 | 0.0041 ppm | 0.0200 ppm | 0.0100 ppm | 0.0099 ppm | 0.0476 ppm | 2.6072 ppm | 0.0128 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0207 ppm | 0.0089 ppm | 0.0100 ppm | 0.0488 ppm | 2.5926 ppm | 0.0087 ppm |
| Recovery Percentage 1 | 102.304 % | 101.447 % | 90.400 % | 98.586 % | 98.438 % | 104.139 % | 109.563 % |
| Concentration RSD | 2.2 % | 1.7 % | 9.8 % | 1.9 % | 3.8 % | 0.4 % | 18.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1010 ppm | 0.0101 ppm | 0.0503 ppm | 1.8382 ppm | 0.0191 ppm | 0.0091 ppm | 0.0521 ppm |
| Concentration per Run 1 | 0.0999 ppm | 0.0100 ppm | 0.0503 ppm | 1.8310 ppm | 0.0194 ppm | 0.0099 ppm | 0.0518 ppm |
| Concentration per Run 2 | 0.1031 ppm | 0.0101 ppm | 0.0509 ppm | 1.8354 ppm | 0.0196 ppm | 0.0093 ppm | 0.0524 ppm |
| Concentration per Run 3 | 0.1000 ppm | 0.0101 ppm | 0.0497 ppm | 1.8481 ppm | 0.0184 ppm | 0.0081 ppm | 0.0521 ppm |
| Recovery Percentage 1 | 100.991 % | 100.562 % | 100.578 % | 91.908 % | 95.602 % | 91.150 % | 104.260 % |
| Concentration RSD | 1.9 % | 0.7 % | 1.1 % | 0.5 % | 3.2 % | 10.0 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0109 ppm | 0.5162 ppm | 0.0505 ppm | 0.0098 ppm | 0.0498 ppm | 0.0190 ppm | 0.0096 ppm |
| Concentration per Run 1 | 0.0106 ppm | 0.5133 ppm | 0.0508 ppm | 0.0098 ppm | 0.0491 ppm | 0.0195 ppm | 0.0092 ppm |
| Concentration per Run 2 | 0.0100 ppm | 0.5161 ppm | 0.0491 ppm | 0.0099 ppm | 0.0502 ppm | 0.0187 ppm | 0.0101 ppm |
| Concentration per Run 3 | 0.0119 ppm | 0.5193 ppm | 0.0515 ppm | 0.0098 ppm | 0.0501 ppm | 0.0189 ppm | 0.0095 ppm |
| Recovery Percentage 1 | 108.632 % | 103.249 % | 100.953 % | 98.191 % | 99.594 % | 95.201 % | 95.804 % |
| Concentration RSD | 8.7 % | 0.6 % | 2.4 % | 0.3 % | 1.2 % | 2.3 % | 4.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0060 ppm | 112.5913 % | 107.7976 % | 110.1581 % | 112.3317 % | 107.3766 % | 110.2805 % |
| Concentration per Run 1 | 0.0059 ppm | 113.6040 % | 107.6416 % | 110.3997 % | 113.5876 % | 107.3026 % | 110.6083 % |
| Concentration per Run 2 | 0.0062 ppm | 111.7060 % | 108.2496 % | 109.3979 % | 111.7569 % | 107.9878 % | 109.6665 % |
| Concentration per Run 3 | 0.0058 ppm | 112.4639 % | 107.5016 % | 110.6768 % | 111.6507 % | 106.8393 % | 110.5666 % |
| Recovery Percentage 1 | 119.833 % | | | | | | |
| Concentration RSD | 3.4 % | 0.8 % | 0.4 % | 0.6 % | 1.0 % | 0.5 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: Blank TAA Trace4
Analysis started at: 9/19/2024 5:10:25 PM
Comments <Comment>
Rack: 0
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -1.4 % | -1.2 % | 0.6 % | 0.1 % | 0.1 % | -0.6 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.5 % | -0.1 % | 0.3 % | 0.0 % | 0.3 % | 0.3 % | -1.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.3 % | -2.3 % | -0.1 % | -0.2 % | -0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.2 % | 0.0 % | 0.1 % | -0.1 % | -0.4 % | -0.2 % | -0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 2.4 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICAL
Analysis started at: 9/19/2024 5:16:48 PM
Comments <Comment>
Rack: 0
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 0.9962 ppm | 24.6288 ppm | 0.9996 ppm | 0.9978 ppm | 0.9859 ppm | 0.9869 ppm | 9.8671 ppm |
| Concentration per Run 2 | 0.9998 ppm | 25.2422 ppm | 1.0007 ppm | 1.0013 ppm | 1.0076 ppm | 1.0092 ppm | 10.0797 ppm |
| Concentration per Run 3 | 1.0039 ppm | 25.1289 ppm | 0.9998 ppm | 1.0009 ppm | 1.0064 ppm | 1.0038 ppm | 10.0532 ppm |
| Concentration RSD | 0.4 % | 1.3 % | 0.1 % | 0.2 % | 1.2 % | 1.2 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9977 ppm | 0.9980 ppm | 1.0017 ppm | 0.9965 ppm | 24.6857 ppm | 34.4465 ppm | 0.9804 ppm |
| Concentration per Run 2 | 1.0007 ppm | 0.9998 ppm | 1.0041 ppm | 1.0040 ppm | 25.2226 ppm | 35.2543 ppm | 1.0105 ppm |
| Concentration per Run 3 | 1.0016 ppm | 1.0022 ppm | 0.9942 ppm | 0.9995 ppm | 25.0917 ppm | 35.2993 ppm | 1.0091 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.5 % | 0.4 % | 1.1 % | 1.4 % | 1.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0159 ppm | 0.9867 ppm | 1.0003 ppm | 24.5679 ppm | 1.0003 ppm | 0.9966 ppm | 0.9997 ppm |
| Concentration per Run 2 | 9.9826 ppm | 1.0056 ppm | 0.9974 ppm | 25.2525 ppm | 0.9995 ppm | 1.0007 ppm | 0.9992 ppm |
| Concentration per Run 3 | 10.0015 ppm | 1.0076 ppm | 1.0023 ppm | 25.1797 ppm | 1.0003 ppm | 1.0026 ppm | 1.0011 ppm |
| Concentration RSD | 0.2 % | 1.2 % | 0.3 % | 1.5 % | 0.0 % | 0.3 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9948 ppm | 9.9956 ppm | 0.9967 ppm | 0.9861 ppm | 0.9997 ppm | 1.0001 ppm | 1.0004 ppm |
| Concentration per Run 2 | 1.0006 ppm | 9.9932 ppm | 1.0016 ppm | 1.0084 ppm | 1.0052 ppm | 1.0012 ppm | 1.0053 ppm |
| Concentration per Run 3 | 1.0046 ppm | 10.0112 ppm | 1.0018 ppm | 1.0055 ppm | 0.9951 ppm | 0.9987 ppm | 0.9943 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 0.3 % | 1.2 % | 0.5 % | 0.1 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 98.9475 % | 97.3307 % | 98.1787 % | 98.4167 % | 90.9934 % | 96.9715 % |
| Concentration per Run 1 | 0.9979 ppm | 99.7662 % | 97.2749 % | 98.2623 % | 99.9660 % | 90.9835 % | 96.9697 % |
| Concentration per Run 2 | 0.9996 ppm | 98.5477 % | 97.4110 % | 98.2809 % | 97.6254 % | 91.2362 % | 96.6799 % |
| Concentration per Run 3 | 1.0025 ppm | 98.5285 % | 97.3061 % | 97.9929 % | 97.6588 % | 90.7604 % | 97.2649 % |
| Concentration RSD | 0.2 % | 0.7 % | 0.1 % | 0.2 % | 1.4 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICV
Analysis started at: 9/19/2024 5:52:16 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5115 ppm | 0.4994 ppm | 0.4965 ppm | 0.5104 ppm | 0.4934 ppm | 0.5011 ppm | 0.4990 ppm |
| Concentration per Run 1 | 0.5106 ppm | 0.4936 ppm | 0.4960 ppm | 0.5087 ppm | 0.4845 ppm | 0.4930 ppm | 0.4918 ppm |
| Concentration per Run 2 | 0.5145 ppm | 0.5003 ppm | 0.4964 ppm | 0.5104 ppm | 0.4976 ppm | 0.5058 ppm | 0.5034 ppm |
| Concentration per Run 3 | 0.5095 ppm | 0.5044 ppm | 0.4971 ppm | 0.5122 ppm | 0.4980 ppm | 0.5045 ppm | 0.5017 ppm |
| Recovery Percentage 1 | 102.307 % | 99.883 % | 99.303 % | 102.083 % | 98.674 % | 100.219 % | 99.792 % |
| Concentration RSD | 0.5 % | 1.1 % | 0.1 % | 0.3 % | 1.6 % | 1.4 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5053 ppm | 0.5144 ppm | 0.4909 ppm | 0.4835 ppm | 0.4921 ppm | 5.1824 ppm | 0.4896 ppm |
| Concentration per Run 1 | 0.5052 ppm | 0.5133 ppm | 0.4878 ppm | 0.4804 ppm | 0.4841 ppm | 5.1074 ppm | 0.4779 ppm |
| Concentration per Run 2 | 0.5057 ppm | 0.5139 ppm | 0.4928 ppm | 0.4855 ppm | 0.4950 ppm | 5.1957 ppm | 0.4926 ppm |
| Concentration per Run 3 | 0.5049 ppm | 0.5158 ppm | 0.4922 ppm | 0.4845 ppm | 0.4972 ppm | 5.2440 ppm | 0.4983 ppm |
| Recovery Percentage 1 | 101.050 % | 102.872 % | 98.185 % | 96.698 % | 98.423 % | 103.647 % | 97.921 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.6 % | 0.6 % | 1.4 % | 1.3 % | 2.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5070 ppm | 0.4934 ppm | 0.4952 ppm | 9.7553 ppm | 0.5114 ppm | 0.5177 ppm | 0.5152 ppm |
| Concentration per Run 1 | 0.5086 ppm | 0.4854 ppm | 0.4944 ppm | 9.5628 ppm | 0.5100 ppm | 0.5171 ppm | 0.5130 ppm |
| Concentration per Run 2 | 0.5080 ppm | 0.4992 ppm | 0.4945 ppm | 9.8189 ppm | 0.5118 ppm | 0.5179 ppm | 0.5165 ppm |
| Concentration per Run 3 | 0.5044 ppm | 0.4956 ppm | 0.4967 ppm | 9.8844 ppm | 0.5124 ppm | 0.5181 ppm | 0.5162 ppm |
| Recovery Percentage 1 | 101.401 % | 98.684 % | 99.043 % | 97.553 % | 102.286 % | 103.543 % | 103.047 % |
| Concentration RSD | 0.4 % | 1.5 % | 0.3 % | 1.7 % | 0.2 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5139 ppm | 5.6406 ppm | 0.4857 ppm | 0.4673 ppm | 0.4967 ppm | 0.5267 ppm | 0.4873 ppm |
| Concentration per Run 1 | 0.5113 ppm | 5.6265 ppm | 0.4851 ppm | 0.4586 ppm | 0.4936 ppm | 0.5250 ppm | 0.4843 ppm |
| Concentration per Run 2 | 0.5133 ppm | 5.6346 ppm | 0.4860 ppm | 0.4712 ppm | 0.4984 ppm | 0.5262 ppm | 0.4885 ppm |
| Concentration per Run 3 | 0.5170 ppm | 5.6608 ppm | 0.4860 ppm | 0.4720 ppm | 0.4981 ppm | 0.5289 ppm | 0.4891 ppm |
| Recovery Percentage 1 | 102.774 % | 107.441 % | 97.143 % | 93.457 % | 99.336 % | 105.343 % | 97.464 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.1 % | 1.6 % | 0.5 % | 0.4 % | 0.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5139 ppm | 99.9510 % | 99.5124 % | 101.1300 % | 100.7389 % | 99.4437 % | 100.2932 % |
| Concentration per Run 1 | 0.5137 ppm | 100.2483 % | 99.1627 % | 101.4713 % | 102.0582 % | 99.8117 % | 100.5362 % |
| Concentration per Run 2 | 0.5150 ppm | 99.2615 % | 99.7378 % | 101.2627 % | 99.4949 % | 99.5161 % | 100.1137 % |
| Concentration per Run 3 | 0.5131 ppm | 100.3430 % | 99.6367 % | 100.6560 % | 100.6636 % | 99.0034 % | 100.2295 % |
| Recovery Percentage 1 | 102.785 % | | | | | | |
| Concentration RSD | 0.2 % | 0.6 % | 0.3 % | 0.4 % | 1.3 % | 0.4 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICB
Analysis started at: 9/19/2024 5:58:20 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0015 ppm | -0.0003 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0044 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0008 ppm | -0.0013 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0005 ppm | 0.0004 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | -0.0011 ppm |
| Recovery Percentage 1 | -0.791 % | 1.543 % | -6.976 % | -0.542 % | -0.556 % | 0.187 % | 0.832 % |
| Concentration RSD | 468.0 % | 165.5 % | 255.0 % | 34.3 % | 130.5 % | 82.2 % | 223.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0008 ppm | -0.0165 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0125 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | -0.0011 ppm | -0.0374 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | -0.0011 ppm | 0.0004 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 0.650 % | 0.419 % | -0.254 % | -0.219 % | -1.514 % | -0.660 % | 3.327 % |
| Concentration RSD | 91.8 % | 79.6 % | 560.9 % | 519.3 % | 83.4 % | 116.4 % | 16.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0001 ppm | 0.0002 ppm | 0.0052 ppm | -0.0002 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0021 ppm | -0.0003 ppm | 0.0002 ppm | 0.0015 ppm | -0.0001 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0001 ppm | 0.0002 ppm | 0.0078 ppm | -0.0003 ppm | -0.0003 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0001 ppm | 0.0002 ppm | 0.0062 ppm | -0.0003 ppm | -0.0004 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 1.058 % | -0.806 % | 0.406 % | 0.258 % | -0.815 % | -2.472 % | -0.004 % |
| Concentration RSD | 128.3 % | 219.5 % | 21.9 % | 62.9 % | 59.1 % | 76.7 % | 27,349.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0004 ppm | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0006 ppm | -0.0005 ppm | 0.0000 ppm | -0.0002 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0010 ppm | -0.0004 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 2.832 % | -0.071 % | -0.781 % | -0.070 % | -0.755 % | -1.941 % | 0.822 % |
| Concentration RSD | 396.2 % | 83.0 % | 44.8 % | 137.0 % | 147.9 % | 68.9 % | 59.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 100.9904 % | 100.8287 % | 100.6013 % | 100.9971 % | 101.1144 % | 100.2806 % |
| Concentration per Run 1 | 0.0002 ppm | 101.6706 % | 100.9562 % | 101.2941 % | 102.0589 % | 101.6812 % | 100.2488 % |
| Concentration per Run 2 | 0.0002 ppm | 101.0175 % | 100.7187 % | 100.4371 % | 100.7827 % | 101.0105 % | 100.4777 % |
| Concentration per Run 3 | 0.0000 ppm | 100.2831 % | 100.8113 % | 100.0726 % | 100.1497 % | 100.6513 % | 100.1153 % |
| Recovery Percentage 1 | 2.952 % | | | | | | |
| Concentration RSD | 74.3 % | 0.7 % | 0.1 % | 0.6 % | 1.0 % | 0.5 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICV
Analysis started at: 9/19/2024 6:04:46 PM
Comments position changed
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5062 ppm | 0.6318 ppm | 0.4951 ppm | 0.5025 ppm | 0.4981 ppm | 0.5077 ppm | 0.5131 ppm |
| Concentration per Run 1 | 0.5065 ppm | 0.6261 ppm | 0.4957 ppm | 0.5032 ppm | 0.4937 ppm | 0.5024 ppm | 0.5080 ppm |
| Concentration per Run 2 | 0.5043 ppm | 0.6343 ppm | 0.4938 ppm | 0.5010 ppm | 0.4990 ppm | 0.5096 ppm | 0.5177 ppm |
| Concentration per Run 3 | 0.5076 ppm | 0.6349 ppm | 0.4959 ppm | 0.5033 ppm | 0.5017 ppm | 0.5112 ppm | 0.5136 ppm |
| Recovery Percentage 1 | 101.234 % | 126.355 % | 99.028 % | 100.494 % | 99.629 % | 101.549 % | 102.621 % |
| Concentration RSD | 0.3 % | 0.8 % | 0.2 % | 0.3 % | 0.8 % | 0.9 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5002 ppm | 0.5152 ppm | 0.4911 ppm | 0.4893 ppm | 0.5065 ppm | 5.1938 ppm | 0.4941 ppm |
| Concentration per Run 1 | 0.5008 ppm | 0.5159 ppm | 0.4907 ppm | 0.4902 ppm | 0.5038 ppm | 5.1190 ppm | 0.4914 ppm |
| Concentration per Run 2 | 0.4995 ppm | 0.5142 ppm | 0.4911 ppm | 0.4875 ppm | 0.5080 ppm | 5.2584 ppm | 0.4938 ppm |
| Concentration per Run 3 | 0.5002 ppm | 0.5156 ppm | 0.4915 ppm | 0.4904 ppm | 0.5076 ppm | 5.2040 ppm | 0.4972 ppm |
| Recovery Percentage 1 | 100.037 % | 103.049 % | 98.222 % | 97.870 % | 101.293 % | 103.876 % | 98.826 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.1 % | 0.3 % | 0.5 % | 1.4 % | 0.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5035 ppm | 0.4967 ppm | 0.4983 ppm | 9.9630 ppm | 0.5121 ppm | 0.5163 ppm | 0.5159 ppm |
| Concentration per Run 1 | 0.5013 ppm | 0.4890 ppm | 0.4997 ppm | 9.9329 ppm | 0.5128 ppm | 0.5174 ppm | 0.5155 ppm |
| Concentration per Run 2 | 0.5071 ppm | 0.4999 ppm | 0.4964 ppm | 9.9382 ppm | 0.5113 ppm | 0.5155 ppm | 0.5155 ppm |
| Concentration per Run 3 | 0.5022 ppm | 0.5012 ppm | 0.4987 ppm | 10.0179 ppm | 0.5121 ppm | 0.5161 ppm | 0.5167 ppm |
| Recovery Percentage 1 | 100.704 % | 99.343 % | 99.657 % | 99.630 % | 102.416 % | 103.269 % | 103.174 % |
| Concentration RSD | 0.6 % | 1.4 % | 0.3 % | 0.5 % | 0.1 % | 0.2 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5047 ppm | 5.6792 ppm | 0.4956 ppm | 0.4840 ppm | 0.5000 ppm | 0.5258 ppm | 0.4893 ppm |
| Concentration per Run 1 | 0.5055 ppm | 5.6840 ppm | 0.4971 ppm | 0.4792 ppm | 0.4986 ppm | 0.5263 ppm | 0.4882 ppm |
| Concentration per Run 2 | 0.5044 ppm | 5.6607 ppm | 0.4959 ppm | 0.4852 ppm | 0.5005 ppm | 0.5250 ppm | 0.4892 ppm |
| Concentration per Run 3 | 0.5041 ppm | 5.6928 ppm | 0.4937 ppm | 0.4876 ppm | 0.5009 ppm | 0.5259 ppm | 0.4906 ppm |
| Recovery Percentage 1 | 100.934 % | 108.174 % | 99.115 % | 96.800 % | 100.001 % | 105.151 % | 97.863 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.9 % | 0.2 % | 0.1 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5072 ppm | 99.8712 % | 99.8807 % | 100.1249 % | 100.1784 % | 97.7141 % | 100.2405 % |
| Concentration per Run 1 | 0.5074 ppm | 100.8941 % | 99.7915 % | 100.0050 % | 101.5733 % | 97.8933 % | 100.3419 % |
| Concentration per Run 2 | 0.5071 ppm | 99.0434 % | 99.9245 % | 100.3266 % | 99.3101 % | 97.5184 % | 100.2906 % |
| Concentration per Run 3 | 0.5072 ppm | 99.6760 % | 99.9259 % | 100.0430 % | 99.6517 % | 97.7306 % | 100.0889 % |
| Recovery Percentage 1 | 101.443 % | | | | | | |
| Concentration RSD | 0.0 % | 0.9 % | 0.1 % | 0.2 % | 1.2 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICB
Analysis started at: 9/19/2024 6:10:52 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0012 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0013 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0039 ppm | 0.0002 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | -0.0009 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0016 ppm | -0.0003 ppm | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0019 ppm |
| Recovery Percentage 1 | -2.759 % | 1.199 % | 0.722 % | -0.306 % | -0.165 % | 0.041 % | -0.386 % |
| Concentration RSD | 52.1 % | 228.4 % | 753.4 % | 219.4 % | 377.3 % | 189.9 % | 478.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0002 ppm | -0.0006 ppm | -0.0120 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | -0.0006 ppm | -0.0255 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0013 ppm | -0.0116 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0010 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 0.581 % | 0.997 % | -1.147 % | 1.680 % | -1.267 % | -0.481 % | 2.460 % |
| Concentration RSD | 89.7 % | 61.1 % | 112.2 % | 86.2 % | 100.2 % | 110.0 % | 90.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0002 ppm | 0.0002 ppm | 0.0021 ppm | -0.0004 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm | -0.0002 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0025 ppm | -0.0003 ppm | 0.0004 ppm | 0.0002 ppm | -0.0003 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0002 ppm | 0.0001 ppm | 0.0044 ppm | -0.0006 ppm | 0.0000 ppm | 0.0010 ppm |
| Recovery Percentage 1 | -0.846 % | -1.705 % | 0.413 % | 0.103 % | -1.466 % | -1.776 % | 0.178 % |
| Concentration RSD | 177.4 % | 84.3 % | 75.0 % | 104.4 % | 65.4 % | 191.7 % | 987.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0002 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0011 ppm | 0.0004 ppm | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.0006 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0016 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 11.508 % | -0.039 % | 0.476 % | -0.020 % | 0.146 % | 1.018 % | 0.199 % |
| Concentration RSD | 127.8 % | 425.2 % | 92.8 % | 2,734.8 % | 1,449.5 % | 209.6 % | 97.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 100.6139 % | 99.5482 % | 99.6686 % | 99.9083 % | 99.4513 % | 99.1517 % |
| Concentration per Run 1 | 0.0001 ppm | 100.3557 % | 99.9226 % | 100.1103 % | 100.4979 % | 99.9696 % | 99.1933 % |
| Concentration per Run 2 | 0.0001 ppm | 100.6715 % | 99.2574 % | 99.5202 % | 99.3375 % | 99.0786 % | 99.2127 % |
| Concentration per Run 3 | 0.0000 ppm | 100.8146 % | 99.4646 % | 99.3754 % | 99.8894 % | 99.3056 % | 99.0490 % |
| Recovery Percentage 1 | 1.441 % | | | | | | |
| Concentration RSD | 82.6 % | 0.2 % | 0.3 % | 0.4 % | 0.6 % | 0.5 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LLOQ
Analysis started at: 9/19/2024 6:17:18 PM
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 0.1071 ppm | 0.0051 ppm | 0.0322 ppm | 0.0102 ppm | 0.0051 ppm | 0.1098 ppm |
| Concentration per Run 1 | 0.0050 ppm | 0.1084 ppm | 0.0040 ppm | 0.0324 ppm | 0.0101 ppm | 0.0050 ppm | 0.1070 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.1102 ppm | 0.0056 ppm | 0.0323 ppm | 0.0103 ppm | 0.0051 ppm | 0.1111 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.1027 ppm | 0.0056 ppm | 0.0319 ppm | 0.0103 ppm | 0.0052 ppm | 0.1114 ppm |
| Recovery Percentage 1 | 101.431 % | 107.088 % | 101.339 % | 107.459 % | 102.113 % | 101.703 % | 109.820 % |
| Concentration RSD | 4.9 % | 3.7 % | 18.5 % | 0.8 % | 1.4 % | 2.2 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0212 ppm | 0.0096 ppm | 0.0106 ppm | **0.0643 ppm** | 2.6340 ppm | 0.0109 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0213 ppm | 0.0096 ppm | 0.0106 ppm | 0.0659 ppm | 2.5692 ppm | 0.0103 ppm |
| Concentration per Run 2 | 0.0043 ppm | 0.0214 ppm | 0.0095 ppm | 0.0105 ppm | 0.0644 ppm | 2.6726 ppm | 0.0112 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.0209 ppm | 0.0097 ppm | 0.0106 ppm | 0.0625 ppm | 2.6603 ppm | 0.0111 ppm |
| Recovery Percentage 1 | 104.835 % | 105.974 % | 96.195 % | 105.803 % | 128.518 % | 105.362 % | 108.919 % |
| Concentration RSD | 1.8 % | 1.3 % | 0.8 % | 0.6 % | **2.7 %** | 2.1 % | 4.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1052 ppm | 0.0109 ppm | 0.0522 ppm | 2.0662 ppm | 0.0203 ppm | 0.0109 ppm | 0.0537 ppm |
| Concentration per Run 1 | 0.1052 ppm | 0.0108 ppm | 0.0524 ppm | 2.0238 ppm | 0.0203 ppm | 0.0110 ppm | 0.0539 ppm |
| Concentration per Run 2 | 0.1053 ppm | 0.0109 ppm | 0.0523 ppm | 2.0926 ppm | 0.0204 ppm | 0.0109 ppm | 0.0544 ppm |
| Concentration per Run 3 | 0.1053 ppm | 0.0111 ppm | 0.0520 ppm | 2.0822 ppm | 0.0203 ppm | 0.0106 ppm | 0.0526 ppm |
| Recovery Percentage 1 | 105.247 % | 109.256 % | 104.466 % | 103.310 % | 101.674 % | 108.658 % | 107.311 % |
| Concentration RSD | 0.0 % | 1.1 % | 0.5 % | 1.8 % | 0.1 % | 1.9 % | 1.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 0.5740 ppm | 0.0521 ppm | 0.0100 ppm | 0.0527 ppm | **0.0223 ppm** | 0.0105 ppm |
| Concentration per Run 1 | 0.0096 ppm | 0.5779 ppm | 0.0524 ppm | 0.0098 ppm | 0.0524 ppm | 0.0224 ppm | 0.0106 ppm |
| Concentration per Run 2 | 0.0110 ppm | 0.5754 ppm | 0.0521 ppm | 0.0102 ppm | 0.0531 ppm | 0.0214 ppm | 0.0105 ppm |
| Concentration per Run 3 | 0.0110 ppm | 0.5688 ppm | 0.0518 ppm | 0.0102 ppm | 0.0526 ppm | 0.0232 ppm | 0.0104 ppm |
| Recovery Percentage 1 | 105.153 % | 114.808 % | 104.236 % | 100.320 % | 105.358 % | 111.595 % | 104.758 % |
| Concentration RSD | 7.8 % | 0.8 % | 0.6 % | 2.4 % | 0.7 % | 3.9 % | 0.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | **0.0072 ppm** | 100.2168 % | 99.1110 % | 99.0715 % | 101.1532 % | 97.2305 % | 98.7499 % |
| Concentration per Run 1 | 0.0073 ppm | 100.2901 % | 99.1288 % | 98.6914 % | 103.1842 % | 96.9199 % | 98.9622 % |
| Concentration per Run 2 | 0.0072 ppm | 100.6491 % | 98.8369 % | 98.6790 % | 100.8266 % | 96.9284 % | 98.2641 % |
| Concentration per Run 3 | 0.0072 ppm | 99.7112 % | 99.3673 % | 99.8439 % | 99.4489 % | 97.8433 % | 99.0232 % |
| Recovery Percentage 1 | 144.666 % | | | | | | |
| Concentration RSD | **1.0 %** | 0.5 % | 0.3 % | 0.7 % | 1.9 % | 0.5 % | 0.4 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: ICSA
Analysis started at: 9/19/2024 6:32:27 PM
Comments <Comment>
Rack: 0
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 513.7559 [SIC 500] | -0.0001 ppm | -0.0121 ppm | 0.0005 ppm | -0.0005 ppm | 557.5856 [SIC 1000] |
| Concentration per Run 1 | 0.0010 ppm | 513.6456 ppm | 0.0036 ppm | -0.0124 ppm | 0.0005 ppm | -0.0005 ppm | 563.8838 ppm |
| Concentration per Run 2 | 0.0007 ppm | 516.3981 ppm | -0.0015 ppm | -0.0115 ppm | 0.0005 ppm | -0.0005 ppm | 559.7792 ppm |
| Concentration per Run 3 | 0.0011 ppm | 511.2241 ppm | -0.0023 ppm | -0.0126 ppm | 0.0005 ppm | -0.0005 ppm | 549.0939 ppm |
| Recovery Percentage 1 | 13.295 % | 513,755.938 % | -1.344 % | -40.497 % | 4.900 % | -9.355 % | 557,585.643 % |
| Concentration RSD | 21.9 % | 0.5 % | 4,762.6 % | 4.6 % | 6.5 % | 4.5 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0011 ppm | 0.0014 ppm | 0.0001 ppm | 182.8364 ppm | -0.0312 ppm | -0.0096 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0012 ppm | 0.0012 ppm | 0.0001 ppm | 181.4142 ppm | -0.0488 ppm | -0.0093 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0011 ppm | 0.0012 ppm | 0.0003 ppm | 185.7278 ppm | -0.0293 ppm | -0.0100 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0010 ppm | 0.0017 ppm | -0.0002 ppm | 181.3671 ppm | -0.0155 ppm | -0.0094 ppm |
| Recovery Percentage 1 | 1.852 % | 5.441 % | 13.671 % | 0.740 % | 365,672.709 % | -1.249 % | -95.579 % |
| Concentration RSD | 149.9 % | 9.1 % | 22.8 % | 337.0 % | 1.4 % | 53.6 % | 3.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 471.3814 ppm | 0.0017 ppm | -0.0011 ppm | 0.0244 ppm | 0.0069 ppm | 0.0076 ppm | -0.0126 ppm |
| Concentration per Run 1 | 473.6367 ppm | 0.0018 ppm | -0.0011 ppm | 0.0234 ppm | 0.0068 ppm | 0.0068 ppm | -0.0153 ppm |
| Concentration per Run 2 | 469.9518 ppm | 0.0019 ppm | -0.0008 ppm | 0.0260 ppm | 0.0076 ppm | 0.0084 ppm | -0.0116 ppm |
| Concentration per Run 3 | 470.5557 ppm | 0.0015 ppm | -0.0012 ppm | 0.0240 ppm | 0.0062 ppm | 0.0077 ppm | -0.0110 ppm |
| Recovery Percentage 1 | 471,381.403 % | 17.231 % | -2.111 % | 1.222 % | 27.435 % | 76.101 % | -25.272 % |
| Concentration RSD | 0.4 % | 10.3 % | 19.5 % | 5.6 % | 10.3 % | 10.4 % | 18.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0016 ppm | -0.0017 ppm | 0.0025 ppm | -0.0004 ppm | -0.0043 ppm | -0.0004 ppm | -0.0024 ppm |
| Concentration per Run 1 | -0.0007 ppm | -0.0015 ppm | 0.0024 ppm | -0.0005 ppm | -0.0044 ppm | -0.0016 ppm | -0.0023 ppm |
| Concentration per Run 2 | -0.0024 ppm | -0.0010 ppm | 0.0024 ppm | -0.0003 ppm | -0.0040 ppm | 0.0006 ppm | -0.0024 ppm |
| Concentration per Run 3 | -0.0017 ppm | -0.0024 ppm | 0.0025 ppm | -0.0003 ppm | -0.0044 ppm | -0.0001 ppm | -0.0026 ppm |
| Recovery Percentage 1 | -15.999 % | -0.334 % | 4.930 % | -3.672 % | -42.572 % | -1.830 % | -24.473 % |
| Concentration RSD | 53.8 % | 42.2 % | 1.5 % | 23.0 % | 5.3 % | 300.8 % | 6.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0084 ppm | 93.9754 % | 85.5341 % | 87.0716 % | 93.7206 % | 66.9058 % | 85.2393 % |
| Concentration per Run 1 | -0.0083 ppm | 93.9533 % | 85.3456 % | 87.2315 % | 94.0601 % | 67.0137 % | 85.0798 % |
| Concentration per Run 2 | -0.0085 ppm | 94.0222 % | 85.6296 % | 87.2053 % | 93.3465 % | 66.9229 % | 85.4572 % |
| Concentration per Run 3 | -0.0084 ppm | 93.9508 % | 85.6271 % | 86.7780 % | 93.7551 % | 66.7809 % | 85.1808 % |
| Recovery Percentage 1 | -167.766 % | | | | | | |
| Concentration RSD | 0.8 % | 0.0 % | 0.2 % | 0.3 % | 0.4 % | 0.2 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LDR Check
Analysis started at: 9/19/2024 7:04:43 PM
Comments <Comment>
Rack: 0
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.1615 ppm | 20.6632 ppm | 23.5254 [SIC 20] | 18.9345 ppm | 5.0343 ppm | 0.0413 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.1588 ppm | 24.1831 ppm | 27.7237 ppm | 19.0795 ppm | 4.9860 ppm | 0.0412 ppm |
| Concentration per Run 2 | 0.0032 ppm | 0.1644 ppm | 24.0324 ppm | 27.4347 ppm | 18.9396 ppm | 5.0669 ppm | 0.0397 ppm |
| Concentration per Run 3 | 0.0031 ppm | 0.1612 ppm | 13.7741 ppm | 15.4177 ppm | 18.7843 ppm | 5.0501 ppm | 0.0431 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 103.316 % | 117.627 % | 94.672 % | 100.686 % | 0.000 % |
| Concentration RSD | 2.2 % | 1.8 % | 28.9 % | 29.9 % | 0.8 % | 0.8 % | 4.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9128 ppm | 4.8078 ppm | -0.0005 ppm | 20.2864 [SIC 20] | 0.0319 ppm | 494.5532 ppm | 19.1125 ppm |
| Concentration per Run 1 | 5.6509 ppm | 5.5879 ppm | -0.0002 ppm | 20.5346 ppm | 0.0343 ppm | 492.3662 ppm | 19.2572 ppm |
| Concentration per Run 2 | 5.6435 ppm | 5.5631 ppm | -0.0008 ppm | 20.1542 ppm | 0.0302 ppm | 518.2165 ppm | 18.7822 ppm |
| Concentration per Run 3 | 3.4441 ppm | 3.2725 ppm | -0.0006 ppm | 20.1703 ppm | 0.0312 ppm | 473.0769 ppm | 19.2982 ppm |
| Recovery Percentage 1 | 98.256 % | 96.157 % | 0.000 % | 101.432 % | 0.000 % | 98.911 % | 95.563 % |
| Concentration RSD | 25.9 % | 27.7 % | 63.5 % | 1.1 % | 6.8 % | 4.6 % | 1.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.1244 ppm | 0.0004 ppm | 4.9642 ppm | 417.8496 ppm | 9.2291 ppm | 45.0897 ppm | 5.0750 ppm |
| Concentration per Run 1 | -0.1259 ppm | 0.0005 ppm | 5.7786 ppm | 429.8745 ppm | 10.7070 ppm | 52.3077 ppm | 5.9933 ppm |
| Concentration per Run 2 | -0.1224 ppm | 0.0003 ppm | 5.7414 ppm | 417.1455 ppm | 10.6736 ppm | 52.0863 ppm | 5.9145 ppm |
| Concentration per Run 3 | -0.1248 ppm | 0.0004 ppm | 3.3725 ppm | 406.5288 ppm | 6.3066 ppm | 30.8752 ppm | 3.3173 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 99.283 % | 83.570 % | 92.291 % | 90.179 % | 101.501 % |
| Concentration RSD | 1.5 % | 22.1 % | 27.8 % | 2.8 % | 27.4 % | 27.3 % | 30.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8924 ppm | 21.0972 [SIC 50] | 9.0325 ppm | 4.7279 ppm | 0.0033 ppm | 4.1166 ppm | 0.0133 ppm |
| Concentration per Run 1 | 5.7553 ppm | 24.8295 ppm | 10.4755 ppm | 4.7288 ppm | 0.0030 ppm | 4.7924 ppm | 0.0140 ppm |
| Concentration per Run 2 | 5.7068 ppm | 24.5716 ppm | 10.4287 ppm | 4.7390 ppm | 0.0036 ppm | 4.7775 ppm | 0.0144 ppm |
| Concentration per Run 3 | 3.2150 ppm | 13.8905 ppm | 6.1932 ppm | 4.7158 ppm | 0.0032 ppm | 2.7798 ppm | 0.0116 ppm |
| Recovery Percentage 1 | 97.848 % | 105.486 % | 90.325 % | 94.557 % | 0.000 % | 82.331 % | 0.000 % |
| Concentration RSD | 29.7 % | 29.6 % | 27.2 % | 0.2 % | 8.3 % | 28.1 % | 11.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.6349 ppm | 96.1725 % | 88.3209 % | 95.1342 % | 95.5309 % | 95.7422 % | 87.2860 % |
| Concentration per Run 1 | 22.4448 ppm | 95.9410 % | 88.2849 % | 78.4885 % | 95.3157 % | 81.2616 % | 87.0568 % |
| Concentration per Run 2 | 22.4835 ppm | 97.3277 % | 88.4627 % | 78.8490 % | 96.4515 % | 81.6952 % | 87.2957 % |
| Concentration per Run 3 | 13.9766 ppm | 95.2489 % | 88.2152 % | 128.0652 % | 94.8255 % | 124.2699 % | 87.5055 % |
| Recovery Percentage 1 | 98.175 % | | | | | | |
| Concentration RSD | 25.0 % | 1.1 % | 0.1 % | 30.0 % | 0.9 % | 25.8 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: SIC Multi
Analysis started at: 9/20/2024 9:46:22 AM
Comments <Comment>
Rack: 0
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0128 ppm | -0.0017 ppm | 0.0087 ppm | 0.0004 ppm | -0.0009 ppm | 0.0138 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0119 ppm | -0.0007 ppm | 0.0084 ppm | 0.0004 ppm | -0.0009 ppm | 0.0125 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.0141 ppm | -0.0027 ppm | 0.0089 ppm | 0.0004 ppm | -0.0008 ppm | 0.0164 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0124 ppm | -0.0016 ppm | 0.0087 ppm | 0.0004 ppm | -0.0010 ppm | 0.0125 ppm |
| Recovery Percentage 1 | 21.274 % | 12.792 % | -33.258 % | 28.889 % | 4.134 % | -18.435 % | 13.797 % |
| Concentration RSD | 20.3 % | 9.1 % | 60.4 % | 3.0 % | 4.9 % | 9.3 % | 16.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0036 ppm | 20.1560 ppm | -0.0034 ppm | -0.0102 ppm | -0.0269 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0036 ppm | 20.2572 ppm | -0.0033 ppm | -0.0091 ppm | -0.0420 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0010 ppm | -0.0036 ppm | 20.1773 ppm | -0.0035 ppm | -0.0103 ppm | -0.0082 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0035 ppm | 20.0334 ppm | -0.0034 ppm | -0.0111 ppm | -0.0305 ppm | -0.0006 ppm |
| Recovery Percentage 1 | -23.609 % | -17.787 % | 201,559.796 % | -33.898 % | -20.339 % | -1.076 % | -4.500 % |
| Concentration RSD | 4.0 % | 1.2 % | 0.6 % | 3.5 % | 9.7 % | 63.8 % | 67.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0198 ppm | 20.1948 [SIC 30] | -0.0021 ppm | 0.0111 ppm | 0.0010 ppm | 0.0036 ppm | -0.0145 ppm |
| Concentration per Run 1 | -0.0193 ppm | 20.4229 ppm | -0.0021 ppm | 0.0095 ppm | 0.0010 ppm | 0.0038 ppm | -0.0155 ppm |
| Concentration per Run 2 | -0.0205 ppm | 20.0259 ppm | -0.0021 ppm | 0.0124 ppm | 0.0009 ppm | 0.0035 ppm | -0.0134 ppm |
| Concentration per Run 3 | -0.0196 ppm | 20.1356 ppm | -0.0021 ppm | 0.0113 ppm | 0.0012 ppm | 0.0036 ppm | -0.0146 ppm |
| Recovery Percentage 1 | -19.812 % | 201,947.764 % | -4.188 % | 0.553 % | 4.082 % | 36.331 % | -29.064 % |
| Concentration RSD | 3.1 % | 1.0 % | 1.5 % | 13.1 % | 16.2 % | 4.0 % | 7.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.2512 ppm | -0.0024 ppm | 0.0001 ppm | 19.8756 ppm | -0.0302 ppm | 10.1403 [SIC 10] |
| Concentration per Run 1 | 0.0000 ppm | 0.2511 ppm | -0.0021 ppm | 0.0001 ppm | 19.8654 ppm | -0.0310 ppm | 10.1095 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.2521 ppm | -0.0024 ppm | 0.0001 ppm | 19.8866 ppm | -0.0303 ppm | 10.1922 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.2505 ppm | -0.0026 ppm | 0.0001 ppm | 19.8749 ppm | -0.0292 ppm | 10.1193 ppm |
| Recovery Percentage 1 | 5.910 % | 50.246 % | -4.759 % | 1.044 % | 198,756.251 % | -150.937 % | 101,403.378 % |
| Concentration RSD | 251.0 % | 0.3 % | 11.2 % | 16.4 % | 0.1 % | 3.1 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0016 ppm | 95.3024 % | 99.6441 % | 105.0436 % | 96.2763 % | 101.3101 % | 100.0681 % |
| Concentration per Run 1 | -0.0016 ppm | 95.3105 % | 99.7528 % | 105.2828 % | 96.7684 % | 101.3784 % | 100.1128 % |
| Concentration per Run 2 | -0.0015 ppm | 94.6917 % | 99.4877 % | 104.7006 % | 96.1241 % | 101.2132 % | 99.8210 % |
| Concentration per Run 3 | -0.0019 ppm | 95.9051 % | 99.6919 % | 105.1473 % | 95.9363 % | 101.3389 % | 100.2706 % |
| Recovery Percentage 1 | -32.641 % | | | | | | |
| Concentration RSD | 12.9 % | 0.6 % | 0.1 % | 0.3 % | 0.5 % | 0.1 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LLOQ 005 Zn pass
Analysis started at: 9/20/2024 9:54:41 AM
Comments <Comment>
Rack: 1
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | **0.0132 ppm** | 0.0051 ppm | **0.0038 ppm** | 0.0050 ppm | 0.0051 ppm | 0.0145 ppm |
| Concentration per Run 1 | 0.0050 ppm | 0.0146 ppm | 0.0047 ppm | 0.0038 ppm | 0.0049 ppm | 0.0050 ppm | 0.0145 ppm |
| Concentration per Run 2 | 0.0051 ppm | 0.0151 ppm | 0.0051 ppm | 0.0039 ppm | 0.0050 ppm | 0.0050 ppm | 0.0132 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0100 ppm | 0.0056 ppm | 0.0039 ppm | 0.0052 ppm | 0.0051 ppm | 0.0157 ppm |
| Recovery Percentage 1 | 102.297 % | 264.769 % | 102.326 % | 76.855 % | 100.337 % | 101.135 % | 0.000 % |
| Concentration RSD | 1.6 % | **21.1 %** | 9.0 % | **1.1 %** | 2.7 % | 1.5 % | 8.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 0.0052 ppm | 0.0052 ppm | 0.0047 ppm | 0.0052 ppm | 0.0271 ppm | **0.0035 ppm** |
| Concentration per Run 1 | 0.0052 ppm | 0.0051 ppm | 0.0052 ppm | 0.0044 ppm | 0.0054 ppm | 0.0234 ppm | 0.0037 ppm |
| Concentration per Run 2 | 0.0053 ppm | 0.0053 ppm | 0.0053 ppm | 0.0048 ppm | 0.0049 ppm | 0.0299 ppm | 0.0034 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0052 ppm | 0.0051 ppm | 0.0047 ppm | 0.0054 ppm | 0.0281 ppm | 0.0034 ppm |
| Recovery Percentage 1 | 105.254 % | 103.848 % | 104.003 % | 93.118 % | 104.931 % | 0.000 % | 70.166 % |
| Concentration RSD | 0.4 % | 1.2 % | 2.5 % | 4.2 % | 5.4 % | 12.3 % | **5.8 %** |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0078 ppm | 0.0052 ppm | 0.0050 ppm | 0.1029 ppm | 0.0050 ppm | 0.0055 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0092 ppm | 0.0054 ppm | 0.0051 ppm | 0.1031 ppm | 0.0051 ppm | 0.0053 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0071 ppm | 0.0052 ppm | 0.0050 ppm | 0.1012 ppm | 0.0049 ppm | 0.0057 ppm | 0.0061 ppm |
| Concentration per Run 3 | 0.0070 ppm | 0.0051 ppm | 0.0050 ppm | 0.1045 ppm | 0.0048 ppm | 0.0055 ppm | 0.0040 ppm |
| Recovery Percentage 1 | 0.000 % | 104.682 % | 100.853 % | 0.000 % | 99.275 % | 109.486 % | 97.288 % |
| Concentration RSD | 16.0 % | 2.6 % | 1.7 % | 1.6 % | 2.7 % | 3.8 % | 22.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | **0.0572 ppm** | 0.0052 ppm | 0.0048 ppm | 0.0052 ppm | 0.0055 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.0054 ppm | 0.0569 ppm | 0.0054 ppm | 0.0048 ppm | 0.0051 ppm | 0.0054 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0059 ppm | 0.0576 ppm | 0.0053 ppm | 0.0048 ppm | 0.0054 ppm | 0.0060 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0060 ppm | 0.0572 ppm | 0.0049 ppm | 0.0049 ppm | 0.0052 ppm | 0.0050 ppm | 0.0051 ppm |
| Recovery Percentage 1 | 115.546 % | 1,144.513 % | 104.003 % | 96.658 % | 104.411 % | 109.839 % | 102.395 % |
| Concentration RSD | 5.2 % | **0.5 %** | 4.6 % | 1.2 % | 2.5 % | 9.2 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0060 ppm | 96.1095 % | 99.1631 % | 103.7059 % | 97.0617 % | 102.4658 % | 99.4508 % |
| Concentration per Run 1 | 0.0058 ppm | 96.5517 % | 99.0515 % | 103.9138 % | 98.6087 % | 102.3343 % | 99.4066 % |
| Concentration per Run 2 | 0.0060 ppm | 95.9605 % | 99.4954 % | 103.6084 % | 97.1193 % | 102.4436 % | 99.1044 % |
| Concentration per Run 3 | 0.0061 ppm | 95.8163 % | 98.9423 % | 103.5956 % | 95.4570 % | 102.6195 % | 99.8413 % |
| Recovery Percentage 1 | 119.245 % | | | | | | |
| Concentration RSD | 2.5 % | 0.4 % | 0.3 % | 0.2 % | 1.6 % | 0.1 % | 0.4 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LLOQ 05 Fe pass
Analysis started at: 9/20/2024 10:01:03 AM
Comments <Comment>
Rack: 1
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 0.0519 ppm | 0.0473 ppm | 0.0462 ppm | 0.0475 ppm | 0.0486 ppm | 0.0567 ppm |
| Concentration per Run 1 | 0.0494 ppm | 0.0538 ppm | 0.0473 ppm | 0.0464 ppm | 0.0463 ppm | 0.0474 ppm | 0.0573 ppm |
| Concentration per Run 2 | 0.0493 ppm | 0.0503 ppm | 0.0465 ppm | 0.0463 ppm | 0.0480 ppm | 0.0489 ppm | 0.0557 ppm |
| Concentration per Run 3 | 0.0492 ppm | 0.0517 ppm | 0.0481 ppm | 0.0460 ppm | 0.0482 ppm | 0.0494 ppm | 0.0572 ppm |
| Recovery Percentage 1 | 0.000 % | 103.815 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 113.461 % |
| Concentration RSD | 0.3 % | 3.4 % | 1.7 % | 0.5 % | 2.2 % | 2.1 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0496 ppm | 0.0500 ppm | 0.0497 ppm | 0.0464 ppm | 0.0494 ppm | **0.4928 ppm** | 0.0464 ppm |
| Concentration per Run 1 | 0.0498 ppm | 0.0502 ppm | 0.0500 ppm | 0.0463 ppm | 0.0485 ppm | 0.4869 ppm | 0.0453 ppm |
| Concentration per Run 2 | 0.0495 ppm | 0.0498 ppm | 0.0495 ppm | 0.0462 ppm | 0.0496 ppm | 0.4820 ppm | 0.0463 ppm |
| Concentration per Run 3 | 0.0496 ppm | 0.0499 ppm | 0.0496 ppm | 0.0465 ppm | 0.0503 ppm | 0.5095 ppm | 0.0477 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 98.884 % | 19.712 % | 0.000 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.5 % | 0.3 % | 1.8 % | **3.0 %** | 2.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0515 ppm | 0.0485 ppm | 0.0474 ppm | 0.9681 ppm | 0.0504 ppm | 0.0514 ppm | 0.0489 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.0476 ppm | 0.0476 ppm | 0.9475 ppm | 0.0507 ppm | 0.0515 ppm | 0.0496 ppm |
| Concentration per Run 2 | 0.0513 ppm | 0.0486 ppm | 0.0473 ppm | 0.9731 ppm | 0.0502 ppm | 0.0517 ppm | 0.0490 ppm |
| Concentration per Run 3 | 0.0514 ppm | 0.0494 ppm | 0.0474 ppm | 0.9837 ppm | 0.0502 ppm | 0.0508 ppm | 0.0481 ppm |
| Recovery Percentage 1 | 103.078 % | 0.000 % | 0.000 % | 96.812 % | 0.000 % | 0.000 % | 97.801 % |
| Concentration RSD | 0.7 % | 1.9 % | 0.3 % | 1.9 % | 0.6 % | 0.9 % | 1.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0505 ppm | 0.5412 ppm | 0.0483 ppm | 0.0463 ppm | 0.0490 ppm | **0.0515 ppm** | 0.0481 ppm |
| Concentration per Run 1 | 0.0504 ppm | 0.5424 ppm | 0.0480 ppm | 0.0453 ppm | 0.0492 ppm | 0.0520 ppm | 0.0483 ppm |
| Concentration per Run 2 | 0.0514 ppm | 0.5417 ppm | 0.0486 ppm | 0.0467 ppm | 0.0488 ppm | 0.0513 ppm | 0.0477 ppm |
| Concentration per Run 3 | 0.0497 ppm | 0.5394 ppm | 0.0482 ppm | 0.0469 ppm | 0.0489 ppm | 0.0512 ppm | 0.0483 ppm |
| Recovery Percentage 1 | 0.000 % | 108.232 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.7 % | 0.3 % | 0.6 % | 1.9 % | 0.4 % | 0.8 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 97.3334 % | 100.8281 % | 105.1949 % | 98.8200 % | 104.1255 % | 101.1476 % |
| Concentration per Run 1 | 0.0513 ppm | 96.9512 % | 100.9083 % | 105.1960 % | 100.5181 % | 104.2715 % | 101.1236 % |
| Concentration per Run 2 | 0.0510 ppm | 98.2033 % | 100.9835 % | 105.2277 % | 98.8033 % | 104.1589 % | 101.4087 % |
| Concentration per Run 3 | 0.0509 ppm | 96.8459 % | 100.5925 % | 105.1609 % | 97.1385 % | 103.9460 % | 100.9104 % |
| Recovery Percentage 1 | 102.068 % | | | | | | |
| Concentration RSD | 0.4 % | 0.8 % | 0.2 % | 0.0 % | 1.7 % | 0.2 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LDR 500 Ca pass
Analysis started at: 9/20/2024 10:07:17 AM
Comments <Comment>
Rack: 1
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0171 ppm | -0.0016 ppm | 0.0006 ppm | 0.0005 ppm | -0.0004 ppm | 521.0936 [SIC 1000] |
| Concentration per Run 1 | 0.0003 ppm | 0.0212 ppm | -0.0011 ppm | 0.0007 ppm | 0.0004 ppm | -0.0005 ppm | 515.3977 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0158 ppm | -0.0010 ppm | 0.0005 ppm | 0.0006 ppm | -0.0004 ppm | 523.9844 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0142 ppm | -0.0029 ppm | 0.0006 ppm | 0.0005 ppm | -0.0004 ppm | 523.8988 ppm |
| Concentration RSD | 106.3 % | 21.6 % | 66.5 % | 15.2 % | 25.3 % | 4.7 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0003 ppm | 0.0002 ppm | 0.0005 ppm | 0.0003 ppm | -0.0094 ppm | -0.0054 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0001 ppm | 0.0003 ppm | 0.0006 ppm | 0.0003 ppm | 0.0041 ppm | -0.0053 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.0003 ppm | 0.0003 ppm | 0.0006 ppm | -0.0005 ppm | -0.0095 ppm | -0.0052 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0010 ppm | -0.0228 ppm | -0.0059 ppm |
| Concentration RSD | 3.5 % | 35.3 % | 56.5 % | 21.4 % | 260.6 % | 142.4 % | 7.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0111 ppm | -0.0007 ppm | 0.0120 ppm | 0.0077 ppm |
| Concentration per Run 1 | -0.0018 ppm | 0.0001 ppm | 0.0004 ppm | 0.0115 ppm | -0.0006 ppm | 0.0124 ppm | 0.0080 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.0003 ppm | 0.0002 ppm | 0.0077 ppm | -0.0009 ppm | 0.0114 ppm | 0.0078 ppm |
| Concentration per Run 3 | -0.0011 ppm | 0.0002 ppm | 0.0001 ppm | 0.0140 ppm | -0.0007 ppm | 0.0122 ppm | 0.0073 ppm |
| Concentration RSD | 1,702.0 % | 54.6 % | 65.4 % | 28.5 % | 25.4 % | 4.4 % | 4.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0063 ppm | 0.0002 ppm | -0.0008 ppm | -0.0043 ppm | 0.0005 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0062 ppm | 0.0003 ppm | -0.0007 ppm | -0.0042 ppm | -0.0006 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0066 ppm | 0.0002 ppm | -0.0009 ppm | -0.0043 ppm | 0.0010 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0060 ppm | 0.0002 ppm | -0.0008 ppm | -0.0045 ppm | 0.0011 ppm | 0.0003 ppm |
| Concentration RSD | 16.2 % | 5.3 % | 19.8 % | 10.8 % | 3.5 % | 186.4 % | 24.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | 89.5649 % | 89.0970 % | 91.7062 % | 91.2907 % | 79.1200 % | 89.1513 % |
| Concentration per Run 1 | -0.0037 ppm | 90.0637 % | 88.9475 % | 91.3990 % | 92.7651 % | 78.7803 % | 89.2500 % |
| Concentration per Run 2 | -0.0036 ppm | 89.0242 % | 88.9599 % | 91.7110 % | 90.4530 % | 79.0638 % | 89.1203 % |
| Concentration per Run 3 | -0.0037 ppm | 89.6070 % | 89.3836 % | 92.0086 % | 90.6541 % | 79.5159 % | 89.0835 % |
| Concentration RSD | 1.7 % | 0.6 % | 0.3 % | 0.3 % | 1.4 % | 0.5 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LDR 500 Na pass
Analysis started at: 9/20/2024 10:13:46 AM
Comments <Comment>
Rack: 1
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0070 ppm | 0.0003 ppm | -0.0007 ppm | 0.0001 ppm | 0.0000 ppm | 0.0149 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0049 ppm | -0.0009 ppm | -0.0011 ppm | 0.0001 ppm | 0.0000 ppm | 0.0151 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0065 ppm | 0.0010 ppm | -0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0157 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0096 ppm | 0.0008 ppm | -0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0140 ppm |
| Concentration RSD | 132.1 % | 34.1 % | 337.2 % | 51.0 % | 48.7 % | 168.8 % | 5.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm | 0.0004 ppm | 0.0006 ppm | 0.0118 ppm | -0.0128 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm | 0.0005 ppm | 0.0003 ppm | -0.0023 ppm | -0.0137 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0005 ppm | 0.0006 ppm | 0.0120 ppm | -0.0117 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0003 ppm | 0.0002 ppm | 0.0011 ppm | 0.0257 ppm | -0.0130 ppm |
| Concentration RSD | 425.6 % | 43.2 % | 452.4 % | 52.2 % | 65.3 % | 118.6 % | 7.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0000 ppm | 0.0002 ppm | 449.2872 ppm | -0.0008 ppm | 0.0006 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.0000 ppm | 0.0003 ppm | 453.9426 ppm | -0.0007 ppm | 0.0008 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 443.6260 ppm | -0.0010 ppm | 0.0006 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0001 ppm | 0.0002 ppm | 450.2929 ppm | -0.0009 ppm | 0.0005 ppm | 0.0011 ppm |
| Concentration RSD | 39.9 % | 178.1 % | 59.2 % | 1.2 % | 20.0 % | 25.2 % | 6.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0002 ppm | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0003 ppm | -0.0003 ppm | 0.0001 ppm | -0.0003 ppm | -0.0004 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0005 ppm | -0.0006 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration RSD | 1,795.7 % | 287.6 % | 40.8 % | 130.4 % | 235.7 % | 921.5 % | 158.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 94.4967 % | 88.6030 % | 94.3467 % | 96.1917 % | 81.3428 % | 88.7370 % |
| Concentration per Run 1 | 0.0007 ppm | 93.3844 % | 88.6531 % | 94.4859 % | 96.4339 % | 81.5804 % | 88.2842 % |
| Concentration per Run 2 | 0.0008 ppm | 95.4586 % | 88.7402 % | 94.1168 % | 96.6447 % | 81.1486 % | 89.3272 % |
| Concentration per Run 3 | 0.0007 ppm | 94.6471 % | 88.4157 % | 94.4374 % | 95.4966 % | 81.2995 % | 88.5995 % |
| Concentration RSD | 4.0 % | 1.1 % | 0.2 % | 0.2 % | 0.6 % | 0.3 % | 0.6 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LDR 20 B
Analysis started at: 9/20/2024 10:20:18 AM
Comments <Comment>
Rack: 1
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0050 ppm | 0.0020 ppm | 19.8585 [SIC 20] | 0.0001 ppm | 0.0000 ppm | 0.0081 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0043 ppm | 0.0025 ppm | 19.5917 ppm | 0.0000 ppm | 0.0000 ppm | 0.0088 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0054 ppm | 0.0021 ppm | 19.6472 ppm | 0.0001 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0054 ppm | 0.0013 ppm | 20.3365 ppm | 0.0001 ppm | 0.0000 ppm | 0.0065 ppm |
| Concentration RSD | 56.4 % | 13.2 % | 32.3 % | 2.1 % | 16.5 % | 1,924.9 % | 17.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | -0.0002 ppm | -0.0006 ppm | -0.0068 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | -0.0111 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm | -0.0011 ppm | -0.0148 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | -0.0002 ppm | -0.0007 ppm | 0.0056 ppm | 0.0015 ppm |
| Concentration RSD | 79.0 % | 14,133.7 % | 77.7 % | 8.3 % | 98.2 % | 160.8 % | 10.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0000 ppm | 0.0001 ppm | 0.0503 ppm | -0.0003 ppm | 0.0001 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0033 ppm | -0.0001 ppm | 0.0001 ppm | 0.0547 ppm | -0.0002 ppm | -0.0001 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0001 ppm | 0.0002 ppm | 0.0511 ppm | -0.0004 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0001 ppm | 0.0001 ppm | 0.0453 ppm | -0.0004 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration RSD | 90.0 % | 745.2 % | 51.9 % | 9.4 % | 30.5 % | 143.1 % | 65.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0011 ppm | 0.0004 ppm | 0.0000 ppm | -0.0003 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0012 ppm | 0.0006 ppm | 0.0000 ppm | -0.0004 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0018 ppm | -0.0014 ppm | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0008 ppm | 0.0006 ppm | 0.0000 ppm | -0.0002 ppm | 0.0013 ppm | 0.0000 ppm |
| Concentration RSD | 41.0 % | 27.6 % | 87.7 % | 239.0 % | 35.9 % | 227.4 % | 226.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 97.9586 % | 101.1072 % | 104.2509 % | 99.2591 % | 103.2114 % | 100.9784 % |
| Concentration per Run 1 | 0.0007 ppm | 98.2224 % | 100.9210 % | 104.9010 % | 100.0711 % | 103.5810 % | 100.5970 % |
| Concentration per Run 2 | 0.0004 ppm | 98.2550 % | 100.9225 % | 105.4041 % | 99.3447 % | 104.3208 % | 100.8054 % |
| Concentration per Run 3 | 0.0005 ppm | 97.3985 % | 101.4781 % | 102.4475 % | 98.3614 % | 101.7323 % | 101.5328 % |
| Concentration RSD | 30.4 % | 0.5 % | 0.3 % | 1.5 % | 0.9 % | 1.3 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 10:28:06 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5149 ppm | 0.5063 ppm | 0.5029 ppm | 0.5194 ppm | 0.4943 ppm | 0.5104 ppm | 0.5109 ppm |
| Concentration per Run 1 | 0.5144 ppm | 0.4954 ppm | 0.5025 ppm | 0.5199 ppm | 0.4849 ppm | 0.5003 ppm | 0.5038 ppm |
| Concentration per Run 2 | 0.5147 ppm | 0.5156 ppm | 0.5018 ppm | 0.5175 ppm | 0.5012 ppm | 0.5172 ppm | 0.5125 ppm |
| Concentration per Run 3 | 0.5157 ppm | 0.5077 ppm | 0.5045 ppm | 0.5208 ppm | 0.4968 ppm | 0.5137 ppm | 0.5164 ppm |
| Recovery Percentage 1 | 102.988 % | 101.252 % | 100.589 % | 103.878 % | 98.862 % | 102.075 % | 102.176 % |
| Concentration RSD | 0.1 % | 2.0 % | 0.3 % | 0.3 % | 1.7 % | 1.7 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5176 ppm | 0.5186 ppm | 0.5132 ppm | 0.4830 ppm | 0.5075 ppm | 5.1976 ppm | 0.4852 ppm |
| Concentration per Run 1 | 0.5167 ppm | 0.5176 ppm | 0.5156 ppm | 0.4814 ppm | 0.4957 ppm | 5.1102 ppm | 0.4756 ppm |
| Concentration per Run 2 | 0.5172 ppm | 0.5178 ppm | 0.5130 ppm | 0.4846 ppm | 0.5177 ppm | 5.2572 ppm | 0.4925 ppm |
| Concentration per Run 3 | 0.5189 ppm | 0.5204 ppm | 0.5109 ppm | 0.4830 ppm | 0.5091 ppm | 5.2255 ppm | 0.4876 ppm |
| Recovery Percentage 1 | 103.518 % | 103.716 % | 102.632 % | 96.604 % | 101.495 % | 103.952 % | 97.047 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.5 % | 0.3 % | 2.2 % | 1.5 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5180 ppm | 0.5020 ppm | 0.4977 ppm | 9.8550 ppm | 0.5189 ppm | 0.5224 ppm | 0.5091 ppm |
| Concentration per Run 1 | 0.5235 ppm | 0.4901 ppm | 0.4963 ppm | 9.6845 ppm | 0.5192 ppm | 0.5217 ppm | 0.5084 ppm |
| Concentration per Run 2 | 0.5142 ppm | 0.5073 ppm | 0.4967 ppm | 9.9997 ppm | 0.5175 ppm | 0.5223 ppm | 0.5077 ppm |
| Concentration per Run 3 | 0.5163 ppm | 0.5085 ppm | 0.5000 ppm | 9.8808 ppm | 0.5199 ppm | 0.5232 ppm | 0.5111 ppm |
| Recovery Percentage 1 | 103.601 % | 100.395 % | 99.533 % | 98.550 % | 103.773 % | 104.481 % | 101.812 % |
| Concentration RSD | 0.9 % | 2.1 % | 0.4 % | 1.6 % | 0.2 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5138 ppm | 5.5870 ppm | 0.4918 ppm | 0.4692 ppm | 0.5127 ppm | 0.5257 ppm | 0.5036 ppm |
| Concentration per Run 1 | 0.5129 ppm | 5.5771 ppm | 0.4900 ppm | 0.4602 ppm | 0.5135 ppm | 0.5234 ppm | 0.5050 ppm |
| Concentration per Run 2 | 0.5141 ppm | 5.5749 ppm | 0.4910 ppm | 0.4757 ppm | 0.5143 ppm | 0.5250 ppm | 0.5043 ppm |
| Concentration per Run 3 | 0.5144 ppm | 5.6088 ppm | 0.4943 ppm | 0.4716 ppm | 0.5105 ppm | 0.5287 ppm | 0.5014 ppm |
| Recovery Percentage 1 | 102.760 % | 106.418 % | 98.351 % | 93.834 % | 102.547 % | 105.146 % | 100.714 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.5 % | 1.7 % | 0.4 % | 0.5 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5300 ppm | 95.4193 % | 97.7732 % | 101.5233 % | 96.0964 % | 98.9896 % | 97.6594 % |
| Concentration per Run 1 | 0.5292 ppm | 96.8239 % | 97.5811 % | 101.5984 % | 98.9693 % | 98.7663 % | 97.4378 % |
| Concentration per Run 2 | 0.5291 ppm | 94.8164 % | 98.0945 % | 101.7081 % | 94.5062 % | 99.2851 % | 97.6700 % |
| Concentration per Run 3 | 0.5316 ppm | 94.6175 % | 97.6441 % | 101.2635 % | 94.8138 % | 98.9174 % | 97.8703 % |
| Recovery Percentage 1 | 105.998 % | | | | | | |
| Concentration RSD | 0.3 % | 1.3 % | 0.3 % | 0.2 % | 2.6 % | 0.3 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 10:34:09 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0111 ppm | 0.0002 ppm | 0.0096 ppm | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0136 ppm | 0.0009 ppm | 0.0103 ppm | 0.0001 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0102 ppm | -0.0004 ppm | 0.0093 ppm | 0.0000 ppm | 0.0000 ppm | -0.0023 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0094 ppm | 0.0002 ppm | 0.0092 ppm | 0.0000 ppm | 0.0000 ppm | 0.0020 ppm |
| Recovery Percentage 1 | -3.993 % | 11.065 % | 4.581 % | 31.946 % | 0.193 % | -0.345 % | 0.479 % |
| Concentration RSD | 99.4 % | 19.9 % | 270.9 % | 6.2 % | 230.4 % | 129.4 % | 503.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0018 ppm | -0.0127 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0012 ppm | -0.0186 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0026 ppm | -0.0017 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | 0.0017 ppm | -0.0179 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 0.303 % | 0.119 % | -0.038 % | -0.473 % | 3.664 % | -0.509 % | 8.920 % |
| Concentration RSD | 160.9 % | 252.3 % | 7,937.6 % | 110.5 % | 37.8 % | 75.3 % | 38.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0001 ppm | 0.0002 ppm | 0.0086 ppm | -0.0004 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0001 ppm | 0.0002 ppm | 0.0100 ppm | -0.0003 ppm | 0.0005 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0002 ppm | 0.0002 ppm | 0.0064 ppm | -0.0005 ppm | -0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0001 ppm | 0.0002 ppm | 0.0095 ppm | -0.0003 ppm | 0.0006 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.732 % | -0.860 % | 0.342 % | 0.431 % | -1.443 % | 2.963 % | 0.059 % |
| Concentration RSD | 140.5 % | 173.0 % | 10.4 % | 22.7 % | 40.1 % | 155.4 % | 1,972.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0005 ppm | -0.0007 ppm | 0.0005 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0009 ppm | -0.0006 ppm | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 6.677 % | -0.191 % | -0.088 % | 0.013 % | -0.831 % | 0.574 % | -0.016 % |
| Concentration RSD | 44.7 % | 25.3 % | 1,179.9 % | 591.0 % | 178.2 % | 124.0 % | 3,563.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 96.0542 % | 99.3346 % | 102.4357 % | 95.3827 % | 102.0102 % | 98.2049 % |
| Concentration per Run 1 | 0.0005 ppm | 95.6359 % | 99.4893 % | 102.9540 % | 96.8860 % | 102.2344 % | 98.4388 % |
| Concentration per Run 2 | 0.0005 ppm | 96.9169 % | 99.2422 % | 102.2527 % | 95.0460 % | 101.9971 % | 98.0422 % |
| Concentration per Run 3 | 0.0003 ppm | 95.6098 % | 99.2722 % | 102.1003 % | 94.2160 % | 101.7990 % | 98.1337 % |
| Recovery Percentage 1 | 8.985 % | | | | | | |
| Concentration RSD | 27.0 % | 0.8 % | 0.1 % | 0.4 % | 1.4 % | 0.2 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-1 WG1973498
Analysis started at: 9/20/2024 10:40:33 AM
Comments <Comment>
Rack: 1
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0050 ppm | -0.0008 ppm | 0.0058 ppm | 0.0001 ppm | 0.0000 ppm | 0.0133 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0028 ppm | 0.0002 ppm | 0.0062 ppm | 0.0001 ppm | 0.0000 ppm | 0.0131 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0086 ppm | -0.0014 ppm | 0.0058 ppm | 0.0001 ppm | 0.0000 ppm | 0.0162 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0037 ppm | -0.0013 ppm | 0.0054 ppm | 0.0001 ppm | 0.0000 ppm | 0.0107 ppm |
| Recovery Percentage 1 | -3.369 % | 5.024 % | -15.845 % | 19.266 % | 0.873 % | 0.146 % | 13.328 % |
| Concentration RSD | 73.8 % | 62.0 % | 112.0 % | 6.3 % | 23.6 % | 374.1 % | 20.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | 0.0001 ppm | -0.0028 ppm | -0.0269 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | 0.0001 ppm | -0.0030 ppm | -0.0287 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | -0.0006 ppm | 0.0001 ppm | -0.0028 ppm | -0.0106 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | 0.0002 ppm | -0.0025 ppm | -0.0416 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -0.130 % | 0.288 % | -6.646 % | 1.428 % | -5.518 % | -1.078 % | 0.732 % |
| Concentration RSD | 268.8 % | 212.9 % | 11.1 % | 39.7 % | 9.7 % | 57.8 % | 495.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0002 ppm | 0.0001 ppm | 0.0013 ppm | -0.0006 ppm | 0.0002 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0011 ppm | -0.0004 ppm | 0.0002 ppm | 0.0016 ppm | -0.0007 ppm | 0.0006 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm | -0.0017 ppm | -0.0005 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0022 ppm | 0.0000 ppm | -0.0001 ppm | 0.0040 ppm | -0.0006 ppm | 0.0002 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 1.198 % | -1.562 % | 0.104 % | 0.065 % | -2.415 % | 2.026 % | 0.738 % |
| Concentration RSD | 82.1 % | 135.7 % | 291.8 % | 219.6 % | 23.2 % | 214.3 % | 162.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | -0.0012 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0016 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0013 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0015 ppm | -0.0007 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 9.565 % | -0.235 % | -0.697 % | -0.124 % | -0.664 % | 0.833 % | -0.730 % |
| Concentration RSD | 93.0 % | 40.5 % | 82.1 % | 220.6 % | 209.5 % | 123.0 % | 117.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 97.9266 % | 100.3879 % | 103.9107 % | 98.2596 % | 104.4543 % | 100.6922 % |
| Concentration per Run 1 | 0.0003 ppm | 100.9351 % | 99.9630 % | 104.0646 % | 102.6496 % | 104.8248 % | 100.3665 % |
| Concentration per Run 2 | 0.0003 ppm | 96.0714 % | 100.3207 % | 103.8552 % | 95.9633 % | 104.4390 % | 100.8385 % |
| Concentration per Run 3 | 0.0002 ppm | 96.7733 % | 100.8799 % | 103.8124 % | 96.1660 % | 104.0991 % | 100.8716 % |
| Recovery Percentage 1 | 5.346 % | | | | | | |
| Concentration RSD | 29.1 % | 2.7 % | 0.5 % | 0.1 % | 3.9 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-2 WG1973498
Analysis started at: 9/20/2024 10:46:57 AM
Comments <Comment>
Rack: 1
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0524 ppm | 2.0800 ppm | 0.1236 ppm | 1.0216 ppm | 2.0481 ppm | 0.0520 ppm | 10.6441 ppm |
| Concentration per Run 1 | 0.0524 ppm | 2.0548 ppm | 0.1241 ppm | 1.0220 ppm | 1.9876 ppm | 0.0513 ppm | 10.4603 ppm |
| Concentration per Run 2 | 0.0519 ppm | 2.0766 ppm | 0.1229 ppm | 1.0227 ppm | 2.0362 ppm | 0.0518 ppm | 10.6271 ppm |
| Concentration per Run 3 | 0.0528 ppm | 2.1086 ppm | 0.1237 ppm | 1.0202 ppm | 2.1205 ppm | 0.0530 ppm | 10.8450 ppm |
| Concentration RSD | 0.9 % | 1.3 % | 0.5 % | 0.1 % | 3.3 % | 1.7 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0570 ppm | 0.5263 ppm | 0.2112 ppm | 0.2615 ppm | 1.0537 ppm | 10.8174 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0570 ppm | 0.5270 ppm | 0.2103 ppm | 0.2614 ppm | 1.0388 ppm | 10.7360 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0569 ppm | 0.5257 ppm | 0.2112 ppm | 0.2609 ppm | 1.0470 ppm | 10.8810 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0571 ppm | 0.5262 ppm | 0.2120 ppm | 0.2623 ppm | 1.0755 ppm | 10.8353 ppm | 0.0000 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.4 % | 0.3 % | 1.8 % | 0.7 % | 133.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.8693 ppm | 0.5275 ppm | 1.0393 ppm | 10.6056 ppm | 0.5310 ppm | 0.5643 ppm | 0.5225 ppm |
| Concentration per Run 1 | 10.8549 ppm | 0.5194 ppm | 1.0401 ppm | 10.5536 ppm | 0.5324 ppm | 0.5650 ppm | 0.5224 ppm |
| Concentration per Run 2 | 10.8760 ppm | 0.5280 ppm | 1.0383 ppm | 10.5824 ppm | 0.5306 ppm | 0.5637 ppm | 0.5229 ppm |
| Concentration per Run 3 | 10.8771 ppm | 0.5351 ppm | 1.0395 ppm | 10.6808 ppm | 0.5301 ppm | 0.5641 ppm | 0.5221 ppm |
| Concentration RSD | 0.1 % | 1.5 % | 0.1 % | 0.6 % | 0.2 % | 0.1 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1239 ppm | 1.0763 ppm | 1.0442 ppm | 0.9862 ppm | 1.0664 ppm | 0.1261 ppm | 0.5252 ppm |
| Concentration per Run 1 | 0.1227 ppm | 1.0778 ppm | 1.0473 ppm | 0.9755 ppm | 1.0631 ppm | 0.1278 ppm | 0.5239 ppm |
| Concentration per Run 2 | 0.1240 ppm | 1.0758 ppm | 1.0424 ppm | 0.9857 ppm | 1.0658 ppm | 0.1255 ppm | 0.5248 ppm |
| Concentration per Run 3 | 0.1249 ppm | 1.0752 ppm | 1.0428 ppm | 0.9975 ppm | 1.0703 ppm | 0.1251 ppm | 0.5268 ppm |
| Concentration RSD | 0.9 % | 0.1 % | 0.3 % | 1.1 % | 0.3 % | 1.2 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5382 ppm | 96.7262 % | 98.1707 % | 101.1900 % | 98.4748 % | 97.7629 % | 98.1027 % |
| Concentration per Run 1 | 0.5388 ppm | 97.5335 % | 98.3994 % | 101.1862 % | 100.5417 % | 97.8522 % | 98.4534 % |
| Concentration per Run 2 | 0.5366 ppm | 96.5484 % | 97.9692 % | 101.2509 % | 98.4018 % | 97.7531 % | 98.0663 % |
| Concentration per Run 3 | 0.5392 ppm | 96.0968 % | 98.1436 % | 101.1329 % | 96.4808 % | 97.6834 % | 97.7885 % |
| Concentration RSD | 0.3 % | 0.8 % | 0.2 % | 0.1 % | 2.1 % | 0.1 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2452799-01 WG1973498
Analysis started at: 9/20/2024 10:53:10 AM
Comments <Comment>
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0148 ppm | 0.0001 ppm | 0.0047 ppm | 0.0012 ppm | 0.0000 ppm | 0.0474 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0183 ppm | -0.0008 ppm | 0.0049 ppm | 0.0012 ppm | 0.0000 ppm | 0.0467 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0101 ppm | 0.0004 ppm | 0.0045 ppm | 0.0012 ppm | 0.0000 ppm | 0.0466 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0162 ppm | 0.0007 ppm | 0.0046 ppm | 0.0013 ppm | 0.0000 ppm | 0.0488 ppm |
| Concentration RSD | 273.4 % | 28.7 % | 777.1 % | 5.4 % | 3.8 % | 157.2 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | 0.0004 ppm | 0.0153 ppm | -0.0128 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | 0.0004 ppm | 0.0143 ppm | -0.0079 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | 0.0003 ppm | 0.0161 ppm | -0.0084 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | -0.0006 ppm | 0.0004 ppm | 0.0156 ppm | -0.0222 ppm | -0.0013 ppm |
| Concentration RSD | 8,301.0 % | 82.1 % | 31.2 % | 16.0 % | 5.9 % | 63.0 % | 410.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0093 ppm | 0.0002 ppm | 0.0007 ppm | 0.0092 ppm | -0.0005 ppm | 0.0022 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0089 ppm | 0.0002 ppm | 0.0008 ppm | 0.0095 ppm | -0.0005 ppm | 0.0022 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0099 ppm | 0.0002 ppm | 0.0008 ppm | 0.0115 ppm | -0.0005 ppm | 0.0023 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0091 ppm | 0.0000 ppm | 0.0006 ppm | 0.0066 ppm | -0.0004 ppm | 0.0021 ppm | 0.0008 ppm |
| Concentration RSD | 5.4 % | 74.3 % | 11.3 % | 26.9 % | 12.2 % | 4.3 % | 125.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0151 ppm | -0.0002 ppm | 0.0002 ppm | 0.0004 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0153 ppm | -0.0002 ppm | 0.0002 ppm | 0.0005 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0150 ppm | -0.0002 ppm | 0.0002 ppm | 0.0003 ppm | 0.0007 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0149 ppm | -0.0003 ppm | 0.0002 ppm | 0.0004 ppm | -0.0002 ppm | -0.0001 ppm |
| Concentration RSD | 40.0 % | 1.4 % | 33.4 % | 2.9 % | 31.7 % | 826.0 % | 152.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 97.3959 % | 99.9694 % | 102.6581 % | 97.8694 % | 103.3778 % | 99.6587 % |
| Concentration per Run 1 | 0.0029 ppm | 98.8780 % | 99.7889 % | 102.7225 % | 100.2535 % | 103.3836 % | 99.5112 % |
| Concentration per Run 2 | 0.0029 ppm | 97.4023 % | 99.7962 % | 102.7134 % | 97.4752 % | 103.5577 % | 99.6657 % |
| Concentration per Run 3 | 0.0029 ppm | 95.9073 % | 100.3232 % | 102.5385 % | 95.8795 % | 103.1920 % | 99.7992 % |
| Concentration RSD | 1.5 % | 1.5 % | 0.3 % | 0.1 % | 2.3 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2452868-06 WG1973498
Analysis started at: 9/20/2024 10:59:33 AM
Comments <Comment>
Rack: 1
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0059 ppm | 0.0003 ppm | 0.0033 ppm | 0.0001 ppm | 0.0000 ppm | 0.0121 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0065 ppm | 0.0009 ppm | 0.0037 ppm | 0.0001 ppm | 0.0000 ppm | 0.0156 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0046 ppm | -0.0002 ppm | 0.0030 ppm | 0.0000 ppm | 0.0000 ppm | 0.0091 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0064 ppm | 0.0002 ppm | 0.0032 ppm | 0.0002 ppm | 0.0000 ppm | 0.0117 ppm |
| Concentration RSD | 321.1 % | 18.1 % | 187.8 % | 10.9 % | 72.3 % | 165.6 % | 26.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm | 0.0000 ppm | -0.0010 ppm | -0.0368 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0000 ppm | -0.0001 ppm | -0.0384 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0002 ppm | -0.0009 ppm | -0.0434 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | -0.0006 ppm | -0.0001 ppm | -0.0019 ppm | -0.0285 ppm | -0.0005 ppm |
| Concentration RSD | 85.5 % | 183.2 % | 18.0 % | 313.1 % | 92.2 % | 20.5 % | 33.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | -0.0003 ppm | 0.0002 ppm | 0.0045 ppm | -0.0006 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0041 ppm | -0.0003 ppm | 0.0003 ppm | 0.0072 ppm | -0.0008 ppm | -0.0002 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0003 ppm | 0.0002 ppm | 0.0023 ppm | -0.0006 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0013 ppm | -0.0002 ppm | 0.0002 ppm | 0.0040 ppm | -0.0005 ppm | -0.0001 ppm | 0.0005 ppm |
| Concentration RSD | 79.5 % | 16.7 % | 27.3 % | 55.7 % | 24.3 % | 443.9 % | 315.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0038 ppm | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0040 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0035 ppm | -0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0039 ppm | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | -0.0001 ppm |
| Concentration RSD | 79.7 % | 6.1 % | 138.3 % | 29.9 % | 106.9 % | 2.3 % | 131.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 97.5011 % | 100.1973 % | 103.1828 % | 97.6531 % | 103.6189 % | 100.1653 % |
| Concentration per Run 1 | 0.0004 ppm | 96.8884 % | 100.4415 % | 103.2260 % | 97.3423 % | 104.0994 % | 100.2735 % |
| Concentration per Run 2 | 0.0003 ppm | 99.1440 % | 99.9858 % | 103.3351 % | 99.3214 % | 103.4816 % | 100.1220 % |
| Concentration per Run 3 | 0.0003 ppm | 96.4709 % | 100.1646 % | 102.9872 % | 96.2956 % | 103.2756 % | 100.1005 % |
| Concentration RSD | 2.5 % | 1.5 % | 0.2 % | 0.2 % | 1.6 % | 0.4 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453058-01 WG1973498
Analysis started at: 9/20/2024 11:05:57 AM
Comments <Comment>
Rack: 1
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0026 ppm | -0.0004 ppm | 0.0131 ppm | 0.0217 ppm | 0.0000 ppm | 18.1610 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0052 ppm | 0.0001 ppm | 0.0131 ppm | 0.0212 ppm | 0.0000 ppm | 17.6413 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0024 ppm | -0.0009 ppm | 0.0130 ppm | 0.0221 ppm | 0.0000 ppm | 18.4389 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm | 0.0130 ppm | 0.0219 ppm | 0.0000 ppm | 18.4028 ppm |
| Concentration RSD | 202.9 % | 97.7 % | 124.3 % | 0.4 % | 2.1 % | 49.2 % | 2.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0002 ppm | 0.0008 ppm | 0.0826 ppm | 1.7127 ppm | -0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0009 ppm | 0.0802 ppm | 1.6728 ppm | -0.0014 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0006 ppm | 0.0846 ppm | 1.7686 ppm | -0.0012 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0009 ppm | 0.0831 ppm | 1.6965 ppm | -0.0008 ppm |
| Concentration RSD | 19.4 % | 17.8 % | 143.9 % | 21.7 % | 2.7 % | 2.9 % | 28.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2615 ppm | 0.0562 ppm | 0.0003 ppm | 2.3710 ppm | -0.0005 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | 3.2626 ppm | 0.0541 ppm | 0.0002 ppm | 2.3222 ppm | -0.0003 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 2 | 3.2655 ppm | 0.0572 ppm | 0.0004 ppm | 2.3988 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 3 | 3.2563 ppm | 0.0572 ppm | 0.0002 ppm | 2.3921 ppm | -0.0007 ppm | -0.0003 ppm | 0.0005 ppm |
| Concentration RSD | 0.1 % | 3.2 % | 48.1 % | 1.8 % | 38.1 % | 900.3 % | 60.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 4.4514 ppm | -0.0003 ppm | 0.0530 ppm | -0.0002 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0020 ppm | 4.4480 ppm | -0.0001 ppm | 0.0517 ppm | -0.0001 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0001 ppm | 4.4740 ppm | -0.0001 ppm | 0.0536 ppm | -0.0003 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0019 ppm | 4.4323 ppm | -0.0008 ppm | 0.0536 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration RSD | 78.6 % | 0.5 % | 120.0 % | 2.1 % | 45.4 % | 687.6 % | 17.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 98.2435 % | 98.8773 % | 101.8911 % | 98.2034 % | 99.9015 % | 98.1620 % |
| Concentration per Run 1 | 0.0015 ppm | 100.4876 % | 98.7589 % | 102.1407 % | 101.2667 % | 100.2053 % | 98.0686 % |
| Concentration per Run 2 | 0.0014 ppm | 96.8964 % | 99.2269 % | 101.5812 % | 96.3810 % | 99.8879 % | 98.6743 % |
| Concentration per Run 3 | 0.0014 ppm | 97.3464 % | 98.6461 % | 101.9515 % | 96.9624 % | 99.6114 % | 97.7432 % |
| Concentration RSD | 3.1 % | 2.0 % | 0.3 % | 0.3 % | 2.7 % | 0.3 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-3 WG1973498
Analysis started at: 9/20/2024 11:12:17 AM
Comments <Comment>
Rack: 1
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0517 ppm | 2.0442 ppm | 0.1212 ppm | 1.0121 ppm | 2.0482 ppm | 0.0514 ppm | 28.2395 ppm |
| Concentration per Run 1 | 0.0515 ppm | 2.0189 ppm | 0.1199 ppm | 1.0127 ppm | 2.0191 ppm | 0.0510 ppm | 28.0275 ppm |
| Concentration per Run 2 | 0.0516 ppm | 2.0626 ppm | 0.1213 ppm | 1.0133 ppm | 2.0619 ppm | 0.0517 ppm | 28.3258 ppm |
| Concentration per Run 3 | 0.0520 ppm | 2.0512 ppm | 0.1223 ppm | 1.0105 ppm | 2.0637 ppm | 0.0515 ppm | 28.3651 ppm |
| Concentration RSD | 0.6 % | 1.1 % | 1.0 % | 0.1 % | 1.2 % | 0.7 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0544 ppm | 0.5029 ppm | 0.2047 ppm | 0.2554 ppm | 1.1156 ppm | 12.3204 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0544 ppm | 0.5033 ppm | 0.2045 ppm | 0.2562 ppm | 1.1057 ppm | 12.1853 ppm | -0.0014 ppm |
| Concentration per Run 2 | 0.0544 ppm | 0.5031 ppm | 0.2060 ppm | 0.2549 ppm | 1.1236 ppm | 12.3291 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0544 ppm | 0.5024 ppm | 0.2037 ppm | 0.2551 ppm | 1.1176 ppm | 12.4468 ppm | -0.0013 ppm |
| Concentration RSD | 0.0 % | 0.1 % | 0.6 % | 0.3 % | 0.8 % | 1.1 % | 13.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.6940 ppm | 0.5676 ppm | 0.9935 ppm | 12.7033 ppm | 0.5068 ppm | 0.5374 ppm | 0.5102 ppm |
| Concentration per Run 1 | 13.6656 ppm | 0.5636 ppm | 0.9923 ppm | 12.5659 ppm | 0.5068 ppm | 0.5373 ppm | 0.5100 ppm |
| Concentration per Run 2 | 13.7542 ppm | 0.5686 ppm | 0.9929 ppm | 12.8057 ppm | 0.5068 ppm | 0.5380 ppm | 0.5115 ppm |
| Concentration per Run 3 | 13.6624 ppm | 0.5705 ppm | 0.9952 ppm | 12.7385 ppm | 0.5069 ppm | 0.5370 ppm | 0.5092 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 0.2 % | 1.0 % | 0.0 % | 0.1 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1234 ppm | 5.4440 ppm | 0.9966 ppm | 1.0114 ppm | 1.0312 ppm | 0.1213 ppm | 0.5090 ppm |
| Concentration per Run 1 | 0.1219 ppm | 5.4499 ppm | 0.9968 ppm | 1.0006 ppm | 1.0311 ppm | 0.1213 ppm | 0.5086 ppm |
| Concentration per Run 2 | 0.1250 ppm | 5.4485 ppm | 0.9978 ppm | 1.0186 ppm | 1.0373 ppm | 0.1218 ppm | 0.5120 ppm |
| Concentration per Run 3 | 0.1232 ppm | 5.4336 ppm | 0.9953 ppm | 1.0148 ppm | 1.0252 ppm | 0.1210 ppm | 0.5062 ppm |
| Concentration RSD | 1.3 % | 0.2 % | 0.1 % | 0.9 % | 0.6 % | 0.3 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5169 ppm | 97.6001 % | 98.5120 % | 101.7551 % | 97.9014 % | 97.0959 % | 97.8984 % |
| Concentration per Run 1 | 0.5166 ppm | 97.4670 % | 98.4142 % | 101.4581 % | 98.7687 % | 96.7714 % | 97.8700 % |
| Concentration per Run 2 | 0.5161 ppm | 97.7975 % | 98.6633 % | 101.7672 % | 97.3971 % | 97.3322 % | 97.6625 % |
| Concentration per Run 3 | 0.5181 ppm | 97.5358 % | 98.4585 % | 102.0402 % | 97.5384 % | 97.1841 % | 98.1627 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.1 % | 0.3 % | 0.8 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-4 WG1973498
Analysis started at: 9/20/2024 11:18:30 AM
Comments <Comment>
Rack: 1
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0529 ppm | 2.1179 ppm | 0.1262 ppm | 1.0548 ppm | 2.1155 ppm | 0.0532 ppm | 29.1374 ppm |
| Concentration per Run 1 | 0.0527 ppm | 2.1016 ppm | 0.1235 ppm | 1.0357 ppm | 2.1084 ppm | 0.0525 ppm | 28.7251 ppm |
| Concentration per Run 2 | 0.0527 ppm | 2.1174 ppm | 0.1269 ppm | 1.0704 ppm | 2.1527 ppm | 0.0535 ppm | 29.3336 ppm |
| Concentration per Run 3 | 0.0532 ppm | 2.1349 ppm | 0.1281 ppm | 1.0583 ppm | 2.0855 ppm | 0.0535 ppm | 29.3536 ppm |
| Concentration RSD | 0.5 % | 0.8 % | 1.9 % | 1.7 % | 1.6 % | 1.1 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0566 ppm | 0.5234 ppm | 0.2102 ppm | 0.2635 ppm | 1.1504 ppm | 12.6590 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0556 ppm | 0.5142 ppm | 0.2100 ppm | 0.2633 ppm | 1.1349 ppm | 12.5210 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0573 ppm | 0.5310 ppm | 0.2101 ppm | 0.2632 ppm | 1.1569 ppm | 12.7318 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0569 ppm | 0.5250 ppm | 0.2104 ppm | 0.2639 ppm | 1.1596 ppm | 12.7243 ppm | -0.0006 ppm |
| Concentration RSD | 1.5 % | 1.6 % | 0.1 % | 0.1 % | 1.2 % | 0.9 % | 130.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.1025 ppm | 0.5864 ppm | 1.0338 ppm | 13.0912 ppm | 0.5267 ppm | 0.5600 ppm | 0.5322 ppm |
| Concentration per Run 1 | 14.0914 ppm | 0.5774 ppm | 1.0141 ppm | 13.0191 ppm | 0.5164 ppm | 0.5511 ppm | 0.5227 ppm |
| Concentration per Run 2 | 14.1254 ppm | 0.5883 ppm | 1.0487 ppm | 13.1231 ppm | 0.5343 ppm | 0.5681 ppm | 0.5414 ppm |
| Concentration per Run 3 | 14.0907 ppm | 0.5935 ppm | 1.0385 ppm | 13.1314 ppm | 0.5293 ppm | 0.5609 ppm | 0.5326 ppm |
| Concentration RSD | 0.1 % | 1.4 % | 1.7 % | 0.5 % | 1.8 % | 1.5 % | 1.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1278 ppm | 5.6394 ppm | 1.0378 ppm | 1.0480 ppm | 1.0600 ppm | 0.1255 ppm | 0.5235 ppm |
| Concentration per Run 1 | 0.1239 ppm | 5.5383 ppm | 1.0187 ppm | 1.0369 ppm | 1.0607 ppm | 0.1230 ppm | 0.5240 ppm |
| Concentration per Run 2 | 0.1290 ppm | 5.7226 ppm | 1.0528 ppm | 1.0523 ppm | 1.0605 ppm | 0.1272 ppm | 0.5246 ppm |
| Concentration per Run 3 | 0.1307 ppm | 5.6572 ppm | 1.0420 ppm | 1.0547 ppm | 1.0589 ppm | 0.1262 ppm | 0.5219 ppm |
| Concentration RSD | 2.8 % | 1.7 % | 1.7 % | 0.9 % | 0.1 % | 1.8 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5372 ppm | 96.9235 % | 98.6211 % | 100.5230 % | 97.7606 % | 96.4689 % | 97.8218 % |
| Concentration per Run 1 | 0.5283 ppm | 97.5896 % | 98.5980 % | 102.1522 % | 99.0957 % | 97.9499 % | 97.7586 % |
| Concentration per Run 2 | 0.5427 ppm | 96.4988 % | 98.7587 % | 99.3259 % | 97.0791 % | 95.2154 % | 97.9031 % |
| Concentration per Run 3 | 0.5406 ppm | 96.6823 % | 98.5068 % | 100.0910 % | 97.1069 % | 96.2415 % | 97.8038 % |
| Concentration RSD | 1.4 % | 0.6 % | 0.1 % | 1.5 % | 1.2 % | 1.4 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-5 WG1973498
Analysis started at: 9/20/2024 11:24:42 AM
Comments <Comment>
Rack: 1
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0498 ppm | 1.9753 ppm | 0.1193 ppm | 1.0047 ppm | 1.9598 ppm | 0.0497 ppm | 27.6459 ppm |
| Concentration per Run 1 | 0.0499 ppm | 1.9500 ppm | 0.1207 ppm | 1.0047 ppm | 1.9576 ppm | 0.0491 ppm | 27.3534 ppm |
| Concentration per Run 2 | 0.0493 ppm | 1.9785 ppm | 0.1194 ppm | 1.0067 ppm | 1.9616 ppm | 0.0497 ppm | 27.6690 ppm |
| Concentration per Run 3 | 0.0503 ppm | 1.9974 ppm | 0.1176 ppm | 1.0027 ppm | 1.9602 ppm | 0.0502 ppm | 27.9154 ppm |
| Concentration RSD | 1.0 % | 1.2 % | 1.3 % | 0.2 % | 0.1 % | 1.1 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0529 ppm | 0.4894 ppm | 0.1976 ppm | 0.2474 ppm | 1.0775 ppm | 12.0956 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0529 ppm | 0.4894 ppm | 0.1959 ppm | 0.2475 ppm | 1.0646 ppm | 11.9904 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0528 ppm | 0.4896 ppm | 0.1986 ppm | 0.2474 ppm | 1.0747 ppm | 12.1453 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0529 ppm | 0.4892 ppm | 0.1985 ppm | 0.2475 ppm | 1.0933 ppm | 12.1509 ppm | -0.0009 ppm |
| Concentration RSD | 0.1 % | 0.0 % | 0.8 % | 0.0 % | 1.4 % | 0.8 % | 199.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.4829 ppm | 0.5507 ppm | 0.9793 ppm | 12.4989 ppm | 0.4920 ppm | 0.5305 ppm | 0.4954 ppm |
| Concentration per Run 1 | 13.4175 ppm | 0.5456 ppm | 0.9790 ppm | 12.4146 ppm | 0.4914 ppm | 0.5300 ppm | 0.4954 ppm |
| Concentration per Run 2 | 13.5076 ppm | 0.5504 ppm | 0.9809 ppm | 12.4928 ppm | 0.4930 ppm | 0.5310 ppm | 0.4984 ppm |
| Concentration per Run 3 | 13.5236 ppm | 0.5562 ppm | 0.9780 ppm | 12.5892 ppm | 0.4917 ppm | 0.5304 ppm | 0.4924 ppm |
| Concentration RSD | 0.4 % | 1.0 % | 0.1 % | 0.7 % | 0.2 % | 0.1 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1208 ppm | 5.2751 ppm | 0.9971 ppm | 0.9970 ppm | 1.0156 ppm | 0.1191 ppm | 0.4927 ppm |
| Concentration per Run 1 | 0.1198 ppm | 5.2763 ppm | 0.9966 ppm | 0.9881 ppm | 1.0125 ppm | 0.1176 ppm | 0.4907 ppm |
| Concentration per Run 2 | 0.1210 ppm | 5.2858 ppm | 0.9978 ppm | 0.9979 ppm | 1.0178 ppm | 0.1201 ppm | 0.4941 ppm |
| Concentration per Run 3 | 0.1215 ppm | 5.2632 ppm | 0.9968 ppm | 1.0049 ppm | 1.0167 ppm | 0.1195 ppm | 0.4932 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.1 % | 0.8 % | 0.3 % | 1.1 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 97.7078 % | 99.0359 % | 101.6473 % | 98.2303 % | 97.5105 % | 98.6092 % |
| Concentration per Run 1 | 0.5019 ppm | 97.9047 % | 99.0640 % | 101.8322 % | 99.5377 % | 97.6974 % | 98.8494 % |
| Concentration per Run 2 | 0.5011 ppm | 97.6824 % | 99.3406 % | 101.2722 % | 98.0200 % | 97.1260 % | 98.7317 % |
| Concentration per Run 3 | 0.5012 ppm | 97.5363 % | 98.7032 % | 101.8375 % | 97.1332 % | 97.7081 % | 98.2466 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.3 % | 0.3 % | 1.2 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973498-6D5 WG1973498
Analysis started at: 9/20/2024 11:30:55 AM
Comments <Comment>
Rack: 1
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0065 ppm | -0.0007 ppm | 0.0048 ppm | 0.0044 ppm | 0.0000 ppm | 3.7373 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0067 ppm | 0.0002 ppm | 0.0049 ppm | 0.0043 ppm | 0.0000 ppm | 3.6812 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0072 ppm | -0.0008 ppm | 0.0048 ppm | 0.0044 ppm | 0.0000 ppm | 3.7480 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0056 ppm | -0.0014 ppm | 0.0045 ppm | 0.0045 ppm | 0.0000 ppm | 3.7828 ppm |
| Concentration RSD | 342.2 % | 12.1 % | 120.3 % | 4.9 % | 2.0 % | 189.1 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0159 ppm | 0.3240 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | -0.0003 ppm | 0.0001 ppm | 0.0152 ppm | 0.3172 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0160 ppm | 0.3243 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0166 ppm | 0.3306 ppm | 0.0007 ppm |
| Concentration RSD | 61.1 % | 72.5 % | 17.5 % | 74.3 % | 4.4 % | 2.1 % | 205.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6613 ppm | 0.0112 ppm | 0.0010 ppm | 0.4804 ppm | -0.0005 ppm | 0.0003 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.6631 ppm | 0.0110 ppm | 0.0011 ppm | 0.4736 ppm | -0.0006 ppm | 0.0003 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.6612 ppm | 0.0113 ppm | 0.0011 ppm | 0.4867 ppm | -0.0003 ppm | 0.0004 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.6595 ppm | 0.0113 ppm | 0.0008 ppm | 0.4808 ppm | -0.0004 ppm | 0.0001 ppm | 0.0014 ppm |
| Concentration RSD | 0.3 % | 1.7 % | 18.2 % | 1.4 % | 29.6 % | 51.6 % | 10.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.8909 ppm | 0.0004 ppm | 0.0108 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.8891 ppm | 0.0004 ppm | 0.0106 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.8904 ppm | 0.0005 ppm | 0.0108 ppm | 0.0002 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.8931 ppm | 0.0002 ppm | 0.0109 ppm | -0.0003 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration RSD | 269.2 % | 0.2 % | 39.9 % | 1.5 % | 699.6 % | 448.2 % | 564.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 96.8593 % | 99.5284 % | 102.4790 % | 96.8112 % | 102.0226 % | 99.2287 % |
| Concentration per Run 1 | 0.0007 ppm | 97.7957 % | 99.1453 % | 102.3268 % | 98.9925 % | 101.8867 % | 98.8813 % |
| Concentration per Run 2 | 0.0007 ppm | 96.8705 % | 99.4899 % | 102.8998 % | 96.4308 % | 102.7632 % | 99.7187 % |
| Concentration per Run 3 | 0.0007 ppm | 95.9115 % | 99.9501 % | 102.2105 % | 95.0102 % | 101.4178 % | 99.0861 % |
| Concentration RSD | 4.2 % | 1.0 % | 0.4 % | 0.4 % | 2.1 % | 0.7 % | 0.4 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 11:37:19 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5106 ppm | 0.5070 ppm | 0.4977 ppm | 0.5060 ppm | 0.4968 ppm | 0.5078 ppm | 0.5123 ppm |
| Concentration per Run 1 | 0.5105 ppm | 0.4949 ppm | 0.4976 ppm | 0.5043 ppm | 0.4860 ppm | 0.4959 ppm | 0.4992 ppm |
| Concentration per Run 2 | 0.5112 ppm | 0.5118 ppm | 0.4976 ppm | 0.5070 ppm | 0.5017 ppm | 0.5118 ppm | 0.5180 ppm |
| Concentration per Run 3 | 0.5101 ppm | 0.5143 ppm | 0.4978 ppm | 0.5068 ppm | 0.5027 ppm | 0.5157 ppm | 0.5197 ppm |
| Recovery Percentage 1 | 102.120 % | 101.396 % | 99.534 % | 101.210 % | 99.357 % | 101.561 % | 102.456 % |
| Concentration RSD | 0.1 % | 2.1 % | 0.0 % | 0.3 % | 1.9 % | 2.1 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5109 ppm | 0.5153 ppm | 0.5059 ppm | 0.4823 ppm | 0.5046 ppm | 5.1649 ppm | 0.4857 ppm |
| Concentration per Run 1 | 0.5118 ppm | 0.5147 ppm | 0.5075 ppm | 0.4817 ppm | 0.4928 ppm | 5.0501 ppm | 0.4749 ppm |
| Concentration per Run 2 | 0.5101 ppm | 0.5157 ppm | 0.5053 ppm | 0.4839 ppm | 0.5080 ppm | 5.2272 ppm | 0.4908 ppm |
| Concentration per Run 3 | 0.5109 ppm | 0.5155 ppm | 0.5048 ppm | 0.4814 ppm | 0.5130 ppm | 5.2173 ppm | 0.4915 ppm |
| Recovery Percentage 1 | 102.184 % | 103.054 % | 101.174 % | 96.465 % | 100.921 % | 103.297 % | 97.149 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.3 % | 2.1 % | 1.9 % | 1.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5095 ppm | 0.4991 ppm | 0.4946 ppm | 9.8061 ppm | 0.5143 ppm | 0.5181 ppm | 0.5087 ppm |
| Concentration per Run 1 | 0.5109 ppm | 0.4896 ppm | 0.4936 ppm | 9.5843 ppm | 0.5139 ppm | 0.5178 ppm | 0.5075 ppm |
| Concentration per Run 2 | 0.5075 ppm | 0.5029 ppm | 0.4951 ppm | 9.9061 ppm | 0.5146 ppm | 0.5183 ppm | 0.5077 ppm |
| Concentration per Run 3 | 0.5102 ppm | 0.5047 ppm | 0.4950 ppm | 9.9278 ppm | 0.5144 ppm | 0.5182 ppm | 0.5108 ppm |
| Recovery Percentage 1 | 101.905 % | 99.810 % | 98.914 % | 98.061 % | 102.859 % | 103.621 % | 101.734 % |
| Concentration RSD | 0.4 % | 1.7 % | 0.2 % | 2.0 % | 0.1 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5121 ppm | 5.5707 ppm | 0.4882 ppm | 0.4703 ppm | 0.5089 ppm | 0.5225 ppm | 0.5003 ppm |
| Concentration per Run 1 | 0.5097 ppm | 5.5536 ppm | 0.4884 ppm | 0.4600 ppm | 0.5102 ppm | 0.5210 ppm | 0.5017 ppm |
| Concentration per Run 2 | 0.5148 ppm | 5.5820 ppm | 0.4866 ppm | 0.4747 ppm | 0.5092 ppm | 0.5231 ppm | 0.4997 ppm |
| Concentration per Run 3 | 0.5118 ppm | 5.5765 ppm | 0.4894 ppm | 0.4761 ppm | 0.5073 ppm | 0.5234 ppm | 0.4995 ppm |
| Recovery Percentage 1 | 102.418 % | 106.109 % | 97.631 % | 94.053 % | 101.786 % | 104.508 % | 100.061 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 1.9 % | 0.3 % | 0.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5221 ppm | 95.8576 % | 97.6394 % | 100.5514 % | 96.0468 % | 98.0885 % | 97.1574 % |
| Concentration per Run 1 | 0.5232 ppm | 95.8796 % | 97.9076 % | 100.6642 % | 97.8946 % | 98.2217 % | 97.1721 % |
| Concentration per Run 2 | 0.5212 ppm | 96.0393 % | 97.7094 % | 100.4102 % | 95.6186 % | 97.9010 % | 97.1766 % |
| Concentration per Run 3 | 0.5220 ppm | 95.6538 % | 97.3013 % | 100.5797 % | 94.6272 % | 98.1428 % | 97.1236 % |
| Recovery Percentage 1 | 104.428 % | | | | | | |
| Concentration RSD | 0.2 % | 0.2 % | 0.3 % | 0.1 % | 1.7 % | 0.2 % | 0.0 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 11:43:21 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0080 ppm | -0.0007 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0083 ppm | -0.0010 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0104 ppm | -0.0004 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0054 ppm | -0.0008 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 0.442 % | 8.009 % | -14.495 % | 5.537 % | 0.524 % | -0.183 % | -0.086 % |
| Concentration RSD | 463.0 % | 31.2 % | 46.2 % | 7.0 % | 104.3 % | 243.8 % | 933.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0007 ppm | -0.0244 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | -0.0185 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0019 ppm | -0.0270 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0003 ppm | 0.0006 ppm | -0.0278 ppm | 0.0006 ppm |
| Recovery Percentage 1 | -0.292 % | 0.739 % | -0.225 % | -1.294 % | 1.400 % | -0.978 % | 6.577 % |
| Concentration RSD | 426.4 % | 25.2 % | 604.1 % | 87.8 % | 159.3 % | 21.0 % | 84.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0000 ppm | 0.0004 ppm | 0.0037 ppm | -0.0002 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0014 ppm | 0.0001 ppm | 0.0004 ppm | 0.0033 ppm | -0.0002 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0011 ppm | -0.0001 ppm | 0.0003 ppm | 0.0042 ppm | -0.0002 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0008 ppm | -0.0001 ppm | 0.0003 ppm | 0.0035 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -0.388 % | 0.040 % | 0.713 % | 0.183 % | -0.694 % | 4.025 % | 0.192 % |
| Concentration RSD | 334.2 % | 3,053.3 % | 20.4 % | 13.4 % | 40.1 % | 46.2 % | 72.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0009 ppm | -0.0011 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0013 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 5.428 % | -0.197 % | 0.085 % | -0.199 % | -1.486 % | 0.949 % | 0.933 % |
| Concentration RSD | 64.3 % | 39.3 % | 48.2 % | 104.4 % | 73.4 % | 166.0 % | 81.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 97.1712 % | 100.5673 % | 103.3413 % | 97.3702 % | 103.0542 % | 99.5075 % |
| Concentration per Run 1 | 0.0002 ppm | 97.8130 % | 100.8780 % | 103.3066 % | 99.1948 % | 103.0371 % | 99.6534 % |
| Concentration per Run 2 | 0.0002 ppm | 96.9980 % | 100.4496 % | 103.5148 % | 96.7923 % | 103.1204 % | 99.2931 % |
| Concentration per Run 3 | 0.0001 ppm | 96.7025 % | 100.3743 % | 103.2026 % | 96.1234 % | 103.0050 % | 99.5759 % |
| Recovery Percentage 1 | 3.112 % | | | | | | |
| Concentration RSD | 47.4 % | 0.6 % | 0.3 % | 0.2 % | 1.7 % | 0.1 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-1 WG1973898
Analysis started at: 9/20/2024 11:51:58 AM
Comments <Comment>
Rack: 1
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0168 ppm | -0.0010 ppm | 0.0041 ppm | 0.0001 ppm | 0.0000 ppm | 0.0124 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0150 ppm | -0.0018 ppm | 0.0040 ppm | 0.0001 ppm | 0.0000 ppm | 0.0126 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0176 ppm | -0.0009 ppm | 0.0043 ppm | 0.0001 ppm | 0.0000 ppm | 0.0100 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0178 ppm | -0.0003 ppm | 0.0040 ppm | 0.0001 ppm | 0.0000 ppm | 0.0145 ppm |
| Recovery Percentage 1 | -3.737 % | 16.797 % | -19.722 % | 13.707 % | 1.031 % | -0.010 % | 12.378 % |
| Concentration RSD | 62.3 % | 9.3 % | 76.3 % | 3.4 % | 39.5 % | 1,338.2 % | 18.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0007 ppm | 0.0004 ppm | 0.0052 ppm | -0.0016 ppm | -0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | -0.0010 ppm | 0.0004 ppm | 0.0048 ppm | -0.0284 ppm | -0.0036 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | -0.0003 ppm | 0.0005 ppm | 0.0058 ppm | 0.0148 ppm | -0.0031 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0007 ppm | 0.0004 ppm | 0.0050 ppm | 0.0088 ppm | -0.0026 ppm |
| Recovery Percentage 1 | 0.443 % | -0.589 % | -6.644 % | 4.300 % | 10.378 % | -0.065 % | -30.888 % |
| Concentration RSD | 73.7 % | 35.9 % | 45.7 % | 11.3 % | 9.8 % | 1,445.6 % | 16.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | -0.0001 ppm | 0.0004 ppm | 136.7501 ppm | -0.0009 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0029 ppm | -0.0001 ppm | 0.0004 ppm | 136.9443 ppm | -0.0013 ppm | -0.0001 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0034 ppm | -0.0001 ppm | 0.0003 ppm | 135.4608 ppm | -0.0006 ppm | -0.0004 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0035 ppm | -0.0002 ppm | 0.0005 ppm | 137.8452 ppm | -0.0009 ppm | 0.0000 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 3.284 % | -1.144 % | 0.724 % | 6,837.505 % | -3.701 % | -1.857 % | 1.655 % |
| Concentration RSD | 9.7 % | 44.7 % | 23.5 % | 0.9 % | 35.0 % | 99.3 % | 28.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0388 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | -0.0022 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.0390 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | -0.0018 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0386 ppm | 0.0004 ppm | 0.0000 ppm | 0.0003 ppm | -0.0022 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0389 ppm | 0.0002 ppm | 0.0000 ppm | 0.0002 ppm | -0.0027 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -3.702 % | 7.768 % | 0.659 % | 0.026 % | 2.374 % | -11.086 % | -1.628 % |
| Concentration RSD | 363.7 % | 0.5 % | 31.2 % | 1,168.2 % | 39.7 % | 21.2 % | 113.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 93.7694 % | 92.7743 % | 94.7236 % | 93.4880 % | 85.6569 % | 91.9273 % |
| Concentration per Run 1 | 0.0005 ppm | 93.5690 % | 92.6949 % | 94.8214 % | 94.5540 % | 85.8641 % | 91.9172 % |
| Concentration per Run 2 | 0.0005 ppm | 93.8575 % | 92.9545 % | 94.6758 % | 92.9377 % | 85.3367 % | 91.9615 % |
| Concentration per Run 3 | 0.0005 ppm | 93.8817 % | 92.6735 % | 94.6737 % | 92.9724 % | 85.7700 % | 91.9032 % |
| Recovery Percentage 1 | 9.985 % | | | | | | |
| Concentration RSD | 6.1 % | 0.2 % | 0.2 % | 0.1 % | 1.0 % | 0.3 % | 0.0 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-2 WG1973898
Analysis started at: 9/20/2024 11:58:30 AM
Comments <Comment>
Rack: 1
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0514 ppm | 2.0286 ppm | 0.1148 ppm | 0.9156 ppm | 2.0248 ppm | 0.0514 ppm | 10.0692 ppm |
| Concentration per Run 1 | 0.0512 ppm | 2.0124 ppm | 0.1153 ppm | 0.9128 ppm | 1.9922 ppm | 0.0510 ppm | 10.0234 ppm |
| Concentration per Run 2 | 0.0516 ppm | 2.0385 ppm | 0.1139 ppm | 0.9136 ppm | 2.0695 ppm | 0.0517 ppm | 10.0706 ppm |
| Concentration per Run 3 | 0.0515 ppm | 2.0349 ppm | 0.1152 ppm | 0.9204 ppm | 2.0127 ppm | 0.0517 ppm | 10.1136 ppm |
| Concentration RSD | 0.3 % | 0.7 % | 0.7 % | 0.5 % | 2.0 % | 0.8 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0531 ppm | 0.5039 ppm | 0.2039 ppm | 0.2521 ppm | 1.0360 ppm | 10.1023 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.5021 ppm | 0.2049 ppm | 0.2500 ppm | 1.0259 ppm | 10.0489 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0531 ppm | 0.5036 ppm | 0.2032 ppm | 0.2524 ppm | 1.0422 ppm | 10.1350 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0530 ppm | 0.5061 ppm | 0.2035 ppm | 0.2539 ppm | 1.0399 ppm | 10.1230 ppm | 0.0007 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.5 % | 0.8 % | 0.9 % | 0.5 % | 46.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8718 ppm | 0.5157 ppm | 0.9789 ppm | 9.9007 ppm | 0.5037 ppm | 0.5298 ppm | 0.4907 ppm |
| Concentration per Run 1 | 9.8855 ppm | 0.5119 ppm | 0.9767 ppm | 9.8009 ppm | 0.5035 ppm | 0.5282 ppm | 0.4881 ppm |
| Concentration per Run 2 | 9.8710 ppm | 0.5158 ppm | 0.9765 ppm | 9.9788 ppm | 0.5023 ppm | 0.5295 ppm | 0.4903 ppm |
| Concentration per Run 3 | 9.8589 ppm | 0.5193 ppm | 0.9835 ppm | 9.9225 ppm | 0.5055 ppm | 0.5317 ppm | 0.4936 ppm |
| Concentration RSD | 0.1 % | 0.7 % | 0.4 % | 0.9 % | 0.3 % | 0.3 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1088 ppm | 0.5423 ppm | 0.9546 ppm | 0.9487 ppm | 1.0071 ppm | 0.1149 ppm | 0.5120 ppm |
| Concentration per Run 1 | 0.1094 ppm | 0.5400 ppm | 0.9543 ppm | 0.9412 ppm | 1.0062 ppm | 0.1147 ppm | 0.5127 ppm |
| Concentration per Run 2 | 0.1089 ppm | 0.5416 ppm | 0.9535 ppm | 0.9548 ppm | 1.0064 ppm | 0.1148 ppm | 0.5125 ppm |
| Concentration per Run 3 | 0.1080 ppm | 0.5454 ppm | 0.9559 ppm | 0.9500 ppm | 1.0088 ppm | 0.1153 ppm | 0.5108 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.1 % | 0.7 % | 0.1 % | 0.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5112 ppm | 94.5882 % | 95.8884 % | 97.7743 % | 93.0190 % | 91.6307 % | 94.6107 % |
| Concentration per Run 1 | 0.5121 ppm | 94.0690 % | 95.2768 % | 97.9335 % | 93.6552 % | 91.8499 % | 94.2822 % |
| Concentration per Run 2 | 0.5107 ppm | 95.5527 % | 95.7050 % | 97.8979 % | 93.1779 % | 91.3235 % | 94.3884 % |
| Concentration per Run 3 | 0.5107 ppm | 94.1430 % | 96.6834 % | 97.4914 % | 92.2238 % | 91.7188 % | 95.1615 % |
| Concentration RSD | 0.2 % | 0.9 % | 0.8 % | 0.3 % | 0.8 % | 0.3 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2451391-25 WG1973498
Analysis started at: 9/20/2024 12:04:43 PM
Comments <Comment>
Rack: 1
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0581 ppm | 0.0191 ppm | 0.0167 ppm | 0.1557 ppm | -0.0001 ppm | 66.3975 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0609 ppm | 0.0183 ppm | 0.0169 ppm | 0.1496 ppm | -0.0001 ppm | 63.6800 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0567 ppm | 0.0190 ppm | 0.0166 ppm | 0.1619 ppm | -0.0001 ppm | 69.1728 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0566 ppm | 0.0200 ppm | 0.0167 ppm | 0.1556 ppm | 0.0000 ppm | 66.3399 ppm |
| Concentration RSD | 166.5 % | 4.2 % | 4.5 % | 0.9 % | 3.9 % | 38.8 % | 4.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0039 ppm | 0.1929 ppm | 0.5636 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0000 ppm | -0.0005 ppm | 0.0039 ppm | 0.1846 ppm | 0.5530 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0001 ppm | 0.0001 ppm | 0.0039 ppm | 0.2012 ppm | 0.5591 ppm | 0.0020 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0002 ppm | 0.0002 ppm | 0.0038 ppm | 0.1928 ppm | 0.5788 ppm | 0.0013 ppm |
| Concentration RSD | 2.1 % | 307.1 % | 448.6 % | 1.3 % | 4.3 % | 2.4 % | 23.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.7529 ppm | 0.0613 ppm | 0.0008 ppm | 9.2601 ppm | -0.0004 ppm | 0.0000 ppm | 0.0024 ppm |
| Concentration per Run 1 | 9.8895 ppm | 0.0588 ppm | 0.0008 ppm | 8.9032 ppm | -0.0005 ppm | 0.0001 ppm | 0.0032 ppm |
| Concentration per Run 2 | 9.7165 ppm | 0.0639 ppm | 0.0009 ppm | 9.6324 ppm | 0.0001 ppm | -0.0005 ppm | 0.0022 ppm |
| Concentration per Run 3 | 9.6526 ppm | 0.0611 ppm | 0.0007 ppm | 9.2447 ppm | -0.0006 ppm | 0.0003 ppm | 0.0017 ppm |
| Concentration RSD | 1.3 % | 4.2 % | 7.9 % | 3.9 % | 110.9 % | 3,873.7 % | 32.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 7.7009 ppm | -0.0004 ppm | 0.2958 ppm | 0.0011 ppm | 0.0005 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0011 ppm | 7.7146 ppm | -0.0004 ppm | 0.2842 ppm | 0.0012 ppm | -0.0009 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 7.6899 ppm | -0.0002 ppm | 0.3078 ppm | 0.0010 ppm | 0.0012 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0005 ppm | 7.6983 ppm | -0.0006 ppm | 0.2956 ppm | 0.0011 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration RSD | 104.8 % | 0.2 % | 47.0 % | 4.0 % | 10.9 % | 226.2 % | 150.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0104 ppm | 95.5331 % | 97.3488 % | 99.7193 % | 95.7354 % | 96.0365 % | 96.5544 % |
| Concentration per Run 1 | 0.0103 ppm | 98.1596 % | 96.1727 % | 99.7349 % | 99.5045 % | 95.7122 % | 95.9238 % |
| Concentration per Run 2 | 0.0104 ppm | 92.0920 % | 97.7649 % | 99.9438 % | 92.2047 % | 96.0214 % | 96.5139 % |
| Concentration per Run 3 | 0.0105 ppm | 96.3476 % | 98.1087 % | 99.4792 % | 95.4969 % | 96.3760 % | 97.2255 % |
| Concentration RSD | 0.9 % | 3.3 % | 1.1 % | 0.2 % | 3.8 % | 0.3 % | 0.7 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2451391-26 WG1973498
Analysis started at: 9/20/2024 12:10:59 PM
Comments <Comment>
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 13.1580 ppm | 0.0201 ppm | 0.0282 ppm | 0.2094 ppm | 0.0008 ppm | 160.2293 ppm |
| Concentration per Run 1 | 0.0000 ppm | 12.8802 ppm | 0.0209 ppm | 0.0282 ppm | 0.2050 ppm | 0.0008 ppm | 155.9798 ppm |
| Concentration per Run 2 | 0.0000 ppm | 12.9618 ppm | 0.0191 ppm | 0.0283 ppm | 0.2063 ppm | 0.0008 ppm | 157.8296 ppm |
| Concentration per Run 3 | 0.0000 ppm | 13.6319 ppm | 0.0202 ppm | 0.0281 ppm | 0.2170 ppm | 0.0008 ppm | 166.8785 ppm |
| Concentration RSD | 302.5 % | 3.1 % | 4.4 % | 0.3 % | 3.2 % | 2.0 % | 3.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0144 ppm | 0.0175 ppm | 0.0770 ppm | 34.5693 ppm | 2.5801 ppm | 0.0270 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0144 ppm | 0.0175 ppm | 0.0772 ppm | 33.7951 ppm | 2.5062 ppm | 0.0267 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0144 ppm | 0.0175 ppm | 0.0768 ppm | 34.0365 ppm | 2.5530 ppm | 0.0264 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0144 ppm | 0.0174 ppm | 0.0769 ppm | 35.8761 ppm | 2.6810 ppm | 0.0278 ppm |
| Concentration RSD | 2.8 % | 0.1 % | 0.1 % | 0.3 % | 3.3 % | 3.5 % | 2.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 39.7965 ppm | 1.5636 ppm | 0.0007 ppm | 17.0969 ppm | 0.0249 ppm | 0.0134 ppm | 0.0023 ppm |
| Concentration per Run 1 | 39.7199 ppm | 1.5298 ppm | 0.0006 ppm | 16.7352 ppm | 0.0252 ppm | 0.0132 ppm | 0.0026 ppm |
| Concentration per Run 2 | 39.8623 ppm | 1.5416 ppm | 0.0006 ppm | 16.8036 ppm | 0.0248 ppm | 0.0141 ppm | 0.0027 ppm |
| Concentration per Run 3 | 39.8073 ppm | 1.6194 ppm | 0.0008 ppm | 17.7517 ppm | 0.0248 ppm | 0.0130 ppm | 0.0016 ppm |
| Concentration RSD | 0.2 % | 3.1 % | 18.8 % | 3.3 % | 1.0 % | 4.1 % | 27.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 19.4301 ppm | -0.0003 ppm | 0.6303 ppm | 0.1517 ppm | -0.0013 ppm | 0.0270 ppm |
| Concentration per Run 1 | 0.0008 ppm | 19.4569 ppm | -0.0001 ppm | 0.6167 ppm | 0.1516 ppm | -0.0023 ppm | 0.0270 ppm |
| Concentration per Run 2 | 0.0003 ppm | 19.4487 ppm | -0.0007 ppm | 0.6207 ppm | 0.1520 ppm | -0.0020 ppm | 0.0271 ppm |
| Concentration per Run 3 | -0.0001 ppm | 19.3848 ppm | -0.0003 ppm | 0.6534 ppm | 0.1517 ppm | 0.0003 ppm | 0.0270 ppm |
| Concentration RSD | 149.2 % | 0.2 % | 86.8 % | 3.2 % | 0.1 % | 106.4 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0915 ppm | 110.3869 % | 109.4820 % | 112.0010 % | 99.1117 % | 90.0053 % | 96.2781 % |
| Concentration per Run 1 | 0.0913 ppm | 112.2173 % | 109.5295 % | 111.9370 % | 101.7341 % | 89.8335 % | 96.1563 % |
| Concentration per Run 2 | 0.0917 ppm | 111.2827 % | 109.4917 % | 111.9035 % | 100.3446 % | 89.8700 % | 96.6060 % |
| Concentration per Run 3 | 0.0914 ppm | 107.6608 % | 109.4247 % | 112.1625 % | 95.2565 % | 90.3123 % | 96.0721 % |
| Concentration RSD | 0.2 % | 2.2 % | 0.0 % | 0.1 % | 3.4 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2448058-04 WG1973898
Analysis started at: 9/20/2024 12:17:18 PM
Comments <Comment>
Rack: 1
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0121 ppm | -0.0020 ppm | 0.0066 ppm | 0.0736 ppm | 0.0000 ppm | 3.1759 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0159 ppm | -0.0016 ppm | 0.0065 ppm | 0.0735 ppm | 0.0000 ppm | 3.1725 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0066 ppm | -0.0008 ppm | 0.0067 ppm | 0.0738 ppm | 0.0000 ppm | 3.1982 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0140 ppm | -0.0036 ppm | 0.0065 ppm | 0.0734 ppm | 0.0000 ppm | 3.1571 ppm |
| Concentration RSD | 94.3 % | 40.5 % | 70.3 % | 1.4 % | 0.3 % | 191.1 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0008 ppm | 0.0010 ppm | 0.1312 ppm | -0.0024 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | -0.0004 ppm | 0.0008 ppm | 0.0010 ppm | 0.1499 ppm | -0.0027 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0007 ppm | 0.0011 ppm | 0.1288 ppm | -0.0027 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0005 ppm | 0.0007 ppm | 0.0009 ppm | 0.1149 ppm | -0.0018 ppm |
| Concentration RSD | 102.2 % | 104.2 % | 19.7 % | 10.4 % | 11.0 % | 13.5 % | 22.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2317 ppm | 0.0125 ppm | 0.0002 ppm | 136.4515 ppm | 0.0014 ppm | -0.0006 ppm | 0.0015 ppm |
| Concentration per Run 1 | 1.2237 ppm | 0.0124 ppm | 0.0002 ppm | 134.7178 ppm | 0.0015 ppm | -0.0001 ppm | 0.0019 ppm |
| Concentration per Run 2 | 1.2350 ppm | 0.0123 ppm | 0.0002 ppm | 137.3182 ppm | 0.0016 ppm | -0.0007 ppm | 0.0010 ppm |
| Concentration per Run 3 | 1.2365 ppm | 0.0126 ppm | 0.0003 ppm | 137.3185 ppm | 0.0011 ppm | -0.0009 ppm | 0.0016 ppm |
| Concentration RSD | 0.6 % | 1.3 % | 22.4 % | 1.1 % | 16.6 % | 68.0 % | 30.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.2655 ppm | 0.0008 ppm | 0.0166 ppm | -0.0001 ppm | -0.0016 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.2672 ppm | 0.0012 ppm | 0.0166 ppm | 0.0000 ppm | -0.0011 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.2652 ppm | 0.0004 ppm | 0.0167 ppm | 0.0000 ppm | -0.0018 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.2642 ppm | 0.0008 ppm | 0.0166 ppm | -0.0002 ppm | -0.0019 ppm | -0.0001 ppm |
| Concentration RSD | 48.2 % | 0.6 % | 45.6 % | 0.5 % | 252.2 % | 27.8 % | 189.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0048 ppm | 93.7107 % | 92.8488 % | 95.1308 % | 91.5621 % | 85.5034 % | 91.5912 % |
| Concentration per Run 1 | 0.0049 ppm | 93.4835 % | 92.7726 % | 94.9740 % | 91.9259 % | 85.2512 % | 91.4633 % |
| Concentration per Run 2 | 0.0049 ppm | 93.4090 % | 93.0405 % | 95.1358 % | 91.0874 % | 85.4489 % | 91.5947 % |
| Concentration per Run 3 | 0.0048 ppm | 94.2396 % | 92.7333 % | 95.2824 % | 91.6731 % | 85.8101 % | 91.7155 % |
| Concentration RSD | 1.4 % | 0.5 % | 0.2 % | 0.2 % | 0.5 % | 0.3 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-3 WG1973898
Analysis started at: 9/20/2024 12:23:48 PM
Comments <Comment>
Rack: 1
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0506 ppm | 1.9449 ppm | 0.1153 ppm | 0.9108 ppm | 1.9588 ppm | 0.0498 ppm | 12.6098 ppm |
| Concentration per Run 1 | 0.0506 ppm | 1.9488 ppm | 0.1164 ppm | 0.9114 ppm | 1.9666 ppm | 0.0500 ppm | 12.6363 ppm |
| Concentration per Run 2 | 0.0504 ppm | 1.9354 ppm | 0.1138 ppm | 0.9092 ppm | 1.9419 ppm | 0.0496 ppm | 12.5808 ppm |
| Concentration per Run 3 | 0.0509 ppm | 1.9507 ppm | 0.1157 ppm | 0.9118 ppm | 1.9680 ppm | 0.0499 ppm | 12.6122 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 1.2 % | 0.2 % | 0.7 % | 0.4 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0509 ppm | 0.4756 ppm | 0.1959 ppm | 0.2481 ppm | 0.9931 ppm | 9.9807 ppm | -0.0018 ppm |
| Concentration per Run 1 | 0.0509 ppm | 0.4757 ppm | 0.1958 ppm | 0.2487 ppm | 0.9938 ppm | 9.8929 ppm | -0.0024 ppm |
| Concentration per Run 2 | 0.0510 ppm | 0.4756 ppm | 0.1958 ppm | 0.2476 ppm | 0.9912 ppm | 9.9960 ppm | -0.0017 ppm |
| Concentration per Run 3 | 0.0507 ppm | 0.4755 ppm | 0.1960 ppm | 0.2480 ppm | 0.9944 ppm | 10.0533 ppm | -0.0012 ppm |
| Concentration RSD | 0.3 % | 0.0 % | 0.1 % | 0.2 % | 0.2 % | 0.8 % | 34.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.4913 ppm | 0.5007 ppm | 0.9477 ppm | 137.0564 ppm | 0.4750 ppm | 0.4958 ppm | 0.4799 ppm |
| Concentration per Run 1 | 10.4274 ppm | 0.5035 ppm | 0.9484 ppm | 137.1415 ppm | 0.4748 ppm | 0.4951 ppm | 0.4808 ppm |
| Concentration per Run 2 | 10.5467 ppm | 0.4987 ppm | 0.9467 ppm | 138.0091 ppm | 0.4749 ppm | 0.4963 ppm | 0.4777 ppm |
| Concentration per Run 3 | 10.4999 ppm | 0.5000 ppm | 0.9480 ppm | 136.0187 ppm | 0.4753 ppm | 0.4961 ppm | 0.4812 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.1 % | 0.7 % | 0.1 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1115 ppm | 0.7862 ppm | 0.9041 ppm | 0.9302 ppm | 0.9822 ppm | 0.1037 ppm | 0.4958 ppm |
| Concentration per Run 1 | 0.1104 ppm | 0.7863 ppm | 0.9045 ppm | 0.9280 ppm | 0.9810 ppm | 0.1036 ppm | 0.4943 ppm |
| Concentration per Run 2 | 0.1127 ppm | 0.7838 ppm | 0.9058 ppm | 0.9294 ppm | 0.9806 ppm | 0.1040 ppm | 0.4959 ppm |
| Concentration per Run 3 | 0.1114 ppm | 0.7886 ppm | 0.9019 ppm | 0.9331 ppm | 0.9851 ppm | 0.1034 ppm | 0.4972 ppm |
| Concentration RSD | 1.1 % | 0.3 % | 0.2 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4983 ppm | 95.4030 % | 93.3412 % | 95.2493 % | 93.9062 % | 85.4539 % | 91.7424 % |
| Concentration per Run 1 | 0.4977 ppm | 94.8673 % | 93.5864 % | 95.1364 % | 93.4080 % | 85.2720 % | 91.9734 % |
| Concentration per Run 2 | 0.5002 ppm | 95.6826 % | 92.9948 % | 95.3579 % | 94.1926 % | 85.6187 % | 91.6228 % |
| Concentration per Run 3 | 0.4972 ppm | 95.6591 % | 93.4423 % | 95.2537 % | 94.1179 % | 85.4711 % | 91.6309 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.3 % | 0.1 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-4 WG1973898
Analysis started at: 9/20/2024 12:30:10 PM
Comments <Comment>
Rack: 1
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0094 ppm | -0.0011 ppm | 0.0072 ppm | 0.0485 ppm | 0.0000 ppm | 3.0203 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0083 ppm | -0.0010 ppm | 0.0072 ppm | 0.0482 ppm | 0.0000 ppm | 3.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0085 ppm | -0.0010 ppm | 0.0071 ppm | 0.0487 ppm | 0.0000 ppm | 3.0283 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0114 ppm | -0.0014 ppm | 0.0072 ppm | 0.0485 ppm | 0.0000 ppm | 3.0324 ppm |
| Concentration RSD | 153.4 % | 18.6 % | 21.6 % | 0.5 % | 0.6 % | 286.2 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0012 ppm | 0.0004 ppm | 0.1245 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | -0.0004 ppm | 0.0011 ppm | 0.0012 ppm | 0.1149 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0014 ppm | 0.0003 ppm | 0.1365 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | -0.0006 ppm | 0.0009 ppm | -0.0001 ppm | 0.1222 ppm | -0.0008 ppm |
| Concentration RSD | 72.9 % | 195.3 % | 39.5 % | 21.5 % | 150.3 % | 8.8 % | 20.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1957 ppm | 0.0119 ppm | 0.0004 ppm | 129.1368 ppm | 0.0003 ppm | -0.0002 ppm | 0.0017 ppm |
| Concentration per Run 1 | 1.1916 ppm | 0.0117 ppm | 0.0004 ppm | 130.5836 ppm | 0.0003 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 2 | 1.2020 ppm | 0.0120 ppm | 0.0004 ppm | 129.9282 ppm | 0.0004 ppm | -0.0004 ppm | 0.0013 ppm |
| Concentration per Run 3 | 1.1935 ppm | 0.0119 ppm | 0.0005 ppm | 126.8985 ppm | 0.0002 ppm | -0.0001 ppm | 0.0017 ppm |
| Concentration RSD | 0.5 % | 1.4 % | 9.1 % | 1.5 % | 30.2 % | 112.3 % | 23.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.2568 ppm | 0.0007 ppm | 0.0153 ppm | -0.0001 ppm | -0.0018 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.2562 ppm | 0.0006 ppm | 0.0153 ppm | -0.0001 ppm | -0.0018 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.2567 ppm | 0.0005 ppm | 0.0154 ppm | 0.0001 ppm | -0.0015 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.2574 ppm | 0.0010 ppm | 0.0154 ppm | -0.0003 ppm | -0.0020 ppm | 0.0000 ppm |
| Concentration RSD | 1,056.7 % | 0.2 % | 40.4 % | 0.4 % | 157.0 % | 13.8 % | 106.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 94.8233 % | 93.3907 % | 95.1769 % | 93.4404 % | 85.6676 % | 92.5164 % |
| Concentration per Run 1 | 0.0050 ppm | 95.0967 % | 93.6679 % | 95.2354 % | 94.3755 % | 85.5832 % | 92.5628 % |
| Concentration per Run 2 | 0.0049 ppm | 94.5879 % | 93.1157 % | 95.3681 % | 92.6743 % | 86.0518 % | 92.4038 % |
| Concentration per Run 3 | 0.0047 ppm | 94.7854 % | 93.3885 % | 94.9270 % | 93.2714 % | 85.3677 % | 92.5826 % |
| Concentration RSD | 3.3 % | 0.3 % | 0.3 % | 0.2 % | 0.9 % | 0.4 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-5 WG1973898
Analysis started at: 9/20/2024 12:36:40 PM
Comments <Comment>
Rack: 1
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0515 ppm | 2.1077 ppm | 0.1231 ppm | 1.0092 ppm | 2.1505 ppm | 0.0531 ppm | 13.7419 ppm |
| Concentration per Run 1 | 0.0512 ppm | 2.1019 ppm | 0.1234 ppm | 1.0088 ppm | 2.1742 ppm | 0.0530 ppm | 13.7169 ppm |
| Concentration per Run 2 | 0.0516 ppm | 2.1043 ppm | 0.1233 ppm | 1.0108 ppm | 2.1002 ppm | 0.0530 ppm | 13.6947 ppm |
| Concentration per Run 3 | 0.0517 ppm | 2.1170 ppm | 0.1227 ppm | 1.0081 ppm | 2.1770 ppm | 0.0532 ppm | 13.8142 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 0.3 % | 0.1 % | 2.0 % | 0.3 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0547 ppm | 0.5059 ppm | 0.2074 ppm | 0.2672 ppm | 1.0597 ppm | 11.1589 ppm | -0.0016 ppm |
| Concentration per Run 1 | 0.0547 ppm | 0.5056 ppm | 0.2066 ppm | 0.2660 ppm | 1.0574 ppm | 11.1609 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0548 ppm | 0.5065 ppm | 0.2078 ppm | 0.2682 ppm | 1.0605 ppm | 11.1176 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0546 ppm | 0.5057 ppm | 0.2077 ppm | 0.2672 ppm | 1.0611 ppm | 11.1983 ppm | -0.0013 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.4 % | 0.2 % | 0.4 % | 28.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.2918 ppm | 0.5303 ppm | 1.0495 ppm | 146.6602 ppm | 0.5067 ppm | 0.5255 ppm | 0.5080 ppm |
| Concentration per Run 1 | 11.3058 ppm | 0.5292 ppm | 1.0488 ppm | 150.6608 ppm | 0.5058 ppm | 0.5248 ppm | 0.5068 ppm |
| Concentration per Run 2 | 11.2925 ppm | 0.5287 ppm | 1.0514 ppm | 145.5035 ppm | 0.5081 ppm | 0.5262 ppm | 0.5086 ppm |
| Concentration per Run 3 | 11.2773 ppm | 0.5330 ppm | 1.0483 ppm | 143.8161 ppm | 0.5062 ppm | 0.5255 ppm | 0.5085 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.2 % | 2.4 % | 0.2 % | 0.1 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1199 ppm | 1.3065 ppm | 1.0113 ppm | 1.0300 ppm | 1.0819 ppm | 0.1106 ppm | 0.5263 ppm |
| Concentration per Run 1 | 0.1210 ppm | 1.3036 ppm | 1.0103 ppm | 1.0289 ppm | 1.0778 ppm | 0.1110 ppm | 0.5255 ppm |
| Concentration per Run 2 | 0.1195 ppm | 1.3099 ppm | 1.0119 ppm | 1.0293 ppm | 1.0838 ppm | 0.1104 ppm | 0.5273 ppm |
| Concentration per Run 3 | 0.1190 ppm | 1.3061 ppm | 1.0117 ppm | 1.0317 ppm | 1.0841 ppm | 0.1105 ppm | 0.5263 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.1 % | 0.1 % | 0.3 % | 0.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5222 ppm | 96.9349 % | 93.5160 % | 94.5050 % | 95.4751 % | 83.9732 % | 91.7007 % |
| Concentration per Run 1 | 0.5225 ppm | 96.9331 % | 93.2473 % | 94.4990 % | 95.6516 % | 83.8272 % | 91.6688 % |
| Concentration per Run 2 | 0.5216 ppm | 97.8914 % | 93.4671 % | 94.3940 % | 96.3664 % | 84.0254 % | 91.5777 % |
| Concentration per Run 3 | 0.5224 ppm | 95.9800 % | 93.8337 % | 94.6221 % | 94.4075 % | 84.0669 % | 91.8558 % |
| Concentration RSD | 0.1 % | 1.0 % | 0.3 % | 0.1 % | 1.0 % | 0.2 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973898-6D5 WG1973898
Analysis started at: 9/20/2024 12:43:03 PM
Comments <Comment>
Rack: 1
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0056 ppm | -0.0004 ppm | 0.0021 ppm | 0.0146 ppm | 0.0000 ppm | 0.6319 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0051 ppm | 0.0002 ppm | 0.0022 ppm | 0.0144 ppm | 0.0000 ppm | 0.6204 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0066 ppm | -0.0006 ppm | 0.0022 ppm | 0.0147 ppm | 0.0000 ppm | 0.6375 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0052 ppm | -0.0009 ppm | 0.0020 ppm | 0.0148 ppm | 0.0000 ppm | 0.6378 ppm |
| Concentration RSD | 306.7 % | 14.6 % | 134.7 % | 6.3 % | 1.3 % | 166.4 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm | 0.0003 ppm | 0.0001 ppm | 0.0059 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0006 ppm | 0.0003 ppm | 0.0003 ppm | 0.0066 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | 0.0003 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0002 ppm | -0.0001 ppm | 0.0114 ppm | -0.0012 ppm |
| Concentration RSD | 685.5 % | 1,212.9 % | 41.4 % | 30.7 % | 154.5 % | 97.8 % | 243.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2632 ppm | 0.0024 ppm | 0.0004 ppm | 27.5592 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.2627 ppm | 0.0024 ppm | 0.0003 ppm | 27.0193 ppm | 0.0000 ppm | -0.0004 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.2648 ppm | 0.0025 ppm | 0.0004 ppm | 27.6713 ppm | 0.0002 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.2620 ppm | 0.0024 ppm | 0.0004 ppm | 27.9871 ppm | 0.0001 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration RSD | 0.6 % | 2.6 % | 4.5 % | 1.8 % | 94.6 % | 480.1 % | 3,120.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0567 ppm | 0.0001 ppm | 0.0033 ppm | 0.0001 ppm | -0.0009 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0569 ppm | 0.0001 ppm | 0.0032 ppm | 0.0000 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0010 ppm | 0.0569 ppm | 0.0000 ppm | 0.0033 ppm | -0.0001 ppm | -0.0015 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0563 ppm | 0.0002 ppm | 0.0033 ppm | 0.0003 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration RSD | 394.9 % | 0.6 % | 72.4 % | 1.6 % | 346.0 % | 64.1 % | 120.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 100.9296 % | 100.7793 % | 101.3700 % | 101.2945 % | 98.8692 % | 99.5969 % |
| Concentration per Run 1 | 0.0014 ppm | 100.6791 % | 100.8518 % | 101.2573 % | 102.6627 % | 99.0143 % | 99.7888 % |
| Concentration per Run 2 | 0.0015 ppm | 100.9931 % | 100.9968 % | 101.6884 % | 101.1146 % | 99.0905 % | 99.5829 % |
| Concentration per Run 3 | 0.0015 ppm | 101.1165 % | 100.4892 % | 101.1643 % | 100.1063 % | 98.5030 % | 99.4189 % |
| Concentration RSD | 3.2 % | 0.2 % | 0.3 % | 0.3 % | 1.3 % | 0.3 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 12:49:27 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5072 ppm | 0.4996 ppm | 0.4929 ppm | 0.5047 ppm | 0.4938 ppm | 0.4983 ppm | 0.4971 ppm |
| Concentration per Run 1 | 0.5059 ppm | 0.4901 ppm | 0.4946 ppm | 0.5049 ppm | 0.4833 ppm | 0.4893 ppm | 0.4868 ppm |
| Concentration per Run 2 | 0.5075 ppm | 0.5035 ppm | 0.4919 ppm | 0.5052 ppm | 0.4973 ppm | 0.5018 ppm | 0.5005 ppm |
| Concentration per Run 3 | 0.5081 ppm | 0.5053 ppm | 0.4921 ppm | 0.5041 ppm | 0.5008 ppm | 0.5037 ppm | 0.5041 ppm |
| Recovery Percentage 1 | 101.437 % | 99.930 % | 98.572 % | 100.950 % | 98.758 % | 99.655 % | 99.423 % |
| Concentration RSD | 0.2 % | 1.7 % | 0.3 % | 0.1 % | 1.9 % | 1.6 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4920 ppm | 0.5049 ppm | 0.4897 ppm | 0.4838 ppm | 0.5259 ppm | 5.1736 ppm | 0.4961 ppm |
| Concentration per Run 1 | 0.4924 ppm | 0.5057 ppm | 0.4918 ppm | 0.4826 ppm | 0.5153 ppm | 5.0830 ppm | 0.4839 ppm |
| Concentration per Run 2 | 0.4910 ppm | 0.5043 ppm | 0.4874 ppm | 0.4827 ppm | 0.5315 ppm | 5.1991 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.4927 ppm | 0.5047 ppm | 0.4898 ppm | 0.4861 ppm | 0.5308 ppm | 5.2389 ppm | 0.5059 ppm |
| Recovery Percentage 1 | 98.402 % | 100.985 % | 97.936 % | 96.757 % | 105.170 % | 103.473 % | 99.222 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.5 % | 0.4 % | 1.7 % | 1.6 % | 2.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5022 ppm | 0.4850 ppm | 0.4873 ppm | 9.8553 ppm | 0.5034 ppm | 0.5085 ppm | 0.5095 ppm |
| Concentration per Run 1 | 0.5018 ppm | 0.4780 ppm | 0.4879 ppm | 9.6288 ppm | 0.5033 ppm | 0.5095 ppm | 0.5123 ppm |
| Concentration per Run 2 | 0.5030 ppm | 0.4880 ppm | 0.4865 ppm | 9.9104 ppm | 0.5032 ppm | 0.5070 ppm | 0.5085 ppm |
| Concentration per Run 3 | 0.5020 ppm | 0.4892 ppm | 0.4875 ppm | 10.0268 ppm | 0.5037 ppm | 0.5090 ppm | 0.5078 ppm |
| Recovery Percentage 1 | 100.448 % | 97.009 % | 97.458 % | 98.553 % | 100.677 % | 101.704 % | 101.905 % |
| Concentration RSD | 0.1 % | 1.3 % | 0.2 % | 2.1 % | 0.1 % | 0.3 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5107 ppm | 5.5719 ppm | 0.4781 ppm | 0.4673 ppm | 0.4961 ppm | 0.5200 ppm | 0.4876 ppm |
| Concentration per Run 1 | 0.5112 ppm | 5.5837 ppm | 0.4773 ppm | 0.4575 ppm | 0.4976 ppm | 0.5193 ppm | 0.4881 ppm |
| Concentration per Run 2 | 0.5103 ppm | 5.5658 ppm | 0.4778 ppm | 0.4705 ppm | 0.4926 ppm | 0.5202 ppm | 0.4854 ppm |
| Concentration per Run 3 | 0.5106 ppm | 5.5661 ppm | 0.4790 ppm | 0.4741 ppm | 0.4980 ppm | 0.5205 ppm | 0.4893 ppm |
| Recovery Percentage 1 | 102.136 % | 106.131 % | 95.610 % | 93.470 % | 99.215 % | 104.001 % | 97.517 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.2 % | 1.9 % | 0.6 % | 0.1 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5274 ppm | 101.1741 % | 101.2189 % | 102.4807 % | 101.3304 % | 100.9898 % | 100.3575 % |
| Concentration per Run 1 | 0.5278 ppm | 100.8656 % | 101.2028 % | 102.4752 % | 102.7950 % | 101.0326 % | 100.2625 % |
| Concentration per Run 2 | 0.5257 ppm | 100.5278 % | 100.9455 % | 102.5326 % | 100.2799 % | 100.8895 % | 100.6869 % |
| Concentration per Run 3 | 0.5288 ppm | 102.1290 % | 101.5084 % | 102.4342 % | 100.9164 % | 101.0472 % | 100.1231 % |
| Recovery Percentage 1 | 105.483 % | | | | | | |
| Concentration RSD | 0.3 % | 0.8 % | 0.3 % | 0.0 % | 1.3 % | 0.1 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 12:55:30 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0061 ppm | -0.0001 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0068 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0084 ppm | 0.0000 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0031 ppm | -0.0003 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 1.151 % | 6.097 % | -1.822 % | 1.884 % | 0.467 % | -0.235 % | -0.422 % |
| Concentration RSD | 330.1 % | 44.8 % | 217.3 % | 29.4 % | 210.9 % | 68.0 % | 154.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | 0.0010 ppm | -0.0357 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0004 ppm | -0.0491 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0003 ppm | 0.0012 ppm | -0.0312 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm | -0.0268 ppm | 0.0006 ppm |
| Recovery Percentage 1 | -0.139 % | 0.014 % | 1.250 % | 2.119 % | 2.084 % | -1.428 % | 2.431 % |
| Concentration RSD | 256.3 % | 5,352.8 % | 133.7 % | 37.6 % | 60.6 % | 33.0 % | 194.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0140 ppm | -0.0003 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0145 ppm | -0.0002 ppm | 0.0008 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0001 ppm | 0.0004 ppm | 0.0123 ppm | -0.0002 ppm | -0.0001 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0001 ppm | 0.0002 ppm | 0.0152 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -0.105 % | 1.120 % | 0.559 % | 0.699 % | -1.186 % | 2.240 % | 0.576 % |
| Concentration RSD | 604.8 % | 28.8 % | 40.4 % | 10.8 % | 66.8 % | 214.8 % | 306.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0017 ppm | -0.0012 ppm | 0.0002 ppm | 0.0000 ppm | 0.0003 ppm | -0.0008 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0015 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | -0.0008 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0014 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 6.732 % | -0.279 % | 0.078 % | 0.060 % | 0.302 % | -3.012 % | -1.742 % |
| Concentration RSD | 144.0 % | 9.9 % | 586.4 % | 608.6 % | 773.3 % | 46.7 % | 96.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 100.0612 % | 100.0723 % | 102.6780 % | 99.8975 % | 102.7385 % | 98.6594 % |
| Concentration per Run 1 | 0.0002 ppm | 99.6694 % | 100.0827 % | 101.2419 % | 101.2484 % | 101.2355 % | 98.6958 % |
| Concentration per Run 2 | 0.0004 ppm | 100.2129 % | 100.0689 % | 103.4004 % | 98.9406 % | 103.5721 % | 99.2886 % |
| Concentration per Run 3 | 0.0002 ppm | 100.3013 % | 100.0652 % | 103.3917 % | 99.5034 % | 103.4078 % | 97.9938 % |
| Recovery Percentage 1 | 5.048 % | | | | | | |
| Concentration RSD | 35.2 % | 0.3 % | 0.0 % | 1.2 % | 1.2 % | 1.3 % | 0.7 % |

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-1 WG1973830
Analysis started at: 9/20/2024 1:04:24 PM
Comments <Comment>
Rack: 1
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0047 ppm | -0.0005 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0094 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0029 ppm | -0.0005 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0102 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0049 ppm | -0.0009 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0062 ppm | -0.0003 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0077 ppm |
| Recovery Percentage 1 | -0.728 % | 4.667 % | -10.596 % | 1.049 % | -0.132 % | -0.481 % | 9.420 % |
| Concentration RSD | 46.0 % | 34.9 % | 57.0 % | 30.2 % | 287.7 % | 51.5 % | 15.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | 0.0003 ppm | -0.0003 ppm | -0.0097 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | -0.0008 ppm | 0.0004 ppm | -0.0005 ppm | -0.0204 ppm | -0.0015 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | -0.0007 ppm | 0.0003 ppm | 0.0001 ppm | -0.0020 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | 0.0003 ppm | -0.0005 ppm | -0.0067 ppm | -0.0007 ppm |
| Recovery Percentage 1 | 0.315 % | 0.397 % | -7.021 % | 3.415 % | -0.592 % | -0.389 % | -9.408 % |
| Concentration RSD | 152.1 % | 184.2 % | 14.4 % | 13.2 % | 109.7 % | 98.3 % | 55.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.0001 ppm | 0.0002 ppm | 0.0074 ppm | -0.0002 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0001 ppm | 0.0004 ppm | 0.0075 ppm | -0.0001 ppm | 0.0006 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0002 ppm | 0.0002 ppm | 0.0029 ppm | -0.0003 ppm | 0.0005 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0019 ppm | 0.0001 ppm | 0.0000 ppm | 0.0117 ppm | -0.0001 ppm | 0.0006 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 3.051 % | 0.513 % | 0.441 % | 0.368 % | -0.606 % | 5.876 % | 0.006 % |
| Concentration RSD | 37.0 % | 247.7 % | 95.4 % | 59.4 % | 78.9 % | 14.7 % | 20,131.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.0007 ppm | 0.0004 ppm | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0016 ppm | -0.0003 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | -0.0007 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0003 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | -0.0004 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 14.264 % | 0.006 % | 0.202 % | 1.099 % | 0.743 % | -1.259 % | 0.254 % |
| Concentration RSD | 22.2 % | 2,005.6 % | 291.7 % | 34.4 % | 122.4 % | 186.6 % | 793.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 100.2749 % | 101.1769 % | 101.6029 % | 100.5935 % | 103.7360 % | 101.1117 % |
| Concentration per Run 1 | 0.0011 ppm | 100.5902 % | 101.0851 % | 101.4127 % | 101.0067 % | 103.8405 % | 101.2580 % |
| Concentration per Run 2 | 0.0012 ppm | 100.2917 % | 101.3166 % | 101.8477 % | 100.4896 % | 103.6066 % | 101.2331 % |
| Concentration per Run 3 | 0.0012 ppm | 99.9428 % | 101.1289 % | 101.5483 % | 100.2841 % | 103.7609 % | 100.8441 % |
| Recovery Percentage 1 | 22.884 % | | | | | | |
| Concentration RSD | 1.5 % | 0.3 % | 0.1 % | 0.2 % | 0.4 % | 0.1 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-2 WG1973830
Analysis started at: 9/20/2024 1:10:50 PM
Comments <Comment>
Rack: 1
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0524 ppm | 2.0044 ppm | 0.1184 ppm | 0.9808 ppm | 1.9772 ppm | 0.0496 ppm | 9.8957 ppm |
| Concentration per Run 1 | 0.0526 ppm | 1.9605 ppm | 0.1181 ppm | 0.9797 ppm | 1.9371 ppm | 0.0488 ppm | 9.7130 ppm |
| Concentration per Run 2 | 0.0523 ppm | 2.0140 ppm | 0.1185 ppm | 0.9823 ppm | 1.9931 ppm | 0.0497 ppm | 9.9534 ppm |
| Concentration per Run 3 | 0.0523 ppm | 2.0386 ppm | 0.1185 ppm | 0.9803 ppm | 2.0015 ppm | 0.0503 ppm | 10.0206 ppm |
| Concentration RSD | 0.3 % | 2.0 % | 0.2 % | 0.1 % | 1.8 % | 1.6 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0531 ppm | 0.5026 ppm | 0.1977 ppm | 0.2543 ppm | 1.0018 ppm | 10.5417 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.5027 ppm | 0.1974 ppm | 0.2549 ppm | 0.9809 ppm | 10.3838 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0531 ppm | 0.5027 ppm | 0.1980 ppm | 0.2543 ppm | 1.0049 ppm | 10.5687 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0532 ppm | 0.5025 ppm | 0.1977 ppm | 0.2538 ppm | 1.0197 ppm | 10.6725 ppm | -0.0008 ppm |
| Concentration RSD | 0.0 % | 0.0 % | 0.2 % | 0.2 % | 2.0 % | 1.4 % | 21.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1131 ppm | 0.4987 ppm | 0.9866 ppm | 10.3043 ppm | 0.5076 ppm | 0.5353 ppm | 0.5158 ppm |
| Concentration per Run 1 | 10.1054 ppm | 0.4892 ppm | 0.9856 ppm | 10.1139 ppm | 0.5067 ppm | 0.5351 ppm | 0.5155 ppm |
| Concentration per Run 2 | 10.1377 ppm | 0.5021 ppm | 0.9864 ppm | 10.3235 ppm | 0.5081 ppm | 0.5350 ppm | 0.5159 ppm |
| Concentration per Run 3 | 10.0963 ppm | 0.5049 ppm | 0.9876 ppm | 10.4755 ppm | 0.5082 ppm | 0.5357 ppm | 0.5161 ppm |
| Concentration RSD | 0.2 % | 1.7 % | 0.1 % | 1.8 % | 0.2 % | 0.1 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1196 ppm | 1.1034 ppm | 0.9797 ppm | 0.9413 ppm | 1.0000 ppm | 0.1206 ppm | 0.4943 ppm |
| Concentration per Run 1 | 0.1183 ppm | 1.1030 ppm | 0.9804 ppm | 0.9242 ppm | 0.9952 ppm | 0.1198 ppm | 0.4929 ppm |
| Concentration per Run 2 | 0.1204 ppm | 1.1037 ppm | 0.9802 ppm | 0.9438 ppm | 1.0032 ppm | 0.1206 ppm | 0.4956 ppm |
| Concentration per Run 3 | 0.1202 ppm | 1.1034 ppm | 0.9784 ppm | 0.9559 ppm | 1.0015 ppm | 0.1215 ppm | 0.4946 ppm |
| Concentration RSD | 1.0 % | 0.0 % | 0.1 % | 1.7 % | 0.4 % | 0.7 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4990 ppm | 101.2216 % | 100.3735 % | 101.0111 % | 102.3284 % | 98.1699 % | 100.2972 % |
| Concentration per Run 1 | 0.4990 ppm | 101.6783 % | 100.1190 % | 101.0507 % | 104.5353 % | 98.4816 % | 100.3070 % |
| Concentration per Run 2 | 0.4985 ppm | 100.3446 % | 100.3950 % | 101.0141 % | 101.4190 % | 98.1065 % | 100.1681 % |
| Concentration per Run 3 | 0.4994 ppm | 101.6420 % | 100.6065 % | 100.9686 % | 101.0309 % | 97.9217 % | 100.4164 % |
| Concentration RSD | 0.1 % | 0.8 % | 0.2 % | 0.0 % | 1.9 % | 0.3 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2452763-02 WG1973830
Analysis started at: 9/20/2024 1:17:00 PM
Comments <Comment>
Rack: 1
Vial: 31

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.3690 ppm | 0.0016 ppm | 0.7685 ppm | 0.0432 ppm | -0.0001 ppm | 77.1059 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.3653 ppm | 0.0022 ppm | 0.7678 ppm | 0.0425 ppm | 0.0000 ppm | 76.3275 ppm |
| Concentration per Run 2 | 0.0032 ppm | 0.3690 ppm | 0.0017 ppm | 0.7700 ppm | 0.0435 ppm | -0.0001 ppm | 77.3283 ppm |
| Concentration per Run 3 | 0.0029 ppm | 0.3725 ppm | 0.0010 ppm | 0.7678 ppm | 0.0436 ppm | -0.0001 ppm | 77.6619 ppm |
| Concentration RSD | 5.5 % | 1.0 % | 35.4 % | 0.2 % | 1.3 % | 42.3 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0003 ppm | 0.0003 ppm | 0.0850 ppm | 0.6048 ppm | 18.8238 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0002 ppm | 0.0002 ppm | 0.0850 ppm | 0.5945 ppm | 18.6793 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0002 ppm | 0.0007 ppm | 0.0848 ppm | 0.6063 ppm | 18.7848 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0004 ppm | 0.0001 ppm | 0.0853 ppm | 0.6138 ppm | 19.0073 ppm | 0.0002 ppm |
| Concentration RSD | 2.6 % | 58.4 % | 101.8 % | 0.3 % | 1.6 % | 0.9 % | 165.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 17.1142 ppm | 0.0303 ppm | 0.0024 ppm | 338.2765 ppm | 0.0017 ppm | 0.0038 ppm | 0.0017 ppm |
| Concentration per Run 1 | 17.1460 ppm | 0.0300 ppm | 0.0025 ppm | 343.5237 ppm | 0.0016 ppm | 0.0034 ppm | 0.0017 ppm |
| Concentration per Run 2 | 17.0566 ppm | 0.0303 ppm | 0.0024 ppm | 339.7293 ppm | 0.0019 ppm | 0.0040 ppm | 0.0017 ppm |
| Concentration per Run 3 | 17.1400 ppm | 0.0305 ppm | 0.0022 ppm | 331.5764 ppm | 0.0016 ppm | 0.0038 ppm | 0.0016 ppm |
| Concentration RSD | 0.3 % | 0.8 % | 5.3 % | 1.8 % | 9.6 % | 8.0 % | 3.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 1.1456 ppm | 0.0007 ppm | 0.6292 ppm | 0.0015 ppm | -0.0011 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0006 ppm | 1.1432 ppm | 0.0009 ppm | 0.6204 ppm | 0.0018 ppm | -0.0005 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0007 ppm | 1.1466 ppm | 0.0004 ppm | 0.6315 ppm | 0.0015 ppm | -0.0019 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0010 ppm | 1.1471 ppm | 0.0007 ppm | 0.6357 ppm | 0.0013 ppm | -0.0010 ppm | 0.0000 ppm |
| Concentration RSD | 907.7 % | 0.2 % | 39.2 % | 1.3 % | 16.5 % | 64.3 % | 161.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0865 ppm | 96.8649 % | 90.8549 % | 90.8501 % | 98.8179 % | 79.5423 % | 90.6856 % |
| Concentration per Run 1 | 0.0867 ppm | 96.6596 % | 90.9855 % | 90.9208 % | 100.2163 % | 79.5955 % | 90.6133 % |
| Concentration per Run 2 | 0.0865 ppm | 96.8502 % | 91.1100 % | 90.9384 % | 98.4212 % | 79.6278 % | 90.6153 % |
| Concentration per Run 3 | 0.0864 ppm | 97.0848 % | 90.4690 % | 90.6912 % | 97.8163 % | 79.4036 % | 90.8284 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.2 % | 1.3 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2452825-01 WG1973830
Analysis started at: 9/20/2024 1:23:25 PM
Comments <Comment>
Rack: 1
Vial: 32

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.1554 ppm | 0.0003 ppm | 0.0313 ppm | 0.1316 ppm | 0.0000 ppm | 32.8941 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.1556 ppm | -0.0004 ppm | 0.0316 ppm | 0.1301 ppm | 0.0000 ppm | 32.5322 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.1534 ppm | 0.0010 ppm | 0.0314 ppm | 0.1325 ppm | 0.0000 ppm | 32.9751 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.1572 ppm | 0.0004 ppm | 0.0310 ppm | 0.1323 ppm | -0.0001 ppm | 33.1749 ppm |
| Concentration RSD | 23.5 % | 1.2 % | 200.8 % | 1.0 % | 1.0 % | 112.8 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0000 ppm | 0.0004 ppm | 0.0262 ppm | 0.4658 ppm | 7.7956 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0260 ppm | 0.4597 ppm | 7.7481 ppm | 0.0018 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0005 ppm | 0.0263 ppm | 0.4678 ppm | 7.8071 ppm | 0.0017 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0001 ppm | 0.0004 ppm | 0.0262 ppm | 0.4699 ppm | 7.8317 ppm | 0.0011 ppm |
| Concentration RSD | 13.9 % | 121.7 % | 43.5 % | 0.7 % | 1.2 % | 0.6 % | 22.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.1423 ppm | 0.0093 ppm | 0.0014 ppm | 21.3762 ppm | 0.0019 ppm | 0.0028 ppm | 0.0005 ppm |
| Concentration per Run 1 | 9.1559 ppm | 0.0092 ppm | 0.0014 ppm | 21.2550 ppm | 0.0019 ppm | 0.0032 ppm | 0.0006 ppm |
| Concentration per Run 2 | 9.1348 ppm | 0.0093 ppm | 0.0014 ppm | 21.4939 ppm | 0.0021 ppm | 0.0023 ppm | 0.0000 ppm |
| Concentration per Run 3 | 9.1363 ppm | 0.0095 ppm | 0.0014 ppm | 21.3797 ppm | 0.0019 ppm | 0.0031 ppm | 0.0008 ppm |
| Concentration RSD | 0.1 % | 1.6 % | 2.3 % | 0.6 % | 7.4 % | 16.9 % | 92.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.4857 ppm | 0.0004 ppm | 0.1419 ppm | 0.0017 ppm | -0.0016 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.4841 ppm | 0.0003 ppm | 0.1404 ppm | 0.0016 ppm | -0.0016 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.4844 ppm | 0.0005 ppm | 0.1424 ppm | 0.0018 ppm | -0.0020 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0019 ppm | 0.4886 ppm | 0.0006 ppm | 0.1428 ppm | 0.0016 ppm | -0.0012 ppm | 0.0002 ppm |
| Concentration RSD | 367.8 % | 0.5 % | 35.8 % | 0.9 % | 7.6 % | 26.4 % | 358.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0382 ppm | 101.2747 % | 98.8374 % | 98.1121 % | 103.4447 % | 95.8034 % | 98.8029 % |
| Concentration per Run 1 | 0.0382 ppm | 101.2252 % | 98.4495 % | 98.2089 % | 104.5645 % | 95.8386 % | 98.7476 % |
| Concentration per Run 2 | 0.0381 ppm | 101.3555 % | 99.1490 % | 98.2469 % | 103.3526 % | 95.9358 % | 98.8732 % |
| Concentration per Run 3 | 0.0383 ppm | 101.2435 % | 98.9137 % | 97.8804 % | 102.4171 % | 95.6358 % | 98.7880 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.4 % | 0.2 % | 1.0 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2452844-01 WG1973830
Analysis started at: 9/20/2024 1:29:44 PM
Comments <Comment>
Rack: 1
Vial: 33

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 1.7911 ppm | 0.0061 ppm | 0.1198 ppm | 0.0222 ppm | 0.0002 ppm | 8.0097 ppm |
| Concentration per Run 1 | 0.0000 ppm | 1.7818 ppm | 0.0055 ppm | 0.1200 ppm | 0.0221 ppm | 0.0002 ppm | 7.9769 ppm |
| Concentration per Run 2 | 0.0001 ppm | 1.7931 ppm | 0.0071 ppm | 0.1206 ppm | 0.0222 ppm | 0.0002 ppm | 7.9944 ppm |
| Concentration per Run 3 | -0.0003 ppm | 1.7983 ppm | 0.0058 ppm | 0.1189 ppm | 0.0223 ppm | 0.0002 ppm | 8.0577 ppm |
| Concentration RSD | 286.9 % | 0.5 % | 14.3 % | 0.7 % | 0.5 % | 5.4 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 0.0036 ppm | 0.0058 ppm | 0.0905 ppm | 2.9403 ppm | 363.8965 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0035 ppm | 0.0057 ppm | 0.0903 ppm | 2.9326 ppm | 369.2160 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.0038 ppm | 0.0058 ppm | 0.0907 ppm | 2.9299 ppm | 352.0832 ppm | 0.0028 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0037 ppm | 0.0058 ppm | 0.0904 ppm | 2.9583 ppm | 370.3903 ppm | 0.0027 ppm |
| Concentration RSD | 0.9 % | 3.7 % | 1.0 % | 0.2 % | 0.5 % | 2.8 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.3509 ppm | 0.3424 ppm | 0.0014 ppm | 26.5370 ppm | 0.0072 ppm | 0.0040 ppm | 0.0007 ppm |
| Concentration per Run 1 | 14.3752 ppm | 0.3416 ppm | 0.0013 ppm | 26.2486 ppm | 0.0071 ppm | 0.0040 ppm | 0.0003 ppm |
| Concentration per Run 2 | 14.3247 ppm | 0.3411 ppm | 0.0014 ppm | 26.6889 ppm | 0.0076 ppm | 0.0040 ppm | 0.0006 ppm |
| Concentration per Run 3 | 14.3527 ppm | 0.3445 ppm | 0.0015 ppm | 26.6735 ppm | 0.0070 ppm | 0.0040 ppm | 0.0012 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 8.9 % | 0.9 % | 4.4 % | 0.8 % | 63.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 2.2153 ppm | 0.0023 ppm | 0.0311 ppm | 0.0322 ppm | -0.0062 ppm | 0.0041 ppm |
| Concentration per Run 1 | 0.0003 ppm | 2.2169 ppm | 0.0026 ppm | 0.0309 ppm | 0.0323 ppm | -0.0067 ppm | 0.0042 ppm |
| Concentration per Run 2 | 0.0019 ppm | 2.2207 ppm | 0.0024 ppm | 0.0311 ppm | 0.0320 ppm | -0.0062 ppm | 0.0041 ppm |
| Concentration per Run 3 | 0.0002 ppm | 2.2084 ppm | 0.0020 ppm | 0.0312 ppm | 0.0323 ppm | -0.0056 ppm | 0.0041 ppm |
| Concentration RSD | 114.6 % | 0.3 % | 13.6 % | 0.5 % | 0.5 % | 9.2 % | 1.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2534 ppm | 97.4848 % | 93.7731 % | 95.3986 % | 95.4267 % | 82.5337 % | 89.9094 % |
| Concentration per Run 1 | 0.2539 ppm | 97.3851 % | 93.6811 % | 95.4905 % | 95.9625 % | 82.9339 % | 89.7454 % |
| Concentration per Run 2 | 0.2534 ppm | 97.6951 % | 93.7888 % | 95.2803 % | 95.6800 % | 82.5110 % | 89.9923 % |
| Concentration per Run 3 | 0.2531 ppm | 97.3742 % | 93.8494 % | 95.4251 % | 94.6376 % | 82.1561 % | 89.9904 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.1 % | 0.1 % | 0.7 % | 0.5 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-01 WG1973830
Analysis started at: 9/20/2024 1:36:07 PM
Comments <Comment>
Rack: 1
Vial: 26

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0054 ppm | 0.0005 ppm | 0.0115 ppm | 0.0222 ppm | 0.0000 ppm | 18.0045 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0061 ppm | 0.0011 ppm | 0.0116 ppm | 0.0223 ppm | 0.0000 ppm | 18.0676 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0056 ppm | -0.0009 ppm | 0.0117 ppm | 0.0220 ppm | 0.0000 ppm | 17.8926 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0046 ppm | 0.0011 ppm | 0.0111 ppm | 0.0222 ppm | 0.0000 ppm | 18.0534 ppm |
| Concentration RSD | 122.8 % | 14.3 % | 251.4 % | 2.9 % | 0.8 % | 2,108.0 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0706 ppm | 1.8970 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0008 ppm | 0.0707 ppm | 1.9176 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0701 ppm | 1.9007 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm | 0.0711 ppm | 1.8726 ppm | 0.0003 ppm |
| Concentration RSD | 28.9 % | 231.7 % | 40.1 % | 7.3 % | 0.7 % | 1.2 % | 168.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2046 ppm | 0.0487 ppm | 0.0003 ppm | 2.4147 ppm | -0.0004 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 1 | 3.2006 ppm | 0.0483 ppm | 0.0002 ppm | 2.4206 ppm | -0.0004 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 2 | 3.2121 ppm | 0.0488 ppm | 0.0003 ppm | 2.4127 ppm | -0.0005 ppm | -0.0001 ppm | 0.0007 ppm |
| Concentration per Run 3 | 3.2012 ppm | 0.0489 ppm | 0.0002 ppm | 2.4108 ppm | -0.0004 ppm | -0.0007 ppm | 0.0001 ppm |
| Concentration RSD | 0.2 % | 0.6 % | 9.2 % | 0.2 % | 12.1 % | 78.4 % | 70.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 4.5854 ppm | -0.0005 ppm | 0.0542 ppm | -0.0002 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0021 ppm | 4.5979 ppm | -0.0008 ppm | 0.0543 ppm | -0.0003 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0004 ppm | 4.5779 ppm | -0.0003 ppm | 0.0541 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0020 ppm | 4.5806 ppm | -0.0004 ppm | 0.0541 ppm | -0.0002 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration RSD | 63.2 % | 0.2 % | 46.7 % | 0.3 % | 86.1 % | 317.8 % | 132.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 103.3130 % | 102.2897 % | 102.9551 % | 103.3866 % | 102.0114 % | 102.0173 % |
| Concentration per Run 1 | 0.0017 ppm | 103.3943 % | 102.1317 % | 102.6059 % | 103.1906 % | 101.6516 % | 102.3672 % |
| Concentration per Run 2 | 0.0018 ppm | 103.5136 % | 102.5306 % | 103.2635 % | 104.1428 % | 102.1556 % | 102.1282 % |
| Concentration per Run 3 | 0.0018 ppm | 103.0311 % | 102.2069 % | 102.9960 % | 102.8262 % | 102.2269 % | 101.5564 % |
| Concentration RSD | 2.6 % | 0.2 % | 0.2 % | 0.3 % | 0.7 % | 0.3 % | 0.4 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-3 WG1973830
Analysis started at: 9/20/2024 1:42:26 PM
Comments <Comment>
Rack: 1
Vial: 27

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 2.0210 ppm | 0.1229 ppm | 1.0441 ppm | 2.0087 ppm | 0.0499 ppm | 28.9447 ppm |
| Concentration per Run 1 | 0.0529 ppm | 1.9981 ppm | 0.1244 ppm | 1.0440 ppm | 1.9928 ppm | 0.0494 ppm | 28.7040 ppm |
| Concentration per Run 2 | 0.0531 ppm | 2.0307 ppm | 0.1213 ppm | 1.0433 ppm | 2.0110 ppm | 0.0501 ppm | 29.0454 ppm |
| Concentration per Run 3 | 0.0531 ppm | 2.0344 ppm | 0.1229 ppm | 1.0450 ppm | 2.0222 ppm | 0.0502 ppm | 29.0849 ppm |
| Concentration RSD | 0.2 % | 1.0 % | 1.3 % | 0.1 % | 0.7 % | 0.9 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0525 ppm | 0.4940 ppm | 0.1966 ppm | 0.2558 ppm | 1.0710 ppm | 12.7062 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0527 ppm | 0.4948 ppm | 0.1968 ppm | 0.2557 ppm | 1.0605 ppm | 12.6040 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0525 ppm | 0.4939 ppm | 0.1968 ppm | 0.2564 ppm | 1.0748 ppm | 12.7307 ppm | -0.0017 ppm |
| Concentration per Run 3 | 0.0523 ppm | 0.4932 ppm | 0.1964 ppm | 0.2553 ppm | 1.0776 ppm | 12.7840 ppm | -0.0003 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.1 % | 0.2 % | 0.9 % | 0.7 % | 74.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.8764 ppm | 0.5472 ppm | 1.0058 ppm | 13.1181 ppm | 0.4954 ppm | 0.5450 ppm | 0.5170 ppm |
| Concentration per Run 1 | 13.8387 ppm | 0.5425 ppm | 1.0042 ppm | 13.0172 ppm | 0.4950 ppm | 0.5459 ppm | 0.5156 ppm |
| Concentration per Run 2 | 13.8851 ppm | 0.5489 ppm | 1.0056 ppm | 13.1772 ppm | 0.4955 ppm | 0.5442 ppm | 0.5176 ppm |
| Concentration per Run 3 | 13.9055 ppm | 0.5502 ppm | 1.0075 ppm | 13.1599 ppm | 0.4957 ppm | 0.5449 ppm | 0.5179 ppm |
| Concentration RSD | 0.2 % | 0.8 % | 0.2 % | 0.7 % | 0.1 % | 0.2 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1263 ppm | 5.9037 ppm | 1.0046 ppm | 1.0334 ppm | 1.0319 ppm | 0.1236 ppm | 0.4936 ppm |
| Concentration per Run 1 | 0.1270 ppm | 5.9007 ppm | 1.0041 ppm | 1.0241 ppm | 1.0321 ppm | 0.1237 ppm | 0.4942 ppm |
| Concentration per Run 2 | 0.1271 ppm | 5.8924 ppm | 1.0052 ppm | 1.0370 ppm | 1.0332 ppm | 0.1238 ppm | 0.4939 ppm |
| Concentration per Run 3 | 0.1248 ppm | 5.9179 ppm | 1.0044 ppm | 1.0392 ppm | 1.0302 ppm | 0.1232 ppm | 0.4927 ppm |
| Concentration RSD | 1.0 % | 0.2 % | 0.1 % | 0.8 % | 0.1 % | 0.2 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4942 ppm | 98.6379 % | 98.0925 % | 98.9396 % | 99.9286 % | 95.7809 % | 97.4114 % |
| Concentration per Run 1 | 0.4949 ppm | 98.6643 % | 97.9447 % | 98.7581 % | 100.9072 % | 95.6517 % | 97.3549 % |
| Concentration per Run 2 | 0.4952 ppm | 99.0887 % | 98.2933 % | 99.0470 % | 99.9108 % | 95.8469 % | 97.3701 % |
| Concentration per Run 3 | 0.4926 ppm | 98.1606 % | 98.0395 % | 99.0139 % | 98.9678 % | 95.8441 % | 97.5090 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.2 % | 0.2 % | 1.0 % | 0.1 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-4 WG1973830
Analysis started at: 9/20/2024 1:48:36 PM
Comments <Comment>
Rack: 1
Vial: 28

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0521 ppm | 2.0131 ppm | 0.1220 ppm | 1.0253 ppm | 2.0227 ppm | 0.0497 ppm | 27.9991 ppm |
| Concentration per Run 1 | 0.0522 ppm | 1.9898 ppm | 0.1211 ppm | 1.0231 ppm | 2.0207 ppm | 0.0492 ppm | 27.6900 ppm |
| Concentration per Run 2 | 0.0520 ppm | 2.0124 ppm | 0.1244 ppm | 1.0263 ppm | 2.0035 ppm | 0.0497 ppm | 27.9489 ppm |
| Concentration per Run 3 | 0.0521 ppm | 2.0371 ppm | 0.1204 ppm | 1.0265 ppm | 2.0440 ppm | 0.0503 ppm | 28.3583 ppm |
| Concentration RSD | 0.2 % | 1.2 % | 1.7 % | 0.2 % | 1.0 % | 1.0 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 0.4919 ppm | 0.1959 ppm | 0.2550 ppm | 1.1484 ppm | 12.4786 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.4911 ppm | 0.1956 ppm | 0.2557 ppm | 1.1356 ppm | 12.3854 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.4922 ppm | 0.1964 ppm | 0.2552 ppm | 1.1481 ppm | 12.6138 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0523 ppm | 0.4924 ppm | 0.1957 ppm | 0.2542 ppm | 1.1616 ppm | 12.4366 ppm | -0.0005 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 0.2 % | 0.3 % | 1.1 % | 1.0 % | 53.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.4480 ppm | 0.5422 ppm | 0.9884 ppm | 12.8150 ppm | 0.4943 ppm | 0.5352 ppm | 0.5155 ppm |
| Concentration per Run 1 | 13.4382 ppm | 0.5371 ppm | 0.9863 ppm | 12.7328 ppm | 0.4930 ppm | 0.5341 ppm | 0.5146 ppm |
| Concentration per Run 2 | 13.4579 ppm | 0.5419 ppm | 0.9879 ppm | 12.8859 ppm | 0.4946 ppm | 0.5354 ppm | 0.5154 ppm |
| Concentration per Run 3 | 13.4478 ppm | 0.5476 ppm | 0.9909 ppm | 12.8264 ppm | 0.4952 ppm | 0.5362 ppm | 0.5165 ppm |
| Concentration RSD | 0.1 % | 1.0 % | 0.2 % | 0.6 % | 0.2 % | 0.2 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1252 ppm | 5.7213 ppm | 0.9856 ppm | 1.0111 ppm | 1.0121 ppm | 0.1222 ppm | 0.4897 ppm |
| Concentration per Run 1 | 0.1239 ppm | 5.7099 ppm | 0.9852 ppm | 1.0038 ppm | 1.0099 ppm | 0.1223 ppm | 0.4879 ppm |
| Concentration per Run 2 | 0.1269 ppm | 5.7240 ppm | 0.9849 ppm | 1.0120 ppm | 1.0157 ppm | 0.1230 ppm | 0.4915 ppm |
| Concentration per Run 3 | 0.1250 ppm | 5.7301 ppm | 0.9867 ppm | 1.0175 ppm | 1.0107 ppm | 0.1214 ppm | 0.4898 ppm |
| Concentration RSD | 1.2 % | 0.2 % | 0.1 % | 0.7 % | 0.3 % | 0.7 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4936 ppm | 100.7737 % | 99.4203 % | 100.1499 % | 100.9340 % | 96.7378 % | 98.6723 % |
| Concentration per Run 1 | 0.4929 ppm | 101.0983 % | 99.9174 % | 100.3934 % | 102.1851 % | 96.8149 % | 99.1871 % |
| Concentration per Run 2 | 0.4934 ppm | 100.9223 % | 99.1963 % | 100.0215 % | 101.2703 % | 96.6607 % | 98.2666 % |
| Concentration per Run 3 | 0.4946 ppm | 100.3006 % | 99.1473 % | 100.0347 % | 99.3466 % | 96.7377 % | 98.5633 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.4 % | 0.2 % | 1.4 % | 0.1 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-5 WG1973830
Analysis started at: 9/20/2024 1:54:46 PM
Comments <Comment>
Rack: 1
Vial: 29

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0492 ppm | 1.9581 ppm | 0.1168 ppm | 0.9977 ppm | 1.9614 ppm | 0.0485 ppm | 27.7220 ppm |
| Concentration per Run 1 | 0.0492 ppm | 1.9519 ppm | 0.1183 ppm | 1.0017 ppm | 1.9598 ppm | 0.0483 ppm | 27.6321 ppm |
| Concentration per Run 2 | 0.0491 ppm | 1.9567 ppm | 0.1153 ppm | 0.9960 ppm | 2.0070 ppm | 0.0485 ppm | 27.7174 ppm |
| Concentration per Run 3 | 0.0492 ppm | 1.9658 ppm | 0.1168 ppm | 0.9955 ppm | 1.9173 ppm | 0.0486 ppm | 27.8164 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 1.3 % | 0.3 % | 2.3 % | 0.3 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0511 ppm | 0.4798 ppm | 0.1916 ppm | 0.2473 ppm | 1.0437 ppm | 12.1881 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0511 ppm | 0.4807 ppm | 0.1932 ppm | 0.2464 ppm | 1.0381 ppm | 12.1199 ppm | -0.0016 ppm |
| Concentration per Run 2 | 0.0513 ppm | 0.4792 ppm | 0.1905 ppm | 0.2477 ppm | 1.0464 ppm | 12.2141 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0510 ppm | 0.4796 ppm | 0.1913 ppm | 0.2478 ppm | 1.0466 ppm | 12.2303 ppm | 0.0006 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.7 % | 0.3 % | 0.5 % | 0.5 % | 215.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.2916 ppm | 0.5310 ppm | 0.9626 ppm | 12.6220 ppm | 0.4829 ppm | 0.5218 ppm | 0.4919 ppm |
| Concentration per Run 1 | 13.2650 ppm | 0.5286 ppm | 0.9638 ppm | 12.5638 ppm | 0.4844 ppm | 0.5222 ppm | 0.4937 ppm |
| Concentration per Run 2 | 13.2380 ppm | 0.5308 ppm | 0.9617 ppm | 12.6346 ppm | 0.4816 ppm | 0.5219 ppm | 0.4917 ppm |
| Concentration per Run 3 | 13.3719 ppm | 0.5336 ppm | 0.9625 ppm | 12.6676 ppm | 0.4825 ppm | 0.5212 ppm | 0.4902 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 0.1 % | 0.4 % | 0.3 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1200 ppm | 5.5695 ppm | 0.9741 ppm | 0.9893 ppm | 0.9945 ppm | 0.1180 ppm | 0.4808 ppm |
| Concentration per Run 1 | 0.1193 ppm | 5.5902 ppm | 0.9748 ppm | 0.9831 ppm | 1.0001 ppm | 0.1186 ppm | 0.4835 ppm |
| Concentration per Run 2 | 0.1201 ppm | 5.5523 ppm | 0.9755 ppm | 0.9923 ppm | 0.9916 ppm | 0.1175 ppm | 0.4789 ppm |
| Concentration per Run 3 | 0.1205 ppm | 5.5659 ppm | 0.9721 ppm | 0.9926 ppm | 0.9919 ppm | 0.1180 ppm | 0.4799 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.2 % | 0.5 % | 0.5 % | 0.5 % | 0.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4846 ppm | 99.0284 % | 97.7868 % | 99.1244 % | 99.8335 % | 95.3649 % | 96.9993 % |
| Concentration per Run 1 | 0.4841 ppm | 99.0372 % | 97.8894 % | 98.7915 % | 100.1115 % | 95.1101 % | 96.7809 % |
| Concentration per Run 2 | 0.4860 ppm | 99.2117 % | 98.0969 % | 99.4746 % | 99.7884 % | 95.8325 % | 97.3016 % |
| Concentration per Run 3 | 0.4838 ppm | 98.8362 % | 97.3743 % | 99.1072 % | 99.6007 % | 95.1523 % | 96.9155 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1973830-6D5 WG1973830
Analysis started at: 9/20/2024 2:00:56 PM
Comments <Comment>
Rack: 1
Vial: 30

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0061 ppm | -0.0002 ppm | 0.0046 ppm | 0.0045 ppm | 0.0000 ppm | 3.6846 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0028 ppm | -0.0012 ppm | 0.0046 ppm | 0.0044 ppm | 0.0000 ppm | 3.6365 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0054 ppm | 0.0007 ppm | 0.0046 ppm | 0.0045 ppm | 0.0000 ppm | 3.7116 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0101 ppm | 0.0000 ppm | 0.0045 ppm | 0.0045 ppm | 0.0000 ppm | 3.7055 ppm |
| Concentration RSD | 239.1 % | 60.4 % | 584.2 % | 1.8 % | 0.9 % | 189.7 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0152 ppm | 0.3508 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0151 ppm | 0.3394 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0152 ppm | 0.3547 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0154 ppm | 0.3582 ppm | 0.0002 ppm |
| Concentration RSD | 47.6 % | 16.8 % | 689.2 % | 13.8 % | 1.0 % | 2.9 % | 570.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6554 ppm | 0.0099 ppm | 0.0012 ppm | 0.4815 ppm | -0.0002 ppm | 0.0002 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.6531 ppm | 0.0097 ppm | 0.0014 ppm | 0.4791 ppm | -0.0004 ppm | 0.0008 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.6556 ppm | 0.0100 ppm | 0.0010 ppm | 0.4815 ppm | -0.0002 ppm | -0.0004 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.6574 ppm | 0.0100 ppm | 0.0011 ppm | 0.4839 ppm | 0.0000 ppm | 0.0002 ppm | 0.0012 ppm |
| Concentration RSD | 0.3 % | 1.5 % | 19.7 % | 0.5 % | 91.3 % | 295.7 % | 21.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.9161 ppm | 0.0009 ppm | 0.0109 ppm | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0019 ppm | 0.9134 ppm | 0.0008 ppm | 0.0108 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.9177 ppm | 0.0010 ppm | 0.0109 ppm | 0.0000 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.9173 ppm | 0.0010 ppm | 0.0110 ppm | 0.0001 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration RSD | 59.8 % | 0.3 % | 12.3 % | 0.9 % | 255.3 % | 108.8 % | 285.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 99.5623 % | 100.5222 % | 102.2040 % | 100.2601 % | 101.8816 % | 100.9017 % |
| Concentration per Run 1 | 0.0009 ppm | 100.1962 % | 100.7507 % | 102.3536 % | 101.3296 % | 102.2686 % | 100.7667 % |
| Concentration per Run 2 | 0.0008 ppm | 98.9339 % | 100.5878 % | 102.0324 % | 99.7202 % | 101.6110 % | 101.2880 % |
| Concentration per Run 3 | 0.0006 ppm | 99.5569 % | 100.2282 % | 102.2261 % | 99.7304 % | 101.7653 % | 100.6505 % |
| Concentration RSD | 16.1 % | 0.6 % | 0.3 % | 0.2 % | 0.9 % | 0.3 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 2:07:17 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5095 ppm | 0.5019 ppm | 0.5035 ppm | 0.5129 ppm | 0.4926 ppm | 0.5022 ppm | 0.4986 ppm |
| Concentration per Run 1 | 0.5100 ppm | 0.4958 ppm | 0.5034 ppm | 0.5117 ppm | 0.4823 ppm | 0.4918 ppm | 0.4885 ppm |
| Concentration per Run 2 | 0.5083 ppm | 0.5019 ppm | 0.5033 ppm | 0.5134 ppm | 0.4947 ppm | 0.5054 ppm | 0.5021 ppm |
| Concentration per Run 3 | 0.5102 ppm | 0.5080 ppm | 0.5040 ppm | 0.5134 ppm | 0.5008 ppm | 0.5093 ppm | 0.5050 ppm |
| Recovery Percentage 1 | 101.898 % | 100.377 % | 100.710 % | 102.571 % | 98.516 % | 100.434 % | 99.711 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.1 % | 0.2 % | 1.9 % | 1.8 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5050 ppm | 0.5154 ppm | 0.4951 ppm | 0.4867 ppm | 0.5291 ppm | 5.2563 ppm | 0.4932 ppm |
| Concentration per Run 1 | 0.5038 ppm | 0.5143 ppm | 0.4958 ppm | 0.4874 ppm | 0.5185 ppm | 5.1868 ppm | 0.4834 ppm |
| Concentration per Run 2 | 0.5055 ppm | 0.5162 ppm | 0.4941 ppm | 0.4856 ppm | 0.5317 ppm | 5.3025 ppm | 0.4977 ppm |
| Concentration per Run 3 | 0.5056 ppm | 0.5158 ppm | 0.4954 ppm | 0.4870 ppm | 0.5371 ppm | 5.2797 ppm | 0.4985 ppm |
| Recovery Percentage 1 | 100.993 % | 103.088 % | 99.022 % | 97.332 % | 105.818 % | 105.127 % | 98.644 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.2 % | 0.2 % | 1.8 % | 1.2 % | 1.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5026 ppm | 0.4913 ppm | 0.4985 ppm | 9.8815 ppm | 0.5184 ppm | 0.5219 ppm | 0.5167 ppm |
| Concentration per Run 1 | 0.4985 ppm | 0.4815 ppm | 0.4969 ppm | 9.6947 ppm | 0.5176 ppm | 0.5201 ppm | 0.5152 ppm |
| Concentration per Run 2 | 0.5025 ppm | 0.4961 ppm | 0.4988 ppm | 9.9433 ppm | 0.5188 ppm | 0.5226 ppm | 0.5174 ppm |
| Concentration per Run 3 | 0.5068 ppm | 0.4962 ppm | 0.4997 ppm | 10.0066 ppm | 0.5189 ppm | 0.5230 ppm | 0.5176 ppm |
| Recovery Percentage 1 | 100.518 % | 98.252 % | 99.695 % | 98.815 % | 103.689 % | 104.379 % | 103.340 % |
| Concentration RSD | 0.8 % | 1.7 % | 0.3 % | 1.7 % | 0.1 % | 0.3 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5230 ppm | 5.6912 ppm | 0.4869 ppm | 0.4672 ppm | 0.5014 ppm | 0.5307 ppm | 0.4903 ppm |
| Concentration per Run 1 | 0.5219 ppm | 5.6841 ppm | 0.4853 ppm | 0.4578 ppm | 0.5029 ppm | 0.5293 ppm | 0.4917 ppm |
| Concentration per Run 2 | 0.5230 ppm | 5.6919 ppm | 0.4873 ppm | 0.4698 ppm | 0.5006 ppm | 0.5311 ppm | 0.4896 ppm |
| Concentration per Run 3 | 0.5240 ppm | 5.6976 ppm | 0.4882 ppm | 0.4741 ppm | 0.5009 ppm | 0.5316 ppm | 0.4895 ppm |
| Recovery Percentage 1 | 104.591 % | 108.404 % | 97.387 % | 93.443 % | 100.288 % | 106.138 % | 98.051 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 1.8 % | 0.3 % | 0.2 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5358 ppm | 97.6445 % | 98.0927 % | 99.8815 % | 98.6960 % | 97.6078 % | 98.8536 % |
| Concentration per Run 1 | 0.5340 ppm | 98.2725 % | 98.0850 % | 99.9380 % | 100.4725 % | 97.5235 % | 98.7073 % |
| Concentration per Run 2 | 0.5360 ppm | 96.9743 % | 98.2535 % | 99.9315 % | 98.0835 % | 97.6981 % | 98.8752 % |
| Concentration per Run 3 | 0.5373 ppm | 97.6868 % | 97.9395 % | 99.7751 % | 97.5320 % | 97.6018 % | 98.9783 % |
| Recovery Percentage 1 | 107.150 % | | | | | | |
| Concentration RSD | 0.3 % | 0.7 % | 0.2 % | 0.1 % | 1.6 % | 0.1 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 2:13:20 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0117 ppm | 0.0000 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0097 ppm | 0.0007 ppm | 0.0012 ppm | 0.0001 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0121 ppm | -0.0010 ppm | 0.0016 ppm | -0.0001 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0134 ppm | 0.0005 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0026 ppm |
| Recovery Percentage 1 | -0.904 % | 11.714 % | 0.749 % | 4.190 % | -0.129 % | 0.254 % | -0.409 % |
| Concentration RSD | 187.4 % | 15.9 % | 2,495.3 % | 22.2 % | 766.8 % | 182.2 % | 463.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0012 ppm | -0.0134 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0012 ppm | -0.0220 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | 0.0004 ppm | -0.0161 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0019 ppm | -0.0020 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.752 % | 0.287 % | 1.798 % | -1.391 % | 2.366 % | -0.535 % | -0.790 % |
| Concentration RSD | 103.4 % | 49.5 % | 59.8 % | 23.5 % | 64.5 % | 76.6 % | 345.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0001 ppm | 0.0005 ppm | 0.0058 ppm | -0.0003 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0001 ppm | 0.0005 ppm | 0.0074 ppm | -0.0003 ppm | -0.0003 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0006 ppm | 0.0099 ppm | -0.0003 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0000 ppm | -0.0004 ppm | 0.0004 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 0.252 % | -0.610 % | 1.032 % | 0.289 % | -1.269 % | 0.715 % | 0.468 % |
| Concentration RSD | 264.8 % | 192.7 % | 15.6 % | 88.6 % | 21.7 % | 496.4 % | 398.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | -0.0003 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0020 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0010 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0014 ppm | -0.0018 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 4.452 % | -0.058 % | 0.562 % | -0.137 % | -0.843 % | 0.664 % | 0.487 % |
| Concentration RSD | 221.5 % | 688.0 % | 67.3 % | 65.8 % | 41.2 % | 188.5 % | 163.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 96.0737 % | 98.5140 % | 103.1213 % | 97.0720 % | 102.4682 % | 98.7123 % |
| Concentration per Run 1 | 0.0003 ppm | 94.1878 % | 98.6287 % | 103.0170 % | 96.9303 % | 102.2598 % | 98.3956 % |
| Concentration per Run 2 | 0.0004 ppm | 97.2131 % | 98.6776 % | 103.2310 % | 96.9113 % | 102.6551 % | 99.0216 % |
| Concentration per Run 3 | 0.0003 ppm | 96.8202 % | 98.2358 % | 103.1159 % | 97.3745 % | 102.4898 % | 98.7198 % |
| Recovery Percentage 1 | 6.842 % | | | | | | |
| Concentration RSD | 25.0 % | 1.7 % | 0.2 % | 0.1 % | 0.3 % | 0.2 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-17 WG1974186
Analysis started at: 9/20/2024 2:19:46 PM
Comments <Comment>
Rack: 1
Vial: 34

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0090 ppm | -0.0004 ppm | 0.0006 ppm | 0.0022 ppm | 0.0001 ppm | 0.0059 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0130 ppm | 0.0003 ppm | 0.0008 ppm | 0.0022 ppm | 0.0001 ppm | 0.0081 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0063 ppm | -0.0007 ppm | 0.0004 ppm | 0.0022 ppm | 0.0001 ppm | 0.0048 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0078 ppm | -0.0007 ppm | 0.0006 ppm | 0.0021 ppm | 0.0001 ppm | 0.0048 ppm |
| Recovery Percentage 1 | -0.365 % | 9.033 % | -7.237 % | 1.992 % | 21.899 % | 1.737 % | 5.909 % |
| Concentration RSD | 424.4 % | 39.0 % | 146.5 % | 36.6 % | 3.4 % | 31.9 % | 32.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0008 ppm | -0.0003 ppm | 0.0005 ppm | -0.0019 ppm | -0.0096 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0008 ppm | -0.0002 ppm | 0.0004 ppm | -0.0008 ppm | 0.0100 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0009 ppm | -0.0003 ppm | 0.0004 ppm | -0.0022 ppm | -0.0187 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0007 ppm | -0.0004 ppm | 0.0007 ppm | -0.0026 ppm | -0.0201 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 2.052 % | 4.066 % | -3.015 % | 5.192 % | -3.774 % | -0.384 % | -4.483 % |
| Concentration RSD | 23.1 % | 13.6 % | 31.0 % | 30.2 % | 50.9 % | 177.0 % | 82.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0009 ppm | 0.0001 ppm | 0.0075 ppm | 0.0004 ppm | 0.0004 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0009 ppm | 0.0000 ppm | 0.0101 ppm | 0.0005 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0009 ppm | 0.0001 ppm | 0.0076 ppm | 0.0005 ppm | 0.0009 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0008 ppm | 0.0001 ppm | 0.0049 ppm | 0.0003 ppm | -0.0001 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 1.231 % | 8.908 % | 0.125 % | 0.377 % | 1.705 % | 4.053 % | 1.454 % |
| Concentration RSD | 52.4 % | 4.9 % | 85.9 % | 34.3 % | 16.0 % | 127.0 % | 71.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0022 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0009 ppm | -0.0025 ppm | 0.0004 ppm | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0019 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0007 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0022 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 5.189 % | -0.442 % | 0.285 % | -0.187 % | -1.389 % | 0.902 % | 6.306 % |
| Concentration RSD | 126.6 % | 13.2 % | 204.2 % | 162.3 % | 125.6 % | 257.9 % | 15.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 99.6462 % | 100.7230 % | 102.5695 % | 99.7417 % | 103.8213 % | 100.9672 % |
| Concentration per Run 1 | 0.0014 ppm | 100.3034 % | 100.7593 % | 102.4035 % | 99.8656 % | 103.8133 % | 100.8814 % |
| Concentration per Run 2 | 0.0014 ppm | 98.4765 % | 100.6474 % | 102.6264 % | 99.4306 % | 103.6055 % | 101.0981 % |
| Concentration per Run 3 | 0.0015 ppm | 100.1587 % | 100.7624 % | 102.6784 % | 99.9290 % | 104.0452 % | 100.9221 % |
| Recovery Percentage 1 | 28.507 % | | | | | | |
| Concentration RSD | 4.5 % | 1.0 % | 0.1 % | 0.1 % | 0.3 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-18 WG1974186
Analysis started at: 9/20/2024 2:26:11 PM
Comments <Comment>
Rack: 1
Vial: 35

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0520 ppm | 2.0083 ppm | 0.1214 ppm | 1.0020 ppm | 1.9670 ppm | 0.0498 ppm | 10.1458 ppm |
| Concentration per Run 1 | 0.0522 ppm | 1.9785 ppm | 0.1211 ppm | 1.0027 ppm | 1.9936 ppm | 0.0493 ppm | 10.0945 ppm |
| Concentration per Run 2 | 0.0518 ppm | 2.0107 ppm | 0.1209 ppm | 1.0009 ppm | 1.9598 ppm | 0.0497 ppm | 10.1026 ppm |
| Concentration per Run 3 | 0.0521 ppm | 2.0357 ppm | 0.1223 ppm | 1.0023 ppm | 1.9476 ppm | 0.0504 ppm | 10.2403 ppm |
| Concentration RSD | 0.4 % | 1.4 % | 0.7 % | 0.1 % | 1.2 % | 1.1 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0534 ppm | 0.5021 ppm | 0.1985 ppm | 0.2529 ppm | 1.0032 ppm | 10.7255 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0534 ppm | 0.5019 ppm | 0.1972 ppm | 0.2524 ppm | 0.9977 ppm | 10.5780 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0535 ppm | 0.5025 ppm | 0.2000 ppm | 0.2532 ppm | 0.9970 ppm | 10.7436 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0533 ppm | 0.5019 ppm | 0.1984 ppm | 0.2530 ppm | 1.0149 ppm | 10.8547 ppm | -0.0013 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.7 % | 0.2 % | 1.0 % | 1.3 % | 27.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.3139 ppm | 0.5001 ppm | 1.0091 ppm | 10.5319 ppm | 0.5088 ppm | 0.5483 ppm | 0.5117 ppm |
| Concentration per Run 1 | 10.3288 ppm | 0.4954 ppm | 1.0085 ppm | 10.3945 ppm | 0.5096 ppm | 0.5488 ppm | 0.5112 ppm |
| Concentration per Run 2 | 10.3216 ppm | 0.4989 ppm | 1.0086 ppm | 10.5399 ppm | 0.5084 ppm | 0.5479 ppm | 0.5116 ppm |
| Concentration per Run 3 | 10.2914 ppm | 0.5058 ppm | 1.0102 ppm | 10.6614 ppm | 0.5085 ppm | 0.5483 ppm | 0.5123 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 0.1 % | 1.3 % | 0.1 % | 0.1 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1228 ppm | 1.1365 ppm | 1.0014 ppm | 0.9611 ppm | 1.0248 ppm | 0.1233 ppm | 0.4943 ppm |
| Concentration per Run 1 | 0.1247 ppm | 1.1393 ppm | 1.0009 ppm | 0.9500 ppm | 1.0180 ppm | 0.1232 ppm | 0.4907 ppm |
| Concentration per Run 2 | 0.1228 ppm | 1.1335 ppm | 1.0005 ppm | 0.9619 ppm | 1.0327 ppm | 0.1233 ppm | 0.4978 ppm |
| Concentration per Run 3 | 0.1208 ppm | 1.1366 ppm | 1.0027 ppm | 0.9713 ppm | 1.0238 ppm | 0.1234 ppm | 0.4944 ppm |
| Concentration RSD | 1.6 % | 0.3 % | 0.1 % | 1.1 % | 0.7 % | 0.1 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5028 ppm | 99.9836 % | 99.6831 % | 101.4599 % | 101.4740 % | 98.1552 % | 100.1441 % |
| Concentration per Run 1 | 0.5025 ppm | 99.9553 % | 99.3100 % | 101.2828 % | 102.2768 % | 98.1097 % | 100.4735 % |
| Concentration per Run 2 | 0.5036 ppm | 99.6609 % | 99.9627 % | 101.4728 % | 101.6659 % | 98.2198 % | 99.8424 % |
| Concentration per Run 3 | 0.5023 ppm | 100.3344 % | 99.7767 % | 101.6242 % | 100.4791 % | 98.1361 % | 100.1163 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.3 % | 0.2 % | 0.9 % | 0.1 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-02 WG1974186
Analysis started at: 9/20/2024 2:32:24 PM
Comments <Comment>
Rack: 1
Vial: 41

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0024 ppm | 0.0011 ppm | 0.0321 ppm | 0.0235 ppm | 0.0000 ppm | 10.1652 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0012 ppm | 0.0018 ppm | 0.0326 ppm | 0.0234 ppm | 0.0000 ppm | 10.0894 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0068 ppm | 0.0016 ppm | 0.0320 ppm | 0.0235 ppm | 0.0000 ppm | 10.1528 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0007 ppm | -0.0002 ppm | 0.0317 ppm | 0.0236 ppm | 0.0000 ppm | 10.2535 ppm |
| Concentration RSD | 1.2 % | 161.5 % | 101.5 % | 1.5 % | 0.5 % | 418.3 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0069 ppm | -0.0005 ppm | 0.0003 ppm | 2.6187 ppm | 0.9687 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0069 ppm | -0.0004 ppm | 0.0003 ppm | 2.6031 ppm | 0.9654 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0067 ppm | -0.0005 ppm | 0.0005 ppm | 2.6115 ppm | 0.9734 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0070 ppm | -0.0005 ppm | 0.0002 ppm | 2.6415 ppm | 0.9673 ppm | -0.0002 ppm |
| Concentration RSD | 34.7 % | 2.3 % | 14.5 % | 41.3 % | 0.8 % | 0.4 % | 258.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4547 ppm | 0.1051 ppm | 0.0009 ppm | 8.1096 ppm | 0.0014 ppm | -0.0016 ppm | 0.0002 ppm |
| Concentration per Run 1 | 4.4567 ppm | 0.1042 ppm | 0.0010 ppm | 8.0830 ppm | 0.0016 ppm | -0.0018 ppm | 0.0001 ppm |
| Concentration per Run 2 | 4.4648 ppm | 0.1050 ppm | 0.0009 ppm | 8.0822 ppm | 0.0013 ppm | -0.0017 ppm | 0.0012 ppm |
| Concentration per Run 3 | 4.4427 ppm | 0.1061 ppm | 0.0008 ppm | 8.1636 ppm | 0.0014 ppm | -0.0012 ppm | -0.0005 ppm |
| Concentration RSD | 0.3 % | 0.9 % | 13.0 % | 0.6 % | 10.2 % | 22.1 % | 354.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 7.7802 ppm | 0.0001 ppm | 0.0378 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0020 ppm | 7.8149 ppm | 0.0002 ppm | 0.0377 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0012 ppm | 7.7499 ppm | -0.0001 ppm | 0.0378 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0033 ppm | 7.7757 ppm | 0.0001 ppm | 0.0380 ppm | -0.0001 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration RSD | 48.0 % | 0.4 % | 249.0 % | 0.4 % | 211.0 % | 138.7 % | 1,283.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0073 ppm | 100.0014 % | 99.6136 % | 101.6739 % | 100.5680 % | 99.5840 % | 100.8312 % |
| Concentration per Run 1 | 0.0071 ppm | 100.4831 % | 99.5579 % | 101.3391 % | 101.3663 % | 99.2501 % | 100.8353 % |
| Concentration per Run 2 | 0.0074 ppm | 99.4490 % | 99.5255 % | 102.0511 % | 100.5783 % | 99.7552 % | 100.3668 % |
| Concentration per Run 3 | 0.0073 ppm | 100.0720 % | 99.7574 % | 101.6315 % | 99.7595 % | 99.7468 % | 101.2914 % |
| Concentration RSD | 1.7 % | 0.5 % | 0.1 % | 0.4 % | 0.8 % | 0.3 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-03 WG1974186
Analysis started at: 9/20/2024 2:38:43 PM
Comments <Comment>
Rack: 1
Vial: 42

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | -0.0004 ppm | 0.0136 ppm | 0.0255 ppm | 0.0000 ppm | 29.2653 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0034 ppm | 0.0006 ppm | 0.0133 ppm | 0.0254 ppm | 0.0000 ppm | 29.1219 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0007 ppm | -0.0010 ppm | 0.0136 ppm | 0.0255 ppm | 0.0000 ppm | 29.3379 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0032 ppm | -0.0007 ppm | 0.0138 ppm | 0.0257 ppm | 0.0000 ppm | 29.3362 ppm |
| Concentration RSD | 467.7 % | 1,240.1 % | 228.0 % | 1.7 % | 0.5 % | 33.5 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0000 ppm | 0.0007 ppm | 0.0011 ppm | 0.0090 ppm | 1.1912 ppm | -0.0009 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | 0.0007 ppm | 0.0010 ppm | 0.0086 ppm | 1.1950 ppm | -0.0013 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0001 ppm | 0.0007 ppm | 0.0012 ppm | 0.0094 ppm | 1.1780 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | 0.0007 ppm | 0.0011 ppm | 0.0090 ppm | 1.2006 ppm | -0.0006 ppm |
| Concentration RSD | 11.0 % | 829.7 % | 3.9 % | 10.0 % | 4.4 % | 1.0 % | 44.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.5374 ppm | 0.0007 ppm | 0.0005 ppm | 3.7309 ppm | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm |
| Concentration per Run 1 | 8.5437 ppm | 0.0008 ppm | 0.0006 ppm | 3.7223 ppm | -0.0003 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 2 | 8.5393 ppm | 0.0007 ppm | 0.0004 ppm | 3.7270 ppm | 0.0000 ppm | -0.0001 ppm | 0.0010 ppm |
| Concentration per Run 3 | 8.5293 ppm | 0.0008 ppm | 0.0004 ppm | 3.7434 ppm | 0.0002 ppm | 0.0005 ppm | 0.0009 ppm |
| Concentration RSD | 0.1 % | 8.5 % | 31.0 % | 0.3 % | 510.0 % | 132.0 % | 26.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 2.9921 ppm | -0.0001 ppm | 0.0565 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0027 ppm | 2.9884 ppm | 0.0001 ppm | 0.0562 ppm | -0.0002 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0037 ppm | 2.9932 ppm | -0.0002 ppm | 0.0566 ppm | -0.0003 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0018 ppm | 2.9947 ppm | 0.0000 ppm | 0.0567 ppm | -0.0002 ppm | 0.0005 ppm | 0.0002 ppm |
| Concentration RSD | 34.2 % | 0.1 % | 252.7 % | 0.4 % | 15.2 % | 158.5 % | 83.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 100.3592 % | 100.1505 % | 101.9738 % | 101.3696 % | 98.3412 % | 100.6548 % |
| Concentration per Run 1 | 0.0037 ppm | 100.7877 % | 99.7326 % | 102.1405 % | 101.7944 % | 98.2843 % | 99.9890 % |
| Concentration per Run 2 | 0.0037 ppm | 99.9266 % | 100.4537 % | 102.0402 % | 101.1784 % | 98.4803 % | 101.2298 % |
| Concentration per Run 3 | 0.0039 ppm | 100.3632 % | 100.2652 % | 101.7408 % | 101.1361 % | 98.2590 % | 100.7455 % |
| Concentration RSD | 3.0 % | 0.4 % | 0.4 % | 0.2 % | 0.4 % | 0.1 % | 0.6 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-04 WG1974186
Analysis started at: 9/20/2024 2:45:02 PM
Comments <Comment>
Rack: 1
Vial: 43

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0040 ppm | 0.0007 ppm | 0.0075 ppm | 0.0252 ppm | 0.0000 ppm | 14.8284 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0064 ppm | 0.0007 ppm | 0.0072 ppm | 0.0250 ppm | 0.0000 ppm | 14.8183 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0021 ppm | 0.0003 ppm | 0.0075 ppm | 0.0253 ppm | 0.0000 ppm | 14.8349 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0035 ppm | 0.0010 ppm | 0.0077 ppm | 0.0251 ppm | 0.0000 ppm | 14.8319 ppm |
| Concentration RSD | 184.3 % | 54.7 % | 51.5 % | 2.9 % | 0.5 % | 514.9 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0019 ppm | -0.0003 ppm | 0.0003 ppm | 2.8959 ppm | 0.8404 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0019 ppm | -0.0001 ppm | 0.0004 ppm | 2.8860 ppm | 0.8655 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0018 ppm | -0.0005 ppm | 0.0004 ppm | 2.9078 ppm | 0.8219 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0020 ppm | -0.0004 ppm | 0.0001 ppm | 2.8939 ppm | 0.8339 ppm | 0.0011 ppm |
| Concentration RSD | 28.4 % | 5.1 % | 60.0 % | 65.4 % | 0.4 % | 2.7 % | 60.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.4428 ppm | 0.2057 ppm | 0.0002 ppm | 7.1813 ppm | -0.0002 ppm | -0.0018 ppm | 0.0003 ppm |
| Concentration per Run 1 | 5.4419 ppm | 0.2052 ppm | 0.0001 ppm | 7.1530 ppm | 0.0001 ppm | -0.0012 ppm | 0.0000 ppm |
| Concentration per Run 2 | 5.4420 ppm | 0.2064 ppm | 0.0002 ppm | 7.2339 ppm | -0.0004 ppm | -0.0020 ppm | 0.0005 ppm |
| Concentration per Run 3 | 5.4444 ppm | 0.2055 ppm | 0.0002 ppm | 7.1569 ppm | -0.0002 ppm | -0.0023 ppm | 0.0004 ppm |
| Concentration RSD | 0.0 % | 0.3 % | 19.5 % | 0.6 % | 163.9 % | 30.2 % | 78.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 9.6565 ppm | -0.0003 ppm | 0.0758 ppm | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0016 ppm | 9.6596 ppm | -0.0003 ppm | 0.0755 ppm | -0.0001 ppm | -0.0010 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0020 ppm | 9.6623 ppm | 0.0002 ppm | 0.0763 ppm | 0.0002 ppm | -0.0015 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0003 ppm | 9.6477 ppm | -0.0007 ppm | 0.0758 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration RSD | 113.7 % | 0.1 % | 164.0 % | 0.5 % | 317.1 % | 96.8 % | 55.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 100.6408 % | 99.5438 % | 101.2366 % | 102.7720 % | 97.5228 % | 100.7252 % |
| Concentration per Run 1 | 0.0010 ppm | 100.1315 % | 99.3450 % | 101.3086 % | 102.8974 % | 97.4490 % | 101.1708 % |
| Concentration per Run 2 | 0.0010 ppm | 101.3239 % | 99.9387 % | 101.0672 % | 102.9014 % | 97.5313 % | 100.6463 % |
| Concentration per Run 3 | 0.0011 ppm | 100.4670 % | 99.3477 % | 101.3339 % | 102.5173 % | 97.5882 % | 100.3586 % |
| Concentration RSD | 7.7 % | 0.6 % | 0.3 % | 0.1 % | 0.2 % | 0.1 % | 0.4 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-01 WG1974186
Analysis started at: 9/20/2024 2:51:21 PM
Comments <Comment>
Rack: 1
Vial: 36

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0041 ppm | 0.0002 ppm | 0.0103 ppm | 0.0210 ppm | 0.0000 ppm | 17.0544 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0066 ppm | 0.0015 ppm | 0.0103 ppm | 0.0208 ppm | 0.0000 ppm | 16.9186 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0010 ppm | -0.0010 ppm | 0.0107 ppm | 0.0209 ppm | 0.0000 ppm | 17.0719 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0045 ppm | 0.0001 ppm | 0.0099 ppm | 0.0213 ppm | 0.0000 ppm | 17.1727 ppm |
| Concentration RSD | 147.4 % | 70.4 % | 694.4 % | 3.9 % | 1.2 % | 1,159.7 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0691 ppm | 1.6959 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0004 ppm | 0.0675 ppm | 1.6643 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0006 ppm | 0.0695 ppm | 1.7069 ppm | -0.0014 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0704 ppm | 1.7165 ppm | 0.0003 ppm |
| Concentration RSD | 8.5 % | 131.0 % | 2,105.4 % | 26.2 % | 2.1 % | 1.6 % | 167.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.0206 ppm | 0.0492 ppm | 0.0002 ppm | 2.2746 ppm | -0.0006 ppm | -0.0001 ppm | 0.0006 ppm |
| Concentration per Run 1 | 3.0154 ppm | 0.0488 ppm | 0.0003 ppm | 2.2456 ppm | -0.0008 ppm | -0.0002 ppm | 0.0002 ppm |
| Concentration per Run 2 | 3.0283 ppm | 0.0492 ppm | 0.0001 ppm | 2.2733 ppm | -0.0005 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration per Run 3 | 3.0180 ppm | 0.0494 ppm | 0.0002 ppm | 2.3048 ppm | -0.0006 ppm | 0.0005 ppm | 0.0010 ppm |
| Concentration RSD | 0.2 % | 0.6 % | 30.8 % | 1.3 % | 24.3 % | 464.8 % | 75.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 4.3599 ppm | -0.0001 ppm | 0.0509 ppm | -0.0001 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0019 ppm | 4.3674 ppm | 0.0002 ppm | 0.0503 ppm | -0.0002 ppm | -0.0009 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 4.3746 ppm | -0.0002 ppm | 0.0509 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0006 ppm | 4.3377 ppm | -0.0003 ppm | 0.0514 ppm | -0.0001 ppm | 0.0012 ppm | 0.0003 ppm |
| Concentration RSD | 140.2 % | 0.4 % | 226.2 % | 1.0 % | 95.9 % | 512.0 % | 78.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 100.7386 % | 100.3477 % | 102.2602 % | 101.7456 % | 99.1387 % | 100.8981 % |
| Concentration per Run 1 | 0.0017 ppm | 100.9237 % | 100.2753 % | 102.1511 % | 102.8056 % | 98.8688 % | 100.9999 % |
| Concentration per Run 2 | 0.0017 ppm | 100.0550 % | 100.5795 % | 102.0550 % | 101.5579 % | 99.1079 % | 100.0888 % |
| Concentration per Run 3 | 0.0017 ppm | 101.2372 % | 100.1881 % | 102.5745 % | 100.8734 % | 99.4394 % | 101.6055 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.2 % | 0.3 % | 1.0 % | 0.3 % | 0.8 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-19 WG1974186
Analysis started at: 9/20/2024 2:57:42 PM
Comments <Comment>
Rack: 1
Vial: 37

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 1.9375 ppm | 0.1217 ppm | 1.0118 ppm | 1.9247 ppm | 0.0486 ppm | 26.6976 ppm |
| Concentration per Run 1 | 0.0504 ppm | 1.9085 ppm | 0.1222 ppm | 1.0127 ppm | 1.9175 ppm | 0.0478 ppm | 26.3846 ppm |
| Concentration per Run 2 | 0.0500 ppm | 1.9421 ppm | 0.1216 ppm | 1.0109 ppm | 1.9155 ppm | 0.0486 ppm | 26.7907 ppm |
| Concentration per Run 3 | 0.0500 ppm | 1.9620 ppm | 0.1212 ppm | 1.0118 ppm | 1.9412 ppm | 0.0492 ppm | 26.9176 ppm |
| Concentration RSD | 0.4 % | 1.4 % | 0.4 % | 0.1 % | 0.7 % | 1.5 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0514 ppm | 0.4815 ppm | 0.1922 ppm | 0.2448 ppm | 1.0373 ppm | 12.4241 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0514 ppm | 0.4807 ppm | 0.1914 ppm | 0.2450 ppm | 1.0223 ppm | 12.3200 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0515 ppm | 0.4827 ppm | 0.1927 ppm | 0.2454 ppm | 1.0373 ppm | 12.3931 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0512 ppm | 0.4812 ppm | 0.1926 ppm | 0.2440 ppm | 1.0523 ppm | 12.5593 ppm | -0.0015 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.3 % | 1.4 % | 1.0 % | 20.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.0051 ppm | 0.5304 ppm | 0.9859 ppm | 12.6880 ppm | 0.4919 ppm | 0.5352 ppm | 0.4971 ppm |
| Concentration per Run 1 | 12.9693 ppm | 0.5251 ppm | 0.9849 ppm | 12.5232 ppm | 0.4914 ppm | 0.5349 ppm | 0.4980 ppm |
| Concentration per Run 2 | 13.0041 ppm | 0.5314 ppm | 0.9868 ppm | 12.6482 ppm | 0.4930 ppm | 0.5356 ppm | 0.4971 ppm |
| Concentration per Run 3 | 13.0419 ppm | 0.5348 ppm | 0.9859 ppm | 12.8926 ppm | 0.4912 ppm | 0.5351 ppm | 0.4961 ppm |
| Concentration RSD | 0.3 % | 0.9 % | 0.1 % | 1.5 % | 0.2 % | 0.1 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1257 ppm | 5.5001 ppm | 0.9740 ppm | 0.9890 ppm | 1.0071 ppm | 0.1209 ppm | 0.4775 ppm |
| Concentration per Run 1 | 0.1247 ppm | 5.5047 ppm | 0.9733 ppm | 0.9774 ppm | 1.0040 ppm | 0.1213 ppm | 0.4759 ppm |
| Concentration per Run 2 | 0.1258 ppm | 5.4972 ppm | 0.9760 ppm | 0.9899 ppm | 1.0100 ppm | 0.1210 ppm | 0.4785 ppm |
| Concentration per Run 3 | 0.1266 ppm | 5.4984 ppm | 0.9728 ppm | 0.9998 ppm | 1.0073 ppm | 0.1205 ppm | 0.4780 ppm |
| Concentration RSD | 0.8 % | 0.1 % | 0.2 % | 1.1 % | 0.3 % | 0.3 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4857 ppm | 100.9566 % | 99.6181 % | 101.4746 % | 102.5707 % | 96.3582 % | 100.4446 % |
| Concentration per Run 1 | 0.4849 ppm | 100.8557 % | 99.5985 % | 101.5855 % | 103.4197 % | 96.5892 % | 100.5787 % |
| Concentration per Run 2 | 0.4871 ppm | 100.5724 % | 99.7001 % | 101.4518 % | 102.1216 % | 96.2624 % | 100.2963 % |
| Concentration per Run 3 | 0.4851 ppm | 101.4416 % | 99.5558 % | 101.3865 % | 102.1709 % | 96.2231 % | 100.4588 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.1 % | 0.1 % | 0.7 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-20 WG1974186
Analysis started at: 9/20/2024 3:03:52 PM
Comments <Comment>
Rack: 1
Vial: 38

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0524 ppm | 2.0382 ppm | 0.1243 ppm | 1.0392 ppm | 2.0286 ppm | 0.0510 ppm | 28.0085 ppm |
| Concentration per Run 1 | 0.0522 ppm | 2.0239 ppm | 0.1250 ppm | 1.0371 ppm | 2.0005 ppm | 0.0507 ppm | 27.8638 ppm |
| Concentration per Run 2 | 0.0525 ppm | 2.0471 ppm | 0.1238 ppm | 1.0407 ppm | 2.0278 ppm | 0.0509 ppm | 27.9866 ppm |
| Concentration per Run 3 | 0.0524 ppm | 2.0435 ppm | 0.1242 ppm | 1.0399 ppm | 2.0573 ppm | 0.0513 ppm | 28.1752 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.5 % | 0.2 % | 1.4 % | 0.6 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0534 ppm | 0.5014 ppm | 0.2015 ppm | 0.2559 ppm | 1.0925 ppm | 12.7439 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0535 ppm | 0.5018 ppm | 0.2021 ppm | 0.2552 ppm | 1.0869 ppm | 12.6058 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0535 ppm | 0.5012 ppm | 0.2007 ppm | 0.2561 ppm | 1.0917 ppm | 12.9263 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0533 ppm | 0.5012 ppm | 0.2018 ppm | 0.2563 ppm | 1.0988 ppm | 12.6995 ppm | -0.0015 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.4 % | 0.2 % | 0.5 % | 1.3 % | 19.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.4339 ppm | 0.5562 ppm | 1.0138 ppm | 13.1217 ppm | 0.5111 ppm | 0.5493 ppm | 0.5197 ppm |
| Concentration per Run 1 | 13.4377 ppm | 0.5525 ppm | 1.0131 ppm | 12.9745 ppm | 0.5114 ppm | 0.5508 ppm | 0.5176 ppm |
| Concentration per Run 2 | 13.4477 ppm | 0.5551 ppm | 1.0140 ppm | 13.3123 ppm | 0.5110 ppm | 0.5484 ppm | 0.5201 ppm |
| Concentration per Run 3 | 13.4162 ppm | 0.5611 ppm | 1.0142 ppm | 13.0785 ppm | 0.5109 ppm | 0.5489 ppm | 0.5213 ppm |
| Concentration RSD | 0.1 % | 0.8 % | 0.1 % | 1.3 % | 0.1 % | 0.2 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1301 ppm | 5.7358 ppm | 1.0024 ppm | 1.0240 ppm | 1.0448 ppm | 0.1240 ppm | 0.5026 ppm |
| Concentration per Run 1 | 0.1306 ppm | 5.7336 ppm | 1.0028 ppm | 1.0140 ppm | 1.0439 ppm | 0.1236 ppm | 0.5020 ppm |
| Concentration per Run 2 | 0.1301 ppm | 5.7373 ppm | 1.0012 ppm | 1.0306 ppm | 1.0435 ppm | 0.1239 ppm | 0.5021 ppm |
| Concentration per Run 3 | 0.1295 ppm | 5.7364 ppm | 1.0034 ppm | 1.0273 ppm | 1.0469 ppm | 0.1245 ppm | 0.5038 ppm |
| Concentration RSD | 0.4 % | 0.0 % | 0.1 % | 0.9 % | 0.2 % | 0.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5056 ppm | 99.9768 % | 99.1062 % | 100.3584 % | 100.9095 % | 95.4149 % | 98.9561 % |
| Concentration per Run 1 | 0.5063 ppm | 99.6766 % | 98.9868 % | 100.3436 % | 101.3566 % | 95.2381 % | 99.0601 % |
| Concentration per Run 2 | 0.5060 ppm | 100.8081 % | 99.0335 % | 100.2998 % | 101.4249 % | 95.6288 % | 98.9436 % |
| Concentration per Run 3 | 0.5045 ppm | 99.4458 % | 99.2982 % | 100.4318 % | 99.9470 % | 95.3777 % | 98.8645 % |
| Concentration RSD | 0.2 % | 0.7 % | 0.2 % | 0.1 % | 0.8 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-21 WG1974186
Analysis started at: 9/20/2024 3:10:01 PM
Comments <Comment>
Rack: 1
Vial: 39

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0500 ppm | 2.0344 ppm | 0.1211 ppm | 1.0136 ppm | 2.0141 ppm | 0.0510 ppm | 26.9857 ppm |
| Concentration per Run 1 | 0.0501 ppm | 2.0248 ppm | 0.1229 ppm | 1.0171 ppm | 1.9980 ppm | 0.0510 ppm | 26.8372 ppm |
| Concentration per Run 2 | 0.0499 ppm | 2.0421 ppm | 0.1201 ppm | 1.0113 ppm | 2.0310 ppm | 0.0511 ppm | 27.0871 ppm |
| Concentration per Run 3 | 0.0499 ppm | 2.0362 ppm | 0.1202 ppm | 1.0123 ppm | 2.0134 ppm | 0.0510 ppm | 27.0329 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 1.3 % | 0.3 % | 0.8 % | 0.1 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 0.4888 ppm | 0.1963 ppm | 0.2523 ppm | 1.0855 ppm | 12.5185 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0524 ppm | 0.4901 ppm | 0.1960 ppm | 0.2532 ppm | 1.0820 ppm | 12.5046 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0523 ppm | 0.4883 ppm | 0.1962 ppm | 0.2508 ppm | 1.0923 ppm | 12.4985 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0520 ppm | 0.4880 ppm | 0.1969 ppm | 0.2529 ppm | 1.0823 ppm | 12.5523 ppm | 0.0002 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.2 % | 0.5 % | 0.5 % | 0.2 % | 128.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.1699 ppm | 0.5539 ppm | 0.9843 ppm | 12.8960 ppm | 0.4965 ppm | 0.5335 ppm | 0.5007 ppm |
| Concentration per Run 1 | 13.2149 ppm | 0.5525 ppm | 0.9867 ppm | 12.8935 ppm | 0.4972 ppm | 0.5337 ppm | 0.5009 ppm |
| Concentration per Run 2 | 13.1582 ppm | 0.5542 ppm | 0.9826 ppm | 12.9069 ppm | 0.4968 ppm | 0.5337 ppm | 0.5020 ppm |
| Concentration per Run 3 | 13.1368 ppm | 0.5552 ppm | 0.9836 ppm | 12.8877 ppm | 0.4956 ppm | 0.5331 ppm | 0.4991 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.2 % | 0.1 % | 0.2 % | 0.1 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1245 ppm | 5.2736 ppm | 0.9926 ppm | 1.0211 ppm | 1.0198 ppm | 0.1216 ppm | 0.4914 ppm |
| Concentration per Run 1 | 0.1237 ppm | 5.2859 ppm | 0.9943 ppm | 1.0184 ppm | 1.0211 ppm | 0.1225 ppm | 0.4918 ppm |
| Concentration per Run 2 | 0.1243 ppm | 5.2655 ppm | 0.9919 ppm | 1.0229 ppm | 1.0159 ppm | 0.1208 ppm | 0.4896 ppm |
| Concentration per Run 3 | 0.1256 ppm | 5.2693 ppm | 0.9916 ppm | 1.0220 ppm | 1.0225 ppm | 0.1214 ppm | 0.4929 ppm |
| Concentration RSD | 0.8 % | 0.2 % | 0.2 % | 0.2 % | 0.3 % | 0.7 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4940 ppm | 99.2341 % | 99.1447 % | 100.7415 % | 100.3550 % | 96.3276 % | 98.8815 % |
| Concentration per Run 1 | 0.4944 ppm | 99.3575 % | 98.8888 % | 100.4194 % | 101.2253 % | 95.7758 % | 98.6193 % |
| Concentration per Run 2 | 0.4939 ppm | 98.9661 % | 99.0385 % | 100.8961 % | 99.8941 % | 96.6030 % | 99.1674 % |
| Concentration per Run 3 | 0.4936 ppm | 99.3788 % | 99.5067 % | 100.9091 % | 99.9455 % | 96.6040 % | 98.8579 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.3 % | 0.3 % | 0.8 % | 0.5 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: WG1974186-22D5 WG1974186
Analysis started at: 9/20/2024 3:16:11 PM
Comments <Comment>
Rack: 1
Vial: 40

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0043 ppm | -0.0004 ppm | 0.0045 ppm | 0.0040 ppm | 0.0000 ppm | 3.2049 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0025 ppm | -0.0007 ppm | 0.0047 ppm | 0.0040 ppm | 0.0000 ppm | 3.1830 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0034 ppm | 0.0000 ppm | 0.0044 ppm | 0.0039 ppm | 0.0000 ppm | 3.1978 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0070 ppm | -0.0005 ppm | 0.0045 ppm | 0.0040 ppm | 0.0000 ppm | 3.2339 ppm |
| Concentration RSD | 164.6 % | 56.5 % | 103.4 % | 4.3 % | 1.2 % | 523.9 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0140 ppm | 0.2964 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0146 ppm | 0.2845 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0131 ppm | 0.2881 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0142 ppm | 0.3165 ppm | -0.0014 ppm |
| Concentration RSD | 56.8 % | 138.6 % | 132.1 % | 186.1 % | 5.6 % | 5.9 % | 225.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6077 ppm | 0.0092 ppm | 0.0012 ppm | 0.4222 ppm | -0.0003 ppm | 0.0000 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.6038 ppm | 0.0091 ppm | 0.0014 ppm | 0.4198 ppm | -0.0005 ppm | 0.0003 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.6044 ppm | 0.0093 ppm | 0.0012 ppm | 0.4230 ppm | -0.0003 ppm | -0.0005 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.6148 ppm | 0.0093 ppm | 0.0010 ppm | 0.4239 ppm | -0.0001 ppm | 0.0001 ppm | 0.0013 ppm |
| Concentration RSD | 1.0 % | 0.8 % | 15.9 % | 0.5 % | 86.6 % | 2,202.1 % | 9.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.8931 ppm | 0.0011 ppm | 0.0095 ppm | 0.0001 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.8826 ppm | 0.0010 ppm | 0.0094 ppm | 0.0002 ppm | -0.0003 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.8952 ppm | 0.0012 ppm | 0.0094 ppm | 0.0001 ppm | -0.0007 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.9016 ppm | 0.0010 ppm | 0.0095 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration RSD | 376.7 % | 1.1 % | 9.2 % | 0.6 % | 183.4 % | 150.6 % | 101.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 100.6709 % | 101.7762 % | 103.4342 % | 101.7862 % | 102.8173 % | 102.3486 % |
| Concentration per Run 1 | 0.0007 ppm | 100.6329 % | 101.9377 % | 103.4565 % | 102.2952 % | 103.0263 % | 101.9503 % |
| Concentration per Run 2 | 0.0008 ppm | 100.6437 % | 101.7041 % | 103.6935 % | 101.8838 % | 103.0736 % | 102.2270 % |
| Concentration per Run 3 | 0.0007 ppm | 100.7360 % | 101.6869 % | 103.1527 % | 101.1795 % | 102.3520 % | 102.8684 % |
| Concentration RSD | 6.6 % | 0.1 % | 0.1 % | 0.3 % | 0.6 % | 0.4 % | 0.5 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 3:22:32 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4989 ppm | 0.5001 ppm | 0.4917 ppm | 0.5015 ppm | 0.4871 ppm | 0.4979 ppm | 0.4927 ppm |
| Concentration per Run 1 | 0.4989 ppm | 0.4931 ppm | 0.4904 ppm | 0.5008 ppm | 0.4784 ppm | 0.4875 ppm | 0.4802 ppm |
| Concentration per Run 2 | 0.4982 ppm | 0.5022 ppm | 0.4929 ppm | 0.5012 ppm | 0.4915 ppm | 0.5045 ppm | 0.4964 ppm |
| Concentration per Run 3 | 0.4996 ppm | 0.5052 ppm | 0.4918 ppm | 0.5025 ppm | 0.4913 ppm | 0.5018 ppm | 0.5014 ppm |
| Recovery Percentage 1 | 99.777 % | 100.029 % | 98.338 % | 100.299 % | 97.411 % | 99.588 % | 98.532 % |
| Concentration RSD | 0.1 % | 1.3 % | 0.3 % | 0.2 % | 1.5 % | 1.8 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4933 ppm | 0.5034 ppm | 0.4888 ppm | 0.4780 ppm | 0.5248 ppm | 5.1854 ppm | 0.4877 ppm |
| Concentration per Run 1 | 0.4929 ppm | 0.5033 ppm | 0.4886 ppm | 0.4785 ppm | 0.5135 ppm | 5.1177 ppm | 0.4805 ppm |
| Concentration per Run 2 | 0.4940 ppm | 0.5035 ppm | 0.4907 ppm | 0.4766 ppm | 0.5324 ppm | 5.2364 ppm | 0.4899 ppm |
| Concentration per Run 3 | 0.4930 ppm | 0.5034 ppm | 0.4872 ppm | 0.4789 ppm | 0.5285 ppm | 5.2023 ppm | 0.4927 ppm |
| Recovery Percentage 1 | 98.662 % | 100.682 % | 97.766 % | 95.600 % | 104.962 % | 103.709 % | 97.540 % |
| Concentration RSD | 0.1 % | 0.0 % | 0.4 % | 0.3 % | 1.9 % | 1.2 % | 1.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4924 ppm | 0.4855 ppm | 0.4853 ppm | 9.8141 ppm | 0.5051 ppm | 0.5097 ppm | 0.5055 ppm |
| Concentration per Run 1 | 0.4910 ppm | 0.4771 ppm | 0.4851 ppm | 9.6540 ppm | 0.5055 ppm | 0.5085 ppm | 0.5050 ppm |
| Concentration per Run 2 | 0.4933 ppm | 0.4907 ppm | 0.4854 ppm | 9.9029 ppm | 0.5048 ppm | 0.5105 ppm | 0.5054 ppm |
| Concentration per Run 3 | 0.4929 ppm | 0.4889 ppm | 0.4852 ppm | 9.8855 ppm | 0.5051 ppm | 0.5100 ppm | 0.5063 ppm |
| Recovery Percentage 1 | 98.481 % | 97.108 % | 97.053 % | 98.141 % | 101.030 % | 101.932 % | 101.109 % |
| Concentration RSD | 0.3 % | 1.5 % | 0.0 % | 1.4 % | 0.1 % | 0.2 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5108 ppm | 5.5487 ppm | 0.4762 ppm | 0.4616 ppm | 0.4952 ppm | 0.5181 ppm | 0.4847 ppm |
| Concentration per Run 1 | 0.5114 ppm | 5.5514 ppm | 0.4752 ppm | 0.4533 ppm | 0.4951 ppm | 0.5187 ppm | 0.4860 ppm |
| Concentration per Run 2 | 0.5103 ppm | 5.5459 ppm | 0.4764 ppm | 0.4658 ppm | 0.4959 ppm | 0.5176 ppm | 0.4856 ppm |
| Concentration per Run 3 | 0.5106 ppm | 5.5488 ppm | 0.4769 ppm | 0.4656 ppm | 0.4946 ppm | 0.5180 ppm | 0.4826 ppm |
| Recovery Percentage 1 | 102.153 % | 105.689 % | 95.237 % | 92.312 % | 99.043 % | 103.623 % | 96.943 % |
| Concentration RSD | 0.1 % | 0.0 % | 0.2 % | 1.5 % | 0.1 % | 0.1 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5229 ppm | 99.7124 % | 100.1896 % | 102.1146 % | 100.1051 % | 99.9294 % | 100.2629 % |
| Concentration per Run 1 | 0.5231 ppm | 100.0102 % | 100.2284 % | 101.9808 % | 101.7498 % | 99.4607 % | 100.1373 % |
| Concentration per Run 2 | 0.5234 ppm | 99.3846 % | 100.1851 % | 102.2100 % | 98.8556 % | 100.0292 % | 100.3341 % |
| Concentration per Run 3 | 0.5222 ppm | 99.7425 % | 100.1553 % | 102.1530 % | 99.7098 % | 100.2983 % | 100.3173 % |
| Recovery Percentage 1 | 104.582 % | | | | | | |
| Concentration RSD | 0.1 % | 0.3 % | 0.0 % | 0.1 % | 1.5 % | 0.4 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 3:28:35 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0079 ppm | -0.0002 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0120 ppm | 0.0008 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0064 ppm | 0.0000 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0052 ppm | -0.0015 ppm | 0.0010 ppm | 0.0001 ppm | 0.0000 ppm | -0.0033 ppm |
| Recovery Percentage 1 | 0.883 % | 7.875 % | -4.981 % | 3.669 % | 0.341 % | -0.035 % | -0.399 % |
| Concentration RSD | 346.4 % | 46.2 % | 460.9 % | 9.2 % | 69.8 % | 767.6 % | 639.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0018 ppm | -0.0217 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0011 ppm | -0.0123 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0027 ppm | 0.0046 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0015 ppm | -0.0575 ppm | -0.0012 ppm |
| Recovery Percentage 1 | -0.368 % | -0.092 % | 0.598 % | 0.244 % | 3.563 % | -0.870 % | -4.396 % |
| Concentration RSD | 165.9 % | 226.5 % | 166.0 % | 51.5 % | 46.5 % | 147.6 % | 159.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0000 ppm | 0.0004 ppm | 0.0082 ppm | -0.0002 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0000 ppm | 0.0004 ppm | 0.0103 ppm | -0.0001 ppm | 0.0007 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0023 ppm | 0.0000 ppm | 0.0003 ppm | 0.0076 ppm | -0.0003 ppm | -0.0004 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0067 ppm | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -1.163 % | 0.087 % | 0.758 % | 0.410 % | -0.922 % | 0.746 % | 1.252 % |
| Concentration RSD | 97.0 % | 179.4 % | 21.6 % | 23.3 % | 51.9 % | 726.2 % | 61.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | -0.0010 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0011 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0018 ppm | -0.0007 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0006 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0015 ppm | -0.0010 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | -0.0012 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 13.565 % | -0.191 % | 0.717 % | 0.049 % | -0.435 % | -1.128 % | -1.354 % |
| Concentration RSD | 40.2 % | 20.4 % | 10.5 % | 420.6 % | 346.8 % | 410.2 % | 62.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 98.3490 % | 99.7486 % | 101.0234 % | 98.7327 % | 100.7355 % | 99.3500 % |
| Concentration per Run 1 | 0.0003 ppm | 99.0120 % | 99.8027 % | 101.2717 % | 100.4732 % | 100.9862 % | 99.6544 % |
| Concentration per Run 2 | 0.0004 ppm | 98.4293 % | 99.4462 % | 100.8752 % | 97.9810 % | 100.6226 % | 99.1055 % |
| Concentration per Run 3 | 0.0002 ppm | 97.6058 % | 99.9967 % | 100.9233 % | 97.7440 % | 100.5978 % | 99.2901 % |
| Recovery Percentage 1 | 6.290 % | | | | | | |
| Concentration RSD | 22.1 % | 0.7 % | 0.3 % | 0.2 % | 1.5 % | 0.2 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: L2453053-05 WG1974186
Analysis started at: 9/20/2024 3:39:59 PM
Comments <Comment>
Rack: 1
Vial: 44

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0031 ppm | 0.0010 ppm | 0.0311 ppm | 0.0233 ppm | 0.0000 ppm | 10.1542 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0045 ppm | 0.0005 ppm | 0.0315 ppm | 0.0232 ppm | 0.0000 ppm | 10.1415 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0025 ppm | 0.0013 ppm | 0.0309 ppm | 0.0234 ppm | 0.0000 ppm | 10.1479 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0023 ppm | 0.0012 ppm | 0.0310 ppm | 0.0234 ppm | 0.0000 ppm | 10.1732 ppm |
| Concentration RSD | 801.5 % | 38.6 % | 43.4 % | 0.9 % | 0.4 % | 20.6 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0069 ppm | -0.0006 ppm | 0.0006 ppm | 2.5546 ppm | 0.9454 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0067 ppm | -0.0009 ppm | 0.0007 ppm | 2.5524 ppm | 0.9286 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0069 ppm | -0.0005 ppm | 0.0004 ppm | 2.5477 ppm | 0.9496 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0069 ppm | -0.0005 ppm | 0.0006 ppm | 2.5639 ppm | 0.9579 ppm | -0.0006 ppm |
| Concentration RSD | 47.0 % | 1.7 % | 32.6 % | 24.3 % | 0.3 % | 1.6 % | 5,407.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.5249 ppm | 0.1045 ppm | 0.0001 ppm | 7.9691 ppm | 0.0013 ppm | -0.0017 ppm | 0.0002 ppm |
| Concentration per Run 1 | 4.5256 ppm | 0.1041 ppm | 0.0003 ppm | 7.9443 ppm | 0.0015 ppm | -0.0015 ppm | -0.0003 ppm |
| Concentration per Run 2 | 4.5387 ppm | 0.1044 ppm | 0.0001 ppm | 7.9567 ppm | 0.0013 ppm | -0.0015 ppm | 0.0004 ppm |
| Concentration per Run 3 | 4.5105 ppm | 0.1049 ppm | 0.0001 ppm | 8.0064 ppm | 0.0011 ppm | -0.0021 ppm | 0.0005 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 76.4 % | 0.4 % | 16.8 % | 19.1 % | 192.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 7.7620 ppm | -0.0004 ppm | 0.0375 ppm | 0.0000 ppm | -0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0004 ppm | 7.7634 ppm | -0.0003 ppm | 0.0373 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0030 ppm | 7.7599 ppm | -0.0006 ppm | 0.0375 ppm | 0.0000 ppm | -0.0004 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 7.7626 ppm | -0.0002 ppm | 0.0376 ppm | -0.0001 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration RSD | 198.9 % | 0.0 % | 50.3 % | 0.4 % | 2,804.6 % | 56.1 % | 40.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0071 ppm | 99.9689 % | 99.8228 % | 101.0300 % | 101.4012 % | 100.1640 % | 100.1500 % |
| Concentration per Run 1 | 0.0071 ppm | 100.0781 % | 99.8719 % | 100.9990 % | 101.5923 % | 100.3624 % | 100.2228 % |
| Concentration per Run 2 | 0.0071 ppm | 100.1573 % | 99.8607 % | 100.9860 % | 101.9012 % | 100.1169 % | 100.1168 % |
| Concentration per Run 3 | 0.0071 ppm | 99.6714 % | 99.7359 % | 101.1049 % | 100.7101 % | 100.0128 % | 100.1103 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.1 % | 0.1 % | 0.6 % | 0.2 % | 0.1 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCV
Analysis started at: 9/20/2024 3:49:02 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5028 ppm | 0.4945 ppm | 0.4896 ppm | 0.5003 ppm | 0.4864 ppm | 0.4949 ppm | 0.4905 ppm |
| Concentration per Run 1 | 0.5030 ppm | 0.4811 ppm | 0.4878 ppm | 0.4996 ppm | 0.4780 ppm | 0.4845 ppm | 0.4807 ppm |
| Concentration per Run 2 | 0.5028 ppm | 0.5006 ppm | 0.4910 ppm | 0.5006 ppm | 0.4913 ppm | 0.5013 ppm | 0.4979 ppm |
| Concentration per Run 3 | 0.5026 ppm | 0.5017 ppm | 0.4900 ppm | 0.5006 ppm | 0.4898 ppm | 0.4990 ppm | 0.4930 ppm |
| Recovery Percentage 1 | 100.559 % | 98.892 % | 97.912 % | 100.052 % | 97.276 % | 98.982 % | 98.109 % |
| Concentration RSD | 0.0 % | 2.3 % | 0.3 % | 0.1 % | 1.5 % | 1.8 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4938 ppm | 0.5033 ppm | 0.4849 ppm | 0.4784 ppm | 0.5210 ppm | 5.1423 ppm | 0.4866 ppm |
| Concentration per Run 1 | 0.4931 ppm | 0.5027 ppm | 0.4862 ppm | 0.4773 ppm | 0.5109 ppm | 5.0447 ppm | 0.4778 ppm |
| Concentration per Run 2 | 0.4954 ppm | 0.5044 ppm | 0.4861 ppm | 0.4792 ppm | 0.5270 ppm | 5.1972 ppm | 0.4903 ppm |
| Concentration per Run 3 | 0.4930 ppm | 0.5027 ppm | 0.4823 ppm | 0.4789 ppm | 0.5252 ppm | 5.1850 ppm | 0.4918 ppm |
| Recovery Percentage 1 | 98.764 % | 100.654 % | 96.973 % | 95.688 % | 104.210 % | 102.846 % | 97.326 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.5 % | 0.2 % | 1.7 % | 1.6 % | 1.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4981 ppm | 0.4845 ppm | 0.4842 ppm | 9.7220 ppm | 0.5025 ppm | 0.5077 ppm | 0.5042 ppm |
| Concentration per Run 1 | 0.4983 ppm | 0.4737 ppm | 0.4843 ppm | 9.5549 ppm | 0.5021 ppm | 0.5073 ppm | 0.5041 ppm |
| Concentration per Run 2 | 0.5015 ppm | 0.4903 ppm | 0.4848 ppm | 9.8241 ppm | 0.5041 ppm | 0.5087 ppm | 0.5040 ppm |
| Concentration per Run 3 | 0.4945 ppm | 0.4895 ppm | 0.4834 ppm | 9.7871 ppm | 0.5012 ppm | 0.5072 ppm | 0.5044 ppm |
| Recovery Percentage 1 | 99.616 % | 96.899 % | 96.836 % | 97.220 % | 100.499 % | 101.548 % | 100.834 % |
| Concentration RSD | 0.7 % | 1.9 % | 0.1 % | 1.5 % | 0.3 % | 0.2 % | 0.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5080 ppm | 5.5310 ppm | 0.4757 ppm | 0.4608 ppm | 0.4900 ppm | 0.5173 ppm | 0.4807 ppm |
| Concentration per Run 1 | 0.5088 ppm | 5.5297 ppm | 0.4743 ppm | 0.4523 ppm | 0.4916 ppm | 0.5170 ppm | 0.4824 ppm |
| Concentration per Run 2 | 0.5063 ppm | 5.5324 ppm | 0.4777 ppm | 0.4651 ppm | 0.4903 ppm | 0.5179 ppm | 0.4802 ppm |
| Concentration per Run 3 | 0.5090 ppm | 5.5308 ppm | 0.4751 ppm | 0.4649 ppm | 0.4881 ppm | 0.5169 ppm | 0.4794 ppm |
| Recovery Percentage 1 | 101.609 % | 105.352 % | 95.139 % | 92.153 % | 97.998 % | 103.451 % | 96.131 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.4 % | 1.6 % | 0.4 % | 0.1 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5225 ppm | 99.4361 % | 100.0819 % | 102.5734 % | 100.0639 % | 100.5081 % | 100.6750 % |
| Concentration per Run 1 | 0.5215 ppm | 100.8201 % | 100.1961 % | 102.5783 % | 103.0139 % | 100.2160 % | 100.5951 % |
| Concentration per Run 2 | 0.5242 ppm | 98.6411 % | 100.0704 % | 102.4443 % | 98.3355 % | 100.5356 % | 100.4946 % |
| Concentration per Run 3 | 0.5217 ppm | 98.8471 % | 99.9792 % | 102.6975 % | 98.8423 % | 100.7728 % | 100.9353 % |
| Recovery Percentage 1 | 104.491 % | | | | | | |
| Concentration RSD | 0.3 % | 1.2 % | 0.1 % | 0.1 % | 2.6 % | 0.3 % | 0.2 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: CCB
Analysis started at: 9/20/2024 3:55:05 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0069 ppm | 0.0003 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0055 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0075 ppm | 0.0002 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0019 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0077 ppm | 0.0005 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0025 ppm |
| Recovery Percentage 1 | -1.068 % | 6.925 % | 6.397 % | 1.507 % | 0.041 % | 0.288 % | 0.176 % |
| Concentration RSD | 234.4 % | 17.6 % | 38.6 % | 41.3 % | 339.8 % | 58.6 % | 1,259.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0018 ppm | -0.0062 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0018 ppm | -0.0092 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0000 ppm | 0.0022 ppm | 0.0002 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0014 ppm | -0.0096 ppm | -0.0014 ppm |
| Recovery Percentage 1 | 0.248 % | -0.100 % | 1.485 % | -0.004 % | 3.575 % | -0.248 % | -6.767 % |
| Concentration RSD | 417.7 % | 415.8 % | 227.6 % | 8,453.8 % | 23.5 % | 89.2 % | 95.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0001 ppm | 0.0004 ppm | 0.0073 ppm | -0.0004 ppm | 0.0003 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0001 ppm | 0.0004 ppm | 0.0076 ppm | -0.0006 ppm | 0.0007 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0000 ppm | 0.0005 ppm | 0.0107 ppm | -0.0004 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0001 ppm | 0.0003 ppm | 0.0037 ppm | -0.0002 ppm | 0.0002 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 1.506 % | 0.525 % | 0.774 % | 0.367 % | -1.572 % | 3.319 % | 1.068 % |
| Concentration RSD | 31.1 % | 71.2 % | 38.0 % | 47.8 % | 58.8 % | 94.5 % | 44.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | -0.0009 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0012 ppm | 0.0005 ppm | 0.0000 ppm | -0.0004 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0023 ppm | -0.0006 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 12.624 % | -0.176 % | 0.731 % | 0.024 % | -1.105 % | 0.077 % | -1.872 % |
| Concentration RSD | 77.2 % | 35.0 % | 58.5 % | 1,425.2 % | 198.3 % | 3,835.5 % | 54.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 97.1987 % | 98.4176 % | 102.9449 % | 97.5909 % | 102.7211 % | 97.8317 % |
| Concentration per Run 1 | 0.0004 ppm | 97.7240 % | 98.4255 % | 102.3309 % | 99.4787 % | 102.1921 % | 97.9594 % |
| Concentration per Run 2 | 0.0004 ppm | 96.8397 % | 98.4055 % | 103.1999 % | 96.9006 % | 103.0919 % | 97.5228 % |
| Concentration per Run 3 | 0.0003 ppm | 97.0324 % | 98.4218 % | 103.3039 % | 96.3933 % | 102.8793 % | 98.0128 % |
| Recovery Percentage 1 | 6.583 % | | | | | | |
| Concentration RSD | 15.8 % | 0.5 % | 0.0 % | 0.5 % | 1.7 % | 0.5 % | 0.3 % |

# ICP DataTrace 4

9/20/2024 4:21:17 PM

LabBook: WG1973931_09192024T4.imexp

Sample: LLOQ
Analysis started at: 9/20/2024 4:01:31 PM
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.1076 ppm | 0.0047 ppm | 0.0319 ppm | 0.0103 ppm | 0.0052 ppm | 0.1149 ppm |
| Concentration per Run 1 | 0.0049 ppm | 0.1076 ppm | 0.0057 ppm | 0.0317 ppm | 0.0102 ppm | 0.0051 ppm | 0.1108 ppm |
| Concentration per Run 2 | 0.0052 ppm | 0.1080 ppm | 0.0046 ppm | 0.0319 ppm | 0.0103 ppm | 0.0052 ppm | 0.1195 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.1073 ppm | 0.0039 ppm | 0.0319 ppm | 0.0104 ppm | 0.0052 ppm | 0.1143 ppm |
| Recovery Percentage 1 | 99.581 % | 107.650 % | 94.320 % | 106.172 % | 102.732 % | 103.272 % | 114.868 % |
| Concentration RSD | 4.7 % | 0.3 % | 19.3 % | 0.4 % | 1.1 % | 1.0 % | 3.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0210 ppm | 0.0096 ppm | 0.0103 ppm | **0.0722 ppm** | 2.6650 ppm | 0.0095 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0211 ppm | 0.0093 ppm | 0.0103 ppm | 0.0705 ppm | 2.6232 ppm | 0.0098 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0209 ppm | 0.0099 ppm | 0.0102 ppm | 0.0732 ppm | 2.6818 ppm | 0.0090 ppm |
| Concentration per Run 3 | 0.0042 ppm | 0.0210 ppm | 0.0095 ppm | 0.0104 ppm | 0.0730 ppm | 2.6899 ppm | 0.0098 ppm |
| Recovery Percentage 1 | 104.195 % | 105.062 % | 95.543 % | 103.188 % | 144.491 % | 106.598 % | 95.478 % |
| Concentration RSD | 0.2 % | 0.5 % | 3.1 % | 0.8 % | **2.1 %** | 1.4 % | 4.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1072 ppm | 0.0109 ppm | 0.0510 ppm | 2.0695 ppm | 0.0200 ppm | 0.0105 ppm | 0.0530 ppm |
| Concentration per Run 1 | 0.1057 ppm | 0.0106 ppm | 0.0510 ppm | 2.0458 ppm | 0.0200 ppm | 0.0108 ppm | 0.0535 ppm |
| Concentration per Run 2 | 0.1075 ppm | 0.0110 ppm | 0.0510 ppm | 2.0796 ppm | 0.0201 ppm | 0.0103 ppm | 0.0530 ppm |
| Concentration per Run 3 | 0.1084 ppm | 0.0110 ppm | 0.0509 ppm | 2.0830 ppm | 0.0200 ppm | 0.0105 ppm | 0.0526 ppm |
| Recovery Percentage 1 | 107.200 % | 108.785 % | 101.932 % | 103.474 % | 100.184 % | 105.444 % | 106.064 % |
| Concentration RSD | 1.3 % | 2.4 % | 0.1 % | 1.0 % | 0.3 % | 2.7 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0111 ppm | 0.5575 ppm | 0.0517 ppm | 0.0101 ppm | 0.0517 ppm | **0.0209 ppm** | 0.0101 ppm |
| Concentration per Run 1 | 0.0116 ppm | 0.5575 ppm | 0.0512 ppm | 0.0099 ppm | 0.0519 ppm | 0.0218 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0088 ppm | 0.5583 ppm | 0.0520 ppm | 0.0101 ppm | 0.0516 ppm | 0.0205 ppm | 0.0102 ppm |
| Concentration per Run 3 | 0.0127 ppm | 0.5567 ppm | 0.0520 ppm | 0.0101 ppm | 0.0517 ppm | 0.0202 ppm | 0.0101 ppm |
| Recovery Percentage 1 | 110.505 % | 111.504 % | 103.489 % | 100.556 % | 103.447 % | 104.270 % | 101.378 % |
| Concentration RSD | 17.9 % | 0.1 % | 0.8 % | 1.2 % | 0.3 % | 4.0 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | **0.0074 ppm** | 97.0741 % | 101.0637 % | 103.0210 % | 98.5091 % | 101.7412 % | 101.3376 % |
| Concentration per Run 1 | 0.0073 ppm | 98.2838 % | 101.3546 % | 103.0791 % | 100.7908 % | 101.7199 % | 101.5611 % |
| Concentration per Run 2 | 0.0074 ppm | 95.5831 % | 100.7242 % | 102.8258 % | 97.2734 % | 101.4458 % | 101.1446 % |
| Concentration per Run 3 | 0.0074 ppm | 97.3554 % | 101.1122 % | 103.1580 % | 97.4632 % | 102.0579 % | 101.3070 % |
| Recovery Percentage 1 | 147.090 % | | | | | | |
| Concentration RSD | **0.6 %** | 1.4 % | 0.3 % | 0.2 % | 2.0 % | 0.3 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: Blank JMF Trace9
Analysis started at: 9/23/2024 9:17:34 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.2 % | 0.9 % | -9.6 % | -0.9 % | 0.1 % | -24.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 2.8 % | 0.6 % | -0.9 % | 0.0 % | 0.7 % | -0.3 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.8 % | -0.9 % | -4.4 % | -0.1 % | 0.4 % | -40.7 % | -2.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 30.4 % | 0.2 % | 0.3 % | -9.1 % | -0.8 % | 0.7 % | -0.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.1 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICAL
Analysis started at: 9/23/2024 9:21:21 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0017 ppm | 24.9108 ppm | 0.9924 ppm | 0.9972 ppm | 0.9979 ppm | 1.0008 ppm | 9.9686 ppm |
| Concentration per Run 2 | 1.0062 ppm | 24.9729 ppm | 1.0069 ppm | 0.9984 ppm | 0.9973 ppm | 0.9975 ppm | 9.9897 ppm |
| Concentration per Run 3 | 0.9922 ppm | 25.1163 ppm | 1.0007 ppm | 1.0044 ppm | 1.0048 ppm | 1.0017 ppm | 10.0417 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 0.7 % | 0.4 % | 0.4 % | 0.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9985 ppm | 0.9983 ppm | 0.9952 ppm | 0.9982 ppm | 24.9089 ppm | 34.9652 ppm | 0.9983 ppm |
| Concentration per Run 2 | 1.0022 ppm | 1.0023 ppm | 1.0046 ppm | 1.0009 ppm | 24.9994 ppm | 34.9382 ppm | 0.9969 ppm |
| Concentration per Run 3 | 0.9994 ppm | 0.9993 ppm | 1.0001 ppm | 1.0010 ppm | 25.0917 ppm | 35.0966 ppm | 1.0048 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.5 % | 0.2 % | 0.4 % | 0.2 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 9.9756 ppm | 0.9982 ppm | 0.9840 ppm | 24.9052 ppm | 0.9950 ppm | 0.9949 ppm | 0.9959 ppm |
| Concentration per Run 2 | 10.0650 ppm | 0.9980 ppm | 1.0008 ppm | 24.9291 ppm | 1.0010 ppm | 1.0094 ppm | 1.0044 ppm |
| Concentration per Run 3 | 9.9594 ppm | 1.0038 ppm | 1.0152 ppm | 25.1657 ppm | 1.0040 ppm | 0.9957 ppm | 0.9997 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 1.6 % | 0.6 % | 0.5 % | 0.8 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9964 ppm | 9.9640 ppm | 0.9940 ppm | 0.9992 ppm | 0.9938 ppm | 0.9913 ppm | 0.9991 ppm |
| Concentration per Run 2 | 1.0017 ppm | 10.0479 ppm | 0.9994 ppm | 0.9959 ppm | 1.0085 ppm | 1.0104 ppm | 0.9997 ppm |
| Concentration per Run 3 | 1.0019 ppm | 9.9881 ppm | 1.0067 ppm | 1.0049 ppm | 0.9978 ppm | 0.9983 ppm | 1.0012 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 0.6 % | 0.5 % | 0.8 % | 1.0 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 102.3534 % | 101.0961 % | 99.2153 % | 99.4588 % | 100.0440 % | 100.5513 % |
| Concentration per Run 1 | 0.9958 ppm | 104.0089 % | 101.3692 % | 100.3153 % | 101.0145 % | 100.2774 % | 101.0728 % |
| Concentration per Run 2 | 1.0006 ppm | 102.3988 % | 101.9781 % | 98.4074 % | 99.3596 % | 101.1018 % | 100.4409 % |
| Concentration per Run 3 | 1.0036 ppm | 100.6524 % | 99.9409 % | 98.9231 % | 98.0024 % | 98.7528 % | 100.1402 % |
| Concentration RSD | 0.4 % | 1.6 % | 1.0 % | 1.0 % | 1.5 % | 1.2 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICV
Analysis started at: 9/23/2024 9:25:13 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5225 ppm | 0.4857 ppm | 0.4910 ppm | 0.5096 ppm | 0.5043 ppm | 0.5171 ppm | 0.4994 ppm |
| Concentration per Run 1 | 0.5204 ppm | 0.4816 ppm | 0.4896 ppm | 0.5100 ppm | 0.5040 ppm | 0.5174 ppm | 0.5009 ppm |
| Concentration per Run 2 | 0.5249 ppm | 0.4825 ppm | 0.4932 ppm | 0.5105 ppm | 0.5036 ppm | 0.5171 ppm | 0.4964 ppm |
| Concentration per Run 3 | 0.5222 ppm | 0.4929 ppm | 0.4901 ppm | 0.5085 ppm | 0.5053 ppm | 0.5167 ppm | 0.5010 ppm |
| Recovery Percentage 1 | 104.501 % | 97.138 % | 98.192 % | 101.930 % | 100.863 % | 103.410 % | 99.887 % |
| Concentration RSD | 0.4 % | 1.3 % | 0.4 % | 0.2 % | 0.2 % | 0.1 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5074 ppm | 0.5207 ppm | 0.5026 ppm | 0.5056 ppm | 0.5125 ppm | 5.2475 ppm | 0.4998 ppm |
| Concentration per Run 1 | 0.5033 ppm | 0.5191 ppm | 0.5011 ppm | 0.5035 ppm | 0.5098 ppm | 5.2674 ppm | 0.5034 ppm |
| Concentration per Run 2 | 0.5103 ppm | 0.5214 ppm | 0.5045 ppm | 0.5078 ppm | 0.5121 ppm | 5.2113 ppm | 0.4959 ppm |
| Concentration per Run 3 | 0.5086 ppm | 0.5218 ppm | 0.5023 ppm | 0.5055 ppm | 0.5158 ppm | 5.2638 ppm | 0.5000 ppm |
| Recovery Percentage 1 | 101.482 % | 104.149 % | 100.527 % | 101.120 % | 102.509 % | 104.950 % | 99.950 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.3 % | 0.4 % | 0.6 % | 0.6 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4964 ppm | 0.4975 ppm | 0.5019 ppm | 10.1156 ppm | 0.5227 ppm | 0.5048 ppm | 0.5164 ppm |
| Concentration per Run 1 | 0.4914 ppm | 0.4987 ppm | 0.4999 ppm | 10.1173 ppm | 0.5251 ppm | 0.5047 ppm | 0.5117 ppm |
| Concentration per Run 2 | 0.4982 ppm | 0.4966 ppm | 0.5032 ppm | 10.1203 ppm | 0.5211 ppm | 0.5059 ppm | 0.5184 ppm |
| Concentration per Run 3 | 0.4996 ppm | 0.4971 ppm | 0.5026 ppm | 10.1091 ppm | 0.5220 ppm | 0.5037 ppm | 0.5190 ppm |
| Recovery Percentage 1 | 99.278 % | 99.496 % | 100.379 % | 101.156 % | 104.545 % | 100.954 % | 103.279 % |
| Concentration RSD | 0.9 % | 0.2 % | 0.4 % | 0.1 % | 0.4 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5037 ppm | 5.3656 ppm | 0.4583 ppm | 0.4816 ppm | 0.5107 ppm | 0.5051 ppm | 0.4988 ppm |
| Concentration per Run 1 | 0.5052 ppm | 5.3253 ppm | 0.4612 ppm | 0.4814 ppm | 0.5090 ppm | 0.5081 ppm | 0.4978 ppm |
| Concentration per Run 2 | 0.5039 ppm | 5.3945 ppm | 0.4566 ppm | 0.4807 ppm | 0.5125 ppm | 0.5043 ppm | 0.5009 ppm |
| Concentration per Run 3 | 0.5019 ppm | 5.3770 ppm | 0.4571 ppm | 0.4827 ppm | 0.5105 ppm | 0.5029 ppm | 0.4977 ppm |
| Recovery Percentage 1 | 100.736 % | 102.202 % | 91.655 % | 96.324 % | 102.136 % | 101.013 % | 99.760 % |
| Concentration RSD | 0.3 % | 0.7 % | 0.6 % | 0.2 % | 0.3 % | 0.5 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5078 ppm | 102.4650 % | 100.4955 % | 102.1431 % | 100.1501 % | 99.1231 % | 101.3509 % |
| Concentration per Run 1 | 0.5089 ppm | 102.6795 % | 100.2555 % | 101.5258 % | 100.3448 % | 99.0592 % | 100.5938 % |
| Concentration per Run 2 | 0.5079 ppm | 102.8466 % | 101.6707 % | 101.7446 % | 100.6936 % | 100.2184 % | 101.2266 % |
| Concentration per Run 3 | 0.5066 ppm | 101.8688 % | 99.5602 % | 103.1590 % | 99.4118 % | 98.0916 % | 102.2325 % |
| Recovery Percentage 1 | 101.564 % | | | | | | |
| Concentration RSD | 0.2 % | 0.5 % | 1.1 % | 0.9 % | 0.7 % | 1.1 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICB
Analysis started at: 9/23/2024 9:29:06 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0026 ppm | -0.0009 ppm | 0.0011 ppm | 0.0002 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0071 ppm | 0.0009 ppm | 0.0014 ppm | 0.0002 ppm | -0.0001 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0038 ppm | -0.0015 ppm | -0.0012 ppm | 0.0001 ppm | -0.0001 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0110 ppm | -0.0021 ppm | 0.0032 ppm | 0.0003 ppm | 0.0000 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 0.366 % | -2.558 % | -18.587 % | 3.791 % | 2.234 % | -0.780 % | 0.587 % |
| Concentration RSD | 875.7 % | 356.8 % | 168.6 % | 193.9 % | 33.0 % | 114.2 % | 214.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | 0.0001 ppm | 0.0002 ppm | 0.0021 ppm | -0.0152 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0005 ppm | -0.0001 ppm | 0.0005 ppm | 0.0040 ppm | -0.0035 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0011 ppm | 0.0005 ppm | 0.0002 ppm | 0.0013 ppm | -0.0066 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0006 ppm | -0.0002 ppm | -0.0001 ppm | 0.0009 ppm | -0.0354 ppm | 0.0018 ppm |
| Recovery Percentage 1 | -0.580 % | -1.918 % | 0.730 % | 2.344 % | 4.147 % | -0.606 % | 2.512 % |
| Concentration RSD | 419.4 % | 209.0 % | 522.7 % | 123.4 % | 80.6 % | 116.0 % | 1,171.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0002 ppm | 0.0011 ppm | 0.0016 ppm | 0.0002 ppm | -0.0003 ppm | -0.0036 ppm |
| Concentration per Run 1 | -0.0030 ppm | -0.0001 ppm | 0.0014 ppm | 0.0079 ppm | -0.0006 ppm | -0.0009 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0012 ppm | -0.0057 ppm | 0.0005 ppm | -0.0003 ppm | -0.0089 ppm |
| Concentration per Run 3 | 0.0014 ppm | -0.0001 ppm | 0.0006 ppm | 0.0025 ppm | 0.0008 ppm | 0.0002 ppm | -0.0019 ppm |
| Recovery Percentage 1 | -0.588 % | -1.527 % | 2.128 % | 0.079 % | 0.935 % | -3.306 % | -7.174 % |
| Concentration RSD | 377.8 % | 56.9 % | 40.1 % | 431.0 % | 309.1 % | 156.9 % | 130.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0052 ppm | -0.0685 ppm | -0.0001 ppm | -0.0002 ppm | -0.0025 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0033 ppm | -0.0042 ppm | -0.0681 ppm | 0.0001 ppm | -0.0003 ppm | -0.0020 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0039 ppm | -0.0042 ppm | -0.0681 ppm | -0.0001 ppm | 0.0000 ppm | -0.0026 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0019 ppm | -0.0073 ppm | -0.0693 ppm | -0.0003 ppm | -0.0003 ppm | -0.0029 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -17.509 % | -1.048 % | -137.017 % | -0.875 % | -1.947 % | -12.642 % | 3.318 % |
| Concentration RSD | 180.1 % | 34.6 % | 1.0 % | 198.7 % | 98.5 % | 18.7 % | 114.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0235 ppm | 102.1249 % | 99.6774 % | 102.2891 % | 101.7080 % | 99.2925 % | 102.6776 % |
| Concentration per Run 1 | -0.0239 ppm | 102.0955 % | 99.3819 % | 102.4406 % | 101.8440 % | 98.3960 % | 102.6978 % |
| Concentration per Run 2 | -0.0233 ppm | 101.8518 % | 100.1272 % | 101.5141 % | 101.3714 % | 99.9937 % | 102.0063 % |
| Concentration per Run 3 | -0.0232 ppm | 102.4275 % | 99.5229 % | 102.9127 % | 101.9087 % | 99.4877 % | 103.3286 % |
| Recovery Percentage 1 | -469.422 % | | | | | | |
| Concentration RSD | 1.6 % | 0.3 % | 0.4 % | 0.7 % | 0.3 % | 0.8 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICV
Analysis started at: 9/23/2024 9:33:00 AM
Rack 0
Vial 10
Comment position changed

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5105 ppm | 0.4616 ppm | 0.4765 ppm | 0.4888 ppm | 0.4962 ppm | 0.5066 ppm | 0.4935 ppm |
| Concentration per Run 1 | 0.5103 ppm | 0.4621 ppm | 0.4766 ppm | 0.4868 ppm | 0.4969 ppm | 0.5078 ppm | 0.4882 ppm |
| Concentration per Run 2 | 0.5119 ppm | 0.4659 ppm | 0.4762 ppm | 0.4887 ppm | 0.4950 ppm | 0.5079 ppm | 0.4974 ppm |
| Concentration per Run 3 | 0.5093 ppm | 0.4567 ppm | 0.4768 ppm | 0.4909 ppm | 0.4966 ppm | 0.5039 ppm | 0.4950 ppm |
| Recovery Percentage 1 | 102.100 % | 92.317 % | 95.309 % | 97.761 % | 99.235 % | 101.312 % | 98.703 % |
| Concentration RSD | 0.3 % | 1.0 % | 0.1 % | 0.4 % | 0.2 % | 0.5 % | 1.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4919 ppm | 0.5070 ppm | 0.4921 ppm | 0.4980 ppm | 0.5033 ppm | 5.0955 ppm | 0.5011 ppm |
| Concentration per Run 1 | 0.4936 ppm | 0.5053 ppm | 0.4933 ppm | 0.4963 ppm | 0.5018 ppm | 5.1419 ppm | 0.5038 ppm |
| Concentration per Run 2 | 0.4876 ppm | 0.5051 ppm | 0.4924 ppm | 0.4978 ppm | 0.5049 ppm | 5.0851 ppm | 0.5023 ppm |
| Concentration per Run 3 | 0.4945 ppm | 0.5105 ppm | 0.4906 ppm | 0.4998 ppm | 0.5032 ppm | 5.0595 ppm | 0.4974 ppm |
| Recovery Percentage 1 | 98.379 % | 101.396 % | 98.422 % | 99.597 % | 100.656 % | 101.910 % | 100.230 % |
| Concentration RSD | 0.8 % | 0.6 % | 0.3 % | 0.4 % | 0.3 % | 0.8 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4891 ppm | 0.4854 ppm | 0.4929 ppm | 9.9548 ppm | 0.5092 ppm | 0.4971 ppm | 0.5002 ppm |
| Concentration per Run 1 | 0.4880 ppm | 0.4866 ppm | 0.4883 ppm | 9.9207 ppm | 0.5105 ppm | 0.4946 ppm | 0.4996 ppm |
| Concentration per Run 2 | 0.4891 ppm | 0.4862 ppm | 0.4934 ppm | 10.0047 ppm | 0.5091 ppm | 0.4985 ppm | 0.4988 ppm |
| Concentration per Run 3 | 0.4900 ppm | 0.4834 ppm | 0.4970 ppm | 9.9390 ppm | 0.5079 ppm | 0.4982 ppm | 0.5023 ppm |
| Recovery Percentage 1 | 97.811 % | 97.084 % | 98.583 % | 99.548 % | 101.840 % | 99.422 % | 100.044 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.9 % | 0.4 % | 0.3 % | 0.4 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4846 ppm | 5.3576 ppm | 0.4780 ppm | 0.4973 ppm | 0.5009 ppm | 0.4984 ppm | 0.4892 ppm |
| Concentration per Run 1 | 0.4809 ppm | 5.3318 ppm | 0.4755 ppm | 0.4982 ppm | 0.5009 ppm | 0.4957 ppm | 0.4887 ppm |
| Concentration per Run 2 | 0.4859 ppm | 5.3608 ppm | 0.4782 ppm | 0.4977 ppm | 0.5021 ppm | 0.5018 ppm | 0.4900 ppm |
| Concentration per Run 3 | 0.4870 ppm | 5.3802 ppm | 0.4803 ppm | 0.4958 ppm | 0.4998 ppm | 0.4977 ppm | 0.4888 ppm |
| Recovery Percentage 1 | 96.919 % | 102.049 % | 95.602 % | 99.451 % | 100.185 % | 99.678 % | 97.831 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.5 % | 0.3 % | 0.2 % | 0.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4918 ppm | 104.2072 % | 101.4813 % | 102.8911 % | 101.5629 % | 100.1108 % | 102.4030 % |
| Concentration per Run 1 | 0.4928 ppm | 104.5078 % | 101.5047 % | 103.1361 % | 101.6273 % | 100.0325 % | 102.5312 % |
| Concentration per Run 2 | 0.4905 ppm | 104.7620 % | 101.3887 % | 102.5812 % | 102.0126 % | 100.2464 % | 102.1810 % |
| Concentration per Run 3 | 0.4921 ppm | 103.3518 % | 101.5505 % | 102.9562 % | 101.0489 % | 100.0536 % | 102.4969 % |
| Recovery Percentage 1 | 98.359 % | | | | | | |
| Concentration RSD | 0.2 % | 0.7 % | 0.1 % | 0.3 % | 0.5 % | 0.1 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICB
Analysis started at: 9/23/2024 9:36:58 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0000 ppm | 0.0004 ppm | 0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0000 ppm | 0.0022 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0038 ppm | -0.0006 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0038 ppm | -0.0005 ppm | 0.0013 ppm | 0.0003 ppm | 0.0000 ppm | 0.0029 ppm |
| Recovery Percentage 1 | 4.047 % | 0.011 % | 7.355 % | 2.068 % | 1.894 % | -0.399 % | 1.710 % |
| Concentration RSD | 142.9 % | 35,647.8 % | 433.6 % | 109.7 % | 59.4 % | 203.0 % | 111.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0004 ppm | 0.0001 ppm | -0.0001 ppm | 0.0029 ppm | -0.0122 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | 0.0004 ppm | -0.0002 ppm | 0.0022 ppm | 0.0115 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0008 ppm | -0.0002 ppm | 0.0000 ppm | 0.0028 ppm | -0.0101 ppm | -0.0016 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0036 ppm | -0.0379 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 1.065 % | -2.120 % | 1.253 % | -1.184 % | 5.792 % | -0.486 % | -2.003 % |
| Concentration RSD | 231.3 % | 98.7 % | 234.2 % | 92.8 % | 24.5 % | 203.9 % | 1,298.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 0.0000 ppm | 0.0013 ppm | -0.0022 ppm | 0.0000 ppm | -0.0008 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0000 ppm | 0.0011 ppm | -0.0017 ppm | -0.0005 ppm | -0.0019 ppm | 0.0041 ppm |
| Concentration per Run 2 | -0.0019 ppm | 0.0001 ppm | 0.0012 ppm | -0.0025 ppm | 0.0005 ppm | -0.0005 ppm | -0.0035 ppm |
| Concentration per Run 3 | -0.0040 ppm | -0.0002 ppm | 0.0016 ppm | -0.0024 ppm | -0.0001 ppm | 0.0001 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -2.517 % | -0.166 % | 2.535 % | -0.110 % | -0.187 % | -7.762 % | 1.317 % |
| Concentration RSD | 51.3 % | 1,055.7 % | 20.5 % | 18.2 % | 1,146.1 % | 128.8 % | 590.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0049 ppm | -0.0689 ppm | 0.0000 ppm | -0.0004 ppm | -0.0012 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0048 ppm | -0.0058 ppm | -0.0685 ppm | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0044 ppm | -0.0698 ppm | 0.0000 ppm | -0.0008 ppm | -0.0015 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0046 ppm | -0.0685 ppm | -0.0001 ppm | -0.0004 ppm | -0.0016 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -18.133 % | -0.986 % | -137.855 % | -0.150 % | -4.129 % | -5.918 % | 0.880 % |
| Concentration RSD | 145.4 % | 15.4 % | 1.1 % | 489.1 % | 99.6 % | 53.1 % | 131.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0241 ppm | 102.6307 % | 99.2877 % | 101.6340 % | 102.2965 % | 98.7229 % | 101.9072 % |
| Concentration per Run 1 | -0.0239 ppm | 103.1676 % | 98.8496 % | 102.2330 % | 102.9479 % | 98.2883 % | 102.4370 % |
| Concentration per Run 2 | -0.0241 ppm | 102.1373 % | 99.5146 % | 101.4273 % | 101.8437 % | 98.7241 % | 101.5519 % |
| Concentration per Run 3 | -0.0242 ppm | 102.5874 % | 99.4988 % | 101.2417 % | 102.0979 % | 99.1563 % | 101.7328 % |
| Recovery Percentage 1 | -481.717 % | | | | | | |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.5 % | 0.6 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LLOQ
Analysis started at: 9/23/2024 9:40:51 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 0.0994 ppm | 0.0042 ppm | 0.0319 ppm | 0.0102 ppm | 0.0050 ppm | 0.1043 ppm |
| Concentration per Run 1 | 0.0062 ppm | 0.1073 ppm | 0.0049 ppm | 0.0328 ppm | 0.0100 ppm | 0.0049 ppm | 0.1057 ppm |
| Concentration per Run 2 | 0.0053 ppm | 0.0915 ppm | 0.0029 ppm | 0.0307 ppm | 0.0104 ppm | 0.0051 ppm | 0.1011 ppm |
| Concentration per Run 3 | 0.0057 ppm | 0.0994 ppm | 0.0047 ppm | 0.0321 ppm | 0.0103 ppm | 0.0051 ppm | 0.1061 ppm |
| Recovery Percentage 1 | 115.124 % | 99.426 % | 83.025 % | 106.286 % | 102.487 % | 100.782 % | 104.292 % |
| Concentration RSD | 7.8 % | 7.9 % | 26.9 % | 3.4 % | 1.8 % | 1.7 % | 2.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0207 ppm | 0.0091 ppm | 0.0104 ppm | 0.0504 ppm | 2.6055 ppm | 0.0102 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0207 ppm | 0.0092 ppm | 0.0106 ppm | 0.0499 ppm | 2.6005 ppm | 0.0098 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.0209 ppm | 0.0092 ppm | 0.0105 ppm | 0.0498 ppm | 2.6003 ppm | 0.0093 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.0205 ppm | 0.0089 ppm | 0.0103 ppm | 0.0514 ppm | 2.6156 ppm | 0.0114 ppm |
| Recovery Percentage 1 | 101.163 % | 103.470 % | 90.662 % | 104.447 % | 100.721 % | 104.219 % | 102.008 % |
| Concentration RSD | 4.5 % | 1.1 % | 2.0 % | 1.3 % | 1.8 % | 0.3 % | 10.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0988 ppm | 0.0105 ppm | 0.0510 ppm | 2.0407 ppm | 0.0208 ppm | 0.0102 ppm | 0.0498 ppm |
| Concentration per Run 1 | 0.0998 ppm | 0.0105 ppm | 0.0512 ppm | 2.0345 ppm | 0.0211 ppm | 0.0099 ppm | 0.0483 ppm |
| Concentration per Run 2 | 0.0983 ppm | 0.0106 ppm | 0.0506 ppm | 2.0297 ppm | 0.0207 ppm | 0.0111 ppm | 0.0490 ppm |
| Concentration per Run 3 | 0.0982 ppm | 0.0104 ppm | 0.0514 ppm | 2.0578 ppm | 0.0206 ppm | 0.0095 ppm | 0.0521 ppm |
| Recovery Percentage 1 | 98.777 % | 105.089 % | 102.099 % | 102.033 % | 103.971 % | 102.119 % | 99.531 % |
| Concentration RSD | 0.9 % | 0.8 % | 0.8 % | 0.7 % | 1.3 % | 8.1 % | 4.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0080 ppm | 0.4993 ppm | -0.0143 ppm | 0.0099 ppm | 0.0510 ppm | 0.0199 ppm | 0.0100 ppm |
| Concentration per Run 1 | 0.0086 ppm | 0.4983 ppm | -0.0134 ppm | 0.0099 ppm | 0.0509 ppm | 0.0200 ppm | 0.0099 ppm |
| Concentration per Run 2 | 0.0066 ppm | 0.5008 ppm | -0.0164 ppm | 0.0099 ppm | 0.0508 ppm | 0.0202 ppm | 0.0099 ppm |
| Concentration per Run 3 | 0.0087 ppm | 0.4988 ppm | -0.0130 ppm | 0.0098 ppm | 0.0513 ppm | 0.0196 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 79.618 % | 99.861 % | -28.539 % | 98.942 % | 102.004 % | 99.486 % | 100.094 % |
| Concentration RSD | 15.3 % | 0.3 % | 13.2 % | 0.6 % | 0.5 % | 1.5 % | 1.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0184 ppm | 103.4809 % | 100.0093 % | 102.1468 % | 101.5069 % | 98.7010 % | 101.5246 % |
| Concentration per Run 1 | -0.0183 ppm | 102.6504 % | 100.0609 % | 101.8332 % | 100.4042 % | 98.7424 % | 101.1993 % |
| Concentration per Run 2 | -0.0185 ppm | 103.7526 % | 99.8229 % | 103.1915 % | 101.8997 % | 98.0541 % | 102.4522 % |
| Concentration per Run 3 | -0.0183 ppm | 104.0395 % | 100.1440 % | 101.4157 % | 102.2168 % | 99.3065 % | 100.9222 % |
| Recovery Percentage 1 | -367.061 % | | | | | | |
| Concentration RSD | 0.9 % | 0.7 % | 0.2 % | 0.9 % | 1.0 % | 0.6 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: Blank JMF Trace9
Analysis started at: 9/23/2024 9:57:47 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.6 % | 0.8 % | 1.4 % | -0.9 % | 0.2 % | -9.2 % | 1.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 2.7 % | 0.5 % | -2.4 % | -0.1 % | 0.0 % | -0.3 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.5 % | -0.7 % | 1.2 % | -0.1 % | 0.8 % | -11.1 % | -1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -1.4 % | 0.2 % | 0.3 % | -0.2 % | -0.7 % | 1.2 % | -1.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.2 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICAL
Analysis started at: 9/23/2024 10:01:45 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0058 ppm | 24.9026 ppm | 1.0014 ppm | 1.0080 ppm | 0.9949 ppm | 0.9963 ppm | 9.9824 ppm |
| Concentration per Run 2 | 1.0011 ppm | 25.1609 ppm | 1.0070 ppm | 0.9953 ppm | 1.0064 ppm | 1.0062 ppm | 9.9872 ppm |
| Concentration per Run 3 | 0.9931 ppm | 24.9364 ppm | 0.9917 ppm | 0.9968 ppm | 0.9987 ppm | 0.9975 ppm | 10.0304 ppm |
| Concentration RSD | 0.6 % | 0.6 % | 0.8 % | 0.7 % | 0.6 % | 0.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 1.0088 ppm | 1.0057 ppm | 1.0071 ppm | 1.0026 ppm | 24.8514 ppm | 34.7612 ppm | 0.9938 ppm |
| Concentration per Run 2 | 0.9939 ppm | 0.9943 ppm | 0.9980 ppm | 0.9995 ppm | 25.1278 ppm | 35.1676 ppm | 1.0035 ppm |
| Concentration per Run 3 | 0.9974 ppm | 1.0001 ppm | 0.9949 ppm | 0.9979 ppm | 25.0208 ppm | 35.0713 ppm | 1.0027 ppm |
| Concentration RSD | 0.8 % | 0.6 % | 0.6 % | 0.2 % | 0.6 % | 0.6 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0220 ppm | 0.9970 ppm | 0.9972 ppm | 24.8613 ppm | 1.0074 ppm | 1.0002 ppm | 0.9959 ppm |
| Concentration per Run 2 | 10.0141 ppm | 1.0002 ppm | 0.9898 ppm | 25.1569 ppm | 0.9940 ppm | 1.0046 ppm | 0.9974 ppm |
| Concentration per Run 3 | 9.9640 ppm | 1.0027 ppm | 1.0130 ppm | 24.9818 ppm | 0.9987 ppm | 0.9953 ppm | 1.0067 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.2 % | 0.6 % | 0.7 % | 0.5 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9984 ppm | 10.0151 ppm | 1.0018 ppm | 0.9960 ppm | 1.0058 ppm | 1.0014 ppm | 1.0003 ppm |
| Concentration per Run 2 | 1.0102 ppm | 9.9573 ppm | 0.9917 ppm | 1.0011 ppm | 1.0027 ppm | 1.0038 ppm | 0.9988 ppm |
| Concentration per Run 3 | 0.9914 ppm | 10.0276 ppm | 1.0065 ppm | 1.0029 ppm | 0.9916 ppm | 0.9948 ppm | 1.0008 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 0.8 % | 0.4 % | 0.7 % | 0.5 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 98.7405 % | 102.6978 % | 99.4926 % | 96.3104 % | 101.6277 % | 100.6169 % |
| Concentration per Run 1 | 1.0023 ppm | 98.5974 % | 103.2611 % | 99.8606 % | 96.0644 % | 101.9486 % | 101.2091 % |
| Concentration per Run 2 | 0.9947 ppm | 99.0358 % | 102.7063 % | 99.5012 % | 96.5214 % | 101.7442 % | 100.7615 % |
| Concentration per Run 3 | 1.0030 ppm | 98.5882 % | 102.1261 % | 99.1162 % | 96.3455 % | 101.1902 % | 99.8801 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.6 % | 0.4 % | 0.2 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICV
Analysis started at: 9/23/2024 10:05:38 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5237 ppm | 0.4908 ppm | 0.4927 ppm | 0.5081 ppm | 0.5106 ppm | 0.5227 ppm | 0.5083 ppm |
| Concentration per Run 1 | 0.5242 ppm | 0.4906 ppm | 0.4940 ppm | 0.5112 ppm | 0.5093 ppm | 0.5222 ppm | 0.5051 ppm |
| Concentration per Run 2 | 0.5214 ppm | 0.4895 ppm | 0.4910 ppm | 0.5034 ppm | 0.5124 ppm | 0.5255 ppm | 0.5105 ppm |
| Concentration per Run 3 | 0.5257 ppm | 0.4923 ppm | 0.4931 ppm | 0.5098 ppm | 0.5100 ppm | 0.5204 ppm | 0.5093 ppm |
| Recovery Percentage 1 | 104.747 % | 98.155 % | 98.539 % | 101.618 % | 102.113 % | 104.542 % | 101.661 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.8 % | 0.3 % | 0.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5170 ppm | 0.5230 ppm | 0.5026 ppm | 0.5064 ppm | 0.5137 ppm | 5.3274 ppm | 0.5042 ppm |
| Concentration per Run 1 | 0.5148 ppm | 0.5215 ppm | 0.5026 ppm | 0.5070 ppm | 0.5142 ppm | 5.3520 ppm | 0.5047 ppm |
| Concentration per Run 2 | 0.5143 ppm | 0.5223 ppm | 0.4995 ppm | 0.5068 ppm | 0.5168 ppm | 5.3413 ppm | 0.5043 ppm |
| Concentration per Run 3 | 0.5219 ppm | 0.5252 ppm | 0.5056 ppm | 0.5054 ppm | 0.5102 ppm | 5.2890 ppm | 0.5035 ppm |
| Recovery Percentage 1 | 103.402 % | 104.599 % | 100.515 % | 101.285 % | 102.748 % | 106.548 % | 100.834 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.6 % | 0.2 % | 0.6 % | 0.6 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5013 ppm | 0.5024 ppm | 0.5036 ppm | 10.2174 ppm | 0.5186 ppm | 0.5116 ppm | 0.5162 ppm |
| Concentration per Run 1 | 0.5045 ppm | 0.5017 ppm | 0.5008 ppm | 10.2282 ppm | 0.5174 ppm | 0.5122 ppm | 0.5120 ppm |
| Concentration per Run 2 | 0.4995 ppm | 0.5052 ppm | 0.5026 ppm | 10.2147 ppm | 0.5173 ppm | 0.5130 ppm | 0.5192 ppm |
| Concentration per Run 3 | 0.4998 ppm | 0.5004 ppm | 0.5074 ppm | 10.2093 ppm | 0.5211 ppm | 0.5096 ppm | 0.5172 ppm |
| Recovery Percentage 1 | 100.255 % | 100.485 % | 100.719 % | 102.174 % | 103.718 % | 102.321 % | 103.233 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.7 % | 0.1 % | 0.4 % | 0.4 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5085 ppm | 5.5529 ppm | 0.4953 ppm | 0.4879 ppm | 0.5128 ppm | 0.5148 ppm | 0.5009 ppm |
| Concentration per Run 1 | 0.5034 ppm | 5.5433 ppm | 0.4935 ppm | 0.4876 ppm | 0.5139 ppm | 0.5148 ppm | 0.5012 ppm |
| Concentration per Run 2 | 0.5052 ppm | 5.5385 ppm | 0.4952 ppm | 0.4878 ppm | 0.5107 ppm | 0.5151 ppm | 0.4999 ppm |
| Concentration per Run 3 | 0.5170 ppm | 5.5770 ppm | 0.4971 ppm | 0.4882 ppm | 0.5137 ppm | 0.5146 ppm | 0.5016 ppm |
| Recovery Percentage 1 | 101.707 % | 105.770 % | 99.062 % | 97.572 % | 102.552 % | 102.967 % | 100.181 % |
| Concentration RSD | 1.5 % | 0.4 % | 0.4 % | 0.1 % | 0.3 % | 0.0 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5207 ppm | 98.8307 % | 101.7778 % | 101.0321 % | 96.8459 % | 100.8571 % | 100.0186 % |
| Concentration per Run 1 | 0.5194 ppm | 99.8677 % | 101.7218 % | 101.1796 % | 97.8172 % | 100.7291 % | 99.8214 % |
| Concentration per Run 2 | 0.5193 ppm | 98.7797 % | 101.6857 % | 100.9515 % | 96.9434 % | 100.9262 % | 100.0757 % |
| Concentration per Run 3 | 0.5233 ppm | 97.8447 % | 101.9259 % | 100.9651 % | 95.7770 % | 100.9160 % | 100.1588 % |
| Recovery Percentage 1 | 104.136 % | | | | | | |
| Concentration RSD | 0.4 % | 1.0 % | 0.1 % | 0.1 % | 1.1 % | 0.1 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICB
Analysis started at: 9/23/2024 10:09:32 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0057 ppm | -0.0005 ppm | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | 0.0040 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0096 ppm | -0.0014 ppm | -0.0013 ppm | 0.0000 ppm | -0.0001 ppm | 0.0063 ppm |
| Concentration per Run 2 | -0.0006 ppm | -0.0016 ppm | -0.0007 ppm | 0.0006 ppm | 0.0003 ppm | -0.0001 ppm | 0.0027 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0060 ppm | 0.0004 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0030 ppm |
| Recovery Percentage 1 | -7.013 % | -5.723 % | -10.970 % | -0.555 % | 0.909 % | -1.918 % | 4.006 % |
| Concentration RSD | 26.3 % | 69.4 % | 165.2 % | 595.3 % | 216.4 % | 49.3 % | 50.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | -0.0008 ppm | -0.0034 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0129 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0003 ppm | -0.0020 ppm | -0.0229 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0006 ppm | 0.0000 ppm | -0.0005 ppm | -0.0002 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.175 % | 0.115 % | 3.643 % | 1.162 % | -1.527 % | -0.135 % | 2.708 % |
| Concentration RSD | 1,209.7 % | 1,715.4 % | 47.4 % | 141.4 % | 141.8 % | 535.7 % | 354.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0009 ppm | 0.0021 ppm | -0.0001 ppm | 0.0002 ppm | -0.0016 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0001 ppm | 0.0010 ppm | 0.0057 ppm | 0.0007 ppm | 0.0010 ppm | -0.0024 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0001 ppm | 0.0007 ppm | 0.0065 ppm | -0.0006 ppm | -0.0011 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | 0.0009 ppm | -0.0059 ppm | -0.0003 ppm | 0.0006 ppm | -0.0024 ppm |
| Recovery Percentage 1 | 0.106 % | 0.315 % | 1.765 % | 0.105 % | -0.269 % | 1.635 % | -3.191 % |
| Concentration RSD | 1,547.2 % | 306.3 % | 19.3 % | 332.4 % | 1,014.7 % | 657.4 % | 89.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | -0.0002 ppm | 0.0005 ppm | 0.0001 ppm | -0.0002 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0027 ppm | -0.0007 ppm | 0.0003 ppm | 0.0002 ppm | -0.0003 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0005 ppm | 0.0006 ppm | 0.0002 ppm | -0.0003 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0041 ppm | -0.0003 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 24.736 % | -0.035 % | 0.975 % | 1.440 % | -2.445 % | 3.259 % | 1.690 % |
| Concentration RSD | 72.1 % | 370.8 % | 28.9 % | 56.5 % | 57.8 % | 58.1 % | 134.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 97.6412 % | 100.8711 % | 101.6212 % | 97.5265 % | 101.1836 % | 101.5050 % |
| Concentration per Run 1 | 0.0001 ppm | 98.2064 % | 100.2577 % | 101.1668 % | 98.1523 % | 100.7802 % | 101.5437 % |
| Concentration per Run 2 | 0.0000 ppm | 98.5924 % | 101.5583 % | 102.6155 % | 98.6480 % | 102.0272 % | 102.1008 % |
| Concentration per Run 3 | -0.0001 ppm | 96.1248 % | 100.7974 % | 101.0814 % | 95.7793 % | 100.7433 % | 100.8705 % |
| Recovery Percentage 1 | -0.251 % | | | | | | |
| Concentration RSD | 961.7 % | 1.4 % | 0.6 % | 0.8 % | 1.6 % | 0.7 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICV
Analysis started at: 9/23/2024 10:13:26 AM
Rack 0
Vial 10
Comment position changed

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5126 ppm | 0.4743 ppm | 0.4782 ppm | 0.4913 ppm | 0.4966 ppm | 0.5098 ppm | 0.4972 ppm |
| Concentration per Run 1 | 0.5149 ppm | 0.4676 ppm | 0.4777 ppm | 0.4927 ppm | 0.4918 ppm | 0.5098 ppm | 0.4971 ppm |
| Concentration per Run 2 | 0.5104 ppm | 0.4781 ppm | 0.4776 ppm | 0.4927 ppm | 0.5001 ppm | 0.5118 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.5125 ppm | 0.4772 ppm | 0.4795 ppm | 0.4885 ppm | 0.4979 ppm | 0.5079 ppm | 0.4961 ppm |
| Recovery Percentage 1 | 102.521 % | 94.855 % | 95.650 % | 98.260 % | 99.318 % | 101.970 % | 99.448 % |
| Concentration RSD | 0.4 % | 1.2 % | 0.2 % | 0.5 % | 0.9 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5025 ppm | 0.5123 ppm | 0.4937 ppm | 0.4985 ppm | 0.5019 ppm | 5.1272 ppm | 0.5008 ppm |
| Concentration per Run 1 | 0.5036 ppm | 0.5123 ppm | 0.4938 ppm | 0.4994 ppm | 0.4979 ppm | 5.1676 ppm | 0.5005 ppm |
| Concentration per Run 2 | 0.5029 ppm | 0.5131 ppm | 0.4934 ppm | 0.4980 ppm | 0.5069 ppm | 5.1673 ppm | 0.5013 ppm |
| Concentration per Run 3 | 0.5010 ppm | 0.5116 ppm | 0.4938 ppm | 0.4981 ppm | 0.5008 ppm | 5.0467 ppm | 0.5005 ppm |
| Recovery Percentage 1 | 100.504 % | 102.466 % | 98.733 % | 99.696 % | 100.374 % | 102.544 % | 100.160 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.0 % | 0.2 % | 0.9 % | 1.4 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4910 ppm | 0.4881 ppm | 0.4951 ppm | 9.9768 ppm | 0.5105 ppm | 0.5014 ppm | 0.5035 ppm |
| Concentration per Run 1 | 0.4928 ppm | 0.4871 ppm | 0.4944 ppm | 9.9552 ppm | 0.5122 ppm | 0.5035 ppm | 0.5015 ppm |
| Concentration per Run 2 | 0.4899 ppm | 0.4886 ppm | 0.4938 ppm | 9.9993 ppm | 0.5122 ppm | 0.4989 ppm | 0.5052 ppm |
| Concentration per Run 3 | 0.4903 ppm | 0.4887 ppm | 0.4971 ppm | 9.9759 ppm | 0.5070 ppm | 0.5017 ppm | 0.5038 ppm |
| Recovery Percentage 1 | 98.202 % | 97.628 % | 99.023 % | 99.768 % | 102.095 % | 100.275 % | 100.700 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.6 % | 0.5 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4894 ppm | 5.5664 ppm | 0.5120 ppm | 0.4999 ppm | 0.5043 ppm | 0.5013 ppm | 0.4913 ppm |
| Concentration per Run 1 | 0.4891 ppm | 5.5484 ppm | 0.5135 ppm | 0.4993 ppm | 0.5050 ppm | 0.5028 ppm | 0.4923 ppm |
| Concentration per Run 2 | 0.4898 ppm | 5.5713 ppm | 0.5099 ppm | 0.5018 ppm | 0.5033 ppm | 0.4982 ppm | 0.4908 ppm |
| Concentration per Run 3 | 0.4893 ppm | 5.5795 ppm | 0.5125 ppm | 0.4984 ppm | 0.5045 ppm | 0.5028 ppm | 0.4908 ppm |
| Recovery Percentage 1 | 97.881 % | 106.027 % | 102.398 % | 99.973 % | 100.852 % | 100.256 % | 98.254 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.4 % | 0.4 % | 0.2 % | 0.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5051 ppm | 100.2739 % | 104.2203 % | 102.2144 % | 98.1412 % | 103.0176 % | 101.1901 % |
| Concentration per Run 1 | 0.5062 ppm | 100.0651 % | 104.5510 % | 101.7453 % | 97.7912 % | 103.3943 % | 100.8701 % |
| Concentration per Run 2 | 0.5040 ppm | 100.7576 % | 104.0864 % | 102.3961 % | 98.6624 % | 103.2047 % | 101.1755 % |
| Concentration per Run 3 | 0.5049 ppm | 99.9989 % | 104.0233 % | 102.5018 % | 97.9699 % | 102.4538 % | 101.5246 % |
| Recovery Percentage 1 | 101.014 % | | | | | | |
| Concentration RSD | 0.2 % | 0.4 % | 0.3 % | 0.4 % | 0.5 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICB
Analysis started at: 9/23/2024 10:17:23 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0015 ppm | -0.0003 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0049 ppm | 0.0004 ppm | 0.0007 ppm | -0.0001 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0011 ppm | -0.0028 ppm | -0.0006 ppm | -0.0003 ppm | 0.0000 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0016 ppm | 0.0015 ppm | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -1.914 % | 1.472 % | -5.881 % | 0.216 % | -1.605 % | -0.442 % | 0.519 % |
| Concentration RSD | 687.7 % | 224.9 % | 767.4 % | 1,023.7 % | 48.7 % | 154.2 % | 222.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0002 ppm | -0.0006 ppm | 0.0039 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | -0.0003 ppm | 0.0009 ppm | 0.0265 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0006 ppm | 0.0003 ppm | 0.0002 ppm | -0.0023 ppm | -0.0033 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm | 0.0006 ppm | -0.0003 ppm | -0.0113 ppm | -0.0017 ppm |
| Recovery Percentage 1 | -0.227 % | -0.396 % | 2.635 % | 1.859 % | -1.141 % | 0.158 % | -25.686 % |
| Concentration RSD | 254.3 % | 525.9 % | 160.5 % | 242.1 % | 288.7 % | 503.9 % | 26.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | 0.0001 ppm | 0.0005 ppm | 0.0011 ppm | 0.0006 ppm | -0.0004 ppm | 0.0024 ppm |
| Concentration per Run 1 | -0.0021 ppm | 0.0002 ppm | 0.0004 ppm | 0.0020 ppm | 0.0009 ppm | -0.0011 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0053 ppm | 0.0002 ppm | 0.0009 ppm | 0.0056 ppm | 0.0011 ppm | 0.0000 ppm | 0.0023 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0001 ppm | 0.0001 ppm | -0.0042 ppm | -0.0003 ppm | -0.0002 ppm | 0.0021 ppm |
| Recovery Percentage 1 | -2.757 % | 1.461 % | 0.902 % | 0.056 % | 2.326 % | -4.272 % | 4.751 % |
| Concentration RSD | 83.1 % | 39.3 % | 85.8 % | 440.8 % | 127.5 % | 136.9 % | 15.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0020 ppm | 0.0007 ppm | 0.0001 ppm | -0.0001 ppm | -0.0008 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0026 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0005 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0030 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.0005 ppm | 0.0007 ppm | 0.0001 ppm | -0.0002 ppm | -0.0020 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 16.443 % | 0.405 % | 1.404 % | 1.176 % | -0.702 % | -3.770 % | 2.610 % |
| Concentration RSD | 164.7 % | 67.3 % | 87.0 % | 20.2 % | 127.8 % | 148.8 % | 53.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 98.0428 % | 99.5393 % | 102.4971 % | 97.7555 % | 99.9239 % | 102.0989 % |
| Concentration per Run 1 | -0.0002 ppm | 97.5238 % | 100.6866 % | 101.9995 % | 97.4738 % | 100.8862 % | 101.6131 % |
| Concentration per Run 2 | -0.0001 ppm | 97.3894 % | 98.8257 % | 102.4683 % | 97.1714 % | 99.2119 % | 102.0925 % |
| Concentration per Run 3 | -0.0003 ppm | 99.2153 % | 99.1057 % | 103.0234 % | 98.6214 % | 99.6734 % | 102.5911 % |
| Recovery Percentage 1 | -3.687 % | | | | | | |
| Concentration RSD | 66.3 % | 1.0 % | 1.0 % | 0.5 % | 0.8 % | 0.9 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LLOQ
Analysis started at: 9/23/2024 10:21:17 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 0.0992 ppm | 0.0050 ppm | 0.0319 ppm | 0.0102 ppm | 0.0051 ppm | 0.1091 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.0932 ppm | 0.0042 ppm | 0.0336 ppm | 0.0102 ppm | 0.0051 ppm | 0.1104 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.1034 ppm | 0.0066 ppm | 0.0314 ppm | 0.0102 ppm | 0.0051 ppm | 0.1094 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.1010 ppm | 0.0043 ppm | 0.0308 ppm | 0.0102 ppm | 0.0051 ppm | 0.1077 ppm |
| Recovery Percentage 1 | 94.857 % | 99.226 % | 100.371 % | 106.427 % | 102.106 % | 101.359 % | 109.144 % |
| Concentration RSD | 4.4 % | 5.4 % | 27.1 % | 4.6 % | 0.3 % | 0.4 % | 1.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0211 ppm | 0.0094 ppm | 0.0107 ppm | 0.0476 ppm | 2.6620 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0214 ppm | 0.0094 ppm | 0.0108 ppm | 0.0479 ppm | 2.6799 ppm | 0.0118 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0205 ppm | 0.0096 ppm | 0.0107 ppm | 0.0487 ppm | 2.6859 ppm | 0.0098 ppm |
| Concentration per Run 3 | 0.0043 ppm | 0.0215 ppm | 0.0092 ppm | 0.0107 ppm | 0.0461 ppm | 2.6201 ppm | 0.0086 ppm |
| Recovery Percentage 1 | 105.842 % | 105.710 % | 94.071 % | 107.277 % | 95.156 % | 106.479 % | 100.505 % |
| Concentration RSD | 0.5 % | 2.5 % | 2.4 % | 0.5 % | 2.8 % | 1.4 % | 16.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1013 ppm | 0.0106 ppm | 0.0516 ppm | 2.0449 ppm | 0.0198 ppm | 0.0109 ppm | 0.0524 ppm |
| Concentration per Run 1 | 0.0985 ppm | 0.0105 ppm | 0.0503 ppm | 2.0447 ppm | 0.0200 ppm | 0.0102 ppm | 0.0524 ppm |
| Concentration per Run 2 | 0.1024 ppm | 0.0106 ppm | 0.0521 ppm | 2.0550 ppm | 0.0194 ppm | 0.0120 ppm | 0.0523 ppm |
| Concentration per Run 3 | 0.1029 ppm | 0.0106 ppm | 0.0523 ppm | 2.0349 ppm | 0.0201 ppm | 0.0106 ppm | 0.0525 ppm |
| Recovery Percentage 1 | 101.289 % | 105.605 % | 103.158 % | 102.243 % | 99.142 % | 109.499 % | 104.804 % |
| Concentration RSD | 2.4 % | 0.2 % | 2.2 % | 0.5 % | 2.0 % | 8.5 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0119 ppm | 0.5286 ppm | 0.0500 ppm | 0.0101 ppm | 0.0511 ppm | 0.0198 ppm | 0.0104 ppm |
| Concentration per Run 1 | 0.0105 ppm | 0.5222 ppm | 0.0495 ppm | 0.0102 ppm | 0.0508 ppm | 0.0203 ppm | 0.0103 ppm |
| Concentration per Run 2 | 0.0125 ppm | 0.5280 ppm | 0.0501 ppm | 0.0100 ppm | 0.0508 ppm | 0.0186 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0127 ppm | 0.5358 ppm | 0.0504 ppm | 0.0102 ppm | 0.0517 ppm | 0.0204 ppm | 0.0105 ppm |
| Recovery Percentage 1 | 119.051 % | 105.728 % | 99.933 % | 101.177 % | 102.163 % | 98.756 % | 103.859 % |
| Concentration RSD | 10.1 % | 1.3 % | 0.9 % | 0.7 % | 1.0 % | 5.0 % | 1.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 99.8021 % | 102.8883 % | 102.5958 % | 97.7400 % | 101.9850 % | 101.6315 % |
| Concentration per Run 1 | 0.0051 ppm | 100.5910 % | 102.3843 % | 103.1481 % | 98.5217 % | 101.8170 % | 102.3945 % |
| Concentration per Run 2 | 0.0050 ppm | 100.0183 % | 103.6701 % | 102.4032 % | 98.0497 % | 102.4817 % | 101.3762 % |
| Concentration per Run 3 | 0.0055 ppm | 98.7969 % | 102.6105 % | 102.2361 % | 96.6487 % | 101.6563 % | 101.1240 % |
| Recovery Percentage 1 | 103.683 % | | | | | | |
| Concentration RSD | 5.1 % | 0.9 % | 0.7 % | 0.5 % | 1.0 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: ICSA
Analysis started at: 9/23/2024 10:27:05 AM
Rack 0
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 481.2385 ppm | -0.0008 ppm | -0.0052 ppm | 0.0015 ppm | 0.0000 ppm | 527.0718 ppm |
| Concentration per Run 1 | 0.0021 ppm | 483.3170 ppm | -0.0016 ppm | -0.0037 ppm | 0.0017 ppm | 0.0000 ppm | 529.8532 ppm |
| Concentration per Run 2 | 0.0022 ppm | 479.7392 ppm | -0.0034 ppm | -0.0058 ppm | 0.0014 ppm | 0.0000 ppm | 526.0480 ppm |
| Concentration per Run 3 | 0.0017 ppm | 480.6594 ppm | 0.0025 ppm | -0.0061 ppm | 0.0015 ppm | 0.0000 ppm | 525.3142 ppm |
| Recovery Percentage 1 | 28.783 % | | -16.406 % | -17.354 % | 15.191 % | 0.575 % | |
| Concentration RSD | 12.3 % | 0.4 % | 371.6 % | 24.8 % | 9.1 % | 84.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0004 ppm | -0.0010 ppm | 0.0001 ppm | 172.4383 ppm | -0.0090 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0015 ppm | -0.0011 ppm | -0.0001 ppm | 172.7228 ppm | -0.0172 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0003 ppm | -0.0010 ppm | 0.0008 ppm | 172.1487 ppm | -0.0184 ppm | -0.0014 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0005 ppm | -0.0009 ppm | -0.0003 ppm | 172.4432 ppm | 0.0087 ppm | -0.0015 ppm |
| Recovery Percentage 1 | -10.593 % | -2.141 % | -9.927 % | 1.448 % | | -0.358 % | -5.795 % |
| Concentration RSD | 24.3 % | 226.6 % | 8.6 % | 415.8 % | 0.2 % | 170.8 % | 682.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 464.8970 ppm | -0.0004 ppm | -0.0017 ppm | 0.0238 ppm | 0.0006 ppm | -0.0037 ppm | -0.0102 ppm |
| Concentration per Run 1 | 465.7124 ppm | 0.0000 ppm | -0.0018 ppm | 0.0252 ppm | -0.0002 ppm | -0.0021 ppm | -0.0115 ppm |
| Concentration per Run 2 | 465.2042 ppm | -0.0006 ppm | -0.0018 ppm | 0.0253 ppm | 0.0007 ppm | -0.0022 ppm | -0.0097 ppm |
| Concentration per Run 3 | 463.7743 ppm | -0.0005 ppm | -0.0015 ppm | 0.0209 ppm | 0.0012 ppm | -0.0067 ppm | -0.0094 ppm |
| Recovery Percentage 1 | | -3.530 % | -3.418 % | 1.190 % | 2.241 % | -36.829 % | -20.421 % |
| Concentration RSD | 0.2 % | 81.2 % | 9.4 % | 10.4 % | 127.0 % | 71.2 % | 10.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | 0.0087 ppm | 0.0009 ppm | -0.0005 ppm | 0.0006 ppm | 0.0048 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0055 ppm | 0.0084 ppm | 0.0016 ppm | -0.0005 ppm | 0.0006 ppm | 0.0042 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0109 ppm | 0.0001 ppm | -0.0005 ppm | 0.0008 ppm | 0.0059 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0069 ppm | 0.0010 ppm | -0.0005 ppm | 0.0005 ppm | 0.0044 ppm | 0.0016 ppm |
| Recovery Percentage 1 | -23.359 % | 1.743 % | 1.888 % | -5.027 % | 6.489 % | 24.208 % | 14.490 % |
| Concentration RSD | 120.7 % | 23.3 % | 79.4 % | 6.9 % | 17.0 % | 19.2 % | 11.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 89.1853 % | 101.8742 % | 81.0499 % | 86.6792 % | 102.2594 % | 91.0289 % |
| Concentration per Run 1 | 0.0002 ppm | 89.2389 % | 102.1083 % | 80.3196 % | 86.4975 % | 103.1975 % | 90.3208 % |
| Concentration per Run 2 | 0.0005 ppm | 89.0037 % | 101.6868 % | 81.3493 % | 86.5742 % | 102.0303 % | 91.5133 % |
| Concentration per Run 3 | -0.0001 ppm | 89.3132 % | 101.8274 % | 81.4809 % | 86.9659 % | 101.5503 % | 91.2526 % |
| Recovery Percentage 1 | 4.182 % | | | | | | |
| Concentration RSD | 134.5 % | 0.2 % | 0.2 % | 0.8 % | 0.3 % | 0.8 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR 500 Fe pass
Analysis started at: 9/23/2024 10:33:55 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0260 ppm | -0.0051 ppm | 0.0036 ppm | 0.0004 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0242 ppm | -0.0056 ppm | 0.0030 ppm | 0.0004 ppm | 0.0000 ppm | 0.0098 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0257 ppm | -0.0065 ppm | 0.0041 ppm | 0.0003 ppm | 0.0001 ppm | 0.0078 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0281 ppm | -0.0031 ppm | 0.0036 ppm | 0.0005 ppm | 0.0000 ppm | 0.0076 ppm |
| Concentration RSD | 57.2 % | 7.6 % | 35.1 % | 15.5 % | 23.3 % | 520.2 % | 14.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0032 ppm | -0.0007 ppm | 0.0002 ppm | 467.0830 ppm | -0.0885 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0033 ppm | -0.0005 ppm | -0.0009 ppm | 472.9280 ppm | -0.1190 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0027 ppm | -0.0005 ppm | 0.0019 ppm | 465.8724 ppm | -0.0770 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0036 ppm | -0.0010 ppm | -0.0004 ppm | 462.4485 ppm | -0.0696 ppm | 0.0000 ppm |
| Concentration RSD | 275.0 % | 14.8 % | 39.6 % | 666.5 % | 1.1 % | 30.1 % | 371.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0028 ppm | -0.0032 ppm | 0.0057 ppm | -0.0018 ppm | 0.0011 ppm | -0.0040 ppm |
| Concentration per Run 1 | 0.0040 ppm | -0.0029 ppm | -0.0040 ppm | 0.0047 ppm | -0.0029 ppm | 0.0025 ppm | -0.0055 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0028 ppm | -0.0030 ppm | 0.0029 ppm | -0.0009 ppm | -0.0002 ppm | -0.0067 ppm |
| Concentration per Run 3 | -0.0028 ppm | -0.0026 ppm | -0.0025 ppm | 0.0096 ppm | -0.0017 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration RSD | 1,265.1 % | 4.5 % | 23.7 % | 60.2 % | 56.1 % | 125.8 % | 95.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0051 ppm | 0.0028 ppm | 0.0005 ppm | -0.0004 ppm | 0.0014 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0011 ppm | 0.0050 ppm | 0.0039 ppm | 0.0005 ppm | -0.0002 ppm | 0.0023 ppm | 0.0029 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0048 ppm | 0.0022 ppm | 0.0005 ppm | -0.0003 ppm | 0.0007 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0055 ppm | 0.0024 ppm | 0.0003 ppm | -0.0005 ppm | 0.0012 ppm | 0.0017 ppm |
| Concentration RSD | 128.5 % | 7.5 % | 32.8 % | 22.4 % | 41.8 % | 61.1 % | 25.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 99.4880 % | 101.8585 % | 93.1259 % | 97.2971 % | 102.1997 % | 100.2316 % |
| Concentration per Run 1 | -0.0008 ppm | 98.8945 % | 101.0822 % | 92.4011 % | 96.7329 % | 101.3573 % | 99.5374 % |
| Concentration per Run 2 | -0.0010 ppm | 97.9988 % | 102.4246 % | 93.4517 % | 95.6642 % | 103.1615 % | 100.9525 % |
| Concentration per Run 3 | -0.0012 ppm | 101.5707 % | 102.0688 % | 93.5251 % | 99.4944 % | 102.0803 % | 100.2051 % |
| Concentration RSD | 20.0 % | 1.9 % | 0.7 % | 0.7 % | 2.0 % | 0.9 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR 200 Fe pass
Analysis started at: 9/23/2024 10:37:53 AM
Rack 1
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0065 ppm | -0.0022 ppm | -0.0013 ppm | 0.0002 ppm | 0.0000 ppm | 0.0112 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0048 ppm | -0.0040 ppm | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0086 ppm | -0.0008 ppm | -0.0031 ppm | 0.0001 ppm | 0.0000 ppm | 0.0128 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0061 ppm | -0.0020 ppm | -0.0009 ppm | 0.0002 ppm | 0.0000 ppm | 0.0120 ppm |
| Concentration RSD | 104.8 % | 29.4 % | 70.7 % | 120.0 % | 65.7 % | 227.7 % | 18.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0015 ppm | -0.0002 ppm | 0.0005 ppm | 195.1279 ppm | -0.0345 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0017 ppm | -0.0004 ppm | 0.0003 ppm | 194.6464 ppm | -0.0489 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0018 ppm | -0.0002 ppm | 0.0009 ppm | 195.7580 ppm | -0.0393 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0011 ppm | -0.0001 ppm | 0.0004 ppm | 194.9791 ppm | -0.0152 ppm | -0.0020 ppm |
| Concentration RSD | 82.8 % | 22.1 % | 76.0 % | 53.1 % | 0.3 % | 50.4 % | 157.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0010 ppm | -0.0015 ppm | 0.0072 ppm | -0.0001 ppm | -0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0009 ppm | -0.0014 ppm | -0.0001 ppm | 0.0002 ppm | -0.0011 ppm | -0.0036 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0009 ppm | -0.0018 ppm | 0.0118 ppm | 0.0007 ppm | -0.0009 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0022 ppm | -0.0012 ppm | -0.0013 ppm | 0.0100 ppm | -0.0011 ppm | 0.0006 ppm | -0.0016 ppm |
| Concentration RSD | 816.4 % | 15.4 % | 17.5 % | 88.8 % | 1,297.2 % | 201.8 % | 9,776.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0052 ppm | 0.0008 ppm | 0.0003 ppm | -0.0001 ppm | -0.0002 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.0062 ppm | 0.0011 ppm | 0.0004 ppm | -0.0001 ppm | -0.0006 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0024 ppm | 0.0061 ppm | 0.0009 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0031 ppm | 0.0005 ppm | 0.0002 ppm | -0.0002 ppm | 0.0003 ppm | 0.0009 ppm |
| Concentration RSD | 382.3 % | 33.8 % | 41.8 % | 23.1 % | 126.3 % | 278.1 % | 12.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 98.8822 % | 102.6112 % | 98.6492 % | 96.7970 % | 102.2778 % | 101.3413 % |
| Concentration per Run 1 | -0.0005 ppm | 99.0381 % | 102.4125 % | 98.7369 % | 96.9128 % | 101.9551 % | 101.2032 % |
| Concentration per Run 2 | -0.0008 ppm | 98.9488 % | 102.3858 % | 98.3291 % | 96.7845 % | 102.1007 % | 101.3641 % |
| Concentration per Run 3 | -0.0005 ppm | 98.6598 % | 103.0354 % | 98.8817 % | 96.6938 % | 102.7775 % | 101.4565 % |
| Concentration RSD | 27.7 % | 0.2 % | 0.4 % | 0.3 % | 0.1 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR 1000 Ca pass _IEC +Se
Analysis started at: 9/23/2024 10:42:16 AM
Rack 1
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0157 ppm | 0.0039 ppm | 0.0033 ppm | 0.0010 ppm | 0.0000 ppm | 902.7429 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0159 ppm | 0.0029 ppm | 0.0046 ppm | 0.0010 ppm | 0.0000 ppm | 901.3034 ppm |
| Concentration per Run 2 | -0.0011 ppm | 0.0181 ppm | 0.0045 ppm | 0.0031 ppm | 0.0008 ppm | 0.0000 ppm | 904.6349 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0133 ppm | 0.0043 ppm | 0.0022 ppm | 0.0010 ppm | 0.0000 ppm | 902.2905 ppm |
| Concentration RSD | 51.4 % | 15.2 % | 22.4 % | 36.5 % | 10.6 % | 556.7 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0003 ppm | -0.0005 ppm | 0.0010 ppm | 0.0027 ppm | 0.0204 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | -0.0009 ppm | 0.0008 ppm | 0.0024 ppm | 0.0356 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0004 ppm | -0.0002 ppm | 0.0010 ppm | 0.0038 ppm | -0.0031 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | -0.0004 ppm | 0.0012 ppm | 0.0019 ppm | 0.0286 ppm | 0.0022 ppm |
| Concentration RSD | 28.5 % | 35.0 % | 66.3 % | 18.4 % | 37.1 % | 101.2 % | 379.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 0.0005 ppm | 0.0002 ppm | 0.0206 ppm | 0.0003 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0003 ppm | -0.0001 ppm | 0.0135 ppm | 0.0000 ppm | 0.0014 ppm | -0.0019 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.0004 ppm | 0.0006 ppm | 0.0210 ppm | 0.0014 ppm | 0.0002 ppm | -0.0019 ppm |
| Concentration per Run 3 | 0.0024 ppm | 0.0007 ppm | 0.0000 ppm | 0.0274 ppm | -0.0005 ppm | 0.0011 ppm | 0.0048 ppm |
| Concentration RSD | 41.1 % | 41.9 % | 211.1 % | 33.9 % | 351.3 % | 67.0 % | 1,161.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 0.0132 ppm | -0.0010 ppm | -0.0014 ppm | 0.0010 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0110 ppm | 0.0001 ppm | -0.0015 ppm | 0.0012 ppm | -0.0007 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0051 ppm | 0.0163 ppm | -0.0017 ppm | -0.0013 ppm | 0.0009 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0122 ppm | -0.0015 ppm | -0.0014 ppm | 0.0008 ppm | 0.0017 ppm | 0.0005 ppm |
| Concentration RSD | 77.2 % | 21.2 % | 99.5 % | 6.0 % | 20.1 % | 346.7 % | 18.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 91.2807 % | 101.5986 % | 84.8288 % | 89.3276 % | 102.3051 % | 93.3376 % |
| Concentration per Run 1 | 0.0020 ppm | 91.8184 % | 101.4897 % | 85.4345 % | 89.4633 % | 102.4732 % | 93.5324 % |
| Concentration per Run 2 | 0.0023 ppm | 90.9633 % | 101.3740 % | 84.7344 % | 89.1594 % | 101.9023 % | 93.7375 % |
| Concentration per Run 3 | 0.0023 ppm | 91.0605 % | 101.9322 % | 84.3175 % | 89.3603 % | 102.5398 % | 92.7427 % |
| Concentration RSD | 7.2 % | 0.5 % | 0.3 % | 0.7 % | 0.2 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: SIC Multi
Analysis started at: 9/23/2024 10:46:38 AM
Rack 0
Vial 7
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0402 ppm | -0.0027 ppm | 0.0093 ppm | 0.0003 ppm | 0.0003 ppm | 0.0326 ppm |
| Concentration per Run 1 | -0.0014 ppm | 0.0484 ppm | -0.0042 ppm | 0.0098 ppm | 0.0002 ppm | 0.0004 ppm | 0.0350 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0356 ppm | -0.0028 ppm | 0.0106 ppm | 0.0003 ppm | 0.0002 ppm | 0.0311 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0366 ppm | -0.0012 ppm | 0.0075 ppm | 0.0004 ppm | 0.0003 ppm | 0.0316 ppm |
| Recovery Percentage 1 | -9.399 % | 40.214 % | -54.747 % | 30.991 % | 2.659 % | 7.221 % | 32.562 % |
| Concentration RSD | 107.6 % | 17.6 % | 53.8 % | 16.9 % | 45.4 % | 21.5 % | 6.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0068 ppm | 20.1987 ppm | -0.0024 ppm | 0.0100 ppm | 0.0188 ppm | -0.0009 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0074 ppm | 20.2558 ppm | -0.0030 ppm | 0.0108 ppm | 0.0319 ppm | -0.0018 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0066 ppm | 20.2317 ppm | -0.0019 ppm | 0.0087 ppm | 0.0162 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0065 ppm | 20.1087 ppm | -0.0023 ppm | 0.0105 ppm | 0.0082 ppm | -0.0008 ppm |
| Recovery Percentage 1 | -8.255 % | -34.146 % | 201,987.432 % | -24.328 % | 20.009 % | 0.750 % | -17.198 % |
| Concentration RSD | 35.8 % | 7.0 % | 0.4 % | 23.0 % | 11.1 % | 64.3 % | 104.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 20.2284 [SIC 100] | -0.0017 ppm | 0.0122 ppm | 0.0007 ppm | -0.0011 ppm | -0.0185 ppm |
| Concentration per Run 1 | 0.0042 ppm | 20.2541 ppm | -0.0016 ppm | 0.0138 ppm | 0.0009 ppm | -0.0027 ppm | -0.0194 ppm |
| Concentration per Run 2 | 0.0046 ppm | 20.2170 ppm | -0.0012 ppm | 0.0167 ppm | 0.0008 ppm | -0.0004 ppm | -0.0210 ppm |
| Concentration per Run 3 | 0.0060 ppm | 20.2140 ppm | -0.0021 ppm | 0.0061 ppm | 0.0003 ppm | -0.0004 ppm | -0.0152 ppm |
| Recovery Percentage 1 | 4.976 % | 202,283.579 % | -3.300 % | 0.610 % | 2.666 % | -11.479 % | -37.022 % |
| Concentration RSD | 19.0 % | 0.1 % | 27.6 % | 45.2 % | 52.9 % | 116.6 % | 16.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 0.2884 ppm | 0.0062 ppm | 0.0001 ppm | 19.9569 ppm | 0.0090 ppm | 9.9621 ppm |
| Concentration per Run 1 | 0.0054 ppm | 0.2542 ppm | 0.0054 ppm | 0.0001 ppm | 19.9992 ppm | 0.0099 ppm | 9.9938 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.2896 ppm | 0.0062 ppm | 0.0002 ppm | 19.9462 ppm | 0.0073 ppm | 9.9529 ppm |
| Concentration per Run 3 | 0.0094 ppm | 0.3214 ppm | 0.0070 ppm | 0.0001 ppm | 19.9253 ppm | 0.0097 ppm | 9.9397 ppm |
| Recovery Percentage 1 | 51.581 % | 57.680 % | 12.366 % | 1.366 % | 199,569.110 % | 44.919 % | 99,621.096 % |
| Concentration RSD | 84.8 % | 11.7 % | 13.3 % | 72.9 % | 0.2 % | 15.9 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 100.5227 % | 104.7835 % | 115.4931 % | 98.3989 % | 104.5178 % | 103.6807 % |
| Concentration per Run 1 | -0.0025 ppm | 100.7239 % | 104.7432 % | 116.0245 % | 98.7909 % | 103.9447 % | 104.2092 % |
| Concentration per Run 2 | -0.0016 ppm | 99.8216 % | 104.5005 % | 114.7351 % | 97.8029 % | 104.8110 % | 102.9908 % |
| Concentration per Run 3 | -0.0018 ppm | 101.0224 % | 105.1069 % | 115.7197 % | 98.6030 % | 104.7977 % | 103.8420 % |
| Recovery Percentage 1 | -39.605 % | | | | | | |
| Concentration RSD | 21.3 % | 0.6 % | 0.3 % | 0.6 % | 0.5 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR Check
Analysis started at: 9/23/2024 10:50:34 AM
Rack 0
Vial 8
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0086 ppm | 22.1665 ppm | 23.6614 [SIC 20] | 18.5238 ppm | 4.7446 ppm | 0.0540 ppm |
| Concentration per Run 1 | 0.0023 ppm | 0.0117 ppm | 22.1844 ppm | 23.6494 ppm | 18.5797 ppm | 4.7508 ppm | 0.0548 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0126 ppm | 22.3437 ppm | 23.7110 ppm | 18.4680 ppm | 4.7397 ppm | 0.0572 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0016 ppm | 21.9715 ppm | 23.6238 ppm | 18.5237 ppm | 4.7433 ppm | 0.0500 ppm |
| Recovery Percentage 1 | | | 110.833 % | 118.307 % | 92.619 % | | |
| Concentration RSD | 16.3 % | 70.4 % | 0.8 % | 0.2 % | 0.3 % | 0.1 % | 6.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9216 ppm | 4.9024 ppm | -0.0001 ppm | 18.5309 ppm | 0.0066 ppm | 496.5841 ppm | 17.9462 ppm |
| Concentration per Run 1 | 4.9344 ppm | 4.9122 ppm | 0.0007 ppm | 18.5256 ppm | 0.0056 ppm | 496.3795 ppm | 17.9455 ppm |
| Concentration per Run 2 | 4.9441 ppm | 4.9023 ppm | -0.0006 ppm | 18.5186 ppm | 0.0048 ppm | 495.8549 ppm | 17.9505 ppm |
| Concentration per Run 3 | 4.8862 ppm | 4.8928 ppm | -0.0003 ppm | 18.5485 ppm | 0.0093 ppm | 497.5178 ppm | 17.9427 ppm |
| Recovery Percentage 1 | 98.432 % | 98.049 % | | 92.654 % | | 99.317 % | 89.731 % |
| Concentration RSD | 0.6 % | 0.2 % | 787.4 % | 0.1 % | 36.4 % | 0.2 % | 0.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0022 ppm | 0.0003 ppm | 5.0559 [SIC 20] | 455.5560 ppm | 9.5315 ppm | 49.7924 ppm | 4.8614 ppm |
| Concentration per Run 1 | -0.0022 ppm | 0.0005 ppm | 4.9910 ppm | 455.3668 ppm | 9.5350 ppm | 49.8427 ppm | 4.8246 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0002 ppm | 5.0773 ppm | 458.3062 ppm | 9.5538 ppm | 50.0772 ppm | 4.8883 ppm |
| Concentration per Run 3 | -0.0040 ppm | 0.0004 ppm | 5.0995 ppm | 452.9950 ppm | 9.5056 ppm | 49.4573 ppm | 4.8713 ppm |
| Recovery Percentage 1 | | 0.000 % | 101.118 % | 91.111 % | 95.315 % | 99.585 % | 97.228 % |
| Concentration RSD | 76.4 % | 50.9 % | 1.1 % | 0.6 % | 0.3 % | 0.6 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.0488 [SIC 20] | 20.5230 [SIC 50] | 9.6283 ppm | 4.6066 ppm | 0.0107 ppm | 4.6487 ppm | 0.0018 ppm |
| Concentration per Run 1 | 5.0531 ppm | 20.4449 ppm | 9.6003 ppm | 4.6067 ppm | 0.0123 ppm | 4.6537 ppm | 0.0014 ppm |
| Concentration per Run 2 | 5.0711 ppm | 20.6061 ppm | 9.6716 ppm | 4.6100 ppm | 0.0103 ppm | 4.6850 ppm | 0.0018 ppm |
| Concentration per Run 3 | 5.0221 ppm | 20.5180 ppm | 9.6129 ppm | 4.6030 ppm | 0.0095 ppm | 4.6075 ppm | 0.0022 ppm |
| Recovery Percentage 1 | 100.976 % | 102.615 % | 96.283 % | 92.131 % | 0.000 % | 92.975 % | 0.000 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.1 % | 13.8 % | 0.8 % | 21.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.6310 ppm | 90.5122 % | 101.3786 % | 86.3616 % | 87.8543 % | 100.9078 % | 90.0472 % |
| Concentration per Run 1 | 19.5901 ppm | 89.9085 % | 101.4385 % | 86.7125 % | 87.1525 % | 101.0959 % | 90.4271 % |
| Concentration per Run 2 | 19.7088 ppm | 90.7842 % | 101.0627 % | 86.3882 % | 88.1610 % | 101.0842 % | 90.6078 % |
| Concentration per Run 3 | 19.5941 ppm | 90.8439 % | 101.6346 % | 85.9841 % | 88.2493 % | 100.5433 % | 89.1067 % |
| Recovery Percentage 1 | 98.155 % | | | | | | |
| Concentration RSD | 0.3 % | 0.6 % | 0.3 % | 0.4 % | 0.7 % | 0.3 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: IEC 20 Cr +Se
Analysis started at: 9/23/2024 11:16:33 AM
Rack 1
Vial 4
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0010 ppm | 0.0012 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | -0.0026 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0061 ppm | 0.0006 ppm | 0.0025 ppm | 0.0001 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0011 ppm | 0.0043 ppm | 0.0023 ppm | 0.0002 ppm | -0.0001 ppm | -0.0021 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0044 ppm | -0.0013 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | -0.0076 ppm |
| Recovery Percentage 1 | -4.101 % | | 24.176 % | 5.887 % | 1.304 % | -0.594 % | |
| Concentration RSD | 46.9 % | 550.5 % | 237.9 % | 64.3 % | 70.6 % | 252.3 % | 177.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0008 ppm | **20.8483 ppm** | -0.0011 ppm | 0.0021 ppm | -0.0091 ppm | -0.0010 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0007 ppm | 20.8686 ppm | -0.0014 ppm | 0.0025 ppm | -0.0040 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0007 ppm | 20.8405 ppm | -0.0009 ppm | 0.0028 ppm | -0.0237 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0011 ppm | 20.8359 ppm | -0.0009 ppm | 0.0011 ppm | 0.0005 ppm | -0.0015 ppm |
| Recovery Percentage 1 | -7.000 % | -4.192 % | 208,483.383 % | -10.836 % | | -0.364 % | -19.391 % |
| Concentration RSD | 42.1 % | 31.4 % | **0.1 %** | 28.1 % | 42.1 % | 141.4 % | 46.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0046 ppm | 0.0002 ppm | 0.0013 ppm | 0.0054 ppm | 0.0006 ppm | -0.0009 ppm | -0.0096 ppm |
| Concentration per Run 1 | -0.0033 ppm | 0.0003 ppm | 0.0013 ppm | 0.0100 ppm | 0.0008 ppm | -0.0011 ppm | -0.0085 ppm |
| Concentration per Run 2 | -0.0039 ppm | 0.0003 ppm | 0.0015 ppm | 0.0054 ppm | 0.0002 ppm | -0.0015 ppm | -0.0142 ppm |
| Concentration per Run 3 | -0.0065 ppm | 0.0002 ppm | 0.0011 ppm | 0.0009 ppm | 0.0006 ppm | -0.0002 ppm | -0.0061 ppm |
| Recovery Percentage 1 | | 2.500 % | 2.581 % | 0.272 % | 2.254 % | -9.487 % | -19.172 % |
| Concentration RSD | 36.7 % | 25.3 % | 15.0 % | 83.2 % | 56.3 % | 72.7 % | 43.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.0111 ppm | 0.0001 ppm | 0.0002 ppm | -0.0016 ppm | 0.0011 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0099 ppm | -0.0005 ppm | 0.0002 ppm | -0.0013 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0103 ppm | 0.0001 ppm | 0.0003 ppm | -0.0018 ppm | 0.0013 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0130 ppm | 0.0008 ppm | 0.0000 ppm | -0.0017 ppm | 0.0023 ppm | -0.0013 ppm |
| Recovery Percentage 1 | 24.947 % | 2.212 % | 0.236 % | 1.608 % | -15.966 % | 5.729 % | -9.145 % |
| Concentration RSD | 95.0 % | 15.4 % | 588.0 % | 74.1 % | 17.4 % | 104.5 % | 79.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 99.1972 % | 102.2969 % | 103.0056 % | 97.5271 % | 101.9085 % | 102.3650 % |
| Concentration per Run 1 | -0.0011 ppm | 99.6578 % | 101.8410 % | 103.3270 % | 98.0420 % | 101.8876 % | 102.6400 % |
| Concentration per Run 2 | -0.0009 ppm | 98.9337 % | 102.7124 % | 102.0229 % | 97.3352 % | 101.6328 % | 101.7543 % |
| Concentration per Run 3 | -0.0008 ppm | 99.0000 % | 102.3372 % | 103.6669 % | 97.2040 % | 102.2051 % | 102.7008 % |
| Recovery Percentage 1 | -18.843 % | | | | | | |
| Concentration RSD | 12.6 % | 0.4 % | 0.4 % | 0.8 % | 0.5 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR 20 As pass
Analysis started at: 9/23/2024 11:20:32 AM
Rack 1
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0058 ppm | 19.7310 ppm | 0.0010 ppm | 0.0002 ppm | 0.0000 ppm | 0.0114 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0010 ppm | 19.6572 ppm | 0.0019 ppm | 0.0002 ppm | 0.0000 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0088 ppm | 19.7563 ppm | 0.0008 ppm | 0.0001 ppm | -0.0001 ppm | 0.0125 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0097 ppm | 19.7797 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0125 ppm |
| Concentration RSD | 97.8 % | 101.5 % | 0.3 % | 94.6 % | 29.6 % | 69.7 % | 16.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0002 ppm | 0.0003 ppm | 0.0003 ppm | 0.0032 ppm | 0.0078 ppm | -0.0016 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | 0.0006 ppm | 0.0004 ppm | 0.0038 ppm | -0.0096 ppm | -0.0012 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0007 ppm | 0.0004 ppm | 0.0006 ppm | 0.0032 ppm | 0.0307 ppm | -0.0025 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0026 ppm | 0.0024 ppm | -0.0012 ppm |
| Concentration RSD | 9.4 % | 213.6 % | 156.5 % | 83.5 % | 18.3 % | 264.1 % | 44.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 0.0001 ppm | 0.0004 ppm | 0.0052 ppm | 0.0008 ppm | -0.0003 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.0002 ppm | 0.0003 ppm | 0.0033 ppm | 0.0010 ppm | -0.0007 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0013 ppm | 0.0011 ppm | -0.0005 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0044 ppm | 0.0001 ppm | 0.0007 ppm | 0.0108 ppm | 0.0003 ppm | 0.0004 ppm | 0.0002 ppm |
| Concentration RSD | 140.5 % | 54.4 % | 74.3 % | 97.1 % | 56.5 % | 210.4 % | 71.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0073 ppm | -0.0002 ppm | 0.0002 ppm | -0.0003 ppm | -0.0007 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0128 ppm | -0.0018 ppm | 0.0003 ppm | -0.0004 ppm | -0.0016 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.0042 ppm | 0.0010 ppm | 0.0001 ppm | -0.0002 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0016 ppm | 0.0048 ppm | 0.0004 ppm | 0.0002 ppm | -0.0004 ppm | -0.0003 ppm | 0.0001 ppm |
| Concentration RSD | 244.4 % | 66.3 % | 977.2 % | 40.2 % | 28.7 % | 117.2 % | 1,540.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 100.4201 % | 102.9078 % | 103.8406 % | 98.9012 % | 103.0030 % | 102.7450 % |
| Concentration per Run 1 | 0.0006 ppm | 101.0693 % | 102.2788 % | 103.8938 % | 99.7303 % | 102.6740 % | 102.8175 % |
| Concentration per Run 2 | 0.0007 ppm | 101.0703 % | 103.9074 % | 103.4926 % | 99.0752 % | 103.6879 % | 102.3121 % |
| Concentration per Run 3 | 0.0005 ppm | 99.1208 % | 102.5370 % | 104.1353 % | 97.8980 % | 102.6471 % | 103.1055 % |
| Concentration RSD | 23.9 % | 1.1 % | 0.9 % | 0.3 % | 0.9 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: LDR 20 B pass
Analysis started at: 9/23/2024 11:24:25 AM
Rack 1
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0052 ppm | -0.0004 ppm | 21.0693 [SIC 20] | 0.0001 ppm | 0.0000 ppm | 0.0130 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0130 ppm | -0.0007 ppm | 21.1174 ppm | 0.0000 ppm | 0.0000 ppm | 0.0129 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0040 ppm | 0.0004 ppm | 21.1137 ppm | 0.0001 ppm | 0.0000 ppm | 0.0171 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0012 ppm | -0.0009 ppm | 20.9768 ppm | 0.0001 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration RSD | 19.7 % | 136.9 % | 183.1 % | 0.4 % | 123.2 % | 53.1 % | 31.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0003 ppm | -0.0004 ppm | 0.0004 ppm | -0.0017 ppm | 0.0077 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0006 ppm | -0.0001 ppm | 0.0003 ppm | -0.0010 ppm | -0.0052 ppm | -0.0011 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0005 ppm | -0.0008 ppm | 0.0003 ppm | -0.0024 ppm | 0.0000 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0007 ppm | -0.0016 ppm | 0.0284 ppm | -0.0011 ppm |
| Concentration RSD | 102.5 % | 156.4 % | 78.7 % | 57.6 % | 41.1 % | 234.7 % | 604.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.0000 ppm | 0.0001 ppm | 0.0048 ppm | 0.0001 ppm | 0.0003 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0010 ppm | -0.0002 ppm | -0.0003 ppm | 0.0031 ppm | 0.0003 ppm | 0.0004 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0016 ppm | 0.0001 ppm | 0.0004 ppm | 0.0036 ppm | -0.0004 ppm | 0.0000 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0001 ppm | 0.0002 ppm | 0.0077 ppm | 0.0005 ppm | 0.0005 ppm | 0.0020 ppm |
| Concentration RSD | 26.7 % | 2,360.5 % | 434.2 % | 52.7 % | 410.4 % | 86.7 % | 114.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0030 ppm | -0.0005 ppm | 0.0001 ppm | -0.0005 ppm | 0.0003 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0022 ppm | -0.0008 ppm | 0.0001 ppm | -0.0006 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0006 ppm | 0.0007 ppm | 0.0003 ppm | -0.0004 ppm | 0.0008 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0039 ppm | 0.0062 ppm | -0.0013 ppm | 0.0000 ppm | -0.0004 ppm | 0.0000 ppm | -0.0003 ppm |
| Concentration RSD | 398.9 % | 96.9 % | 230.1 % | 129.2 % | 26.5 % | 144.8 % | 60.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 98.9472 % | 101.5346 % | 103.5983 % | 98.7114 % | 102.0871 % | 103.7875 % |
| Concentration per Run 1 | -0.0001 ppm | 98.8753 % | 101.1528 % | 104.2880 % | 99.0871 % | 101.7764 % | 104.3608 % |
| Concentration per Run 2 | -0.0001 ppm | 99.1957 % | 101.2094 % | 103.6134 % | 98.8019 % | 101.8653 % | 103.7640 % |
| Concentration per Run 3 | -0.0005 ppm | 98.7705 % | 102.2417 % | 102.8936 % | 98.2452 % | 102.6195 % | 103.2376 % |
| Concentration RSD | 115.5 % | 0.2 % | 0.6 % | 0.7 % | 0.4 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCV
Analysis started at: 9/23/2024 11:46:45 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5294 ppm | 0.5141 ppm | 0.5079 ppm | 0.5237 ppm | 0.5139 ppm | 0.5326 ppm | 0.5259 ppm |
| Concentration per Run 1 | 0.5313 ppm | 0.5145 ppm | 0.5021 ppm | 0.5219 ppm | 0.5148 ppm | 0.5334 ppm | 0.5275 ppm |
| Concentration per Run 2 | 0.5262 ppm | 0.5132 ppm | 0.4748 ppm | 0.5209 ppm | 0.5139 ppm | 0.5328 ppm | 0.5247 ppm |
| Concentration per Run 3 | 0.5308 ppm | 0.5145 ppm | 0.5467 ppm | 0.5283 ppm | 0.5130 ppm | 0.5316 ppm | 0.5256 ppm |
| Recovery Percentage 1 | 105.889 % | 102.811 % | 101.571 % | 104.741 % | 102.784 % | 106.518 % | 105.184 % |
| Concentration RSD | 0.5 % | 0.1 % | 7.1 % | 0.8 % | 0.2 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5430 ppm | 0.5338 ppm | 0.5068 ppm | 0.5112 ppm | 0.5209 ppm | 5.3733 ppm | 0.5056 ppm |
| Concentration per Run 1 | 0.5403 ppm | 0.5321 ppm | 0.5089 ppm | 0.5111 ppm | 0.5255 ppm | 5.3907 ppm | 0.5062 ppm |
| Concentration per Run 2 | 0.5460 ppm | 0.5362 ppm | 0.5031 ppm | 0.5106 ppm | 0.5198 ppm | 5.3775 ppm | 0.5070 ppm |
| Concentration per Run 3 | 0.5427 ppm | 0.5332 ppm | 0.5085 ppm | 0.5119 ppm | 0.5174 ppm | 5.3518 ppm | 0.5034 ppm |
| Recovery Percentage 1 | 108.605 % | 106.767 % | 101.365 % | 102.242 % | 104.174 % | 107.467 % | 101.113 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.6 % | 0.1 % | 0.8 % | 0.4 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5092 ppm | 0.5096 ppm | 0.5167 ppm | 10.3930 ppm | 0.5250 ppm | 0.5179 ppm | 0.5287 ppm |
| Concentration per Run 1 | 0.5123 ppm | 0.5099 ppm | 0.5122 ppm | 10.3847 ppm | 0.5243 ppm | 0.5170 ppm | 0.5236 ppm |
| Concentration per Run 2 | 0.5037 ppm | 0.5090 ppm | 0.5166 ppm | 10.3869 ppm | 0.5236 ppm | 0.4839 ppm | 0.5279 ppm |
| Concentration per Run 3 | 0.5116 ppm | 0.5098 ppm | 0.5213 ppm | 10.4074 ppm | 0.5270 ppm | 0.5526 ppm | 0.5346 ppm |
| Recovery Percentage 1 | 101.843 % | 101.912 % | 103.339 % | 103.930 % | 104.992 % | 103.574 % | 105.742 % |
| Concentration RSD | 0.9 % | 0.1 % | 0.9 % | 0.1 % | 0.3 % | 6.6 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5217 ppm | 5.6679 ppm | 0.5037 ppm | 0.4941 ppm | 0.5131 ppm | 0.5179 ppm | 0.5043 ppm |
| Concentration per Run 1 | 0.5181 ppm | 5.6406 ppm | 0.5029 ppm | 0.4950 ppm | 0.5148 ppm | 0.5180 ppm | 0.5044 ppm |
| Concentration per Run 2 | 0.4886 ppm | 5.6797 ppm | 0.5026 ppm | 0.4947 ppm | 0.5092 ppm | 0.4838 ppm | 0.5045 ppm |
| Concentration per Run 3 | 0.5584 ppm | 5.6835 ppm | 0.5058 ppm | 0.4926 ppm | 0.5154 ppm | 0.5519 ppm | 0.5041 ppm |
| Recovery Percentage 1 | 104.342 % | 107.961 % | 100.750 % | 98.817 % | 102.620 % | 103.581 % | 100.861 % |
| Concentration RSD | 6.7 % | 0.4 % | 0.4 % | 0.3 % | 0.7 % | 6.6 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5302 ppm | 96.0112 % | 100.9458 % | 100.0980 % | 94.1051 % | 101.4124 % | 98.1012 % |
| Concentration per Run 1 | 0.5320 ppm | 95.8509 % | 100.4558 % | 99.9880 % | 94.0395 % | 100.6880 % | 98.3133 % |
| Concentration per Run 2 | 0.5269 ppm | 96.7222 % | 101.4787 % | 106.7613 % | 94.8180 % | 101.8315 % | 105.1094 % |
| Concentration per Run 3 | 0.5317 ppm | 95.4604 % | 100.9028 % | 93.5446 % | 93.4579 % | 101.7176 % | 90.8809 % |
| Recovery Percentage 1 | 106.040 % | | | | | | |
| Concentration RSD | 0.5 % | 0.7 % | 0.5 % | 6.6 % | 0.7 % | 0.6 % | 7.3 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCB
Analysis started at: 9/23/2024 11:50:54 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0043 ppm | 0.0000 ppm | 0.0021 ppm | 0.0002 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0023 ppm | -0.0013 ppm | 0.0035 ppm | 0.0001 ppm | 0.0000 ppm | 0.0018 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0212 ppm | -0.0002 ppm | 0.0014 ppm | 0.0001 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0060 ppm | 0.0016 ppm | 0.0013 ppm | 0.0003 ppm | -0.0001 ppm | 0.0046 ppm |
| Recovery Percentage 1 | 0.384 % | 4.280 % | 0.669 % | 6.990 % | 1.865 % | -0.613 % | 3.135 % |
| Concentration RSD | 1,761.4 % | 344.3 % | 4,306.2 % | 59.8 % | 73.6 % | 172.9 % | 44.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0006 ppm | -0.0001 ppm | -0.0209 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0008 ppm | 0.0002 ppm | 0.0006 ppm | 0.0000 ppm | -0.0321 ppm | -0.0014 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 0.0005 ppm | -0.0013 ppm | -0.0273 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0012 ppm | 0.0001 ppm | 0.0007 ppm | 0.0010 ppm | -0.0032 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 2.129 % | -1.065 % | 0.600 % | 5.805 % | -0.184 % | -0.835 % | -21.395 % |
| Concentration RSD | 138.1 % | 468.6 % | 289.9 % | 11.3 % | 1,220.7 % | 74.1 % | 24.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0030 ppm | 0.0000 ppm | 0.0011 ppm | -0.0013 ppm | 0.0005 ppm | -0.0002 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0025 ppm | 0.0000 ppm | 0.0016 ppm | -0.0044 ppm | 0.0006 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0024 ppm | 0.0001 ppm | 0.0011 ppm | -0.0017 ppm | 0.0011 ppm | 0.0006 ppm | 0.0073 ppm |
| Concentration per Run 3 | -0.0041 ppm | -0.0002 ppm | 0.0006 ppm | 0.0021 ppm | -0.0002 ppm | -0.0008 ppm | -0.0011 ppm |
| Recovery Percentage 1 | -2.997 % | -0.017 % | 2.244 % | -0.067 % | 2.054 % | -2.361 % | 3.878 % |
| Concentration RSD | 31.1 % | 8,374.9 % | 43.2 % | 243.4 % | 126.9 % | 328.4 % | 239.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0021 ppm | -0.0002 ppm | 0.0001 ppm | -0.0007 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0012 ppm | -0.0009 ppm | 0.0002 ppm | -0.0008 ppm | -0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0042 ppm | 0.0003 ppm | 0.0001 ppm | -0.0007 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0009 ppm | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm | -0.0003 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 1.558 % | 0.424 % | -0.418 % | 1.391 % | -6.874 % | 0.691 % | 0.479 % |
| Concentration RSD | 1,160.3 % | 86.3 % | 289.4 % | 15.7 % | 23.7 % | 396.0 % | 112.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 97.4313 % | 99.9770 % | 101.2459 % | 97.1798 % | 100.8795 % | 101.1267 % |
| Concentration per Run 1 | -0.0005 ppm | 96.7968 % | 100.7004 % | 102.1051 % | 96.5384 % | 101.9451 % | 102.1474 % |
| Concentration per Run 2 | -0.0005 ppm | 97.7972 % | 100.3217 % | 100.4082 % | 97.4248 % | 101.1351 % | 100.1049 % |
| Concentration per Run 3 | -0.0002 ppm | 97.7000 % | 98.9089 % | 101.2245 % | 97.5761 % | 99.5584 % | 101.1279 % |
| Recovery Percentage 1 | -7.811 % | | | | | | |
| Concentration RSD | 34.0 % | 0.6 % | 0.9 % | 0.8 % | 0.6 % | 1.2 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-1 WG1974555
Analysis started at: 9/23/2024 12:09:33 PM
Rack 1
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0154 ppm | 0.0010 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0212 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0229 ppm | -0.0008 ppm | 0.0022 ppm | 0.0000 ppm | 0.0000 ppm | 0.0225 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0059 ppm | 0.0037 ppm | 0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0198 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0175 ppm | 0.0001 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | 0.0213 ppm |
| Recovery Percentage 1 | -0.320 % | 15.434 % | 19.958 % | 5.544 % | -0.115 % | 0.021 % | 21.201 % |
| Concentration RSD | 1,301.8 % | 56.2 % | 239.6 % | 38.9 % | 717.9 % | 2,566.1 % | 6.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | -0.0006 ppm | 0.0008 ppm | **0.0286 ppm** | -0.0034 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | -0.0006 ppm | 0.0010 ppm | 0.0274 ppm | -0.0047 ppm | -0.0009 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0008 ppm | -0.0004 ppm | 0.0006 ppm | 0.0293 ppm | 0.0019 ppm | -0.0016 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | -0.0006 ppm | 0.0008 ppm | 0.0291 ppm | -0.0074 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -1.240 % | -0.808 % | -5.519 % | 7.882 % | 57.161 % | -0.135 % | -25.149 % |
| Concentration RSD | 258.0 % | 341.1 % | 18.7 % | 21.4 % | **3.6 %** | 141.7 % | 26.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.0005 ppm | 0.0002 ppm | 0.0057 ppm | 0.0028 ppm | -0.0006 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0006 ppm | 0.0002 ppm | 0.0033 ppm | 0.0029 ppm | -0.0004 ppm | -0.0041 ppm |
| Concentration per Run 2 | 0.0019 ppm | 0.0005 ppm | 0.0001 ppm | 0.0063 ppm | 0.0029 ppm | -0.0008 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.0005 ppm | 0.0004 ppm | 0.0075 ppm | 0.0026 ppm | -0.0005 ppm | 0.0015 ppm |
| Recovery Percentage 1 | 3.082 % | 4.981 % | 0.494 % | 0.284 % | 11.344 % | -5.854 % | -2.642 % |
| Concentration RSD | 49.3 % | 10.7 % | 71.0 % | 37.8 % | 5.8 % | 36.0 % | 210.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0096 ppm | -0.0006 ppm | 0.0001 ppm | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0100 ppm | -0.0007 ppm | 0.0002 ppm | -0.0004 ppm | -0.0011 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0104 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0015 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0083 ppm | -0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -3.508 % | 1.915 % | -1.161 % | 1.093 % | -1.252 % | -3.925 % | 0.695 % |
| Concentration RSD | 203.4 % | 11.9 % | 127.2 % | 93.8 % | 218.2 % | 113.7 % | 351.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 101.0811 % | 104.2493 % | 104.1385 % | 99.8113 % | 104.7666 % | 103.6948 % |
| Concentration per Run 1 | 0.0004 ppm | 101.0739 % | 104.3573 % | 104.8237 % | 99.7301 % | 105.0527 % | 104.0264 % |
| Concentration per Run 2 | 0.0008 ppm | 101.7886 % | 103.7664 % | 103.0084 % | 100.6419 % | 104.3254 % | 102.8299 % |
| Concentration per Run 3 | 0.0007 ppm | 100.3808 % | 104.6241 % | 104.5834 % | 99.0621 % | 104.9217 % | 104.2282 % |
| Recovery Percentage 1 | 12.692 % | | | | | | |
| Concentration RSD | 26.8 % | 0.7 % | 0.4 % | 0.9 % | 0.8 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-1 WG1974337
Analysis started at: 9/23/2024 12:13:33 PM
Rack 1
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0071 ppm | -0.0002 ppm | 0.0010 ppm | 0.0015 ppm | 0.0000 ppm | 0.0380 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.0015 ppm | 0.0011 ppm | 0.0010 ppm | 0.0013 ppm | -0.0001 ppm | 0.0413 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0130 ppm | -0.0010 ppm | 0.0001 ppm | 0.0016 ppm | 0.0001 ppm | 0.0397 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0068 ppm | -0.0006 ppm | 0.0018 ppm | 0.0015 ppm | 0.0000 ppm | 0.0330 ppm |
| Recovery Percentage 1 | -5.450 % | 7.094 % | -3.700 % | 3.248 % | 14.746 % | -0.043 % | 38.019 % |
| Concentration RSD | 102.2 % | 80.8 % | 618.0 % | 86.8 % | 8.9 % | 3,336.0 % | 11.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | -0.0009 ppm | 0.0003 ppm | 0.0261 ppm | 0.0102 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | -0.0010 ppm | 0.0006 ppm | 0.0264 ppm | 0.0166 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0008 ppm | -0.0006 ppm | 0.0002 ppm | 0.0257 ppm | 0.0082 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | -0.0010 ppm | 0.0000 ppm | 0.0262 ppm | 0.0058 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 0.137 % | 2.059 % | -8.898 % | 2.741 % | 52.232 % | 0.407 % | -0.703 % |
| Concentration RSD | 2,665.1 % | 92.1 % | 26.1 % | 99.9 % | 1.5 % | 55.3 % | 346.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0075 ppm | 0.0015 ppm | -0.0003 ppm | 0.0120 ppm | 0.0060 ppm | -0.0003 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.0084 ppm | 0.0014 ppm | -0.0005 ppm | 0.0127 ppm | 0.0061 ppm | 0.0002 ppm | 0.0073 ppm |
| Concentration per Run 2 | 0.0093 ppm | 0.0014 ppm | -0.0007 ppm | 0.0148 ppm | 0.0057 ppm | -0.0008 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0047 ppm | 0.0017 ppm | 0.0004 ppm | 0.0085 ppm | 0.0062 ppm | -0.0002 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 7.475 % | 14.865 % | -0.517 % | 0.601 % | 24.027 % | -2.925 % | 6.931 % |
| Concentration RSD | 32.5 % | 13.0 % | 236.0 % | 26.9 % | 3.9 % | 169.3 % | 97.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.0096 ppm | -0.0002 ppm | 0.0002 ppm | -0.0002 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0076 ppm | 0.0001 ppm | 0.0003 ppm | -0.0001 ppm | 0.0013 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0097 ppm | -0.0009 ppm | 0.0001 ppm | 0.0002 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0114 ppm | 0.0000 ppm | 0.0002 ppm | -0.0007 ppm | -0.0018 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 22.494 % | 1.914 % | -0.483 % | 1.878 % | -2.113 % | 0.877 % | -0.917 % |
| Concentration RSD | 86.8 % | 20.1 % | 226.6 % | 38.2 % | 212.0 % | 979.9 % | 138.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 100.2487 % | 103.0483 % | 106.9522 % | 99.1577 % | 103.3257 % | 106.0222 % |
| Concentration per Run 1 | 0.0040 ppm | 100.2561 % | 102.3051 % | 104.2699 % | 99.2328 % | 102.8559 % | 103.5116 % |
| Concentration per Run 2 | 0.0038 ppm | 100.6569 % | 103.2706 % | 103.7958 % | 99.1679 % | 103.3175 % | 103.2594 % |
| Concentration per Run 3 | 0.0037 ppm | 99.8330 % | 103.5693 % | 112.7910 % | 99.0723 % | 103.8038 % | 111.2955 % |
| Recovery Percentage 1 | 76.885 % | | | | | | |
| Concentration RSD | 4.1 % | 0.4 % | 0.6 % | 4.7 % | 0.1 % | 0.5 % | 4.3 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-2D2 WG1974555
Analysis started at: 9/23/2024 12:17:25 PM
Rack 1
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0532 ppm | 2.0225 ppm | 0.1245 ppm | 1.0029 ppm | 2.0363 ppm | 0.0525 ppm | 10.1875 ppm |
| Concentration per Run 1 | 0.0526 ppm | 2.0306 ppm | 0.1260 ppm | 1.0064 ppm | 2.0453 ppm | 0.0526 ppm | 10.1927 ppm |
| Concentration per Run 2 | 0.0535 ppm | 2.0196 ppm | 0.1252 ppm | 1.0114 ppm | 2.0299 ppm | 0.0525 ppm | 10.1614 ppm |
| Concentration per Run 3 | 0.0534 ppm | 2.0173 ppm | 0.1223 ppm | 0.9907 ppm | 2.0338 ppm | 0.0524 ppm | 10.2083 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 1.6 % | 1.1 % | 0.4 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0547 ppm | 0.5229 ppm | 0.2058 ppm | 0.2609 ppm | 1.0516 ppm | 10.2984 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0552 ppm | 0.5268 ppm | 0.2063 ppm | 0.2609 ppm | 1.0561 ppm | 10.3090 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0555 ppm | 0.5264 ppm | 0.2073 ppm | 0.2622 ppm | 1.0469 ppm | 10.2873 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0535 ppm | 0.5154 ppm | 0.2039 ppm | 0.2596 ppm | 1.0519 ppm | 10.2988 ppm | 0.0006 ppm |
| Concentration RSD | 1.9 % | 1.2 % | 0.9 % | 0.5 % | 0.4 % | 0.1 % | 385.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2704 ppm | 0.5202 ppm | 1.0358 ppm | 10.2055 ppm | 0.5250 ppm | 0.5452 ppm | 0.5229 ppm |
| Concentration per Run 1 | 10.3141 ppm | 0.5228 ppm | 1.0274 ppm | 10.2375 ppm | 0.5239 ppm | 0.5460 ppm | 0.5237 ppm |
| Concentration per Run 2 | 10.2675 ppm | 0.5183 ppm | 1.0533 ppm | 10.1795 ppm | 0.5306 ppm | 0.5451 ppm | 0.5230 ppm |
| Concentration per Run 3 | 10.2296 ppm | 0.5195 ppm | 1.0269 ppm | 10.1995 ppm | 0.5206 ppm | 0.5447 ppm | 0.5220 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 1.5 % | 0.3 % | 1.0 % | 0.1 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1194 ppm | 0.6043 ppm | 1.0017 ppm | 0.9753 ppm | 1.0371 ppm | 0.1237 ppm | 0.5198 ppm |
| Concentration per Run 1 | 0.1224 ppm | 0.6042 ppm | 1.0033 ppm | 0.9767 ppm | 1.0404 ppm | 0.1237 ppm | 0.5217 ppm |
| Concentration per Run 2 | 0.1171 ppm | 0.6111 ppm | 1.0142 ppm | 0.9759 ppm | 1.0364 ppm | 0.1240 ppm | 0.5211 ppm |
| Concentration per Run 3 | 0.1188 ppm | 0.5977 ppm | 0.9878 ppm | 0.9734 ppm | 1.0345 ppm | 0.1235 ppm | 0.5167 ppm |
| Concentration RSD | 2.3 % | 1.1 % | 1.3 % | 0.2 % | 0.3 % | 0.2 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5243 ppm | 100.1427 % | 105.5551 % | 102.1471 % | 97.9378 % | 105.5719 % | 102.0132 % |
| Concentration per Run 1 | 0.5241 ppm | 100.0970 % | 105.4563 % | 102.7723 % | 98.1458 % | 104.9929 % | 102.7192 % |
| Concentration per Run 2 | 0.5294 ppm | 99.0835 % | 106.3589 % | 102.5570 % | 96.8473 % | 106.2766 % | 102.4238 % |
| Concentration per Run 3 | 0.5193 ppm | 101.2475 % | 104.8501 % | 101.1120 % | 98.8203 % | 105.4462 % | 100.8965 % |
| Concentration RSD | 1.0 % | 1.1 % | 0.7 % | 0.9 % | 1.0 % | 0.6 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-2D2 WG1974337
Analysis started at: 9/23/2024 12:21:19 PM
Rack 1
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 2.0163 ppm | 0.1214 ppm | 0.9862 ppm | 2.0228 ppm | 0.0523 ppm | 10.0594 ppm |
| Concentration per Run 1 | 0.0525 ppm | 2.0084 ppm | 0.1219 ppm | 0.9809 ppm | 2.0206 ppm | 0.0524 ppm | 10.0674 ppm |
| Concentration per Run 2 | 0.0531 ppm | 2.0141 ppm | 0.1194 ppm | 0.9901 ppm | 2.0302 ppm | 0.0523 ppm | 10.0551 ppm |
| Concentration per Run 3 | 0.0529 ppm | 2.0264 ppm | 0.1230 ppm | 0.9876 ppm | 2.0177 ppm | 0.0522 ppm | 10.0559 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 1.5 % | 0.5 % | 0.3 % | 0.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0539 ppm | 0.5169 ppm | 0.2026 ppm | 0.2571 ppm | 1.0448 ppm | 10.2260 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0546 ppm | 0.5190 ppm | 0.2016 ppm | 0.2562 ppm | 1.0432 ppm | 10.2143 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0534 ppm | 0.5154 ppm | 0.2040 ppm | 0.2573 ppm | 1.0444 ppm | 10.2337 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0536 ppm | 0.5164 ppm | 0.2021 ppm | 0.2579 ppm | 1.0468 ppm | 10.2300 ppm | -0.0008 ppm |
| Concentration RSD | 1.2 % | 0.4 % | 0.6 % | 0.3 % | 0.2 % | 0.1 % | 63.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0367 ppm | 0.5168 ppm | 1.0090 ppm | 10.1204 ppm | 0.5198 ppm | 0.5384 ppm | 0.5197 ppm |
| Concentration per Run 1 | 9.9617 ppm | 0.5157 ppm | 1.0042 ppm | 10.1284 ppm | 0.5165 ppm | 0.5371 ppm | 0.5203 ppm |
| Concentration per Run 2 | 10.0630 ppm | 0.5175 ppm | 1.0104 ppm | 10.1321 ppm | 0.5204 ppm | 0.5359 ppm | 0.5213 ppm |
| Concentration per Run 3 | 10.0856 ppm | 0.5172 ppm | 1.0124 ppm | 10.1007 ppm | 0.5224 ppm | 0.5422 ppm | 0.5176 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.4 % | 0.2 % | 0.6 % | 0.6 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1203 ppm | 0.6815 ppm | 0.9797 ppm | 0.9621 ppm | 1.0102 ppm | 0.1222 ppm | 0.5128 ppm |
| Concentration per Run 1 | 0.1231 ppm | 0.6763 ppm | 0.9786 ppm | 0.9558 ppm | 1.0030 ppm | 0.1226 ppm | 0.5115 ppm |
| Concentration per Run 2 | 0.1218 ppm | 0.6828 ppm | 0.9822 ppm | 0.9687 ppm | 1.0161 ppm | 0.1203 ppm | 0.5140 ppm |
| Concentration per Run 3 | 0.1162 ppm | 0.6855 ppm | 0.9784 ppm | 0.9617 ppm | 1.0115 ppm | 0.1237 ppm | 0.5129 ppm |
| Concentration RSD | 3.0 % | 0.7 % | 0.2 % | 0.7 % | 0.7 % | 1.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5214 ppm | 99.3360 % | 104.0671 % | 101.2884 % | 97.1213 % | 103.8440 % | 100.9524 % |
| Concentration per Run 1 | 0.5203 ppm | 99.6047 % | 103.9546 % | 101.6289 % | 97.2721 % | 103.8073 % | 101.4339 % |
| Concentration per Run 2 | 0.5232 ppm | 99.1404 % | 103.5904 % | 101.2203 % | 96.9296 % | 102.9548 % | 100.5110 % |
| Concentration per Run 3 | 0.5208 ppm | 99.2629 % | 104.6562 % | 101.0162 % | 97.1622 % | 104.7700 % | 100.9122 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.5 % | 0.3 % | 0.2 % | 0.9 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: Test FM 0640 ADG
Analysis started at: 9/23/2024 12:25:11 PM
Rack 1
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0185 ppm | 0.1167 ppm | 0.9893 ppm | 0.0130 ppm | 0.0000 ppm | 10.2006 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0135 ppm | 0.1178 ppm | 0.9889 ppm | 0.0131 ppm | 0.0000 ppm | 10.1674 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0194 ppm | 0.1180 ppm | 0.9962 ppm | 0.0128 ppm | 0.0000 ppm | 10.2192 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0227 ppm | 0.1143 ppm | 0.9829 ppm | 0.0132 ppm | 0.0000 ppm | 10.2152 ppm |
| Concentration RSD | 80.1 % | 25.1 % | 1.8 % | 0.7 % | 1.6 % | 137.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | -0.0004 ppm | -0.0010 ppm | 0.0002 ppm | 0.0062 ppm | 10.3985 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0029 ppm | -0.0007 ppm | -0.0004 ppm | 0.0002 ppm | 0.0061 ppm | 10.3831 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0029 ppm | -0.0003 ppm | -0.0013 ppm | -0.0004 ppm | 0.0071 ppm | 10.3548 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0028 ppm | -0.0002 ppm | -0.0012 ppm | 0.0008 ppm | 0.0053 ppm | 10.4576 ppm | -0.0011 ppm |
| Concentration RSD | 3.2 % | 71.2 % | 50.8 % | 337.4 % | 14.7 % | 0.5 % | 91.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1582 ppm | 0.0003 ppm | 0.9689 ppm | 10.2436 ppm | -0.0006 ppm | 0.5336 ppm | 0.0058 ppm |
| Concentration per Run 1 | 10.2320 ppm | 0.0002 ppm | 0.9629 ppm | 10.2517 ppm | -0.0007 ppm | 0.5318 ppm | 0.0032 ppm |
| Concentration per Run 2 | 10.1584 ppm | 0.0002 ppm | 0.9705 ppm | 10.2092 ppm | -0.0001 ppm | 0.5370 ppm | 0.0053 ppm |
| Concentration per Run 3 | 10.0841 ppm | 0.0006 ppm | 0.9734 ppm | 10.2698 ppm | -0.0010 ppm | 0.5322 ppm | 0.0089 ppm |
| Concentration RSD | 0.7 % | 67.3 % | 0.6 % | 0.3 % | 75.9 % | 0.5 % | 49.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1240 ppm | 0.5231 ppm | 0.9595 ppm | 0.9778 ppm | 1.0211 ppm | 0.1209 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.1246 ppm | 0.5284 ppm | 0.9580 ppm | 0.9775 ppm | 1.0294 ppm | 0.1214 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.1225 ppm | 0.5194 ppm | 0.9677 ppm | 0.9755 ppm | 1.0189 ppm | 0.1202 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.1250 ppm | 0.5215 ppm | 0.9530 ppm | 0.9804 ppm | 1.0151 ppm | 0.1209 ppm | 0.0001 ppm |
| Concentration RSD | 1.1 % | 0.9 % | 0.8 % | 0.3 % | 0.7 % | 0.5 % | 892.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 99.6683 % | 103.2775 % | 103.0936 % | 97.6792 % | 103.1730 % | 102.0403 % |
| Concentration per Run 1 | 0.0002 ppm | 99.6024 % | 102.9802 % | 102.9066 % | 97.8025 % | 102.9635 % | 101.7867 % |
| Concentration per Run 2 | -0.0008 ppm | 99.1468 % | 103.5718 % | 102.2223 % | 97.1693 % | 103.3888 % | 101.2734 % |
| Concentration per Run 3 | -0.0002 ppm | 100.2558 % | 103.2806 % | 104.1520 % | 98.0657 % | 103.1665 % | 103.0609 % |
| Concentration RSD | 187.4 % | 0.6 % | 0.3 % | 0.9 % | 0.5 % | 0.2 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2454335-01D2 WG1974555
Analysis started at: 9/23/2024 12:29:05 PM
Rack 1
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 71.9242 ppm | 0.0197 ppm | 0.0281 ppm | 0.0612 ppm | 0.0035 ppm | 3.3073 ppm |
| Concentration per Run 1 | 0.0002 ppm | 71.9642 ppm | 0.0210 ppm | 0.0294 ppm | 0.0613 ppm | 0.0036 ppm | 3.3160 ppm |
| Concentration per Run 2 | 0.0003 ppm | 72.1306 ppm | 0.0182 ppm | 0.0274 ppm | 0.0613 ppm | 0.0035 ppm | 3.3064 ppm |
| Concentration per Run 3 | 0.0002 ppm | 71.6777 ppm | 0.0199 ppm | 0.0274 ppm | 0.0609 ppm | 0.0035 ppm | 3.2995 ppm |
| Concentration RSD | 14.6 % | 0.3 % | 7.1 % | 4.2 % | 0.4 % | 1.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0322 ppm | 0.1236 ppm | 0.0710 ppm | 98.9167 ppm | 5.8595 ppm | 0.2813 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0330 ppm | 0.1231 ppm | 0.0708 ppm | 99.1845 ppm | 5.8752 ppm | 0.2840 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0323 ppm | 0.1245 ppm | 0.0711 ppm | 99.0796 ppm | 5.8351 ppm | 0.2798 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0313 ppm | 0.1232 ppm | 0.0712 ppm | 98.4861 ppm | 5.8683 ppm | 0.2799 ppm |
| Concentration RSD | 313.4 % | 2.7 % | 0.6 % | 0.3 % | 0.4 % | 0.4 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.2845 ppm | 0.6915 ppm | 0.0116 ppm | 1.8023 ppm | 0.1473 ppm | 0.0496 ppm | 0.0001 ppm |
| Concentration per Run 1 | 22.3444 ppm | 0.6923 ppm | 0.0116 ppm | 1.8059 ppm | 0.1491 ppm | 0.0490 ppm | 0.0009 ppm |
| Concentration per Run 2 | 22.3296 ppm | 0.6935 ppm | 0.0116 ppm | 1.7955 ppm | 0.1473 ppm | 0.0504 ppm | -0.0008 ppm |
| Concentration per Run 3 | 22.1794 ppm | 0.6886 ppm | 0.0117 ppm | 1.8055 ppm | 0.1456 ppm | 0.0493 ppm | 0.0003 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 1.0 % | 0.3 % | 1.2 % | 1.5 % | 691.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 1.8744 ppm | 0.0125 ppm | 0.0909 ppm | 1.5724 ppm | 0.0016 ppm | 0.1413 ppm |
| Concentration per Run 1 | 0.0026 ppm | 1.8801 ppm | 0.0129 ppm | 0.0911 ppm | 1.5751 ppm | 0.0007 ppm | 0.1417 ppm |
| Concentration per Run 2 | 0.0010 ppm | 1.8794 ppm | 0.0129 ppm | 0.0909 ppm | 1.5751 ppm | 0.0028 ppm | 0.1415 ppm |
| Concentration per Run 3 | -0.0010 ppm | 1.8635 ppm | 0.0118 ppm | 0.0907 ppm | 1.5669 ppm | 0.0013 ppm | 0.1407 ppm |
| Concentration RSD | 210.3 % | 0.5 % | 5.3 % | 0.2 % | 0.3 % | 68.0 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2084 ppm | 102.7787 % | 108.4830 % | 102.7459 % | 106.5319 % | 114.8439 % | 111.8621 % |
| Concentration per Run 1 | 0.2091 ppm | 102.3787 % | 108.9149 % | 102.3638 % | 105.9773 % | 115.1885 % | 111.9057 % |
| Concentration per Run 2 | 0.2087 ppm | 103.1467 % | 108.1797 % | 103.1856 % | 106.9994 % | 114.5993 % | 112.0178 % |
| Concentration per Run 3 | 0.2074 ppm | 102.8106 % | 108.3544 % | 102.6881 % | 106.6191 % | 114.7438 % | 111.6627 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.4 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-3D2 WG1974555
Analysis started at: 9/23/2024 12:32:59 PM
Rack 1
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0544 ppm | 77.2757 ppm | 0.1421 ppm | 0.9967 ppm | 2.1226 ppm | 0.0567 ppm | 13.8617 ppm |
| Concentration per Run 1 | 0.0541 ppm | 77.4182 ppm | 0.1406 ppm | 0.9994 ppm | 2.1313 ppm | 0.0569 ppm | 13.8452 ppm |
| Concentration per Run 2 | 0.0548 ppm | 77.0152 ppm | 0.1476 ppm | 0.9945 ppm | 2.1132 ppm | 0.0565 ppm | 13.8580 ppm |
| Concentration per Run 3 | 0.0543 ppm | 77.3936 ppm | 0.1381 ppm | 0.9962 ppm | 2.1234 ppm | 0.0568 ppm | 13.8819 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 3.5 % | 0.2 % | 0.4 % | 0.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0542 ppm | 0.5592 ppm | 0.3338 ppm | 0.3390 ppm | 91.4947 ppm | 16.8478 ppm | 0.3012 ppm |
| Concentration per Run 1 | 0.0544 ppm | 0.5588 ppm | 0.3349 ppm | 0.3379 ppm | 91.7096 ppm | 16.8839 ppm | 0.3021 ppm |
| Concentration per Run 2 | 0.0542 ppm | 0.5587 ppm | 0.3326 ppm | 0.3396 ppm | 91.1941 ppm | 16.7693 ppm | 0.2988 ppm |
| Concentration per Run 3 | 0.0541 ppm | 0.5601 ppm | 0.3339 ppm | 0.3395 ppm | 91.5804 ppm | 16.8902 ppm | 0.3026 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.3 % | 0.3 % | 0.4 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 34.0350 ppm | 1.2886 ppm | 1.0530 ppm | 12.1524 ppm | 0.6746 ppm | 0.5965 ppm | 0.5077 ppm |
| Concentration per Run 1 | 34.1037 ppm | 1.2917 ppm | 1.0467 ppm | 12.2044 ppm | 0.6754 ppm | 0.5982 ppm | 0.5036 ppm |
| Concentration per Run 2 | 34.0813 ppm | 1.2894 ppm | 1.0546 ppm | 12.0582 ppm | 0.6725 ppm | 0.5940 ppm | 0.5127 ppm |
| Concentration per Run 3 | 33.9201 ppm | 1.2848 ppm | 1.0576 ppm | 12.1946 ppm | 0.6760 ppm | 0.5973 ppm | 0.5068 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 0.5 % | 0.7 % | 0.3 % | 0.4 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1208 ppm | 3.2665 ppm | 1.0186 ppm | 1.0804 ppm | 2.8439 ppm | 0.1248 ppm | 0.6794 ppm |
| Concentration per Run 1 | 0.1268 ppm | 3.2790 ppm | 1.0199 ppm | 1.0840 ppm | 2.8587 ppm | 0.1268 ppm | 0.6781 ppm |
| Concentration per Run 2 | 0.1179 ppm | 3.2623 ppm | 1.0200 ppm | 1.0757 ppm | 2.8414 ppm | 0.1249 ppm | 0.6797 ppm |
| Concentration per Run 3 | 0.1178 ppm | 3.2582 ppm | 1.0159 ppm | 1.0815 ppm | 2.8315 ppm | 0.1226 ppm | 0.6804 ppm |
| Concentration RSD | 4.3 % | 0.3 % | 0.2 % | 0.4 % | 0.5 % | 1.7 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7681 ppm | 102.4027 % | 108.9098 % | 102.7738 % | 106.2029 % | 115.6843 % | 112.0223 % |
| Concentration per Run 1 | 0.7692 ppm | 102.2688 % | 109.5927 % | 102.1993 % | 105.9324 % | 115.8663 % | 111.2096 % |
| Concentration per Run 2 | 0.7682 ppm | 102.7627 % | 109.6976 % | 102.6692 % | 106.5026 % | 116.7991 % | 111.7719 % |
| Concentration per Run 3 | 0.7669 ppm | 102.1766 % | 107.4390 % | 103.4528 % | 106.1738 % | 114.3874 % | 113.0854 % |
| Concentration RSD | 0.1 % | 0.3 % | 1.2 % | 0.6 % | 0.3 % | 1.1 % | 0.9 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-4D2 WG1974555
Analysis started at: 9/23/2024 12:36:53 PM
Rack 1
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 76.5221 ppm | 0.0184 ppm | 0.0292 ppm | 0.0653 ppm | 0.0038 ppm | 3.8269 ppm |
| Concentration per Run 1 | -0.0004 ppm | 76.7563 ppm | 0.0165 ppm | 0.0264 ppm | 0.0654 ppm | 0.0038 ppm | 3.8236 ppm |
| Concentration per Run 2 | 0.0003 ppm | 76.4199 ppm | 0.0186 ppm | 0.0297 ppm | 0.0652 ppm | 0.0038 ppm | 3.8351 ppm |
| Concentration per Run 3 | 0.0000 ppm | 76.3901 ppm | 0.0200 ppm | 0.0314 ppm | 0.0652 ppm | 0.0038 ppm | 3.8220 ppm |
| Concentration RSD | 1,678.2 % | 0.3 % | 9.6 % | 8.7 % | 0.2 % | 0.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0301 ppm | 0.1461 ppm | 0.0679 ppm | 95.3650 ppm | 5.9065 ppm | 0.2948 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0311 ppm | 0.1476 ppm | 0.0675 ppm | 95.7518 ppm | 5.9254 ppm | 0.2954 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0296 ppm | 0.1448 ppm | 0.0680 ppm | 95.1121 ppm | 5.9053 ppm | 0.2948 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0297 ppm | 0.1458 ppm | 0.0683 ppm | 95.2310 ppm | 5.8888 ppm | 0.2942 ppm |
| Concentration RSD | 100.7 % | 2.7 % | 1.0 % | 0.5 % | 0.4 % | 0.3 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.0560 ppm | 0.6703 ppm | 0.0099 ppm | 2.0726 ppm | 0.1620 ppm | 0.0448 ppm | 0.0009 ppm |
| Concentration per Run 1 | 22.0048 ppm | 0.6727 ppm | 0.0101 ppm | 2.0749 ppm | 0.1637 ppm | 0.0451 ppm | 0.0019 ppm |
| Concentration per Run 2 | 22.0061 ppm | 0.6727 ppm | 0.0096 ppm | 2.0734 ppm | 0.1624 ppm | 0.0441 ppm | 0.0010 ppm |
| Concentration per Run 3 | 22.1572 ppm | 0.6656 ppm | 0.0099 ppm | 2.0693 ppm | 0.1600 ppm | 0.0451 ppm | -0.0002 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 2.7 % | 0.1 % | 1.1 % | 1.3 % | 114.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 2.6371 ppm | 0.0040 ppm | 0.1031 ppm | 1.7769 ppm | 0.0024 ppm | 0.1452 ppm |
| Concentration per Run 1 | 0.0012 ppm | 2.6499 ppm | 0.0046 ppm | 0.1035 ppm | 1.7865 ppm | 0.0031 ppm | 0.1449 ppm |
| Concentration per Run 2 | -0.0010 ppm | 2.6292 ppm | 0.0039 ppm | 0.1029 ppm | 1.7694 ppm | 0.0024 ppm | 0.1456 ppm |
| Concentration per Run 3 | 0.0070 ppm | 2.6321 ppm | 0.0034 ppm | 0.1029 ppm | 1.7749 ppm | 0.0018 ppm | 0.1452 ppm |
| Concentration RSD | 172.4 % | 0.4 % | 15.2 % | 0.3 % | 0.5 % | 26.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2035 ppm | 103.0395 % | 108.6226 % | 104.3594 % | 107.6868 % | 116.4040 % | 114.0165 % |
| Concentration per Run 1 | 0.2056 ppm | 102.2202 % | 108.8650 % | 104.4487 % | 106.8476 % | 116.3606 % | 114.2282 % |
| Concentration per Run 2 | 0.2039 ppm | 103.5292 % | 108.1507 % | 104.4545 % | 108.2283 % | 115.9852 % | 114.0743 % |
| Concentration per Run 3 | 0.2011 ppm | 103.3690 % | 108.8522 % | 104.1749 % | 107.9846 % | 116.8662 % | 113.7469 % |
| Concentration RSD | 1.1 % | 0.7 % | 0.4 % | 0.2 % | 0.7 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-5D2 WG1974555
Analysis started at: 9/23/2024 12:40:48 PM
Rack 1
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0484 ppm | 70.5007 ppm | 0.1381 ppm | 1.0045 ppm | 2.0113 ppm | 0.0537 ppm | 13.5079 ppm |
| Concentration per Run 1 | 0.0487 ppm | 70.3215 ppm | 0.1356 ppm | 0.9985 ppm | 1.9999 ppm | 0.0535 ppm | 13.4972 ppm |
| Concentration per Run 2 | 0.0479 ppm | 70.6372 ppm | 0.1375 ppm | 1.0053 ppm | 2.0216 ppm | 0.0539 ppm | 13.5473 ppm |
| Concentration per Run 3 | 0.0485 ppm | 70.5434 ppm | 0.1411 ppm | 1.0096 ppm | 2.0124 ppm | 0.0538 ppm | 13.4794 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 2.0 % | 0.6 % | 0.5 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0529 ppm | 0.5158 ppm | 0.3094 ppm | 0.3138 ppm | 94.3879 ppm | 16.0877 ppm | 0.2662 ppm |
| Concentration per Run 1 | 0.0540 ppm | 0.5191 ppm | 0.3083 ppm | 0.3117 ppm | 93.8978 ppm | 16.0210 ppm | 0.2672 ppm |
| Concentration per Run 2 | 0.0521 ppm | 0.5140 ppm | 0.3101 ppm | 0.3141 ppm | 94.8873 ppm | 16.2183 ppm | 0.2670 ppm |
| Concentration per Run 3 | 0.0524 ppm | 0.5143 ppm | 0.3098 ppm | 0.3158 ppm | 94.3786 ppm | 16.0239 ppm | 0.2645 ppm |
| Concentration RSD | 2.0 % | 0.6 % | 0.3 % | 0.7 % | 0.5 % | 0.7 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 30.8954 ppm | 1.1569 ppm | 1.0028 ppm | 12.2303 ppm | 0.6225 ppm | 0.5674 ppm | 0.4853 ppm |
| Concentration per Run 1 | 30.9158 ppm | 1.1536 ppm | 0.9910 ppm | 12.1824 ppm | 0.6194 ppm | 0.5649 ppm | 0.4832 ppm |
| Concentration per Run 2 | 30.9063 ppm | 1.1619 ppm | 1.0052 ppm | 12.2543 ppm | 0.6242 ppm | 0.5700 ppm | 0.4881 ppm |
| Concentration per Run 3 | 30.8640 ppm | 1.1552 ppm | 1.0122 ppm | 12.2540 ppm | 0.6239 ppm | 0.5672 ppm | 0.4846 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 1.1 % | 0.3 % | 0.4 % | 0.5 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1214 ppm | 2.8101 ppm | 1.0077 ppm | 1.0634 ppm | 2.4952 ppm | 0.1200 ppm | 0.6244 ppm |
| Concentration per Run 1 | 0.1223 ppm | 2.8186 ppm | 1.0028 ppm | 1.0576 ppm | 2.4989 ppm | 0.1191 ppm | 0.6239 ppm |
| Concentration per Run 2 | 0.1200 ppm | 2.8023 ppm | 1.0138 ppm | 1.0668 ppm | 2.5014 ppm | 0.1193 ppm | 0.6236 ppm |
| Concentration per Run 3 | 0.1218 ppm | 2.8094 ppm | 1.0066 ppm | 1.0659 ppm | 2.4852 ppm | 0.1216 ppm | 0.6257 ppm |
| Concentration RSD | 1.0 % | 0.3 % | 0.6 % | 0.5 % | 0.4 % | 1.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6825 ppm | 100.7309 % | 107.0130 % | 101.4043 % | 104.0630 % | 113.6194 % | 110.0495 % |
| Concentration per Run 1 | 0.6760 ppm | 100.4109 % | 107.3263 % | 101.5561 % | 103.7602 % | 114.0218 % | 110.0796 % |
| Concentration per Run 2 | 0.6883 ppm | 100.6336 % | 105.9568 % | 101.6555 % | 103.9201 % | 111.9534 % | 110.4262 % |
| Concentration per Run 3 | 0.6831 ppm | 101.1482 % | 107.7558 % | 101.0012 % | 104.5086 % | 114.8829 % | 109.6425 % |
| Concentration RSD | 0.9 % | 0.4 % | 0.9 % | 0.3 % | 0.4 % | 1.3 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974555-6D10 WG1974555
Analysis started at: 9/23/2024 12:44:43 PM
Rack 1
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 14.8850 ppm | 0.0043 ppm | 0.0059 ppm | 0.0126 ppm | 0.0007 ppm | 0.6901 ppm |
| Concentration per Run 1 | 0.0006 ppm | 14.9132 ppm | 0.0039 ppm | 0.0056 ppm | 0.0128 ppm | 0.0007 ppm | 0.6891 ppm |
| Concentration per Run 2 | -0.0005 ppm | 14.8885 ppm | 0.0050 ppm | 0.0068 ppm | 0.0126 ppm | 0.0008 ppm | 0.6867 ppm |
| Concentration per Run 3 | -0.0003 ppm | 14.8535 ppm | 0.0040 ppm | 0.0054 ppm | 0.0124 ppm | 0.0007 ppm | 0.6946 ppm |
| Concentration RSD | 875.4 % | 0.2 % | 14.4 % | 12.7 % | 1.6 % | 4.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0065 ppm | 0.0248 ppm | 0.0145 ppm | 20.7882 ppm | 1.2103 ppm | 0.0577 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0069 ppm | 0.0250 ppm | 0.0146 ppm | 20.7481 ppm | 1.2251 ppm | 0.0588 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0063 ppm | 0.0248 ppm | 0.0143 ppm | 20.8763 ppm | 1.2002 ppm | 0.0580 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0064 ppm | 0.0245 ppm | 0.0146 ppm | 20.7401 ppm | 1.2056 ppm | 0.0563 ppm |
| Concentration RSD | 353.5 % | 4.6 % | 1.0 % | 1.1 % | 0.4 % | 1.1 % | 2.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.5219 ppm | 0.1411 ppm | 0.0031 ppm | 0.3687 ppm | 0.0307 ppm | 0.0103 ppm | 0.0037 ppm |
| Concentration per Run 1 | 4.5103 ppm | 0.1411 ppm | 0.0031 ppm | 0.3683 ppm | 0.0300 ppm | 0.0116 ppm | 0.0023 ppm |
| Concentration per Run 2 | 4.5284 ppm | 0.1411 ppm | 0.0034 ppm | 0.3621 ppm | 0.0306 ppm | 0.0098 ppm | 0.0041 ppm |
| Concentration per Run 3 | 4.5269 ppm | 0.1412 ppm | 0.0027 ppm | 0.3756 ppm | 0.0314 ppm | 0.0095 ppm | 0.0046 ppm |
| Concentration RSD | 0.2 % | 0.0 % | 12.0 % | 1.8 % | 2.3 % | 10.8 % | 31.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.3523 ppm | 0.0014 ppm | 0.0187 ppm | 0.3146 ppm | 0.0012 ppm | 0.0285 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.3513 ppm | 0.0020 ppm | 0.0187 ppm | 0.3132 ppm | 0.0005 ppm | 0.0285 ppm |
| Concentration per Run 2 | -0.0034 ppm | 0.3545 ppm | 0.0014 ppm | 0.0188 ppm | 0.3149 ppm | 0.0030 ppm | 0.0284 ppm |
| Concentration per Run 3 | 0.0034 ppm | 0.3512 ppm | 0.0007 ppm | 0.0186 ppm | 0.3156 ppm | 0.0001 ppm | 0.0285 ppm |
| Concentration RSD | 1,144.6 % | 0.5 % | 51.1 % | 0.4 % | 0.4 % | 129.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0428 ppm | 101.0116 % | 104.0808 % | 104.5423 % | 100.2135 % | 105.4243 % | 105.3443 % |
| Concentration per Run 1 | 0.0426 ppm | 100.6391 % | 104.2214 % | 104.8689 % | 99.9586 % | 105.8099 % | 105.8537 % |
| Concentration per Run 2 | 0.0429 ppm | 101.2070 % | 104.3018 % | 104.2615 % | 100.2015 % | 105.3107 % | 105.0788 % |
| Concentration per Run 3 | 0.0429 ppm | 101.1888 % | 103.7193 % | 104.4965 % | 100.4805 % | 105.1524 % | 105.1006 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCV
Analysis started at: 9/23/2024 12:48:35 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5130 ppm | 0.4833 ppm | 0.4875 ppm | 0.5007 ppm | 0.4989 ppm | 0.5130 ppm | 0.5026 ppm |
| Concentration per Run 1 | 0.5103 ppm | 0.4827 ppm | 0.4888 ppm | 0.5016 ppm | 0.5002 ppm | 0.5118 ppm | 0.5076 ppm |
| Concentration per Run 2 | 0.5138 ppm | 0.4814 ppm | 0.4842 ppm | 0.4983 ppm | 0.4961 ppm | 0.5130 ppm | 0.4965 ppm |
| Concentration per Run 3 | 0.5150 ppm | 0.4858 ppm | 0.4894 ppm | 0.5021 ppm | 0.5005 ppm | 0.5142 ppm | 0.5036 ppm |
| Recovery Percentage 1 | 102.605 % | 96.663 % | 97.494 % | 100.136 % | 99.790 % | 102.598 % | 100.512 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.6 % | 0.4 % | 0.5 % | 0.2 % | 1.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5095 ppm | 0.5158 ppm | 0.4953 ppm | 0.4950 ppm | 0.5031 ppm | 5.1922 ppm | 0.4948 ppm |
| Concentration per Run 1 | 0.5077 ppm | 0.5165 ppm | 0.4928 ppm | 0.4952 ppm | 0.5030 ppm | 5.2055 ppm | 0.4943 ppm |
| Concentration per Run 2 | 0.5124 ppm | 0.5165 ppm | 0.4978 ppm | 0.4949 ppm | 0.5020 ppm | 5.2261 ppm | 0.4967 ppm |
| Concentration per Run 3 | 0.5085 ppm | 0.5145 ppm | 0.4952 ppm | 0.4950 ppm | 0.5042 ppm | 5.1451 ppm | 0.4933 ppm |
| Recovery Percentage 1 | 101.904 % | 103.163 % | 99.054 % | 99.010 % | 100.616 % | 103.844 % | 98.952 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.5 % | 0.0 % | 0.2 % | 0.8 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4942 ppm | 0.4933 ppm | 0.4980 ppm | 10.0083 ppm | 0.5125 ppm | 0.5034 ppm | 0.5083 ppm |
| Concentration per Run 1 | 0.4935 ppm | 0.4926 ppm | 0.4945 ppm | 9.9539 ppm | 0.5118 ppm | 0.5054 ppm | 0.5022 ppm |
| Concentration per Run 2 | 0.4944 ppm | 0.4952 ppm | 0.5012 ppm | 10.0334 ppm | 0.5136 ppm | 0.5018 ppm | 0.5133 ppm |
| Concentration per Run 3 | 0.4946 ppm | 0.4922 ppm | 0.4984 ppm | 10.0377 ppm | 0.5122 ppm | 0.5029 ppm | 0.5093 ppm |
| Recovery Percentage 1 | 98.834 % | 98.668 % | 99.607 % | 100.083 % | 102.509 % | 100.677 % | 101.657 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.7 % | 0.5 % | 0.2 % | 0.4 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4983 ppm | 5.4150 ppm | 0.4877 ppm | 0.4805 ppm | 0.5029 ppm | 0.5040 ppm | 0.4907 ppm |
| Concentration per Run 1 | 0.5002 ppm | 5.3964 ppm | 0.4833 ppm | 0.4805 ppm | 0.5008 ppm | 0.5055 ppm | 0.4910 ppm |
| Concentration per Run 2 | 0.4977 ppm | 5.4330 ppm | 0.4917 ppm | 0.4772 ppm | 0.5043 ppm | 0.5022 ppm | 0.4908 ppm |
| Concentration per Run 3 | 0.4969 ppm | 5.4156 ppm | 0.4880 ppm | 0.4838 ppm | 0.5036 ppm | 0.5043 ppm | 0.4903 ppm |
| Recovery Percentage 1 | 99.656 % | 103.143 % | 97.534 % | 96.106 % | 100.578 % | 100.799 % | 98.137 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.9 % | 0.7 % | 0.4 % | 0.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5123 ppm | 99.8527 % | 102.8171 % | 103.2500 % | 97.7617 % | 102.2487 % | 102.4984 % |
| Concentration per Run 1 | 0.5092 ppm | 100.2272 % | 102.9768 % | 103.5858 % | 98.2187 % | 102.2718 % | 103.0109 % |
| Concentration per Run 2 | 0.5145 ppm | 99.2904 % | 102.3945 % | 103.1540 % | 97.1936 % | 102.1730 % | 102.2454 % |
| Concentration per Run 3 | 0.5131 ppm | 100.0405 % | 103.0800 % | 103.0101 % | 97.8727 % | 102.3012 % | 102.2390 % |
| Recovery Percentage 1 | 102.455 % | | | | | | |
| Concentration RSD | 0.5 % | 0.5 % | 0.4 % | 0.3 % | 0.5 % | 0.1 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCB
Analysis started at: 9/23/2024 12:52:29 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0059 ppm | 0.0020 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0032 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0118 ppm | 0.0006 ppm | 0.0009 ppm | -0.0001 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0007 ppm | 0.0077 ppm | 0.0015 ppm | -0.0026 ppm | 0.0000 ppm | 0.0000 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0016 ppm | 0.0038 ppm | 0.0018 ppm | -0.0001 ppm | 0.0000 ppm | 0.0077 ppm |
| Recovery Percentage 1 | -6.971 % | 5.934 % | 39.749 % | 0.150 % | -0.586 % | -0.027 % | 3.237 % |
| Concentration RSD | 38.7 % | 115.7 % | 82.9 % | 5,139.6 % | 102.4 % | 3,200.1 % | 131.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | -0.0004 ppm | -0.0122 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0002 ppm | -0.0004 ppm | 0.0000 ppm | -0.0109 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0002 ppm | -0.0005 ppm | -0.0001 ppm | -0.0010 ppm | 0.0049 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | -0.0001 ppm | 0.0000 ppm | -0.0003 ppm | -0.0305 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -0.030 % | -0.462 % | -1.501 % | -1.414 % | -0.848 % | -0.487 % | -7.078 % |
| Concentration RSD | 9,622.8 % | 389.8 % | 213.3 % | 152.1 % | 113.3 % | 145.7 % | 26.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 0.0002 ppm | 0.0010 ppm | -0.0050 ppm | 0.0002 ppm | -0.0006 ppm | 0.0021 ppm |
| Concentration per Run 1 | -0.0031 ppm | 0.0001 ppm | 0.0004 ppm | -0.0008 ppm | 0.0004 ppm | -0.0005 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0029 ppm | 0.0003 ppm | 0.0012 ppm | -0.0058 ppm | 0.0013 ppm | -0.0003 ppm | 0.0049 ppm |
| Concentration per Run 3 | -0.0014 ppm | 0.0001 ppm | 0.0013 ppm | -0.0085 ppm | -0.0011 ppm | -0.0009 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -2.478 % | 1.574 % | 1.921 % | -0.252 % | 0.748 % | -5.760 % | 4.284 % |
| Concentration RSD | 38.5 % | 61.8 % | 49.7 % | 78.0 % | 637.7 % | 45.9 % | 121.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0021 ppm | -0.0001 ppm | 0.0002 ppm | -0.0004 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0036 ppm | -0.0007 ppm | 0.0003 ppm | -0.0002 ppm | 0.0008 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0023 ppm | -0.0005 ppm | -0.0002 ppm | 0.0003 ppm | -0.0003 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0032 ppm | 0.0007 ppm | 0.0000 ppm | -0.0006 ppm | -0.0012 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 4.220 % | 0.419 % | -0.150 % | 2.038 % | -3.700 % | -0.524 % | -0.812 % |
| Concentration RSD | 422.4 % | 107.4 % | 908.0 % | 90.1 % | 62.0 % | 935.9 % | 305.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 99.4920 % | 100.8754 % | 102.2803 % | 99.0757 % | 101.5973 % | 102.2275 % |
| Concentration per Run 1 | -0.0005 ppm | 103.3638 % | 101.8958 % | 101.1541 % | 102.4638 % | 102.5923 % | 101.0373 % |
| Concentration per Run 2 | -0.0006 ppm | 96.3441 % | 100.6321 % | 102.9507 % | 96.0680 % | 101.0908 % | 102.7584 % |
| Concentration per Run 3 | -0.0002 ppm | 98.7682 % | 100.0982 % | 102.7360 % | 98.6952 % | 101.1089 % | 102.8866 % |
| Recovery Percentage 1 | -8.301 % | | | | | | |
| Concentration RSD | 54.3 % | 3.6 % | 0.9 % | 1.0 % | 3.2 % | 0.8 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974746-1 WG1974746
Analysis started at: 9/23/2024 12:57:27 PM
Rack 1
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0106 ppm | 0.0011 ppm | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0175 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0037 ppm | 0.0031 ppm | 0.0025 ppm | 0.0001 ppm | 0.0000 ppm | 0.0206 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0141 ppm | -0.0007 ppm | 0.0029 ppm | 0.0003 ppm | 0.0000 ppm | 0.0166 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0139 ppm | 0.0008 ppm | 0.0029 ppm | -0.0002 ppm | 0.0000 ppm | 0.0154 ppm |
| Recovery Percentage 1 | -7.736 % | 10.565 % | 21.954 % | 9.225 % | 0.726 % | -0.141 % | 17.523 % |
| Concentration RSD | 118.9 % | 56.2 % | 173.2 % | 7.9 % | 331.1 % | 805.4 % | 15.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | -0.0010 ppm | 0.0005 ppm | 0.0001 ppm | 0.0084 ppm | -0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0011 ppm | 0.0004 ppm | -0.0014 ppm | 0.0266 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0009 ppm | -0.0007 ppm | 0.0001 ppm | 0.0012 ppm | 0.0153 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0011 ppm | 0.0009 ppm | 0.0006 ppm | -0.0167 ppm | -0.0018 ppm |
| Recovery Percentage 1 | -1.206 % | -0.751 % | -9.842 % | 4.594 % | 0.251 % | 0.336 % | -16.355 % |
| Concentration RSD | 121.1 % | 435.2 % | 22.3 % | 81.4 % | 1,084.5 % | 267.2 % | 118.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0003 ppm | -0.0004 ppm | 130.5560 ppm | -0.0004 ppm | -0.0001 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0003 ppm | -0.0006 ppm | 130.4264 ppm | -0.0001 ppm | -0.0012 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0005 ppm | -0.0005 ppm | 130.2238 ppm | -0.0013 ppm | 0.0027 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0025 ppm | 0.0002 ppm | -0.0002 ppm | 131.0179 ppm | 0.0001 ppm | -0.0019 ppm | 0.0035 ppm |
| Recovery Percentage 1 | 0.495 % | 3.294 % | -0.829 % | 6,527.800 % | -1.674 % | -1.245 % | 3.674 % |
| Concentration RSD | 348.5 % | 53.1 % | 48.4 % | 0.3 % | 175.8 % | 1,987.2 % | 83.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0192 ppm | -0.0002 ppm | 0.0002 ppm | -0.0003 ppm | -0.0007 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0049 ppm | 0.0206 ppm | -0.0009 ppm | 0.0003 ppm | -0.0003 ppm | -0.0004 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0031 ppm | 0.0185 ppm | 0.0005 ppm | 0.0003 ppm | -0.0002 ppm | -0.0003 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0047 ppm | 0.0186 ppm | -0.0002 ppm | 0.0002 ppm | -0.0005 ppm | -0.0015 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 42.476 % | 3.844 % | -0.425 % | 2.482 % | -3.440 % | -3.635 % | -1.011 % |
| Concentration RSD | 22.7 % | 6.2 % | 325.3 % | 21.8 % | 35.3 % | 89.7 % | 128.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 96.7289 % | 107.5970 % | 97.0652 % | 93.9124 % | 107.3217 % | 99.7787 % |
| Concentration per Run 1 | 0.0006 ppm | 97.2236 % | 107.8953 % | 96.3447 % | 94.2423 % | 107.4998 % | 99.1223 % |
| Concentration per Run 2 | 0.0009 ppm | 96.2117 % | 107.3170 % | 97.6244 % | 93.5106 % | 106.5855 % | 100.1223 % |
| Concentration per Run 3 | 0.0006 ppm | 96.7515 % | 107.5786 % | 97.2264 % | 93.9842 % | 107.8798 % | 100.0915 % |
| Recovery Percentage 1 | 13.776 % | | | | | | |
| Concentration RSD | 20.7 % | 0.5 % | 0.3 % | 0.7 % | 0.4 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974746-2 WG1974746
Analysis started at: 9/23/2024 1:01:30 PM
Rack 1
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0436 ppm | 1.7624 ppm | 0.1059 ppm | 0.8885 ppm | 1.7761 ppm | 0.0449 ppm | 9.4136 ppm |
| Concentration per Run 1 | 0.0432 ppm | 1.6756 ppm | 0.1054 ppm | 0.8787 ppm | 1.6926 ppm | 0.0429 ppm | 8.9912 ppm |
| Concentration per Run 2 | 0.0436 ppm | 1.8265 ppm | 0.1056 ppm | 0.8936 ppm | 1.8334 ppm | 0.0462 ppm | 9.7208 ppm |
| Concentration per Run 3 | 0.0441 ppm | 1.7851 ppm | 0.1068 ppm | 0.8932 ppm | 1.8024 ppm | 0.0457 ppm | 9.5290 ppm |
| Concentration RSD | 1.0 % | 4.4 % | 0.7 % | 1.0 % | 4.2 % | 3.9 % | 4.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0476 ppm | 0.4501 ppm | 0.1787 ppm | 0.2237 ppm | 0.9043 ppm | 9.4596 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0476 ppm | 0.4479 ppm | 0.1787 ppm | 0.2231 ppm | 0.8574 ppm | 9.0401 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0476 ppm | 0.4497 ppm | 0.1775 ppm | 0.2240 ppm | 0.9287 ppm | 9.7759 ppm | -0.0015 ppm |
| Concentration per Run 3 | 0.0477 ppm | 0.4528 ppm | 0.1799 ppm | 0.2240 ppm | 0.9269 ppm | 9.5629 ppm | -0.0018 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 0.7 % | 0.2 % | 4.5 % | 4.0 % | 200.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.3366 ppm | 0.4500 ppm | 0.9595 ppm | 9.4999 ppm | 0.4516 ppm | 0.4875 ppm | 0.4477 ppm |
| Concentration per Run 1 | 9.3278 ppm | 0.4306 ppm | 0.9472 ppm | 9.0761 ppm | 0.4482 ppm | 0.4893 ppm | 0.4421 ppm |
| Concentration per Run 2 | 9.3253 ppm | 0.4632 ppm | 0.9619 ppm | 9.7922 ppm | 0.4527 ppm | 0.4892 ppm | 0.4461 ppm |
| Concentration per Run 3 | 9.3567 ppm | 0.4562 ppm | 0.9695 ppm | 9.6315 ppm | 0.4539 ppm | 0.4840 ppm | 0.4551 ppm |
| Concentration RSD | 0.2 % | 3.8 % | 1.2 % | 4.0 % | 0.7 % | 0.6 % | 1.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1063 ppm | 1.0796 ppm | 0.9231 ppm | 0.8893 ppm | 0.9519 ppm | 0.1087 ppm | 0.4519 ppm |
| Concentration per Run 1 | 0.1072 ppm | 1.0786 ppm | 0.9129 ppm | 0.8509 ppm | 0.9504 ppm | 0.1095 ppm | 0.4499 ppm |
| Concentration per Run 2 | 0.1059 ppm | 1.0786 ppm | 0.9230 ppm | 0.9132 ppm | 0.9517 ppm | 0.1080 ppm | 0.4525 ppm |
| Concentration per Run 3 | 0.1057 ppm | 1.0816 ppm | 0.9333 ppm | 0.9039 ppm | 0.9536 ppm | 0.1087 ppm | 0.4532 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 1.1 % | 3.8 % | 0.2 % | 0.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4474 ppm | 101.6177 % | 107.4747 % | 104.1912 % | 99.2210 % | 107.1042 % | 104.5060 % |
| Concentration per Run 1 | 0.4431 ppm | 102.5924 % | 111.5531 % | 103.2683 % | 100.2165 % | 110.3690 % | 103.7548 % |
| Concentration per Run 2 | 0.4472 ppm | 101.4583 % | 103.7459 % | 104.4901 % | 99.0159 % | 104.0548 % | 104.9748 % |
| Concentration per Run 3 | 0.4519 ppm | 100.8026 % | 107.1251 % | 104.8153 % | 98.4305 % | 106.8887 % | 104.7884 % |
| Concentration RSD | 1.0 % | 0.9 % | 3.6 % | 0.8 % | 0.9 % | 3.0 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-01 WG1974746
Analysis started at: 9/23/2024 1:05:25 PM
Rack 1
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0493 ppm | 0.0014 ppm | 0.0059 ppm | 0.0103 ppm | 0.0001 ppm | 0.1717 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0357 ppm | 0.0037 ppm | 0.0048 ppm | 0.0102 ppm | 0.0000 ppm | 0.1756 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0488 ppm | -0.0001 ppm | 0.0059 ppm | 0.0105 ppm | 0.0001 ppm | 0.1718 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0634 ppm | 0.0005 ppm | 0.0070 ppm | 0.0101 ppm | 0.0000 ppm | 0.1676 ppm |
| Concentration RSD | 17,914.5 % | 28.1 % | 150.6 % | 18.9 % | 2.0 % | 97.9 % | 2.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0009 ppm | -0.0004 ppm | 0.0003 ppm | 0.3641 ppm | 0.1012 ppm | -0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0007 ppm | -0.0003 ppm | 0.0002 ppm | 0.3626 ppm | 0.1099 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0010 ppm | -0.0003 ppm | 0.0004 ppm | 0.3672 ppm | 0.1016 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0009 ppm | -0.0006 ppm | 0.0003 ppm | 0.3624 ppm | 0.0923 ppm | -0.0017 ppm |
| Concentration RSD | 158.6 % | 16.9 % | 51.0 % | 30.0 % | 0.7 % | 8.7 % | 58.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0769 ppm | 0.0340 ppm | 0.0008 ppm | 125.8984 ppm | 0.0004 ppm | 0.0020 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0747 ppm | 0.0338 ppm | 0.0009 ppm | 125.3292 ppm | -0.0006 ppm | 0.0011 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0791 ppm | 0.0342 ppm | 0.0010 ppm | 126.0423 ppm | 0.0006 ppm | 0.0020 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0770 ppm | 0.0341 ppm | 0.0005 ppm | 126.3237 ppm | 0.0014 ppm | 0.0029 ppm | 0.0044 ppm |
| Concentration RSD | 2.9 % | 0.5 % | 33.3 % | 0.4 % | 223.5 % | 45.9 % | 107.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0901 ppm | 0.0001 ppm | 0.0015 ppm | -0.0002 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.0911 ppm | -0.0003 ppm | 0.0015 ppm | 0.0001 ppm | 0.0004 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0920 ppm | 0.0008 ppm | 0.0015 ppm | 0.0000 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0016 ppm | 0.0872 ppm | -0.0003 ppm | 0.0016 ppm | -0.0007 ppm | -0.0009 ppm | 0.0001 ppm |
| Concentration RSD | 192.1 % | 2.8 % | 960.7 % | 5.8 % | 231.4 % | 767.9 % | 86.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 100.0693 % | 107.2458 % | 99.1732 % | 97.6559 % | 107.1364 % | 103.0384 % |
| Concentration per Run 1 | 0.0036 ppm | 100.2087 % | 107.3637 % | 99.7677 % | 97.7845 % | 107.0629 % | 103.6116 % |
| Concentration per Run 2 | 0.0039 ppm | 100.1927 % | 106.5019 % | 98.5639 % | 97.7126 % | 106.3988 % | 102.5423 % |
| Concentration per Run 3 | 0.0038 ppm | 99.8066 % | 107.8717 % | 99.1879 % | 97.4707 % | 107.9475 % | 102.9614 % |
| Concentration RSD | 4.0 % | 0.2 % | 0.6 % | 0.6 % | 0.2 % | 0.7 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974746-3 WG1974746
Analysis started at: 9/23/2024 1:09:19 PM
Rack 1
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0430 ppm | 1.8249 ppm | 0.1130 ppm | 0.8984 ppm | 1.8045 ppm | 0.0458 ppm | 9.5777 ppm |
| Concentration per Run 1 | 0.0434 ppm | 1.8244 ppm | 0.1124 ppm | 0.9005 ppm | 1.8010 ppm | 0.0457 ppm | 9.5857 ppm |
| Concentration per Run 2 | 0.0423 ppm | 1.8262 ppm | 0.1151 ppm | 0.8980 ppm | 1.7971 ppm | 0.0457 ppm | 9.5507 ppm |
| Concentration per Run 3 | 0.0431 ppm | 1.8241 ppm | 0.1115 ppm | 0.8966 ppm | 1.8156 ppm | 0.0459 ppm | 9.5968 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 1.6 % | 0.2 % | 0.5 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0492 ppm | 0.4546 ppm | 0.1797 ppm | 0.2264 ppm | 1.2662 ppm | 9.6044 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0486 ppm | 0.4545 ppm | 0.1800 ppm | 0.2265 ppm | 1.2727 ppm | 9.6076 ppm | -0.0015 ppm |
| Concentration per Run 2 | 0.0496 ppm | 0.4564 ppm | 0.1802 ppm | 0.2270 ppm | 1.2578 ppm | 9.5702 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.0493 ppm | 0.4530 ppm | 0.1789 ppm | 0.2258 ppm | 1.2681 ppm | 9.6353 ppm | -0.0007 ppm |
| Concentration RSD | 1.0 % | 0.4 % | 0.4 % | 0.3 % | 0.6 % | 0.3 % | 45.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.1681 ppm | 0.4839 ppm | 0.9685 ppm | 133.7450 ppm | 0.4526 ppm | 0.4894 ppm | 0.4545 ppm |
| Concentration per Run 1 | 9.1335 ppm | 0.4862 ppm | 0.9666 ppm | 133.7416 ppm | 0.4528 ppm | 0.4909 ppm | 0.4595 ppm |
| Concentration per Run 2 | 9.2142 ppm | 0.4812 ppm | 0.9698 ppm | 133.5067 ppm | 0.4526 ppm | 0.4875 ppm | 0.4523 ppm |
| Concentration per Run 3 | 9.1567 ppm | 0.4845 ppm | 0.9690 ppm | 133.9866 ppm | 0.4523 ppm | 0.4897 ppm | 0.4517 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 0.2 % | 0.2 % | 0.1 % | 0.4 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1098 ppm | 1.1807 ppm | 0.9154 ppm | 0.8889 ppm | 0.9535 ppm | 0.1075 ppm | 0.4630 ppm |
| Concentration per Run 1 | 0.1061 ppm | 1.1802 ppm | 0.9148 ppm | 0.8911 ppm | 0.9522 ppm | 0.1080 ppm | 0.4624 ppm |
| Concentration per Run 2 | 0.1102 ppm | 1.1828 ppm | 0.9153 ppm | 0.8829 ppm | 0.9553 ppm | 0.1076 ppm | 0.4639 ppm |
| Concentration per Run 3 | 0.1131 ppm | 1.1791 ppm | 0.9163 ppm | 0.8926 ppm | 0.9531 ppm | 0.1071 ppm | 0.4627 ppm |
| Concentration RSD | 3.2 % | 0.2 % | 0.1 % | 0.6 % | 0.2 % | 0.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4663 ppm | 99.4375 % | 106.9193 % | 98.5621 % | 96.9267 % | 106.8529 % | 102.0700 % |
| Concentration per Run 1 | 0.4668 ppm | 99.7788 % | 107.0650 % | 98.0925 % | 97.3056 % | 107.2326 % | 101.7250 % |
| Concentration per Run 2 | 0.4669 ppm | 99.2834 % | 107.8926 % | 98.5028 % | 96.8659 % | 107.8879 % | 101.6394 % |
| Concentration per Run 3 | 0.4653 ppm | 99.2503 % | 105.8004 % | 99.0909 % | 96.6087 % | 105.4381 % | 102.8454 % |
| Concentration RSD | 0.2 % | 0.3 % | 1.0 % | 0.5 % | 0.4 % | 1.2 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974746-4 WG1974746
Analysis started at: 9/23/2024 1:13:11 PM
Rack 1
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0385 ppm | 0.0011 ppm | 0.0064 ppm | 0.0103 ppm | 0.0001 ppm | 0.1725 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0313 ppm | 0.0034 ppm | 0.0082 ppm | 0.0103 ppm | 0.0001 ppm | 0.1748 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0390 ppm | -0.0016 ppm | 0.0064 ppm | 0.0103 ppm | 0.0001 ppm | 0.1680 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0452 ppm | 0.0014 ppm | 0.0046 ppm | 0.0102 ppm | 0.0001 ppm | 0.1748 ppm |
| Concentration RSD | 19.0 % | 18.0 % | 233.1 % | 28.4 % | 0.5 % | 37.6 % | 2.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0007 ppm | -0.0004 ppm | 0.0008 ppm | 0.3614 ppm | 0.0819 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0012 ppm | -0.0007 ppm | 0.0009 ppm | 0.3589 ppm | 0.0881 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0009 ppm | -0.0005 ppm | 0.0007 ppm | 0.3657 ppm | 0.0643 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0007 ppm | 0.3598 ppm | 0.0932 ppm | -0.0005 ppm |
| Concentration RSD | 92.0 % | 73.6 % | 53.1 % | 12.2 % | 1.0 % | 18.9 % | 403.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0749 ppm | 0.0336 ppm | 0.0010 ppm | 125.5359 ppm | 0.0006 ppm | -0.0001 ppm | 0.0039 ppm |
| Concentration per Run 1 | 0.0739 ppm | 0.0337 ppm | 0.0011 ppm | 124.6839 ppm | 0.0004 ppm | -0.0006 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0760 ppm | 0.0337 ppm | 0.0009 ppm | 125.9061 ppm | 0.0008 ppm | -0.0005 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0748 ppm | 0.0335 ppm | 0.0011 ppm | 126.0177 ppm | 0.0006 ppm | 0.0006 ppm | 0.0035 ppm |
| Concentration RSD | 1.4 % | 0.4 % | 9.3 % | 0.6 % | 34.4 % | 481.2 % | 16.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 0.0885 ppm | 0.0005 ppm | 0.0016 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0060 ppm | 0.0867 ppm | 0.0013 ppm | 0.0017 ppm | -0.0001 ppm | 0.0003 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0914 ppm | -0.0001 ppm | 0.0015 ppm | 0.0000 ppm | 0.0009 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0025 ppm | 0.0874 ppm | 0.0004 ppm | 0.0015 ppm | -0.0001 ppm | -0.0012 ppm | 0.0004 ppm |
| Concentration RSD | 118.3 % | 2.9 % | 140.0 % | 4.7 % | 90.9 % | 11,941.0 % | 820.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0036 ppm | 100.1425 % | 106.3028 % | 99.3065 % | 97.8770 % | 105.5396 % | 102.7396 % |
| Concentration per Run 1 | 0.0035 ppm | 100.0601 % | 107.5817 % | 99.8550 % | 97.9136 % | 106.1342 % | 103.4071 % |
| Concentration per Run 2 | 0.0037 ppm | 99.6835 % | 105.5440 % | 98.5057 % | 97.3268 % | 105.0601 % | 101.8408 % |
| Concentration per Run 3 | 0.0037 ppm | 100.6839 % | 105.7828 % | 99.5588 % | 98.3907 % | 105.4244 % | 102.9709 % |
| Concentration RSD | 2.7 % | 0.5 % | 1.0 % | 0.7 % | 0.5 % | 0.5 % | 0.8 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-02 WG1974746
Analysis started at: 9/23/2024 1:17:03 PM
Rack 1
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0523 ppm | 0.0029 ppm | 0.0131 ppm | 0.0143 ppm | 0.0000 ppm | 0.7968 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0466 ppm | 0.0039 ppm | 0.0134 ppm | 0.0142 ppm | 0.0000 ppm | 0.8015 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0545 ppm | 0.0020 ppm | 0.0134 ppm | 0.0142 ppm | 0.0001 ppm | 0.7977 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0556 ppm | 0.0029 ppm | 0.0124 ppm | 0.0145 ppm | 0.0000 ppm | 0.7912 ppm |
| Concentration RSD | 211.1 % | 9.4 % | 33.4 % | 4.4 % | 1.1 % | 82.9 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0049 ppm | -0.0007 ppm | 0.0006 ppm | 0.3450 ppm | 0.0679 ppm | -0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0046 ppm | -0.0007 ppm | 0.0008 ppm | 0.3509 ppm | 0.0729 ppm | -0.0029 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0051 ppm | -0.0006 ppm | 0.0004 ppm | 0.3427 ppm | 0.0541 ppm | -0.0019 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0050 ppm | -0.0006 ppm | 0.0008 ppm | 0.3415 ppm | 0.0767 ppm | -0.0005 ppm |
| Concentration RSD | 163.9 % | 6.0 % | 12.7 % | 32.6 % | 1.5 % | 17.8 % | 67.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3551 ppm | 0.0886 ppm | 0.0004 ppm | 124.2356 ppm | 0.0013 ppm | 0.0023 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.3570 ppm | 0.0888 ppm | 0.0000 ppm | 124.6201 ppm | 0.0021 ppm | 0.0021 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.3532 ppm | 0.0886 ppm | 0.0008 ppm | 123.9088 ppm | 0.0013 ppm | 0.0026 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.3551 ppm | 0.0883 ppm | 0.0003 ppm | 124.1778 ppm | 0.0005 ppm | 0.0021 ppm | -0.0031 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 114.5 % | 0.3 % | 63.2 % | 12.7 % | 319.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 0.1131 ppm | -0.0010 ppm | 0.0052 ppm | 0.0005 ppm | -0.0006 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.1113 ppm | -0.0015 ppm | 0.0052 ppm | 0.0003 ppm | -0.0007 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.1133 ppm | -0.0012 ppm | 0.0052 ppm | 0.0004 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0058 ppm | 0.1148 ppm | -0.0002 ppm | 0.0052 ppm | 0.0007 ppm | -0.0006 ppm | 0.0003 ppm |
| Concentration RSD | 61.8 % | 1.6 % | 65.8 % | 0.2 % | 38.0 % | 8.8 % | 124.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 100.4311 % | 107.9634 % | 99.3119 % | 98.1189 % | 107.6656 % | 102.9560 % |
| Concentration per Run 1 | 0.0047 ppm | 100.0666 % | 107.6878 % | 100.3876 % | 97.8464 % | 107.5472 % | 104.0972 % |
| Concentration per Run 2 | 0.0043 ppm | 100.7941 % | 109.2109 % | 98.5667 % | 98.2978 % | 109.0281 % | 102.4353 % |
| Concentration per Run 3 | 0.0048 ppm | 100.4325 % | 106.9916 % | 98.9813 % | 98.2127 % | 106.4214 % | 102.3356 % |
| Concentration RSD | 6.4 % | 0.4 % | 1.1 % | 1.0 % | 0.2 % | 1.2 % | 1.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-03 WG1974746
Analysis started at: 9/23/2024 1:20:55 PM
Rack 1
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0326 ppm | 0.0006 ppm | 0.0097 ppm | 0.0322 ppm | 0.0000 ppm | 6.6568 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0327 ppm | 0.0001 ppm | 0.0085 ppm | 0.0323 ppm | 0.0000 ppm | 6.6722 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0310 ppm | 0.0013 ppm | 0.0108 ppm | 0.0323 ppm | 0.0000 ppm | 6.6566 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0339 ppm | 0.0003 ppm | 0.0099 ppm | 0.0321 ppm | 0.0000 ppm | 6.6416 ppm |
| Concentration RSD | 51.0 % | 4.4 % | 115.2 % | 11.8 % | 0.2 % | 72.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0011 ppm | -0.0007 ppm | 0.0004 ppm | 0.1874 ppm | 0.1116 ppm | -0.0006 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0009 ppm | -0.0004 ppm | 0.0007 ppm | 0.1875 ppm | 0.1373 ppm | -0.0014 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0004 ppm | -0.0008 ppm | 0.0003 ppm | 0.1860 ppm | 0.0814 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0019 ppm | -0.0010 ppm | 0.0003 ppm | 0.1888 ppm | 0.1160 ppm | -0.0007 ppm |
| Concentration RSD | 1,611.8 % | 71.3 % | 40.7 % | 59.5 % | 0.7 % | 25.3 % | 135.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4348 ppm | 0.0606 ppm | 0.0000 ppm | 125.3944 ppm | 0.0005 ppm | 0.0015 ppm | 0.0039 ppm |
| Concentration per Run 1 | 0.4332 ppm | 0.0608 ppm | -0.0003 ppm | 125.6926 ppm | 0.0005 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.4335 ppm | 0.0601 ppm | -0.0001 ppm | 125.0193 ppm | -0.0006 ppm | 0.0011 ppm | 0.0045 ppm |
| Concentration per Run 3 | 0.4378 ppm | 0.0609 ppm | 0.0002 ppm | 125.4713 ppm | 0.0016 ppm | 0.0024 ppm | 0.0067 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 651.3 % | 0.3 % | 219.2 % | 53.5 % | 81.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.1767 ppm | -0.0005 ppm | 0.0327 ppm | 0.0000 ppm | -0.0019 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0022 ppm | 0.1754 ppm | -0.0002 ppm | 0.0328 ppm | -0.0002 ppm | -0.0015 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.1799 ppm | -0.0013 ppm | 0.0326 ppm | 0.0000 ppm | -0.0015 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0020 ppm | 0.1746 ppm | 0.0000 ppm | 0.0328 ppm | 0.0003 ppm | -0.0029 ppm | 0.0002 ppm |
| Concentration RSD | 242.6 % | 1.6 % | 135.9 % | 0.3 % | 522.8 % | 43.3 % | 121.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0131 ppm | 100.0559 % | 107.5918 % | 98.4811 % | 97.8829 % | 107.0872 % | 101.9672 % |
| Concentration per Run 1 | 0.0133 ppm | 101.1809 % | 107.5307 % | 99.1326 % | 99.0096 % | 107.3767 % | 102.5597 % |
| Concentration per Run 2 | 0.0128 ppm | 99.4288 % | 106.4394 % | 97.8791 % | 97.0516 % | 105.9111 % | 101.1782 % |
| Concentration per Run 3 | 0.0132 ppm | 99.5580 % | 108.8053 % | 98.4315 % | 97.5874 % | 107.9738 % | 102.1638 % |
| Concentration RSD | 2.1 % | 1.0 % | 1.1 % | 0.6 % | 1.0 % | 1.0 % | 0.7 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-04 WG1974746
Analysis started at: 9/23/2024 1:24:49 PM
Rack 1
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0708 ppm | 0.0013 ppm | 0.0111 ppm | 0.0109 ppm | 0.0000 ppm | 3.3121 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0752 ppm | 0.0030 ppm | 0.0122 ppm | 0.0110 ppm | 0.0000 ppm | 3.3444 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0706 ppm | -0.0004 ppm | 0.0113 ppm | 0.0110 ppm | 0.0000 ppm | 3.3574 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0667 ppm | 0.0015 ppm | 0.0099 ppm | 0.0108 ppm | 0.0000 ppm | 3.2345 ppm |
| Concentration RSD | 15,688.0 % | 6.0 % | 127.0 % | 10.4 % | 1.0 % | 2,212.2 % | 2.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0007 ppm | 0.0005 ppm | 0.0012 ppm | 0.2068 ppm | 0.1942 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0008 ppm | 0.0013 ppm | 0.2098 ppm | 0.1756 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0005 ppm | 0.0002 ppm | 0.0013 ppm | 0.2109 ppm | 0.2209 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0017 ppm | 0.0005 ppm | 0.0010 ppm | 0.1997 ppm | 0.1861 ppm | -0.0009 ppm |
| Concentration RSD | 179.3 % | 123.2 % | 54.3 % | 13.0 % | 3.0 % | 12.2 % | 96.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3048 ppm | 0.0752 ppm | -0.0006 ppm | 121.3341 ppm | 0.0014 ppm | 0.0011 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.3037 ppm | 0.0765 ppm | -0.0005 ppm | 122.6061 ppm | 0.0010 ppm | 0.0016 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.3030 ppm | 0.0760 ppm | -0.0005 ppm | 122.3038 ppm | 0.0019 ppm | 0.0018 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.3077 ppm | 0.0731 ppm | -0.0008 ppm | 119.0923 ppm | 0.0012 ppm | 0.0000 ppm | 0.0045 ppm |
| Concentration RSD | 0.8 % | 2.5 % | 25.6 % | 1.6 % | 30.7 % | 85.0 % | 38.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.2388 ppm | -0.0006 ppm | 0.0186 ppm | 0.0008 ppm | -0.0011 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.2388 ppm | 0.0000 ppm | 0.0190 ppm | 0.0011 ppm | -0.0019 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.2387 ppm | -0.0014 ppm | 0.0187 ppm | 0.0008 ppm | -0.0012 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0012 ppm | 0.2390 ppm | -0.0005 ppm | 0.0181 ppm | 0.0006 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration RSD | 121.2 % | 0.1 % | 120.9 % | 2.5 % | 29.1 % | 74.3 % | 43.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0125 ppm | 100.1784 % | 109.2820 % | 99.6493 % | 97.6059 % | 107.9363 % | 102.7185 % |
| Concentration per Run 1 | 0.0126 ppm | 102.2875 % | 108.3862 % | 99.2854 % | 99.5771 % | 106.9808 % | 102.3708 % |
| Concentration per Run 2 | 0.0123 ppm | 98.8195 % | 107.3854 % | 100.2599 % | 96.3182 % | 106.0412 % | 103.3721 % |
| Concentration per Run 3 | 0.0125 ppm | 99.4281 % | 112.0746 % | 99.4025 % | 96.9225 % | 110.7869 % | 102.4126 % |
| Concentration RSD | 1.3 % | 1.8 % | 2.3 % | 0.5 % | 1.8 % | 2.3 % | 0.6 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-05 WG1974746
Analysis started at: 9/23/2024 1:28:43 PM
Rack 1
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.1073 ppm | 0.0013 ppm | 0.0073 ppm | 0.0165 ppm | 0.0001 ppm | 2.9797 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.1119 ppm | 0.0011 ppm | 0.0092 ppm | 0.0164 ppm | 0.0001 ppm | 2.9602 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.1016 ppm | 0.0022 ppm | 0.0052 ppm | 0.0166 ppm | 0.0001 ppm | 3.0038 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.1085 ppm | 0.0006 ppm | 0.0074 ppm | 0.0164 ppm | 0.0001 ppm | 2.9749 ppm |
| Concentration RSD | 62.9 % | 4.9 % | 60.7 % | 27.7 % | 0.8 % | 4.8 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0006 ppm | 0.0019 ppm | 0.0007 ppm | 0.3966 ppm | 0.1591 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0012 ppm | 0.0015 ppm | 0.0003 ppm | 0.3943 ppm | 0.1589 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0004 ppm | 0.0024 ppm | 0.0010 ppm | 0.4022 ppm | 0.1585 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0004 ppm | 0.0017 ppm | 0.0010 ppm | 0.3934 ppm | 0.1600 ppm | -0.0001 ppm |
| Concentration RSD | 79.9 % | 72.3 % | 24.7 % | 56.2 % | 1.2 % | 0.5 % | 425.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3196 ppm | 0.0338 ppm | -0.0007 ppm | 128.0704 ppm | 0.0048 ppm | 0.0011 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.3200 ppm | 0.0338 ppm | -0.0005 ppm | 127.2108 ppm | 0.0046 ppm | -0.0001 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.3214 ppm | 0.0340 ppm | -0.0006 ppm | 128.9580 ppm | 0.0048 ppm | 0.0014 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.3173 ppm | 0.0336 ppm | -0.0009 ppm | 128.0425 ppm | 0.0050 ppm | 0.0020 ppm | -0.0024 ppm |
| Concentration RSD | 0.7 % | 0.6 % | 30.4 % | 0.7 % | 4.6 % | 95.9 % | 496.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.1488 ppm | -0.0010 ppm | 0.0133 ppm | 0.0003 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.1473 ppm | -0.0012 ppm | 0.0133 ppm | 0.0003 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.1472 ppm | -0.0006 ppm | 0.0134 ppm | 0.0003 ppm | 0.0010 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.1519 ppm | -0.0013 ppm | 0.0133 ppm | 0.0003 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration RSD | 32.7 % | 1.8 % | 35.0 % | 0.5 % | 1.5 % | 146.6 % | 46.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0090 ppm | 100.3128 % | 107.7709 % | 98.8502 % | 97.9626 % | 106.9003 % | 102.1887 % |
| Concentration per Run 1 | 0.0089 ppm | 100.5676 % | 107.7652 % | 99.1227 % | 98.1227 % | 106.5479 % | 102.4929 % |
| Concentration per Run 2 | 0.0092 ppm | 100.3567 % | 107.7624 % | 98.1945 % | 97.8534 % | 107.1921 % | 101.7088 % |
| Concentration per Run 3 | 0.0088 ppm | 100.0142 % | 107.7851 % | 99.2335 % | 97.9119 % | 106.9608 % | 102.3643 % |
| Concentration RSD | 2.4 % | 0.3 % | 0.0 % | 0.6 % | 0.1 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453583-06 WG1974746
Analysis started at: 9/23/2024 1:32:37 PM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0340 ppm | -0.0003 ppm | 0.0055 ppm | 0.0170 ppm | 0.0001 ppm | 1.5607 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0403 ppm | 0.0000 ppm | 0.0066 ppm | 0.0170 ppm | 0.0000 ppm | 1.5610 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0278 ppm | -0.0009 ppm | 0.0044 ppm | 0.0170 ppm | 0.0001 ppm | 1.5591 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0340 ppm | -0.0001 ppm | 0.0057 ppm | 0.0169 ppm | 0.0001 ppm | 1.5620 ppm |
| Concentration RSD | 258.7 % | 18.4 % | 154.2 % | 20.5 % | 0.4 % | 88.9 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0013 ppm | -0.0006 ppm | 0.0010 ppm | 0.1445 ppm | 0.0840 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0012 ppm | -0.0002 ppm | 0.0009 ppm | 0.1448 ppm | 0.0654 ppm | -0.0017 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0015 ppm | -0.0008 ppm | 0.0012 ppm | 0.1438 ppm | 0.0993 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0010 ppm | -0.0009 ppm | 0.0008 ppm | 0.1449 ppm | 0.0872 ppm | -0.0027 ppm |
| Concentration RSD | 168.9 % | 20.2 % | 61.9 % | 21.7 % | 0.4 % | 20.4 % | 132.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5114 ppm | 0.0489 ppm | -0.0004 ppm | 127.5299 ppm | 0.0012 ppm | 0.0033 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.5093 ppm | 0.0489 ppm | -0.0007 ppm | 127.4451 ppm | 0.0012 ppm | 0.0054 ppm | -0.0019 ppm |
| Concentration per Run 2 | 0.5110 ppm | 0.0490 ppm | -0.0005 ppm | 127.0321 ppm | 0.0007 ppm | 0.0025 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.5138 ppm | 0.0487 ppm | 0.0002 ppm | 128.1126 ppm | 0.0015 ppm | 0.0019 ppm | 0.0014 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 143.6 % | 0.4 % | 32.9 % | 56.9 % | 1,340.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.1125 ppm | -0.0016 ppm | 0.0089 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.1100 ppm | -0.0009 ppm | 0.0089 ppm | -0.0001 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0052 ppm | 0.1138 ppm | -0.0024 ppm | 0.0089 ppm | 0.0001 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.1136 ppm | -0.0016 ppm | 0.0090 ppm | 0.0001 ppm | -0.0006 ppm | 0.0004 ppm |
| Concentration RSD | 231.4 % | 1.9 % | 43.9 % | 0.6 % | 1,330.1 % | 1,056.8 % | 43.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0122 ppm | 99.4751 % | 105.1665 % | 98.5755 % | 97.2678 % | 104.6005 % | 101.8730 % |
| Concentration per Run 1 | 0.0120 ppm | 99.9676 % | 105.9143 % | 98.4171 % | 97.9192 % | 105.2471 % | 101.9840 % |
| Concentration per Run 2 | 0.0120 ppm | 98.5941 % | 105.0625 % | 98.9627 % | 96.1972 % | 104.6538 % | 102.2150 % |
| Concentration per Run 3 | 0.0125 ppm | 99.8636 % | 104.5229 % | 98.3469 % | 97.6870 % | 103.9004 % | 101.4200 % |
| Concentration RSD | 2.1 % | 0.8 % | 0.7 % | 0.3 % | 1.0 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCV
Analysis started at: 9/23/2024 1:36:31 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5109 ppm | 0.4796 ppm | 0.4822 ppm | 0.4940 ppm | 0.4973 ppm | 0.5109 ppm | 0.4934 ppm |
| Concentration per Run 1 | 0.5107 ppm | 0.4685 ppm | 0.4811 ppm | 0.4977 ppm | 0.4932 ppm | 0.5114 ppm | 0.4887 ppm |
| Concentration per Run 2 | 0.5108 ppm | 0.4825 ppm | 0.4836 ppm | 0.4914 ppm | 0.4983 ppm | 0.5100 ppm | 0.4997 ppm |
| Concentration per Run 3 | 0.5112 ppm | 0.4878 ppm | 0.4818 ppm | 0.4930 ppm | 0.5005 ppm | 0.5114 ppm | 0.4918 ppm |
| Recovery Percentage 1 | 102.178 % | 95.918 % | 96.430 % | 98.806 % | 99.468 % | 102.184 % | 98.681 % |
| Concentration RSD | 0.0 % | 2.1 % | 0.3 % | 0.7 % | 0.8 % | 0.2 % | 1.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5070 ppm | 0.5121 ppm | 0.4915 ppm | 0.4937 ppm | 0.4983 ppm | 5.2005 ppm | 0.4915 ppm |
| Concentration per Run 1 | 0.5072 ppm | 0.5104 ppm | 0.4913 ppm | 0.4927 ppm | 0.4969 ppm | 5.2113 ppm | 0.4908 ppm |
| Concentration per Run 2 | 0.5063 ppm | 0.5123 ppm | 0.4912 ppm | 0.4947 ppm | 0.4972 ppm | 5.1810 ppm | 0.4907 ppm |
| Concentration per Run 3 | 0.5077 ppm | 0.5138 ppm | 0.4921 ppm | 0.4937 ppm | 0.5008 ppm | 5.2093 ppm | 0.4929 ppm |
| Recovery Percentage 1 | 101.408 % | 102.428 % | 98.304 % | 98.747 % | 99.656 % | 104.010 % | 98.297 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.1 % | 0.2 % | 0.4 % | 0.3 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4925 ppm | 0.4908 ppm | 0.4902 ppm | 9.9795 ppm | 0.5106 ppm | 0.4991 ppm | 0.5059 ppm |
| Concentration per Run 1 | 0.4923 ppm | 0.4923 ppm | 0.4883 ppm | 9.9372 ppm | 0.5096 ppm | 0.5003 ppm | 0.5042 ppm |
| Concentration per Run 2 | 0.4908 ppm | 0.4886 ppm | 0.4891 ppm | 9.9798 ppm | 0.5090 ppm | 0.5006 ppm | 0.5049 ppm |
| Concentration per Run 3 | 0.4945 ppm | 0.4913 ppm | 0.4930 ppm | 10.0217 ppm | 0.5133 ppm | 0.4963 ppm | 0.5085 ppm |
| Recovery Percentage 1 | 98.508 % | 98.153 % | 98.030 % | 99.795 % | 102.126 % | 99.812 % | 101.180 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.5 % | 0.4 % | 0.5 % | 0.5 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4968 ppm | 5.3662 ppm | 0.4815 ppm | 0.4743 ppm | 0.5019 ppm | 0.4995 ppm | 0.4898 ppm |
| Concentration per Run 1 | 0.5025 ppm | 5.3541 ppm | 0.4796 ppm | 0.4703 ppm | 0.5028 ppm | 0.5023 ppm | 0.4900 ppm |
| Concentration per Run 2 | 0.4979 ppm | 5.3709 ppm | 0.4841 ppm | 0.4752 ppm | 0.5009 ppm | 0.5002 ppm | 0.4898 ppm |
| Concentration per Run 3 | 0.4900 ppm | 5.3736 ppm | 0.4809 ppm | 0.4773 ppm | 0.5018 ppm | 0.4960 ppm | 0.4898 ppm |
| Recovery Percentage 1 | 99.360 % | 102.213 % | 96.302 % | 94.852 % | 100.372 % | 99.904 % | 97.969 % |
| Concentration RSD | 1.3 % | 0.2 % | 0.5 % | 0.8 % | 0.2 % | 0.6 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5099 ppm | 99.8429 % | 103.0027 % | 103.3382 % | 97.9365 % | 101.7865 % | 102.1251 % |
| Concentration per Run 1 | 0.5095 ppm | 100.7269 % | 103.6183 % | 103.6136 % | 98.8636 % | 102.1256 % | 102.4494 % |
| Concentration per Run 2 | 0.5091 ppm | 100.0866 % | 103.1127 % | 102.9368 % | 98.2339 % | 101.6603 % | 101.8142 % |
| Concentration per Run 3 | 0.5112 ppm | 98.7152 % | 102.2772 % | 103.4642 % | 96.7120 % | 101.5735 % | 102.1116 % |
| Recovery Percentage 1 | 101.986 % | | | | | | |
| Concentration RSD | 0.2 % | 1.0 % | 0.7 % | 0.3 % | 1.1 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCB
Analysis started at: 9/23/2024 1:40:25 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0044 ppm | 0.0014 ppm | 0.0004 ppm | -0.0001 ppm | -0.0001 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | 0.0024 ppm | 0.0018 ppm | 0.0000 ppm | 0.0000 ppm | 0.0071 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0119 ppm | 0.0013 ppm | 0.0015 ppm | -0.0001 ppm | -0.0001 ppm | 0.0043 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0015 ppm | 0.0006 ppm | -0.0021 ppm | -0.0002 ppm | 0.0000 ppm | -0.0010 ppm |
| Recovery Percentage 1 | -5.740 % | -4.433 % | 28.698 % | 1.261 % | -1.260 % | -1.278 % | 3.472 % |
| Concentration RSD | 73.7 % | 147.4 % | 65.0 % | 579.0 % | 97.2 % | 61.9 % | 118.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0015 ppm | 0.0030 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0003 ppm | -0.0013 ppm | 0.0183 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0006 ppm | -0.0002 ppm | 0.0002 ppm | -0.0001 ppm | 0.0021 ppm | -0.0013 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0031 ppm | -0.0113 ppm | -0.0014 ppm |
| Recovery Percentage 1 | 0.805 % | 1.359 % | -0.032 % | 0.691 % | -2.975 % | 0.122 % | -26.555 % |
| Concentration RSD | 556.7 % | 99.7 % | 5,622.4 % | 470.4 % | 103.4 % | 486.5 % | 2.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 0.0001 ppm | 0.0007 ppm | 0.0065 ppm | 0.0005 ppm | -0.0006 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0004 ppm | 0.0001 ppm | 0.0063 ppm | 0.0010 ppm | -0.0015 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0018 ppm | 0.0000 ppm | 0.0008 ppm | 0.0071 ppm | 0.0007 ppm | 0.0005 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0046 ppm | 0.0000 ppm | 0.0011 ppm | 0.0060 ppm | -0.0001 ppm | -0.0009 ppm | 0.0045 ppm |
| Recovery Percentage 1 | -2.469 % | 1.384 % | 1.396 % | 0.324 % | 2.068 % | -6.267 % | 3.785 % |
| Concentration RSD | 76.7 % | 170.4 % | 74.4 % | 8.8 % | 110.2 % | 169.1 % | 132.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0031 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0021 ppm | 0.0027 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0031 ppm | 0.0024 ppm | -0.0003 ppm | -0.0001 ppm | -0.0001 ppm | -0.0006 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.0043 ppm | 0.0004 ppm | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 16.340 % | 0.628 % | -0.002 % | 0.982 % | 0.323 % | -0.795 % | 4.821 % |
| Concentration RSD | 199.6 % | 31.9 % | 38,929.3 % | 168.5 % | 309.6 % | 229.5 % | 52.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 99.0238 % | 101.0520 % | 102.5084 % | 98.7105 % | 101.2299 % | 102.4571 % |
| Concentration per Run 1 | -0.0005 ppm | 99.4252 % | 101.2421 % | 102.0054 % | 99.2298 % | 101.6460 % | 101.8240 % |
| Concentration per Run 2 | -0.0008 ppm | 98.5794 % | 100.6121 % | 102.7253 % | 98.1489 % | 100.4987 % | 102.8676 % |
| Concentration per Run 3 | -0.0008 ppm | 99.0669 % | 101.3018 % | 102.7944 % | 98.7530 % | 101.5451 % | 102.6798 % |
| Recovery Percentage 1 | -13.463 % | | | | | | |
| Concentration RSD | 28.0 % | 0.4 % | 0.4 % | 0.4 % | 0.5 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974290-1 WG1974290
Analysis started at: 9/23/2024 1:45:24 PM
Rack 1
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0056 ppm | -0.0013 ppm | 0.0006 ppm | 0.0002 ppm | -0.0001 ppm | 0.0118 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0120 ppm | -0.0006 ppm | 0.0011 ppm | 0.0001 ppm | -0.0001 ppm | 0.0127 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.0074 ppm | -0.0018 ppm | -0.0006 ppm | 0.0002 ppm | -0.0001 ppm | 0.0111 ppm |
| Concentration per Run 3 | -0.0012 ppm | -0.0026 ppm | -0.0015 ppm | 0.0013 ppm | 0.0002 ppm | 0.0000 ppm | 0.0115 ppm |
| Recovery Percentage 1 | -12.338 % | 5.608 % | -26.063 % | 1.967 % | 1.635 % | -1.281 % | 11.757 % |
| Concentration RSD | 38.6 % | 132.7 % | 51.2 % | 172.8 % | 31.5 % | 79.1 % | 7.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | 0.0000 ppm | -0.0040 ppm | -0.0392 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | -0.0011 ppm | -0.0003 ppm | -0.0052 ppm | -0.0521 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0005 ppm | -0.0002 ppm | 0.0000 ppm | -0.0007 ppm | -0.0379 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | -0.0007 ppm | 0.0002 ppm | -0.0061 ppm | -0.0278 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -0.594 % | 0.337 % | -6.611 % | -0.271 % | -8.004 % | -1.570 % | -4.066 % |
| Concentration RSD | 256.5 % | 566.3 % | 67.3 % | 1,075.9 % | 72.6 % | 31.0 % | 281.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0001 ppm | 0.0001 ppm | 0.0028 ppm | 0.0006 ppm | 0.0010 ppm | 0.0020 ppm |
| Concentration per Run 1 | -0.0006 ppm | -0.0001 ppm | 0.0001 ppm | 0.0051 ppm | 0.0009 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0001 ppm | -0.0004 ppm | 0.0021 ppm | 0.0008 ppm | 0.0016 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0014 ppm | 0.0001 ppm | 0.0005 ppm | 0.0012 ppm | 0.0002 ppm | 0.0014 ppm | 0.0033 ppm |
| Recovery Percentage 1 | -0.926 % | -0.517 % | 0.151 % | 0.140 % | 2.494 % | 10.219 % | 4.063 % |
| Concentration RSD | 46.6 % | 208.7 % | 584.0 % | 73.9 % | 57.4 % | 84.3 % | 91.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0046 ppm | -0.0015 ppm | 0.0001 ppm | -0.0006 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0043 ppm | -0.0007 ppm | 0.0001 ppm | -0.0006 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0036 ppm | 0.0035 ppm | -0.0025 ppm | 0.0002 ppm | -0.0007 ppm | -0.0002 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0061 ppm | -0.0012 ppm | 0.0001 ppm | -0.0004 ppm | -0.0009 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 13.864 % | 0.924 % | -2.918 % | 1.077 % | -5.626 % | -1.967 % | 3.542 % |
| Concentration RSD | 145.8 % | 29.7 % | 64.2 % | 48.6 % | 32.4 % | 119.5 % | 63.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 96.2012 % | 100.2665 % | 102.3373 % | 96.6166 % | 100.3170 % | 101.1463 % |
| Concentration per Run 1 | -0.0005 ppm | 95.9264 % | 99.3090 % | 101.3428 % | 96.7542 % | 99.6589 % | 100.4338 % |
| Concentration per Run 2 | -0.0005 ppm | 96.7374 % | 99.9135 % | 104.5823 % | 97.1462 % | 100.2754 % | 103.4033 % |
| Concentration per Run 3 | -0.0004 ppm | 95.9398 % | 101.5771 % | 101.0869 % | 95.9494 % | 101.0166 % | 99.6019 % |
| Recovery Percentage 1 | -8.829 % | | | | | | |
| Concentration RSD | 17.2 % | 0.5 % | 1.2 % | 1.9 % | 0.6 % | 0.7 % | 2.0 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453053-02 WG1973830
Analysis started at: 9/23/2024 1:49:26 PM
Rack 1
Vial 34
Comment rr Al

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0006 ppm | 0.0020 ppm | 0.0289 ppm | 0.0247 ppm | -0.0001 ppm | 10.9746 ppm |
| Concentration per Run 1 | -0.0014 ppm | -0.0084 ppm | 0.0026 ppm | 0.0292 ppm | 0.0247 ppm | -0.0001 ppm | 11.0372 ppm |
| Concentration per Run 2 | -0.0007 ppm | 0.0082 ppm | 0.0012 ppm | 0.0305 ppm | 0.0246 ppm | -0.0001 ppm | 10.9199 ppm |
| Concentration per Run 3 | -0.0006 ppm | -0.0016 ppm | 0.0022 ppm | 0.0270 ppm | 0.0246 ppm | 0.0000 ppm | 10.9668 ppm |
| Concentration RSD | 48.8 % | 1,409.0 % | 36.3 % | 6.2 % | 0.2 % | 48.7 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0078 ppm | -0.0001 ppm | 0.0005 ppm | 2.9224 ppm | 0.9754 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0085 ppm | 0.0000 ppm | 0.0010 ppm | 2.9240 ppm | 0.9923 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0074 ppm | 0.0000 ppm | 0.0000 ppm | 2.9216 ppm | 0.9633 ppm | -0.0024 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0075 ppm | -0.0004 ppm | 0.0004 ppm | 2.9216 ppm | 0.9706 ppm | -0.0006 ppm |
| Concentration RSD | 196.6 % | 8.1 % | 173.8 % | 114.6 % | 0.0 % | 1.5 % | 232.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6704 ppm | 0.1130 ppm | 0.0001 ppm | 8.4784 ppm | 0.0026 ppm | 0.0010 ppm | -0.0001 ppm |
| Concentration per Run 1 | 4.7085 ppm | 0.1134 ppm | 0.0004 ppm | 8.5013 ppm | 0.0036 ppm | 0.0004 ppm | 0.0035 ppm |
| Concentration per Run 2 | 4.6727 ppm | 0.1128 ppm | 0.0004 ppm | 8.4483 ppm | 0.0025 ppm | 0.0017 ppm | -0.0029 ppm |
| Concentration per Run 3 | 4.6299 ppm | 0.1127 ppm | -0.0004 ppm | 8.4856 ppm | 0.0016 ppm | 0.0009 ppm | -0.0009 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 413.6 % | 0.3 % | 37.5 % | 66.8 % | 2,365.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 7.5954 ppm | -0.0013 ppm | 0.0401 ppm | 0.0004 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0011 ppm | 7.6669 ppm | -0.0024 ppm | 0.0401 ppm | 0.0007 ppm | -0.0012 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0027 ppm | 7.6318 ppm | -0.0005 ppm | 0.0399 ppm | 0.0001 ppm | -0.0011 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0023 ppm | 7.4876 ppm | -0.0010 ppm | 0.0402 ppm | 0.0005 ppm | 0.0016 ppm | 0.0002 ppm |
| Concentration RSD | 40.1 % | 1.3 % | 76.5 % | 0.3 % | 66.7 % | 743.2 % | 51.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0075 ppm | 99.0296 % | 102.2270 % | 102.8208 % | 98.7964 % | 101.7680 % | 103.0275 % |
| Concentration per Run 1 | 0.0075 ppm | 97.8517 % | 100.9111 % | 103.6813 % | 98.0805 % | 100.7714 % | 104.2435 % |
| Concentration per Run 2 | 0.0075 ppm | 100.0494 % | 102.7359 % | 102.2411 % | 99.6247 % | 102.1598 % | 101.9975 % |
| Concentration per Run 3 | 0.0074 ppm | 99.1878 % | 103.0342 % | 102.5400 % | 98.6840 % | 102.3729 % | 102.8414 % |
| Concentration RSD | 0.7 % | 1.1 % | 1.1 % | 0.7 % | 0.8 % | 0.9 % | 1.1 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453053-03 WG1973830
Analysis started at: 9/23/2024 1:53:21 PM
Rack 1
Vial 35
Comment rr Al

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 0.0241 ppm | -0.0002 ppm | 0.0135 ppm | 0.0278 ppm | -0.0001 ppm | 32.2998 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0242 ppm | 0.0028 ppm | 0.0144 ppm | 0.0279 ppm | 0.0000 ppm | 32.1990 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0344 ppm | -0.0009 ppm | 0.0136 ppm | 0.0277 ppm | -0.0001 ppm | 32.3063 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0137 ppm | -0.0025 ppm | 0.0123 ppm | 0.0277 ppm | -0.0001 ppm | 32.3940 ppm |
| Concentration RSD | 48.2 % | 42.9 % | 1,194.2 % | 7.8 % | 0.5 % | 49.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0003 ppm | 0.0012 ppm | 0.0796 ppm | 1.2399 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | 0.0004 ppm | 0.0016 ppm | 0.0794 ppm | 1.2548 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0806 ppm | 1.2172 ppm | -0.0014 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0005 ppm | 0.0002 ppm | 0.0010 ppm | 0.0788 ppm | 1.2477 ppm | -0.0005 ppm |
| Concentration RSD | 32.9 % | 617.9 % | 34.0 % | 32.7 % | 1.1 % | 1.6 % | 184.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.1626 ppm | 0.0105 ppm | -0.0001 ppm | 3.7818 ppm | 0.0006 ppm | 0.0004 ppm | 0.0034 ppm |
| Concentration per Run 1 | 9.2242 ppm | 0.0105 ppm | -0.0008 ppm | 3.7791 ppm | 0.0001 ppm | 0.0006 ppm | 0.0042 ppm |
| Concentration per Run 2 | 9.1843 ppm | 0.0106 ppm | 0.0001 ppm | 3.7770 ppm | 0.0004 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | 9.0793 ppm | 0.0106 ppm | 0.0003 ppm | 3.7892 ppm | 0.0014 ppm | 0.0003 ppm | 0.0064 ppm |
| Concentration RSD | 0.8 % | 0.7 % | 428.5 % | 0.2 % | 113.3 % | 55.9 % | 102.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 2.9384 ppm | -0.0022 ppm | 0.0627 ppm | 0.0014 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0039 ppm | 2.9443 ppm | -0.0021 ppm | 0.0629 ppm | 0.0011 ppm | -0.0007 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0023 ppm | 2.9457 ppm | -0.0025 ppm | 0.0623 ppm | 0.0019 ppm | -0.0014 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0023 ppm | 2.9252 ppm | -0.0019 ppm | 0.0628 ppm | 0.0012 ppm | -0.0002 ppm | 0.0007 ppm |
| Concentration RSD | 33.5 % | 0.4 % | 14.4 % | 0.5 % | 29.0 % | 76.1 % | 42.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 97.4176 % | 101.1393 % | 101.7217 % | 97.2221 % | 101.0026 % | 102.2527 % |
| Concentration per Run 1 | 0.0031 ppm | 97.7347 % | 101.0704 % | 100.7777 % | 97.8750 % | 100.6874 % | 101.0495 % |
| Concentration per Run 2 | 0.0025 ppm | 97.4448 % | 101.1571 % | 102.7616 % | 96.9894 % | 101.0517 % | 103.4779 % |
| Concentration per Run 3 | 0.0029 ppm | 97.0732 % | 101.1904 % | 101.6257 % | 96.8018 % | 101.2688 % | 102.2309 % |
| Concentration RSD | 11.7 % | 0.3 % | 0.1 % | 1.0 % | 0.6 % | 0.3 % | 1.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453053-04 WG1973830
Analysis started at: 9/23/2024 1:57:16 PM
Rack 1
Vial 36
Comment rr Al

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0672 ppm | -0.0011 ppm | 0.0058 ppm | 0.0280 ppm | 0.0000 ppm | 16.3742 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0774 ppm | -0.0002 ppm | 0.0062 ppm | 0.0280 ppm | 0.0000 ppm | 16.3058 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0735 ppm | -0.0022 ppm | 0.0056 ppm | 0.0279 ppm | 0.0000 ppm | 16.4138 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0508 ppm | -0.0008 ppm | 0.0057 ppm | 0.0281 ppm | -0.0001 ppm | 16.4030 ppm |
| Concentration RSD | 59.4 % | 21.3 % | 96.2 % | 5.7 % | 0.3 % | 172.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0020 ppm | 0.0001 ppm | 0.0006 ppm | 3.5016 ppm | 0.9054 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0021 ppm | 0.0001 ppm | 0.0007 ppm | 3.4998 ppm | 0.9059 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0014 ppm | 0.0002 ppm | 0.0008 ppm | 3.5078 ppm | 0.9085 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0025 ppm | 0.0000 ppm | 0.0003 ppm | 3.4971 ppm | 0.9017 ppm | 0.0017 ppm |
| Concentration RSD | 65.5 % | 27.0 % | 66.7 % | 43.7 % | 0.2 % | 0.4 % | 75.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7997 ppm | 0.2203 ppm | -0.0003 ppm | 7.7387 ppm | 0.0005 ppm | 0.0012 ppm | 0.0013 ppm |
| Concentration per Run 1 | 5.8266 ppm | 0.2198 ppm | 0.0001 ppm | 7.7217 ppm | 0.0006 ppm | 0.0015 ppm | 0.0014 ppm |
| Concentration per Run 2 | 5.7824 ppm | 0.2206 ppm | 0.0000 ppm | 7.7525 ppm | 0.0005 ppm | 0.0008 ppm | 0.0011 ppm |
| Concentration per Run 3 | 5.7902 ppm | 0.2205 ppm | -0.0009 ppm | 7.7421 ppm | 0.0005 ppm | 0.0013 ppm | 0.0015 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 214.6 % | 0.2 % | 8.0 % | 28.6 % | 17.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 9.7273 ppm | -0.0023 ppm | 0.0830 ppm | 0.0034 ppm | -0.0005 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0023 ppm | 9.7704 ppm | -0.0028 ppm | 0.0830 ppm | 0.0037 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0025 ppm | 9.7120 ppm | -0.0022 ppm | 0.0827 ppm | 0.0031 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0003 ppm | 9.6996 ppm | -0.0020 ppm | 0.0833 ppm | 0.0033 ppm | -0.0013 ppm | 0.0010 ppm |
| Concentration RSD | 106.6 % | 0.4 % | 18.0 % | 0.4 % | 8.4 % | 123.9 % | 63.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 98.9297 % | 102.4620 % | 102.3157 % | 98.3473 % | 101.4452 % | 102.6550 % |
| Concentration per Run 1 | 0.0007 ppm | 98.3638 % | 103.2491 % | 102.7551 % | 98.5077 % | 102.3341 % | 103.0405 % |
| Concentration per Run 2 | 0.0007 ppm | 99.3767 % | 101.7658 % | 102.5916 % | 98.7411 % | 100.7435 % | 102.8174 % |
| Concentration per Run 3 | 0.0007 ppm | 99.0487 % | 102.3711 % | 101.6004 % | 97.7931 % | 101.2580 % | 102.1070 % |
| Concentration RSD | 2.2 % | 0.5 % | 0.7 % | 0.6 % | 0.5 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2453053-05 WG1973830
Analysis started at: 9/23/2024 2:01:12 PM
Rack 1
Vial 37
Comment rr Al

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.0018 ppm | 0.0012 ppm | 0.0287 ppm | 0.0244 ppm | -0.0001 ppm | 10.8040 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0030 ppm | 0.0020 ppm | 0.0283 ppm | 0.0245 ppm | -0.0001 ppm | 10.7411 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0085 ppm | -0.0002 ppm | 0.0299 ppm | 0.0243 ppm | -0.0001 ppm | 10.8443 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0061 ppm | 0.0018 ppm | 0.0277 ppm | 0.0245 ppm | -0.0001 ppm | 10.8267 ppm |
| Concentration RSD | 61.3 % | 405.3 % | 103.1 % | 4.0 % | 0.5 % | 18.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0079 ppm | -0.0003 ppm | 0.0006 ppm | 2.8718 ppm | 0.9760 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0082 ppm | 0.0001 ppm | 0.0006 ppm | 2.8779 ppm | 0.9959 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0080 ppm | -0.0007 ppm | 0.0006 ppm | 2.8616 ppm | 0.9641 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0076 ppm | -0.0003 ppm | 0.0005 ppm | 2.8759 ppm | 0.9679 ppm | 0.0017 ppm |
| Concentration RSD | 164.0 % | 4.1 % | 141.3 % | 5.6 % | 0.3 % | 1.8 % | 81.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6080 ppm | 0.1105 ppm | -0.0002 ppm | 8.3788 ppm | 0.0024 ppm | -0.0007 ppm | -0.0004 ppm |
| Concentration per Run 1 | 4.6207 ppm | 0.1102 ppm | -0.0001 ppm | 8.3206 ppm | 0.0030 ppm | -0.0002 ppm | -0.0036 ppm |
| Concentration per Run 2 | 4.5987 ppm | 0.1107 ppm | -0.0001 ppm | 8.4118 ppm | 0.0030 ppm | -0.0007 ppm | 0.0029 ppm |
| Concentration per Run 3 | 4.6046 ppm | 0.1106 ppm | -0.0003 ppm | 8.4039 ppm | 0.0014 ppm | -0.0012 ppm | -0.0003 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 76.4 % | 0.6 % | 37.5 % | 73.7 % | 913.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 7.5252 ppm | -0.0014 ppm | 0.0396 ppm | 0.0003 ppm | 0.0005 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0017 ppm | 7.5267 ppm | -0.0008 ppm | 0.0397 ppm | 0.0002 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0006 ppm | 7.4973 ppm | -0.0020 ppm | 0.0394 ppm | 0.0003 ppm | 0.0015 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0035 ppm | 7.5515 ppm | -0.0015 ppm | 0.0396 ppm | 0.0003 ppm | -0.0004 ppm | 0.0002 ppm |
| Concentration RSD | 323.6 % | 0.4 % | 43.1 % | 0.3 % | 18.1 % | 178.7 % | 58.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 98.9275 % | 102.2221 % | 102.7300 % | 98.3148 % | 101.8508 % | 102.6645 % |
| Concentration per Run 1 | 0.0074 ppm | 98.9833 % | 102.9753 % | 102.9249 % | 99.0424 % | 102.0313 % | 103.1892 % |
| Concentration per Run 2 | 0.0075 ppm | 98.4871 % | 102.4493 % | 102.3206 % | 97.7561 % | 102.7130 % | 102.1654 % |
| Concentration per Run 3 | 0.0072 ppm | 99.3120 % | 101.2418 % | 102.9445 % | 98.1459 % | 100.8082 % | 102.6390 % |
| Concentration RSD | 2.4 % | 0.4 % | 0.9 % | 0.3 % | 0.7 % | 0.9 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: L2450818-13D2 WG1974337
Analysis started at: 9/23/2024 2:05:04 PM
Rack 1
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0036 ppm | 57.4321 ppm | 0.0699 ppm | 0.0500 ppm | 1.8457 ppm | 0.0062 ppm | 160.3644 ppm |
| Concentration per Run 1 | 0.0039 ppm | 57.5002 ppm | 0.0687 ppm | 0.0497 ppm | 1.8485 ppm | 0.0062 ppm | 160.5732 ppm |
| Concentration per Run 2 | 0.0033 ppm | 57.5298 ppm | 0.0703 ppm | 0.0513 ppm | 1.8401 ppm | 0.0063 ppm | 160.2507 ppm |
| Concentration per Run 3 | 0.0037 ppm | 57.2662 ppm | 0.0706 ppm | 0.0490 ppm | 1.8484 ppm | 0.0062 ppm | 160.2692 ppm |
| Concentration RSD | 7.6 % | 0.3 % | 1.5 % | 2.3 % | 0.3 % | 1.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 0.1016 ppm | 0.2165 ppm | 5.7862 ppm | 149.0704 ppm | 3.1988 ppm | 0.0553 ppm |
| Concentration per Run 1 | 0.0054 ppm | 0.1013 ppm | 0.2162 ppm | 5.7736 ppm | 149.0881 ppm | 3.2214 ppm | 0.0556 ppm |
| Concentration per Run 2 | 0.0057 ppm | 0.1010 ppm | 0.2167 ppm | 5.8116 ppm | 148.8380 ppm | 3.1747 ppm | 0.0550 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.1024 ppm | 0.2168 ppm | 5.7736 ppm | 149.2852 ppm | 3.2003 ppm | 0.0553 ppm |
| Concentration RSD | 2.7 % | 0.8 % | 0.1 % | 0.4 % | 0.2 % | 0.7 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.6871 ppm | 2.3904 ppm | 0.0292 ppm | 1.2899 ppm | 1.0908 ppm | 6.8541 ppm | 0.0649 ppm |
| Concentration per Run 1 | 21.6166 ppm | 2.3954 ppm | 0.0287 ppm | 1.2879 ppm | 1.0858 ppm | 6.8315 ppm | 0.0660 ppm |
| Concentration per Run 2 | 21.7242 ppm | 2.3872 ppm | 0.0297 ppm | 1.2909 ppm | 1.0904 ppm | 6.8468 ppm | 0.0632 ppm |
| Concentration per Run 3 | 21.7204 ppm | 2.3885 ppm | 0.0293 ppm | 1.2909 ppm | 1.0962 ppm | 6.8840 ppm | 0.0656 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 1.8 % | 0.1 % | 0.5 % | 0.4 % | 2.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 3.5916 ppm | 1.1699 ppm | 0.4243 ppm | 1.3313 ppm | 0.0096 ppm | 4.7627 ppm |
| Concentration per Run 1 | 0.0015 ppm | 3.6200 ppm | 1.1692 ppm | 0.4220 ppm | 1.3394 ppm | 0.0101 ppm | 4.7585 ppm |
| Concentration per Run 2 | 0.0068 ppm | 3.5574 ppm | 1.1729 ppm | 0.4260 ppm | 1.3252 ppm | 0.0092 ppm | 4.7700 ppm |
| Concentration per Run 3 | 0.0044 ppm | 3.5973 ppm | 1.1675 ppm | 0.4249 ppm | 1.3294 ppm | 0.0095 ppm | 4.7598 ppm |
| Concentration RSD | 62.1 % | 0.9 % | 0.2 % | 0.5 % | 0.5 % | 4.8 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5422 ppm | 100.5973 % | 108.6101 % | 98.3268 % | 111.1740 % | 122.8987 % | 116.0204 % |
| Concentration per Run 1 | 5.5395 ppm | 100.7833 % | 108.2603 % | 98.3264 % | 111.4091 % | 122.8849 % | 115.8095 % |
| Concentration per Run 2 | 5.5651 ppm | 100.2147 % | 109.6573 % | 98.8340 % | 110.8729 % | 124.0144 % | 116.5638 % |
| Concentration per Run 3 | 5.5221 ppm | 100.7940 % | 107.9126 % | 97.8201 % | 111.2399 % | 121.7968 % | 115.6879 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.9 % | 0.5 % | 0.2 % | 0.9 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-3D2 WG1974337
Analysis started at: 9/23/2024 2:08:57 PM
Rack 1
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0541 ppm | 70.1589 ppm | 0.1782 ppm | 0.9586 ppm | 3.8970 ppm | 0.0538 ppm | 162.9177 ppm |
| Concentration per Run 1 | 0.0543 ppm | 70.1930 ppm | 0.1801 ppm | 0.9530 ppm | 3.8999 ppm | 0.0539 ppm | 163.1726 ppm |
| Concentration per Run 2 | 0.0539 ppm | 70.2357 ppm | 0.1791 ppm | 0.9584 ppm | 3.9046 ppm | 0.0536 ppm | 162.7873 ppm |
| Concentration per Run 3 | 0.0540 ppm | 70.0479 ppm | 0.1753 ppm | 0.9643 ppm | 3.8866 ppm | 0.0538 ppm | 162.7931 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 1.4 % | 0.6 % | 0.2 % | 0.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0546 ppm | 0.5628 ppm | 0.4435 ppm | 5.4134 ppm | 142.0968 ppm | 13.1639 ppm | 0.0652 ppm |
| Concentration per Run 1 | 0.0544 ppm | 0.5614 ppm | 0.4424 ppm | 5.3951 ppm | 142.3478 ppm | 13.1493 ppm | 0.0649 ppm |
| Concentration per Run 2 | 0.0542 ppm | 0.5605 ppm | 0.4422 ppm | 5.4131 ppm | 141.9192 ppm | 13.1698 ppm | 0.0671 ppm |
| Concentration per Run 3 | 0.0552 ppm | 0.5664 ppm | 0.4459 ppm | 5.4320 ppm | 142.0235 ppm | 13.1726 ppm | 0.0636 ppm |
| Concentration RSD | 1.0 % | 0.6 % | 0.5 % | 0.3 % | 0.2 % | 0.1 % | 2.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 32.5372 ppm | 2.7896 ppm | 0.9497 ppm | 10.8630 ppm | 1.7467 ppm | 5.8728 ppm | 0.5284 ppm |
| Concentration per Run 1 | 32.5116 ppm | 2.7901 ppm | 0.9415 ppm | 10.8250 ppm | 1.7453 ppm | 5.8668 ppm | 0.5280 ppm |
| Concentration per Run 2 | 32.4180 ppm | 2.7891 ppm | 0.9462 ppm | 10.9078 ppm | 1.7434 ppm | 5.8755 ppm | 0.5309 ppm |
| Concentration per Run 3 | 32.6818 ppm | 2.7896 ppm | 0.9615 ppm | 10.8561 ppm | 1.7515 ppm | 5.8760 ppm | 0.5262 ppm |
| Concentration RSD | 0.4 % | 0.0 % | 1.1 % | 0.4 % | 0.2 % | 0.1 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1160 ppm | 4.2602 ppm | 1.5644 ppm | 1.3809 ppm | 2.4846 ppm | 0.1226 ppm | 5.5585 ppm |
| Concentration per Run 1 | 0.1118 ppm | 4.2583 ppm | 1.5559 ppm | 1.3793 ppm | 2.4803 ppm | 0.1251 ppm | 5.5510 ppm |
| Concentration per Run 2 | 0.1162 ppm | 4.2200 ppm | 1.5649 ppm | 1.3835 ppm | 2.4762 ppm | 0.1220 ppm | 5.5424 ppm |
| Concentration per Run 3 | 0.1200 ppm | 4.3024 ppm | 1.5725 ppm | 1.3797 ppm | 2.4974 ppm | 0.1209 ppm | 5.5821 ppm |
| Concentration RSD | 3.5 % | 1.0 % | 0.5 % | 0.2 % | 0.5 % | 1.8 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.3049 ppm | 100.3041 % | 108.7978 % | 98.1128 % | 113.3496 % | 125.7809 % | 117.8676 % |
| Concentration per Run 1 | 4.2858 ppm | 100.8593 % | 108.5064 % | 97.8262 % | 113.8350 % | 125.4996 % | 117.4991 % |
| Concentration per Run 2 | 4.3046 ppm | 100.5942 % | 108.7689 % | 98.4093 % | 113.6769 % | 125.6062 % | 118.4784 % |
| Concentration per Run 3 | 4.3243 ppm | 99.4587 % | 109.1181 % | 98.1028 % | 112.5370 % | 126.2369 % | 117.6251 % |
| Concentration RSD | 0.4 % | 0.7 % | 0.3 % | 0.3 % | 0.6 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-4D2 WG1974337
Analysis started at: 9/23/2024 2:12:50 PM
Rack 1
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 65.1499 ppm | 0.0542 ppm | 0.0383 ppm | 1.7489 ppm | 0.0041 ppm | 144.5391 ppm |
| Concentration per Run 1 | 0.0034 ppm | 64.9060 ppm | 0.0543 ppm | 0.0372 ppm | 1.7458 ppm | 0.0041 ppm | 143.8457 ppm |
| Concentration per Run 2 | 0.0036 ppm | 65.3845 ppm | 0.0531 ppm | 0.0397 ppm | 1.7616 ppm | 0.0042 ppm | 145.3651 ppm |
| Concentration per Run 3 | 0.0036 ppm | 65.1592 ppm | 0.0552 ppm | 0.0380 ppm | 1.7392 ppm | 0.0041 ppm | 144.4064 ppm |
| Concentration RSD | 3.5 % | 0.4 % | 1.9 % | 3.4 % | 0.7 % | 1.5 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0718 ppm | 0.2146 ppm | 4.1803 ppm | 127.1856 ppm | 3.0449 ppm | 0.0555 ppm |
| Concentration per Run 1 | 0.0049 ppm | 0.0711 ppm | 0.2144 ppm | 4.1689 ppm | 126.9109 ppm | 3.0577 ppm | 0.0565 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.0718 ppm | 0.2147 ppm | 4.1908 ppm | 127.7481 ppm | 3.0501 ppm | 0.0554 ppm |
| Concentration per Run 3 | 0.0049 ppm | 0.0726 ppm | 0.2148 ppm | 4.1812 ppm | 126.8978 ppm | 3.0271 ppm | 0.0545 ppm |
| Concentration RSD | 1.0 % | 1.1 % | 0.1 % | 0.3 % | 0.4 % | 0.5 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.8117 ppm | 2.6484 ppm | 0.0203 ppm | 1.0989 ppm | 1.1518 ppm | 5.7026 ppm | 0.0421 ppm |
| Concentration per Run 1 | 20.7317 ppm | 2.6301 ppm | 0.0201 ppm | 1.0940 ppm | 1.1536 ppm | 5.7286 ppm | 0.0410 ppm |
| Concentration per Run 2 | 20.8539 ppm | 2.6616 ppm | 0.0205 ppm | 1.1115 ppm | 1.1559 ppm | 5.6995 ppm | 0.0406 ppm |
| Concentration per Run 3 | 20.8495 ppm | 2.6536 ppm | 0.0202 ppm | 1.0913 ppm | 1.1459 ppm | 5.6796 ppm | 0.0448 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.9 % | 1.0 % | 0.5 % | 0.4 % | 5.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 2.5165 ppm | 0.6164 ppm | 0.4112 ppm | 1.3234 ppm | 0.0085 ppm | 4.5538 ppm |
| Concentration per Run 1 | 0.0033 ppm | 2.5227 ppm | 0.6179 ppm | 0.4104 ppm | 1.3223 ppm | 0.0084 ppm | 4.5380 ppm |
| Concentration per Run 2 | 0.0048 ppm | 2.5513 ppm | 0.6141 ppm | 0.4138 ppm | 1.3278 ppm | 0.0083 ppm | 4.5602 ppm |
| Concentration per Run 3 | 0.0011 ppm | 2.4754 ppm | 0.6173 ppm | 0.4093 ppm | 1.3203 ppm | 0.0087 ppm | 4.5633 ppm |
| Concentration RSD | 60.8 % | 1.5 % | 0.3 % | 0.6 % | 0.3 % | 2.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.1745 ppm | 100.0352 % | 107.3884 % | 98.3446 % | 110.9250 % | 122.3954 % | 116.3387 % |
| Concentration per Run 1 | 3.1781 ppm | 99.3134 % | 107.3378 % | 98.1027 % | 110.0423 % | 122.3671 % | 116.6313 % |
| Concentration per Run 2 | 3.1740 ppm | 101.1113 % | 106.8191 % | 97.8360 % | 112.1663 % | 121.6970 % | 115.7894 % |
| Concentration per Run 3 | 3.1715 ppm | 99.6808 % | 108.0084 % | 99.0952 % | 110.5664 % | 123.1221 % | 116.5954 % |
| Concentration RSD | 0.1 % | 0.9 % | 0.6 % | 0.7 % | 1.0 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-5D2 WG1974337
Analysis started at: 9/23/2024 2:16:43 PM
Rack 1
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0497 ppm | 58.5210 ppm | 0.1891 ppm | 0.9805 ppm | 3.6908 ppm | 0.0544 ppm | 167.1926 ppm |
| Concentration per Run 1 | 0.0498 ppm | 58.3608 ppm | 0.1921 ppm | 0.9734 ppm | 3.6903 ppm | 0.0542 ppm | 166.9020 ppm |
| Concentration per Run 2 | 0.0498 ppm | 58.6095 ppm | 0.1898 ppm | 0.9861 ppm | 3.6968 ppm | 0.0547 ppm | 167.4277 ppm |
| Concentration per Run 3 | 0.0496 ppm | 58.5927 ppm | 0.1855 ppm | 0.9820 ppm | 3.6854 ppm | 0.0543 ppm | 167.2481 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 1.8 % | 0.7 % | 0.2 % | 0.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0536 ppm | 0.5516 ppm | 0.3968 ppm | 5.8683 ppm | 147.0597 ppm | 13.2661 ppm | 0.0557 ppm |
| Concentration per Run 1 | 0.0533 ppm | 0.5489 ppm | 0.3990 ppm | 5.8427 ppm | 147.0851 ppm | 13.2668 ppm | 0.0560 ppm |
| Concentration per Run 2 | 0.0534 ppm | 0.5523 ppm | 0.3956 ppm | 5.8991 ppm | 147.0085 ppm | 13.3444 ppm | 0.0545 ppm |
| Concentration per Run 3 | 0.0541 ppm | 0.5537 ppm | 0.3958 ppm | 5.8629 ppm | 147.0854 ppm | 13.1873 ppm | 0.0565 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 0.5 % | 0.5 % | 0.0 % | 0.6 % | 1.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 30.5857 ppm | 2.8036 ppm | 0.9761 ppm | 11.4166 ppm | 1.5210 ppm | 7.1985 ppm | 0.5215 ppm |
| Concentration per Run 1 | 30.5907 ppm | 2.8001 ppm | 0.9650 ppm | 11.4105 ppm | 1.5197 ppm | 7.2225 ppm | 0.5200 ppm |
| Concentration per Run 2 | 30.5704 ppm | 2.8042 ppm | 0.9768 ppm | 11.4563 ppm | 1.5286 ppm | 7.1755 ppm | 0.5233 ppm |
| Concentration per Run 3 | 30.5959 ppm | 2.8065 ppm | 0.9865 ppm | 11.3830 ppm | 1.5147 ppm | 7.1975 ppm | 0.5213 ppm |
| Concentration RSD | 0.0 % | 0.1 % | 1.1 % | 0.3 % | 0.5 % | 0.3 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1230 ppm | 4.3871 ppm | 2.0793 ppm | 1.3450 ppm | 2.2924 ppm | 0.1224 ppm | 5.1552 ppm |
| Concentration per Run 1 | 0.1211 ppm | 4.3786 ppm | 2.0830 ppm | 1.3440 ppm | 2.3011 ppm | 0.1223 ppm | 5.1513 ppm |
| Concentration per Run 2 | 0.1237 ppm | 4.4170 ppm | 2.0825 ppm | 1.3479 ppm | 2.2872 ppm | 0.1219 ppm | 5.1574 ppm |
| Concentration per Run 3 | 0.1241 ppm | 4.3658 ppm | 2.0724 ppm | 1.3431 ppm | 2.2889 ppm | 0.1229 ppm | 5.1570 ppm |
| Concentration RSD | 1.3 % | 0.6 % | 0.3 % | 0.2 % | 0.3 % | 0.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8577 ppm | 99.6260 % | 107.2037 % | 97.0801 % | 110.0471 % | 121.6062 % | 114.4550 % |
| Concentration per Run 1 | 5.8647 ppm | 99.4901 % | 107.5172 % | 97.1627 % | 109.6940 % | 122.1853 % | 114.6570 % |
| Concentration per Run 2 | 5.8696 ppm | 99.7124 % | 107.5018 % | 96.3947 % | 110.2074 % | 122.0771 % | 113.7885 % |
| Concentration per Run 3 | 5.8390 ppm | 99.6754 % | 106.5921 % | 97.6829 % | 110.2397 % | 120.5562 % | 114.9196 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.5 % | 0.7 % | 0.3 % | 0.7 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: WG1974337-6D10 WG1974337
Analysis started at: 9/23/2024 2:20:37 PM
Rack 1
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 11.8173 ppm | 0.0145 ppm | 0.0112 ppm | 0.3840 ppm | 0.0013 ppm | 33.7323 ppm |
| Concentration per Run 1 | 0.0002 ppm | 11.8439 ppm | 0.0136 ppm | 0.0123 ppm | 0.3876 ppm | 0.0013 ppm | 33.7395 ppm |
| Concentration per Run 2 | 0.0006 ppm | 11.8011 ppm | 0.0172 ppm | 0.0107 ppm | 0.3819 ppm | 0.0013 ppm | 33.6707 ppm |
| Concentration per Run 3 | 0.0010 ppm | 11.8069 ppm | 0.0127 ppm | 0.0106 ppm | 0.3825 ppm | 0.0013 ppm | 33.7866 ppm |
| Concentration RSD | 70.7 % | 0.2 % | 16.4 % | 8.8 % | 0.8 % | 2.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0212 ppm | 0.0452 ppm | 1.1963 ppm | 31.9916 ppm | 0.6729 ppm | 0.0111 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0205 ppm | 0.0451 ppm | 1.1929 ppm | 32.0826 ppm | 0.6916 ppm | 0.0127 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0209 ppm | 0.0448 ppm | 1.1961 ppm | 32.0205 ppm | 0.6860 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0223 ppm | 0.0457 ppm | 1.1998 ppm | 31.8719 ppm | 0.6412 ppm | 0.0101 ppm |
| Concentration RSD | 8.5 % | 4.4 % | 1.0 % | 0.3 % | 0.3 % | 4.1 % | 12.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6032 ppm | 0.4995 ppm | 0.0071 ppm | 0.2686 ppm | 0.2335 ppm | 1.4073 ppm | 0.0219 ppm |
| Concentration per Run 1 | 4.5935 ppm | 0.5012 ppm | 0.0070 ppm | 0.2715 ppm | 0.2336 ppm | 1.4064 ppm | 0.0233 ppm |
| Concentration per Run 2 | 4.6186 ppm | 0.5002 ppm | 0.0071 ppm | 0.2669 ppm | 0.2350 ppm | 1.4059 ppm | 0.0236 ppm |
| Concentration per Run 3 | 4.5973 ppm | 0.4970 ppm | 0.0072 ppm | 0.2673 ppm | 0.2320 ppm | 1.4097 ppm | 0.0188 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 1.7 % | 1.0 % | 0.6 % | 0.1 % | 12.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.7789 ppm | 0.2523 ppm | 0.0879 ppm | 0.2777 ppm | 0.0024 ppm | 0.9875 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.7675 ppm | 0.2505 ppm | 0.0881 ppm | 0.2750 ppm | 0.0030 ppm | 0.9841 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.7892 ppm | 0.2522 ppm | 0.0878 ppm | 0.2769 ppm | 0.0030 ppm | 0.9885 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.7800 ppm | 0.2541 ppm | 0.0877 ppm | 0.2811 ppm | 0.0012 ppm | 0.9899 ppm |
| Concentration RSD | 41.3 % | 1.4 % | 0.7 % | 0.3 % | 1.1 % | 43.5 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1937 ppm | 100.5635 % | 104.9778 % | 102.7333 % | 101.4051 % | 107.0239 % | 106.0853 % |
| Concentration per Run 1 | 1.1915 ppm | 101.7108 % | 104.8677 % | 102.8933 % | 102.8413 % | 106.6949 % | 106.2568 % |
| Concentration per Run 2 | 1.1953 ppm | 100.2056 % | 104.5626 % | 102.6218 % | 100.8621 % | 106.3892 % | 105.9138 % |
| Concentration per Run 3 | 1.1943 ppm | 99.7739 % | 105.5031 % | 102.6848 % | 100.5120 % | 107.9876 % | 106.0854 % |
| Concentration RSD | 0.2 % | 1.0 % | 0.5 % | 0.1 % | 1.2 % | 0.8 % | 0.2 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCV
Analysis started at: 9/23/2024 2:24:31 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5110 ppm | 0.4882 ppm | 0.4851 ppm | 0.4943 ppm | 0.5029 ppm | 0.5141 ppm | 0.5044 ppm |
| Concentration per Run 1 | 0.5080 ppm | 0.4911 ppm | 0.4863 ppm | 0.4920 ppm | 0.5056 ppm | 0.5163 ppm | 0.5082 ppm |
| Concentration per Run 2 | 0.5105 ppm | 0.4919 ppm | 0.4832 ppm | 0.4942 ppm | 0.5052 ppm | 0.5149 ppm | 0.5027 ppm |
| Concentration per Run 3 | 0.5145 ppm | 0.4817 ppm | 0.4858 ppm | 0.4967 ppm | 0.4979 ppm | 0.5112 ppm | 0.5022 ppm |
| Recovery Percentage 1 | 102.203 % | 97.647 % | 97.017 % | 98.856 % | 100.583 % | 102.823 % | 100.872 % |
| Concentration RSD | 0.6 % | 1.2 % | 0.3 % | 0.5 % | 0.9 % | 0.5 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5040 ppm | 0.5117 ppm | 0.4924 ppm | 0.4947 ppm | 0.5054 ppm | 5.2171 ppm | 0.4969 ppm |
| Concentration per Run 1 | 0.5024 ppm | 0.5097 ppm | 0.4917 ppm | 0.4939 ppm | 0.5041 ppm | 5.2485 ppm | 0.4960 ppm |
| Concentration per Run 2 | 0.5056 ppm | 0.5130 ppm | 0.4910 ppm | 0.4952 ppm | 0.5037 ppm | 5.2075 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.5042 ppm | 0.5124 ppm | 0.4945 ppm | 0.4951 ppm | 0.5083 ppm | 5.1952 ppm | 0.4961 ppm |
| Recovery Percentage 1 | 100.808 % | 102.336 % | 98.476 % | 98.945 % | 101.072 % | 104.342 % | 99.375 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.4 % | 0.1 % | 0.5 % | 0.5 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4921 ppm | 0.4916 ppm | 0.4923 ppm | 10.0271 ppm | 0.5105 ppm | 0.5023 ppm | 0.5089 ppm |
| Concentration per Run 1 | 0.4918 ppm | 0.4936 ppm | 0.4887 ppm | 10.0678 ppm | 0.5089 ppm | 0.5030 ppm | 0.5105 ppm |
| Concentration per Run 2 | 0.4937 ppm | 0.4919 ppm | 0.4946 ppm | 10.0524 ppm | 0.5108 ppm | 0.5014 ppm | 0.5086 ppm |
| Concentration per Run 3 | 0.4909 ppm | 0.4893 ppm | 0.4935 ppm | 9.9613 ppm | 0.5118 ppm | 0.5025 ppm | 0.5076 ppm |
| Recovery Percentage 1 | 98.425 % | 98.318 % | 98.456 % | 100.271 % | 102.095 % | 100.458 % | 101.772 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.6 % | 0.6 % | 0.3 % | 0.2 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5009 ppm | 5.3721 ppm | 0.4882 ppm | 0.4821 ppm | 0.5017 ppm | 0.5023 ppm | 0.4906 ppm |
| Concentration per Run 1 | 0.4990 ppm | 5.3497 ppm | 0.4884 ppm | 0.4839 ppm | 0.4993 ppm | 0.5012 ppm | 0.4886 ppm |
| Concentration per Run 2 | 0.5022 ppm | 5.3707 ppm | 0.4875 ppm | 0.4861 ppm | 0.5013 ppm | 0.5009 ppm | 0.4919 ppm |
| Concentration per Run 3 | 0.5014 ppm | 5.3959 ppm | 0.4888 ppm | 0.4764 ppm | 0.5045 ppm | 0.5049 ppm | 0.4912 ppm |
| Recovery Percentage 1 | 100.177 % | 102.326 % | 97.647 % | 96.426 % | 100.337 % | 100.469 % | 98.118 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.1 % | 1.1 % | 0.5 % | 0.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5098 ppm | 99.7323 % | 102.6740 % | 102.4300 % | 97.7794 % | 101.7180 % | 101.4828 % |
| Concentration per Run 1 | 0.5079 ppm | 100.1946 % | 102.7549 % | 102.9978 % | 98.3499 % | 102.0190 % | 102.0540 % |
| Concentration per Run 2 | 0.5115 ppm | 98.8276 % | 102.1421 % | 102.1562 % | 97.0090 % | 100.8371 % | 101.3901 % |
| Concentration per Run 3 | 0.5099 ppm | 100.1747 % | 103.1251 % | 102.1360 % | 97.9794 % | 102.2979 % | 101.0042 % |
| Recovery Percentage 1 | 101.951 % | | | | | | |
| Concentration RSD | 0.4 % | 0.8 % | 0.5 % | 0.5 % | 0.7 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

9/23/2024 2:33:25 PM

LabBook: WG1975024_09232024T9.imexp

Sample: CCB
Analysis started at: 9/23/2024 2:28:26 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0009 ppm | -0.0012 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0012 ppm | -0.0030 ppm | -0.0017 ppm | -0.0001 ppm | 0.0000 ppm | -0.0019 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0062 ppm | 0.0001 ppm | -0.0004 ppm | 0.0002 ppm | 0.0000 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0047 ppm | -0.0007 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0038 ppm |
| Recovery Percentage 1 | -7.065 % | -0.883 % | -23.782 % | -1.704 % | 0.042 % | -0.304 % | 1.552 % |
| Concentration RSD | 65.2 % | 616.4 % | 138.1 % | 212.7 % | 3,859.4 % | 258.3 % | 193.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0343 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0001 ppm | 0.0001 ppm | -0.0007 ppm | -0.0391 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0359 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0010 ppm | -0.0279 ppm | -0.0015 ppm |
| Recovery Percentage 1 | -0.408 % | -2.059 % | 1.377 % | 0.643 % | 0.020 % | -1.373 % | -15.258 % |
| Concentration RSD | 681.9 % | 104.7 % | 68.3 % | 78.6 % | 8,583.8 % | 16.8 % | 82.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 0.0002 ppm | 0.0009 ppm | -0.0046 ppm | 0.0001 ppm | -0.0008 ppm | 0.0025 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0004 ppm | 0.0006 ppm | -0.0051 ppm | 0.0008 ppm | -0.0026 ppm | 0.0046 ppm |
| Concentration per Run 2 | -0.0019 ppm | -0.0001 ppm | 0.0010 ppm | -0.0058 ppm | -0.0008 ppm | 0.0009 ppm | 0.0040 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0002 ppm | 0.0012 ppm | -0.0030 ppm | 0.0001 ppm | -0.0006 ppm | -0.0012 ppm |
| Recovery Percentage 1 | -1.411 % | 1.688 % | 1.844 % | -0.230 % | 0.254 % | -7.987 % | 4.950 % |
| Concentration RSD | 54.2 % | 148.0 % | 36.1 % | 32.0 % | 1,233.5 % | 220.0 % | 129.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0034 ppm | -0.0006 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0040 ppm | 0.0023 ppm | 0.0002 ppm | 0.0000 ppm | -0.0007 ppm | -0.0010 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0033 ppm | 0.0046 ppm | -0.0007 ppm | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0033 ppm | -0.0013 ppm | 0.0000 ppm | 0.0002 ppm | 0.0009 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -0.356 % | 0.685 % | -1.202 % | -0.220 % | -3.396 % | -0.175 % | 3.060 % |
| Concentration RSD | 10,454.2 % | 33.6 % | 126.5 % | 209.5 % | 133.5 % | 2,645.5 % | 12.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 99.2174 % | 101.2476 % | 103.0166 % | 98.8808 % | 101.6079 % | 103.1256 % |
| Concentration per Run 1 | -0.0002 ppm | 100.0926 % | 100.9727 % | 104.3188 % | 100.2261 % | 101.3316 % | 104.6019 % |
| Concentration per Run 2 | -0.0004 ppm | 99.3847 % | 101.1040 % | 102.7418 % | 99.0599 % | 101.3605 % | 102.5577 % |
| Concentration per Run 3 | -0.0004 ppm | 98.1748 % | 101.6662 % | 101.9891 % | 97.3562 % | 102.1315 % | 102.2172 % |
| Recovery Percentage 1 | -6.749 % | | | | | | |
| Concentration RSD | 46.5 % | 1.0 % | 0.4 % | 1.2 % | 1.5 % | 0.4 % | 1.3 % |

**QC True Values: Trace 4,5,6,7**

| | Element | True Value (mg/L) |
|---|---|---|
| **ICV/CCV** | All | 0.50 |
| | K | 5.00 |
| | Na | 10.00 |
| | Si | 5.25 |
| **ICSA** | Al | 250 |
| | Ca | 250 |
| | Fe | 100 |
| | Mg | 250 |
| **ICSB** | Al | 9.00 |
| | Sb | 1.00 |
| | As | 1.00 |
| | Ba | 0.30 |
| | Be | 0.10 |
| | Bi | 1.00 |
| | B | 0.50 |
| | Cd | 0.30 |
| | Ca | 45.00 |
| | Cr | 0.30 |
| | Co | 0.30 |
| | Cu | 0.30 |
| | Fe | 37.50 |
| | Pb | 1.00 |
| | Mg | 22.50 |
| | Mn | 0.20 |
| | Mo | 0.30 |
| | Ni | 0.30 |
| | K | 20.00 |
| | Se | 0.50 |
| | Si | 1.23 |
| | Ag | 0.30 |
| | Na | 7.50 |
| | Sr | 1.00 |
| | Tl | 1.00 |
| | Sn | 1.00 |
| | Ti | 1.00 |
| | V | 0.30 |
| | Zn | 0.30 |

| | Element | True Value (mg/L) |
|---|---|---|
| **CRI** | Al | 0.40 |
| | Sb | 0.10 |
| | As | 0.02 |
| | Ba | 0.04 |
| | Be | 0.01 |
| | Bi | 0.02 |
| | B | 0.10 |
| | Cd | 0.01 |
| | Ca | 0.40 |
| | Cr | 0.02 |
| | Co | 0.10 |
| | Cu | 0.05 |
| | Fe | 0.20 |
| | Pb | 0.05 |
| | Mg | 0.40 |
| | Mn | 0.03 |
| | Mo | 0.10 |
| | Ni | 0.08 |
| | K | 5.00 |
| | Se | 0.02 |
| | Si | 1.00 |
| | Ag | 0.02 |
| | Na | 5.00 |
| | Sr | 0.02 |
| | Tl | 0.02 |
| | Sn | 0.02 |
| | Ti | 0.02 |
| | V | 0.10 |
| | Zn | 0.04 |

**LCS & MS Spike Concentrations**

| Element | Liquid concentrations (mg/L) | Soil concentrations (mg/kg) |
|---|---|---|
| Al | 2.00 | 100 |
| Sb | 0.50 | 25.0 |
| As | 0.12 | 6.0 |
| Ba | 2.00 | 100 |
| Be | 0.05 | 2.5 |
| Bi | 1.00 | 50.0 |
| B | 1.00 | 50.0 |
| Cd | 0.05 | 2.55 |
| Ca | 10.00 | 500 |
| Cr | 0.20 | 10.0 |
| Co | 0.50 | 25.0 |
| Cu | 0.25 | 12.5 |
| Fe | 1.00 | 50.0 |
| Pb | 0.51 | 25.5 |
| Mg | 10.00 | 500 |
| Mn | 0.50 | 25.0 |
| Mo | 1.00 | 50.0 |
| Ni | 0.50 | 25.0 |
| K | 10.00 | 500 |
| Se | 0.12 | 6.0 |
| Si | 1.00 | 50.0 |
| Ag | 0.05 | 2.5 |
| Na | 10.00 | 500 |
| Sr | 1.00 | 50.0 |
| Tl | 0.12 | 6.0 |
| Sn | 1.00 | 50.0 |
| Ti | 1.00 | 50.0 |
| V | 0.50 | 25.0 |
| Zn | 0.50 | 25.0 |

# LCS and MS Spike Concentrations—As of 08/09/2011

| Element | Liquid Concentration(mg/L) | Soil Concentration (mg/kg) |
|---|---|---|
| Al | 2.00 | 160 |
| Sb | 0.50 | 40 |
| As | 0.12 | 9.6 |
| Ba | 2.00 | 160 |
| Be | 0.05 | 4.0 |
| Bi | 1.00 | 80 |
| B | 1.00 | 80 |
| Cd | 0.051 | 4.08 |
| Ca | 10.0 | 800 |
| Cr | 0.20 | 16 |
| Co | 0.50 | 40 |
| Cu | 0.25 | 20 |
| Fe | 1.00 | 80 |
| Pb | 0.51 | 40.8 |
| Mg | 10.0 | 800 |
| Mn | 0.50 | 40 |
| Mo | 1.00 | 80 |
| Ni | 0.50 | 40 |
| K | 10.0 | 800 |
| Se | 0.12 | 9.6 |
| Si | 1.00 | 80 |
| Ag | 0.05 | 24 |
| Na | 10.0 | 800 |
| Sr | 1.00 | 80 |
| Tl | 0.12 | 9.6 |
| Sn | 1.00 | 80 |
| Ti | 1.00 | 80 |
| V | 0.50 | 40 |
| Zn | 0.50 | 40 |

Revised 8/9/11 Soil spike is based on (2x water spike)x(50/1.25), where 50 is the final volume of soil digestate and 1.25 is the nominal digestion weight of 1.25g, except in the case of Ag, where additional Ag is added to the spike.

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
$U_{char}$ = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
$U_{LTS}$ = Standard uncertainty associated with long-term stability.
$U_{STS}$ = Standard uncertainty associated with short-term (transport) stability.
$U_{RSS}$ = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

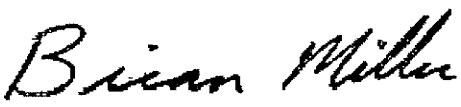
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**



**Quality Officer**

**Matthew Seebeck**

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ERA
A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 6010B Metals

**Aqueous Samples**

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

**Soil or Solid Samples**

Soil samples are calculated as follows:

$$\text{Result, mg/Kg} = \frac{C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)}{A}$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

$$A = \frac{\text{Sample weight (grams)}}{\text{Final Volume (mL)}}$$

**Dry weight correction**

Dry weight correction is calculated as follows:

$$\text{Final concentration in mg/Kg, dry weight} = \frac{\text{Result, mg/Kg}}{\%_{solids}}$$

Where:

$\%_{solids}$ = Percent Solids, as a decimal value

# Sequence Trace 9

9/23/2024 10:06:04 AM

LabBook: WG1974083_09202024T9.imexp

## Summary

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 1 | Blank DMC Trace9 | 0 | 1 | 9/20/2024 6:16:48 AM |
| 2 | ICAL | 0 | 2 | 9/20/2024 6:20:41 AM |
| 3 | ICV | 0 | 3 | 9/20/2024 6:24:34 AM |
| 4 | ICB | 0 | 4 | 9/20/2024 6:28:27 AM |
| 5 | ICV | 0 | 10 | 9/20/2024 6:39:12 AM |
| 6 | ICB | 0 | 4 | 9/20/2024 6:43:15 AM |
| 7 | LLOQ | 0 | 5 | 9/20/2024 6:47:09 AM |
| 8 | ICSA | 0 | 6 | 9/20/2024 6:51:03 AM |
| 9 | SIC Multi | 0 | 7 | 9/20/2024 6:54:58 AM |
| 10 | LDR Check | 0 | 8 | 9/20/2024 6:58:54 AM |
| 11 | xLLOQ 0.005ppm | 1 | 1 | 9/20/2024 7:15:53 AM |
| 12 | LLOQ 0.01ppm Pb Se | 1 | 2 | 9/20/2024 7:19:53 AM |
| 13 | zLLOQ 0.05ppm | 1 | 3 | 9/20/2024 7:23:44 AM |
| 14 | LDR 20 As pass | 1 | 4 | 9/20/2024 7:27:36 AM |
| 15 | LDR 20 B pass | 1 | 5 | 9/20/2024 7:31:28 AM |
| 16 | IEC 20 Ti, +Si | 1 | 6 | 9/20/2024 7:35:21 AM |
| 17 | LDR 500 Fe pass | 1 | 7 | 9/20/2024 7:39:14 AM |
| 18 | LDR 1000 Ca pass | 1 | 8 | 9/20/2024 7:43:07 AM |
| 19 | LLOQ 0.005ppm Ag | 1 | 1 | 9/20/2024 7:58:28 AM |
| 20 | CCV | 0 | 3 | 9/20/2024 8:10:26 AM |
| 21 | CCB | 0 | 4 | 9/20/2024 8:14:25 AM |
| 22 | WG1973886-1 WG1973886 | 1 | 9 | 9/20/2024 8:22:41 AM |
| 23 | WG1973886-2 WG1973886 | 1 | 10 | 9/20/2024 8:26:41 AM |
| 24 | L2452741-01 WG1973886 | 1 | 16 | 9/20/2024 8:30:35 AM |
| 25 | L2452771-02 WG1973886 | 1 | 17 | 9/20/2024 8:34:27 AM |
| 26 | L2453269-11 WG1973886 | 1 | 18 | 9/20/2024 8:38:20 AM |
| 27 | L2452771-01 WG1973886 | 1 | 11 | 9/20/2024 8:42:13 AM |
| 28 | WG1973886-3 WG1973886 | 1 | 12 | 9/20/2024 8:46:07 AM |
| 29 | WG1973886-4 WG1973886 | 1 | 13 | 9/20/2024 8:50:01 AM |
| 30 | WG1973886-5 WG1973886 | 1 | 14 | 9/20/2024 8:53:53 AM |
| 31 | WG1973886-6D5 WG1973886 | 1 | 15 | 9/20/2024 8:57:45 AM |
| 32 | CCV | 0 | 3 | 9/20/2024 9:01:37 AM |
| 33 | CCB | 0 | 4 | 9/20/2024 9:05:31 AM |
| 34 | WG1974109-1 WG1974109 | 1 | 22 | 9/20/2024 9:18:50 AM |
| 35 | WG1974109-2 WG1974109 | 1 | 23 | 9/20/2024 9:23:02 AM |
| 36 | L2453269-01 WG1974109 | 1 | 24 | 9/20/2024 9:26:57 AM |
| 37 | WG1974109-3 WG1974109 | 1 | 25 | 9/20/2024 9:30:51 AM |
| 38 | WG1974109-4 WG1974109 | 1 | 26 | 9/20/2024 9:34:43 AM |
| 39 | L2453269-12 WG1973886 | 1 | 19 | 9/20/2024 9:38:35 AM |
| 40 | L2453269-13 WG1973886 | 1 | 20 | 9/20/2024 9:42:29 AM |
| 41 | L2453269-15 WG1973886 | 1 | 21 | 9/20/2024 9:46:23 AM |
| 42 | L2453269-04 WG1974109 | 1 | 27 | 9/20/2024 9:50:17 AM |
| 43 | L2453269-05 WG1974109 | 1 | 28 | 9/20/2024 9:54:10 AM |
| 44 | CCV | 0 | 3 | 9/20/2024 9:58:02 AM |
| 45 | CCB | 0 | 4 | 9/20/2024 10:01:56 AM |
| 46 | WG1973896-1 WG1973896 | 1 | 33 | 9/20/2024 10:13:02 AM |
| 47 | WG1973896-2 WG1973896 | 1 | 34 | 9/20/2024 10:17:16 AM |
| 48 | L2453207-09 WG1973896 | 1 | 35 | 9/20/2024 10:21:11 AM |
| 49 | WG1973896-3 WG1973896 | 1 | 36 | 9/20/2024 10:25:05 AM |
| 50 | WG1973896-4 WG1973896 | 1 | 37 | 9/20/2024 10:29:01 AM |
| 51 | L2453207-10 WG1973896 | 1 | 38 | 9/20/2024 10:32:53 AM |
| 52 | L2453269-14 WG1974109 | 1 | 29 | 9/20/2024 10:36:45 AM |
| 53 | L2453269-16 WG1974109 | 1 | 30 | 9/20/2024 10:40:39 AM |
| 54 | L2453269-18 WG1974109 | 1 | 31 | 9/20/2024 10:44:32 AM |
| 55 | L2453269-19 WG1974109 | 1 | 32 | 9/20/2024 10:48:26 AM |
| 56 | CCV | 0 | 3 | 9/20/2024 10:52:20 AM |
| 57 | CCB | 0 | 4 | 9/20/2024 10:56:14 AM |
| 58 | WG1974073-1 WG1974073 | 1 | 39 | 9/20/2024 11:03:34 AM |
| 59 | WG1974073-2D2 WG1974073 | 1 | 40 | 9/20/2024 11:07:45 AM |
| 60 | L2454074-02D2 WG1974073 | 1 | 46 | 9/20/2024 11:11:38 AM |
| 61 | L2454074-03D2 WG1974073 | 1 | 47 | 9/20/2024 11:15:32 AM |
| 62 | L2454074-04D2 WG1974073 | 1 | 48 | 9/20/2024 11:19:27 AM |
| 63 | L2454074-01D2 WG1974073 | 1 | 41 | 9/20/2024 11:23:21 AM |
| 64 | WG1974073-3D2 WG1974073 | 1 | 42 | 9/20/2024 11:27:14 AM |
| 65 | WG1974073-4D2 WG1974073 | 1 | 43 | 9/20/2024 11:31:08 AM |
| 66 | WG1974073-5D2 WG1974073 | 1 | 44 | 9/20/2024 11:35:01 AM |
| 67 | WG1974073-6D10 WG1974073 | 1 | 45 | 9/20/2024 11:38:55 AM |
| 68 | CCV | 0 | 3 | 9/20/2024 11:42:50 AM |

# Sequence Trace 9

9/23/2024 10:06:04 AM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 69 | CCB | 0 | 4 | 9/20/2024 11:46:44 AM |
| 70 | L2454074-05D2 WG1974073 | 1 | 49 | 9/20/2024 11:51:49 AM |
| 71 | L2454074-06D2 WG1974073 | 1 | 50 | 9/20/2024 11:55:53 AM |
| 72 | L2454074-07D2 WG1974073 | 1 | 51 | 9/20/2024 11:59:46 AM |
| 73 | L2454074-08D2 WG1974073 | 1 | 52 | 9/20/2024 12:03:39 PM |
| 74 | L2454074-09D2 WG1974073 | 1 | 53 | 9/20/2024 12:07:32 PM |
| 75 | L2454074-10D2 WG1974073 | 1 | 54 | 9/20/2024 12:11:25 PM |
| 76 | L2454074-11D2 WG1974073 | 1 | 55 | 9/20/2024 12:15:19 PM |
| 77 | L2454074-12D2 WG1974073 | 1 | 56 | 9/20/2024 12:19:13 PM |
| 78 | L2454074-13D2 WG1974073 | 1 | 57 | 9/20/2024 12:23:07 PM |
| 79 | CCV | 0 | 3 | 9/20/2024 12:27:01 PM |
| 80 | CCB | 0 | 4 | 9/20/2024 12:30:56 PM |
| 81 | WG1973923-1 WG1973923 | 1 | 58 | 9/20/2024 12:39:45 PM |
| 82 | WG1973923-2 WG1973923 | 1 | 59 | 9/20/2024 12:43:56 PM |
| 83 | WG1973923-3 WG1973923 | 1 | 60 | 9/20/2024 12:47:51 PM |
| 84 | L2452806-01 WG1973923 | 2 | 1 | 9/20/2024 12:51:46 PM |
| 85 | L2452806-05 WG1973923 | 2 | 2 | 9/20/2024 12:55:41 PM |
| 86 | L2452756-02 WG1973936 | 2 | 5 | 9/20/2024 12:59:35 PM |
| 87 | WG1973936-3 WG1973936 | 2 | 6 | 9/20/2024 1:03:29 PM |
| 88 | WG1973936-4 WG1973936 | 2 | 7 | 9/20/2024 1:07:23 PM |
| 89 | WG1973936-5 WG1973936 | 2 | 8 | 9/20/2024 1:11:17 PM |
| 90 | WG1973936-6D5 WG1973936 | 2 | 9 | 9/20/2024 1:15:12 PM |
| 91 | CCV | 0 | 3 | 9/20/2024 1:19:07 PM |
| 92 | CCB | 0 | 4 | 9/20/2024 1:23:01 PM |
| 93 | WG1973936-1 WG1973936 | 2 | 3 | 9/20/2024 1:34:26 PM |
| 94 | WG1973936-2 WG1973936 | 2 | 4 | 9/20/2024 1:38:37 PM |
| 95 | L2452756-08 WG1973936 | 2 | 15 | 9/20/2024 1:42:31 PM |
| 96 | L2452756-11 WG1973936 | 2 | 16 | 9/20/2024 1:46:26 PM |
| 97 | L2452756-14 WG1973936 | 2 | 17 | 9/20/2024 1:50:20 PM |
| 98 | L2452756-05 WG1973936 | 2 | 10 | 9/20/2024 1:54:15 PM |
| 99 | WG1973936-7 WG1973936 | 2 | 11 | 9/20/2024 1:58:10 PM |
| 100 | WG1973936-8 WG1973936 | 2 | 12 | 9/20/2024 2:02:05 PM |
| 101 | WG1973936-9 WG1973936 | 2 | 13 | 9/20/2024 2:06:01 PM |
| 102 | WG1973936-10D5 WG1973936 | 2 | 14 | 9/20/2024 2:09:55 PM |
| 103 | CCV | 0 | 3 | 9/20/2024 2:13:50 PM |
| 104 | CCB | 0 | 4 | 9/20/2024 2:17:45 PM |
| 105 | L2452756-17 WG1973936 | 2 | 18 | 9/20/2024 2:30:16 PM |
| 106 | L2452756-20 WG1973936 | 2 | 19 | 9/20/2024 2:34:28 PM |
| 107 | L2452762-02 WG1973936 | 2 | 20 | 9/20/2024 2:38:22 PM |
| 108 | L2452762-05 WG1973936 | 2 | 21 | 9/20/2024 2:42:17 PM |
| 109 | L2452762-08 WG1973936 | 2 | 22 | 9/20/2024 2:46:12 PM |
| 110 | L2452762-11 WG1973936 | 2 | 23 | 9/20/2024 2:50:07 PM |
| 111 | L2452762-14 WG1973936 | 2 | 24 | 9/20/2024 2:54:02 PM |
| 112 | L2452762-17 WG1973936 | 2 | 25 | 9/20/2024 2:57:58 PM |
| 113 | L2452762-20 WG1973936 | 2 | 26 | 9/20/2024 3:01:53 PM |
| 114 | L2452762-23 WG1973936 | 2 | 27 | 9/20/2024 3:05:48 PM |
| 115 | CCV | 0 | 3 | 9/20/2024 3:09:44 PM |
| 116 | CCB | 0 | 4 | 9/20/2024 3:13:38 PM |
| 117 | Test FM 1045 AJT | 2 | 29 | 9/20/2024 3:22:26 PM |
| 118 | Test FM 0925 AJT | 2 | 30 | 9/20/2024 3:26:40 PM |
| 119 | L2452896-01 WG1973936 | 2 | 28 | 9/20/2024 3:30:35 PM |
| 120 | L2452177-01d2 WG1974073 | 2 | 31 | 9/20/2024 3:34:30 PM |
| 121 | L2453062-01d2 WG1974073 | 2 | 32 | 9/20/2024 3:38:25 PM |
| 122 | L2453062-02d2 WG1974073 | 2 | 33 | 9/20/2024 3:42:19 PM |
| 123 | L2453062-03d2 WG1974073 | 2 | 34 | 9/20/2024 3:46:14 PM |
| 124 | L2453062-04d2 WG1974073 | 2 | 35 | 9/20/2024 3:50:09 PM |
| 125 | L2453062-05d2 WG1974073 | 2 | 36 | 9/20/2024 3:54:05 PM |
| 126 | L2454057-01d2 WG1974073 | 2 | 37 | 9/20/2024 3:58:01 PM |
| 127 | CCV | 0 | 3 | 9/20/2024 4:01:57 PM |
| 128 | CCB | 0 | 4 | 9/20/2024 4:05:52 PM |
| 129 | WG1974175-1 WG1974175 | 2 | 38 | 9/20/2024 4:12:06 PM |
| 130 | WG1974175-2 WG1974175 | 2 | 39 | 9/20/2024 4:16:18 PM |
| 131 | L2454057-01d8 WG1974073 | 2 | 54 | 9/20/2024 4:20:13 PM |
| 132 | L2454090-02 WG1974175 | 2 | 45 | 9/20/2024 4:24:09 PM |
| 133 | L2454090-03 WG1974175 | 2 | 46 | 9/20/2024 4:28:04 PM |
| 134 | L2454090-01 WG1974175 | 2 | 40 | 9/20/2024 4:31:59 PM |
| 135 | WG1974175-3 WG1974175 | 2 | 41 | 9/20/2024 4:35:55 PM |
| 136 | WG1974175-4 WG1974175 | 2 | 42 | 9/20/2024 4:39:50 PM |
| 137 | WG1974175-5 WG1974175 | 2 | 43 | 9/20/2024 4:43:45 PM |
| 138 | WG1974175-6d5 WG1974175 | 2 | 44 | 9/20/2024 4:47:40 PM |
| 139 | CCV | 0 | 3 | 9/20/2024 4:51:36 PM |
| 140 | CCB | 0 | 4 | 9/20/2024 4:55:30 PM |
| 141 | L2454090-04 WG1974175 | 2 | 47 | 9/20/2024 5:03:05 PM |
| 142 | L2454090-05 WG1974175 | 2 | 48 | 9/20/2024 5:07:17 PM |

# Sequence Trace 9

9/23/2024 10:06:04 AM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 143 | L2454090-06 WG1974175 | 2 | 49 | 9/20/2024 5:11:13 PM |
| 144 | L2454090-10 WG1974175 | 2 | 50 | 9/20/2024 5:15:10 PM |
| 145 | L2454090-11 WG1974175 | 2 | 51 | 9/20/2024 5:19:07 PM |
| 146 | L2454090-12 WG1974175 | 2 | 52 | 9/20/2024 5:23:04 PM |
| 147 | L2454090-13 WG1974175 | 2 | 53 | 9/20/2024 5:26:59 PM |
| 148 | CCV | 0 | 3 | 9/20/2024 5:30:56 PM |
| 149 | CCB | 0 | 4 | 9/20/2024 5:34:51 PM |
| 150 | WG1974077-1 WG1974077 | 2 | 55 | 9/20/2024 5:41:58 PM |
| 151 | WG1974077-2d2 WG1974077 | 2 | 56 | 9/20/2024 5:46:12 PM |
| 152 | eL2452998-01d2 WG1974077 | 3 | 2 | 9/20/2024 5:50:07 PM |
| 153 | L2453024-01d2 WG1974077 | 3 | 3 | 9/20/2024 5:54:04 PM |
| 154 | L2453024-02d2 WG1974077 | 3 | 4 | 9/20/2024 5:58:01 PM |
| 155 | L2453726-03d2 WG1974077 | 2 | 57 | 9/20/2024 6:01:58 PM |
| 156 | WG1974077-3d2 WG1974077 | 2 | 58 | 9/20/2024 6:05:53 PM |
| 157 | WG1974077-4d2 WG1974077 | 2 | 59 | 9/20/2024 6:09:49 PM |
| 158 | WG1974077-5d2 WG1974077 | 2 | 60 | 9/20/2024 6:13:45 PM |
| 159 | WG1974077-6d10 WG1974077 | 3 | 1 | 9/20/2024 6:17:41 PM |
| 160 | CCV | 0 | 3 | 9/20/2024 6:21:38 PM |
| 161 | CCB | 0 | 4 | 9/20/2024 6:25:33 PM |
| 162 | L2453024-03d2 WG1974077 | 3 | 5 | 9/20/2024 6:36:01 PM |
| 163 | L2453039-01d2 WG1974077 | 3 | 6 | 9/20/2024 6:40:03 PM |
| 164 | L2453039-02d2 WG1974077 | 3 | 7 | 9/20/2024 6:44:00 PM |
| 165 | L2453039-03d2 WG1974077 | 3 | 8 | 9/20/2024 6:47:56 PM |
| 166 | eL2453039-04d2 WG1974077 | 3 | 9 | 9/20/2024 6:51:53 PM |
| 167 | L2453039-05d2 WG1974077 | 3 | 10 | 9/20/2024 6:55:49 PM |
| 168 | L2453039-06d2 WG1974077 | 3 | 11 | 9/20/2024 6:59:45 PM |
| 169 | L2453065-01d2 WG1974077 | 3 | 12 | 9/20/2024 7:03:42 PM |
| 170 | L2453065-02d2 WG1974077 | 3 | 13 | 9/20/2024 7:07:38 PM |
| 171 | L2453065-03d2 WG1974077 | 3 | 14 | 9/20/2024 7:11:35 PM |
| 172 | CCV | 0 | 3 | 9/20/2024 7:15:32 PM |
| 173 | CCB | 0 | 4 | 9/20/2024 7:19:28 PM |
| 174 | L2453065-04d2 WG1974077 | 3 | 15 | 9/20/2024 7:23:46 PM |
| 175 | L2453695-05d2 WG1974077 | 3 | 16 | 9/20/2024 7:27:43 PM |
| 176 | eL2453695-06d2 WG1974077 | 3 | 17 | 9/20/2024 7:31:40 PM |
| 177 | L2453726-01d2 WG1974077 | 3 | 18 | 9/20/2024 7:35:37 PM |
| 178 | L2453726-02d2 WG1974077 | 3 | 19 | 9/20/2024 7:39:34 PM |
| 179 | L2453726-04d2 WG1974077 | 3 | 20 | 9/20/2024 7:43:31 PM |
| 180 | L2452998-01d4 WG1974077 | 3 | 21 | 9/20/2024 7:47:29 PM |
| 181 | L2453039-02d8 WG1974077 | 3 | 22 | 9/20/2024 7:51:26 PM |
| 182 | L2453039-04d4 WG1974077 | 3 | 23 | 9/20/2024 7:55:23 PM |
| 183 | L2453695-06d4 WG1974077 | 3 | 24 | 9/20/2024 7:59:21 PM |
| 184 | CCV | 0 | 3 | 9/20/2024 8:03:18 PM |
| 185 | CCB | 0 | 4 | 9/20/2024 8:07:14 PM |
| 186 | WG1974266-2 WG1974266 | 3 | 32 | 9/20/2024 8:20:38 PM |
| 187 | L2453583-01d2 WG1973818 | 3 | 25 | 9/20/2024 8:24:53 PM |
| 188 | L2453583-02d2 WG1973818 | 3 | 26 | 9/20/2024 8:28:51 PM |
| 189 | L2453583-03d2 WG1973818 | 3 | 27 | 9/20/2024 8:32:48 PM |
| 190 | L2453583-04d2 WG1973818 | 3 | 28 | 9/20/2024 8:36:45 PM |
| 191 | L2453583-05d2 WG1973818 | 3 | 29 | 9/20/2024 8:40:43 PM |
| 192 | L2453583-06d2 WG1973818 | 3 | 30 | 9/20/2024 8:44:41 PM |
| 193 | L2453680-02d2 WG1973818 | 3 | 31 | 9/20/2024 8:48:38 PM |
| 194 | CCV | 0 | 3 | 9/20/2024 8:52:36 PM |
| 195 | CCB | 0 | 4 | 9/20/2024 8:56:32 PM |
| 196 | L2452987-01d2 WG1974088 | 3 | 33 | 9/20/2024 9:06:54 PM |
| 197 | L2453085-01d2 WG1974088 | 3 | 34 | 9/20/2024 9:11:13 PM |
| 198 | L2453085-02d2 WG1974088 | 3 | 35 | 9/20/2024 9:15:10 PM |
| 199 | L2453085-03d2 WG1974088 | 3 | 36 | 9/20/2024 9:19:08 PM |
| 200 | L2453085-04d2 WG1974088 | 3 | 37 | 9/20/2024 9:23:06 PM |
| 201 | L2453085-05d2 WG1974088 | 3 | 38 | 9/20/2024 9:27:03 PM |
| 202 | L2453085-06d2 WG1974088 | 3 | 39 | 9/20/2024 9:31:01 PM |
| 203 | L2453901-07d2 WG1974088 | 3 | 40 | 9/20/2024 9:34:59 PM |
| 204 | L2453901-08d2 WG1974088 | 3 | 41 | 9/20/2024 9:38:57 PM |
| 205 | L2452968-01 WG1973178 | 3 | 42 | 9/20/2024 9:42:55 PM |
| 206 | CCV | 0 | 3 | 9/20/2024 9:46:53 PM |
| 207 | CCB | 0 | 4 | 9/20/2024 9:50:50 PM |
| 208 | L2452968-03 WG1973178 | 3 | 43 | 9/20/2024 9:56:27 PM |
| 209 | L2452968-05 WG1973178 | 3 | 44 | 9/20/2024 10:00:41 PM |
| 210 | L2452968-06 WG1973178 | 3 | 45 | 9/20/2024 10:04:39 PM |
| 211 | L2452968-08 WG1973178 | 3 | 46 | 9/20/2024 10:08:37 PM |
| 212 | L2452968-11 WG1973178 | 3 | 47 | 9/20/2024 10:12:35 PM |
| 213 | L2452968-12 WG1973178 | 3 | 48 | 9/20/2024 10:16:34 PM |
| 214 | L2452968-14 WG1973178 | 3 | 49 | 9/20/2024 10:20:32 PM |
| 215 | L2452974-01 WG1973178 | 3 | 50 | 9/20/2024 10:24:31 PM |
| 216 | L2452976-02 WG1973178 | 3 | 51 | 9/20/2024 10:28:29 PM |

# Sequence Trace 9

9/23/2024 10:06:04 AM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 217 | L2452976-03 WG1973178 | 3 | 52 | 9/20/2024 10:32:28 PM |
| 218 | CCV | 0 | 3 | 9/20/2024 10:36:26 PM |
| 219 | CCB | 0 | 4 | 9/20/2024 10:40:22 PM |
| 220 | L2452976-04 WG1973178 | 3 | 53 | 9/20/2024 10:44:19 PM |
| 221 | L2453053-02 WG1973830 | 3 | 54 | 9/20/2024 10:48:17 PM |
| 222 | L2453053-03 WG1973830 | 3 | 55 | 9/20/2024 10:52:16 PM |
| 223 | L2453053-04 WG1973830 | 3 | 56 | 9/20/2024 10:56:15 PM |
| 224 | L2453053-05 WG1973830 | 3 | 57 | 9/20/2024 11:00:14 PM |
| 225 | CCV | 0 | 3 | 9/20/2024 11:04:12 PM |
| 226 | CCB | 0 | 4 | 9/20/2024 11:08:09 PM |
| 227 | CCV | 0 | 3 | 9/20/2024 11:12:05 PM |
| 228 | CCB | 0 | 4 | 9/20/2024 11:16:01 PM |
| 229 | LLOQ | 0 | 5 | 9/20/2024 11:19:58 PM |

# Sequence Trace 4

9/20/2024 4:21:41 PM

LabBook: WG1973931_09192024T4.imexp

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 1 | xBlank TAA Trace4 | 0 | 1 | 9/19/2024 4:55:41 PM |
| 2 | xICAL | 0 | 2 | 9/19/2024 5:02:07 PM |
| 3 | Blank TAA Trace4 | 0 | 1 | 9/19/2024 5:10:25 PM |
| 4 | ICAL | 0 | 2 | 9/19/2024 5:16:48 PM |
| 5 | ICV | 0 | 3 | 9/19/2024 5:52:16 PM |
| 6 | ICB | 0 | 4 | 9/19/2024 5:58:20 PM |
| 7 | ICV | 0 | 10 | 9/19/2024 6:04:46 PM |
| 8 | ICB | 0 | 4 | 9/19/2024 6:10:52 PM |
| 9 | LLOQ | 0 | 5 | 9/19/2024 6:17:18 PM |
| 10 | xICSA not enough volume | 0 | 6 | 9/19/2024 6:23:42 PM |
| 11 | ICSA | 0 | 6 | 9/19/2024 6:32:27 PM |
| 12 | xSIC Multi not enough volume | 0 | 7 | 9/19/2024 6:57:47 PM |
| 13 | LDR Check | 0 | 8 | 9/19/2024 7:04:43 PM |
| 14 | zICSA | 0 | 6 | 9/20/2024 9:39:38 AM |
| 15 | SIC Multi | 0 | 7 | 9/20/2024 9:46:22 AM |
| 16 | LLOQ 005 Zn pass | 1 | 1 | 9/20/2024 9:54:41 AM |
| 17 | LLOQ 05 Fe pass | 1 | 2 | 9/20/2024 10:01:03 AM |
| 18 | LDR 500 Ca pass | 1 | 3 | 9/20/2024 10:07:17 AM |
| 19 | LDR 500 Na pass | 1 | 4 | 9/20/2024 10:13:46 AM |
| 20 | LDR 20 B | 1 | 5 | 9/20/2024 10:20:18 AM |
| 21 | CCV | 0 | 3 | 9/20/2024 10:28:06 AM |
| 22 | CCB | 0 | 4 | 9/20/2024 10:34:09 AM |
| 23 | WG1973498-1 WG1973498 | 1 | 6 | 9/20/2024 10:40:33 AM |
| 24 | WG1973498-2 WG1973498 | 1 | 7 | 9/20/2024 10:46:57 AM |
| 25 | L2452799-01 WG1973498 | 1 | 15 | 9/20/2024 10:53:10 AM |
| 26 | L2452868-06 WG1973498 | 1 | 16 | 9/20/2024 10:59:33 AM |
| 27 | L2453058-01 WG1973498 | 1 | 8 | 9/20/2024 11:05:57 AM |
| 28 | WG1973498-3 WG1973498 | 1 | 9 | 9/20/2024 11:12:17 AM |
| 29 | WG1973498-4 WG1973498 | 1 | 10 | 9/20/2024 11:18:30 AM |
| 30 | WG1973498-5 WG1973498 | 1 | 11 | 9/20/2024 11:24:42 AM |
| 31 | WG1973498-6D5 WG1973498 | 1 | 12 | 9/20/2024 11:30:55 AM |
| 32 | CCV | 0 | 3 | 9/20/2024 11:37:19 AM |
| 33 | CCB | 0 | 4 | 9/20/2024 11:43:21 AM |
| 34 | WG1973898-1 WG1973898 | 1 | 17 | 9/20/2024 11:51:58 AM |
| 35 | WG1973898-2 WG1973898 | 1 | 18 | 9/20/2024 11:58:30 AM |
| 36 | L2451391-25 WG1973498 | 1 | 13 | 9/20/2024 12:04:43 PM |
| 37 | L2451391-26 WG1973498 | 1 | 14 | 9/20/2024 12:10:59 PM |
| 38 | L2448058-04 WG1973898 | 1 | 19 | 9/20/2024 12:17:18 PM |
| 39 | WG1973898-3 WG1973898 | 1 | 20 | 9/20/2024 12:23:48 PM |
| 40 | WG1973898-4 WG1973898 | 1 | 21 | 9/20/2024 12:30:10 PM |
| 41 | WG1973898-5 WG1973898 | 1 | 22 | 9/20/2024 12:36:40 PM |
| 42 | WG1973898-6D5 WG1973898 | 1 | 23 | 9/20/2024 12:43:03 PM |
| 43 | CCV | 0 | 3 | 9/20/2024 12:49:27 PM |
| 44 | CCB | 0 | 4 | 9/20/2024 12:55:30 PM |
| 45 | WG1973830-1 WG1973830 | 1 | 24 | 9/20/2024 1:04:24 PM |
| 46 | WG1973830-2 WG1973830 | 1 | 25 | 9/20/2024 1:10:50 PM |
| 47 | L2452763-02 WG1973830 | 1 | 31 | 9/20/2024 1:17:00 PM |
| 48 | L2452825-01 WG1973830 | 1 | 32 | 9/20/2024 1:23:25 PM |
| 49 | L2452844-01 WG1973830 | 1 | 33 | 9/20/2024 1:29:44 PM |
| 50 | L2453053-01 WG1973830 | 1 | 26 | 9/20/2024 1:36:07 PM |
| 51 | WG1973830-3 WG1973830 | 1 | 27 | 9/20/2024 1:42:26 PM |
| 52 | WG1973830-4 WG1973830 | 1 | 28 | 9/20/2024 1:48:36 PM |
| 53 | WG1973830-5 WG1973830 | 1 | 29 | 9/20/2024 1:54:46 PM |
| 54 | WG1973830-6D5 WG1973830 | 1 | 30 | 9/20/2024 2:00:56 PM |
| 55 | CCV | 0 | 3 | 9/20/2024 2:07:17 PM |
| 56 | CCB | 0 | 4 | 9/20/2024 2:13:20 PM |
| 57 | WG1974186-17 WG1974186 | 1 | 34 | 9/20/2024 2:19:46 PM |
| 58 | WG1974186-18 WG1974186 | 1 | 35 | 9/20/2024 2:26:11 PM |
| 59 | L2453053-02 WG1974186 | 1 | 41 | 9/20/2024 2:32:24 PM |
| 60 | L2453053-03 WG1974186 | 1 | 42 | 9/20/2024 2:38:43 PM |
| 61 | L2453053-04 WG1974186 | 1 | 43 | 9/20/2024 2:45:02 PM |
| 62 | L2453053-01 WG1974186 | 1 | 36 | 9/20/2024 2:51:21 PM |
| 63 | WG1974186-19 WG1974186 | 1 | 37 | 9/20/2024 2:57:42 PM |
| 64 | WG1974186-20 WG1974186 | 1 | 38 | 9/20/2024 3:03:52 PM |
| 65 | WG1974186-21 WG1974186 | 1 | 39 | 9/20/2024 3:10:01 PM |
| 66 | WG1974186-22D5 WG1974186 | 1 | 40 | 9/20/2024 3:16:11 PM |
| 67 | CCV | 0 | 3 | 9/20/2024 3:22:32 PM |
| 68 | CCB | 0 | 4 | 9/20/2024 3:28:35 PM |
| 69 | L2453053-05 WG1974186 | 1 | 44 | 9/20/2024 3:39:59 PM |
| 70 | CCV | 0 | 3 | 9/20/2024 3:49:02 PM |
| 71 | CCB | 0 | 4 | 9/20/2024 3:55:05 PM |
| 72 | LLOQ | 0 | 5 | 9/20/2024 4:01:31 PM |

# Sequence Trace 4

9/20/2024 4:21:41 PM

# Sequence Trace 9

9/23/2024 2:33:50 PM

LabBook: WG1975024_09232024T9.imexp

## Summary

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 1 | Blank JMF Trace9 | 0 | 1 | 9/23/2024 9:17:34 AM |
| 2 | ICAL | 0 | 2 | 9/23/2024 9:21:21 AM |
| 3 | ICV | 0 | 3 | 9/23/2024 9:25:13 AM |
| 4 | ICB | 0 | 4 | 9/23/2024 9:29:06 AM |
| 5 | ICV | 0 | 10 | 9/23/2024 9:33:00 AM |
| 6 | ICB | 0 | 4 | 9/23/2024 9:36:58 AM |
| 7 | LLOQ | 0 | 5 | 9/23/2024 9:40:51 AM |
| 8 | Blank JMF Trace9 | 0 | 1 | 9/23/2024 9:57:47 AM |
| 9 | ICAL | 0 | 2 | 9/23/2024 10:01:45 AM |
| 10 | ICV | 0 | 3 | 9/23/2024 10:05:38 AM |
| 11 | ICB | 0 | 4 | 9/23/2024 10:09:32 AM |
| 12 | ICV | 0 | 10 | 9/23/2024 10:13:26 AM |
| 13 | ICB | 0 | 4 | 9/23/2024 10:17:23 AM |
| 14 | LLOQ | 0 | 5 | 9/23/2024 10:21:17 AM |
| 15 | ICSA | 0 | 6 | 9/23/2024 10:27:05 AM |
| 16 | LDR 500 Fe pass | 1 | 1 | 9/23/2024 10:33:55 AM |
| 17 | LDR 200 Fe pass | 1 | 2 | 9/23/2024 10:37:53 AM |
| 18 | LDR 1000 Ca pass _IEC +Se | 1 | 3 | 9/23/2024 10:42:16 AM |
| 19 | SIC Multi | 0 | 7 | 9/23/2024 10:46:38 AM |
| 20 | LDR Check | 0 | 8 | 9/23/2024 10:50:34 AM |
| 21 | IEC 20 Cr +Se | 1 | 4 | 9/23/2024 11:16:33 AM |
| 22 | LDR 20 As pass | 1 | 5 | 9/23/2024 11:20:32 AM |
| 23 | LDR 20 B pass | 1 | 6 | 9/23/2024 11:24:25 AM |
| 24 | CCV | 0 | 3 | 9/23/2024 11:46:45 AM |
| 25 | CCB | 0 | 4 | 9/23/2024 11:50:54 AM |
| 26 | WG1974555-1 WG1974555 | 1 | 7 | 9/23/2024 12:09:33 PM |
| 27 | WG1974337-1 WG1974337 | 1 | 14 | 9/23/2024 12:13:33 PM |
| 28 | WG1974555-2D2 WG1974555 | 1 | 8 | 9/23/2024 12:17:25 PM |
| 29 | WG1974337-2D2 WG1974337 | 1 | 15 | 9/23/2024 12:21:19 PM |
| 30 | Test FM 0640 ADG | 1 | 21 | 9/23/2024 12:25:11 PM |
| 31 | L2454335-01D2 WG1974555 | 1 | 9 | 9/23/2024 12:29:05 PM |
| 32 | WG1974555-3D2 WG1974555 | 1 | 10 | 9/23/2024 12:32:59 PM |
| 33 | WG1974555-4D2 WG1974555 | 1 | 11 | 9/23/2024 12:36:53 PM |
| 34 | WG1974555-5D2 WG1974555 | 1 | 12 | 9/23/2024 12:40:48 PM |
| 35 | WG1974555-6D10 WG1974555 | 1 | 13 | 9/23/2024 12:44:43 PM |
| 36 | CCV | 0 | 3 | 9/23/2024 12:48:35 PM |
| 37 | CCB | 0 | 4 | 9/23/2024 12:52:29 PM |
| 38 | WG1974746-1 WG1974746 | 1 | 22 | 9/23/2024 12:57:27 PM |
| 39 | WG1974746-2 WG1974746 | 1 | 23 | 9/23/2024 1:01:30 PM |
| 40 | L2453583-01 WG1974746 | 1 | 24 | 9/23/2024 1:05:25 PM |
| 41 | WG1974746-3 WG1974746 | 1 | 25 | 9/23/2024 1:09:19 PM |
| 42 | WG1974746-4 WG1974746 | 1 | 26 | 9/23/2024 1:13:11 PM |
| 43 | L2453583-02 WG1974746 | 1 | 29 | 9/23/2024 1:17:03 PM |
| 44 | L2453583-03 WG1974746 | 1 | 30 | 9/23/2024 1:20:55 PM |
| 45 | L2453583-04 WG1974746 | 1 | 31 | 9/23/2024 1:24:49 PM |
| 46 | L2453583-05 WG1974746 | 1 | 32 | 9/23/2024 1:28:43 PM |
| 47 | L2453583-06 WG1974746 | 1 | 33 | 9/23/2024 1:32:37 PM |
| 48 | CCV | 0 | 3 | 9/23/2024 1:36:31 PM |
| 49 | CCB | 0 | 4 | 9/23/2024 1:40:25 PM |
| 50 | WG1974290-1 WG1974290 | 1 | 38 | 9/23/2024 1:45:24 PM |
| 51 | L2453053-02 WG1973830 | 1 | 34 | 9/23/2024 1:49:26 PM |
| 52 | L2453053-03 WG1973830 | 1 | 35 | 9/23/2024 1:53:21 PM |
| 53 | L2453053-04 WG1973830 | 1 | 36 | 9/23/2024 1:57:16 PM |
| 54 | L2453053-05 WG1973830 | 1 | 37 | 9/23/2024 2:01:12 PM |
| 55 | L2450818-13D2 WG1974337 | 1 | 16 | 9/23/2024 2:05:04 PM |
| 56 | WG1974337-3D2 WG1974337 | 1 | 17 | 9/23/2024 2:08:57 PM |
| 57 | WG1974337-4D2 WG1974337 | 1 | 18 | 9/23/2024 2:12:50 PM |
| 58 | WG1974337-5D2 WG1974337 | 1 | 19 | 9/23/2024 2:16:43 PM |
| 59 | WG1974337-6D10 WG1974337 | 1 | 20 | 9/23/2024 2:20:37 PM |
| 60 | CCV | 0 | 3 | 9/23/2024 2:24:31 PM |
| 61 | CCB | 0 | 4 | 9/23/2024 2:28:26 PM |
| 62 | WG1974290-2 WG1974290 | 1 | 39 | |
| 63 | WG1974290-3 WG1974290 | 1 | 40 | |
| 64 | L2453195-01 WG1974746 | 1 | 27 | |
| 65 | L2453195-02 WG1974746 | 1 | 28 | |
| 66 | L2452976-03 WG1974290 | 1 | 41 | |
| 67 | L2451318-01 WG1974327 | 1 | 42 | |
| 68 | L2451318-02 WG1974327 | 1 | 43 | |

# Sequence Trace 9

9/23/2024 2:33:50 PM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 69 | WG1974746-5 WG1974746 | 1 | 44 | |
| 70 | WG1974746-6D5 WG1974746 | 1 | 45 | |
| 71 | CCV | 0 | 3 | |
| 72 | CCB | 0 | 4 | |
| 73 | | 1 | 46 | |
| 74 | | 1 | 47 | |
| 75 | | 1 | 48 | |
| 76 | | 1 | 49 | |
| 77 | | 1 | 50 | |
| 78 | | 1 | 51 | |
| 79 | | 1 | 52 | |
| 80 | CCV | 0 | 3 | |
| 81 | CCB | 0 | 4 | |
| 82 | | 1 | 53 | |
| 83 | | 1 | 54 | |
| 84 | | 1 | 55 | |
| 85 | | 1 | 56 | |
| 86 | CCV | 0 | 3 | |
| 87 | CCB | 0 | 4 | |
| 88 | | 1 | 57 | |
| 89 | | 1 | 58 | |
| 90 | | 1 | 59 | |
| 91 | | 1 | 60 | |
| 92 | | 2 | 1 | |
| 93 | | 2 | 2 | |
| 94 | | 2 | 3 | |
| 95 | | 2 | 4 | |
| 96 | | 2 | 5 | |
| 97 | | 2 | 6 | |
| 98 | CCV | 0 | 3 | |
| 99 | CCB | 0 | 4 | |
| 100 | | 2 | 7 | |
| 101 | | 2 | 8 | |
| 102 | | 2 | 9 | |
| 103 | | 2 | 10 | |
| 104 | | 2 | 11 | |
| 105 | | 2 | 12 | |
| 106 | | 2 | 13 | |
| 107 | | 2 | 14 | |
| 108 | | 2 | 15 | |
| 109 | | 2 | 16 | |
| 110 | CCV | 0 | 3 | |
| 111 | CCB | 0 | 4 | |
| 112 | | 2 | 17 | |
| 113 | | 2 | 18 | |
| 114 | | 2 | 19 | |
| 115 | | 2 | 20 | |
| 116 | | 2 | 21 | |
| 117 | CCV | 0 | 3 | |
| 118 | CCB | 0 | 4 | |
| 119 | CCV | 0 | 3 | |
| 120 | CCB | 0 | 4 | |
| 121 | LLOQ | 0 | 5 | |

# METALS ELN REPORT

**Workgroup: WG1973830**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHN0324381 80400CLH | 1:1 HCl | tHCL243712 0918EFM | METALS | METSPIKE2 | IPS, FPS, MIX | METSPIKE2 | IPS, FPS, MIX | 326, 140 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2452763-02 WATER | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2452825-01 WATER | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2452844-01 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453053-01 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453053-02 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453053-03 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453053-04 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453053-05 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-01 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-02 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-03 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-04 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-05 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-07 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |



Reported: 23-SEP-24 03:34 PM

# METALS ELN REPORT

**Workgroup: WG1973830**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2453342-08 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| L2453342-10 SAMP | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-1 BLANK | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-2 LCS | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | 0.5 | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-3 MS | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | 0.5 | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | FM2437130422 CLH |
| WG1973830-4 MSD | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | 0.5 | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | IPS2433150405 CLH |
| WG1973830-5 PS | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-6 SERDIL | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-7 MS | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | 0.5 | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-8 MSD | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | 0.5 | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-9 PS | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | |
| WG1973830-10 SERDIL | 09/20/24 08:00 | Alexander Gonatas | 50 | <2 | | 09/20/24 08:00 | 7 | 95.1 | 09/20/24 11:00 | 50 | ELN:efm |



Reported: 23-SEP-24 03:34 PM

# METALS ELN REPORT

**Workgroup: WG1973830**

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



Reported: 23-SEP-24 03:34 PM

# METALS ELN REPORT

**Workgroup: WG1974186**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHN0324381 80400CLH | 1:1 HCl | tHCL243712 0918EFM | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| L2453053-02 SAMP | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| L2453053-03 SAMP | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| L2453053-04 SAMP | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| L2453053-05 SAMP | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| WG1974186-17 BLANK | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | eln: ADG |
| WG1974186-18 LCS | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | 0.5 | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| WG1974186-19 MS | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | 0.5 | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | FM2437130422 CLH |
| WG1974186-20 MSD | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | 0.5 | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | IPS2433150405 CLH |
| WG1974186-21 PS | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |
| WG1974186-22 SERDIL | 09/20/24 09:46 | Cristy Estevez | NA | 50 | <2 | | 09/20/24 09:46 | 9 | 95.0 | 09/20/24 12:48 | 50 | |



Reported: 23-SEP-24 03:34 PM

# METALS ELN REPORT

**Workgroup: WG1974186**

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



Reported: 23-SEP-24 03:34 PM

# Inorganic Data
# (Mercury Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:33 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:43 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 14:03 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 14:06 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974191-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974191-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/23/24 13:27 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : MJR |
| **Lab File ID** | : WG1975044.pdf | **Instrument ID** | : NIC3 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 12:57 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:21 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:24 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973832-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973832-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/23/24 12:50 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 3,245.1 | **Analyst** | : CEY |
| **Lab File ID** | : WG1975103.pdf | **Instrument ID** | : NIC1 |
| **Sample Amount** | : 25ml | **%Solids** | : N/A |
| **Digestion Method** | : EPA 245.1 | **Date Digested** | : 09/20/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | R1879036-1 | | | R1879036-3 | | | R1879036-5 | | R1879036-7 | |
| **Date Analyzed** | : | 09/23/24 09:20 | | | 09/23/24 10:16 | | | 09/23/24 10:56 | | 09/23/24 11:54 | |
| **Parameter** | | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | | 0.00300 | 0.0029 | 96 | 0.0050 | 0.00510 | 102 | 0.00520 | 104 | 0.00510 | 102 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | | R1879036-9 | | | R1879036-11 | | R1879036-13 | |
| **Date Analyzed** : | | | | 09/23/24 12:34 | | | 09/23/24 13:10 | | 09/23/24 13:50 | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | | | | 0.0050 | 0.00520 | 104 | 0.00470 | 94 | 0.00520 | 104 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | | R1879036-15 | | | | | | |
| **Date Analyzed** : | | | | 09/23/24 15:05 | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| **Mercury** | | | | 0.0050 | 0.00510 | 103 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | **95-105%** | **(Methods 200.7, 245.1)** |
| | **90-110%** | **(Methods 200.8, 6010, 6020, 7470, 7471, 7474)** |
| | **85-115%** | **(Method 1631)** |
| **CCV:** | **90-110%** | **(Methods 200.7, 245.1, 6010, 6020, 7474)** |
| | **85-115%** | **(Methods 200.8, 1631)** |
| | **80-120%** | **(Methods 7470, 7471)** |

# Form 2A
## Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC1 | **Units** | : mg/l |

| | | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | R1879154-1 | | | R1879154-3 | | | R1879154-5 | | R1879154-7 | |
| **Date Analyzed** | : | 09/23/24 11:39 | | | 09/23/24 12:28 | | | 09/23/24 13:10 | | 09/23/24 13:59 | |
| **Parameter** | | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | | 0.00300 | 0.0029 | 95 | 0.0050 | 0.00510 | 102 | 0.00510 | 103 | 0.00520 | 103 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| **ICV:** | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| **CCV:** | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | | |

| | | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | R1879036-2 | | R1879036-4 | | R1879036-6 | | R1879036-8 | | WG1974191-1 | |
| **Date Analyzed** | : | 09/23/24 09:23 | | 09/23/24 10:19 | | 09/23/24 10:59 | | 09/23/24 11:57 | | 09/23/24 13:27 | |
| **Parameter** | | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Mercury | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1879036-10 | | R1879036-12 | | R1879036-14 | | | |
| **Date Analyzed** : | | | 09/23/24 12:37 | | 09/23/24 13:13 | | 09/23/24 13:53 | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| **Mercury** | | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** : | | | R1879036-16 | | | | | | | |
| **Date Analyzed** : | | | 09/23/24 15:08 | | | | | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| **Mercury** | | | 0.0000910 | U | | | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC1 | | |

| | | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab ID** | : | R1879154-2 | | R1879154-4 | | R1879154-6 | | R1879154-8 | | | | WG1973832-1 | |
| **Date Analyzed** | : | 09/23/24 11:42 | | 09/23/24 12:32 | | 09/23/24 13:13 | | 09/23/24 14:02 | | | | 09/23/24 12:50 | |
| **Parameter** | | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | | mg/l | Q |
| **Mercury** | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | | | 0.00009 | U |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1974191-3 | **MS Analysis Date** | : 09/23/24 13:37 |
| **Matrix Spike Dup** | : WG1974191-4 | **MSD Analysis Date** | : 09/23/24 13:40 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | ND | 0.005 | 0.00486 | 97 | 0.005 | 0.00480 | 96 | 1 | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1973832-3 | **MS Analysis Date** | : 09/23/24 13:00 |
| **Matrix Spike Dup** | : WG1973832-4 | **MSD Analysis Date** | : 09/23/24 13:04 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | ND | 0.005 | 0.00473 | 95 | 0.005 | 0.00479 | 96 | 1 | 70-130 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1974191-2 | **LCS Analysis Date** | : 09/23/24 13:30 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Mercury, Dissolved** | **0.00100** | **0.000950** | **96.** | | | | | **85-115** | **20** |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973832-2 | **LCS Analysis Date** | : 09/23/24 12:54 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Mercury, Total** | **0.00100** | **0.000890** | **89.** | | | | | **85-115** | **20** |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-01 | 09/20/24 10:41 | - | 25 |
| L2453053-02 | 09/20/24 10:41 | - | 25 |
| L2453053-03 | 09/20/24 10:41 | - | 25 |
| L2453053-04 | 09/20/24 10:41 | - | 25 |
| L2453053-05 | 09/20/24 10:41 | - | 25 |
| WG1974191-1 | 09/20/24 10:41 | - | 25 |
| WG1974191-2 | 09/20/24 10:41 | - | 25 |
| WG1974191-3 | 09/20/24 10:41 | - | 25 |
| WG1974191-4 | 09/20/24 10:41 | - | 25 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2453053-01 | 09/20/24 08:50 | - | 25 |
| L2453053-02 | 09/20/24 08:50 | - | 25 |
| L2453053-03 | 09/20/24 08:50 | - | 25 |
| L2453053-04 | 09/20/24 08:50 | - | 25 |
| L2453053-05 | 09/20/24 08:50 | - | 25 |
| WG1973832-1 | 09/20/24 08:50 | - | 25 |
| WG1973832-2 | 09/20/24 08:50 | - | 25 |
| WG1973832-3 | 09/20/24 11:58 | - | 25 |
| WG1973832-4 | 09/20/24 11:58 | - | 25 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC3 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 09/23/24 09:20 | **End Date** | : 09/23/24 15:08 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Dissolved |
|---|---|---|---|
| R1879036-1 ICV | 1 | 09:20:39 | X |
| R1879036-2 ICB | 1 | 09:23:58 | X |
| R1879036-3 CCV | 1 | 10:16:24 | X |
| R1879036-4 CCB | 1 | 10:19:42 | X |
| R1879036-5 CCV | 1 | 10:56:21 | X |
| R1879036-6 CCB | 1 | 10:59:39 | X |
| R1879036-7 CCV | 1 | 11:54:35 | X |
| R1879036-8 CCB | 1 | 11:57:53 | X |
| R1879036-9 CCV | 1 | 12:34:14 | X |
| R1879036-10 CCB | 1 | 12:37:32 | X |
| R1879036-11 CCV | 1 | 13:10:33 | X |
| R1879036-12 CCB | 1 | 13:13:50 | X |
| WG1974191-1 BLANK | 1 | 13:27:18 | X |
| WG1974191-2 LCS | 1 | 13:30:36 | X |
| L2453053-01 | 1 | 13:33:54 | X |
| WG1974191-3 MS | 1 | 13:37:12 | X |
| WG1974191-4 MSD | 1 | 13:40:29 | X |
| L2453053-02 | 1 | 13:43:48 | X |
| L2453053-03 | 1 | 13:47:06 | X |
| R1879036-13 CCV | 1 | 13:50:24 | X |
| R1879036-14 CCB | 1 | 13:53:42 | X |
| L2453053-04 | 1 | 14:03:34 | X |
| L2453053-05 | 1 | 14:06:53 | X |
| R1879036-15 CCV | 1 | 15:05:08 | X |
| R1879036-16 CCB | 1 | 15:08:27 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Instrument ID** | : NIC1 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 09/23/24 11:39 | **End Date** | : 09/23/24 14:02 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Total |
|---|---|---|---|
| R1879154-1 ICV | 1 | 11:39:37 | X |
| R1879154-2 ICB | 1 | 11:42:57 | X |
| R1879154-3 CCV | 1 | 12:28:52 | X |
| R1879154-4 CCB | 1 | 12:32:10 | X |
| WG1973832-1 BLANK | 1 | 12:50:51 | X |
| WG1973832-2 LCS | 1 | 12:54:10 | X |
| L2453053-01 | 1 | 12:57:28 | X |
| WG1973832-3 MS | 1 | 13:00:46 | X |
| WG1973832-4 MSD | 1 | 13:04:04 | X |
| R1879154-5 CCV | 1 | 13:10:41 | X |
| R1879154-6 CCB | 1 | 13:13:59 | X |
| L2453053-02 | 1 | 13:18:08 | X |
| L2453053-03 | 1 | 13:21:26 | X |
| L2453053-04 | 1 | 13:24:44 | X |
| L2453053-05 | 1 | 13:28:03 | X |
| R1879154-7 CCV | 1 | 13:59:00 | X |
| R1879154-8 CCB | 1 | 14:02:19 | X |

**Date Created:** 03/19/18
**Created By:** Jason Hebert
**File:** PM4631-1
**Page:** 1

**MERCURY by 7470A, 245.1 (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | 20 | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor.* *(Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9836-1
**Page:** 1

**METALS by 7470A (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9837-1
**Page:** 1

**METALS by 7471B (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.08 | 0.05216 | mg/kg | 72-128 | | 80-120 | 20 | 20 | | 28 days | Metals Only-Glass 60mL/2oz unpreserv |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

Title :
Date : 9/23/2024
Name :

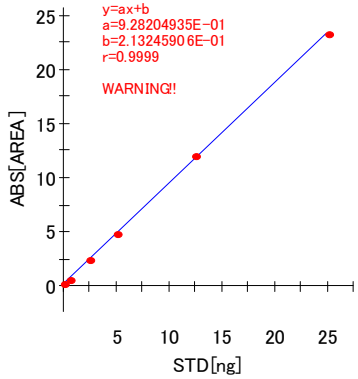
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | 0.2455 | 0.0347 | - | 09/23/2024 11:17 | CEY,NIC1 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.6250 | 0.4436 | 11.3 | 09/23/2024 11:21 | CEY,NIC1 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.4667 | 2.4278 | 2.9 | 09/23/2024 11:24 | CEY,NIC1 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 4.8349 | 4.9791 | 0.4 | 09/23/2024 11:27 | CEY,NIC1 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.0056 | 12.7045 | 1.6 | 09/23/2024 11:30 | CEY,NIC1 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 23.3351 | 24.9103 | 0.4 | 09/23/2024 11:34 | CEY,NIC1 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 6.8439 | 7.1435 | 2.857 | - | 09/23/2024 11:39 | CEY,NIC1 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.2893 | 0.0819 | 0.033 | - | 09/23/2024 11:42 | CEY,NIC1 |
| 3 | 0.2 PPB | 2.500 | 2.500 | 2.500 | 0.6425 | 0.4625 | 0.185 | - | 09/23/2024 11:46 | CEY,NIC1 |
| 4 | I2453052-01 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2591 | 0.0494 | 0.020 | - | 09/23/2024 11:59 | CEY,NIC1 |
| 5 | I2453052-02 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2630 | 0.0536 | 0.021 | - | 09/23/2024 12:02 | CEY,NIC1 |
| 6 | I2453052-03 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2500 | 0.0396 | 0.016 | - | 09/23/2024 12:05 | CEY,NIC1 |





NIC NIPPON INSTRUMENTS CORPORATION

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | I2453062-01 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2481 | 0.0375 | 0.015 | - | 09/23/2024 12:09 | CEY,NIC1 |
| 8 | I2453062-02 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2168 | 0.0038 | 0.002 | - | 09/23/2024 12:12 | CEY,NIC1 |
| 9 | I2453062-03 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2420 | 0.0310 | 0.012 | - | 09/23/2024 12:15 | CEY,NIC1 |
| 10 | I2453062-04 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2272 | 0.0150 | 0.006 | - | 09/23/2024 12:18 | CEY,NIC1 |
| 11 | I2453062-05 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2353 | 0.0238 | 0.010 | - | 09/23/2024 12:22 | CEY,NIC1 |
| 12 | I2453070-06 WG1973876 | 2.500 | 2.500 | 2.500 | 0.2465 | 0.0358 | 0.014 | - | 09/23/2024 12:25 | CEY,NIC1 |
| 13 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.1032 | 12.8096 | 5.124 | 102.5 | 09/23/2024 12:28 | CEY,NIC1 |
| 14 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3534 | 0.1510 | 0.060 | - | 09/23/2024 12:32 | CEY,NIC1 |
| 15 | L2453002-01 WG1973434 | 2.500 | 2.500 | 2.500 | 0.1723 | -0.0441 | -0.018 | - | 09/23/2024 12:37 | CEY,NIC1 |
| 16 | L2453002-03 WG1973434 | 2.500 | 2.500 | 2.500 | 0.1699 | -0.0467 | -0.019 | - | 09/23/2024 12:40 | CEY,NIC1 |
| 17 | L2453051-01 WG1973434 | 2.500 | 2.500 | 2.500 | 0.1734 | -0.0429 | -0.017 | - | 09/23/2024 12:44 | CEY,NIC1 |
| 18 | L2453051-02 WG1973434 | 2.500 | 2.500 | 2.500 | 0.1962 | -0.0184 | -0.007 | - | 09/23/2024 12:47 | CEY,NIC1 |
| 19 | WG1973832-1 WG1973832 | 2.500 | 2.500 | 2.500 | 0.1847 | -0.0308 | -0.012 | - | 09/23/2024 12:50 | CEY,NIC1 |
| 20 | WG1973832-2 WG1973832 | 2.500 | 2.500 | 2.500 | 2.2846 | 2.2316 | 0.893 | - | 09/23/2024 12:54 | CEY,NIC1 |
| 21 | L2453053-01 WG1973832 | 2.500 | 2.500 | 2.500 | 0.1755 | -0.0407 | -0.016 | - | 09/23/2024 12:57 | CEY,NIC1 |
| 22 | WG1973832-3 WG1973832 | 2.500 | 2.500 | 2.500 | 11.1923 | 11.8283 | 4.731 | - | 09/23/2024 13:00 | CEY,NIC1 |
| 23 | WG1973832-4 WG1973832 | 2.500 | 2.500 | 2.500 | 11.3395 | 11.9869 | 4.795 | - | 09/23/2024 13:04 | CEY,NIC1 |
| 24 | L2452763-02 WG1973832 | 2.500 | 2.500 | 2.500 | 0.2432 | 0.0323 | 0.013 | - | 09/23/2024 13:07 | CEY,NIC1 |
| 25 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.1231 | 12.8311 | 5.132 | 102.6 | 09/23/2024 13:10 | CEY,NIC1 |
| 26 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3591 | 0.1571 | 0.063 | - | 09/23/2024 13:13 | CEY,NIC1 |
| 27 | L2453053-02 WG1973832 | 2.500 | 2.500 | 2.500 | 0.2212 | 0.0086 | 0.003 | - | 09/23/2024 13:18 | CEY,NIC1 |
| 28 | L2453053-03 WG1973832 | 2.500 | 2.500 | 2.500 | 0.2336 | 0.0219 | 0.009 | - | 09/23/2024 13:21 | CEY,NIC1 |
| 29 | L2453053-04 WG1973832 | 2.500 | 2.500 | 2.500 | 0.2199 | 0.0072 | 0.003 | - | 09/23/2024 13:24 | CEY,NIC1 |
| 30 | L2453053-05 WG1973832 | 2.500 | 2.500 | 2.500 | 0.2088 | -0.0048 | -0.002 | - | 09/23/2024 13:28 | CEY,NIC1 |
| 31 | XHG2438210357FAC | 2.500 | 2.500 | 2.500 | 2.4928 | 2.4559 | 0.982 | - | 09/23/2024 13:31 | CEY,NIC1 |
| 32 | wg1974310-1 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2028 | -0.0113 | -0.005 | - | 09/23/2024 13:35 | CEY,NIC1 |
| 33 | wg1974310-2 wg1974310 | 2.500 | 2.500 | 2.500 | 2.3964 | 2.3520 | 0.941 | - | 09/23/2024 13:39 | CEY,NIC1 |
| 34 | I2453011-01 wg1974310 | 2.500 | 2.500 | 2.500 | 0.1942 | -0.0205 | -0.008 | - | 09/23/2024 13:42 | CEY,NIC1 |
| 35 | wg1974310-3 wg1974310 | 2.500 | 2.500 | 2.500 | 11.2301 | 11.8690 | 4.748 | - | 09/23/2024 13:45 | CEY,NIC1 |
| 36 | wg1974310-4 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2186 | 0.0058 | 0.002 | - | 09/23/2024 13:49 | CEY,NIC1 |
| 37 | xCheck STD(5ug/L) | 2.500 | 2.500 | 2.500 | 0.3614 | 0.1596 | 0.064 | - | 09/23/2024 13:52 | CEY,NIC1/Check STD Err |
| 38 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.2031 | 12.9172 | 5.167 | 103.3 | 09/23/2024 13:59 | CEY,NIC1 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3655 | 0.1640 | 0.066 | - | 09/23/2024 14:02 | CEY,NIC1 |
| 40 | I2453011-02 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2067 | -0.0071 | -0.003 | - | 09/23/2024 14:06 | CEY,NIC1 |
| 41 | wg1974310-5 wg1974310 | 2.500 | 2.500 | 2.500 | 11.4416 | 12.0968 | 4.839 | - | 09/23/2024 14:09 | CEY,NIC1 |
| 42 | wg1974310-6 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2024 | -0.0117 | -0.005 | - | 09/23/2024 14:12 | CEY,NIC1 |
| 43 | I2453011-03 wg1974310 | 2.500 | 2.500 | 2.500 | 0.1935 | -0.0213 | -0.009 | - | 09/23/2024 14:15 | CEY,NIC1 |
| 44 | I2453011-04 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2091 | -0.0045 | -0.002 | - | 09/23/2024 14:19 | CEY,NIC1 |
| 45 | I2453063-01 wg1974310 | 2.500 | 2.500 | 2.500 | 0.2000 | -0.0143 | -0.006 | - | 09/23/2024 14:22 | CEY,NIC1 |
| 46 | WG1974261-1 WG1974261 | 2.500 | 2.500 | 2.500 | 0.1764 | -0.0397 | -0.016 | - | 09/23/2024 14:25 | CEY,NIC1 |
| 47 | WG1974261-2 WG1974261 | 2.500 | 2.500 | 2.500 | 2.3782 | 2.3324 | 0.933 | - | 09/23/2024 14:29 | CEY,NIC1 |
| 48 | WG1974261-3 WG1974261 | 2.500 | 2.500 | 2.500 | 2.3543 | 2.3067 | 0.923 | - | 09/23/2024 14:32 | CEY,NIC1 |
| 49 | L2452952-01 WG1974261 | 2.500 | 2.500 | 2.500 | 0.1931 | -0.0217 | -0.009 | - | 09/23/2024 14:35 | CEY,NIC1 |
| 50 | xCheck STD(5ug/L) | 2.500 | 2.500 | 2.500 | 0.3180 | 0.1129 | 0.045 | - | 09/23/2024 14:39 | CEY,NIC1/Check STD Erro |
| 51 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.1581 | 12.8688 | 5.148 | 103.0 | 09/23/2024 14:43 | CEY,NIC1 |
| 52 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3699 | 0.1688 | 0.068 | - | 09/23/2024 14:47 | CEY,NIC1 |
| 53 | WG1974296-1 WG1974296 | 2.500 | 2.500 | 2.500 | 0.1788 | -0.0371 | -0.015 | - | 09/23/2024 15:09 | CEY,NIC1 |

Title :
Date : 09/23/2024
Name :

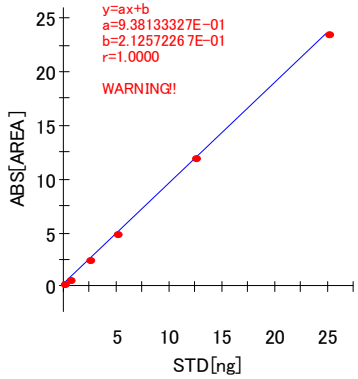
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | 0.2281 | 0.0166 | - | 09/23/2024 09:00 | MJR,NIC3 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.6428 | 0.4586 | 8.3 | 09/23/2024 09:03 | MJR,NIC3 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.5304 | 2.4707 | 1.2 | 09/23/2024 09:06 | MJR,NIC3 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 4.8990 | 4.9955 | 0.1 | 09/23/2024 09:10 | MJR,NIC3 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.0406 | 12.6080 | 0.9 | 09/23/2024 09:13 | MJR,NIC3 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 23.6196 | 24.9506 | 0.2 | 09/23/2024 09:16 | MJR,NIC3 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 6.9478 | 7.1794 | 2.872 | - | 09/23/2024 09:20 | MJR,NIC3 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.2380 | 0.0271 | 0.011 | - | 09/23/2024 09:23 | MJR,NIC3 |
| 3 | 0.2PPB | 2.500 | 2.500 | 2.500 | 0.6533 | 0.4698 | 0.188 | - | 09/23/2024 09:27 | MJR,NIC3 |
| 4 | WG1974182-1 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1749 | -0.0402 | -0.016 | - | 09/23/2024 09:43 | MJR,NIC3 |
| 5 | WG1974182-2 WG1974182 | 2.500 | 2.500 | 2.500 | 2.5188 | 2.4583 | 0.983 | - | 09/23/2024 09:46 | MJR,NIC3 |
| 6 | L2453857-07 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1851 | -0.0293 | -0.012 | - | 09/23/2024 09:50 | MJR,NIC3 |





NIC NIPPON INSTRUMENTS CORPORATION

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | WG1974182-3 WG1974182 | 2.500 | 2.500 | 2.500 | 11.4809 | 12.0114 | 4.805 | - | 09/23/2024 09:53 | MJR,NIC3 |
| 8 | WG1974182-4 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1826 | -0.0319 | -0.013 | - | 09/23/2024 09:56 | MJR,NIC3 |
| 9 | L2453857-01 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1864 | -0.0279 | -0.011 | - | 09/23/2024 10:00 | MJR,NIC3 |
| 10 | L2453857-08 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1813 | -0.0333 | -0.013 | - | 09/23/2024 10:03 | MJR,NIC3 |
| 11 | L2453857-11 WG1974182 | 2.500 | 2.500 | 2.500 | 0.1848 | -0.0296 | -0.012 | - | 09/23/2024 10:06 | MJR,NIC3 |
| 12 | WG1974748-1 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2664 | 0.0574 | 0.023 | - | 09/23/2024 10:13 | MJR,NIC3 |
| 13 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.2169 | 12.7960 | 5.118 | 102.4 | 09/23/2024 10:16 | MJR,NIC3 |
| 14 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3513 | 0.1479 | 0.059 | - | 09/23/2024 10:19 | MJR,NIC3 |
| 15 | WG1974748-2 WG1974748 | 2.500 | 2.500 | 2.500 | 2.8953 | 2.8596 | 1.144 | - | 09/23/2024 10:23 | MJR,NIC3 |
| 16 | L2453583-01 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2365 | 0.0255 | 0.010 | - | 09/23/2024 10:26 | MJR,NIC3 |
| 17 | WG1974748-3 WG1974748 | 2.500 | 2.500 | 2.500 | 13.0939 | 13.7308 | 5.492 | - | 09/23/2024 10:29 | MJR,NIC3 |
| 18 | WG1974748-4 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2113 | -0.0014 | -0.001 | - | 09/23/2024 10:33 | MJR,NIC3 |
| 19 | L2453583-02 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2427 | 0.0321 | 0.013 | - | 09/23/2024 10:36 | MJR,NIC3 |
| 20 | L2453583-03 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2329 | 0.0217 | 0.009 | - | 09/23/2024 10:39 | MJR,NIC3 |
| 21 | L2453583-04 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2214 | 0.0094 | 0.004 | - | 09/23/2024 10:43 | MJR,NIC3 |
| 22 | L2453583-05 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2271 | 0.0155 | 0.006 | - | 09/23/2024 10:46 | MJR,NIC3 |
| 23 | L2453583-06 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2242 | 0.0124 | 0.005 | - | 09/23/2024 10:49 | MJR,NIC3 |
| 24 | L2453195-01 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2164 | 0.0041 | 0.002 | - | 09/23/2024 10:53 | MJR,NIC3 |
| 25 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.3600 | 12.9485 | 5.179 | 103.6 | 09/23/2024 10:56 | MJR,NIC3 |
| 26 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3499 | 0.1464 | 0.059 | - | 09/23/2024 10:59 | MJR,NIC3 |
| 27 | L2453195-02 WG1974748 | 2.500 | 2.500 | 2.500 | 0.2327 | 0.0215 | 0.009 | - | 09/23/2024 11:02 | MJR,NIC3 |
| 28 | WG1974924-1 WG1974924 | 2.500 | 2.500 | 2.500 | 0.1631 | -0.0527 | -0.021 | - | 09/23/2024 11:17 | MJR,NIC3 |
| 29 | WG1974924-2 WG1974924 | 2.500 | 2.500 | 2.500 | 2.5342 | 2.4747 | 0.990 | - | 09/23/2024 11:21 | MJR,NIC3 |
| 30 | I2454057-01 WG1974924 | 2.500 | 2.500 | 2.500 | 0.2763 | 0.0679 | 0.027 | - | 09/23/2024 11:24 | MJR,NIC3 |
| 31 | WG1974924-3 WG1974924 | 2.500 | 2.500 | 2.500 | 11.9432 | 12.5042 | 5.002 | - | 09/23/2024 11:27 | MJR,NIC3 |
| 32 | WG1974924-4 WG1974924 | 2.500 | 2.500 | 2.500 | 0.3436 | 0.1397 | 0.056 | - | 09/23/2024 11:30 | MJR,NIC3 |
| 33 | WG1973933-1 WG1973933 | 2.500 | 2.500 | 2.500 | 0.4043 | 0.2044 | 0.082 | - | 09/23/2024 11:41 | MJR,NIC3 |
| 34 | WG1973933-2 WG1973933 | 2.500 | 2.500 | 2.500 | 2.5768 | 2.5201 | 1.008 | - | 09/23/2024 11:44 | MJR,NIC3 |
| 35 | I2453695-01 WG1973933 | 2.500 | 2.500 | 2.500 | 1.7755 | 1.6660 | 0.666 | - | 09/23/2024 11:47 | MJR,NIC3 |
| 36 | WG1973933-3 WG1973933 | 2.500 | 2.500 | 2.500 | 13.4187 | 14.0770 | 5.631 | - | 09/23/2024 11:51 | MJR,NIC3 |
| 37 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.2221 | 12.8015 | 5.121 | 102.4 | 09/23/2024 11:54 | MJR,NIC3 |
| 38 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3483 | 0.1447 | 0.058 | - | 09/23/2024 11:57 | MJR,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | WG1973933-4 WG1973933 | 2.500 | 2.500 | 2.500 | 1.5600 | 1.4363 | 0.575 | - | 09/23/2024 12:01 | MJR,NIC3 |
| 40 | I2452663-01 WG1973933 | 2.500 | 2.500 | 2.500 | 0.3951 | 0.1946 | 0.078 | - | 09/23/2024 12:04 | MJR,NIC3 |
| 41 | I2453695-02 WG1973933 | 2.500 | 2.500 | 2.500 | 1.2614 | 1.1180 | 0.447 | - | 09/23/2024 12:07 | MJR,NIC3 |
| 42 | I2453695-03 WG1973933 | 2.500 | 2.500 | 2.500 | 1.5419 | 1.4170 | 0.567 | - | 09/23/2024 12:11 | MJR,NIC3 |
| 43 | WG1973183-1 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1610 | -0.0550 | -0.022 | - | 09/23/2024 12:14 | MJR,NIC3 |
| 44 | WG1973183-2 WG1973183 | 2.500 | 2.500 | 2.500 | 2.4677 | 2.4038 | 0.962 | - | 09/23/2024 12:17 | MJR,NIC3 |
| 45 | WG1973183-3 WG1973183 | 2.500 | 2.500 | 2.500 | 2.4900 | 2.4276 | 0.971 | - | 09/23/2024 12:21 | MJR,NIC3 |
| 46 | L2452968-02 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1794 | -0.0354 | -0.014 | - | 09/23/2024 12:24 | MJR,NIC3 |
| 47 | WG1973183-4 WG1973183 | 2.500 | 2.500 | 2.500 | 11.9251 | 12.4849 | 4.994 | - | 09/23/2024 12:27 | MJR,NIC3 |
| 48 | WG1973183-5 WG1973183 | 2.500 | 2.500 | 2.500 | 11.7826 | 12.3330 | 4.933 | - | 09/23/2024 12:30 | MJR,NIC3 |
| 49 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.3790 | 12.9688 | 5.188 | 103.8 | 09/23/2024 12:34 | MJR,NIC3 |
| 50 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3474 | 0.1437 | 0.057 | - | 09/23/2024 12:37 | MJR,NIC3 |
| 51 | L2452968-03 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1710 | -0.0443 | -0.018 | - | 09/23/2024 12:40 | MJR,NIC3 |
| 52 | L2452968-05 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1764 | -0.0386 | -0.015 | - | 09/23/2024 12:44 | MJR,NIC3 |
| 53 | L2452968-06 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1789 | -0.0359 | -0.014 | - | 09/23/2024 12:47 | MJR,NIC3 |
| 54 | L2452968-08 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1709 | -0.0444 | -0.018 | - | 09/23/2024 12:50 | MJR,NIC3 |
| 55 | L2452968-11 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1889 | -0.0252 | -0.010 | - | 09/23/2024 12:54 | MJR,NIC3 |
| 56 | L2452968-12 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1716 | -0.0437 | -0.017 | - | 09/23/2024 12:57 | MJR,NIC3 |
| 57 | L2452968-14 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1647 | -0.0510 | -0.020 | - | 09/23/2024 13:00 | MJR,NIC3 |
| 58 | L2452974-01 WG1973183 | 2.500 | 2.500 | 2.500 | 0.4095 | 0.2099 | 0.084 | - | 09/23/2024 13:03 | MJR,NIC3 |
| 59 | L2452976-02 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1789 | -0.0359 | -0.014 | - | 09/23/2024 13:07 | MJR,NIC3 |
| 60 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 11.2399 | 11.7545 | 4.702 | 94.0 | 09/23/2024 13:10 | MJR,NIC3 |
| 61 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3465 | 0.1428 | 0.057 | - | 09/23/2024 13:13 | MJR,NIC3 |
| 62 | L2452976-03 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1777 | -0.0372 | -0.015 | - | 09/23/2024 13:17 | MJR,NIC3 |
| 63 | L2452976-04 WG1973183 | 2.500 | 2.500 | 2.500 | 0.1720 | -0.0432 | -0.017 | - | 09/23/2024 13:20 | MJR,NIC3 |
| 64 | L2452968-01 WG1973183 | 2.500 | 2.500 | 2.500 | 0.2189 | 0.0067 | 0.003 | - | 09/23/2024 13:24 | MJR,NIC3 |
| 65 | WG1974191-1 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1679 | -0.0476 | -0.019 | - | 09/23/2024 13:27 | MJR,NIC3 |
| 66 | WG1974191-2 WG1974191 | 2.500 | 2.500 | 2.500 | 2.4574 | 2.3929 | 0.957 | - | 09/23/2024 13:30 | MJR,NIC3 |
| 67 | L2453053-01 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1847 | -0.0297 | -0.012 | - | 09/23/2024 13:33 | MJR,NIC3 |
| 68 | WG1974191-3 WG1974191 | 2.500 | 2.500 | 2.500 | 11.6265 | 12.1666 | 4.867 | - | 09/23/2024 13:37 | MJR,NIC3 |
| 69 | WG1974191-4 WG1974191 | 2.500 | 2.500 | 2.500 | 11.4923 | 12.0236 | 4.809 | - | 09/23/2024 13:40 | MJR,NIC3 |
| 70 | L2453053-02 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1814 | -0.0332 | -0.013 | - | 09/23/2024 13:43 | MJR,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | L2453053-03 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1885 | -0.0257 | -0.010 | - | 09/23/2024 13:47 | MJR,NIC3 |
| 72 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.3839 | 12.9740 | 5.190 | 103.8 | 09/23/2024 13:50 | MJR,NIC3 |
| 73 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3447 | 0.1408 | 0.056 | - | 09/23/2024 13:53 | MJR,NIC3 |
| 74 | L2453053-04 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1776 | -0.0373 | -0.015 | - | 09/23/2024 14:03 | MJR,NIC3 |
| 75 | L2453053-05 WG1974191 | 2.500 | 2.500 | 2.500 | 0.1839 | -0.0306 | -0.012 | - | 09/23/2024 14:06 | MJR,NIC3 |
| 76 | I2453039-01 WG1973890 | 2.500 | 2.500 | 2.500 | 0.2972 | 0.0902 | 0.036 | - | 09/23/2024 14:48 | MJR,NIC3 |
| 77 | I2453039-02 WG1973890 | 2.500 | 2.500 | 2.500 | 0.3107 | 0.1046 | 0.042 | - | 09/23/2024 14:51 | MJR,NIC3 |
| 78 | I2453039-03 WG1973890 | 2.500 | 2.500 | 2.500 | 0.3130 | 0.1071 | 0.043 | - | 09/23/2024 14:55 | MJR,NIC3 |
| 79 | I2453039-05 WG1973890 | 2.500 | 2.500 | 2.500 | 0.3186 | 0.1130 | 0.045 | - | 09/23/2024 14:58 | MJR,NIC3 |
| 80 | I2453039-06 WG1973890 | 2.500 | 2.500 | 2.500 | 0.3139 | 0.1080 | 0.043 | - | 09/23/2024 15:01 | MJR,NIC3 |
| 81 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.2338 | 12.8140 | 5.126 | 102.5 | 09/23/2024 15:05 | MJR,NIC3 |
| 82 | Check Blank | 2.500 | 2.500 | 2.500 | 0.3387 | 0.1344 | 0.054 | - | 09/23/2024 15:08 | MJR,NIC3 |

MERCURY TRUE VALUE CRITERIA

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS | 1 ug/l |
| CCV | 5 ug/l |

As of 6/1/13, Mercury True Value criteria is as follows:

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS(aq) | 5 ug/l |
| MS(soil) | 1 ug/l |
| CCV | 10 ug/l |

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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**Reference Material**

# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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# ▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
$U_{char}$ = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
$U_{LTS}$ = Standard uncertainty associated with long-term stability.
$U_{STS}$ = Standard uncertainty associated with short-term (transport) stability.
$U_{RSS}$ = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

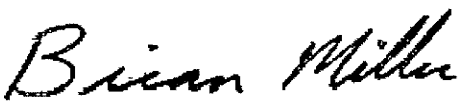
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**



**Quality Officer**

**Matthew Seebeck**

ERA
A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

# Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

| No. | Sample No. | NAME | CURVE: WG1972915 |
|---|---|---|---|
| 1 | 1 | STD | |
| 2 | 2 | STD | |
| 3 | 3 | STD | |
| 4 | 4 | STD | |
| 5 | 5 | STD | |
| 6 | 6 | STD | |
| 1 | 7 | ICV | |
| 2 | 8 | ICB | |
| 3 | 9 | 0.2 PPB | |
| 4 | 10 | l2453052-01 WG1973876 | |
| 5 | 11 | l2453052-02 WG1973876 | |
| 6 | 12 | l2453052-03 WG1973876 | |
| 7 | 13 | l2453062-01 WG1973876 | |
| 8 | 14 | l2453062-02 WG1973876 | |
| 9 | 15 | l2453062-03 WG1973876 | |
| 10 | 16 | l2453062-04 WG1973876 | |
| 11 | 17 | l2453062-05 WG1973876 | |
| 12 | 18 | l2453070-06 WG1973876 | |
| 13 | 19 | Check STD(5ug/L) | |
| 14 | 20 | Check Blank | |
| 15 | 21 | L2453002-01 WG1973434 | |
| 16 | 22 | L2453002-03 WG1973434 | |
| 17 | 23 | L2453051-01 WG1973434 | |
| 18 | 24 | L2453051-02 WG1973434 | |
| 19 | 25 | WG1973832-1 WG1973832 | |
| 20 | 26 | WG1973832-2 WG1973832 | |
| 21 | 27 | L2453053-01 WG1973832 | |
| 22 | 28 | WG1973832-3 WG1973832 | |
| 23 | 29 | WG1973832-4 WG1973832 | |
| 24 | 30 | L2452763-02 WG1973832 | |
| 25 | 31 | Check STD(5ug/L) | |
| 26 | 32 | Check Blank | |
| 27 | 33 | L2453053-02 WG1973832 | |
| 28 | 34 | L2453053-03 WG1973832 | |
| 29 | 35 | L2453053-04 WG1973832 | |
| 30 | 36 | L2453053-05 WG1973832 | |
| 31 | 37 | XHG2438210357FAC | |
| 32 | 38 | wg1974310-1 wg1974310 | |
| 33 | 39 | wg1974310-2 wg1974310 | |
| 34 | 40 | l2453011-01 wg1974310 | |
| 35 | 41 | wg1974310-3 wg1974310 | |
| 36 | 42 | wg1974310-4 wg1974310 | |
| 37 | 43 | xCheck STD(5ug/L) | |

| | | |
|---|---|---|
| 38 | 43 | Check STD(5ug/L) |
| 39 | 44 | Check Blank |
| 40 | 45 | l2453011-02 wg1974310 |
| 41 | 46 | wg1974310-5 wg1974310 |
| 42 | 47 | wg1974310-6 wg1974310 |
| 43 | 48 | l2453011-03 wg1974310 |
| 44 | 49 | l2453011-04 wg1974310 |
| 45 | 50 | l2453063-01 wg1974310 |
| 46 | 51 | WG1974261-1 WG1974261 |
| 47 | 52 | WG1974261-2 WG1974261 |
| 48 | 53 | WG1974261-3 WG1974261 |
| 49 | 54 | L2452952-01 WG1974261 |
| 50 | 55 | xCheck STD(5ug/L) |
| 51 | 55 | Check STD(5ug/L) |
| 52 | 56 | Check Blank |

| No. | Sample No. | NAME | CURVE: WG1972915 |
|---|---|---|---|
| 1 | 1 | STD | |
| 2 | 2 | STD | |
| 3 | 3 | STD | |
| 4 | 4 | STD | |
| 5 | 5 | STD | |
| 6 | 6 | STD | |
| 1 | 7 | ICV | |
| 2 | 8 | ICB | |
| 3 | 9 | 0.2PPB | |
| 4 | 10 | WG1974182-1 | WG1974182 |
| 5 | 11 | WG1974182-2 | WG1974182 |
| 6 | 12 | L2453857-07 | WG1974182 |
| 7 | 13 | WG1974182-3 | WG1974182 |
| 8 | 14 | WG1974182-4 | WG1974182 |
| 9 | 15 | L2453857-01 | WG1974182 |
| 10 | 16 | L2453857-08 | WG1974182 |
| 11 | 17 | L2453857-11 | WG1974182 |
| 12 | 18 | WG1974748-1 | WG1974748 |
| 13 | 19 | Check STD(5ug/L) | |
| 14 | 20 | Check Blank | |
| 15 | 21 | WG1974748-2 | WG1974748 |
| 16 | 22 | L2453583-01 | WG1974748 |
| 17 | 23 | WG1974748-3 | WG1974748 |
| 18 | 24 | WG1974748-4 | WG1974748 |
| 19 | 25 | L2453583-02 | WG1974748 |
| 20 | 26 | L2453583-03 | WG1974748 |
| 21 | 27 | L2453583-04 | WG1974748 |
| 22 | 28 | L2453583-05 | WG1974748 |
| 23 | 29 | L2453583-06 | WG1974748 |
| 24 | 30 | L2453195-01 | WG1974748 |
| 25 | 31 | Check STD(5ug/L) | |
| 26 | 32 | Check Blank | |
| 27 | 33 | L2453195-02 | WG1974748 |
| 28 | 34 | WG1974924-1 | WG1974924 |
| 29 | 35 | WG1974924-2 | WG1974924 |
| 30 | 36 | l2454057-01 | WG1974924 |
| 31 | 37 | WG1974924-3 | WG1974924 |
| 32 | 38 | WG1974924-4 | WG1974924 |
| 33 | 39 | WG1973933-1 | WG1973933 |
| 34 | 40 | WG1973933-2 | WG1973933 |
| 35 | 41 | l2453695-01 | WG1973933 |
| 36 | 42 | WG1973933-3 | WG1973933 |
| 37 | 43 | Check STD(5ug/L) | |

| | | |
|---|---|---|
| 38 | 44 | Check Blank |
| 39 | 45 | WG1973933-4 WG1973933 |
| 40 | 46 | l2452663-01 WG1973933 |
| 41 | 47 | l2453695-02 WG1973933 |
| 42 | 48 | l2453695-03 WG1973933 |
| 43 | 49 | WG1973183-1 WG1973183 |
| 44 | 50 | WG1973183-2 WG1973183 |
| 45 | 51 | WG1973183-3 WG1973183 |
| 46 | 52 | L2452968-02 WG1973183 |
| 47 | 53 | WG1973183-4 WG1973183 |
| 48 | 54 | WG1973183-5 WG1973183 |
| 49 | 55 | Check STD(5ug/L) |
| 50 | 56 | Check Blank |
| 51 | 58 | L2452968-03 WG1973183 |
| 52 | 59 | L2452968-05 WG1973183 |
| 53 | 60 | L2452968-06 WG1973183 |
| 54 | 61 | L2452968-08 WG1973183 |
| 55 | 62 | L2452968-11 WG1973183 |
| 56 | 63 | L2452968-12 WG1973183 |
| 57 | 64 | L2452968-14 WG1973183 |
| 58 | 65 | L2452974-01 WG1973183 |
| 59 | 66 | L2452976-02 WG1973183 |
| 60 | 67 | Check STD(5ug/L) |
| 61 | 68 | Check Blank |
| 62 | 69 | L2452976-03 WG1973183 |
| 63 | 70 | L2452976-04 WG1973183 |
| 64 | 71 | L2452968-01 WG1973183 |
| 65 | 72 | WG1974191-1 WG1974191 |
| 66 | 73 | WG1974191-2 WG1974191 |
| 67 | 74 | L2453053-01 WG1974191 |
| 68 | 75 | WG1974191-3 WG1974191 |
| 69 | 76 | WG1974191-4 WG1974191 |
| 70 | 77 | L2453053-02 WG1974191 |
| 71 | 78 | L2453053-03 WG1974191 |
| 72 | 79 | Check STD(5ug/L) |
| 73 | 80 | Check Blank |
| 74 | 1 | L2453053-04 WG1974191 |
| 75 | 2 | L2453053-05 WG1974191 |
| 76 | 3 | l2453039-01 WG1973890 |
| 77 | 4 | l2453039-02 WG1973890 |
| 78 | 5 | l2453039-03 WG1973890 |
| 79 | 6 | l2453039-05 WG1973890 |
| 80 | 7 | l2453039-06 WG1973890 |
| 81 | 11 | Check STD(5ug/L) |

82 12 Check Blank

# METALS ELN REPORT

**Workgroup: WG1973832**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24011095 | H2SO4 | 24001335 | METALS | METSPIKE | HG24381708 07AJTV1 | METSPIKE | HG24381708 07AJTV1 | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2438191125AJT |
| | KMnO4 | PP2438191900CLH |
| | NaCl-NH2OH.HCl | HH2438191515MJR |
| | | ICV2436051025CME |

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2452763-02 WATER | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453053-01 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453053-02 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453053-03 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453053-04 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453053-05 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-01 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-02 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-03 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-04 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-05 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-07 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |



Reported: 23-SEP-24 03:52 PM

# METALS ELN REPORT

**Workgroup: WG1973832**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453342-08 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| L2453342-10 SAMP | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| WG1973832-1 BLANK | 09/20/24 08:50 | Alexander Gonatas | 25 | | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| WG1973832-2 LCS | 09/20/24 08:50 | Alexander Gonatas | 25 | 0.25 | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | ELN: NRS |
| WG1973832-3 MS | 09/20/24 11:58 | Alexander Gonatas | 25 | 1.25 | 09/20/24 11:58 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| WG1973832-4 MSD | 09/20/24 11:58 | Alexander Gonatas | 25 | 1.25 | 09/20/24 11:58 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| WG1973832-5 MS | 09/20/24 08:50 | Alexander Gonatas | 25 | 1.25 | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |
| WG1973832-6 MSD | 09/20/24 08:50 | Alexander Gonatas | 25 | 1.25 | 09/20/24 08:50 | 5 | 95.0 | 09/20/24 10:50 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



Reported: 23-SEP-24 03:52 PM

# METALS ELN REPORT

**Workgroup: WG1974191**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24011095 | H2SO4 | 24001335 | METALS | METSPIKE | HG24381708 07AJTV1 | METSPIKE | HG24381708 07AJTV1 | 320, 348 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2438191125AJT |
| | KMnO4 | PP2438191900CLH |
| | NaCl-NH2OH.HCl | HH2438191515MJR |
| | | ICV2436051025CME |

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol ml | Spike Amt | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2453053-01 SAMP | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| L2453053-02 SAMP | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| L2453053-03 SAMP | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| L2453053-04 SAMP | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| L2453053-05 SAMP | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| WG1974191-1 BLANK | 09/20/24 10:41 | Cristy Estevez | NA | 25 | | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | eln: ADG |
| WG1974191-2 LCS | 09/20/24 10:41 | Cristy Estevez | NA | 25 | 0.25 | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| WG1974191-3 MS | 09/20/24 10:41 | Cristy Estevez | NA | 25 | 1.25 | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |
| WG1974191-4 MSD | 09/20/24 10:41 | Cristy Estevez | NA | 25 | 1.25 | 09/20/24 10:41 | 8 | 95.0 | 09/20/24 12:41 | 25 | |



Reported: 23-SEP-24 03:52 PM

# METALS ELN REPORT

**Workgroup: WG1974191**

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



Reported: 23-SEP-24 03:52 PM

# Wet Chemistry

# Total Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-01 | **Date Collected** | : | 09/16/24 11:10 |
| **Client ID** | : | MW-1SR | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/23/24 13:06 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 107,- | **Analyst** | : | JRO |
| **Lab File ID** | : | wg1975168.csv | **Instrument ID** | : | |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Total Nitrogen | 0.93 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:06 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 107,- | **Analyst** | : JRO |
| **Lab File ID** | : wg1975168.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Total Nitrogen | 1.2 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:06 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 107,- | **Analyst** | : JRO |
| **Lab File ID** | : wg1975168.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Total Nitrogen | 0.80 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:06 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 107,- | **Analyst** | : JRO |
| **Lab File ID** | : wg1975168.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Total Nitrogen | 0.36 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/23/24 13:06 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 107,- | **Analyst** | : JRO |
| **Lab File ID** | : wg1975168.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Total Nitrogen | 1.2 | 0.30 | 0.30 | |

# Sample Raw Data

**ALPHA ANALYTICAL LABS**

# WET CHEMISTRY DEPARTMENT

**TOTAL NITROGEN**

Last Change 3/5/13 GFF
File tnitrogen.xlt

**Sample #:** _____

**Client:** _____

**Analysis:** **Total Nitrogen**

**Method:** ***Calculation from TKN & NO3/NO2***

**Product:** **TNITROGEN**
**Analyte:** **Total Nitrogen,**
**Analysis Date:** 9/23/2024 13:06
**Technician:** JRO
**Work group:** wg1975168
**RL:** **0.3 mg/L**

| | Sample Number | TKN (mg/L) | NO3/NO2 (mg/L) | RL Multiplier | Result (mg/L) |
|---|---|---|---|---|---|
| SAMP | L2453053-01 | 0.277 | 0.93 | 1.0 | 0.93 |
| SAMP | L2453053-02 | 0.138 | 1.2 | 1.0 | 1.2 |
| SAMP | L2453053-03 | 0.0927 | 0.8 | 1.0 | 0.8 |
| SAMP | L2453053-04 | 0.141 | 0.36 | 1.0 | 0.36 |
| SAMP | L2453053-05 | 0.113 | 1.2 | 1.0 | 1.2 |
| | | | | | |
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| | | | | | |

# Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

# Total Kjeldahl Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.277 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:19 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.138 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:20 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.092 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:24 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.141 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:25 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.113 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973578-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973578-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:12 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.022 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973578-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.352 | 0.300 | 0.066 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973578-5 | **Date Collected** | : 09/16/24 11:15 |
| **Client ID** | : WG1973578-5 DUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 4,351.1 | **Analyst** | : AT |
| **Lab File ID** | : NH320240919-C | **Instrument ID** | : LACHAT |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Total Kjeldahl | 0.382 | 0.300 | 0.066 | |

# Sample Raw Data

Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Original Run Filename: OM_9-19-2024_02-32-33PM.OMN Created: 9/19/2024 2:32:33 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_02-32-33PM.OMN Last Modified: 9/19/2024 2:58:40 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

(A)

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | |
|---|---|---|---|---|---|---|---|
| STD 1 | 1 | S1 | 10.00000 | | | | |
| STD 2 | 1 | S2 | 8.00000 | | | | |
| STD 3 | 1 | S3 | 4.00000 | | | | |
| STD 4 | 1 | S4 | 2.00000 | | | | |
| STD 5 | 1 | S5 | 1.00000 | | | | |
| STD 6 | 1 | S6 | 0.40000 | | | | |
| STD 7 | 1 | S7 | 0.20000 | | | | |
| STD 8 | 1 | S8 | 0.10000 | | | | |
| STD 9 | 1 | S9 | 0.05000 | | | | |
| STD 10 | 1 | S10 | 0.00000 | | | | |
| CCV 0.4000 | 1 | S6 | 0.36797 | 92% | | | |
| | Known Conc: | | 100.00000 | | | | |
| | Calibration: | | Table/Fig. : 1 | | | | |
| CCV 4.0000 | 1 | S3 | 3.97753 | 100% | | | |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.03328 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| HI ICV 8.0 | 1 | 1 | 7.89018 | 99% | | | |
| LO ICV 1.0 | 1 | 2 | 0.96665 | 97% | | | |
| ICB | 1 | 3 | 0.02586 | | | | |
| WG1973478-1 | 1 | 4 | 0.01500 | | 1.50 | | 81% |
| WG1973478-2 | 1 | 5 | 16.13574 | | 7.50 | | 93% |
| LCS LO | 1 | 6 | 1.85483 | | 1.50 | | |
| L2452052-01 | 1 | 7 | 18.90273 | | 3.00 | | |
| L2452052-02 | 1 | 8 | 0.49607 | | 1.50 | | |
| L2452063-01 | 1 | 9 | 0.39304 | | 1.50 | | |
| ~~L2452066-01~~ | ~~1~~ | ~~10~~ | ~~22.81327~~ | | ~~1.50~~ | | w/dilution. |
| CCV 0.4000 | 1 | S6 | 0.80730 | | | | |
| | Known Conc: | | 100.00000 | | | | |

weight - OK

Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

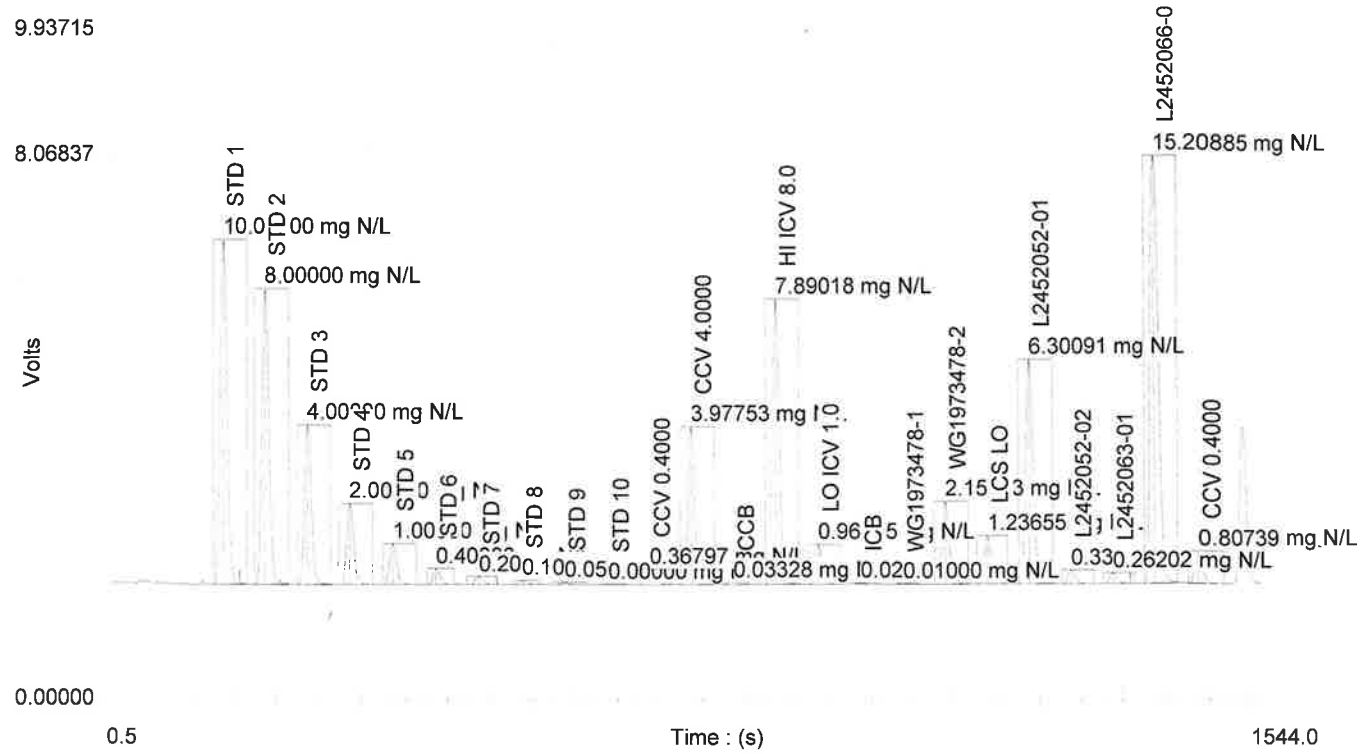
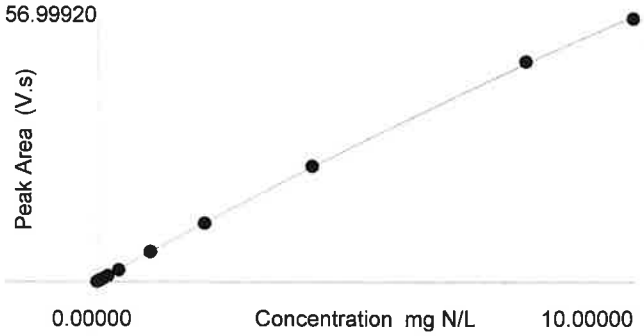



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Original Run Filename: OM_9-19-2024_02-59-41PM.OMN Created: 9/19/2024 2:59:41 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_02-59-41PM.OMN Last Modified: 9/19/2024 3:30:57 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

A2

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.41599 | 104% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCV 4.0000 | 1 | S3 | 4.01676 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.04923 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2452486-01 | 1 | 11 | 15.33254 | | 1.50 | |
| L2452512-01 | 1 | 12 | 0.56325 | | 1.50 | |
| WG1973478-4 | 1 | 13 | 4.19356 | | 1.50 | 101% |
| WG1973478-3 | 1 | 14 | 0.27435 | | 1.50 | 56% |
| L2452512-02 | 1 | 15 | 0.05235 | | 1.50 | |
| L2452512-03 | 1 | 16 | 0.11620 | | 1.50 | |
| L2452512-04 | 1 | 17 | 0.05973 | | 1.50 | |
| L2452621-01 | 1 | 18 | 2.10134 | | 7.50 | |
| L2452623-01 | 1 | 19 | 0.27063 | | 1.50 | |
| L2452650-01 | 1 | 20 | 0.37497 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37944 | 95% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.98103 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.04219 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2452651-01 | 1 | 21 | 31.01604 | | 1.50 | |
| L2452654-01 | 1 | 22 | 1.12044 | | 1.50 | |
| L2452668-01 | 1 | 23 | 0.89843 | | 1.50 | |
| L2452668-02 | 1 | 24 | 3.62301 | | 1.50 | |
| L2452668-03 | 1 | 25 | 4.52545 | | 1.50 | |
| L2452668-04 | 1 | 26 | 50.91280 | | 1.50 | |
| L2452680-01 | 1 | 27 | 2.03025 | | 1.50 | |
| L2452715-01 | 1 | 28 | 0.37061 | | 1.50 | |
| L2452066-01; 20X | 1 | 29 | 23.76126 | | 30.00 | |
| CCV 0.4000 | 1 | S6 | 0.39921 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.00743 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.06538 | | | |
| | Known Conc: | | 100.00000 | | | |

w/dilution.

reinject - OK

Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

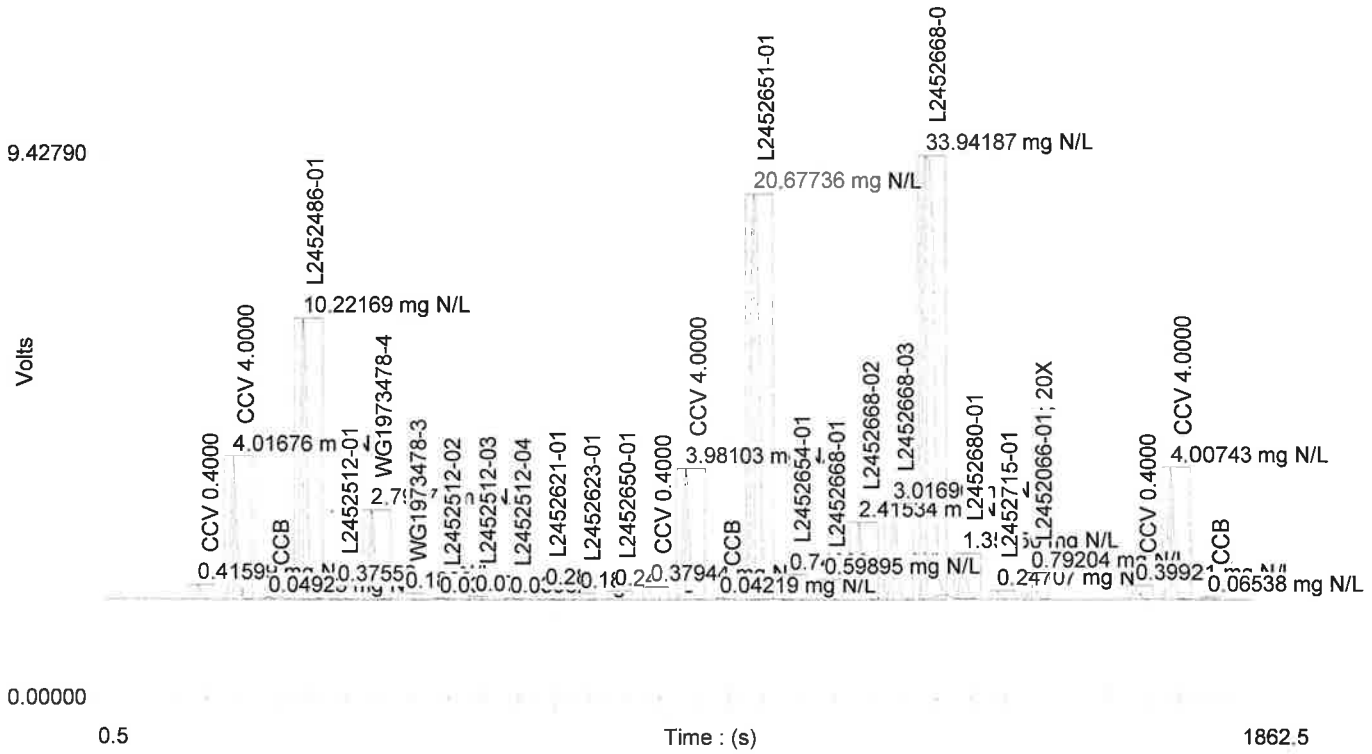
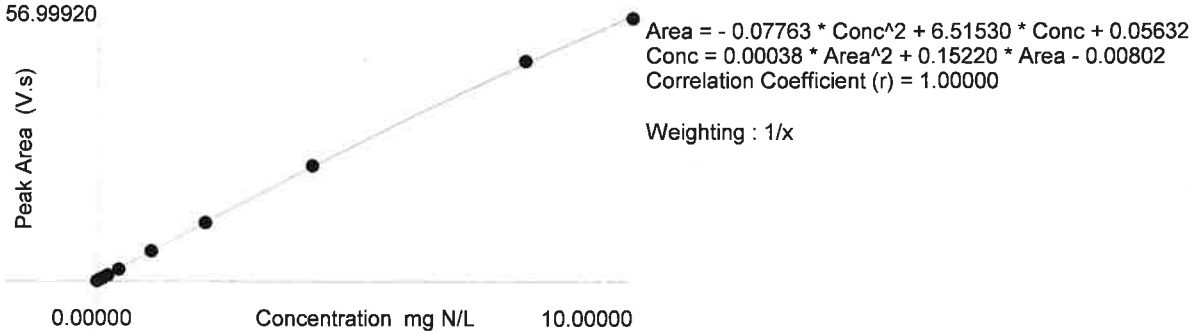



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Original Run Filename: OM_9-19-2024_03-43-09PM.OMN Created: 9/19/2024 3:43:09 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_03-43-09PM.OMN Last Modified: 9/19/2024 3:58:22 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.36739 | | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.98562 | | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S10 | 0.04130 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2452486-01; 10X | 1 | 11 | 14.30680 | | 15.00 | |
| L2452512-01 | 1 | 12 | 0.15388 | | 1.50 | |
| L2452651-01; 10X | 1 | 21 | 38.73191 | | 15.00 | |
| L2452654-01 | 1 | 22 | 0.48787 | | 1.50 | |
| L2452668-04; 50X | 1 | 26 | 169.40408 | | 75.00 | |
| L2452680-01 | 1 | 27 | 0.42496 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37797 | | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.99949 | | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.04393 | | | |
| | Known Conc: | | 100.00000 | | | |

A3

Channel 2 (Ammonia High) - Current View

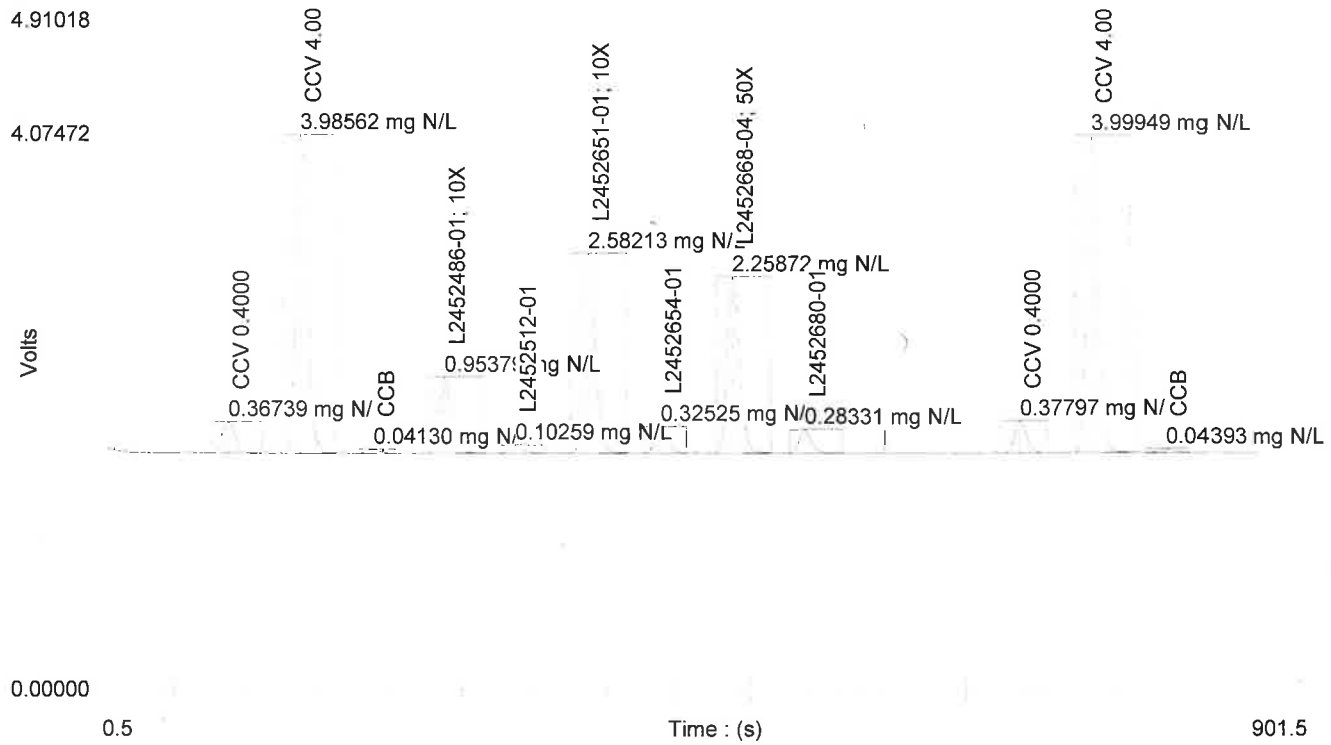
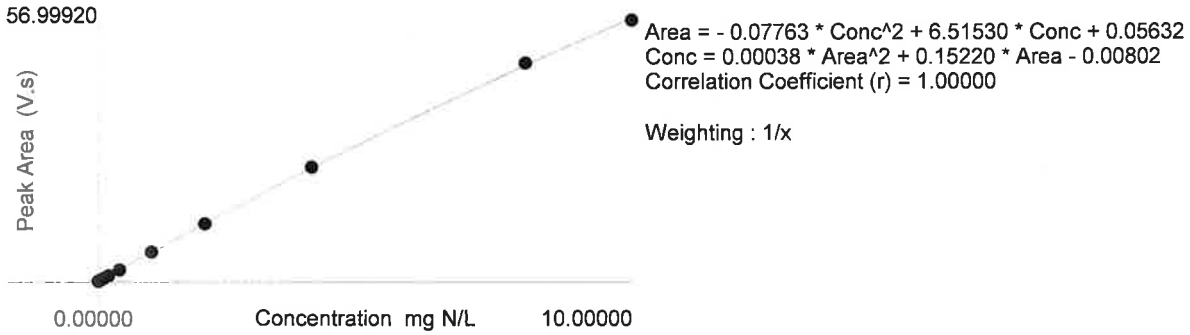


Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Original Run Filename: OM_9-19-2024_04-27-43PM.OMN Created: 9/19/2024 4:27:43 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_04-27-43PM.OMN Last Modified: 9/19/2024 5:07:36 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

13

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.40018 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCV 4.0000 | 1 | S3 | 4.06258 | 102% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01920 ✓ | | | |
| | Known Conc: | | 100.00000 | | | |
| WG1973120-1 T; BLK 9/18 | 1 | 1 | 0.03601 | | | 96% |
| WG1973120-2 T; HI LCS; 5X | 1 | 2 | 38.31075 | | 15.00 | |
| LO LCS T | 1 | 3 | 4.03301 | | 3.00 | 101% |
| L2452252-02 T | 1 | 4 | 3.35270 | | 3.00 | |
| L2452286-01 T | 1 | 5 | 0.21738 | | 3.00 | |
| L2452333-01 T | 1 | 6 | 0.46818 | | 3.00 | |
| L2452341-02 T | 1 | 7 | 28.08090 | | 150.00 | |
| L2452349-01 T | 1 | 8 | 4.63901 | | 3.00 | |
| L2452352-01 T | 1 | 9 | 10.24639 | | 3.00 | |
| L2452366-01 T | 1 | 10 | 2.00576 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.43355 | 108% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.05920 | 102% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.02259 ✓ | | | |
| | Known Conc: | | 100.00000 | | | |
| L2452447-01 T | 1 | 11 | 1.73288 | | 15.00 | |
| L2452451-01 T | 1 | 12 | 1.89763 | | 3.00 | |
| L2452474-02 T | 1 | 13 | 1.41370 | | 3.00 | |
| L2452477-01 T | 1 | 14 | 16.30866 | | 6.00 | |
| L2452477-02 T | 1 | 15 | 4.68624 | | 3.00 | |
| L2452481-02 T | 1 | 16 | 0.94793 | | 3.00 | |
| L2452482-01 T | 1 | 17 | 2.45819 | | 3.00 | |
| L2452486-01 T | 1 | 18 | 20.70851 | | 3.00 | |
| L2452490-01 T | 1 | 19 | 6.33591 | | 3.00 | |
| L2452493-01 T | 1 | 20 | 2.79622 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.43157 | 108% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.08069 | 102% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03230 ✓ | | | |
| | Known Conc: | | 100.00000 | | | |
| L2452636-07 T | 1 | 21 | 0.06455 | | 3.00 | |
| L2452640-01 T | 1 | 22 | 0.67674 ✓ | | 3.00 | 105% |
| WG1973120-4 T; 52640.1 MS | 1 | 23 | 9.04326 | | 3.00 | |
| WG1973120-3 T; 52640.1 DUP | 1 | 24 | 1.02038 ✓ | | 3.00 | 40% (<CFRL) |
| L2452785-01 T | 1 | 25 | 0.25603 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.39193 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.03942 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.02804 ✓ | | | |
| | Known Conc: | | 100.00000 | | | |

Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

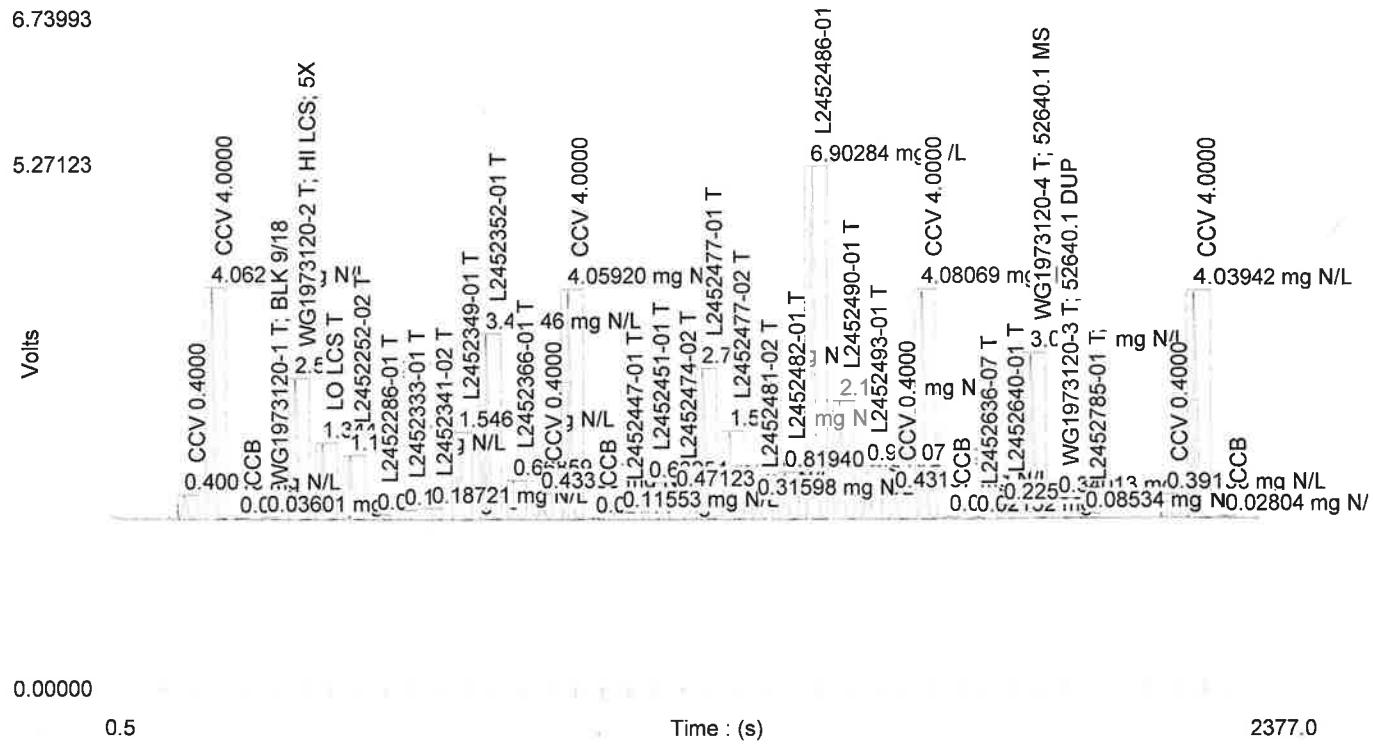
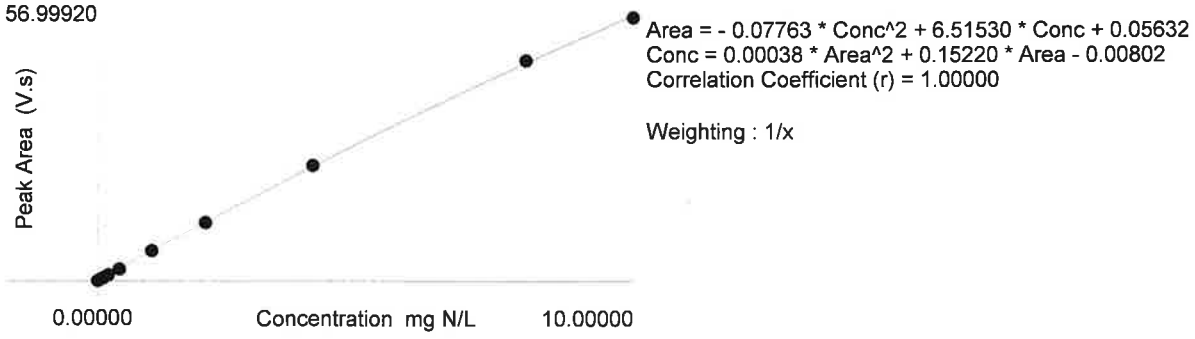



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Original Run Filename: OM_9-19-2024_05-08-22PM.OMN Created: 9/19/2024 5:08:22 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_05-08-22PM.OMN Last Modified: 9/19/2024 5:36:49 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.38542 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCV 4.0000 | 1 | S3 | 4.03731 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.02994 | | | |
| | Known Conc: | | 100.00000 | | | |
| WG1973578-1 T; BLK 9/19 | 1 | 1 | 0.01534 | | | |
| WG1973578-2 T; HI LCS; 5X | 1 | 2 | 40.06555 | | 15.00 | (00% |
| LO LCS T | 1 | 3 | 4.03258 | | 3.00 | 101% |
| L2452500-01 T | 1 | 4 | 24.20411 | | 3.00 | |
| L2452500-02 T | 1 | 5 | 15.39015 | | 15.00 | |
| L2453053-01 T | 1 | 6 | 0.27704 | | 3.00 | |
| WG1973578-4 T; 53053.1 MS | 1 | 7 | 8.32544 | | 3.00 | 104% |
| WG1973578-3 T; 53053.1 DUP | 1 | 8 | 0.35199 | | 3.00 | NC(<rl) |
| L2453053-02 T | 1 | 9 | 0.13845 | | 3.00 | |
| L2453053-03 T | 1 | 10 | 0.09273 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.38701 | 97% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.03913 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03362 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2453053-04 T | 1 | 11 | 0.14132 | | 3.00 | |
| L2453053-05 T | 1 | 12 | 0.11311 | | 3.00 | |
| L2453058-01 T | 1 | 13 | 0.05781 | | 3.00 | |
| WG1973578-6 T; 53058.1 MS | 1 | 14 | 8.30130 | | 3.00 | 104% |
| WG1973578-5 T; 53058.1 DUP | 1 | 15 | 0.38208 | | 3.00 | NC(<rl) |
| L2453058-02 T | 1 | 16 | 0.10252 | | 3.00 | |
| L2453058-03 T | 1 | 17 | 0.05644 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.38197 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.03605 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03163 | | | |
| | Known Conc: | | 100.00000 | | | |

C

Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

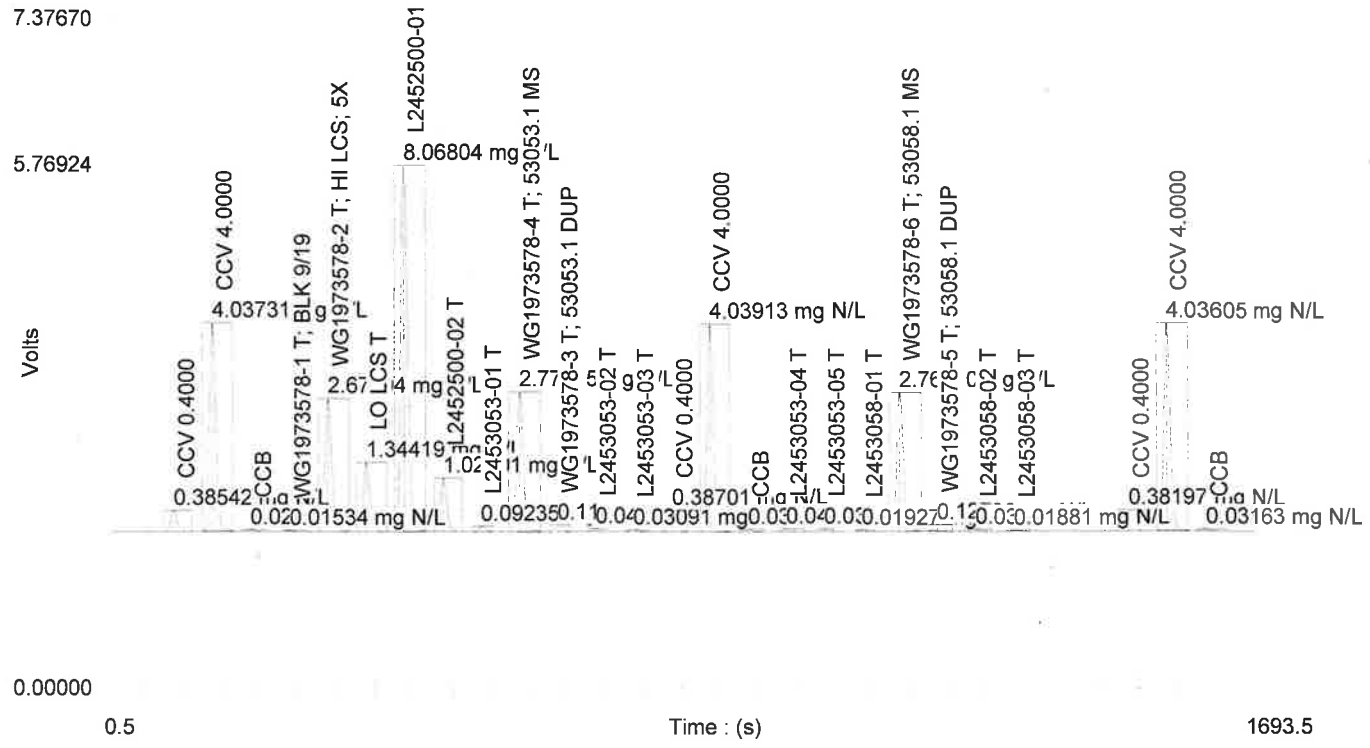
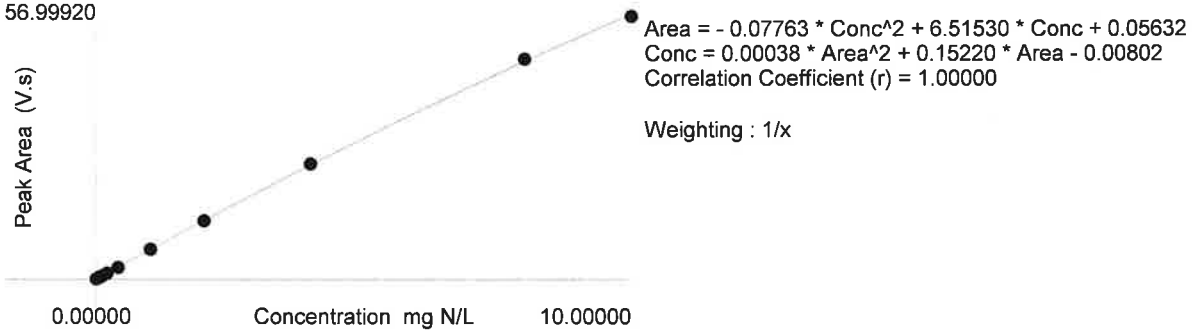



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Original Run Filename: OM_9-19-2024_05-49-42PM.OMN Created: 9/19/2024 5:49:42 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_05-49-42PM.OMN Last Modified: 9/19/2024 6:31:27 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.38358 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.98786 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S10 | 0.03209 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| WG1973486-1; BLK 9/19 | 1 | 1 | 0.01563 | | 1.50 | 95% |
| WG1973486-2; HI LCS; 5X | 1 | 2 | 19.03682 | | 7.50 | |
| LO LCS | 1 | 3 | 2.00789 | - | 1.50 | 100% |
| L2453058-01 | 1 | 4 | 0.13386 | | 1.50 | |
| WG1973486-6; 53058.1 MS | 1 | 5 | 4.19111 | | 1.50 | 101% |
| WG1973486-5; 53058.1 DUP | 1 | 6 | 0.18050 | ✓ | 1.50 | 30% (LT+RL) |
| L2453058-02 | 1 | 7 | 0.05677 | | 1.50 | |
| L2453058-03 | 1 | 8 | 0.03196 | | 1.50 | |
| L2451391-03; 25X | 1 | 9 | 477.34070 | | 375.00 | |
| L2451391-04 | 1 | 10 | 0.22995 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.39222 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.99388 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03796 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| L2451391-05 | 1 | 11 | 0.07174 | | 1.50 | |
| L2451391-06 | 1 | 12 | 0.05410 | | 1.50 | |
| L2451391-07 | 1 | 13 | 1.73000 | | 1.50 | |
| L2451391-08 | 1 | 14 | 0.09677 | | 1.50 | |
| L2451391-09 | 1 | 15 | 0.05556 | | 1.50 | |
| L2451391-10 | 1 | 16 | 0.03521 | | 1.50 | |
| L2451391-11 | 1 | 17 | 14.02313 | | 1.50 | |
| L2451391-12 | 1 | 18 | 0.31129 | | 1.50 | |
| L2451844-25 | 1 | 19 | 0.07513 | | 1.50 | |
| L2451844-26 | 1 | 20 | 0.04160 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.39256 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.97829 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03896 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| L2451844-27 | 1 | 21 | 0.16619 | | 1.50 | |
| L2451844-28 | 1 | 22 | 0.11110 | ✓ | 1.50 | |
| WG1973486-4; 51844.28 MS | 1 | 23 | 4.23305 | | 1.50 | 103% |
| WG1973486-3; 51844.28 DUP | 1 | 24 | 0.24117 | ✓ | 1.50 | 74% (LT+RL) |
| L2451844-29 | 1 | 25 | 0.12132 | | 1.50 | |
| L2451844-30 | 1 | 26 | 0.49016 | | 1.50 | |
| L2451844-31 | 1 | 27 | 0.10296 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.38236 | 96% | | |
| | Known Conc: | | 100.00000 | 99% | | |
| CCV 4.0000 | 1 | S3 | 3.94486 | | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03794 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |

Author: A1WETCHEMINSTRUMENT

Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

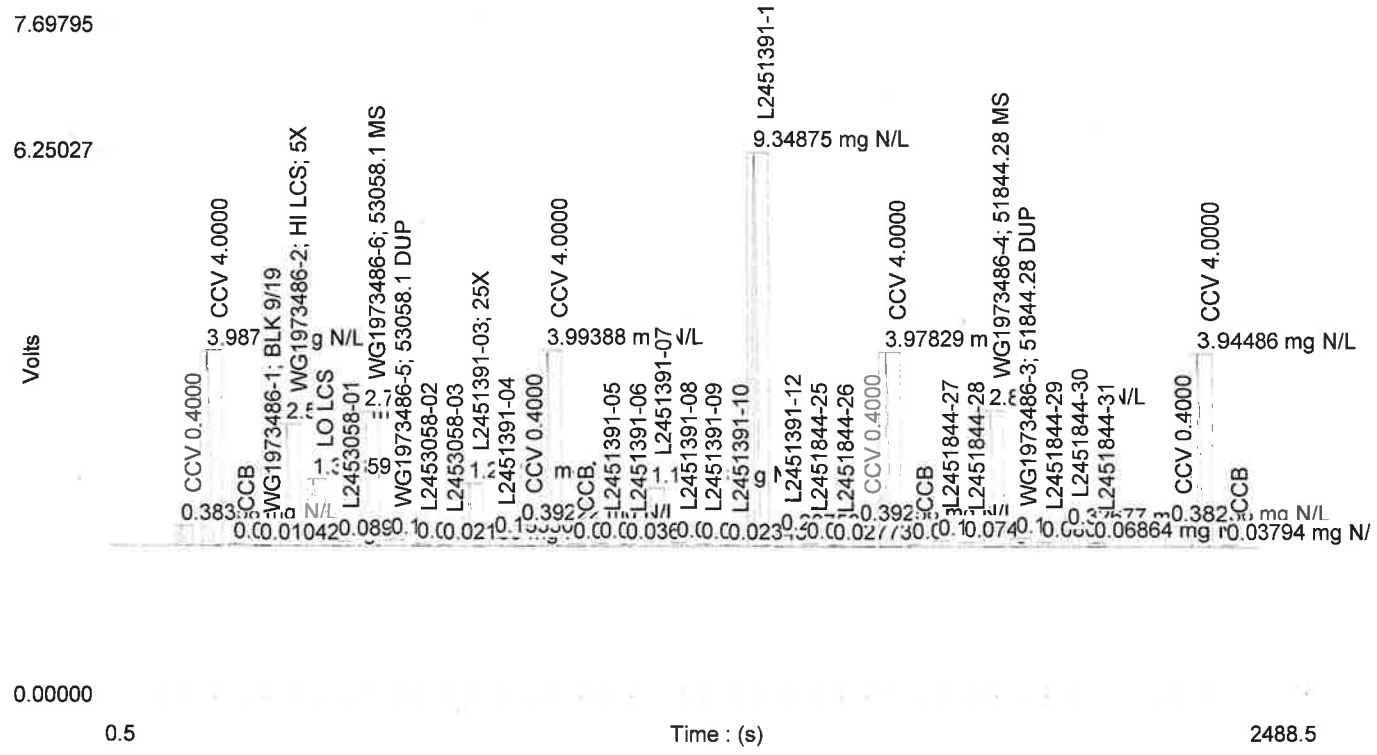
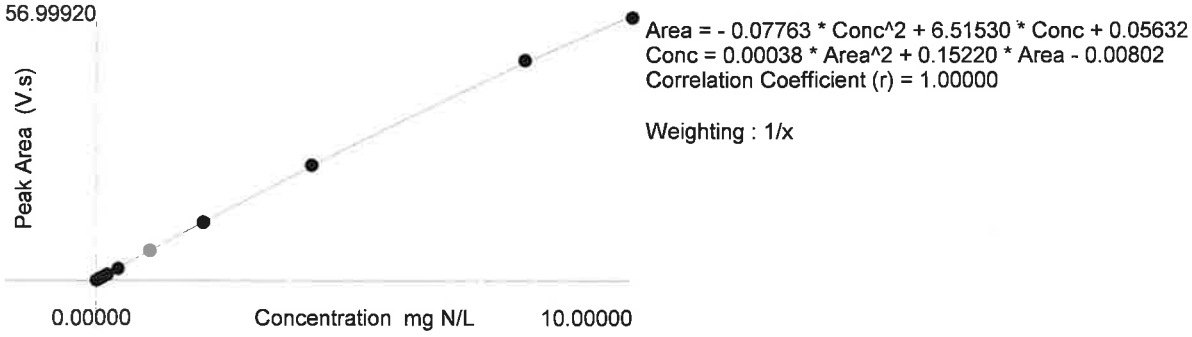



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Original Run Filename: OM_9-19-2024_06-32-03PM.OMN Created: 9/19/2024 6:32:03 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-19-2024_06-32-03PM.OMN Last Modified: 9/19/2024 7:12:48 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

E

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.38434 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCV 4.0000 | 1 | S3 | 3.92346 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03925 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| WG1973678-1; BLK 9/19 | 1 | 1 | 0.02492 | | 1.50 | 93% |
| WG1973678-2; HI LCS; 5X | 1 | 2 | 18.67644 | | 7.50 | 89% |
| LO LCS | 1 | 3 | 1.78357 | | 1.50 | |
| L2451391-13 | 1 | 4 | 0.09784 | | 1.50 | |
| L2451391-14 | 1 | 5 | 0.06927 | | 1.50 | |
| L2451391-15 | 1 | 6 | 0.27680 | | 7.50 | |
| L2451391-16 | 1 | 7 | 0.52829 | | 7.50 | |
| L2451391-17 | 1 | 8 | 0.79660 | | 1.50 | |
| L2451391-18 | 1 | 9 | 0.09323 | | 1.50 | |
| L2451391-19 | 1 | 10 | 0.11540 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.38517 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.96292 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.03935 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| L2451391-20 | 1 | 11 | 2.28184 | | 1.50 | |
| L2451391-21 | 1 | 12 | 0.12194 | | 1.50 | |
| L2451391-22 | 1 | 13 | 0.13967 | | 7.50 | |
| L2451391-23 | 1 | 14 | 0.01764 | | 1.50 | |
| L2451391-24 | 1 | 15 | 0.29198 | ✓ | 1.50 | |
| WG1973678-4; 51391.24 MS | 1 | 16 | 4.48101 | | 1.50 | 105% |
| WG1973678-3; 51391.24 DUP | 1 | 17 | 0.37785 | ✓ | 1.50 | 26% |
| L2451391-25 | 1 | 18 | 0.11240 | ✓ | 1.50 | |
| WG1973678-6; 51391.25 MS | 1 | 19 | 4.15012 | | 1.50 | 101% |
| WG1973678-5; 51391.25 DUP | 1 | 20 | 0.22280 | ✓ | 1.50 | 66% (CCERL) |
| CCV 0.4000 | 1 | S6 | 0.39131 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.90511 | 98% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.04412 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |
| L2452511-01 | 1 | 21 | 0.07221 | | 1.50 | |
| L2452511-02 | 1 | 22 | 0.03100 | | 1.50 | |
| L2452522-01 | 1 | 23 | 0.01842 | | 1.50 | |
| L2452522-02 | 1 | 24 | 0.01604 | | 1.50 | |
| L2452525-01 | 1 | 25 | 0.03964 | | 1.50 | |
| L2452527-01 | 1 | 26 | 0.01560 | | 1.50 | |
| L2452531-01 | 1 | 27 | 0.01313 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37648 | 94% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.87168 | 97% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.04350 | ✓ | | |
| | Known Conc: | | 100.00000 | | | |

Author: A1WETCHEMINSTRUMENT Date : 9/19/2024

Channel 2 (Ammonia High) - Current View

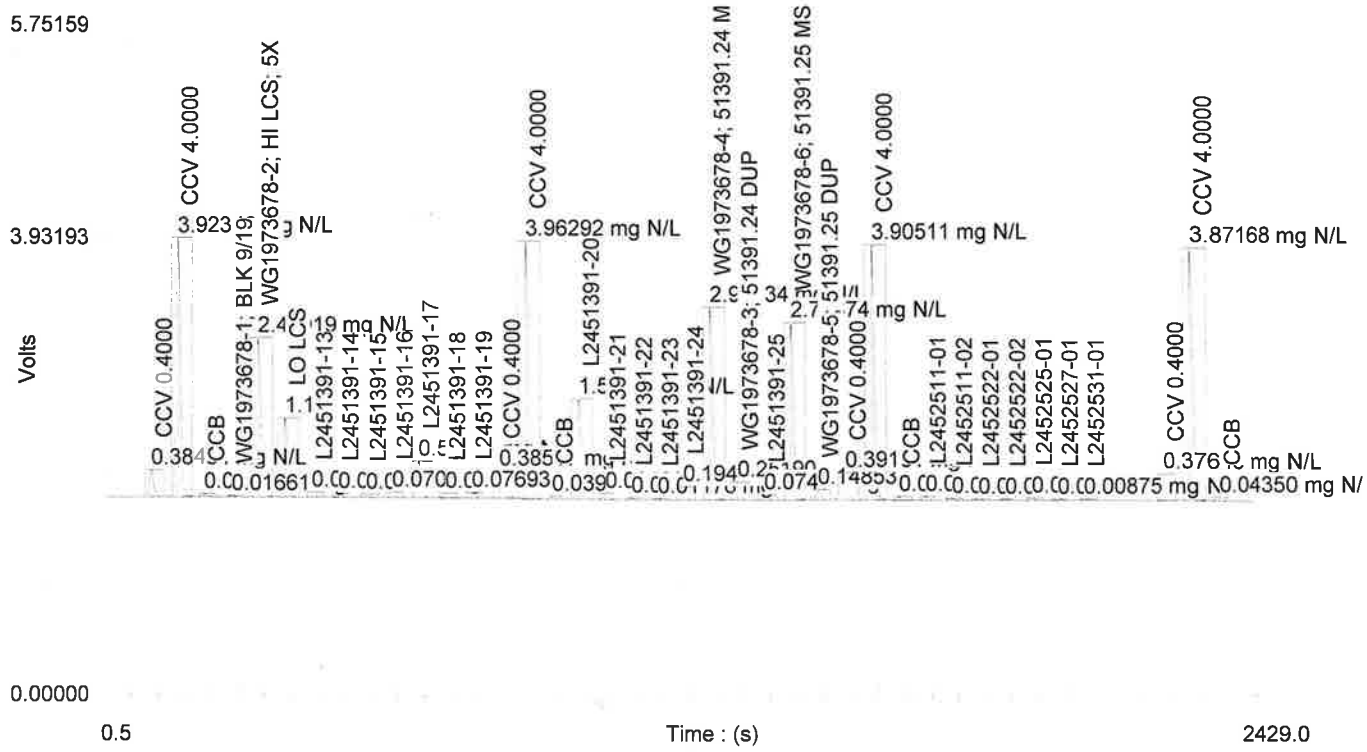
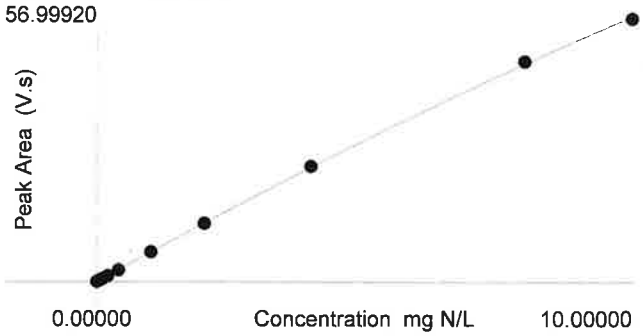



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 56.99920 | 5.11504 | 0.0 | 0.8 | 9.88975 | 9/19/2024 | 2:34:32 PM |
| 2 | 8.00000 | 1 | 47.73017 | 4.38613 | 0.0 | -1.1 | 8.11371 | 9/19/2024 | 2:35:29 PM |
| 3 | 4.00000 | 1 | 25.00774 | 2.36931 | 0.0 | -0.5 | 4.03343 | 9/19/2024 | 2:36:26 PM |
| 4 | 2.00000 | 1 | 12.68482 | 1.20710 | 0.0 | 0.7 | 1.98312 | 9/19/2024 | 2:37:23 PM |
| 5 | 1.00000 | 1 | 6.50206 | 0.61545 | 0.0 | -0.1 | 0.99748 | 9/19/2024 | 2:38:21 PM |
| 6 | 0.40000 | 1 | 2.55357 | 0.23877 | 0.0 | 3.6 | 0.38308 | 9/19/2024 | 2:39:19 PM |
| 7 | 0.20000 | 1 | 1.32555 | 0.12013 | 0.0 | 2.3 | 0.19439 | 9/19/2024 | 2:40:17 PM |
| 8 | 0.10000 | 1 | 0.70259 | 0.06329 | 0.0 | 0.6 | 0.09910 | 9/19/2024 | 2:41:16 PM |
| 9 | 0.05000 | 1 | 0.39167 | 0.03187 | 0.0 | -2.6 | 0.05165 | 9/19/2024 | 2:42:13 PM |
| 10 | 0.00000 | 1 | 0.06772 | 0.00458 | | | 0.00229 | 9/19/2024 | 2:43:10 PM |

Figure : 1 (Ammonia)



# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1973578-4 | **MS Analysis Date** | : 09/19/24 17:17 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Total Kjeldahl | 0.277J | 8 | 8.32 | 104 | | | | | 77-111 | 24 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453058-01 | | |
| **Matrix Spike** | : WG1973578-6 | **MS Analysis Date** | : 09/19/24 17:27 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (mg/l)** | **Spike Added (mg/l)** | **Spike Conc. (mg/l)** | **%R** | **Spike Added (mg/l)** | **Spike Conc. (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Nitrogen, Total Kjeldahl** | **ND** | **8** | **8.30** | **104** | | | | | **77-111** | **24** |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/19/24 17:17 |
| **Dup Sample ID** | : WG1973578-3 | **DUP Analysis Date** | : 09/19/24 17:18 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | 0.277J | 0.352 | NC | 24 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 09/19/24 17:26 |
| **Dup Sample ID** | : WG1973578-5 | **DUP Analysis Date** | : 09/19/24 17:28 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | ND | 0.382 | NC | 24 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973578-2 | **LCS Analysis Date** | : 09/19/24 17:13 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Nitrogen, Total Kjeldahl** | **40.0** | **40.1** | **100.** | | | | | **78-122** | **24** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 4500NH3-H | 28 days | 1 - Plastic 500ml H2SO4 preserved |
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 351.1 | 28 days | 1 - Plastic 500ml H2SO4 preserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 150 | 31.5 | mg/kg | 81-115 | 26 | 43-160 | 26 | 26 | 4500NH3-H | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

# Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

# Sequence Logs

Project No. _____

ntial Book No. _____ TITLE $NH_3$ 9/19/24

ge No. _____

A (02-32-338 m

p 9/19 @ 01:15

ICV 5.0

Lo ICV 1.0

ICB

WG197347 8-1 · Blk

-2 · Lvs

Lo Lvs

52052-1 (2x)

2

52443-1

52066-1 (8) 20x (0.5 10)

52486-1 -10x

52512-1

1 MS

1 Dup

2

3

4

52621-1 (5x)

52623-1

52650-1

52654-1 -10x

52654-1

56668-1

2

3

4 -50x

52680-1

52715-1

02-59-41 pm

03-48-07 pm

T B (04-27-438 m)

9/18 @ 17:23

1 WG197312 0-1 · Blk

2 -2 · Lvs

3 Lo Lvs

4 52252-2 T

5 52286-1 T

6 52333-1 T

7 52341-2 T (5x)

8 52349-1 T

9 52352-1 T

10 52366-1 T

11 52447-1 T (5x)

12 52454-1 T

13 52474-2 T

14 52477-1 T (2x)

15 2 T

16 52481-2 T

17 52482-1 T

18 52486-1 T

19 52490-1 T

20 52493-1 T

21 52636-7 T

22 52640-1 T

23 ~~52700~~ 527 -1 MS

24 -1 Dup

25 52785-1 T

26

Date: 9/19/24

Sodium Phenolate: 8/30/24 R-4065

Sodium Hypochlorate: 8/30/24 ~~R-4065~~ R-4065

Sodium Nitropruisside: 8/30/24 R-5969

Borric Acid Soln.: 8/30/24 R-4019

ICV 1.0: 9/11/24 WC-5476

ICV 8.0:

Cal. Std: 8/30/24 WC-5392

To Page No. _____

ssed & Understood by me,

Date See Front Page for Instructions:

Date

Recorded by:

From Page No.

tj..C (05-08-228 m)
fyp 9/19/24 @0738

1 wh 973578-1 T; Blk 9/19
2 wh 973578-2 T; Hi ms T x
3 lo ms T
4 52500.1 T
5 .2 T (ET)
6 53053.1 T
7 wh 973578-4 T; 53053.1 ms
8 wh 973578-3 T; 53053.1 fyp
9 53053.2 T
10 .3 T
11 .4 T
12 .5 T
13 53058.1 T
14 wh 973578-6 T; 53058.1 ms
15 wh 973578-5 T; 53058.1 fyp
16 53058.2 T
17 .3 T

tj..D (05-49-428 m)
fyp 9/19/24 @0720

1 wh 973486.1 Blk 9/19
2 wh 973486.2 T; Hi ms T p
3 lo ms
4 53058.1
5 wh 973486.6 T; 53058.1 ms
6 wh 973486.5 T; 53058.1 fyp
7 53058.2
8 .3
9 57391.3 (10 x) -x-
10 .4
11 .5
12 .6
13 .7
14 .8
15 .9
16 .10
17 .11
18 .12
19 57444.25
20 .26
21 .27
22 28
23 wh 973486.4 T; 57444.28 ms
24 wh 973486.3 T; 57444.28 fyp
25 57444.29
26 .30
27 .31

To Page No

| Witnessed & Understood by me, | Date | Invented by: | Date |
|---|---|---|---|
| | | Recorded by: | |

fg. E (06-32-038.M)
Pg 9/19/24 @1653

1 WG-1973678-1; Blk 9/19
2 WG-1973678-2; thi wg 5x
3 6 wg
4 51391.13
5 .14
6 .15 (5T)
7 .16 (5T)
8 .17
9 .18
10 .19
11 .20
12 .21
13 .22 (5T)
14 .23
15 .24
16 WG-1973678-4; 51391.24 MS
17 WG-1973678-3; 51391.24 BF
18 51391.25
19 WG-1973678-6; 51391.25 MS
20 WG-1973678-5; 51391.25 BF
21 52511.1
22 .2
23 52522.1
24 .2
25 52525.1
26 52527.1
27 52531.1



essed & Understood by me; Date Invented by: Date
Recorded by:

# Sample Preparation

| Sample | Volume | Dilution | Final Volume |
|---|---|---|---|
| | 5mL | | 150 mL |
| Blank | | 1x | |
| Lcs | | ↓ | |
| High | | 5x(10+50) N=18 | |
| 525aa-1 | | ↓ | |
| -2 | | 1x | |
| 53053-1 PA | | ↓ | |
| -2 | | ↓ | |
| -3 | | ↓ | |
| -4 | | ↓ | |
| -5 | | ↓ | |
| -1 DUP | | ↓ | |
| -1 MS | | ↓ | |
| 53058-1 PA | | ↓ | |
| -1 DUP | | ↓ | |
| -1 MS | | ↓ | |
| -2 | | ↓ | |
| -3 | | ↓ | |

Same standards and reagents as pg. ~~77~~ 89

09/19/24 @ 07:38 AJC

Distilled by SAO 09 19 24 @ 11:38



Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

# Nitrate and Nitrite Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 06:20 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500NO3-F | **Analyst** | : KAF |
| **Lab File ID** | : NO3240921-B1 | **Instrument ID** | : FIA1 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 0.93 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-02 | **Date Collected** | : | 09/16/24 11:50 |
| **Client ID** | : | MW-1DR2 | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/21/24 06:24 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500NO3-F | **Analyst** | : | KAF |
| **Lab File ID** | : | NO3240921-B1 | **Instrument ID** | : | FIA1 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 1.2 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-03 | **Date Collected** | : | 09/16/24 14:20 |
| **Client ID** | : | MW-11S | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/21/24 06:25 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500NO3-F | **Analyst** | : | KAF |
| **Lab File ID** | : | NO3240921-B1 | **Instrument ID** | : | FIA1 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 0.80 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 06:26 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500NO3-F | **Analyst** | : KAF |
| **Lab File ID** | : NO3240921-B1 | **Instrument ID** | : FIA1 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 0.36 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/21/24 06:27 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500NO3-F | **Analyst** | : KAF |
| **Lab File ID** | : NO3240921-B1 | **Instrument ID** | : FIA1 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 1.2 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974476-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974476-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 04:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500NO3-F | **Analyst** | : KAF |
| **Lab File ID** | : NO3240921-B1 | **Instrument ID** | : FIA1 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974476-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/21/24 06:21 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500NO3-F | **Analyst** | : KAF |
| **Lab File ID** | : NO3240921-B1 | **Instrument ID** | : FIA1 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Nitrogen, Nitrate/Nitrite | 0.94 | 0.10 | 0.05 | |

# Sample Raw Data

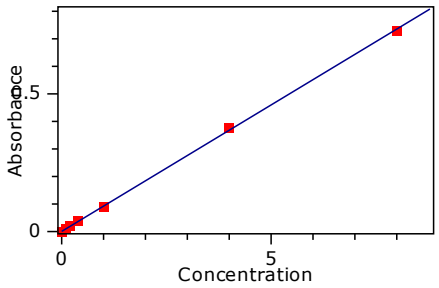
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 03:50:37
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-034937.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

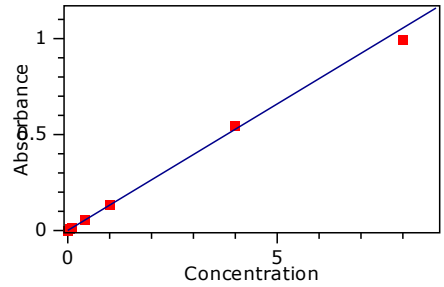
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00055
B: 0.09185
$R^2$: 0.99974
RSE(%): 2.51622
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 2 | NOx 8.0ppm | 0.72980 | 8.00000 | 7.93920 | 0.76 | 2024-09-21T02:41:10 |
| 3 | NOx 4.0ppm | 0.37680 | 4.00000 | 4.09690 | 2.42 | 2024-09-21T02:42:20 |
| 4 | NOx 1.0ppm | 0.08940 | 1.00000 | 0.96690 | 3.31 | 2024-09-21T02:43:27 |
| 5 | NOx 0.4ppm | 0.03830 | 0.40000 | 0.41110 | 2.77 | 2024-09-21T02:44:35 |
| 6 | NOx 0.2ppm | 0.01880 | 0.20000 | 0.19890 | 0.53 | 2024-09-21T02:45:46 |
| 7 | NOx 0.1ppm | 0.00970 | 0.10000 | 0.09990 | 0.09 | 2024-09-21T02:46:55 |
| 8 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00540 | NA | 2024-09-21T02:48:07 |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00050
B: 0.13182
$R^2$: 0.99799
RSE(%): 4.76158
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 9 | Nitrite 8.0ppm | 0.99050 | 8.00000 | 7.51020 | 6.12 | 2024-09-21T02:49:04 |
| 10 | Nitrite 4.0ppm | 0.54370 | 4.00000 | 4.12090 | 3.02 | 2024-09-21T02:50:14 |
| 11 | Nitrite 1.0ppm | 0.13040 | 1.00000 | 0.98560 | 1.44 | 2024-09-21T02:51:20 |
| 12 | Nitrite 0.4ppm | 0.05620 | 0.40000 | 0.42270 | 5.69 | 2024-09-21T02:52:30 |
| 13 | Nitrite 0.1ppm | 0.01400 | 0.10000 | 0.10250 | 2.50 | 2024-09-21T02:53:40 |
| 14 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04910 | 1.85 | 2024-09-21T02:54:50 |
| 15 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00280 | NA | 2024-09-21T02:56:15 |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0011 | | 2024-09-21T02:39:55 |
| NOx 8.0ppm | 2 | Standard | 8 | 0.7298 | 1 | 1 | 1 | 7.9392 | | 2024-09-21T02:41:10 |
| NOx 4.0ppm | 3 | Standard | 4 | 0.3768 | 1 | 1 | 1 | 4.0969 | | 2024-09-21T02:42:20 |
| NOx 1.0ppm | 4 | Standard | 1 | 0.0894 | 1 | 1 | 1 | 0.9669 | | 2024-09-21T02:43:27 |
| NOx 0.4ppm | 5 | Standard | 0.4 | 0.0383 | 1 | 1 | 1 | 0.4111 | | 2024-09-21T02:44:35 |
| NOx 0.2ppm | 6 | Standard | 0.2 | 0.0188 | 1 | 1 | 1 | 0.1989 | | 2024-09-21T02:45:46 |
| NOx 0.1ppm | 7 | Standard | 0.1 | 0.0097 | 1 | 1 | 1 | 0.0999 | | 2024-09-21T02:46:55 |
| NOx 0.0ppm | 8 | Standard | 0 | 0.0001 | 1 | 1 | 1 | -0.0054 | | 2024-09-21T02:48:07 |
| Nitrite 8.0ppm | 9 | Standard | ? | 0.7224 | 1 | 1 | 1 | 7.8590 | | 2024-09-21T02:49:16 |
| Nitrite 4.0ppm | 10 | Standard | ? | 0.3866 | 1 | 1 | 1 | 4.2033 | | 2024-09-21T02:50:26 |
| Nitrite 1.0ppm | 11 | Standard | ? | 0.0906 | 1 | 1 | 1 | 0.9807 | | 2024-09-21T02:51:33 |
| Nitrite 0.4ppm | 12 | Standard | ? | 0.0390 | 1 | 1 | 1 | 0.4183 | | 2024-09-21T02:52:41 |
| Nitrite 0.1ppm | 13 | Standard | ? | 0.0096 | 1 | 1 | 1 | 0.0985 | | 2024-09-21T02:53:52 |
| Nitrite 0.05ppm | 14 | Standard | ? | 0.0048 | 1 | 1 | 1 | 0.0463 | | 2024-09-21T02:55:01 |
| Nitrite 0.0ppm | 15 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0049 | | 2024-09-21T02:56:14 |
| CCV NO3 | 16 | QC | 1 | 0.0925 | 1 | 1 | 1 | 1.0011 | | 2024-09-21T02:57:19 |
| CCV NO2 | 17 | QC | ? | 0.0877 | 1 | 1 | 1 | 0.9486 | | 2024-09-21T02:58:25 |
| CCB | 18 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0061 | | 2024-09-21T02:59:11 |
| ICV NO3 5.0 | 19 | QC | 5 | 0.4612 | 1 | 1 | 1 | 5.0149 | | 2024-09-21T03:00:42 |
| ICV NO2 5.0 | 20 | QC | ? | 0.4644 | 1 | 1 | 1 | 5.0505 | | 2024-09-21T03:01:51 |
| ICV NO3 0.5 | 21 | QC | 0.5 | 0.0450 | 1 | 1 | 1 | 0.4844 | | 2024-09-21T03:02:59 |
| ICV NO2 0.5 | 22 | QC | ? | 0.0500 | 1 | 1 | 1 | 0.5389 | | 2024-09-21T03:04:07 |
| ICB | 23 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0063 | | 2024-09-21T03:04:53 |
| BLANK NO3 | 24 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0054 | | 2024-09-21T03:06:18 |
| LCS NO3 | 25 | Unknown | ? | 0.4425 | 1 | 1 | 1 | 4.8119 | | 2024-09-21T03:07:31 |
| BLANK NO2 | 26 | Unknown | ? | -0.0002 | 1 | 1 | 1 | -0.0078 | | 2024-09-21T03:08:13 |
| LCS NO2 | 27 | Unknown | ? | 0.4765 | 1 | 1 | 1 | 5.1814 | | 2024-09-21T03:09:45 |
| CCV NO3 | 28 | QC | 1 | 0.0853 | 1 | 1 | 1 | 0.9232 | | 2024-09-21T03:10:51 |
| CCV NO2 | 29 | QC | ? | 0.0888 | 1 | 1 | 1 | 0.9609 | | 2024-09-21T03:11:56 |
| CCB | 30 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0059 | | 2024-09-21T03:12:43 |
| WG1974468-1; WG1974469-1 | 31 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0051 | | 2024-09-21T03:14:16 |
| WG1974468-2; | 32 | Unknown | ? | 0.4361 | 1 | 1 | 1 | 4.7422 | | 2024-09-21T03:15:22 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| WG1974469-2 | | | | | | | | | | |
| WG1974470-1 | 33 | Unknown | ? | -0.0003 | 1 | 1 | 1 | -0.0098 | | 2024-09-21T03:16:00 |
| WG1974470-2 | 34 | Unknown | ? | 0.4371 | 1 | 1 | 1 | 4.7528 | | 2024-09-21T03:17:33 |
| WG1974471-1 | 35 | Unknown | ? | -0.0003 | 1 | 1 | 1 | -0.0088 | | 2024-09-21T03:18:11 |
| WG1974471-2 | 36 | Unknown | ? | 0.4402 | 1 | 1 | 1 | 4.7868 | | 2024-09-21T03:19:45 |
| WG1974472-1 | 37 | Unknown | ? | -0.0002 | 1 | 1 | 1 | -0.0081 | | 2024-09-21T03:20:26 |
| WG1974472-2 | 38 | Unknown | ? | 0.4428 | 1 | 1 | 1 | 4.8146 | | 2024-09-21T03:22:00 |
| WG1974474-1 | 39 | Unknown | ? | -0.0003 | 1 | 1 | 1 | -0.0090 | | 2024-09-21T03:22:39 |
| WG1974474-2 | 40 | Unknown | ? | 0.4490 | 1 | 1 | 1 | 4.8825 | | 2024-09-21T03:24:13 |
| CCV NO3 | 41 | QC | 1 | 0.0839 | 1 | 1 | 1 | 0.9079 | | 2024-09-21T03:25:18 |
| CCV NO2 | 42 | QC | ? | 0.0887 | 1 | 1 | 1 | 0.9601 | | 2024-09-21T03:26:24 |
| CCB | 43 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0063 | | 2024-09-21T03:27:11 |
| WG1974476-1 | 44 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0046 | | 2024-09-21T03:28:46 |
| WG1974476-2 | 45 | Unknown | ? | 0.4482 | 1 | 1 | 1 | 4.8733 | | 2024-09-21T03:29:52 |
| L2453990-01 | 46 | Unknown | ? | -0.0003 | 1 | 1 | 1 | -0.0093 | | 2024-09-21T03:30:30 |
| WG1974472-3 | 47 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0036 | | 2024-09-21T03:32:04 |
| WG1974472-4 | 48 | Unknown | ? | 0.3585 | 1 | 1 | 1 | 3.8968 | | 2024-09-21T03:33:09 |
| L2453990-02 | 49 | Unknown | ? | -0.0003 | 1 | 1 | 1 | -0.0090 | | 2024-09-21T03:33:46 |
| L2453990-03 | 50 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0084 | | 2024-09-21T03:35:21 |
| L2453990-04 | 51 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0075 | | 2024-09-21T03:36:25 |
| L2453990-05 | 52 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0058 | | 2024-09-21T03:37:29 |
| L2453990-06 | 53 | Unknown | ? | 0.0025 | 1 | 1 | 1 | 0.0208 | | 2024-09-21T03:38:40 |
| CCV NO3 | 54 | QC | 1 | 0.0785 | 1 | 1 | 1 | 0.8485 | QCR | 2024-09-21T03:39:38 |
| CCV NO2 | 55 | QC | ? | 0.0815 | 1 | 1 | 1 | 0.8818 | | 2024-09-21T03:40:44 |
| CCB | 56 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0063 | | 2024-09-21T03:41:31 |
| L2453990-07 | 57 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0034 | | 2024-09-21T03:43:07 |
| L2453990-08 | 58 | Unknown | ? | 0.0028 | 1 | 1 | 1 | 0.0249 | | 2024-09-21T03:44:18 |
| L2453990-09 | 59 | Unknown | ? | 0.0025 | 1 | 1 | 1 | 0.0210 | | 2024-09-21T03:45:34 |
| L2453576-06 | 60 | Unknown | ? | 0.0033 | 1 | 1 | 1 | 0.0304 | | 2024-09-21T03:46:27 |
| L2454051-01 | 61 | Unknown | ? | 0.0048 | 1 | 1 | 1 | 0.0468 | | 2024-09-21T03:47:33 |
| WG1974470-5 | 62 | Unknown | ? | 0.0044 | 1 | 1 | 1 | 0.0423 | | 2024-09-21T03:48:40 |
| WG1974470-6 | 63 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0045 | | 2024-09-21T03:49:30 |

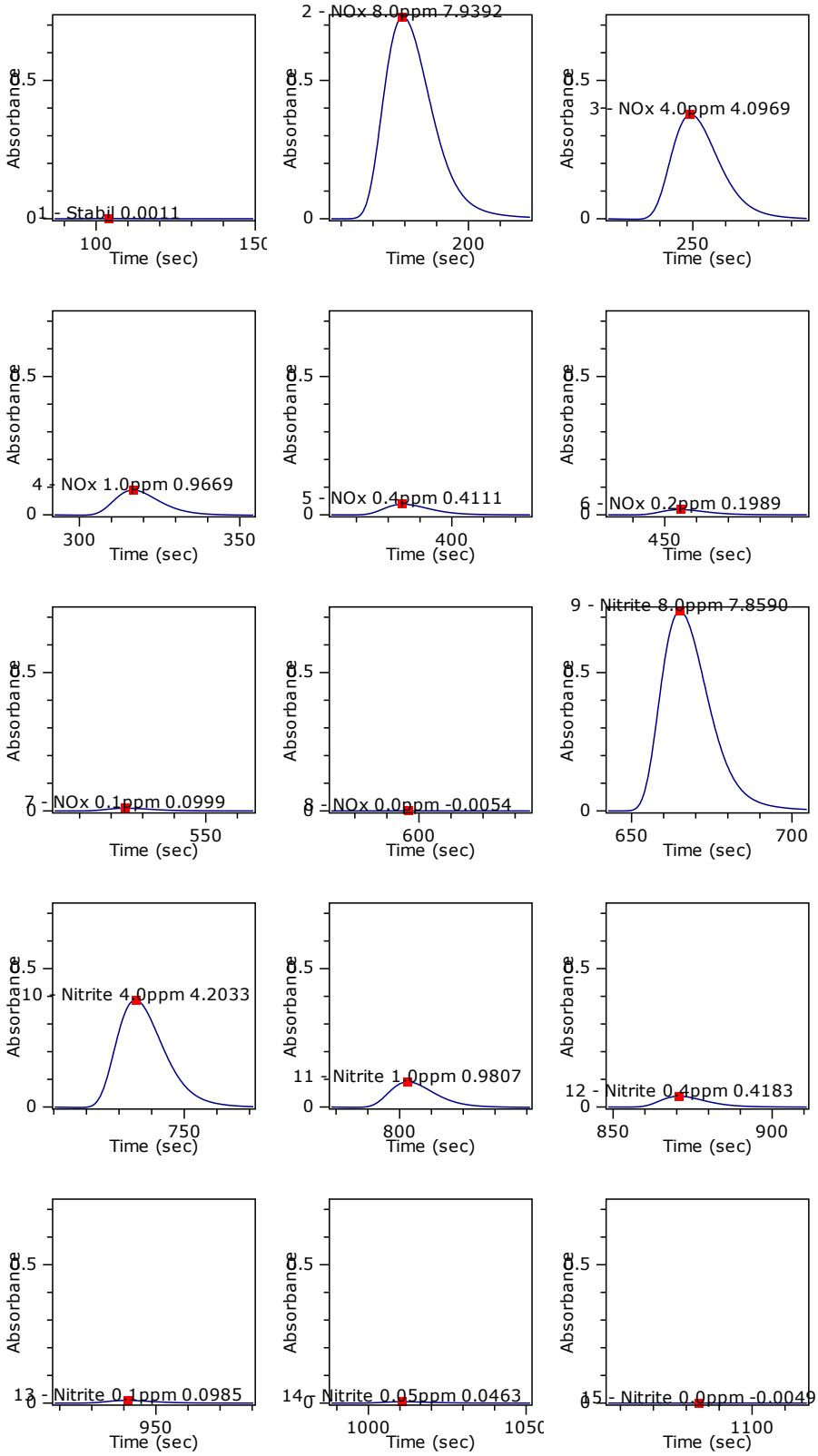
Channel: 2-NO2

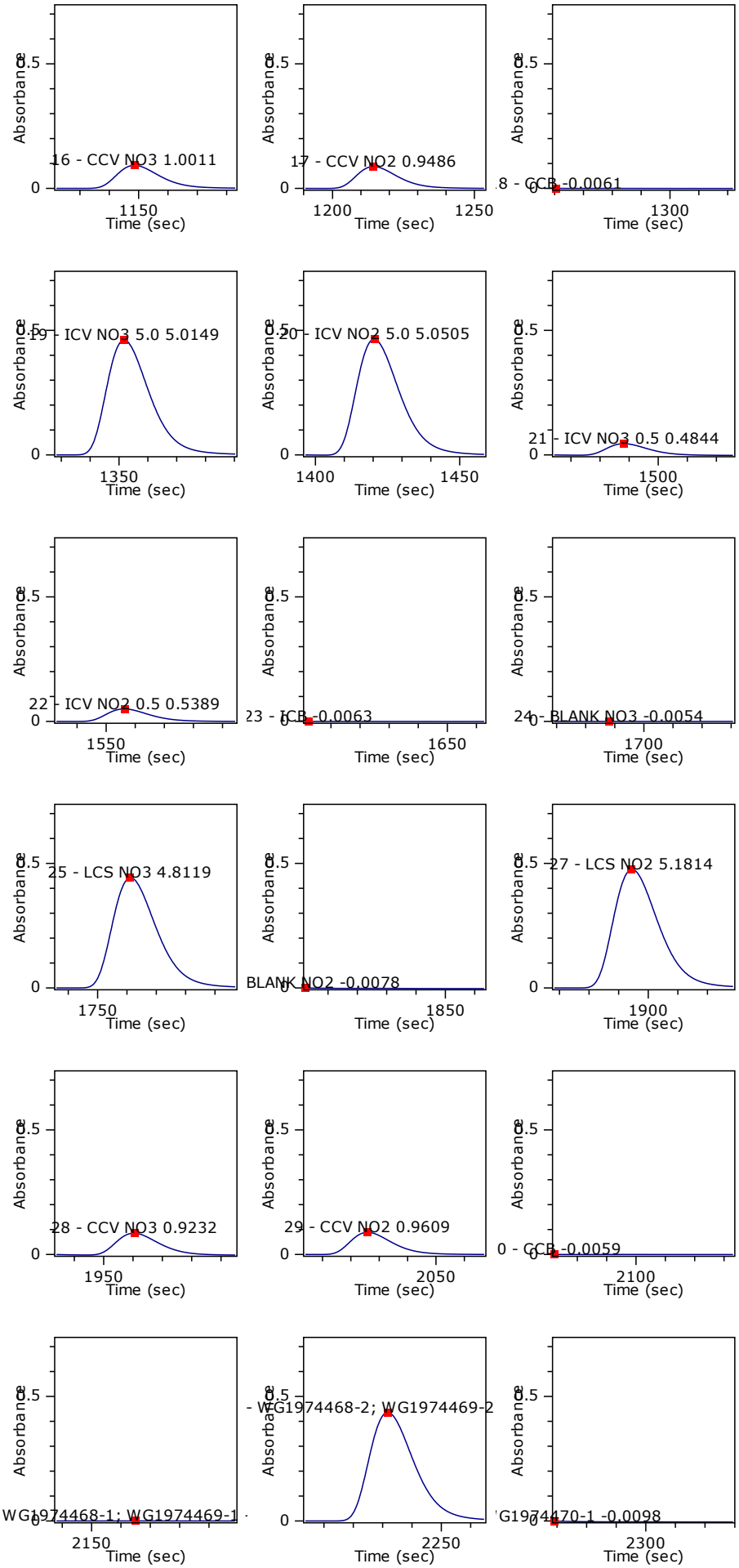
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T02:39:59 |
| NOx 8.0ppm | 2 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T02:40:57 |
| NOx 4.0ppm | 3 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T02:42:09 |
| NOx 1.0ppm | 4 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T02:43:12 |
| NOx 0.4ppm | 5 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T02:44:25 |
| NOx 0.2ppm | 6 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T02:45:31 |
| NOx 0.1ppm | 7 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T02:46:42 |
| NOx 0.0ppm | 8 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T02:47:54 |
| Nitrite 8.0ppm | 9 | Standard | 8 | 0.9905 | 1 | 1 | 1 | 7.5102 | | 2024-09-21T02:49:04 |
| Nitrite 4.0ppm | 10 | Standard | 4 | 0.5437 | 1 | 1 | 1 | 4.1209 | | 2024-09-21T02:50:14 |
| Nitrite 1.0ppm | 11 | Standard | 1 | 0.1304 | 1 | 1 | 1 | 0.9856 | | 2024-09-21T02:51:20 |
| Nitrite 0.4ppm | 12 | Standard | 0.4 | 0.0562 | 1 | 1 | 1 | 0.4227 | | 2024-09-21T02:52:30 |
| Nitrite 0.1ppm | 13 | Standard | 0.1 | 0.0140 | 1 | 1 | 1 | 0.1025 | | 2024-09-21T02:53:40 |
| Nitrite 0.05ppm | 14 | Standard | 0.05 | 0.0070 | 1 | 1 | 1 | 0.0491 | | 2024-09-21T02:54:50 |
| Nitrite 0.0ppm | 15 | Standard | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T02:56:15 |
| CCV NO3 | 16 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T02:57:08 |
| CCV NO2 | 17 | QC | 1 | 0.1275 | 1 | 1 | 1 | 0.9634 | | 2024-09-21T02:58:12 |
| CCB | 18 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T02:59:27 |
| ICV NO3 5.0 | 19 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T03:00:35 |
| ICV NO2 5.0 | 20 | QC | 5 | 0.6586 | 1 | 1 | 1 | 4.9926 | | 2024-09-21T03:01:40 |
| ICV NO3 0.5 | 21 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T03:02:48 |
| ICV NO2 0.5 | 22 | QC | 0.5 | 0.0702 | 1 | 1 | 1 | 0.5287 | | 2024-09-21T03:03:56 |
| ICB | 23 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T03:05:03 |
| BLANK NO3 | 24 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T03:06:23 |
| LCS NO3 | 25 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T03:07:34 |
| BLANK NO2 | 26 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T03:08:34 |
| LCS NO2 | 27 | Unknown | ? | 0.6563 | 1 | 1 | 1 | 4.9746 | | 2024-09-21T03:09:33 |
| CCV NO3 | 28 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0022 | | 2024-09-21T03:10:39 |
| CCV NO2 | 29 | QC | 1 | 0.1297 | 1 | 1 | 1 | 0.9799 | | 2024-09-21T03:11:44 |
| CCB | 30 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T03:12:57 |
| WG1974468-1; WG1974469-1 | 31 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T03:14:07 |
| WG1974468-2; | 32 | Unknown | ? | 0.6273 | 1 | 1 | 1 | 4.7551 | | 2024-09-21T03:15:08 |

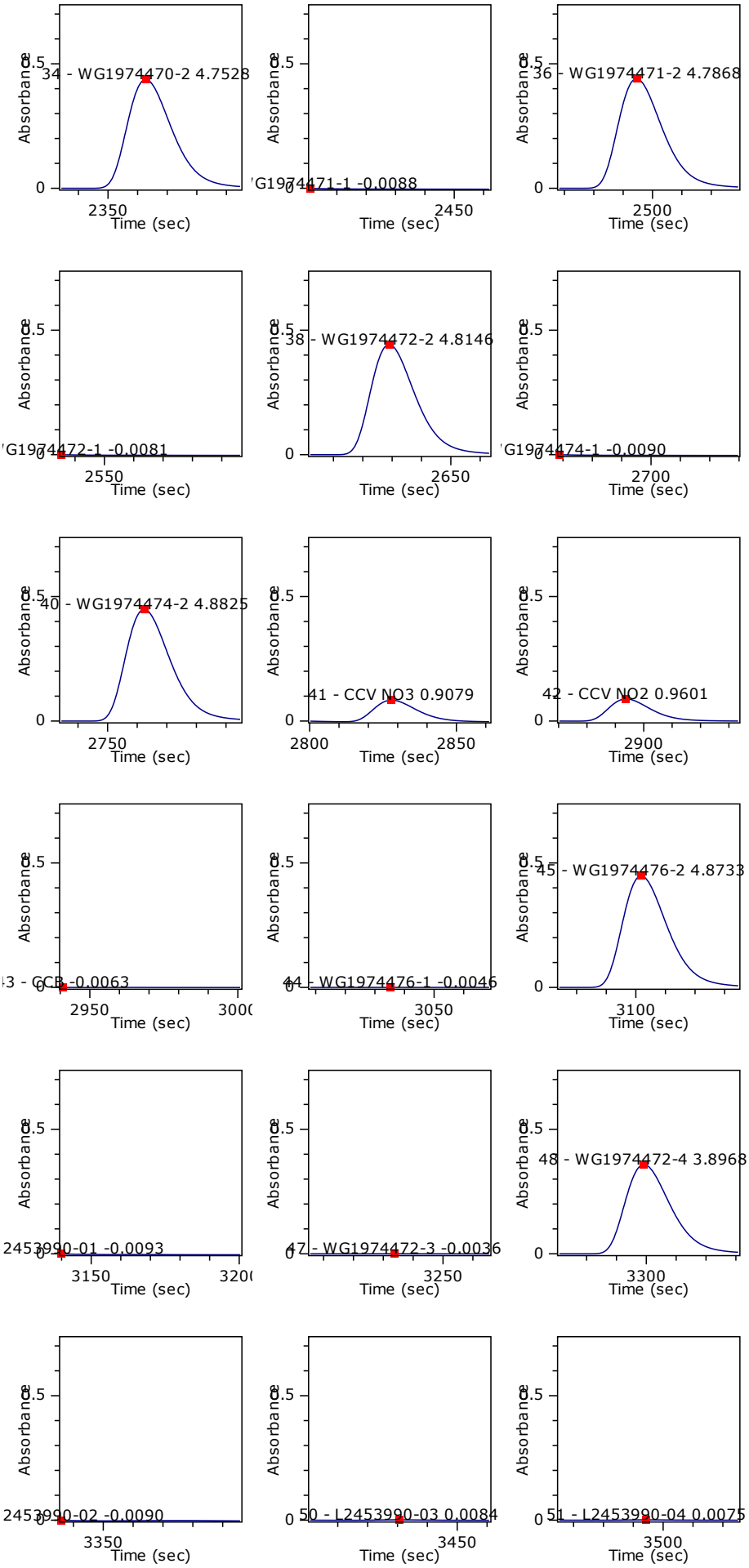
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| WG1974469-2 | | | | | | | | | | |
| WG1974470-1 | 33 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T03:16:15 |
| WG1974470-2 | 34 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T03:17:25 |
| WG1974471-1 | 35 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T03:18:44 |
| WG1974471-2 | 36 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T03:19:35 |
| WG1974472-1 | 37 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T03:20:47 |
| WG1974472-2 | 38 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T03:21:57 |
| WG1974474-1 | 39 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T03:23:08 |
| WG1974474-2 | 40 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T03:23:53 |
| CCV NO3 | 41 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T03:25:04 |
| CCV NO2 | 42 | QC | 1 | 0.1257 | 1 | 1 | 1 | 0.9494 | | 2024-09-21T03:26:11 |
| CCB | 43 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T03:27:22 |
| WG1974476-1 | 44 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0036 | | 2024-09-21T03:28:39 |
| WG1974476-2 | 45 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T03:29:42 |
| L2453990-01 | 46 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T03:30:43 |
| WG1974472-3 | 47 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0023 | | 2024-09-21T03:31:52 |
| WG1974472-4 | 48 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0019 | | 2024-09-21T03:32:52 |
| L2453990-02 | 49 | Unknown | ? | 0.0102 | 1 | 1 | 1 | 0.0737 | | 2024-09-21T03:34:02 |
| L2453990-03 | 50 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0024 | | 2024-09-21T03:35:06 |
| L2453990-04 | 51 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0023 | | 2024-09-21T03:36:10 |
| L2453990-05 | 52 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0015 | | 2024-09-21T03:37:15 |
| L2453990-06 | 53 | Unknown | ? | 0.0038 | 1 | 1 | 1 | 0.0253 | | 2024-09-21T03:38:19 |
| CCV NO3 | 54 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T03:39:24 |
| CCV NO2 | 55 | QC | 1 | 0.1272 | 1 | 1 | 1 | 0.9610 | | 2024-09-21T03:40:30 |
| CCB | 56 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T03:41:40 |
| L2453990-07 | 57 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0022 | | 2024-09-21T03:42:51 |
| L2453990-08 | 58 | Unknown | ? | 0.0028 | 1 | 1 | 1 | 0.0173 | | 2024-09-21T03:44:00 |
| L2453990-09 | 59 | Unknown | ? | 0.0101 | 1 | 1 | 1 | 0.0732 | | 2024-09-21T03:45:08 |
| L2453576-06 | 60 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0033 | | 2024-09-21T03:46:13 |
| L2454051-01 | 61 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0141 | | 2024-09-21T03:47:20 |
| WG1974470-5 | 62 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0096 | | 2024-09-21T03:48:26 |
| WG1974470-6 | 63 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0099 | | 2024-09-21T03:49:30 |

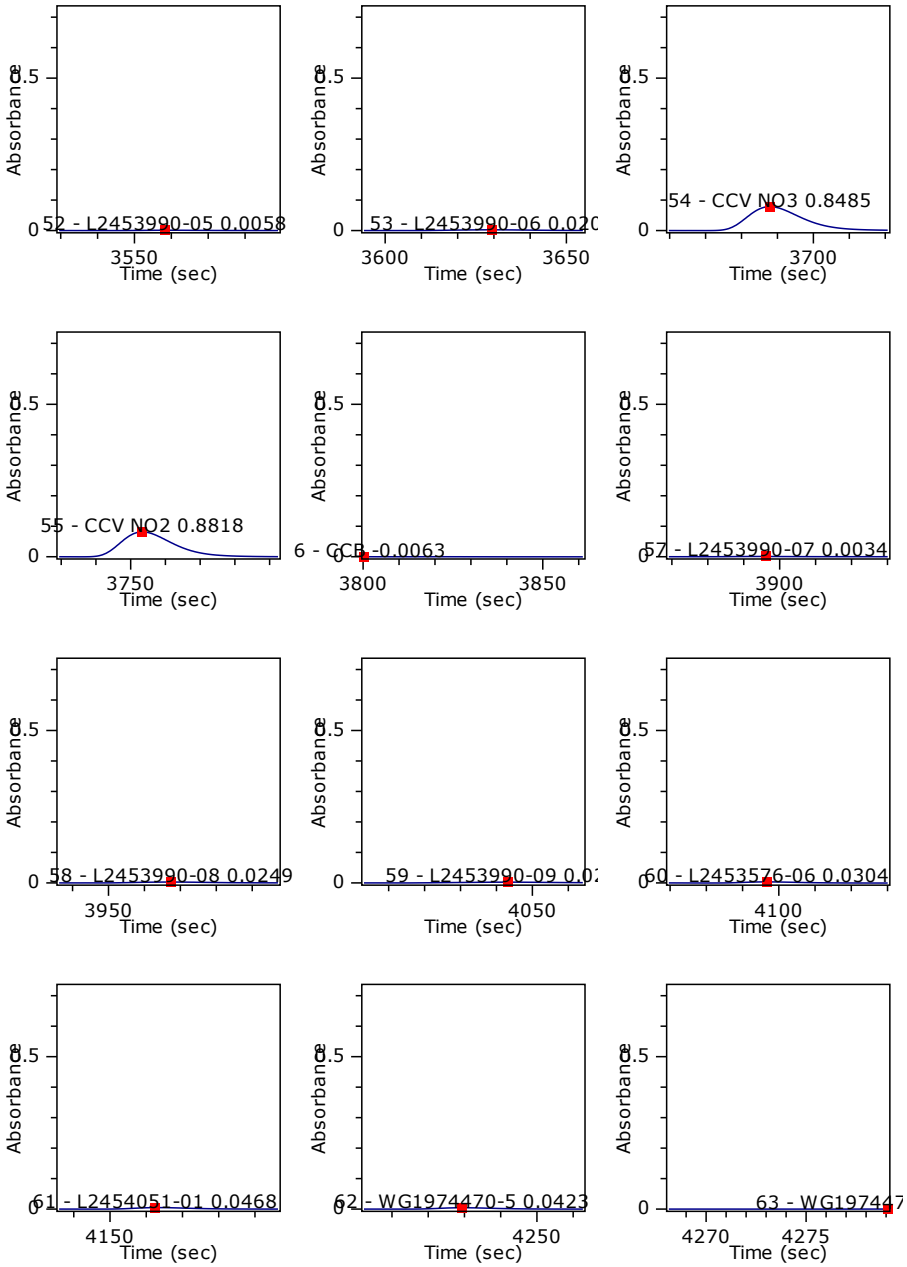
Peaks:

Channel: 1-NOx

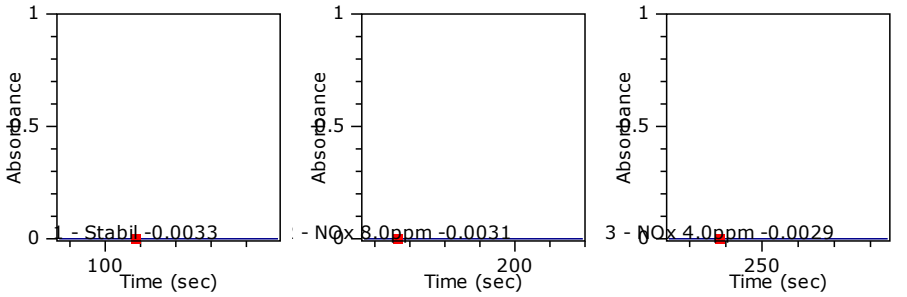


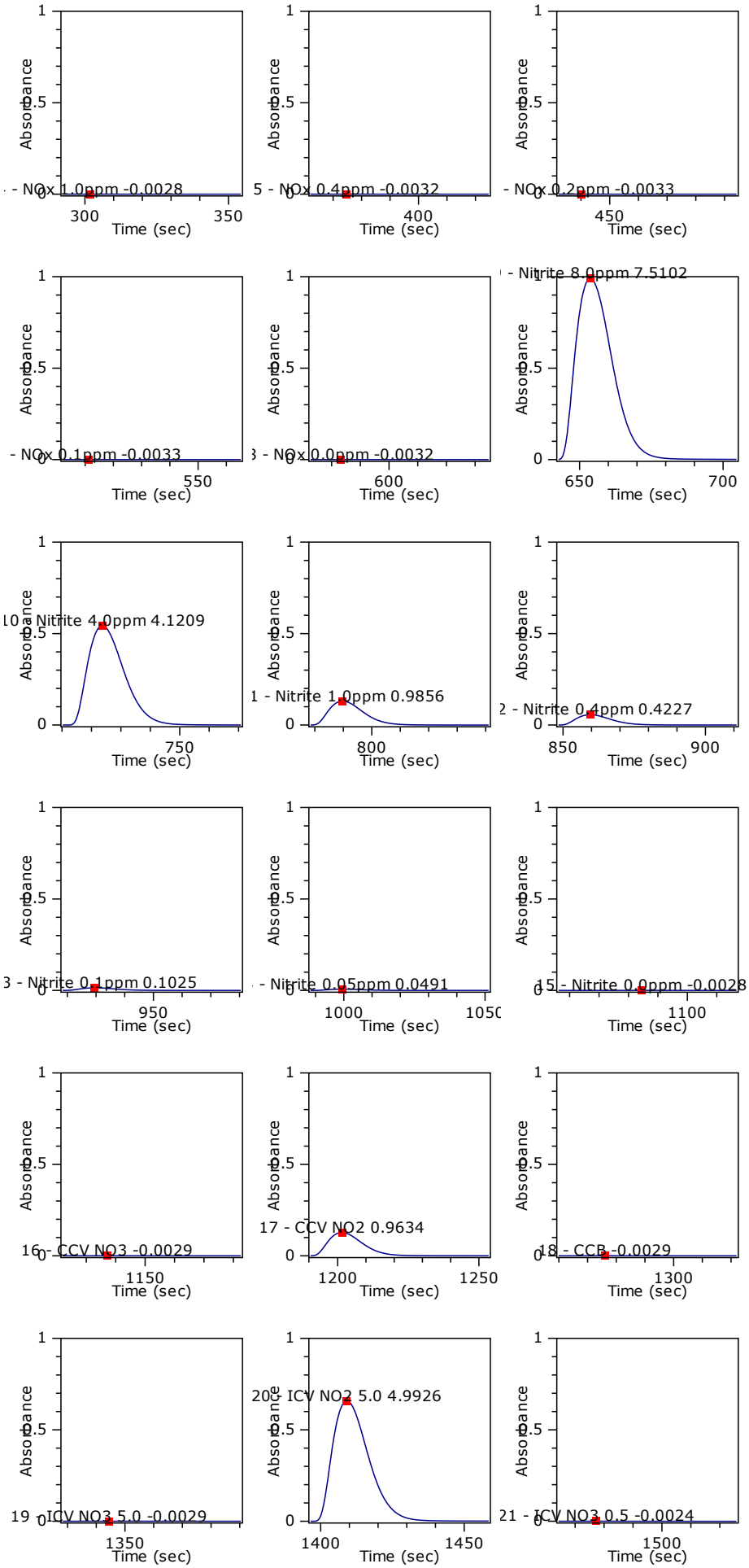

16 - CCV NO3 1.0011
17 - CCV NO2 0.9486
8 - GCB -0.0061
19 - ICV NO3 5.0 5.0149
20 - ICV NO2 5.0 5.0505
21 - ICV NO3 0.5 0.4844
22 - ICV NO2 0.5 0.5389
23 - ICB -0.0063
24 - BLANK NO3 -0.0054
25 - LCS NO3 4.8119
BLANK NO2 -0.0078
27 - LCS NO2 5.1814
28 - CCV NO3 0.9232
29 - CCV NO2 0.9609
0 - GCB -0.0059
- WG1974468-2; WG1974469-2
WG1974468-1; WG1974469-1
G1974470-1 -0.0098
Absorbance
Time (sec)

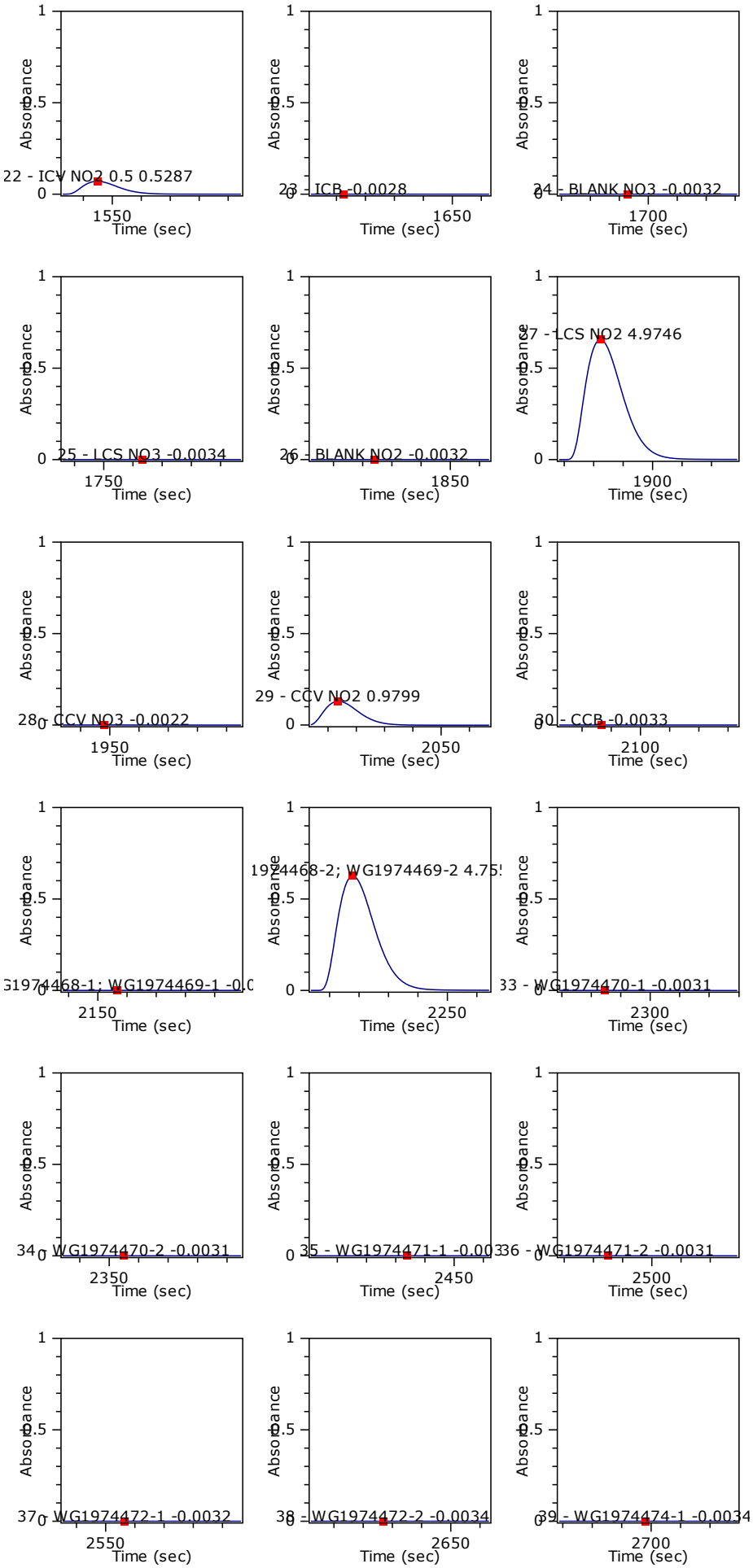

34 - WG1974470-2 4.7528
G1974471-1 -0.0088
36 - WG1974471-2 4.7868
G1974472-1 -0.0081
38 - WG1974472-2 4.8146
G1974474-1 -0.0090
40 - WG1974474-2 4.8825
41 - CCV NO3 0.9079
42 - CCV NO2 0.9601
3 - GCB -0.0063
44 - WG1974476-1 -0.0046
45 - WG1974476-2 4.8733
2453990-01 -0.0093
47 - WG1974472-3 -0.0036
48 - WG1974472-4 3.8968
2453990-02 -0.0090
50 - L2453990-03 0.0084
51 - L2453990-04 0.0075
Absorbance
Time (sec)

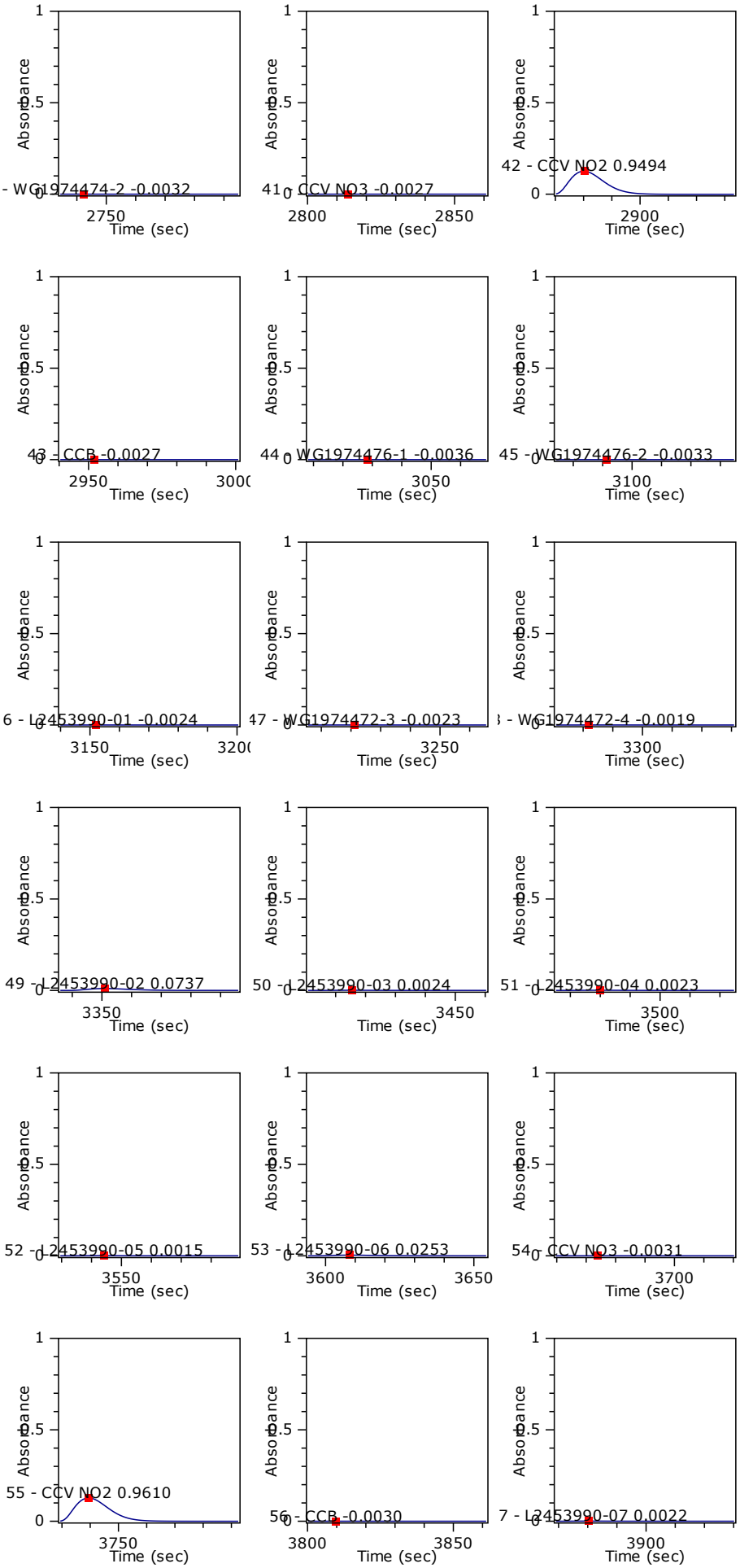


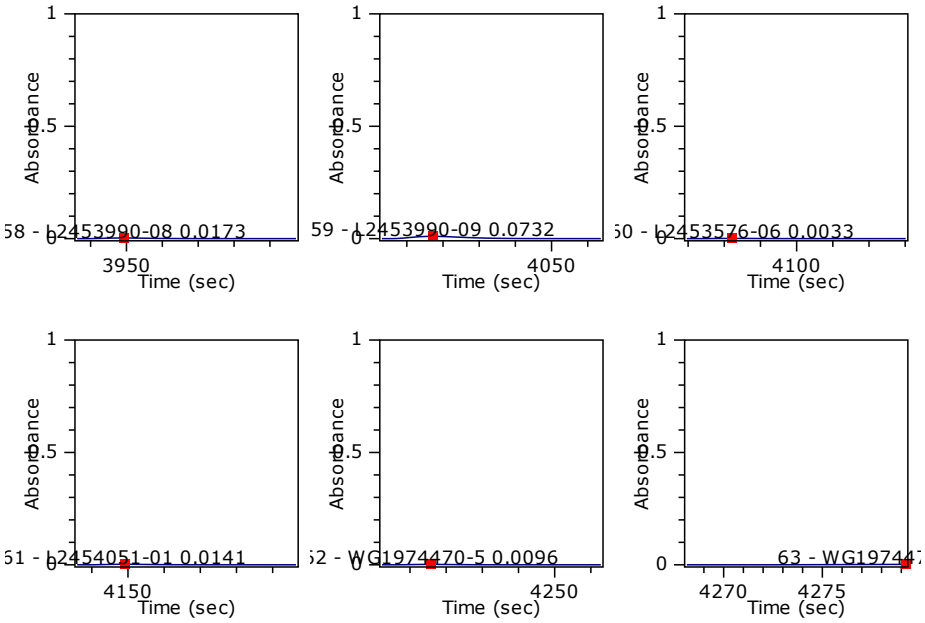

Channel: 2-NO2




- NOx 1.0ppm -0.0028
5 - NOx 0.4ppm -0.0032
- NOx 0.2ppm -0.0033
- NOx 0.1ppm -0.0033
3 - NOx 0.0ppm -0.0032
- Nitrite 8.0ppm 7.5102
10 - Nitrite 4.0ppm 4.1209
1 - Nitrite 1.0ppm 0.9856
2 - Nitrite 0.4ppm 0.4227
3 - Nitrite 0.1ppm 0.1025
- Nitrite 0.05ppm 0.0491
15 - Nitrite 0.0ppm -0.0028
16 - CCV NO3 -0.0029
17 - CCV NO2 0.9634
18 - CCB -0.0029
19 - ICV NO3 5.0 -0.0029
20 - ICV NO2 5.0 4.9926
21 - ICV NO3 0.5 -0.0024
Absorbance
Time (sec)


22 - ICV NO2 0.5 0.5287
23 - ICB -0.0028
24 - BLANK NO3 -0.0032
25 - LCS NO3 -0.0034
26 - BLANK NO2 -0.0032
27 - LCS NO2 4.9746
28 - CCV NO3 -0.0022
29 - CCV NO2 0.9799
30 - CCB -0.0033
31974468-1; WG1974469-1 -0.0
1974468-2; WG1974469-2 4.75
33 - WG1974470-1 -0.0031
34 - WG1974470-2 -0.0031
35 - WG1974471-1 -0.00
36 - WG1974471-2 -0.0031
37 - WG1974472-1 -0.0032
38 - WG1974472-2 -0.0034
39 - WG1974474-1 -0.0034
Absorbance
Time (sec)


- WG1974474-2 -0.0032
41 - CCV NO3 -0.0027
42 - CCV NO2 0.9494
43 - CCB -0.0027
44 - WG1974476-1 -0.0036
45 - WG1974476-2 -0.0033
6 - L2453990-01 -0.0024
47 - WG1974472-3 -0.0023
- WG1974472-4 -0.0019
49 - L2453990-02 0.0737
50 - L2453990-03 0.0024
51 - L2453990-04 0.0023
52 - L2453990-05 0.0015
53 - L2453990-06 0.0253
54 - CCV NO3 -0.0031
55 - CCV NO2 0.9610
56 - CCB -0.0030
7 - L2453990-07 0.0022
Absorbance
Time (sec)




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 34.7
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T02:38:11

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.
```

```
    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

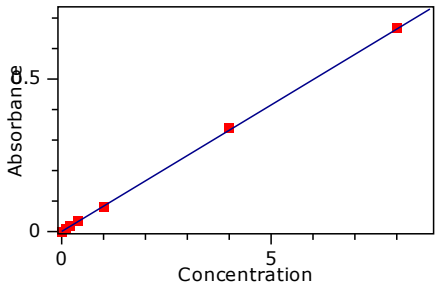
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 08:00:22
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-075958.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

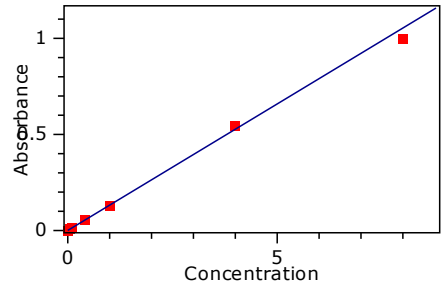
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00037
B: 0.08294
$R^2$: 0.99987
RSE(%): 2.47701
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 2 | NOx 8.0ppm | 0.66720 | 8.00000 | 8.04000 | 0.50 | 2024-09-21T04:24:48 |
| 3 | NOx 4.0ppm | 0.34030 | 4.00000 | 4.09890 | 2.47 | 2024-09-21T04:25:59 |
| 4 | NOx 1.0ppm | 0.08010 | 1.00000 | 0.96080 | 3.92 | 2024-09-21T04:27:06 |
| 5 | NOx 0.4ppm | 0.03410 | 0.40000 | 0.40660 | 1.64 | 2024-09-21T04:28:13 |
| 6 | NOx 0.2ppm | 0.01690 | 0.20000 | 0.19930 | 0.34 | 2024-09-21T04:29:24 |
| 7 | NOx 0.1ppm | 0.00870 | 0.10000 | 0.10010 | 0.14 | 2024-09-21T04:30:34 |
| 8 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00320 | NA | 2024-09-21T04:31:49 |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00047
B: 0.13165
$R^2$: 0.99823
RSE(%): 4.38727
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 9 | Nitrite 8.0ppm | 0.99500 | 8.00000 | 7.55440 | 5.57 | 2024-09-21T04:32:42 |
| 10 | Nitrite 4.0ppm | 0.54310 | 4.00000 | 4.12190 | 3.05 | 2024-09-21T04:33:52 |
| 11 | Nitrite 1.0ppm | 0.13000 | 1.00000 | 0.98370 | 1.63 | 2024-09-21T04:34:59 |
| 12 | Nitrite 0.4ppm | 0.05590 | 0.40000 | 0.42120 | 5.30 | 2024-09-21T04:36:09 |
| 13 | Nitrite 0.1ppm | 0.01390 | 0.10000 | 0.10190 | 1.90 | 2024-09-21T04:37:19 |
| 14 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04920 | 1.51 | 2024-09-21T04:38:29 |
| 15 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00290 | NA | 2024-09-21T04:39:42 |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T04:23:44 |
| NOx 8.0ppm | 2 | Standard | 8 | 0.6672 | 1 | 1 | 1 | 8.0400 | | 2024-09-21T04:24:48 |
| NOx 4.0ppm | 3 | Standard | 4 | 0.3403 | 1 | 1 | 1 | 4.0989 | | 2024-09-21T04:25:59 |
| NOx 1.0ppm | 4 | Standard | 1 | 0.0801 | 1 | 1 | 1 | 0.9608 | | 2024-09-21T04:27:06 |
| NOx 0.4ppm | 5 | Standard | 0.4 | 0.0341 | 1 | 1 | 1 | 0.4066 | | 2024-09-21T04:28:13 |
| NOx 0.2ppm | 6 | Standard | 0.2 | 0.0169 | 1 | 1 | 1 | 0.1993 | | 2024-09-21T04:29:24 |
| NOx 0.1ppm | 7 | Standard | 0.1 | 0.0087 | 1 | 1 | 1 | 0.1001 | | 2024-09-21T04:30:34 |
| NOx 0.0ppm | 8 | Standard | 0 | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T04:31:49 |
| Nitrite 8.0ppm | 9 | Standard | ? | 0.6643 | 1 | 1 | 1 | 8.0053 | | 2024-09-21T04:32:54 |
| Nitrite 4.0ppm | 10 | Standard | ? | 0.3538 | 1 | 1 | 1 | 4.2615 | | 2024-09-21T04:34:04 |
| Nitrite 1.0ppm | 11 | Standard | ? | 0.0833 | 1 | 1 | 1 | 0.9999 | | 2024-09-21T04:35:12 |
| Nitrite 0.4ppm | 12 | Standard | ? | 0.0352 | 1 | 1 | 1 | 0.4194 | | 2024-09-21T04:36:20 |
| Nitrite 0.1ppm | 13 | Standard | ? | 0.0087 | 1 | 1 | 1 | 0.0998 | | 2024-09-21T04:37:31 |
| Nitrite 0.05ppm | 14 | Standard | ? | 0.0044 | 1 | 1 | 1 | 0.0484 | | 2024-09-21T04:38:40 |
| Nitrite 0.0ppm | 15 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0036 | | 2024-09-21T04:39:52 |
| CCV NO3 | 16 | QC | 1 | 0.0840 | 1 | 1 | 1 | 1.0086 | | 2024-09-21T04:40:58 |
| CCV NO2 | 17 | QC | ? | 0.0840 | 1 | 1 | 1 | 1.0084 | | 2024-09-21T04:42:04 |
| CCB | 18 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0036 | | 2024-09-21T04:43:10 |
| ICV NO3 5.0 | 19 | QC | 5 | 0.4343 | 1 | 1 | 1 | 5.2321 | | 2024-09-21T04:44:22 |
| ICV NO2 5.0 | 20 | QC | ? | 0.4362 | 1 | 1 | 1 | 5.2552 | | 2024-09-21T04:45:31 |
| ICV NO3 0.5 | 21 | QC | 0.5 | 0.0435 | 1 | 1 | 1 | 0.5206 | | 2024-09-21T04:46:38 |
| ICV NO2 0.5 | 22 | QC | ? | 0.0451 | 1 | 1 | 1 | 0.5389 | | 2024-09-21T04:47:47 |
| ICB | 23 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0042 | | 2024-09-21T04:48:31 |
| CCV NO3 | 24 | QC | 1 | 0.0840 | 1 | 1 | 1 | 1.0078 | | 2024-09-21T04:50:04 |
| CCV NO2 | 25 | QC | ? | 0.0863 | 1 | 1 | 1 | 1.0363 | | 2024-09-21T04:51:10 |
| CCB | 26 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0040 | | 2024-09-21T04:52:21 |
| WG1974476-1 | 27 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0041 | | 2024-09-21T04:53:32 |
| WG1974476-2 | 28 | Unknown | ? | 0.4297 | 1 | 1 | 1 | 5.1761 | | 2024-09-21T04:54:37 |
| L2453990-01 | 29 | Unknown | ? | -0.0001 | 1 | 1 | 1 | -0.0056 | | 2024-09-21T04:55:16 |
| WG1974472-3 | 30 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0018 | | 2024-09-21T04:56:52 |
| WG1974472-4 | 31 | Unknown | ? | 0.3485 | 1 | 1 | 1 | 4.1978 | | 2024-09-21T04:57:54 |
| L2453990-02 | 32 | Unknown | ? | -0.0001 | 1 | 1 | 1 | -0.0054 | | 2024-09-21T04:58:32 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453990-03 | 33 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0073 | | 2024-09-21T05:00:05 |
| L2453990-04 | 34 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0110 | | 2024-09-21T05:01:10 |
| L2453990-05 | 35 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0051 | | 2024-09-21T05:02:15 |
| L2453990-06 | 36 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0135 | | 2024-09-21T05:03:22 |
| CCV NO3 | 37 | QC | 1 | 0.0798 | 1 | 1 | 1 | 0.9572 | | 2024-09-21T05:04:23 |
| CCV NO2 | 38 | QC | ? | 0.0821 | 1 | 1 | 1 | 0.9860 | | 2024-09-21T05:05:28 |
| CCB | 39 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0047 | | 2024-09-21T05:06:14 |
| L2453990-07 | 40 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0054 | | 2024-09-21T05:07:48 |
| L2453990-08 | 41 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0135 | | 2024-09-21T05:08:57 |
| L2453990-09 | 42 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0115 | | 2024-09-21T05:10:12 |
| L2453576-06 | 43 | Unknown | ? | 0.0036 | 1 | 1 | 1 | 0.0386 | | 2024-09-21T05:11:07 |
| L2454051-01 | 44 | Unknown | ? | 0.0048 | 1 | 1 | 1 | 0.0531 | | 2024-09-21T05:12:14 |
| WG1974470-5 | 45 | Unknown | ? | 0.0044 | 1 | 1 | 1 | 0.0480 | | 2024-09-21T05:13:20 |
| WG1974470-6 | 46 | Unknown | ? | 0.3427 | 1 | 1 | 1 | 4.1278 | | 2024-09-21T05:14:26 |
| L2454051-02 | 47 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0273 | | 2024-09-21T05:15:33 |
| L2454051-03 | 48 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0066 | | 2024-09-21T05:16:38 |
| L2454051-04 | 49 | Unknown | ? | 0.0029 | 1 | 1 | 1 | 0.0308 | | 2024-09-21T05:17:43 |
| CCV NO3 | 50 | QC | 1 | 0.0813 | 1 | 1 | 1 | 0.9754 | | 2024-09-21T05:18:49 |
| CCV NO2 | 51 | QC | ? | 0.0824 | 1 | 1 | 1 | 0.9887 | | 2024-09-21T05:19:55 |
| CCB | 52 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T05:21:02 |
| L2454051-05 | 53 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0041 | | 2024-09-21T05:22:14 |
| L2454181-02 | 54 | Unknown | ? | 1.2938 | 1 | 1 | 1 | 15.5956 | OVR | 2024-09-21T05:23:35 |
| WG1974470-3 | 55 | Unknown | ? | 1.2541 | 1 | 1 | 1 | 15.1172 | OVR | 2024-09-21T05:24:40 |
| WG1974470-4 | 56 | Unknown | ? | 1.2465 | 1 | 1 | 1 | 15.0248 | OVR | 2024-09-21T05:25:44 |
| WG1974468-3 | 57 | Unknown | ? | 1.2497 | 1 | 1 | 1 | 15.0644 | OVR | 2024-09-21T05:26:49 |
| WG1974468-4 | 58 | Unknown | ? | 1.2591 | 1 | 1 | 1 | 15.1778 | OVR | 2024-09-21T05:27:54 |
| L2454221-01 | 59 | Unknown | ? | 0.1047 | 1 | 1 | 1 | 1.2574 | | 2024-09-21T05:28:48 |
| L2454326-01 | 60 | Unknown | ? | 0.3449 | 1 | 1 | 1 | 4.1542 | | 2024-09-21T05:29:55 |
| L2454350-01 | 61 | Unknown | ? | 0.2308 | 1 | 1 | 1 | 2.7780 | | 2024-09-21T05:31:02 |
| L2454013-01 | 62 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0274 | | 2024-09-21T05:32:08 |
| CCV NO3 | 63 | QC | 1 | 0.0832 | 1 | 1 | 1 | 0.9992 | | 2024-09-21T05:33:14 |
| CCV NO2 | 64 | QC | ? | 0.0841 | 1 | 1 | 1 | 1.0097 | | 2024-09-21T05:34:20 |
| CCB | 65 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T05:35:33 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454312-02 | 66 | Unknown | ? | 0.2016 | 1 | 1 | 1 | 2.4257 | | 2024-09-21T05:36:40 |
| L2454312-03 | 67 | Unknown | ? | 0.3402 | 1 | 1 | 1 | 4.0976 | | 2024-09-21T05:37:48 |
| L2454312-04 | 68 | Unknown | ? | 0.0138 | 1 | 1 | 1 | 0.1624 | | 2024-09-21T05:38:54 |
| L2454324-01 | 69 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0125 | | 2024-09-21T05:39:59 |
| WG1974471-3 | 70 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0143 | | 2024-09-21T05:41:06 |
| WG1974471-4 | 71 | Unknown | ? | 0.3856 | 1 | 1 | 1 | 4.6452 | | 2024-09-21T05:42:10 |
| WG1974469-3 | 72 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0051 | | 2024-09-21T05:43:15 |
| WG1974469-4 | 73 | Unknown | ? | 0.3638 | 1 | 1 | 1 | 4.3816 | | 2024-09-21T05:44:20 |
| L2454324-02 | 74 | Unknown | ? | 0.0017 | 1 | 1 | 1 | 0.0166 | | 2024-09-21T05:45:24 |
| L2454324-03 | 75 | Unknown | ? | 0.0052 | 1 | 1 | 1 | 0.0584 | | 2024-09-21T05:46:30 |
| CCV NO3 | 76 | QC | 1 | 0.0846 | 1 | 1 | 1 | 1.0153 | | 2024-09-21T05:47:34 |
| CCV NO2 | 77 | QC | ? | 0.0844 | 1 | 1 | 1 | 1.0127 | | 2024-09-21T05:48:39 |
| CCB | 78 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T05:49:56 |
| L2454324-04 | 79 | Unknown | ? | 0.0866 | 1 | 1 | 1 | 1.0393 | | 2024-09-21T05:51:00 |
| L2454324-05 | 80 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0039 | | 2024-09-21T05:52:09 |
| L2454324-06 | 81 | Unknown | ? | 0.0198 | 1 | 1 | 1 | 0.2348 | | 2024-09-21T05:53:16 |
| L2454324-07 | 82 | Unknown | ? | 0.0291 | 1 | 1 | 1 | 0.3470 | | 2024-09-21T05:54:23 |
| L2452564-01 | 83 | Unknown | ? | 0.0082 | 1 | 1 | 1 | 0.0940 | | 2024-09-21T05:55:29 |
| L2452564-02 | 84 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0058 | | 2024-09-21T05:56:38 |
| L2453362-01 | 85 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0034 | | 2024-09-21T05:57:43 |
| WG1974474-3 | 86 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0025 | | 2024-09-21T05:58:48 |
| WG1974474-4 | 87 | Unknown | ? | 0.3527 | 1 | 1 | 1 | 4.2487 | | 2024-09-21T05:59:53 |
| L2453559-02 | 88 | Unknown | ? | 0.2239 | 1 | 1 | 1 | 2.6956 | | 2024-09-21T06:00:59 |
| CCV NO3 | 89 | QC | 1 | 0.0836 | 1 | 1 | 1 | 1.0038 | | 2024-09-21T06:02:03 |
| CCV NO2 | 90 | QC | ? | 0.0842 | 1 | 1 | 1 | 1.0109 | | 2024-09-21T06:03:09 |
| CCB | 91 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T06:04:19 |
| L2453559-04 | 92 | Unknown | ? | 0.2496 | 1 | 1 | 1 | 3.0056 | | 2024-09-21T06:05:27 |
| L2453559-07 | 93 | Unknown | ? | 0.1071 | 1 | 1 | 1 | 1.2871 | | 2024-09-21T06:06:34 |
| L2453562-01 | 94 | Unknown | ? | 0.5325 | 1 | 1 | 1 | 6.4156 | | 2024-09-21T06:07:39 |
| L2453851-01 | 95 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0108 | | 2024-09-21T06:08:43 |
| L2453851-02 | 96 | Unknown | ? | 0.7380 | 1 | 1 | 1 | 8.8936 | OVR | 2024-09-21T06:09:48 |
| L2453950-01 | 97 | Unknown | ? | 0.0266 | 1 | 1 | 1 | 0.3163 | | 2024-09-21T06:10:54 |
| L2454072-01 | 98 | Unknown | ? | 0.0327 | 1 | 1 | 1 | 0.3897 | | 2024-09-21T06:12:01 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454081-01 | 99 | Unknown | ? | 0.1412 | 1 | 1 | 1 | 1.6976 | | 2024-09-21T06:13:08 |
| WG1974474-5 | 100 | Unknown | ? | 0.1418 | 1 | 1 | 1 | 1.7057 | | 2024-09-21T06:14:15 |
| WG1974474-6 | 101 | Unknown | ? | 0.4965 | 1 | 1 | 1 | 5.9825 | | 2024-09-21T06:15:22 |
| CCV NO3 | 102 | QC | 1 | 0.0830 | 1 | 1 | 1 | 0.9966 | | 2024-09-21T06:16:27 |
| CCV NO2 | 103 | QC | ? | 0.0842 | 1 | 1 | 1 | 1.0105 | | 2024-09-21T06:17:33 |
| CCB | 104 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T06:18:44 |
| L2454081-02 | 105 | Unknown | ? | 0.1422 | 1 | 1 | 1 | 1.7106 | | 2024-09-21T06:19:54 |
| L2453053-01 | 106 | Unknown | ? | 0.0776 | 1 | 1 | 1 | 0.9306 | | 2024-09-21T06:21:01 |
| WG1974476-3 | 107 | Unknown | ? | 0.0780 | 1 | 1 | 1 | 0.9364 | | 2024-09-21T06:22:08 |
| WG1974476-4 | 108 | Unknown | ? | 0.4303 | 1 | 1 | 1 | 5.1840 | | 2024-09-21T06:23:14 |
| L2453053-02 | 109 | Unknown | ? | 0.0975 | 1 | 1 | 1 | 1.1707 | | 2024-09-21T06:24:19 |
| L2453053-03 | 110 | Unknown | ? | 0.0666 | 1 | 1 | 1 | 0.7983 | | 2024-09-21T06:25:24 |
| L2453053-04 | 111 | Unknown | ? | 0.0303 | 1 | 1 | 1 | 0.3607 | | 2024-09-21T06:26:29 |
| L2453053-05 | 112 | Unknown | ? | 0.0979 | 1 | 1 | 1 | 1.1762 | | 2024-09-21T06:27:35 |
| L2453123-02 | 113 | Unknown | ? | 0.1524 | 1 | 1 | 1 | 1.8333 | | 2024-09-21T06:28:40 |
| L2453131-01 | 114 | Unknown | ? | 0.0768 | 1 | 1 | 1 | 0.9215 | | 2024-09-21T06:29:45 |
| CCV NO3 | 115 | QC | 1 | 0.0836 | 1 | 1 | 1 | 1.0036 | | 2024-09-21T06:30:50 |
| CCV NO2 | 116 | QC | ? | 0.0841 | 1 | 1 | 1 | 1.0101 | | 2024-09-21T06:31:56 |
| CCB | 117 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T06:33:08 |
| L2453131-02 | 118 | Unknown | ? | 0.4284 | 1 | 1 | 1 | 5.1604 | | 2024-09-21T06:34:17 |
| L2453342-01 | 119 | Unknown | ? | 0.0429 | 1 | 1 | 1 | 0.5123 | | 2024-09-21T06:35:27 |
| L2453342-02 | 120 | Unknown | ? | 0.0701 | 1 | 1 | 1 | 0.8411 | | 2024-09-21T06:36:33 |
| L2453342-03 | 121 | Unknown | ? | 0.2070 | 1 | 1 | 1 | 2.4920 | | 2024-09-21T06:37:40 |
| L2453342-04 | 122 | Unknown | ? | 0.3501 | 1 | 1 | 1 | 4.2169 | | 2024-09-21T06:38:47 |
| L2453342-05 | 123 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0273 | | 2024-09-21T06:39:53 |
| L2453342-06 | 124 | Unknown | ? | 0.0201 | 1 | 1 | 1 | 0.2380 | | 2024-09-21T06:40:59 |
| L2453342-07 | 125 | Unknown | ? | 0.1560 | 1 | 1 | 1 | 1.8765 | | 2024-09-21T06:42:06 |
| L2453342-08 | 126 | Unknown | ? | 0.0753 | 1 | 1 | 1 | 0.9032 | | 2024-09-21T06:43:11 |
| L2453342-10 | 127 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0050 | | 2024-09-21T06:44:16 |
| CCV NO3 | 128 | QC | 1 | 0.0834 | 1 | 1 | 1 | 1.0009 | | 2024-09-21T06:45:22 |
| CCV NO2 | 129 | QC | ? | 0.0833 | 1 | 1 | 1 | 1.0000 | | 2024-09-21T06:46:28 |
| CCB | 130 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0031 | | 2024-09-21T06:47:38 |
| L2454221-01 | 131 | Unknown | ? | 0.1136 | 1 | 1 | 1 | 1.3648 | | 2024-09-21T06:48:49 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453950-01 | 132 | Unknown | ? | 0.0264 | 1 | 1 | 1 | 0.3135 | | 2024-09-21T06:49:59 |
| CCV NO3 | 133 | QC | 1 | 0.0839 | 1 | 1 | 1 | 1.0073 | | 2024-09-21T06:51:04 |
| CCV NO2 | 134 | QC | ? | 0.0836 | 1 | 1 | 1 | 1.0032 | | 2024-09-21T06:52:10 |
| CCB | 135 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0043 | | 2024-09-21T06:53:19 |

Channel: 2-NO2

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T04:23:22 |
| NOx 8.0ppm | 2 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T04:24:36 |
| NOx 4.0ppm | 3 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T04:25:49 |
| NOx 1.0ppm | 4 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T04:26:54 |
| NOx 0.4ppm | 5 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T04:28:03 |
| NOx 0.2ppm | 6 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T04:29:14 |
| NOx 0.1ppm | 7 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T04:30:21 |
| NOx 0.0ppm | 8 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T04:31:34 |
| Nitrite 8.0ppm | 9 | Standard | 8 | 0.9950 | 1 | 1 | 1 | 7.5544 | | 2024-09-21T04:32:42 |
| Nitrite 4.0ppm | 10 | Standard | 4 | 0.5431 | 1 | 1 | 1 | 4.1219 | | 2024-09-21T04:33:52 |
| Nitrite 1.0ppm | 11 | Standard | 1 | 0.1300 | 1 | 1 | 1 | 0.9837 | | 2024-09-21T04:34:59 |
| Nitrite 0.4ppm | 12 | Standard | 0.4 | 0.0559 | 1 | 1 | 1 | 0.4212 | | 2024-09-21T04:36:09 |
| Nitrite 0.1ppm | 13 | Standard | 0.1 | 0.0139 | 1 | 1 | 1 | 0.1019 | | 2024-09-21T04:37:19 |
| Nitrite 0.05ppm | 14 | Standard | 0.05 | 0.0070 | 1 | 1 | 1 | 0.0492 | | 2024-09-21T04:38:29 |
| Nitrite 0.0ppm | 15 | Standard | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T04:39:42 |
| CCV NO3 | 16 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0021 | | 2024-09-21T04:40:43 |
| CCV NO2 | 17 | QC | 1 | 0.1294 | 1 | 1 | 1 | 0.9793 | | 2024-09-21T04:41:51 |
| CCB | 18 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T04:43:01 |
| ICV NO3 5.0 | 19 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T04:44:11 |
| ICV NO2 5.0 | 20 | QC | 5 | 0.6515 | 1 | 1 | 1 | 4.9451 | | 2024-09-21T04:45:19 |
| ICV NO3 0.5 | 21 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T04:46:26 |
| ICV NO2 0.5 | 22 | QC | 0.5 | 0.0696 | 1 | 1 | 1 | 0.5251 | | 2024-09-21T04:47:34 |
| ICB | 23 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T04:48:44 |
| CCV NO3 | 24 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2024-09-21T04:49:52 |
| CCV NO2 | 25 | QC | 1 | 0.1302 | 1 | 1 | 1 | 0.9856 | | 2024-09-21T04:50:57 |
| CCB | 26 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T04:52:11 |
| WG1974476- | 27 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09- |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | 21T04:53:13 |
| WG1974476-2 | 28 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T04:54:49 |
| L2453990-01 | 29 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T04:55:29 |
| WG1974472-3 | 30 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T04:56:37 |
| WG1974472-4 | 31 | Unknown | ? | 0.0003 | 1 | 1 | 1 | -0.0016 | | 2024-09-21T04:57:40 |
| L2453990-02 | 32 | Unknown | ? | 0.0104 | 1 | 1 | 1 | 0.0754 | | 2024-09-21T04:58:47 |
| L2453990-03 | 33 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0029 | | 2024-09-21T04:59:51 |
| L2453990-04 | 34 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0027 | | 2024-09-21T05:00:55 |
| L2453990-05 | 35 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0016 | | 2024-09-21T05:01:59 |
| L2453990-06 | 36 | Unknown | ? | 0.0038 | 1 | 1 | 1 | 0.0256 | | 2024-09-21T05:03:04 |
| CCV NO3 | 37 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T05:04:10 |
| CCV NO2 | 38 | QC | 1 | 0.1295 | 1 | 1 | 1 | 0.9800 | | 2024-09-21T05:05:15 |
| CCB | 39 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T05:06:24 |
| L2453990-07 | 40 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0022 | | 2024-09-21T05:07:33 |
| L2453990-08 | 41 | Unknown | ? | 0.0028 | 1 | 1 | 1 | 0.0173 | | 2024-09-21T05:08:41 |
| L2453990-09 | 42 | Unknown | ? | 0.0103 | 1 | 1 | 1 | 0.0745 | | 2024-09-21T05:09:49 |
| L2453576-06 | 43 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0040 | | 2024-09-21T05:10:54 |
| L2454051-01 | 44 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0147 | | 2024-09-21T05:12:01 |
| WG1974470-5 | 45 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0099 | | 2024-09-21T05:13:07 |
| WG1974470-6 | 46 | Unknown | ? | 0.0020 | 1 | 1 | 1 | 0.0115 | | 2024-09-21T05:14:13 |
| L2454051-02 | 47 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0084 | | 2024-09-21T05:15:19 |
| L2454051-03 | 48 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0025 | | 2024-09-21T05:16:25 |
| L2454051-04 | 49 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0030 | | 2024-09-21T05:17:29 |
| CCV NO3 | 50 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T05:18:35 |
| CCV NO2 | 51 | QC | 1 | 0.1302 | 1 | 1 | 1 | 0.9851 | | 2024-09-21T05:19:41 |
| CCB | 52 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T05:20:53 |
| L2454051-05 | 53 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0025 | | 2024-09-21T05:22:00 |
| L2454181-02 | 54 | Unknown | ? | 0.2165 | 1 | 1 | 1 | 1.6410 | | 2024-09-21T05:23:07 |
| WG1974470-3 | 55 | Unknown | ? | 0.2175 | 1 | 1 | 1 | 1.6482 | | 2024-09-21T05:24:11 |
| WG1974470-4 | 56 | Unknown | ? | 0.2125 | 1 | 1 | 1 | 1.6105 | | 2024-09-21T05:25:16 |
| WG1974468-3 | 57 | Unknown | ? | 0.2176 | 1 | 1 | 1 | 1.6495 | | 2024-09-21T05:26:20 |
| WG1974468-4 | 58 | Unknown | ? | 0.7297 | 1 | 1 | 1 | 5.5391 | | 2024-09-21T05:27:28 |
| L2454221-01 | 59 | Unknown | ? | 0.0076 | 1 | 1 | 1 | 0.0541 | | 2024-09-21T05:28:35 |

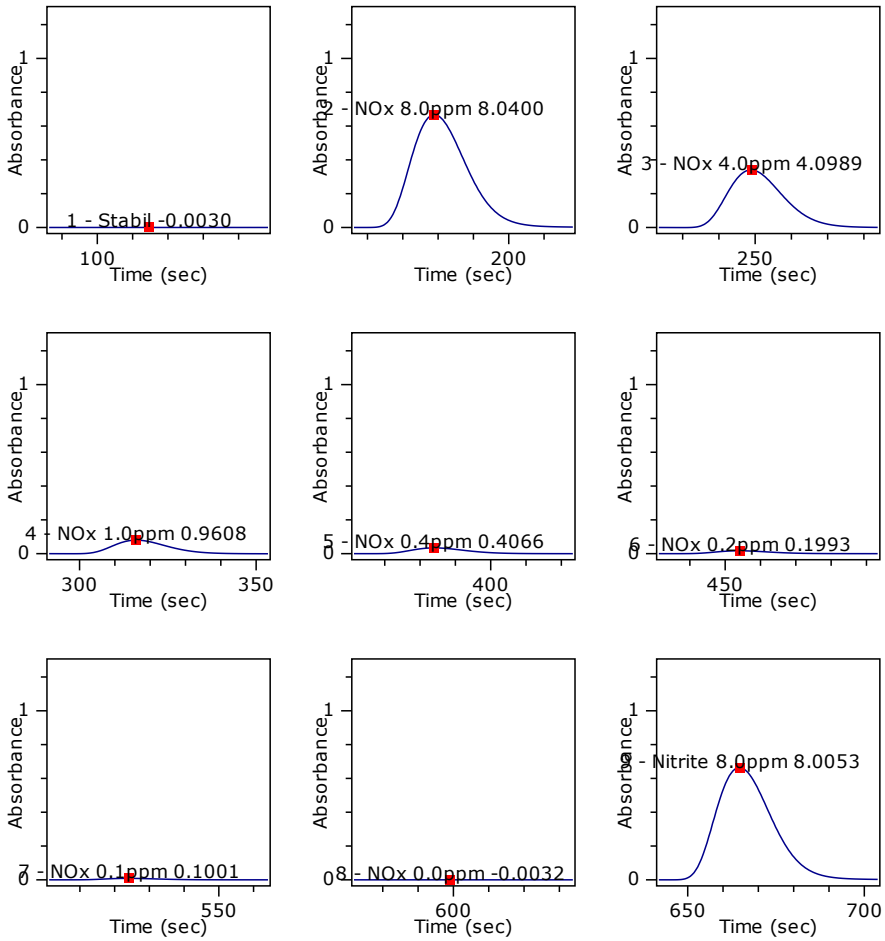
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454326-01 | 60 | Unknown | ? | 0.0124 | 1 | 1 | 1 | 0.0904 | | 2024-09-21T05:29:42 |
| L2454350-01 | 61 | Unknown | ? | 0.2165 | 1 | 1 | 1 | 1.6408 | | 2024-09-21T05:30:49 |
| L2454013-01 | 62 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0164 | | 2024-09-21T05:31:55 |
| CCV NO3 | 63 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2024-09-21T05:33:00 |
| CCV NO2 | 64 | QC | 1 | 0.1301 | 1 | 1 | 1 | 0.9843 | | 2024-09-21T05:34:06 |
| CCB | 65 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T05:35:19 |
| L2454312-02 | 66 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0060 | | 2024-09-21T05:36:26 |
| L2454312-03 | 67 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0024 | | 2024-09-21T05:37:34 |
| L2454312-04 | 68 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0023 | | 2024-09-21T05:38:40 |
| L2454324-01 | 69 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0089 | | 2024-09-21T05:39:46 |
| WG1974471-3 | 70 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0089 | | 2024-09-21T05:40:51 |
| WG1974471-4 | 71 | Unknown | ? | 0.0041 | 1 | 1 | 1 | 0.0276 | | 2024-09-21T05:41:56 |
| WG1974469-3 | 72 | Unknown | ? | 0.0017 | 1 | 1 | 1 | 0.0094 | | 2024-09-21T05:43:01 |
| WG1974469-4 | 73 | Unknown | ? | 0.5421 | 1 | 1 | 1 | 4.1144 | | 2024-09-21T05:44:05 |
| L2454324-02 | 74 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0163 | | 2024-09-21T05:45:10 |
| L2454324-03 | 75 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0145 | | 2024-09-21T05:46:15 |
| CCV NO3 | 76 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T05:47:21 |
| CCV NO2 | 77 | QC | 1 | 0.1298 | 1 | 1 | 1 | 0.9821 | | 2024-09-21T05:48:26 |
| CCB | 78 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T05:49:39 |
| L2454324-04 | 79 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0039 | | 2024-09-21T05:50:47 |
| L2454324-05 | 80 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0030 | | 2024-09-21T05:51:56 |
| L2454324-06 | 81 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0016 | | 2024-09-21T05:53:03 |
| L2454324-07 | 82 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0016 | | 2024-09-21T05:54:09 |
| L2452564-01 | 83 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0037 | | 2024-09-21T05:55:16 |
| L2452564-02 | 84 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0017 | | 2024-09-21T05:56:21 |
| L2453362-01 | 85 | Unknown | ? | 0.0004 | 1 | 1 | 1 | -0.0008 | | 2024-09-21T05:57:26 |
| WG1974474-3 | 86 | Unknown | ? | 0.0004 | 1 | 1 | 1 | -0.0008 | | 2024-09-21T05:58:32 |
| WG1974474-4 | 87 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0148 | | 2024-09-21T05:59:39 |
| L2453559-02 | 88 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0159 | | 2024-09-21T06:00:45 |
| CCV NO3 | 89 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T06:01:49 |
| CCV NO2 | 90 | QC | 1 | 0.1299 | 1 | 1 | 1 | 0.9832 | | 2024-09-21T06:02:55 |
| CCB | 91 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T06:04:09 |
| L2453559-04 | 92 | Unknown | ? | 0.0029 | 1 | 1 | 1 | 0.0186 | | 2024-09-21T06:05:13 |

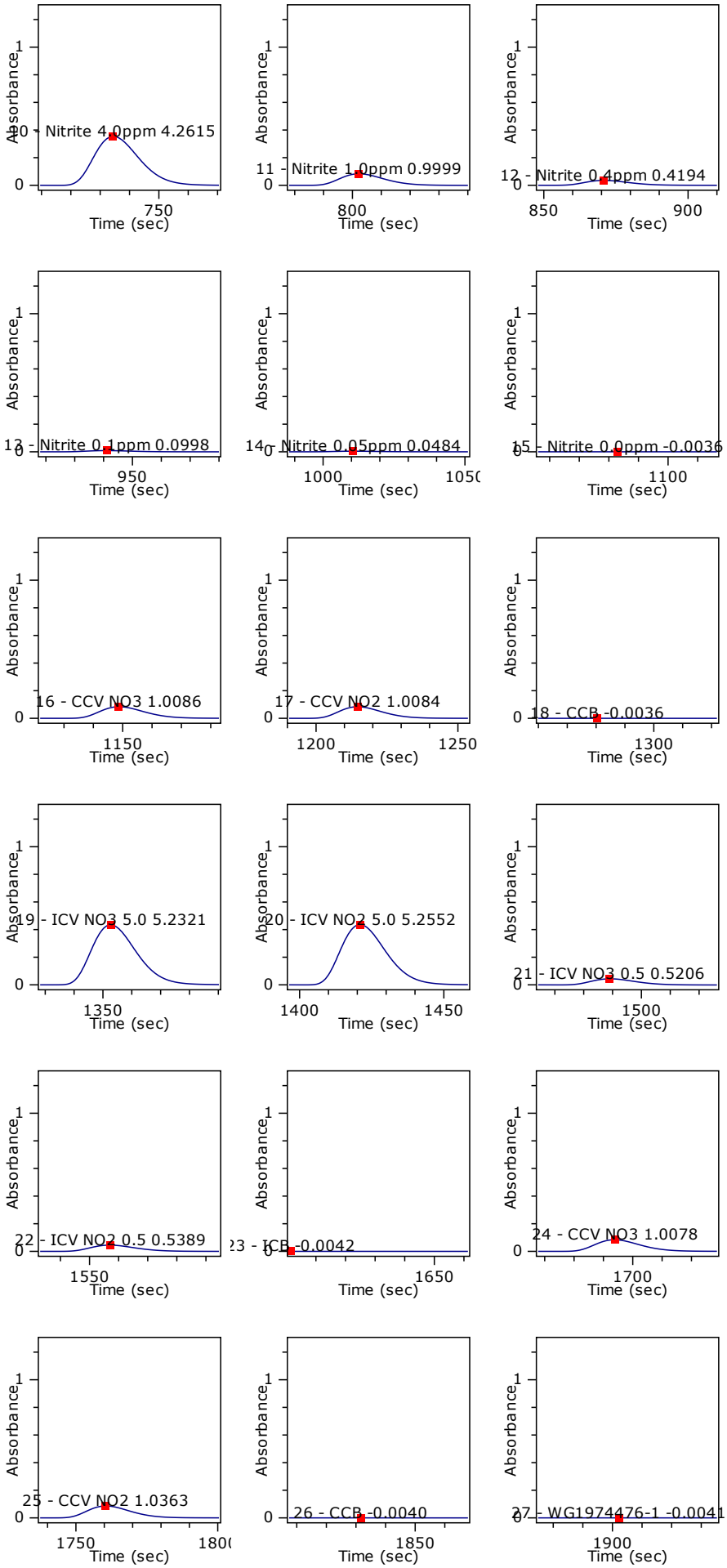
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453559-07 | 93 | Unknown | ? | 0.0025 | 1 | 1 | 1 | 0.0156 | | 2024-09-21T06:06:19 |
| L2453562-01 | 94 | Unknown | ? | 0.0084 | 1 | 1 | 1 | 0.0599 | | 2024-09-21T06:07:25 |
| L2453851-01 | 95 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0148 | | 2024-09-21T06:08:29 |
| L2453851-02 | 96 | Unknown | ? | 0.1199 | 1 | 1 | 1 | 0.9071 | | 2024-09-21T06:09:34 |
| L2453950-01 | 97 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0037 | | 2024-09-21T06:10:42 |
| L2454072-01 | 98 | Unknown | ? | 0.0022 | 1 | 1 | 1 | 0.0129 | | 2024-09-21T06:11:48 |
| L2454081-01 | 99 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0017 | | 2024-09-21T06:12:54 |
| WG1974474-5 | 100 | Unknown | ? | 0.0003 | 1 | 1 | 1 | -0.0017 | | 2024-09-21T06:14:01 |
| WG1974474-6 | 101 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0052 | | 2024-09-21T06:15:08 |
| CCV NO3 | 102 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T06:16:16 |
| CCV NO2 | 103 | QC | 1 | 0.1293 | 1 | 1 | 1 | 0.9782 | | 2024-09-21T06:17:20 |
| CCB | 104 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T06:18:34 |
| L2454081-02 | 105 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0020 | | 2024-09-21T06:19:40 |
| L2453053-01 | 106 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0031 | | 2024-09-21T06:20:48 |
| WG1974476-3 | 107 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T06:21:54 |
| WG1974476-4 | 108 | Unknown | ? | 0.0003 | 1 | 1 | 1 | -0.0013 | | 2024-09-21T06:23:00 |
| L2453053-02 | 109 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0026 | | 2024-09-21T06:24:05 |
| L2453053-03 | 110 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0023 | | 2024-09-21T06:25:11 |
| L2453053-04 | 111 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0019 | | 2024-09-21T06:26:15 |
| L2453053-05 | 112 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0018 | | 2024-09-21T06:27:21 |
| L2453123-02 | 113 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0033 | | 2024-09-21T06:28:26 |
| L2453131-01 | 114 | Unknown | ? | 0.0121 | 1 | 1 | 1 | 0.0885 | | 2024-09-21T06:29:31 |
| CCV NO3 | 115 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T06:30:37 |
| CCV NO2 | 116 | QC | 1 | 0.1291 | 1 | 1 | 1 | 0.9769 | | 2024-09-21T06:31:43 |
| CCB | 117 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T06:32:56 |
| L2453131-02 | 118 | Unknown | ? | 0.0050 | 1 | 1 | 1 | 0.0347 | | 2024-09-21T06:34:04 |
| L2453342-01 | 119 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0017 | | 2024-09-21T06:35:13 |
| L2453342-02 | 120 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0027 | | 2024-09-21T06:36:20 |
| L2453342-03 | 121 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0022 | | 2024-09-21T06:37:26 |
| L2453342-04 | 122 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0017 | | 2024-09-21T06:38:33 |
| L2453342-05 | 123 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0018 | | 2024-09-21T06:39:40 |
| L2453342-06 | 124 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0018 | | 2024-09-21T06:40:47 |
| L2453342-07 | 125 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0027 | | 2024-09-21T06:41:51 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453342-08 | 126 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0016 | | 2024-09-21T06:42:57 |
| L2453342-10 | 127 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0026 | | 2024-09-21T06:44:02 |
| CCV NO3 | 128 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T06:45:09 |
| CCV NO2 | 129 | QC | 1 | 0.1276 | 1 | 1 | 1 | 0.9657 | | 2024-09-21T06:46:15 |
| CCB | 130 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T06:47:27 |
| L2454221-01 | 131 | Unknown | ? | 0.0070 | 1 | 1 | 1 | 0.0498 | | 2024-09-21T06:48:36 |
| L2453950-01 | 132 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0037 | | 2024-09-21T06:49:46 |
| CCV NO3 | 133 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T06:50:52 |
| CCV NO2 | 134 | QC | 1 | 0.1303 | 1 | 1 | 1 | 0.9859 | | 2024-09-21T06:51:57 |
| CCB | 135 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T06:53:10 |

Peaks:

Channel: 1-NOx

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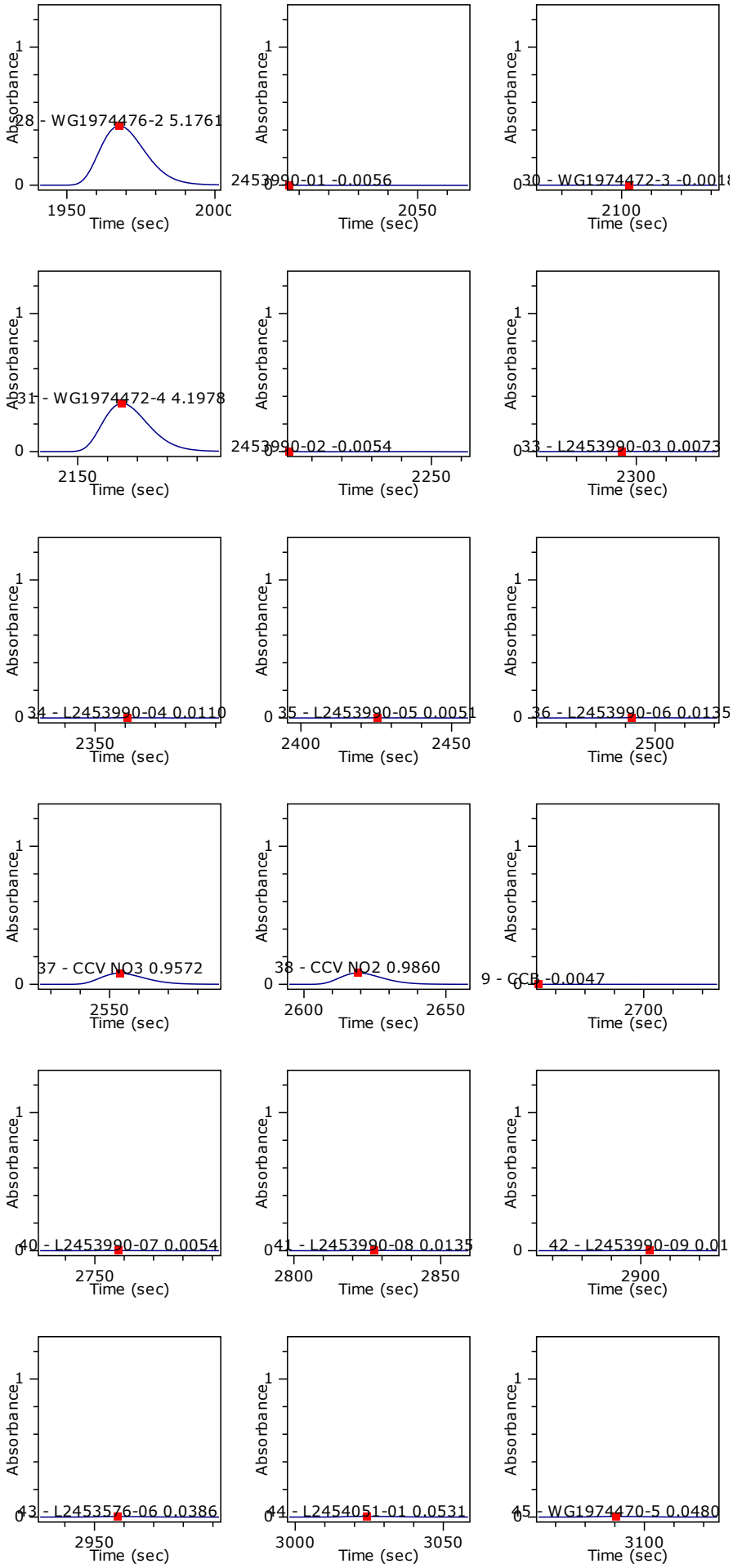
12 - Nitrite 0.4ppm 0.4194
13 - Nitrite 0.1ppm 0.0998
14 - Nitrite 0.05ppm 0.0484
15 - Nitrite 0.0ppm -0.0036
16 - CCV NO3 1.0086
17 - CCV NO2 1.0084
18 - CCB -0.0036
19 - ICV NO3 5.0 5.2321
20 - ICV NO2 5.0 5.2552
21 - ICV NO3 0.5 0.5206
22 - ICV NO2 0.5 0.5389
23 - ICB -0.0042
24 - CCV NO3 1.0078
25 - CCV NO2 1.0363
26 - CCB -0.0040
27 - WG1974476-1 -0.0041


Absorbance
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30 - WG1974472-3 -0.001
31 - WG1974472-4 4.1978
2453990-02 -0.0054
33 - L2453990-03 0.0073
34 - L2453990-04 0.0110
35 - L2453990-05 0.0051
36 - L2453990-06 0.0135
37 - CCV NO3 0.9572
38 - CCV NO2 0.9860
9 - CCB -0.0047
40 - L2453990-07 0.0054
41 - L2453990-08 0.0135
42 - L2453990-09 0.01
43 - L2453576-06 0.0386
44 - L2454051-01 0.0531
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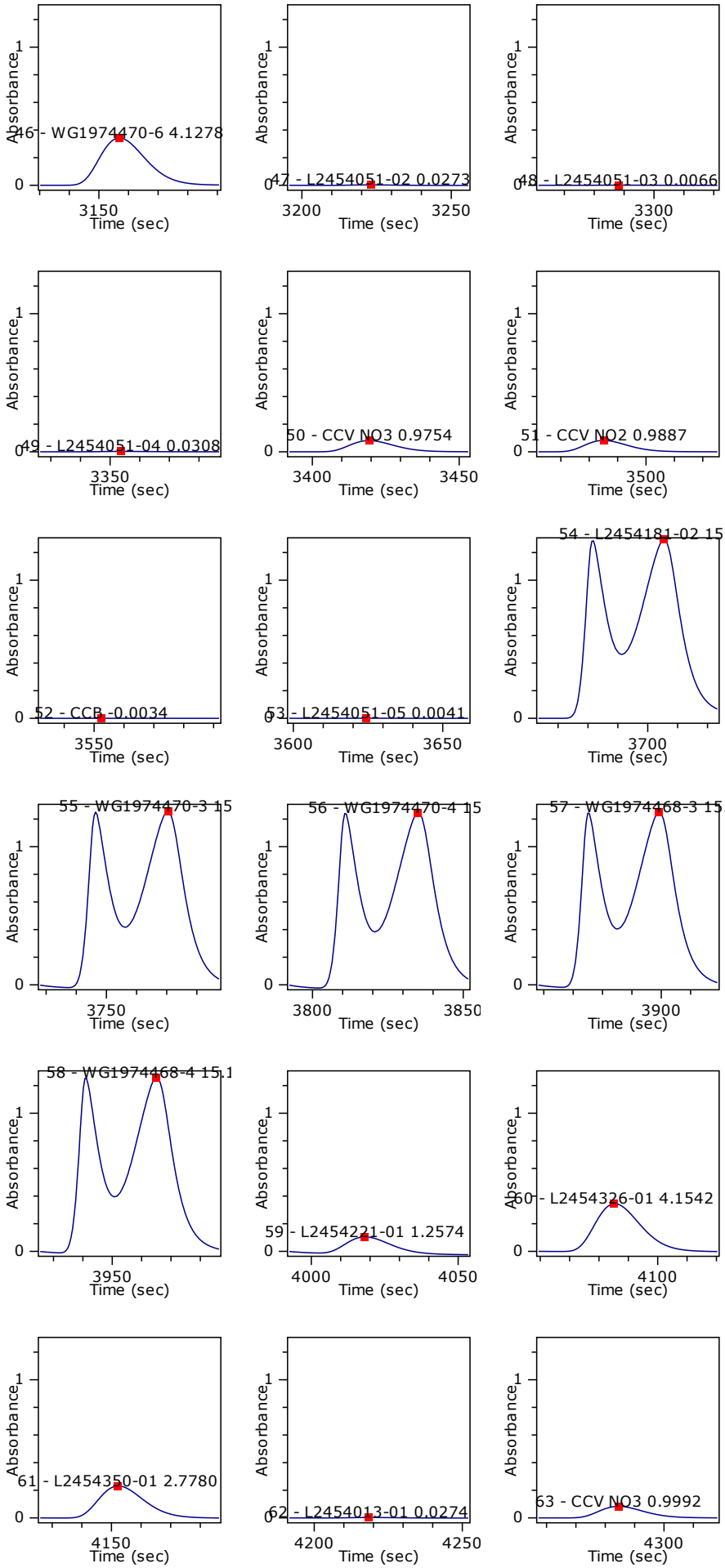
46 - WG1974470-6 4.1278
47 - L2454051-02 0.0273
48 - L2454051-03 0.0066
49 - L2454051-04 0.0308
50 - CCV NO3 0.9754
51 - CCV NO2 0.9887
52 - CCB -0.0034
53 - L2454051-05 0.0041
54 - L2454181-02 15.
55 - WG1974470-3 15
56 - WG1974470-4 15
57 - WG1974468-3 15.
58 - WG1974468-4 15.1
59 - L2454221-01 1.2574
60 - L2454326-01 4.1542
61 - L2454350-01 2.7780
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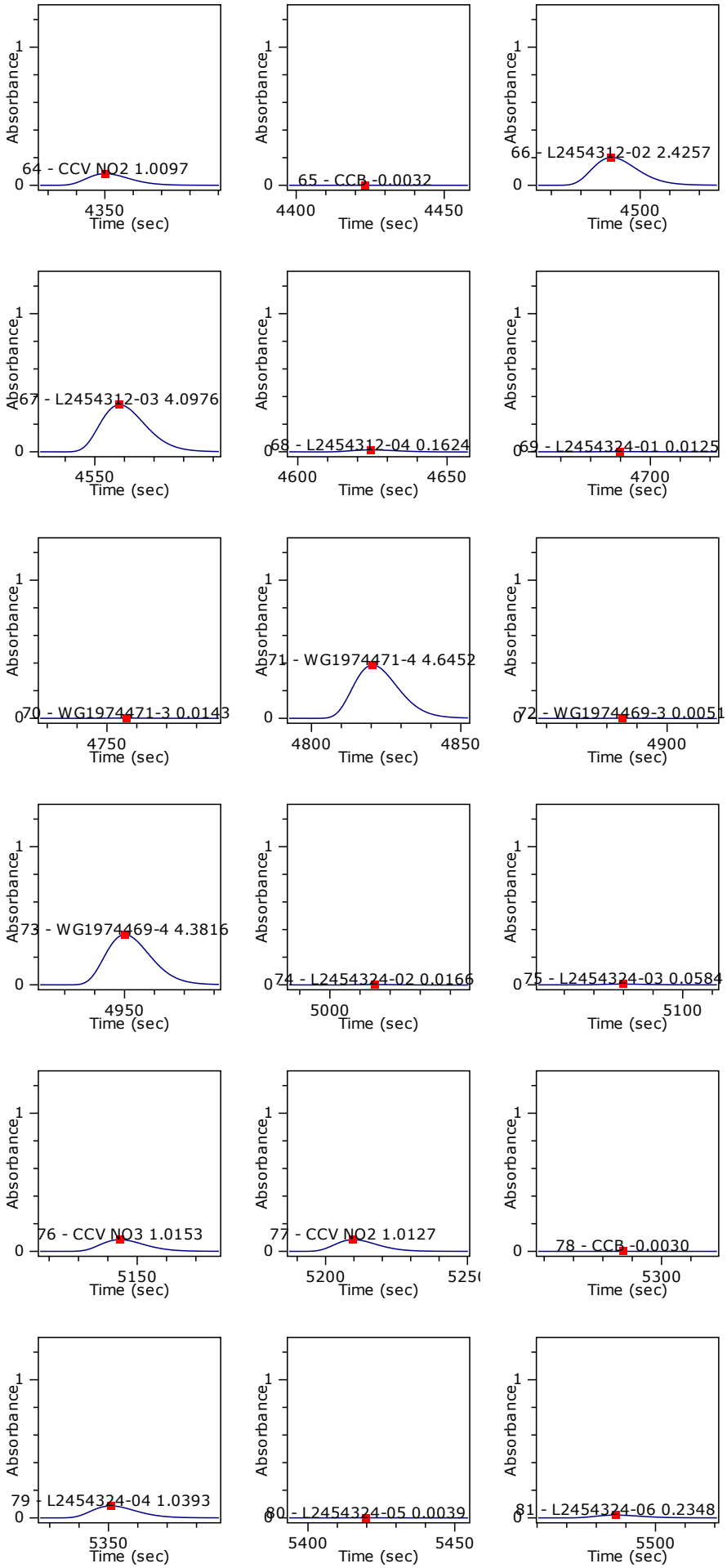
Time (sec)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4450
Time (sec)
66 - L2454312-02 2.4257
4500
Time (sec)
67 - L2454312-03 4.0976
4550
Time (sec)
68 - L2454312-04 0.1624
4600
4650
Time (sec)
69 - L2454324-01 0.0125
4700
Time (sec)
70 - WG1974471-3 0.0143
4750
Time (sec)
71 - WG1974471-4 4.6452
4800
4850
Time (sec)
72 - WG1974469-3 0.0051
4900
Time (sec)
73 - WG1974469-4 4.3816
4950
Time (sec)
74 - L2454324-02 0.0166
5000
Time (sec)
75 - L2454324-03 0.0584
5100
Time (sec)
76 - CCV NO3 1.0153
5150
Time (sec)
77 - CCV NO2 1.0127
5200
Time (sec)
78 - CCB -0.0030
5300
Time (sec)
79 - L2454324-04 1.0393
5350
Time (sec)
80 - L2454324-05 0.0039
5400
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Time (sec)
81 - L2454324-06 0.2348
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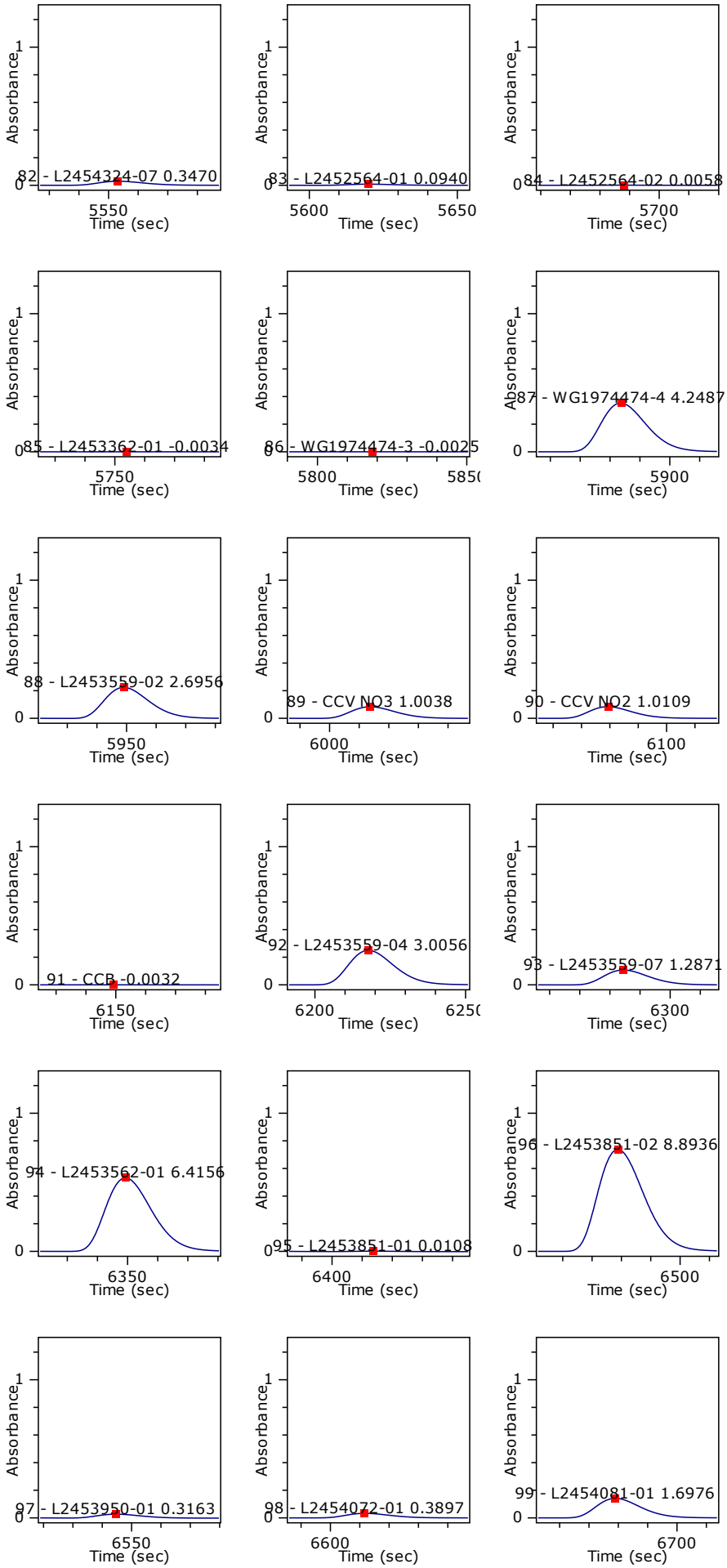
Time (sec)


Absorbance
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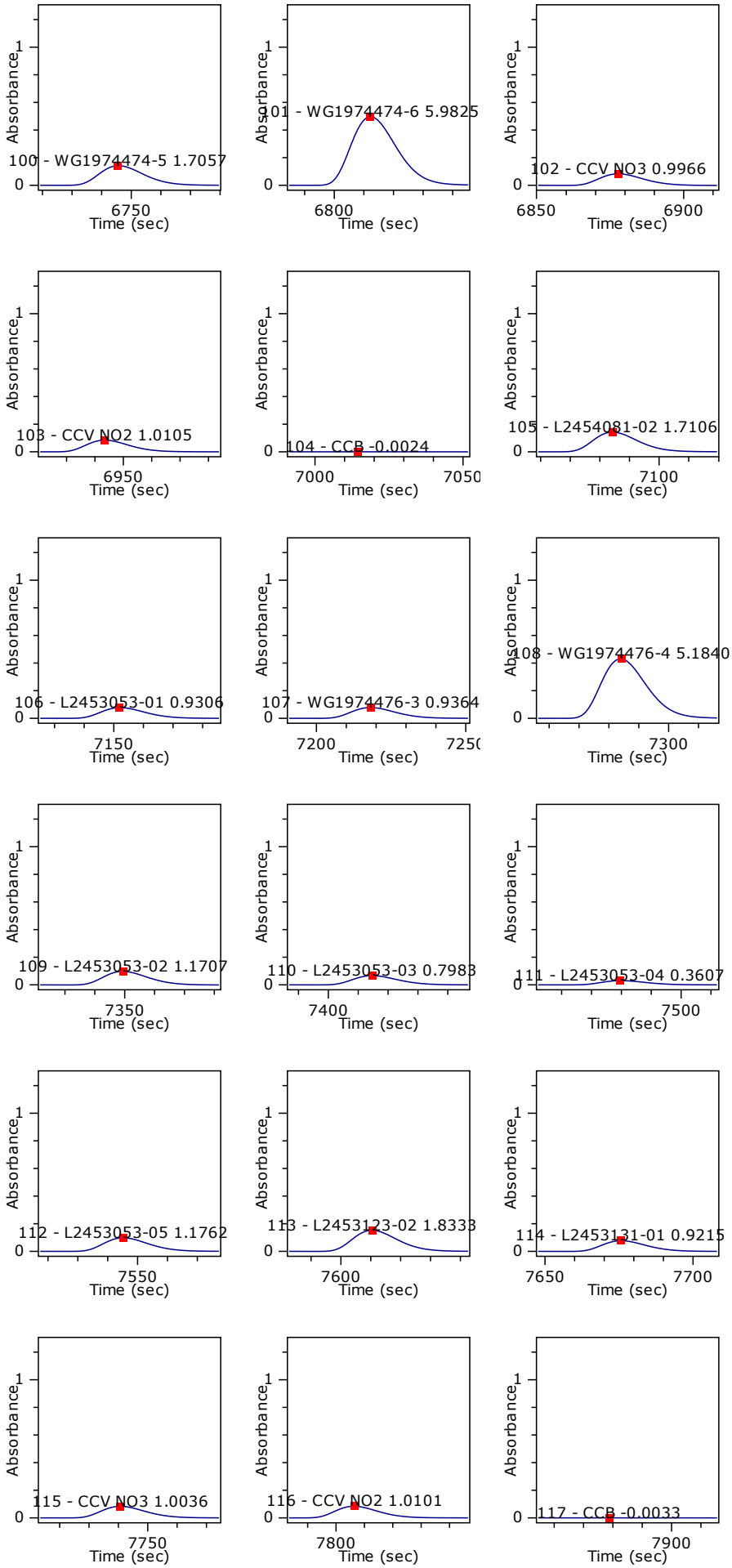
83 - L2452564-01 0.0940
84 - L2452564-02 0.0058
85 - L2453362-01 -0.0034
86 - WG1974474-3 -0.0025
87 - WG1974474-4 4.2487
88 - L2453559-02 2.6956
89 - CCV NO3 1.0038
90 - CCV NO2 1.0109
91 - CCB -0.0032
92 - L2453559-04 3.0056
93 - L2453559-07 1.2871
94 - L2453562-01 6.4156
95 - L2453851-01 0.0108
96 - L2453851-02 8.8936
97 - L2453950-01 0.3163
98 - L2454072-01 0.3897
99 - L2454081-01 1.6976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101 - WG1974474-6 5.9825
6800
Time (sec)
102 - CCV NO3 0.9966
6850
6900
Time (sec)
103 - CCV NO2 1.0105
6950
Time (sec)
104 - CCB -0.0024
7000
7050
Time (sec)
105 - L2454081-02 1.7106
7100
Time (sec)
106 - L2453053-01 0.9306
7150
Time (sec)
107 - WG1974476-3 0.9364
7200
7250
Time (sec)
108 - WG1974476-4 5.1840
7300
Time (sec)
109 - L2453053-02 1.1707
7350
Time (sec)
110 - L2453053-03 0.7983
7400
Time (sec)
111 - L2453053-04 0.3607
7500
Time (sec)
112 - L2453053-05 1.1762
7550
Time (sec)
113 - L2453123-02 1.8333
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Time (sec)
114 - L2453131-01 0.9215
7650
7700
Time (sec)
115 - CCV NO3 1.0036
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116 - CCV NO2 1.0101
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Time (sec)
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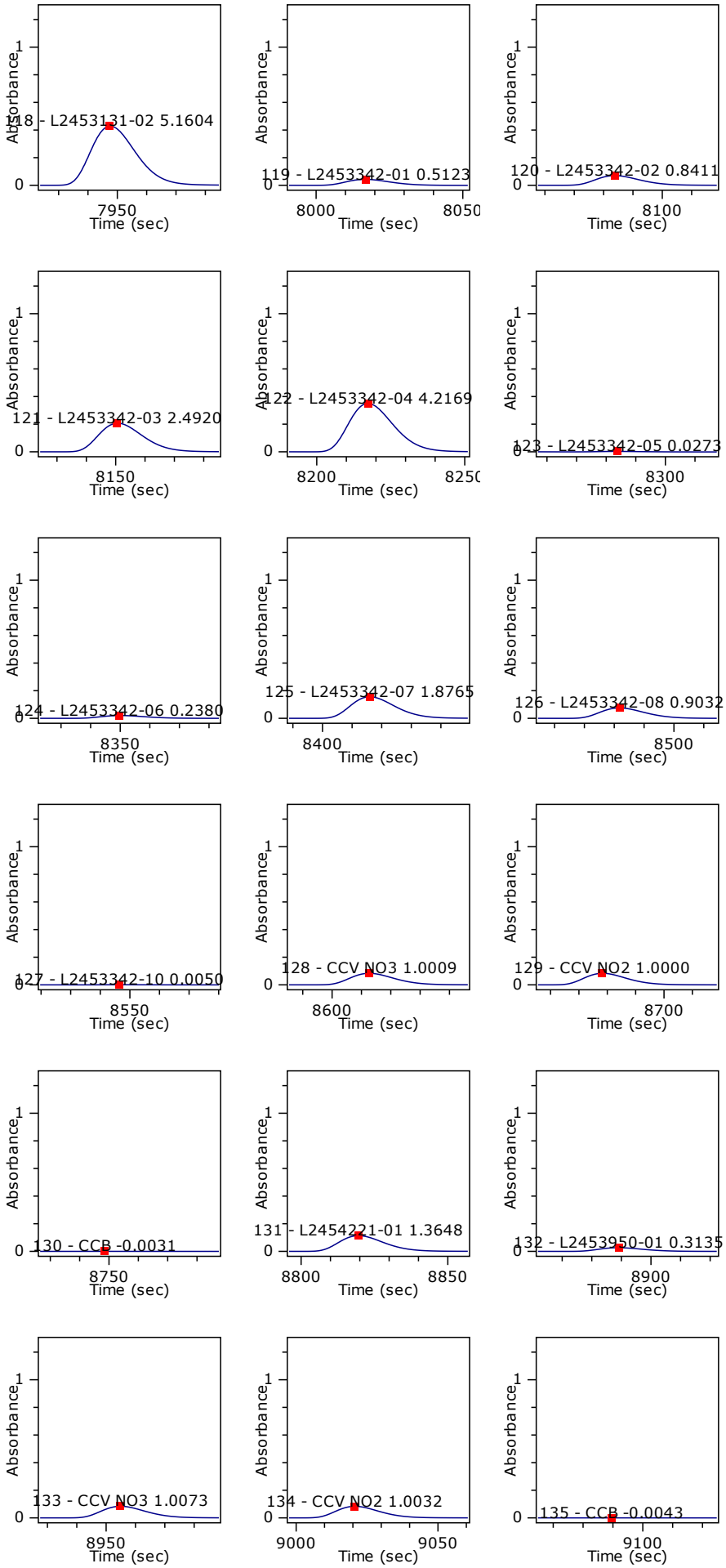
Time (sec)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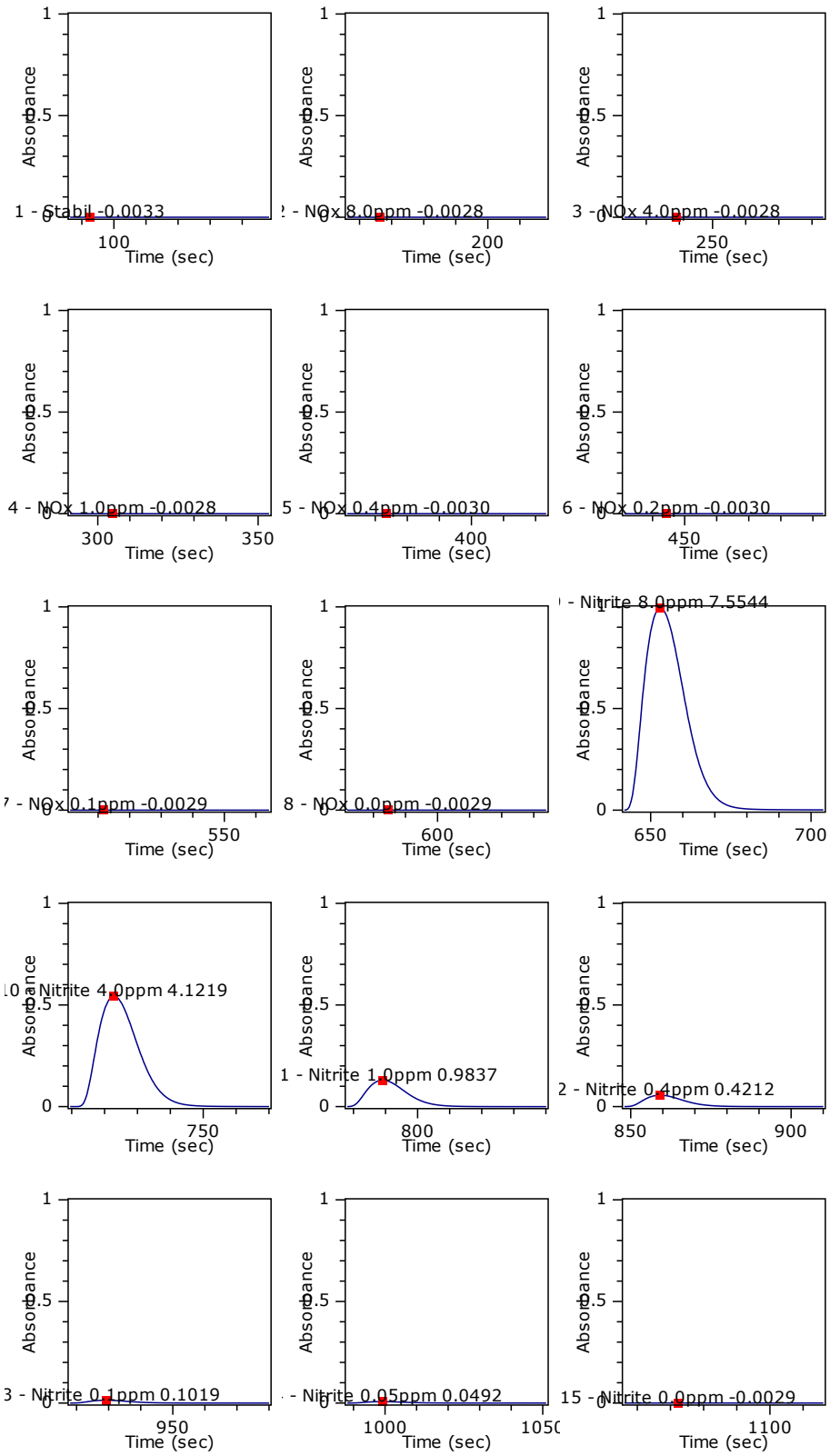
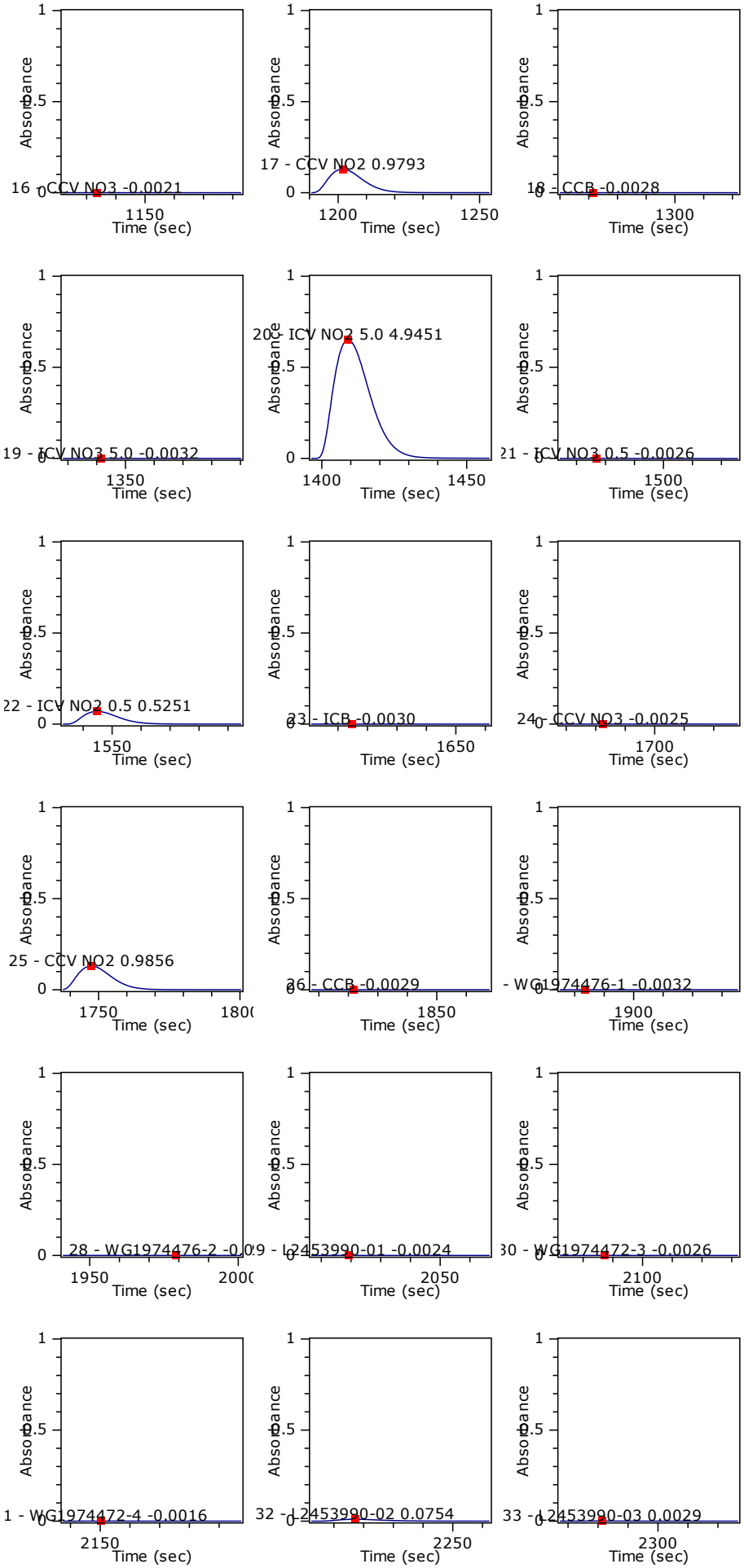
122 - L2453342-04 4.2169
123 - L2453342-05 0.0273
124 - L2453342-06 0.2380
125 - L2453342-07 1.8765
126 - L2453342-08 0.9032
127 - L2453342-10 0.0050
128 - CCV NO3 1.0009
129 - CCV NO2 1.0000
130 - CCB -0.0031
131 - L2454221-01 1.3648
132 - L2453950-01 0.3135
133 - CCV NO3 1.0073
134 - CCV NO2 1.0032
135 - CCB -0.0043
Absorbance
Time (sec)

Channel: 2-NO2

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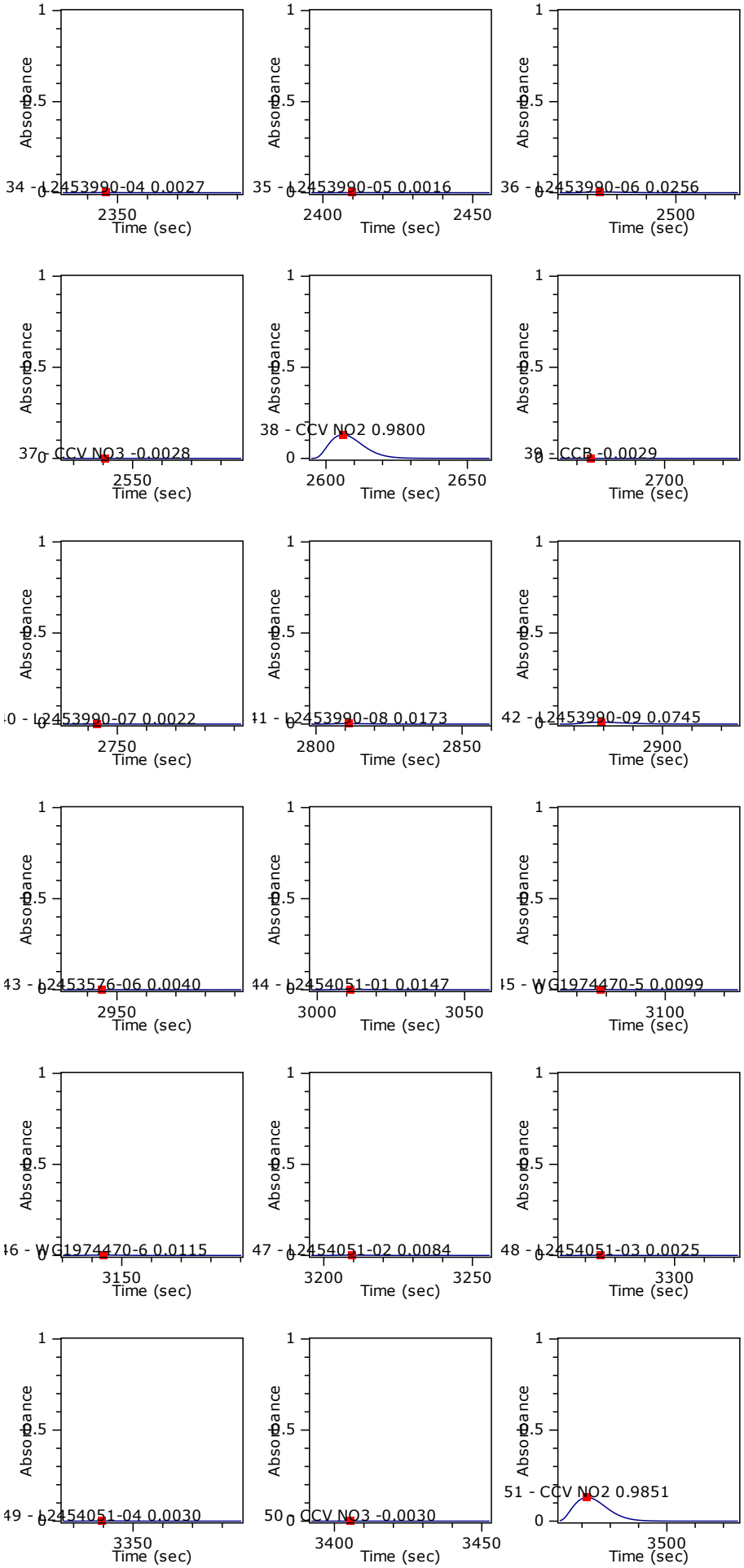
19 - ICV NO3 5.0 -0.0032
20 - ICV NO2 5.0 4.9451
21 - ICV NO3 0.5 -0.0026
22 - ICV NO2 0.5 0.5251
23 - ICB -0.0030
24 - CCV NO3 -0.0025
25 - CCV NO2 0.9856
26 - CCB -0.0029
- WG1974476-1 -0.0032
28 - WG1974476-2 -0.0
9 - L2453990-01 -0.0024
30 - WG1974472-3 -0.0026
1 - WG1974472-4 -0.0016
32 - L2453990-02 0.0754
33 - L2453990-03 0.0029
Absorbance
Time (sec)


34 - L2453990-04 0.0027
35 - L2453990-05 0.0016
36 - L2453990-06 0.0256
37 - CCV NO3 -0.0028
38 - CCV NO2 0.9800
39 - CCB -0.0029
40 - L2453990-07 0.0022
41 - L2453990-08 0.0173
42 - L2453990-09 0.0745
43 - L2453576-06 0.0040
44 - L2454051-01 0.0147
45 - WG1974470-5 0.0099
46 - WG1974470-6 0.0115
47 - L2454051-02 0.0084
48 - L2454051-03 0.0025
49 - L2454051-04 0.0030
50 - CCV NO3 -0.0030
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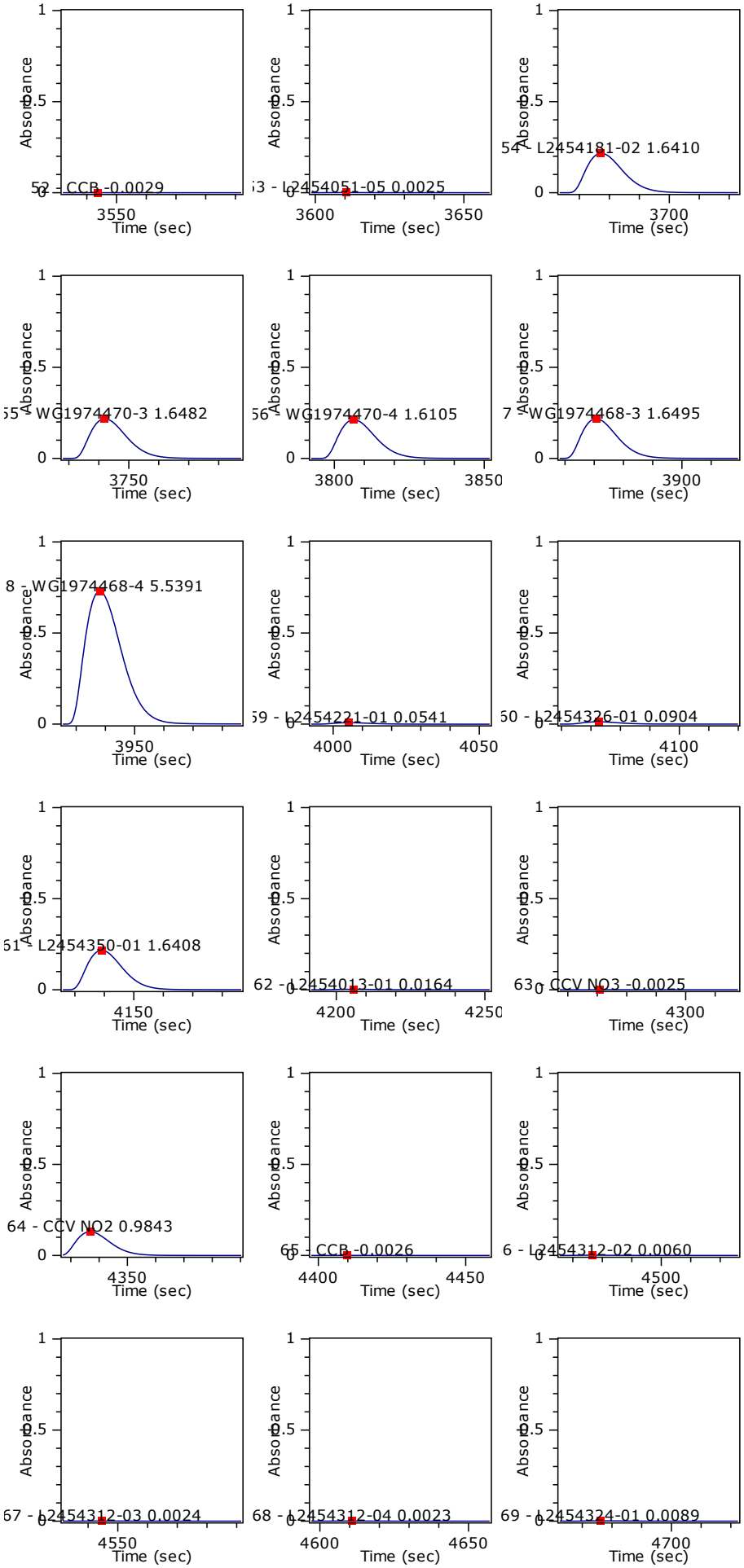
Absorbance
Time (sec)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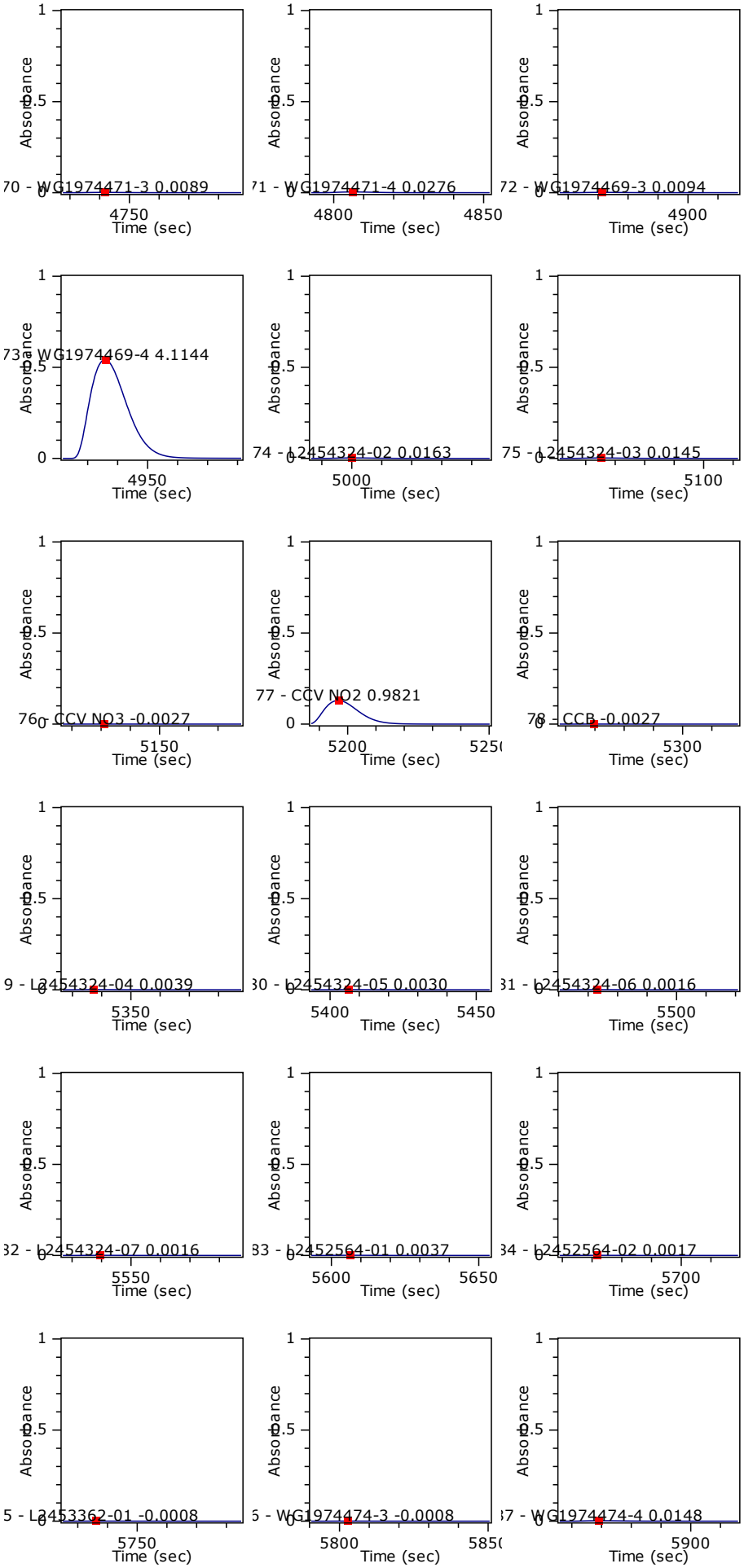
53 - L2454051-05 0.0025
54 - L2454181-02 1.6410
55 - WG1974470-3 1.6482
56 - WG1974470-4 1.6105
57 - WG1974468-3 1.6495
58 - WG1974468-4 5.5391
59 - L2454221-01 0.0541
60 - L2454326-01 0.0904
61 - L2454350-01 1.6408
62 - L2454013-01 0.0164
63 - CCV NO3 -0.0025
64 - CCV NO2 0.9843
65 - CCB -0.0026
66 - L2454312-02 0.0060
67 - L2454312-03 0.0024
68 - L2454312-04 0.0023
69 - L2454324-01 0.0089
Absorbance
Time (sec)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72 - WG1974469-3 0.0094
73a WG1974469-4 4.1144
74 - L2454324-02 0.0163
75 - L2454324-03 0.0145
76 - CCV NO3 -0.0027
77 - CCV NO2 0.9821
78 - CCB -0.0027
79 - L2454324-04 0.0039
80 - L2454324-05 0.0030
81 - L2454324-06 0.0016
82 - L2454324-07 0.0016
83 - L2452564-01 0.0037
84 - L2452564-02 0.0017
85 - L2453362-01 -0.0008
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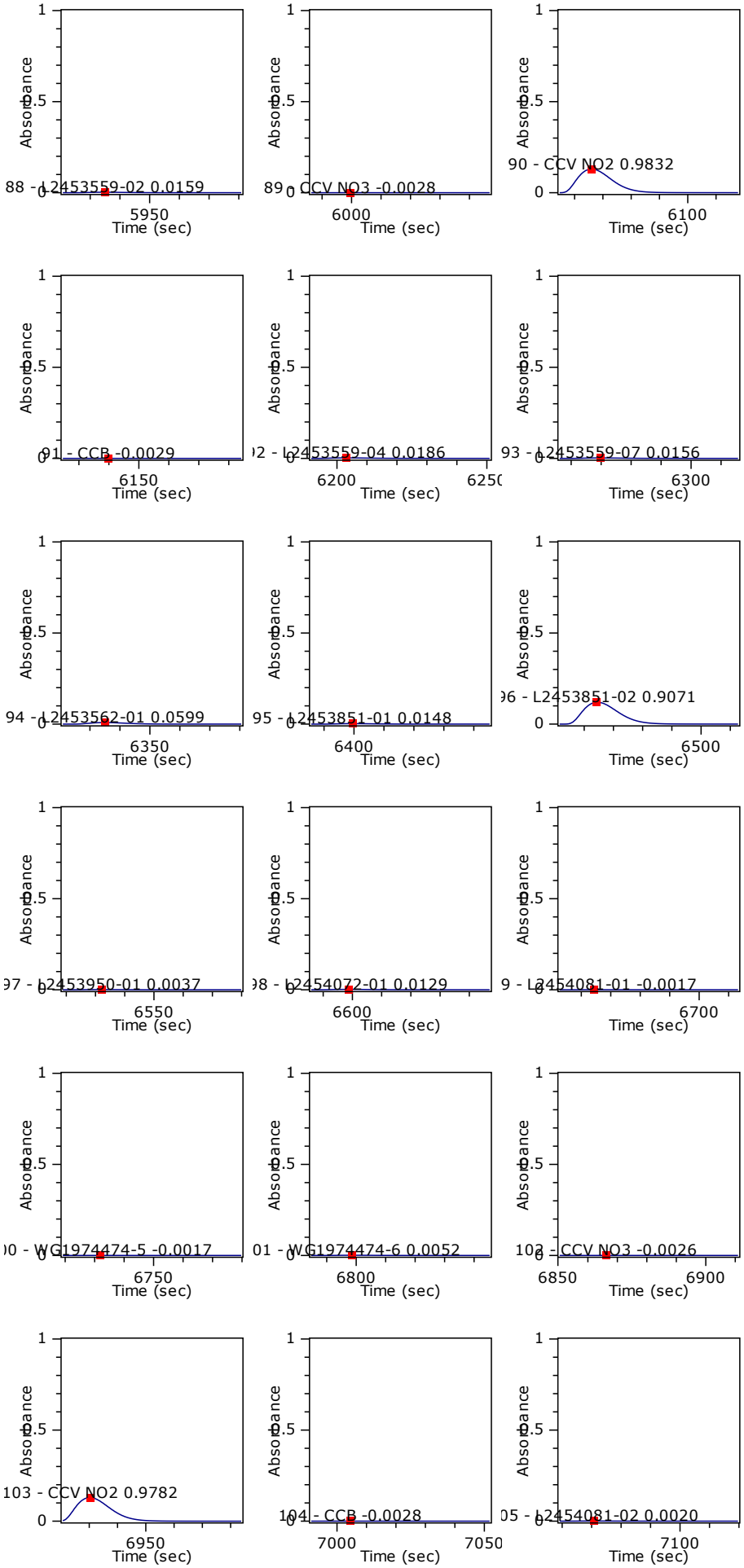
87 - WG1974474-4 0.0148
Absorbance
Time (sec)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90 - CCV NO2 0.9832
91 - CCB -0.0029
92 - L2453559-04 0.0186
93 - L2453559-07 0.0156
94 - L2453562-01 0.0599
95 - L2453851-01 0.0148
96 - L2453851-02 0.9071
97 - L2453950-01 0.0037
98 - L2454072-01 0.0129
99 - L2454081-01 -0.0017
100 - WG1974474-5 -0.0017
101 - WG1974474-6 0.0052
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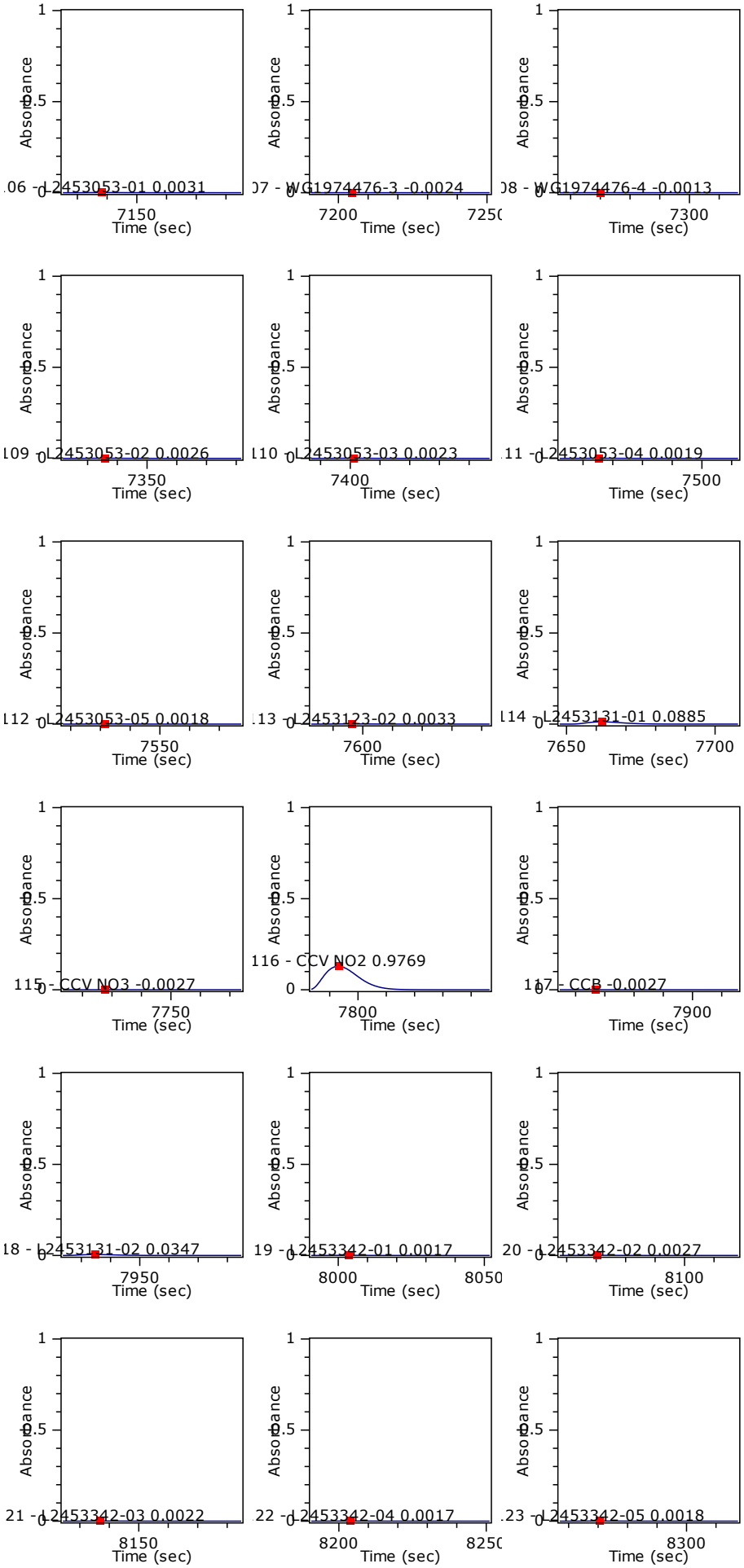
103 - CCV NO2 0.9782
104 - CCB -0.0028
105 - L2454081-02 0.0020
Absorbance
Time (sec)


Absorbance
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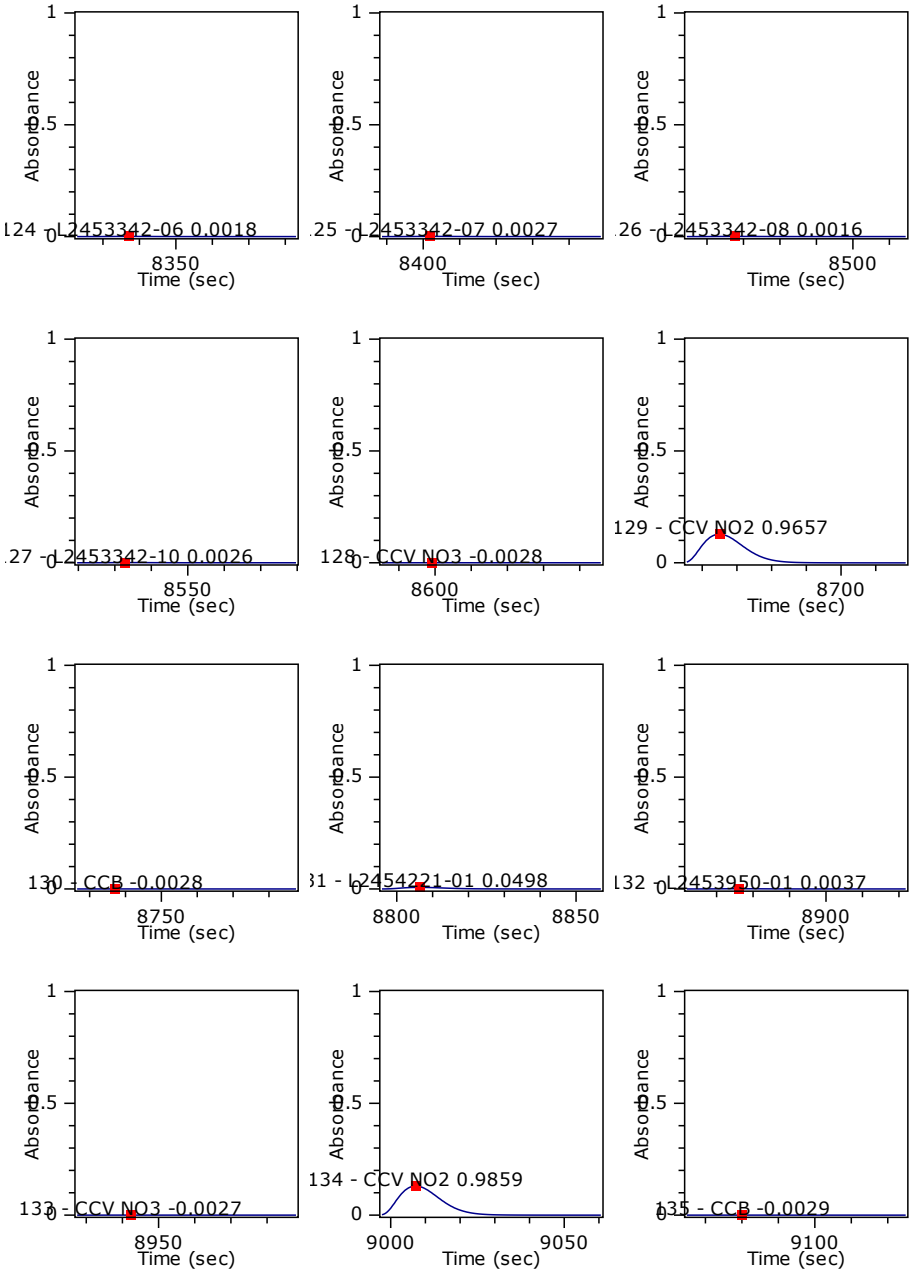
08 - WG1974476-4 -0.0013
09 - L2453053-02 0.0026
10 - L2453053-03 0.0023
11 - L2453053-04 0.0019
12 - L2453053-05 0.0018
13 - L2453123-02 0.0033
14 - L2453131-01 0.0885
15 - CCV NO3 -0.0027
116 - CCV NO2 0.9769
17 - CCB -0.0027
18 - L2453131-02 0.0347
19 - L2453342-01 0.0017
20 - L2453342-02 0.0027
21 - L2453342-03 0.0022
22 - L2453342-04 0.0017
23 - L2453342-05 0.0018




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 35
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.1
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T04:21:50

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.
```

```
FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

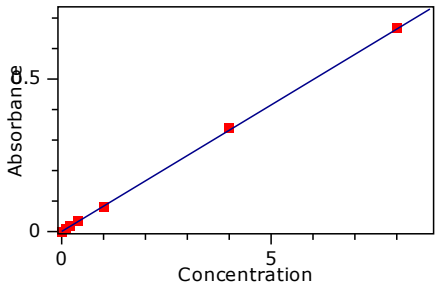
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 08:50:11
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-084953.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

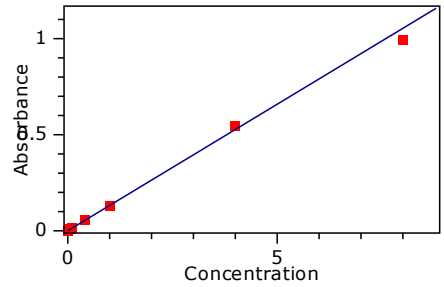
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00037
B: 0.08294
$R^2$: 0.99987
RSE(%): 2.47701
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.66720 | 8.00000 | 8.04000 | 0.50 | N/A |
| 10002 | NOx 4.0ppm | 0.34030 | 4.00000 | 4.09890 | 2.47 | N/A |
| 10003 | NOx 1.0ppm | 0.08010 | 1.00000 | 0.96080 | 3.92 | N/A |
| 10004 | NOx 0.4ppm | 0.03410 | 0.40000 | 0.40660 | 1.64 | N/A |
| 10005 | NOx 0.2ppm | 0.01690 | 0.20000 | 0.19930 | 0.34 | N/A |
| 10006 | NOx 0.1ppm | 0.00870 | 0.10000 | 0.10010 | 0.14 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00320 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00047
B: 0.13165
$R^2$: 0.99823
RSE(%): 4.38727
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 0.99500 | 8.00000 | 7.55440 | 5.57 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54310 | 4.00000 | 4.12190 | 3.05 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13000 | 1.00000 | 0.98370 | 1.63 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05590 | 0.40000 | 0.42120 | 5.30 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01390 | 0.10000 | 0.10190 | 1.90 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04920 | 1.51 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00290 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T08:05:07 |
| CCV NO3 | 2 | QC | 1 | 0.0833 | 1 | 1 | 1 | 0.9999 | | 2024-09-21T08:06:20 |
| CCV NO2 | 3 | QC | ? | 0.0834 | 1 | 1 | 1 | 1.0016 | | 2024-09-21T08:07:26 |
| CCB | 4 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0044 | | 2024-09-21T08:08:10 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454201-01 | 5 | Unknown | ? | 0.2866 | 1 | 1 | 1 | 3.4507 | | 2024-09-21T08:09:43 |
| L2454201-02 | 6 | Unknown | ? | 0.6114 | 1 | 1 | 1 | 7.3673 | | 2024-09-21T08:10:49 |
| L2454201-03 | 7 | Unknown | ? | 0.0381 | 1 | 1 | 1 | 0.4552 | | 2024-09-21T08:11:55 |
| L2454201-04 | 8 | Unknown | ? | 0.2818 | 1 | 1 | 1 | 3.3934 | | 2024-09-21T08:13:00 |
| L2454309-01 | 9 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0051 | | 2024-09-21T08:13:39 |
| L2454275-01 | 10 | Unknown | ? | 0.3098 | 1 | 1 | 1 | 3.7309 | | 2024-09-21T08:15:13 |
| L2454263-01 | 11 | Unknown | ? | 0.0163 | 1 | 1 | 1 | 0.1923 | | 2024-09-21T08:16:20 |
| L2454277-02 | 12 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0145 | | 2024-09-21T08:17:28 |
| L2454338-01 | 13 | Unknown | ? | 1.2893 | 1 | 1 | 1 | 15.5413 | OVR | 2024-09-21T08:18:48 |
| L2454181-02; 1 UP TO 5 | 14 | Unknown | ? | 1.2241 | 5 | 1 | 1 | 73.7760 | OVR | 2024-09-21T08:19:42 |
| CCV NO3 | 15 | QC | 1 | 0.0786 | 1 | 1 | 1 | 0.9433 | | 2024-09-21T08:20:48 |
| CCV NO2 | 16 | QC | ? | 0.0830 | 1 | 1 | 1 | 0.9963 | | 2024-09-21T08:21:54 |
| CCB | 17 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0020 | | 2024-09-21T08:23:03 |
| WG1974470-3; 1 UP TO 5 | 18 | Unknown | ? | 1.2515 | 5 | 1 | 1 | 75.4301 | OVR | 2024-09-21T08:24:14 |
| WG1974470-4; 1 UP TO 5 | 19 | Unknown | ? | 1.2524 | 5 | 1 | 1 | 75.4853 | OVR | 2024-09-21T08:25:24 |
| L2453851-02; 1 UP TO 5 | 20 | Unknown | ? | 0.1500 | 5 | 1 | 1 | 9.0200 | | 2024-09-21T08:26:33 |
| CCV NO3 | 21 | QC | 1 | 0.0830 | 1 | 1 | 1 | 0.9968 | | 2024-09-21T08:27:39 |
| CCV NO2 | 22 | QC | ? | 0.0820 | 1 | 1 | 1 | 0.9839 | | 2024-09-21T08:28:45 |
| CCB | 23 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0044 | | 2024-09-21T08:29:54 |

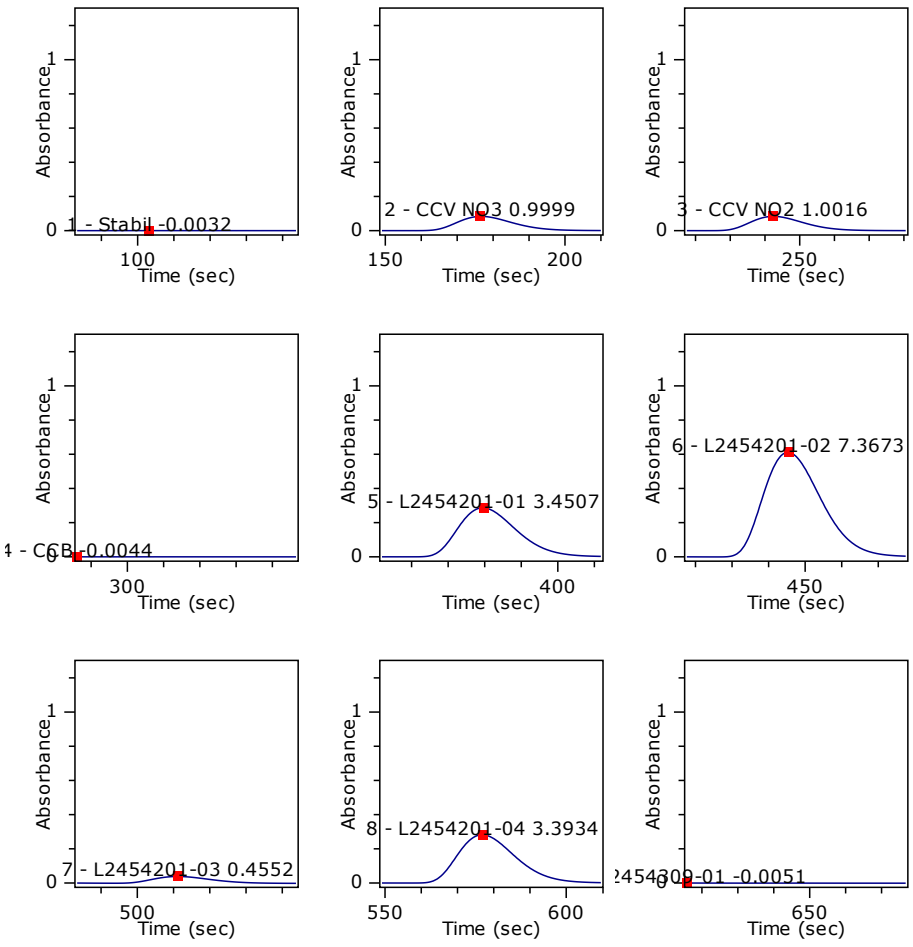
Channel: 2-NO2

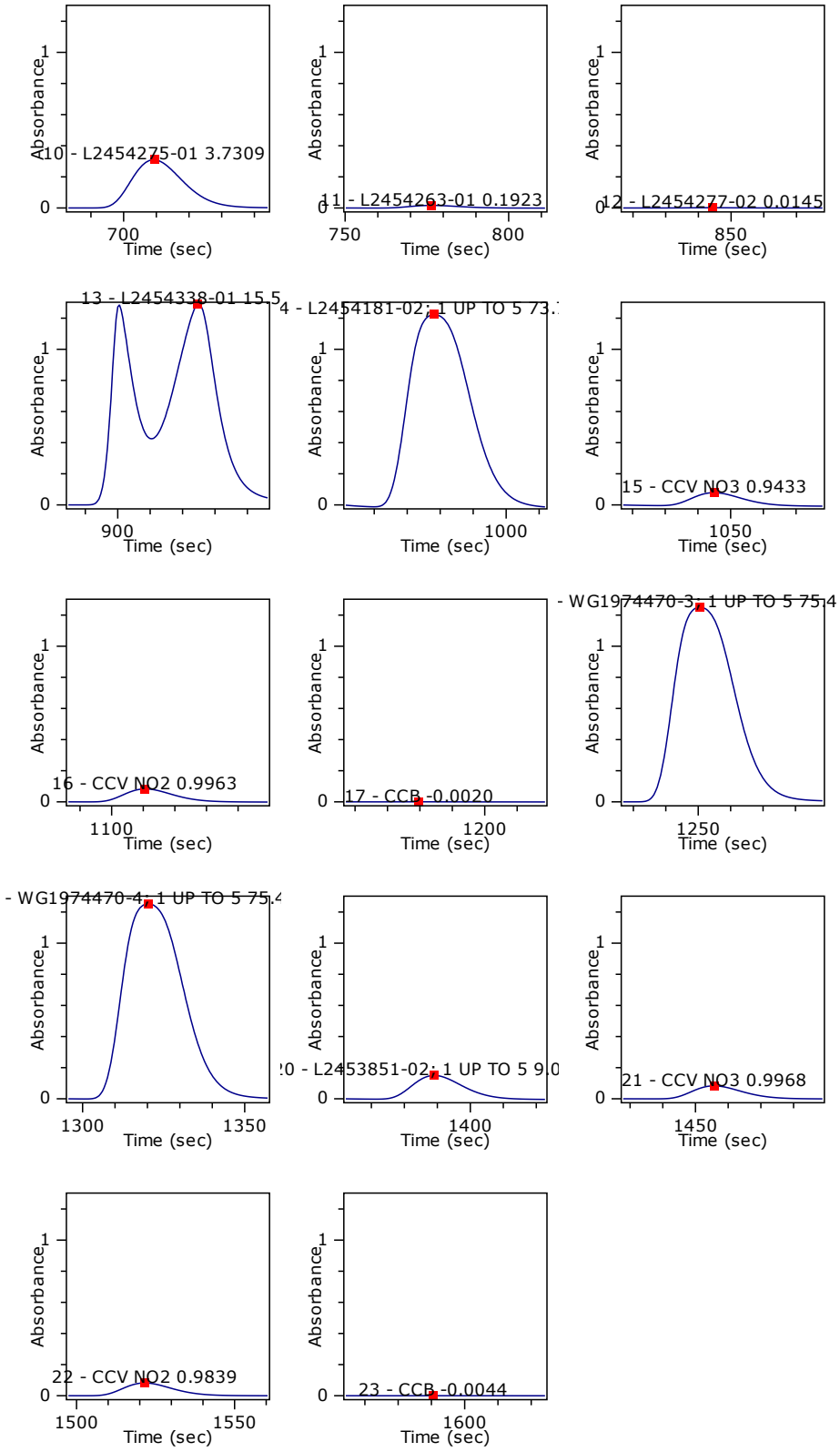
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T08:04:56 |
| CCV NO3 | 2 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T08:06:07 |
| CCV NO2 | 3 | QC | 1 | 0.1304 | 1 | 1 | 1 | 0.9872 | | 2024-09-21T08:07:12 |
| CCB | 4 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T08:08:23 |
| L2454201-01 | 5 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0022 | | 2024-09-21T08:09:29 |
| L2454201-02 | 6 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0050 | | 2024-09-21T08:10:35 |
| L2454201-03 | 7 | Unknown | ? | 0.0516 | 1 | 1 | 1 | 0.3886 | | 2024-09-21T08:11:41 |
| L2454201-04 | 8 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0052 | | 2024-09-21T08:12:46 |
| L2454309-01 | 9 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0032 | | 2024-09-21T08:14:01 |
| L2454275-01 | 10 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0033 | | 2024-09-21T08:15:03 |
| L2454263-01 | 11 | Unknown | ? | 0.0237 | 1 | 1 | 1 | 0.1761 | | 2024-09-21T08:16:06 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454277-02 | 12 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0026 | | 2024-09-21T08:17:13 |
| L2454338-01 | 13 | Unknown | ? | 0.0997 | 1 | 1 | 1 | 0.7534 | | 2024-09-21T08:18:20 |
| L2454181-02; 1 UP TO 5 | 14 | Unknown | ? | 0.0440 | 5 | 1 | 1 | 1.6535 | | 2024-09-21T08:19:29 |
| CCV NO3 | 15 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2024-09-21T08:20:35 |
| CCV NO2 | 16 | QC | 1 | 0.1302 | 1 | 1 | 1 | 0.9851 | | 2024-09-21T08:21:40 |
| CCB | 17 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T08:22:52 |
| WG1974470-3; 1 UP TO 5 | 18 | Unknown | ? | 0.0442 | 5 | 1 | 1 | 1.6597 | | 2024-09-21T08:24:02 |
| WG1974470-4; 1 UP TO 5 | 19 | Unknown | ? | 0.0431 | 5 | 1 | 1 | 1.6204 | | 2024-09-21T08:25:11 |
| L2453851-02; 1 UP TO 5 | 20 | Unknown | ? | 0.0243 | 5 | 1 | 1 | 0.9032 | | 2024-09-21T08:26:20 |
| CCV NO3 | 21 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T08:27:26 |
| CCV NO2 | 22 | QC | 1 | 0.1304 | 1 | 1 | 1 | 0.9866 | | 2024-09-21T08:28:31 |
| CCB | 23 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T08:29:43 |

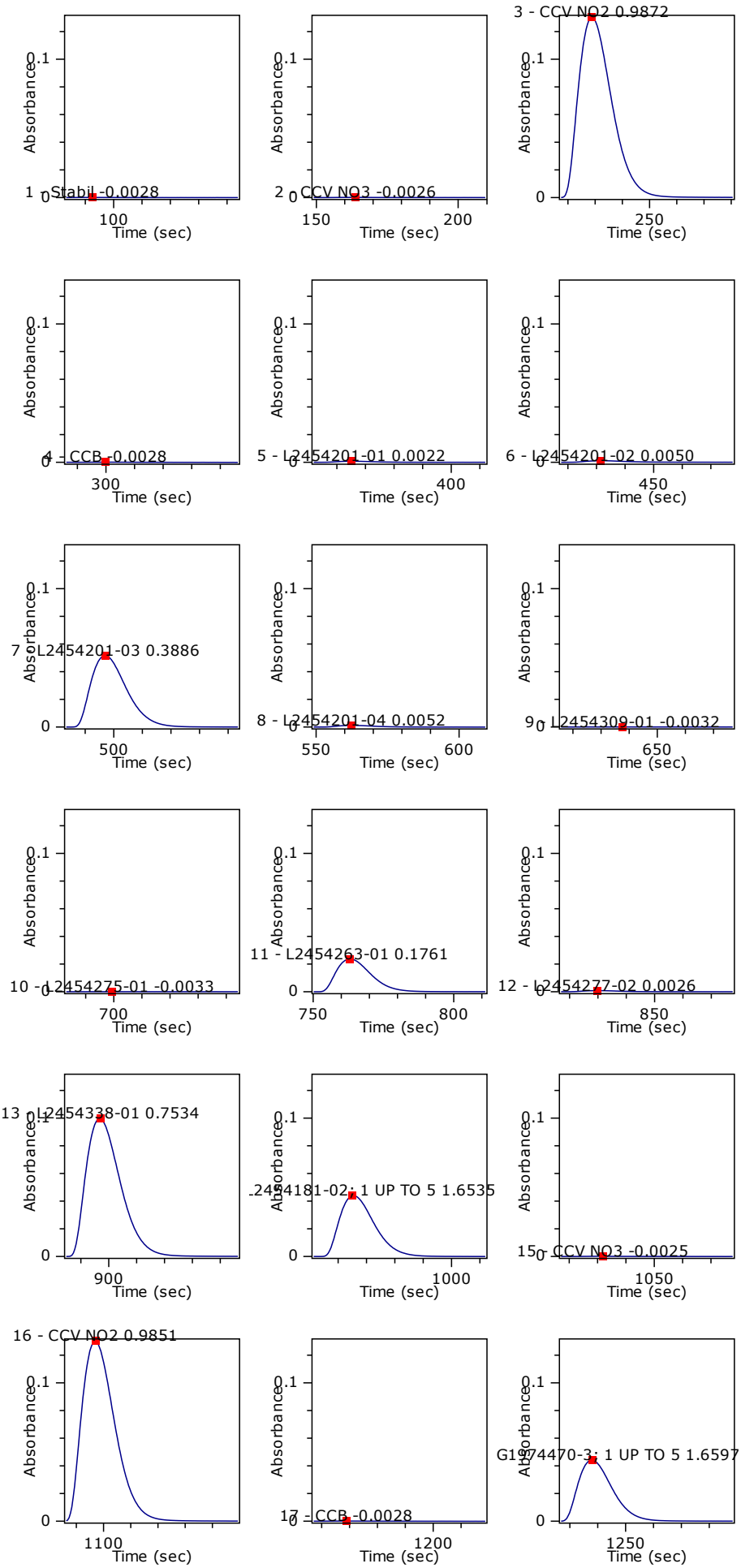
Peaks:

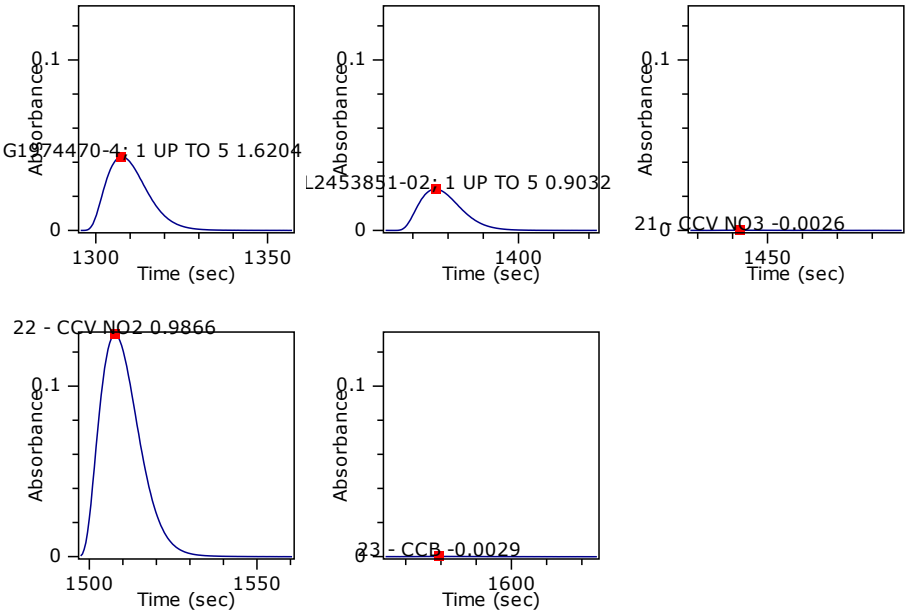
Channel: 1-NOx






Channel: 2-NO2


1 - Stabil -0.0028
2 - CCV NO3 -0.0026
3 - CCV NO2 0.9872
4 - CCB -0.0028
5 - L2454201-01 0.0022
6 - L2454201-02 0.0050
7 - L2454201-03 0.3886
8 - L2454201-04 0.0052
9 - L2454309-01 -0.0032
10 - L2454275-01 -0.0033
11 - L2454263-01 0.1761
12 - L2454277-02 0.0026
13 - L2454338-01 0.7534
14 - L2454181-02 1 UP TO 5 1.6535
15 - CCV NO3 -0.0025
16 - CCV NO2 0.9851
17 - CCB -0.0028
18 - G1974470-3 1 UP TO 5 1.6597
Absorbance
Time (sec)




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 35
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.1
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T08:03:23

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.
```

```
    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

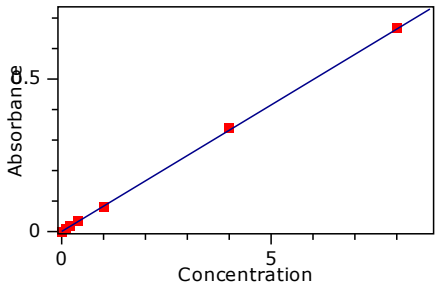
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 09:26:16
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-092550.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

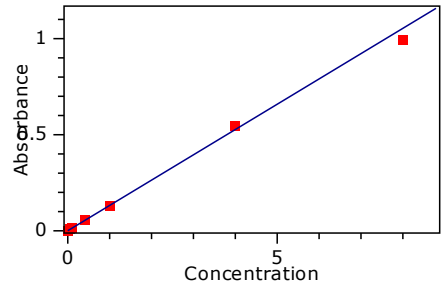
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00037
B: 0.08294
$R^2$: 0.99987
RSE(%): 2.47701
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.66720 | 8.00000 | 8.04000 | 0.50 | N/A |
| 10002 | NOx 4.0ppm | 0.34030 | 4.00000 | 4.09890 | 2.47 | N/A |
| 10003 | NOx 1.0ppm | 0.08010 | 1.00000 | 0.96080 | 3.92 | N/A |
| 10004 | NOx 0.4ppm | 0.03410 | 0.40000 | 0.40660 | 1.64 | N/A |
| 10005 | NOx 0.2ppm | 0.01690 | 0.20000 | 0.19930 | 0.34 | N/A |
| 10006 | NOx 0.1ppm | 0.00870 | 0.10000 | 0.10010 | 0.14 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00320 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00047
B: 0.13165
$R^2$: 0.99823
RSE(%): 4.38727
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 0.99500 | 8.00000 | 7.55440 | 5.57 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54310 | 4.00000 | 4.12190 | 3.05 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13000 | 1.00000 | 0.98370 | 1.63 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05590 | 0.40000 | 0.42120 | 5.30 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01390 | 0.10000 | 0.10190 | 1.90 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04920 | 1.51 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00290 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0023 | | 2024-09-21T08:55:02 |
| CCV NO3 | 2 | QC | 1 | 0.0829 | 1 | 1 | 1 | 0.9952 | | 2024-09-21T08:56:17 |
| CCV NO2 | 3 | QC | ? | 0.0837 | 1 | 1 | 1 | 1.0043 | | 2024-09-21T08:57:23 |
| CCB | 4 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0040 | | 2024-09-21T08:58:36 |

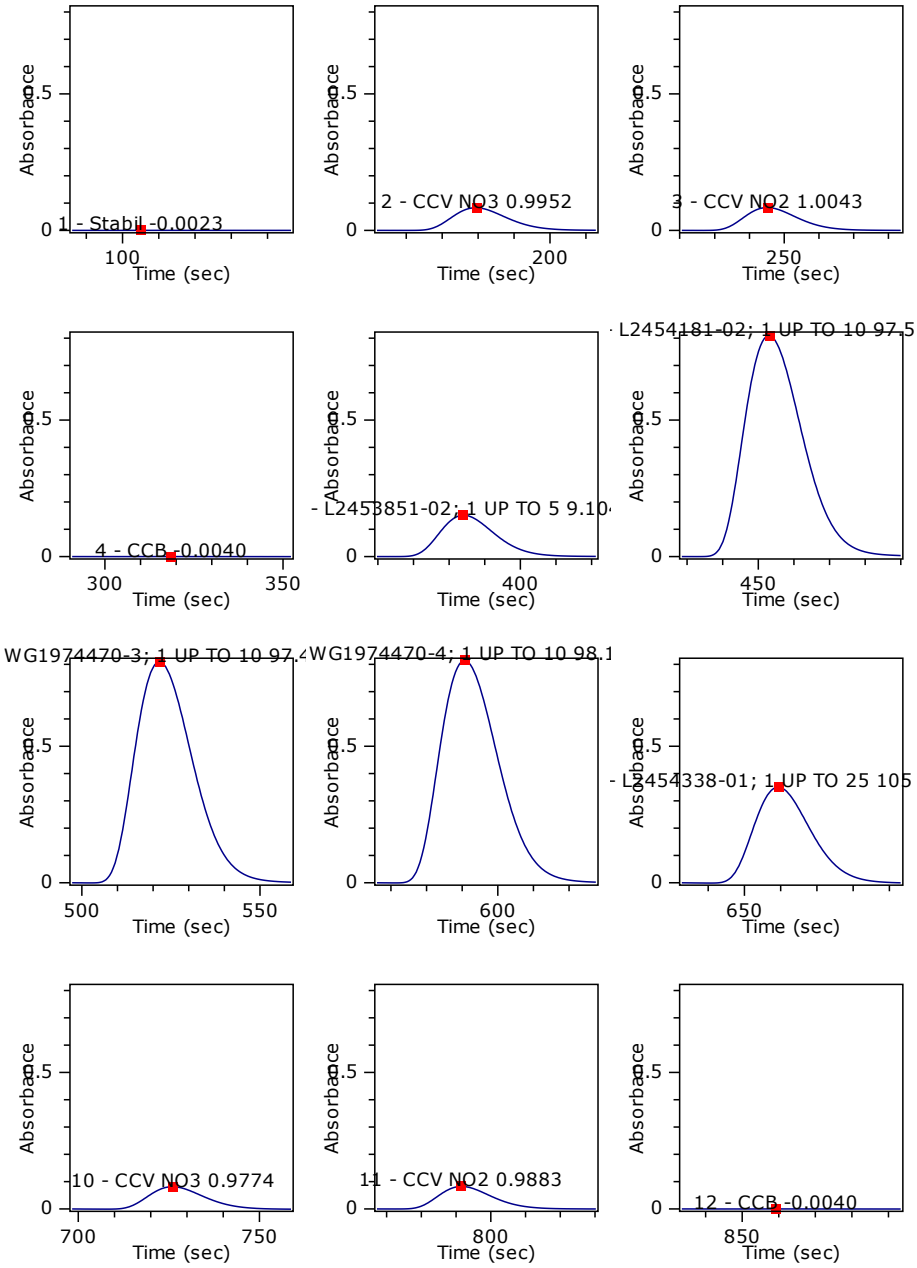
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2453851-02; 1 UP TO 5 | 5 | Unknown | ? | 0.1514 | 5 | 1 | 1 | 9.1047 | | 2024-09-21T08:59:41 |
| L2454181-02; 1 UP TO 10 | 6 | Unknown | ? | 0.8094 | 10 | 1 | 1 | 97.5554 | OVR | 2024-09-21T09:00:51 |
| WG1974470-3; 1 UP TO 10 | 7 | Unknown | ? | 0.8090 | 10 | 1 | 1 | 97.4967 | OVR | 2024-09-21T09:01:59 |
| WG1974470-4; 1 UP TO 10 | 8 | Unknown | ? | 0.8143 | 10 | 1 | 1 | 98.1390 | OVR | 2024-09-21T09:03:08 |
| L2454338-01; 1 UP TO 25 | 9 | Unknown | ? | 0.3503 | 25 | 1 | 1 | 105.4742 | | 2024-09-21T09:04:17 |
| CCV NO3 | 10 | QC | 1 | 0.0814 | 1 | 1 | 1 | 0.9774 | | 2024-09-21T09:05:24 |
| CCV NO2 | 11 | QC | ? | 0.0823 | 1 | 1 | 1 | 0.9883 | | 2024-09-21T09:06:29 |
| CCB | 12 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0040 | | 2024-09-21T09:07:37 |

Channel: 2-NO2

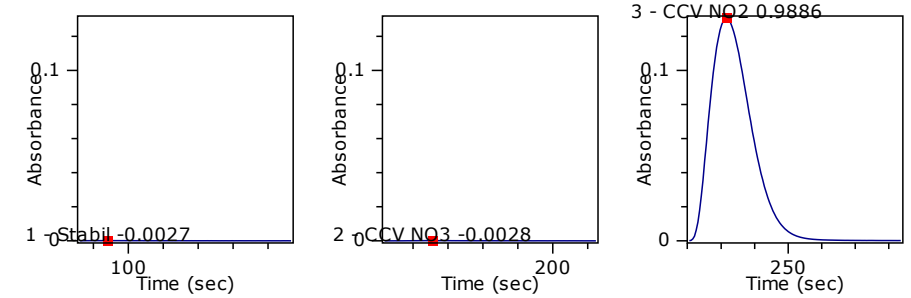
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T08:54:52 |
| CCV NO3 | 2 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T08:56:03 |
| CCV NO2 | 3 | QC | 1 | 0.1306 | 1 | 1 | 1 | 0.9886 | | 2024-09-21T08:57:09 |
| CCB | 4 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2024-09-21T08:58:20 |
| L2453851-02; 1 UP TO 5 | 5 | Unknown | ? | 0.0241 | 5 | 1 | 1 | 0.8960 | | 2024-09-21T08:59:29 |
| L2454181-02; 1 UP TO 10 | 6 | Unknown | ? | 0.0220 | 10 | 1 | 1 | 1.6347 | | 2024-09-21T09:00:38 |
| WG1974470-3; 1 UP TO 10 | 7 | Unknown | ? | 0.0221 | 10 | 1 | 1 | 1.6411 | | 2024-09-21T09:01:46 |
| WG1974470-4; 1 UP TO 10 | 8 | Unknown | ? | 0.0217 | 10 | 1 | 1 | 1.6086 | | 2024-09-21T09:02:55 |
| L2454338-01; 1 UP TO 25 | 9 | Unknown | ? | 0.0039 | 25 | 1 | 1 | 0.6584 | | 2024-09-21T09:04:04 |
| CCV NO3 | 10 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T09:05:10 |
| CCV NO2 | 11 | QC | 1 | 0.1297 | 1 | 1 | 1 | 0.9813 | | 2024-09-21T09:06:15 |
| CCB | 12 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0029 | | 2024-09-21T09:07:29 |

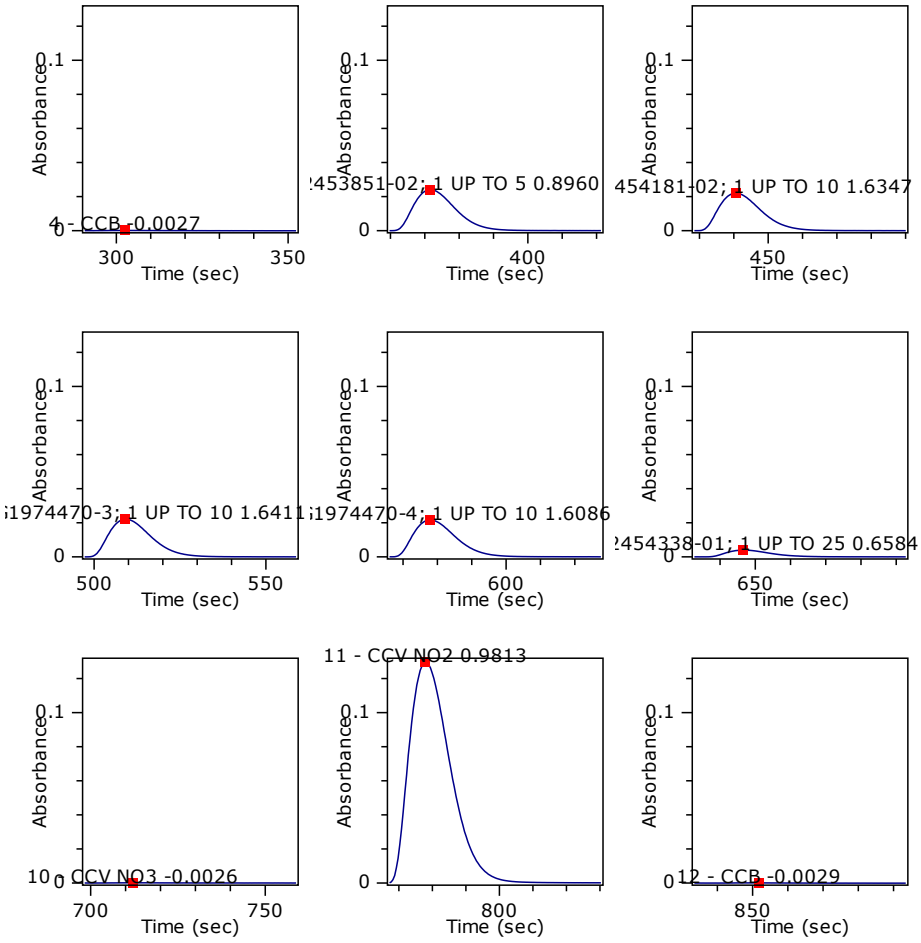
Peaks:

Channel: 1-NOx




Channel: 2-NO2






Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |

| | |
|---|---|
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 35
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.1
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T08:53:18

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
```

```
    Delay (sec) 1
    Next Sample
    Autosampler Probe Force Down

    Spectrometer Reference Scan
    Spectrometer Absorbance Scanning

    Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

    FIAlab Injection Valve Sample Load

    Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

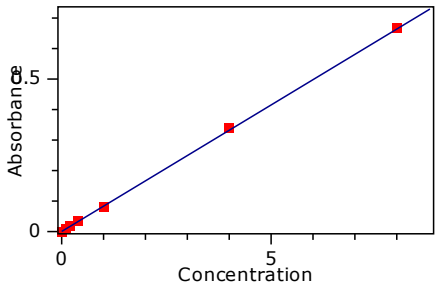
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 09:42:16
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-094200.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

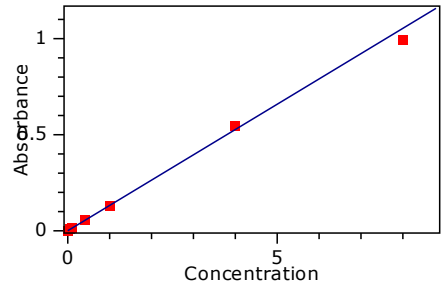
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00037
B: 0.08294
$R^2$: 0.99987
RSE(%): 2.47701
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.66720 | 8.00000 | 8.04000 | 0.50 | N/A |
| 10002 | NOx 4.0ppm | 0.34030 | 4.00000 | 4.09890 | 2.47 | N/A |
| 10003 | NOx 1.0ppm | 0.08010 | 1.00000 | 0.96080 | 3.92 | N/A |
| 10004 | NOx 0.4ppm | 0.03410 | 0.40000 | 0.40660 | 1.64 | N/A |
| 10005 | NOx 0.2ppm | 0.01690 | 0.20000 | 0.19930 | 0.34 | N/A |
| 10006 | NOx 0.1ppm | 0.00870 | 0.10000 | 0.10010 | 0.14 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00320 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00047
B: 0.13165
$R^2$: 0.99823
RSE(%): 4.38727
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 0.99500 | 8.00000 | 7.55440 | 5.57 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54310 | 4.00000 | 4.12190 | 3.05 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13000 | 1.00000 | 0.98370 | 1.63 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05590 | 0.40000 | 0.42120 | 5.30 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01390 | 0.10000 | 0.10190 | 1.90 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04920 | 1.51 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00290 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T09:28:22 |
| CCV NO3 | 2 | QC | 1 | 0.0836 | 1 | 1 | 1 | 1.0038 | | 2024-09-21T09:29:31 |
| CCV NO2 | 3 | QC | ? | 0.0825 | 1 | 1 | 1 | 0.9908 | | 2024-09-21T09:30:37 |
| CCB | 4 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0038 | | 2024-09-21T09:31:45 |

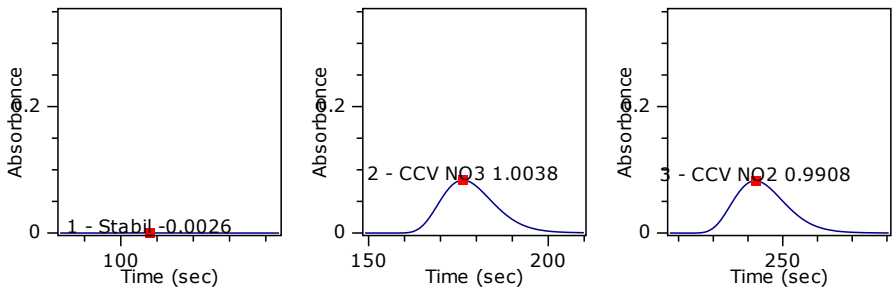
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454181-02; 1 UP TO 25 | 5 | Unknown | ? | 0.3427 | 25 | 1 | 1 | 103.1915 | | 2024-09-21T09:32:55 |
| WG1974470-3; 1 UP TO 25 | 6 | Unknown | ? | 0.3499 | 25 | 1 | 1 | 105.3621 | | 2024-09-21T09:34:04 |
| WG1974470-4; 1 UP TO 25 | 7 | Unknown | ? | 0.3498 | 25 | 1 | 1 | 105.3324 | | 2024-09-21T09:35:13 |
| L2454338-01; 1 UP TO 25 | 8 | Unknown | ? | 0.3515 | 25 | 1 | 1 | 105.8425 | | 2024-09-21T09:36:22 |
| CCV NO3 | 9 | QC | 1 | 0.0804 | 1 | 1 | 1 | 0.9652 | | 2024-09-21T09:37:29 |
| CCV NO2 | 10 | QC | ? | 0.0817 | 1 | 1 | 1 | 0.9806 | | 2024-09-21T09:38:34 |
| CCB | 11 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0045 | | 2024-09-21T09:39:42 |

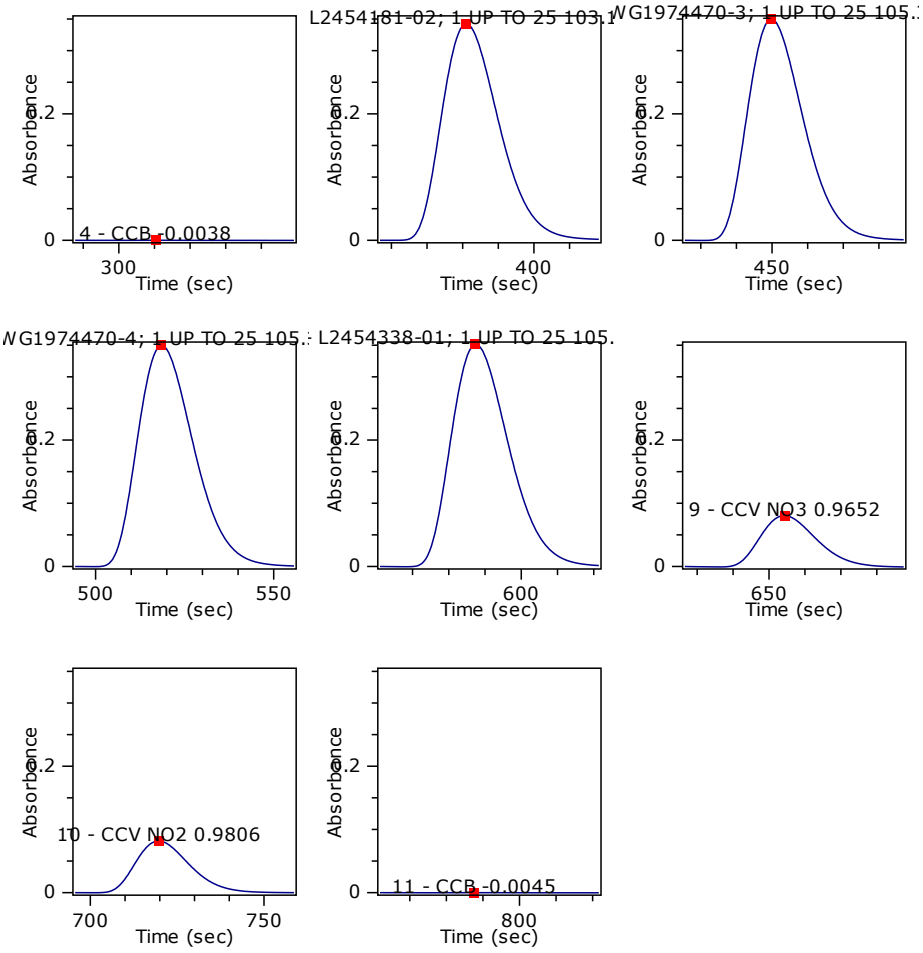
Channel: 2-NO2

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0030 | | 2024-09-21T09:28:04 |
| CCV NO3 | 2 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T09:29:19 |
| CCV NO2 | 3 | QC | 1 | 0.1305 | 1 | 1 | 1 | 0.9879 | | 2024-09-21T09:30:23 |
| CCB | 4 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T09:31:34 |
| L2454181-02; 1 UP TO 25 | 5 | Unknown | ? | 0.0089 | 25 | 1 | 1 | 1.5937 | | 2024-09-21T09:32:43 |
| WG1974470-3; 1 UP TO 25 | 6 | Unknown | ? | 0.0089 | 25 | 1 | 1 | 1.5952 | | 2024-09-21T09:33:52 |
| WG1974470-4; 1 UP TO 25 | 7 | Unknown | ? | 0.0086 | 25 | 1 | 1 | 1.5377 | | 2024-09-21T09:35:01 |
| L2454338-01; 1 UP TO 25 | 8 | Unknown | ? | 0.0040 | 25 | 1 | 1 | 0.6645 | | 2024-09-21T09:36:09 |
| CCV NO3 | 9 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T09:37:14 |
| CCV NO2 | 10 | QC | 1 | 0.1293 | 1 | 1 | 1 | 0.9785 | | 2024-09-21T09:38:21 |
| CCB | 11 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2024-09-21T09:39:34 |

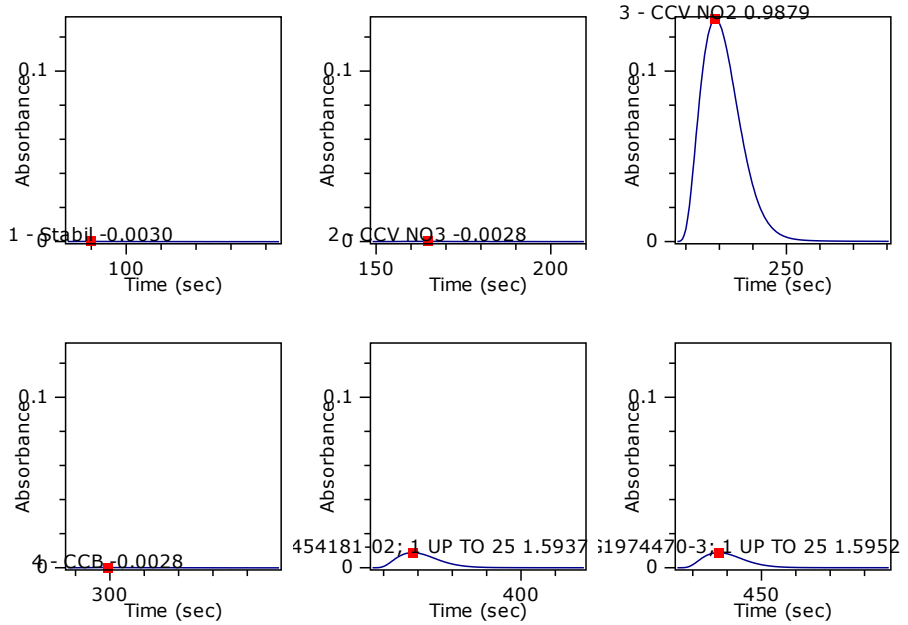
Peaks:

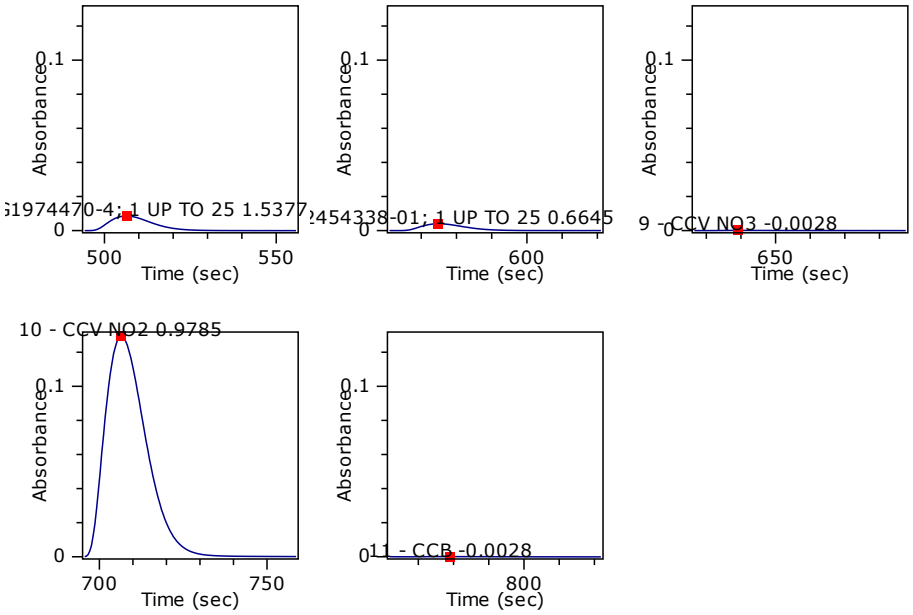
Channel: 1-NOx






Channel: 2-NO2






Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 35
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.1
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T09:26:35

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.
```

```
    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

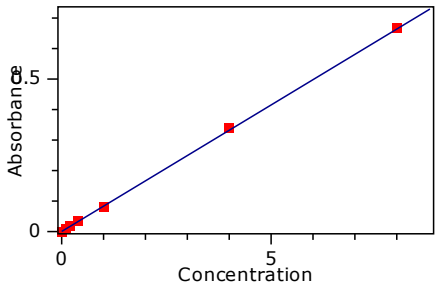
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-09-21 10:17:34
Data file (.dat): C:\FIAlab\Autosave Data\2024-09-21-101717.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

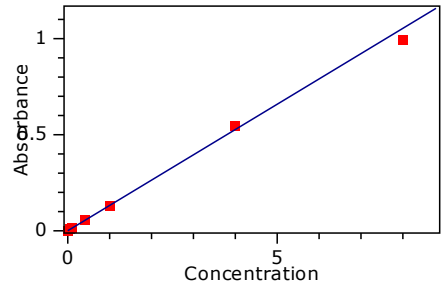
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00037
B: 0.08294
$R^2$: 0.99987
RSE(%): 2.47701
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.66720 | 8.00000 | 8.04000 | 0.50 | N/A |
| 10002 | NOx 4.0ppm | 0.34030 | 4.00000 | 4.09890 | 2.47 | N/A |
| 10003 | NOx 1.0ppm | 0.08010 | 1.00000 | 0.96080 | 3.92 | N/A |
| 10004 | NOx 0.4ppm | 0.03410 | 0.40000 | 0.40660 | 1.64 | N/A |
| 10005 | NOx 0.2ppm | 0.01690 | 0.20000 | 0.19930 | 0.34 | N/A |
| 10006 | NOx 0.1ppm | 0.00870 | 0.10000 | 0.10010 | 0.14 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | -0.00320 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00047
B: 0.13165
$R^2$: 0.99823
RSE(%): 4.38727
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 0.99500 | 8.00000 | 7.55440 | 5.57 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54310 | 4.00000 | 4.12190 | 3.05 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13000 | 1.00000 | 0.98370 | 1.63 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05590 | 0.40000 | 0.42120 | 5.30 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01390 | 0.10000 | 0.10190 | 1.90 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00700 | 0.05000 | 0.04920 | 1.51 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00010 | 0.00000 | -0.00290 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T10:04:17 |
| CCV NO3 | 2 | QC | 1 | 0.0813 | 1 | 1 | 1 | 0.9763 | | 2024-09-21T10:05:26 |
| CCV NO2 | 3 | QC | ? | 0.0807 | 1 | 1 | 1 | 0.9686 | | 2024-09-21T10:06:32 |
| CCB | 4 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0042 | | 2024-09-21T10:07:42 |

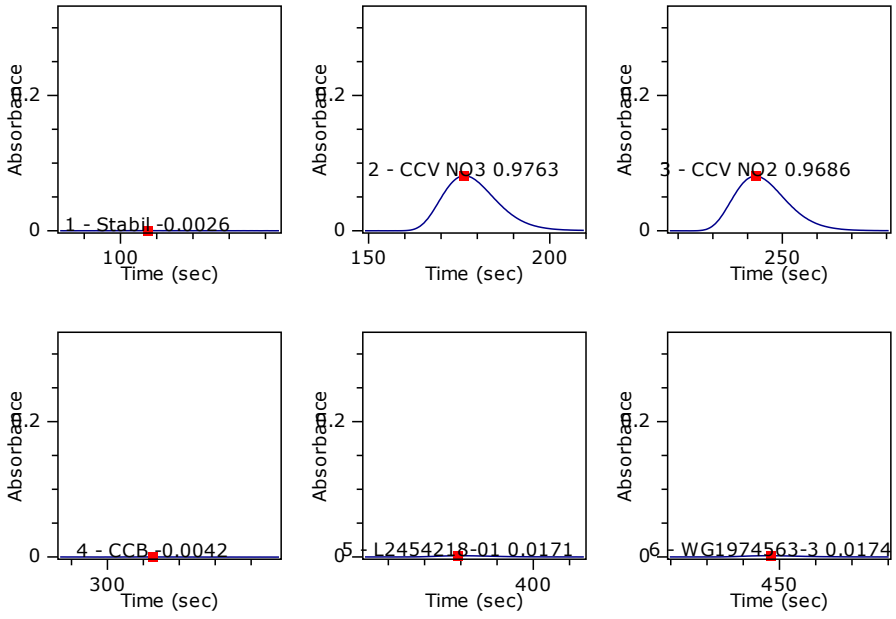
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2454218-01 | 5 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0171 | | 2024-09-21T10:08:49 |
| WG1974563-3 | 6 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0174 | | 2024-09-21T10:09:57 |
| WG1974563-4 | 7 | Unknown | ? | 0.3288 | 1 | 1 | 1 | 3.9601 | | 2024-09-21T10:11:03 |
| CCV NO3 | 8 | QC | 1 | 0.0808 | 1 | 1 | 1 | 0.9698 | | 2024-09-21T10:12:08 |
| CCV NO2 | 9 | QC | ? | 0.0812 | 1 | 1 | 1 | 0.9751 | | 2024-09-21T10:13:13 |
| CCB | 10 | QC | 0 | 0.0000 | 1 | 1 | 1 | -0.0041 | | 2024-09-21T10:14:24 |

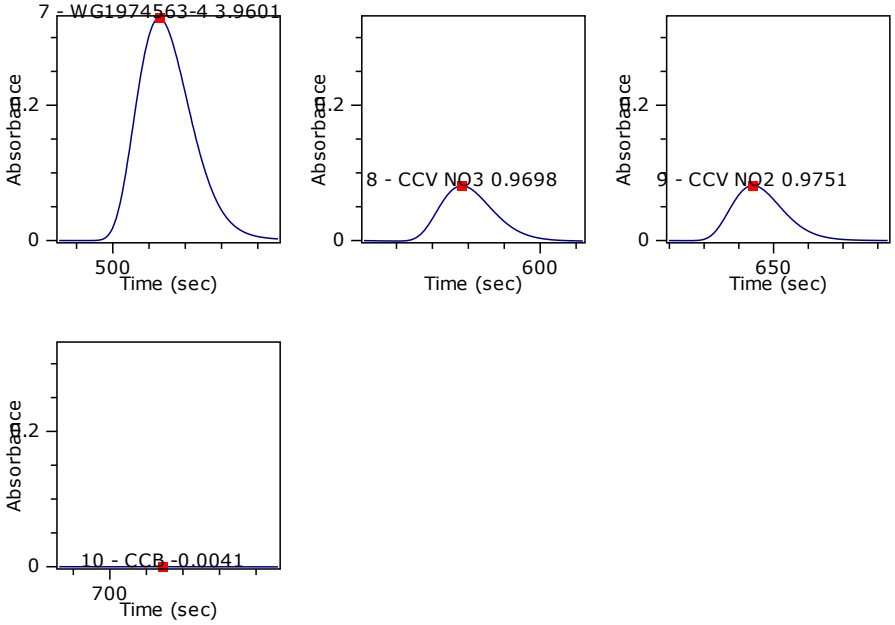
Channel: 2-NO2

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2024-09-21T10:04:09 |
| CCV NO3 | 2 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T10:05:13 |
| CCV NO2 | 3 | QC | 1 | 0.1291 | 1 | 1 | 1 | 0.9769 | | 2024-09-21T10:06:18 |
| CCB | 4 | QC | 0 | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2024-09-21T10:07:31 |
| L2454218-01 | 5 | Unknown | ? | 0.0019 | 1 | 1 | 1 | 0.0110 | | 2024-09-21T10:08:36 |
| WG1974563-3 | 6 | Unknown | ? | 0.0019 | 1 | 1 | 1 | 0.0110 | | 2024-09-21T10:09:43 |
| WG1974563-4 | 7 | Unknown | ? | 0.4991 | 1 | 1 | 1 | 3.7875 | | 2024-09-21T10:10:49 |
| CCV NO3 | 8 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0020 | | 2024-09-21T10:11:53 |
| CCV NO2 | 9 | QC | 1 | 0.1289 | 1 | 1 | 1 | 0.9755 | | 2024-09-21T10:13:01 |
| CCB | 10 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0024 | | 2024-09-21T10:14:13 |

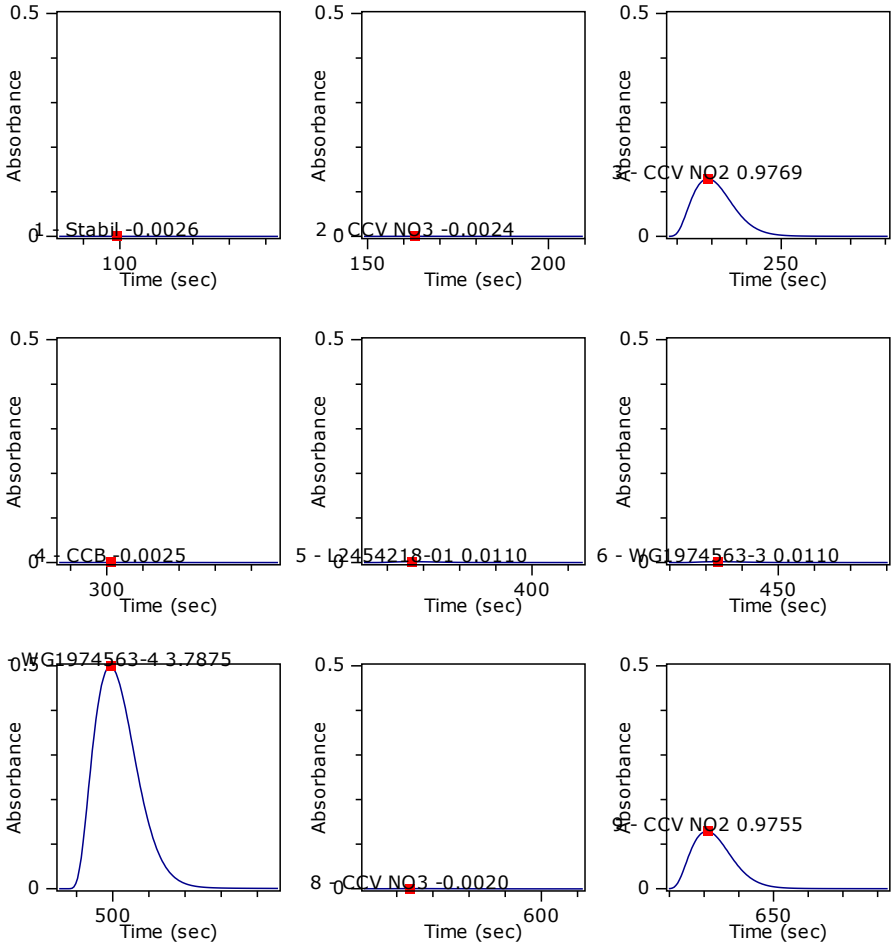
Peaks:

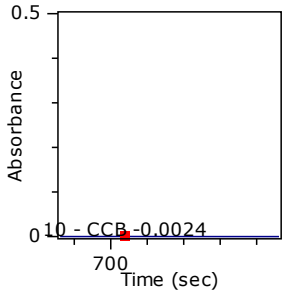
Channel: 1-NOx






Channel: 2-NO2






Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
```

```
Integration Time: 35
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 3.1
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-09-21T10:02:30

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.
```

```
    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

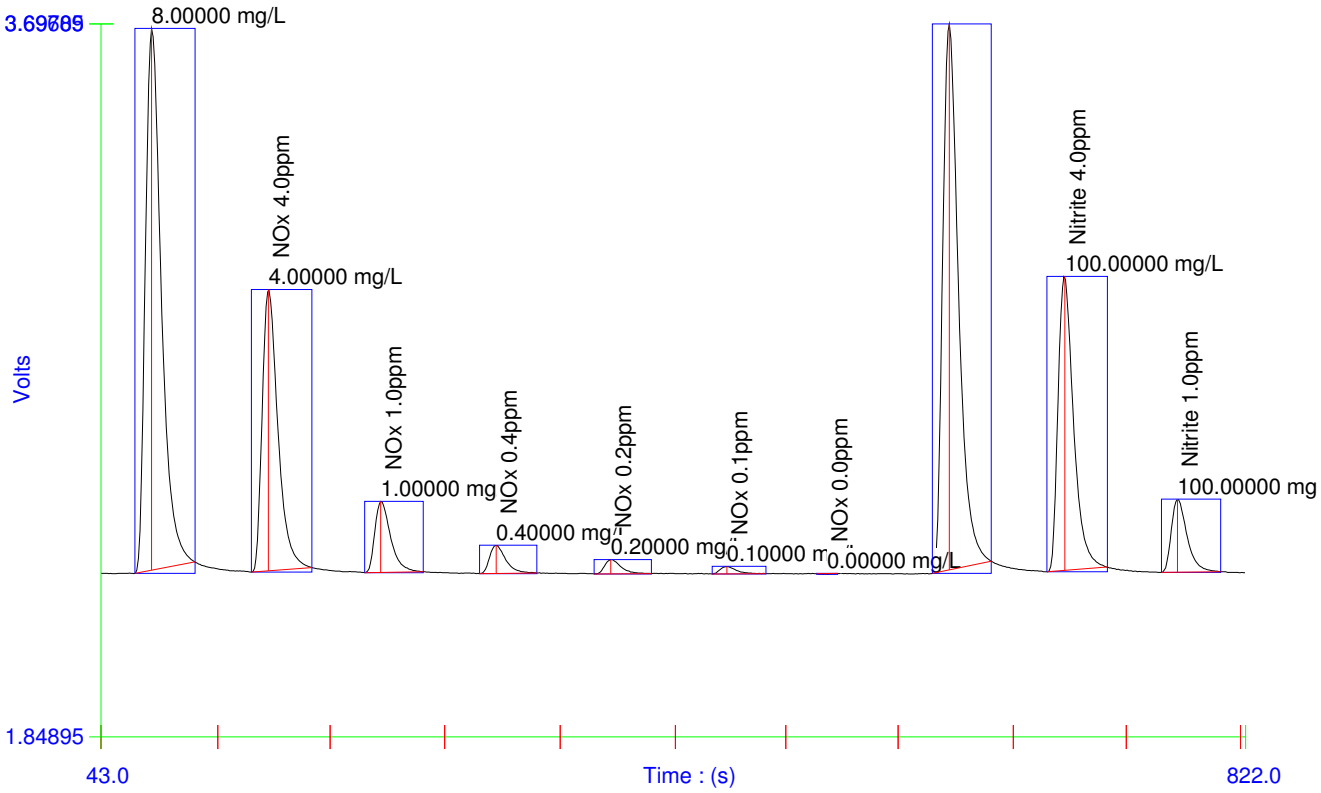
Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

Original Run Filename: OM_9-21-2024_08-29-06AM.OMN Created: 9/21/2024 8:29:06 AM
Original Run Author's Signature: [A1wetcheminstrument]
Current Run Filename: OM_9-21-2024_08-29-06AM.OMN Last Modified: 9/21/2024 9:28:45 AM
Current Run Author's Signature: [A1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 NO3+NO2 (mg/L) | Channel 2 Nitrite (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|---|
| NOx 8.0ppm | 1 | S3 | 8.00000 | 100.00000 | | | |
| NOx 4.0ppm | 1 | S4 | 4.00000 | 100.00000 | | | |
| NOx 1.0ppm | 1 | S2 | 1.00000 | 100.00000 | | | |
| NOx 0.4ppm | 1 | S5 | 0.40000 | 100.00000 | | | |
| NOx 0.2ppm | 1 | S6 | 0.20000 | 100.00000 | | | |
| NOx 0.1ppm | 1 | S7 | 0.10000 | 100.00000 | | | |
| NOx 0.0ppm | 1 | S1 | 0.00000 | 100.00000 | | | |
| Nitrite 8.0ppm | 1 | S10 | 100.00000 | 8.00000 | | | |
| Nitrite 4.0ppm | 1 | S11 | 100.00000 | 4.00000 | | | |
| Nitrite 1.0ppm | 1 | S9 | 100.00000 | 1.00000 | | | |
| Nitrite 0.4ppm | 1 | S12 | 100.00000 | 0.40000 | | | |
| Nitrite 0.1ppm | 1 | S13 | 100.00000 | 0.10000 | | | |
| Nitrite 0.05ppm | 1 | S14 | 100.00000 | 0.05000 | | | |
| Nitrite 0.0ppm | 1 | S1 | 100.00000 | 0.00000 | | | |
| CCV NO3 | 1 | S2 | 1.01547 | -0.01235 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | Table/Fig. : 2 | | | |
| CCV NO2 | 1 | S9 | 1.04250 | 1.07208 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.00555 | -0.00959 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| ICV NO3 5.0 | 1 | 1 | 4.87013 | -0.00621 | | | |
| ICV NO2 5.0 | 1 | 2 | 5.06768 | 5.12041 | | | |
| ICV NO3 0.5 | 1 | 3 | 0.50611 | -0.01356 | | | |
| ICV NO2 0.5 | 1 | 4 | 0.52283 | 0.53798 | | | |
| ICB | 1 | 5 | -0.00853 | -0.00919 | | | |
| DILUTER CHK 8PPM | 1 | 6 | 8.70153 | -0.03927 | 5.00 | | |
| WG1974513-1; 5.0757 | 1 | 7 | 0.12686 | -0.02358 | | | 0.10151 g |
| WG1974513-2; 5.0171 | 1 | 8 | 48.37550 | -0.01646 | | | 0.10034 g |
| WG1974512-1; 5.0757 | 1 | 9 | -0.12436 | -0.05400 | | | 0.10151 g |
| WG1974512-2; 5.1100 | 1 | 10 | 49.66204 | 50.12344 | | | 0.10220 g |
| CCV NO3 | 1 | S2 | 1.01653 | -0.01403 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.04844 | 1.06203 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.00790 | -0.01135 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| WG1974512-5 | 1 | 11 | 1.15639 | 1.06405 | | | 0.10000 g |
| L2452073-01; 5.0837 | 1 | 12 | 0.13238 | 0.00409 | | | 0.10167 g |
| WG1974513-3; 5.0020 | 1 | 13 | 0.13812 | -0.00102 | | | 0.10004 g |
| WG1974513-4; 5.0348 | 1 | 14 | 91.00108 | -0.20077 | 5.00 | | 0.10070 g |
| WG1974512-3; 5.0020 | 1 | 15 | 0.12134 | -0.00182 | | | 0.10004 g |
| WG1974512-4; 5.0687 | 1 | 16 | 89.33211 | 91.58638 | 5.00 | | 0.10137 g |
| L2451415-01; 5.0497 | 1 | 17 | 0.14236 | 0.01024 | | | 0.10099 g |
| L2453579-01; 5.1366 | 1 | 18 | 1.47100 | 0.79944 | | | 0.10273 g |
| CCV NO3 | 1 | S2 | 1.02464 | -0.00647 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.05611 | 1.08130 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.00441 | -0.00817 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |

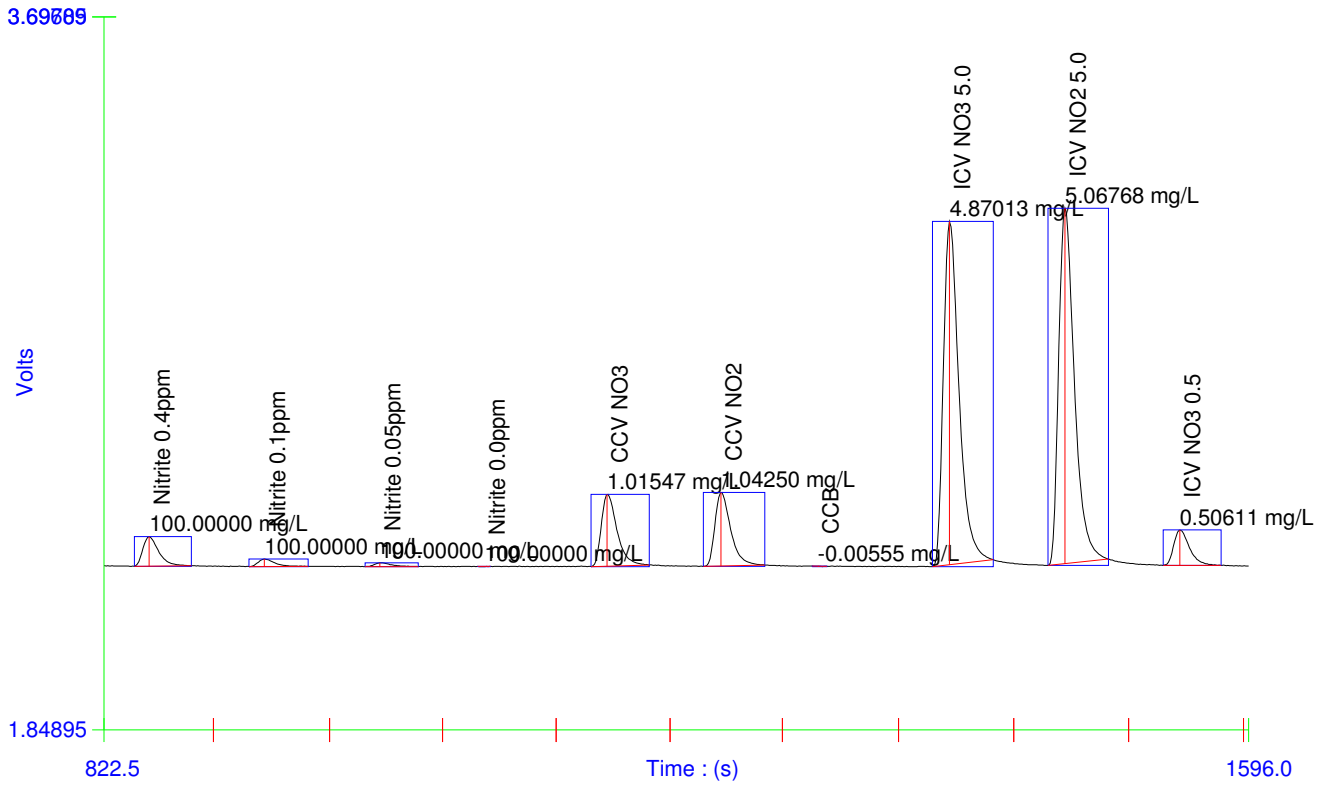
Author: KAF TRAY 1 Date : 240921-1

Channel 1 (NO3+NO2) - Set: 1 / 5



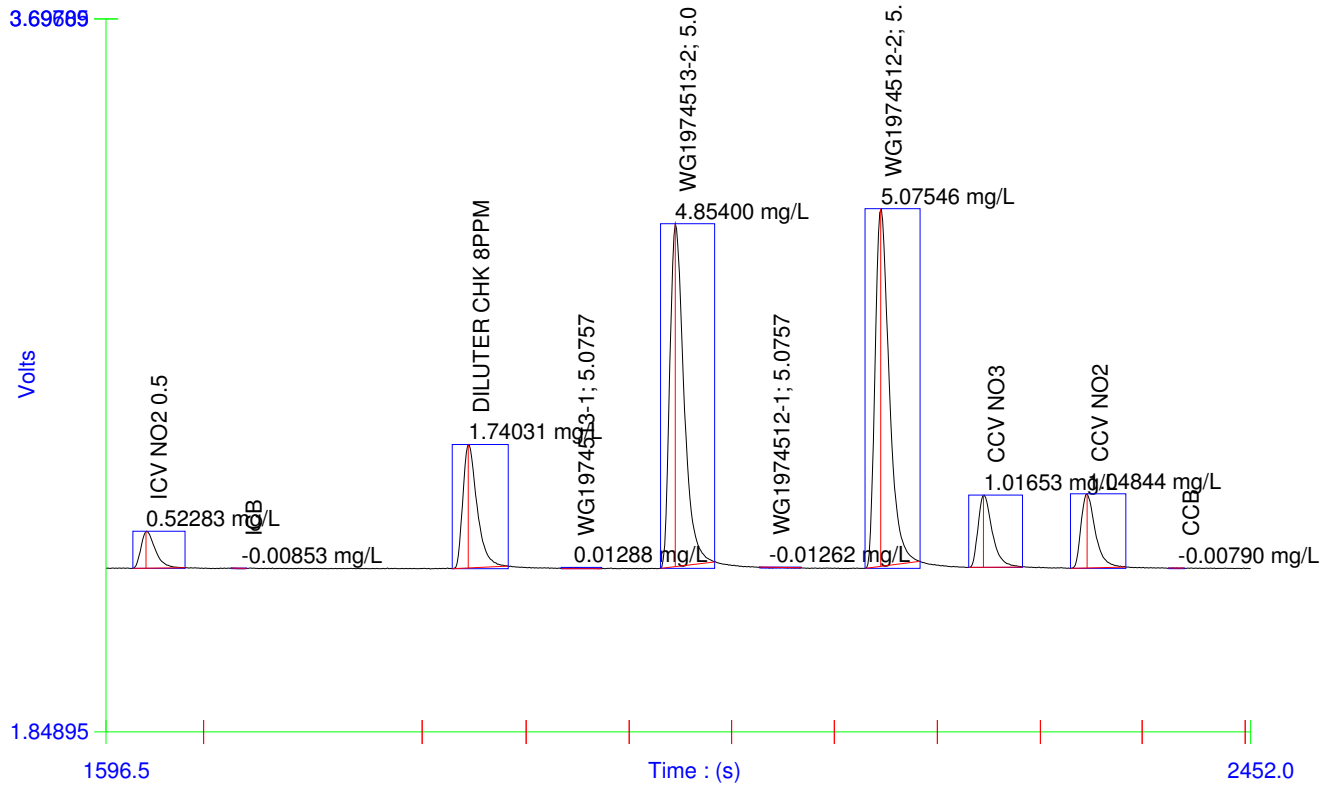
Author: KAF TRAY 1 Date : 240921-1

Channel 1 (NO3+NO2) - Set: 2 / 5



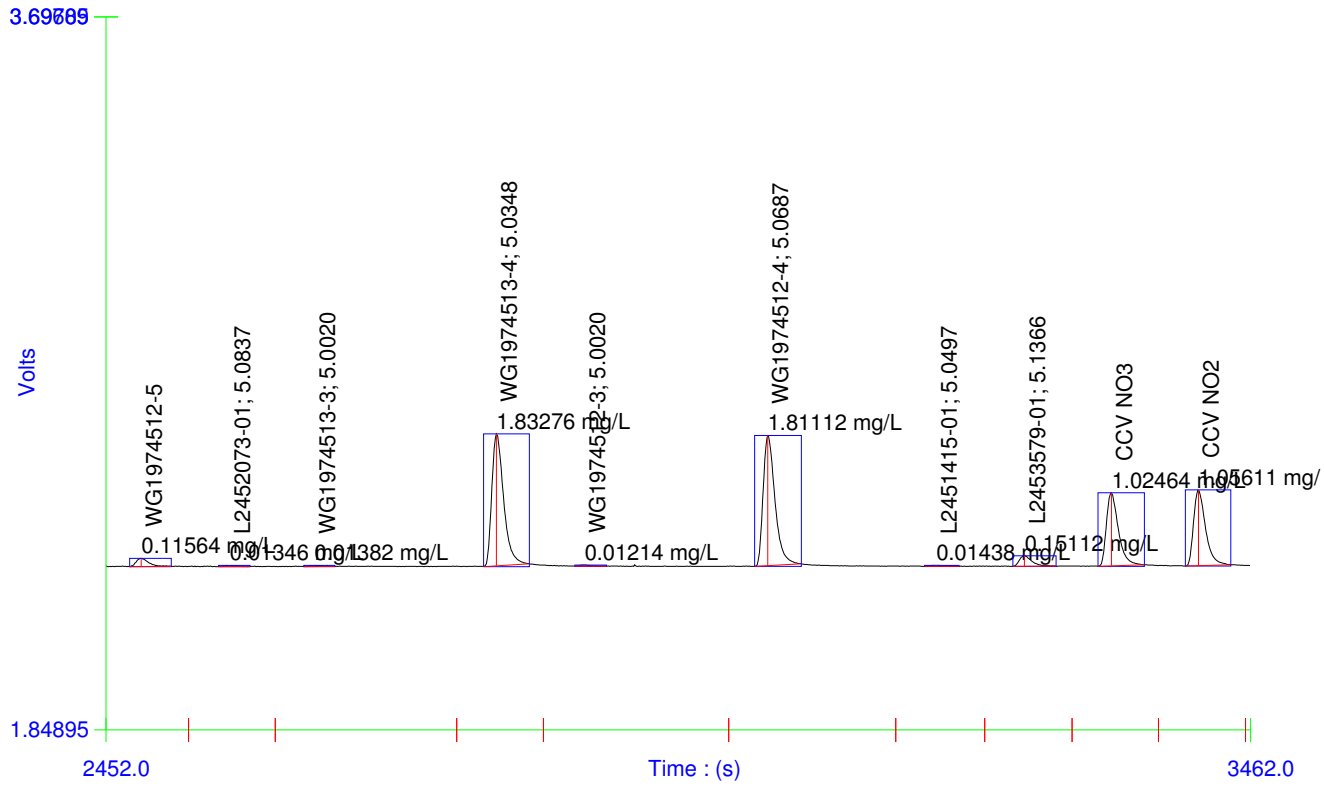
Author: KAF TRAY 1 Date : 240921-1

Channel 1 (NO3+NO2) - Set: 3 / 5

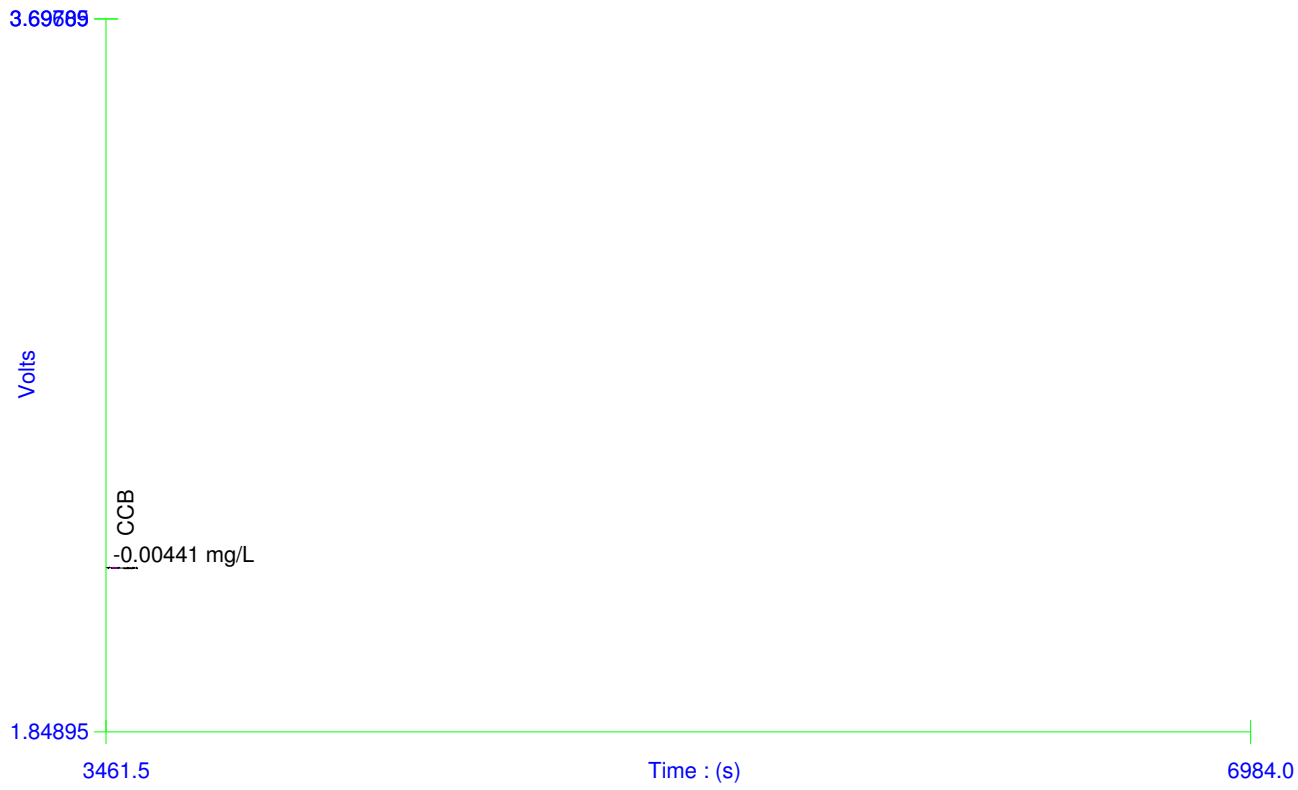


Author: KAF TRAY 1 Date : 240921-1

Channel 1 (NO3+NO2) - Set: 4 / 5

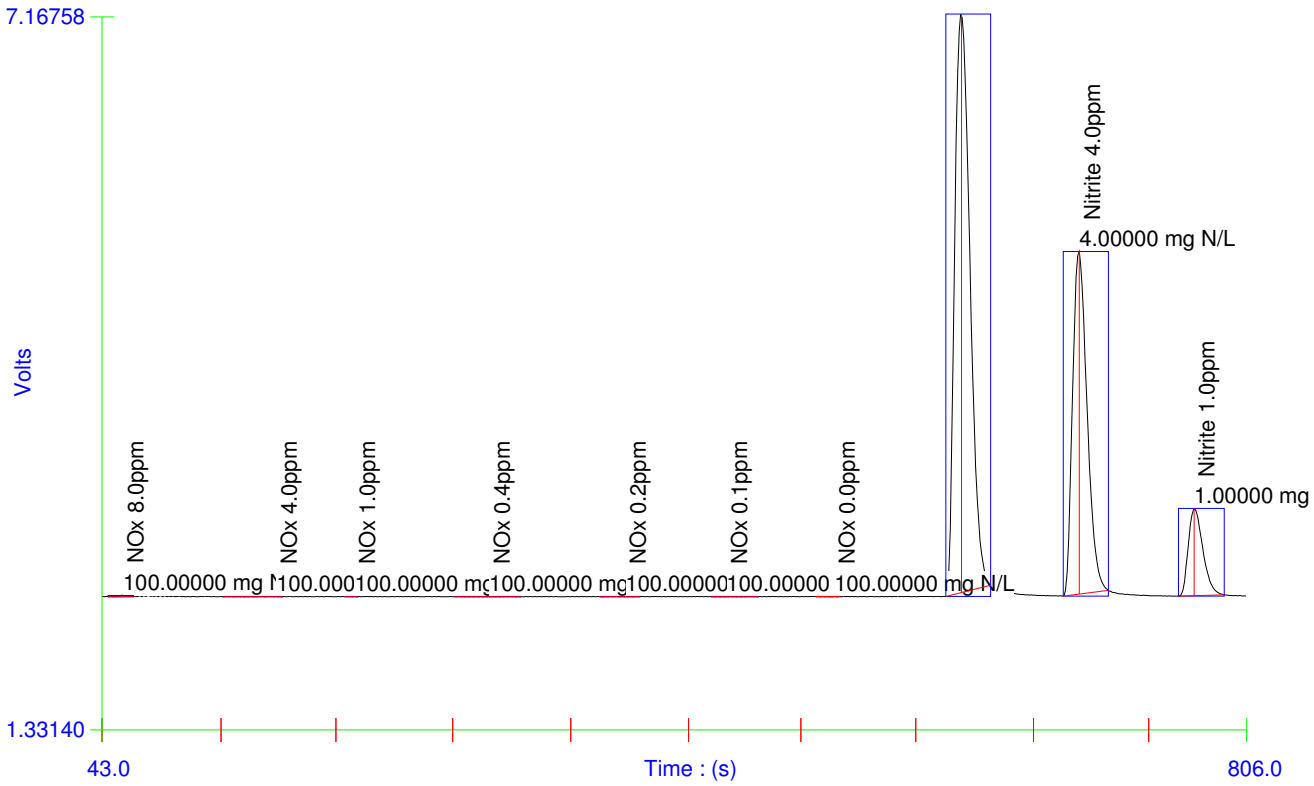


Channel 1 (NO3+NO2) - Set: 5 / 5



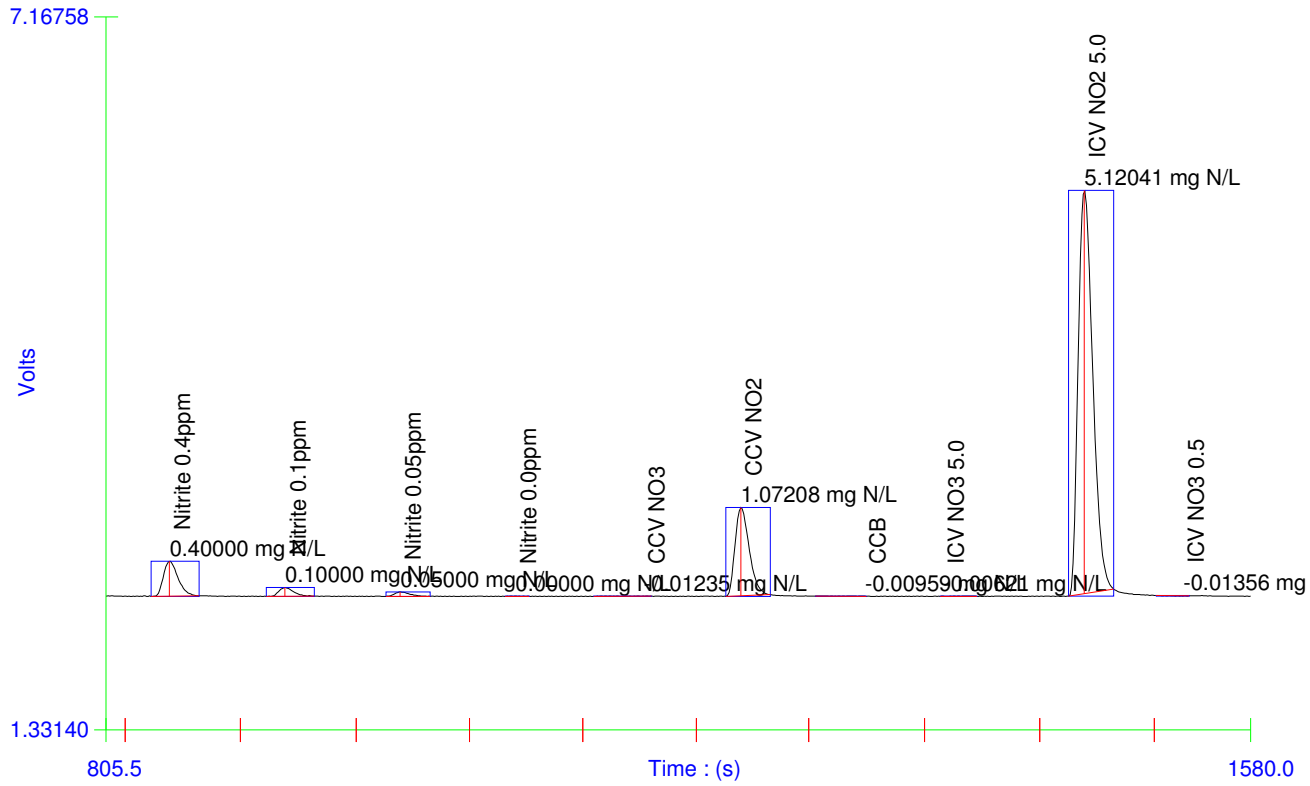
Author: KAF TRAY 1 Date : 240921-1

Channel 2 (NO2) - Set: 1 / 5



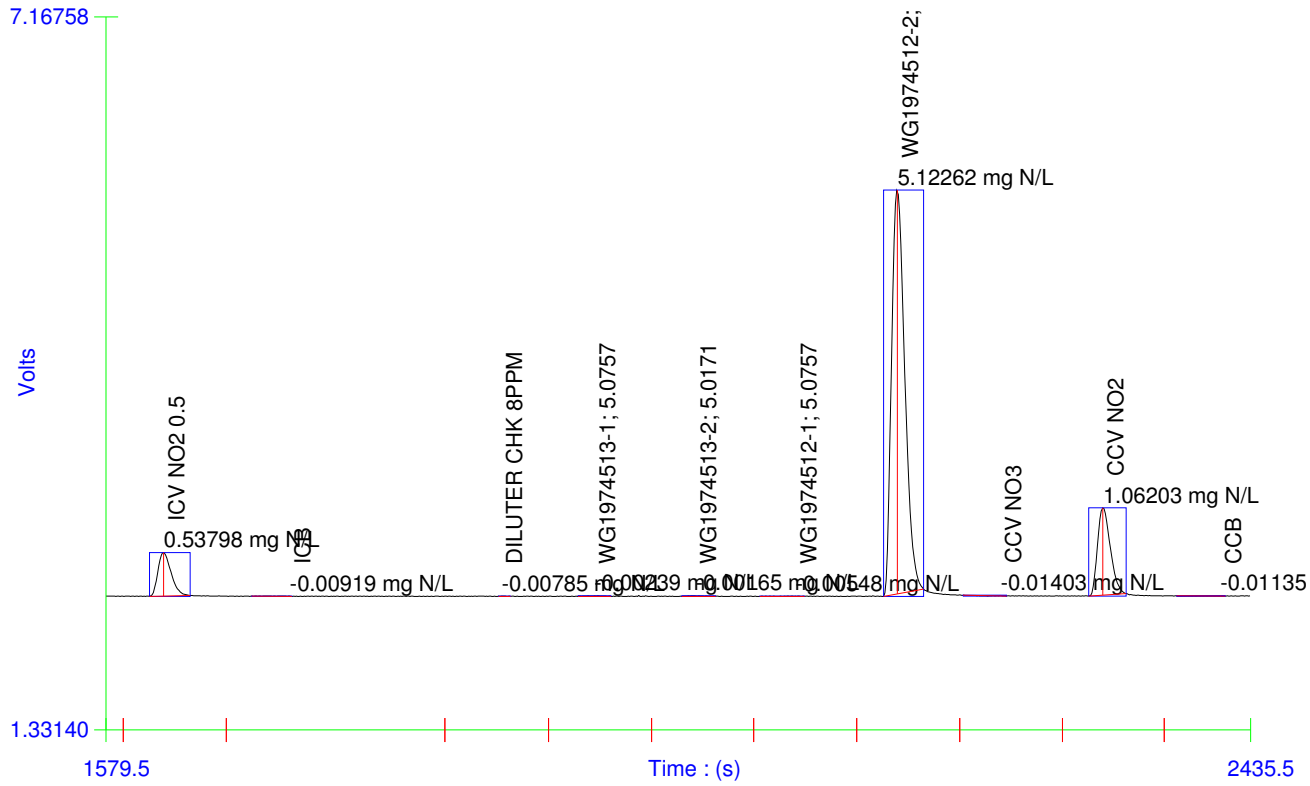
Author: KAF TRAY 1 Date : 240921-1

Channel 2 (NO2) - Set: 2 / 5

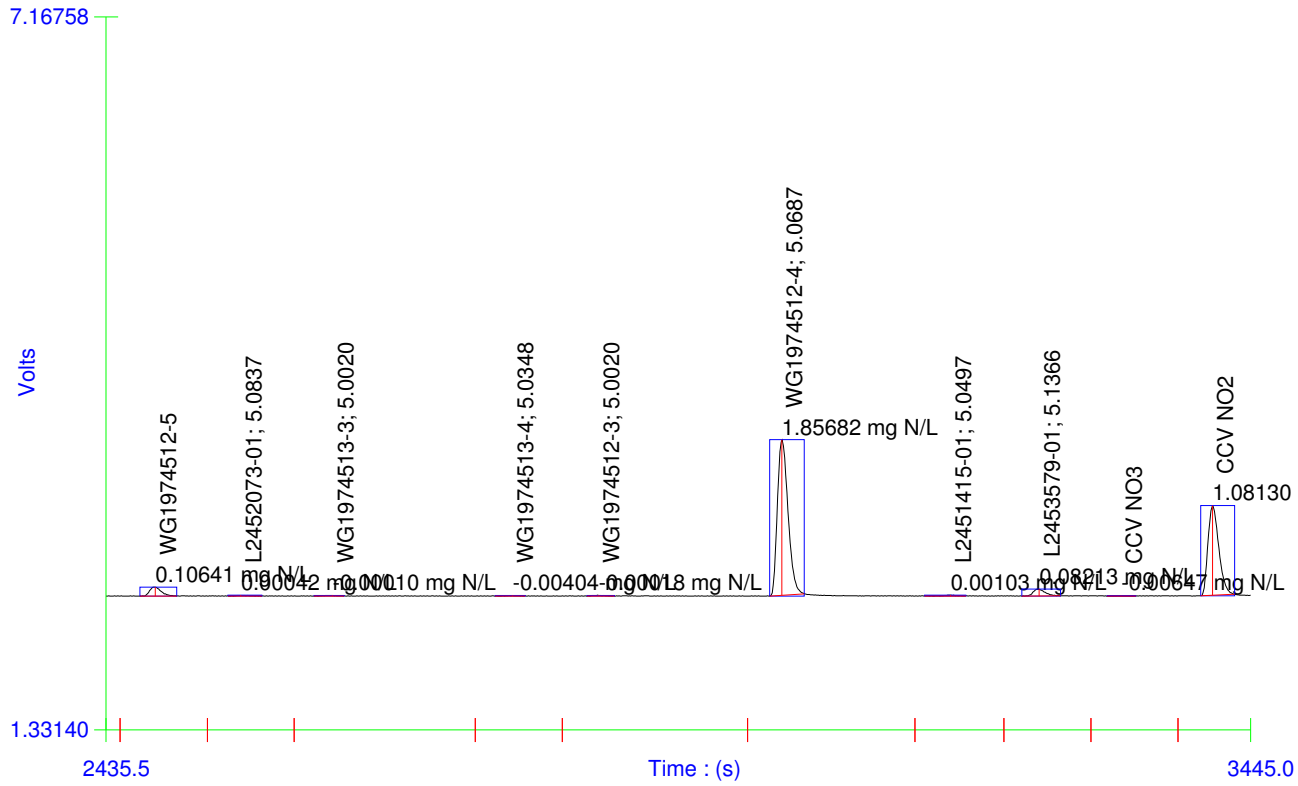


Author: KAF TRAY 1 Date : 240921-1

Channel 2 (NO2) - Set: 3 / 5



Channel 2 (NO2) - Set: 4 / 5



Channel 2 (NO2) - Set: 5 / 5

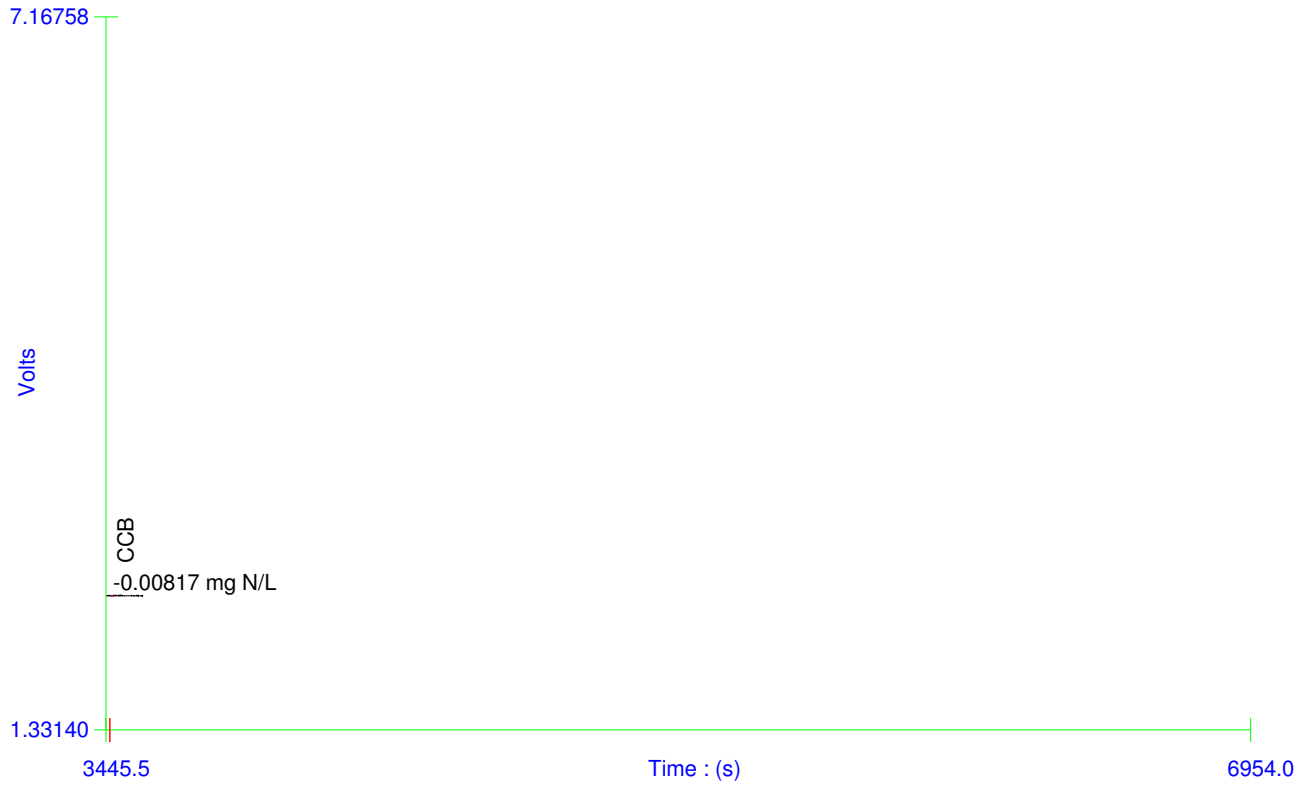



Table : 1 (NO3+NO2)

| | Known Conc. (mg/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.00000 | 1 | 17.73595 | 1.40413 | 0.0 | 0.9 | 7.92908 | 9/21/2024 | 8:30:02 AM |
| 2 | 4.00000 | 1 | 9.03329 | 0.72850 | 0.0 | -0.9 | 4.03645 | 9/21/2024 | 8:31:22 AM |
| 3 | 1.00000 | 1 | 2.27824 | 0.18382 | 0.0 | -1.5 | 1.01498 | 9/21/2024 | 8:32:39 AM |
| 4 | 0.40000 | 1 | 0.91928 | 0.07278 | 0.0 | -1.8 | 0.40713 | 9/21/2024 | 8:33:57 AM |
| 5 | 0.20000 | 1 | 0.46665 | 0.03663 | 0.0 | -2.3 | 0.20467 | 9/21/2024 | 8:35:15 AM |
| 6 | 0.10000 | 1 | 0.24361 | 0.01924 | 0.0 | -4.7 | 0.10491 | 9/21/2024 | 8:36:34 AM |
| 7 | 0.00000 | 1 | -0.01452 | -0.00180 | | | -0.01055 | 9/21/2024 | 8:37:49 AM |

Figure : 1 (NO3+NO2)

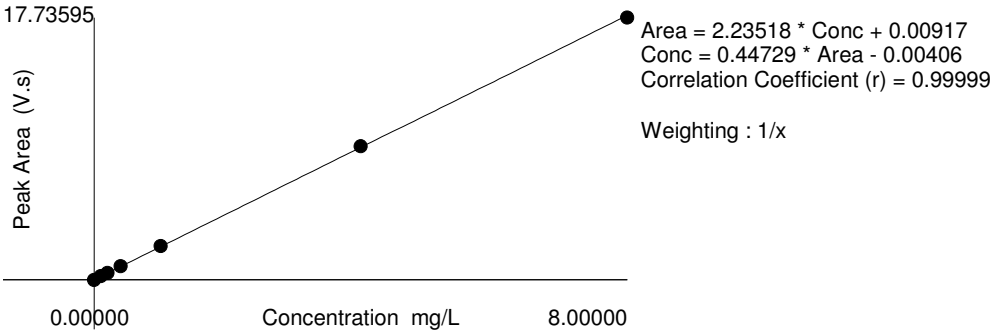
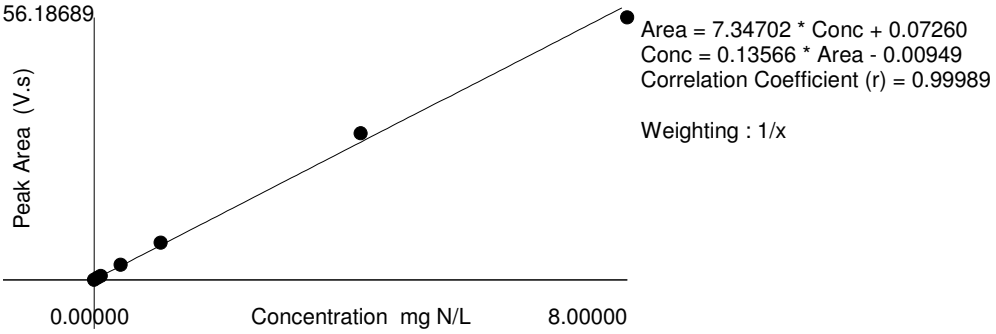


Table : 2 (Nitrite)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.00000 | 1 | 56.18689 | 4.73455 | 0.0 | 4.5 | 7.61308 | 9/21/2024 | 8:39:06 AM |
| 2 | 4.00000 | 1 | 31.33063 | 2.80328 | 0.0 | -6.3 | 4.24097 | 9/21/2024 | 8:40:25 AM |
| 3 | 1.00000 | 1 | 7.97721 | 0.71410 | 0.0 | -7.5 | 1.07274 | 9/21/2024 | 8:41:42 AM |
| 4 | 0.40000 | 1 | 3.24350 | 0.28589 | 0.0 | -7.7 | 0.43054 | 9/21/2024 | 8:42:59 AM |
| 5 | 0.10000 | 1 | 0.81773 | 0.07142 | 0.0 | -1.3 | 0.10145 | 9/21/2024 | 8:44:18 AM |
| 6 | 0.05000 | 1 | 0.43178 | 0.03656 | 0.0 | 1.9 | 0.04909 | 9/21/2024 | 8:45:36 AM |
| 7 | 0.00000 | 1 | 0.01193 | 0.00202 | | | -0.00787 | 9/21/2024 | 8:46:53 AM |

Figure : 2 (Nitrite)



# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1974476-4 | **MS Analysis Date** | : 09/21/24 06:23 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sample Conc. | Spike Added | Spike Conc. | %R | Spike Added | Spike Conc. | %R | RPD | Recovery Limits | RPD Limit |
| **Parameter** | (mg/l) | (mg/l) | (mg/l) | | (mg/l) | (mg/l) | | | | |
| **Nitrogen, Nitrate/Nitrite** | 0.93 | 4 | 5.2 | 107 | | | | | 80-120 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/21/24 06:20 |
| **Dup Sample ID** | : WG1974476-3 | **DUP Analysis Date** | : 09/21/24 06:21 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Nitrate/Nitrite | 0.93 | 0.94 | 1 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1974476-2 | **LCS Analysis Date** | : 09/21/24 04:54 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Nitrogen, Nitrate/Nitrite** | **5.00** | **5.20** | **104.** | | | | | **90-110** | **20** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 6 | 6 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 17 | 17 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 1 | 0.261 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |
| Nitrogen, Nitrite | NONE | 1 | 0.282 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

## Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

$$NO3\ mg/I = (NO3+NO2)\ mg/L - (NO2)\ mg/L$$

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO3)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

## Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO2)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

# Sequence Logs

| Date: | Initals: | Syringe Lot: | Syringe Lot: 20230620 |
|---|---|---|---|
| 092124 | KAF | Filter Lot: | Filter Lot: 18048470A |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| **19** | RA1 | ICV NO3 5 | *Buffer: NO3NO2_091924_BUFFER* |
| **20** | RA2 | ICV NO2 5 | *Color: NO3NO2_091824_COLOR* |
| **21** | RA3 | ICV NO3 0.5 | *NO3 MS: NO3_082924_200PPM_CAL* |
| **22** | RA4 | ICV NO2 0.5 | *NO2 MS: NO2_092124_200PPM_CAL* |
| **23** | RA5 | ICB | *ICV NO3 5: NO3_092124_5PPM_ICV* |
| **X** | RA6 | 5X DILUTER CHECK | *ICV NO2 5: NO2_091224_5PPM_ICV* |
| **24** | RA7 | BLANK NO3 | *ICV NO3 0.5: NO3_092124_0.5PPM_ICV* |
| **25** | RA8 | LCS NO3 | *ICV NO2 0.5: NO2_092124_0.5PPM_ICV* |
| **26** | RA9 | BLANK NO2 | |
| **27** | RA10 | LCS NO2 | |
| 31 | RA11 | WG1974468/469-1; NO2/563 | |
| 32 | RA12 | WG1974468/469-2; NO2/563 | |
| 33 | RA13 | WG1974470-1; NO3 | |
| 34 | RA14 | WG1974470-2; NO3 | |
| 35 | RA15 | WG1974471-1; NO3 | *OOH* |
| 36 | RA16 | WG1974471-2; NO3 | *DW* |
| 37 | RA17 | WG1974472-1; NO3 | GOING OOH |
| 38 | RA18 | WG1974472-2; NO3 | FIELD BLANK |
| 39 | RA19 | WG1974474-1; CNO3 | |
| 40 | RA20 | WG1974474-2; CNO3 | |
| 27 | RA21 | WG1974476-1; CNO3 | |
| 28 | RA22 | WG1974476-2; CNO3 | |
| 29 | RA23 | L2453990-01 | |
| 30 | RA24 | WG1974472-3; NO3 | |
| 31 | RA25 | WG1974472-4; NO3 | |
| 32 | RA26 | L2453990-02 | |
| 33 | RA27 | L2453990-03 | |
| 34 | RA28 | L2453990-04 | |
| 35 | RA29 | L2453990-05 | |
| 36 | RA30 | L2453990-06 | |
| 40 | RA31 | L2453990-07 | |
| 41 | RA32 | L2453990-08 | |
| 42 | RA33 | L2453990-09 | |
| 43 | RA34 | L2453576-06 | |
| 44 | RA35 | L2454051-01 | |
| 45 | RA36 | WG1974470-5; NO3 | |
| 46 | RA37 | WG1974470-6; NO3 | |
| 47 | RA38 | L2454051-02 | |
| 48 | RA39 | L2454051-03 | |
| 49 | RA40 | L2454051-04 | |
| 53 | RA41 | L2454051-05 | |
| 54 | RA42 | L2454181-02 | |
| 55 | RA43 | WG1974470-3; NO3 | |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| 56 | RA44 | WG1974470-4; NO3 | |
| 57 | RA45 | WG1974468-3; NO2 | |
| 58 | RA46 | WG1974468-4; NO2 | |
| 59; 131 | RA47 | L2454221-01 | |
| 60 | RA48 | L2454326-01 | |
| 61 | RA49 | L2454350-01 | |
| 62 | RA50 | L2454013-01 | |
| 66 | RA51 | L2454312-02 | |
| 67 | RA52 | L2454312-03 | |
| 68 | RA53 | L2454312-04 | |
| 69 | RA54 | L2454324-01 | |
| 70 | RA55 | WG1974471-3; NO3 | |
| 71 | RA56 | WG1974471-4; NO3 | |
| 72 | RA57 | WG1974469-3; NO2 | |
| 73 | RA58 | WG1974469-4; NO2 | |
| 74 | RA59 | L2454324-02 | |
| 75 | RA60 | L2454324-03 | |
| 79 | RA61 | L2454324-04 | |
| 80 | RA62 | L2454324-05 | |
| 81 | RA63 | L2454324-06 | |
| 82 | RA64 | L2454324-07 | |
| 83 | RA65 | L2452564-01 | |
| 84 | RA66 | L2452564-02 | |
| 85 | RA67 | L2453362-01 | |
| 86 | RA68 | WG1974474-3; CNO3 | |
| 87 | RA69 | WG1974474-4; CNO3 | |
| 88 | RA70 | L2453559-02 | |
| 92 | RA71 | L2453559-04 | |
| 93 | RA72 | L2453559-07 | |
| 94 | RA73 | L2453562-01 | |
| 95 | RA74 | L2453851-01 | |
| 96 | RA75 | L2453851-02 | |
| 97; 132 | RA76 | L2453950-01 | |
| 98 | RA77 | L2454072-01 | |
| 99 | RA78 | L2454081-01 | |
| 100 | RA79 | WG1974474-5; CNO3 | |
| 101 | RA80 | WG1974474-6; CNO3 | |
| 105 | RA81 | L2454081-02 | |
| 106 | RA82 | L2453053-01 | |
| 107 | RA83 | WG1974476-3; CNO3 | |
| 108 | RA84 | WG1974476-4; CNO3 | |
| 109 | RA85 | L2453053-02 | |
| 110 | RA86 | L2453053-03 | |
| 111 | RA87 | L2453053-04 | |
| 112 | RA88 | L2453053-05 | |
| 113 | RA89 | L2453123-02 | |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| 114 | RA90 | L2453131-01 | |
| 118 | RB1 | L2453131-02 | |
| 119 | RB2 | L2453342-01 | |
| 120 | RB3 | L2453342-02 | |
| 121 | RB4 | L2453342-03 | |
| 122 | RB5 | L2453342-04 | |
| 123 | RB6 | L2453342-05 | |
| 124 | RB7 | L2453342-06 | |
| 125 | RB8 | L2453342-07 | |
| 126 | RB9 | L2453342-08 | |
| 127 | RB10 | L2453342-10 | |
| | | | |
| 5 | RB11 | L2454201-01D | |
| 6 | RB12 | L2454201-02D | |
| 7 | RB13 | L2454201-03D | |
| 8 | RB14 | L2454201-04D | |
| 9 | RB15 | L2454309-01P | |
| 10 | RB16 | L2454275-01A | |
| 11 | RB17 | L2454263-01A | |
| 12 | RB18 | L2454277-02A | |
| 13 | RB19 | L2454338-01A | |
| | | | |
| 5 | RB20 | L2454218-01A | |
| 6 | RB21 | WG1974563-3; NO2 | |
| 7 | RB22 | WG1974563-4; NO2 | |
| | | | |
| 14 | RD1 | L2454181-02 | |
| 18 | RD2 | WG1974470-3 | |
| 19 | RD3 | WG1974470-4 | |
| 20; 5 | RD4 | L2453851-02 | |
| 6 | RD5 | l2454181-02 | |
| 7 | RD6 | WG1974470-3 | |
| 8 | RD7 | WG1974470-4 | |
| 9; 8 | RD8 | l2454338-01 | |
| 5 | RD9 | L2454181-02 | |
| 6 | RD10 | WG1974470-3 | |
| 7 | RD11 | WG1974470-4 | |

| Injection # | Rack # | Sample ID: | Comments: | | |
|---|---|---|---|---|---|
| | 1 | ICV NO3 5 | | | |
| | 2 | ICV NO2 5 | | | |
| | 3 | ICV NO3 0.5 | | | |
| | 4 | ICV NO2 0.5 | | | |
| | 5 | ICB | | | |
| | 6 | 5X DILUTER CHECK | | | |
| | 7 | WG1974513-1 | 5.0757 | 0.101514 | |
| | 8 | WG1974513-2 | 5.0171 | 0.100342 | 49.82958 |
| | 9 | WG1974512-1 | 5.0757 | 0.101514 | |
| | 10 | WG1974512-2 | 5.1100 | 0.1022 | 48.92368 |
| | 11 | WG1974512-5 | | | |
| | 12 | L2452073-01 | 5.0837 | 0.101674 | |
| | 13 | WG1974513-3 | 5.0020 | 0.10004 | |
| | 14 | WG1974513-4 | 5.0348 | 0.100696 | 79.44705 |
| | 15 | WG1974512-3 | 5.0020 | 0.10004 | |
| | 16 | WG1974512-4 | 5.0687 | 0.101374 | 78.9157 |
| | 17 | L2451415-01 | 5.0497 | 0.100994 | |
| | 18 | L2453579-01 | 5.1366 | 0.102732 | |

# Total Dissolved Solids Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 31. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-02 | **Date Collected** | : | 09/16/24 11:50 |
| **Client ID** | : | MW-1DR2 | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/19/24 17:18 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1.3 |
| **Analytical Method** | : | 121,2540C | **Analyst** | : | REM |
| **Lab File ID** | : | WG1973941.pdf | **Instrument ID** | : | BALANCE#22 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 78. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 79. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 92. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 79. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973941-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973941-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 5.0 | 10 | 3.1 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973941-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 71. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973941-4 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2DUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 17:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1.3 |
| **Analytical Method** | : 121,2540C | **Analyst** | : REM |
| **Lab File ID** | : WG1973941.pdf | **Instrument ID** | : BALANCE#22 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| NONE | Solids, Total Dissolved | 99. | 13 | 4.0 | |

# Sample Raw Data

# Wet Chemistry Gravimetric ELN

Printed: SEP-20-24 15:08:44

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WorkGroup** | WG1973941 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | | **Temp In (C)** | | | | | |
| **Title** | Solids, Total Dissolved | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | | **Temp Out (C)** | | | | | |
| **Method** | SM2540C | **Time In** | 20-SEP-24 06:50 | **Time In** | 20-SEP-24 09:40 | **Time In** | 20-SEP-24 13:08 | **Time In** | | **Time In** | | | | | |
| **Instrument** | BALANCE#22 | **Time Out** | 20-SEP-24 08:53 | **Time Out** | 20-SEP-24 11:50 | **Time Out** | 20-SEP-24 14:15 | **Time Out** | | **Time Out** | | | | | |

| **Evaporation** | **Temp In (C)** | **Time In** |
|---|---|---|
| | 90 | 19-SEP-24 21:30 |

| **LCS Lot #** | **TrueValue** | **Units** |
|---|---|---|
| 082724C | 500 | mg/l |

| Sample # | Analysis Date | Analyst | Cup ID | Filter Lot | Tare Weight (gm) | Sample Volume (ml) | Net Weight (1) (gm) | Net Weight (2) (gm) | Net Weight (3) (gm) | Net Weight (4) (gm) | Net Weight (5) (gm) | Result mg/L | Dil | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2451391-21 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | BC | 71913377 | 125.9194 | 80 | 125.9439 | 125.9454 | 125.9452 | | | 306.25 | 1.3 | |
| L2451391-22 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | BD | 71913377 | 101.471 | 30 | 101.4744 | 101.4747 | | | | 113.33 | 3.3 | MAT |
| L2451391-23 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | V9 | 71913377 | 65.0266 | 80 | 65.0402 | 65.0405 | | | | 170.00 | 1.3 | |
| L2451391-24 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | CE | 71913377 | 64.7218 | 80 | 64.7764 | 64.7761 | | | | 678.75 | 1.3 | |
| L2451391-25 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | BT | 71913377 | 123.7876 | 80 | 123.8079 | 123.8101 | 123.8082 | | | 253.75 | 1.3 | |
| L2451391-26 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | EU | 71913377 | 63.7389 | 50 | 63.7463 | 63.748 | 63.7476 | | | 148.00 | 2 | MAT |
| L2452564-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | XC | 71913377 | 64.8734 | 80 | 64.9038 | 64.9041 | | | | 380.00 | 1.3 | INFLUENT |
| L2452564-02 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | X9 | 71913377 | 60.9372 | 80 | 60.9639 | 60.965 | 60.9646 | | | 333.75 | 1.3 | EFFLUENT |
| L2452785-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | V7 | 71913377 | 70.6329 | 80 | 70.7495 | 70.7499 | | | | 1457.50 | 1.3 | T2 |
| L2452818-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | L4 | 71913377 | 60.4676 | 80 | 60.5011 | 60.5013 | | | | 418.75 | 1.3 | |
| L2452818-02 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | P3 | 71913377 | 66.9104 | 80 | 67.0049 | 67.0086 | 67.0086 | | | 1181.25 | 1.3 | |
| L2452818-04 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | OG | 71913377 | 138.4205 | 80 | 138.4593 | 138.4645 | 138.4648 | | | 485.00 | 1.3 | |

# Wet Chemistry Gravimetric ELN

Printed: SEP-20-24 15:08:44

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WorkGroup** | WG1973941 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | | **Temp In (C)** | | | | | |
| **Title** | Solids, Total Dissolved | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | | **Temp Out (C)** | | | | | |
| **Method** | SM2540C | **Time In** | 20-SEP-24 06:50 | **Time In** | 20-SEP-24 09:40 | **Time In** | 20-SEP-24 13:08 | **Time In** | | **Time In** | | | | | |
| **Instrument** | BALANCE#22 | **Time Out** | 20-SEP-24 08:53 | **Time Out** | 20-SEP-24 11:50 | **Time Out** | 20-SEP-24 14:15 | **Time Out** | | **Time Out** | | | | | |

| **Temp In (C)** | **Time In** |
|---|---|
| 90 | 19-SEP-24 21:30 |

| **LCS Lot #** | **TrueValue** | **Units** |
|---|---|---|
| 082724C | 500 | mg/l |

| Sample # | Analysis Date | Analyst | Cup ID | | | Sample Volume (ml) | | | | | Result mg/L | Dil | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2452818-05 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | W12 | 71913377 | 64.6761 | 80 | 64.7797 | 64.7797 | | | 1295.00 | 1.3 | |
| L2452896-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | AA3 | 71913377 | 60.2615 | 80 | 60.2644 | 60.2644 | | | 36.25 | 1.3 | |
| L2452950-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | W44 | 71913377 | 72.5794 | 80 | 72.5979 | 72.6008 | 72.6011 | | 231.25 | 1.3 | |
| L2453053-01 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | VI | 71913377 | 68.4608 | 80 | 68.4633 | 68.4634 | | | 31.25 | 1.3 | |
| L2453053-02 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | RG | 71913377 | 137.1496 | 80 | 137.1558 | 137.156 | | | 77.50 | 1.3 | |
| L2453053-03 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | MQ | 71913377 | 89.4488 | 80 | 89.4551 | 89.4581 | 89.458 | | 78.75 | 1.3 | |
| L2453053-04 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | EX | 71913377 | 66.3264 | 80 | 66.3338 | 66.3342 | | | 92.50 | 1.3 | |
| L2453053-05 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | CD | 71913377 | 69.1141 | 80 | 69.1204 | 69.1204 | | | 78.75 | 1.3 | |
| WG1973941-1 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | FD | 71913377 | 66.0933 | 100 | 66.0938 | 66.0938 | | | 5.00 | 1 | |
| WG1973941-2 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | BR | 71913377 | 119.4535 | 50 | 119.4772 | 119.4771 | | | 472.00 | 2 | |
| WG1973941-3 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | XB | 71913377 | 71.075 | 80 | 71.0807 | 71.0807 | | | 71.25 | 1.3 | |
| WG1973941-4 | 19-SEP-24 17:18 | RENATA MUKHAMETZHANOVA | F | 71913377 | 59.1642 | 80 | 59.1721 | 59.1725 | | | 98.75 | 1.3 | |

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/19/24 17:18 |
| **Dup Sample ID** | : WG1973941-3 | **DUP Analysis Date** | : 09/19/24 17:18 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 31. | 71. | 78 Q | 10 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1DR2 | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-02 | **Analysis Date** | : 09/19/24 17:18 |
| **Dup Sample ID** | : WG1973941-4 | **DUP Analysis Date** | : 09/19/24 17:18 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 78. | 99. | 24 Q | 10 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973941-2 | **LCS Analysis Date** | : 09/19/24 17:18 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Solids, Total Dissolved** | **500.** | **470.** | **94.** | | | | | **80-120** | **10** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Solids, Total Dissolved | NONE | 10 | 3.07 | mg/l | 80-120 | | | 10 | 10 | 2540C | 7 days | 1 - Plastic 500ml unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

8 Walkup Drive, Westborough, Massachusetts 01581 • 508-898-9220 • www.alphalab.com
Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA

# Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

# Sulfate Analysis

# Results

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-01 | **Date Collected** | : | 09/16/24 11:10 |
| **Client ID** | : | MW-1SR | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/22/24 16:00 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500SO4-E | **Analyst** | : | MRW |
| **Lab File ID** | : | WG1974798.csv | **Instrument ID** | : | SPEC6 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 3.8 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 16. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 5.8 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 25. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 14. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974798-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974798-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 2.1 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974798-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/22/24 16:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500SO4-E | **Analyst** | : MRW |
| **Lab File ID** | : WG1974798.csv | **Instrument ID** | : SPEC6 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/22/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 14808-79-8 | Sulfate | 3.8 | 10 | 1.4 | J |

# Sample Raw Data

**ALPHA ANALYTICAL LABS**

# WET CHEMISTRY DEPARTMENT

**S U L F A T E**

Last Change 3/5/13
File SO4-L.xlt
Curve/spike/ccv;wc3437
LCS;wc3373

**Sample Number:** _____ **Product:** **SO4-4500** **Reagent;lot A4117**
**Curve Calibration Date :** 09/22/24 Pippette/s: 322, 424
**Client:** _____ **Curve Identifier:** 9/22/2024 Acrodisk: FJ5503
**Analysis:** **Sulfate, SO4** **Analysis Analyte:** **Sulfate** **Syringe: 2125536**
**Method:** **SM 4500SO4-E** **Analysis Date:** 9/22/2024 16:00
**Instrument:** **SPEC6** **Preparation Date:** 9/22/2024 16:00
**Wavelength:** **420 nm** **Technician:** MRW
**Spike Volume(ml):** **0.5** **Work group:** WG1974798
**Spike Concentration (mg/l):** **1000** **RL:** **10 mg/l**
**Cell:** **2.5 cm**

| Standard ID | Mean signal (pk area) abs | Dilution | Calc-ed Result |
|---|---|---|---|
| 0 | 0.000 | 1.0 | 1.86 |
| 10 | 0.155 | 1.0 | 8.32 |
| 20 | 0.406 | 1.0 | 18.8 |
| 40 | 0.939 | 1.0 | 41.0 |

**Calibration Curve**
Volume: 25 ml

| Slope | y-intercept |
|---|---|
| 0.023977 | -0.0446 |

**Correlation Coefficient**
0.995026

**ICV/LCS Concentration (mg/l) =** 20.0000

| | Sample number | Sample Volume (ml) | Final Volume (ml) | Bkgd. Abs. | Gross Abs. | Net Absorbance | RESULT (mg/l) | Dilution Factor | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 25 | 25 | 0 | 0.001 | 0.001 | 2.057 | 1 | 1.0 | 2.1 | Recovery |
| | ICV | 25 | 25 | 0 | 0.406 | 0.406 | 18.780 | 1 | 1.0 | 18.8 | 94% |
| SAMP | L2453049-01 | 25 | 25 | 0.066 | 0.646 | 0.580 | 25.965 | 1 | 1.0 | 26.0 | |
| SAMP | L2453049-02 | 25 | 25 | 0.114 | 0.759 | 0.645 | 28.649 | 1 | 1.0 | 28.6 | |
| SAMP | L2453049-03 | 25 | 25 | 0.193 | 0.612 | 0.419 | 19.317 | 1 | 1.0 | 19.3 | |
| SAMP | L2453049-04 | 25 | 25 | 0.083 | 0.744 | 0.661 | 29.310 | 1 | 1.0 | 29.3 | |
| SAMP | L2453053-01 | 25 | 25 | 0.005 | 0.049 | 0.044 | 3.832 | 1 | 1.0 | 3.8 | |
| SAMP | L2453053-02 | 25 | 25 | 0.014 | 0.357 | 0.343 | 16.179 | 1 | 1.0 | 16.2 | |
| SAMP | L2453053-03 | 25 | 25 | 0.005 | 0.096 | 0.091 | 5.773 | 1 | 1.0 | 5.8 | |
| SAMP | L2453053-04 | 25 | 25 | 0.046 | 0.595 | 0.549 | 24.685 | 1 | 1.0 | 24.7 | |
| | CCV1 | 25 | 25 | 0 | 0.403 | 0.403 | 18.656 | 1 | 1.0 | 18.7 | |
| | CCB1 | 25 | 25 | 0 | 0.003 | 0.003 | 2.139 | 1 | 1.0 | 2.1 | |
| SAMP | L2453053-05 | 25 | 25 | 0.016 | 0.302 | 0.286 | 13.825 | 1 | 1.0 | 13.8 | |
| | CCV2 | 25 | 25 | 0 | 0.401 | 0.401 | 18.574 | 1 | 1.0 | 18.6 | |
| | CCB2 | 25 | 25 | 0 | 0.003 | 0.003 | 2.139 | 1 | 1.0 | 2.1 | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| BLANK | WG1974798-1 | 25 | 25 | 0.000 | 0.001 | 0.001 | 2.057 | 1 | 1.0 | 2.1 | |
| DUP | WG1974798-3 | 25 | 25 | 0.005 | 0.048 | 0.043 | 3.791 | 1 | 1.0 | 3.8 | L2453053-01 |

| | Sample number | sample volume | Final volume (ml) | Bkgd. Abs. | Gross Abs. | Absorbance | Sample Result mg/l | Spiked Volume | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG1974798-4 | 12.5 | 25 | 0.003 | 0.504 | 0.501 | 0.000 | 12.5 | 40.0000 | 45 | 114 |
| | | | | | | | | | | | L2453053-01 |
| LCS | WG1974798-2 | 25 | 25 | 0 | 0.406 | 0.406 | | 1 | 20.0000 | 19 | 94 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1974798-4 | **MS Analysis Date** | : 09/22/24 16:00 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 3.8J | 40 | 45. | 112 | | | | | 55-147 | 14 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/22/24 16:00 |
| **Dup Sample ID** | : WG1974798-3 | **DUP Analysis Date** | : 09/22/24 16:00 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Sulfate | 3.8J | 3.8J | NC | 14 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1974798-2 | **LCS Analysis Date** | : 09/22/24 16:00 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Sulfate** | **20.0** | **19.0** | **95.** | | | | | **90-110** | **14** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 4500SO4-E | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 9038 | 28 days | 1 - Plastic 500ml unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 100 | 13.6 | mg/kg | 80-121 | 12 | 22-183 | 12 | 12 | 9038 | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

# Calculations of Sulfate

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve.

$$mgSO_4/L = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

If sample has a background absorbance, it has to be subtracted before calculation.

# Alkalinity Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 04:44 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 60.0 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 04:53 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 35.6 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 04:55 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 106. | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 04:58 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 39.1 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 05:00 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 35.1 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974042-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974042-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 06:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | ND | 2.00 | NA | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974042-3 | **Date Collected** | : 09/17/24 09:25 |
| **Client ID** | : WG1974042-3 DUP | **Date Received** | : 09/17/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 05:18 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 71-52-3 | Alkalinity, Bicarbonate | 41.8 | 2.00 | NA | |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974042-5 | **Date Collected** | : 09/17/24 09:21 |
| **Client ID** | : WG1974042-5 DUP | **Date Received** | : 09/17/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 05:42 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 71-52-3 | Alkalinity, Bicarbonate | 18.0 | 2.00 | NA | |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974042-7 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 04:46 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,2320B | **Analyst** | : MRM |
| **Lab File ID** | : ALK240920-A1 | **Instrument ID** | : TITR5 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 71-52-3 | Alkalinity, Bicarbonate | 56.9 | 2.00 | NA | |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |

# Sample Raw Data

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | pH Cal. 7 4 10 | **Release state** | Released |
| **Name** | Calibration | **Modified by** | SystemInternal |
| **Modified on** | 10/3/2023 12:47:09 PM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | METTLER TOLEDO (Ref. 25°C) pH | pH | 7.00 | |
| 2 | METTLER TOLEDO (Ref. 25°C) pH | pH | 4.01 | |
| 3 | METTLER TOLEDO (Ref. 25°C) pH | pH | 10.00 | |

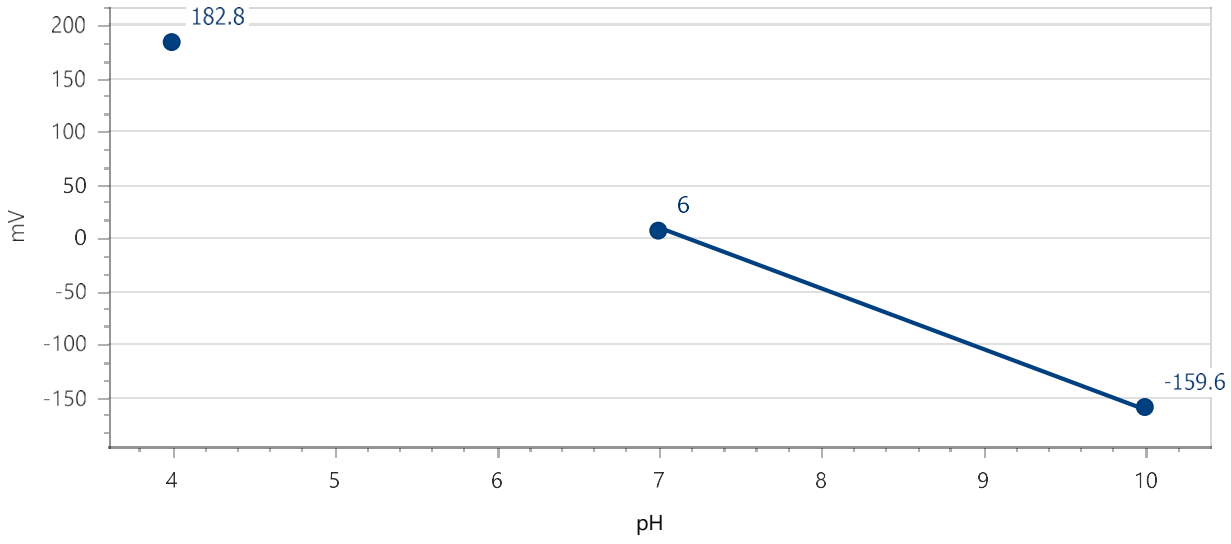
### Results

| | |
|---|---|
| **Zero point 1 Cal1.Z1** | 7.174 pH |
| **Slope 1 Cal1.S1** | -57.16 mV/pH |

### Calibration

| | |
|---|---|
| **Sensor** | Sensor DG111-SC |
| **Creation time** | 9/20/2024 3:14:37 AM |
| **Overall state** | OK |
| **Successful** | Yes |
| **Calib. temperature** | 25.0 °C |
| **SLOPECal** | -57.16 mV/pH |
| **ZEROCal** | 7.174 pH |

## Calibration Curve




## Used Instruments

# Titration report

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 9/20/2024 3:10:08 AM | SystemInternal | System internal account |

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | pH Measure | **Release state** | Released |
| **Name** | Measure | **Modified by** | SystemInternal |
| **Modified on** | 2/23/2024 9:31:05 AM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | -- | Sample size | 0 mL | |
| | | Potential R1 | 7.05 pH | OK |

## Used Instruments

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 9/20/2024 3:28:17 AM | SystemInternal | System internal account |

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | Alk Total (2) | **Release state** | Released |
| **Name** | EP/EP | **Modified by** | SystemInternal |
| **Modified on** | 10/14/2023 11:44:43 AM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 7.08 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.804 mL | OK |
| | | Consumption 4.2 R3 | 0.810 mL | OK |
| | | Content R5 | 16.080 mg/L | OK |
| | | ALK LOW R6 | 15.960 mg/L | OK |
| 2 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 5.21 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.044 mL | OK |
| | | Consumption 4.2 R3 | 0.047 mL | OK |
| | | Content R5 | 0.880 mg/L | OK |
| | | ALK LOW R6 | 0.820 mg/L | OK |
| 3 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 5.18 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.037 mL | OK |
| | | Consumption 4.2 R3 | 0.042 mL | OK |
| | | Content R5 | 0.740 mg/L | OK |
| | | ALK LOW R6 | 0.640 mg/L | OK |
| 4 | WG1974041-1 | Sample size | 50 mL | |
| | | Potential R4 | 5.10 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.032 mL | OK |
| | | Consumption 4.2 R3 | 0.037 mL | OK |
| | | Content R5 | 0.640 mg/L | OK |
| | | ALK LOW R6 | 0.540 mg/L | OK |
| 5 | WG1974041-2 | Sample size | 50 mL | |
| | | Potential R4 | 10.62 pH | OK |
| | | Consumption 8.3 R1 | 4.738 mL | OK |
| | | Consumption 4.5 R2 | 5.142 mL | OK |
| | | Consumption 4.2 R3 | 5.146 mL | OK |
| | | Content R5 | 102.840 mg/L | OK |
| | | ALK LOW R6 | 102.760 mg/L | OK |
| 6 | L2453084-06 | Sample size | 50 mL | |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Potential R4 | 6.03 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 11.919 mL | OK |
| | | Consumption 4.2 R3 | 12.047 mL | OK |
| | | Content R5 | 238.380 mg/L | OK |
| | | ALK LOW R6 | 235.820 mg/L | OK |
| 7 | L2453084-07 | Sample size | 50 mL | |
| | | Potential R4 | 6.14 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 10.320 mL | OK |
| | | Consumption 4.2 R3 | 10.417 mL | OK |
| | | Content R5 | 206.400 mg/L | OK |
| | | ALK LOW R6 | 204.460 mg/L | OK |
| 8 | L2453084-08 | Sample size | 50 mL | |
| | | Potential R4 | 6.10 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 9.684 mL | OK |
| | | Consumption 4.2 R3 | 9.762 mL | OK |
| | | Content R5 | 193.680 mg/L | OK |
| | | ALK LOW R6 | 192.120 mg/L | OK |
| 9 | L2453084-09 | Sample size | 50 mL | |
| | | Potential R4 | 5.85 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 7.776 mL | OK |
| | | Consumption 4.2 R3 | 7.890 mL | OK |
| | | Content R5 | 155.520 mg/L | OK |
| | | ALK LOW R6 | 153.240 mg/L | OK |
| 10 | L2453084-10 | Sample size | 50 mL | |
| | | Potential R4 | 5.70 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.694 mL | OK |
| | | Consumption 4.2 R3 | 2.709 mL | OK |
| | | Content R5 | 53.880 mg/L | OK |
| | | ALK LOW R6 | 53.580 mg/L | OK |
| 11 | L2453084-11 | Sample size | 50 mL | |
| | | Potential R4 | 5.66 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.394 mL | OK |
| | | Consumption 4.2 R3 | 2.411 mL | OK |
| | | Content R5 | 47.880 mg/L | OK |
| | | ALK LOW R6 | 47.540 mg/L | OK |
| 12 | L2453084-12 | Sample size | 50 mL | |
| | | Potential R4 | 5.14 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.602 mL | OK |
| | | Consumption 4.2 R3 | 0.629 mL | OK |
| | | Content R5 | 12.040 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | ALK LOW R6 | 11.500 mg/L | OK |
| 13 | L2453084-13 | Sample size | 50 mL | |
| | | Potential R4 | 5.28 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.189 mL | OK |
| | | Consumption 4.2 R3 | 1.219 mL | OK |
| | | Content R5 | 23.780 mg/L | OK |
| | | ALK LOW R6 | 23.180 mg/L | OK |
| 14 | L2453084-15 | Sample size | 50 mL | |
| | | Potential R4 | 5.90 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 6.859 mL | OK |
| | | Consumption 4.2 R3 | 6.919 mL | OK |
| | | Content R5 | 137.180 mg/L | OK |
| | | ALK LOW R6 | 135.980 mg/L | OK |
| 15 | L2453084-16 | Sample size | 50 mL | |
| | | Potential R4 | 5.80 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.319 mL | OK |
| | | Consumption 4.2 R3 | 4.355 mL | OK |
| | | Content R5 | 86.380 mg/L | OK |
| | | ALK LOW R6 | 85.660 mg/L | OK |
| 16 | L2453250-01 | Sample size | 50 mL | |
| | | Potential R4 | 9.56 pH | OK |
| | | Consumption 8.3 R1 | 3.428 mL | OK |
| | | Consumption 4.5 R2 | 8.094 mL | OK |
| | | Consumption 4.2 R3 | 8.268 mL | OK |
| | | Content R5 | 161.880 mg/L | OK |
| | | ALK LOW R6 | 158.400 mg/L | OK |
| 17 | WG1974041-3 | Sample size | 50 mL | |
| | | Potential R4 | 9.57 pH | OK |
| | | Consumption 8.3 R1 | 3.303 mL | OK |
| | | Consumption 4.5 R2 | 7.825 mL | OK |
| | | Consumption 4.2 R3 | 7.991 mL | OK |
| | | Content R5 | 156.500 mg/L | OK |
| | | ALK LOW R6 | 153.180 mg/L | OK |
| 18 | WG1974041-4 | Sample size | 50 mL | |
| | | Potential R4 | 10.49 pH | OK |
| | | Consumption 8.3 R1 | 7.489 mL | OK |
| | | Consumption 4.5 R2 | 12.761 mL | OK |
| | | Consumption 4.2 R3 | 13.269 mL | OK |
| | | Content R5 | 255.220 mg/L | OK |
| | | ALK LOW R6 | 245.060 mg/L | OK |
| 19 | L2453053-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.85 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.001 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 4.2 R3 | 3.033 mL | OK |
| | | Content R5 | 60.020 mg/L | OK |
| | | ALK LOW R6 | 59.380 mg/L | OK |
| 20 | WG1974042-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.72 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.843 mL | OK |
| | | Consumption 4.2 R3 | 2.868 mL | OK |
| | | Content R5 | 56.860 mg/L | OK |
| | | ALK LOW R6 | 56.360 mg/L | OK |
| 21 | WG1974042-4 | Sample size | 50 mL | |
| | | Potential R4 | 9.99 pH | OK |
| | | Consumption 8.3 R1 | 4.418 mL | OK |
| | | Consumption 4.5 R2 | 8.411 mL | OK |
| | | Consumption 4.2 R3 | 8.424 mL | OK |
| | | Content R5 | 168.220 mg/L | OK |
| | | ALK LOW R6 | 167.960 mg/L | OK |
| 22 | L2453053-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.57 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.782 mL | OK |
| | | Consumption 4.2 R3 | 1.808 mL | OK |
| | | Content R5 | 35.640 mg/L | OK |
| | | ALK LOW R6 | 35.120 mg/L | OK |
| 23 | L2453053-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.83 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 5.307 mL | OK |
| | | Consumption 4.2 R3 | 5.387 mL | OK |
| | | Content R5 | 106.140 mg/L | OK |
| | | ALK LOW R6 | 104.540 mg/L | OK |
| 24 | L2453053-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.63 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.954 mL | OK |
| | | Consumption 4.2 R3 | 1.979 mL | OK |
| | | Content R5 | 39.080 mg/L | OK |
| | | ALK LOW R6 | 38.580 mg/L | OK |
| 25 | L2453053-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.57 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.755 mL | OK |
| | | Consumption 4.2 R3 | 1.776 mL | OK |
| | | Content R5 | 35.100 mg/L | OK |
| | | ALK LOW R6 | 34.680 mg/L | OK |
| 26 | L2453342-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.80 pH | OK |

# Titration report

LabX

| | | | | |
|---|---|---|---|---|
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.159 mL | OK |
| | | Consumption 4.2 R3 | 3.203 mL | OK |
| | | Content R5 | 63.180 mg/L | OK |
| | | ALK LOW R6 | 62.300 mg/L | OK |
| 27 | L2453342-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.65 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.448 mL | OK |
| | | Consumption 4.2 R3 | 2.487 mL | OK |
| | | Content R5 | 48.960 mg/L | OK |
| | | ALK LOW R6 | 48.180 mg/L | OK |
| 28 | L2453342-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.51 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.974 mL | OK |
| | | Consumption 4.2 R3 | 0.988 mL | OK |
| | | Content R5 | 19.480 mg/L | OK |
| | | ALK LOW R6 | 19.200 mg/L | OK |
| 29 | L2453342-04 | Sample size | 50 mL | |
| | | Potential R4 | 6.02 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 13.257 mL | OK |
| | | Consumption 4.2 R3 | 13.453 mL | OK |
| | | Content R5 | 265.140 mg/L | OK |
| | | ALK LOW R6 | 261.220 mg/L | OK |
| 30 | L2453342-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.74 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.206 mL | OK |
| | | Consumption 4.2 R3 | 2.220 mL | OK |
| | | Content R5 | 44.120 mg/L | OK |
| | | ALK LOW R6 | 43.840 mg/L | OK |
| 31 | WG1974042-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.74 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.092 mL | OK |
| | | Consumption 4.2 R3 | 2.102 mL | OK |
| | | Content R5 | 41.840 mg/L | OK |
| | | ALK LOW R6 | 41.640 mg/L | OK |
| 32 | WG1974042-4 | Sample size | 50 mL | |
| | | Potential R4 | 10.31 pH | OK |
| | | Consumption 8.3 R1 | 5.217 mL | OK |
| | | Consumption 4.5 R2 | 7.658 mL | OK |
| | | Consumption 4.2 R3 | 7.664 mL | OK |
| | | Content R5 | 153.160 mg/L | OK |
| | | ALK LOW R6 | 153.040 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| 33 | L2453342-06 | Sample size | 50 mL | |
| | | Potential R4 | 5.52 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.886 mL | OK |
| | | Consumption 4.2 R3 | 0.915 mL | OK |
| | | Content R5 | 17.720 mg/L | OK |
| | | ALK LOW R6 | 17.140 mg/L | OK |
| 34 | WG1974042-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.36 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.935 mL | OK |
| | | Consumption 4.2 R3 | 0.971 mL | OK |
| | | Content R5 | 18.700 mg/L | OK |
| | | ALK LOW R6 | 17.980 mg/L | OK |
| 35 | WG1974042-4 | Sample size | 50 mL | |
| | | Potential R4 | 9.50 pH | OK |
| | | Consumption 8.3 R1 | 2.533 mL | OK |
| | | Consumption 4.5 R2 | 6.332 mL | OK |
| | | Consumption 4.2 R3 | 6.341 mL | OK |
| | | Content R5 | 126.640 mg/L | OK |
| | | ALK LOW R6 | 126.460 mg/L | OK |
| 36 | L2453342-07 | Sample size | 50 mL | |
| | | Potential R4 | 5.65 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.215 mL | OK |
| | | Consumption 4.2 R3 | 2.240 mL | OK |
| | | Content R5 | 44.300 mg/L | OK |
| | | ALK LOW R6 | 43.800 mg/L | OK |
| 37 | L2453342-08 | Sample size | 50 mL | |
| | | Potential R4 | 6.03 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 9.278 mL | OK |
| | | Consumption 4.2 R3 | 9.374 mL | OK |
| | | Content R5 | 185.560 mg/L | OK |
| | | ALK LOW R6 | 183.640 mg/L | OK |
| 38 | L2453342-10 | Sample size | 50 mL | |
| | | Potential R4 | 5.45 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.076 mL | OK |
| | | Consumption 4.2 R3 | 0.081 mL | OK |
| | | Content R5 | 1.520 mg/L | OK |
| | | ALK LOW R6 | 1.420 mg/L | OK |
| 39 | L2453342-10 | Sample size | 50 mL | |
| | | Potential R4 | 5.31 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.073 mL | OK |
| | | Consumption 4.2 R3 | 0.079 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Content R5 | 1.460 mg/L | OK |
| | | ALK LOW R6 | 1.340 mg/L | OK |
| 40 | WG1974042-2 | Sample size | 50 mL | |
| | | Potential R4 | 11.00 pH | OK |
| | | Consumption 8.3 R1 | 4.811 mL | OK |
| | | Consumption 4.5 R2 | 5.182 mL | OK |
| | | Consumption 4.2 R3 | 5.186 mL | OK |
| | | Content R5 | 103.640 mg/L | OK |
| | | ALK LOW R6 | 103.560 mg/L | OK |
| 41 | WG1974042-1 | Sample size | 50 mL | |
| | | Potential R4 | 5.29 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.049 mL | OK |
| | | Consumption 4.2 R3 | 0.054 mL | OK |
| | | Content R5 | 0.980 mg/L | OK |
| | | ALK LOW R6 | 0.880 mg/L | OK |
| 42 | CCV | Sample size | 50 mL | |
| | | Potential R4 | 10.83 pH | OK |
| | | Consumption 8.3 R1 | 4.740 mL | OK |
| | | Consumption 4.5 R2 | 5.073 mL | OK |
| | | Consumption 4.2 R3 | 5.079 mL | OK |
| | | Content R5 | 101.460 mg/L | OK |
| | | ALK LOW R6 | 101.340 mg/L | OK |
| 43 | CCB | Sample size | 50 mL | |
| | | Potential R4 | 5.30 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.067 mL | OK |
| | | Consumption 4.2 R3 | 0.075 mL | OK |
| | | Content R5 | 1.340 mg/L | OK |
| | | ALK LOW R6 | 1.180 mg/L | OK |

## Statistics

### R1

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 7.489 mL | **Minimum** | 2.533 mL |
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 43 | **Samples excluded** | 0 |

### R2

| | | | |
|---|---|---|---|
| **Mean** | 4.175 mL | | |
| **Maximum** | 13.257 mL | **Minimum** | 0.032 mL |
| **Standard deviation** | 3.850 mL | **Rel. standard deviation** | 92.225 % |
| **Total samples** | 43 | **Samples excluded** | 0 |

### R3

# Titration report

| | | | |
|---|---|---|---|
| **Mean** | 4.227 mL | | |
| **Maximum** | 13.453 mL | **Minimum** | 0.037 mL |
| **Standard deviation** | 3.910 mL | **Rel. standard deviation** | 92.501 % |
| **Total samples** | 43 | **Samples excluded** | 0 |

### R4

| | | | |
|---|---|---|---|
| **Mean** | 6.62 pH | | |
| **Maximum** | 11.00 pH | **Minimum** | 5.10 pH |
| **Standard deviation** | 1.92 pH | **Rel. standard deviation** | 28.945 % |
| **Total samples** | 43 | **Samples excluded** | 0 |

### R5

| | | | |
|---|---|---|---|
| **Mean** | 83.492 mg/L | | |
| **Maximum** | 265.140 mg/L | **Minimum** | 0.640 mg/L |
| **Standard deviation** | 77.001 mg/L | **Rel. standard deviation** | 92.225 % |
| **Total samples** | 43 | **Samples excluded** | 0 |

### R6

| | | | |
|---|---|---|---|
| **Mean** | 82.447 mg/L | | |
| **Maximum** | 261.220 mg/L | **Minimum** | 0.540 mg/L |
| **Standard deviation** | 75.824 mg/L | **Rel. standard deviation** | 91.967 % |
| **Total samples** | 43 | **Samples excluded** | 0 |

## Used Instruments

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 9/20/2024 3:37:42 AM | SystemInternal | System internal account |

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 09/20/24 05:15 |
| **Dup Sample ID** | : WG1974042-3 | **DUP Analysis Date** | : 09/20/24 05:18 |

| Parameter | Sample Concentration (mg CaCO3/L) | Duplicate Concentration (mg CaCO3/L) | RPD | RPD Limit |
|---|---|---|---|---|
| Alkalinity, Carbonate | ND | ND | NC | 10 |
| Alkalinity, Bicarbonate | 44.1 | 41.8 | 5 | 9 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 09/20/24 05:28 |
| **Dup Sample ID** | : WG1974042-5 | **DUP Analysis Date** | : 09/20/24 05:42 |

| Parameter | Sample Concentration (mg CaCO3/L) | Duplicate Concentration (mg CaCO3/L) | RPD | RPD Limit |
|---|---|---|---|---|
| Alkalinity, Carbonate | ND | ND | NC | 10 |
| Alkalinity, Bicarbonate | 17.1 | 18.0 | 5 | 9 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/20/24 04:44 |
| **Dup Sample ID** | : WG1974042-7 | **DUP Analysis Date** | : 09/20/24 04:46 |

| Parameter | Sample Concentration (mg CaCO3/L) | Duplicate Concentration (mg CaCO3/L) | RPD | RPD Limit |
|---|---|---|---|---|
| Alkalinity, Carbonate | ND | ND | NC | 10 |
| Alkalinity, Bicarbonate | 60.0 | 56.9 | 5 | 9 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity, Total | 471-34-1 | 2 | | mg CaCO3/L | 90-110 | 10 | 86-116 | 10 | 10 | 2320B | 14 days | 1 - Plastic 250ml unpreserved/No Headspace |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

## Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

# Sequence Logs

| | | | | | |
|---|---|---|---|---|---|
| CAL | 240920 | LCS 7.0 | 7.05 | INT: | MRM |
| pH 4 | 3295 | Titrant: | 4193 | | |
| pH 7 | 3386 | LCS: | 3257 | | |
| pH 10 | 3298 | MS: | 3255 | | |
| LCS | 3409 | | | | |

| | | | |
|---|---|---|---|
| 1 | Rinse,MRM | 42 | CCV |
| 2 | Rinse,MRM | 43 | CCB |
| 3 | Rinse,MRM | | |
| 4 | WG1974041-1 | | |
| 5 | WG1974041-2 | | |
| 6 | L2453084-06 | | |
| 7 | L2453084-07 | | 2X = 25 mL |
| 8 | L2453084-08 | | 5X = 10 mL |
| 9 | L2453084-09 | | 10X = 5 mL |
| 10 | L2453084-10 | | |
| 11 | L2453084-11 | | |
| 12 | L2453084-12 | | |
| 13 | L2453084-13 | | |
| 14 | L2453084-15 | | |
| 15 | L2453084-16 | | |
| 16 | L2453250-01 | | |
| 17 | WG1974041-3 | | |
| 18 | WG1974041-4 | | |
| 19 | L2453053-01 | | |
| 20 | WG1974042-3 | | |
| 21 | WG1974042-4 | | |
| 22 | L2453053-02 | | |
| 23 | L2453053-03 | | |
| 24 | L2453053-04 | | |
| 25 | L2453053-05 | | |
| 26 | L2453342-01 | | |
| 27 | L2453342-02 | | |
| 28 | L2453342-03 | | |
| 29 | L2453342-04 | | |
| 30 | L2453342-05 | | |
| 31 | WG1974042-3 | | |
| 32 | WG1974042-4 | | |
| 33 | L2453342-06 | | |
| 34 | WG1974042-3 | | |
| 35 | WG1974042-4 | | |
| 36 | L2453342-07 | | |
| 37 | L2453342-08 | | |
| 38 | L2453342-10 | | |
| 39 | L2453342-10 | | |
| 40 | WG1974042-2 | | |
| 41 | WG1974042-1 | | |

# Chloride Analysis

# Results

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-01 | **Date Collected** | : | 09/16/24 11:10 |
| **Client ID** | : | MW-1SR | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/19/24 10:20 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500CL-E | **Analyst** | : | MRM |
| **Lab File ID** | : | CL240919-B1 | **Instrument ID** | : | LACHAT3 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 1.4 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 11:26 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500CL-E | **Analyst** | : MRM |
| **Lab File ID** | : CL240919-Z1 | **Instrument ID** | : LACHAT3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 9.0 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-03 | **Date Collected** | : | 09/16/24 14:20 |
| **Client ID** | : | MW-11S | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/19/24 11:16 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500CL-E | **Analyst** | : | MRM |
| **Lab File ID** | : | CL240919-Z1 | **Instrument ID** | : | LACHAT3 |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 5.3 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 11:16 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500CL-E | **Analyst** | : MRM |
| **Lab File ID** | : CL240919-Z1 | **Instrument ID** | : LACHAT3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 14. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 11:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500CL-E | **Analyst** | : MRM |
| **Lab File ID** | : CL240919-Z1 | **Instrument ID** | : LACHAT3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 8.9 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973473-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973473-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 09:12 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500CL-E | **Analyst** | : MRM |
| **Lab File ID** | : CL240919-A1 | **Instrument ID** | : LACHAT3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | ND | 1.0 | 0.89 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973473-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 10:21 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500CL-E | **Analyst** | : MRM |
| **Lab File ID** | : CL240919-B1 | **Instrument ID** | : LACHAT3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16887-00-6 | Chloride | 1.4 | 1.0 | 0.89 | |

# Sample Raw Data

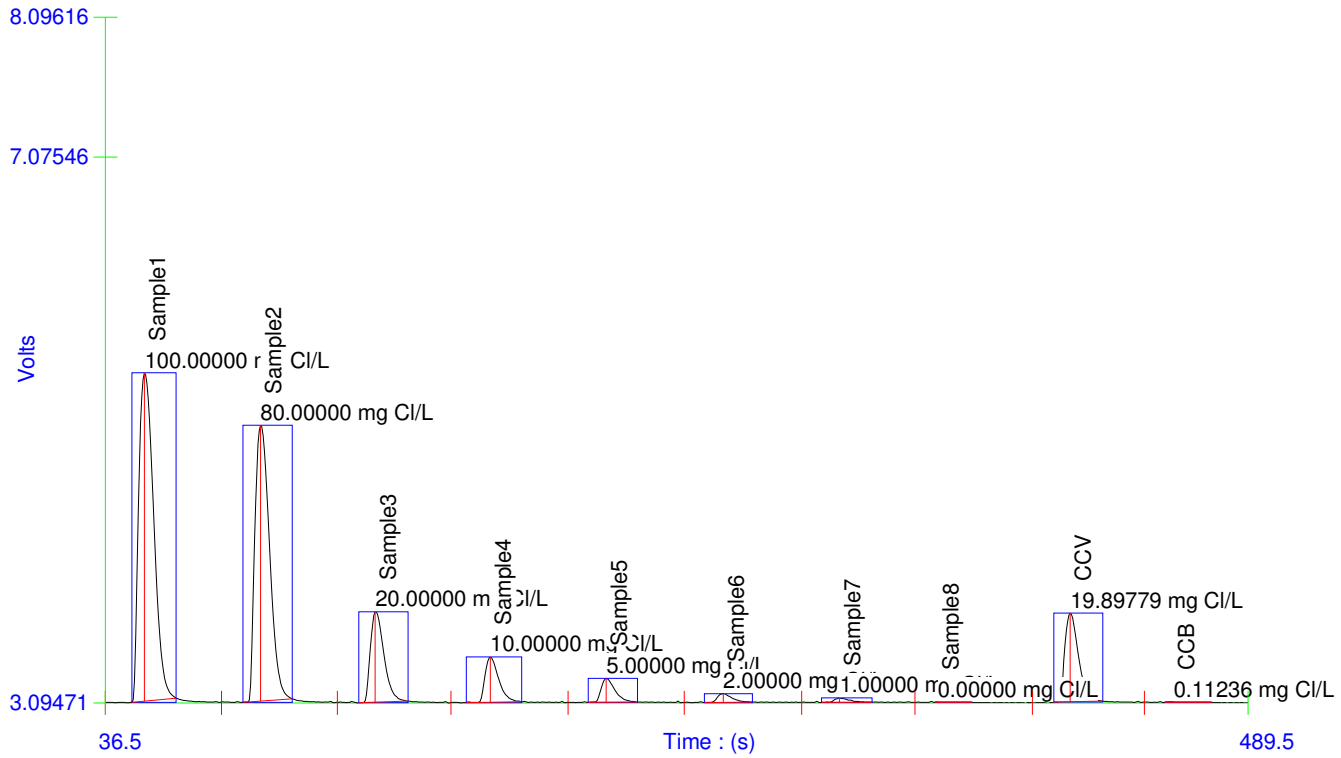
Author: Date : 9/19/2024

Original Run Filename: OM_9-19-2024_08-53-06AM.OMN Created: 9/19/2024 8:53:06 AM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_9-19-2024_08-53-06AM.OMN Last Modified: 9/19/2024 9:34:15 AM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

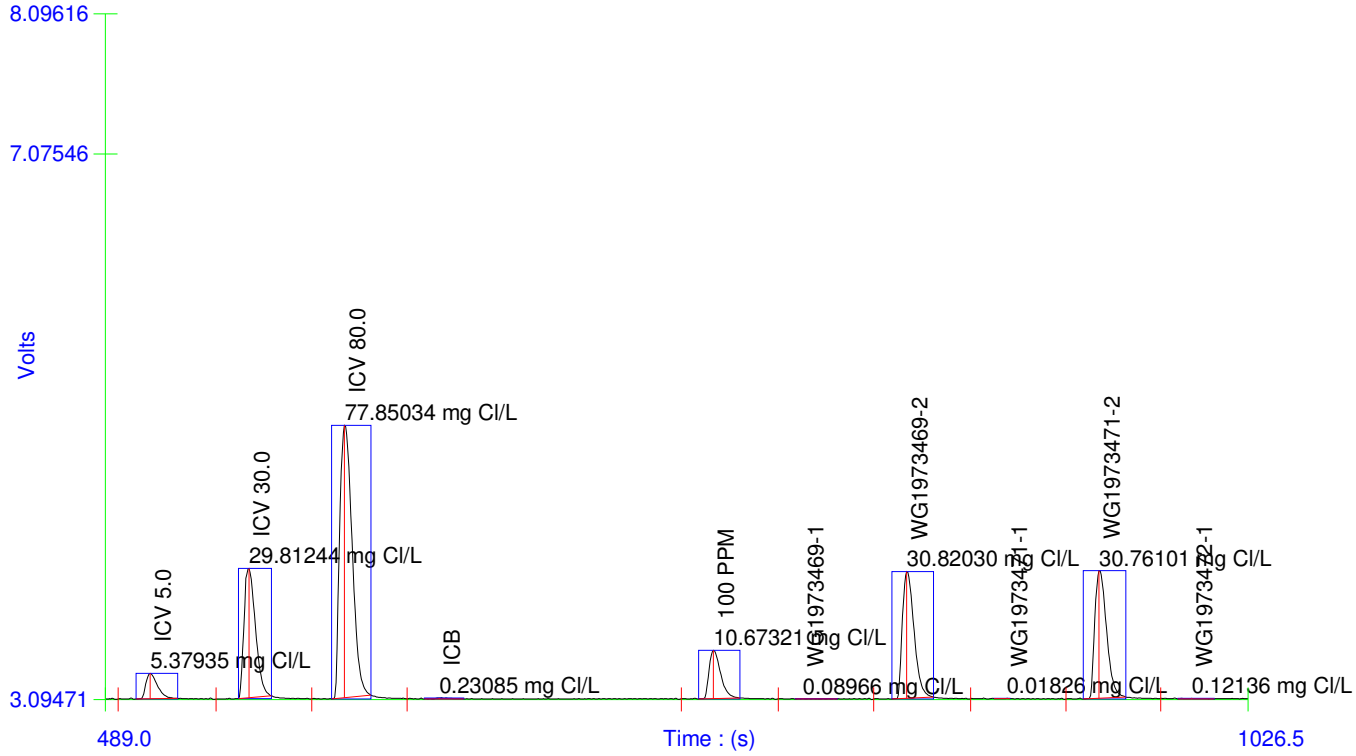
| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| Sample1 | 1 | S1 | 100.00000 | | | |
| Sample2 | 1 | S2 | 80.00000 | | | |
| Sample3 | 1 | S3 | 20.00000 | | | |
| Sample4 | 1 | S4 | 10.00000 | | | |
| Sample5 | 1 | S5 | 5.00000 | | | |
| Sample6 | 1 | S6 | 2.00000 | | | |
| Sample7 | 1 | S7 | 1.00000 | | | |
| Sample8 | 1 | S9 | 0.00000 | | | |
| CCV | 1 | S3 | 19.89779 | | | |
| | Known Conc: | | 20.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S9 | 0.11236 | | | |
| | Known Conc: | | 0.00000 | | | |
| ICV 5.0 | 1 | 1 | 5.37935 | | | |
| ICV 30.0 | 1 | 2 | 29.81244 | | | |
| ICV 80.0 | 1 | 3 | 77.85034 | | | |
| ICB | 1 | 4 | 0.23085 | | | |
| 100 PPM | 1 | 5 | 106.73209 | 10.00 | | |
| WG1973469-1 | 1 | 6 | 0.08966 | | | |
| WG1973469-2 | 1 | 7 | 30.82030 | | | |
| WG1973471-1 | 1 | 8 | 0.01826 | | | |
| WG1973471-2 | 1 | 9 | 30.76101 | | | |
| WG1973472-1 | 1 | 10 | 0.12136 | | | |
| CCV | 1 | S3 | 20.47691 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.05202 | | | |
| | Known Conc: | | 0.00000 | | | |
| WG1973472-2 | 1 | 11 | 30.64899 | | | |
| WG1973473-1 | 1 | 12 | 0.02170 | | | |
| WG1973473-2 | 1 | 13 | 30.88128 | | | |
| L2453665-01 | 1 | 89 | 360.97333 | 25.00 | | |
| L2453665-02 | 1 | 90 | 270.84998 | 25.00 | | |
| L2453665-03 | 1 | 91 | 245.24332 | 25.00 | | |
| L2453665-04 | 1 | 92 | 241.63759 | 25.00 | | |
| L2453665-05 | 1 | 93 | 1457.93188 | 25.00 | | |
| L2453665-06 | 1 | 94 | 1500.91309 | 25.00 | | |
| L2453665-07 | 1 | 95 | 446.64542 | 25.00 | | |
| CCV | 1 | S3 | 19.65973 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.06930 | | | |
| | Known Conc: | | 0.00000 | | | |
| ~~L2453665-08~~ | ~~1~~ | ~~96~~ | ~~203.07822~~ | ~~25.00~~ | | |
| ~~L2452713-01~~ | ~~1~~ | ~~14~~ | ~~244.09100~~ | | | |
| ~~WG1973469-3~~ | ~~1~~ | ~~15~~ | ~~244.39040~~ | | | |

Author: Date : 9/19/2024

Channel 1 (Chloride) - Set: 1 / 4

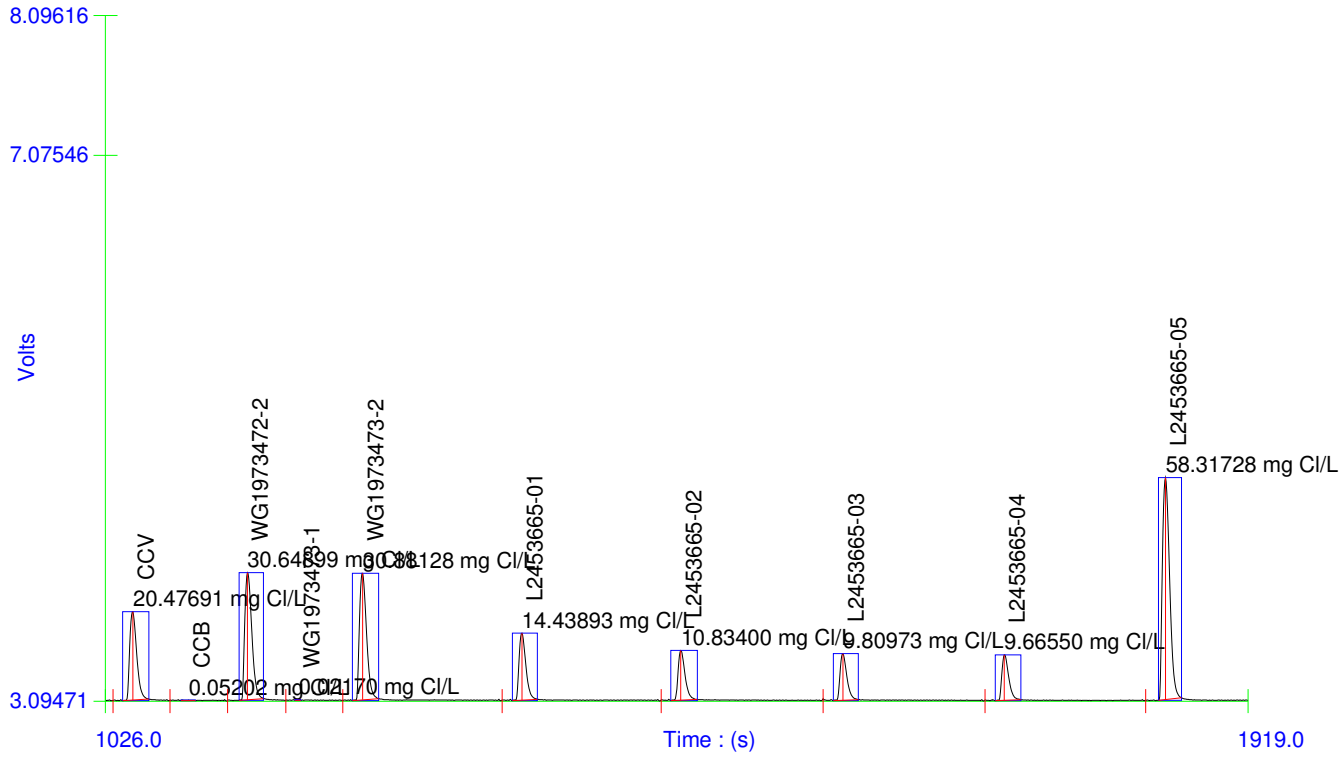



Channel 1 (Chloride) - Set: 2 / 4



Author: Date : 9/19/2024

Channel 1 (Chloride) - Set: 3 / 4



Author: Date : 9/19/2024

Channel 1 (Chloride) - Set: 4 / 4

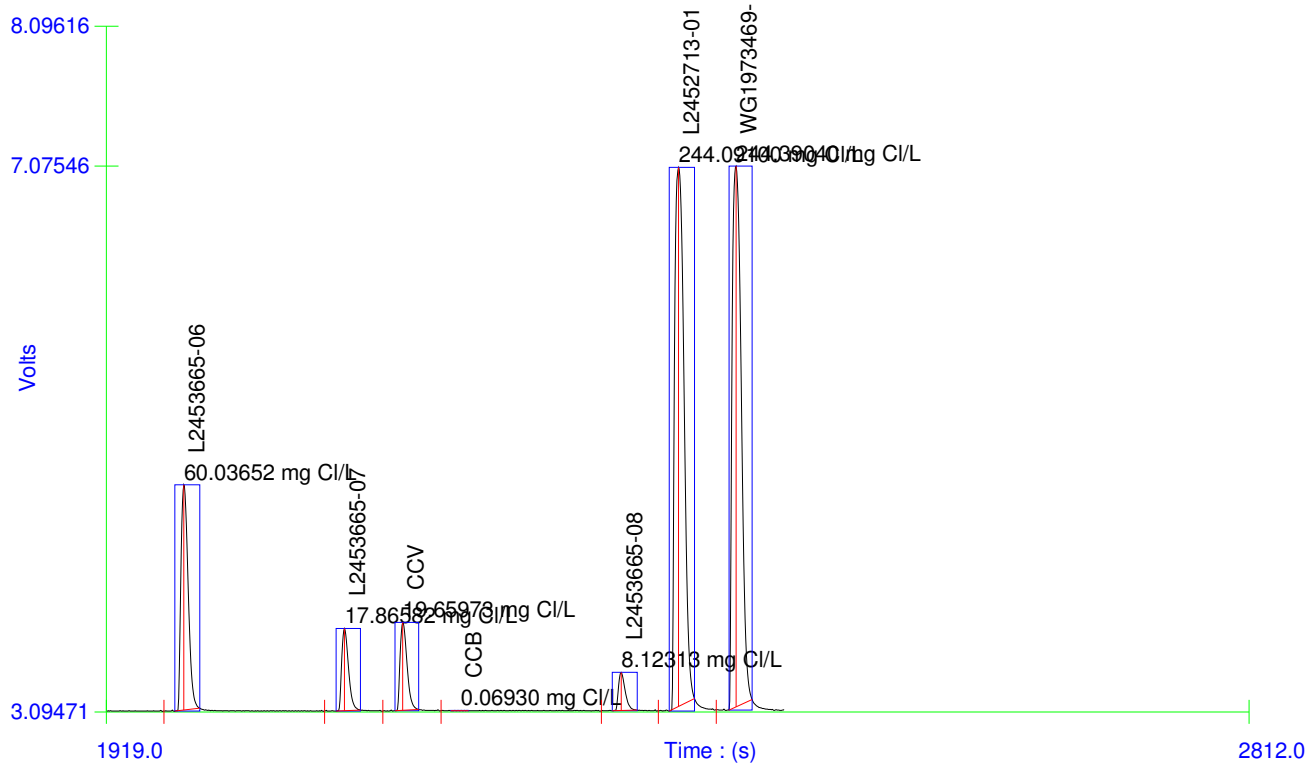
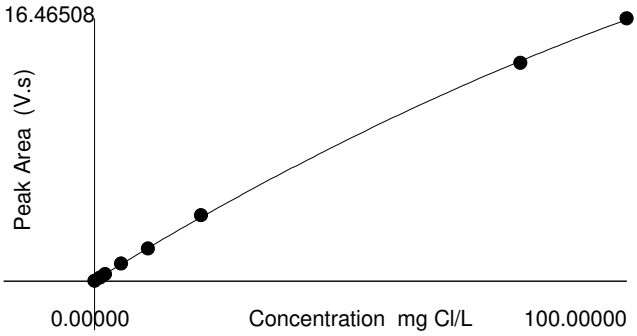



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 16.46508 | 2.39376 | 0.0 | -0.4 | 100.15244 | 9/19/2024 | 8:53:57 AM |
| 2 | 80.00000 | 1 | 13.68599 | 2.01200 | 0.0 | 0.8 | 79.75552 | 9/19/2024 | 8:54:43 AM |
| 3 | 20.00000 | 1 | 4.11025 | 0.65942 | 0.0 | -3.0 | 20.33070 | 9/19/2024 | 8:55:29 AM |
| 4 | 10.00000 | 1 | 2.04242 | 0.32956 | 0.0 | 0.8 | 9.70750 | 9/19/2024 | 8:56:14 AM |
| 5 | 5.00000 | 1 | 1.09294 | 0.17351 | 0.0 | -3.0 | 5.09256 | 9/19/2024 | 8:57:01 AM |
| 6 | 2.00000 | 1 | 0.42468 | 0.06433 | 0.0 | 6.1 | 1.94367 | 9/19/2024 | 8:57:47 AM |
| 7 | 1.00000 | 1 | 0.21755 | 0.03197 | 0.0 | 12.2 | 0.98426 | 9/19/2024 | 8:58:34 AM |
| 8 | 0.00000 | 1 | 0.01054 | 0.00283 | | | 0.03334 | 9/19/2024 | 8:59:19 AM |

Figure : 1 (Chloride-CH3)




Area = - 0.00042 * Conc^2 + 0.20582 * Conc + 0.04250
Conc = 0.09176 * Area^2 + 4.57281 * Area - 0.01488
Correlation Coefficient (r) = 0.99994

Weighting : None

Author: Date : 9/20/2024

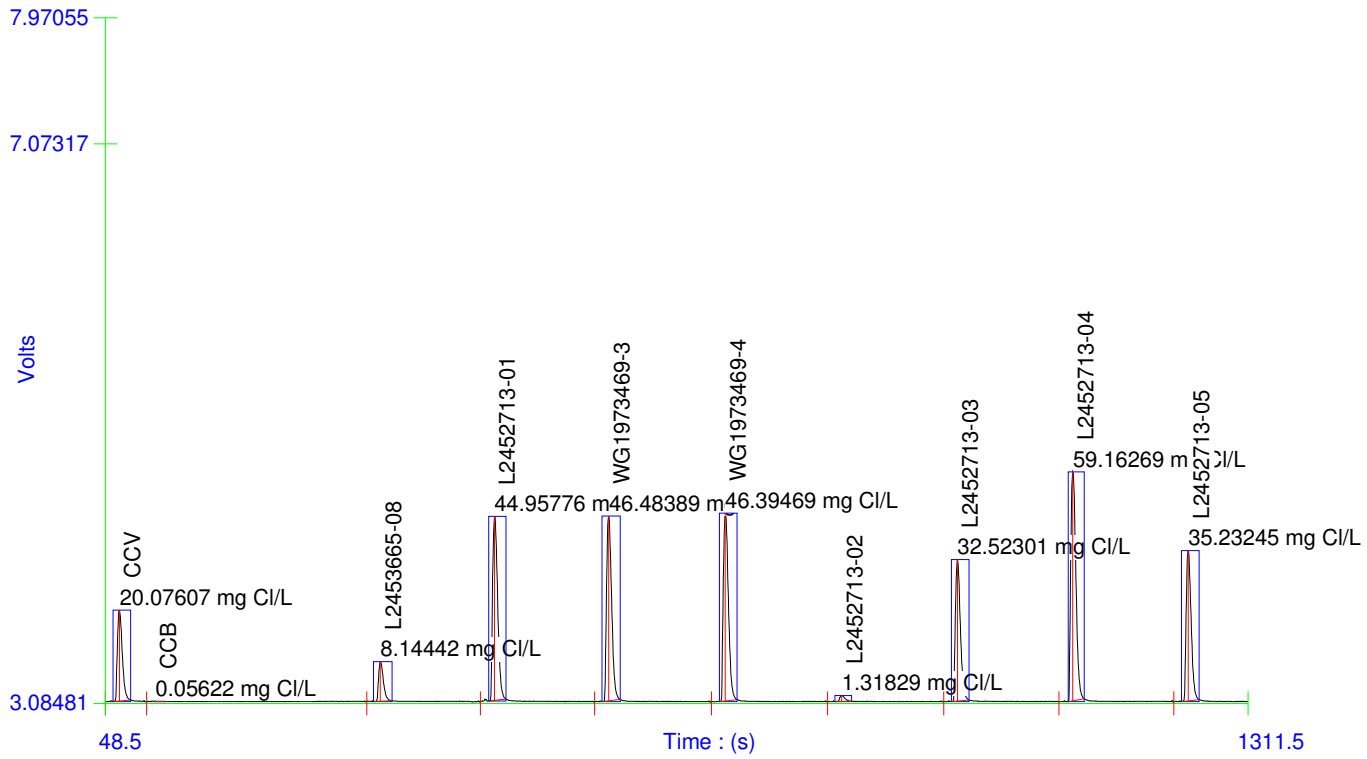
Original Run Filename: OM_9-19-2024_09-50-39AM.OMN Created: 9/19/2024 9:50:39 AM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_9-19-2024_09-50-39AM.OMN Last Modified: 9/19/2024 11:29:38 AM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 20.07607 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.05622 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2453665-08 | 1 | 96 | 203.61057 | 25.00 | | |
| L2452713-01 | 1 | 14 | 449.57761 | 10.00 | | |
| WG1973469-3 | 1 | 15 | 464.83887 | 10.00 | | |
| WG1973469-4 | 1 | 16 | 463.94690 | 10.00 | | |
| L2452713-02 | 1 | 17 | 13.18290 | 10.00 | | |
| L2452713-03 | 1 | 18 | 325.23010 | 10.00 | | |
| L2452713-04 | 1 | 19 | 591.62689 | 10.00 | | |
| L2452713-05 | 1 | 20 | 352.32449 | 10.00 | | |
| L2452713-06 | 1 | 21 | 318.48547 | 10.00 | | |
| L2452713-07 | 1 | 22 | 283.48575 | 10.00 | | |
| CCV | 1 | S3 | 19.82475 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.05898 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2452713-08 | 1 | 23 | 578.84589 | 10.00 | | |
| L2452713-09; FB | 1 | 24 | 0.09514 | | | |
| L2453053-01 | 1 | 82 | 1.36346 | | | |
| WG1973473-3 | 1 | 83 | 1.43179 | | | |
| WG1973473-4 | 1 | 84 | 22.16075 | | | |
| L2452727-03 | 1 | 25 | 10.10673 | | | |
| L2452727-06 | 1 | 26 | 12.71589 | | | |
| L2452727-09 | 1 | 27 | 1.87265 | | | |
| L2452727-12 | 1 | 28 | 6.40097 | | | |
| L2452727-15 | 1 | 29 | 6.46034 | | | |
| CCV | 1 | S3 | 19.53902 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | -0.02400 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2452727-18 | 1 | 30 | 0.02802 | | | |
| L2452727-21 | 1 | 31 | 13.28427 | | | |
| L2452727-24 | 1 | 32 | 8.96060 | | | |
| L2452727-27 | 1 | 33 | 0.90952 | | | |
| L2452731-03 | 1 | 34 | 47.50902 | | | |
| L2452731-06 | 1 | 35 | 48.37154 | | | |
| L2452731-09 | 1 | 36 | 0.01998 | | | |
| L2452731-12 | 1 | 37 | 77.72665 | | | |
| L2452731-15 | 1 | 38 | 25.11521 | | | |
| L2452731-18 | 1 | 39 | 10.20554 | | | |
| CCV | 1 | S3 | 19.70425 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.05587 | | | |
| | Known Conc: | | 0.00000 | | | |
| WG1973471-3 | 1 | 40 | 10.14897 | | | |
| WG1973471-4 | 1 | 41 | 29.40251 | | | |
| L2452731-21 | 1 | 42 | 22.19728 | | | |
| L2452731-24 | 1 | 43 | 33.60207 | | | |
| L2452731-27 | 1 | 44 | 1.76307 | | | |
| L2452736-03 | 1 | 45 | 4.44293 | | | |
| L2452736-06 | 1 | 46 | 7.33335 | | | |
| L2452736-09 | 1 | 47 | 23.32418 | | | |
| L2452736-12 | 1 | 48 | 3.12382 | | | |
| L2452736-15 | 1 | 49 | 3.08397 | | | |
| CCV | 1 | S3 | 19.65253 | | | |
| | Known Conc: | | 20.00000 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| CCB | 1 | S9 | 0.04216 | | | |
| | | Known Conc: | 0.00000 | | | |
| L2452736-18 | 1 | 50 | 0.06164 | | | |
| L2452736-21 | 1 | 51 | 1.60749 | | | |
| L2452736-24 | 1 | 52 | 7.80113 | | | |
| L2452736-27 | 1 | 53 | 0.73416 | | | |
| L2452745-03 | 1 | 54 | 6.93975 | | | |
| L2452745-06 | 1 | 55 | 21.01037 | | | |
| L2452745-09 | 1 | 56 | 16.64947 | | | |
| L2452745-12 | 1 | 57 | 13.13174 | | | |
| L2452745-15 | 1 | 58 | 13.24989 | | | |
| L2452745-18 | 1 | 59 | -0.07354 | | | |
| CCV | 1 | S3 | 19.53427 | | | |
| | | Known Conc: | 20.00000 | | | |
| | | Calibration: | Table/Fig. : 1 | | | |
| CCB | 1 | S9 | 0.14648 | | | |
| | | Known Conc: | 0.00000 | | | |
| L2452745-21 | 1 | 60 | 6.98953 | | | |
| L2452745-24 | 1 | 61 | 2.85805 | | | |
| L2452745-27 | 1 | 62 | 1.07563 | | | |
| L2452745-30 | 1 | 63 | 6.58146 | | | |
| L2452756-03 | 1 | 64 | 9.36304 | | | |
| L2452756-06 | 1 | 65 | 9.34373 | | | |
| L2452756-09 | 1 | 66 | 0.05950 | | | |
| L2452756-12 | 1 | 67 | 26.14334 | | | |
| L2452756-15 | 1 | 68 | 6.80361 | | | |
| L2452756-18 | 1 | 69 | 15.64439 | | | |
| CCV | 1 | S3 | 19.64866 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.13710 | | | |
| | | Known Conc: | 0.00000 | | | |
| L2452756-21 | 1 | 70 | 43.02522 | | | |
| L2452762-03 | 1 | 71 | 16.93083 | | | |
| L2452762-06 | 1 | 72 | 16.94176 | | | |
| L2452762-09 | 1 | 73 | 0.14491 | | | |
| L2452762-12 | 1 | 74 | 9.88355 | | | |
| L2452762-15 | 1 | 75 | 5.79920 | | | |
| L2452762-18 | 1 | 76 | 9.01929 | | | |
| L2452762-21 | 1 | 77 | 10.15546 | | | |
| WG1973472-3 | 1 | 78 | 10.10998 | | | |
| WG1973472-4 | 1 | 79 | 28.90825 | | | |
| CCV | 1 | S3 | 19.61710 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.19975 | | | |
| | | Known Conc: | 0.00000 | | | |
| L2452762-24 | 1 | 80 | 0.60134 | | | |
| L2452951-02 | 1 | 81 | 246.94026 | | | |
| L2453053-02 | 1 | 85 | 10.00372 | | | |
| L2453053-03 | 1 | 86 | 5.34103 | | | |
| L2453053-04 | 1 | 87 | 14.55614 | | | |
| L2453053-05 | 1 | 88 | 8.88712 | | | |
| WG1973712-1 | 1 | 97 | 0.04183 | | | |
| WG1973712-2 | 1 | 98 | 29.46730 | | | |
| L2452481-02 | 1 | 99 | 46.74469 | | | |
| WG1973712-3 | 1 | 100 | 46.61466 | | | |
| CCV | 1 | S3 | 19.75920 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.05813 | | | |
| | | Known Conc: | 0.00000 | | | |
| WG1973712-4 | 1 | 101 | 61.78114 | | | |
| L2452713-02 | 1 | 17 | 16.19428 | | | |
| L2452951-02 | 1 | 81 | 474.62903 | 10.00 | | |
| L2453053-02 | 1 | 85 | 9.05166 | | | |
| CCV | 1 | S3 | 19.89729 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | -0.06824 | | | |
| | | Known Conc: | 0.00000 | | | |

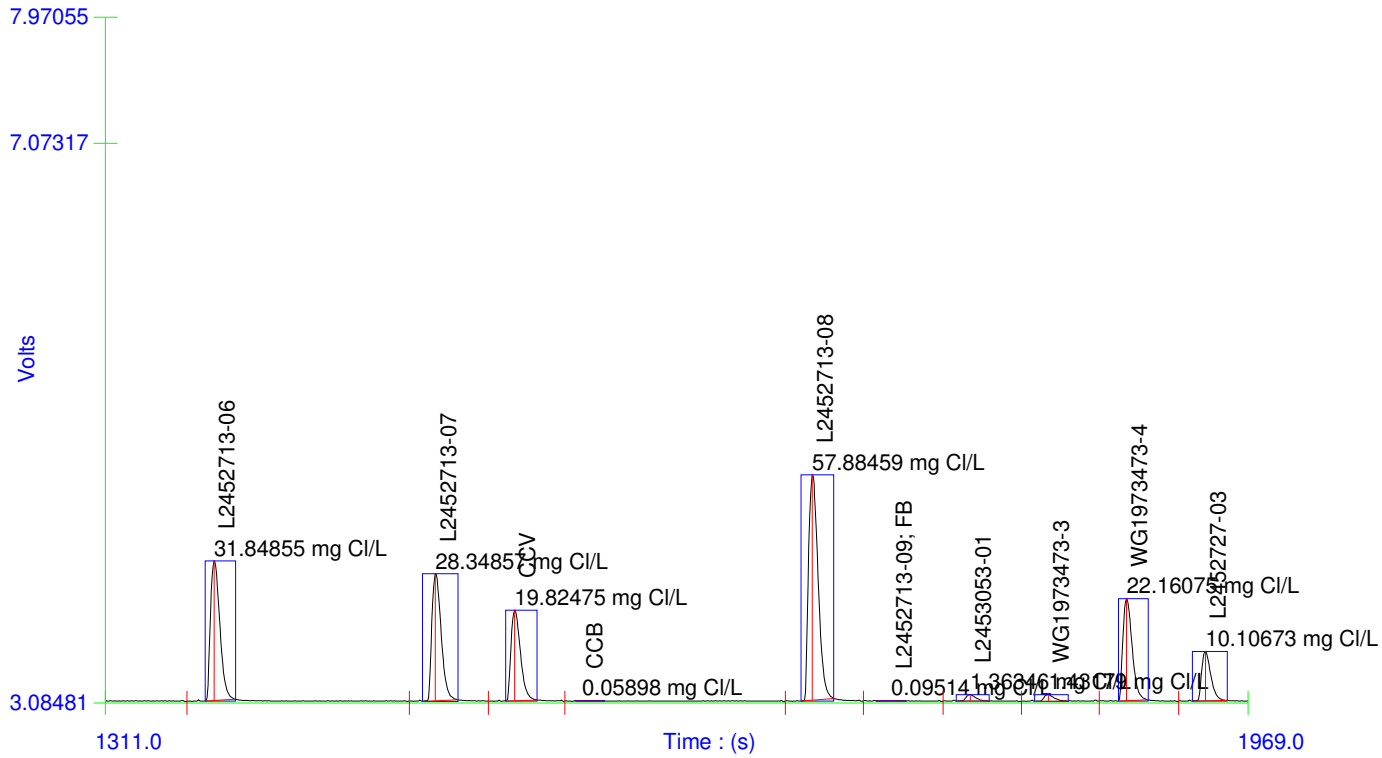
Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 1 / 11

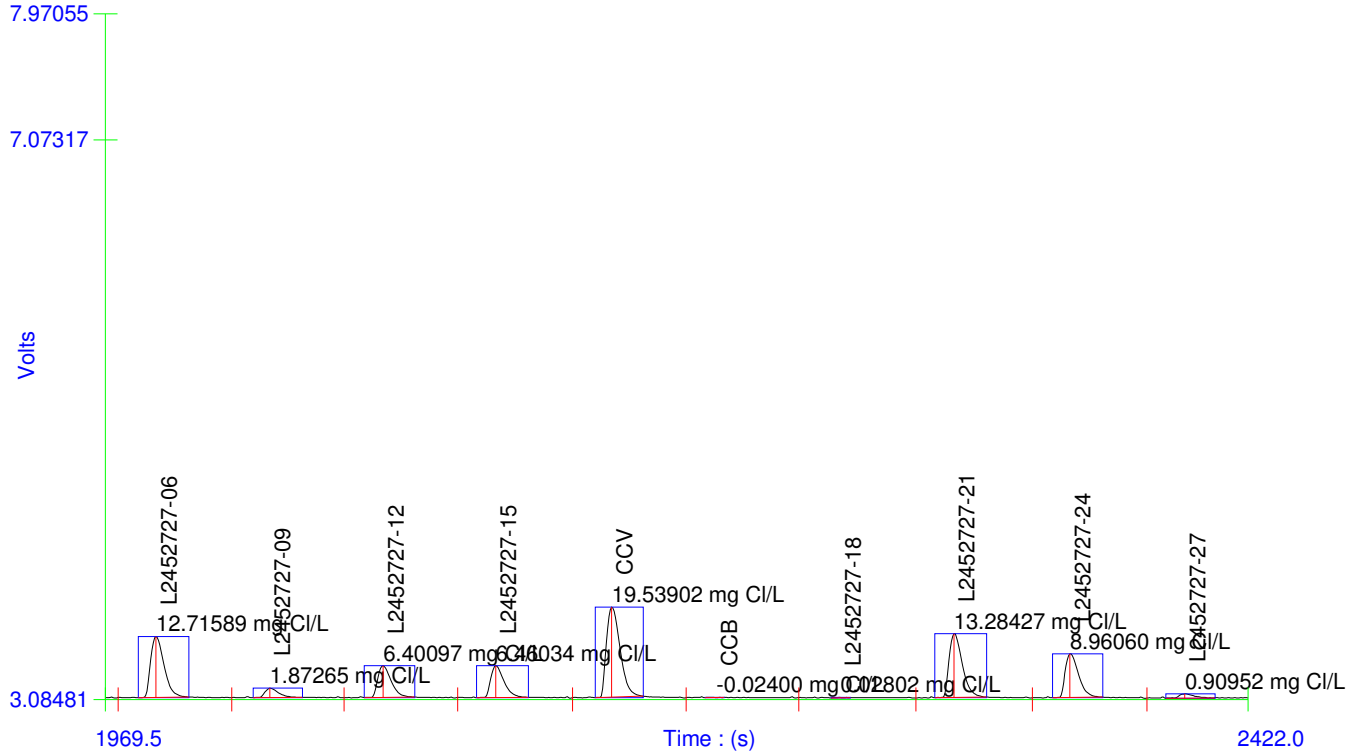


Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 2 / 11

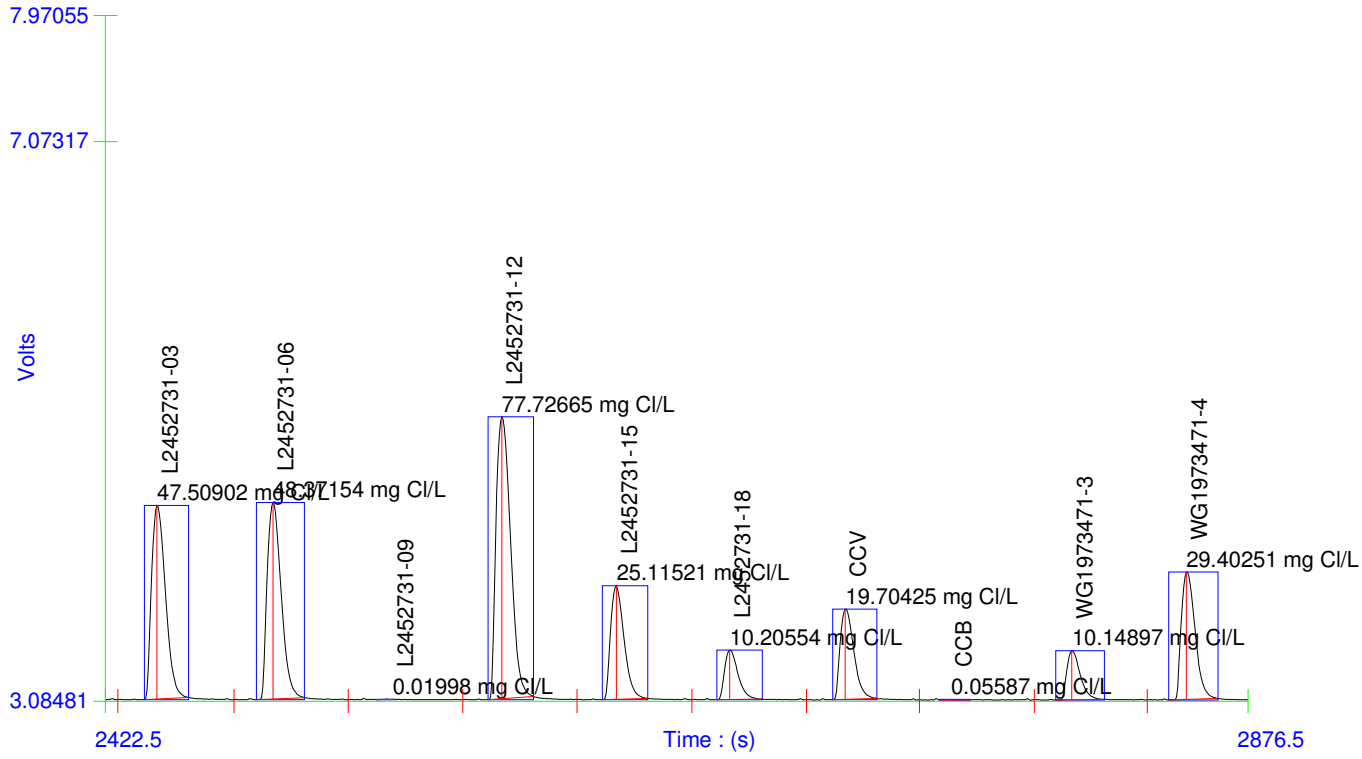



Channel 1 (Chloride) - Set: 3 / 11



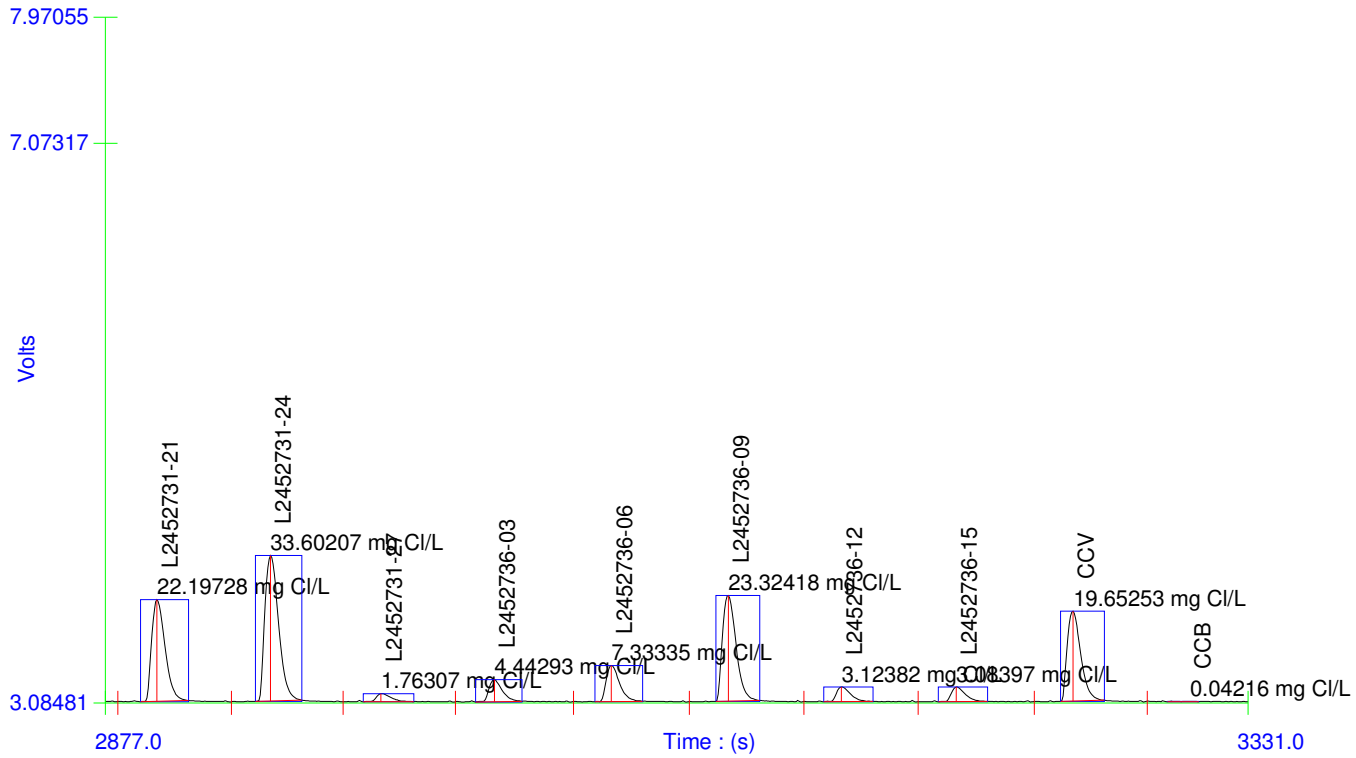
Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 4 / 11

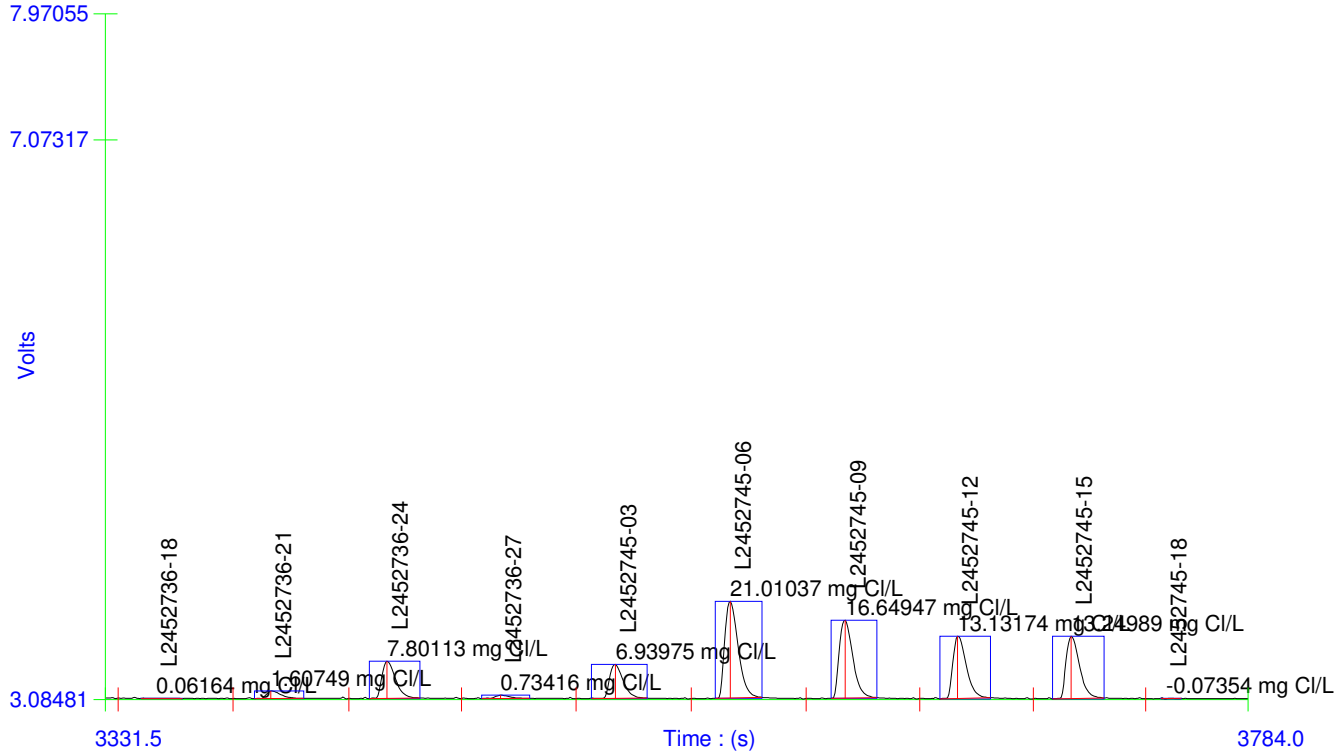


Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 5 / 11

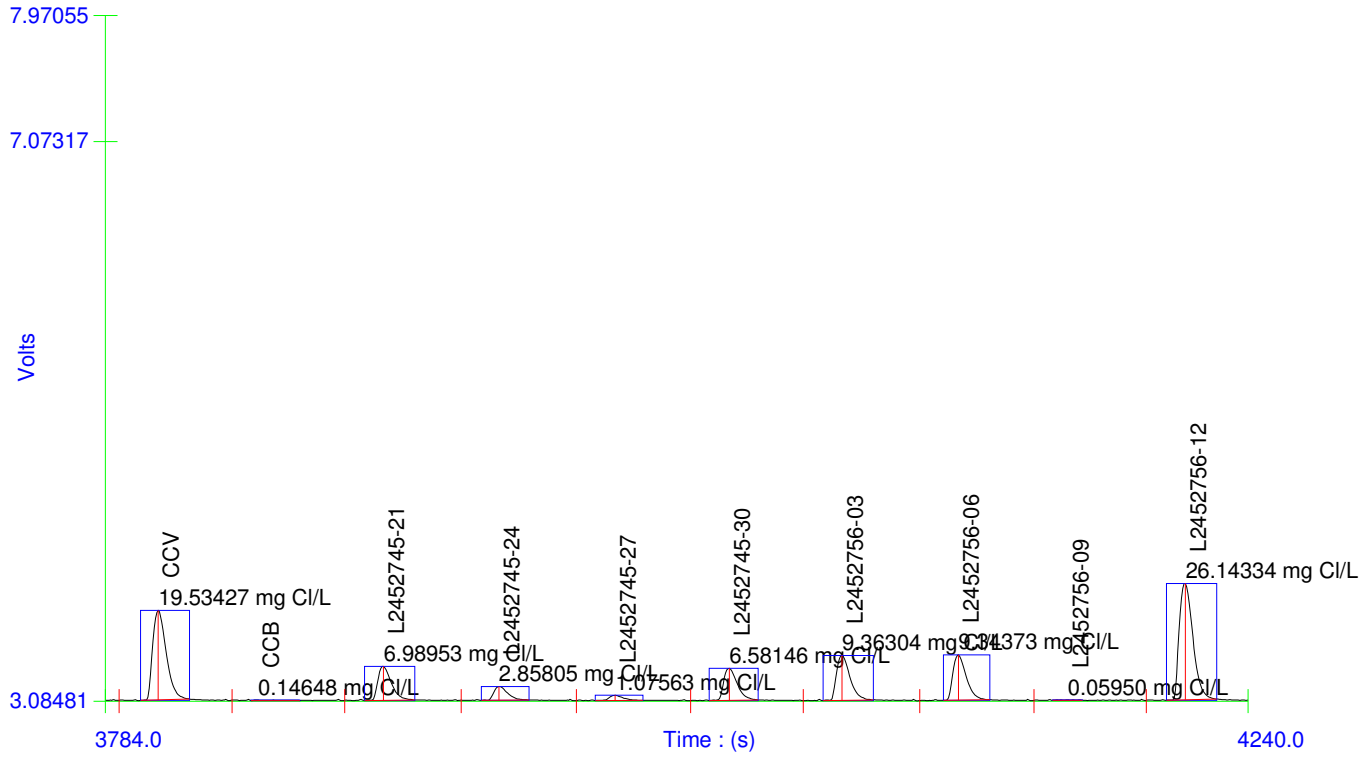



Channel 1 (Chloride) - Set: 6 / 11



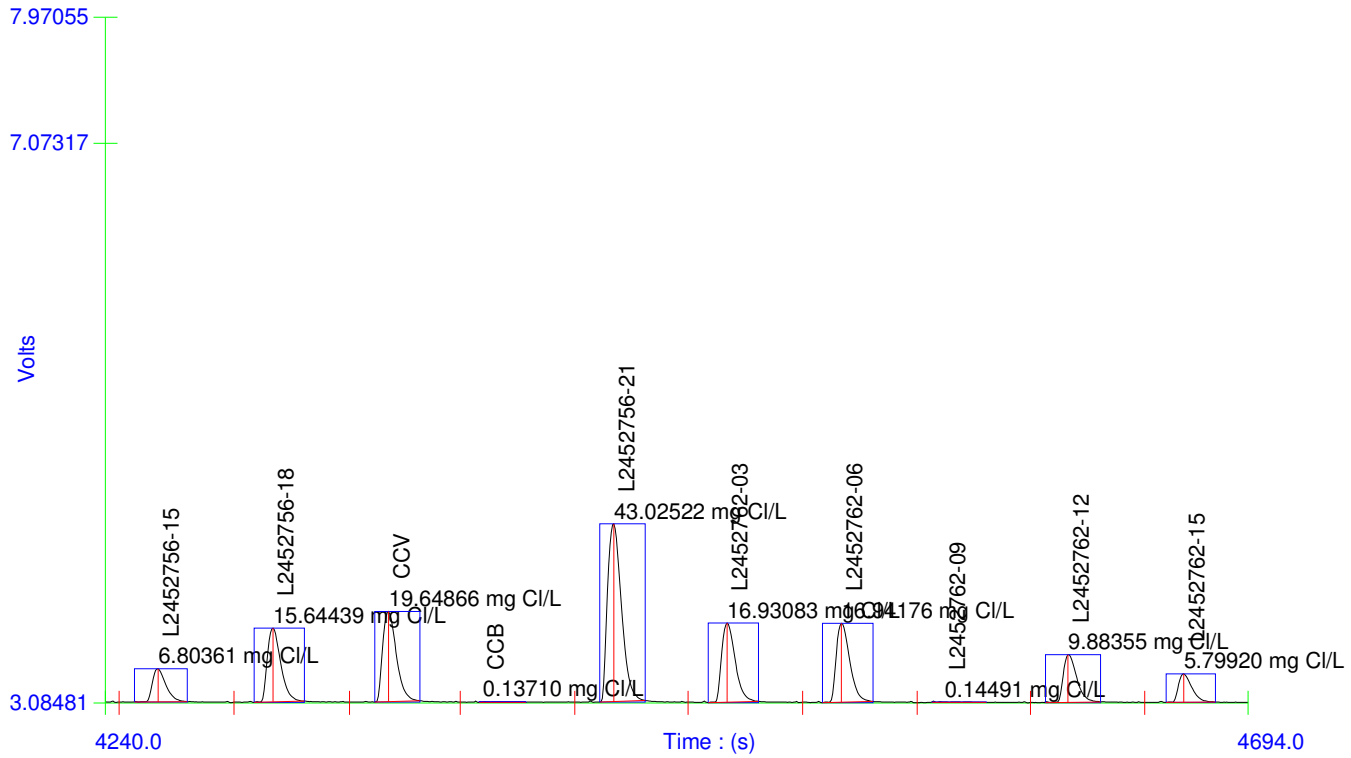
Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 7 / 11

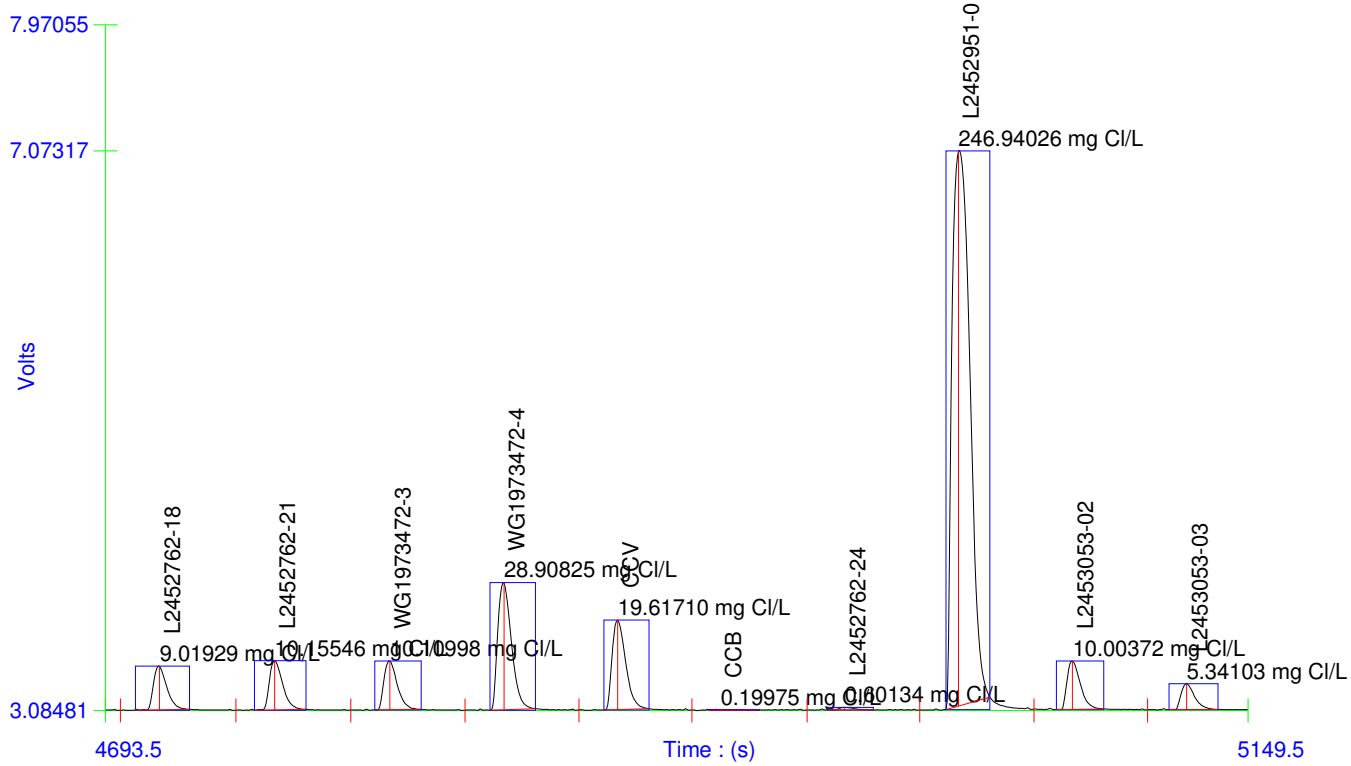


Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 8 / 11

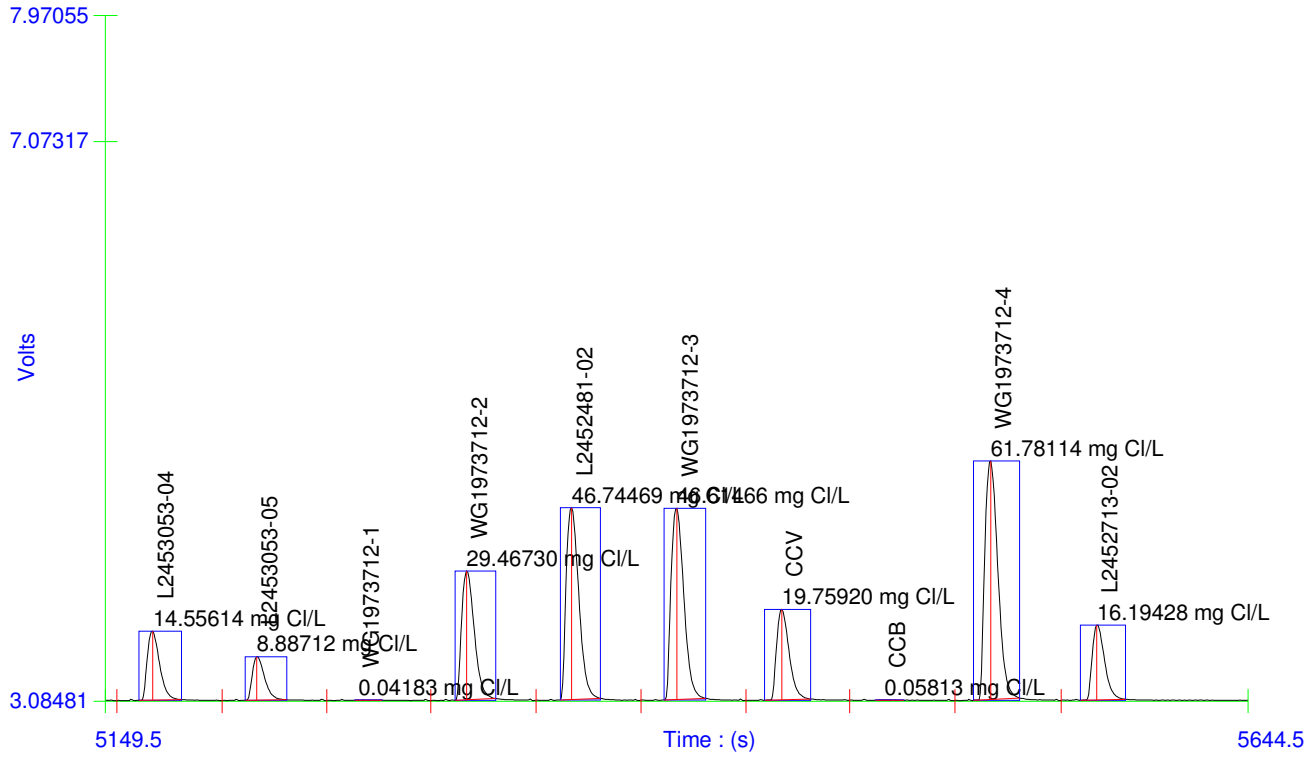



Channel 1 (Chloride) - Set: 9 / 11



Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 10 / 11



Author: Date : 9/20/2024

Channel 1 (Chloride) - Set: 11 / 11

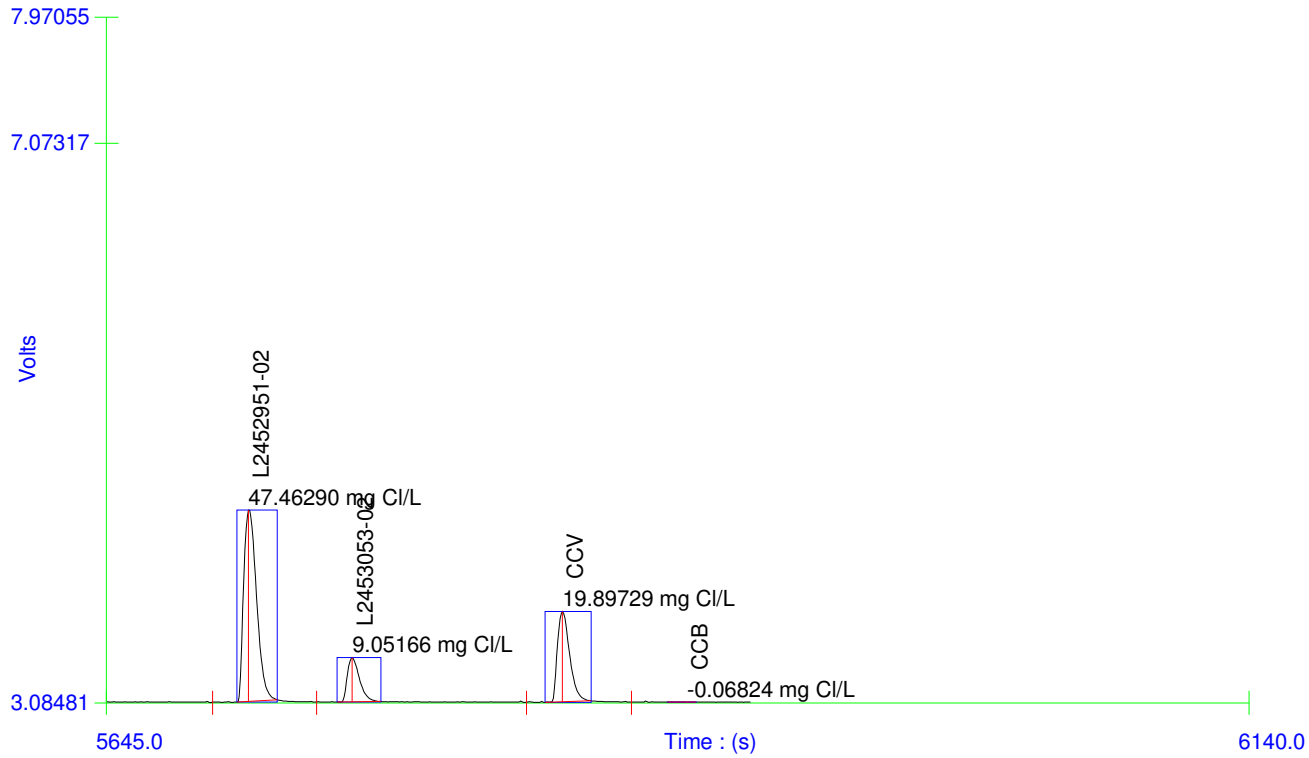
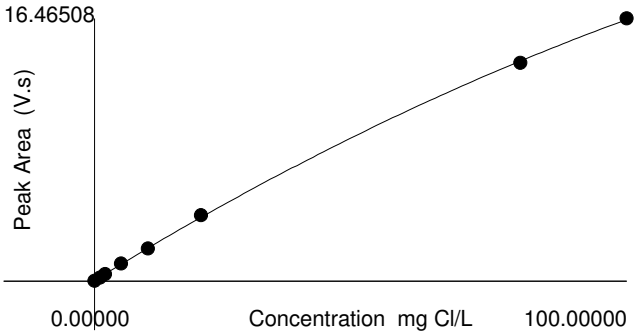



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 16.46508 | 2.39376 | 0.0 | -0.4 | 100.15244 | 9/19/2024 | 8:53:57 AM |
| 2 | 80.00000 | 1 | 13.68599 | 2.01200 | 0.0 | 0.8 | 79.75552 | 9/19/2024 | 8:54:43 AM |
| 3 | 20.00000 | 1 | 4.11025 | 0.65942 | 0.0 | -3.0 | 20.33070 | 9/19/2024 | 8:55:29 AM |
| 4 | 10.00000 | 1 | 2.04242 | 0.32956 | 0.0 | 0.8 | 9.70750 | 9/19/2024 | 8:56:14 AM |
| 5 | 5.00000 | 1 | 1.09294 | 0.17351 | 0.0 | -3.0 | 5.09256 | 9/19/2024 | 8:57:01 AM |
| 6 | 2.00000 | 1 | 0.42468 | 0.06433 | 0.0 | 6.1 | 1.94367 | 9/19/2024 | 8:57:47 AM |
| 7 | 1.00000 | 1 | 0.21755 | 0.03197 | 0.0 | 12.2 | 0.98426 | 9/19/2024 | 8:58:34 AM |
| 8 | 0.00000 | 1 | 0.01054 | 0.00283 | | | 0.03334 | 9/19/2024 | 8:59:19 AM |

Figure : 1 (Chloride-CH3)




Area = - 0.00042 * Conc^2 + 0.20582 * Conc + 0.04250
Conc = 0.09176 * Area^2 + 4.57281 * Area - 0.01488
Correlation Coefficient (r) = 0.99994

Weighting : None

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1973473-4 | **MS Analysis Date** | : 09/19/24 10:22 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 1.4 | 20 | 22. | 103 | | | | | 58-140 | 7 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/19/24 10:20 |
| **Dup Sample ID** | : WG1973473-3 | **DUP Analysis Date** | : 09/19/24 10:21 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Chloride | 1.4 | 1.4 | 0 | 7 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973473-2 | **LCS Analysis Date** | : 09/19/24 09:13 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | True | Found | %R | True | Found | %R | RPD | Recovery | RPD |
| Parameter | (mg/l) | (mg/l) | | (mg/l) | (mg/l) | | | Limits | Limit |
| Chloride | 30.0 | 31.0 | 103. | | | | | 90-110 | 7 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 1 | 0.2 | mg/l | 90-110 | | 58-140 | 7 | 7 | 4500CL-E | 28 days | 1 - Plastic 250ml unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 89-109 | 35 | 62-129 | 35 | 35 | 9251 | 28 days | 1 - Glass 250ml/8oz unpreserved |
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 90-110 | 35 | 62-129 | 35 | 35 | 4500CL-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Calculations of Chloride

Aqueous samples:

Compute sample Chloride concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (Chloride)

To compute the final results for aqueous samples, multiply the direct reading by the dilution factor. (also done using software)

Cl mg/L = mg/L direct reading x dilution factor

# Sequence Logs

240919 TRAY 1, MRM Chloride

1 ICV 5.0
2 ICV 30.0
3 ICV 80.0
4 ICB
5 100 PPM
6 WG1973469-1
7 WG1973469-2
8 WG1973471-1
9 WG1973471-2
10 WG1973472-1
11 WG1973472-2
12 WG1973473-1
13 WG1973473-2
14 L2452713-01
15 WG1973469-3
16 WG1973469-4
17 L2452713-02
18 L2452713-03
19 L2452713-04
20 L2452713-05
21 L2452713-06
22 L2452713-07
23 L2452713-08
24 L2452713-09; FB
25 L2452727-03
26 L2452727-06
27 L2452727-09
28 L2452727-12
29 L2452727-15
30 L2452727-18
31 L2452727-21
32 L2452727-24
33 L2452727-27
34 L2452731-03
35 L2452731-06
36 L2452731-09
37 L2452731-12
38 L2452731-15
39 L2452731-18
40 WG1973471-3
41 WG1973471-4
42 L2452731-21
43 L2452731-24
44 L2452731-27
45 L2452736-03
46 L2452736-06

47 L2452736-09
48 L2452736-12
49 L2452736-15
50 L2452736-18
51 L2452736-21
52 L2452736-24
53 L2452736-27
54 L2452745-03
55 L2452745-06
56 L2452745-09
57 L2452745-12
58 L2452745-15
59 L2452745-18
60 L2452745-21
61 L2452745-24
62 L2452745-27
63 L2452745-30
64 L2452756-03
65 L2452756-06
66 L2452756-09
67 L2452756-12
68 L2452756-15
69 L2452756-18
70 L2452756-21
71 L2452762-03
72 L2452762-06
73 L2452762-09
74 L2452762-12
75 L2452762-15
76 L2452762-18
77 L2452762-21
78 WG1973472-3
79 WG1973472-4
80 L2452762-24
81 L2452951-02
82 L2453053-01
83 WG1973473-3
84 WG1973473-4
85 L2453053-02
86 L2453053-03
87 L2453053-04
88 L2453053-05
89 L2453665-01
90 L2453665-02
91 L2453665-03
92 L2453665-04
93 L2453665-05

94 L2453665-06
95 L2453665-07
96 L2453665-08
97 WG1973712-1
98 WG1973712-2
99 L2452481-02
100 WG1973712-3
101 WG1973712-4

# Fluoride Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/18/24 07:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500F-BC | **Analyst** | : DTH |
| **Lab File ID** | : WG1972861.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.09 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-02 | **Date Collected** | : | 09/16/24 11:50 |
| **Client ID** | : | MW-1DR2 | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/18/24 07:47 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500F-BC | **Analyst** | : | DTH |
| **Lab File ID** | : | WG1972861.csv | **Instrument ID** | : | |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-03 | **Date Collected** | : | 09/16/24 14:20 |
| **Client ID** | : | MW-11S | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/18/24 07:47 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500F-BC | **Analyst** | : | DTH |
| **Lab File ID** | : | WG1972861.csv | **Instrument ID** | : | |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/18/24 07:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500F-BC | **Analyst** | : DTH |
| **Lab File ID** | : WG1972861.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.04 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | | | |
|---|---|---|---|---|---|
| **Client** | : | Roux Env. Eng. & Geology, DPC | **Lab Number** | : | L2453053 |
| **Project Name** | : | CORAM MATERIALS | **Project Number** | : | 2232.0006Y005 |
| **Lab ID** | : | L2453053-05 | **Date Collected** | : | 09/16/24 12:00 |
| **Client ID** | : | DUP_091624 | **Date Received** | : | 09/16/24 |
| **Sample Location** | : | 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : | 09/18/24 07:47 |
| **Sample Matrix** | : | WATER | **Dilution Factor** | : | 1 |
| **Analytical Method** | : | 121,4500F-BC | **Analyst** | : | DTH |
| **Lab File ID** | : | WG1972861.csv | **Instrument ID** | : | |
| **Sample Amount** | : | | **%Solids** | : | N/A |
| **Digestion Method** | : | | **Date Digested** | : | 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1972861-1 | **Date Collected** | : NA |
| **Client ID** | : WG1972861-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/18/24 07:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500F-BC | **Analyst** | : DTH |
| **Lab File ID** | : WG1972861.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | ND | 0.20 | 0.01 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1972861-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/18/24 07:47 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500F-BC | **Analyst** | : DTH |
| **Lab File ID** | : WG1972861.csv | **Instrument ID** | : |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/18/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 16984-48-8 | Fluoride | 0.09 | 0.20 | 0.02 | J |

# Sample Raw Data

**ALPHA ANALYTICAL LABS**

# WET CHEMISTRY DEPARTMENT

**F L U O R I D E**

Last Change 03/4/13
File Flouride.xlt

**Sample Number:** _____

**Client:** _____

**Product:** F-4500
**Analysis Analyte:** Fluoride,
**Analysis:** FLUORIDE
**Analysis Date:** 9/18/2024 7:47
**Method:** SM 4500F-BC
**Technician:** DTH
**LCS Concentration (mg/l):** 2
**Work group:** WG1972861
**Spike Concentration (mg/l):** 1
**RL:** 0.20 mg/L
**Distillation Date:** 9/18/2024 2:20

| Standard ID mg/L | Log Std-d | Reading mV | Result, Curve | Antilog Result | % Recovery | Calibration Curve | |
|---|---|---|---|---|---|---|---|
| | | | | | | Slope | y-intercept |
| 0.2 | -0.699 | 126.1 | -0.707 | 0.1965 | 98 | -59.0462145 | 84.375 |
| 0.5 | -0.301 | 102 | -0.298 | 0.5029 | 101 | | |
| 1.0 | 0.000 | 83.8 | 0.010 | 1.0227 | 102 | Correlation | Coefficient |
| 10 | 1.000 | 25.6 | 0.995 | 9.895 | 99 | 0.99994278 | |

| | Sample number | Sample Volume (ml) | Distill Volume (ml) | Flask | Reagent | Dilution Factor | Meter Reading | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | Recovery |
| | ICV | 50 | 50 | | YES | 1.00 | 0.969 | 1.00 | 0.97 | 97% |
| | L2451241-05 | 50 | 50 | | YES | 1.00 | 0.00608 | 1.00 | 0.01 | |
| | L2451241-08 | 25 | 50 | | YES | 2.00 | 0.132 | 2.00 | 0.26 | |
| SAMP | L2451914-01 | 50 | 50 | | YES | 1.00 | 0.0596 | 1.00 | 0.06 | |
| SAMP | L2453053-01 | 50 | 50 | | YES | 1.00 | 0.0883 | 1.00 | 0.09 | |
| SAMP | L2453053-02 | 50 | 50 | | YES | 1.00 | 0.0342 | 1.00 | 0.03 | |
| SAMP | L2453053-03 | 50 | 50 | | YES | 1.00 | 0.0263 | 1.00 | 0.03 | |
| SAMP | L2453053-04 | 50 | 50 | | YES | 1.00 | 0.0442 | 1.00 | 0.04 | |
| SAMP | L2453053-05 | 50 | 50 | | YES | 1.00 | 0.0294 | 1.00 | 0.03 | |
| SAMP | L2453250-01 | 50 | 50 | | YES | 1.00 | 0.199 | 1.00 | 0.20 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.0973 | 1.00 | 0.10 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.997 | 1.00 | 1.00 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| BLANK | WG1972861-1 | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| DUP | WG1972861-3 | 50 | 50 | | YES | 1.00 | 0.0867 | 1.00 | 0.09 | L2453053-01 |

| | Sample number | sample volume | Distill volume (ml) | Flask | Reagent | Sample Result mg/l | Meter Reading | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG1972861-4 | 50 | 50 | | YES | .09 | 0.998 | 1 | 1.00 | 91 |
| LCS | WG1972861-2 | 50 | 50 | | YES | | 1.72 | 2 | 1.72 | 86 |

last sample

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1972861-4 | **MS Analysis Date** | : 09/18/24 07:47 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 0.09J | 1 | 1.0 | 100 | | | | | 69-124 | 13 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/18/24 07:47 |
| **Dup Sample ID** | : WG1972861-3 | **DUP Analysis Date** | : 09/18/24 07:47 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Fluoride | 0.09J | 0.09J | NC | 13 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1972861-2 | **LCS Analysis Date** | : 09/18/24 07:47 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Fluoride** | **2.00** | **1.70** | **86.** | | | | | **78-120** | **13** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 0.2 | 0.017 | mg/l | 78-120 | | 69-124 | 13 | 13 | 4500F-BC | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 10 | 1.04 | mg/kg | 80-120 | | 70-130 | 20 | 20 | 4500F-BC | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

# Calculations of Fluoride

When the volume of the distillate is the same as the volume of the sample used, the direct determination of Fluoride concentration is the instrument's result.

However, when analyzing soil samples or high level samples requiring a dilution, the following equations apply:

**For liquids:**

Fluoride, mg/L = (mg F-/L) X (Volume of Distillate, mL)/ Volume of Sample, mL

**For solids:**

Fluoride, mg/Kg = (mg F-/L) X (Volume of Distillate, mL)/Weight of Sample, gm

To calculate final result for soil samples based on dry weight, multiply final result on 100 and divide on %TS (in %)

# Sample Preparation

WG1972861

| STD | Nv | |
|---|---|---|
| 0.2 | ~~126.1~~ | 126.1 |
| 0.5 | 102.0 | 102.0 |
| 1.0 | ~~95.6~~ 94.4 | 83.8 |
| 10.0 | ~~25.6~~ | 25.6 |

Analyst: DTH
Date & Time: 9/18/24 7:47
ICV:F 040324
LCS:F 040324
Spike:F 071524
Curve:WC- 3420
TISAB III: R- 4715

| Sample | Volume | Final Volume | Meter |
|---|---|---|---|
| ICV | 50mL | 50mL | 0.969 |
| ICB | | | 0.00 |
| Blank | | | 0.00 |
| LCS | | | 1.72 |
| 51241-05 | | | 0.00668 |
| -08 | 2x(25mL↑50mL) | | 0.132 |
| 51914-01 | 50mL | | 0.0596 |
| 53053-01 | | | 0.0883 |
| Dup 01 | | | 0.0867 |
| MS 01 | | | 0.998 |
| -02 | | | 0.0342 |
| -03 | | | 0.0763 |
| CCV -04 | | | 0.973 |
| CCB | | | 0.00 |
| -04 | | | 0.0442 |
| -05 | | | 0.0294 |
| 53250-01 | | | 0.199 |
| CCV | | | 0.947 |
| CCB | | | 0.00 |



Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

| Tube | Sample | Volume | Final Volume | Block | Comments |
|---|---|---|---|---|---|
| 1 | Blank | 50mL | 50mL | Phenol H2 | TSTH 9/18/24 02:20 |
| 2 | LCS | ↓ | ↓ | ↓ | 1mL P071584 100ppm |
| 3 | 57241-05 | ↓ | ↓ | ↓ | |
| 4 | -08 | 2x (25mL, 50mL) | ↓ | ↓ | Limited Volume |
| 5 | 51911-01 | 50mL | ↓ | ↓ | |
| 6 | 53053-01 | ↓ | ↓ | ↓ | |
| 7 | -Dup 01 | ↓ | ↓ | ↓ | |
| 8 | -MS 01 | ↓ | ↓ | ↓ | 0.5mL P071584 100ppm |
| 9 | 02 | ↓ | ↓ | ↓ | |
| 10 | 03 | ↓ | ↓ | ↓ | |
| 11 | 04 | ↓ | ↓ | Phenol #3 | |
| 12 | 05 | ↓ | ↓ | ↓ | |
| 13 | 53350-01 | ↓ | ↓ | ↓ | |



Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

# Phosphates Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 13:10 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.031 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 13:15 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.018 | 0.031 | 0.012 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 13:16 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.040 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 13:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.172 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/19/24 13:17 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.025 | 0.031 | 0.012 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973566-1 | **Date Collected** | : NA |
| **Client ID** | : WG1973566-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 12:51 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.015 | 0.031 | 0.012 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1973566-3 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SRDUP | **Date Received** | : 09/16/24 |
| **Sample Location** | : | **Date Analyzed** | : 09/19/24 13:11 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 121,4500P-E(M) | **Analyst** | : EYA |
| **Lab File ID** | : PHOS091924-WG1973566 | **Instrument ID** | : SEAL |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : 09/19/24 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 7723-14-0 | Phosphate, Total | 0.031 | 0.031 | 0.012 | |

# Sample Raw Data

Logo

# AQ-2 Tray Report

| | |
|---|---|
| **Serial Number:** | 090856 |
| **Report Requested By:** | EASAMOAH |
| **Date & Time:** | 19-Sep-2024 14:02:14 |
| **Tray Number:** | 1 |
| **Tray Name:** | WG1973559,66 |

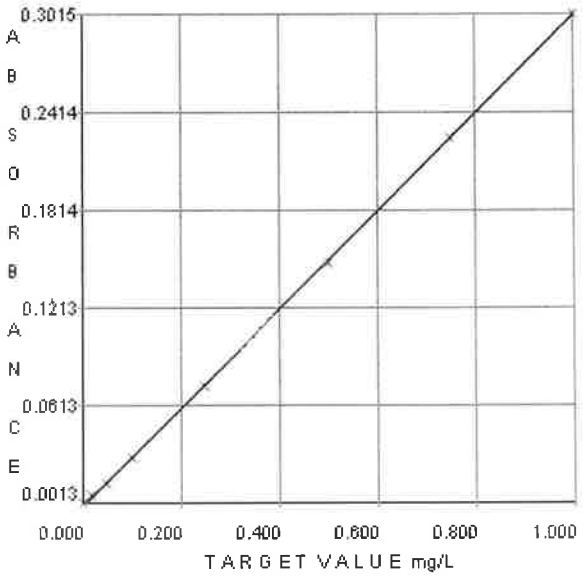
## T-Phos 1

### Calibration Chart

| Type | Observed | Calculated | Target | % Error |
|---|---|---|---|---|
| S1 | 0.0013 | 0.006 | 0.000 | |
| S90 | 0.0061 | 0.022 | 0.020 | 8.33 |
| S91 | 0.0143 | 0.049 | 0.050 | -1.79 |
| S92 | 0.0289 | 0.097 | 0.100 | -2.50 |
| S93 | 0.0738 | 0.246 | 0.250 | -1.46 |
| S94 | 0.1489 | 0.496 | 0.500 | -0.90 |
| S95 | 0.2265 | 0.753 | 0.750 | 0.36 |
| S96 | 0.3015 | 1.001 | 1.000 | 0.14 |
| S0 | 0.0015 | 0.006 | 0.000 | |

| | |
|---|---|
| Polynomial Order: | 1 |
| Correlation Coefficient: | 1.0000 |
| Carryover(%): | 0.1 |
| Calibration Equation: | y = bx + a |
| y =: | Concentration mg/L |
| x =: | Measured Absorbance |
| a =: | 1.550406E-003 |
| b =: | 3.316558E+000 |
| Date & Time: | 19-Sep-2024 12:48:17 |

### Calibration Graph




### Reagents

| Name | Batch | Prepared By | Expiry Date |
|---|---|---|---|
| TP color | 091524-tp color | Maeve Flaherty | 06-Oct-2024 22:00:00 |
| TP ascorbic | 091824-aa | Maeve Flaherty | 25-Sep-2024 22:00:00 |

### Test Results

| Cup | Type | ID | Result | Units | Raw Data | Test Dil. | Cup Dil. | User | Time/Date |
|---|---|---|---|---|---|---|---|---|---|
| | S1 | STANDARD 1 | 0.001 | | 0.001270 | | | EYA | 19-Sep-2024 12:39:17 |
| | S90 | STANDARD 90 | 0.006 | | 0.006065 | | | EYA | 19-Sep-2024 12:40:24 |
| | S91 | STANDARD 91 | 0.014 | | 0.014338 | | | EYA | 19-Sep-2024 12:41:30 |
| | S92 | STANDARD 92 | 0.029 | | 0.028930 | | | EYA | 19-Sep-2024 12:42:37 |
| | S93 | STANDARD 93 | 0.074 | | 0.073814 | | | EYA | 19-Sep-2024 12:43:44 |
| | S94 | STANDARD 94 | 0.149 | | 0.148940 | | | EYA | 19-Sep-2024 12:44:51 |
| | S95 | STANDARD 95 | 0.226 | | 0.226490 | | | EYA | 19-Sep-2024 12:45:58 |
| | S96 | STANDARD 96 | 0.301 | | 0.301465 | | | EYA | 19-Sep-2024 12:47:08 |
| | S0 | STANDARD 0 | 0.001 | | 0.001459 | | | EYA | 19-Sep-2024 12:48:17 |
| 2 | ICV | ICV | 0.482 | mg/L | 0.144925 | | | EYA | 19-Sep-2024 12:49:24 |
| 3 | ICB | ICB | 0.004 | mg/L | 0.000717 | | | EYA | 19-Sep-2024 12:50:32 |
| 4 | U1 | WG1973559-1 | 0.005ELL | mg/L | 0.000940 | | | EYA | 19-Sep-2024 12:51:40 |
| 5 | U2 | WG1973559-2 | 0.473 | mg/L | 0.142176 | | | EYA | 19-Sep-2024 12:52:47 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6 | U3 | L2452439-04 | 8.198 | mg/L | 0.098412 | x25.0000 | | EYA | 19-Sep-2024 13:57:17 |
| 6 | U3 | L2452439-04 | 7.452 | mg/L | 0.448931 | x5.0000 | | EYA | 19-Sep-2024 13:36:12 |
| 6 | U3 | L2452439-04 | 2.767 | mg/L | 0.833956 | | | EYA | 19-Sep-2024 12:53:55 |
| 7 | U4 | L2452768-01 | 2.987 | mg/L | 0.179679 | x5.0000 | | EYA | 19-Sep-2024 13:37:06 |
| 7 | U4 | L2452768-01 | 2.045 | mg/L | 0.616286 | | | EYA | 19-Sep-2024 12:55:03 |
| 8 | U5 | L2452825-01 | 2.033 | mg/L | 0.122109 | x5.0000 | | EYA | 19-Sep-2024 13:37:59 |
| 8 | U5 | L2452825-01 | 1.696 | mg/L | 0.510926 | | | EYA | 19-Sep-2024 12:56:10 |
| 9 | U6 | L2452829-01-10 | 63.395 | mg/L | 0.075991 | x25.0000 | x10.0000 | EYA | 19-Sep-2024 13:58:11 |
| 9 | U6 | L2452829-01-10 | 59.474 | mg/L | 0.358182 | x5.0000 | x10.0000 | EYA | 19-Sep-2024 13:38:53 |
| 9 | U6 | L2452829-01-10 | 28.802 | mg/L | 0.867965 | | x10.0000 | EYA | 19-Sep-2024 12:57:18 |
| 10 | U7 | L2452844-01-10 | 21.118 | mg/L | 0.126883 | x5.0000 | x10.0000 | EYA | 19-Sep-2024 13:39:46 |
| 10 | U7 | L2452844-01-10 | 18.526 | mg/L | 0.558117 | | x10.0000 | EYA | 19-Sep-2024 12:58:25 |
| | CCV | C C V | 0.472 | mg/L | 0.141914 | | | EYA | 19-Sep-2024 12:59:33 |
| | CCB | C C B | 0.004 | mg/L | 0.000670 | | | EYA | 19-Sep-2024 13:00:42 |
| 11 | U8 | L2453009-01 | 0.008 | mg/L | 0.001988 | | | EYA | 19-Sep-2024 13:01:51 |
| 12 | U9 | L2453009-02 | 0.008 | mg/L | 0.001858 | | | EYA | 19-Sep-2024 13:02:58 |
| 13 | U10 | L2453063-01 | 0.034 | mg/L | 0.009853 | | | EYA | 19-Sep-2024 13:04:06 |
| 14 | U11 | WG1973559-3 | 0.035 | mg/L | 0.010078 | | | EYA | 19-Sep-2024 13:05:13 |
| 15 | U12 | WG1973559-4 | 0.534 | mg/L | 0.160537 | | | EYA | 19-Sep-2024 13:06:21 |
| 16 | U13 | L2453069-01 | 0.016 | mg/L | 0.004246 | | | EYA | 19-Sep-2024 13:07:28 |
| 17 | U14 | L2453069-02 | 0.027 | mg/L | 0.007803 | | | EYA | 19-Sep-2024 13:08:37 |
| 18 | U15 | L2453069-03 | 0.016 | mg/L | 0.004423 | | | EYA | 19-Sep-2024 13:09:46 |
| 19 | U16 | L2453053-01O | 0.010 | mg/L | 0.002400 | | | EYA | 19-Sep-2024 13:10:40 |
| 20 | U17 | WG1973566-3O | 0.010 | mg/L | 0.002529 | | | EYA | 19-Sep-2024 13:11:42 |
| | CCV | C C V | 0.484 | mg/L | 0.145577 | | | EYA | 19-Sep-2024 13:12:36 |
| | CCB | C C B | 0.005 | mg/L | 0.001034 | | | EYA | 19-Sep-2024 13:13:31 |
| 21 | U18 | WG1973566-4O | 0.511 | mg/L | 0.153499 | | | EYA | 19-Sep-2024 13:14:25 |
| 22 | U19 | L2453053-02O | 0.006 | mg/L | 0.001434 | | | EYA | 19-Sep-2024 13:15:19 |
| 23 | U20 | L2453053-03O | 0.013 | mg/L | 0.003392 | | | EYA | 19-Sep-2024 13:16:12 |
| 24 | U21 | L2453053-04O | 0.056 | mg/L | 0.016427 | | | EYA | 19-Sep-2024 13:17:06 |
| 25 | U22 | L2453053-05O | 0.008 | mg/L | 0.001822 | | | EYA | 19-Sep-2024 13:17:59 |
| | CCV | C C V | 0.478 | mg/L | 0.143739 | | | EYA | 19-Sep-2024 13:18:53 |
| | CCB | C C B | 0.005 | mg/L | 0.001069 | | | EYA | 19-Sep-2024 13:19:48 |
| | CCV | CCV | 0.471 | mg/L | 0.141426 | | | | 19-Sep-2024 13:34:23 |
| | CCB | CCB | 0.004 | mg/L | 0.000810 | | | | 19-Sep-2024 13:35:17 |
| | CCV | CCV | 0.487 | mg/L | 0.146412 | | | | 19-Sep-2024 13:40:40 |
| | CCB | CCB | 0.005 | mg/L | 0.000999 | | | | 19-Sep-2024 13:41:35 |
| | CCV | CCV | 0.471 | mg/L | 0.141469 | | | | 19-Sep-2024 13:55:27 |
| | CCB | CCB | 0.004 | mg/L | 0.000822 | | | | 19-Sep-2024 13:56:22 |
| | CCV | CCV | 0.478 | mg/L | 0.143584 | | | | 19-Sep-2024 13:59:04 |
| | CCB | CCB | 0.005 | mg/L | 0.001140 | | | | 19-Sep-2024 13:59:59 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1973566-4 | **MS Analysis Date** | : 09/19/24 13:14 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sample Conc. | Spike Added | Spike Conc. | %R | Spike Added | Spike Conc. | %R | RPD | Recovery Limits | RPD Limit |
| **Parameter** | (mg/l) | (mg/l) | (mg/l) | | (mg/l) | (mg/l) | | | | |
| **Phosphate, Total** | 0.031 | 1.53 | 1.57 | 103 | | | | | 80-120 | 15 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | **Analysis Date** | : 09/19/24 13:10 |
| **Dup Sample ID** | : WG1973566-3 | **DUP Analysis Date** | : 09/19/24 13:11 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Phosphate, Total | 0.031 | 0.031 | 0 | 15 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1973566-2 | **LCS Analysis Date** | : 09/19/24 12:52 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **True (mg/l)** | **Found (mg/l)** | **%R** | **True (mg/l)** | **Found (mg/l)** | **%R** | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Phosphate, Total** | **1.53** | **1.45** | **95.** | | | | | **84-118** | **15** |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 0.01 | 0.004 | mg/l | 80-120 | | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Plastic 500ml H2SO4 preserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 5 | 1.67 | mg/kg | 52-148 | 20 | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.005 | 0.001 | mg/l | 90-110 | | 80-120 | 20 | 20 | 4500P-E | 48 hours | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.05 | 0.05 | mg/kg | | | | | | 4500P-E | 48 hours | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.*

# Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

# Wet Chemistry
# By
# IC Methods

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-01 | **Date Collected** | : 09/16/24 11:10 |
| **Client ID** | : MW-1SR | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 10:52 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-02 | **Date Collected** | : 09/16/24 11:50 |
| **Client ID** | : MW-1DR2 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 11:04 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | 0.066 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-03 | **Date Collected** | : 09/16/24 14:20 |
| **Client ID** | : MW-11S | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 11:16 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | 0.043 | 0.050 | 0.013 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-04 | **Date Collected** | : 09/16/24 14:15 |
| **Client ID** | : MW-11D | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 11:28 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : L2453053-05 | **Date Collected** | : 09/16/24 12:00 |
| **Client ID** | : DUP_091624 | **Date Received** | : 09/16/24 |
| **Sample Location** | : 416 MILLER PLACE-YAPHANK ROAD | **Date Analyzed** | : 09/20/24 12:04 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | 0.066 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Lab ID** | : WG1974201-1 | **Date Collected** | : NA |
| **Client ID** | : WG1974201-1BLANK | **Date Received** | : NA |
| **Sample Location** | : | **Date Analyzed** | : 09/20/24 10:03 |
| **Sample Matrix** | : WATER | **Dilution Factor** | : 1 |
| **Analytical Method** | : 44,300.0 | **Analyst** | : CVN, |
| **Lab File ID** | : WG1974201 | **Instrument ID** | : IC3 |
| **Sample Amount** | : | **%Solids** | : N/A |
| **Digestion Method** | : | **Date Digested** | : |

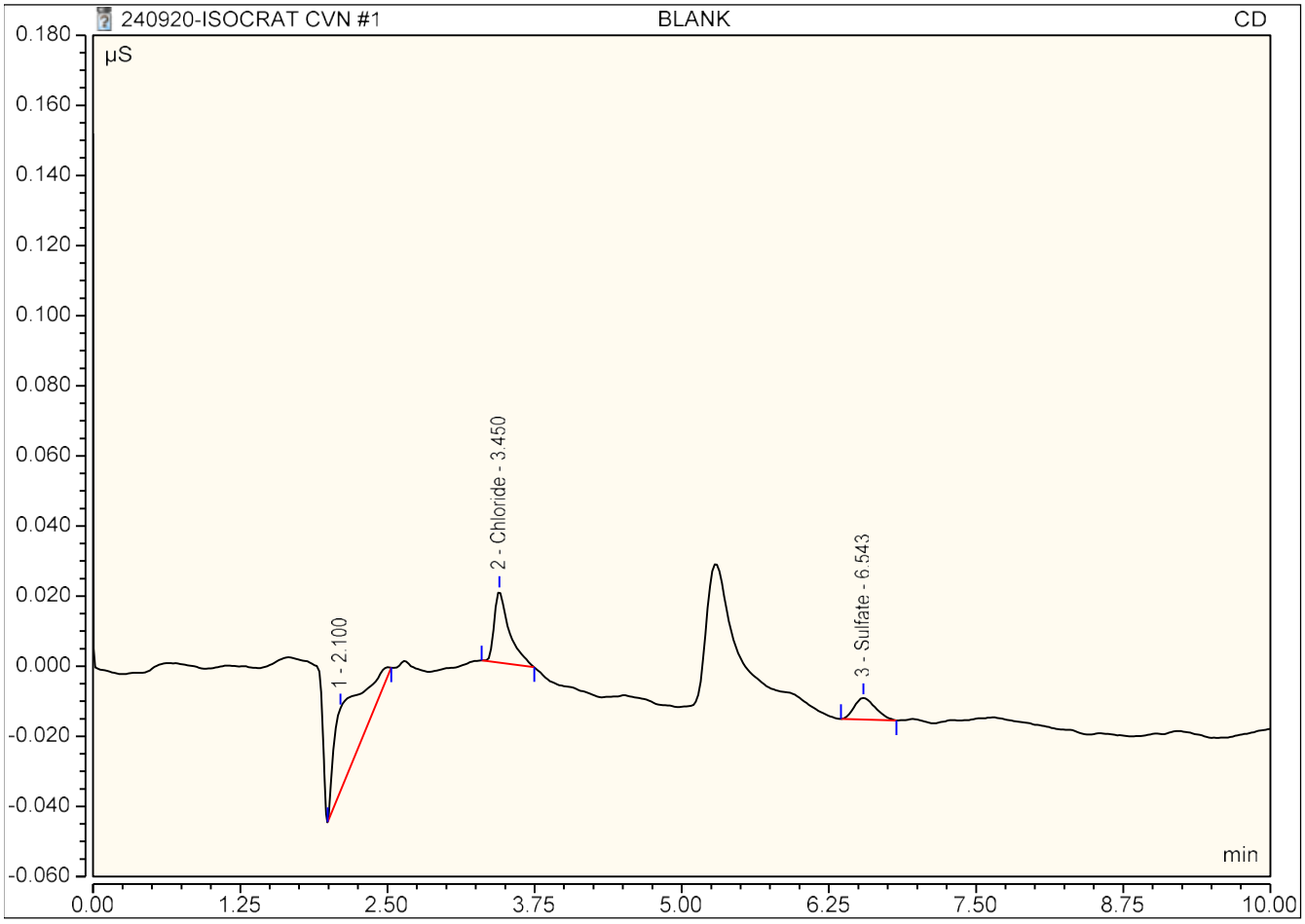
| | | mg/l | | | |
|---|---|---|---|---|---|
| **CAS NO.** | **Parameter** | **Results** | **RL** | **MDL** | **Qualifier** |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Sample Raw Data

## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLANK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 16:08** | *Run Time:* | **10.00** |

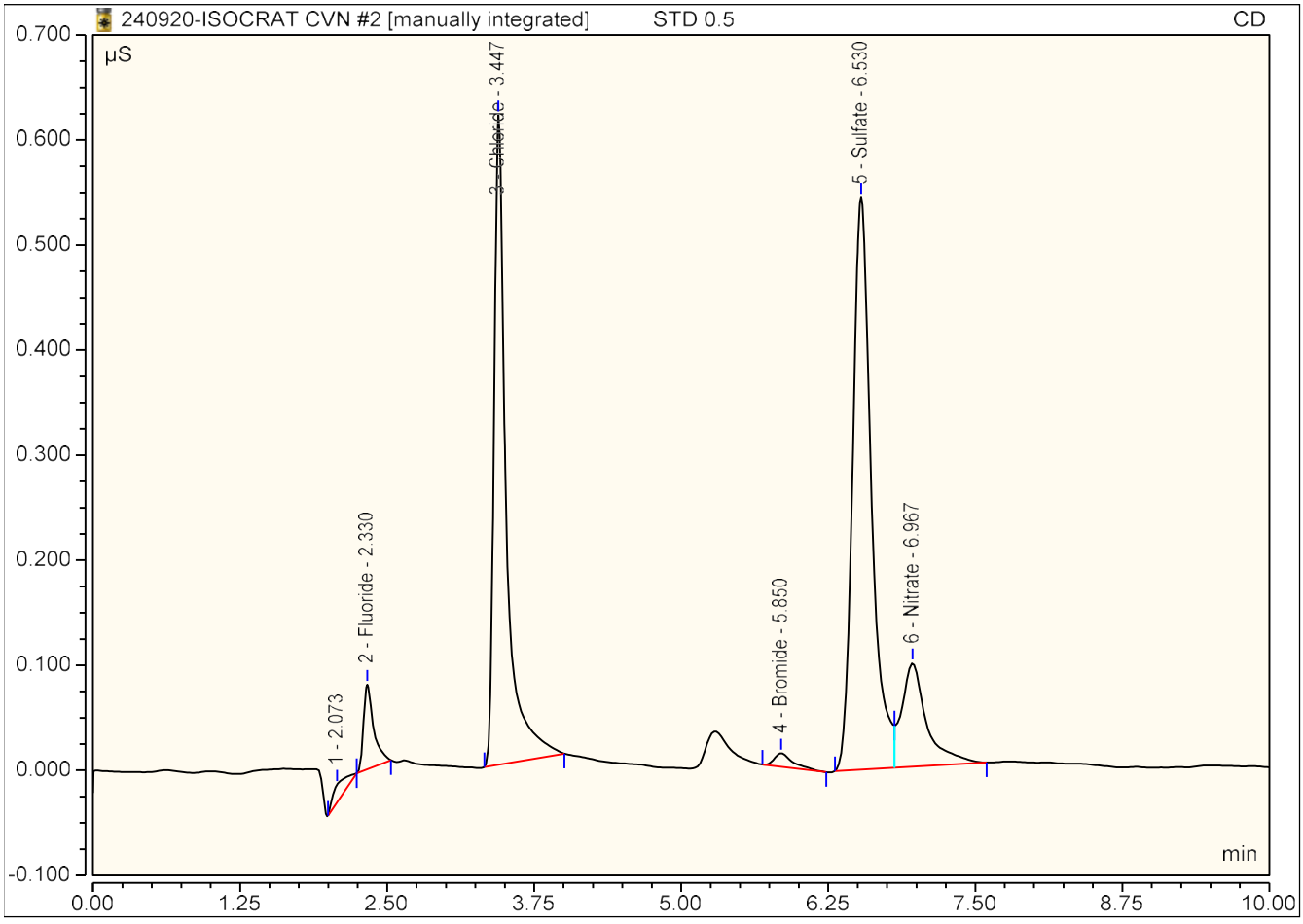
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.45 | **Chloride** | BMB | 0.003 | 0.020 | 0.2129 |
| 3 | 6.54 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2810 |
| **TOTAL:** | | | | 0.00 | 0.03 | 0.49 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 0.5** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 16:20** | *Run Time:* | **10.00** |

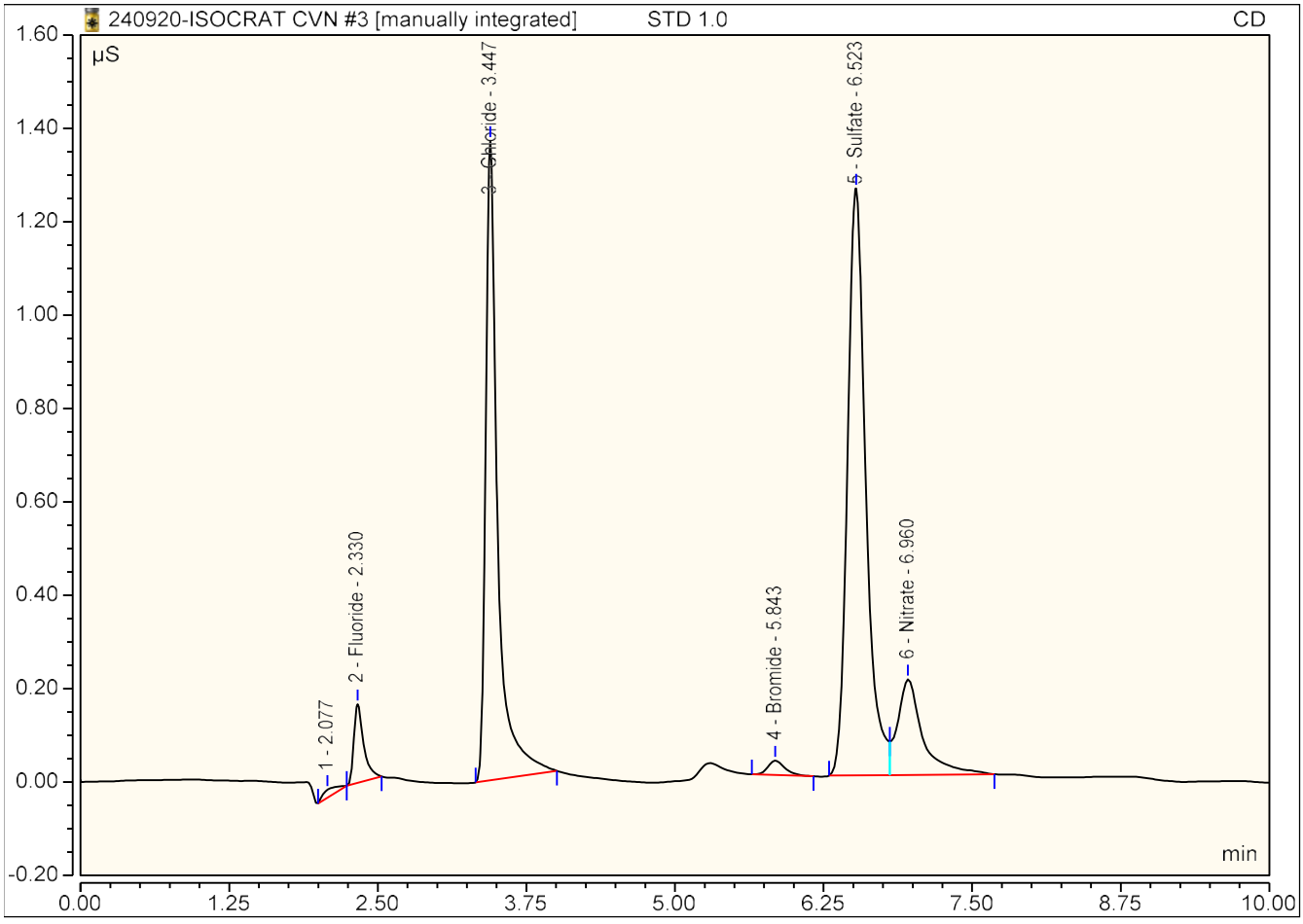
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.008 | 0.081 | 0.0592 |
| 3 | 3.45 | **Chloride** | BMB* | 0.074 | 0.618 | 0.3873 |
| 4 | 5.85 | **Bromide** | BMB | 0.002 | 0.013 | 0.0525 |
| 5 | 6.53 | **Sulfate** | BM * | 0.100 | 0.545 | 0.6237 |
| 6 | 6.97 | **Nitrate** | MB* | 0.024 | 0.098 | 0.0442 |
| **TOTAL:** | | | | 0.21 | 1.35 | 1.17 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 1.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 16:33** | *Run Time:* | **10.00** |

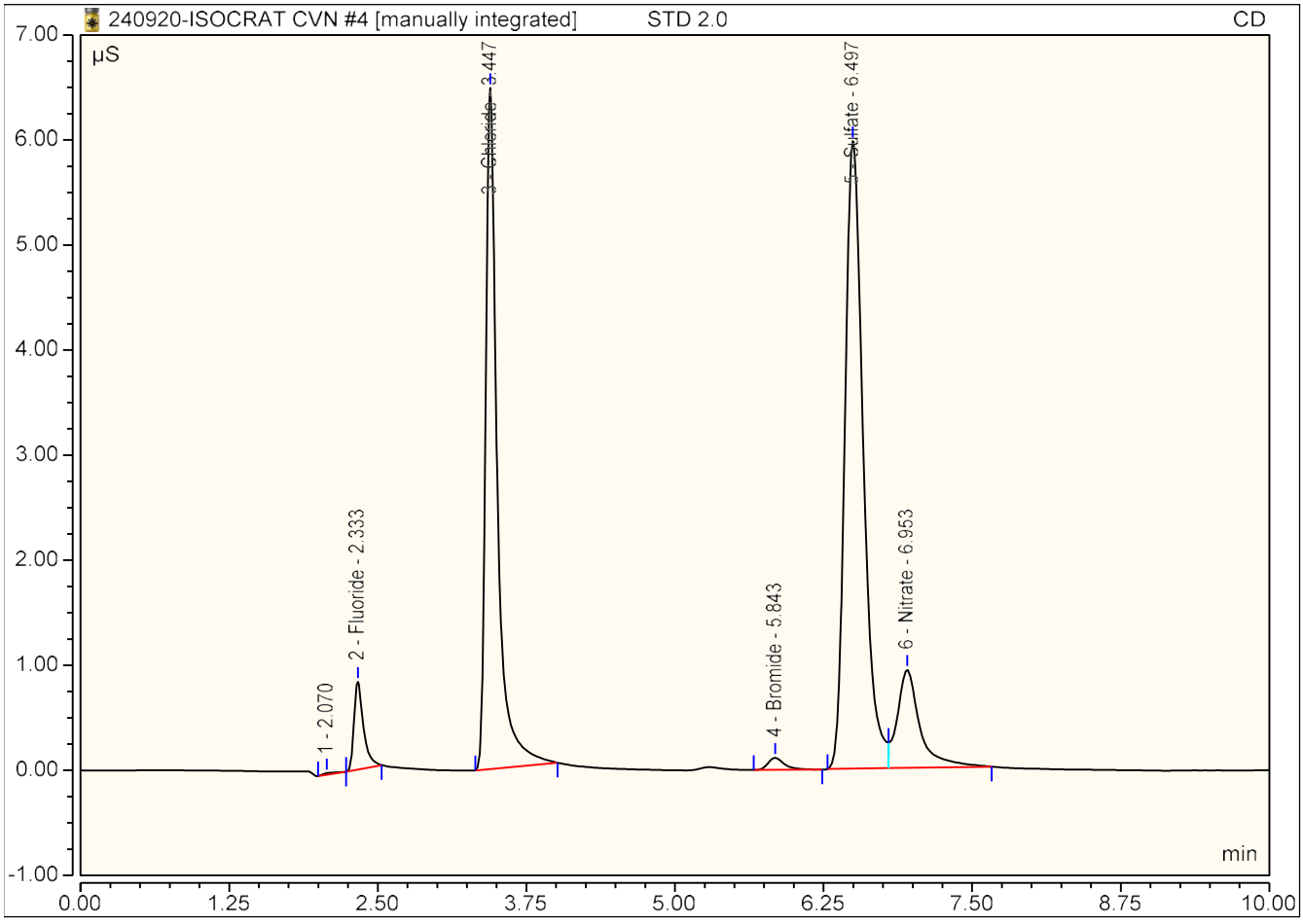
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.016 | 0.169 | 0.0738 |
| 3 | 3.45 | **Chloride** | BMB* | 0.159 | 1.370 | 0.5947 |
| 4 | 5.84 | **Bromide** | BMB | 0.005 | 0.031 | 0.0753 |
| 5 | 6.52 | **Sulfate** | BM * | 0.223 | 1.257 | 1.0491 |
| 6 | 6.96 | **Nitrate** | MB* | 0.050 | 0.205 | 0.0646 |
| **TOTAL:** | | | | 0.45 | 3.03 | 1.86 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 2.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 16:45** | *Run Time:* | **10.00** |

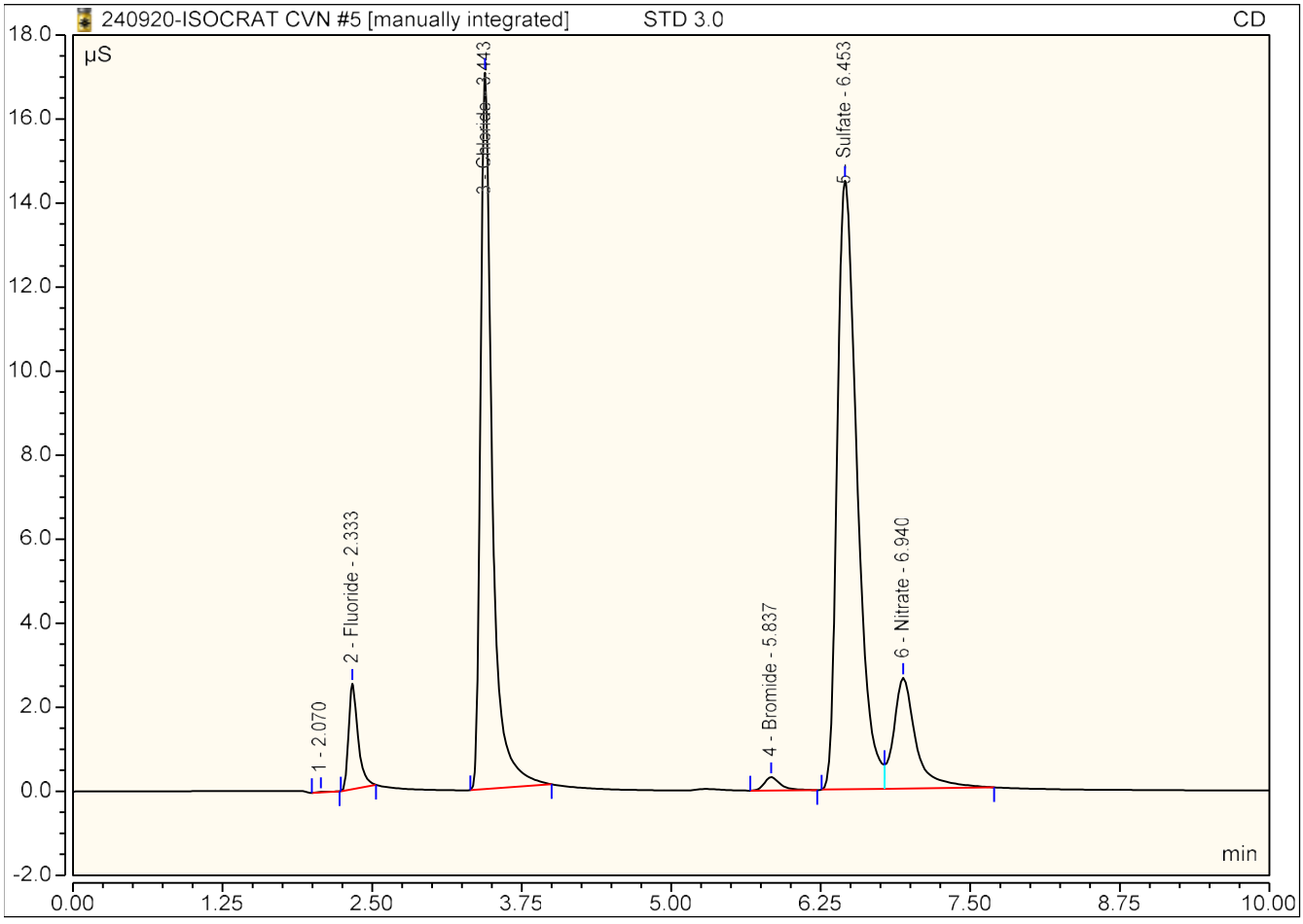
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.077 | 0.836 | 0.1840 |
| 3 | 3.45 | **Chloride** | BMB* | 0.734 | 6.483 | 1.9971 |
| 4 | 5.84 | **Bromide** | BMB | 0.019 | 0.116 | 0.1890 |
| 5 | 6.50 | **Sulfate** | BM * | 1.064 | 5.973 | 3.9561 |
| 6 | 6.95 | **Nitrate** | MB* | 0.206 | 0.936 | 0.1868 |
| **TOTAL:** | | | | 2.10 | 14.34 | 6.51 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 3.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 16:57** | *Run Time:* | **10.00** |

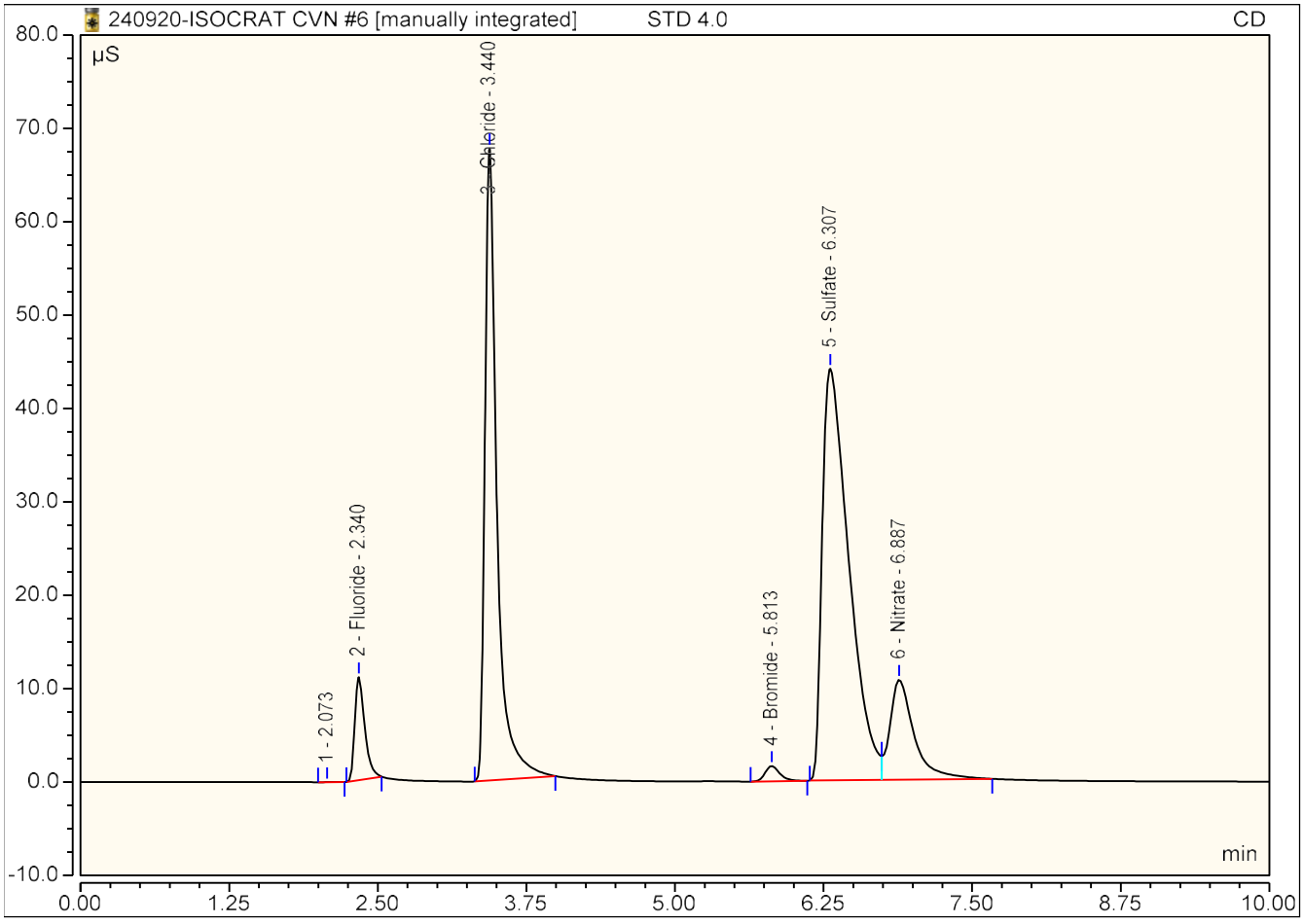
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.228 | 2.511 | 0.4607 |
| 3 | 3.44 | **Chloride** | BMB* | 1.937 | 17.049 | 4.9336 |
| 4 | 5.84 | **Bromide** | BMB | 0.050 | 0.317 | 0.4440 |
| 5 | 6.45 | **Sulfate** | BM * | 2.793 | 14.483 | 9.9320 |
| 6 | 6.94 | **Nitrate** | MB* | 0.570 | 2.634 | 0.4717 |
| **TOTAL:** | | | | 5.58 | 36.99 | 16.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 4.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 17:09** | *Run Time:* | **10.00** |

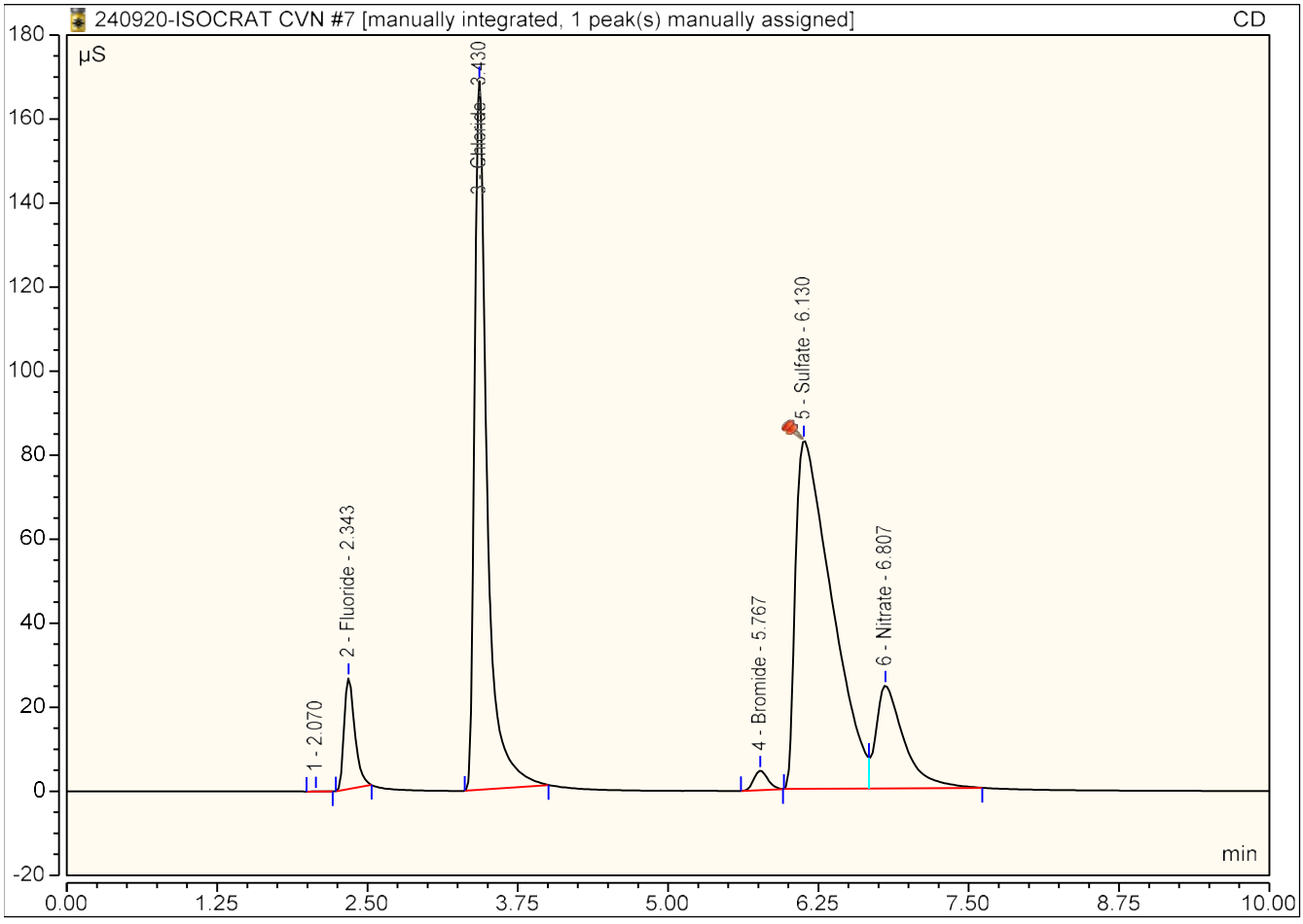
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.34 | **Fluoride** | BMB | 1.066 | 11.023 | 1.9885 |
| 3 | 3.44 | **Chloride** | BMB* | 7.993 | 67.701 | 19.7203 |
| 4 | 5.81 | **Bromide** | BMB | 0.239 | 1.650 | 2.0141 |
| 5 | 6.31 | **Sulfate** | BM * | 11.456 | 44.080 | 39.8861 |
| 6 | 6.89 | **Nitrate** | MB* | 2.529 | 10.726 | 2.0078 |
| **TOTAL:** | | | | 23.28 | 135.18 | 65.62 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 5.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 17:21** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.34 | **Fluoride** | BMB | 2.722 | 26.414 | 5.0087 |
| 3 | 3.43 | **Chloride** | BMB* | 20.443 | 168.608 | 50.1170 |
| 4 | 5.77 | **Bromide** | BMB | 0.629 | 4.639 | 5.2575 |
| 5 | 6.13 | **Sulfate** | BM *^ | 28.857 | 82.915 | 100.0530 |
| 6 | 6.81 | **Nitrate** | MB* | 6.605 | 24.427 | 5.2021 |
| **TOTAL:** | | | | 59.26 | 307.00 | 165.64 |



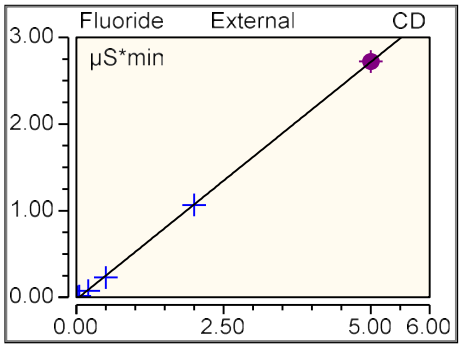
# Calibration Batch Report

| | | | |
|---|---|---|---|
| *Sequence:* | **240920-ISOCRAT CVN** | *Injection Volume:* | **25.00** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **05-Sep-2024 / 17:21** | *Run Time:* | **10** |

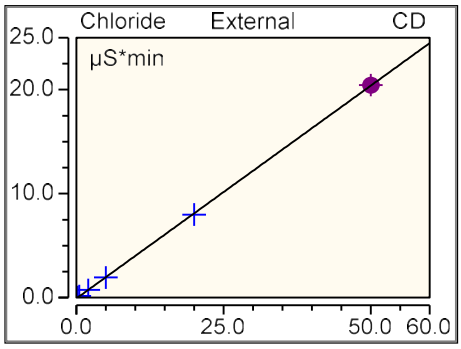
**Calibration Summary**

| Peak Name | Eval.Type | Cal.Type | Points | Offset (C0) | Slope (C1) | Curve (C2) | Coeff.Det. % |
|---|---|---|---|---|---|---|---|
| Fluoride | Area | in, WithOffse | 6.000 | -0.024 | 0.548 | 0.000 | 99.9805 |
| Chloride | Area | in, WithOffse | 6.000 | -0.084 | 0.410 | 0.000 | 99.9935 |
| Bromide | Area | in, WithOffse | 5.000 | -0.004 | 0.120 | 0.000 | 99.8241 |
| Sulfate | Area | in, WithOffse | 6.000 | -0.080 | 0.289 | 0.000 | 99.9995 |
| Nitrate | Area | in, WithOffse | 5.000 | -0.032 | 1.276 | 0.000 | 99.9412 |
| | | **AVERAGE:** | | -0.0449 | 0.5287 | 0.0000 | 99.9478 |

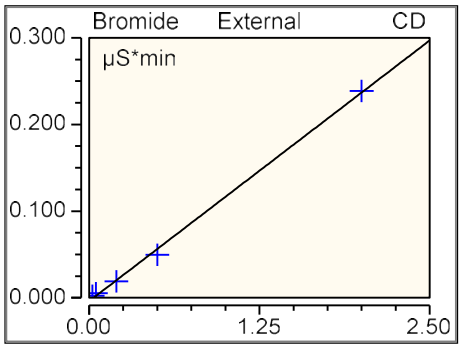
| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Fluoride | Fluoride | Fluoride | Fluoride |
| STD 0.5 | 2.330 | 0.0081 | 0.081 | 0.059 |
| STD 1.0 | 2.330 | 0.0161 | 0.169 | 0.074 |
| STD 2.0 | 2.333 | 0.0765 | 0.836 | 0.184 |
| STD 3.0 | 2.333 | 0.2282 | 2.511 | 0.461 |
| STD 4.0 | 2.340 | 1.0658 | 11.023 | 1.989 |
| STD 5.0 | 2.343 | 2.7217 | 26.414 | 5.009 |
| **Average** | 2.335 | | | |
| **Rel. Std. Dev.** | 0.235 % | | | |



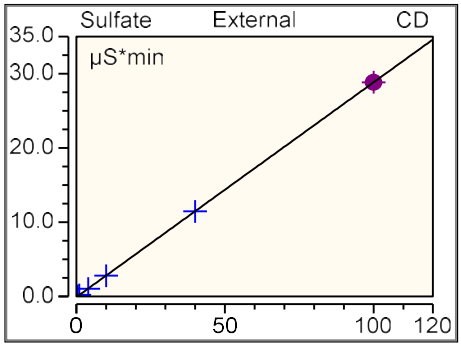

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Chloride | Chloride | Chloride | Chloride |
| STD 0.5 | 3.447 | 0.0744 | 0.618 | 0.387 |
| STD 1.0 | 3.447 | 0.1594 | 1.370 | 0.595 |
| STD 2.0 | 3.447 | 0.7338 | 6.483 | 1.997 |
| STD 3.0 | 3.443 | 1.9365 | 17.049 | 4.934 |
| STD 4.0 | 3.440 | 7.9930 | 67.701 | 19.720 |
| STD 5.0 | 3.430 | 20.4430 | 168.608 | 50.117 |
| **Average** | 3.442 | | | |
| **Rel. Std. Dev.** | 0.190 % | | | |



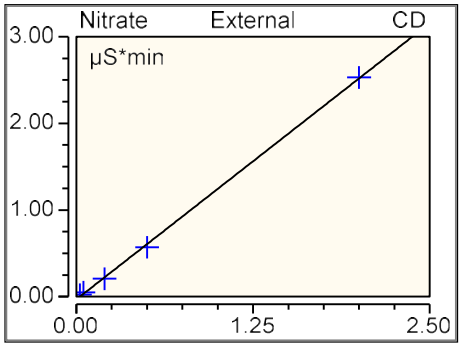

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Bromide | Bromide | Bromide | Bromide |
| STD 0.5 | 5.850 | 0.0024 | 0.013 | 0.053 |
| STD 1.0 | 5.843 | 0.0051 | 0.031 | 0.075 |
| STD 2.0 | 5.843 | 0.0188 | 0.116 | 0.189 |
| STD 3.0 | 5.837 | 0.0495 | 0.317 | 0.444 |
| STD 4.0 | 5.813 | 0.2386 | 1.650 | 2.014 |
| STD 5.0 | 5.767 | 0.6291 | 4.639 | 5.257 |
| **Average** | 5.826 | | | |
| **Rel. Std. Dev.** | 0.541 % | | | |



| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Sulfate | Sulfate | Sulfate | Sulfate |
| STD 0.5 | 6.530 | 0.1004 | 0.545 | 0.624 |
| STD 1.0 | 6.523 | 0.2234 | 1.257 | 1.049 |
| STD 2.0 | 6.497 | 1.0642 | 5.973 | 3.956 |
| STD 3.0 | 6.453 | 2.7926 | 14.483 | 9.932 |
| STD 4.0 | 6.307 | 11.4558 | 44.080 | 39.886 |
| STD 5.0 | 6.130 | 28.8572 | 82.915 | 100.053 |
| **Average** | 6.407 | | | |
| **Rel. Std. Dev.** | 2.474 % | | | |



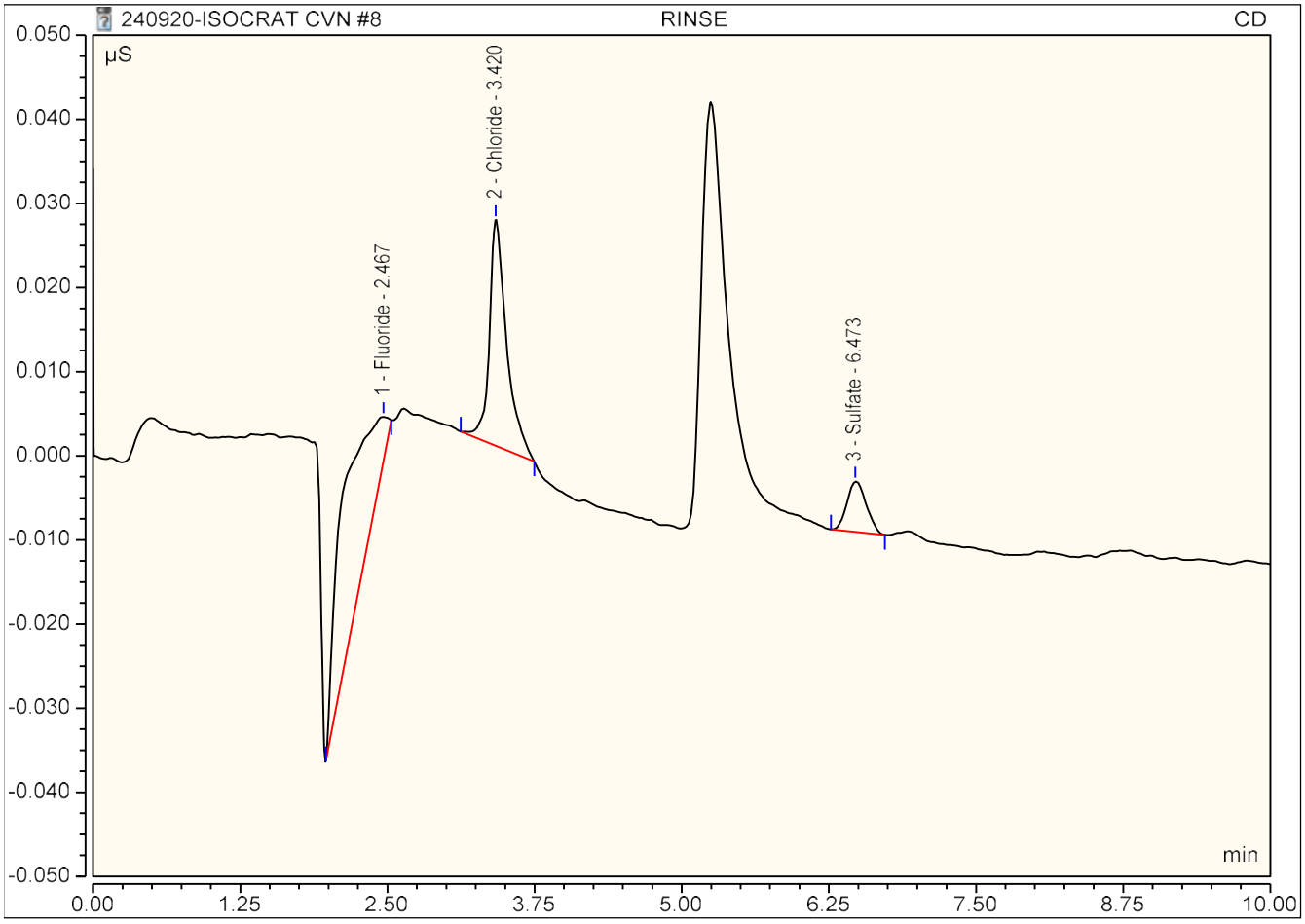

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Nitrate | Nitrate | Nitrate | Nitrate |
| STD 0.5 | 6.967 | 0.0242 | 0.098 | 0.044 |
| STD 1.0 | 6.960 | 0.0502 | 0.205 | 0.065 |
| STD 2.0 | 6.953 | 0.2061 | 0.936 | 0.187 |
| STD 3.0 | 6.940 | 0.5696 | 2.634 | 0.472 |
| STD 4.0 | 6.887 | 2.5293 | 10.726 | 2.008 |
| STD 5.0 | 6.807 | 6.6045 | 24.427 | 5.202 |
| **Average** | 6.919 | | | |
| **Rel. Std. Dev.** | 0.896 % | | | |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **RINSE** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 09:03** | *Run Time:* | **10.00** |

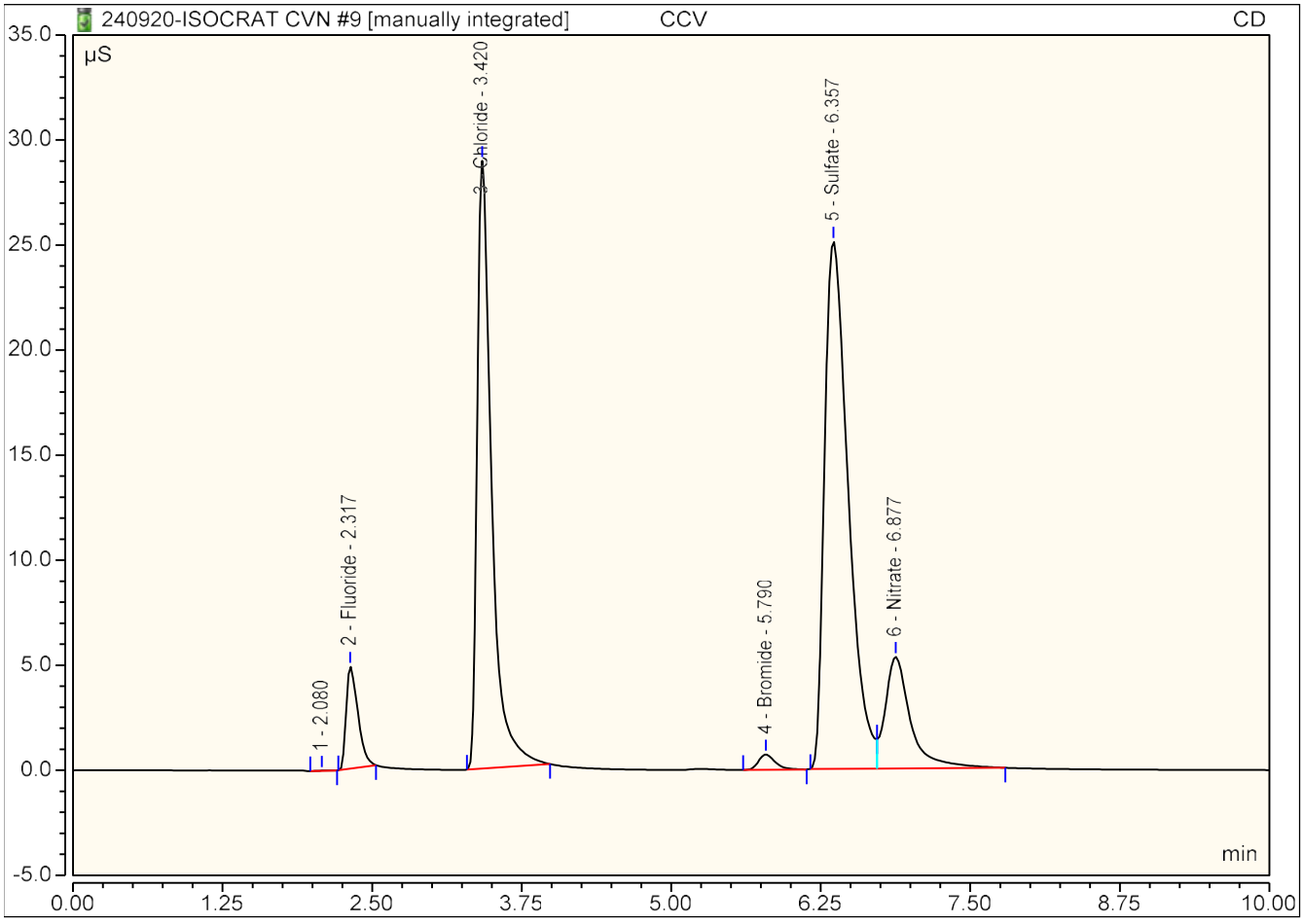
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.47 | **Fluoride** | BMB | 0.007 | 0.005 | 0.0574 |
| 2 | 3.42 | **Chloride** | BMB | 0.005 | 0.027 | 0.2167 |
| 3 | 6.47 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2805 |
| **TOTAL:** | | | | 0.01 | 0.04 | 0.55 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 09:15** | *Run Time:* | **10.00** |

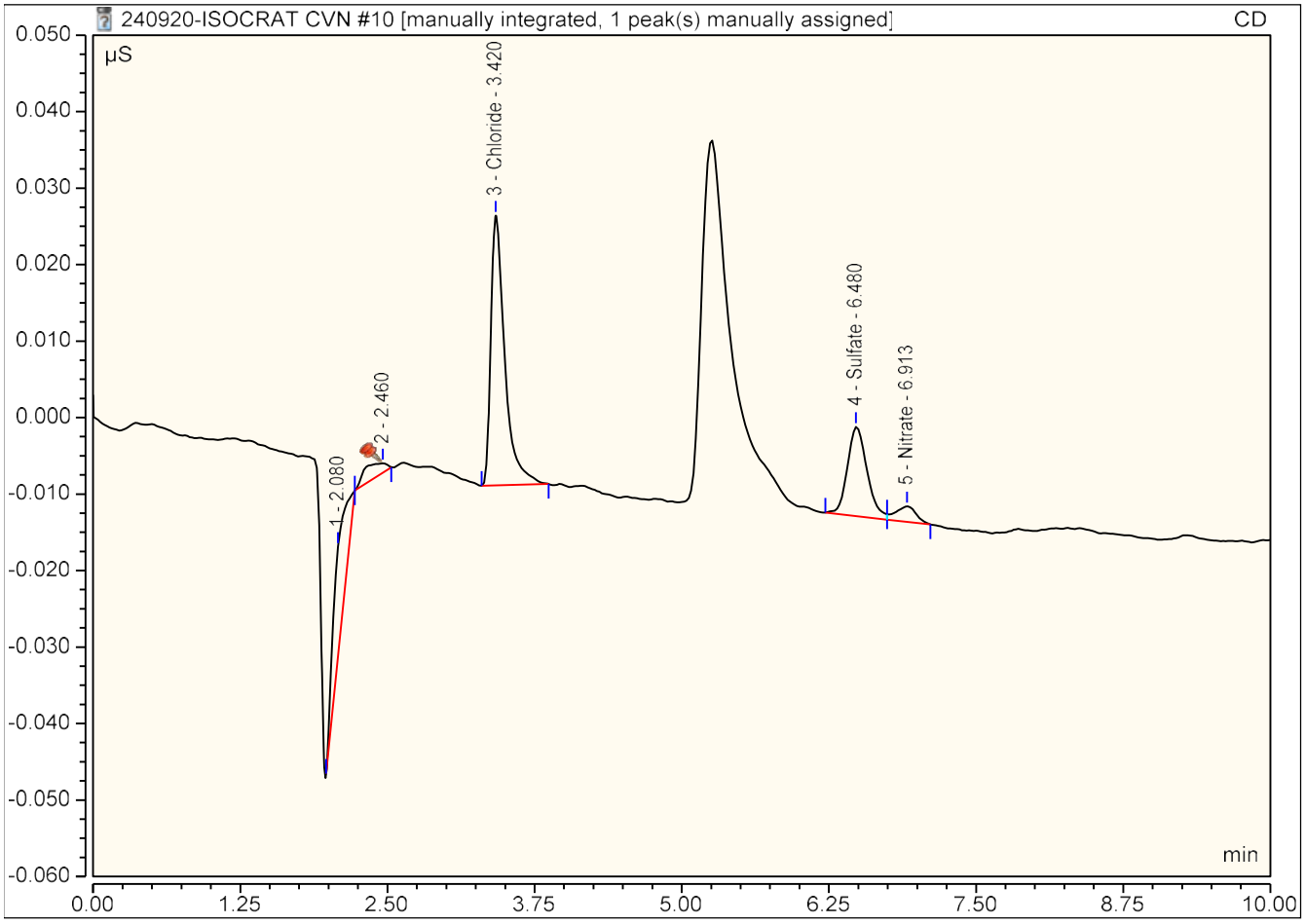
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.549 | 4.858 | 1.0451 |
| 3 | 3.42 | **Chloride** | BMB* | 4.050 | 28.934 | 10.0941 |
| 4 | 5.79 | **Bromide** | BMB | 0.119 | 0.732 | 1.0174 |
| 5 | 6.36 | **Sulfate** | BM * | 5.774 | 25.094 | 20.2391 |
| 6 | 6.88 | **Nitrate** | MB* | 1.297 | 5.315 | 1.0419 |
| **TOTAL:** | | | | 11.79 | 64.93 | 33.44 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 09:27** | *Run Time:* | **10.00** |

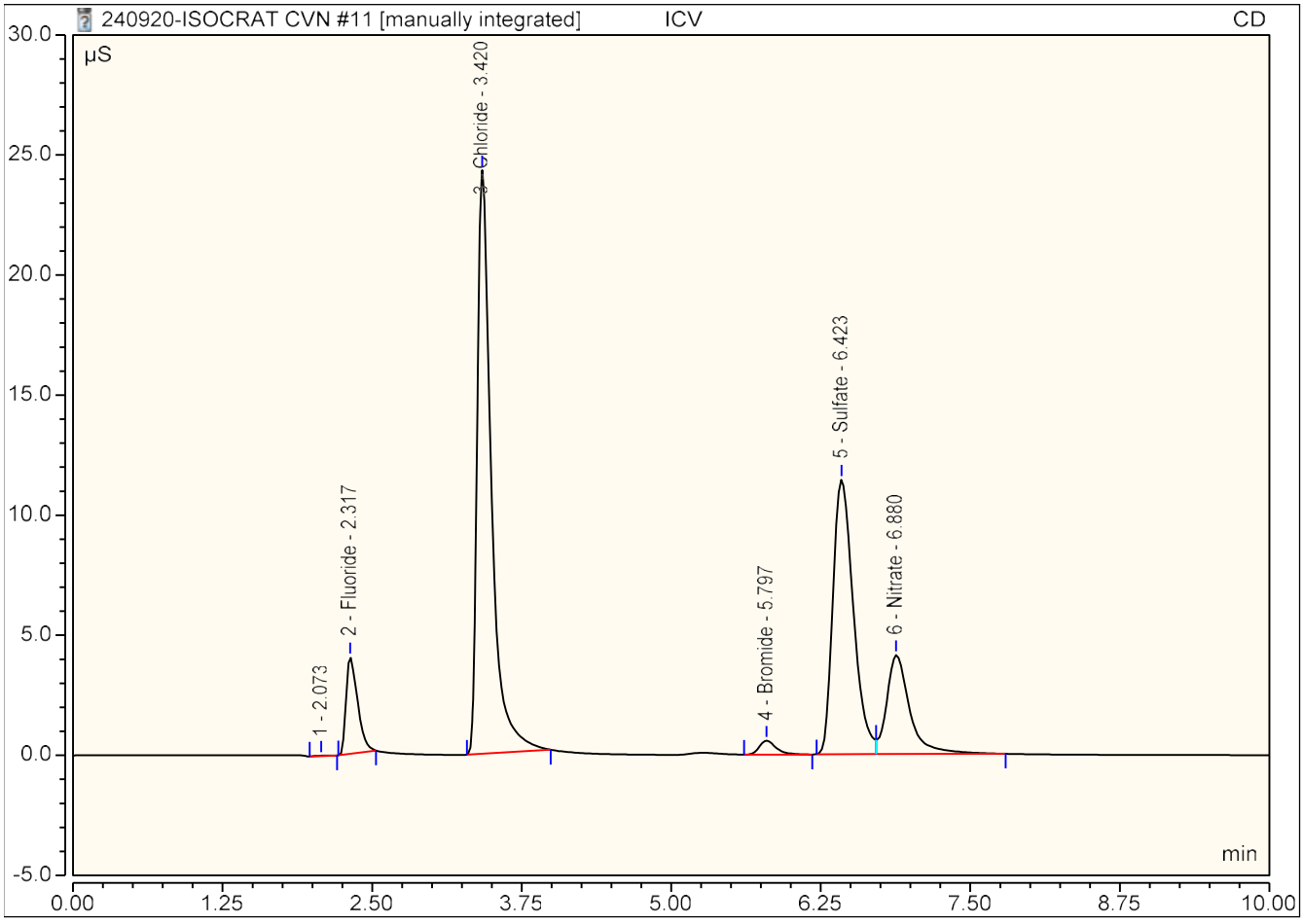
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 3.42 | **Chloride** | BMB* | 0.005 | 0.035 | 0.2174 |
| 4 | 6.48 | **Sulfate** | BM * | 0.002 | 0.012 | 0.2843 |
| 5 | 6.91 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 09:39** | *Run Time:* | **10.00** |

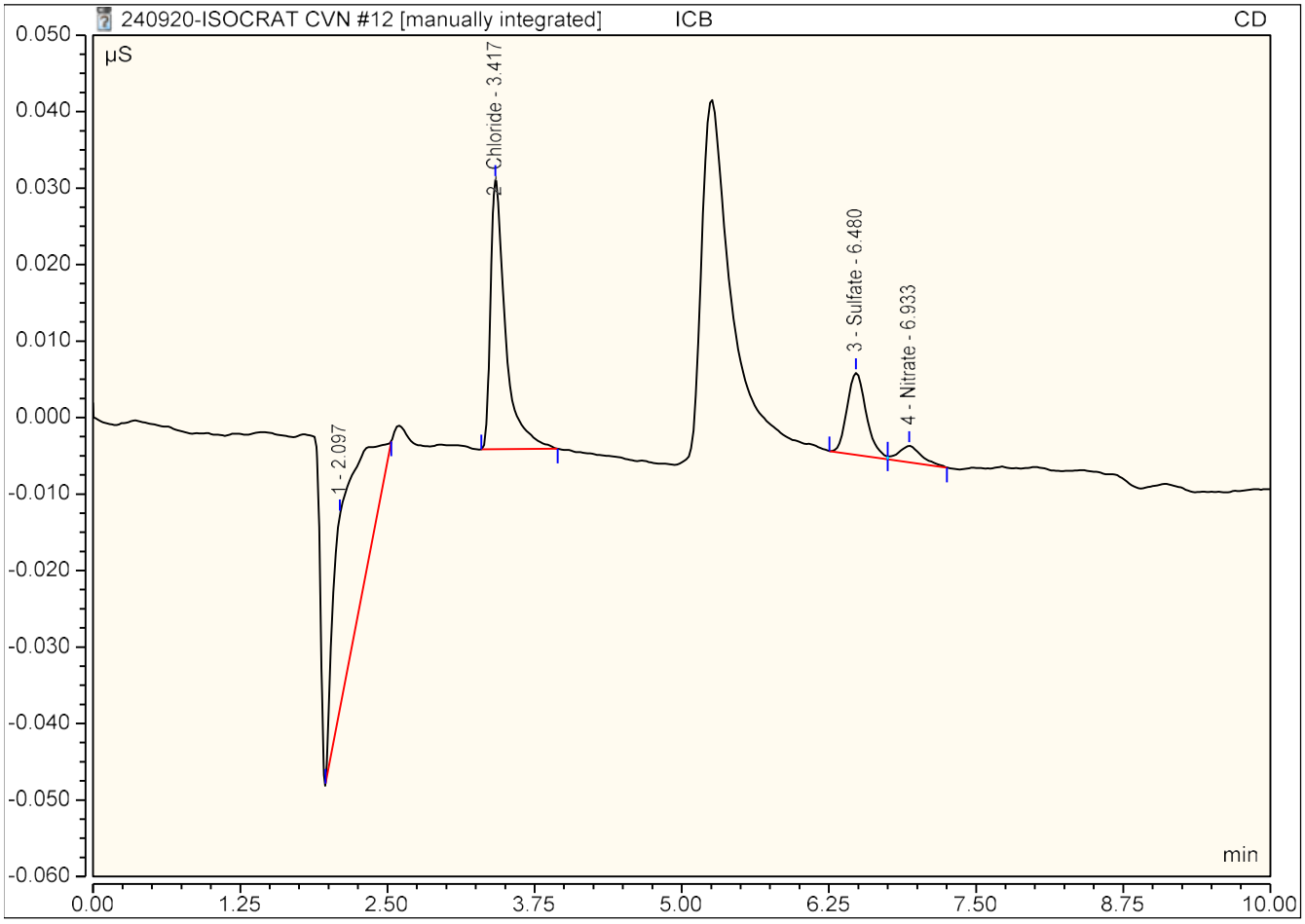
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.447 | 4.023 | 0.8593 |
| 3 | 3.42 | **Chloride** | BMB* | 3.330 | 24.309 | 8.3357 |
| 4 | 5.80 | **Bromide** | BMB | 0.095 | 0.584 | 0.8235 |
| 5 | 6.42 | **Sulfate** | BM * | 2.267 | 11.432 | 8.1139 |
| 6 | 6.88 | **Nitrate** | MB* | 0.922 | 4.122 | 0.7476 |
| **TOTAL:** | | | | 7.06 | 44.47 | 18.88 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 09:51** | *Run Time:* | **10.00** |

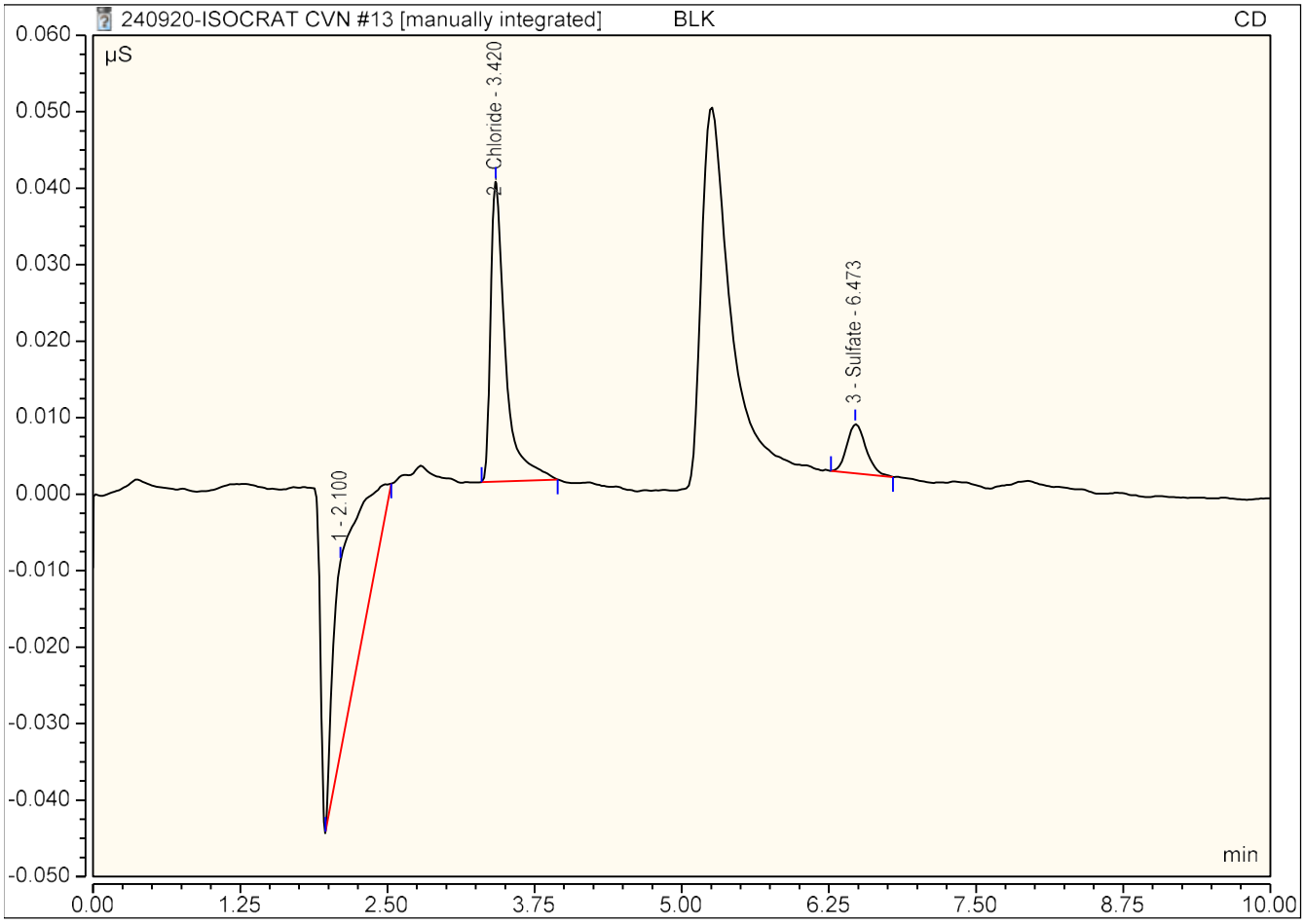
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.005 | 0.035 | 0.2182 |
| 3 | 6.48 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2836 |
| 4 | 6.93 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 10:03** | *Run Time:* | **10.00** |

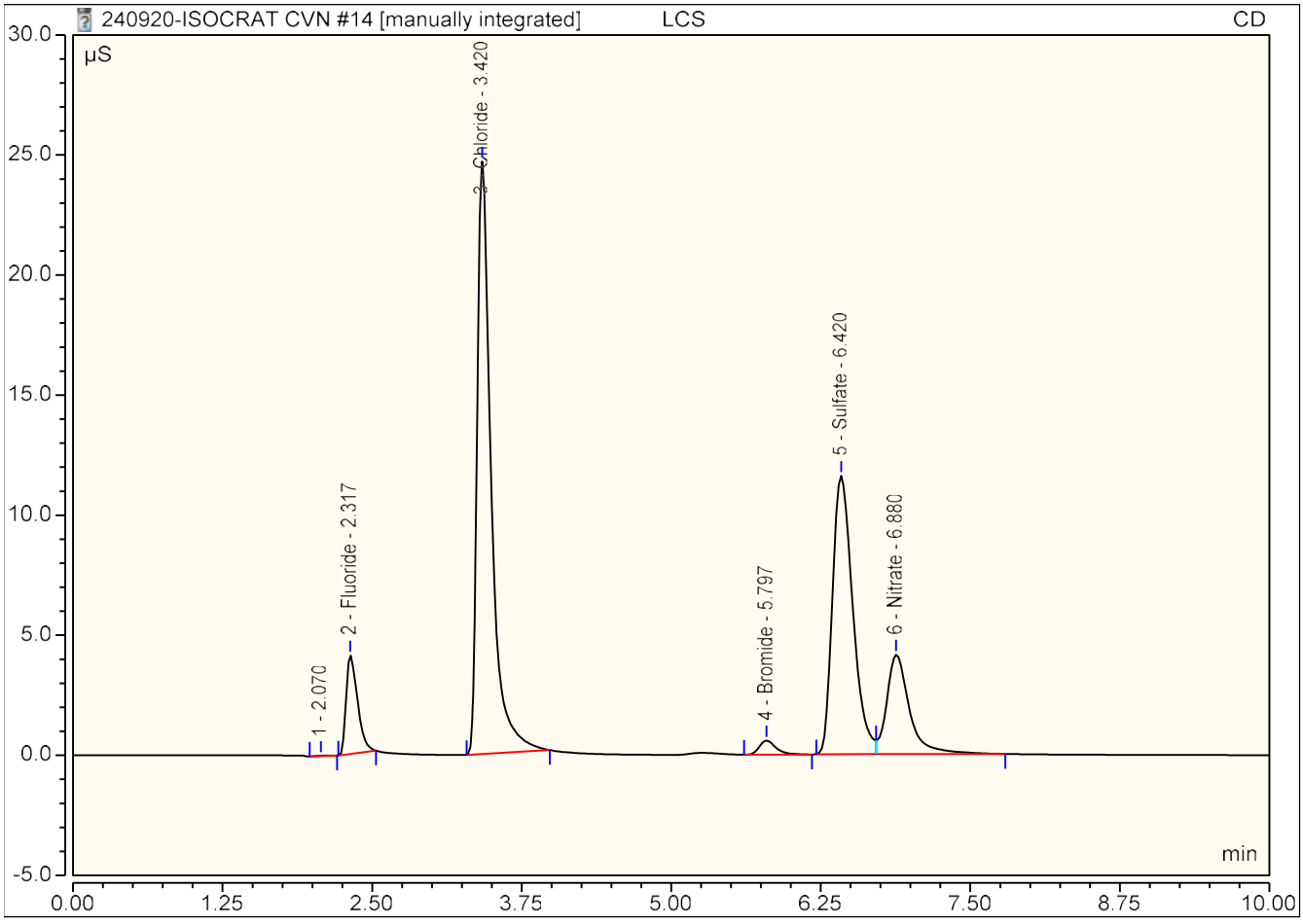
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.006 | 0.039 | 0.2195 |
| 3 | 6.47 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2807 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 10:16** | *Run Time:* | **10.00** |

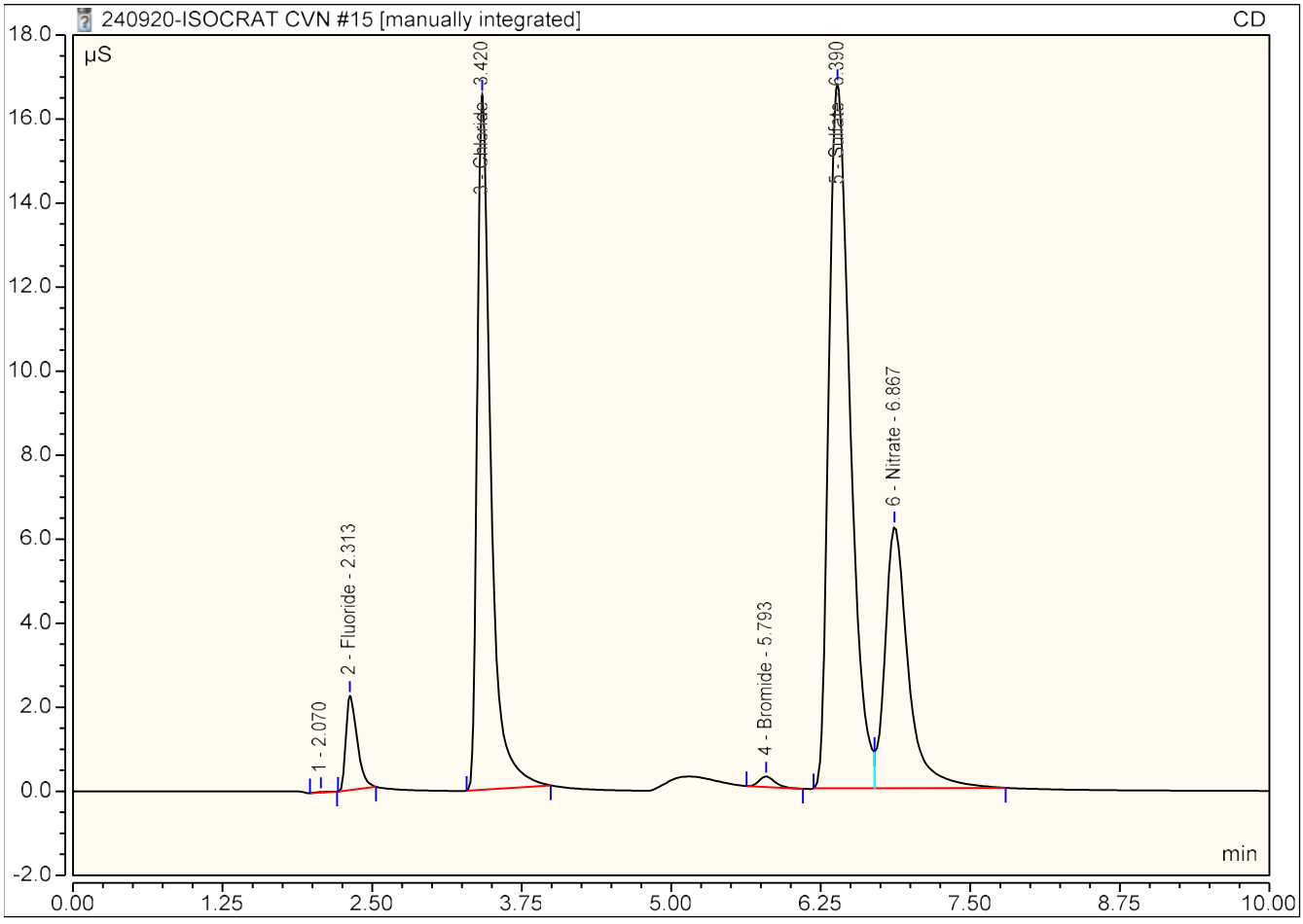
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.451 | 4.102 | 0.8666 |
| 3 | 3.42 | **Chloride** | BMB* | 3.347 | 24.679 | 8.3768 |
| 4 | 5.80 | **Bromide** | BMB | 0.095 | 0.590 | 0.8232 |
| 5 | 6.42 | **Sulfate** | BM * | 2.282 | 11.593 | 8.1675 |
| 6 | 6.88 | **Nitrate** | MB* | 0.913 | 4.145 | 0.7406 |
| **TOTAL:** | | | | 7.09 | 45.11 | 18.97 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-01 BR MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 10:28** | *Run Time:* | **10.00** |

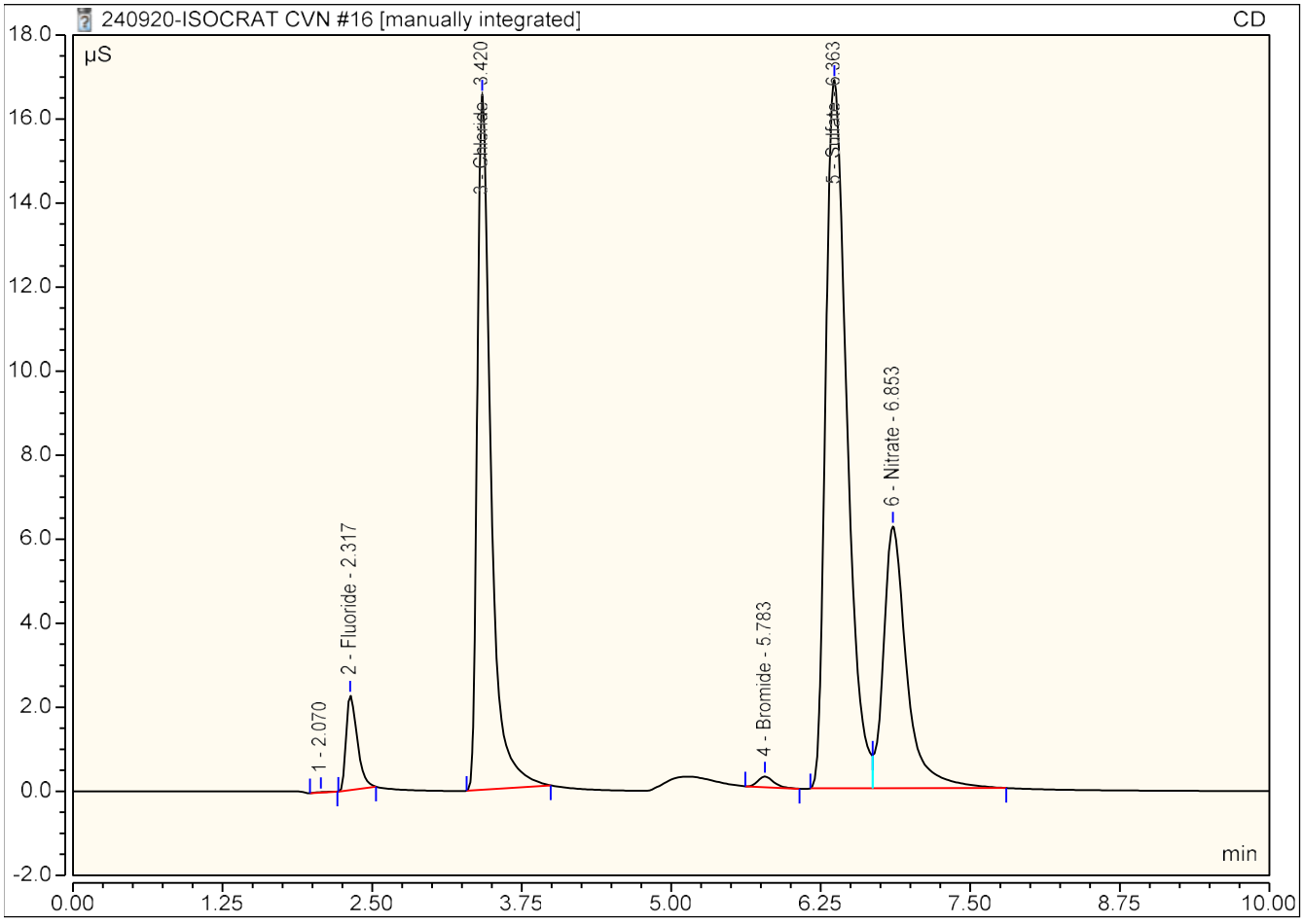
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.243 | 2.242 | 0.4868 |
| 3 | 3.42 | **Chloride** | BMB* | 2.192 | 16.548 | 5.5569 |
| 4 | 5.79 | **Bromide** | BMB | 0.039 | 0.253 | 0.3547 |
| 5 | 6.39 | **Sulfate** | BM * | 3.458 | 16.759 | 12.2323 |
| 6 | 6.87 | **Nitrate** | MB* | 1.407 | 6.231 | 1.1284 |
| **TOTAL:** | | | | 7.34 | 42.03 | 19.76 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-01 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 10:40** | *Run Time:* | **10.00** |

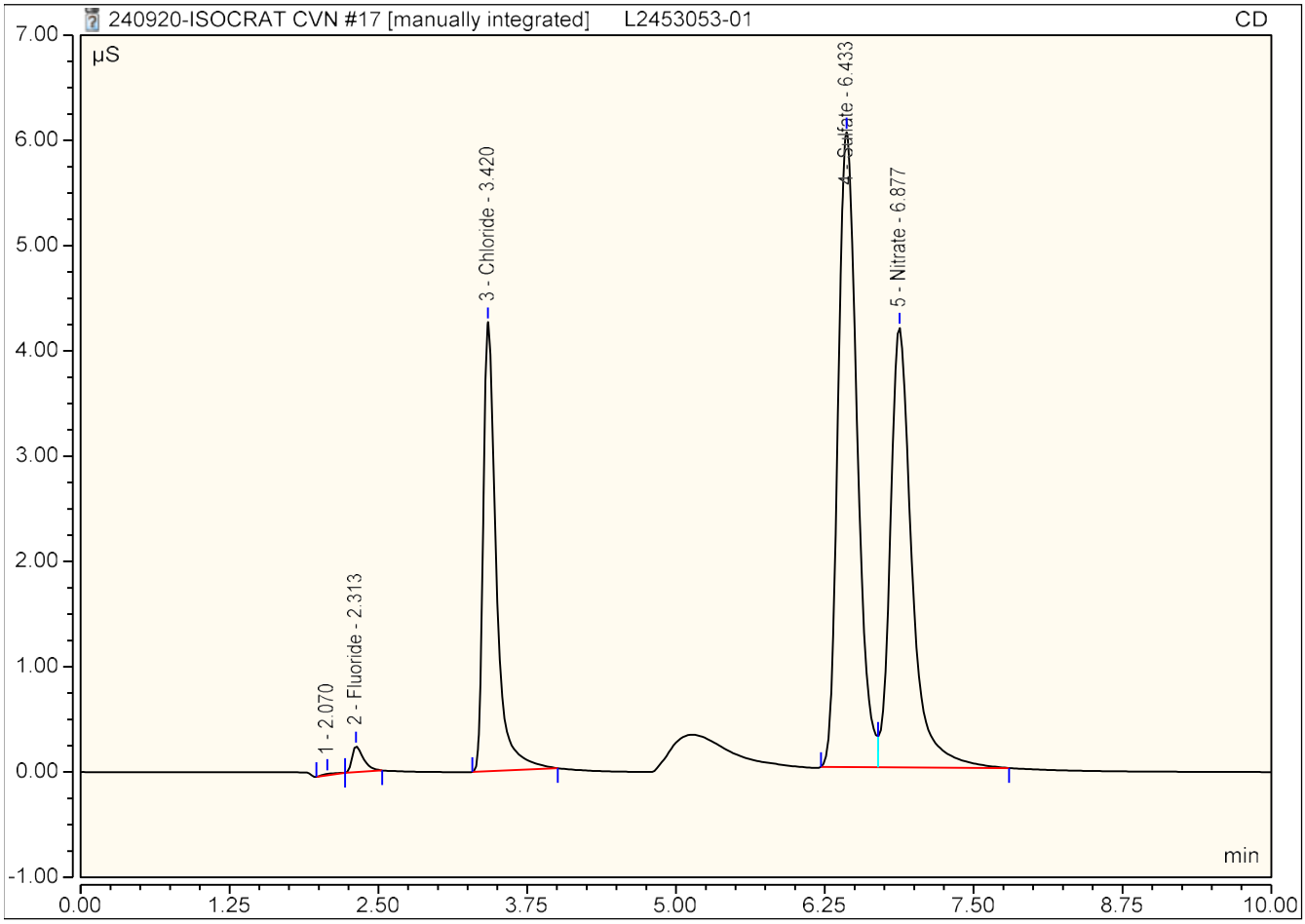
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.243 | 2.251 | 0.4873 |
| 3 | 3.42 | **Chloride** | BMB* | 2.194 | 16.550 | 5.5630 |
| 4 | 5.78 | **Bromide** | BMB | 0.039 | 0.254 | 0.3553 |
| 5 | 6.36 | **Sulfate** | BM * | 3.464 | 16.861 | 12.2534 |
| 6 | 6.85 | **Nitrate** | MB* | 1.400 | 6.228 | 1.1228 |
| **TOTAL:** | | | | 7.34 | 42.14 | 19.78 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-01** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 10:52** | *Run Time:* | **10.00** |

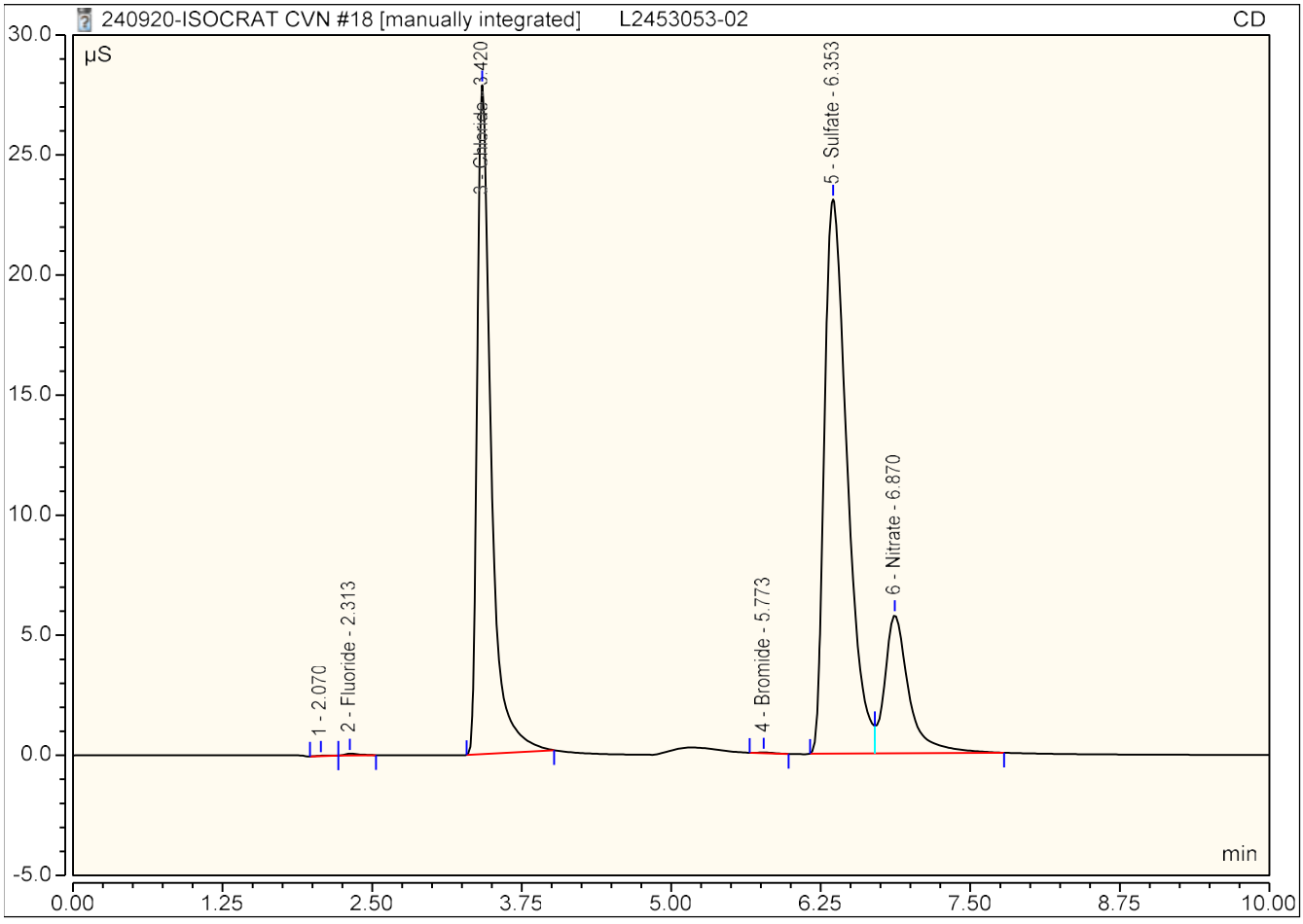
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.027 | 0.244 | 0.0944 |
| 3 | 3.42 | **Chloride** | BMB* | 0.545 | 4.267 | 1.5364 |
| 4 | 6.43 | **Sulfate** | BM * | 1.122 | 6.030 | 4.1565 |
| 5 | 6.88 | **Nitrate** | MB* | 0.880 | 4.179 | 0.7151 |
| **TOTAL:** | | | | 2.57 | 14.72 | 6.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 11:04** | *Run Time:* | **10.00** |

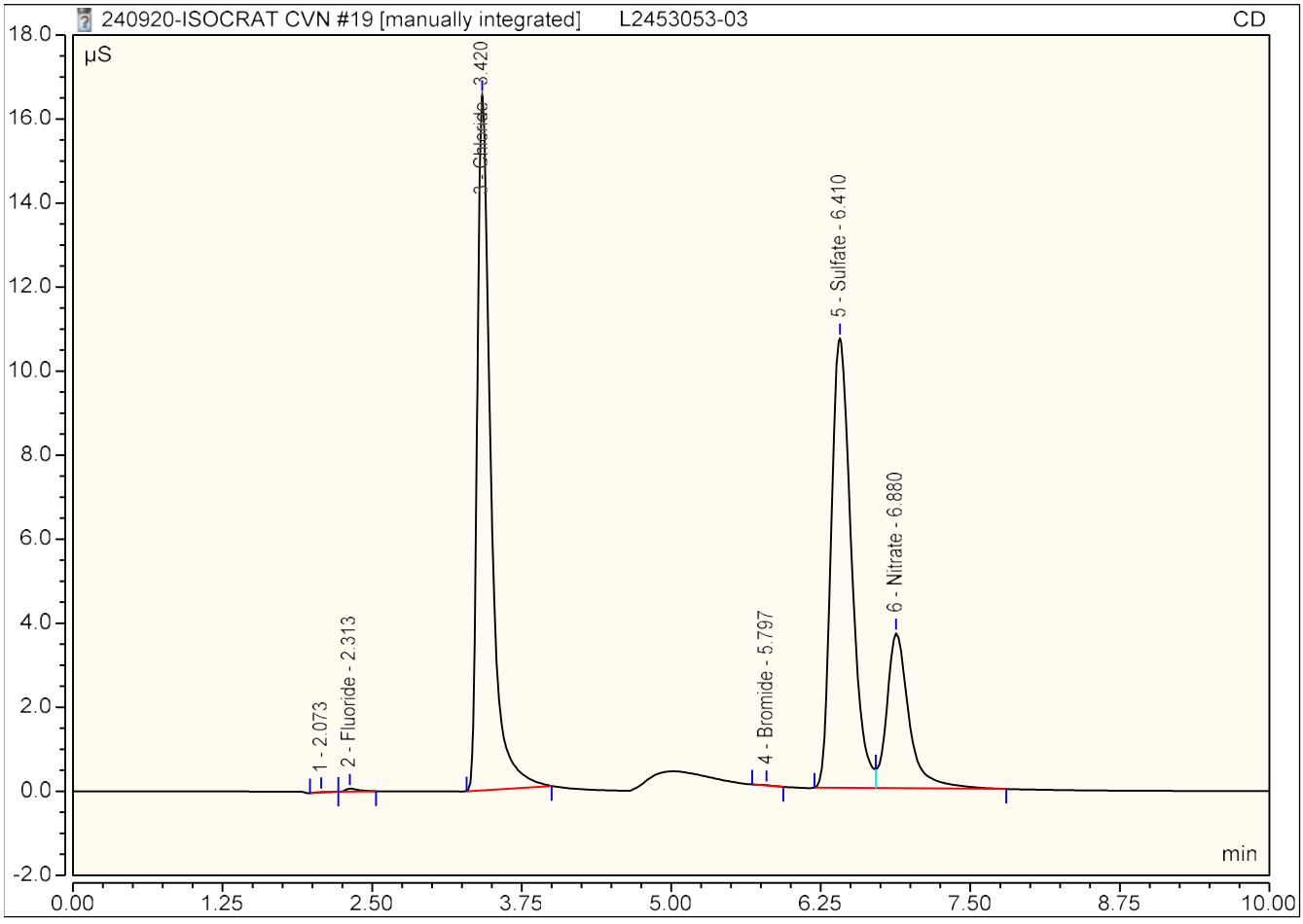
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.009 | 0.075 | 0.0618 |
| 3 | 3.42 | **Chloride** | BMB* | 3.759 | 27.867 | 9.3844 |
| 4 | 5.77 | **Bromide** | BMB | 0.004 | 0.029 | 0.0668 |
| 5 | 6.35 | **Sulfate** | BM * | 5.081 | 23.073 | 17.8456 |
| 6 | 6.87 | **Nitrate** | MB* | 1.347 | 5.759 | 1.0809 |
| **TOTAL:** | | | | 10.20 | 56.80 | 28.44 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 11:16** | *Run Time:* | **10.00** |

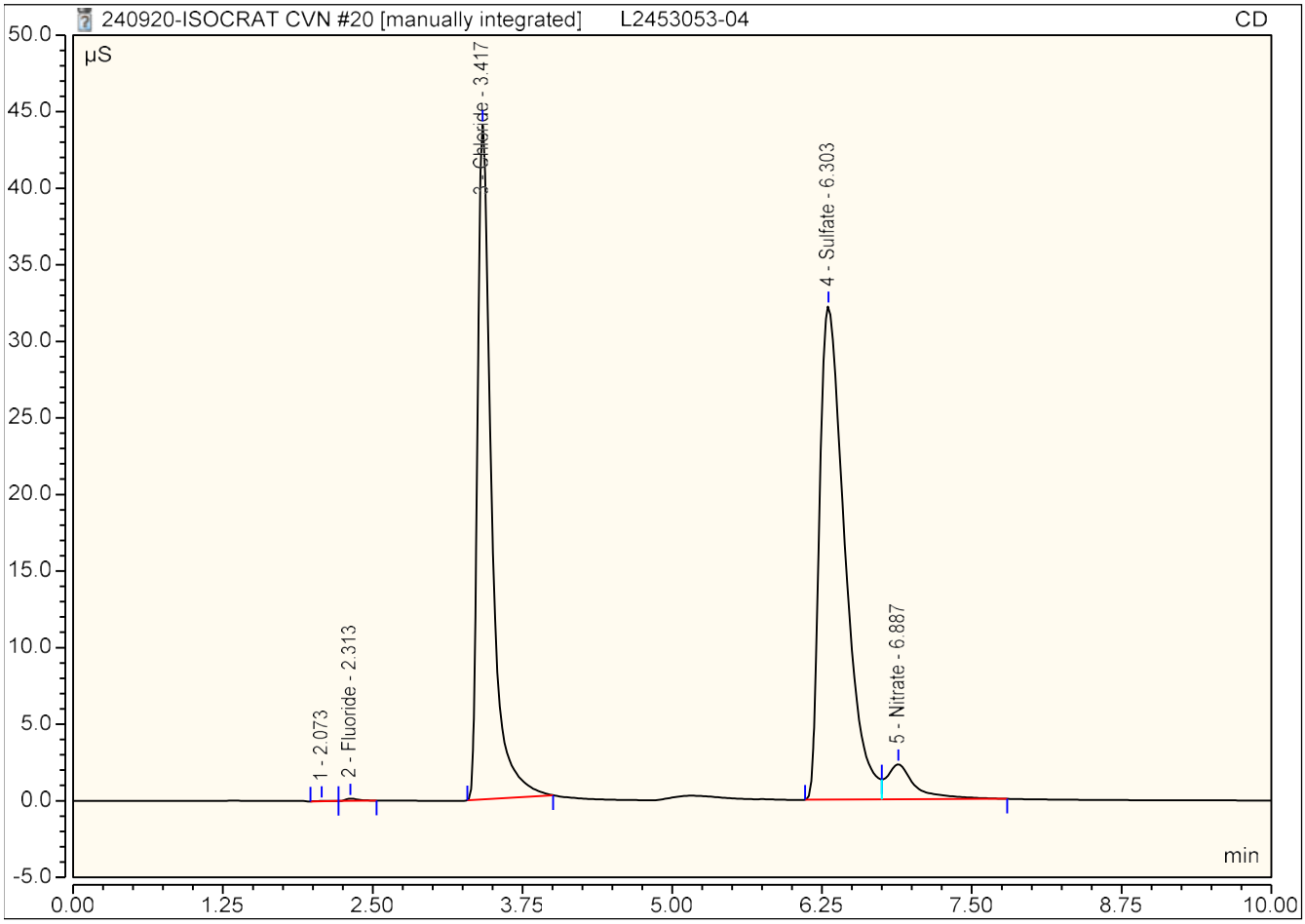
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.009 | 0.069 | 0.0601 |
| 3 | 3.42 | **Chloride** | BMB* | 2.175 | 16.552 | 5.5166 |
| 4 | 5.80 | **Bromide** | BMB | 0.001 | 0.011 | 0.0437 |
| 5 | 6.41 | **Sulfate** | BM * | 2.089 | 10.699 | 7.4978 |
| 6 | 6.88 | **Nitrate** | MB* | 0.795 | 3.691 | 0.6480 |
| **TOTAL:** | | | | 5.07 | 31.02 | 13.77 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 11:28** | *Run Time:* | **10.00** |

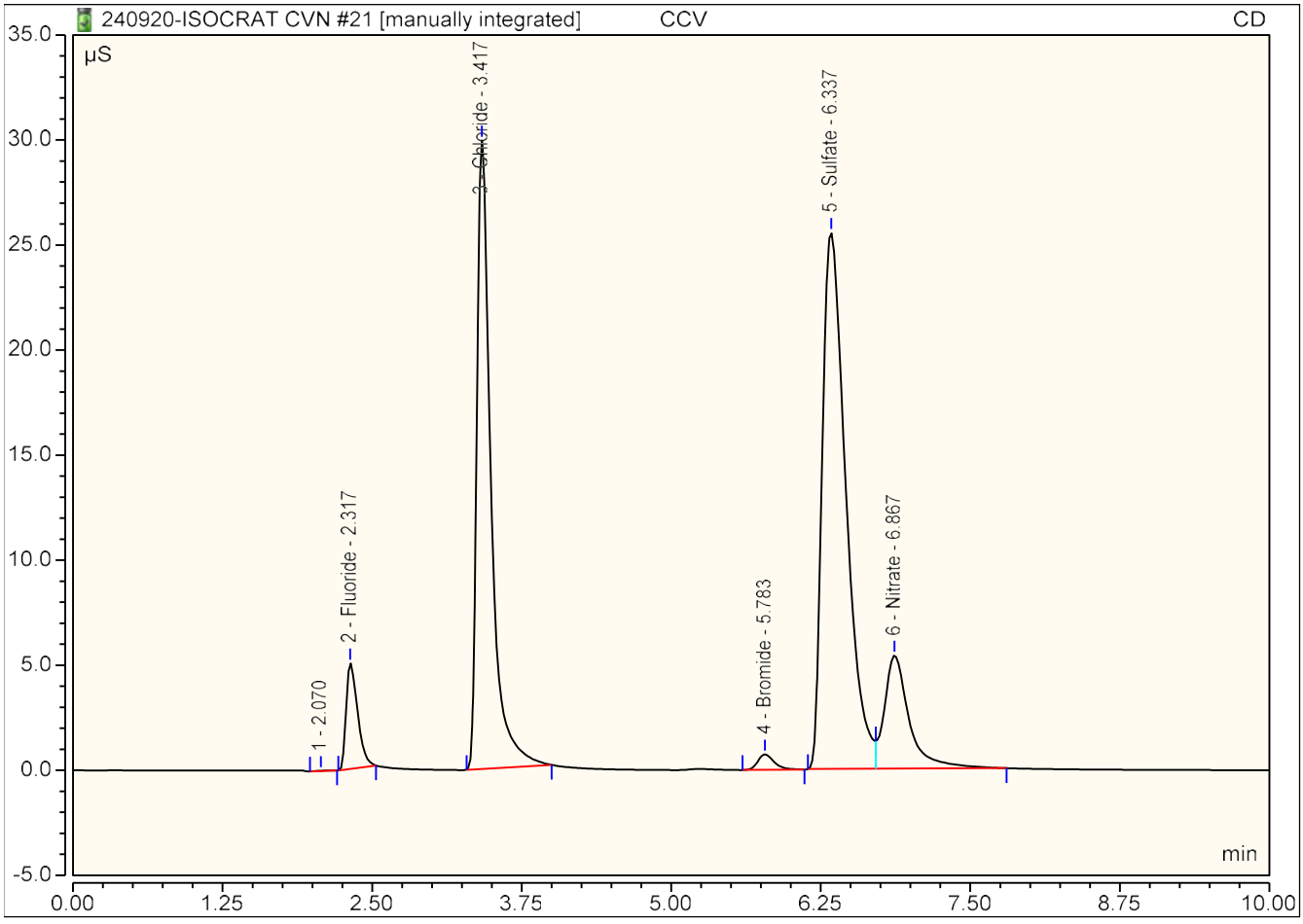
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.017 | 0.145 | 0.0752 |
| 3 | 3.42 | **Chloride** | BMB* | 5.985 | 44.056 | 14.8191 |
| 4 | 6.30 | **Sulfate** | BM * | 7.869 | 32.217 | 27.4834 |
| 5 | 6.89 | **Nitrate** | MB* | 0.629 | 2.293 | 0.5180 |
| **TOTAL:** | | | | 14.50 | 78.71 | 42.90 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 11:40** | *Run Time:* | **10.00** |

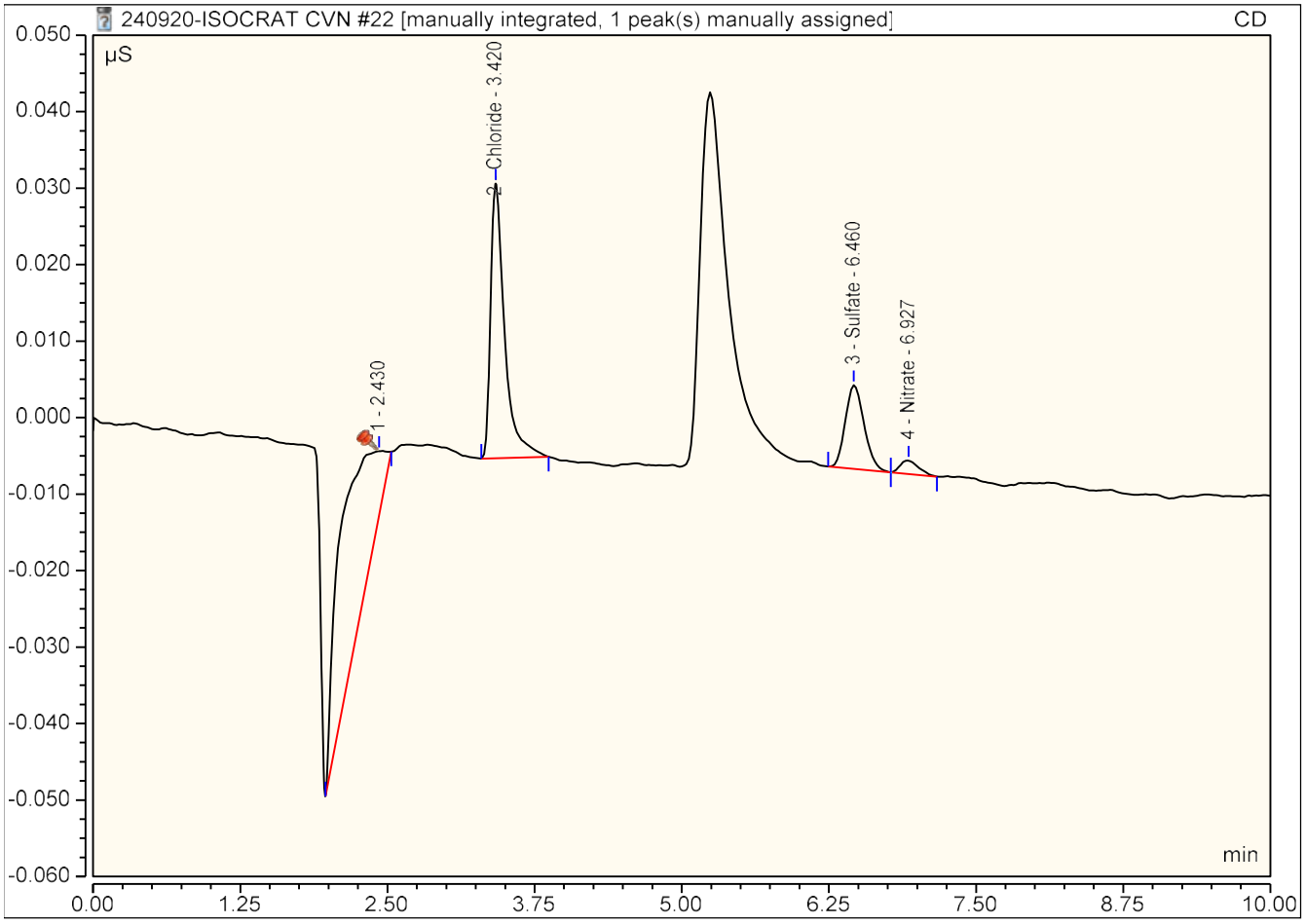
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.555 | 5.026 | 1.0575 |
| 3 | 3.42 | **Chloride** | BMB* | 4.081 | 29.914 | 10.1694 |
| 4 | 5.78 | **Bromide** | BMB | 0.117 | 0.738 | 1.0038 |
| 5 | 6.34 | **Sulfate** | BM * | 5.825 | 25.522 | 20.4161 |
| 6 | 6.87 | **Nitrate** | MB* | 1.294 | 5.393 | 1.0398 |
| **TOTAL:** | | | | 11.87 | 66.59 | 33.69 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 11:52** | *Run Time:* | **10.00** |

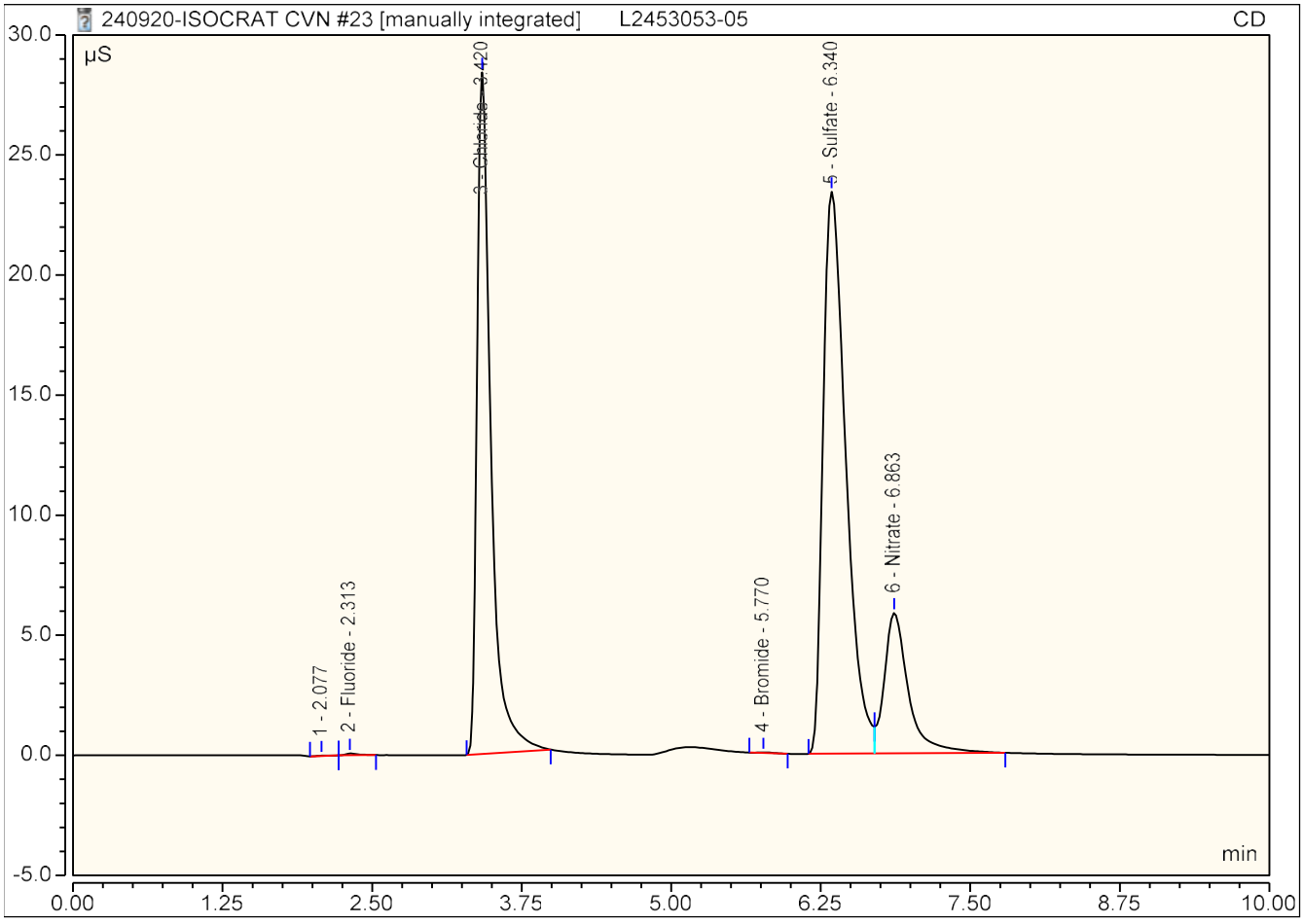
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.005 | 0.036 | 0.2177 |
| 3 | 6.46 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2835 |
| 4 | 6.93 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0255 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453053-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 12:04** | *Run Time:* | **10.00** |

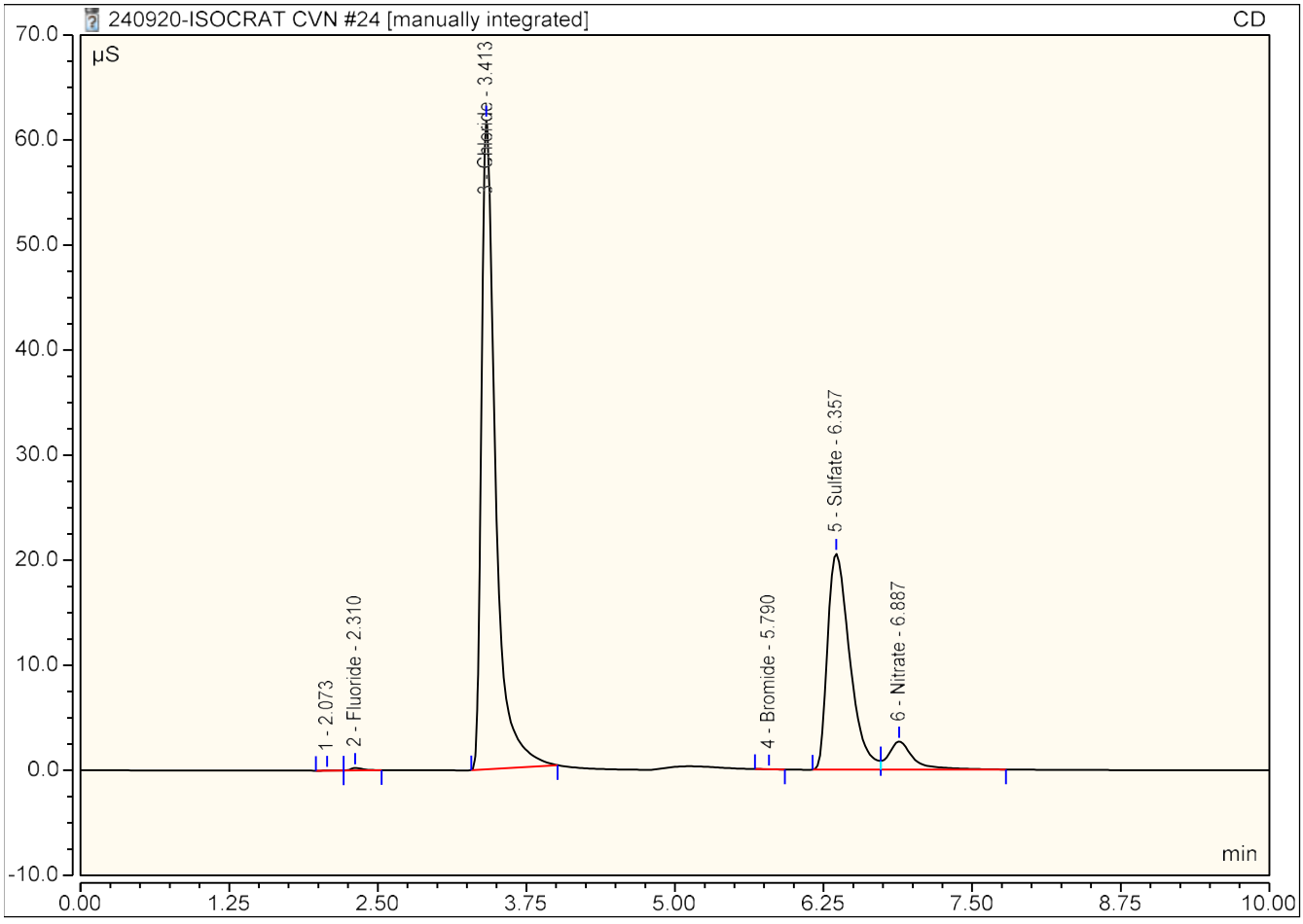
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.009 | 0.076 | 0.0617 |
| 3 | 3.42 | **Chloride** | BMB* | 3.811 | 28.378 | 9.5096 |
| 4 | 5.77 | **Bromide** | BMB | 0.004 | 0.029 | 0.0664 |
| 5 | 6.34 | **Sulfate** | BM * | 5.158 | 23.386 | 18.1098 |
| 6 | 6.86 | **Nitrate** | MB* | 1.364 | 5.849 | 1.0947 |
| **TOTAL:** | | | | 10.35 | 57.72 | 28.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 12:16** | *Run Time:* | **10.00** |

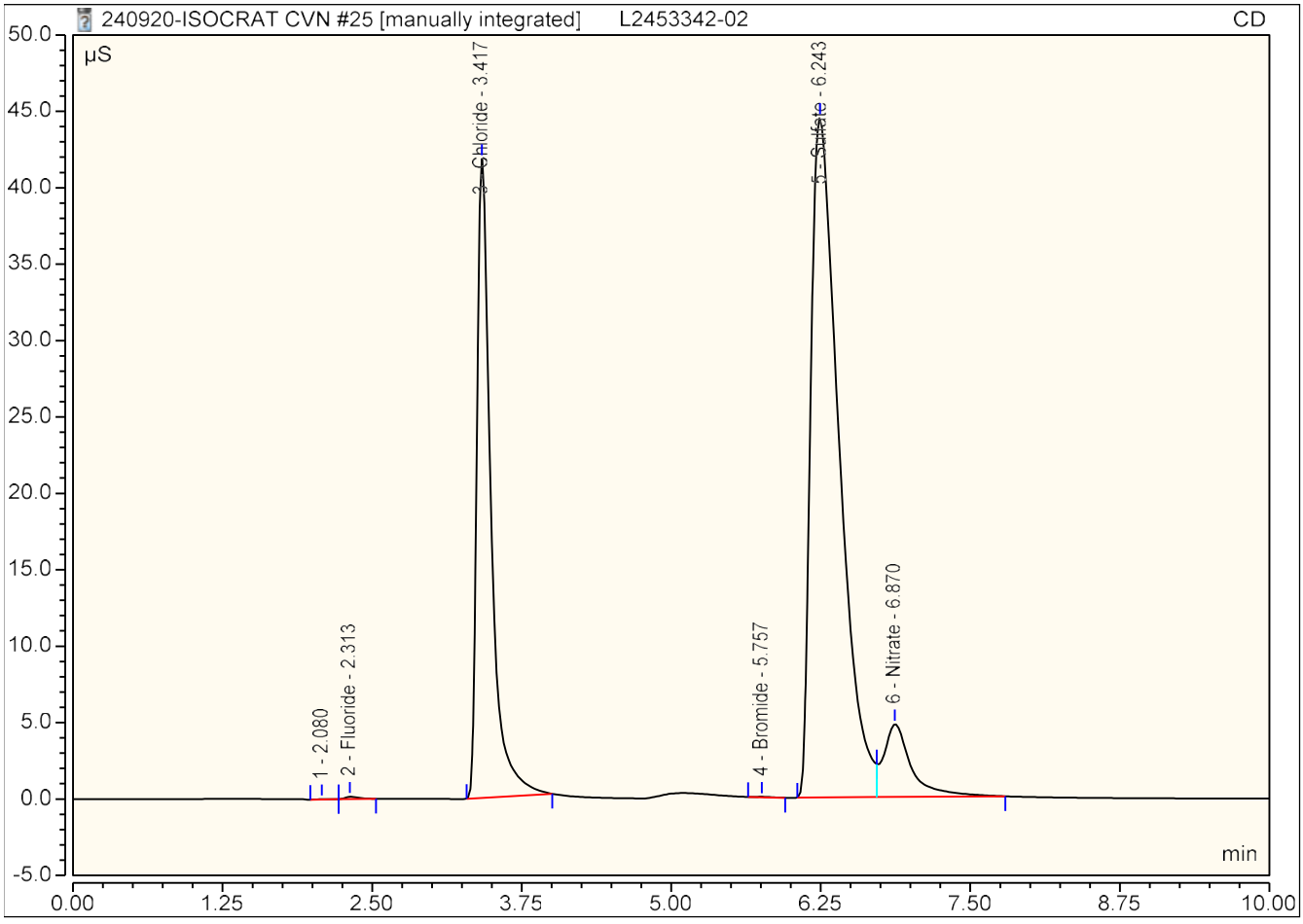
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.027 | 0.236 | 0.0933 |
| 3 | 3.41 | **Chloride** | BMB* | 8.553 | 61.759 | 21.0882 |
| 4 | 5.79 | **Bromide** | BMB | 0.001 | 0.011 | 0.0441 |
| 5 | 6.36 | **Sulfate** | BM * | 4.460 | 20.568 | 15.6990 |
| 6 | 6.89 | **Nitrate** | MB* | 0.644 | 2.684 | 0.5300 |
| **TOTAL:** | | | | 13.69 | 85.26 | 37.45 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 12:28** | *Run Time:* | **10.00** |

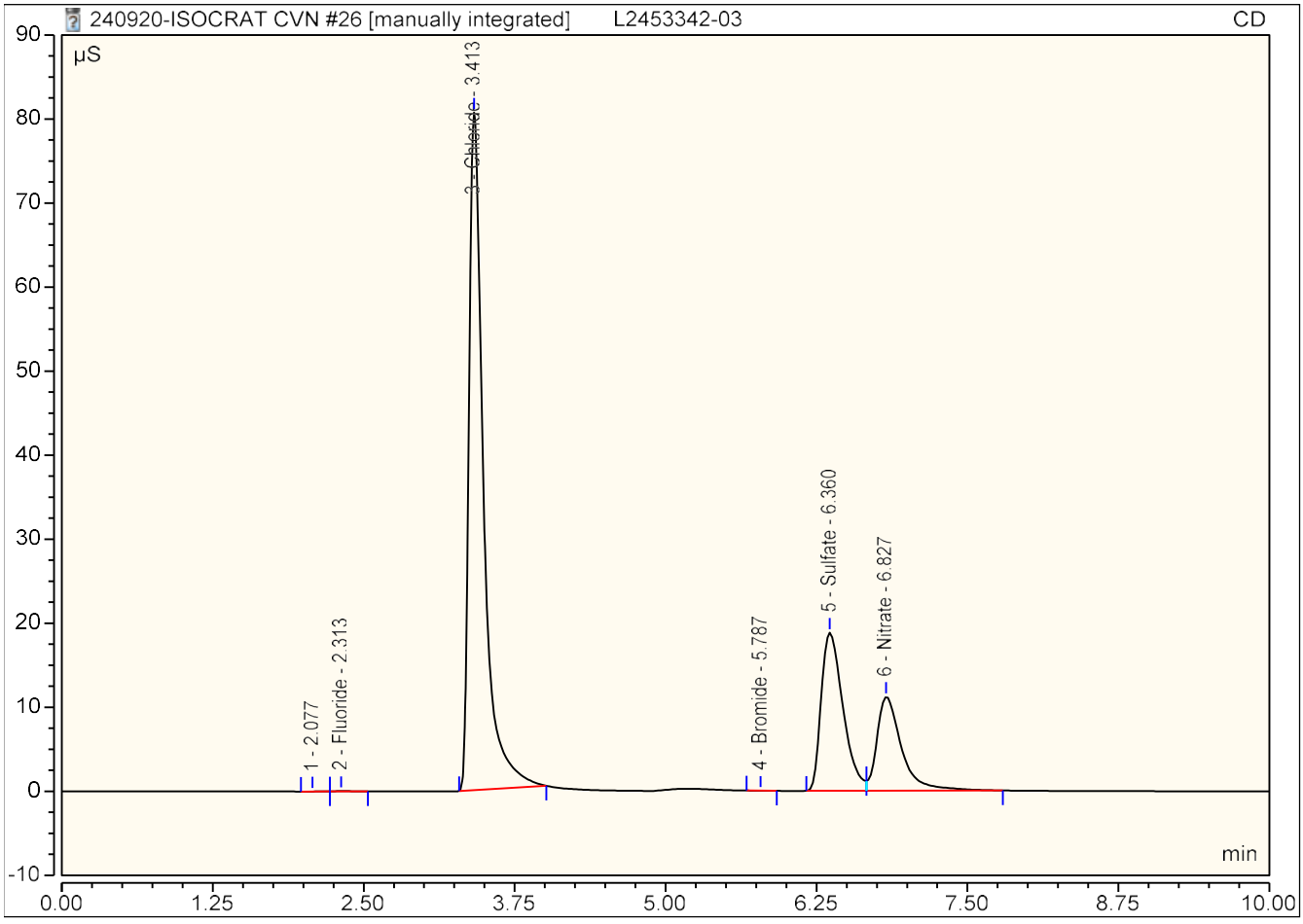
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.018 | 0.150 | 0.0774 |
| 3 | 3.42 | **Chloride** | BMB* | 5.701 | 41.819 | 14.1236 |
| 4 | 5.76 | **Bromide** | BMB | 0.004 | 0.027 | 0.0651 |
| 5 | 6.24 | **Sulfate** | BM * | 12.154 | 44.473 | 42.2995 |
| 6 | 6.87 | **Nitrate** | MB* | 1.284 | 4.758 | 1.0316 |
| **TOTAL:** | | | | 19.16 | 91.23 | 57.60 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 12:41** | *Run Time:* | **10.00** |

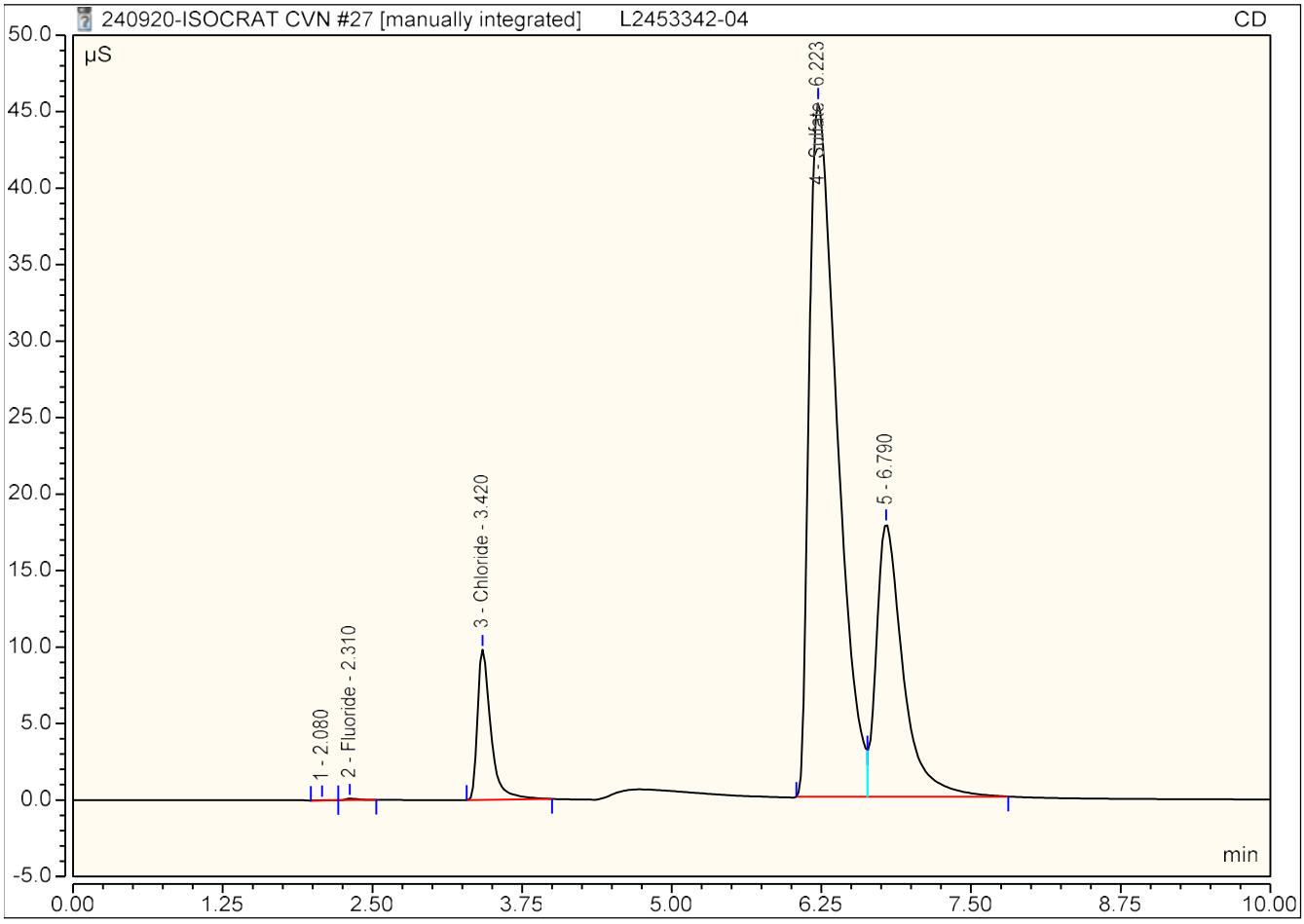
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.007 | 0.053 | 0.0567 |
| 3 | 3.41 | **Chloride** | BMB* | 11.227 | 80.607 | 27.6154 |
| 4 | 5.79 | **Bromide** | BMB | 0.001 | 0.009 | 0.0416 |
| 5 | 6.36 | **Sulfate** | BM * | 3.929 | 18.799 | 13.8598 |
| 6 | 6.83 | **Nitrate** | MB* | 2.623 | 11.163 | 2.0814 |
| **TOTAL:** | | | | 17.79 | 110.63 | 43.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 12:53** | *Run Time:* | **10.00** |

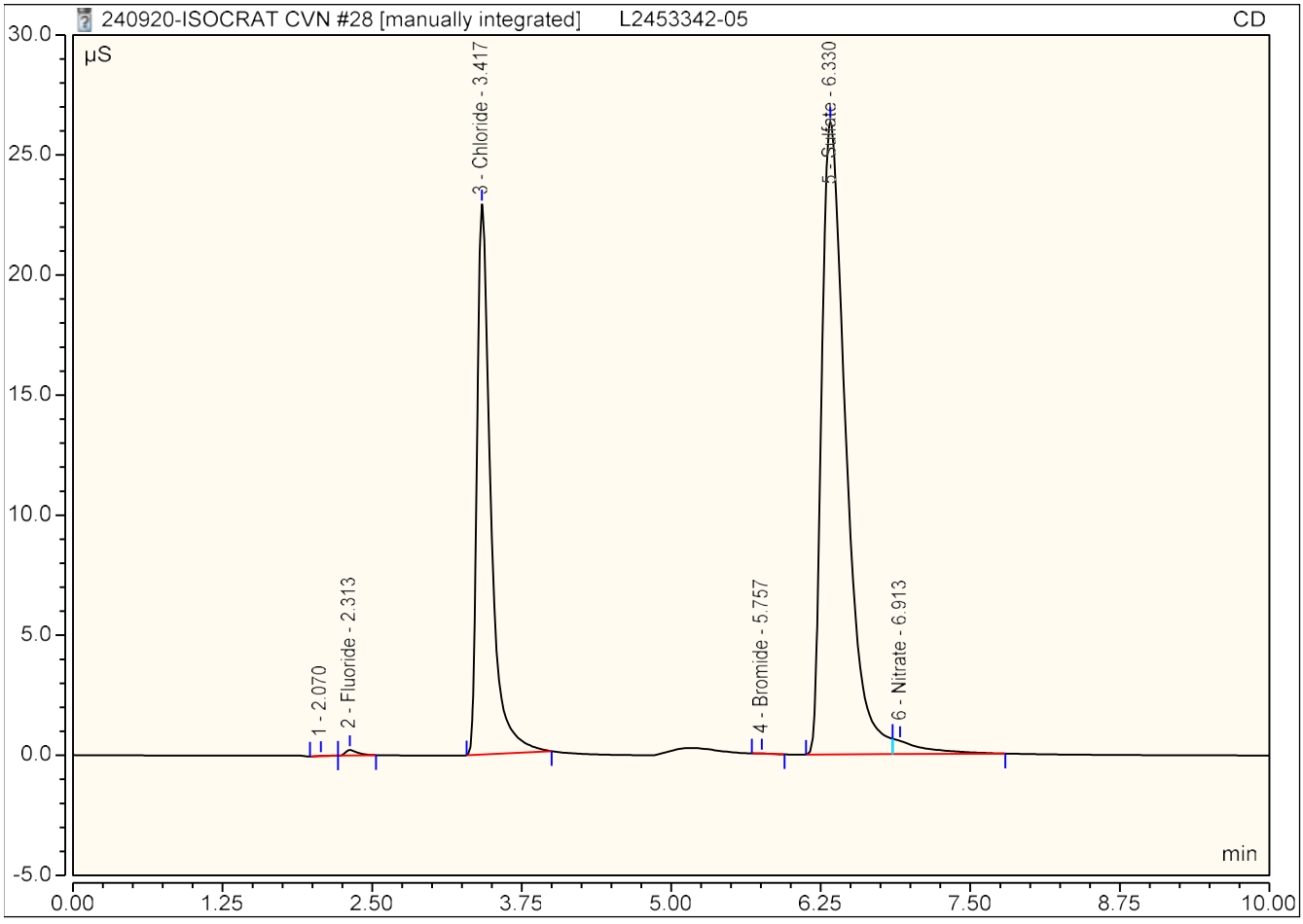
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.012 | 0.097 | 0.0659 |
| 3 | 3.42 | **Chloride** | BMB* | 1.269 | 9.822 | 3.3049 |
| 4 | 6.22 | **Sulfate** | BM * | 12.230 | 45.379 | 42.5626 |
| **TOTAL:** | | | | 13.51 | 55.30 | 45.93 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 13:05** | *Run Time:* | **10.00** |

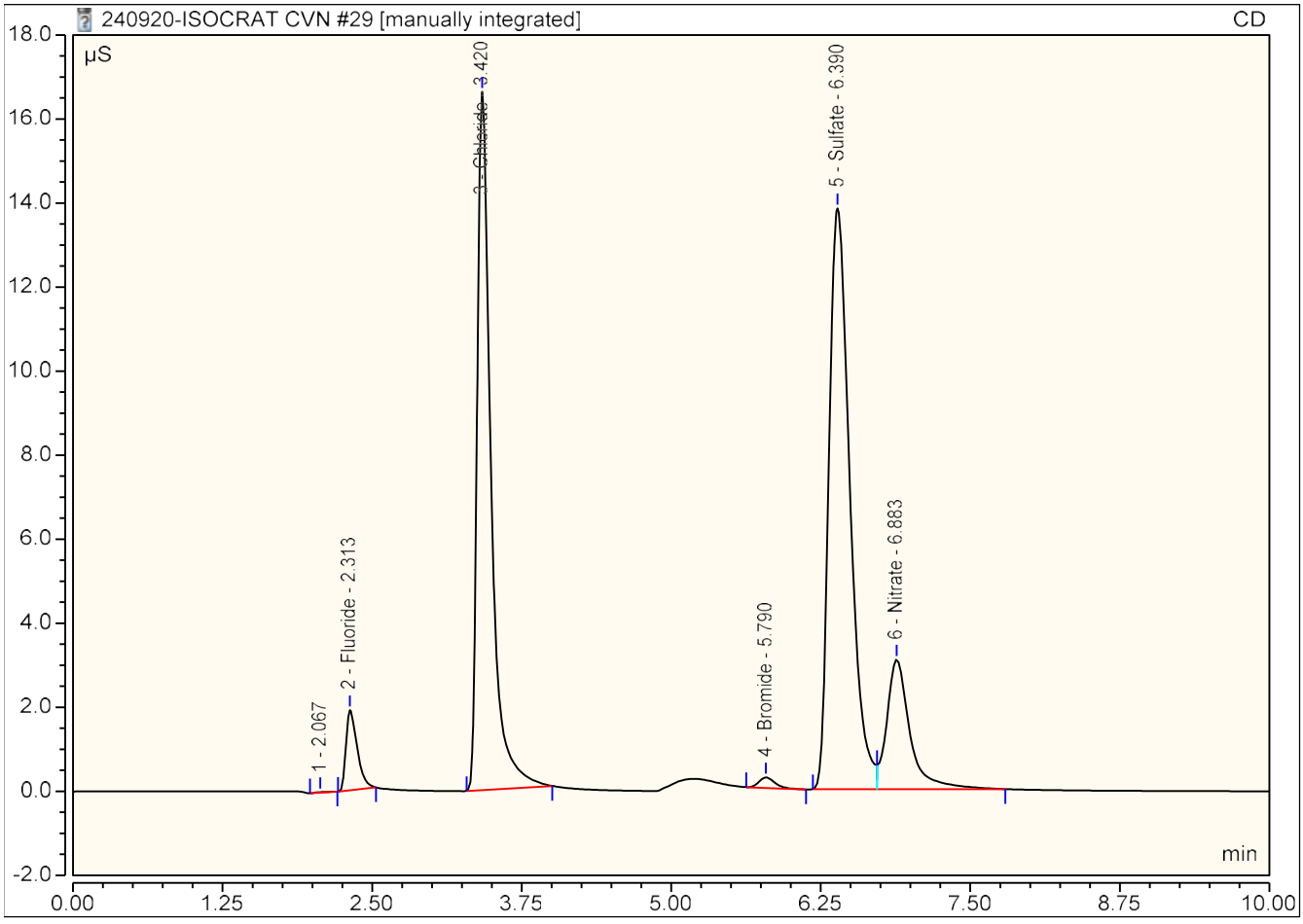
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.026 | 0.233 | 0.0927 |
| 3 | 3.42 | **Chloride** | BMB* | 3.059 | 22.918 | 7.6745 |
| 4 | 5.76 | **Bromide** | BMB | 0.002 | 0.013 | 0.0485 |
| 5 | 6.33 | **Sulfate** | BM * | 6.131 | 26.345 | 21.4740 |
| 6 | 6.91 | **Nitrate** | MB* | 0.174 | 0.552 | 0.1612 |
| **TOTAL:** | | | | 9.39 | 50.06 | 29.45 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-06 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 13:17** | *Run Time:* | **10.00** |

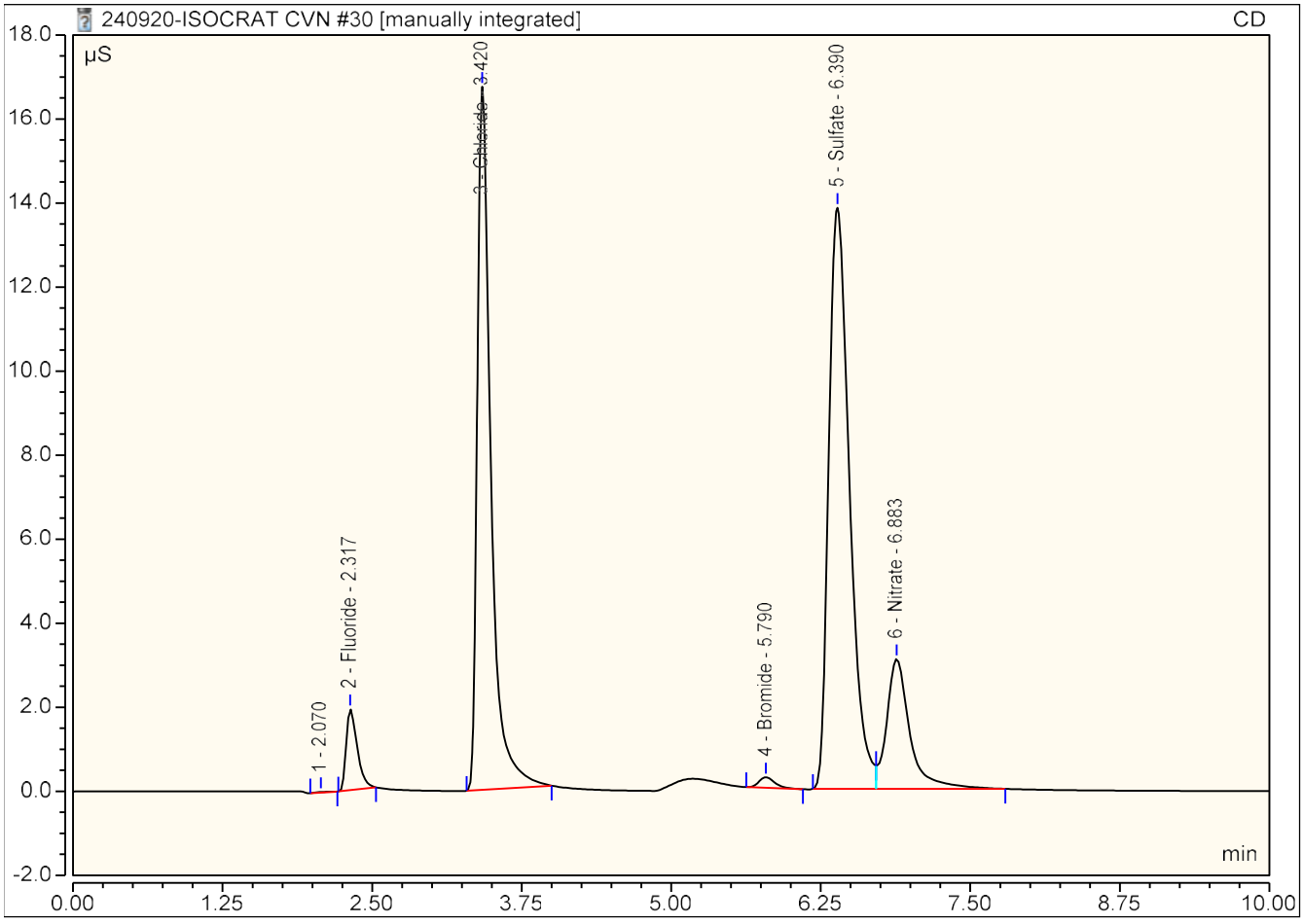
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.206 | 1.911 | 0.4198 |
| 3 | 3.42 | **Chloride** | BMB* | 2.207 | 16.618 | 5.5950 |
| 4 | 5.79 | **Bromide** | BMB | 0.039 | 0.250 | 0.3560 |
| 5 | 6.39 | **Sulfate** | BM * | 2.784 | 13.821 | 9.9030 |
| 6 | 6.88 | **Nitrate** | MB* | 0.692 | 3.084 | 0.5673 |
| **TOTAL:** | | | | 5.93 | 35.68 | 16.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-06 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 13:29** | *Run Time:* | **10.00** |

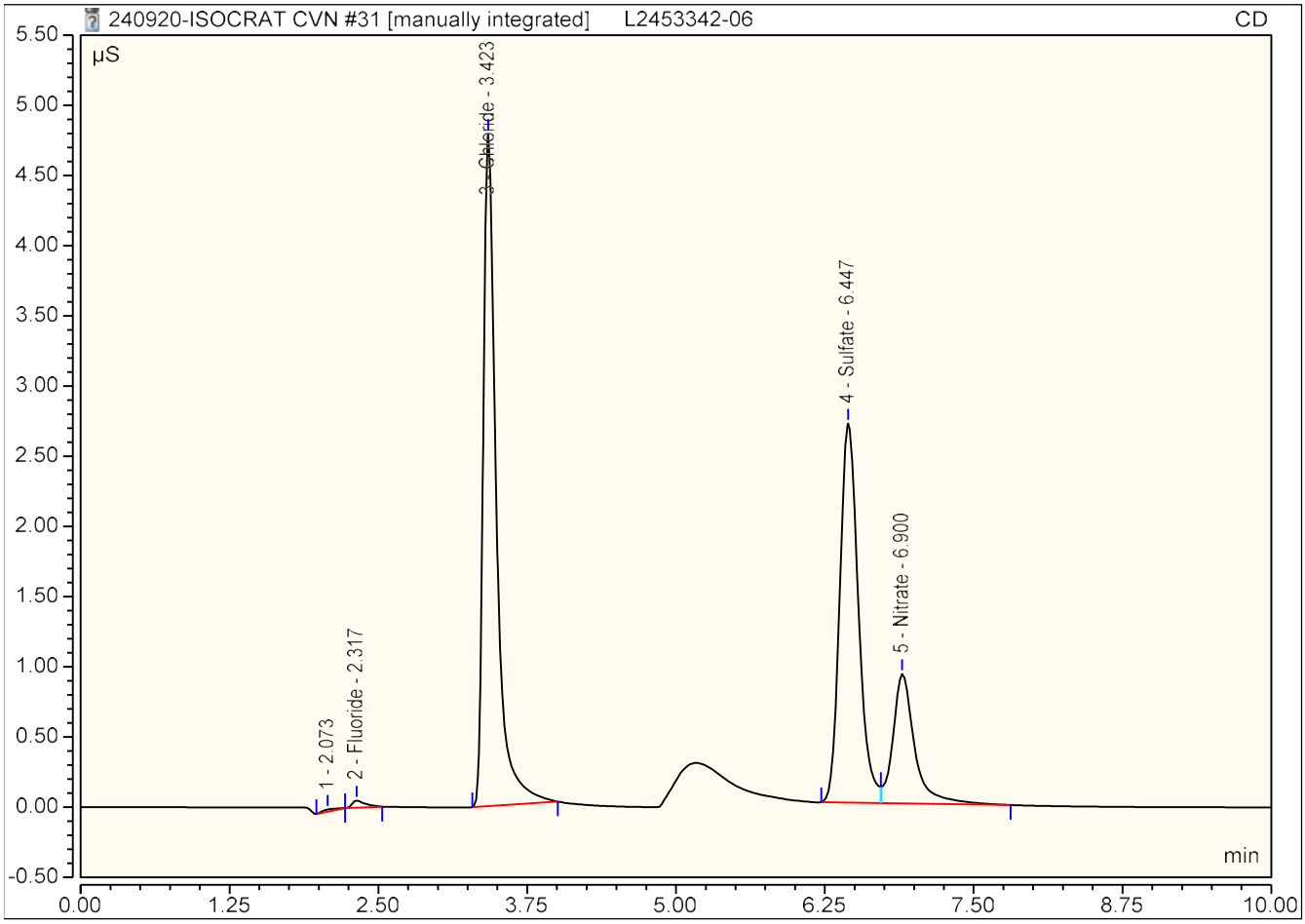
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.206 | 1.928 | 0.4199 |
| 3 | 3.42 | **Chloride** | BMB* | 2.204 | 16.736 | 5.5869 |
| 4 | 5.79 | **Bromide** | BMB | 0.039 | 0.251 | 0.3547 |
| 5 | 6.39 | **Sulfate** | BM * | 2.772 | 13.830 | 9.8624 |
| 6 | 6.88 | **Nitrate** | MB* | 0.692 | 3.091 | 0.5676 |
| **TOTAL:** | | | | 5.91 | 35.84 | 16.79 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 13:41** | *Run Time:* | **10.00** |

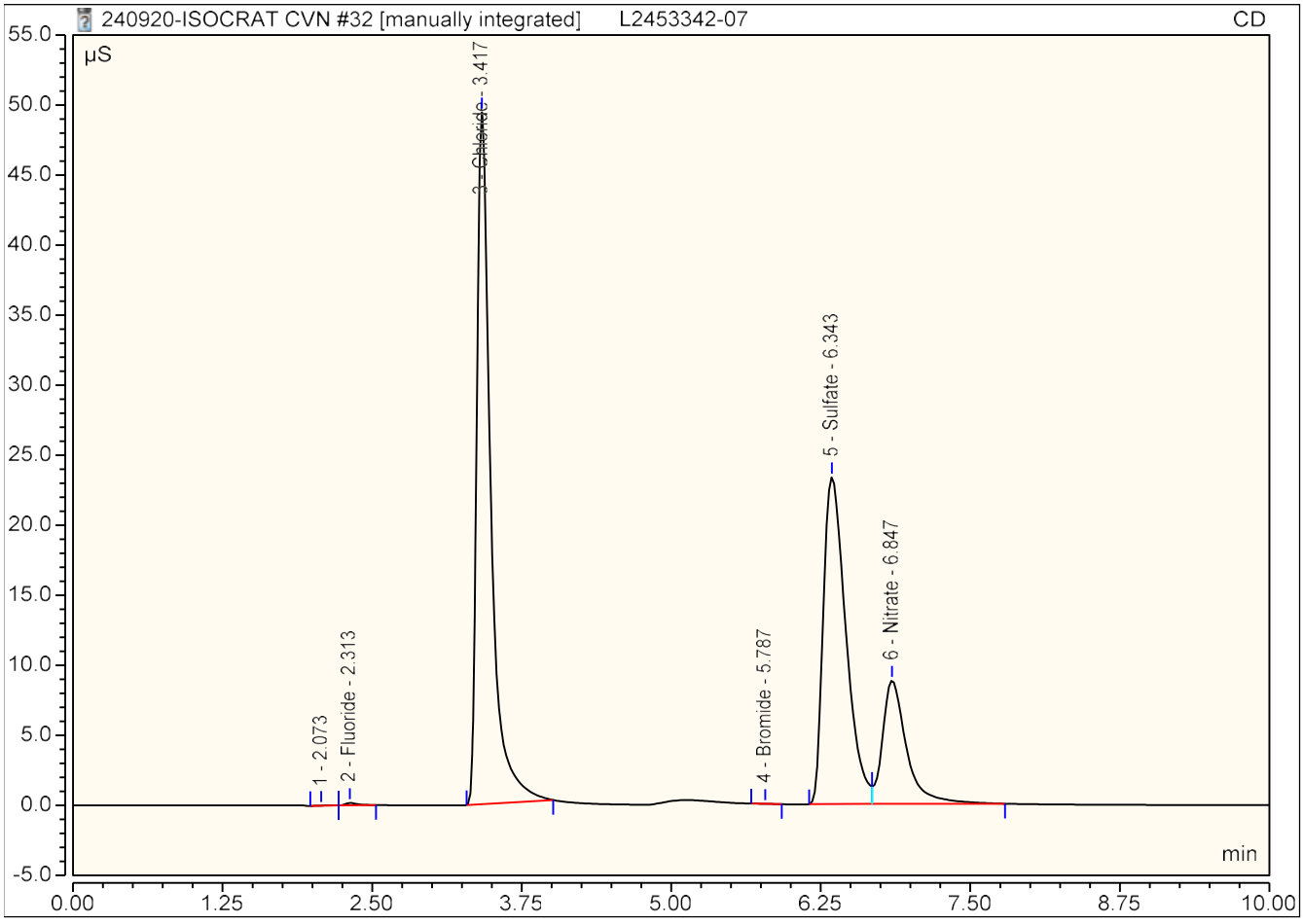
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.007 | 0.051 | 0.0564 |
| 3 | 3.42 | **Chloride** | BMB* | 0.610 | 4.789 | 1.6945 |
| 4 | 6.45 | **Sulfate** | BM * | 0.489 | 2.700 | 1.9668 |
| 5 | 6.90 | **Nitrate** | MB* | 0.195 | 0.922 | 0.1781 |
| **TOTAL:** | | | | 1.30 | 8.46 | 3.90 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 13:53** | *Run Time:* | **10.00** |

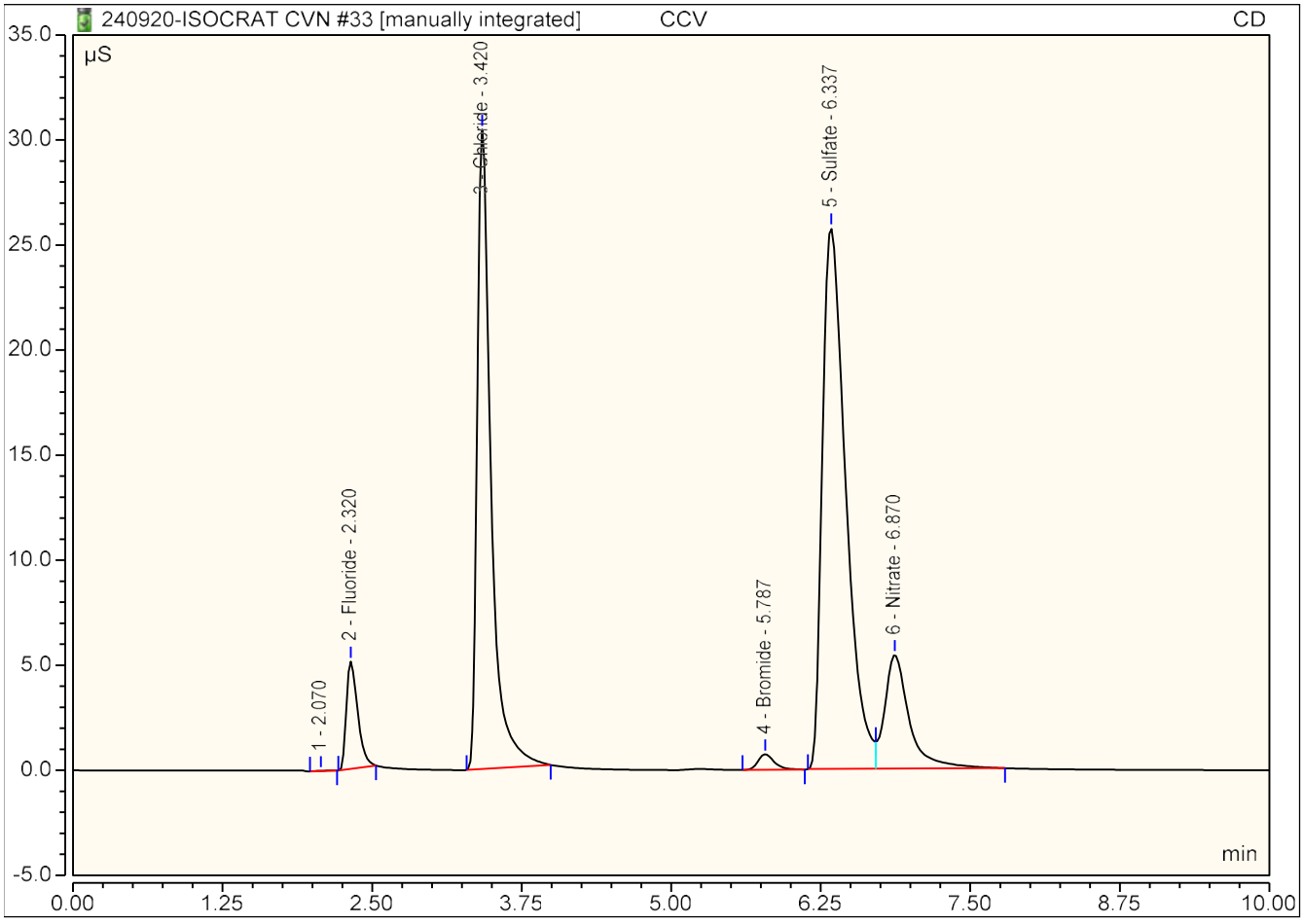
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.020 | 0.173 | 0.0814 |
| 3 | 3.42 | **Chloride** | BMB* | 6.695 | 49.395 | 16.5523 |
| 4 | 5.79 | **Bromide** | BMB | 0.002 | 0.012 | 0.0453 |
| 5 | 6.34 | **Sulfate** | BM * | 5.104 | 23.339 | 17.9245 |
| 6 | 6.85 | **Nitrate** | MB* | 2.050 | 8.814 | 1.6323 |
| **TOTAL:** | | | | 13.87 | 81.73 | 36.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 14:05** | *Run Time:* | **10.00** |

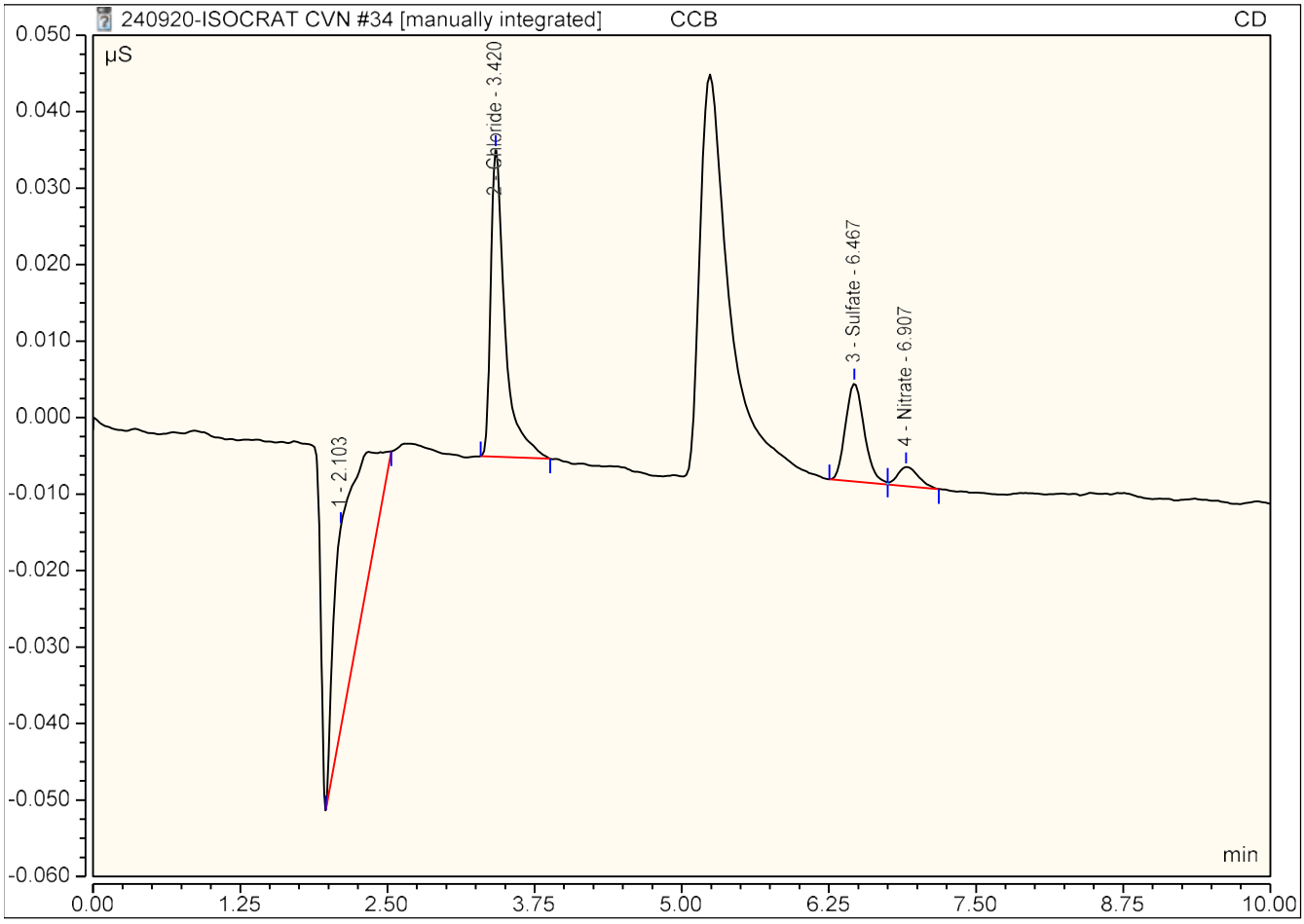
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.557 | 5.111 | 1.0597 |
| 3 | 3.42 | **Chloride** | BMB* | 4.082 | 30.434 | 10.1722 |
| 4 | 5.79 | **Bromide** | BMB | 0.117 | 0.747 | 1.0069 |
| 5 | 6.34 | **Sulfate** | BM * | 5.831 | 25.742 | 20.4383 |
| 6 | 6.87 | **Nitrate** | MB* | 1.290 | 5.420 | 1.0362 |
| **TOTAL:** | | | | 11.88 | 67.45 | 33.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 14:17** | *Run Time:* | **10.00** |

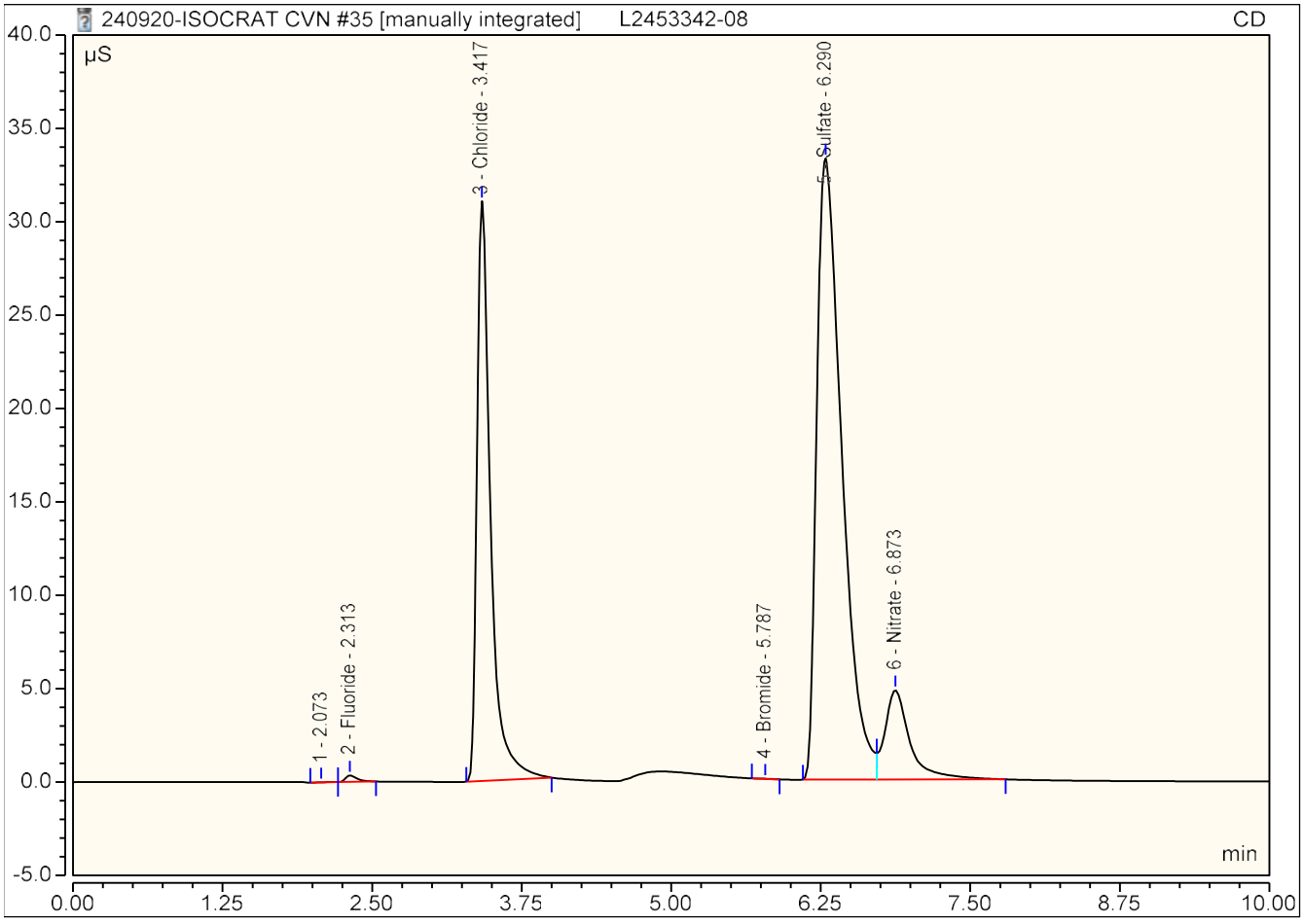
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.006 | 0.040 | 0.2193 |
| 3 | 6.47 | **Sulfate** | BM * | 0.002 | 0.013 | 0.2848 |
| 4 | 6.91 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.06 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 14:29** | *Run Time:* | **10.00** |

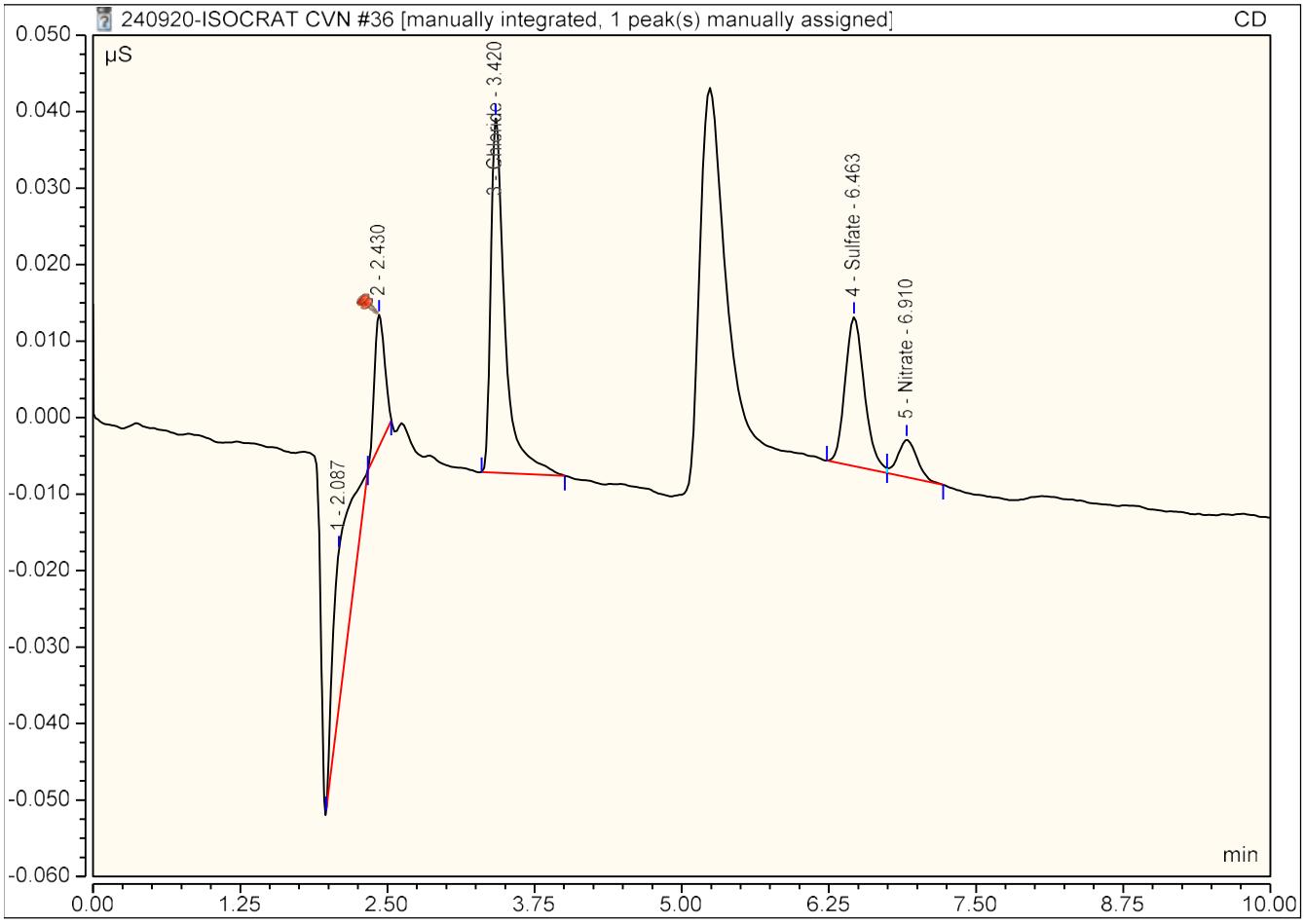
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.038 | 0.344 | 0.1145 |
| 3 | 3.42 | **Chloride** | BMB* | 4.094 | 31.038 | 10.2015 |
| 4 | 5.79 | **Bromide** | BMB | 0.001 | 0.008 | 0.0401 |
| 5 | 6.29 | **Sulfate** | BM * | 8.083 | 33.261 | 28.2230 |
| 6 | 6.87 | **Nitrate** | MB* | 1.164 | 4.781 | 0.9376 |
| **TOTAL:** | | | | 13.38 | 69.43 | 39.52 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453342-10** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 14:41** | *Run Time:* | **10.00** |

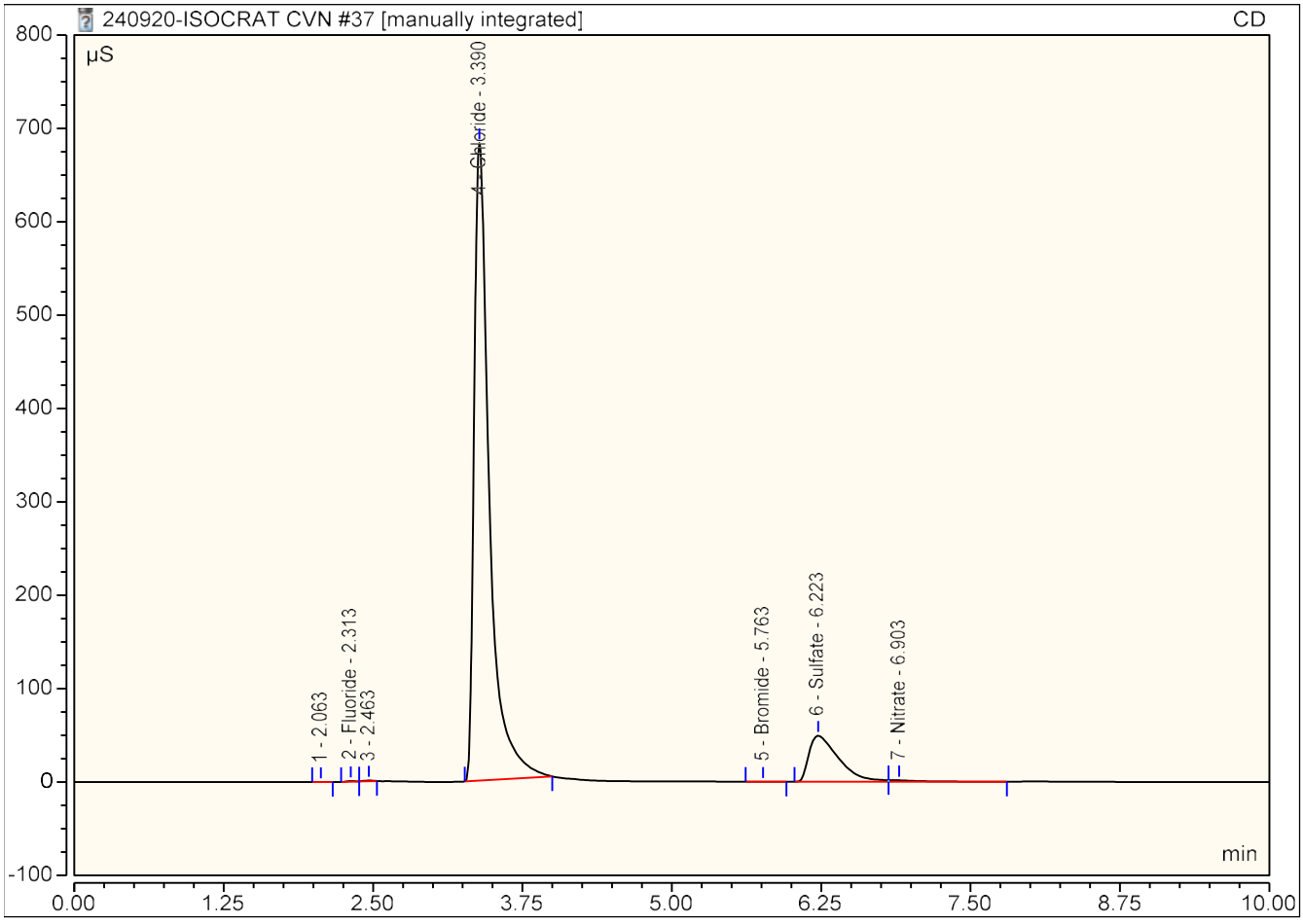
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 3.42 | **Chloride** | BMB* | 0.006 | 0.046 | 0.2214 |
| 4 | 6.46 | **Sulfate** | BM * | 0.004 | 0.019 | 0.2894 |
| 5 | 6.91 | **Nitrate** | MB* | 0.001 | 0.005 | 0.0260 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.54 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453250-01 BR CL SO4** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 14:53** | *Run Time:* | **10.00** |

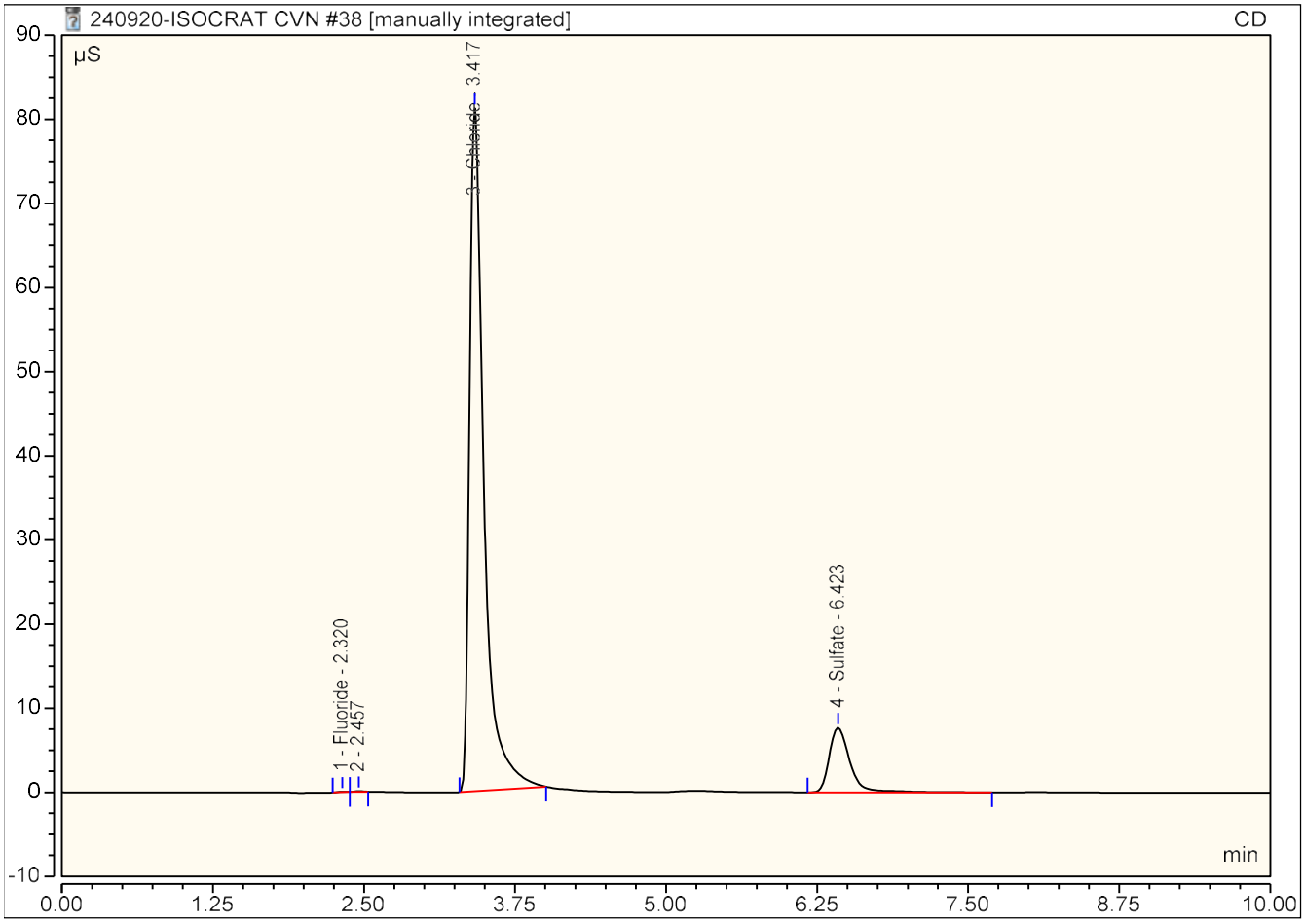
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.049 | 0.641 | 0.1337 |
| 4 | 3.39 | **Chloride** | BMB* | 101.168 | 682.817 | 247.2077 |
| 5 | 5.76 | **Bromide** | BMB | 0.020 | 0.137 | 0.1955 |
| 6 | 6.22 | **Sulfate** | BM * | 14.172 | 49.271 | 49.2784 |
| 7 | 6.90 | **Nitrate** | MB* | 0.472 | 1.545 | 0.3949 |
| **TOTAL:** | | | | 115.88 | 734.41 | 297.21 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453250-01; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 15:06** | *Run Time:* | **10.00** |

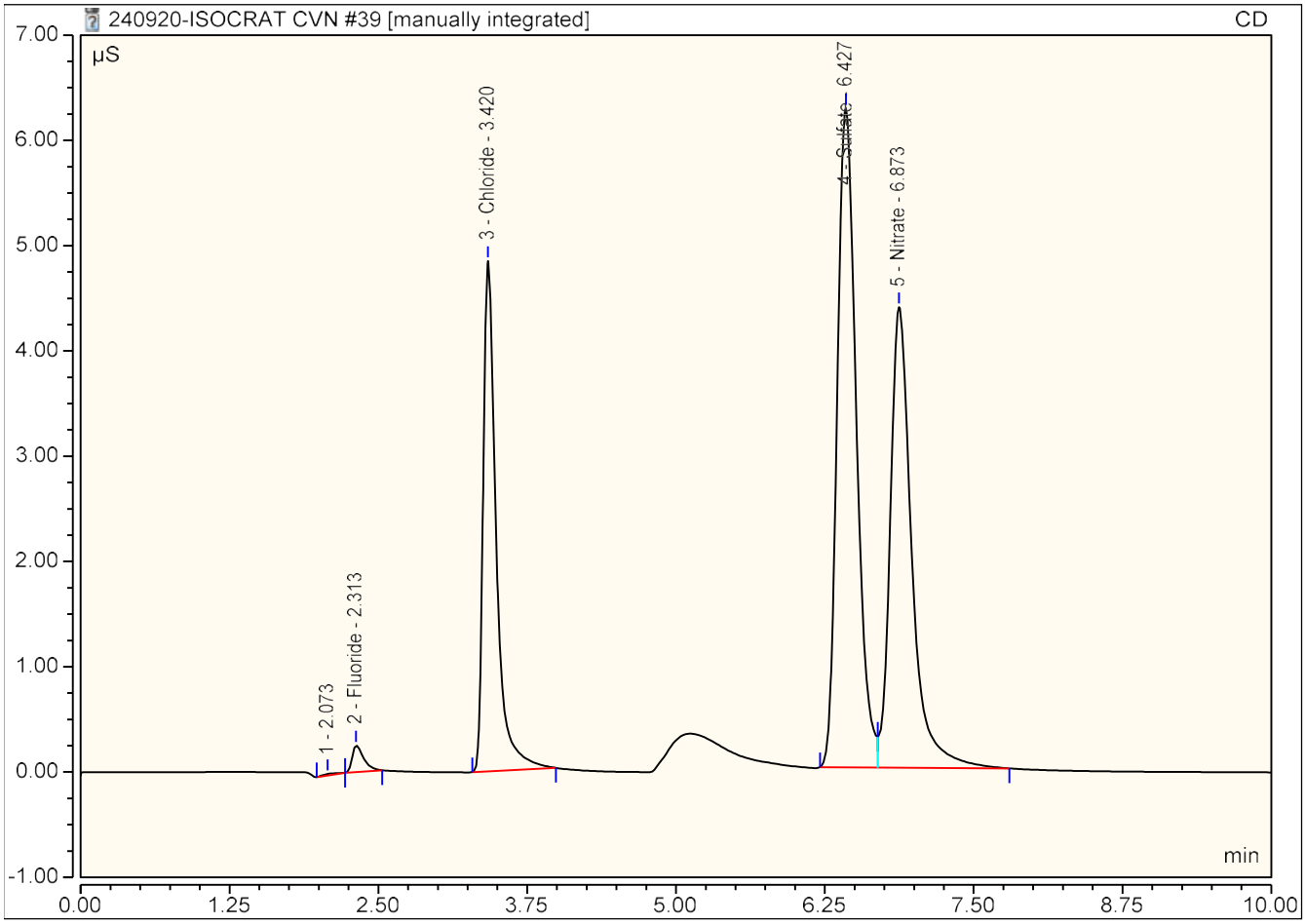
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.32 | **Fluoride** | BMB | 0.004 | 0.053 | 0.5188 |
| 3 | 3.42 | **Chloride** | BMB* | 11.214 | 81.163 | 275.8528 |
| 4 | 6.42 | **Sulfate** | BMB | 1.526 | 7.678 | 55.5150 |
| **TOTAL:** | | | | 12.74 | 88.89 | 331.89 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453058-01 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 15:18** | *Run Time:* | **10.00** |

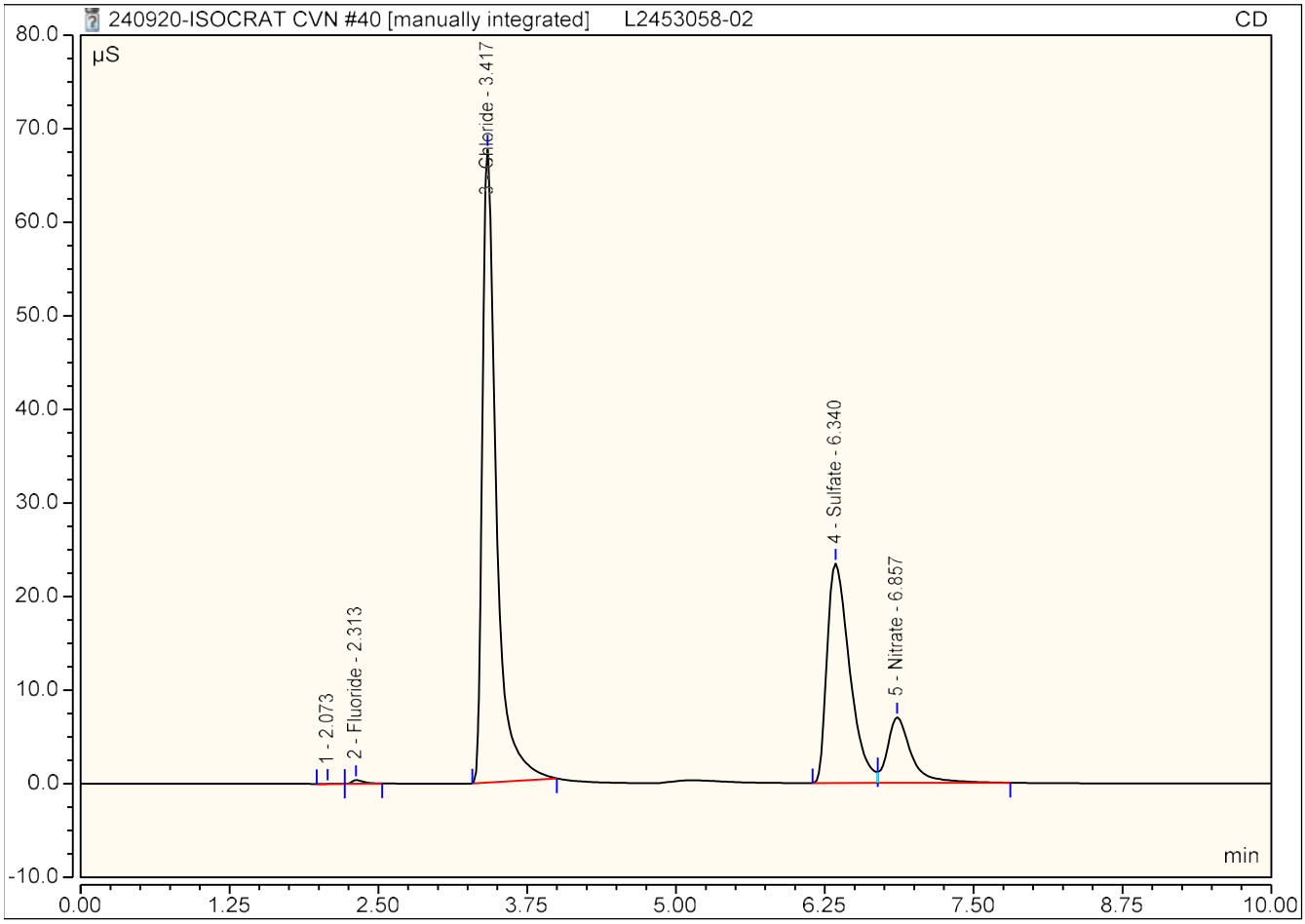
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.028 | 0.253 | 0.0961 |
| 3 | 3.42 | **Chloride** | BMB* | 0.616 | 4.848 | 1.7085 |
| 4 | 6.43 | **Sulfate** | BM * | 1.165 | 6.259 | 4.3049 |
| 5 | 6.87 | **Nitrate** | MB* | 0.919 | 4.373 | 0.7453 |
| **TOTAL:** | | | | 2.73 | 15.73 | 6.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453058-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 15:30** | *Run Time:* | **10.00** |

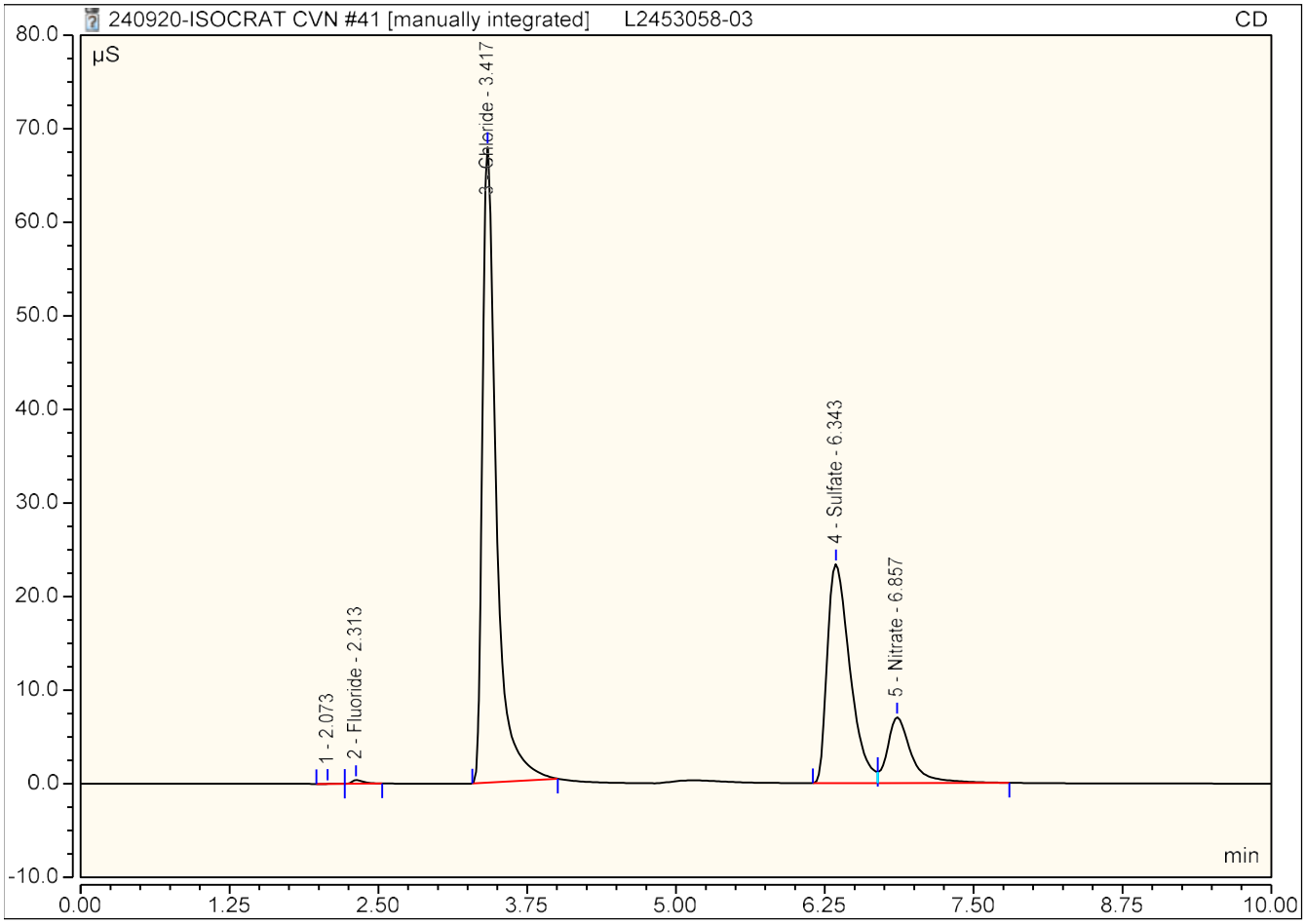
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.043 | 0.398 | 0.1235 |
| 3 | 3.42 | **Chloride** | BMB* | 9.246 | 67.646 | 22.7801 |
| 4 | 6.34 | **Sulfate** | BM * | 5.155 | 23.444 | 18.0996 |
| 5 | 6.86 | **Nitrate** | MB* | 1.624 | 7.016 | 1.2980 |
| **TOTAL:** | | | | 16.07 | 98.50 | 42.30 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453058-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 15:42** | *Run Time:* | **10.00** |

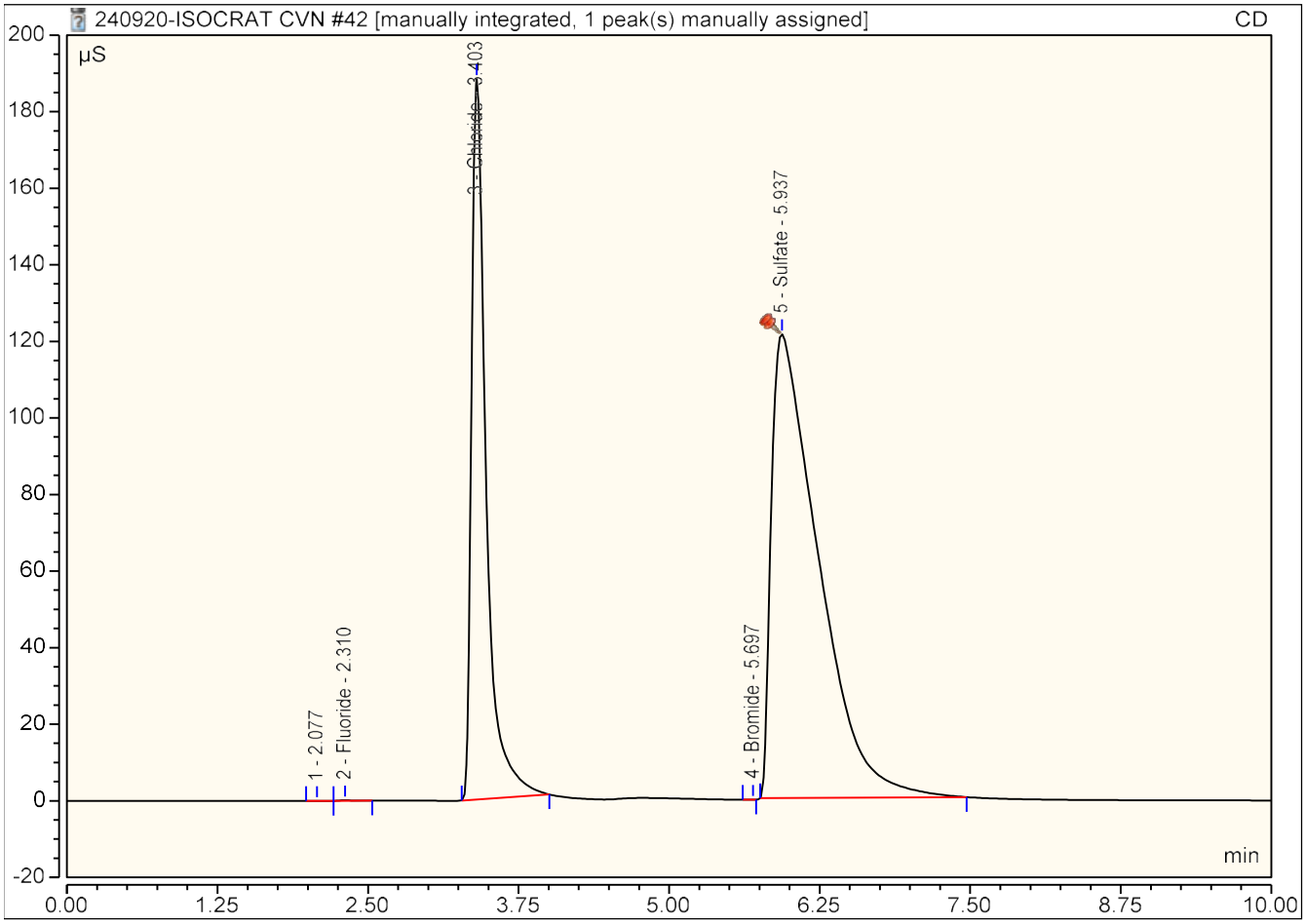
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.043 | 0.398 | 0.1237 |
| 3 | 3.42 | **Chloride** | BMB* | 9.265 | 67.914 | 22.8251 |
| 4 | 6.34 | **Sulfate** | BM * | 5.159 | 23.400 | 18.1147 |
| 5 | 6.86 | **Nitrate** | MB* | 1.621 | 7.010 | 1.2960 |
| **TOTAL:** | | | | 16.09 | 98.72 | 42.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2453985-01 CL SO4 NO3** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 15:54** | *Run Time:* | **10.00** |

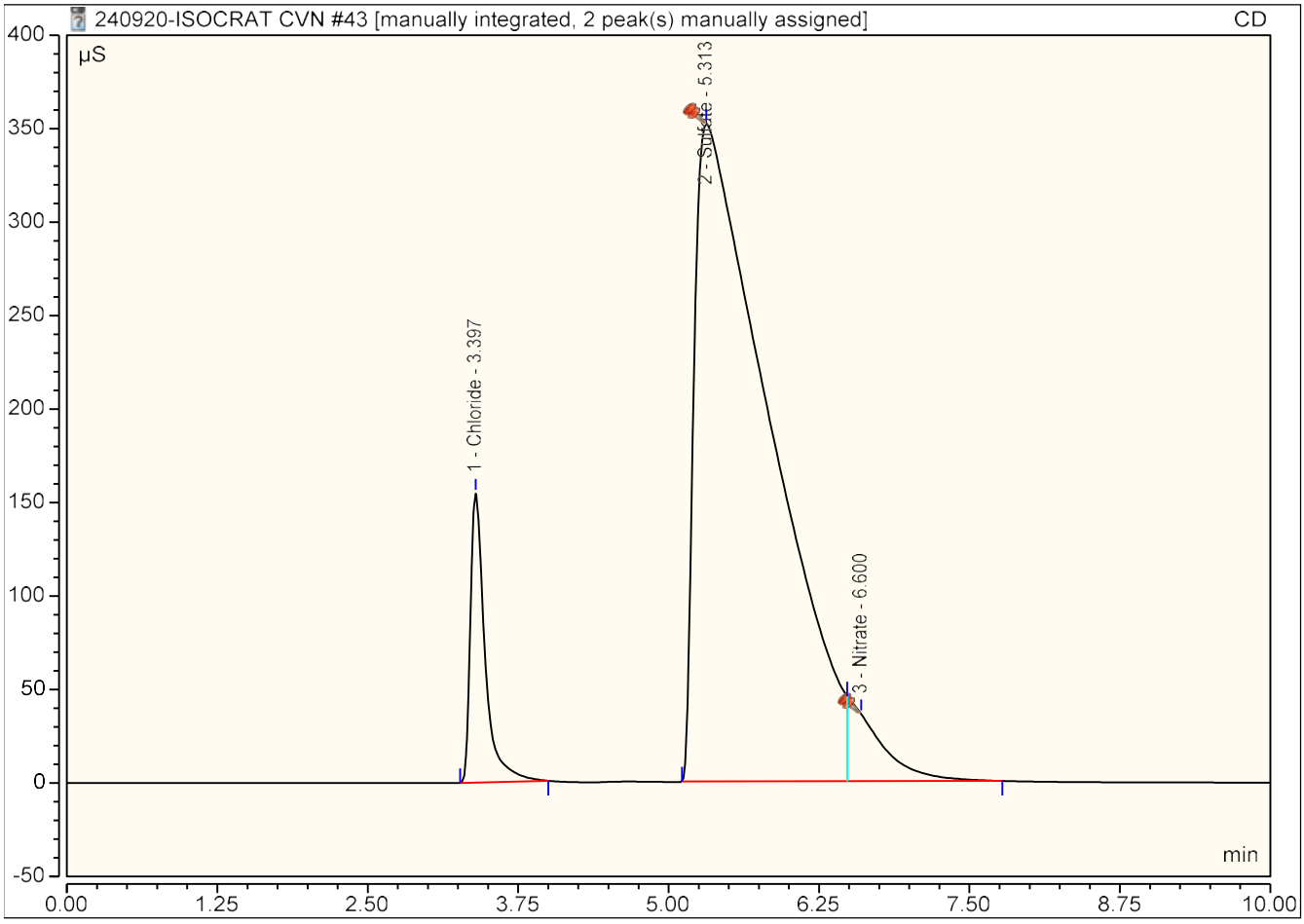
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.015 | 0.120 | 0.0717 |
| 3 | 3.40 | **Chloride** | BMB* | 26.544 | 188.241 | 65.0129 |
| 4 | 5.70 | **Bromide** | BMB | 0.001 | 0.012 | 0.0403 |
| 5 | 5.94 | **Sulfate** | BMB*^ | 54.871 | 121.178 | 189.9967 |
| **TOTAL:** | | | | 81.43 | 309.55 | 255.12 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2453985-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 16:06** | *Run Time:* | **10.00** |

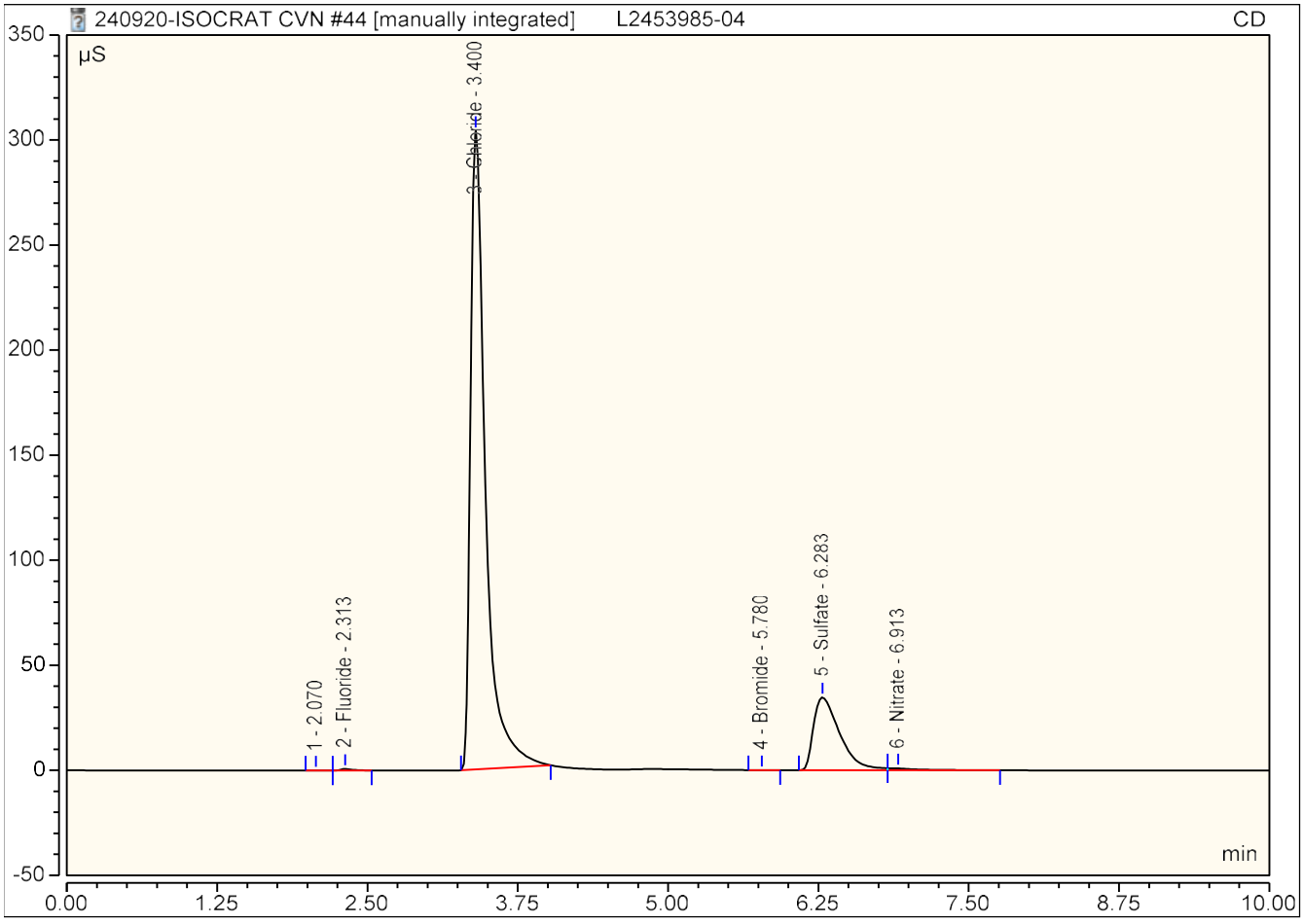
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 3.40 | **Chloride** | BMB* | 21.888 | 154.556 | 53.6439 |
| 2 | 5.31 | **Sulfate** | BM *^ | 255.259 | 351.732 | 882.8567 |
| 3 | 6.60 | **Nitrate** | MB*^ | 13.736 | 35.841 | 10.7924 |
| **TOTAL:** | | | | 290.88 | 542.13 | 947.29 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 16:18** | *Run Time:* | **10.00** |

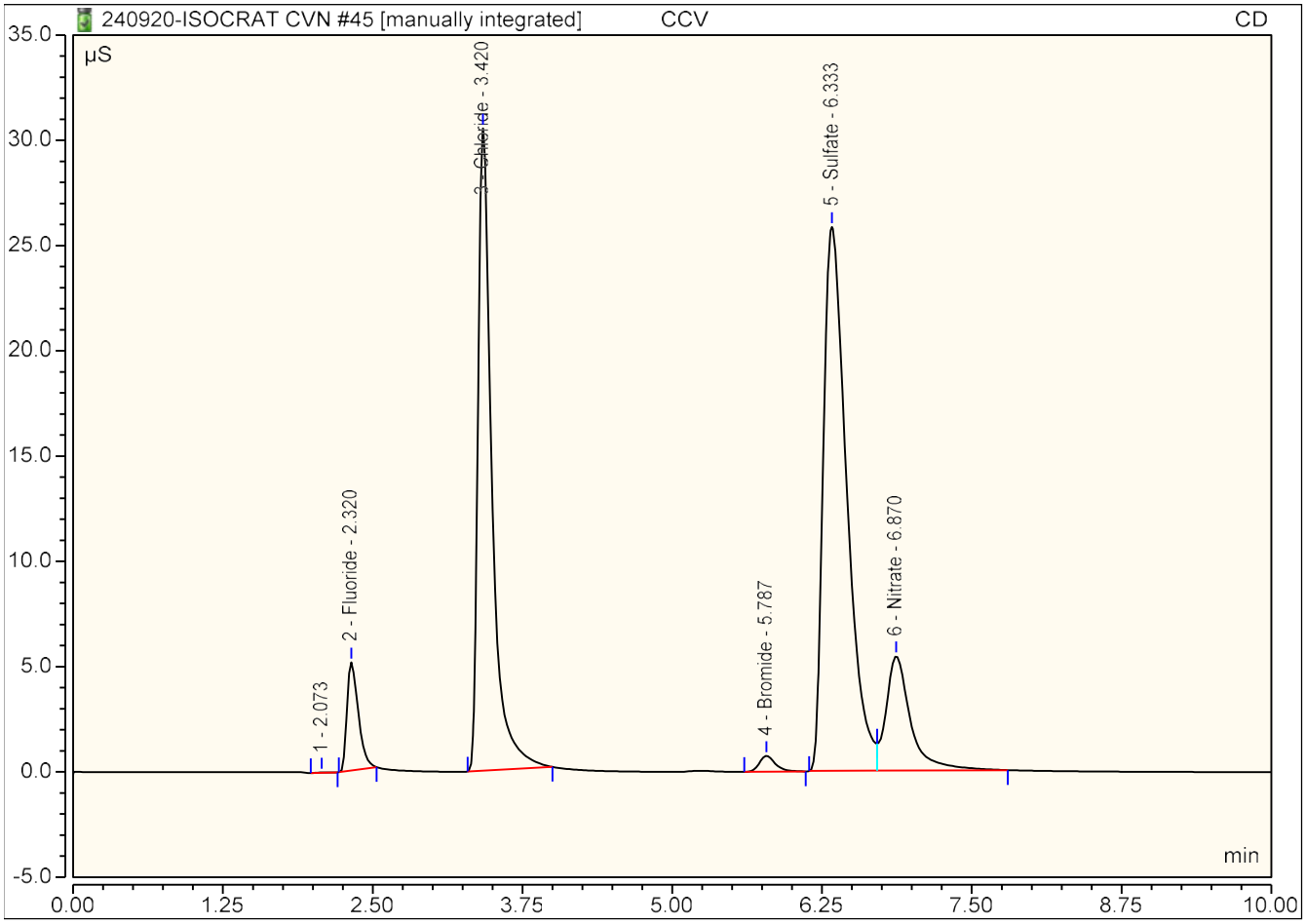
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.076 | 0.691 | 0.1828 |
| 3 | 3.40 | **Chloride** | BMB* | 43.927 | 303.850 | 107.4539 |
| 4 | 5.78 | **Bromide** | BMB | 0.002 | 0.018 | 0.0511 |
| 5 | 6.28 | **Sulfate** | BM * | 8.760 | 34.725 | 30.5639 |
| 6 | 6.91 | **Nitrate** | MB* | 0.271 | 0.888 | 0.2374 |
| **TOTAL:** | | | | 53.04 | 340.17 | 138.49 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 16:30** | *Run Time:* | **10.00** |

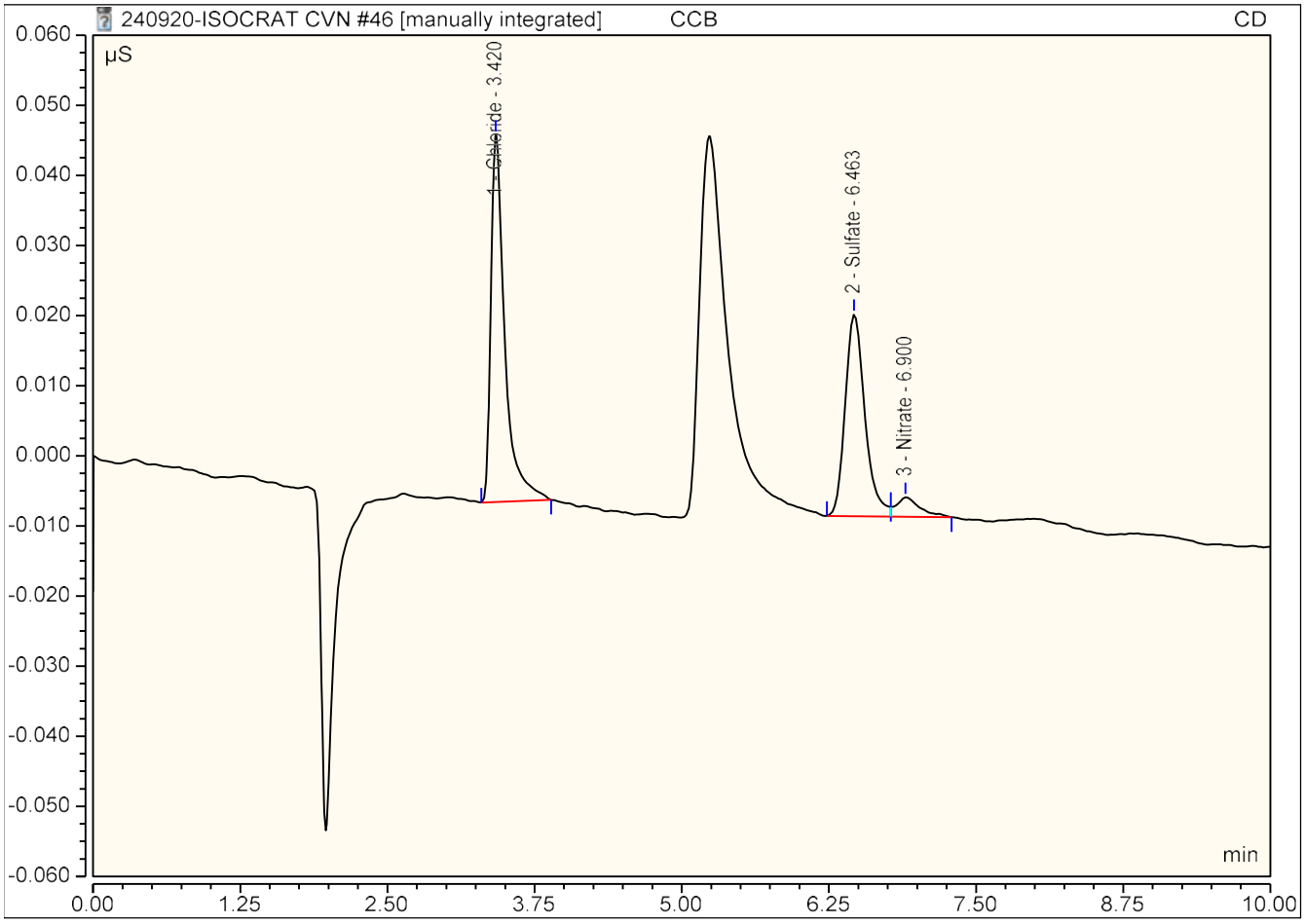
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.561 | 5.141 | 1.0682 |
| 3 | 3.42 | **Chloride** | BMB* | 4.104 | 30.511 | 10.2266 |
| 4 | 5.79 | **Bromide** | BMB | 0.118 | 0.755 | 1.0121 |
| 5 | 6.33 | **Sulfate** | BM * | 5.851 | 25.831 | 20.5060 |
| 6 | 6.87 | **Nitrate** | MB* | 1.292 | 5.438 | 1.0383 |
| **TOTAL:** | | | | 11.93 | 67.67 | 33.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 16:42** | *Run Time:* | **10.00** |

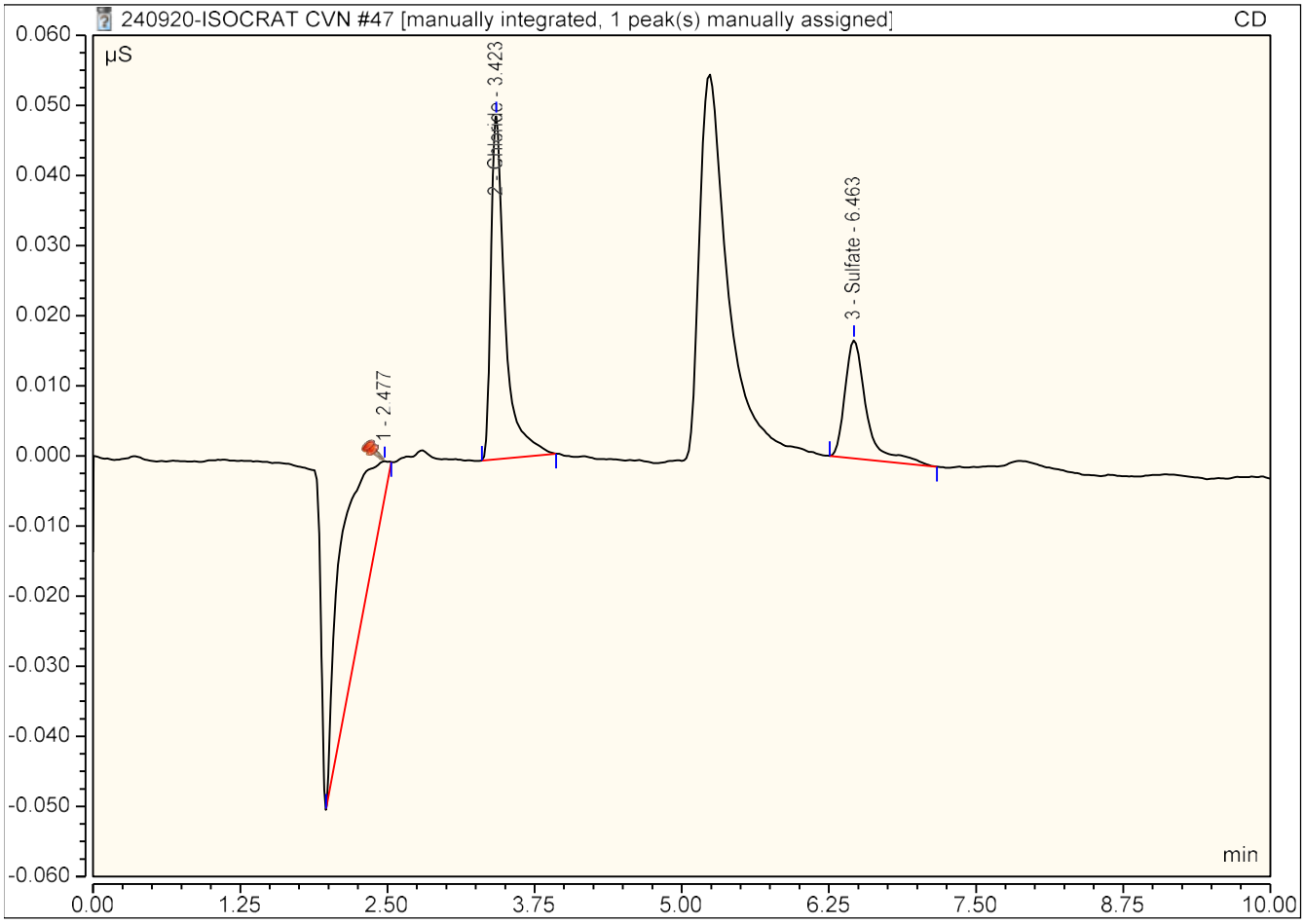
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 3.42 | **Chloride** | BMB* | 0.007 | 0.052 | 0.2230 |
| 2 | 6.46 | **Sulfate** | BM * | 0.006 | 0.029 | 0.2959 |
| 3 | 6.90 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0258 |
| **TOTAL:** | | | | 0.01 | 0.08 | 0.54 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 16:54** | *Run Time:* | **10.00** |

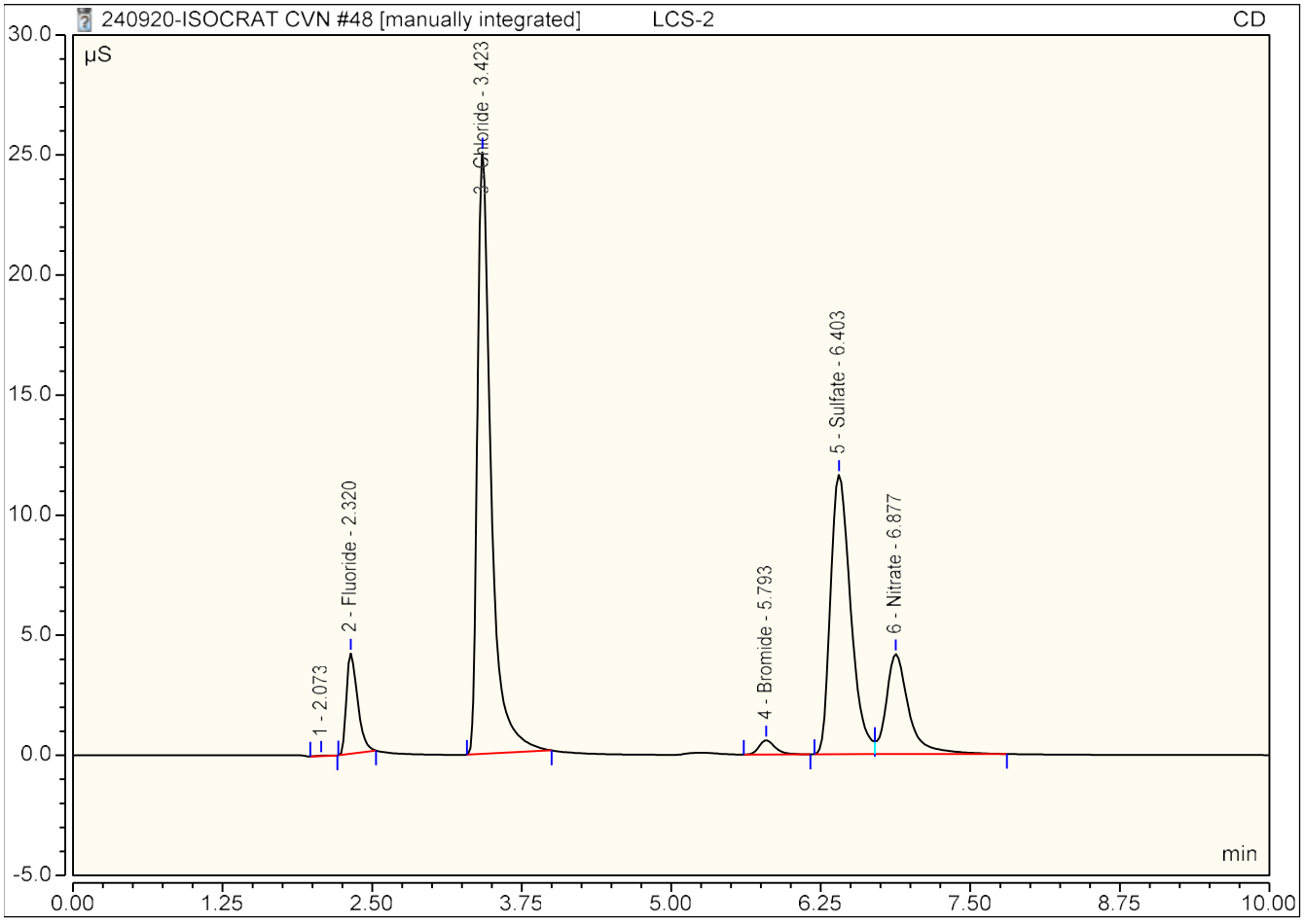
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.007 | 0.049 | 0.2221 |
| 3 | 6.46 | **Sulfate** | BMB | 0.004 | 0.017 | 0.2889 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.51 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 17:06** | *Run Time:* | **10.00** |

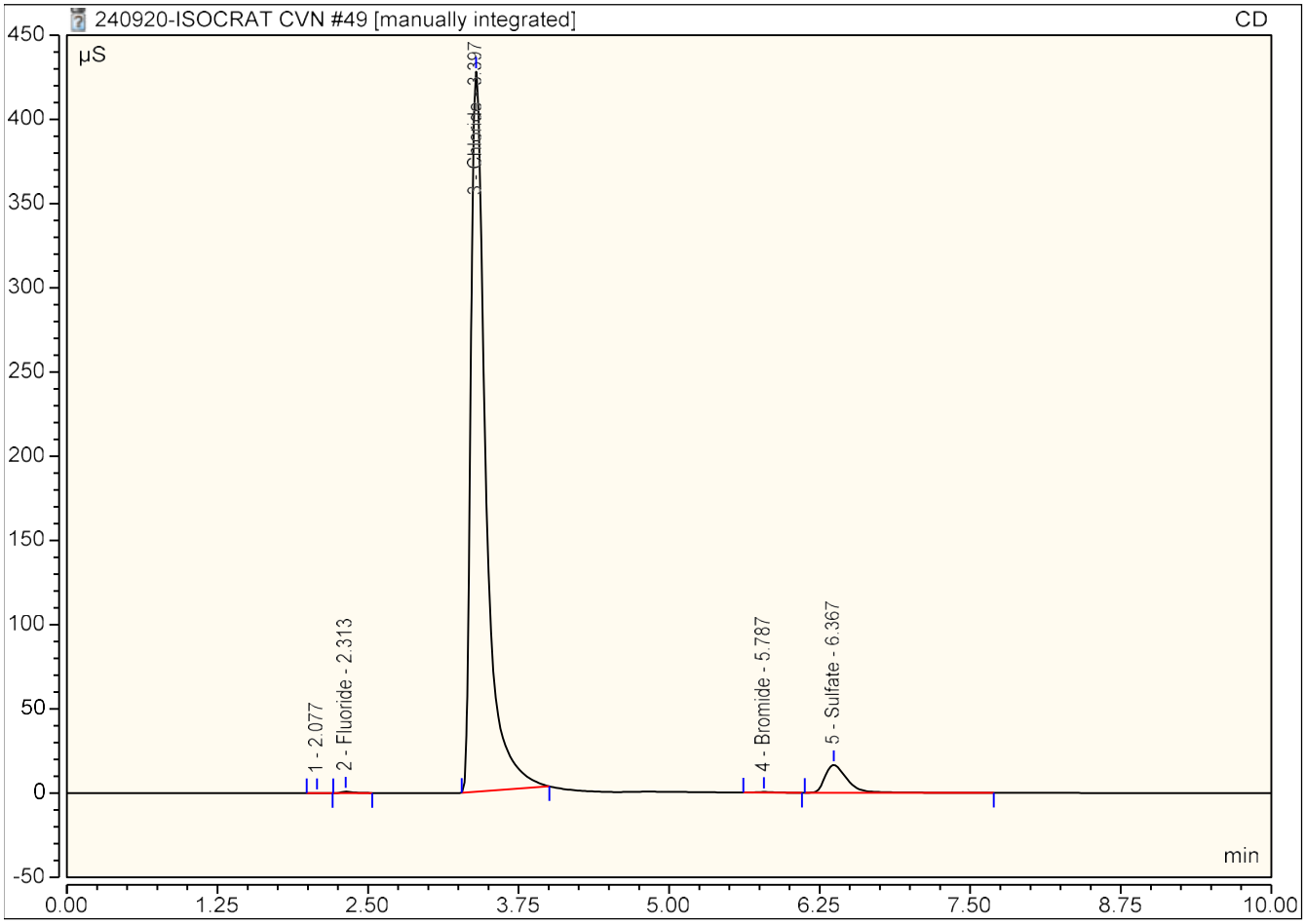
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.450 | 4.183 | 0.8660 |
| 3 | 3.42 | **Chloride** | BMB* | 3.335 | 25.045 | 8.3482 |
| 4 | 5.79 | **Bromide** | BMB | 0.095 | 0.596 | 0.8184 |
| 5 | 6.40 | **Sulfate** | BM * | 2.272 | 11.634 | 8.1306 |
| 6 | 6.88 | **Nitrate** | MB* | 0.910 | 4.165 | 0.7383 |
| **TOTAL:** | | | | 7.06 | 45.62 | 18.90 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2453433-01 CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 17:19** | *Run Time:* | **10.00** |

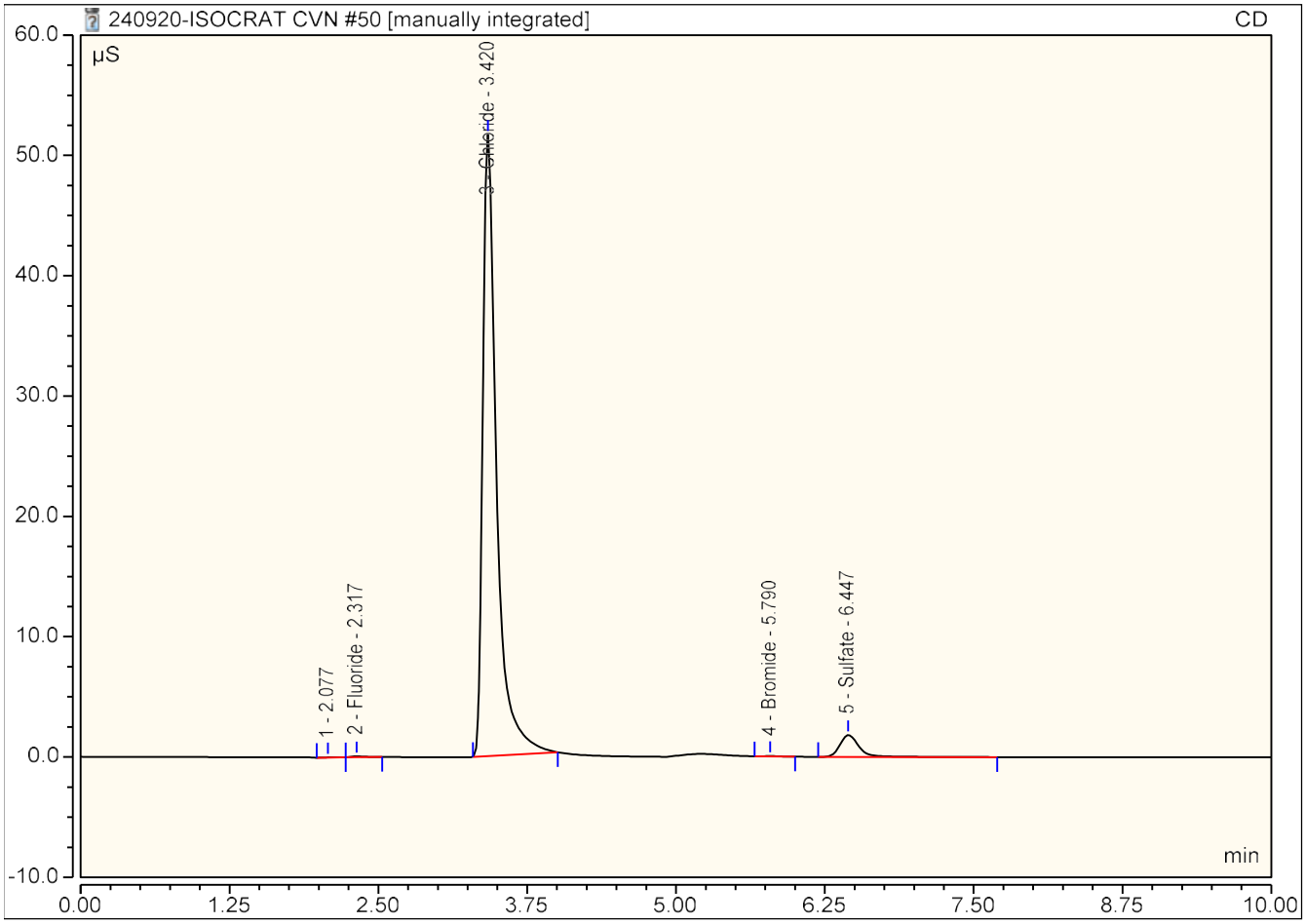
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.094 | 0.850 | 0.2159 |
| 3 | 3.40 | **Chloride** | BMB* | 62.103 | 427.320 | 151.8308 |
| 4 | 5.79 | **Bromide** | BMB | 0.061 | 0.392 | 0.5377 |
| 5 | 6.37 | **Sulfate** | BMB | 3.526 | 16.480 | 12.4674 |
| **TOTAL:** | | | | 65.78 | 445.04 | 165.05 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453433-01; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 17:31** | *Run Time:* | **10.00** |

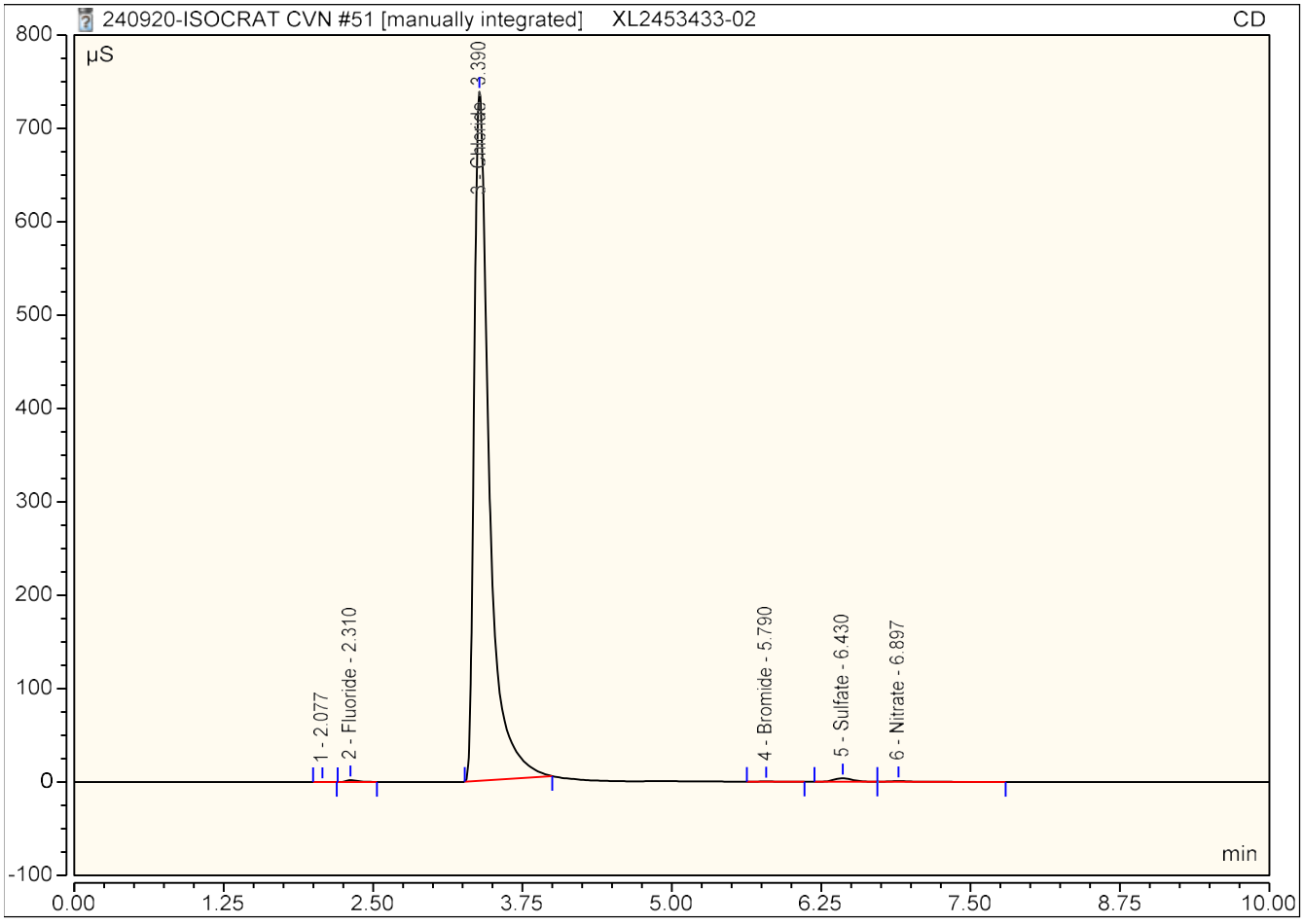
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.010 | 0.079 | 0.6233 |
| 3 | 3.42 | **Chloride** | BMB* | 6.974 | 51.640 | 172.3261 |
| 4 | 5.79 | **Bromide** | BMB | 0.005 | 0.033 | 0.7120 |
| 5 | 6.45 | **Sulfate** | BMB | 0.341 | 1.818 | 14.5484 |
| **TOTAL:** | | | | 7.33 | 53.57 | 188.21 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2453433-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 17:43** | *Run Time:* | **10.00** |

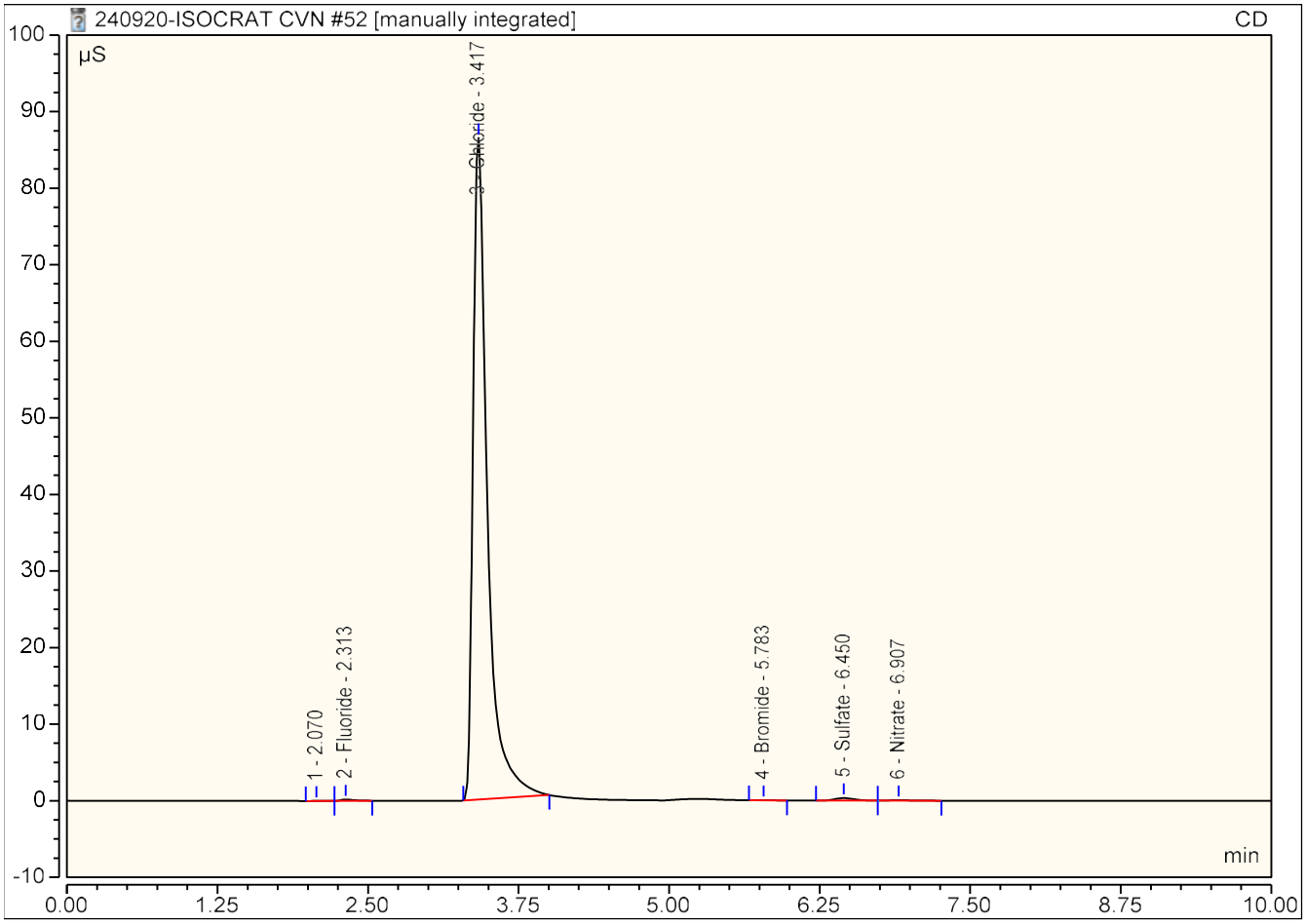
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.224 | 2.050 | 0.4528 |
| 3 | 3.39 | **Chloride** | BMB* | 108.508 | 737.907 | 265.1267 |
| 4 | 5.79 | **Bromide** | BMB | 0.043 | 0.282 | 0.3905 |
| 5 | 6.43 | **Sulfate** | BM * | 0.714 | 3.843 | 2.7463 |
| 6 | 6.90 | **Nitrate** | MB* | 0.187 | 0.910 | 0.1718 |
| **TOTAL:** | | | | 109.68 | 744.99 | 268.89 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453433-02; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 17:55** | *Run Time:* | **10.00** |

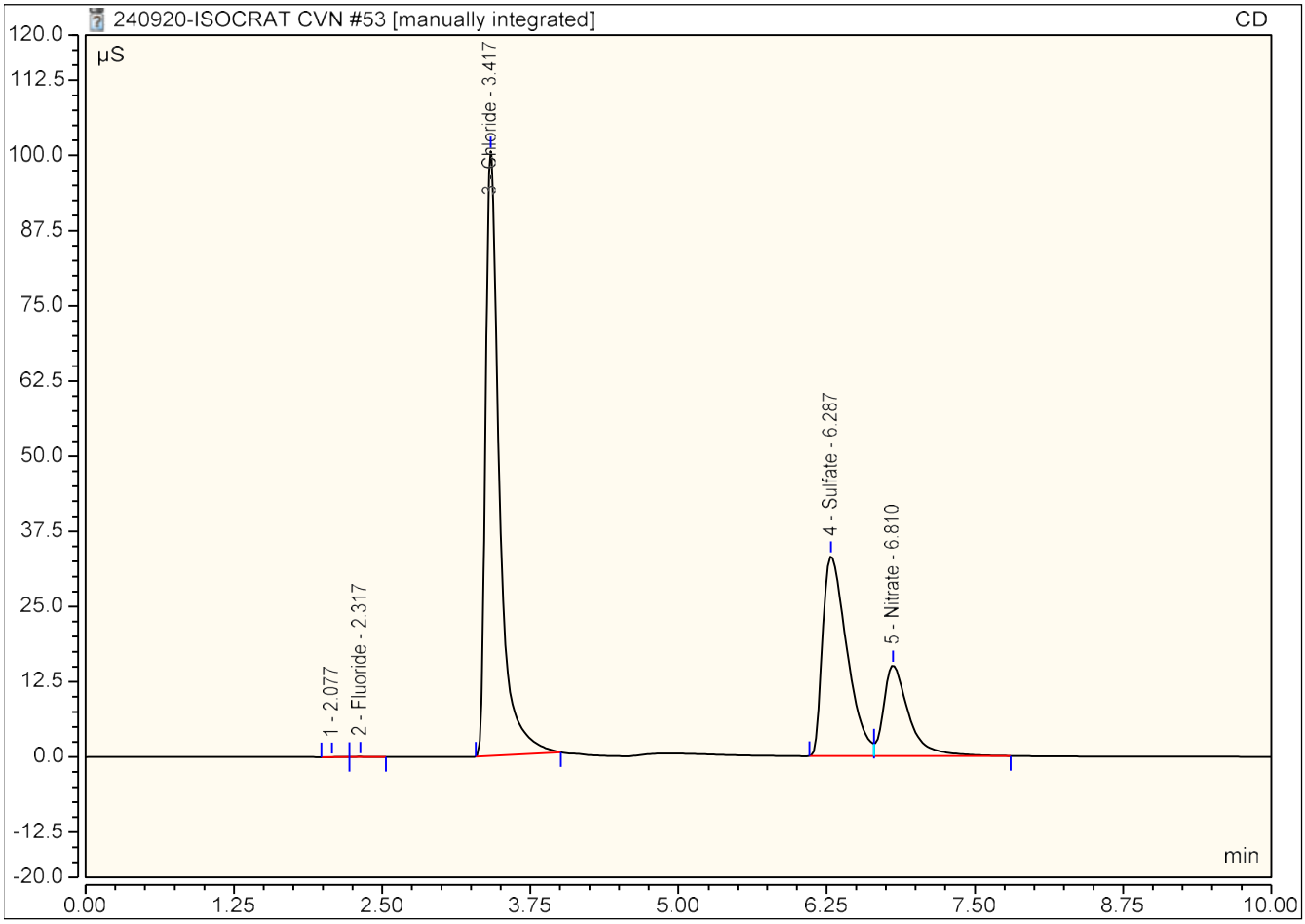
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.019 | 0.173 | 0.7966 |
| 3 | 3.42 | **Chloride** | BMB* | 11.918 | 86.372 | 293.0261 |
| 4 | 5.78 | **Bromide** | BMB | 0.003 | 0.021 | 0.5736 |
| 5 | 6.45 | **Sulfate** | BM * | 0.061 | 0.334 | 4.8835 |
| 6 | 6.91 | **Nitrate** | MB* | 0.015 | 0.074 | 0.3690 |
| **TOTAL:** | | | | 12.02 | 86.97 | 299.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-01 BR CL SO4** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 18:07** | *Run Time:* | **10.00** |

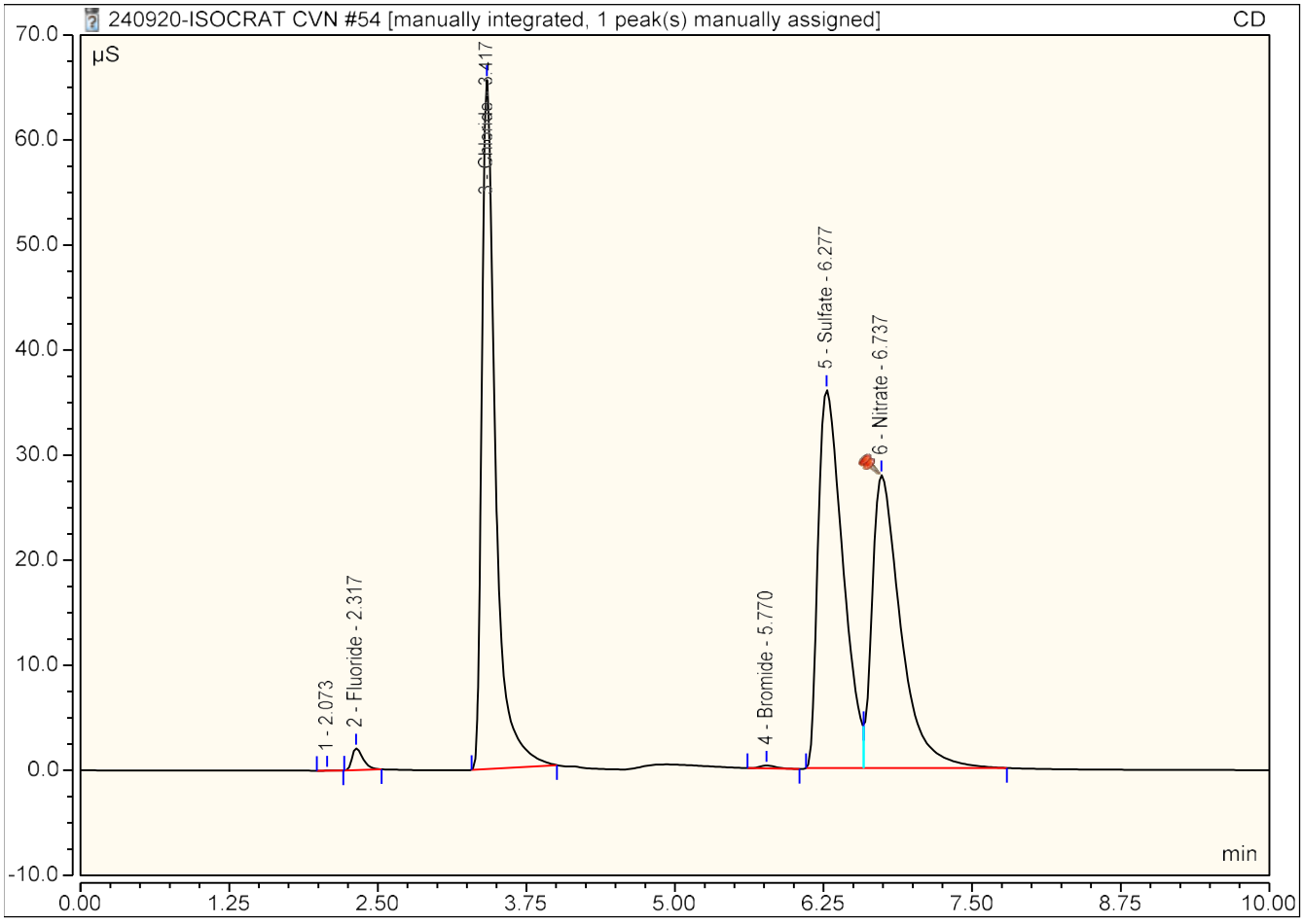
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.006 | 0.046 | 0.0549 |
| 3 | 3.42 | **Chloride** | BMB* | 13.683 | 100.494 | 33.6121 |
| 4 | 6.29 | **Sulfate** | BM * | 7.926 | 33.242 | 27.6803 |
| 5 | 6.81 | **Nitrate** | MB* | 3.683 | 15.054 | 2.9123 |
| **TOTAL:** | | | | 25.30 | 148.84 | 64.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 18:19** | *Run Time:* | **10.00** |

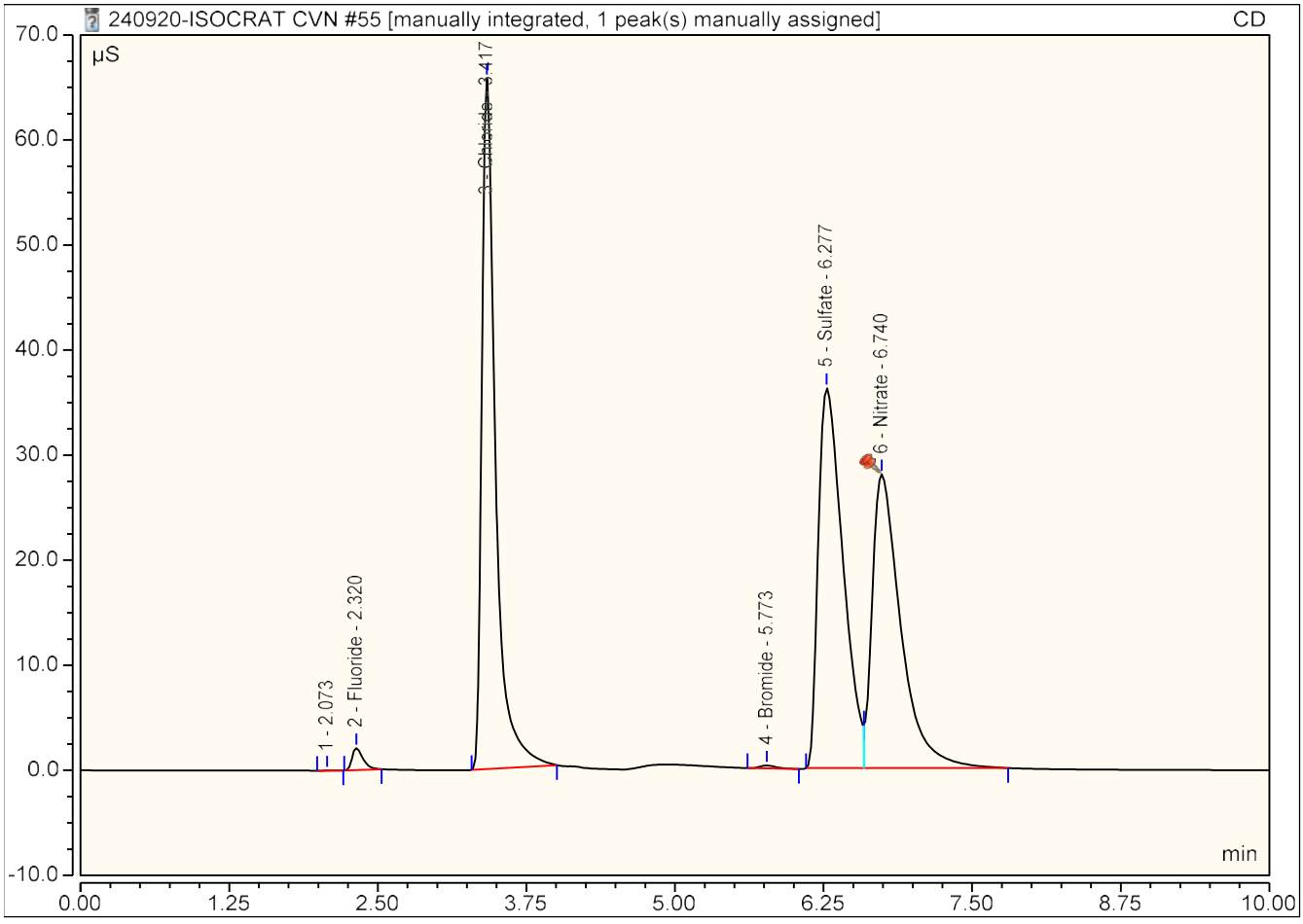
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.221 | 2.073 | 0.4479 |
| 3 | 3.42 | **Chloride** | BMB* | 8.815 | 65.607 | 21.7286 |
| 4 | 5.77 | **Bromide** | BMB | 0.043 | 0.284 | 0.3877 |
| 5 | 6.28 | **Sulfate** | BM * | 8.645 | 35.976 | 30.1670 |
| 6 | 6.74 | **Nitrate** | MB*^ | 7.768 | 27.876 | 6.1144 |
| **TOTAL:** | | | | 25.49 | 131.82 | 58.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-02 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 18:31** | *Run Time:* | **10.00** |

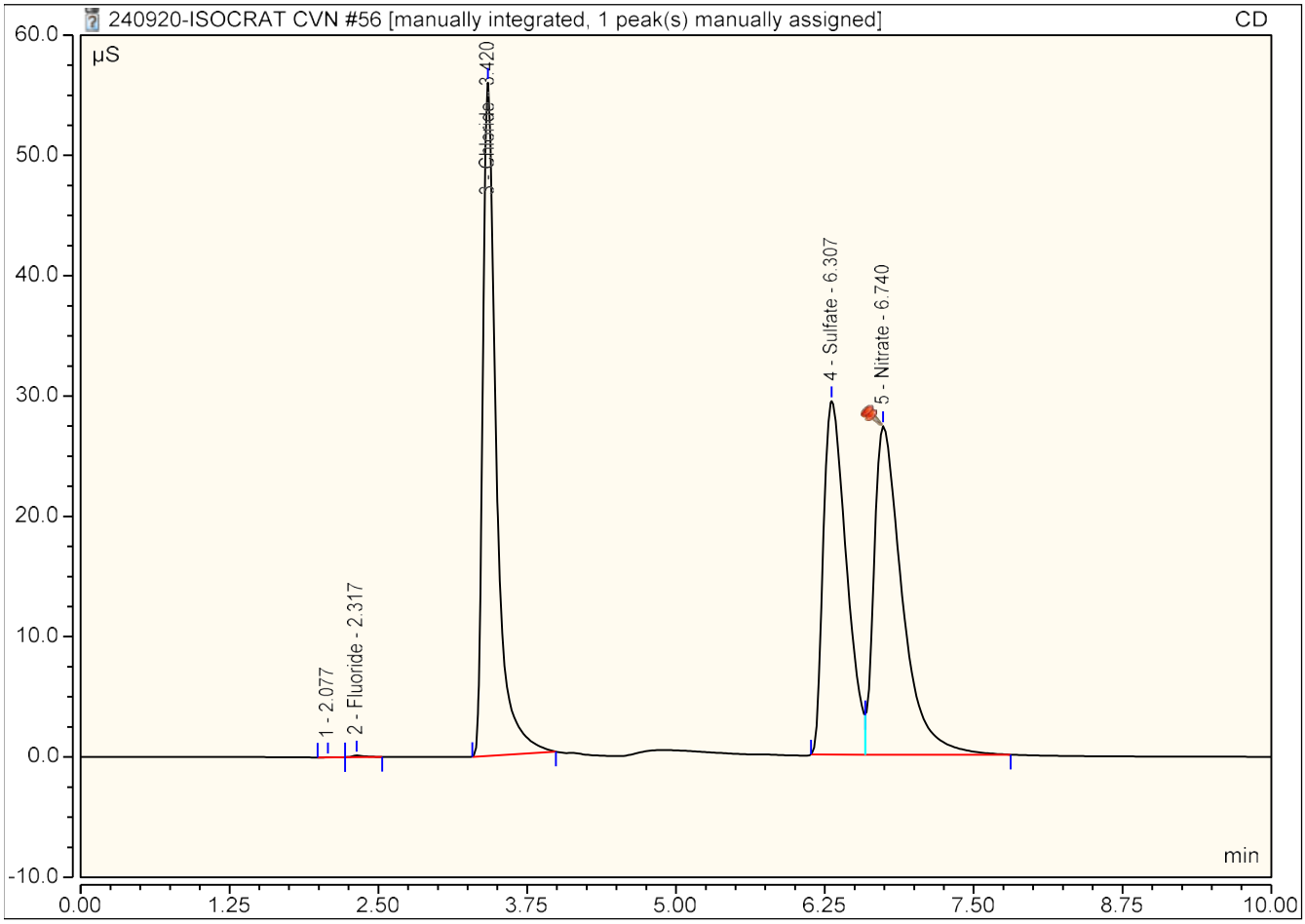
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.221 | 2.077 | 0.4483 |
| 3 | 3.42 | **Chloride** | BMB* | 8.828 | 65.749 | 21.7584 |
| 4 | 5.77 | **Bromide** | BMB | 0.043 | 0.286 | 0.3881 |
| 5 | 6.28 | **Sulfate** | BM * | 8.677 | 36.174 | 30.2764 |
| 6 | 6.74 | **Nitrate** | MB*^ | 7.784 | 27.959 | 6.1270 |
| **TOTAL:** | | | | 25.55 | 132.25 | 59.00 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 18:43** | *Run Time:* | **10.00** |

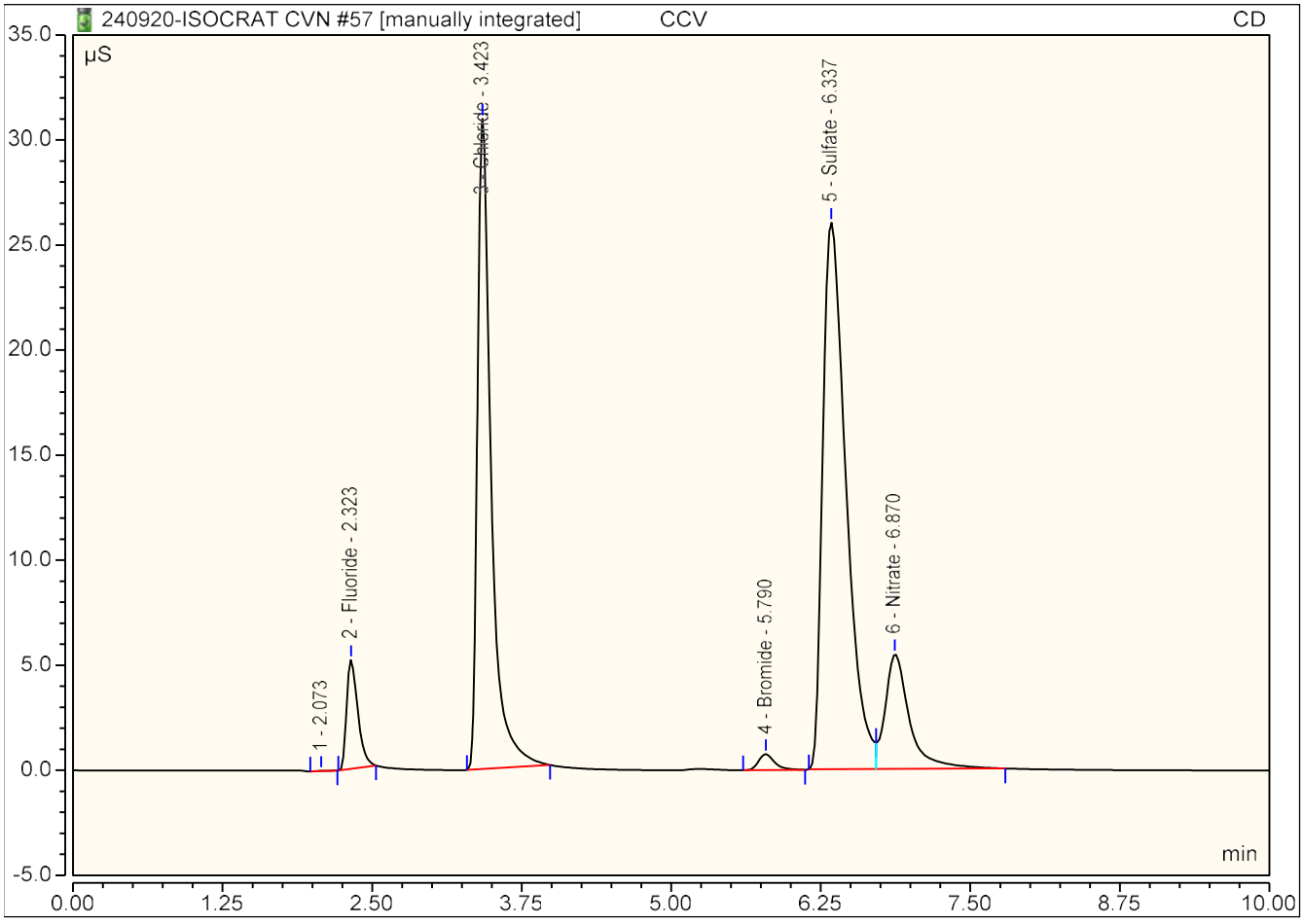
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.016 | 0.139 | 0.0734 |
| 3 | 3.42 | **Chloride** | BMB* | 7.422 | 55.950 | 18.3268 |
| 4 | 6.31 | **Sulfate** | BM * | 6.578 | 29.389 | 23.0202 |
| 5 | 6.74 | **Nitrate** | MB*^ | 7.480 | 27.315 | 5.8884 |
| **TOTAL:** | | | | 21.50 | 112.79 | 47.31 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 18:55** | *Run Time:* | **10.00** |

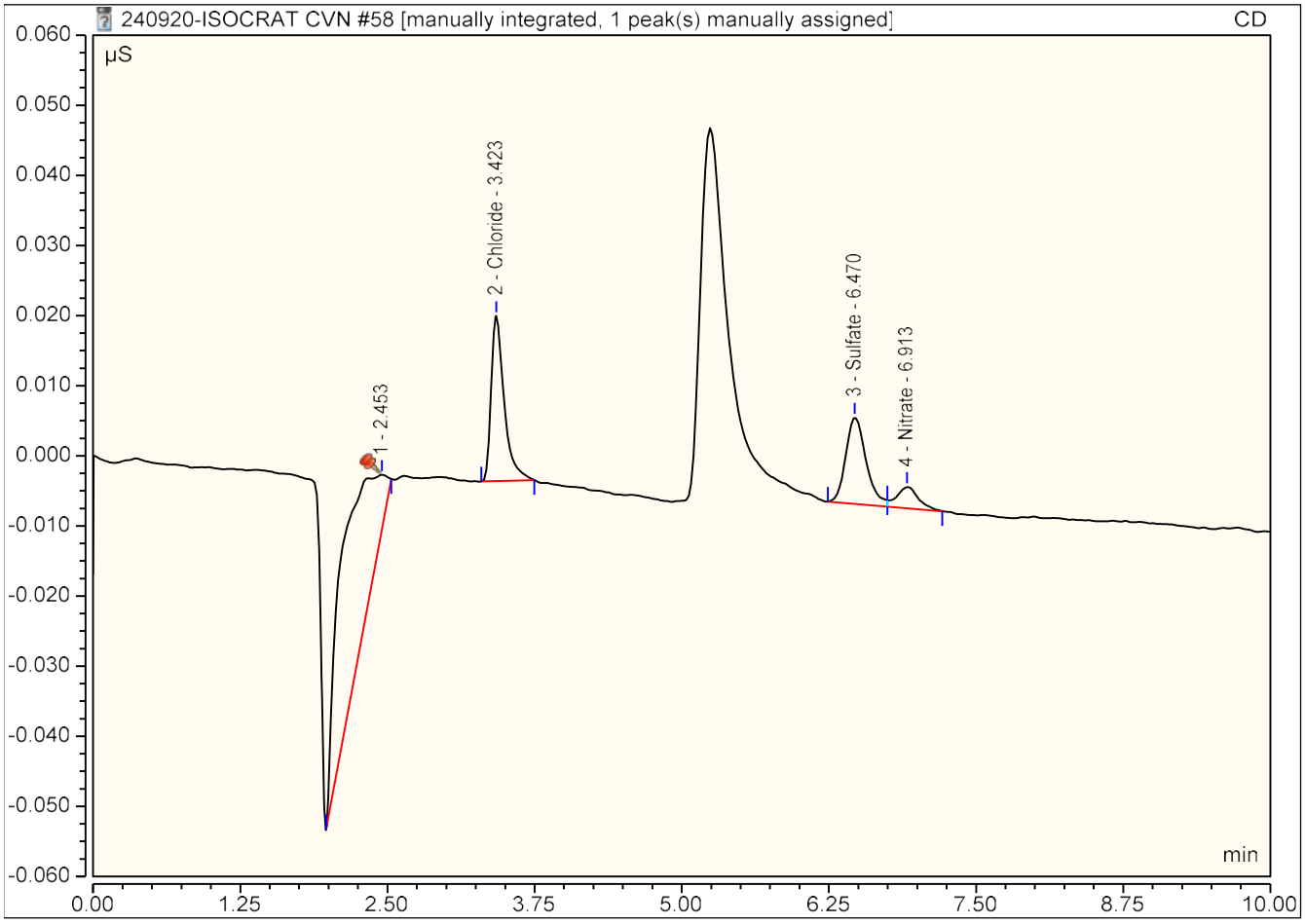
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.560 | 5.182 | 1.0653 |
| 3 | 3.42 | **Chloride** | BMB* | 4.098 | 30.943 | 10.2101 |
| 4 | 5.79 | **Bromide** | BMB | 0.118 | 0.758 | 1.0106 |
| 5 | 6.34 | **Sulfate** | BM * | 5.864 | 26.006 | 20.5503 |
| 6 | 6.87 | **Nitrate** | MB* | 1.284 | 5.458 | 1.0315 |
| **TOTAL:** | | | | 11.92 | 68.35 | 33.87 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 19:07** | *Run Time:* | **10.00** |

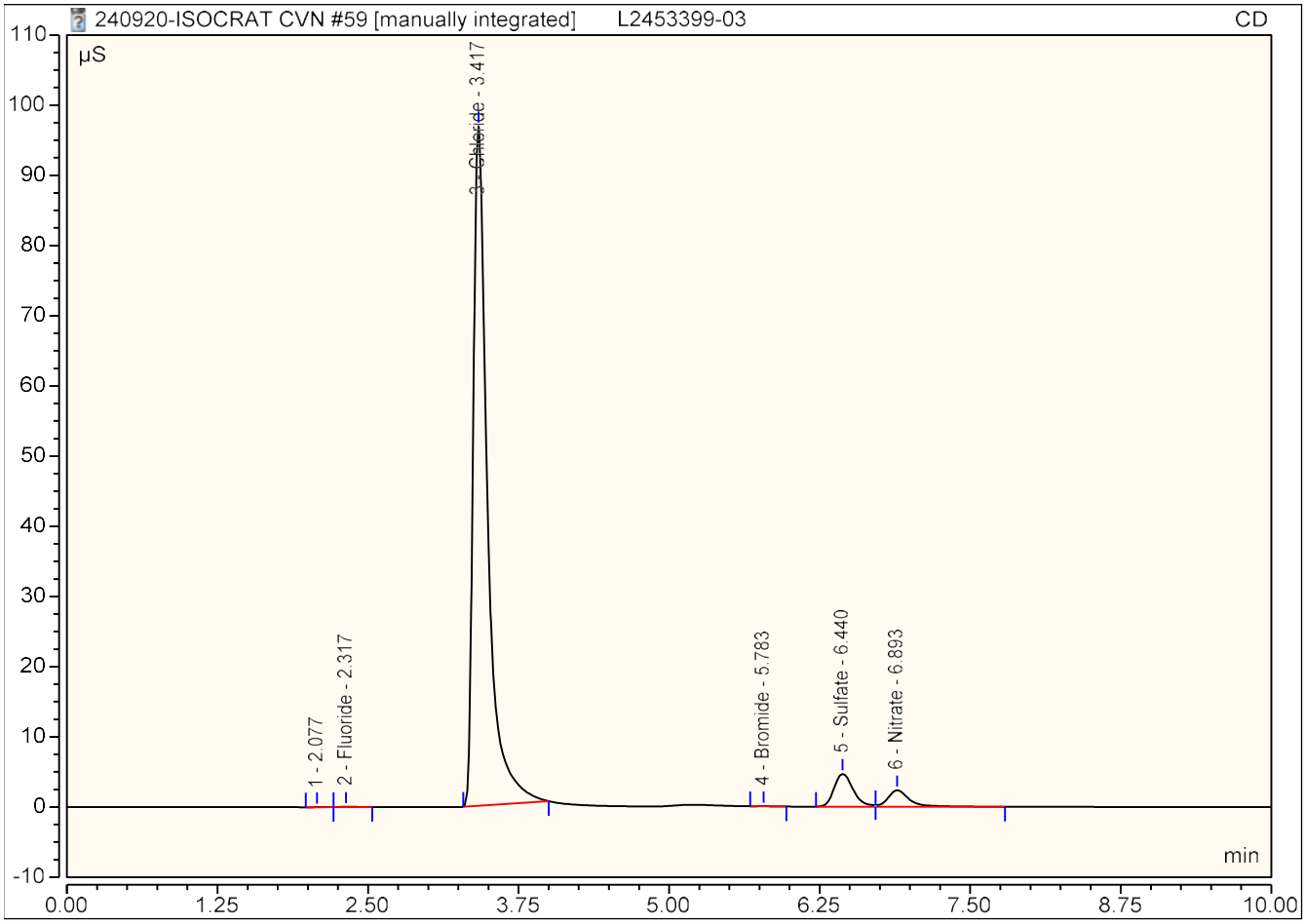
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB | 0.003 | 0.024 | 0.2130 |
| 3 | 6.47 | **Sulfate** | BM * | 0.002 | 0.012 | 0.2851 |
| 4 | 6.91 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0257 |
| **TOTAL:** | | | | 0.01 | 0.04 | 0.52 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 19:19** | *Run Time:* | **10.00** |

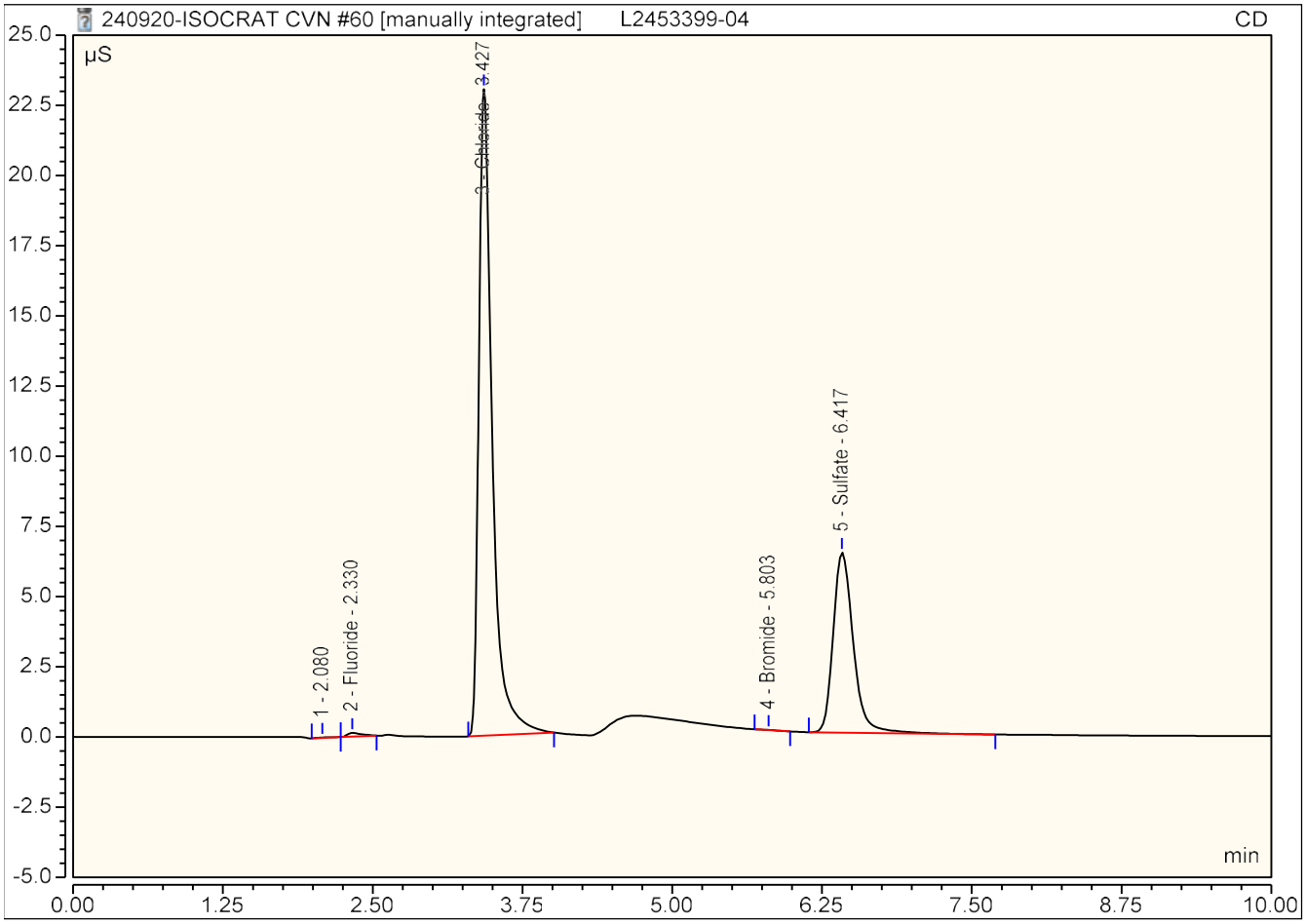
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.007 | 0.057 | 0.0568 |
| 3 | 3.42 | **Chloride** | BMB* | 13.297 | 96.819 | 32.6692 |
| 4 | 5.78 | **Bromide** | BMB | 0.003 | 0.021 | 0.0570 |
| 5 | 6.44 | **Sulfate** | BM * | 0.858 | 4.676 | 3.2417 |
| 6 | 6.89 | **Nitrate** | MB* | 0.485 | 2.347 | 0.4055 |
| **TOTAL:** | | | | 14.65 | 103.92 | 36.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453399-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 19:32** | *Run Time:* | **10.00** |

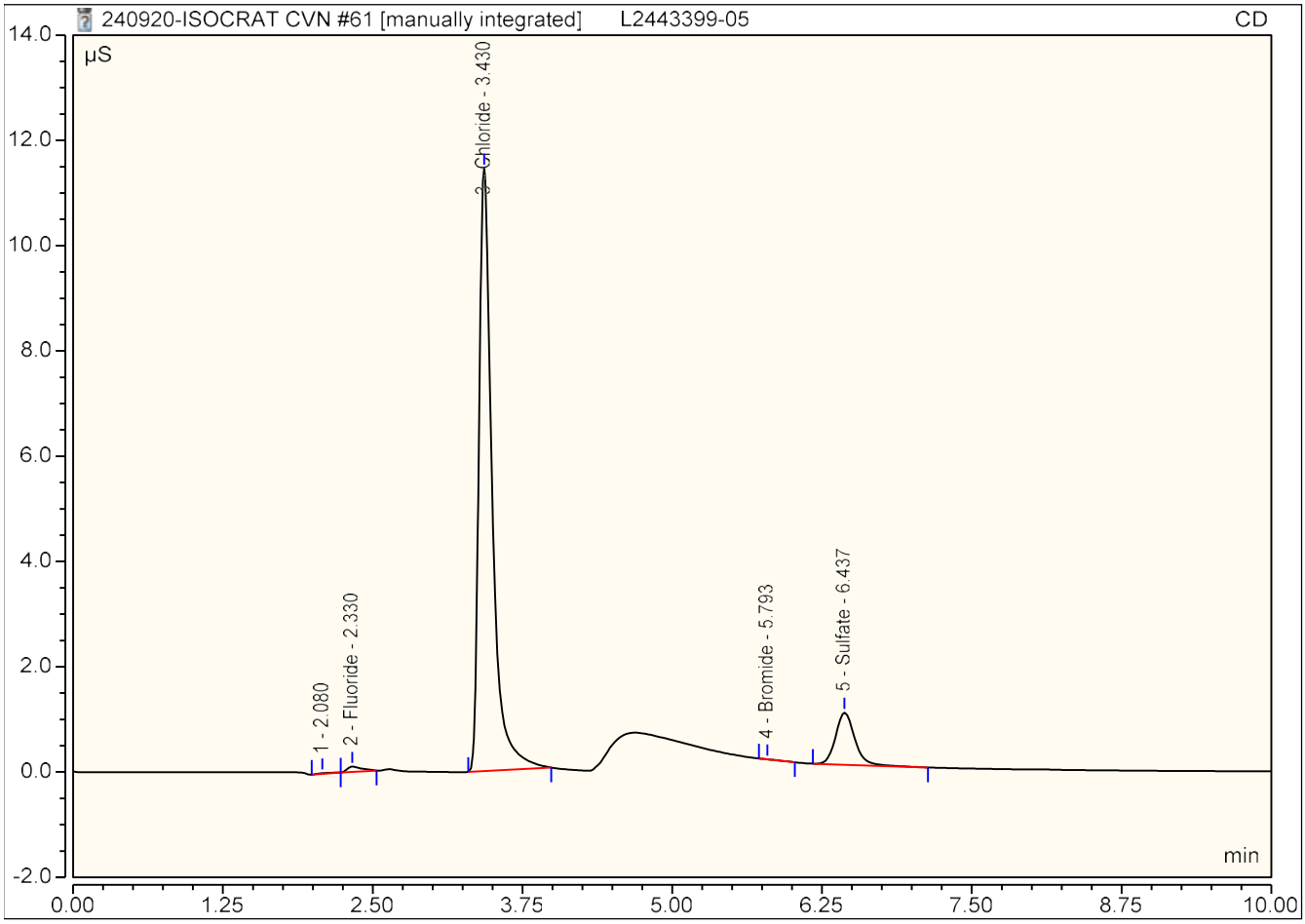
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.018 | 0.134 | 0.0781 |
| 3 | 3.43 | **Chloride** | BMB* | 2.995 | 23.032 | 7.5167 |
| 4 | 5.80 | **Bromide** | BMB | 0.001 | 0.008 | 0.0415 |
| 5 | 6.42 | **Sulfate** | BMB | 1.249 | 6.414 | 4.5938 |
| **TOTAL:** | | | | 4.26 | 29.59 | 12.23 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2443399-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 19:44** | *Run Time:* | **10.00** |

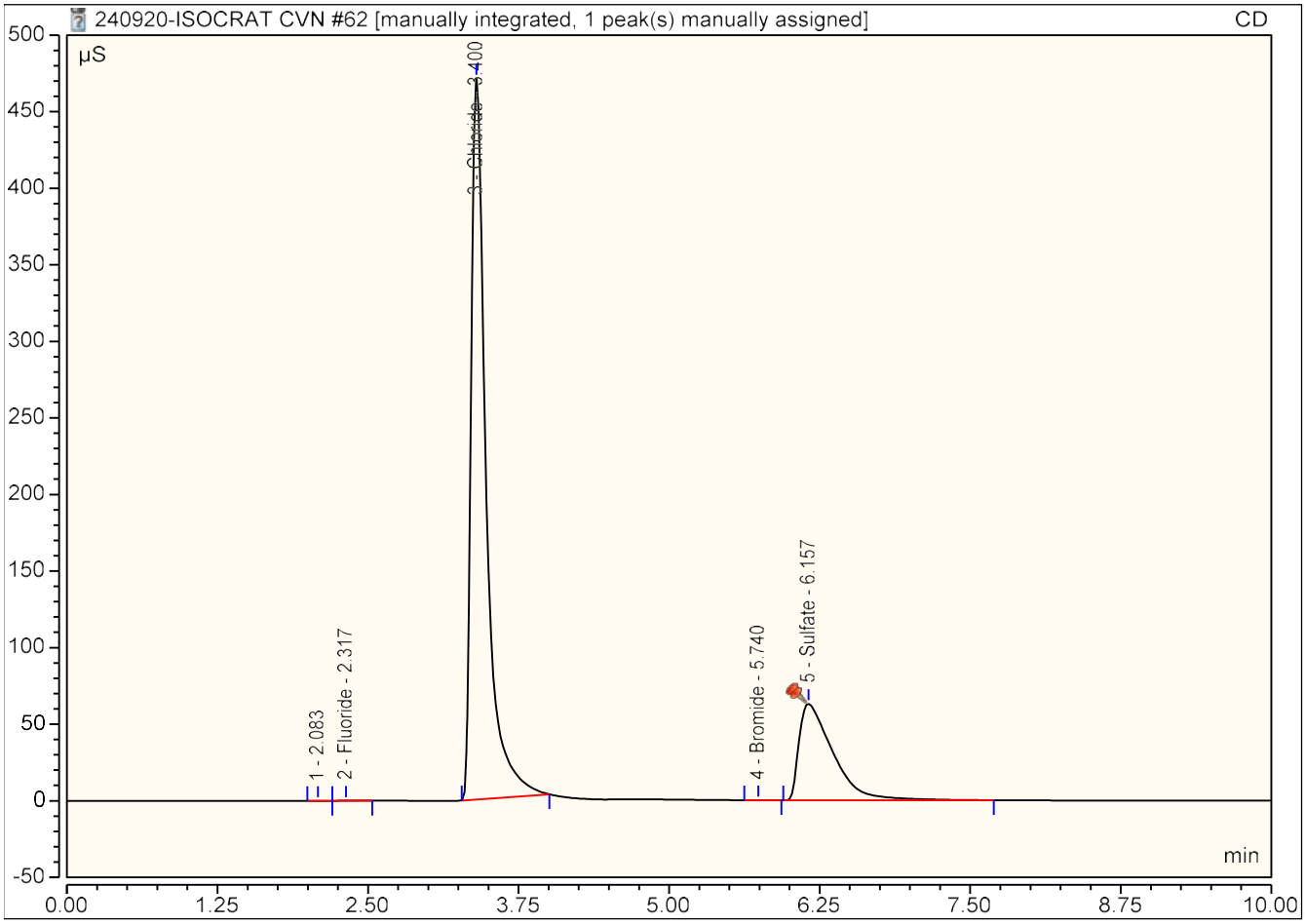
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.014 | 0.101 | 0.0701 |
| 3 | 3.43 | **Chloride** | BMB* | 1.466 | 11.449 | 3.7859 |
| 4 | 5.79 | **Bromide** | BMB | 0.000 | 0.002 | 0.0351 |
| 5 | 6.44 | **Sulfate** | BMB | 0.184 | 0.992 | 0.9136 |
| **TOTAL:** | | | | 1.67 | 12.54 | 4.80 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-01 BR CL SO4** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 19:56** | *Run Time:* | **10.00** |

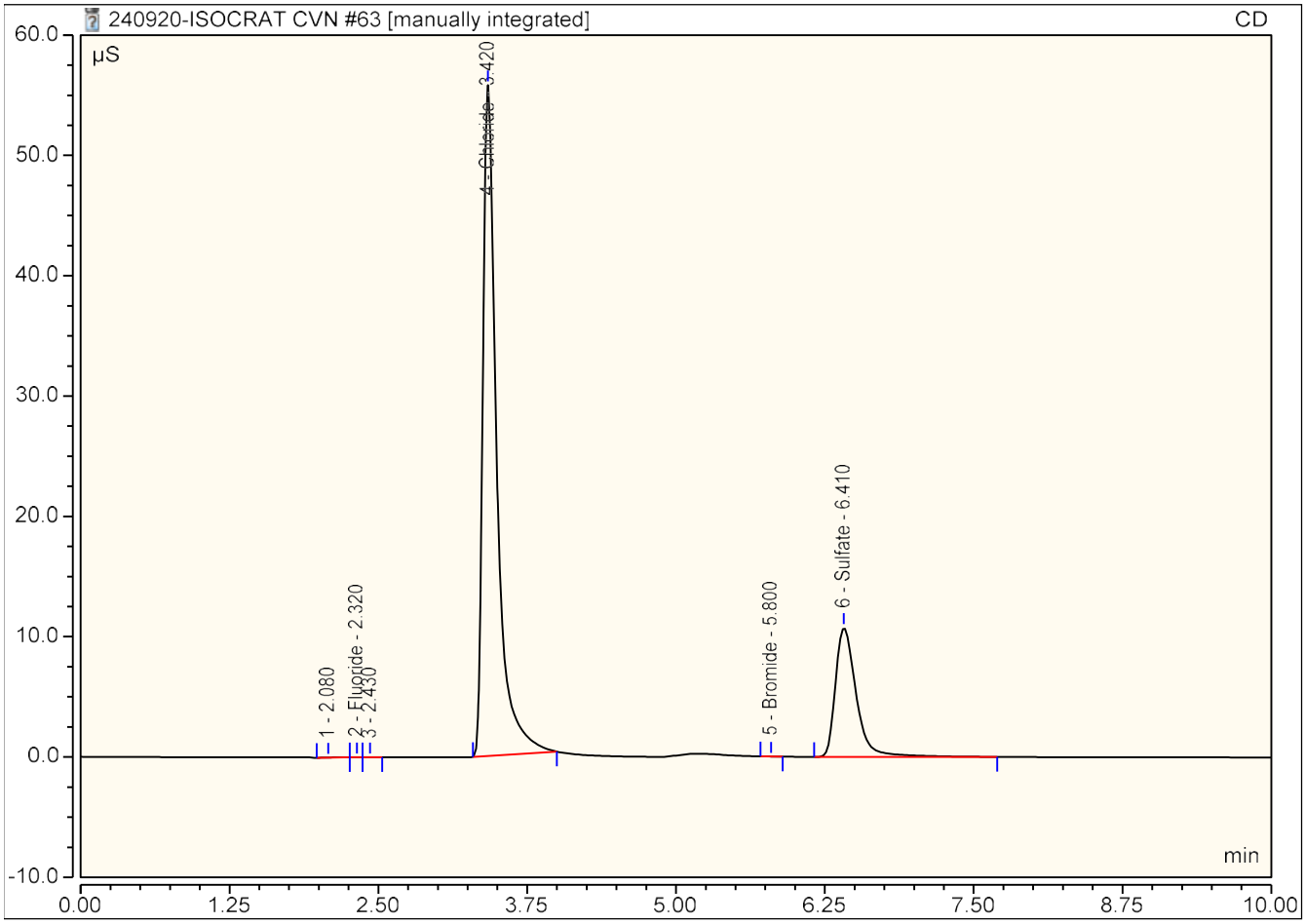
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.006 | 0.047 | 0.0557 |
| 3 | 3.40 | **Chloride** | BMB* | 68.308 | 470.745 | 166.9800 |
| 4 | 5.74 | **Bromide** | BMB | 0.006 | 0.040 | 0.0832 |
| 5 | 6.16 | **Sulfate** | BMB^ | 20.488 | 63.042 | 71.1172 |
| **TOTAL:** | | | | 88.81 | 533.87 | 238.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-01; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 20:08** | *Run Time:* | **10.00** |

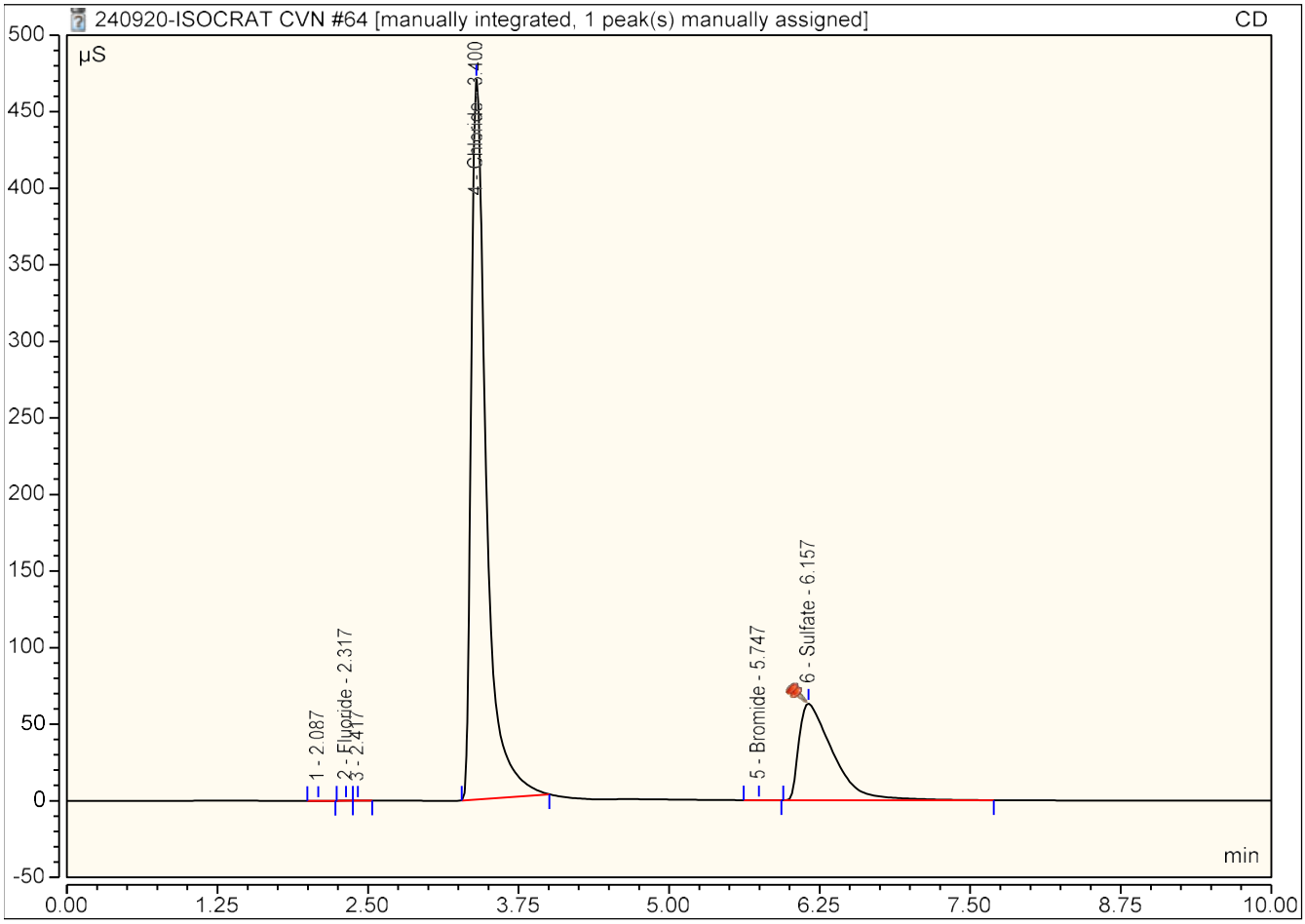
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.000 | 0.003 | 0.4480 |
| 4 | 3.42 | **Chloride** | BMB* | 7.548 | 55.754 | 186.3504 |
| 5 | 5.80 | **Bromide** | BMB | 0.000 | 0.002 | 0.3429 |
| 6 | 6.41 | **Sulfate** | BMB | 2.176 | 10.732 | 78.0160 |
| **TOTAL:** | | | | 9.73 | 66.49 | 265.16 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 20:20** | *Run Time:* | **10.00** |

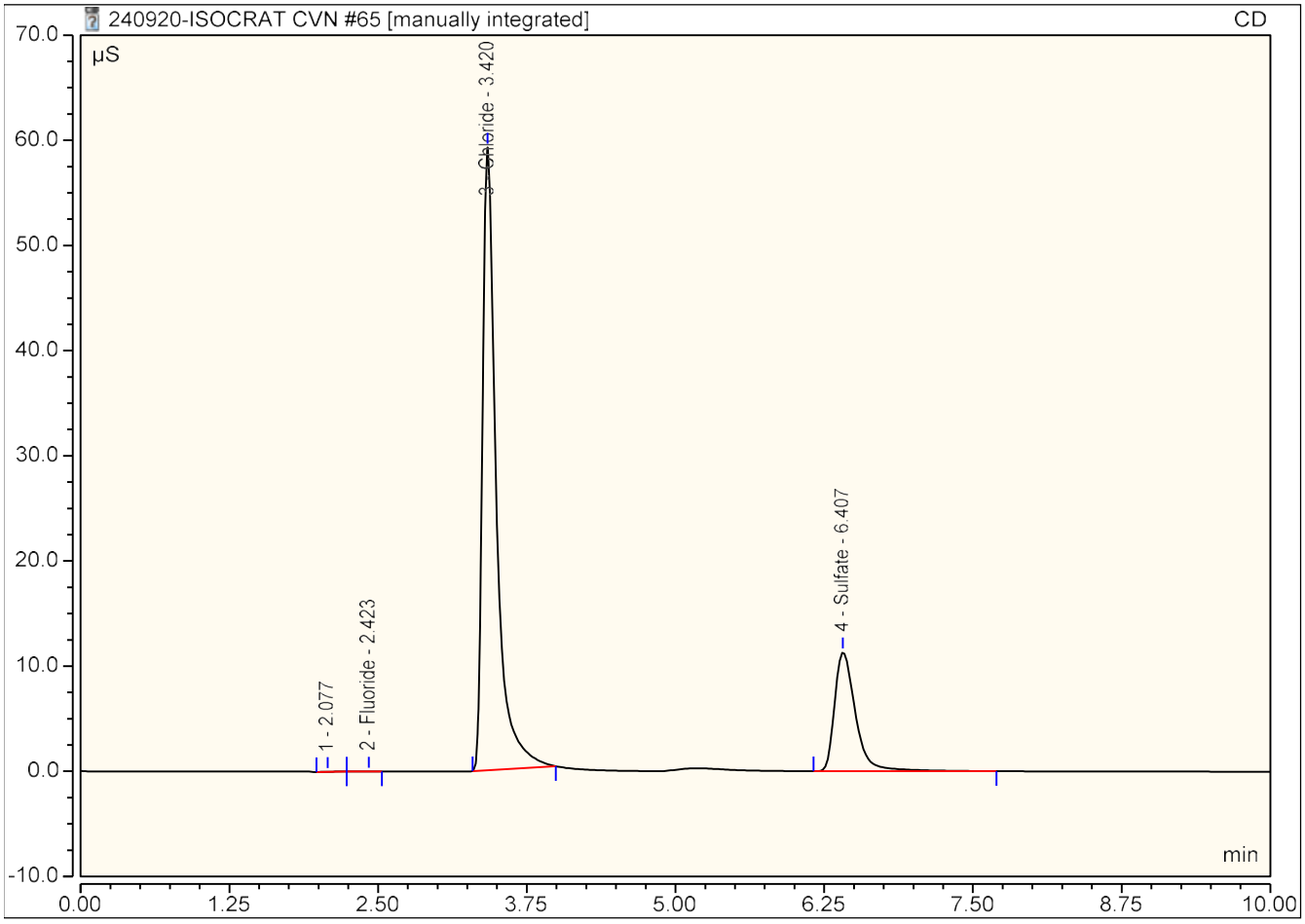
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.002 | 0.025 | 0.0476 |
| 4 | 3.40 | **Chloride** | BMB* | 68.412 | 470.091 | 167.2335 |
| 5 | 5.75 | **Bromide** | BMB | 0.006 | 0.044 | 0.0853 |
| 6 | 6.16 | **Sulfate** | BMB^ | 20.511 | 63.098 | 71.1954 |
| **TOTAL:** | | | | 88.93 | 533.26 | 238.56 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-02; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 20:32** | *Run Time:* | **10.00** |

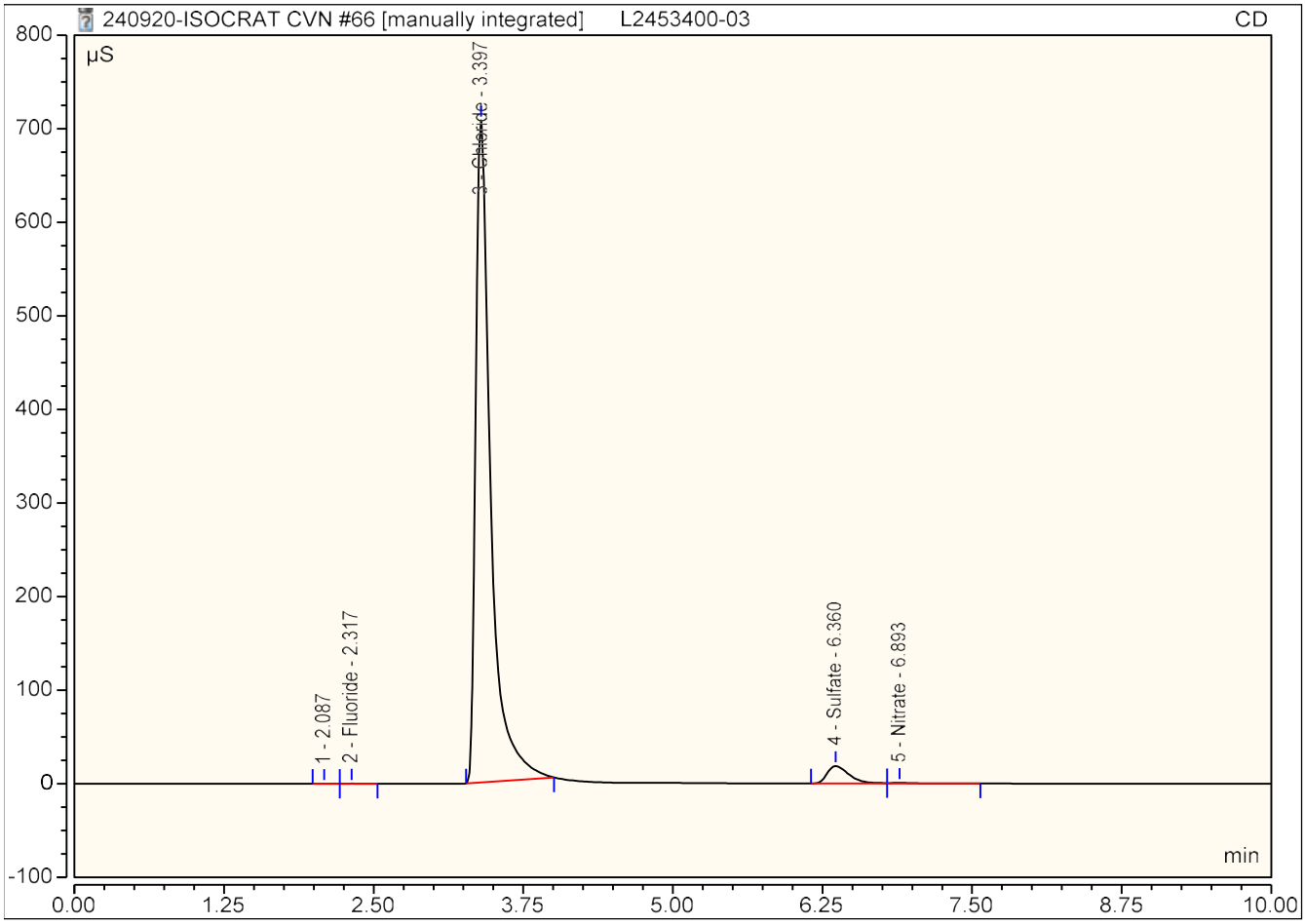
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.42 | **Fluoride** | BMB | 0.001 | 0.007 | 0.4686 |
| 3 | 3.42 | **Chloride** | BMB* | 7.990 | 59.233 | 197.1201 |
| 4 | 6.41 | **Sulfate** | BMB | 2.315 | 11.317 | 82.8044 |
| **TOTAL:** | | | | 10.31 | 70.56 | 280.39 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 20:44** | *Run Time:* | **10.00** |

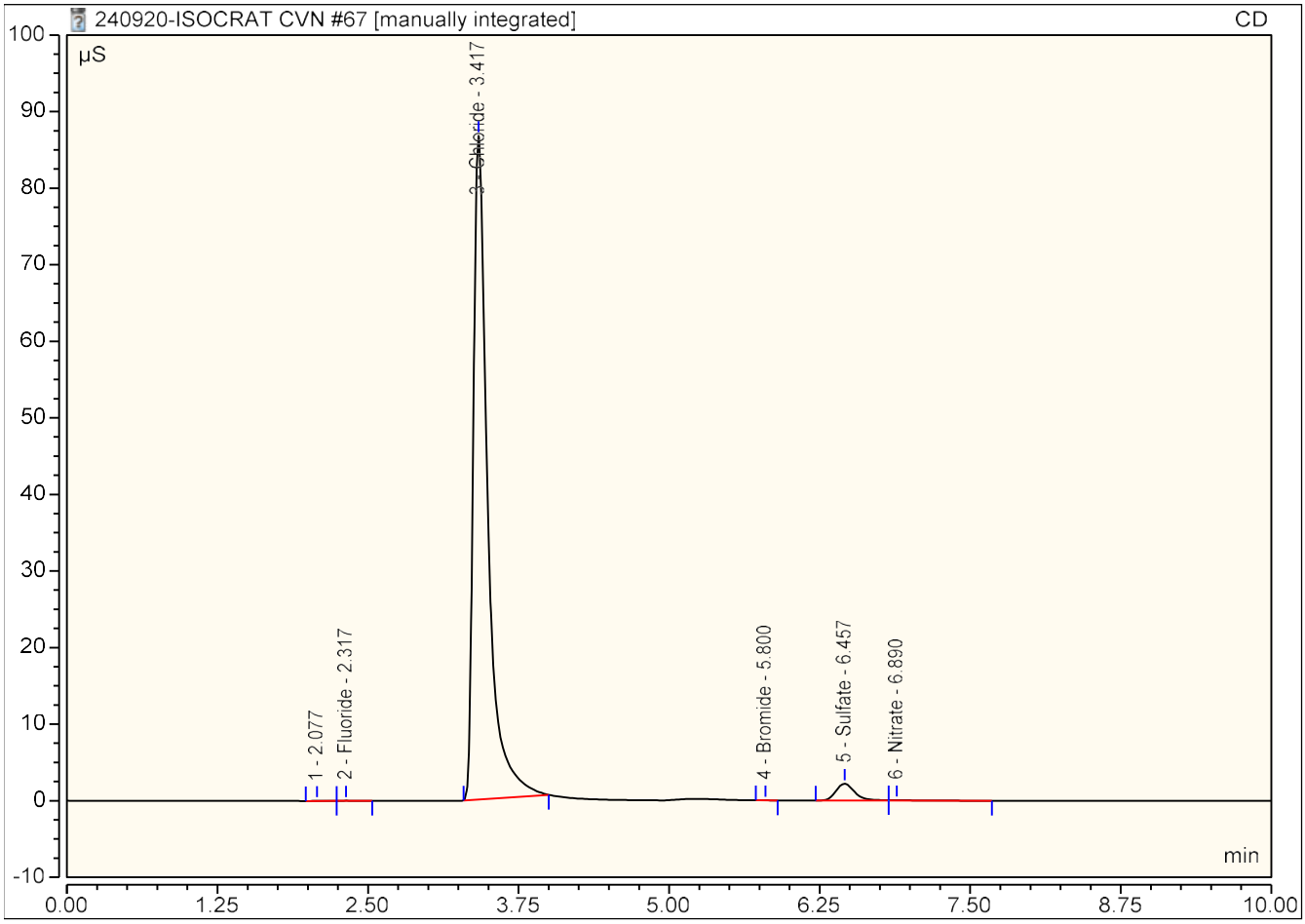
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.019 | 0.155 | 0.0786 |
| 3 | 3.40 | **Chloride** | BMB* | 103.213 | 707.614 | 252.1996 |
| 4 | 6.36 | **Sulfate** | BM * | 4.005 | 18.732 | 14.1225 |
| 5 | 6.89 | **Nitrate** | MB* | 0.182 | 0.676 | 0.1680 |
| **TOTAL:** | | | | 107.42 | 727.18 | 266.57 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-03; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 20:56** | *Run Time:* | **10.00** |

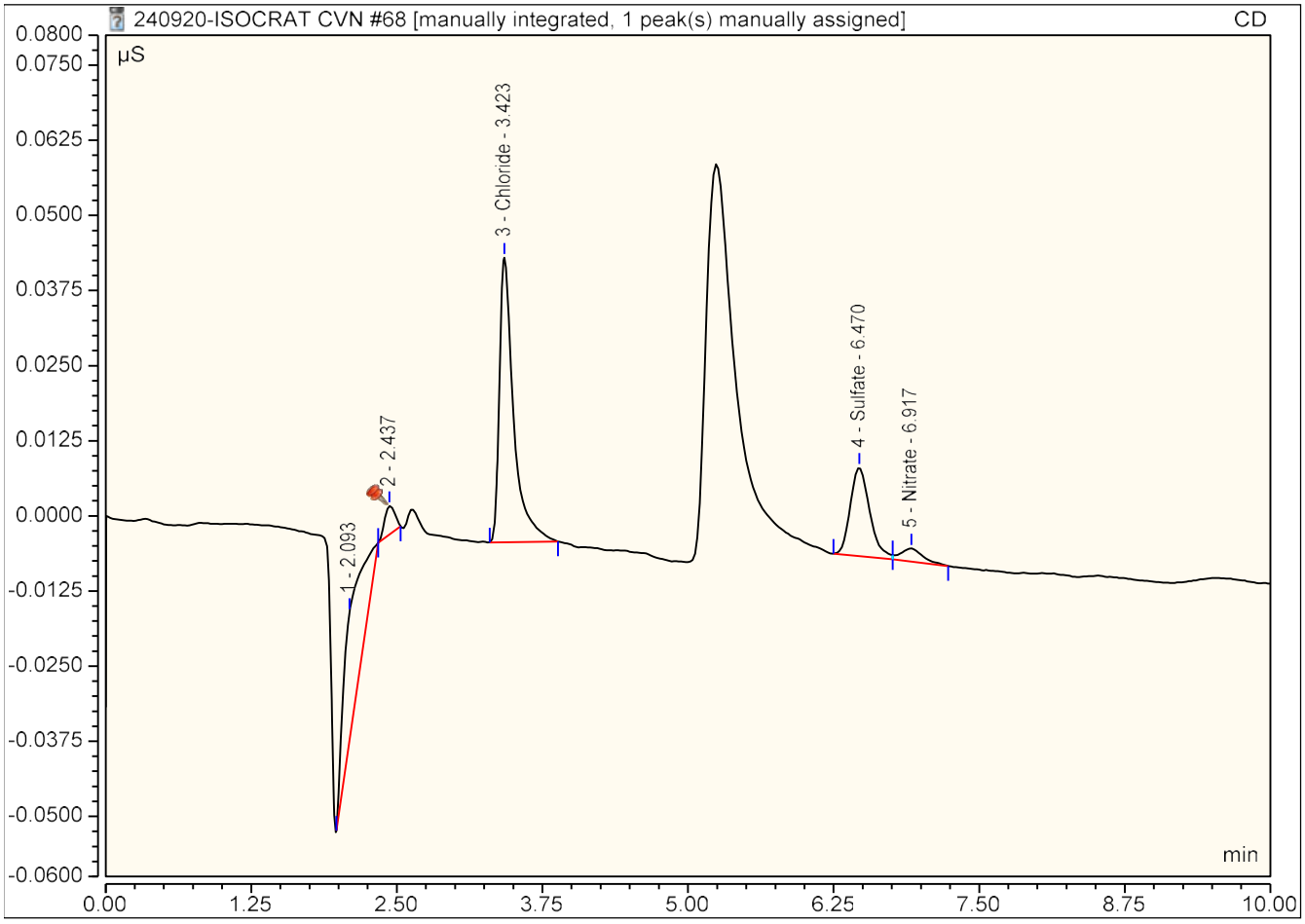
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.002 | 0.018 | 0.4895 |
| 3 | 3.42 | **Chloride** | BMB* | 11.991 | 86.662 | 294.8066 |
| 4 | 5.80 | **Bromide** | BMB | 0.000 | 0.001 | 0.3369 |
| 5 | 6.46 | **Sulfate** | BM * | 0.406 | 2.200 | 16.8185 |
| 6 | 6.89 | **Nitrate** | MB* | 0.018 | 0.070 | 0.3969 |
| **TOTAL:** | | | | 12.42 | 88.95 | 312.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453400-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 21:08** | *Run Time:* | **10.00** |

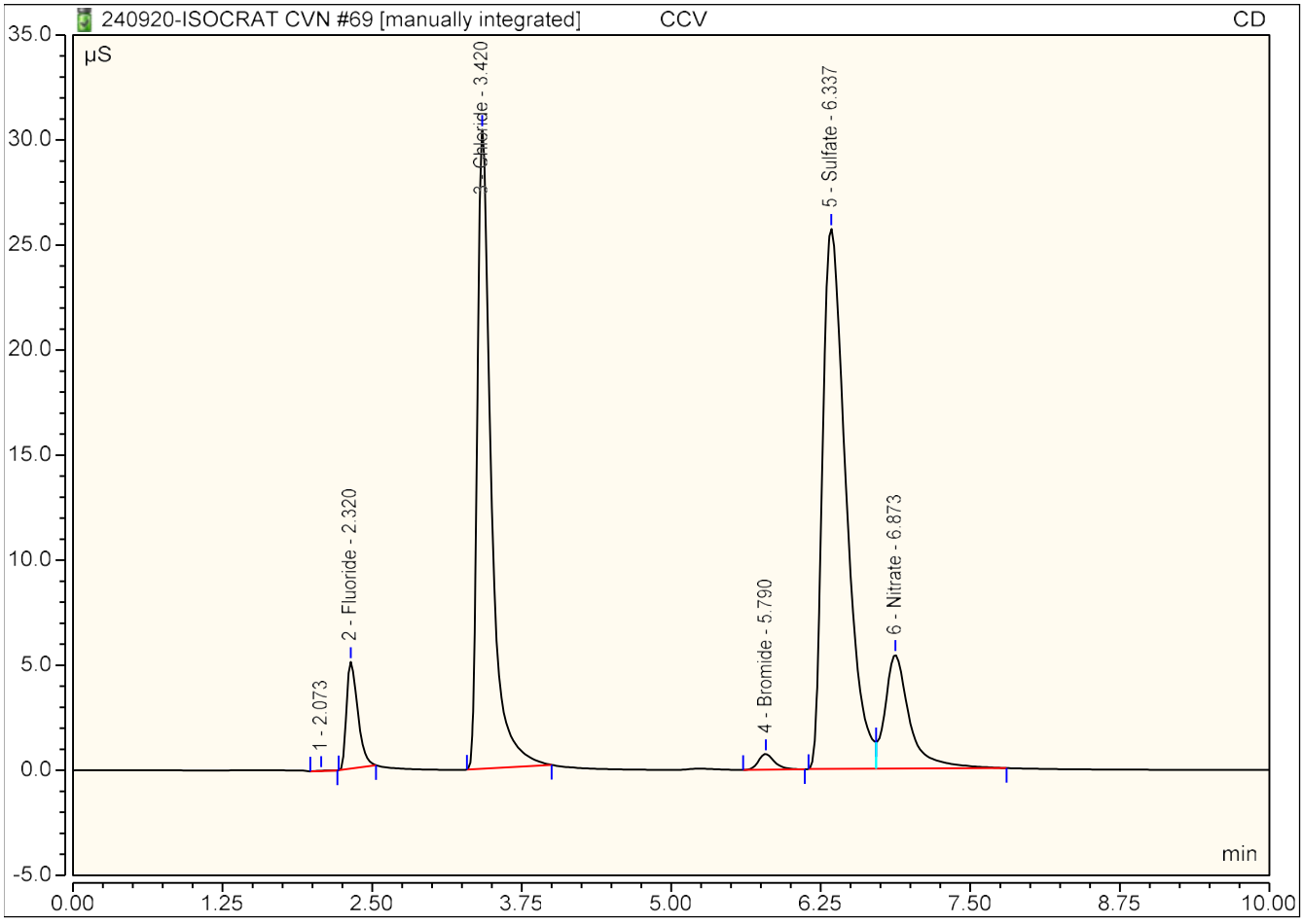
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 3.42 | **Chloride** | BMB* | 0.007 | 0.047 | 0.2219 |
| 4 | 6.47 | **Sulfate** | BM * | 0.003 | 0.015 | 0.2863 |
| 5 | 6.92 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.06 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 21:20** | *Run Time:* | **10.00** |

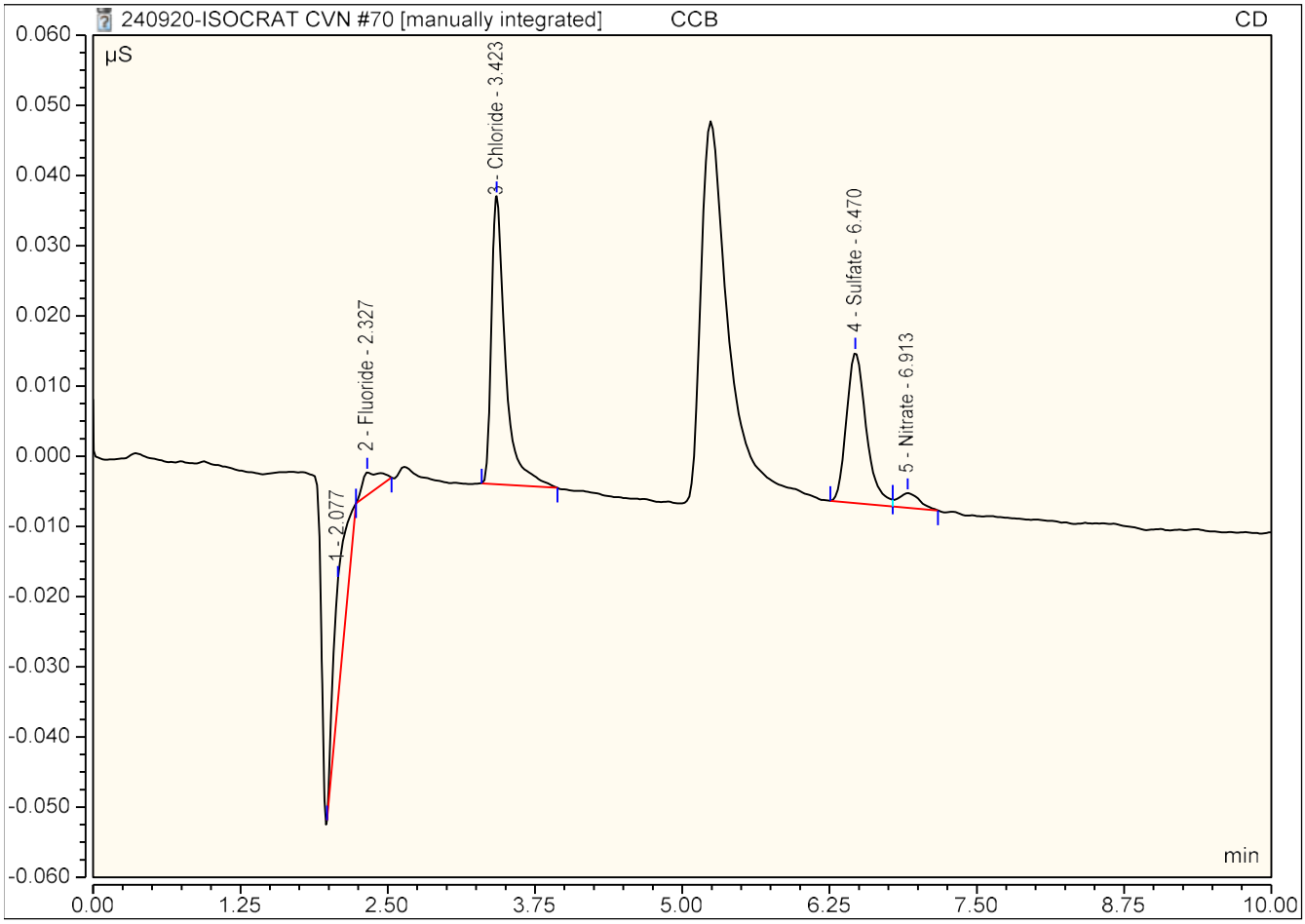
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.553 | 5.089 | 1.0532 |
| 3 | 3.42 | **Chloride** | BMB* | 4.092 | 30.415 | 10.1966 |
| 4 | 5.79 | **Bromide** | BMB | 0.117 | 0.747 | 1.0030 |
| 5 | 6.34 | **Sulfate** | BM * | 5.825 | 25.703 | 20.4166 |
| 6 | 6.87 | **Nitrate** | MB* | 1.287 | 5.415 | 1.0340 |
| **TOTAL:** | | | | 11.87 | 67.37 | 33.70 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 21:32** | *Run Time:* | **10.00** |

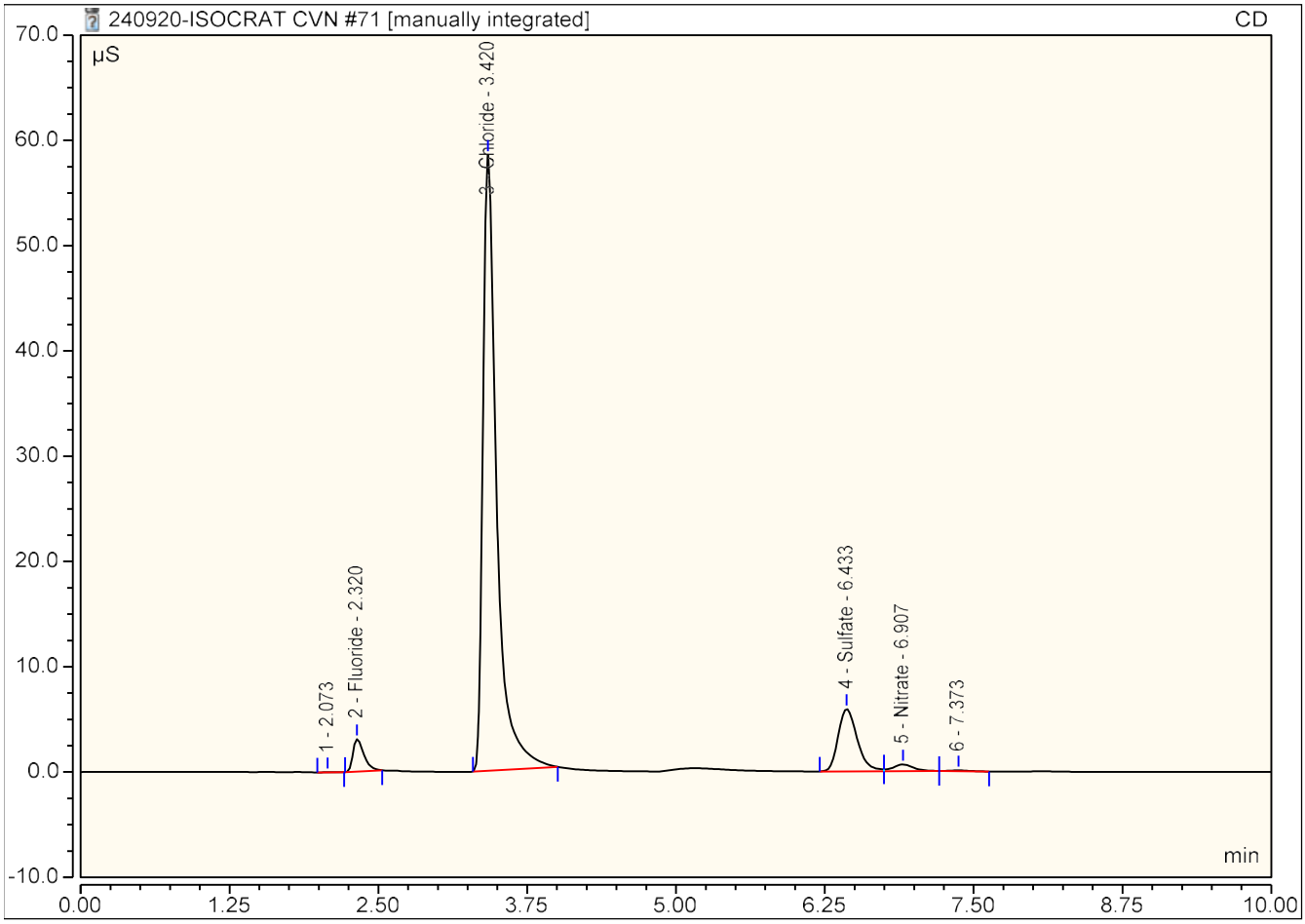
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.33 | **Fluoride** | BMB | 0.001 | 0.003 | 0.0454 |
| 3 | 3.42 | **Chloride** | BMB* | 0.006 | 0.041 | 0.2193 |
| 4 | 6.47 | **Sulfate** | BM * | 0.004 | 0.021 | 0.2910 |
| 5 | 6.91 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.58 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453383-01 CL SO4** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 21:45** | *Run Time:* | **10.00** |

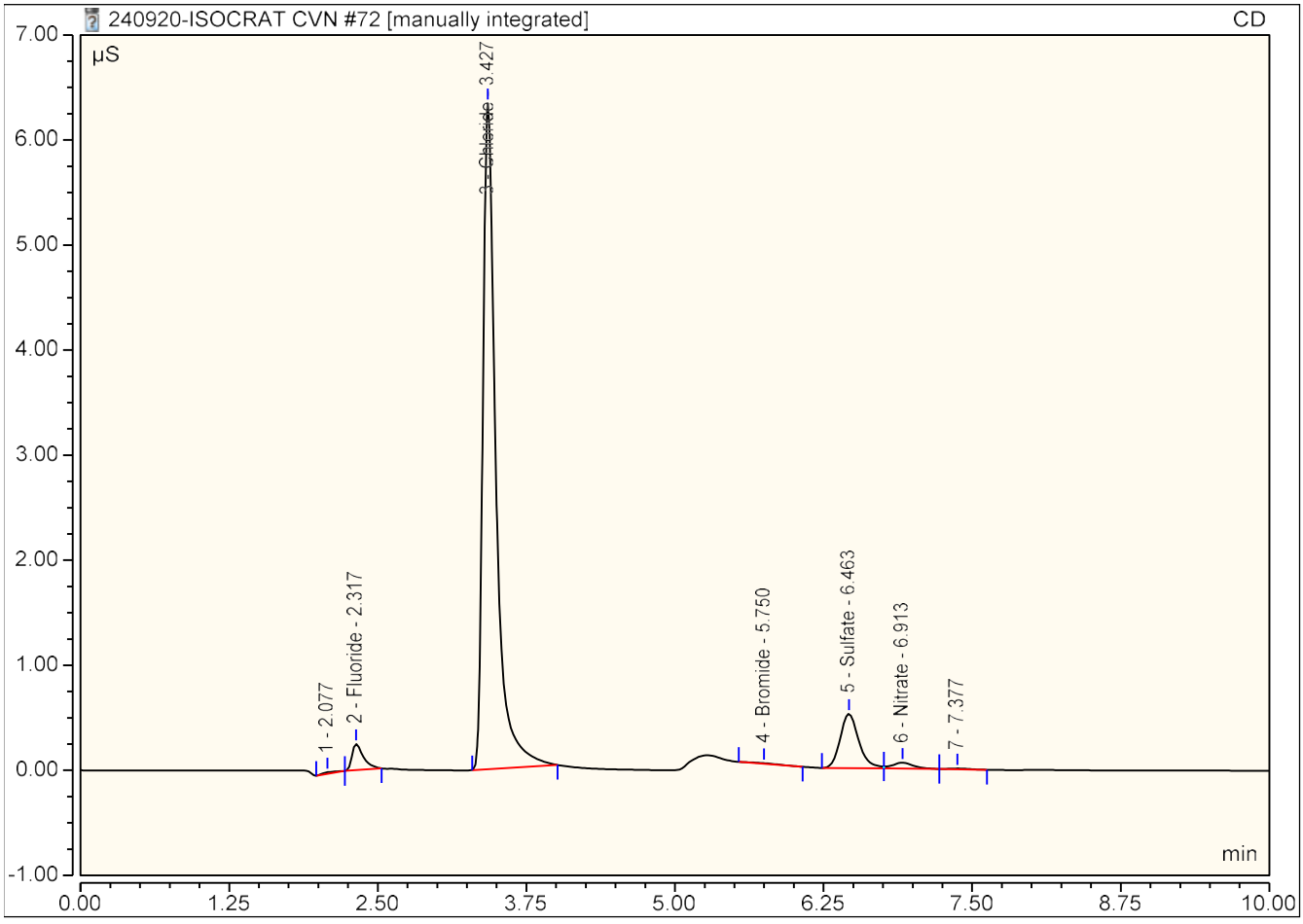
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.329 | 3.080 | 0.6438 |
| 3 | 3.42 | **Chloride** | BMB* | 7.882 | 58.511 | 19.4495 |
| 4 | 6.43 | **Sulfate** | BM * | 1.099 | 5.918 | 4.0775 |
| 5 | 6.91 | **Nitrate** | Mb* | 0.124 | 0.630 | 0.1223 |
| **TOTAL:** | | | | 9.43 | 68.14 | 24.29 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2453383-01; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 21:57** | *Run Time:* | **10.00** |

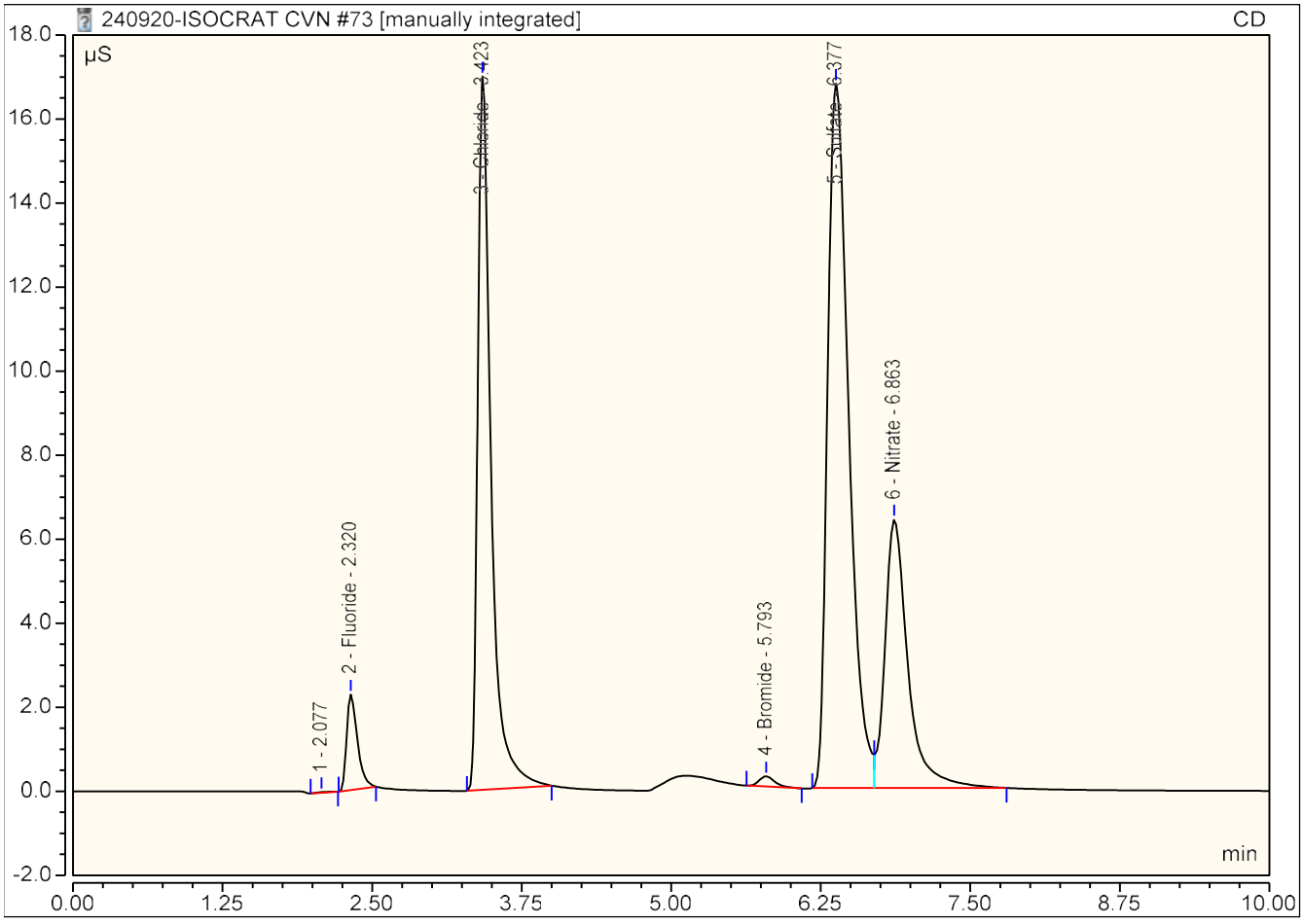
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.028 | 0.249 | 0.9496 |
| 3 | 3.43 | **Chloride** | BMB* | 0.806 | 6.339 | 21.7379 |
| 4 | 5.75 | **Bromide** | BMB | 0.002 | 0.006 | 0.4692 |
| 5 | 6.46 | **Sulfate** | BM * | 0.094 | 0.517 | 6.0025 |
| 6 | 6.91 | **Nitrate** | Mb* | 0.011 | 0.056 | 0.3414 |
| **TOTAL:** | | | | 0.94 | 7.17 | 29.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453058-01 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 22:09** | *Run Time:* | **10.00** |

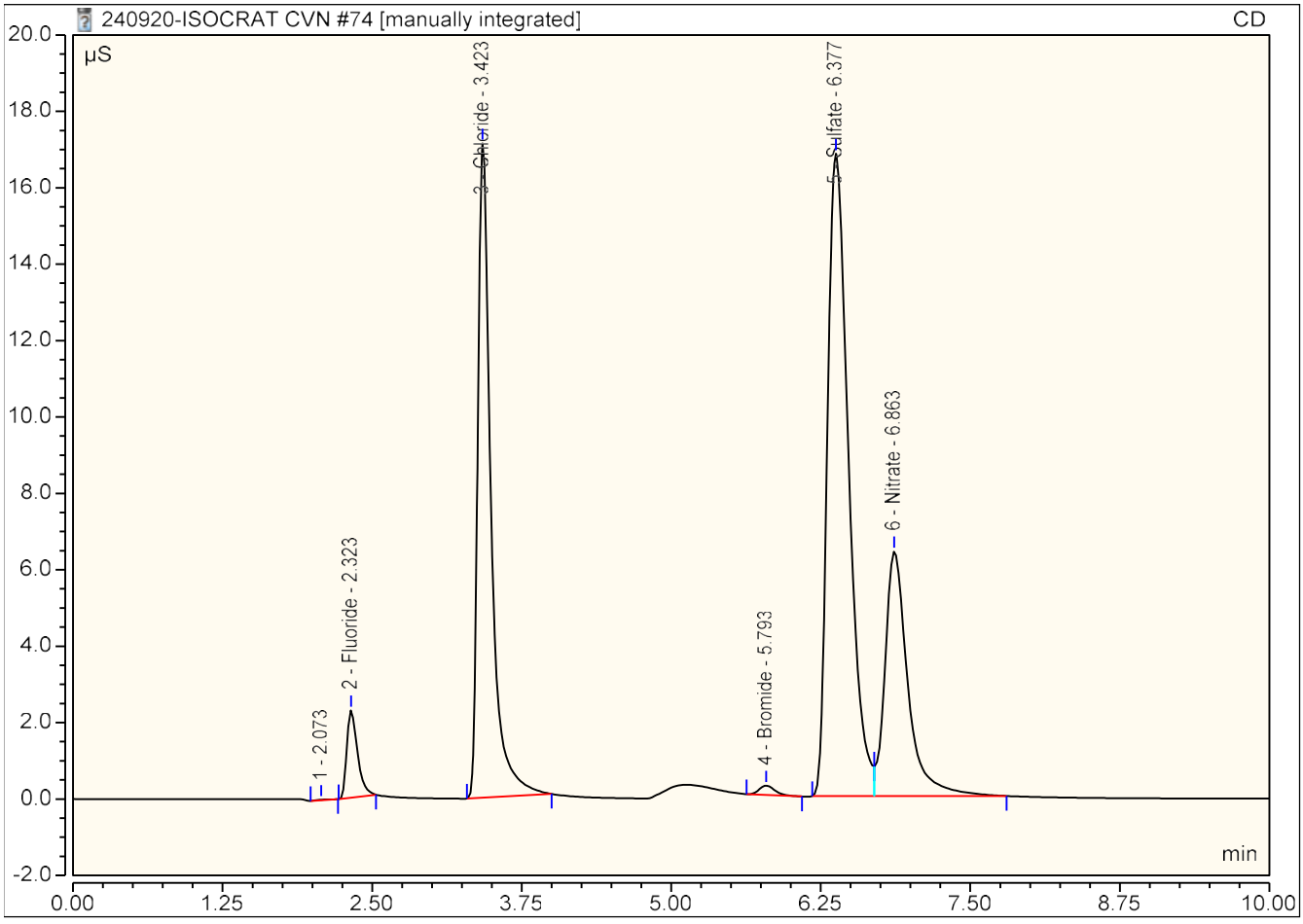
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.236 | 2.270 | 0.4755 |
| 3 | 3.42 | **Chloride** | BMB* | 2.186 | 16.977 | 5.5435 |
| 4 | 5.79 | **Bromide** | BMB | 0.037 | 0.245 | 0.3412 |
| 5 | 6.38 | **Sulfate** | BM * | 3.416 | 16.758 | 12.0874 |
| 6 | 6.86 | **Nitrate** | MB* | 1.421 | 6.391 | 1.1389 |
| **TOTAL:** | | | | 7.30 | 42.64 | 19.59 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453058-01 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 22:21** | *Run Time:* | **10.00** |

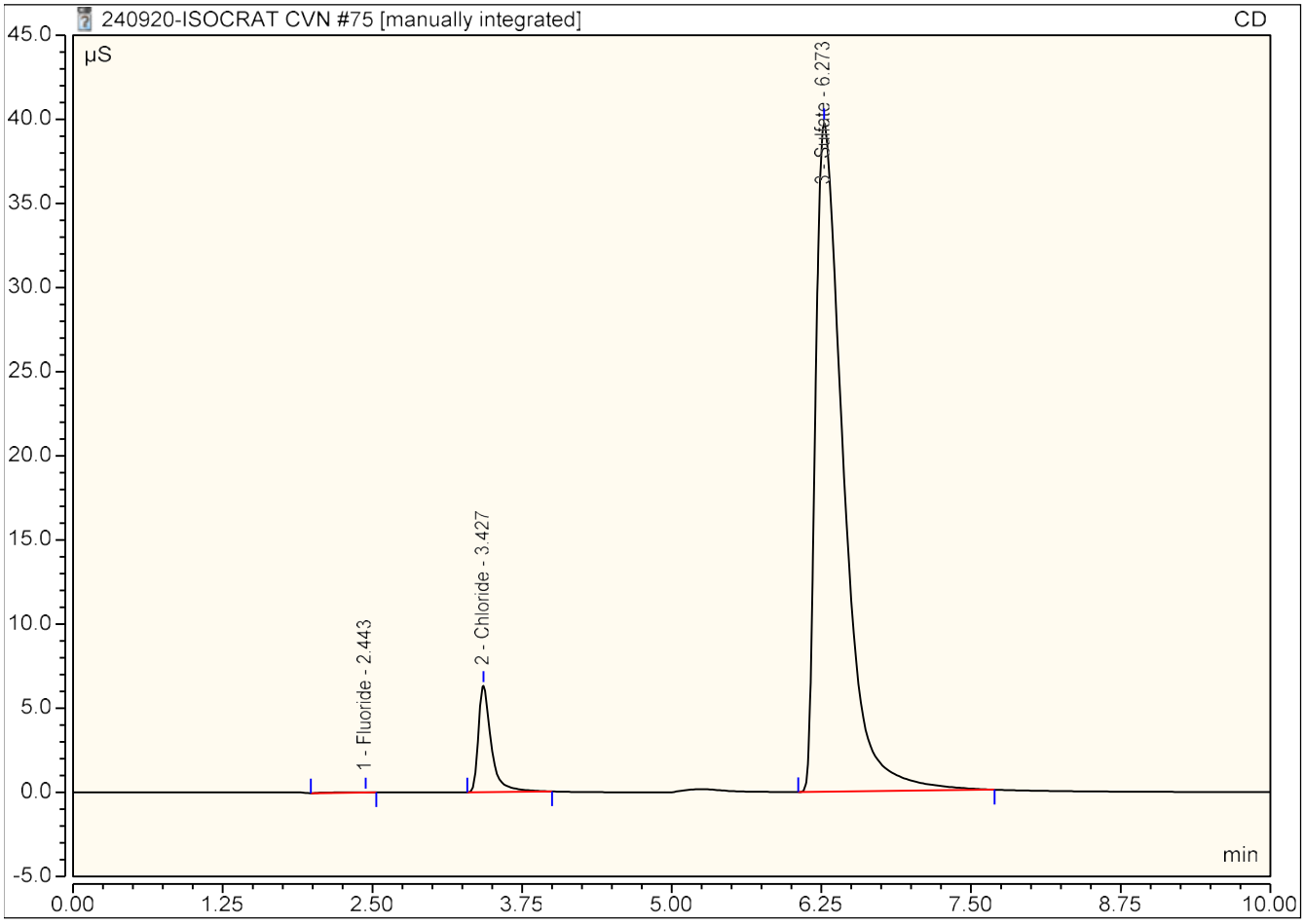
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.237 | 2.290 | 0.4772 |
| 3 | 3.42 | **Chloride** | BMB* | 2.191 | 17.128 | 5.5545 |
| 4 | 5.79 | **Bromide** | BMB | 0.037 | 0.245 | 0.3401 |
| 5 | 6.38 | **Sulfate** | BM * | 3.416 | 16.812 | 12.0877 |
| 6 | 6.86 | **Nitrate** | MB* | 1.421 | 6.407 | 1.1390 |
| **TOTAL:** | | | | 7.30 | 42.88 | 19.60 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-02; 25X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **25.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 22:33** | *Run Time:* | **10.00** |

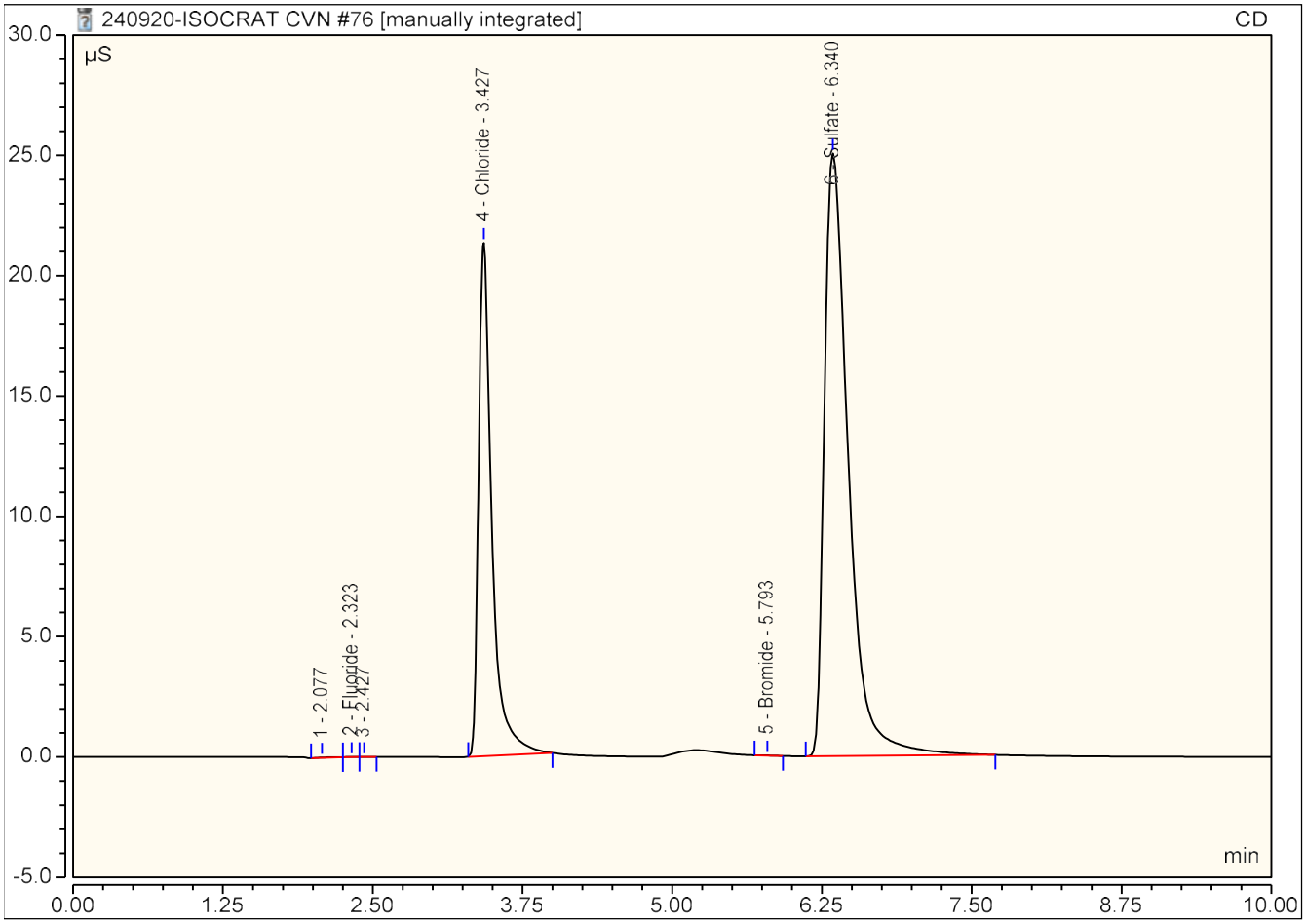
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.44 | **Fluoride** | BMB | 0.009 | 0.014 | 1.5411 |
| 2 | 3.43 | **Chloride** | BMB* | 0.791 | 6.321 | 53.4003 |
| 3 | 6.27 | **Sulfate** | BMB | 10.692 | 39.734 | 931.1507 |
| **TOTAL:** | | | | 11.49 | 46.07 | 986.09 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-01; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 22:45** | *Run Time:* | **10.00** |

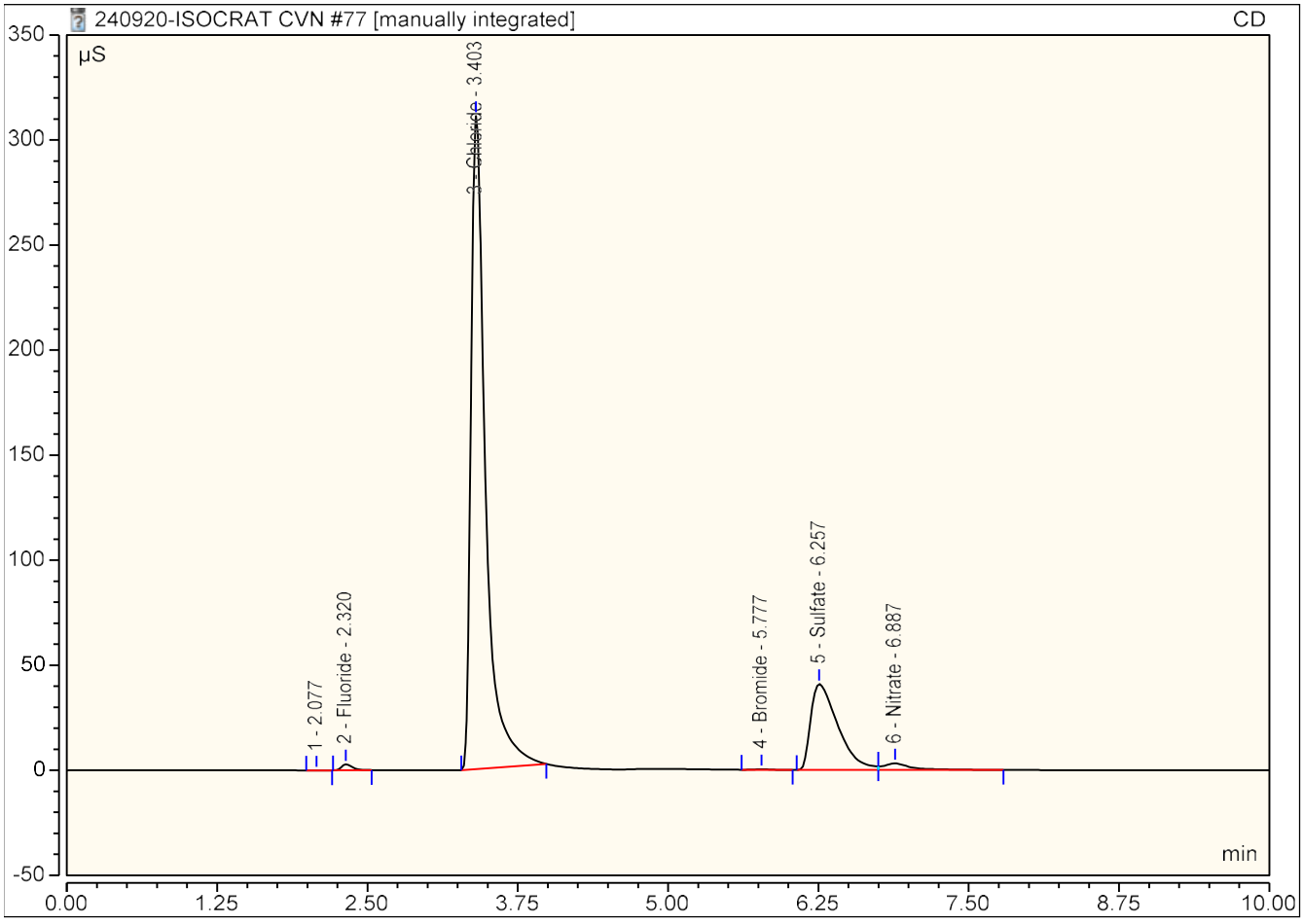
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.001 | 0.009 | 0.4571 |
| 4 | 3.43 | **Chloride** | BMB* | 2.755 | 21.332 | 69.3248 |
| 5 | 5.79 | **Bromide** | BMB | 0.001 | 0.005 | 0.3719 |
| 6 | 6.34 | **Sulfate** | BMB | 5.821 | 25.044 | 204.0383 |
| **TOTAL:** | | | | 8.58 | 46.39 | 274.19 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04 MS NO3 SO4** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 22:57** | *Run Time:* | **10.00** |

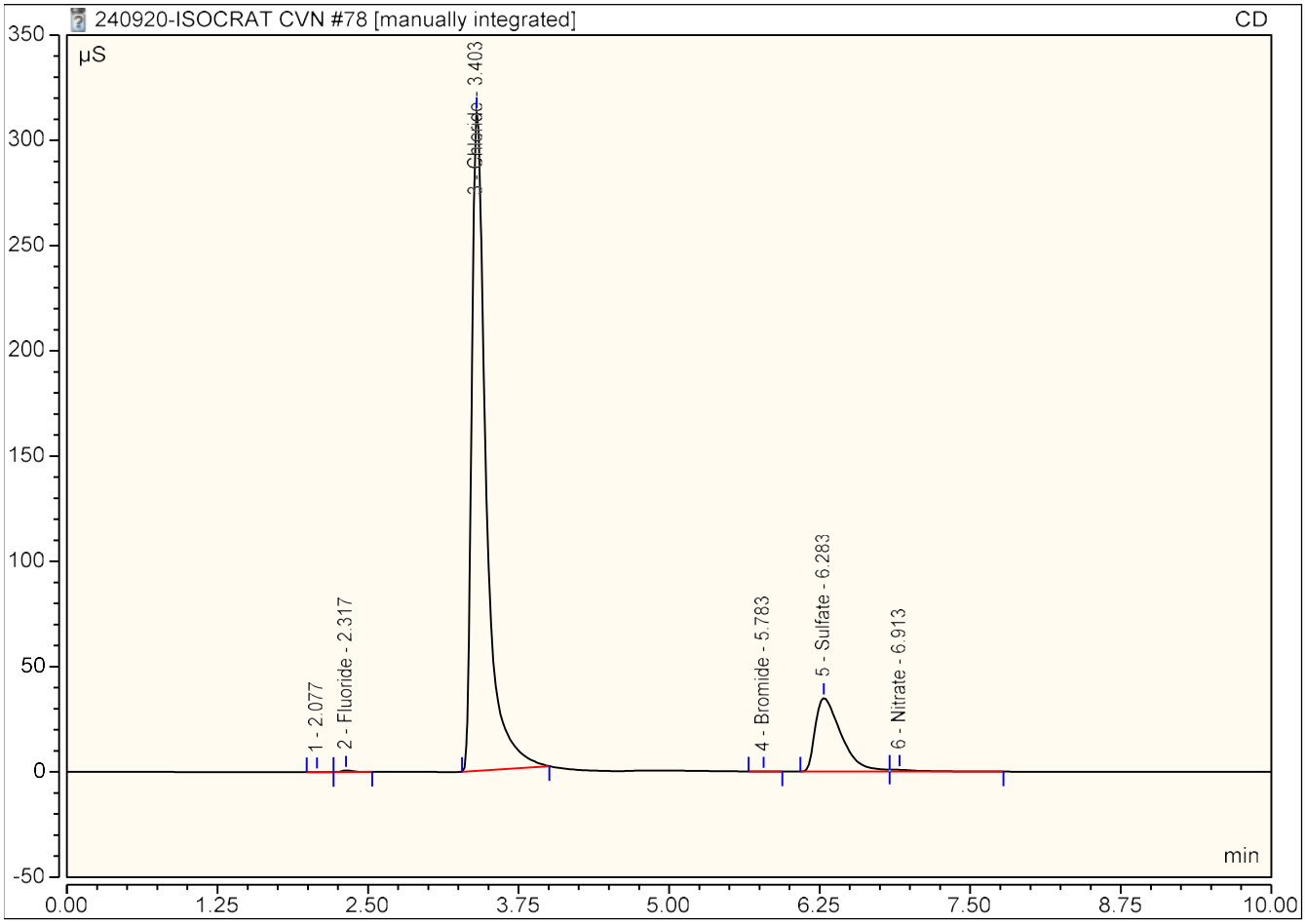
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.294 | 2.781 | 0.5809 |
| 3 | 3.40 | **Chloride** | BMB* | 43.587 | 310.756 | 106.6225 |
| 4 | 5.78 | **Bromide** | BMB | 0.041 | 0.276 | 0.3769 |
| 5 | 6.26 | **Sulfate** | BM * | 10.678 | 40.848 | 37.1980 |
| 6 | 6.89 | **Nitrate** | MB* | 0.841 | 3.115 | 0.6841 |
| **TOTAL:** | | | | 55.44 | 357.78 | 145.46 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 23:09** | *Run Time:* | **10.00** |

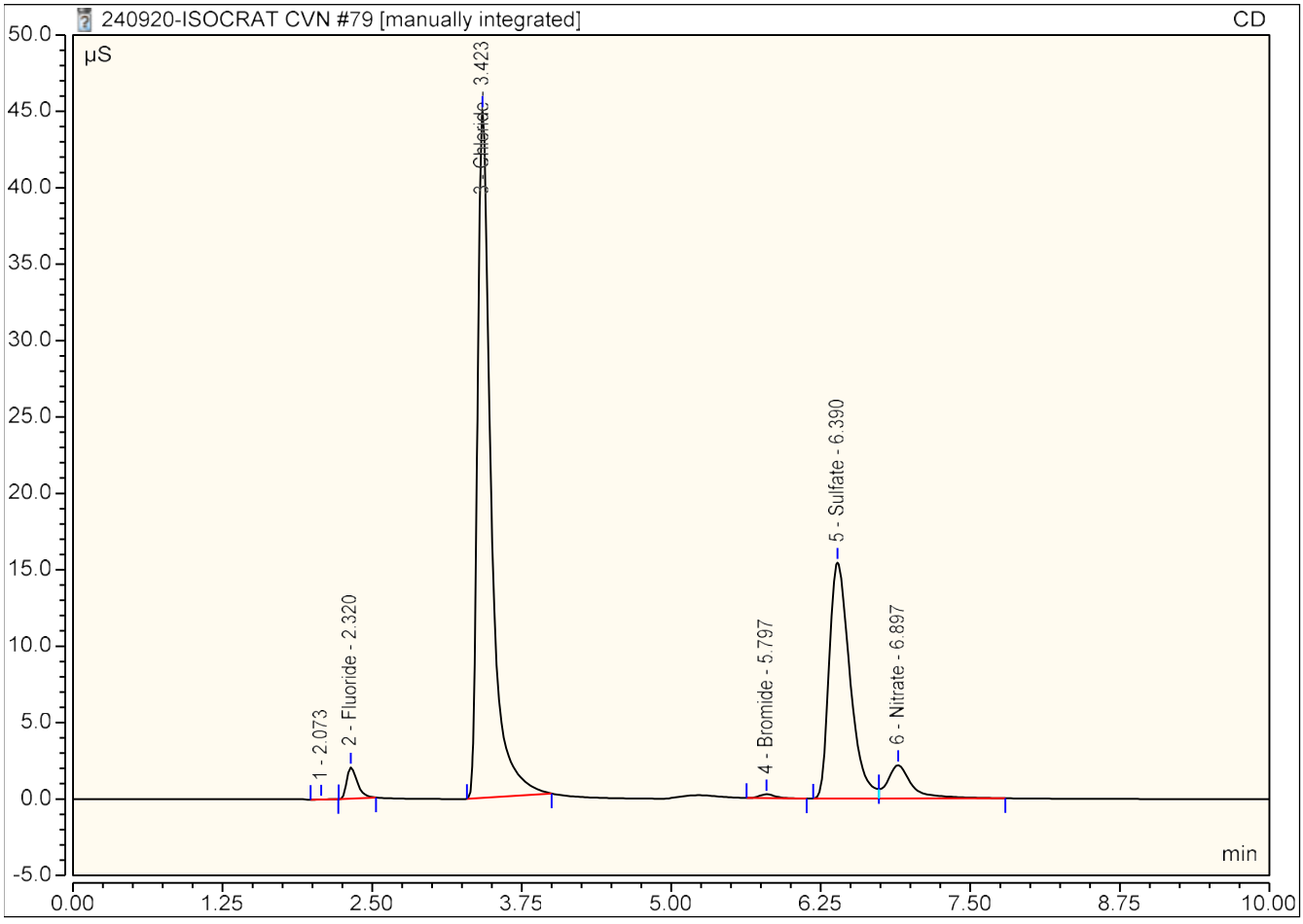
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.073 | 0.700 | 0.1784 |
| 3 | 3.40 | **Chloride** | BMB* | 43.804 | 312.978 | 107.1522 |
| 4 | 5.78 | **Bromide** | BMB | 0.002 | 0.019 | 0.0521 |
| 5 | 6.28 | **Sulfate** | BM * | 8.708 | 34.967 | 30.3863 |
| 6 | 6.91 | **Nitrate** | MB* | 0.272 | 0.888 | 0.2388 |
| **TOTAL:** | | | | 52.86 | 349.55 | 138.01 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04 MS; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 23:21** | *Run Time:* | **10.00** |

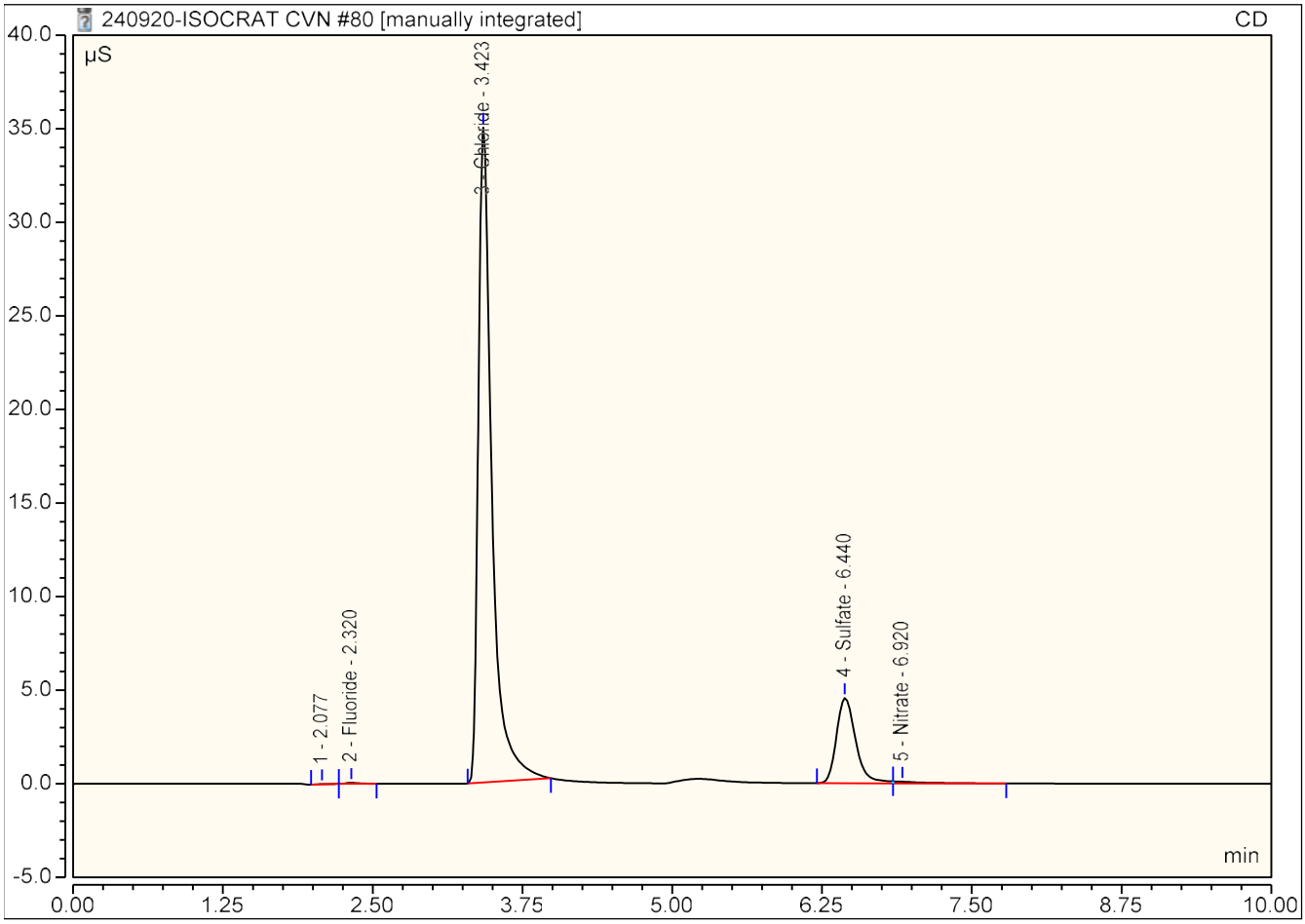
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.212 | 2.056 | 4.3034 |
| 3 | 3.42 | **Chloride** | BMB* | 5.945 | 44.957 | 147.1985 |
| 4 | 5.80 | **Bromide** | BMB | 0.039 | 0.256 | 3.5986 |
| 5 | 6.39 | **Sulfate** | BM * | 3.114 | 15.431 | 110.4208 |
| 6 | 6.90 | **Nitrate** | MB* | 0.509 | 2.181 | 4.2436 |
| **TOTAL:** | | | | 9.82 | 64.88 | 269.76 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04 DUP; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 23:33** | *Run Time:* | **10.00** |

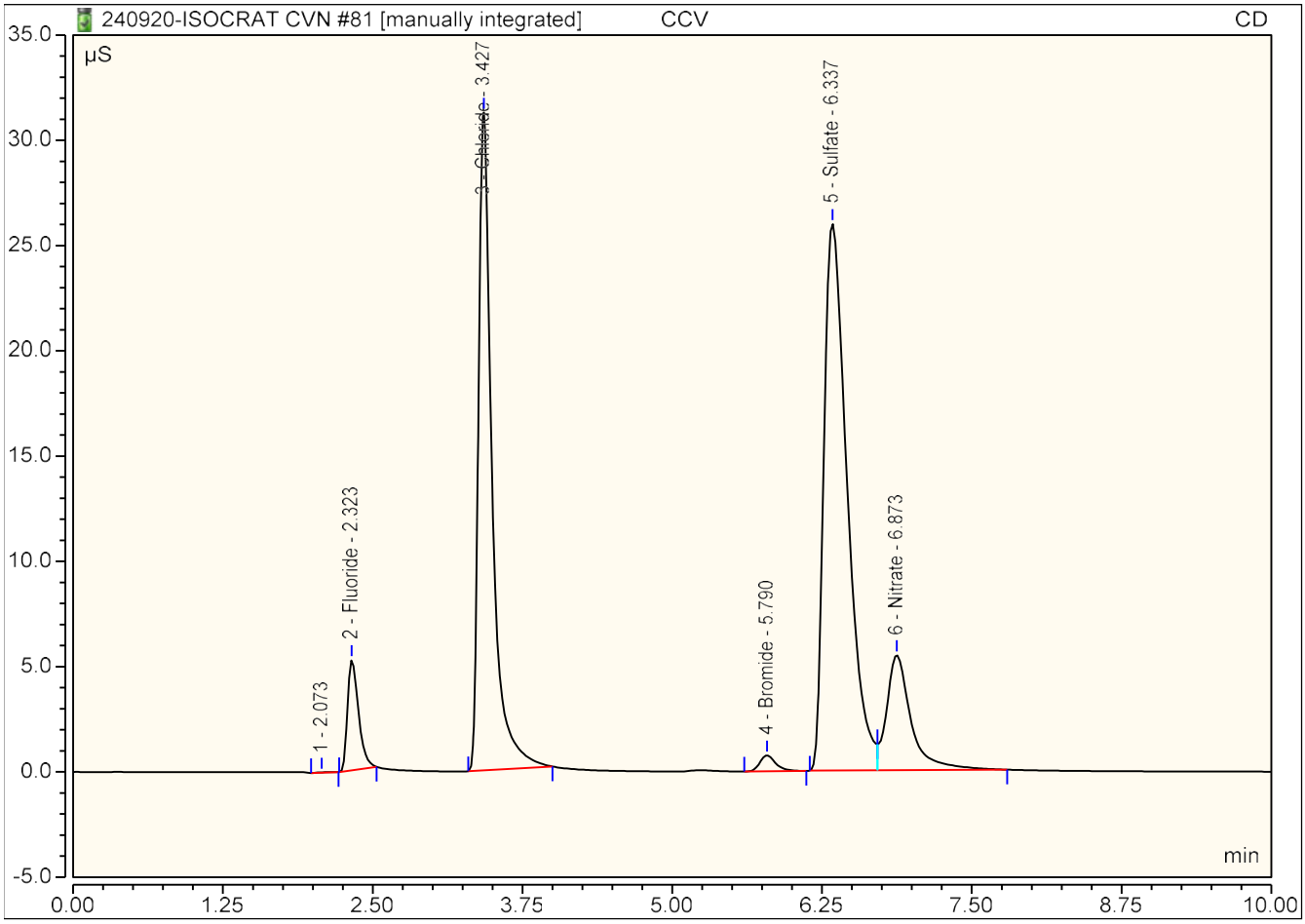
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.007 | 0.062 | 0.5740 |
| 3 | 3.42 | **Chloride** | BMB* | 4.593 | 34.992 | 114.2018 |
| 4 | 6.44 | **Sulfate** | BM * | 0.848 | 4.560 | 32.0972 |
| 5 | 6.92 | **Nitrate** | MB* | 0.029 | 0.091 | 0.4767 |
| **TOTAL:** | | | | 5.48 | 39.70 | 147.35 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 23:45** | *Run Time:* | **10.00** |

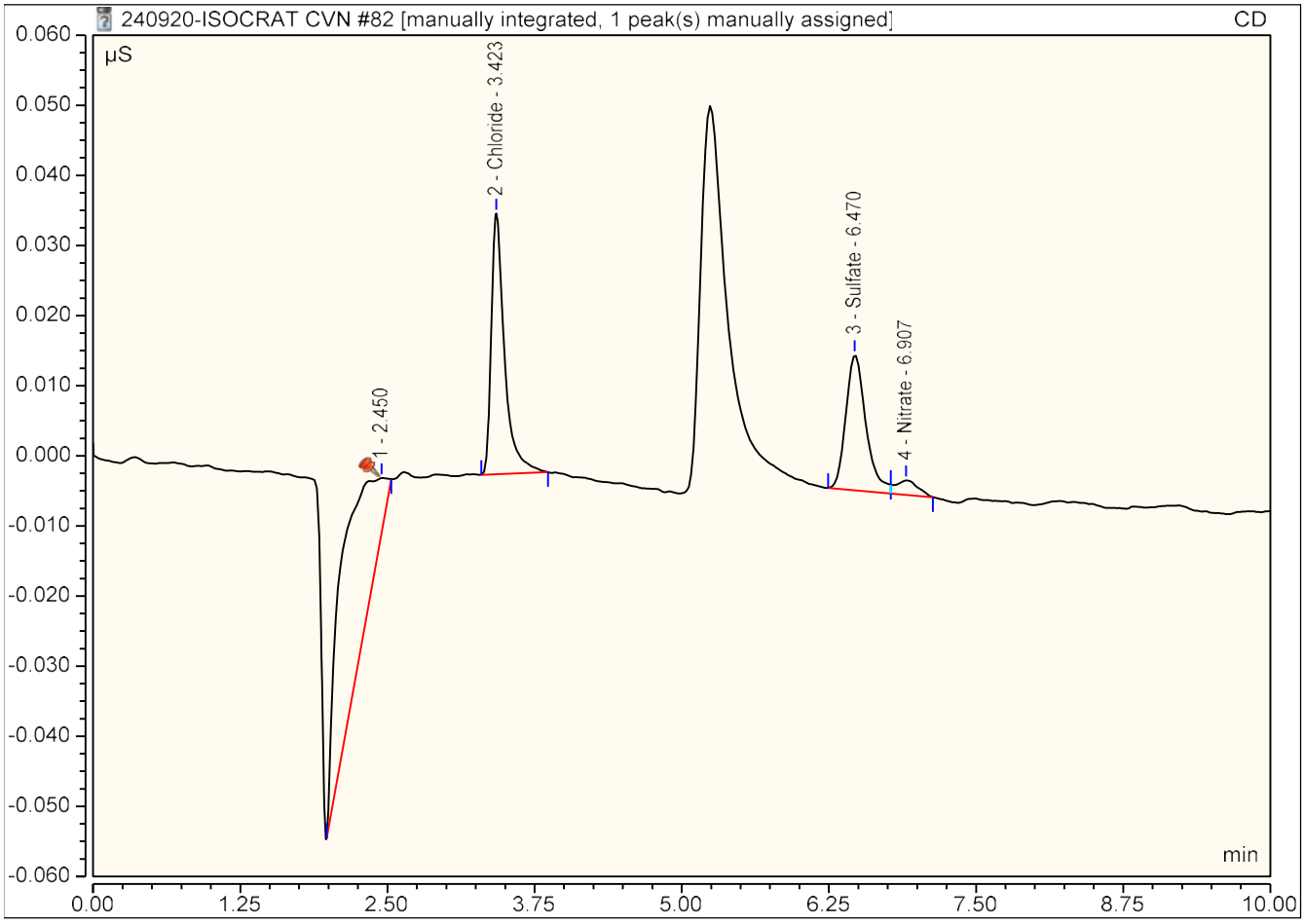
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.556 | 5.248 | 1.0587 |
| 3 | 3.43 | **Chloride** | BMB* | 4.097 | 31.251 | 10.2072 |
| 4 | 5.79 | **Bromide** | BMB | 0.117 | 0.759 | 1.0073 |
| 5 | 6.34 | **Sulfate** | BM * | 5.835 | 25.960 | 20.4529 |
| 6 | 6.87 | **Nitrate** | MB* | 1.292 | 5.471 | 1.0383 |
| **TOTAL:** | | | | 11.90 | 68.69 | 33.76 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **20-Sep-2024 / 23:57** | *Run Time:* | **10.00** |

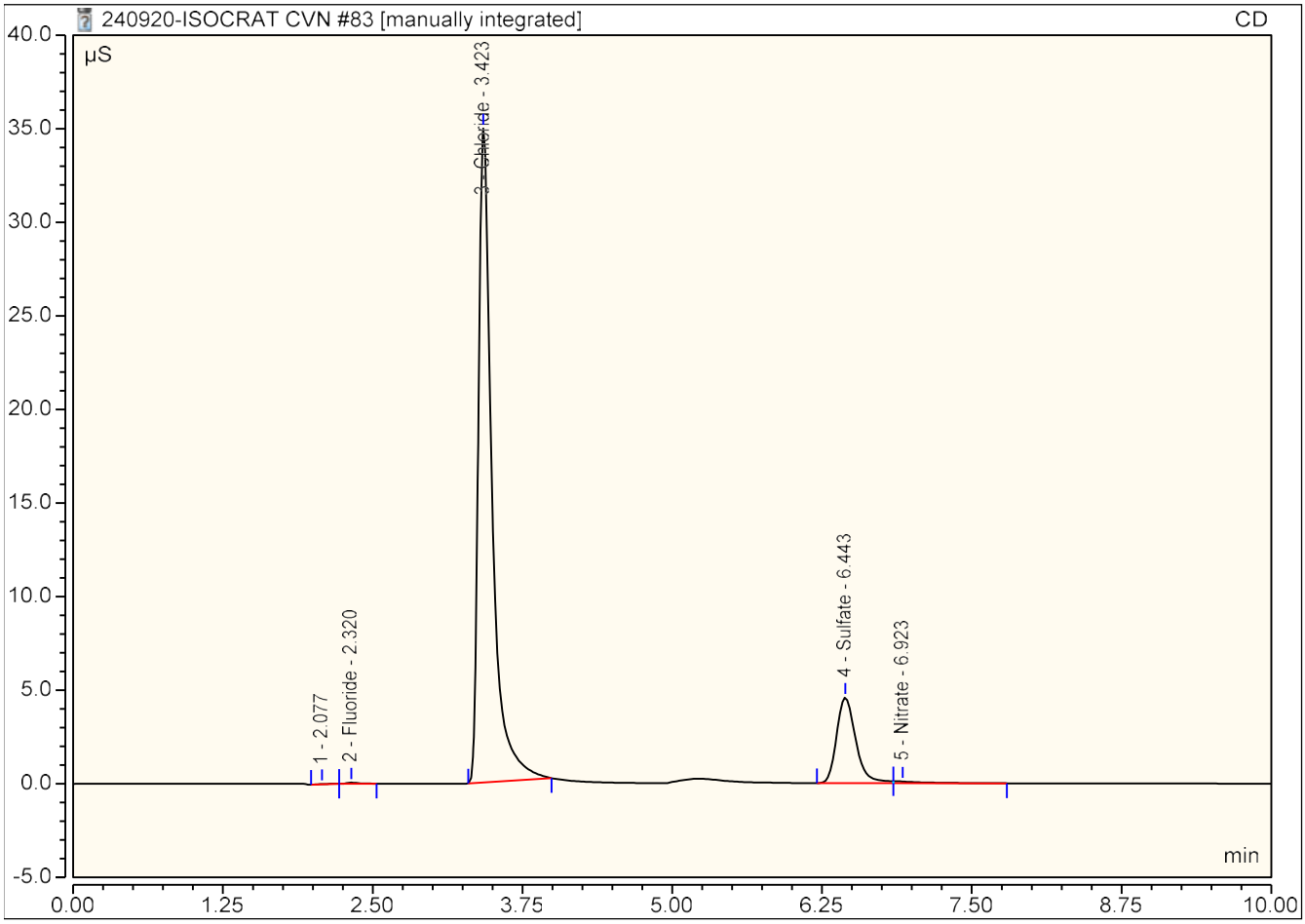
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 3.42 | **Chloride** | BMB* | 0.005 | 0.037 | 0.2174 |
| 3 | 6.47 | **Sulfate** | BM * | 0.004 | 0.019 | 0.2897 |
| 4 | 6.91 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.06 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2453985-04; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **21-Sep-2024 / 00:10** | *Run Time:* | **10.00** |

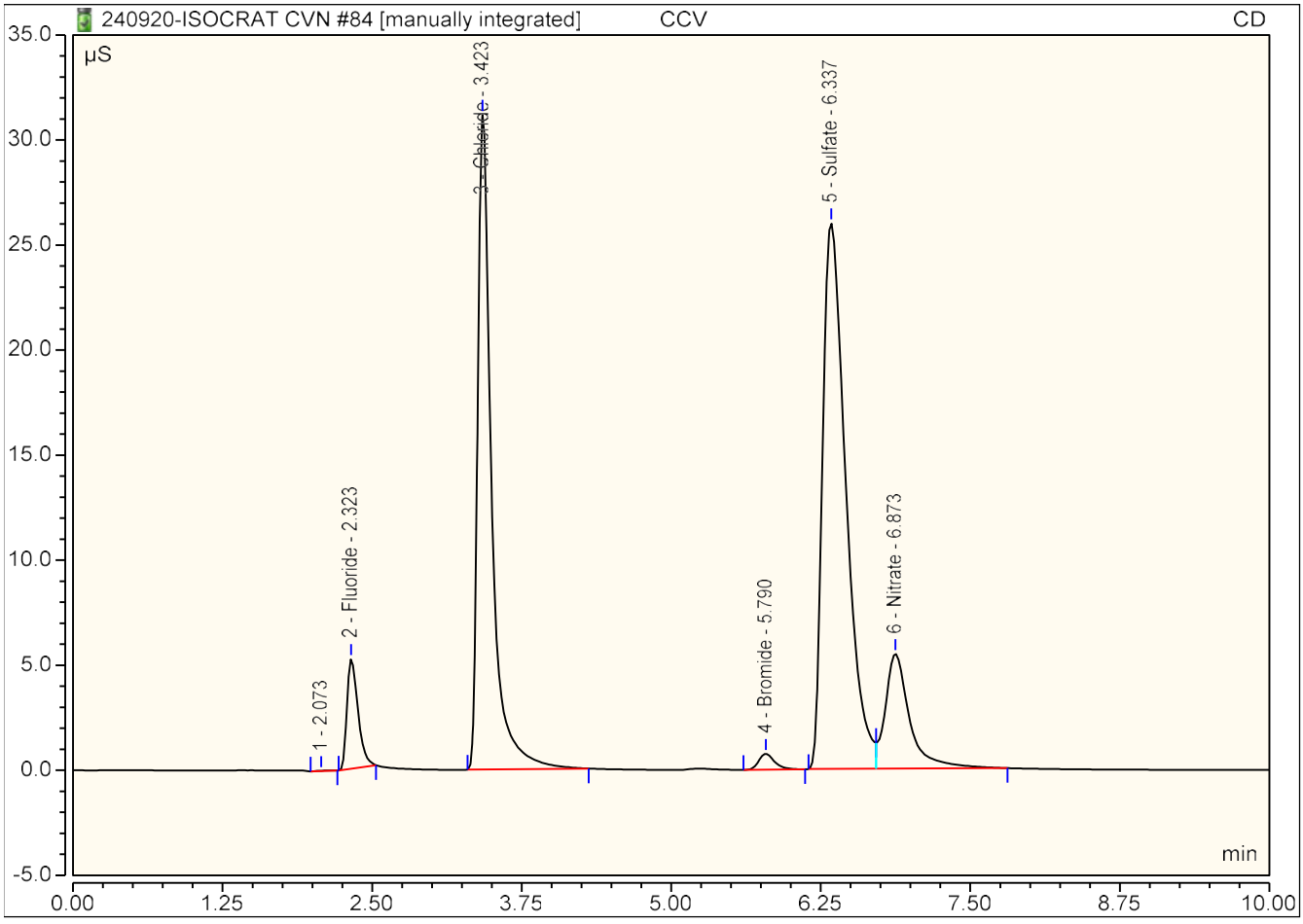
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.007 | 0.060 | 0.5703 |
| 3 | 3.42 | **Chloride** | BMB* | 4.594 | 34.942 | 114.2133 |
| 4 | 6.44 | **Sulfate** | BM * | 0.850 | 4.564 | 32.1693 |
| 5 | 6.92 | **Nitrate** | MB* | 0.028 | 0.090 | 0.4740 |
| **TOTAL:** | | | | 5.48 | 39.66 | 147.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **21-Sep-2024 / 00:22** | *Run Time:* | **10.00** |

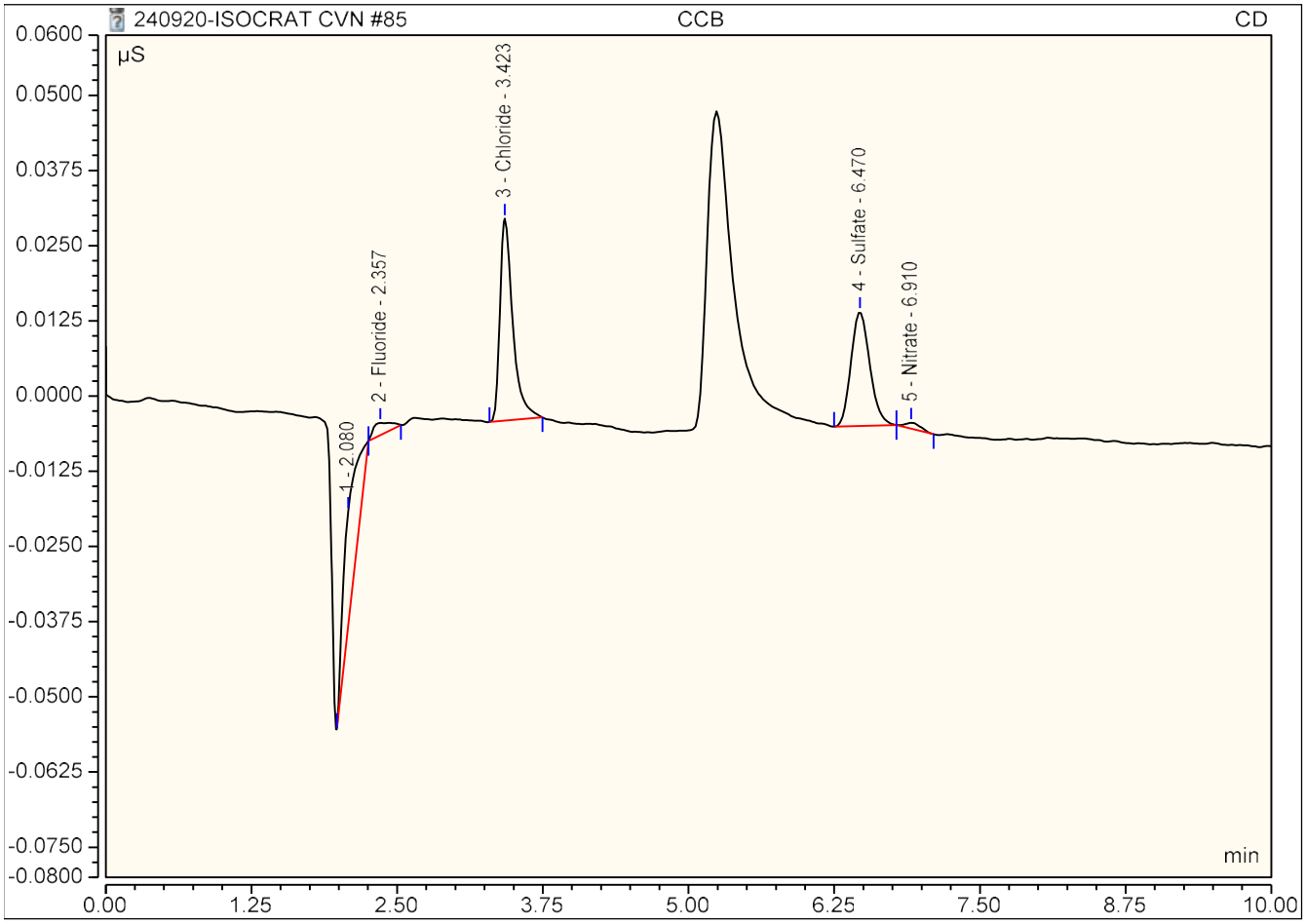
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 0.556 | 5.229 | 1.0580 |
| 3 | 3.42 | **Chloride** | BMB* | 4.178 | 31.173 | 10.4060 |
| 4 | 5.79 | **Bromide** | BMB | 0.117 | 0.758 | 1.0073 |
| 5 | 6.34 | **Sulfate** | BM * | 5.838 | 25.973 | 20.4603 |
| 6 | 6.87 | **Nitrate** | MB* | 1.288 | 5.468 | 1.0349 |
| **TOTAL:** | | | | 11.98 | 68.60 | 33.97 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **21-Sep-2024 / 00:34** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.36 | **Fluoride** | BMB | 0.000 | 0.002 | 0.0451 |
| 3 | 3.42 | **Chloride** | BMB | 0.004 | 0.034 | 0.2160 |
| 4 | 6.47 | **Sulfate** | BMB | 0.004 | 0.019 | 0.2888 |
| 5 | 6.91 | **Nitrate** | BMB | 0.000 | 0.001 | 0.0254 |
| **TOTAL:** | | | | 0.01 | 0.06 | 0.58 |



Anion Summary Report

| No. | Name | Dilution | Amount CD Fluoride | Amount CD Chloride | Amount CD Nitrate | Amount CD Sulfate | Amount CD Bromide |
|---|---|---|---|---|---|---|---|
| 1 | BLANK | 1.0 | n.a. | 0.2129 | n.a. | 0.2810 | n.a. |
| 2 | STD 0.5 | 1.0 | 0.0592 | 0.3873 | 0.0442 | 0.6237 | 0.0525 |
| 3 | STD 1.0 | 1.0 | 0.0738 | 0.5947 | 0.0646 | 1.0491 | 0.0753 |
| 4 | STD 2.0 | 1.0 | 0.1840 | 1.9971 | 0.1868 | 3.9561 | 0.1890 |
| 5 | STD 3.0 | 1.0 | 0.4607 | 4.9336 | 0.4717 | 9.9320 | 0.4440 |
| 6 | STD 4.0 | 1.0 | 1.9885 | 19.7203 | 2.0078 | 39.8861 | 2.0141 |
| 7 | STD 5.0 | 1.0 | 5.0087 | 50.1170 | 5.2021 | 100.0530 | 5.2575 |
| 8 | RINSE | 1.0 | 0.0574 | 0.2167 | n.a. | 0.2805 | n.a. |
| 9 | CCV | 1.0 | 1.0451 | 10.0941 | 1.0419 | 20.2391 | 1.0174 |
| 10 | CCB | 1.0 | n.a. | 0.2174 | 0.0256 | 0.2843 | n.a. |
| 11 | ICV | 1.0 | 0.8593 | 8.3357 | 0.7476 | 8.1139 | 0.8235 |
| 12 | ICB | 1.0 | n.a. | 0.2182 | 0.0256 | 0.2836 | n.a. |
| 13 | BLK | 1.0 | n.a. | 0.2195 | n.a. | 0.2807 | n.a. |
| 14 | LCS | 1.0 | 0.8666 | 8.3768 | 0.7406 | 8.1675 | 0.8232 |
| 15 | L2453053-01 BR MS | 1.0 | 0.4868 | 5.5569 | 1.1284 | 12.2323 | 0.3547 |
| 16 | L2453053-01 MSD | 1.0 | 0.4873 | 5.5630 | 1.1228 | 12.2534 | 0.3553 |
| 17 | L2453053-01 | 1.0 | 0.0944 | 1.5364 | 0.7151 | 4.1565 | n.a. |
| 18 | L2453053-02 | 1.0 | 0.0618 | 9.3844 | 1.0809 | 17.8456 | 0.0668 |
| 19 | L2453053-03 | 1.0 | 0.0601 | 5.5166 | 0.6480 | 7.4978 | 0.0437 |
| 20 | L2453053-04 | 1.0 | 0.0752 | 14.8191 | 0.5180 | 27.4834 | n.a. |
| 21 | CCV | 1.0 | 1.0575 | 10.1694 | 1.0398 | 20.4161 | 1.0038 |
| 22 | CCB | 1.0 | n.a. | 0.2177 | 0.0255 | 0.2835 | n.a. |
| 23 | L2453053-05 | 1.0 | 0.0617 | 9.5096 | 1.0947 | 18.1098 | 0.0664 |
| 24 | L2453342-01 BR | 1.0 | 0.0933 | 21.0882 | 0.5300 | 15.6990 | 0.0441 |
| 25 | L2453342-02 | 1.0 | 0.0774 | 14.1236 | 1.0316 | 42.2995 | 0.0651 |
| 26 | L2453342-03 | 1.0 | 0.0567 | 27.6154 | 2.0814 | 13.8598 | 0.0416 |
| 27 | L2453342-04 | 1.0 | 0.0659 | 3.3049 | n.a. | 42.5626 | n.a. |
| 28 | L2453342-05 | 1.0 | 0.0927 | 7.6745 | 0.1612 | 21.4740 | 0.0485 |
| 29 | L2453342-06 MS | 1.0 | 0.4198 | 5.5950 | 0.5673 | 9.9030 | 0.3560 |
| 30 | L2453342-06 MSD | 1.0 | 0.4199 | 5.5869 | 0.5676 | 9.8624 | 0.3547 |
| 31 | L2453342-06 | 1.0 | 0.0564 | 1.6945 | 0.1781 | 1.9668 | n.a. |
| 32 | L2453342-07 | 1.0 | 0.0814 | 16.5523 | 1.6323 | 17.9245 | 0.0453 |
| 33 | CCV | 1.0 | 1.0597 | 10.1722 | 1.0362 | 20.4383 | 1.0069 |
| 34 | CCB | 1.0 | n.a. | 0.2193 | 0.0256 | 0.2848 | n.a. |
| 35 | L2453342-08 | 1.0 | 0.1145 | 10.2015 | 0.9376 | 28.2230 | 0.0401 |
| 36 | L2453342-10 | 1.0 | n.a. | 0.2214 | 0.0260 | 0.2894 | n.a. |
| 37 | L2453250-01 BR CL SO4 | 1.0 | 0.1337 | 247.2077 | 0.3949 | 49.2784 | 0.1955 |
| 38 | L2453250-01; 10X | 10.0 | 0.5188 | 275.8528 | n.a. | 55.5150 | n.a. |
| 39 | L2453058-01 CL SO4 BR | 1.0 | 0.0961 | 1.7085 | 0.7453 | 4.3049 | n.a. |
| 40 | L2453058-02 | 1.0 | 0.1235 | 22.7801 | 1.2980 | 18.0996 | n.a. |
| 41 | L2453058-03 | 1.0 | 0.1237 | 22.8251 | 1.2960 | 18.1147 | n.a. |
| 42 | XL2453985-01 CL SO4 NO3 | 1.0 | 0.0717 | 65.0129 | n.a. | 189.9967 | 0.0403 |
| 43 | XL2453985-02 | 1.0 | n.a. | 53.6439 | 10.7924 | 882.8567 | n.a. |
| 44 | L2453985-04 | 1.0 | 0.1828 | 107.4539 | 0.2374 | 30.5639 | 0.0511 |
| 45 | CCV | 1.0 | 1.0682 | 10.2266 | 1.0383 | 20.5060 | 1.0121 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 46 | CCB | 1.0 | n.a. | 0.2230 | 0.0258 | 0.2959 | n.a. |
| 47 | BLK-2 | 1.0 | n.a. | 0.2221 | n.a. | 0.2889 | n.a. |
| 48 | LCS-2 | 1.0 | 0.8660 | 8.3482 | 0.7383 | 8.1306 | 0.8184 |
| 49 | XL2453433-01 CL | 1.0 | 0.2159 | 151.8308 | n.a. | 12.4674 | 0.5377 |
| 50 | L2453433-01; 10X | 10.0 | 0.6233 | 172.3261 | n.a. | 14.5484 | 0.7120 |
| 51 | XL2453433-02 | 1.0 | 0.4528 | 265.1267 | 0.1718 | 2.7463 | 0.3905 |
| 52 | L2453433-02; 10X | 10.0 | 0.7966 | 293.0261 | 0.3690 | 4.8835 | 0.5736 |
| 53 | L2453399-01 BR CL SO4 | 1.0 | 0.0549 | 33.6121 | 2.9123 | 27.6803 | n.a. |
| 54 | L2453399-02 MS | 1.0 | 0.4479 | 21.7286 | 6.1144 | 30.1670 | 0.3877 |
| 55 | L2453399-02 MSD | 1.0 | 0.4483 | 21.7584 | 6.1270 | 30.2764 | 0.3881 |
| 56 | L2453399-02 | 1.0 | 0.0734 | 18.3268 | 5.8884 | 23.0202 | n.a. |
| 57 | CCV | 1.0 | 1.0653 | 10.2101 | 1.0315 | 20.5503 | 1.0106 |
| 58 | CCB | 1.0 | n.a. | 0.2130 | 0.0257 | 0.2851 | n.a. |
| 59 | L2453399-03 | 1.0 | 0.0568 | 32.6692 | 0.4055 | 3.2417 | 0.0570 |
| 60 | L2453399-04 | 1.0 | 0.0781 | 7.5167 | n.a. | 4.5938 | 0.0415 |
| 61 | L2443399-05 | 1.0 | 0.0701 | 3.7859 | n.a. | 0.9136 | 0.0351 |
| 62 | L2453400-01 BR CL SO4 | 1.0 | 0.0557 | 166.9800 | n.a. | 71.1172 | 0.0832 |
| 63 | L2453400-01; 10X | 10.0 | 0.4480 | 186.3504 | n.a. | 78.0160 | 0.3429 |
| 64 | L2453400-02 | 1.0 | 0.0476 | 167.2335 | n.a. | 71.1954 | 0.0853 |
| 65 | L2453400-02; 10X | 10.0 | 0.4686 | 197.1201 | n.a. | 82.8044 | n.a. |
| 66 | L2453400-03 | 1.0 | 0.0786 | 252.1996 | 0.1680 | 14.1225 | n.a. |
| 67 | L2453400-03; 10X | 10.0 | 0.4895 | 294.8066 | 0.3969 | 16.8185 | 0.3369 |
| 68 | L2453400-04 | 1.0 | n.a. | 0.2219 | 0.0256 | 0.2863 | n.a. |
| 69 | CCV | 1.0 | 1.0532 | 10.1966 | 1.0340 | 20.4166 | 1.0030 |
| 70 | CCB | 1.0 | 0.0454 | 0.2193 | 0.0256 | 0.2910 | n.a. |
| 71 | L2453383-01 CL SO4 | 1.0 | 0.6438 | 19.4495 | 0.1223 | 4.0775 | n.a. |
| 72 | XL2453383-01; 10X | 10.0 | 0.9496 | 21.7379 | 0.3414 | 6.0025 | 0.4692 |
| 73 | L2453058-01 MS | 1.0 | 0.4755 | 5.5435 | 1.1389 | 12.0874 | 0.3412 |
| 74 | L2453058-01 MSD | 1.0 | 0.4772 | 5.5545 | 1.1390 | 12.0877 | 0.3401 |
| 75 | L2453985-02; 25X | 25.0 | 1.5411 | 53.4003 | n.a. | 931.1507 | n.a. |
| 76 | L2453985-01; 10X | 10.0 | 0.4571 | 69.3248 | n.a. | 204.0383 | 0.3719 |
| 77 | L2453985-04 MS NO3 SO4 | 1.0 | 0.5809 | 106.6225 | 0.6841 | 37.1980 | 0.3769 |
| 78 | L2453985-04 DUP | 1.0 | 0.1784 | 107.1522 | 0.2388 | 30.3863 | 0.0521 |
| 79 | L2453985-04 MS; 10X CL | 10.0 | 4.3034 | 147.1985 | 4.2436 | 110.4208 | 3.5986 |
| 80 | L2453985-04 DUP; 10X | 10.0 | 0.5740 | 114.2018 | 0.4767 | 32.0972 | n.a. |
| 81 | CCV | 1.0 | 1.0587 | 10.2072 | 1.0383 | 20.4529 | 1.0073 |
| 82 | CCB | 1.0 | n.a. | 0.2174 | 0.0256 | 0.2897 | n.a. |
| 83 | L2453985-04; 10X | 10.0 | 0.5703 | 114.2133 | 0.4740 | 32.1693 | n.a. |
| 84 | CCV | 1.0 | 1.0580 | 10.4060 | 1.0349 | 20.4603 | 1.0073 |
| 85 | CCB | 1.0 | 0.0451 | 0.2160 | 0.0254 | 0.2888 | n.a. |
| | Sum: | 208.000 | 38.6932 | | 78.9515 | 3800.0967 | 30.2567 |
| | Average: | 2.447 | 0.5374 | | 1.1611 | 44.7070 | 0.5709 |
| | Rel.Std.Dev: | 160.083 % | 1.5180 | | 1.5850 | 3.1142 | 1.5538 |

| Inject Time | Comment |
|---|---|
| 05/Sep/2024 16:08 | AU |
| 05/Sep/2024 16:20 | LOT#240905-0.5 |
| 05/Sep/2024 16:33 | LOT#240905-1.0 |
| 05/Sep/2024 16:45 | LOT#240905-2.0 |
| 05/Sep/2024 16:57 | LOT#240905-3.0 |
| 05/Sep/2024 17:09 | LOT#240905-4.0 |
| 05/Sep/2024 17:21 | LOT#240905-5.0 |
| 20/Sep/2024 09:03 | 4321-4201-4405-4208-4204 |
| 20/Sep/2024 09:15 | LOT#240916-C |
| 20/Sep/2024 09:27 | CVN |
| 20/Sep/2024 09:39 | LOT#240916-I |
| 20/Sep/2024 09:51 | CVN |
| 20/Sep/2024 10:03 | CVN |
| 20/Sep/2024 10:16 | LOT#240916-I |
| 20/Sep/2024 10:28 | CVN |
| 20/Sep/2024 10:40 | CVN |
| 20/Sep/2024 10:52 | CVN |
| 20/Sep/2024 11:04 | CVN |
| 20/Sep/2024 11:16 | CVN |
| 20/Sep/2024 11:28 | CVN |
| 20/Sep/2024 11:40 | LOT#240916-C |
| 20/Sep/2024 11:52 | CVN |
| 20/Sep/2024 12:04 | CVN |
| 20/Sep/2024 12:16 | CVN |
| 20/Sep/2024 12:28 | CVN |
| 20/Sep/2024 12:41 | CVN |
| 20/Sep/2024 12:53 | CVN |
| 20/Sep/2024 13:05 | CVN |
| 20/Sep/2024 13:17 | CVN |
| 20/Sep/2024 13:29 | CVN |
| 20/Sep/2024 13:41 | CVN |
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| 20/Sep/2024 14:05 | LOT#240916-C |
| 20/Sep/2024 14:17 | CVN |
| 20/Sep/2024 14:29 | CVN |
| 20/Sep/2024 14:41 | CVN |
| 20/Sep/2024 14:53 | CVN |
| 20/Sep/2024 15:06 | CVN |
| 20/Sep/2024 15:18 | CVN |
| 20/Sep/2024 15:30 | CVN |
| 20/Sep/2024 15:42 | CVN |
| 20/Sep/2024 15:54 | CVN |
| 20/Sep/2024 16:06 | CVN |
| 20/Sep/2024 16:18 | CVN |
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|---|---|
| 20/Sep/2024 16:42 | CVN |
| 20/Sep/2024 16:54 | CVN |
| 20/Sep/2024 17:06 | LOT#240916-I |
| 20/Sep/2024 17:19 | CVN |
| 20/Sep/2024 17:31 | CVN |
| 20/Sep/2024 17:43 | CVN |
| 20/Sep/2024 17:55 | CVN |
| 20/Sep/2024 18:07 | CVN |
| 20/Sep/2024 18:19 | CVN |
| 20/Sep/2024 18:31 | CVN |
| 20/Sep/2024 18:43 | CVN |
| 20/Sep/2024 18:55 | LOT#240916-C |
| 20/Sep/2024 19:07 | CVN |
| 20/Sep/2024 19:19 | CVN |
| 20/Sep/2024 19:32 | CVN |
| 20/Sep/2024 19:44 | CVN |
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| 20/Sep/2024 20:08 | CVN |
| 20/Sep/2024 20:20 | CVN |
| 20/Sep/2024 20:32 | CVN |
| 20/Sep/2024 20:44 | CVN |
| 20/Sep/2024 20:56 | CVN |
| 20/Sep/2024 21:08 | CVN |
| 20/Sep/2024 21:20 | LOT#240916-C |
| 20/Sep/2024 21:32 | CVN |
| 20/Sep/2024 21:45 | CVN |
| 20/Sep/2024 21:57 | CVN |
| 20/Sep/2024 22:09 | CVN |
| 20/Sep/2024 22:21 | CVN |
| 20/Sep/2024 22:33 | CVN |
| 20/Sep/2024 22:45 | CVN |
| 20/Sep/2024 22:57 | CVN |
| 20/Sep/2024 23:09 | CVN |
| 20/Sep/2024 23:21 | CVN |
| 20/Sep/2024 23:33 | CVN |
| 20/Sep/2024 23:45 | CVN |
| 20/Sep/2024 23:57 | CVN |
| 21/Sep/2024 00:10 | CVN |
| 21/Sep/2024 00:22 | LOT#240916-C |
| 21/Sep/2024 00:34 | CVN |
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# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : MW-1SR | **Matrix** | : WATER |
| **Lab Sample ID** | : L2453053-01 | | |
| **Matrix Spike** | : WG1974201-3 | **MS Analysis Date** | : 09/20/24 10:28 |
| **Matrix Spike Dup** | : WG1974201-4 | **MSD Analysis Date** | : 09/20/24 10:40 |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | | RPD | Recovery Limits | RPD Limit |
| Bromide | ND | 0.4 | 0.355 | 88 | Q | 0.4 | 0.355 | 88 | Q | 0 | 90-110 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : Roux Env. Eng. & Geology, DPC | **Lab Number** | : L2453053 |
| **Project Name** | : CORAM MATERIALS | **Project Number** | : 2232.0006Y005 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG1974201-2 | **LCS Analysis Date** | : 09/20/24 10:16 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | True | Found | %R | True | Found | %R | RPD | Recovery | RPD |
| Parameter | (mg/l) | (mg/l) | | (mg/l) | (mg/l) | | | Limits | Limit |
| Bromide | 0.800 | 0.823 | 103. | | | | | 90-110 | 20 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | 0.05 | 0.0132 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 64-148 | 18 | 18 | 9056 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 90-110 | 18 | 18 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 81-124 | 15 | 15 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 80-120 | 15 | 15 | 9056 | 48 hours | 1 - Plastic 250ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 72-124 | 20 | 20 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.***

# Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$